Symantec NetBackup
OpsCenter Reporting Guide

Release 7.7
Technical Support

Symantec Technical Support maintains support centers globally. Technical Support’s primary role is to respond to specific queries about product features and functionality. The Technical Support group also creates content for our online Knowledge Base. The Technical Support group works collaboratively with the other functional areas within Symantec to answer your questions in a timely fashion. For example, the Technical Support group works with Product Engineering and Symantec Security Response to provide alerting services and virus definition updates.

Symantec’s support offerings include the following:

- A range of support options that give you the flexibility to select the right amount of service for any size organization
- Telephone and/or Web-based support that provides rapid response and up-to-the-minute information
- Upgrade assurance that delivers software upgrades
- Global support purchased on a regional business hours or 24 hours a day, 7 days a week basis
- Premium service offerings that include Account Management Services

For information about Symantec’s support offerings, you can visit our website at the following URL:

support.symantec.com

All support services will be delivered in accordance with your support agreement and the then-current enterprise technical support policy.

Contacting Technical Support

Customers with a current support agreement may access Technical Support information at the following URL:

support.symantec.com

Before contacting Technical Support, make sure you have satisfied the system requirements that are listed in your product documentation. Also, you should be at the computer on which the problem occurred, in case it is necessary to replicate the problem.

When you contact Technical Support, please have the following information available:

- Product release level
- Hardware information
- Available memory, disk space, and NIC information
- Operating system
- Version and patch level
- Network topology
- Router, gateway, and IP address information
- Problem description:
  - Error messages and log files
  - Troubleshooting that was performed before contacting Symantec
  - Recent software configuration changes and network changes

**Licensing and registration**

If your Symantec product requires registration or a license key, access our technical support Web page at the following URL:


**Customer service**

Customer service information is available at the following URL:


Customer Service is available to assist with non-technical questions, such as the following types of issues:

- Questions regarding product licensing or serialization
- Product registration updates, such as address or name changes
- General product information (features, language availability, local dealers)
- Latest information about product updates and upgrades
- Information about upgrade assurance and support contracts
- Information about the Symantec Buying Programs
- Advice about Symantec's technical support options
- Nontechnical presales questions
- Issues that are related to CD-ROMs, DVDs, or manuals
Support agreement resources

If you want to contact Symantec regarding an existing support agreement, please contact the support agreement administration team for your region as follows:

- Asia-Pacific and Japan: customercare_apj@symantec.com
- Europe, Middle-East, and Africa: semea@symantec.com
- North America and Latin America: supportsolutions@symantec.com
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Reporting in OpsCenter

This chapter includes the following topics:

■ About OpsCenter reports
■ About managing reports in OpsCenter
■ About managing My Reports
■ About managing My Dashboard
■ About managing reports folders in OpsCenter
■ About managing report schedules in OpsCenter
■ About managing time schedules in OpsCenter

About OpsCenter reports

Symantec NetBackup OpsCenter is a Web-based software application that helps organizations by providing visibility into their data protection environment. By using OpsCenter, you can track the effectiveness of data backup and archive operations by generating comprehensive business-level reports.

OpsCenter displays customizable, multi-level views of backup and archive resources and customizable reports for tracking service usage and expenditures. It also contains tools for defining cost metrics and chargeback formulas or handling alerts. A wide range of audiences benefit from the reporting and the management capabilities of OpsCenter. The audiences include IT (Information Technology) managers, application owners, IT finance teams, external compliance auditors, legal teams, line-of-business managers, external customers, IT architects, and capacity planning teams.
Note: Starting with version 7.7, Symantec NetBackup OpsCenter no longer supports Search & Hold. Therefore, the Indexing, Index Server Name, and Indexing enabled for Schedule columns are deprecated and may not show correct or updated data in the saved custom reports and custom SQL reports.

Symantec recommends that you delete these columns from the saved reports.

OpsCenter reports UI

The OpsCenter reports UI consists of the following components:

Report Templates tab

This tab lists all Report Templates (or standard or canned reports) that are available in OpsCenter. You can modify the default parameter values of a Report Template as required and generate a new report of that kind.

For example, use the existing Backup > Job Activity > Client Count Report Template, change the relative timeframe to four weeks (default timeframe is two weeks) and generate a new Client Count report. You can see all clients that are backed up over the last four weeks.

For report template descriptions, refer to the OpsCenter Reporting Guide at the following location:

http://www.symantec.com/docs/DOC5808

My Reports tab

You can save generated reports for your future use. These saved reports are stored in the My Reports tab. Use this section to view the saved reports or modify the parameters of the saved reports and generate new reports out of them. You can also delete the saved reports using the My Reports tab.

See “About managing My Reports” on page 22.

See “Saving an OpsCenter report” on page 16.

My Dashboard tab

Your saved reports are preserved in My Reports tab, which you can select and publish on My Dashboard tab. You can select multiple reports and add them in the same dashboard section. Thus, you can create multiple dashboard section containing a number of reports.

See “About managing My Dashboard” on page 25.

Schedules tab

This tab contains all report schedules.

You can create, edit, or delete schedules using this tab.

See “Using report schedules in OpsCenter” on page 32.
Manage Folders tab

Use this tab to manage folders where you have saved your reports.

See “About managing reports folders in OpsCenter” on page 28.

Report creation wizards in OpsCenter

OpsCenter provides wizards, which guide you through the entire report creation procedure.

To create a report, in the OpsCenter console on the Reports tab, click Create New Report. The following report creation options are available on the Select Report Creation Option panel:

- Create a report using an existing Report Template.
  See “Creating an OpsCenter report using a Report Template” on page 43.
- Create a custom report.
  See “Creating a custom report in OpsCenter” on page 351.
- Create a report using SQL Query.
  See “Creating an OpsCenter report using SQL query” on page 366.

Reports > Report Templates

This section provides details of the Report Templates that are available in OpsCenter.

OpsCenter provides a number of Report Templates (or standard or canned reports) that you can modify and generate a new report of that kind.

In the OpsCenter console, when you click the Reports tab, the Report Templates home page is displayed.

From the Reports > Report Templates page, you can click any of the Report Templates to view the respective report with default parameter values.

For description about each report template, refer to the OpsCenter Reporting Guide.
http://www.symantec.com/docs/DOC5808

You can also click the following options on the Reports > Report Templates page:

Create New Report
Click Create New Report to create a standard report, custom report, or run an SQL query.
If you do not want to run a report template with default parameter values, you can directly edit it from Reports > Report Templates page. To edit a report template, first select the report template by selecting the checkbox on the extreme left of the report template. Click **Edit Report** to edit and save the report without executing it.

**Figure 1-1** shows various components of a report that is generated using a template.

**Figure 1-1** Report Template

**Figure 1-1**

- **Report Templates tree**: This tree lists all Report Templates that are available in OpsCenter.
  
  For report template descriptions, refer to the *OpsCenter Reporting Guide* at the following location:
  
  http://www.symantec.com/docs/DOC5808

- **Manage report toolbar**: Use this toolbar to save, export, or email the generated report.

- **Time filters**: Use these time filters to view the data for a specific period of time.
About custom reports in OpsCenter Analytics

Apart from generating reports using the existing templates, you can also create custom reports in OpsCenter by changing the report parameters as required.

See “Creating a custom report in OpsCenter” on page 351.

About custom SQL query in OpsCenter Analytics

In OpsCenter, you can create reports by directly running SQL queries. Using this report creation option, you do not need to go through multiple parameter selections.

OpsCenter provides detailed information about the OpsCenter database schema that you may want to know before running any SQL query to generate reports. On the Report Wizard > SQL Query page, click the OpsCenter Schema Document link to open the PDF that contains all relevant information.

Note: You can create only tabular reports by running SQL queries. You can also run stored procedures using this feature.

See “About supporting OpsCenter custom reports and custom SQL queries” on page 13.

See “Creating an OpsCenter report using SQL query” on page 366.

About supporting OpsCenter custom reports and custom SQL queries

Symantec is committed to product quality and will support the accuracy and validity of the data collected and stored in the OpsCenter database and the documentation of the OpsCenter database schema. However, no Technical Support will be provided on the actual creation of custom reports, custom SQL queries for specific reports, or for 3rd party reporting applications (for example, Microsoft Excel, Access, or Crystal Reports).

See “About custom reports in OpsCenter Analytics” on page 13.

See “About custom SQL query in OpsCenter Analytics” on page 13.
About managing reports in OpsCenter

This section provides information on the operations that you can carry out on the standard reports that you generate in OpsCenter.

You can carry out the following operations:

- Saving a report
  See “Saving an OpsCenter report” on page 16.

- Exporting a report
  See “Exporting an OpsCenter report” on page 17.

- Emailing a report
  See “Emailing a report in OpsCenter” on page 19.

Save report and email report dialog boxes

A description of the **Save report** and **Email report** dialog box options follows in the table.

<table>
<thead>
<tr>
<th>Table 1-1</th>
<th>Save report dialog box options</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Option</strong></td>
<td><strong>Description</strong></td>
</tr>
</tbody>
</table>
| Report name | Enter the report name. For example, if you generated the Job Count standard report with the group by option that is selected as **Policy Type** and report view as **Historical**, you can name this report **NumberOfJobsbyPolicies**. When you select this report on the **Saved Reports** tab, the report is displayed with the saved filters and in the report view that were selected when the reports were saved, with respect to the current time. Review the following points about report names:
- The report name must be unique in the folder where you create it. For example, if you create a report in the **Private Reports** folder under My Reports, the report name that you specify must be unique in the Private Reports folder. The same user can have two reports with the same name—like one in **Public Reports** and one in **Private Reports** folder.
- The report name must not contain any special characters like (/ \ * ? | )
- The report name must not be more than 220 characters. |
| Description | Enter the short description for the report. |
### Table 1-1  Save report dialog box options (continued)

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Folder</strong></td>
<td>Select Public or Private folder. If you save the report in a public folder, all other OpsCenter users can view it. If you save the report in a private folder, only you can view it. Expand the Public or Private folder and select a folder where you want to save the report. Depending on the folder type that you have selected - public or private - the folders displayed for selection vary.</td>
</tr>
<tr>
<td><strong>Create New</strong></td>
<td>Click this option to create a new public or private folder. Clicking this option changes the view of Folder. Enter the folder name and click OK. This folder is made available in the Folder tree for selection. Select this newly created folder where you want to save the report.</td>
</tr>
<tr>
<td><strong>Overwrite if report already exists in the selected folder</strong></td>
<td>Select this check box if you want to overwrite the existing report with the same name in the same folder. If you do not select this check box and save a report with a name identical to any of the existing reports in the selected folder, a confirmation message is displayed before you overwrite the existing report.</td>
</tr>
</tbody>
</table>

### Table 1-2  Email report dialog box options

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
</table>
| **Select Format** | Select one of the following formats:  
  - PDF  
  - HTML  
  - CSV  
  - TSV  
  - XML  
  
  **Note:** Some of these formats may not be available for specific reports. For example, the Drive Throughput and Drive Utilization reports can be exported and emailed only in the HTML format. |
Table 1-2  Email report dialog box options (continued)

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select Content</td>
<td>Select one of the following report formats:</td>
</tr>
<tr>
<td></td>
<td>■ Distribution</td>
</tr>
<tr>
<td></td>
<td>■ Historical</td>
</tr>
<tr>
<td></td>
<td>■ Ranking</td>
</tr>
<tr>
<td></td>
<td>■ Tabular</td>
</tr>
<tr>
<td></td>
<td>Distribution, Historical, and Ranking formats are available only for chart-based reports.</td>
</tr>
<tr>
<td>Email</td>
<td>Enter appropriate email details like address, subject, and message.</td>
</tr>
</tbody>
</table>

Saving an OpsCenter report

You can save a standard report. This action saves the filters that you have selected while generating a report. You can use this set of filters to regenerate the reports with the current time selections.

These reports are saved in the OpsCenter database, which you can view using the My Reports tab.

You cannot save a report whose name contains any special characters like (/ \ * ? | ”).

See “About managing My Reports” on page 22.

To save a report

1. In the OpsCenter console, click Reports > Report Templates.
2. From the Reports tree, select the report template that you want to save.
3. In the right-hand report view area, click the Save As Report icon. The Save Report pop-up screen opens.
4. On the Save Report screen, enter the required details.
   See “Save report and email report dialog boxes” on page 14.
5. Click OK.

After a successful save, My Reports tab is displayed with this report selected.

**Note:** You cannot save a report name that contains special characters like (/ \ * ? | ”)
Exporting an OpsCenter report

Using OpsCenter, you can preserve report data in files or print the data.

See “File formats available in OpsCenter” on page 17.

You can open the exported file using other applications, such as a spreadsheet program or a text editor.

To export a report

1. In the OpsCenter console, click **Reports > Report Templates**.
   You can also export reports that you may have created from **Reports > My Reports**.

2. From the **Reports** tree, select the report template or report that you want to export.

3. In the report view area at the right-hand side, click the **Export Report** icon.
   The **Export Report** pop-up screen opens.

4. On the **Export Report** pop-up screen, select the export options that you want to export the report with: File format, such as PDF, HTML, CSV, TSV, or XML and content or report view, such as **Tabular**, **Distribution**, **Historical**, or **Ranking**.
   Note that only the applicable formats and report views appear for specific reports.
   See “Save report and email report dialog boxes” on page 14.

5. Click **OK**. The system displays the export options pertaining to the file format you have selected. Select those options and export the report.

File formats available in OpsCenter

You can export or email OpsCenter reports in the following file formats:

- **PDF (Portable Document Format)**: Can be viewed using a PDF reader, such as Adobe Reader
- **CSV (comma-separated values)**: Use with spreadsheet programs, such as Microsoft Excel.
- **TSV (tab-separated values)**: Compatible with word-processing applications and text editors
- **HTML (hypertext markup language)**: Can be opened using with Web browsers
XML (Extensible Markup Language)  Can be imported (using user-written scripts) by other programs like databases or billing applications.

The XML format has been enhanced in OpsCenter 7.5. Some of the fields that were present in other formats like PDF, CSV, TSV, and HTML are now also shown in the XML format.

The following was the older XML format:

```xml
<Report>
  {Report Name}
  <Disclaimer> {customer message} </Disclaimer>
  <Table>
    <Header>
      <Row>…</Row>
    </Header>
    <Rows>
      <Row>…</Row> ...
    </Rows>
  </Table>
  <Table>
    <Header>
      <Row>…</Row>
    </Header>
    <Rows>
      <Row>…</Row> ...
    </Rows>
  </Table>
  {footer}
</Report>
```

In the old XML format, for each view (like distribution, timeline, etc) there is one <Table> tag that contains information for that view.

The following is the new XML format:

```xml
<Report>
  <ReportView>
    <Name> {nameValue} </Name>
    <Description> {descriptionForReportView} </Description>
    <TimeDuration> {timeValue} </TimeDuration>

    <ViewName> {viewNameValue} </ViewName>
  </ReportView>
</Report>
```
In the new format <Table> has been moved under a new tag called <ReportView>. If multiple views (distribution, historical, ranking) are selected for export or email, each of the views will have one <ReportView> tag corresponding to it. Name, Description and TimeDuration tags inside ReportView tag will always be present for each view. However, ViewName, GroupBy, and ViewSelections tags will be present only if applicable. If report is edited and view selections are changed, these tags will be added in export.

Emailing a report in OpsCenter

Using OpsCenter, you can email report data to the selected recipients. You can email a report in a number of different file formats.

See “File formats available in OpsCenter” on page 17.
To email a report

1 In the OpsCenter console, click Reports > Report Templates.
   You can also export reports that you may have created from Reports > My Reports.

2 From the Reports tree, select the report template or the report that you want
to email.

3 In the report view area at the right-hand side, click the Email Report icon. The Email Report pop-up screen opens.
   See “Save report and email report dialog boxes” on page 14.

4 On the Email Report pop-up screen, select the email options: File format, such as PDF, HTML, CSV, TSV, or XML and content or report view, such as Tabular, Distribution, Historical, or Ranking
   Note that only the applicable formats and report views appear for specific reports.

5 Enter email IDs in To, Cc, and Bcc text boxes, to which you want to send emails.
   If these email IDs do not already exist, they are automatically added to the database.
   Alternatively, you can add existing email recipients.
   See “Adding email recipients to an OpsCenter report mailing” on page 22.

6 Enter the subject of the email.

7 Enter the message that may be a short description regarding the report data that you want to email.

8 Click OK.

Configuring number of rows in a tabular report for email or export

When you export, email, or schedule a tabular report, 4000 rows are exported by default.

You can configure the maximum number of rows in a tabular report that you can export or email.
To configure the maximum number of rows for export

1. Log on to the OpsCenter Server.

2. Stop all the OpsCenter Server services or processes by using the following commands on Windows and UNIX:

   Windows: `INSTALL_PATH\OpsCenter\server\bin\opsadmin.bat stop`
   UNIX: `<INSTALL_PATH>/SYMCOpsCenterServer/bin/opsadmin.sh stop`

3. Navigate to the following location:

   Windows: `C:\Program Files\Symantec\OpsCenter\server\config`
   UNIX: `<INSTALL_PATH>/SYMCOpsCenterServer/config`

4. Open the `report.conf` file.

5. You may want to export all the rows or you may want to increase or decrease the maximum value. Note that if you export all rows or increase the number of rows, exporting a report may take time when there are a large number of rows.
   - To export all the rows, you can either comment out `report.schedule.max.tabular.rows` parameter or specify any value less than or equal to -1 for `report.schedule.max.tabular.rows` parameter. To comment out `report.schedule.max.tabular.rows` parameter, add two forward slashes before the parameter in this manner:
     ```bash
     //report.schedule.max.tabular.rows=4000
     ```
   - Or edit the value 4000 in `report.schedule.max.tabular.rows=4000` to -1.
     ```bash
     report.schedule.max.tabular.rows=-1
     ```
   - To change the maximum number of rows to say 5000, you can set the value of `report.schedule.max.tabular.rows` as 5000.
     Configure `report.schedule.max.tabular.rows=5000`

6. Start all Symantec OpsCenter Server services or processes by using the following command for Windows and UNIX:

   Windows: `INSTALL_PATH\OpsCenter\server\bin\opsadmin.bat start`
   UNIX: `<INSTALL_PATH>/SYMCOpsCenterServer/bin/opsadmin.sh start`
Adding email recipients to an OpsCenter report mailing

This section provides information on how to add email recipients to whom you want to send emails. This procedure assumes you've already started the email report procedure. More information is available about this procedure.

See “Emailing a report in OpsCenter” on page 19.

To add email recipients

1. On the Add Email Recipients screen, select the check boxes in front of the email recipients to whom you want to send emails.

   See “Add email recipients dialog box options” on page 22.

   Click To.., Cc.., or Bcc.. depending on where you want to add the selected recipients.

2. Click OK.

Add email recipients dialog box options

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recipient Name/Email Address</td>
<td>Select the check boxes in front of the email recipients to whom you want to send emails.</td>
</tr>
<tr>
<td>To../Cc../Bcc...</td>
<td>Click To.., Cc.., or Bcc.. depending on where you want to add the selected recipients.</td>
</tr>
</tbody>
</table>

About managing My Reports

You can save generated reports for your future use. These saved reports are stored in the My Reports tab. Use this section to view the saved reports or modify the parameters of the saved reports and generate new reports out of them. You can also delete the saved reports using the My Reports tab.

The following topics provide more information about managing reports.

See “Creating a report using the My Reports tab” on page 23.

See “Deleting a saved report using the My Reports tab” on page 23.

See “Viewing a saved report using the My Reports tab” on page 23.

See “Editing a saved report using the My Reports tab” on page 23.

See “Exporting a saved report” on page 24.
Creating a report using the My Reports tab

This section provides the procedure to create a report using My Reports tab.

To create a report using the My Reports tab

1. In the OpsCenter console, click Reports > My Reports.

You can create a report in any of the following ways:

See “Creating an OpsCenter report using a Report Template” on page 43.
See “Creating a custom report in OpsCenter” on page 351.
See “Creating an OpsCenter report using SQL query” on page 366.

Deleting a saved report using the My Reports tab

This section provides the procedure to delete a saved report.

To delete a saved report

1. In the OpsCenter console, click Reports > My Reports.
2. On the My Reports tab, in the Reports list, expand a report folder to view the reports that are saved within it.
3. Select the check box in front of the report name.
4. Click Delete.

Viewing a saved report using the My Reports tab

You can view the saved reports using the My Reports tab.

To view a saved report

1. In the OpsCenter console, click Reports > My Reports.
2. On the My Reports tab, in the Reports list, expand a report folder to view the reports that are saved within it. Select the saved report that you want to view.

Editing a saved report using the My Reports tab

You can edit a saved report. You can edit the report details, such as the report name or the folder where you want to save the edited report.
To edit a saved report

1. In the OpsCenter console, click Reports > My Reports.

2. On the My Reports tab, in the Reports list, expand a report folder to view the reports that are saved within it. Select the saved report that you want to edit.

3. In the report view area at the right-hand side, click the Save As Report icon. The Save Report pop-up screen opens.


5. Click OK.

Exporting a saved report

Using OpsCenter, you can preserve saved report data in files or print the data. You can email a report in a number of different file formats.

See “File formats available in OpsCenter” on page 17.

You can open the exported file using other applications, such as a spreadsheet program or a text editor.

To export a saved report

1. In the OpsCenter console, click Reports > My Reports.

2. On the My Reports tab, in the Reports list, expand a report folder to view the reports that are saved within it. Select the saved report that you want to export.

3. In the report view area at the right-hand side, click the Export Report icon. The Export Report pop-up screen opens.

4. On the Export Report pop-up screen, select the export options that you want to export the report with. Select file format, such as PDF, CSV, or XML and content or report view, such as Distribution, Historical, or Ranking.

5. Click OK. The system displays the export options pertaining to the file format you have selected. Select those options and export the saved report.

Emailing a saved report

Using OpsCenter, you can email the saved report data to the selected recipients. You can email the report in the following file formats:

- PDF (Portable Document Format) Can be viewed using a PDF reader, such as Adobe Reader
CSV (comma-separated values)  Use with spreadsheet programs, such as Microsoft Excel.

TSV (tab-separated values)  Compatible with word-processing applications and text editors

HTML (hypertext markup language)  Can be opened using with Web browsers

XML (Extensible Markup Language)  Can be imported (using user-written scripts) by other programs like databases or billing applications

To email a report

1 In the OpsCenter console, click Reports > Saved Reports.

2 On the My Reports tab, in the Reports list, expand a report folder to view the reports that are saved within it. Select the saved report that you want to email.

3 In the report view area at the right-hand side, click the Email Report icon. The Email Report pop-up screen opens.

4 On the Email Report pop-up screen, select the email options: File format, such as PDF, CSV, or XML and content or report view, such as Distribution, Historical, or Ranking.

5 Enter email IDs in To, Cc, and Bcc text boxes, to which you want to send emails.

6 Enter the subject of the email.

7 Enter the message that may be a short description regarding the report data that you want to email.

8 Click OK.

About managing My Dashboard

Your saved reports are preserved in My Reports tab, which you can select and publish on My Dashboard tab. You can select multiple reports and add them in the same dashboard section. Thus, you can create multiple dashboard sections containing a number of reports.

You can add only 10 reports in a dashboard.

See “Adding reports to a dashboard” on page 26.

See “Modifying a dashboard section” on page 26.

See “Deleting a dashboard section” on page 27.
Reports > My Dashboard options

Select and publish reports on My Dashboard tab. You can select multiple reports and add them in the same dashboard section. Thus, you can create multiple dashboard sections containing a number of reports.

You can add only 10 reports in a dashboard.

Table 1-4  Reports > My Dashboard options

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Add/Edit/Delete</td>
<td>You can add multiple Dashboards on this page and one or more reports from My Reports to each of the dashboards. Use Add, Edit, Delete tasks to add, edit, or remove dashboard</td>
</tr>
<tr>
<td>Email Dashboard</td>
<td>Select this option if you want to email all the dashboard reports. In the Email Dashboard dialog box that opens, you can specify the format in which you want to email the dashboard reports along with the other email details. Click OK.</td>
</tr>
<tr>
<td>Refresh Dashboard</td>
<td>Select this option to update the reports in the dashboard.</td>
</tr>
</tbody>
</table>

Adding reports to a dashboard

This section provides the procedure to add reports to a dashboard.

To add reports to a dashboard

1. In the OpsCenter console, click Reports > My Dashboard.
2. Click Add.
3. On the Add Dashboard Section pop-up screen, enter the section name.
4. Expand the Private or Public Reports folder to view existing reports.
5. Select the check boxes in front of the report names, which you want to publish on the dashboard.
6. Click OK.

Modifying a dashboard section

This section provides the procedure to modify dashboard section.
To modify a dashboard
1. In the OpsCenter console, click **Reports > My Dashboard**.
2. Click **Edit**.
3. On the **Edit Dashboard Section** pop-up screen, select the dashboard section from the drop-down list, that you want to modify.
4. Modify the section name.
5. Expand the Private or Public Reports folder to view existing reports.
6. Select or clear the check boxes in front of the report names, which you want to publish on or remove from this dashboard section.
7. Click **OK**.

Deleting a dashboard section

This section provides the procedure to delete a dashboard section.

**To delete a dashboard section**
1. In the OpsCenter console, click **Reports > My Dashboard**.
2. Click **Delete**.
3. On the **Delete Dashboard Section** pop-up screen, select the dashboard section from the drop-down list, that you want to delete.
4. Click **OK**.

Emailing dashboard sections

You can email your dashboards.

**To email a dashboard**
1. In the OpsCenter console, click **Reports > My Dashboard**.
2. Click the **Email Dashboard** icon.
3. On the **Email Dashboard** pop-up screen, select the format in which you want to send the email.
4. Select email recipients from the To., Cc., and Bcc. as appropriate. Alternatively, enter new email recipients, which are added into the database.
5. Enter the email subject and message.
6. Click **OK**.
Refreshing My Dashboard
This section provides the procedure to refresh My Dashboard.

To refresh My Dashboard
1. In the OpsCenter console, click Reports > My Dashboard.
2. Click the Refresh icon.

About managing reports folders in OpsCenter
OpsCenter provides a way to manage folders where you have saved your reports. They can be both private reports and public reports.

Using the Manage Folders tab in the Reports section, you can add new report folders, edit names of the existing folders, or delete them.

You can also select reports in a particular folder and delete them using this tab.

See “Adding a reports folder in OpsCenter” on page 28.
See “Editing a reports folder in OpsCenter” on page 29.
See “Deleting reports folders in OpsCenter” on page 29.
See “Deleting reports from a folder in OpsCenter” on page 29.

Reports > Manage Folders options
Using the Manage Folders tab in the Reports section, you can add new report folders, edit names of the existing folders, or delete them.

Adding a reports folder in OpsCenter
This section provides a procedure to add a report folder.

To add a folder
1. In the OpsCenter console, click Reports > Manage Folders.
2. On the Reports tree, select a check box in front of a private folder node or public folder node in which you want to create a new folder.
3. Click Add.
4. In the Create new folder pop-up window, make sure that you have selected only one folder. If multiple folders are selected, the Add option is disabled.
Enter the folder name.
6 Click OK.
This folder is added in the selected node.

Editing a reports folder in OpsCenter
This section provides a procedure to edit a report folder.

To edit a folder
1 In the OpsCenter console, click Reports > Manage Folders.
2 On the Reports tree, select a check box in front of a private folder or public folder that you want to edit.
3 Click Edit.
4 In the Edit folder name pop-up window, make sure that you have selected only one folder. If multiple folders are selected, the Edit option is disabled.
5 Edit the folder name.
6 Click OK.

Deleting reports folders in OpsCenter
This section provides a procedure to delete a report folder. If you delete a report folder, all reports that are saved in that folder are deleted.

To delete folders
1 In the OpsCenter console, click Reports > Manage Folders.
2 On the Reports tree, select a check boxes in front of the private folders or public folders that you want to delete.
3 Click Delete.

Deleting reports from a folder in OpsCenter
This section provides a procedure for deleting the reports that are saved in a public folder or private folder.

To delete reports from a folder
1 In the OpsCenter console, click Reports > Manage Folders.
2 On the Reports tree, select a private folder or public folder from which you want to delete the reports. A list of reports that are saved in the selected folder displays at the right-hand side of the page.
From the list of reports, select the check boxes in front of the reports that you want to delete.

Click **Delete**.

### About managing report schedules in OpsCenter

NetBackup OpsCenter provides a way to export or email a report on a specific schedule. For this task you need to create a report schedule that is associated with a time schedule on which the specified reports are exported or emailed.

Each report schedule can be associated with a single time schedule. A single time schedule can be associated with multiple report schedules.

See “About managing time schedules in OpsCenter” on page 37.

The following topics describe how to create and manage report schedules.

See “Viewing report schedule details in OpsCenter” on page 31.

See “Creating a report schedule in OpsCenter” on page 35.

See “Editing a report schedule in OpsCenter” on page 36.

See “Deleting a report schedule in OpsCenter” on page 36.

See “Enabling or disabling a report schedule” on page 37.

### Reports > Schedules options

Using report schedules, you can email or export reports at a scheduled time. Each report schedule is associated with a time schedule at which it emails or sends the specified reports.

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Add/Edit</td>
<td>Select <strong>Add</strong> or <strong>Edit</strong> to start the Report Schedule Wizard.</td>
</tr>
<tr>
<td>Delete</td>
<td>Select <strong>Delete</strong> to remove the selected report schedules.</td>
</tr>
<tr>
<td>Enable/Disable</td>
<td>Select <strong>Enable</strong> or <strong>Disable</strong> to enable or disable the selected report schedules.</td>
</tr>
<tr>
<td>Name</td>
<td>Name of a report schedule.</td>
</tr>
<tr>
<td>Time Schedule Name</td>
<td>Name of a time schedule that is associated with this report schedule.</td>
</tr>
<tr>
<td>Enabled</td>
<td>Specifies whether the report schedule is enabled or not.</td>
</tr>
</tbody>
</table>
### Table 1-5  Report Schedules tab options (continued)

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Start Date</td>
<td>Date on which this schedule runs.</td>
</tr>
<tr>
<td>End Date</td>
<td>Date on which this schedule stops.</td>
</tr>
<tr>
<td>Export</td>
<td>Specifies whether you have exported the associated reports.</td>
</tr>
<tr>
<td>Email</td>
<td>Specifies whether you have emailed the associated reports.</td>
</tr>
<tr>
<td>Reports</td>
<td>Number of the reports that are exported or emailed when this schedule runs.</td>
</tr>
</tbody>
</table>

### Table 1-6  Time Schedules tab options

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Add/Edit</td>
<td>Select Add or Edit to go to the Time Schedule page.</td>
</tr>
<tr>
<td>Delete</td>
<td>Select Delete to delete the selected time schedules.</td>
</tr>
<tr>
<td>Name</td>
<td>Name of the time schedule.</td>
</tr>
<tr>
<td>Schedule Time</td>
<td>Time when the associated reports are exported or emailed.</td>
</tr>
<tr>
<td>Recurrence Pattern</td>
<td>A pattern with which this schedule runs.</td>
</tr>
<tr>
<td>Start Date</td>
<td>Date when the schedule starts.</td>
</tr>
<tr>
<td>End Date</td>
<td>Date when the schedule stops.</td>
</tr>
</tbody>
</table>

### Viewing report schedule details in OpsCenter

This section provides information on viewing the list of report schedules.

If you have applied conditions for the selected report, the list of applicable conditions is shown on the last page of the wizard. You can select the appropriate conditions. An email notification is sent to the relevant recipients if the selected condition is satisfied.

**To view report schedule details**

1. In the OpsCenter console, click **Reports > Schedules**.
   
   By default, the **Report Schedules** tab is selected.

2. On the **Report Schedules** tab, view the report schedule details.

   See “Reports > Schedules options” on page 30.
Using report schedules in OpsCenter

Using report schedules, you can email or export reports at a scheduled time. Each report schedule is associated with a time schedule at which it emails or sends the specified reports.

OpsCenter provides a wizard to create a report schedule.

See “Creating a report schedule in OpsCenter” on page 35.

The following table describes the steps that you need to carry out to email or export a report on a specific schedule.

See “About managing time schedules in OpsCenter” on page 37.

### Table 1-7 Creating a report schedule

<table>
<thead>
<tr>
<th>Step Number</th>
<th>Step and reference topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Create a time schedule.</td>
</tr>
<tr>
<td></td>
<td>See “Creating a time schedule” on page 38.</td>
</tr>
<tr>
<td>2</td>
<td>Create a report schedule.</td>
</tr>
<tr>
<td></td>
<td>OpsCenter provides a wizard to create a report schedule. This wizard lets you specify the following details:</td>
</tr>
<tr>
<td></td>
<td>■ Report schedule name</td>
</tr>
<tr>
<td></td>
<td>■ File format in which you want to email or export reports</td>
</tr>
<tr>
<td></td>
<td>■ Select a time schedule.</td>
</tr>
<tr>
<td></td>
<td>You can either select an existing time schedule that you have created in the first step or create a new schedule from here to associate it with this report schedule.</td>
</tr>
<tr>
<td></td>
<td>■ Specify details of export or email options.</td>
</tr>
<tr>
<td></td>
<td>■ Select the reports that you want to export or email on a specific schedule.</td>
</tr>
<tr>
<td></td>
<td><strong>Note:</strong> You can select only saved reports in a schedule.</td>
</tr>
<tr>
<td></td>
<td>See “Creating a report schedule in OpsCenter” on page 35.</td>
</tr>
</tbody>
</table>

### Table 1-8

<table>
<thead>
<tr>
<th>Steps</th>
<th>Reference topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>◆ Create a time schedule.</td>
<td>See “Creating a time schedule” on page 38.</td>
</tr>
</tbody>
</table>

Create a time schedule.
Table 1-8  *(continued)*

<table>
<thead>
<tr>
<th>Steps</th>
<th>Reference topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>◆ Create a report schedule.</td>
<td>See “Creating a report schedule in OpsCenter” on page 35.</td>
</tr>
<tr>
<td>Create a report schedule.</td>
<td></td>
</tr>
<tr>
<td>OpsCenter provides a wizard to create a report schedule. This wizard</td>
<td></td>
</tr>
<tr>
<td>lets you specify the following details:</td>
<td></td>
</tr>
<tr>
<td>■ Report schedule name</td>
<td></td>
</tr>
<tr>
<td>■ File format in which you want to email or export reports</td>
<td></td>
</tr>
<tr>
<td>■ Select a time schedule.</td>
<td></td>
</tr>
<tr>
<td>You can either select an existing time schedule that you have</td>
<td></td>
</tr>
<tr>
<td>created in the first step or create a new schedule from here to</td>
<td></td>
</tr>
<tr>
<td>associate it with this report schedule.</td>
<td></td>
</tr>
<tr>
<td>■ Specify details of export or email options.</td>
<td></td>
</tr>
<tr>
<td>■ Select the reports that you want to export or email on a specific</td>
<td></td>
</tr>
<tr>
<td>schedule.</td>
<td></td>
</tr>
<tr>
<td>Note: You can select only saved reports in a schedule.</td>
<td></td>
</tr>
</tbody>
</table>

Table 1-9  Enter Report Schedule Details panel options

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Report Schedule Name</td>
<td>Enter a report schedule name. This field must be filled.</td>
</tr>
<tr>
<td>Select Format</td>
<td>Select a file format in which you want to export or email report the</td>
</tr>
<tr>
<td></td>
<td>associated reports.</td>
</tr>
<tr>
<td></td>
<td>See &quot;File formats available in OpsCenter&quot; on page 17.</td>
</tr>
</tbody>
</table>

Table 1-10  Select Time Schedule panel options

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Create new Time Schedule</td>
<td>Select this option if you want a new time schedule to be associated with the report schedule.</td>
</tr>
</tbody>
</table>
**Table 1-10** Select Time Schedule panel options *(continued)*

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use existing Schedule</td>
<td>Select this option if you want the report schedule to be associated with an existing time schedule</td>
</tr>
</tbody>
</table>

**Table 1-11** Select Export/Email Report Options panel options

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
</table>
| Export      | Select this check box if you want to export the reports that are associated with this schedule.  

   See “File formats available in OpsCenter” on page 17. |
| Location    | Enter a directory path where you want to save the exported report or click Browse to select the desired location. |
| Overwrite if file exists | Select this check box if you want to overwrite a file that already exists at the specified location. |
| Email       | Select this check box if you want to email the reports that are associated with this schedule. |
| To          | Select email IDs to which you want to email reports. |
| Cc          | Select email IDs to add in the Cc list of email. |
| Bcc         | Select email IDs to add in the Bcc list email. |
| Subject     | Type the email subject. For example: Daily Job Count Report |
| Message     | Type any other related information. |

**Table 1-12** Select Reports panel options

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
</table>
| Private Reports | Select private reports from the list that you want to schedule.  
You can select both public reports and private reports. |
| Public Reports | Select public reports from the list that you want to schedule.  
You can select both public reports and private reports. |
Table 1-13  Select a report condition to be applied panel options

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Send email only if the report meets one or more selected conditions</td>
<td>Check this option if you want the report to be emailed only if it meets one or more of the selected conditions. You can create conditions for custom reports while editing the report.</td>
</tr>
<tr>
<td>Report Name</td>
<td>The custom reports that have conditions and are selected to be scheduled are displayed.</td>
</tr>
<tr>
<td>Condition</td>
<td>The condition that is associated with the custom report is displayed. You can create a condition only for custom reports.</td>
</tr>
</tbody>
</table>

Creating a report schedule in OpsCenter

To create a report schedule

1 In the OpsCenter console, click **Reports > Schedules**.

2 On the **Report Schedules** tab, click **Add**. OpsCenter provides a Report Schedule Wizard that guides you through the procedure of creating a report schedule.

   The **Enter Report Schedule Details** panel appears.

   Enter the report schedule details.

   See "**Report Schedule Wizard**" on page 33.

3 Click **Next**.

   The **Select Time Schedule** panel appears:

   Select the **Use existing schedule** option if you want to run this schedule on any existing time schedule. If you want to create a new time schedule for this report schedule, select **Create new time schedule**.

   See "Creating a time schedule" on page 38.

   If you have selected **Create new time schedule**, the system takes you to the Time Schedule Wizard. After creating a time schedule you can select the export and the email report options.

4 Click **Next**.

5 If you have selected the **Use existing schedule option** in the previous step, in the **Configure Export/Email Report Settings** panel, specify the following details:

   You can select either **Export**, **Email**, or both options.

   See "**Report Schedule Wizard**" on page 33.
6 Click Next.

7 In the Select Reports panel, select the public reports or private reports that you want to export or email on this schedule.

   These reports should be saved.

   Click Back if you want to change the previous selections.

8 In the Select a report condition to be applied panel, select a report and report condition to be applied. You can apply report conditions to custom reports.

   You can also select the option Send email only if the report meets one or more of the selected conditions if you want the report to be emailed only when the report meets one or more of the selected conditions.

9 Click Save.

Editing a report schedule in OpsCenter

   This section describes how to edit report schedule details.

   To edit a report schedule

   1 In the OpsCenter console, click Reports > Schedules.

       By default, the Report Schedules tab is selected.

   2 On the Report Schedules tab, select a report schedule from the list that you want to edit.

   3 Click Edit.

   4 Edit the report schedule details using the wizard.

   5 Click Save.

Deleting a report schedule in OpsCenter

   This section describes how to delete a report schedule.

   To delete a report schedule

   1 In the OpsCenter console, click Reports > Schedules.

       By default, the Report Schedules tab is selected.

   2 On the Report Schedules tab, select one or more report schedules from the list that you want to delete.

   3 Click Delete.
Enabling or disabling a report schedule

This section describes how to enable or disable a report schedule.

To enable or disable a report schedule

1. In the OpsCenter console, click Reports > Schedules.
   By default, the Report Schedules tab is selected.

2. On the Report Schedules tab, select one or more report schedules from the list that you want to enable or disable.

3. Click Enable or Disable.

About managing time schedules in OpsCenter

This section provides procedures to create and manage a report schedule.

Each report schedule can be associated with only a single time schedule. A single time schedule can be associated with multiple report schedules.

See “About managing report schedules in OpsCenter” on page 30.

The following topics provide more information about managing time schedules.

See “Viewing time schedule details” on page 38.

See “Creating a time schedule” on page 38.

See “Editing a time schedule” on page 38.

See “Deleting a time schedule” on page 39.

Reports > Schedules > Create or Edit Time Schedule options

Use the page to create or edit a time schedule.

Table 1-14 Create or Edit Time Schedule options

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Schedule Name</td>
<td>Enter name of the time schedule.</td>
</tr>
<tr>
<td>Schedule Time</td>
<td>Enter the time when the schedule runs and the associated reports are exported or emailed.</td>
</tr>
</tbody>
</table>
Table 1-14  Create or Edit Time Schedule options (continued)

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Schedule Pattern</strong></td>
<td>Select a pattern with which you want this schedule to be run.</td>
</tr>
<tr>
<td></td>
<td>The following schedule patterns are available:</td>
</tr>
<tr>
<td></td>
<td>■ One Time</td>
</tr>
<tr>
<td></td>
<td>■ Daily</td>
</tr>
<tr>
<td></td>
<td>■ Weekly</td>
</tr>
<tr>
<td></td>
<td>■ Monthly</td>
</tr>
<tr>
<td></td>
<td>■ Quarterly</td>
</tr>
<tr>
<td></td>
<td>■ Yearly</td>
</tr>
<tr>
<td></td>
<td>Depending on the pattern-selected, options change.</td>
</tr>
</tbody>
</table>

Viewing time schedule details

This section provides a procedure to view the details of time schedules.

To view a time schedule
1  In the OpsCenter console, click Reports > Schedules.
2  Click Time Schedules.
   The time schedule details appear:
   See “Reports > Schedules options” on page 30.

Creating a time schedule

Use the following procedure to create a time schedule.

To create a time schedule
1  In the OpsCenter console, click Reports > Schedules.
2  Click Time Schedules.
3  On the Time Schedules tab, click Create.
4  On the Create Time Schedule page, specify the necessary details.
   See “Reports > Schedules > Create or Edit Time Schedule options” on page 37.
5  Click OK.

Editing a time schedule

Use the following procedure to edit a time schedule.
To edit a time schedule

1. In the OpsCenter console, click Reports > Schedules.
2. Click Time Schedules.
3. On the Time Schedules tab, in the table, select the time schedule that you want to edit.
4. Click Edit.
5. Edit the time schedule details.
6. Click OK.

Deleting a time schedule

Use the following procedure to delete a time schedule.

To delete a time schedule

1. In the OpsCenter console, click Reports > Schedules.
2. Click Time Schedules.
3. On the Time Schedules tab, in the table, select the time schedules that you want to delete.
4. Click Delete.
OpsCenter reports

This chapter includes the following topics:

- Report Templates in OpsCenter
- About Report Templates descriptions

Report Templates in OpsCenter

Symantec NetBackup OpsCenter provides a set of Report Templates or standard or canned reports that have parameters set to default values. You can modify the default parameters and generate reports to view the required data. OpsCenter reports help you to have a good visibility into your data protection environment.

See “Reports > Report Templates” on page 11.

Report Templates are categorized as follows:

<table>
<thead>
<tr>
<th>Backup Reports</th>
<th>The backup reports show the information that is related to backups, such as success rate, job status, and protected bytes. This category also includes recovery reports.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Note:</strong> If you select Reports &gt; Activity Planning &gt; Job Size in the OpsCenter user interface, the report that appears displays the wrong client name. Instead of showing the client names, a list of backed up VM images is displayed in this report. In addition, the list of VM images may not be accurate.</td>
</tr>
</tbody>
</table>

<p>| Catalog Reports | These reports provide details about the catalogs. |</p>
<table>
<thead>
<tr>
<th>Report Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chargeback Reports</td>
<td>The chargeback reports provide details of the backup services expenditures. Using these reports you can track the backup and the recovery usage and the associated cost. You can calculate the cost of data protection management and chargeback to customers and business units.</td>
</tr>
<tr>
<td>Client Reports</td>
<td>These reports provide details about clients such as backup status, restore job details, or summary dashboard.</td>
</tr>
<tr>
<td>Cloud Reports</td>
<td>These reports provide details about NetBackup cloud storage server.</td>
</tr>
<tr>
<td></td>
<td><strong>Note</strong>: Among all available Amazon S3-compatible cloud providers, OpsCenter supports monitoring and reporting of Amazon S3 only.</td>
</tr>
<tr>
<td></td>
<td>Apart from Amazon S3, OpsCenter supports monitoring and reporting of AT &amp; T and Rackspace.</td>
</tr>
<tr>
<td>Disk &amp; Tape Device Activity Reports</td>
<td>Disk-based data protection (DBDP) reports show disk pool capacity and its usage, performance of clients on LAN or SAN, NetBackup storage lifecycle Map</td>
</tr>
<tr>
<td>Hold Reports</td>
<td>Hold reports are a part of NetBackup Search. The Hold report category is visible only if you have added a valid NetBackup Search license key in OpsCenter and when you log on as a Security Administrator.</td>
</tr>
<tr>
<td>Media Reports</td>
<td>These reports provide media data, such as tape count or usage.</td>
</tr>
<tr>
<td>Performance Reports</td>
<td>These reports provide details of throughput.</td>
</tr>
<tr>
<td>Policy Reports</td>
<td>These reports show all details about the backup job policies in NetBackup.</td>
</tr>
<tr>
<td>Restore Reports</td>
<td>These reports provide details about restore operation.</td>
</tr>
</tbody>
</table>
Storage Lifecycle Policy

The SLP reports in OpsCenter show an end-to-end view of the SLP process that includes backup to import of duplicated image into different NetBackup domains. The SLP reports help you to verify if each step in the SLP is executed and identify the possible bottlenecks.

Workload Analyzer

The Workload Analyzer report gives information about the activities that are done across a period of seven days. The activities are number of jobs running at a given period of time and the amount of data that is transferred during this period. The report contains 168 data points of analysis in terms of the activities that are done for each hour for a period of seven days.

About report filters in OpsCenter

There can be hundreds of records or thousands of MB of the data that you may not be concerned about. For example, you want to view only those jobs that were successful. To view this specific data, you need to use the ‘status’ filter. By setting this filter to Successful while generating the Job Count report, you can view all jobs that were successful.

OpsCenter provides a number of filters that you can use to view the required data. For each report category there is a different set of filters.

Note the following considerations with respect to using the report filters:

- If you edit certain standard reports and select Backup from Snapshot Job type from the Filters section, incorrect data is shown if data for Backup from Snapshot jobs exists. This also happens when you create image-related reports via custom reporting and apply Backup from Snapshot job type filter.

The following standard reports display incorrect data when you select Backup from Snapshot job type from the Filters section:

- Hold Reports > Image Retention Summary
- Backup > Planning Activity > Stored Backup Images > Duplicate copies
- Backup > Planning Activity > Stored Backup Images > Stored Backup Images on Media
- Backup > Planning Activity > Stored Backup Images > Valid Backup Images
- Backup > Planning Activity > Capacity Planning > Forecasted Size
Backup > Planning Activity > Capacity Planning > Historical Size

The Backup Media Role filter when applied to the Tapes Expiring In Future and Tapes Expiring Now reports does not return any data as data is miscalculated in OpsCenter.

Creating an OpsCenter report using a Report Template

This section provides the procedure to create a report using an existing Report Template.

To create a report using an existing Report Template

1. In the OpsCenter console, click Reports.

To view a report output of a template, select a template in the reports tree. The report output is as per the default parameter values. You cannot modify any of the report parameters.

By clicking the Create New Report option, you can launch the report creation wizard that guides you through the entire report creation procedure. Here you can modify the report parameters and view the required data.

4. On the Report Templates list, expand a report category to see the Report Templates within it. Select the Report Template that you want to create a report from.

Click Next.

5. Select time frame and other filters as required and click Next.
6. Modify display options and click Next.

Using report formats

The following formats are available for standard reports in OpsCenter.

About report formats

Report formats are described as follows:

Rankings reports Display a horizontal bar graph showing all the data for each view level object, from greatest to least, within the selected time frame.
Distribution reports  Display a pie chart showing all the data for each view level object within the selected time frame.

Historical reports  Display a stacked (segmented) bar graph with a trend line superimposed over it, showing the average upward and downward trends of the data over time.
   For example the total size of each day’s backup jobs broken out by geography. Some backup reports use a different bar chart format, displaying clustered columns for easy comparison between two classes of objects or events.

Tabular reports  Display backup data in a table

About viewing data in a graphical report

Graphical reports present data in a convenient, ‘at a glance’ fashion. However, some precision may be lost when you use this format. When you are viewing a graphical report, tool tips are available to provide the precise numerical data. To view the numerical data on which a graphical report is based, move your mouse pointer over an area of the graph.

You can also click Show Chart as Table at the bottom of the report to view the data in a tabular format.

When you are viewing a backup report, you can easily view lower-level reports. On a graphical report, when you click an area within a graph, the report refreshes to display data for the next lowest object level.

For example, in a Geography view, you can click a bar labeled Canada to display a bar chart showing data for Toronto and Vancouver. You can select the bar for a host to display data for the host’s file systems.

About Report Templates descriptions

This section provides descriptions of all Report Templates available in OpsCenter.

A few important notes on the OpsCenter Report Templates:

- The Drive Throughput, and Drive Utilization reports can be exported and emailed only in the HTML format.

The Drive Throughput and Drive Utilization reports display data only till 1 A.M. and not till the time when you run the report. This is because OpsCenter collects data for Drive Throughput and Drive Utilization report once per day at 1 A.M. everyday after midnight.

Therefore the Drive Throughput or Drive Utilization reports are only able to report on data up until 1 AM on that day, even when run with a relative timeframe of
Previous 24 hours. Similarly if you run Drive Throughput and Drive Utilization reports at 2 P.M. in the afternoon, the reports display data collected till 1 A.M. only.

- Symantec recommends that you configure the retention period of error logs in NetBackup as more than 1 day. If the retention period of error logs is less than 24 hours, it may result in data loss for some reports like Drive Throughput.

- A tabular report that is scheduled for emailing has up to 4000 rows by default. Similarly, exporting a tabular report in the available formats displays data for a maximum of 4000 rows by default. The maximum number of rows can be configured.
  See “Configuring number of rows in a tabular report for email or export” on page 20.

- Reports in the PDF, TSV, XML, or CSV formats are sent as email attachments.

- A report in the HTML format is sent as an inline message in email.

- Sorting for HTML-based reports (for example, Drive Utilization) is not supported.

- The default view that is selected is All My Views. All standard reports by default show the data based on what you select for Report Template Default View. The Report Template Default View can be specified in Settings > User Preferences. The default value of Report Template Default View is All My Views.

See “About Audit reports” on page 46.
See “About Backup reports in OpsCenter” on page 46.
See “About Catalog reports in OpsCenter” on page 200.
See “About Chargeback reports in OpsCenter” on page 200.
See “About Client reports in OpsCenter” on page 209.
See “About Disk and Tape Device Activity reports in OpsCenter” on page 253.
See “About Media reports in OpsCenter” on page 265.
See “About Performance reports in OpsCenter” on page 275.
See “About Policy reports in OpsCenter” on page 281.
See “About Restore reports in OpsCenter” on page 297.
See “About Storage Lifecycle Policy reports” on page 306.
See “Workload Analyzer report” on page 342.
About Audit reports

This section provides the reports for the NetBackup Audit Trails feature which provide a record of all user-initiated actions for auditing NetBackup operational changes.

Audit Reports > Audit Trails Report

This section provides descriptions on the Audit Report Template available in OpsCenter.

Audit trails is a record of all the user initiated activities. An audit trail consists of the changes that are made in the NetBackup environment. For example, changes such as creating a policy, deactivating a policy, or modifying a policy.

You can generate the Audit trails report through the reports tab. You can also create a custom SQL. For example, enter a query: SELECT * FROM audit_record on SQL query page.

See “Creating an OpsCenter report using a Report Template” on page 43.
See “Creating an OpsCenter report using SQL query” on page 366.

About Backup reports in OpsCenter

This section provides descriptions on all backup Report Templates available in OpsCenter.

You can view the reports for all NetBackup backup operations including job activity, deduplication rates, and overall backup status and success rates.

Deduplication > Deduplication Rates by Master Server
See “Deduplication > Deduplication Rates by Master Server” on page 49.

Deduplication > Deduplication Rates by Policy Type
See “Deduplication > Deduplication Rates by Policy Type” on page 51.

Deduplication > Deduplication Size Factor
See “Deduplication > Deduplication Size Factor” on page 53.

Deduplication > Pre vs. Post Deduplication Size
See “Deduplication > Pre vs. Post Deduplication Size report” on page 59.

Deduplication > Deduplication Size Savings
See “Deduplication > Deduplication Size Savings” on page 63.

Job Activity > Variance > About Throughput Variance report
See “Variance > Throughput Variance” on page 69.
<table>
<thead>
<tr>
<th>Report Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job Activity &gt; Variance &gt; About File Count</td>
<td>See “Job Activity &gt; Variance &gt; File Count Variance report” on page 71.</td>
</tr>
<tr>
<td>Job Activity &gt; Variance &gt; About Backup Duration Variance report</td>
<td>See “Job Activity &gt; Variance &gt; Backup Duration Variance report” on page 71.</td>
</tr>
<tr>
<td>Job Activity &gt; Variance &gt; About Backup Job Size Variance report</td>
<td>See “Job Activity &gt; Variance &gt; Backup Job Size Variance report” on page 71.</td>
</tr>
<tr>
<td>Job Activity &gt; Backup Window &gt; Job Count</td>
<td>See “Job Activity &gt; Backup Window &gt; Job Count report” on page 76.</td>
</tr>
<tr>
<td>Job Activity &gt; Backup Window &gt; Job Size</td>
<td>See “Job Activity &gt; Backup Window &gt; Job Size report” on page 79.</td>
</tr>
<tr>
<td>Job Activity &gt; Job Count</td>
<td>See “Job Activity &gt; Backup Window &gt; Job Count report” on page 76.</td>
</tr>
<tr>
<td>Job Activity &gt; Job Size</td>
<td>See “Job Activity &gt; Job Size” on page 86.</td>
</tr>
<tr>
<td>Job Activity &gt; Client Count &gt; Historical</td>
<td>See “Job Activity &gt; Client Count” on page 93.</td>
</tr>
<tr>
<td>Job Activity &gt; Job Duration &gt; Ranking</td>
<td>See “Job Activity &gt; Job Duration” on page 100.</td>
</tr>
<tr>
<td>Job Activity &gt; File Count</td>
<td>See “Job Activity &gt; File Count” on page 104.</td>
</tr>
<tr>
<td>Planning Activity &gt; Capacity Planning &gt; Forecasted Size</td>
<td>See “Planning Activity &gt; Capacity Planning &gt; Forecasted Size report” on page 117.</td>
</tr>
<tr>
<td>Planning Activity &gt; Capacity Planning &gt; Historical Size</td>
<td>See “Planning Activity &gt; Capacity Planning &gt; Historical Size report” on page 117.</td>
</tr>
<tr>
<td>Planning Activity &gt; Forecast &gt; Job Count</td>
<td>See “Planning Activity &gt; Forecast &gt; Job Count report” on page 118.</td>
</tr>
<tr>
<td>Planning Activity &gt; Forecast &gt; Job Size</td>
<td>See “Planning Activity &gt; Forecast &gt; Job Size” on page 118.</td>
</tr>
<tr>
<td>Planning Activity &gt; Scheduled Job &gt; Scheduled Job</td>
<td>See “Planning Activity &gt; Scheduled Job &gt; Scheduled Job report” on page 123.</td>
</tr>
<tr>
<td>Planning Activity &gt; Scheduled Job &gt; Job Count Scheduled Vs Actual</td>
<td>See “Planning Activity &gt; Scheduled Job &gt; Job Count Scheduled Vs Actual report” on page 124.</td>
</tr>
<tr>
<td>Report Template Description</td>
<td>Page</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>Planning Activity &gt; Scheduled Job &gt; Job Count within Backup Window</td>
<td>128</td>
</tr>
<tr>
<td>Planning Activity &gt; Scheduled Jobs &gt; Job Details Scheduled Vs Actual</td>
<td>130</td>
</tr>
<tr>
<td>Planning Activity &gt; Scheduled Job &gt; All Jobs</td>
<td>134</td>
</tr>
<tr>
<td>Planning Activity &gt; Stored Backup Images &gt; Valid Backup Images</td>
<td>134</td>
</tr>
<tr>
<td>Planning Activity &gt; Stored Backup Images &gt; Duplicate Copies</td>
<td>136</td>
</tr>
<tr>
<td>Planning Activity &gt; Stored Backup Images &gt; Historical</td>
<td>137</td>
</tr>
<tr>
<td>Status &amp; Success Rate &gt; Status &gt; Failed Job Count</td>
<td>144</td>
</tr>
<tr>
<td>Status &amp; Success Rate &gt; Status &gt; Partially Successful Job Count</td>
<td>148</td>
</tr>
<tr>
<td>Status &amp; Success Rate &gt; Status &gt; Successful Job Count</td>
<td>152</td>
</tr>
<tr>
<td>Status &amp; Success Rate &gt; Status &gt; All Failed Backups</td>
<td>156</td>
</tr>
<tr>
<td>Status &amp; Success Rate &gt; Status &gt; Consecutive Failures</td>
<td>156</td>
</tr>
<tr>
<td>Status &amp; Success Rate &gt; Status &gt; Week At A Glance</td>
<td>161</td>
</tr>
<tr>
<td>Status &amp; Success Rate &gt; Status &gt; Backup Window Failures</td>
<td>169</td>
</tr>
<tr>
<td>Status &amp; Success Rate &gt; Status &gt; Partially Successful Job Details</td>
<td>169</td>
</tr>
</tbody>
</table>
Deduplication > Deduplication Rates by Master Server

This report provides the deduplication rates for each NetBackup master server.

You can view the reports for NetBackup deduplication storage including deduplication rates and storage space saved.

The following are the details that are associated with the Deduplication Rates by Master Server report:

<table>
<thead>
<tr>
<th>Report Name</th>
<th>Deduplication Rates by Master Server</th>
</tr>
</thead>
</table>

See “Status & Success Rate > Status > Skipped Files Summary report” on page 169.

See “Status & Success Rate > Status > Job Exit Status Detail report” on page 170.

See “Status & Success Rate > Status > Job Details report” on page 174.

See “Status & Success Rate > Status > Job Summary by Status report” on page 174.

See “Status & Success Rate > Status > Job Status Historical report” on page 174.

See “Status & Success Rate > Status > Job Status Distribution report” on page 178.

See “Status & Success Rate > Success Rate – All Jobs report ” on page 181.

See “Status & Success Rate > Success Rate – Advanced Success Rate report” on page 185.

See “Status & Success Rate > Success Rate - All Attempts report” on page 188.

See “Status & Success Rate > Success Rate - First Attempt report” on page 192.

See “Status & Success Rate > Success Rate - Line report” on page 196.
Report Category | Deduplication
--- | ---
Where to Locate | Report > Report Templates > Backup > Deduplication > Deduplication Rates by Master Server
Report Purpose | Tabular report that shows deduplication rates for each NetBackup master server.
Supported products | Symantec NetBackup, Symantec PureDisk, and their Appliances
Applicable View | Master Server, Media Server
Report Display | Tabular
Drill down report | Yes.
Can be scheduled | Yes.
Supported formats | PDF, CSV, HTML, XML, TSV
Mapping with VBR report | All Reports > Standard Report > Backup > Deduplication > Deduplication Rates by Master Server

You can edit the Deduplication Rates by Master Server report to show or hide the columns that you are interested in. All the columns are shown by default. You can also filter the report to view reports of specific master servers. The following table shows the filters for Deduplication Rates by Master Server report and how you can use these filters to view specific data in the report.

<table>
<thead>
<tr>
<th>Filter</th>
<th>Column</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>View</td>
<td></td>
<td>Select a view to show data for the selected view in the report. By default <strong>All My Views</strong> is selected.</td>
</tr>
<tr>
<td>Master Server</td>
<td>Master Server</td>
<td>Select one or more master servers to view data for the clients that are backed up by the selected master servers in the report. All master servers that are added to the OpsCenter console are shown in the <strong>Value</strong> drop-down list.</td>
</tr>
<tr>
<td>Media Server</td>
<td>Media Server</td>
<td>Select one or more media servers to view data for the selected media servers in the report. All media servers that are added to the OpsCenter console are shown in the <strong>Value</strong> dropdown list.</td>
</tr>
</tbody>
</table>
### Deduplication Rates by Policy Type

This report provides the deduplication rates by NetBackup policy type.

The following are the details that are associated with the Deduplication Rates by Policy Type report:

<table>
<thead>
<tr>
<th>Filter</th>
<th>Column</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Client</td>
<td>Client Name</td>
<td>Select one or more clients to view data for the selected clients in the report. All clients that are protected by the master servers in the OpsCenter console are listed. Select one or more client OS to view data for the selected client OS in the report.</td>
</tr>
<tr>
<td></td>
<td>Client OS</td>
<td></td>
</tr>
<tr>
<td>Policy</td>
<td>Policy Name</td>
<td>Select one or more policy names to view data for the selected policies.</td>
</tr>
<tr>
<td></td>
<td>Policy Type</td>
<td>Select one or more policy types to view data for the selected policy types.</td>
</tr>
<tr>
<td></td>
<td>Policy Keyword</td>
<td>Select one or more policy keyword to view data for the policies having the selected keyword.</td>
</tr>
<tr>
<td></td>
<td>Policy Data Classification Name</td>
<td>Select one or more policy data classification names like Gold, Silver, Bronze etc. to view data for the policies having the selected data classification names.</td>
</tr>
<tr>
<td>Schedule</td>
<td>Schedule Level Type</td>
<td>Select one or more schedule or level types to view the data for the configured schedules.</td>
</tr>
<tr>
<td></td>
<td>Schedule Name</td>
<td>Select one or more schedule names to view data for the selected schedule names.</td>
</tr>
<tr>
<td>Job</td>
<td>Job Type</td>
<td>Select one or more job types as Archive, Backup, or Restore to view data for the selected job types. Select one or more backup products to view data for the selected products.</td>
</tr>
<tr>
<td></td>
<td>Product Type</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Job Transport Type</td>
<td>Select one or more transport types like FT, LAN, or Unknown to view data for the jobs that have the selected transport type. Select one or more job status like Failed, Successful etc. to view data for the selected job status.</td>
</tr>
<tr>
<td></td>
<td>Job Status</td>
<td></td>
</tr>
</tbody>
</table>

**Deduplication Rates by Policy Type**

This report provides the deduplication rates by NetBackup policy type.

The following are the details that are associated with the Deduplication Rates by Policy Type report:

<table>
<thead>
<tr>
<th>Report Name</th>
<th>Deduplication Rates by Policy Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Report Category</td>
<td>Deduplication</td>
</tr>
</tbody>
</table>
Where to Locate: Report > Report Templates > Backup > Deduplication > Deduplication Rates by Policy Type.

Report Purpose: Tabular report that shows deduplication rates for each NetBackup master server.

Supported products: Symantec NetBackup, Symantec PureDisk, and their Appliances

Applicable View: Master Server, Media Server

Report Display: Tabular

Drill down report: Yes.

Can be scheduled: Yes.

Supported formats: PDF, CSV, HTML, XML, TSV

Mapping with VBR report: All Reports > Standard Report > Backup > Deduplication > Deduplication Rates by Policy Type

You can edit the Deduplication Rates by Policy Type report to show or hide the columns that you are interested in. All the columns are shown by default. You can also filter the report to view reports of specific master servers. The following table shows the filters for Deduplication Rates by Policy Type report and how you can use these filters to view specific data in the report.

<table>
<thead>
<tr>
<th>Filter</th>
<th>Column</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>View</td>
<td></td>
<td>Select a view to show data for the selected view in the report. By default All My Views is selected.</td>
</tr>
<tr>
<td>Master</td>
<td>Master Server</td>
<td>Select one or more master servers to view data for the clients that are backed up by the selected master servers in the report. All master servers that are added to the OpsCenter console are shown in the Value drop-down list.</td>
</tr>
<tr>
<td>Media</td>
<td>Media Server</td>
<td>Select one or more media servers to view data for the selected media servers in the report. All media servers that are added to the OpsCenter console are shown in the Value dropdown list.</td>
</tr>
<tr>
<td>Client</td>
<td>Client Name Client OS</td>
<td>Select one or more clients to view data for the selected clients in the report. All clients that are protected by the master servers in the OpsCenter console are listed. Select one or more client OS to view data for the selected client OS in the report.</td>
</tr>
</tbody>
</table>
Deduplication > Deduplication Size Factor

This report is usually the most talked about when it comes to deduplication since it shows what the deduplication ratio is for each day over the last two weeks (the time frame is modifiable). The deduplication ratio is calculated by taking the total number of bytes that would normally be backed up and dividing it by the number of bytes that have changed and were backed up. So if 100TB exists on all the backups taking place but only 10TB were changed and therefore transferred, you have a rate of 10. This report shows only deduplication jobs. The default Report On parameter for this report is Master Server. This report is available in a line-chart format.

This report is available in historical and ranking views. The ranking report ranks the top hosts in terms of which ones have the best deduplication ratio in bytes. These hosts have the least amount of change and therefore you get the best benefit from deduplication.

Figure 2-1 shows a sample view of Deduplication Size Factor Report.
This deduplication report ranks the top hosts in terms of which ones have the best deduplication ratio in bytes. These hosts have the least amount of change and therefore you get the best benefit from deduplication.

**Figure 2-2** shows a sample view of Deduplication Size Factor Report.
The following are the details that are associated with the Deduplication Size Factor report:

- **Report Name**: Deduplication Size Factor
- **Report Category**: Deduplication
- **Report Purpose**: Historical trending report showing savings deduplication factors.
- **Supported products**: Symantec NetBackup, Symantec PureDisk, and their Appliances
- **Applicable View**: Master Server, Client
- **Report Display**: Historical, Ranking
Drill down report: Yes. Drill down reports can be viewed at following four levels depending on the selected parameter value. Level 1: Client Name, Level 2: Job Type, Level 3: Schedule/Level Type, Level 4: Policy Name

Can be scheduled: Yes.

Supported formats: PDF, CSV, HTML, XML, TSV

Mapping with VBR report: All Reports > Standard Report > Backup > Deduplication > Size Factor

You can edit the Deduplication Size Factor report to show or hide the columns that you are interested in. All the columns are shown by default. You can also filter the report to view reports of specific master servers. The following table shows the filters for Deduplication Size Factor report and how you can use these filters to view specific data in the report.

<table>
<thead>
<tr>
<th>Filter</th>
<th>Column</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>View</td>
<td>Select a view</td>
<td>Select a view to show data for the selected view in the report. By default</td>
</tr>
<tr>
<td>Master Server</td>
<td>Master Server</td>
<td>Select one or more master servers to view data for the clients that are</td>
</tr>
<tr>
<td>Media Server</td>
<td>Media Server</td>
<td>Select one or more media servers to view data for the selected media servers</td>
</tr>
<tr>
<td>Client</td>
<td>Client Name, Client OS</td>
<td>Select one or more clients to view data for the selected clients in the</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Select one or more client OS to view data for the selected client OS in the</td>
</tr>
</tbody>
</table>

You can also filter the report to view reports of specific master servers. The following table shows the filters for Deduplication Size Factor report and how you can use these filters to view specific data in the report.
<table>
<thead>
<tr>
<th>Filter</th>
<th>Column</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Policy</td>
<td>Policy Name</td>
<td>Select one or more policy names to view data for the selected policies.</td>
</tr>
<tr>
<td></td>
<td>Policy Type</td>
<td>Select one or more policy types to view data for the selected policy types.</td>
</tr>
<tr>
<td></td>
<td>Policy Keyword</td>
<td>Select one or more policy keyword to view data for the policies having the selected keyword.</td>
</tr>
<tr>
<td></td>
<td>Policy Data Classification</td>
<td>Select one or more policy data classification names like Gold, Silver, Bronze etc. to view data for the policies having the selected data classification names.</td>
</tr>
<tr>
<td>Schedule</td>
<td>Schedule/Level Type</td>
<td>Select one or more schedule or level types to view the data for the configured schedules.</td>
</tr>
<tr>
<td></td>
<td>Schedule Name</td>
<td>Select one or more schedule names to view data for the selected schedule names.</td>
</tr>
<tr>
<td>Job</td>
<td>Job Type</td>
<td>Select one or more job types as Archive, Backup, or Restore to view data for the selected job types.</td>
</tr>
<tr>
<td></td>
<td>Product Type</td>
<td>Select one or more backup products to view data for the selected products.</td>
</tr>
<tr>
<td></td>
<td>Job Transport Type</td>
<td>Select one or more transport types like FT, LAN, or Unknown to view data for the jobs that have the selected transport type.</td>
</tr>
<tr>
<td></td>
<td>Job Status</td>
<td>Select one or more job status like Failed, Successful etc. to view data for the selected job status.</td>
</tr>
</tbody>
</table>

**Example of filter usage:** You may run the Duplication Size Factor report for a specific client to view details for the specific clients.

**Report Enhancements:**

The following report enhancements have been made for the Duplication Size Factor report:

- Drill down reports for following four levels have been added.
  - Level 1: Client Name
  - Level 2: Job Type
  - Level 3: Schedule/Level Type
  - Level 4: Policy Name

- The report now shows trendlines with customized average periods with option: Show trendline with moving average period of 3. The value can be 1, 2, 3, 7, 14, or 30. The default value is 3. Example: 3 displays a trendline that, at each
interval, shows the average of the current data point and the two previous data points.

- The unit **Years** has been added for Relative Timeframe selection. You can now view data for the last x years.

- The option **Next** has been removed from the drop-down menu for Relative Timeframe. You now cannot enter a relative timeframe like Next 2 weeks. This is because the report does not support any futuristic data.

- The following options have been removed from **TimeFrameGroupBy** selection:
  - Days of week Average
  - Days of week total
  - Hours of day Average
  - Hours of day Total
  - Minutes
  - Month of year Average
  - Month of year total
  - Quarter of year Average
  - Quarter of year total

The following filter enhancements have been made for the Duplication Size Factor report:

- New columns Job Status (Complete Only) and Job Status(Complete and Partial Only) are added to the Report On parameter.

- **UNKNOWN** has been added as a value for Policy Type column in the Policy filter. You can now filter report data for policy types that are UNKNOWN.

- Job types which are not applicable for this report are removed from the filter. The supported job types are Backup, Archive, Restore, Catalog Backup, Backup from Snapshot, Snapshot, Duplicate, and Replication.

- The default selected value for Job Type column is changed to Backup.

- The default unit for Y1 axis is now GB.

- Value SAN is removed from the Job Transport Type filter.

**Known Issues:**

- Selecting **Report** on Storage Unit name in OpsCenter does not result in any data for Symantec PureDisk because Storage Unit is not present in PureDisk. In VBR, jobs data collected from PureDisk puts the storage unit name incorrectly as “SPA”.
As compared to VBR, the unit of data for Y axis/Y1 axis is one unit lower. For example: Unit GB in VBR matches up with unit MB in OpsCenter. OpsCenter shows the correct data.

**Deduplication > Pre vs. Post Deduplication Size report**

The Pre vs. Post Deduplication Size report gives the comparison between the total number of bytes that exist on all the backups as if they were normal full backups and the number of bytes that have changed and therefore needed to be transferred. This report shows only deduplication jobs. The default Report On parameter for this report is All Master Servers. This report is available in a line-chart format. Figure 2-3 shows a sample view of Pre vs. Post Deduplication Size Report.

![Pre vs. Post Deduplication Size Report](image)

The following are the details that are associated with the Deduplication Size Factor report:
Report Name: Pre vs. Post Deduplication Size report

Report Category: Deduplication


Report Purpose: Historical trending report of pre vs. post deduplication size.

Supported products: Symantec NetBackup, Symantec PureDisk, and their Appliances

Applicable View: Master Server, Client

Report Display: Historical

Drill down report: None

Can be scheduled: Yes

Supported formats: PDF, CSV, HTML, XML, TSV

Mapping with VBR report: All Reports > Standard Report > Backup > Deduplication > Protected size vs. Backed up size

You can edit the Pre vs. Post Deduplication Size report to show or hide the columns that you are interested in. All the columns are shown by default. You can also filter the report to view reports of specific master servers. The following table shows the filters for Pre vs. Post Deduplication Size report and how you can use these filters to view specific data in the report.

<table>
<thead>
<tr>
<th>Filter</th>
<th>Column</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>View</td>
<td>View</td>
<td>Select a view to show data for the selected view in the report. By default All My Views is selected.</td>
</tr>
<tr>
<td>Master Server</td>
<td>Master Server</td>
<td>Select one or more master servers to view data for the clients that are backed up by the selected master servers in the report. All master servers that are added to the OpsCenter console are shown in the Value drop-down list.</td>
</tr>
<tr>
<td>Media Server</td>
<td>Media Server</td>
<td>Select one or more media servers to view data for the selected media servers in the report. All media servers that are added to the OpsCenter console are shown in the Value dropdown list.</td>
</tr>
</tbody>
</table>
### Filter | Column | Description
--- | --- | ---
Client | Client Name | Select one or more clients to view data for the selected clients in the report. All clients that are protected by the master servers in the OpsCenter console are listed.
 | Client OS | Select one or more client OS to view data for the selected client OS in the report.
Policy | Policy Name | Select one or more policy names to view data for the selected policies.
 | Policy Type | Select one or more policy types to view data for the selected policy types.
 | Policy Keyword | Select one or more policy keyword to view data for the policies having the selected keyword.
 | Policy Data Classification Name | Select one or more policy data classification names like Gold, Silver, Bronze etc. to view data for the policies having the selected data classification names.
Schedule | Schedule Level Type | Select one or more schedule or level types to view the data for the configured schedules.
 | Schedule Name | Select one or more schedule names to view data for the selected schedule names.
Job | Job Type | Select one or more job types as Archive, Backup, or Restore to view data for the selected job types.
 | Product Type | Select one or more backup products to view data for the selected products.
 | Job Transport Type | Select one or more transport types like FT, LAN, or Unknown to view data for the jobs that have the selected transport type.
 | Job Status | Select one or more job status like Failed, Successful etc. to view data for the selected job status.

**Example of filter usage:** You may run the Pre vs. Post Deduplication Size report for a specific client to view details for the specific clients.

The following report enhancements have been made for the Pre vs. Post Deduplication Size report:

- The option **Next** has been removed from the drop-down menu for Relative Timeframe. You now cannot enter a relative timeframe like Next 2 weeks. This is because the report does not support any futuristic data.
- The unit **Years** has been added for Relative Timeframe selection. You can now view data for the last X years. You can also select Year from the top-right corner of the report
Drill down reports for following four levels have been added in OpsCenter.

- Level 1: Client Name
- Level 2: Job Type
- Level 3: Schedule/Level Type
- Level 4: Policy Name

The following options have been removed from **TimeFrameGroupBy** selection:

- Days of week Average
- Days of week total
- Hours of day Average
- Hours of day Total
- Minutes
- Month of year Average
- Month of year total
- Quarter of year Average
- Quarter of year total

The following filter enhancements have been made for the Pre vs. Post Duplication Size report:

- New columns Job Status (Complete Only) and Job Status(Complete and Partial Only) are added to the Report On parameter.

**UNKNOWN** has been added as a value for Policy Type column in the Policy filter. You can now filter report data for policy types that are UNKNOWN.

- Job types which are not applicable for this report are removed from the filter. The supported job types are Backup, Archive, Restore, Catalog Backup, Backup from Snapshot, Snapshot, Duplicate, and Replication.

- The default selected value for Job Type column is changed to Backup.

- The default value of Report On is **None**.

- Value SAN is removed from the Job Transport Type filter.

**Known Issues:**

- Selecting **Report** on Storage Unit name in OpsCenter does not result in any data for Symantec PureDisk because Storage Unit is not present in PureDisk. In VBR, jobs data collected from PureDisk puts the storage unit name incorrectly as “SPA”.
As compared to VBR, the unit of data for Y axis/Y1 axis is one unit lower. For example: Unit GB in VBR matches up with unit MB in OpsCenter. OpsCenter shows the correct data.

Deduplication > Deduplication Size Savings

Most NetBackup customers have either implemented some sort of deduplication or plan to in the near future. This is the current trend as customers try to get control of infrastructure and the amount of time backups take. Add to this the need for many customers to protect remote offices across smaller WAN links and deduplication becomes critical since only so much data can be pushed through a small pipe and many times there is no one at the remote site who is capable of managing hardware. In the data center, deduplication reporting helps to determine what the actual deduplication rate is occurring at each PureDisk storage unit. Reporting can be abstracted to view the protected size or stored size across all PureDisk environments or drilled down in to one specific area. Common file or data types can then be identified and matched with their ability to be deduplicated. The report below is a simple dedupe report created using a Media Server Deduplication Pool. It is a very basic report and shows how much data would have been backed up without deduplication enabled. In large environments this would show the number of GB or TB that is NOT being used due to deduplication. The other reports can contrast the dedupe data savings vs. the actual deduped information however in this very small test environment this report shows better information. OpsCenter and OpsCenter Analytics provide the ability to report on the various forms of deduplication available with NetBackup. It can provide reports that show things such as how much deduplication is being done at a remote site before the data hits the WAN pipe. Using the trending feature of Opscenter Analytics can also help to understand if the data is growing faster than the hardware or when the WAN bandwidth can be expected to max out. This allows the company to make educated decisions on when to add infrastructure proactively instead of waiting for things to fail. This report shows the total number of bytes that do not need to be backed up because of deduplication. There is no calculation or ratio in this number. It is the number of bytes (MB, GB, TB etc.) that have not changed since the last backup and therefore do not need to be backed up. This report shows only deduplication jobs. The default Report On parameter for this report is Master Server. This report is available in Historical, and Ranking views. The ranking report groups the total number of bytes saved per host being backed up to show the top five hosts in terms of deduplication savings.

The historical report shows the total number of bytes that do not need to be backed up because of deduplication. There is no calculation or ratio in this number. It is the number of bytes (MB, GB, TB etc.) that have not changed since the last backup and therefore do not need to be backed up. This report shows only deduplication jobs. The default Report On parameter for this report is Master Server
**Figure 2-4** shows a sample view of Deduplication Size Savings Report.

The ranking report shows the number of bytes that have not changed within the time frame and therefore do not have to be backed up due to deduplication. The report groups the total number of bytes saved per host being backed up to show the top five hosts in terms of deduplication savings. This report shows only deduplication jobs. The default Report On parameter for this report is Master Server.

**Figure 2-5** shows a sample view of Deduplication Size Savings Report.
The following are the details that are associated with the Deduplication Size Savings report:

- **Report Name**: Deduplication Size Savings
- **Report Category**: Deduplication
- **Report Purpose**: Historical trending report showing savings in storage due to deduplication.
- **Supported products**: Symantec NetBackup, Symantec PureDisk, and their Appliances
- **Applicable View**: Master Server, Client
- **Report Display**: Historical, Ranking
Drill down report: Yes. Drill down reports can be viewed at following four levels depending on the selected parameter value. Level 1: Client Name, Level 2: Job Type, Level 3: Schedule/Level Type, Level 4: Policy Name.

Can be scheduled: Yes.

Supported formats: PDF, CSV, HTML, XML, TSV.


You can edit the Deduplication Size Savings report to show or hide the columns that you are interested in. All the columns are shown by default. You can also filter the report to view reports of specific master servers. The following table shows the filters for Deduplication Size Savings report and how you can use these filters to view specific data in the report.

<table>
<thead>
<tr>
<th>Filter</th>
<th>Column</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>View</td>
<td></td>
<td>Select a view to show data for the selected view in the report. By default All My Views is selected.</td>
</tr>
<tr>
<td>Master Server</td>
<td>Master Server</td>
<td>Select one or more master servers to view data for the clients that are backed up by the selected master servers in the report. All master servers that are added to the OpsCenter console are shown in the Value drop-down list.</td>
</tr>
<tr>
<td>Media Server</td>
<td>Media Server</td>
<td>Select one or more media servers to view data for the selected media servers in the report. All media servers that are added to the OpsCenter console are shown in the Value dropdown list.</td>
</tr>
<tr>
<td>Client</td>
<td>Client Name</td>
<td>Select one or more clients to view data for the selected clients in the report. All clients that are protected by the master servers in the OpsCenter console are listed. Select one or more client OS to view data for the selected client OS in the report.</td>
</tr>
</tbody>
</table>
### Filter

<table>
<thead>
<tr>
<th>Column</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Policy Name</td>
<td>Select one or more policy names to view data for the selected policies.</td>
</tr>
<tr>
<td>Policy Type</td>
<td>Select one or more policy types to view data for the selected policy types.</td>
</tr>
<tr>
<td>Policy Keyword</td>
<td>Select one or more policy keyword to view data for the policies having the selected keyword.</td>
</tr>
<tr>
<td>Policy Data Classification</td>
<td>Select one or more policy data classification names like Gold, Silver, Bronze etc. to view data for the policies having the selected data classification names.</td>
</tr>
<tr>
<td>Schedule Type</td>
<td>Select one or more schedule or level types to view the data for the configured schedules.</td>
</tr>
<tr>
<td>Schedule Name</td>
<td>Select one or more schedule names to view data for the selected schedule names.</td>
</tr>
<tr>
<td>Job Type</td>
<td>Select one or more job types as Archive, Backup, or Restore to view data for the selected job types.</td>
</tr>
<tr>
<td>Product Type</td>
<td>Select one or more backup products to view data for the selected products.</td>
</tr>
<tr>
<td>Job Transport Type</td>
<td>Select one or more transport types like FT, LAN, or Unknown to view data for the jobs that have the selected transport type.</td>
</tr>
<tr>
<td>Job Status</td>
<td>Select one or more job status like Failed, Successful etc. to view data for the selected job status.</td>
</tr>
</tbody>
</table>

### Example of filter usage: You may run the Duplication Size Savings report for a specific client to view details for the specific clients

The following report enhancements have been made for the Duplication Size Savings report:

- Drill down reports for following four levels have been added.
  - Level 1: Client Name
  - Level 2: Job Type
  - Level 3: Schedule/Level Type
  - Level 4: Policy Name

- The report now shows trendlines with customized average periods with option: Show trendline with moving average period of 3. The value can be 1, 2, 3, 7, 14, or 30. The default value is 3. Example: 3 displays a trendline that, at each
interval, shows the average of the current data point and the two previous data points.

- The unit **Years** has been added for Relative Timeframe selection. You can now view data for the last x years.

- The option **Next** has been removed from the drop-down menu for Relative Timeframe. You now cannot enter a relative timeframe like Next 2 weeks. This is because the report does not support any futuristic data.

- The following options have been removed from **TimeFrameGroupBy** selection:
  - Days of week Average
  - Days of week total
  - Hours of day Average
  - Hours of day Total
  - Minutes
  - Month of year Average
  - Month of year total
  - Quarter of year Average
  - Quarter of year total

The following filter enhancements have been made for the Duplication Size Savings report:

- New columns Job Status (Complete Only) and Job Status(Complete and Partial Only) are added to the Report On parameter.

- **UNKNOWN** has been added as a value for Policy Type column in the Policy filter. You can now filter report data for policy types that are UNKNOWN.

- Job types which are not applicable for this report are removed from the filter. The supported job types are Backup, Archive, Restore, Catalog Backup, Backup from Snapshot, Snapshot, Duplicate, and Replication.

- The default selected value for Job Type column is changed to Backup.

- The default unit for Y1 axis is now GB.

- Value SAN is removed from the Job Transport Type filter.

**Known Issues:**

- Selecting **Report** on Storage Unit name in OpsCenter does not result in any data for Symantec PureDisk because Storage Unit is not present in PureDisk. In VBR, jobs data collected from PureDisk puts the storage unit name incorrectly as “SPA”.
As compared to VBR, the unit of data for Y axis/Y1 axis is one unit lower. For example: Unit GB in VBR matches up with unit MB in OpsCenter. OpsCenter shows the correct data.

**Variance > Throughput Variance**

This report shows client or policy level details on backup job throughput variations between last full backup and recent averages.

*Figure 2-6* shows a sample view of Throughput Variance Report.

*Figure 2-6*  Throughput Variance Report

The following are the details that are associated with the *Throughput Variance* report:

<table>
<thead>
<tr>
<th>Report Name</th>
<th>Throughput Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Report Category</td>
<td>Backup</td>
</tr>
<tr>
<td>Where to Locate</td>
<td>All Reports &gt; Report Templates &gt; Backup &gt; Job Activity &gt; Variance &gt; Throughput Variance report.</td>
</tr>
<tr>
<td>Report Purpose</td>
<td>Client/Policy level detail on backup job throughput variations between last full backup and recent averages.</td>
</tr>
</tbody>
</table>
Symantec NetBackup, Symantec NetBackup Master Appliance, Symantec Backup Exec, Symantec NetBackup PureDisk

Applicable View Master Server, Client

Report Display Tabular

Drill down report Yes. See Client Backup Details.

Can be scheduled Yes

Supported formats PDF, CSV, TSV, XML, HTML

Mapping with NOM report All Reports > Standard Reports > Jobs > Throughput Variance

You can edit the Throughput Variance report to show or hide the columns that you are interested in. All the columns are shown by default. You can also filter the report to view reports of specific master servers. The following table shows the filters for Throughput Variance report and how you can use these filters to view specific data in the report.

<table>
<thead>
<tr>
<th>Filter</th>
<th>Column</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>View</td>
<td></td>
<td>Select a view to show data for the selected view in the report. By default All My Views is selected.</td>
</tr>
<tr>
<td>Master</td>
<td>Master Server</td>
<td>Select one or more master servers to view data for the clients that are backed up by the selected master servers in the report. All master servers that are added to the OpsCenter console are shown in the Value drop-down list.</td>
</tr>
<tr>
<td>Percentage</td>
<td>Percentage</td>
<td>Select an appropriate value of variance percentage. By default, all the variance percentages that are greater than 1 are displayed in the Variance (%) column in the report.</td>
</tr>
</tbody>
</table>

Example of filter usage: You may run the Throughput Variance report for a specific master server to view details only for the specific master server.

The following report enhancements have been made for the Job Duration report:

- The unit Years has been added for Relative Timeframe selection. You can now view data for the last x years.
- The default Relative Timeframe for this report was 28 days now it is changes to Previous 14 days.
Job Activity > Variance > File Count Variance report

You can view the detailed reports for NetBackup job activity statistics including file, job, size, Clients, and job duration.

From Job Activity > Variance you can view the reports on NetBackup operational ranges to identify statistical variances in backup sizes, throughputs, duration, and file counts.

The Job Activity > Variance > File Count Variance report lets you investigate why a particular full backup is different than usual. For example, a file server backup is successful, but contains fewer files than usual for a full backup.

The report shows NetBackup jobs with significant differences in file counts from the average count for a master server, policy, and schedule.

If any variation calculation is greater than the selected value of variance when the report is run, the server, client, policy, and schedule type combination is shown with the actual file count variation. The table provides the percent variance (in file counts) for each good job from the average for that server, policy, and schedule.

The Client Name column of the report provides a drilldown link to back up job details for the specified time frame.

Job Activity > Variance > Backup Duration Variance report

This report provides an indication of how backup time varies from the average backup time. You can detect any anomalies if the variation is too high.

This report calculates the backup time variation of the last good backup with the average backup time per client, policy, and schedule type. If any variation calculation is greater than the selected value of variance when the report is run, the client, policy, and schedule type combination is shown with the actual variation.

About client jobs for selected time frame report

This drilldown report from the Client Name column provides detailed job information for the client for the selected time frame.

This drilldown report uses the run time parameters that are passed from the main report.

Job Activity > Variance > Backup Job Size Variance report

This report provides an indication of how a backup size varies from the average size. You can detect any anomalies if the variation is too high.

This report calculates the backup size variation of the last good backup with the average backup size per a client, policy, and schedule type. If any variation
calculation is greater than the selected value of variance when the report is run, the client, policy and schedule type combination is shown with the actual variation.

Size variance is calculated using the following formula: (the last backup size - the average backup size) / the average backup size x 100.

Consider the following points before running a Backup Job Size Variance report:

■ This report considers only full schedules.

■ This report does not consider deduplication jobs.

■ This report does not consider failed jobs. The report considers jobs with status code like 0, 1 etc.

■ If you ran multiple jobs for the same client in the given time frame like 10 jobs per the master server, client, policy, and schedule combination then the report calculates the difference between the last job and the average of the remaining 9 jobs.

■ In case of multi-stream jobs, the report considers each stream as a different job.

The Client Name column of the report provides a drilldown link to back up job details for the specified time frame.

Figure 2-7 shows a sample view of the Backup Job Size Variance report.

The following are the details that are associated with the Backup Job Size Variance report:

<table>
<thead>
<tr>
<th>Report Name</th>
<th>Backup Job Size Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Report Category</td>
<td>Backup</td>
</tr>
</tbody>
</table>
Where to Locate  
Report > Report Templates > Backup > Job Activity > Variance > Backup Job Size Variance

Report Purpose  
This report shows job size variance.

Supported products  
Symantec Backup Exec, Symantec NetBackup, Symantec NetBackup Master Appliance, Symantec NetBackup PureDisk

Applicable View  
Master Server

Report Display  
Tabular

Drill down report  
Yes

See “Client backup jobs” on page 74.

Can be scheduled  
Yes

Supported formats  
PDF, CSV, TSV, XML, HTML

Mapping with NOM report  
Reporting > All Reports > Standard Reports > Jobs > Backup Job Size Variance

The following table lists the filters for Backup Job Size Variance report and how you can use these filters to view specific data in the report.

<table>
<thead>
<tr>
<th>Filter</th>
<th>Column</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>View</td>
<td></td>
<td>Select a view to show data for the selected view in the report. By default All My Views is selected.</td>
</tr>
<tr>
<td>Master Server</td>
<td>Master Server</td>
<td>Select one or more master servers to view data for the selected master servers in the report. All master servers that are added to the OpsCenter console are shown in the Value drop-down list.</td>
</tr>
<tr>
<td>Percentage</td>
<td>Percentage</td>
<td>Select an appropriate value of variance percentage. By default, all the variance percentages that are greater than 1 are displayed in the Variance (%) column in the report.</td>
</tr>
</tbody>
</table>

**Example of filter usage:** You may run the Backup Job Size Variance report for a specific master server to view details only for the specific master server.

The following report enhancements have been made for the Backup Job Size Variance report:

- The unit **Years** has been added for Relative Timeframe selection. You can now view data for the last x years.
- The option **Next** has been removed from the drop-down menu for Relative Timeframe. You now cannot enter a relative timeframe like Next 2 weeks. This is because the report does not support any futuristic data.

**Client backup jobs**

The **Client Backup Jobs** report shows details of the jobs run for a selected client. This tabular report shows information like Job ID, Policy Name, Schedule Name, Status Code, Number of files, Throughput (KB/Sec) etc.

**Figure 2-8** shows a sample view of the **Client Backup Jobs** report.

**Figure 2-8**  
Client backup jobs report

The following are the details that are associated with the **Client Backup Jobs** report:

<table>
<thead>
<tr>
<th>Report Name</th>
<th>Client backup jobs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Report Category</td>
<td>Backup</td>
</tr>
<tr>
<td>Where to Locate</td>
<td>Report &gt; Report Templates &gt; Backup &gt; Job Activity &gt; Variance &gt; Backup Job Size Variance (drill down on Client Name) &gt; Client backup jobs</td>
</tr>
<tr>
<td>Report Purpose</td>
<td>This report shows details of the jobs run for a selected client.</td>
</tr>
</tbody>
</table>
Supported products  Symantec NetBackup, Symantec NetBackup Master Appliance
Applicable View Master Server
Report Display Tabular
Drill down report No
Can be scheduled Yes
Supported formats PDF, CSV, TSV, XML, HTML
Mapping with NOM report Reporting > All Reports > Standard Reports > Jobs > Backup Job Size Variance > Client Backup Job

The following table shows the filters for Client Backup Jobs report and how you can use these filters to view specific data in the report.

<table>
<thead>
<tr>
<th>Filter</th>
<th>Column</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>View</td>
<td></td>
<td>Select a view to show data for the selected view in the report. By default All My Views is selected.</td>
</tr>
<tr>
<td>Master Server</td>
<td>Master Server</td>
<td>Select one or more master servers to view data for the virtual clients that are backed up by the selected master servers in the report. All master servers that are added to the OpsCenter console are shown in the Value drop-down list.</td>
</tr>
<tr>
<td>Client</td>
<td>Client is Active</td>
<td>Select Yes to view only Active Clients or No to view all the clients in the report. By default, only Active Clients are shown in the report.</td>
</tr>
<tr>
<td></td>
<td>Client Name</td>
<td>Select one or more clients to view data for the selected clients in the report. All clients that are protected by the master servers in the OpsCenter console are listed.</td>
</tr>
</tbody>
</table>

**Example of filter usage:** You may run the Client Backup Jobs report for more than one master server. Select Master Server and then select specific master servers to view details for all the clients.

The following report enhancements have been made for the Backup Job Size Variance report:

- The unit **Years** has been added for Relative Timeframe selection. You can now view data for the last x years.
- The option **Next** has been removed from the drop-down menu for Relative Timeframe. You now cannot enter a relative timeframe like Next 2 weeks. This is because the report does not support any futuristic data.
Job Activity > Backup Window > Job Count report

The Job Activity > Backup Window provides the reports on NetBackup backup window statistics including the number of jobs, job size, and file counts.

The Job Activity > Backup Window > Job Count report shows the total number backup jobs in the last two weeks shown by the hour of the day in which each job ends. It also renders a configurable backup window to help quickly identify if a lot of jobs end in or outside of what your backup window is or should be. The report can help you see if there are any hours within the backup window that are under used and whether any load balancing is appropriate.

Figure 2-9 shows a sample view of the Job Count report.

Figure 2-9 Job Count report

The following are the details that are associated with the Job Count report:

<table>
<thead>
<tr>
<th>Report Name</th>
<th>Job Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Report Category</td>
<td>Backup</td>
</tr>
<tr>
<td>Where to Locate</td>
<td>Report &gt; Report Templates &gt; Backup &gt; Job Activity &gt; Backup Window &gt; Job Count</td>
</tr>
<tr>
<td>Report Purpose</td>
<td>This report shows job count by hour of day in which job ends.</td>
</tr>
<tr>
<td>Supported products</td>
<td>Symantec Backup Exec, Symantec NetBackup, Symantec NetBackup Master Appliance, Symantec NetBackup PureDisk</td>
</tr>
<tr>
<td>Applicable View</td>
<td>Master Server, Client</td>
</tr>
</tbody>
</table>
Historical (Chart) Report Display

Drill down report: No

Can be scheduled: Yes

Supported formats: PDF, CSV, TSV, XML, HTML

Mapping with VBR report: Backups->Activity Planning->Backup Window->Job Count

Deviation from VBR: In OpsCenter, the Job Count report does not include the jobs that were collected during the image data collection. These jobs are called Sparse Jobs. This is unlike the Job Count report in VBR, which also included Sparse Jobs. Because of this change, you may notice a mismatch between the job count on the OpsCenter report and the corresponding VBR report.

The following table shows the filters for Job Count report and how you can use these filters to view specific data in the report.

<table>
<thead>
<tr>
<th>Filter</th>
<th>Column</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>View</td>
<td></td>
<td>Select a view to show data for the selected view in the report. By default <strong>All My Views</strong> is selected.</td>
</tr>
<tr>
<td>Master Server</td>
<td>Master Server</td>
<td>Select one or more master servers to view data for the selected master servers in the report. All master servers that are added to the OpsCenter console are shown in the <strong>Value</strong> drop-down list.</td>
</tr>
<tr>
<td>Media server</td>
<td>Media server</td>
<td>Select one or more media servers to view data for the specific media servers in the report. All media servers that are attached to the master servers in the OpsCenter console are shown in the <strong>Value</strong> drop-down list.</td>
</tr>
<tr>
<td>Client</td>
<td>Client Name Client OS</td>
<td>Select one or more clients to view data for the selected clients in the report. All clients that are protected by the master servers in the OpsCenter console are listed. Select one or more client OS to view data for the selected client OS in the report.</td>
</tr>
<tr>
<td>Filter</td>
<td>Column</td>
<td>Description</td>
</tr>
<tr>
<td>--------------</td>
<td>---------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Policy</td>
<td>Policy Data Classification Name</td>
<td>Select one or more policy data classification names to view data for the selected policy data classification names.</td>
</tr>
<tr>
<td>Policy</td>
<td>Policy Keyword</td>
<td>Select one or more policy keyword to view data for the policies having the selected keyword.</td>
</tr>
<tr>
<td>Policy</td>
<td>Policy Name</td>
<td>Select one or more policy names to view data for the selected policies.</td>
</tr>
<tr>
<td>Policy</td>
<td>Policy Type</td>
<td>Select one or more policy types to view data for the selected policy types.</td>
</tr>
<tr>
<td>Schedule</td>
<td>Schedule Level Type</td>
<td>Select one or more schedule types like CINC, Copy, Daily etc. to view data for the selected schedule types.</td>
</tr>
<tr>
<td>Schedule</td>
<td>Schedule Name</td>
<td>Select one or more schedule names to view data for the selected schedule names.</td>
</tr>
<tr>
<td>Job</td>
<td>Job Status</td>
<td>Select one or more job status like Failed, Successful etc. to view data for the selected job status.</td>
</tr>
<tr>
<td>Job</td>
<td>Job Transport Type</td>
<td>Select one or more transport types like FT, LAN, or Unknown to view data for the jobs that have the selected transport type.</td>
</tr>
<tr>
<td>Job</td>
<td>Job Type</td>
<td>Select one or more job types like Archive, Backup, Restore etc. to view data for the selected job types.</td>
</tr>
<tr>
<td>Job</td>
<td>Product Type</td>
<td>Select one or more backup products to view data for the selected products.</td>
</tr>
<tr>
<td>Attempt</td>
<td>Attempt Status</td>
<td>The <strong>Attempt Status</strong> column can have two values i.e. Attempt or Job. When Job Count is calculated, the report considers all attempts if <strong>Attempt</strong> is selected. By default, <strong>Job</strong> is selected. Number of attempts are not considered when <strong>Job</strong> is selected.</td>
</tr>
</tbody>
</table>

**Example of filter usage:** You may run the Job Count report for a specific policy to view job counts for the specific policy. Further if you are interested in knowing about the job counts for specific products, you can use the **Job** filter and under **Product Type** column, select **Backup Exec**.

The following report enhancements have been made for the Job Count report:

- The unit **Years** has been added for Relative Timeframe selection. You can now view data for the last x years.
- The option **Next** has been removed from the drop-down menu for Relative Timeframe. You now cannot enter a relative timeframe like Next 2 weeks. This is because the report does not support any futuristic data.
The following Report On options have been added under Backup Job Attributes:

- Job Status (Complete and Partial only)
- Job Status (Complete only)

The Schedule Name column is added under the Schedule filter to filter data by schedule name.

UNKNOWN has been added as a value for Policy Type column in the Policy filter. You can now filter report data for policy types that are unknown. In earlier versions of OpsCenter the unknown policy types were shown as blank. Now all static columns like job type, schedule type, policy type, etc. are shown as UNKNOWN like in VBR.

Job Activity > Backup Window > Job Size report

This report shows the total gigabytes backed up in the last two weeks shown by the hour of the day in which each job ends. It also renders a configurable backup window to help quickly identify if a lot of jobs end in or outside of what your backup window is or should be. The report can help you see if there are any hours within the backup window that are under used and whether any load balancing is appropriate.

Job Activity > Backup Window > File Count report

This report shows the number of files that were backed up for each hour of the day. The height of each bar on the graph represents the total number of files that are backed up for that hour across the entire date range selected. A user defined backup window is drawn in yellow for example to compare with what hours the files should have been backed up in. Bars outside of the yellow window represent the activity that occurred outside of the backup window. The report can also be used to see what hours may have capacity to add more backups while still remaining in the backup window.

Job Activity > Job Count

This report provides as a summary of backup job counts across products, domains, clients, policies and business level views. There are three display options to see this report. Historical report view shows the total amount of time spent while doing backups each day for the past two weeks.

Figure 2-10 shows a sample view of Job Count Report.
Ranking view shows the top ten environments by ranking total number of jobs performed by each media server during the last two weeks.

Figure 2-11 shows a sample view of Job Count Report.
Figure 2-11  
Job Count Report (Ranking)

Distribution view gives a breakdown of number of jobs performed by each media server and provides information if any type of load balancing is beneficial.

Figure 2-12 shows a sample view of Job Count Report.
You can view historical, ranking and distribution report types in tabular format. Figure 2-13 shows a sample view of Job Count Report.
The following are the details that are associated with the Job Count report:

- **Report Name**: Job Count
- **Report Category**: Backup
- **Where to Locate**: All Reports > Report Templates > Backup > Job Activity > Job Count report.
- **Report Purpose**: Customizable report that shows total number of unique clients backed up per day for the last two weeks, by each master server.
- **Supported products**: Symantec NetBackup, Symantec NetBackup Master Appliance, Symantec Backup Exec, Symantec NetBackup PureDisk
- **Applicable View**: Master Server, Client
- **Report Display**: Historical, Ranking, Distribution
Drill down report: Yes

You can view drill down reports for the selected parameter value. These reports are available for NetBackup and NetBackup appliance.

Example: For ranking type of report, you can view four levels of drill down reports: Level 1: Client Name, Level 2: Job Type, Level 3: Schedule/Level Type, Level 4: Policy Name

Can be scheduled: Yes

Supported formats: PDF, CSV, TSV, XML, HTML

Mapping with VBR report: All Reports > Standard Reports > Backup > Activity Planning > Job Count

You can edit the Job Count report to show or hide the columns that you are interested in. All the columns are shown by default. You can also filter the report to view reports of specific master servers. The following table shows the filters for Job Count report and how you can use these filters to view specific data in the report.

<table>
<thead>
<tr>
<th>Filter</th>
<th>Column</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>View</td>
<td></td>
<td>Select a view to show data for the selected view in the report. By default All My Views is selected.</td>
</tr>
<tr>
<td>Master Server</td>
<td>Master Server</td>
<td>Select one or more master servers to view data for the selected master servers in the report. All master servers that are added to the OpsCenter console are shown in the Value drop-down list.</td>
</tr>
<tr>
<td>Media Server</td>
<td>Media Server</td>
<td>Select one or more media servers to view data for the selected media servers in the report. All media servers that are added to the OpsCenter console are shown in the Value dropdown list.</td>
</tr>
<tr>
<td>Client</td>
<td>Client Name</td>
<td>Select one or more clients to view data for the selected clients in the report. All clients that are protected by the master servers in the OpsCenter console are listed.</td>
</tr>
<tr>
<td></td>
<td>Client OS</td>
<td>Select one or more client OS to view data for the selected client OS in the report.</td>
</tr>
</tbody>
</table>
**Filter** | **Column** | **Description**
--- | --- | ---
Policy | Policy Name | Select one or more policy names to view data for the selected policies.
Policy Type | Policy Type | Select one or more policy types to view data for the selected policy types.
Policy Type | Policy Keyword | Select one or more policy keyword to view data for the policies having the selected keyword.
Policy Type | Policy Data Classification Name | Select one or more policy data classification names like Gold, Silver, Bronze etc. to view data for the policies having the selected data classification names.
Schedule/Level Type | Schedule/Level Type | Select one or more schedule or level types to view the data for the configured schedules.
Schedule Name | Schedule Name | Select one or more schedule names to view data for the selected schedule names.
Job | Job Type | Select one or more job types as Archive, Backup, or Restore to view data for the selected job types.
Job | Product Type | Select one or more backup products to view data for the selected products.
Job | Job Transport Type | Select one or more transport types like FT, LAN, or Unknown to view data for the jobs that have the selected transport type.
Job | Job Status | Select one or more job status like Failed, Successful etc. to view data for the selected job status.
Attempt | Attempt Status | The Attempt Status filter can have two values i.e. Attempt or Job. When Job Count is calculated, the report considers all attempts if Attempt is selected.

**Example of filter usage:** To view a count of all job attempts in the Job Count report, select Attempt Status as Attempt.

The following report enhancements have been made for the Job Count report:

- The unit **Years** has been added for Relative Timeframe selection. You can now view data for the last x years.

- The option **Next** has been removed from the drop-down menu for Relative Timeframe. You now cannot enter a relative timeframe like Next 2 weeks. This is because the report does not support any futuristic data.

The following filter enhancements have been made for the Job Count report:

- **UNKNOWN** has been added as a value for **Policy Type** column in the Policy filter. You can now filter report data for policy types that are UNKNOWN. In
earlier versions of OpsCenter the unknown policy types were shown as blank. Now all static columns like job type, schedule type, policy type, etc. are shown as UNKNOWN as in VBR.

- **Job Transport Type** column has been added to the Job filter. For example, you can view report data for jobs for which the Job transport type is **FT** or **LAN**.

**Job Activity > Job Size**

This report provides as a summary of backup job sizes across products, domains, clients, policies and business level views. There are three display options to see this report. Historical report view shows the total megabytes backed up each day during the last two weeks.

**Figure 2-14** shows a sample view of Job Size Report.
Figure 2-14  Job Size Report (Historical)

Ranking view shows the top 10 backup client ranking them on total megabytes backed up for that client for last two weeks. The report provides an overview of top consumers and whether those consumers are the expected ones.

Figure 2-15 shows a sample view of Job Size Report.
Distribution view gives a breakdown view about total megabytes they have been backed up in the last two week, for each media server. It shows a clear distribution of amount of data going to all the media servers and provides inputs if any type of load balancing is beneficial.

Figure 2-16 shows a sample view of Job SizeReport.
You can view historical, ranking and distribution report types in tabular format.  

Figure 2-17 shows a sample view of Job Size Report.
The following are the details that are associated with the **Job Size** report:

<table>
<thead>
<tr>
<th>Report Name</th>
<th>Job Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Report Category</td>
<td>Backup</td>
</tr>
<tr>
<td>Where to Locate</td>
<td>All Reports &gt; Report Templates &gt; Backup &gt; Job Activity &gt; Job Size report</td>
</tr>
<tr>
<td>Report Purpose</td>
<td>Customizable report about the total megabytes backed up for each day during the last two weeks.</td>
</tr>
<tr>
<td>Supported products</td>
<td>Symantec NetBackup, Symantec NetBackup Master Appliance, Symantec Backup Exec, Symantec NetBackup PureDisk</td>
</tr>
<tr>
<td>Applicable View</td>
<td>Master Server, Client</td>
</tr>
<tr>
<td>Report Display</td>
<td>Historical, Ranking, Distribution</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Client Name</th>
<th>Job Size (MB)</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>nbur420-60.engba.symantec.com</td>
<td>10,062,729.47</td>
<td>15.67%</td>
</tr>
<tr>
<td>nbur420-62.engba.symantec.com</td>
<td>9,972,215.41</td>
<td>15.52%</td>
</tr>
<tr>
<td>nbur420-61.engba.symantec.com</td>
<td>9,862,948.72</td>
<td>15.35%</td>
</tr>
<tr>
<td>nbur420-09.engba.symantec.com</td>
<td>8,545,486.47</td>
<td>13.3%</td>
</tr>
<tr>
<td>nbur420-51.engba.symantec.com</td>
<td>2,846,157.38</td>
<td>4.43%</td>
</tr>
<tr>
<td>apphpb6b7.engba.symantec.com</td>
<td>2,595,031.08</td>
<td>4.04%</td>
</tr>
<tr>
<td>apphpb6b3.engba.symantec.com</td>
<td>2,587,330.4</td>
<td>4.03%</td>
</tr>
<tr>
<td>apphpb6b2.engba.symantec.com</td>
<td>2,568,453.33</td>
<td>4%</td>
</tr>
<tr>
<td>apphpb6b8.engba.symantec.com</td>
<td>2,510,457.72</td>
<td>3.91%</td>
</tr>
<tr>
<td>nbur420-56.engba.symantec.com</td>
<td>2,468,013.43</td>
<td>3.84%</td>
</tr>
<tr>
<td>nbur420-07.engba.symantec.com</td>
<td>1,239,433.95</td>
<td>1.93%</td>
</tr>
<tr>
<td>nbur420-51.engba.symantec.com</td>
<td>979,002.52</td>
<td>1.52%</td>
</tr>
</tbody>
</table>
Drill down report: Yes. You can view drill down report for the selected parameter value. These drill down reports are available for NetBackup and NetBackup appliance.

Example: For ranking type of report, you can view three levels of drill down reports: Level 1: Job Type, Level 2: Schedule/Level Type, Level 3: Policy Name

Can be scheduled: Yes

Supported formats: PDF, CSV, TSV, XML, HTML

Mapping with VBR report: All Reports > Standard Reports > Backup > Activity Planning > Job Size

You can edit the Job Size report to show or hide the columns that you are interested in. All the columns are shown by default. You can also filter the report to view reports of specific master servers. The following table shows the filters for Job Size report and how you can use these filters to view specific data in the report.

<table>
<thead>
<tr>
<th>Filter</th>
<th>Column</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>View</td>
<td>Master Server</td>
<td>Select one or more master servers to view data for the virtual clients that are backed up by the selected master servers in the report. All master servers that are added to the OpsCenter console are shown in the Value drop-down list.</td>
</tr>
<tr>
<td>View</td>
<td>Media Server</td>
<td>Select one or more media servers to view data for the selected media servers in the report. All media servers that are added to the OpsCenter console are shown in the Value drop-down list.</td>
</tr>
<tr>
<td>View</td>
<td>Client Name</td>
<td>Select one or more clients to view data for the selected clients in the report. All clients that are protected by the master servers in the OpsCenter console are listed.</td>
</tr>
<tr>
<td>View</td>
<td>Client OS</td>
<td>Select one or more client OS to view data for the selected client OS in the report.</td>
</tr>
<tr>
<td>Filter</td>
<td>Column</td>
<td>Description</td>
</tr>
<tr>
<td>----------------</td>
<td>---------------------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Policy</td>
<td>Policy Name</td>
<td>Select one or more policy names to view data for the selected policies.</td>
</tr>
<tr>
<td></td>
<td>Policy Type</td>
<td>Select one or more policy types to view data for the selected policy types.</td>
</tr>
<tr>
<td></td>
<td>Policy Keyword</td>
<td>Select one or more policy keyword to view data for the policies having the selected keyword.</td>
</tr>
<tr>
<td></td>
<td>Policy Data Classification Name</td>
<td>Select one or more policy data classification names like Gold, Silver, Bronze etc. to view data for the policies having the selected data classification names.</td>
</tr>
<tr>
<td>Schedule</td>
<td>Schedule/Level Type</td>
<td>Select one or more schedule or level types to view the data for the configured schedules.</td>
</tr>
<tr>
<td></td>
<td>Schedule Name</td>
<td>Select one or more schedule names to view data for the selected schedule names.</td>
</tr>
<tr>
<td>Job</td>
<td>Job Type</td>
<td>Select one or more job types as Archive, Backup, or Restore to view data for the selected job types.</td>
</tr>
<tr>
<td></td>
<td>Product Type</td>
<td>Select one or more backup products to view data for the selected products.</td>
</tr>
<tr>
<td></td>
<td>Job Transport Type</td>
<td>Select one or more transport types like FT, LAN, or Unknown to view data for the jobs that have the selected transport type.</td>
</tr>
<tr>
<td></td>
<td>Job Status</td>
<td>Select one or more job status like Failed, Successful etc. to view data for the selected job status.</td>
</tr>
</tbody>
</table>

**Example of filter usage:** You may run the Job Size report for specific policy data classification names to view details only for the specific policy classifications.

The following report enhancements have been made for the Job Size report:

- The unit **Years** has been added for Relative Timeframe selection.
  You can now view data for the last x years.

- The option **Next** has been removed from the drop-down menu for Relative Timeframe. You now cannot enter a relative timeframe like Next 2 weeks. This is because the report does not support any futuristic data.

The following filter enhancements have been made for the Job Size report:

- **UNKNOWN** has been added as a value for Policy Type column in the Policy filter. You can now filter report data for policy types that are UNKNOWN. In earlier versions of OpsCenter the unknown policy types were shown as blank. Now all static columns like job type, schedule type, policy type, etc. are shown as UNKNOWN as in VBR.
Job Transport Type column has been added to the Job filter. For example, you can view report data for jobs for which the Job transport type is FT or LAN.

The following options have been removed from TimeFrameGroupBy selection:

- Days of week Average
- Days of week Total
- Hours of day Average
- Hours of day Total
- Minutes
- Month of year Average
- Month of year Total
- Quarter of year Average
- Quarter of year Total

Job Activity > Client Count

This report provides a summary of backup client counts across products, domains, clients, policies and business level views. There are three display options to see this report. Historical report view shows the total number of unique clients backed up per day for the last two weeks, for each master server. It can help in highlighting potential problems by showing any variations in the number of clients that needs to be backed up and how many are actually getting backed up.

Figure 2-18 shows a sample view of Client Count Report.
Ranking view shows the top ten environments by listing the number of unique clients that got backed up per each media server during the last two weeks.

Figure 2-19 shows a sample view of Client Count Report.
Distribution view gives you breakdown by each master server of the number of unique clients that got backed up in the last two weeks.

Figure 2-20 shows a sample view of Client Count Report.
You can view historical, ranking and distribution report types in tabular format. 

Figure 2-21 shows a sample view of Client Count Report.
The following are the details that are associated with the Client Count report:

<table>
<thead>
<tr>
<th>Master Server</th>
<th>Number of Clients Backed up</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>NBAPP_nbapp101.engba.symantec.com</td>
<td>31</td>
<td>31%</td>
</tr>
<tr>
<td>rajanikanth.punin.son.symantec.com</td>
<td>17</td>
<td>17%</td>
</tr>
<tr>
<td>pmwin8.vxinda.veritas.com</td>
<td>10</td>
<td>10%</td>
</tr>
<tr>
<td>NB_APP_nbapp125.engba.symantec.com</td>
<td>10</td>
<td>10%</td>
</tr>
<tr>
<td>NB_APP_nbapp235.engba.symantec.com</td>
<td>8</td>
<td>8%</td>
</tr>
<tr>
<td>v-116442a.punin.son.symantec.com</td>
<td>5</td>
<td>5%</td>
</tr>
<tr>
<td>nbapp141.engba.symantec.com</td>
<td>4</td>
<td>4%</td>
</tr>
<tr>
<td>v-225501a.punin.son.symantec.com</td>
<td>3</td>
<td>3%</td>
</tr>
<tr>
<td>omwin3.vxinda.veritas.com</td>
<td>3</td>
<td>3%</td>
</tr>
<tr>
<td>ragad.vxinda.veritas.com</td>
<td>2</td>
<td>2%</td>
</tr>
<tr>
<td>pmwin10.vxinda.veritas.com</td>
<td>1</td>
<td>1%</td>
</tr>
<tr>
<td>vbr-pd-5.vxinda.veritas.com</td>
<td>1</td>
<td>1%</td>
</tr>
</tbody>
</table>

**Report Name**: Client Count

**Report Category**: Backup

**Where to Locate**: All Reports > Report Templates > Backup > Job Activity > Client Count report.

**Report Purpose**: Customizable report that shows total number of unique clients backed up per day during last two weeks, by each master server.

**Supported products**: Symantec NetBackup, Symantec NetBackup Master Appliance, Symantec Backup Exec, Symantec NetBackup PureDisk

**Applicable View**: Master Server, Client

**Report Display**: Historical, Ranking, Distribution
Drill down report
Yes
You can view drill down reports for the selected parameter value. These reports are available for NetBackup and NetBackup appliance.
Example: For ranking type of report, you can view four levels of drill down reports: Level 1: Client Name, Level 2: Job Type, Level 3: Schedule/Level Type, Level 4: Policy Name

Can be scheduled
Yes

Supported formats
PDF, CSV, TSV, XML, HTML

Mapping with VBR report
All Reports > Standard Reports > Backup > Activity Planning > Client Count

You can edit the Client Count report to show or hide the columns that you are interested in. All the columns are shown by default. You can also filter the report to view reports of specific master servers. The following table shows the filters for Client Count report and how you can use these filters to view specific data in the report.

<table>
<thead>
<tr>
<th>Filter</th>
<th>Column</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>View</td>
<td></td>
<td>Select a view to show data for the selected view in the report. By default All My Views is selected.</td>
</tr>
<tr>
<td>Master Server</td>
<td>Master Server</td>
<td>Select one or more master servers to view data for the virtual clients that are backed up by the selected master servers in the report. All master servers that are added to the OpsCenter console are shown in the Value drop-down list.</td>
</tr>
<tr>
<td>Media Server</td>
<td>Media Server</td>
<td>Select one or more media servers to view data for the selected media servers in the report. All media servers that are added to the OpsCenter console are shown in the Value dropdown list.</td>
</tr>
<tr>
<td>Client</td>
<td>Client Name</td>
<td>Select one or more clients to view data for the selected clients in the report. All clients that are protected by the master servers in the OpsCenter console are listed.</td>
</tr>
<tr>
<td></td>
<td>Client OS</td>
<td>Select one or more client OS to view data for the selected client OS in the report.</td>
</tr>
<tr>
<td>Filter</td>
<td>Column</td>
<td>Description</td>
</tr>
<tr>
<td>------------</td>
<td>---------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Policy</td>
<td>Policy Name</td>
<td>Select one or more policy names to view data for the selected policies.</td>
</tr>
<tr>
<td>Policy</td>
<td>Policy Type</td>
<td>Select one or more policy types to view data for the selected policy types.</td>
</tr>
<tr>
<td>Policy</td>
<td>Policy Keyword</td>
<td>Select one or more policy keyword to view data for the policies having the selected keyword.</td>
</tr>
<tr>
<td>Policy</td>
<td>Policy Data Classification Name</td>
<td>Select one or more policy data classification names like Gold, Silver, Bronze etc. to view data for the policies having the selected data classification names.</td>
</tr>
<tr>
<td>Schedule</td>
<td>Schedule/Level Type</td>
<td>Select one or more schedule or level types to view the data for the configured schedules.</td>
</tr>
<tr>
<td>Schedule</td>
<td>Schedule Name</td>
<td>Select one or more schedule names to view data for the selected schedule names.</td>
</tr>
<tr>
<td>Job</td>
<td>Job Type</td>
<td>Select one or more job types as Archive, Backup, or Restore to view data for the selected job types.</td>
</tr>
<tr>
<td>Job</td>
<td>Product Type</td>
<td>Select one or more backup products to view data for the selected products.</td>
</tr>
<tr>
<td>Job</td>
<td>Job Transport Type</td>
<td>Select one or more transport types like FT, LAN, or Unknown to view data for the jobs that have the selected transport type.</td>
</tr>
<tr>
<td>Job</td>
<td>Job Status</td>
<td>Select one or more job status like Failed, Successful etc. to view data for the selected job status.</td>
</tr>
</tbody>
</table>

**Example of filter usage:** You may run the Client Count report for specific policy data classification names to view details only for the specific policy classifications.

The following report enhancements have been made for the Client Count report:

- The unit **Years** has been added for Relative Timeframe selection. You can now view data for the last x years.

- The option **Next** has been removed from the drop-down menu for Relative Timeframe. You now cannot enter a relative timeframe like Next 2 weeks. This is because the report does not support any futuristic data.

The following filter enhancements have been made for the Client Count report:

- **UNKNOWN** has been added as a value for **Policy Type** column in the Policy filter. You can now filter report data for policy types that are UNKNOWN. In earlier versions of OpsCenter the unknown policy types were shown as blank. Now all static columns like job type, schedule type, policy type, etc. are shown as UNKNOWN as in VBR.
The following options have been removed from `TimeFrameGroupBy` selection:

- Days of week Average
- Days of week Total
- Hours of day Average
- Hours of day Total
- Minutes
- Month of year Average
- Month of year Total
- Quarter of year Average
- Quarter of year Total

**Job Activity > Job Duration**

This report provides a summary of backup job durations across products, domains, clients, policies and business level views. It shows you the top ten clients ranked by the total amount of time consumed for the backup during last two weeks.

*Figure 2-22* shows a sample view of Job Duration Report.
Figure 2-22  
Job Duration Report

In addition, you can view the report in tabular format.

Figure 2-23 shows a sample view of Job Duration Report.
**Figure 2-23** Job Duration Report (Tabular)

<table>
<thead>
<tr>
<th>Client Name</th>
<th>Job Duration (Hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td>nbur420-49.engba.symantec.com</td>
<td>152.52</td>
</tr>
<tr>
<td>nbur420-07.engba.symantec.com</td>
<td>147.71</td>
</tr>
<tr>
<td>purandar</td>
<td>136.68</td>
</tr>
<tr>
<td>nbur420-05.engba.symantec.com</td>
<td>135.99</td>
</tr>
<tr>
<td>nbur420-51.engba.symantec.com</td>
<td>135.45</td>
</tr>
<tr>
<td>nbur420-53.engba.symantec.com</td>
<td>133.86</td>
</tr>
<tr>
<td>nbur420-04.engba.symantec.com</td>
<td>111.3</td>
</tr>
<tr>
<td>nbur420-01.engba.symantec.com</td>
<td>106.94</td>
</tr>
<tr>
<td>nbur420-62.engba.symantec.com</td>
<td>69.01</td>
</tr>
<tr>
<td>nbur420-61.engba.symantec.com</td>
<td>68.83</td>
</tr>
</tbody>
</table>

The following are the details that are associated with the Job Duration report:

- **Report Name**: Job Duration
- **Report Category**: Backup
- **Where to Locate**: All Reports > Report Templates > Backup > Job Activity > Job Duration report.
- **Report Purpose**: Customizable report that shows top ten clients ranked by the total amount of time for the backup during the last two weeks.
- **Supported products**: Symantec NetBackup, Symantec NetBackup Master Appliance, Symantec Backup Exec, Symantec NetBackup PureDisk
- **Applicable View**: Master Server, Client
- **Report Display**: Ranking
- **Drill down report**: Yes. You can view drill down reports for the selected parameter value. These reports are available for NetBackup and NetBackup appliance.
  
  Example: For ranking type of report, you can view four levels of drill down reports: Level 1: Job Type, Level 2: Schedule/Level Type, Level 3: Policy Name
- **Can be scheduled**: Yes
You can edit the Job Duration report to show or hide the columns that you are interested in. All the columns are shown by default. You can also filter the report to view reports of specific master servers. The following table shows the filters for Job Duration report and how you can use these filters to view specific data in the report.

<table>
<thead>
<tr>
<th>Filter</th>
<th>Column</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>View</td>
<td></td>
<td>Select a view to show data for the selected view in the report. By default All My Views is selected.</td>
</tr>
<tr>
<td>Master</td>
<td>Master Server</td>
<td>Select one or more master servers to view data for the virtual clients that are backed up by the selected master servers in the report. All master servers that are added to the OpsCenter console are shown in the Value drop-down list.</td>
</tr>
<tr>
<td>Media</td>
<td>Media Server</td>
<td>Select one or more media servers to view data for the selected media servers in the report. All media servers that are added to the OpsCenter console are shown in the Value drop-down list.</td>
</tr>
<tr>
<td>Client</td>
<td>Client Name</td>
<td>Select one or more clients to view data for the selected clients in the report. All clients that are protected by the master servers in the OpsCenter console are listed.</td>
</tr>
<tr>
<td></td>
<td>Client OS</td>
<td>Select one or more client OS to view data for the selected client OS in the report.</td>
</tr>
<tr>
<td>Policy</td>
<td>Policy Name</td>
<td>Select one or more policy names to view data for the selected policies.</td>
</tr>
<tr>
<td></td>
<td>Policy Type</td>
<td>Select one or more policy types to view data for the selected policy types.</td>
</tr>
<tr>
<td></td>
<td>Policy Keyword</td>
<td>Select one or more policy keyword to view data for the policies having the selected keyword.</td>
</tr>
<tr>
<td></td>
<td>Policy Data Classification Name</td>
<td>Select one or more policy data classification names like Gold, Silver, Bronze etc. to view data for the policies having the selected data classification names.</td>
</tr>
<tr>
<td>Schedule/Level</td>
<td>Schedule/Level Type</td>
<td>Select one or more schedule or level types to view the data for the configured schedules.</td>
</tr>
<tr>
<td></td>
<td>Schedule Name</td>
<td>Select one or more schedule names to view data for the selected schedule names.</td>
</tr>
</tbody>
</table>
Select one or more job types as Archive, Backup, or Restore to view data for the selected job types.

Select one or more backup products to view data for the selected products.

Select one or more transport types like FT, LAN, or Unknown to view data for the jobs that have the selected transport type.

Select one or more job status like Failed, Successful etc. to view data for the selected job status.

Example of filter usage: You may run the Job Duration report for specific policy data classification names to view details only for the specific policy classifications.

The following report enhancements have been made for the Job Duration report:

- The unit **Years** has been added for Relative Timeframe selection.

  You can now view data for the last x years.

- The option **Next** has been removed from the drop-down menu for Relative Timeframe. You now cannot enter a relative timeframe like Next 2 weeks. This is because the report does not support any futuristic data.

The following filter enhancements have been made for the Job Duration report:

- **UNKNOWN** has been added as a value for **Policy Type** column in the Policy filter. You can now filter report data for policy types that are UNKNOWN. In earlier versions of OpsCenter the unknown policy types were shown as blank. Now all static columns like job type, schedule type, policy type, etc. are shown as UNKNOWN as in VBR.

- **Job Transport Type** column has been added to the Job filter. For example, you can view report data for jobs for which the Job transport type is **FT** or **LAN**.

**Job Activity > File Count**

This report provides the summary of backed up file counts across products, domains, clients, policies and business level views. There are three display options to see this report. Historical report view shows the total number of files that got backed up for each day during the last two weeks for each master server.

**Figure 2-24** shows a sample view of File Count Report.
Ranking view shows the top ten backup clients ranking them on total numbers of files that were backed up for them during the last two weeks.

Figure 2-25 shows a sample view of File Count Report.
Figure 2-25  File Count Report (Ranking)

Distribution view gives a breakdown for the number of files that got backed up in the last two weeks, for each master server.

Figure 2-26 shows a sample view of File Count Report.
You can view historical, ranking and distribution report types in tabular format.

**Figure 2-27** shows a sample view of File Count Report.
The following are the details that are associated with the File Count report:

- **Report Name**: File Count
- **Report Category**: Backup
- **Where to Locate**: Report > Report Templates > Backup > Job Activity > File Count
- **Report Purpose**: Customizable report showing the total number of files that are backed up each day during the last two weeks.
- **Supported products**: Symantec NetBackup, Symantec NetBackup Master Appliance, Symantec Backup Exec, Symantec NetBackup PureDisk
- **Applicable View**: Master Server, Client
- **Report Display**: Historical, Ranking, Distribution
Drill down report | Yes
---|---
You can view drill down reports for the selected parameter value. These reports are available for NetBackup and NetBackup appliance.
Example: For ranking type of report, you can view three levels of drill down reports: Level 1: Job Type, Level 2: Schedule/Level Type, Level 3: Policy Name

Can be scheduled | Yes

Supported formats | PDF, CSV, TSV, XML, HTML

Mapping with VBR report | All Reports > Standard Reports > Backup > Activity Planning > File Count

You can edit the File Count report to show or hide the columns that you are interested in. All the columns are shown by default. You can also filter the report to view reports of specific master servers. The following table shows the filters for File Count report and how you can use these filters to view specific data in the report.

<table>
<thead>
<tr>
<th>Filter</th>
<th>Column</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>View</td>
<td></td>
<td>Select a view to show data for the selected view in the report. By default <em>All My Views</em> is selected.</td>
</tr>
<tr>
<td>Master Server</td>
<td>Master Server</td>
<td>Select one or more master servers to view data for the virtual clients that are backed up by the selected master servers in the report. All master servers that are added to the OpsCenter console are shown in the Value drop-down list.</td>
</tr>
<tr>
<td>Media Server</td>
<td>Media Server</td>
<td>Select one or more media servers to view data for the selected media servers in the report. All media servers that are added to the OpsCenter console are shown in the Value dropdown list.</td>
</tr>
<tr>
<td>Client</td>
<td>Client Name</td>
<td>Select one or more clients to view data for the selected clients in the report. All clients that are protected by the master servers in the OpsCenter console are listed. Select one or more client OS to view data for the selected client OS in the report.</td>
</tr>
</tbody>
</table>
### Filter Column Description

<table>
<thead>
<tr>
<th>Filter</th>
<th>Column</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Policy</td>
<td>Policy Name</td>
<td>Select one or more policy names to view data for the selected policies.</td>
</tr>
<tr>
<td></td>
<td>Policy Type</td>
<td>Select one or more policy types to view data for the selected policy types.</td>
</tr>
<tr>
<td></td>
<td>Policy Keyword</td>
<td>Select one or more policy keyword to view data for the policies having the selected keyword.</td>
</tr>
<tr>
<td></td>
<td>Policy Data Classification Name</td>
<td>Select one or more policy data classification names like Gold, Silver, Bronze etc. to view data for the policies having the selected data classification names.</td>
</tr>
<tr>
<td>Schedule</td>
<td>Schedule Level Type</td>
<td>Select one or more schedule or level types to view the data for the configured schedules.</td>
</tr>
<tr>
<td></td>
<td>Schedule Name</td>
<td>Select one or more schedule names to view data for the selected schedule names.</td>
</tr>
<tr>
<td>Job</td>
<td>Job Type</td>
<td>Select one or more job types as Archive, Backup, or Restore to view data for the selected job types.</td>
</tr>
<tr>
<td></td>
<td>Product Type</td>
<td>Select one or more backup products to view data for the selected products.</td>
</tr>
<tr>
<td></td>
<td>Job Transport Type</td>
<td>Select one or more transport types like FT, LAN, or Unknown to view data for the jobs that have the selected transport type.</td>
</tr>
<tr>
<td></td>
<td>Job Status</td>
<td>Select one or more job status like Failed, Successful etc. to view data for the selected job status.</td>
</tr>
</tbody>
</table>

**Example of filter usage:** You may run the File Count report for specific policy data classification names to view details only for the specific policy classifications.

The following report enhancements have been made for the File Count report:

- The unit **Years** has been added for Relative Timeframe selection.
  You can now view data for the last x years.

- The option **Next** has been removed from the drop-down menu for Relative Timeframe. You now cannot enter a relative timeframe like Next 2 weeks. This is because the report does not support any futuristic data.

The following filter enhancements have been made for the File Count report:

- **UNKNOWN** has been added as a value for **Policy Type** column in the Policy filter. You can now filter report data for policy types that are UNKNOWN. In earlier versions of OpsCenter the unknown policy types were shown as blank. Now all static columns like job type, schedule type, policy type, etc. are shown as UNKNOWN as in VBR.
Job Transport Type column has been added to the Job filter. For example, you can view report data for jobs for which the Job transport type is FT or LAN.

The following options have been removed from TimeFrameGroupBy selection:

- Days of week Average
- Days of week Total
- Hours of day Average
- Hours of day Total
- Minutes
- Month of year Average
- Month of year Total
- Quarter of year Average
- Quarter of year Total

Job Browser > Tabular Backup Report

This section provides the reports on NetBackup job activity similar to the NetBackup Activity Monitor.

You can view a detailed listing of all the backup activity performed for the specified timeframe. The default timeframe is last two weeks. This report lets you view the status for multiple job attempts (from Job Attempt Count and Status Code columns). This report also lets you know the time it takes for backup or restore operations to complete (from the Job Duration column). It thus helps you to quickly identify details about the backup or restore jobs that take the maximum time.

You can also drill down from the Job Primary ID column in the report to know the skip file details that are associated with the job. Only some jobs may have skipped files associated with them. For jobs that do not have any skipped files, the drill-down report is either blank or shows hyphens.

Figure 2-28 shows a sample view of the Tabular Backup Report.
The following are details associated with the Tabular Backup Report:

- **Report Name**: Tabular Backup Report
- **Report Category**: Backup
- **Where to Locate**: Report > Report Templates > Backup > Job Browser > Tabular Backup Report
- **Report Purpose**: Customizable tabular report of all backup data (size, start time, status code etc.) by client.
- **Supported products**: NetBackup, NetBackup Appliance, Backup Exec, NetBackup PureDisk
- **Applicable View**: Master Server, Client
- **Report Display**: Tabular
- **Drill down report**: Skip File Details
  
  See "Skip File Details" on page 116.
- **Can be scheduled**: Yes
- **Supported export formats**: CSV, HTML, PDF, XML, TSV
- **Mapping with VBR report**: Backups > Job Browser > Scheduled Jobs > Tabular Backup Report
You can edit the Tabular Backup Report to show or hide the columns that you are interested in. All the columns are shown by default. You can also filter the report to show activity for a limited sample set, such as one or more policies, master servers, clients, views, product types, job status etc.

The following table shows the filters for Tabular Backup report and how you can use these filters to view specific data in the report.

<table>
<thead>
<tr>
<th>Filter</th>
<th>Column</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>View</td>
<td>Column</td>
<td>Description</td>
</tr>
<tr>
<td>Master</td>
<td>Master Server</td>
<td>Select one or more master servers to view data for the selected master servers in the report. All master servers that are added to the OpsCenter console are shown in the Value drop-down list.</td>
</tr>
<tr>
<td>Media</td>
<td>Media server</td>
<td>Select one or more media servers to view data for the specific media servers in the report. All media servers that are attached to the master servers in the OpsCenter console are shown in the Value drop-down list.</td>
</tr>
<tr>
<td>Client</td>
<td>Client Name</td>
<td>Select one or more clients to view data for the selected clients in the report. All clients that are protected by the master servers in the OpsCenter console are listed.</td>
</tr>
<tr>
<td></td>
<td>Client OS</td>
<td>Select one or more client OS to view data for the selected client OS in the report.</td>
</tr>
<tr>
<td>Policy</td>
<td>Policy Data Classification Name</td>
<td>Select one or more policy data classification names like Gold, Silver, Bronze etc. to view data for the policies having the selected data classification names.</td>
</tr>
<tr>
<td></td>
<td>Policy Keyword</td>
<td>Select one or more policy keyword to view data for the policies having the selected keyword.</td>
</tr>
<tr>
<td></td>
<td>Policy Name</td>
<td>Select one or more policy names to view data for the selected policies.</td>
</tr>
<tr>
<td></td>
<td>Policy Type</td>
<td>Select one or more policy types to view data for the selected policy types.</td>
</tr>
<tr>
<td>Schedule</td>
<td>Schedule/Level Type</td>
<td>Select one or more schedule types like CINC, Copy, Daily etc. to view data for the selected schedule types.</td>
</tr>
<tr>
<td></td>
<td>Schedule Name</td>
<td>Select one or more schedule names to view data for the selected schedule names.</td>
</tr>
</tbody>
</table>
Select one or more Job Status like Failed, Missed, Partially Successful etc. to view data for the selected job status in the report.

Select one or more transport types like FT, LAN, or Unknown to view data for the jobs that have the selected transport type.

Select one or more products like Backup Exec to view data for the selected products.

**Example of filter usage:** You may run the Tabular Backup report for a specific master server to view backup details only for the selected master server. The sample report view that is shown above shows data for a specific master server.

The following report enhancements have been made:

- Each Job primary ID is now a link. You can drill down from the Job Primary ID column to know the skipped file details for a job.
- The report now displays the seconds in Job End Time, Job Start Time, and Expiration Time columns like 9:40:37 A.M. Earlier the report used to display the time in hours and minutes only like 9:40 A.M.
- The report now shows data for all your views by default. All My Views is the default view when you edit the report.
- Fixed issues of data correctness and parity with VBR.
The following additional columns are shown in the report. These columns are not displayed by default on the report. You need to edit the report to manually add these columns and rerun the report.

- **Attempt Status**
  This column lets you know the status of the attempt; whether it was successful or failed.

- **Product**
  This column shows the product that is associated with the job like Symantec NetBackup, Symantec NetBackup Master Appliance.

- **Job Directory**
  Path that is backed up by a job.

- **Policy Keyword**
  Policy keyword that is associated with the job

- **Storage Unit Name**
  Name of the storage unit that is associated with the job

- **Attempt Start Time**
  Shows the start date and time for the specific job attempt. A job may require multiple attempts or retries due to resources not being available etc. Ensure that the report always shows the **Attempt Start Time** column. In case you remove **Attempt Start Time** column, the report may show duplicate records.

The following filter enhancements are listed:

- **The unit Years has been added for Relative Timeframe selection.**
  You can now view data for the last x years. You can also see the Years tab on top-right corner of the Tabular Backup Report.

- **The option Next has been removed from the drop-down menu for Relative Timeframe. You now cannot enter a relative timeframe like Next 2 weeks.**

- **The following columns have been removed for the Job filter:**
  - Agent Server
  - Job State

- **UNKNOWN has been added as a value for Policy Type column in the Policy filter. You can now filter report data for policy types that are unknown. In earlier versions of OpsCenter the unknown policy types were shown as blank. Now all static columns like job type, schedule type, policy type, etc. are shown as unknown like in VBR.**

- **Job Transport Type column has been added to the Job filter. For example, you can view report data for jobs for which the Job transport type is FT or LAN.**
Skip File Details

In the Tabular Backup report, you can drill down from the **Job Primary ID** column to know the skip file details that are associated with the job. Only some jobs may have the skipped files that are associated with them. For the jobs that do not have any skipped files, the drill-down report is either blank or shows hyphens.

**Note:** The Skip File Details report is also available when you click a Job Primary ID in the Week at a Glance Details report.

Figure 2-29 shows a sample view of the skip file details report that is obtained by clicking the **Job Primary ID** column in Tabular Backup Report.

![Skip file details](image)

The following are details associated with the Skip File Details report:

<table>
<thead>
<tr>
<th>Report Name</th>
<th>Skip File Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Report Category</td>
<td>Backup</td>
</tr>
<tr>
<td>Where to Locate</td>
<td>Report &gt; Report Templates &gt; Backup &gt; Job Browser &gt; Tabular Backup Report (click the Job Primary ID link)</td>
</tr>
<tr>
<td>Report Purpose</td>
<td>Lists the skip file details for the selected job.</td>
</tr>
<tr>
<td>Supported products</td>
<td>NetBackup, NetBackup Appliance, Backup Exec, NetBackup PureDisk</td>
</tr>
<tr>
<td>Applicable View</td>
<td>Master Server, Client</td>
</tr>
<tr>
<td>Report Display</td>
<td>Tabular</td>
</tr>
<tr>
<td>Drill down report</td>
<td>None</td>
</tr>
<tr>
<td>Can be scheduled</td>
<td>Yes</td>
</tr>
<tr>
<td>Supported formats</td>
<td>CSV, HTML, PDF, XML, TSV</td>
</tr>
</tbody>
</table>
Mapping with VBR report
Backups > Job Browser > Scheduled Jobs > Tabular Backup Report > Skip File Details

You can edit the report to show or hide the columns that you are interested in. All the columns are shown by default. You can also filter the report to show skipped files for a specific job primary ID.

The following table shows the filter for Skip File Details report and how you can use the filter to view specific data in the report.

<table>
<thead>
<tr>
<th>Filter</th>
<th>Column</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary Job</td>
<td>Job Primary ID</td>
<td>Select a job primary ID to view skipped file details for the selected job primary ID.</td>
</tr>
</tbody>
</table>

**Planning Activity > Capacity Planning > Forecasted Size report**

Planning Activity provides reports on future NetBackup projected trends for storage capacity needs, media consumption, job sizes, schedules, and counts.

Capacity Planning provides reports on historical NetBackup storage consumption and projected future NetBackup storage needs.

The Planning Activity > Capacity Planning > Forecasted Size report shows the supply vs. demand historically but also adds a forecast line for both supply and demand that can show when in the future they may meet. The point that these two lines intersect would be the date that new capacity (more disk or more backup tapes) needs to be added. In the above example the supply is by far outgrowing the demand, which would suggest that more capacity does not need to be purchased.

The default first view of this report shows the entire backup environment but for actual use it should be filtered to a specific tape library or disk pool since some libraries or pools may be closer to full capacity than others.

The **EMM Server** column has been removed from the Media filter. The Master Server filter can be used to view data for specific servers instead of the EMM Server column.

**Planning Activity > Capacity Planning > Historical Size report**

This report shows the historical supply vs. demand. Supply is defined as all available free space on all the tape media in the backup application. This number is calculated by taking the average size of all full media of the same tape type. That average is then used for the predicted size of all other tapes that are not full of the same type. Use of the average is necessary since tapes do not have an exact capacity and
are written to until the end of tape mark. On the demand side this is a calculation of all backup jobs for the time period. The idea for this report is that the difference between the two lines is the extra capacity that was not needed. In an ideal environment these lines match the blue line, for example, being slightly under the line showing that all the space for backups is used. This report can sometimes be referred to as the “just in time inventory” report after the business theory by the same name.

The default is to show the total environment but for operational use it would need to be filtered down to individual storage locations since some can be closer to 100% capacity than others. This change is easily made by clicking Edit Report at the top of the report.

The EMM Server column has been removed from the Media filter. The Master Server filter can be used to view data for specific servers instead of the EMM Server column.

**Planning Activity > Forecast > Job Count report**

The Forecast reports provide information on the future projected NetBackup job sizes and job counts.

The Planning Activity > Forecast > Job Count report displays the total number of backup jobs for each day in specified time frame. A linear regression forecast is also performed to show you how many backups you can expect for the next three days based on the current data.

**Planning Activity > Forecast > Job Size**

This report shows you the total number of backup jobs for each day in specified time frame. A linear regression forecast is also performed to show you how many backups you can expect for the next three days based on the current data.

Figure 2-30 shows a sample view of Job Size – Forecast Report.
Figure 2-30  Job Size – Forecast Report (Historical)

This report is also available in tabular format.

Figure 2-31 shows a sample view of Job Size – Forecast Report.
The following are the details that are associated with the Job Size – Forecast report:

**Report Name**: Job Size – Forecast report

**Report Category**: Planning Activity


**Report Purpose**: Provides forecast of future backup job sizes across products, domains, clients, policies and business level views.

**Supported products**: Symantec NetBackup, Symantec NetBackup Master Appliance

**Applicable View**: Master Server, Client

**Report Display**: Historical

**Drill down report**: Yes. Drill down reports can be viewed at following five levels for the selected parameter value. Level 1: Master Server, Level 2: Client Name, Level 3: Job Type, Level 4: Schedule/Level Type, Level 5: Policy Name

**Can be scheduled**: Yes

**Supported formats**: PDF, CSV, HTML, XML, TSV
You can edit the **Job Size – Forecast** report to show or hide the columns that you are interested in. All the columns are shown by default. You can also filter the report to view reports of specific master servers. The following table shows the filters for **Job Size – Forecast** report and how you can use these filters to view specific data in the report.

<table>
<thead>
<tr>
<th>Filter</th>
<th>Column</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>View</td>
<td>View</td>
<td>Select a view to show data for the selected view in the report. By default <strong>All My Views</strong> is selected.</td>
</tr>
<tr>
<td>Master Server</td>
<td>Master Server</td>
<td>Select one or more master servers to view data for the virtual clients that are backed up by the selected master servers in the report. All master servers that are added to the OpsCenter console are shown in the <strong>Value</strong> drop-down list.</td>
</tr>
<tr>
<td>Media Server</td>
<td>Media Server</td>
<td>Select one or more media servers to view data for the selected media servers in the report. All media servers that are added to the OpsCenter console are shown in the <strong>Value</strong> dropdown list.</td>
</tr>
<tr>
<td>Client</td>
<td>Client Name</td>
<td>Select one or more clients to view data for the selected clients in the report. All clients that are protected by the master servers in the OpsCenter console are listed.</td>
</tr>
<tr>
<td></td>
<td>Client OS</td>
<td>Select one or more client OS to view data for the selected client OS in the report.</td>
</tr>
<tr>
<td>Policy</td>
<td>Policy Name</td>
<td>Select one or more policy names to view data for the selected policies.</td>
</tr>
<tr>
<td></td>
<td>Policy Type</td>
<td>Select one or more policy types to view data for the selected policy types.</td>
</tr>
<tr>
<td></td>
<td>Policy Keyword</td>
<td>Select one or more policy keyword to view data for the policies having the selected keyword.</td>
</tr>
<tr>
<td></td>
<td>Policy Data Classification Name</td>
<td>Select one or more policy data classification names like Gold, Silver, Bronze etc. to view data for the policies having the selected data classification names.</td>
</tr>
<tr>
<td>Schedule</td>
<td>Schedule/Level Type</td>
<td>Select one or more schedule or level types to view the data for the configured schedules.</td>
</tr>
<tr>
<td></td>
<td>Schedule Name</td>
<td>Select one or more schedule names to view data for the selected schedule names.</td>
</tr>
</tbody>
</table>
Select one or more job types as Archive, Backup, or Restore to view data for the selected job types.

Select one or more backup products to view data for the selected products.

Select one or more transport types like FT, LAN, or Unknown to view data for the jobs that have the selected transport type.

Select one or more job status like Failed, Successful etc. to view data for the selected job status.

**Example of filter usage:** You may run the Job Size – Forecast report for a specific client to view details for the specific clients.

The following report enhancements have been made for the Job Size – Forecast report:

- The option **Next** has been removed from the drop-down menu for Relative Timeframe. You now cannot enter a relative timeframe like Next 2 weeks. This is because the report does not support any futuristic data.

- The unit **Years** has been added for Relative Timeframe selection. You can now view data for the last X years. You can also select Year from the top-right corner of the report.

- Drill down reports for following five levels have been added in OpsCenter.
  - Level 1: Master Server
  - Level 2: Client Name
  - Level 3: Job Type
  - Level 4: Schedule/Level Type
  - Level 5: Policy Name

- The following options have been removed from **TimeFrameGroupBy** selection:
  - Days of week Average
  - Days of week total
  - Hours of day Average
  - Hours of day Total
  - Minutes
  - Month of year Average
  - Month of year total
Quarter of year Average

Quarter of year total

The following filter enhancements have been made for the Job Size – Forecast report:

- New columns Job Status (Complete Only) and Job Status(Complete and Partial Only) are added to the Report On parameter.
- **UNKNOWN** has been added as a value for Policy Type column in the Policy filter. You can now filter report data for policy types that are UNKNOWN.
- The default unit for Y1 axis is now GB.
- Value SAN is removed from the Job Transport Type filter.

Planning Activity > Scheduled Job > Scheduled Job report

Scheduled job provides reports on all future NetBackup scheduled operations to plan workload capacity, backup windows, and compare against completed operations.

The Planning Activity > Scheduled Job > Scheduled Job report is available in **Ranking Report** view, which depicts how many jobs have been scheduled to run in future. You can view the Scheduled Jobs per schedule, policy, master server, or client.

**Note:** By default, the Scheduled Jobs report shows job count per policy. If you want to view the job count for clients, schedules, or master servers, change the report parameters.

There is more information available about how to change this report's parameters.

See “Changing the Planning Activity > Scheduled Job > Scheduled Job report parameters” on page 123.

Changing the Planning Activity > Scheduled Job > Scheduled Job report parameters

To change the report parameters

1. On the Scheduled Jobs report, click the **Edit** link.

2. On the Report Wizard, from the **Report On** drop-down list, select a **Scheduled Job** attribute. For example: **Client, Master Server, Policy, or Schedule Name**.

3. Click **Run**.
Note: To view job count for a specific client, policy, master server, or schedule, click Show Advanced Filters and select name of the client, policy, master server, or schedule, for which you want to view job count.

There is more information about the Planning Activity > Scheduled Job > Scheduled Job report.

See “Planning Activity > Scheduled Job > Scheduled Job report” on page 123.

**Planning Activity > Scheduled Job > Job Count Scheduled Vs Actual report**

This historical report depicts how many jobs were scheduled to run in future and how many jobs are run. The report essentially shows the comparison between Scheduled (Future) Job Count and Actual Job Count.

Using this report you can determine whether the jobs that were scheduled to run in future have been run on schedule.

Figure 2-32 shows a sample view of the Job Count Scheduled Vs Actual report.
The following are details associated with the Job Count Scheduled Vs Actual report:

<table>
<thead>
<tr>
<th>Report Name</th>
<th>Job Count Scheduled Vs Actual report</th>
</tr>
</thead>
<tbody>
<tr>
<td>Report Category</td>
<td>Backup</td>
</tr>
<tr>
<td>Where to Locate</td>
<td>Report &gt; Report Templates &gt; Backup &gt; Planning Activity &gt; Scheduled Job &gt; Job Count Scheduled Vs Actual</td>
</tr>
<tr>
<td>Report Purpose</td>
<td>This historical report compares actual and scheduled job counts. This report is valid for NetBackup and NetBackup Appliance.</td>
</tr>
</tbody>
</table>
You can view comparison between actual and scheduled job count for a specific client, policy, master server, or schedule by using filters. The following table shows the filters for Job Count Scheduled Vs Actual report and how you can use these filters to view specific data in the report.

**Filter** | **Column** | **Description**
--- | --- | ---
View | Select a view to show data for the selected view in the report. By default **All My Views** is selected.
Master Server | Select one or more master servers to view data for the selected master servers in the report. All master servers that are added to the OpsCenter console are shown in the **Value** drop-down list.
Client | Select one or more clients to view data for the selected clients in the report. All clients that are protected by the master servers in the OpsCenter console are listed.
Policy | Select one or more policy names to view data for the selected policies.
Schedule Name | Select one or more schedule names to view data for the selected schedule names.
Scheduled Job | By default the Actual Job Count includes manual jobs, which were initiated manually. You can exclude manual jobs from the actual job count, and view only the jobs that are of execution type Scheduled. To exclude manual jobs in the report, select **Yes**.
Exclude Manual Jobs

**Example of filter usage:** By default the Actual Job Count includes manual jobs, which were initiated manually by the NetBackup admin. There is more information available about how to exclude manual jobs from the actual job count.
See “Excluding manual jobs from the actual jobs in the Job Count Scheduled Vs Actual report” on page 127.

The following enhancements have been made for this report:

- The unit **Years** has been added for Relative Timeframe selection. You can now view data for the last x years. You can also see the **Year** tab on top-right corner of the report.

- The following units for Time Frame Grouping have been removed:
  - Day of week Average
  - Day of Week total
  - Hour of day Average
  - Hour of day total
  - Minutes
  - Month of year Average
  - Month of year Total
  - Quarter
  - Quarter of year Average
  - Quarter of year total

- The default value for **Exclude Manual Jobs** column in **Scheduled Job** filter is now changed to **No**. Earlier the default value for **Exclude Manual Jobs** was **Yes**.

### Excluding manual jobs from the actual jobs in the Job Count Scheduled Vs Actual report

By default the Actual Job Count includes manual jobs, which were initiated manually by NetBackup admin. To exclude manual jobs from the Actual Job count, and view only those jobs that have execution type as **Scheduled**, do the following:

**To exclude manual jobs from the actual jobs**

1. On the Job Count-Scheduled Vs Actual report, click the **Edit** link.
2. On the Report Wizard, in the **Filter Options** section, select **Yes** from the **Exclude Manual Jobs** drop-down list.
3. Click **Run**.

More information is available about the Planning Activity > Scheduled Job > Job Count Scheduled Vs Actual report.
Planning Activity > Scheduled Job > Job Count within Backup Window report

This historical report depicts how many jobs were scheduled and how many jobs have been run within the specified backup window. The report essentially shows the comparison between Scheduled (Future) Job Count and Actual Job Count, during the backup window.

Use this report to determine whether your backup windows are appropriate and are properly used. Click Show Chart as Table link below the report to display report details in a tabular format.

The Job Count within Backup Window report can show if jobs are finishing within a specified backup window. This report is complemented with a graphical drawing of the backup window for a quick analysis. You can quickly determine if all backup activity is occurring within the defined window.

Furthermore, looking at window performance across broad timelines using intelligent averaging is also necessary. Missing a window once or twice doesn’t necessarily point to broader systematic problems and thus the averaging context needs to be examined alongside the actual daily context.

The following are details associated with the Job Count within Backup Window report:

<table>
<thead>
<tr>
<th>Report Name</th>
<th>Job Count within Backup Window</th>
</tr>
</thead>
<tbody>
<tr>
<td>Report Category</td>
<td>Backup</td>
</tr>
<tr>
<td>Where to Locate</td>
<td>Report &gt; Report Templates &gt; Backup &gt; Planning Activity &gt; Scheduled Job &gt; Job Count within Backup Window</td>
</tr>
<tr>
<td>Report Purpose</td>
<td>Comparison of actual vs scheduled NetBackup jobs across a user-defined backup window against a 24-hour timeline.</td>
</tr>
<tr>
<td>Supported products</td>
<td>NetBackup, NetBackup Appliance</td>
</tr>
<tr>
<td>Applicable View</td>
<td>Master Server</td>
</tr>
<tr>
<td>Report Display</td>
<td>Historical</td>
</tr>
<tr>
<td>Drill down report</td>
<td>None</td>
</tr>
<tr>
<td>Can be scheduled</td>
<td>Yes</td>
</tr>
<tr>
<td>Supported formats</td>
<td>PDF, CSV, TSV, XML, HTML</td>
</tr>
</tbody>
</table>
Mapping with VBR report  
Backups > Activity Planning > Scheduled Jobs > Job Count within Backup Window

**Figure 2-33** shows a sample view of Job Count within Backup Window report.

### Figure 2-33  
Job Count within Backup Window report

This report shows that backups occurred outside of the window shown in green (18:00 - 09:00).

The following table shows the filters for Job Count within Backup Window report and how you can use these filters to view specific data in the report.

<table>
<thead>
<tr>
<th>Filter</th>
<th>Column</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>View</td>
<td>Column</td>
<td>Select a view to show data for the selected view in the report. By default <strong>All My Views</strong> is selected.</td>
</tr>
<tr>
<td>Filter</td>
<td>Column</td>
<td>Description</td>
</tr>
<tr>
<td>--------------</td>
<td>----------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>Master Server</td>
<td>Master Server</td>
<td>Select one or more master servers to view data for the selected master servers in the report. All master servers that are added to the OpsCenter console are shown in the Value drop-down list.</td>
</tr>
<tr>
<td>Client</td>
<td>Client Name</td>
<td>Select one or more clients to view data for the selected clients in the report. All clients that are protected by the master servers in the OpsCenter console are listed.</td>
</tr>
<tr>
<td>Policy</td>
<td>Policy Name</td>
<td>Select one or more policy names to view data for the selected policies.</td>
</tr>
<tr>
<td>Schedule</td>
<td>Schedule Name</td>
<td>Select one or more schedule names to view data for the selected schedule names.</td>
</tr>
<tr>
<td>Scheduled Job</td>
<td>Exclude Manual Jobs</td>
<td>Select if you want to exclude manual jobs in the report. You can select Yes or No.</td>
</tr>
</tbody>
</table>

**Example of filter usage:** You may run the Job Count Window report for a specific master server to view job count details only for the selected master server.

The following enhancements have been made for this report:

- The unit **Years** has been added for Relative Timeframe selection. You can now view data for the last x years. You can also see the **Years** tab on top-right corner of the report.

- The default value for **Exclude Manual Jobs** column in **Scheduled Job** filter is now changed to No. Earlier the default value for **Exclude Manual Jobs** was Yes.

**Planning Activity > Scheduled Jobs > Job Details Scheduled Vs Actual report**

This tabular report shows the comparison between Scheduled Job count and Actual Job count for each of the combinations of clients, policies, and schedules, for each day.

**Note:** By default, the Job Count Details-Scheduled Vs Actual report shows job count per policy. If you want to view the job count per client or master server, change the filter parameters.

Figure 2-34 shows a sample view of the Job Details Scheduled vs Actual report.
The following are details associated with the Job Details Scheduled Vs Actual report:

- **Report Name**: Job Details Scheduled Vs Actual report
- **Report Category**: Backup
- **Where to Locate**: Report > Report Templates > Backup > Planning Activity > Scheduled Job > Job Details Scheduled Vs Actual
- **Report Purpose**: This is a tabular report comparing scheduled to actual job counts grouped by date, master server, client and policy. This report is valid for NetBackup and NetBackup Appliance.
- **Supported products**: NetBackup, NetBackup Appliance
- **Applicable View**: Master Server
- **Report Display**: Tabular
- **Drill down report**: None
- **Can be scheduled**: Yes
- **Supported export formats**: PDF, CSV, TSV, XML, HTML
Mapping with VBR report  Backups > Activity Planning > Scheduled Jobs > Job Details - Scheduled Vs Actual

The following table lists the filters for Job Details Scheduled Vs Actual report and how you can use these filters to view specific data in the report.

<table>
<thead>
<tr>
<th>Filter</th>
<th>Column</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>View</td>
<td></td>
<td>Select a view to show data for the selected view in the report. By default All My Views is selected.</td>
</tr>
<tr>
<td>Master Server</td>
<td>Master Server</td>
<td>Select one or more master servers to view data for the selected master servers in the report. All master servers that are added to the OpsCenter console are shown in the Value drop-down list.</td>
</tr>
<tr>
<td>Client</td>
<td>Client Name</td>
<td>Select one or more clients to view data for the selected clients in the report. All clients that are protected by the master servers in the OpsCenter console are listed.</td>
</tr>
<tr>
<td>Policy</td>
<td>Policy Name</td>
<td>Select one or more policy names to view data for the selected policies.</td>
</tr>
<tr>
<td>Schedule</td>
<td>Schedule Name</td>
<td>Select one or more schedule names to view data for the selected schedule names.</td>
</tr>
<tr>
<td>Scheduled Job</td>
<td>Exclude Manual Jobs</td>
<td>By default, the Actual Job Count includes manual jobs, which were initiated manually. You can exclude manual jobs from the actual job count, and view only the jobs that are of execution type Scheduled. To exclude manual jobs in the report, select Yes.</td>
</tr>
</tbody>
</table>

There is more information available about modifying the Planning Activity > Scheduled Jobs > Job Details Scheduled Vs Actual report.

See “Modifying the Planning Activity > Scheduled Jobs > Job Details Scheduled Vs Actual report” on page 133.

The unit **Years** has been added for Relative Timeframe selection. You can now view data for the last x years. You can also see the **Years** tab on top-right corner of the report.
Modifying the Planning Activity > Scheduled Jobs > Job Details Scheduled Vs Actual report

Note: By default, the Job Count Details-Scheduled Vs Actual report shows job count per policy. If you want to view the job count per client or master server, change the filter parameters.

To change the report parameters
1. On the Job Count Details-Scheduled Vs Actual report, click the Edit link.
2. On the Report Wizard, in the Define Viewable Columns section, select a column name (Client or Master Server) from the Available Columns list.
3. Click >> option.
4. Click Run.

Note: To view job count for a specific client, policy, master server, or schedule, go to the Filters section and select the name of the policy, master server, or schedule for which you want to view job count.

By default the jobs that were run (Actual Job Count) include manual jobs, which do not have any schedule time associated with them as they are initiated manually. You can exclude manual jobs from the actual job count, and view only the jobs that are of execution type Scheduled.

To exclude manual jobs from the actual jobs
1. On the Job Count Details-Scheduled Vs Actual report, click the Edit link.
3. Click Run.

The Job Count Details-Scheduled Vs Actual report shows comparison between Scheduled Job count and Actual Job count. The Actual Job count includes Manual Jobs.

There is more information available about the Planning Activity > Scheduled Jobs > Job Details Scheduled Vs Actual report.

See “Planning Activity > Scheduled Jobs > Job Details Scheduled Vs Actual report” on page 130.
Planning Activity > Scheduled Job > All Jobs report

This canned report shows jobs in a tabular form, which include the following:

**Manual Jobs**
These jobs are initiated manually, by NetBackup admin at his or her discretion. Therefore, these jobs do not have schedule time associated with them.

*Note:* While generating the Job Count-Scheduled Vs Actual report, you have an option to exclude the manual jobs from the actual job count and show only those jobs that are of execution type **Scheduled**.

See “Planning Activity > Scheduled Job > Job Count Scheduled Vs Actual report” on page 124.

**Scheduled Jobs**
These jobs are scheduled to run in future. Each Scheduled Job information comprises a client, policy, schedule, and schedule time. OpsCenter stores this information historically. Each Scheduled Job when run on the specified schedule time becomes an actual job of execution type **Scheduled**. Thus, a Scheduled Job has a corresponding actual job entry in OpsCenter database. This particular Scheduled Job can be identified by the unique combination of client, policy, schedule, and schedule time. You can compare the schedule time of this Scheduled Job with the corresponding Job Start Time to determine whether that job was run on scheduled time or not.

Planning Activity > Stored Backup Images > Valid Backup Images report

Stored Backup Images provide reports on NetBackup backup, duplicate, expired, unexpired images and their sizes.

The Valid Backup Images report shows unexpired backup images across products, domains, clients, policies, and business level views. This report is valid only for NetBackup. This report is available in Ranking and Distribution views.

The unit Years has been added for Relative Timeframe selection. You can now view data for the last x years. You can also see the Years tab on top-right corner of the Tabular Backup report.

The option Next has been removed from the drop-down menu for Relative Timeframe. You now cannot enter a relative timeframe like Next 2 weeks.

The following units for Time Frame Grouping have been removed:

- Day of week Average
- Day of Week total
- Hour of day Average
- Hour of day total
- Minutes
- Month of year Average
- Month of year Total
- Quarter
- Quarter of year Average
- Quarter of year total

The default Report On parameter is None. Earlier it was Master Server.

**UNKNOWN** has been added as a value for Policy Type column in the Policy filter. You can now filter report data for policy types that are **UNKNOWN**. In earlier versions of OpsCenter the unknown policy types were shown as blank. Now all static columns like job type, schedule type, policy type, etc. are shown as UNKNOWN like in VBR.

The following values for Job Type have been removed:

- Automatic Discovery and Protection
- Cleaning
- DB Recover
- DQTS
- Erase
- Generic
- Image Cleanup
- Import
- Inventory
- Label
- LiveUpdate
- Media Contents
- Migration
- None
- Reclamation
- Replication
- Report
The default value "All" for Job Type is not there now. The default-selected value is Backup.

Add Scheduled Job filter. You can filter on the basis of Schedule Name or Schedule/Level Type.

The default unit for Y axis is now GB. Earlier it was MB.

The following option has been added:

Show trendline with moving average period of 3. The value can be 1, 2, 3, 7, 14, or 30.

The Distribution and ranking view is part of another report in OpsCenter "Valid Backup Images"

ImageExpirationTime with value NULL should also be considered as in VBR.

**Planning Activity > Stored Backup Images > Duplicate Copies report**

The axis on the left is for the height of the blue bars for example that tells the number of duplicate backup copies that exist overall. The yellow line for example is the axis on the right and it shows the percentage of backup images that are copies. This is a particularly useful report for situations where you want to make certain there is always more than 1 backup copy. If two copies of a backup exist, the blue bar would be a height of 1 (since there is 1 extra copy) and the line would show .5 for 50% since half of the backup images are copies. The same situation for 3 copies would
be a blue bar height of 2 and a yellow line percentage of .66 or 66%. In operational use you can filter this report down to specific policies or the clients that you want to ensure always have a 50% or greater yellow line so that more than 1 backup copy exists.

**Planning Activity > Stored Backup Images > Stored Backup Images > Stored Backup Images on Media**

This report shows you the total amount of data in gigabytes that was backed up but has not expired yet for each of the days in the past two weeks. This report shows results only for NetBackup and NetBackup Appliances. The report can now also show trendlines with customized average periods.

Click [Show Chart as Table](#) link below the report to view tabular details.

You can also filter the report to show unexpired backed up data for a limited sample set, such as one or more policies, clients, views, or job status. You can use timeframe grouping filter. For example: If you want to view unexpired backup images for the period between 1st Jan 2010 to 1st Feb 2010, in groups each of one week, select 1 Week from the Group by drop-down list. On the report, you can see data in four stacked bars, one per week. Using the Report On parameter, you can select report grouping attribute from the drop-down list, which you want to view the report for. For example: Backup Job Attributes, Backup Image Attributes etc.

The following are details associated with the Stored Backup Images on Media report:

<table>
<thead>
<tr>
<th>Report Name</th>
<th>Stored Backup Images on Media</th>
</tr>
</thead>
<tbody>
<tr>
<td>Report Category</td>
<td>Backup</td>
</tr>
<tr>
<td>Where to Locate</td>
<td>Report &gt; Report Templates &gt; Backup &gt; Planning Activity &gt; Stored Backup Images on Media</td>
</tr>
<tr>
<td>Report Purpose</td>
<td>Historical report of unexpired image sizes across products, domains, clients, policies, and business level views.</td>
</tr>
<tr>
<td>Supported products</td>
<td>Symantec Backup Exec, NetBackup, NetBackup Master Appliance, NetBackup PureDisk</td>
</tr>
<tr>
<td>Applicable View</td>
<td>Master Server</td>
</tr>
<tr>
<td>Report Display</td>
<td>Historical</td>
</tr>
<tr>
<td>Drill down report</td>
<td>None</td>
</tr>
<tr>
<td>Can be scheduled</td>
<td>Yes</td>
</tr>
<tr>
<td>Supported formats</td>
<td>PDF, CSV, TSV, XML, HTML</td>
</tr>
</tbody>
</table>

---

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*About Report Templates descriptions*
Mapping with VBR report  Backups > Activity Planning > Scheduled Jobs > Stored Backup Images

Deviation from VBR  The data for this report from VBR and OpsCenter does not match as OpsCenter points to expiration time from Image_Copy table while VBR used expiration time from Image_fragment table. This change was introduced in OpsCenter 7.1 to correct the behavior of the report and also improve the performance.

Figure 2-35 shows a sample view of the Stored Backup Images on Media report.
The following table shows the filters for Stored Backup Image on Media report and how you can use these filters to view specific data in the report.

<table>
<thead>
<tr>
<th>Filter</th>
<th>Column</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>View</td>
<td></td>
<td>Select a view to show data for the selected view in the report. By default <strong>All My Views</strong> is selected.</td>
</tr>
<tr>
<td>Filter</td>
<td>Column</td>
<td>Description</td>
</tr>
<tr>
<td>------------</td>
<td>---------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Master Server</td>
<td>Master Server</td>
<td>Select one or more master servers to view data for the selected master servers in the report. All master servers that are added to the OpsCenter console are shown in the Value drop-down list.</td>
</tr>
<tr>
<td>Media server</td>
<td>Media server</td>
<td>Select one or more media servers to view data for the specific media servers in the report. All media servers that are attached to the master servers in the OpsCenter console are shown in the Value drop-down list.</td>
</tr>
<tr>
<td>Client</td>
<td>Client Name, Client OS</td>
<td>Select one or more clients to view data for the selected clients in the report. All clients that are protected by the master servers in the OpsCenter console are listed. Select one or more client OS to view data for the selected client OS in the report.</td>
</tr>
<tr>
<td>Policy</td>
<td>Policy Data Classification Name</td>
<td>Select one or more policy data classification names like Gold, Silver, Bronze etc. to view data for the policies having the selected data classification names.</td>
</tr>
<tr>
<td></td>
<td>Policy Keyword</td>
<td>Select one or more policy keywords to view data for the policies having the selected keyword.</td>
</tr>
<tr>
<td></td>
<td>Policy Name</td>
<td>Select one or more policy names to view data for the selected policies.</td>
</tr>
<tr>
<td></td>
<td>Policy Type</td>
<td>Select one or more policy types to view data for the selected policy types.</td>
</tr>
<tr>
<td>Schedule</td>
<td>Schedule/Level Type, Schedule Name</td>
<td>Select one or more schedule types like Full, Incremental etc. to view data for the selected schedule types. Select one or more schedule names to view data for the selected schedule names.</td>
</tr>
<tr>
<td>Job</td>
<td>Job Status, Job Transport Type, Job Type, Product Type</td>
<td>Select one or more Job Status like Failed, Missed, Partially Successful etc. to view data for the selected job status in the report. Select one or more transport types like FT, LAN, or Unknown to view data for the jobs that have the selected transport type. Select one or more job types like Archive, Backup, Restore etc. to view data for the selected job types. Select one or more products like Backup Exec to view data for the selected products.</td>
</tr>
</tbody>
</table>
**Example of filter usage:** You may run the Stored Backup Images on Media report for a specific policy to view unexpired image sizes for the specific policy. Further if you are interested in knowing about the unexpired image sizes for specific products, you can use the **Job** filter and under **Product Type** column, select **Backup Exec**.

The following enhancements have been made in the Stored Backup Images on Media report:

<table>
<thead>
<tr>
<th>Report Enhancements</th>
<th>The following report enhancements have been made:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>- The report now also shows trendlines with customized average periods.</td>
</tr>
<tr>
<td></td>
<td>The following option has been added:</td>
</tr>
<tr>
<td></td>
<td><strong>Show trendline with moving average period of 3.</strong> The value can be 1, 2, 3, 7, 14, or 30. The default value is 3. Select Show trendline with moving average checkbox and use the drop-down list to specify the number of data points to factor into the average. At each interval on the graph, the trendline shows a moving average of the most recent data points. Example: 3 displays a trendline that, at each interval, shows the average of the current data point and the two previous data points.</td>
</tr>
<tr>
<td></td>
<td><strong>Fixed issues of data correctness and parity with VBR.</strong> Image Expiration time with value NULL is now considered in the report.</td>
</tr>
</tbody>
</table>
Filter
Enhancements
The following filter enhancements are listed:

- The unit **Years** has been added for Relative Timeframe selection. You can now view data for the last x years. You can also select **Year** from the top-right corner of the report.

- The option **Next** has been removed from the drop-down menu for Relative Timeframe. You now cannot enter a relative timeframe like Next two weeks.

- The following units for Time Frame Grouping have been removed:
  - Day of week Average
  - Day of Week total
  - Hour of day Average
  - Hour of day total
  - Minutes
  - Month of year Average
  - Month of year Total
  - Quarter
  - Quarter of year Average
  - Quarter of year total

- The default **Report On** parameter is now **None**. Earlier it was **Master Server**.

- **UNKNOWN** has been added as a value for **Policy Type** column in the Policy filter. You can now filter report data for the policy types that are **unknown**. In earlier versions of OpsCenter the unknown policy types were shown as blank. Now all static columns like job type, schedule type, policy type, etc. are shown as UNKNOWN like in VBR.

- The following values for **Job Type** column have been removed for the **Jobs** filter:
  - Automatic Discovery and Protection
  - Cleaning
  - DB Recover
  - DQTS
  - Erase
  - Generic
  - Image Cleanup
  - Import
  - Inventory
  - Label
  - LiveUpdate
  - Media Contents
  - Migration
  - None
The Job Type column is mandatory and the default-selected value for Job Type column is Backup. Earlier the Job Type column was not applied by default.

A new filter called Scheduled Jobs has been added. You can now filter on the basis of Schedule Name or Schedule/Level Type.

The default unit for Y1 axis is now GB. Earlier it was MB.

The Distribution view and Ranking view for this report is part of Valid Backup Images.

Status & Success Rate > Status > Failed Job Count report

Status & Success Rate provides reports of both basic and advanced success and failure rates across NetBackup operations in both per backup window and week-at-a-glance views.

The Success Rate provides advanced reporting on the NetBackup job success rates including the ability to filter out retry attempts and partially successful jobs for both Full and Incremental job schedules.

The Failed Job Count report aggregates failed jobs and shows these across a timeline. In reality, this report is the same as “all jobs” as no distinction on whether the failed job was first or last one is made. It provides visualization of whether a problematic trend exists. It can be reported on against any view or level within a view along with any of the key backup infrastructure components (backup server, media server) and attributes (policy, policy type, schedule, OS, product, transport type). Filtering is available on all components and attributes. The primary use case of the report is verification of whether actions taken to correct persistent failures
produce results and reversing trends. The report can now also show trendlines with customized average periods.  

**Figure 2-36** shows a sample view of the Failed Job Count report.

**Figure 2-36**  Failed Job Count report

The following are details associated with the Failed Job Count report:

<table>
<thead>
<tr>
<th>Detail</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Report Name</td>
<td>Failed Job Count</td>
</tr>
<tr>
<td>Report Category</td>
<td>Backup</td>
</tr>
<tr>
<td>Where to Locate</td>
<td>Report &gt; Report Templates &gt; Backup &gt; Status &amp; Success</td>
</tr>
<tr>
<td></td>
<td>Rate &gt; Status &gt; Failed Job Count</td>
</tr>
<tr>
<td>Report Purpose</td>
<td>This report shows the failed job density over time.</td>
</tr>
<tr>
<td>Supported products</td>
<td>NetBackup, NetBackup Appliance, Backup Exec, NetBackup PureDisk</td>
</tr>
<tr>
<td>Applicable View</td>
<td>Master Server, Client</td>
</tr>
<tr>
<td>Report Display</td>
<td>Historical</td>
</tr>
</tbody>
</table>
Drill down report: No
Can be scheduled: Yes
Supported export formats: CSV, HTML, PDF, XML, TSV
Mapping with VBR report: Backups > Status > Failed Job Count

The following table shows the filters for Failed Job Count report and how you can use these filters to view specific data in the report.

<table>
<thead>
<tr>
<th>Filter</th>
<th>Column</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>View</td>
<td>Select a view to show data for the selected view in the report. By default <strong>All My Views</strong> is selected.</td>
<td></td>
</tr>
<tr>
<td>Master Server</td>
<td>Select one or more master servers to view data for the selected master servers in the report. All master servers that are added to the OpsCenter console are shown in the <strong>Value</strong> drop-down list.</td>
<td></td>
</tr>
<tr>
<td>Media server</td>
<td>Select one or more media servers to view data for the specific media servers in the report. All media servers that are attached to the master servers in the OpsCenter console are shown in the <strong>Value</strong> drop-down list.</td>
<td></td>
</tr>
<tr>
<td>Client</td>
<td>Select one or more clients to view data for the selected clients in the report. All clients that are protected by the master servers in the OpsCenter console are listed.</td>
<td></td>
</tr>
<tr>
<td>Client OS</td>
<td>Select one or more client OS to view data for the selected client OS in the report.</td>
<td></td>
</tr>
<tr>
<td>Policy</td>
<td>Select one or more policy data classification names to view data for the selected policy data classification names.</td>
<td></td>
</tr>
<tr>
<td>Policy Keyword</td>
<td>Select one or more policy keyword to view data for the policies having the selected keyword.</td>
<td></td>
</tr>
<tr>
<td>Policy Name</td>
<td>Select one or more policy names to view data for the selected policies.</td>
<td></td>
</tr>
<tr>
<td>Policy Type</td>
<td>Select one or more policy types to view data for the selected policy types.</td>
<td></td>
</tr>
<tr>
<td>Schedule Type</td>
<td>Select one or more schedule types like CINC, Copy, Daily etc. to view data for the selected schedule types.</td>
<td></td>
</tr>
<tr>
<td>Schedule Name</td>
<td>Select one or more schedule names to view data for the selected schedule names.</td>
<td></td>
</tr>
</tbody>
</table>
### Filter Column Description

<table>
<thead>
<tr>
<th>Filter</th>
<th>Column</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job</td>
<td>Job Transport Type</td>
<td>Select one or more transport types like FT, LAN, or Unknown to view data for the jobs that have the selected transport type.</td>
</tr>
<tr>
<td></td>
<td>Job Type</td>
<td>By default, Backup jobs are shown in the report. You can select one or more job types like Archive, Backup, Restore etc. to view data for the selected job types.</td>
</tr>
<tr>
<td></td>
<td>Product Type</td>
<td>Select one or more backup products to view data for the selected products.</td>
</tr>
<tr>
<td>Attempt</td>
<td>Attempt Status</td>
<td>The Attempt Status filter can have two values i.e. Attempt or Job. When Job Count is calculated, the report considers all attempts if Attempt is selected.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>By default, Job is selected. Number of attempts are not considered when Job is selected.</td>
</tr>
</tbody>
</table>

**Example of filter usage:** To view a count of all job attempts in the Failed Job Count report, select Attempt Status as **Attempt**.

The following report enhancements have been made for Failed Job Count report:

- The unit **Years** has been added for Relative Timeframe selection. You can now view data for the last x years.

- The option **Next** has been removed from the drop-down menu for Relative Timeframe. You now cannot enter a relative timeframe like Next 2 weeks. This is because the report does not support any futuristic data.

- The following options have been removed from **Time Frame Group By** selection:
  - Days of week Average
  - Days of week total
  - Hours of day Average
  - Hours of day Total
  - Minutes
  - Month of year Average
  - Month of year total
  - Quarter
  - Quarter of year Average
  - Quarter of year total

- The following **Report On** options have been added under Backup Job Attributes:
- Job Status (Complete and Partial only)
- Job Status (Complete only)

- The Schedule Name column is added under the Schedule filter to filter data by schedule name.

- The report now also shows trendlines with customized average periods.
  The following option has been added:
  **Show trendline with moving average period of 3.** The value can be 1, 2, 3, 7, 14, or 30. The default value is 3.
  Select **Show trendline with moving average** checkbox and use the drop-down list to specify the number of data points to factor into the average. At each interval on the graph, the trendline shows a moving average of the most recent data points. Example: 3 displays a trendline that, at each interval, shows the average of the current data point and the two previous data points.

- **UNKNOWN** has been added as a value for **Policy Type** column in the Policy filter. You can now filter report data for policy types that are unknown. In earlier versions of OpsCenter the unknown policy types were shown as blank. Now all static columns like job type, schedule type, policy type, etc. are shown as UNKNOWN like in VBR

**Status & Success Rate > Status > Partially Successful Job Count report**

This report aggregates partially successful jobs and shows these across a timeline. It provides a visualization of job volume trends that skip the files that are open during the backup job. It can be reported on against any view or level within a view along with any of the key backup infrastructure components (backup server, media server) and attributes (policy, policy type, schedule, OS, product, transport type). Filtering is available on all components and attributes. The primary use case of the report is verification of whether actions taken to correct the open file situation by moving the scheduling of the client or policies produce results and reversing trends.

*Figure 2-37* shows a sample view of the Partially Successful Job Count report.
The following are details associated with the Partially Successful Job Count report:

<table>
<thead>
<tr>
<th>Report Name</th>
<th>Partially Successful Job Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Report Category</td>
<td>Backup</td>
</tr>
<tr>
<td>Where to Locate</td>
<td>Report &gt; Report Templates &gt; Backup &gt; Status &amp; Success Rate &gt; Status &gt; Partially Successful Job Count</td>
</tr>
<tr>
<td>Report Purpose</td>
<td>This report shows the partially successful jobs density over time.</td>
</tr>
<tr>
<td>Supported products</td>
<td>NetBackup, NetBackup Appliance, Backup Exec, NetBackup PureDisk</td>
</tr>
<tr>
<td>Applicable View</td>
<td>Master Server, Client</td>
</tr>
<tr>
<td>Report Display</td>
<td>Historical</td>
</tr>
<tr>
<td>Drill down report</td>
<td>No</td>
</tr>
<tr>
<td>Can be scheduled</td>
<td>Yes</td>
</tr>
</tbody>
</table>
The following table shows the filters for Partially Successful Job Count report and how you can use these filters to view specific data in the report.

<table>
<thead>
<tr>
<th>Filter</th>
<th>Column</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>View</td>
<td>Column</td>
<td>Select a view to show data for the selected view in the report. By default <strong>All My Views</strong> is selected.</td>
</tr>
<tr>
<td>Master Server</td>
<td>Master Server</td>
<td>Select one or more master servers to view data for the selected master servers in the report. All master servers that are added to the OpsCenter console are shown in the <strong>Value</strong> drop-down list.</td>
</tr>
<tr>
<td>Media server</td>
<td>Media server</td>
<td>Select one or more media servers to view data for the specific media servers in the report. All media servers that are attached to the master servers in the OpsCenter console are shown in the <strong>Value</strong> drop-down list.</td>
</tr>
<tr>
<td>Client</td>
<td>Client Name</td>
<td>Select one or more clients to view data for the selected clients in the report. All clients that are protected by the master servers in the OpsCenter console are listed.</td>
</tr>
<tr>
<td></td>
<td>Client OS</td>
<td>Select one or more client OS to view data for the selected client OS in the report.</td>
</tr>
<tr>
<td>Policy</td>
<td>Policy Data Classification Name</td>
<td>Select one or more policy data classification names to view data for the selected policy data classification names.</td>
</tr>
<tr>
<td></td>
<td>Policy Keyword</td>
<td>Select one or more policy keyword to view data for the policies having the selected keyword.</td>
</tr>
<tr>
<td></td>
<td>Policy Name</td>
<td>Select one or more policy names to view data for the selected policies.</td>
</tr>
<tr>
<td></td>
<td>Policy Type</td>
<td>Select one or more policy types to view data for the selected policy types.</td>
</tr>
<tr>
<td>Schedule</td>
<td>Schedule Type</td>
<td>Select one or more schedule types like CINC, Copy, Daily etc. to view data for the selected schedule types.</td>
</tr>
<tr>
<td></td>
<td>Schedule Name</td>
<td>Select one or more schedule names to view data for the selected schedule names.</td>
</tr>
<tr>
<td>Filter</td>
<td>Column</td>
<td>Description</td>
</tr>
<tr>
<td>--------</td>
<td>-------------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Job</td>
<td>Job Transport Type</td>
<td>Select one or more transport types like FT, LAN, or Unknown to view data for the jobs that have the selected transport type.</td>
</tr>
<tr>
<td>Job</td>
<td>Job Type</td>
<td>By default, Backup jobs are shown in the report. You can select one or more job types like Archive, Backup, Restore etc. to view data for the selected job types.</td>
</tr>
<tr>
<td>Job</td>
<td>Product Type</td>
<td>Select one or more backup products to view data for the selected products.</td>
</tr>
<tr>
<td>Attempt</td>
<td>Attempt Status</td>
<td>The Attempt Status column can have two values i.e. Attempt or Job. When Job Count is calculated, the report considers all attempts if Attempt is selected.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>By default, Job is selected. Number of attempts are not considered when Job is selected.</td>
</tr>
</tbody>
</table>

**Example of filter usage:** You may run the Partially Successful Job Count report for a specific policy to view partially successful jobs for the specific policy. Further if you are interested in knowing about the partially successful job count for specific products, you can use the Job filter and under Product Type column, select Backup Exec.

The following report enhancements have been made for Partially Successful Job Count report:

- The unit **Years** has been added for Relative Timeframe selection.
  You can now view data for the last x years.

- The option **Next** has been removed from the drop-down menu for Relative Timeframe. You now cannot enter a relative timeframe like Next 2 weeks. This is because the report does not support any futuristic data.

- The following options have been removed from Time Frame Group By selection:
  - Days of week Average
  - Days of week total
  - Hours of day Average
  - Hours of day Total
  - Minutes
  - Month of year Average
  - Month of year total
  - Quarter
- Quarter of year Average
- Quarter of year total

- The following **Report On** options have been added under Backup Job Attributes:
  - Job Status (Complete and Partial only)
  - Job Status (Complete only)

- The **Schedule Name** column is added under the **Schedule** filter to filter data by schedule name.

- The report now also shows trendlines with customized average periods.
  The following option has been added:
  **Show trendline with moving average period of** 3. The value can be 1, 2, 3, 7, 14, or 30. The default value is 3.
  Select **Show trendline with moving average** checkbox and use the drop-down list to specify the number of data points to factor into the average. At each interval on the graph, the trendline shows a moving average of the most recent data points. Example: 3 displays a trendline that, at each interval, shows the average of the current data point and the two previous data points.

- **UNKNOWN** has been added as a value for **Policy Type** column in the Policy filter. You can now filter report data for policy types that are unknown. In earlier versions of OpsCenter the unknown policy types were shown as blank. Now all static columns like job type, schedule type, policy type, etc. are shown as **UNKNOWN** like in VBR

### Status & Success Rate > Status > Successful Job Count report

This report aggregates successful jobs and shows these across a timeline. It provides a visualization of job volume trends. It can be reported on against any view or level within a view along with any of the key backup infrastructure components (backup server, media server) and attributes (policy, policy type, schedule, OS, product, transport type). By default backup jobs are shown in the report. Filtering is available on all components and attributes. The primary use case of the report is verification of trends and the days that are exception to the norm. The report is highly effective for presenting long-term historical data on one of the most fundamental metrics of managing a backup operation.

**Figure 2-38** shows a sample view of the Successful Job Count report.
The following are details associated with the Successful Job Count report:

<table>
<thead>
<tr>
<th>Report Name</th>
<th>Successful Job Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Report Category</td>
<td>Backup</td>
</tr>
<tr>
<td>Where to Locate</td>
<td>Report &gt; Report Templates &gt; Backup &gt; Status &amp; Success Rate &gt; Status &gt; Successful Job Count</td>
</tr>
<tr>
<td>Report Purpose</td>
<td>This report shows the successful jobs density over time.</td>
</tr>
<tr>
<td>Supported products</td>
<td>NetBackup, NetBackup Appliance, Backup Exec, NetBackup PureDisk</td>
</tr>
<tr>
<td>Applicable View</td>
<td>Master Server, Client</td>
</tr>
<tr>
<td>Report Display</td>
<td>Historical (Chart)</td>
</tr>
<tr>
<td>Drill down report</td>
<td>No</td>
</tr>
<tr>
<td>Can be scheduled</td>
<td>Yes</td>
</tr>
<tr>
<td>Supported export formats</td>
<td>CSV, HTML, PDF, XML, TSV</td>
</tr>
<tr>
<td>Mapping with VBR report</td>
<td>Backups &gt; Status &gt; Successful Job Count</td>
</tr>
</tbody>
</table>

The following table shows the filters for Successful Job Count report and how you can use these filters to view specific data in the report.
<table>
<thead>
<tr>
<th>Filter</th>
<th>Column</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>View</td>
<td></td>
<td>Select a view to show data for the selected view in the report. By default All My Views is selected.</td>
</tr>
<tr>
<td>Master Server</td>
<td>Master Server</td>
<td>Select one or more master servers to view data for the selected master servers in the report. All master servers that are added to the OpsCenter console are shown in the Value drop-down list.</td>
</tr>
<tr>
<td>Media server</td>
<td>Media server</td>
<td>Select one or more media servers to view data for the specific media servers in the report. All media servers that are attached to the master servers in the OpsCenter console are shown in the Value drop-down list.</td>
</tr>
<tr>
<td>Client</td>
<td>Client Name</td>
<td>Select one or more clients to view data for the selected clients in the report. All clients that are protected by the master servers in the OpsCenter console are listed.</td>
</tr>
<tr>
<td></td>
<td>Client OS</td>
<td>Select one or more client OS to view data for the selected client OS in the report.</td>
</tr>
<tr>
<td>Policy</td>
<td>Policy Data Classification Name</td>
<td>Select one or more policy data classification names to view data for the selected policy data classification names.</td>
</tr>
<tr>
<td></td>
<td>Policy Keyword</td>
<td>Select one or more policy keyword to view data for the policies having the selected keyword.</td>
</tr>
<tr>
<td></td>
<td>Policy Name</td>
<td>Select one or more policy names to view data for the selected policies.</td>
</tr>
<tr>
<td></td>
<td>Policy Type</td>
<td>Select one or more policy types to view data for the selected policy types.</td>
</tr>
<tr>
<td>Schedule</td>
<td>Schedule Type</td>
<td>Select one or more schedule types like CINC, Copy, Daily etc. to view data for the selected schedule types.</td>
</tr>
<tr>
<td></td>
<td>Schedule Name</td>
<td>Select one or more schedule names to view data for the selected schedule names.</td>
</tr>
<tr>
<td>Job</td>
<td>Job Transport Type</td>
<td>Select one or more transport types like FT, LAN, or Unknown to view data for the jobs that have the selected transport type.</td>
</tr>
<tr>
<td></td>
<td>Job Type</td>
<td>By default, Backup jobs are shown in the report. You can select one or more job types like Archive, Backup, Restore etc. to view data for the selected job types.</td>
</tr>
<tr>
<td></td>
<td>Product Type</td>
<td>Select one or more backup products to view data for the selected products.</td>
</tr>
</tbody>
</table>
The **Attempt Status** column can have two values i.e. Attempt or Job. When Job Count is calculated, the report considers all attempts if **Attempt** is selected.

By default, **Job** is selected. Number of attempts are not considered when **Job** is selected.

**Example of filter usage:** You may run the Successful Job Count report for a specific policy to view successful job counts for the specific policy. Further if you are interested in knowing about the successful job counts for specific products, you can use the **Job** filter and under **Product Type** column, select **Backup Exec**.

The following report enhancements have been made for the Successful Job Count report:

- The unit **Years** has been added for Relative Timeframe selection. You can now view data for the last x years.

- The option **Next** has been removed from the drop-down menu for Relative Timeframe. You now cannot enter a relative timeframe like Next 2 weeks. This is because the report does not support any futuristic data.

- The following options have been removed from **Time Frame Group By** selection:
  - Days of week Average
  - Days of week total
  - Hours of day Average
  - Hours of day Total
  - Minutes
  - Month of year Average
  - Month of year total
  - Quarter
  - Quarter of year Average
  - Quarter of year total

- The following **Report On** options have been added under Backup Job Attributes:
  - Job Status (Complete and Partial only)
  - Job Status (Complete only)

- The **Schedule Name** column is added under the **Schedule** filter to filter data by schedule name.
The report now also shows trendlines with customized average periods. The following option has been added:

**Show trendline with moving average period of** 3. The value can be 1, 2, 3, 7, 14, or 30. The default value is 3.

Select **Show trendline with moving average** checkbox and use the drop-down list to specify the number of data points to factor into the average. At each interval on the graph, the trendline shows a moving average of the most recent data points. Example: 3 displays a trendline that, at each interval, shows the average of the current data point and the two previous data points.

**UNKNOWN** has been added as a value for **Policy Type** column in the Policy filter. You can now filter report data for policy types that are unknown. In earlier versions of OpsCenter the unknown policy types were shown as blank. Now all static columns like job type, schedule type, policy type, etc. are shown as UNKNOWN like in VBR.

**Status & Success Rate > Status > All Failed Backups report**

This report is one of three using the advanced success or failure calculation logic around the notion of first, all and last job. They require schedule and window parameters enabling a precise definition of timeframes. Additionally, these reports have aggregation levels of job and client. The first job success or failure is the first job for a client/policy/schedule combination in its defined backup window and last job is the opposite. As failed jobs are rerun one or more times, the “last job” represents the last of the reruns within the window. This report produces the details of the failed jobs based on which one of the three (first or all or last) methods is chosen. The main use case for this report is based on last job where failure notification to users is based around last job and failures leading up to the last one is ignored.

**Status > Consecutive Failures**

This report is the second of three using the advanced success or failure calculation logic around the notion of first, all and last job. The main use case is the calculation of two or more consecutive failures based around Last Job Success/Failure. It applies intricate logic to pick off the last failed job and in turn to determine that the last job failures are indeed consecutive. This report can be best verified through the Client Risk Analysis report. In this report, if three consecutive failures with 24 hour windows were chosen, the client or the policy combination should also appear on the risk report as not having a successful backup in 72 or more hours.

Jobs that fail consecutively appear in the Consecutive Failures report. The period for which they fail consecutively is configurable.

*Figure 2-39* shows a sample view of Consecutive Failures Report.
### Figure 2-39 Consecutive Failures Report

<table>
<thead>
<tr>
<th>Node Name</th>
<th>Client Name</th>
<th>Policy Name</th>
<th>Schedule</th>
<th>Job ID</th>
<th>Start Time</th>
<th>End Time</th>
<th>Status Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>101.engba.symantec.com</td>
<td>appesx29-vm1</td>
<td>linux_gendata_1</td>
<td>Full</td>
<td>182770</td>
<td>Jul 23, 2013 2:03:37 PM</td>
<td>Jul 23, 2013 2:03:45 PM</td>
<td>2074</td>
</tr>
</tbody>
</table>

The following columns are displayed in the report:
Value in the **Node Name** column depends on the **Report On** parameter that you select. The default value of **Report On** parameter is Master Server. So the value in **Node Name** column by default shows the master server name.

When you select a view from the **Filters** section while editing the report, the **Report On** parameter drop-down list also shows the view levels. Based on the levels that you select from the **Report On** drop-down list, value in the **Node Name** column changes.

For example, if there is a view like **Location** with two levels:

**Location (View name)**

- US
  -- Client1
  -- Client2
  -- Client3
- India
  -- Client4
  -- Client5
  -- Client6

The following selections are possible:

- Select this view called **Location** from the **Filters** section and select the **Report On** parameter as **Master Server** (default selection). The **Node Name** column displays the master server.
- Select this view called **Location** from the **Filters** section and select the **Report On** parameter as **Level 1**. The **Node Name** column displays US and India
- Select this view called **Location** from the **Filters** section and select the **Report On** parameter as **Level 2**. The **Node Name** column displays the clients (clients 1-6).

<table>
<thead>
<tr>
<th>Client Name</th>
<th>Name of the client</th>
</tr>
</thead>
<tbody>
<tr>
<td>Policy Name</td>
<td>Policies associated with the client and node name</td>
</tr>
<tr>
<td>Schedule Name</td>
<td>Schedules associated with the client</td>
</tr>
<tr>
<td>Job ID</td>
<td>Job IDs associated with the policy and schedule that fail consecutively.</td>
</tr>
<tr>
<td>Start Time</td>
<td>Date and Time when the job started</td>
</tr>
<tr>
<td>End Time</td>
<td>Date and time when the job ended.</td>
</tr>
</tbody>
</table>
The following are the details that are associated with the Consecutive Failures report:

<table>
<thead>
<tr>
<th>Report Name</th>
<th>Consecutive Failures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Report Category</td>
<td>Status and Success Rate</td>
</tr>
<tr>
<td>Where to Locate</td>
<td>Report &gt; Report Templates &gt; Backup &gt; Status and Success Rate &gt; Status &gt; Consecutive Failures report.</td>
</tr>
<tr>
<td>Report Purpose</td>
<td>Provides tabular view showing clients that had consecutive job failures.</td>
</tr>
<tr>
<td>Supported products</td>
<td>Symantec NetBackup, Symantec NetBackup Master Appliance</td>
</tr>
<tr>
<td>Applicable View</td>
<td>Master Server, Client</td>
</tr>
<tr>
<td>Report Display</td>
<td>Tabular</td>
</tr>
<tr>
<td>Drill down report</td>
<td>None</td>
</tr>
<tr>
<td>Can be scheduled</td>
<td>Yes</td>
</tr>
<tr>
<td>Supported formats</td>
<td>PDF, CSV, HTML, XML, TSV</td>
</tr>
<tr>
<td>Mapping with VBR report</td>
<td>All Reports &gt; Standard Report &gt; Backup &gt; Status &gt; Consecutive Failures</td>
</tr>
</tbody>
</table>

You can edit the Consecutive Failures report to show or hide the columns that you are interested in. All the columns are shown by default. You can also filter the report to view reports of specific master servers. The following table shows the filters for Consecutive Failures report and how you can use these filters to view specific data in the report.

<table>
<thead>
<tr>
<th>Filter</th>
<th>Column</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>View</td>
<td></td>
<td>Select a view to show data for the selected view in the report. By default All My Views is selected.</td>
</tr>
</tbody>
</table>
### Description

Select one or more master servers to view data for the selected master servers in the report. All master servers that are added to the OpsCenter console are shown in the **Value** drop-down list.

**Filter**

<table>
<thead>
<tr>
<th>Master Server</th>
<th>Column</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Master Server</td>
<td>Master Server</td>
<td>Select one or more master servers to view data for the selected master servers in the report. All master servers that are added to the OpsCenter console are shown in the <strong>Value</strong> drop-down list.</td>
</tr>
</tbody>
</table>

**Policy**

| Policy | Policy Name | Select one or more policy names to view data for the selected policies. |

**Job**

| Job | Job Types | Select one or more job types as Archive, Backup, or Restore to view data for the selected job types. |

**Status Code**

| Status Code | Select one or more status codes to view data for the selected status codes. |

**Success Rate**

| Success Rate | Aggregation Level | Select different parameters for criteria definition about success rate of the jobs. Select All Jobs Success Rate, First job Success Rate, Last Job Success Rate. Select Aggregation Level to consider the kind of jobs for the specified time frame. For example, if you select First Job Success Rate then the report shows only the first job for the combination of master server, client, policy, and schedule. |

**Metric Type**

| Metric Type | Select **Metric Type** to calculate the success rate based as jobs. |

**Full Days**

| Full Days | Select **Full Days** to specify the list of days to be considered for Full backups. |

**Full Window Parameter**

| Full Window Parameter | Select **Full Window Parameter** to specify the start time for the full backup window. |

**Count Partial Successful Job as Successful**

| Count Partial Successful Job as Successful | Select **Count Partially Successful Job as Successful** to count partially successful jobs as successful. |

**Full for Duration of (In Hours)**

| Full for Duration of (In Hours) | Select **Full for Duration of (In Hours)** to calculate the end time for the incremental backup window. Backup window end time is equal to the duration from the start time of the backup window. |

**Consecutive Failures**

| Consecutive Failures | Select how many consecutive failures should be included in the report. |

**Increment Window Parameter**

| Increment Window Parameter | Select **Increment Window Parameter** to specify the start time for the incremental backup window. |

**Schedule/Level Type**

| Schedule/Level Type | Select the schedule of jobs is Full or Increment or All. |
**Filter** | **Column** | **Description**  
--- | --- | ---  
Increment for Duration of (In Hours) | Select **Increment for Duration of** (In Hours) to calculate the end time for the incremental backup window. Backup window end time is equal to the duration from the start time of the backup window.  
Increment Days | Select **Increment Days** to specify the list of days to be considered for Incremental backups.  

**Example of filter usage**: You may run the report for specific policy names to view details only for that specific policy.

**Status & Success Rate > Status > Week At A Glance report**

This report summarizes activity for a week by symbolically displaying the result of each job for each client under the day of the week. The symbols are the blue (Success) and yellow (Partial Success) men and failures that are denoted by a red “X”. This report provides quick and comprehensive verification that all is well in the data protection solution using symbols. A drill-down capability to the job level details (i.e Job ID, Start/End Time, Size etc.) is provided. You can drill down to any server on any day and get the job level detail.

It can be reported on against any view or level within a view along with any of the key backup infrastructure components (backup server, media server) and attributes (policy, policy type, schedule, OS, product, transport type). Filtering is available on all components and attributes. The report provides a visualization of job status for the most current data and how that compares to the previous six days.

This report can be used for automated report generation and email features where different report filters can be used to show specific systems and then that data emailed to the relevant parties once a week. Symantec recommends that you use filters in large environments. This is because the report shows every master server and client by default.

Week at a Glance Report’s performance declines as the data to be displayed in the report increases. For example, running a two-month report is slower than running a two-week report.

**Note**: The Week at a Glance report displays icons when it is exported or emailed in an HTML format. Earlier in OpsCenter 7.0.x, the Week at a Glance report could not display icons when exported or emailed in an HTML format. This issue has been fixed in OpsCenter 7.1 and later versions.

*Figure 2-40* shows a sample view of the Week at a Glance report.
This report shows that there were a number of failures and also quickly shows that most of the backups completed successfully. Using this report you can see if backups ran each day of the week and the status of that backup. This report can be scheduled to be emailed or exported weekly which saves a great deal of time.

The following are details associated with the Week at a Glance report:

**Report Name**  
Week at a Glance

**Report Category**  
Backup

**Where to Locate**  
Report > Report Templates > Backup > Status & Success Rate > Week At a Glance

**Report Purpose**  
This is a graphical report of the backup status for each protected client. A blue icon represents a successful backup, a yellow icon represents a partially successful backup, and a red icon represents a failed backup. A green background indicates a full backup. A light blue background represents an incremental backup.
Supported products  Symantec Backup Exec, NetBackup, NetBackup Master Appliance, NetBackup PureDisk
Applicable View  Master Server, Client
Report Display  Tabular
Drill down report  Week at a Glance Detail

See "Week at a Glance Detail report" on page 165.
The Week at a Glance Details report further drills down to Skip File Details.

Can be scheduled  Yes
Supported export formats  CSV, TSV, XML, HTML
Mapping with VBR report  Backups > Status > Week At a Glance
Deviations from VBR  If one client is backed up by two master servers, two rows are shown in OpsCenter while one row is displayed in VBR.

The following table shows the filters for Week at a Glance report and how you can use these filters to view specific data in the report.

<table>
<thead>
<tr>
<th>Filter</th>
<th>Column</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>View</td>
<td></td>
<td>Select a view to show data for the selected view in the report. By default <strong>All My Views</strong> is selected.</td>
</tr>
<tr>
<td>Master Server</td>
<td>Master Server</td>
<td>Select one or more master servers to view data for the selected master servers in the report. All master servers that are added to the OpsCenter console are shown in the <strong>Value</strong> dropdown list.</td>
</tr>
<tr>
<td>Media Server</td>
<td>Media Server</td>
<td>Select one or more media servers to view data for the specific media servers in the report. All media servers that are attached to the master servers in the OpsCenter console are shown in the <strong>Value</strong> dropdown list.</td>
</tr>
<tr>
<td>Client</td>
<td>Client Name</td>
<td>Select one or more clients to view data for the selected clients in the report. All clients that are protected by the master servers in the OpsCenter console are listed.</td>
</tr>
<tr>
<td></td>
<td>Client OS</td>
<td>Select one or more client OS to view data for the selected client OS in the report.</td>
</tr>
<tr>
<td>Filter</td>
<td>Column</td>
<td>Description</td>
</tr>
<tr>
<td>-------------</td>
<td>---------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Policy</td>
<td>Policy Data Classification Name</td>
<td>Select one or more policy data classification names like Gold, Silver, Bronze etc. to view data for the policies having the selected data classification names.</td>
</tr>
<tr>
<td>Policy</td>
<td>Keyword</td>
<td>Select one or more policy keyword to view data for the policies having the selected keyword.</td>
</tr>
<tr>
<td>Policy</td>
<td>Name</td>
<td>Select one or more policy names to view data for the selected policies.</td>
</tr>
<tr>
<td>Policy</td>
<td>Type</td>
<td>Select one or more policy types to view data for the selected policy types.</td>
</tr>
<tr>
<td>Schedule</td>
<td>Name</td>
<td>Select one or more schedule names to view data for the selected schedule names.</td>
</tr>
<tr>
<td>Job</td>
<td>Status</td>
<td>Select one or more Job Status like Failed, Missed, Partially Successful etc. to view data for the selected job status in the report.</td>
</tr>
<tr>
<td>Job</td>
<td>Transport Type</td>
<td>Select one or more transport types like FT, LAN, or Unknown to view data for the jobs that have the selected transport type.</td>
</tr>
<tr>
<td>Job</td>
<td>Type</td>
<td>Select one or more job types like Archive, Backup, Restore etc. to view data for the selected job types.</td>
</tr>
<tr>
<td>Job</td>
<td>Product Type</td>
<td>Select one or more products like Backup Exec to view data for the selected products.</td>
</tr>
</tbody>
</table>

**Example of filter usage:** You may run the Week at a Glance report for a specific master server to view backup status for the clients protected by the specific master server. Further if you are interested in knowing about the status of say only Backup jobs (and no other jobs like Restore or archive jobs), you can use the **Job Type** filter and select **Backup**.

The following enhancements have been made in the Week at a Glance report:
The following report enhancements have been made:

- The Week at a Glance report can now show the files and directories that are backed up for each client. The following checkbox has been added on the Modify Display Options pane when you edit the report:
  
  **Show the files and directories backed up for each client**

  If you check this option and click Run Report, you can view the client name and the backed up directory in the **Client Name** column of Week at a Glance report.

- You can drill down from the **Client Name** column in the Week at a Glance report to view Week at a Glance Details report. This was also available earlier.

  Now an additional level of drill down is available from the Week at a Glance Details report. You can now further drill down from the **Job Primary ID** column in Week at a Glance Details report to view Skip File Details report.

- The **Client Name** column in the Week at a Glance report is now sorted by default.

- Earlier if you selected **Rolling 8 days** column in the **Week Information** filter, the Week at a Glance report displayed one day less than VBR. This issue has now been fixed.

The following filter enhancements are listed:

- For Week Information filter, the value list for **Week of the year** column has been updated. The values staring from **17 Weeks Ago** to **30 Weeks Ago** have been added. Earlier the value selections were limited from current week to 16 Weeks Ago.

  By selecting these additional values, you can view older data in the report.

- **UNKNOWN** has been added as a value for **Policy Type** column in the Policy filter. You can now filter report data for policy types that are **UNKNOWN**. In earlier versions of OpsCenter the unknown policy types were shown as blank. Now all static columns like job type, schedule type, policy type, etc. are shown as **UNKNOWN** like in VBR.

- **Schedule** filter has been added to the list of filters for this report. You can now view report data for jobs that have a specific schedule name.

### Week at a Glance Detail report

In the Week at a Glance report, you can drill down from the **Client Name** column to know the job details that are associated with the client in the selected week. You can also click on a job icon to see job details for the selected day for the specific client.

**Figure 2-41** shows a sample view of the Week at a Glance Details report that is obtained by clicking the **Client Name** column in Week at a Glance report.
You can click a Job Primary ID to view skipped file details for the job. A new drilldown report named Skip File Details has been added.

The following are details associated with the Week At A Glance Details report:

<table>
<thead>
<tr>
<th>Report Name</th>
<th>Week at a Glance Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Report Category</td>
<td>Backup</td>
</tr>
<tr>
<td>Where to Locate</td>
<td>Report &gt; Report Templates &gt; Backup &gt; Status &amp; Success Rate &gt; Week At a Glance (click the Client Name link or any icon)</td>
</tr>
<tr>
<td>Report Purpose</td>
<td>Backup status for the selected client.</td>
</tr>
<tr>
<td>Supported products</td>
<td>Symantec Backup Exec, NetBackup, NetBackup Master Appliance, NetBackup PureDisk</td>
</tr>
<tr>
<td>Applicable View</td>
<td>Master Server, Client</td>
</tr>
</tbody>
</table>
Report Display  Tabular
Drill down report  Skip File Detail
See “Skip File Details” on page 116.
Can be scheduled  Yes
Supported export formats  PDF, CSV, TSV, XML, HTML
Mapping with VBR report  Backups > Status > Week At a Glance > Week at a Glance Details

You can edit the report to show or hide the columns that you are interested in. All the columns are shown by default. You can also filter the report to show jobs for a specific product or master server.

The following table shows the filters for Week at a Glance Details report and how you can use these filters to view specific data in the report.

<table>
<thead>
<tr>
<th>Filter</th>
<th>Column</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>View</td>
<td>Master Server</td>
<td>Select a view to show data for the selected view in the report. By default <strong>All My Views</strong> is selected.</td>
</tr>
<tr>
<td>Master Server</td>
<td>Media Server</td>
<td>Select one or more master servers to view data for the selected master servers in the report. All master servers that are added to the OpsCenter console are shown in the <strong>Value</strong> dropdown list.</td>
</tr>
<tr>
<td>Media Server</td>
<td>Media Server</td>
<td>Select one or more media servers to view data for the specific media servers in the report. All media servers that are attached to the master servers in the OpsCenter console are shown in the <strong>Value</strong> dropdown list.</td>
</tr>
<tr>
<td>Client Name</td>
<td>Client OS</td>
<td>Select one or more clients to view data for the selected clients in the report. All clients that are protected by the master servers in the OpsCenter console are listed. Select one or more client OS to view data for the selected client OS in the report.</td>
</tr>
</tbody>
</table>
**Filter** | **Column** | **Description**
--- | --- | ---
Policy | Policy Data Classification Name | Select one or more policy data classification names like Gold, Silver, Bronze etc. to view data for the policies having the selected data classification names.
Policy | Policy Keyword | Select one or more policy keywords to view data for the policies having the selected keyword.
Policy | Policy Name | Select one or more policy names to view data for the selected policies.
Policy | Policy Type | Select one or more policy types to view data for the selected policy types.
Schedule | Schedule/Level Type | Select one or more schedule types like Full, Incremental etc. to view data for the selected schedule types.
Job | Job Status | Select one or more Job Status like Failed, Missed, Partially Successful etc. to view data for the selected job status in the report.
Job | Job Transport Type | Select one or more transport types like FT, LAN, or Unknown to view data for the jobs that have the selected transport type.
Job | Job Type | Select one or more job types like Archive, Backup, Restore etc. to view data for the selected job types.
Job | Product Type | Select one or more products like Backup Exec to view data for the selected products.

**Example of filter usage:** You may run the Week at a Glance Details report for a specific policy to view backup details for the specific policy. Further if you are interested in knowing about the status of say only Full schedule types, you can use the Schedule filter and select Full.

The following enhancements have been made in the Week at a Glance Details report:

- The **Job Primary ID** column in the Week at a Glance Details report is now a link and you can drill down to Skip File Details report. Use the Skip File Details report to view the skipped files that are associated with a job.
- The **Master Server OS** column has been removed from the **Master Server** filter.
- The **Media Server OS** column has been removed from the **Media Server** filter.
- The **Client Architecture** column has been removed from the **Client** filter.
- The **Policy Domain** column has been removed from the **Policy** filter.
The **Job Type**, **Job Transport Type**, and **Product Type** columns have been added to the **Job** filter. You can now filter this report on the basis of job type, job transport type or product type.

The **Agent Server** and **Job State** columns have been removed from the **Job** filter.

**Status & Success Rate > Status > Backup Window Failures report**

This report lists the jobs which were scheduled to run but failed because the scheduled backup window was no longer open (the NetBackup status code is 196).

**Status & Success Rate > Status > Partially Successful Job Details report**

This report provides details for all NetBackup partially successful jobs. Partially successful jobs have an exit status of 1. The table in the report is organized by job ID, server name, and client name.

**Status & Success Rate > Status > Skipped Files Summary report**

The information in this report is presented using a set of linked reports. The main report that is organized by master server, displays clients and policies, and the corresponding number of files that were skipped.

**Skipped file details for client report**

This drilldown report from the **Client Name** column identifies risks to the client because of any skipped files.

This drilldown report uses the run time parameters that are passed from the main report.

**Skipped file details for policy report**

This drilldown report from the **Policy Name** column identifies risks to the client due to any skipped files.

This drilldown report uses the run time parameters that are passed from the main report.

**Skipped file details for policy and client report**

This drilldown report from the **No. of Skipped Files** column provides the names of all skipped files.

This drilldown report uses the run time parameters that are passed from the main report.
Status & Success Rate > Status > Job Attempt Status Detail report

This report provides information about the completion status for a NetBackup job. The report table provides a count of jobs having a particular status code on a specific day. The table is organized by server name and date. This report was earlier named as Job Exit Status Detail report.

A drilldown report is available from the **Number of Occurrences** column of the table of the main report. This drilldown report shows job details, such as job type and policy name. The table includes all jobs having a particular status code on a given day.

**Note:** This report may provide inaccurate output when a Job ID is reset in NetBackup like for catalog recovery or via manual resetting of the Job ID. In case the Job ID is reset, you must delete the NetBackup master server from the OpsCenter console and add it again.

Figure 2-42 shows a sample view of the Job Attempt Status Detail report.

The following are details associated with the Job Attempt Status Detail report:
Report Name: Job Attempt Status Detail
Report Category: Backup
Where to Locate: Report > Report Templates > Backup > Status & Success Rate > Status > Job Attempt Status Detail
Report Purpose: This report shows the successful jobs density over time.
Supported products: NetBackup, NetBackup Appliance
Applicable View: Master Server, Client
Report Display: Tabular
Drill down report: Yes
See “Job details by attempt status” on page 172.
Can be scheduled: Yes
Supported export formats: CSV, HTML, PDF, XML, TSV
Mapping with NOM report: Standard Reports > Job > Job Attempt Status Detail

The following table shows the filters for Job Attempt Status Detail report and how you can use these filters to view specific data in the report.

<table>
<thead>
<tr>
<th>Filter</th>
<th>Column</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>View</td>
<td></td>
<td>Select a view to show data for the selected view in the report. By default <strong>All My Views</strong> is selected.</td>
</tr>
<tr>
<td>Master</td>
<td>Master Server</td>
<td>Select one or more master servers to view data for the selected master servers in the report. All master servers that are added to the OpsCenter console are shown in the <strong>Value</strong> dropdown list.</td>
</tr>
<tr>
<td>Job</td>
<td>Job Type</td>
<td>Select one or more job types like Archive, Backup, Restore etc. to view data for the selected job types.</td>
</tr>
</tbody>
</table>

**Example of filter usage:** You may run the Job Attempt Status Detail report for a specific job type like Backup to view status code details for the backup jobs.

The following report enhancements have been made for the Job Attempt Status Detail report:

- The unit **Years** has been added for Relative Timeframe selection.
  You can now view data for the last x years.
The option **Next** has been removed from the drop-down menu for Relative Timeframe. You now cannot enter a relative timeframe like Next 2 weeks. This is because the report does not support any futuristic data.

This report was earlier named Job Exit Status Detail. This has been renamed to Job Attempt Status Detail report.

**Job details by attempt status**

A drilldown report named Job details by attempt status is available when you click the **Number of Occurrences** column in Job Attempt Status Detail report. This drilldown report shows job details, such as job type and policy name. The table includes all jobs that have a particular status code on a given day.

This tabular report shows job information i.e. Job Type, Job End time etc by its attempt numbers.

**Figure 2-43** shows a sample view of the Job details by attempt status report.

The following are details associated with the Job details by attempt status report:

<table>
<thead>
<tr>
<th>Report Name</th>
<th>Job details by attempt status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Report Category</td>
<td>Backup</td>
</tr>
</tbody>
</table>
Where to Locate

Report > Report Templates > Backup > Status & Success Rate > Status > Job Attempt Status Detail (drill down from Number of Occurrences column) > Job details by attempt status

Report Purpose

This report shows job information by job attempt.

Supported products

NetBackup, NetBackup Appliance

Applicable View

Master Server

Report Display

Tabular

Drill down report

No

Can be scheduled

Yes

Supported export formats

CSV, HTML, PDF, XML, TSV

Mapping with NOM report

Standard Reports > Job > Job Attempt Status Detail (drill down from Number of Occurrences column) > Job Details By Status for

The following table shows the filters for Job details by attempt status report and how you can use these filters to view specific data in the report.

<table>
<thead>
<tr>
<th>Filter</th>
<th>Column</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>View</td>
<td></td>
<td>Select a view to show data for the selected view in the report. By default All My Views is selected.</td>
</tr>
<tr>
<td>Master Server</td>
<td>Master Server</td>
<td>Select one or more master servers to view data for the selected master servers in the report. All master servers that are added to the OpsCenter console are shown in the Value dropdown list.</td>
</tr>
<tr>
<td>Job</td>
<td>Job Type</td>
<td>Select one or more job types like Archive, Backup, Restore etc. to view data for the selected job types.</td>
</tr>
<tr>
<td></td>
<td>Status Code</td>
<td>Select one or more status codes to view data for the selected status codes.</td>
</tr>
</tbody>
</table>

**Example of filter usage:** You may run the Job details by attempt status report for a specific job type like Backup to view job attempt details for the backup jobs.

The following report enhancements have been made for the Job details by attempt status report:

- The unit **Years** has been added for Relative Timeframe selection.
  
  You can now view data for the last x years.
- The option **Next** has been removed from the drop-down menu for Relative Timeframe. You now cannot enter a relative timeframe like Next 2 weeks. This is because the report does not support any futuristic data.

**Status & Success Rate > Status > Job Details report**

This report provides detailed information about NetBackup jobs.

**Status & Success Rate > Status > Job Summary by Status report**

Status Report provides information on basic NetBackup job status including successful, partially successful, skipped files, and failed backup attempts.

The Job Summary by Status report summarizes NetBackup jobs based on the job exit status for a specified time interval. You can use this report to provide trend information.

The bar chart shows a count of successful, partially successful, and failed jobs per a given date.

**Status & Success Rate > Status > Job Status > Historical report**

A Job Status report in red (failure), yellow (partial success) and green (success) displayed in stacked bar format that is grouped by hour, day, week, month, or year across any timeframe. The report is a count of jobs for each of the three outcomes.

The simplicity of the presentation helps easily identify both positive and negative trends as well as one-off deviations. For NetBackup environments, the report can also be generated where attempts rather than jobs are counted. In NetBackup, jobs can be configured for x many attempts before a job exits with a status. The report can be filtered across a selection that includes views, backup and media servers, backup level, policies, schedules, transport types, Operating Systems, and business classifications.

*Figure 2-44* shows a sample view of the Job Status (Historical) report.
The following are details associated with the Job Status (Historical) report:

**Report Name** | Job Status
---|---
**Report Category** | Backup
**Where to Locate** | Report > Report Templates > Backup > Status & Success Rate > Status > Job Status
**Report Purpose** | This report shows job density over time.
**Supported products** | NetBackup, NetBackup Master Appliance, Symantec Backup Exec, Symantec NetBackup PureDisk
**Applicable View** | Master Server, Client, Policy
**Report Display** | Historical
**Drill down report** | No
**Can be scheduled** | Yes
**Supported export formats** | CSV, HTML, PDF, XML, TSV
**Mapping with VBR report** | Backup > Status and Success Rate > Status > Job Status

The following table shows the filters for Job Status report and how you can use these filters to view specific data in the report.
<table>
<thead>
<tr>
<th>Filter</th>
<th>Column</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>View</td>
<td></td>
<td>Select a view to show data for the selected view in the report. By default <strong>All My Views</strong> is selected.</td>
</tr>
<tr>
<td>Master Server</td>
<td>Master Server</td>
<td>Select one or more master servers to view data for the selected master servers in the report. All master servers that are added to the OpsCenter console are shown in the Value dropdown list.</td>
</tr>
<tr>
<td>Media Server</td>
<td>Media Server</td>
<td>Select one or more media servers to view data for the specific media servers in the report. All media servers that are attached to the master servers in the OpsCenter console are shown in the Value dropdown list.</td>
</tr>
<tr>
<td>Client</td>
<td>Client Name</td>
<td>Select one or more clients to view data for the selected clients in the report. All clients that are protected by the master servers in the OpsCenter console are listed.</td>
</tr>
<tr>
<td></td>
<td>Client OS</td>
<td>Select one or more client OS to view data for the selected client OS in the report.</td>
</tr>
<tr>
<td>Policy</td>
<td>Policy Data Classification Name</td>
<td>Select one or more policy data classification names to view data for the selected policy data classification names.</td>
</tr>
<tr>
<td></td>
<td>Policy Keyword</td>
<td>Select one or more policy keyword to view data for the policies having the selected keyword.</td>
</tr>
<tr>
<td></td>
<td>Policy Name</td>
<td>Select one or more policy names to view data for the selected policies.</td>
</tr>
<tr>
<td></td>
<td>Policy Type</td>
<td>Select one or more policy types to view data for the selected policy types.</td>
</tr>
<tr>
<td>Schedule</td>
<td>Schedule Level Type</td>
<td>Select one or more schedule types like CINC, Copy, Daily etc. to view data for the selected schedule types.</td>
</tr>
<tr>
<td></td>
<td>Schedule Name</td>
<td>Select one or more schedule names to view data for the selected schedule names.</td>
</tr>
<tr>
<td>Job</td>
<td>Job Status</td>
<td>Select one or more job status like Failed, Successful etc. to view data for the selected job status.</td>
</tr>
<tr>
<td></td>
<td>Job Transport Type</td>
<td>Select one or more transport types like FT, LAN, or Unknown to view data for the jobs that have the selected transport type.</td>
</tr>
<tr>
<td></td>
<td>Job Type</td>
<td>By default, Backup jobs are shown in the report. Select one or more job types like Archive, Backup, Restore etc. to view data for the selected job types.</td>
</tr>
<tr>
<td></td>
<td>Product Type</td>
<td>Select one or more backup products to view data for the selected products.</td>
</tr>
</tbody>
</table>
**Example of filter usage:** You may run the Job Status report for a specific policy to view job counts for the specific policy. Further if you are interested in knowing about the job counts for specific products, you can use the Job filter and under **Product Type** column, select **Backup Exec**.

The following report enhancements have been made for the Successful Job Count report:

- The unit **Years** has been added for Relative Timeframe selection. You can now view data for the last x years.
- The option **Next** has been removed from the drop-down menu for Relative Timeframe. You now cannot enter a relative timeframe like Next 2 weeks. This is because the report does not support any futuristic data.
- The following options have been removed from **Time Frame Group By** selection:
  - Days of week Average
  - Days of week total
  - Hours of day Average
  - Hours of day Total
  - Minutes
  - Month of year Average
  - Month of year total
  - Quarter
  - Quarter of year Average
  - Quarter of year total
- The following **Report On** options have been added under Backup Job Attributes:
  - Job Status (Complete and Partial only)
  - Job Status (Complete only)
- The **Schedule Name** column is added under the **Schedule** filter to filter data by schedule name.
- The report now also shows trendlines with customized average periods. The following option has been added:
  **Show trendline with moving average period of** 3. The value can be 1, 2, 3, 7, 14, or 30. The default value is 3.
  Select **Show trendline with moving average** checkbox and use the drop-down list to specify the number of data points to factor into the average. At each interval on the graph, the trendline shows a moving average of the most recent data.
points. Example: 3 displays a trendline that, at each interval, shows the average of the current data point and the two previous data points.

- **UNKNOWN** has been added as a value for **Policy Type** column in the Policy filter. You can now filter report data for policy types that are UNKNOWN. In earlier versions of OpsCenter, the unknown policy types were shown as blank. Now all static columns like job type, schedule type, policy type, etc. are shown as UNKNOWN like in VBR

**Status & Success Rate > Status > Job Status > Distribution report**

A job status report in red (failure), yellow (partial success) and green (success) displayed in pie chart format. The report is a count of jobs for each of the three outcomes. The main use cases of the report are typically short-term verification (i.e. last 24 – 48 hours) of backup job status and long term (i.e. 1+ months) management level reporting requiring high-level status summaries. The report can be filtered across a selection that includes views, backup and media servers, backup level, policies, schedules, transport types, Operating Systems, and business classifications.

*Figure 2-45* shows a sample view of the Job Status (Distribution) report.

*Figure 2-45*  
Job Status (Distribution) report

The following are details associated with the Job Status (Distribution) report:

<table>
<thead>
<tr>
<th>Report Name</th>
<th>Job Status</th>
</tr>
</thead>
</table>

OpsCenter reports  
About Report Templates descriptions
Report Category: Backup
Where to Locate: Report > Report Templates > Backup > Status & Success Rate > Status > Job Status
Report Purpose: This report shows job density over time.
Supported products: NetBackup, NetBackup Master Appliance, Symantec Backup Exec, Symantec NetBackup PureDisk
Applicable View: Master Server, Client, Policy
Report Display: Distribution
Drill down report: No
Can be scheduled: Yes
Supported export formats: CSV, HTML, PDF, XML, TSV
Mapping with VBR report: Backup > Status and Success Rate > Status > Job Status

The following table shows the filters for Job Status report and how you can use these filters to view specific data in the report.

<table>
<thead>
<tr>
<th>Filter</th>
<th>Column</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>View</td>
<td></td>
<td>Select a view to show data for the selected view in the report. By default <strong>All My Views</strong> is selected.</td>
</tr>
<tr>
<td>Master Server</td>
<td>Master Server</td>
<td>Select one or more master servers to view data for the selected master servers in the report. All master servers that are added to the OpsCenter console are shown in the <strong>Value</strong> dropdown list.</td>
</tr>
<tr>
<td>Media Server</td>
<td>Media Server</td>
<td>Select one or more media servers to view data for the specific media servers in the report. All media servers that are attached to the master servers in the OpsCenter console are shown in the <strong>Value</strong> dropdown list.</td>
</tr>
<tr>
<td>Client</td>
<td>Client Name</td>
<td>Select one or more clients to view data for the selected clients in the report. All clients that are protected by the master servers in the OpsCenter console are listed.</td>
</tr>
<tr>
<td></td>
<td>Client OS</td>
<td>Select one or more client OS to view data for the selected client OS in the report.</td>
</tr>
</tbody>
</table>
### Filter, Column, Description

<table>
<thead>
<tr>
<th>Filter</th>
<th>Column</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Policy</td>
<td>Policy Data Classification Name</td>
<td>Select one or more policy data classification names to view data for the selected policy data classification names.</td>
</tr>
<tr>
<td></td>
<td>Policy Keyword</td>
<td>Select one or more policy keyword to view data for the policies having the selected keyword.</td>
</tr>
<tr>
<td></td>
<td>Policy Name</td>
<td>Select one or more policy names to view data for the selected policies.</td>
</tr>
<tr>
<td></td>
<td>Policy Type</td>
<td>Select one or more policy types to view data for the selected policy types.</td>
</tr>
<tr>
<td>Schedule</td>
<td>Schedule Level Type</td>
<td>Select one or more schedule types like CINC, Copy, Daily etc. to view data for the selected schedule types.</td>
</tr>
<tr>
<td></td>
<td>Schedule Name</td>
<td>Select one or more schedule names to view data for the selected schedule names.</td>
</tr>
<tr>
<td>Job</td>
<td>Job Status</td>
<td>Select one or more job status like Failed, Successful etc. to view data for the selected job status.</td>
</tr>
<tr>
<td></td>
<td>Job Transport Type</td>
<td>Select one or more transport types like FT, LAN, or Unknown to view data for the jobs that have the selected transport type.</td>
</tr>
<tr>
<td></td>
<td>Job Type</td>
<td>Select one or more job types like Archive, Backup, Restore etc. to view data for the selected job types. By default, only Backup is selected.</td>
</tr>
<tr>
<td></td>
<td>Product Type</td>
<td>Select one or more backup products to view data for the selected products.</td>
</tr>
</tbody>
</table>

**Example of filter usage:** You may run the Job Status report for a specific policy to view job counts for the specific policy. Further if you are interested in knowing about the job counts per job status for specific products, you can use the Job filter and under **Product Type** column, select Backup Exec.

The following report enhancements have been made for the Successful Job Count report:

- The unit Years has been added for Relative Timeframe selection. You can now view data for the last x years.
- The option Next has been removed from the drop-down menu for Relative Timeframe. You now cannot enter a relative timeframe like Next 2 weeks. This is because the report does not support any futuristic data.
- The following options have been removed from Time Frame Group By selection:
  - Days of week Average
  - Days of week total
- Hours of day Average
- Hours of day Total
- Minutes
- Month of year Average
- Month of year total
- Quarter
- Quarter of year Average
- Quarter of year total

- The following Report On options have been added under Backup Job Attributes:
  - Job Status (Complete and Partial only)
  - Job Status (Complete only)

- The Schedule Name column is added under the Schedule filter to filter data by schedule name.

- UNKNOWN has been added as a value for Policy Type column in the Policy filter. You can now filter report data for policy types that are UNKNOWN. In earlier versions of OpsCenter the unknown policy types were shown as blank. Now all static columns like job type, schedule type, policy type, etc. are shown as UNKNOWN like in VBR

**Status & Success Rate > Success Rate > Success Rate – All Jobs report**

This last of the single-line success rate reports give the highest number since it shows at least one success per client stream. Meaning as long as one job is successful despite any number of retries, it is a 100% success. This report typically shows overall exposure to someone outside the backup team. A 100% on this report indicates that everything was backed up even though it may have taken a number of retries.

Figure 2-46 shows a sample view of the Success Rate-All Jobs report.
The following are details associated with the Success Rate – All Jobs report:

Report Name: Success Rate - All Jobs

Report Category: Backup

Where to Locate: Report > Report Templates > Backup > Status & Success Rate > Success Rate > Success Rate - All Jobs

Report Purpose: This report shows the Success rate by job level across products, domains, clients, policies and business level views.

Supported products: NetBackup, NetBackup Appliance, Backup Exec, NetBackup PureDisk

Applicable View: Master Server, Client

Report Display: Historical (Chart)

Drill down report: No

Can be scheduled: Yes
The following table shows the filters for Success Rate – All Jobs report and how you can use these filters to view specific data in the report.

<table>
<thead>
<tr>
<th>Filter</th>
<th>Column</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>View</td>
<td></td>
<td>Select a view to show data for the selected view in the report. By default <strong>All My Views</strong> is selected.</td>
</tr>
<tr>
<td>Master Server</td>
<td>Master Server</td>
<td>Select one or more master servers to view data for the selected master servers in the report. All master servers that are added to the OpsCenter console are shown in the <strong>Value</strong> dropdown list.</td>
</tr>
<tr>
<td>Media Server</td>
<td>Media Server</td>
<td>Select one or more media servers to view data for the specific media servers in the report. All media servers that are attached to the master servers in the OpsCenter console are shown in the <strong>Value</strong> dropdown list.</td>
</tr>
<tr>
<td>Client</td>
<td>Client Name</td>
<td>Select one or more clients to view data for the selected clients in the report. All clients that are protected by the master servers in the OpsCenter console are listed.</td>
</tr>
<tr>
<td></td>
<td>Client OS</td>
<td>Select one or more client OS to view data for the selected client OS in the report.</td>
</tr>
<tr>
<td>Policy</td>
<td>Policy Data Classification Name</td>
<td>Select one or more policy data classification names to view data for the selected policy data classification names.</td>
</tr>
<tr>
<td></td>
<td>Policy Keyword</td>
<td>Select one or more policy keyword to view data for the policies having the selected keyword.</td>
</tr>
<tr>
<td></td>
<td>Policy Name</td>
<td>Select one or more policy names to view data for the selected policies.</td>
</tr>
<tr>
<td></td>
<td>Policy Type</td>
<td>Select one or more policy types to view data for the selected policy types.</td>
</tr>
<tr>
<td>Schedule</td>
<td>Schedule Type</td>
<td>Select one or more schedule types like CINC, Copy, Daily etc. to view data for the selected schedule types.</td>
</tr>
<tr>
<td></td>
<td>Schedule Name</td>
<td>Select one or more schedule names to view data for the selected schedule names.</td>
</tr>
<tr>
<td>Filter</td>
<td>Column</td>
<td>Description</td>
</tr>
<tr>
<td>------------</td>
<td>------------------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Job</td>
<td>Job Status</td>
<td>Select one or more Job Status like Failed, Missed, Partially Successful etc. to view data for the selected job status in the report.</td>
</tr>
<tr>
<td></td>
<td>Job Transport Type</td>
<td>Select one or more transport types like FT, LAN, or Unknown to view data for the jobs that have the selected transport type.</td>
</tr>
<tr>
<td></td>
<td>Job Type</td>
<td>The value selection for Job Type is mandatory. By default, Backup jobs are shown in the report. You can select one or more job types like Archive, Backup, Restore etc. to view data for the selected job types.</td>
</tr>
<tr>
<td></td>
<td>Product Type</td>
<td>Select one or more backup products to view data for the selected products.</td>
</tr>
<tr>
<td>Success</td>
<td>Consider</td>
<td>The default selection is Yes.</td>
</tr>
<tr>
<td>Rate</td>
<td>Partially Successful Job as</td>
<td>Select No if you do not want to consider partially successful jobs as successful.</td>
</tr>
<tr>
<td></td>
<td>Successful</td>
<td>Selecting Yes or No may impact the Success Rate percentage that is shown in the report. Consider a policy that has 5 successful jobs, 3 partially successful jobs, and 2 failed jobs. If you select the value as Yes, the Success Rate is 80%. However if you select the value as No, the Success Rate is 50%.</td>
</tr>
</tbody>
</table>

Example of filter usage: Run the Success Rate - All Jobs report for a specific product like Backup Exec to get an idea of the success rate for Backup Exec jobs.

The following report enhancements have been made for Success Rate – All Jobs report:

- The option Next has been removed from the drop-down menu for Relative Timeframe. You now cannot enter a relative timeframe like Next 2 weeks. This is because the report does not support any futuristic data.
- The following options have been removed from Time Frame Group By selection:
  - Days of week Average
  - Days of week total
  - Hours of day Average
  - Hours of day Total
  - Minutes
  - Month of year Average
  - Month of year total
Quarter
Quarter of year Average
Quarter of year total

The following Report On options have been added under Backup Job Attributes:
- Job Status (Complete and Partial only)
- Job Status (Complete only)

Two new filters called Schedule and Success Rate have been added.

A new checkbox named Target Performance has been added in the Modify Display Options page under Timeline Chart Properties. You can use the Target Performance option to specify where a report draws the target line, with which you can compare the actual performance shown. The Target Performance option allows you to specify the target for Y1 axis. In case you set a value of say 100 for Y1 axis and run the report, you will see a straight line parallel to X-axis and the value as 100 on Y1 axis. Using this option, you can easily compare the actual performance with the target performance.

Status & Success Rate > Success Rate > Advanced Success Rate report

This report uses the advanced success or the failure calculation logic around the notion of first, all and last job. It collects all information around both successes and failures and presents the results that are grouped by (day or month) timeframe for either client or the job success rate. Client success rate is a count of successful clients where all policies that are defined to the client must be successful to declare the client successful. Thus a client is either 0% or 100% and no intermediate state. Job success rate is derived from all jobs and separated out by first, all and last and a specific client can have a job success rate that can range between 0% and 100%.

End-user and customer typically get Last Job Success for job and client whereas backup architects and administrators examine all three. These reports work well with views and can be reported on at any level with robust filtering capabilities.

This report simply aggregates jobs according to success rate and shows these across a timeline. It can be reported on against views and view levels, along with any of the key backup infrastructure components (master server etc) and attributes (policy, policy, job etc). Filtering is available on all components and attributes. The primary use case of the report is verification of trends and the days that are exception to the norm. The report is highly effective for presenting long-term tabular data on one of the most fundamental metrics of managing a backup operation.

Figure 2-47 shows a sample view of the Advanced Success Rate report.
The following are details associated with the Advanced Success Rate report:

<table>
<thead>
<tr>
<th>Period</th>
<th>Node Name</th>
<th>Successful Jobs</th>
<th>Failed Jobs</th>
<th>Total Job Count</th>
<th>Success Rate (%)</th>
<th>Size (MB)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011-09-27</td>
<td>purandar</td>
<td>412</td>
<td>80</td>
<td>492</td>
<td>83.74</td>
<td>737.94</td>
</tr>
<tr>
<td>2011-09-28</td>
<td>purandar</td>
<td>413</td>
<td>78</td>
<td>491</td>
<td>84.11</td>
<td>20,462.7</td>
</tr>
<tr>
<td>2011-09-29</td>
<td>purandar</td>
<td>444</td>
<td>74</td>
<td>518</td>
<td>85.71</td>
<td>2,770.32</td>
</tr>
<tr>
<td>2011-09-30</td>
<td>purandar</td>
<td>4213</td>
<td>153</td>
<td>4366</td>
<td>96.5</td>
<td>6,541.72</td>
</tr>
<tr>
<td>2011-10-01</td>
<td>purandar</td>
<td>4213</td>
<td>72</td>
<td>4285</td>
<td>98.32</td>
<td>676.57</td>
</tr>
<tr>
<td>2011-10-02</td>
<td>purandar</td>
<td>4211</td>
<td>74</td>
<td>4285</td>
<td>98.27</td>
<td>856.5</td>
</tr>
<tr>
<td>2011-10-03</td>
<td>purandar</td>
<td>4211</td>
<td>71</td>
<td>4282</td>
<td>98.34</td>
<td>856.5</td>
</tr>
<tr>
<td>GRAND SUMMARY</td>
<td></td>
<td>18117</td>
<td>602</td>
<td>18719</td>
<td>96.78</td>
<td>32,902.27</td>
</tr>
</tbody>
</table>

Report Name: Advanced Success Rate
Report Category: Backup
Where to Locate: Report > Report Templates > Backup > Status & Success Rate > Advanced Success Rate
Report Purpose: This report shows the master server, number of backups that were successful and failed, the success rate and total amount processed for each day.
Supported products: NetBackup, NetBackup Appliance, Backup Exec, NetBackup PureDisk
Applicable View: Master Server, Client
Report Display: Tabular
Drill down report: No
Can be scheduled: Yes
Supported export formats: CSV, HTML, PDF, XML, TSV
Mapping with VBR report: Backups > Status > Daily Summary of Backup Activity
The following table shows the filters for Advanced Success Rate report and how you can use these filters to view specific data in the report.

<table>
<thead>
<tr>
<th>Filter</th>
<th>Column</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>View</td>
<td></td>
<td>Select a view to show data for the selected view in the report. By default <strong>All My Views</strong> is selected.</td>
</tr>
<tr>
<td>Master</td>
<td>Master Server</td>
<td>Select one or more master servers to view data for the selected master servers in the report. All master servers that are added to the OpsCenter console are shown in the <strong>Value</strong> dropdown list.</td>
</tr>
<tr>
<td>Policy</td>
<td>Policy Name</td>
<td>Select one or more policy names to view data for the selected policies.</td>
</tr>
<tr>
<td>Job</td>
<td>Job Type</td>
<td>You can select one or more job types like Archive, Backup, Restore etc. to view data for the selected job types. By default, Backup jobs are shown in the report.</td>
</tr>
<tr>
<td></td>
<td>Status Code</td>
<td>Select one or more status codes to view data for the selected status codes.</td>
</tr>
</tbody>
</table>
Success Rate

**Aggregation Level**
Select **Aggregation Level** to consider the kind of jobs for the specified time frame. For example, if you select **First Job Success Rate** then the report shows only the first job for the combination of master, client, policy, and schedule.

**Full Days**
Select **Full Days** to specify the list of days to be considered for Full backups.

**Full Window Parameter**
Select **Full Window Parameter** to specify the start time for the full backup window.

**Metric Type**
Select **Metric Type** to calculate the success rate based on clients or jobs.

**Full for Duration of (In Hours)**
Select **Full for Duration of (In Hours)** to calculate the end time for the full backup window. Backup window end time is equal to the duration from the start time of the backup window.

**Increment Days**
Select **Increment Days** to specify the list of days to be considered for Incremental backups.

**Increment Window Parameter**
Select **Increment Window Parameter** to specify the start time for the Incremental backup window.

**Increment for Duration of (In Hours)**
Select **Increment for Duration of (In Hours)** to calculate the end time for the Incremental backup window. Backup window end time is equal to the duration from the start time of the backup window.

**Consider Partially Successful Job as Successful**
Select **Count Partially Successful Job as Successful** to count partially successful jobs as successful while calculating the Success Rate.

**Example of filter usage:** Run the Advanced Success Rate report for a one week timeframe and for a single master server.

The default Relative Timeframe is now changed to Previous 15 days. Earlier the report showed data for the Previous 14 days by default.

**Status & Success Rate > Success Rate > Success Rate - All Attempts report**

This report shows success rate as it is aggregated at the attempt ("try") level. Jobs can be configured for x many attempts before exiting with a status. If for example the attempt setting is two and success is attained on the second attempt, this translates into a 50% attempt rate and 100% job success rate. This metric is only supported for backup applications in which attempt level data is available. A target line is also supported providing for an effective visual presentation on when the
target is exceeded. It can be reported on against any view or level within a view along with any of the key backup infrastructure components (backup server, media server) and attributes (policy, policy type, schedule, OS, product, transport type). Filtering is available on all components and attributes. Main use case is long-term historical data on one of the key performance indicators.

Figure 2-48 shows a sample view of the Success Rate All Attempts report.

**Figure 2-48** Success Rate – All Attempts report

The following are details associated with the Success Rate – All Attempts report:

<table>
<thead>
<tr>
<th>Report Name</th>
<th>Success Rate - All Attempts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Report Category</td>
<td>Backup</td>
</tr>
<tr>
<td>Where to Locate</td>
<td>Report &gt; Report Templates &gt; Backup &gt; Status &amp; Success Rate &gt; Success Rate &gt; Success Rate - All Attempts</td>
</tr>
</tbody>
</table>
This report shows the success rate by all job attempt level across products, domains, clients, policies and business level views.

Supported products: NetBackup, NetBackup Appliance, Backup Exec, NetBackup PureDisk

Applicable View: Master Server, Client

Report Display: Historical (Chart)

Drill down report: No

Can be scheduled: Yes

Supported export formats: CSV, HTML, PDF, XML, TSV

Mapping with VBR report: Backups > Success Rate > Success Rate - All Attempts

The following table shows the filters for Success Rate – All Attempts report and how you can use these filters to view specific data in the report.

<table>
<thead>
<tr>
<th>Filter</th>
<th>Column</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>View</td>
<td></td>
<td>Select a view to show data for the selected view in the report. By default All My Views is selected.</td>
</tr>
<tr>
<td>Master Server</td>
<td>Master Server</td>
<td>Select one or more master servers to view data for the selected master servers in the report. All master servers that are added to the OpsCenter console are shown in the Value dropdown list.</td>
</tr>
<tr>
<td>Media Server</td>
<td>Media Server</td>
<td>Select one or more media servers to view data for the specific media servers in the report. All media servers that are attached to the master servers in the OpsCenter console are shown in the Value dropdown list.</td>
</tr>
<tr>
<td>Client</td>
<td>Client Name</td>
<td>Select one or more clients to view data for the selected clients in the report. All clients that are protected by the master servers in the OpsCenter console are listed.</td>
</tr>
<tr>
<td></td>
<td>Client OS</td>
<td>Select one or more client OS to view data for the selected client OS in the report.</td>
</tr>
<tr>
<td>Filter</td>
<td>Column</td>
<td>Description</td>
</tr>
<tr>
<td>-------------</td>
<td>---------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Policy</td>
<td>Policy Data Classification Name</td>
<td>Select one or more policy data classification names to view data for the selected policy data classification names.</td>
</tr>
<tr>
<td>Policy</td>
<td>Policy Keyword</td>
<td>Select one or more policy keyword to view data for the policies having the selected keyword.</td>
</tr>
<tr>
<td>Policy</td>
<td>Policy Name</td>
<td>Select one or more policy names to view data for the selected policies.</td>
</tr>
<tr>
<td>Policy</td>
<td>Policy Type</td>
<td>Select one or more policy types to view data for the selected policy types.</td>
</tr>
<tr>
<td>Schedule</td>
<td>Schedule Level Type</td>
<td>Select one or more schedule types like CINC, Copy, Daily etc. to view data for the selected schedule types.</td>
</tr>
<tr>
<td>Schedule</td>
<td>Schedule Name</td>
<td>Select one or more schedule names to view data for the selected schedule names.</td>
</tr>
<tr>
<td>Job</td>
<td>Job Status</td>
<td>Select one or more Job Status like Failed, Missed, Partially Successful etc. to view data for the selected job status in the report.</td>
</tr>
<tr>
<td>Job</td>
<td>Job Transport Type</td>
<td>Select one or more transport types like FT, LAN, or Unknown to view data for the jobs that have the selected transport type.</td>
</tr>
<tr>
<td>Job</td>
<td>Job Type</td>
<td>The value selection for Job Type is mandatory. By default, Backup jobs are shown in the report. You can select one or more job types like Archive, Backup, Restore etc. to view data for the selected job types.</td>
</tr>
<tr>
<td></td>
<td>Product Type</td>
<td>Select one or more backup products to view data for the selected products.</td>
</tr>
<tr>
<td>Success Rate</td>
<td>Consider Partially Successful Job as Successful</td>
<td>The default selection is Yes. Select No if you do not want to consider partially successful jobs as successful. Selecting Yes or No may impact the Success Rate percentage that is shown in the report. Consider a policy that has 5 successful jobs, 3 partially successful jobs, and 2 failed jobs for all job attempts. If you select the value as Yes, the Success Rate is 80%. However if you select the value as No, the Success Rate is 50%.</td>
</tr>
</tbody>
</table>

**Examples of filter usage**: You can run this report for a few master servers for which you want to view the success rate for all attempts.

The following report enhancements have been made for Success Rate - All Attempts report:
- The unit **Years** has been added for Relative Timeframe selection. You can now view data for the last x years.

- The option **Next** has been removed from the drop-down menu for Relative Timeframe. You now cannot enter a relative timeframe like Next 2 weeks. This is because the report does not support any futuristic data.

- The following options have been removed from **Time Frame Group By** selection:
  - Days of week Average
  - Days of week total
  - Hours of day Average
  - Hours of day Total
  - Minutes
  - Month of year Average
  - Month of year total
  - Quarter
  - Quarter of year Average
  - Quarter of year total

- The following **Report On** options have been added under Backup Job Attributes:
  - Job Status (Complete and Partial only)
  - Job Status (Complete only)

- Two new filters called **Schedule** and **Success Rate** have been added.

- A new checkbox named **Target Performance** has been added in the **Modify Display Options** page under **Timeline Chart Properties**. You can use the **Target Performance** option to specify where a report draws the target line, with which you can compare the actual performance shown. The **Target Performance** option allows you to specify the target for Y1 axis. In case you set a value of say 100 for Y1 axis and run the report, you will see a straight line parallel to X-axis and the value as 100 on Y1 axis. Using this option, you can easily compare the actual performance with the target performance.

**Status & Success Rate > Success Rate > Success Rate - First Attempt report**

This report shows success rate as it is aggregated at the attempt (known as “try”) level. Specifically, it zooms in on the measurement of the first attempt for each job. Jobs can be configured for x many attempts before you exit with a status. If for
example the attempt setting is two and success is attained on the second attempt, this data translates into a 50% All Attempt rate and 0% First Attempt rate and 100% job success rate. This metric is only supported for backup applications in which attempt level data is available. A target line is also supported providing for an effective visual presentation on when the target is exceeded. Filtering is available on all components and attributes. Main use case is to use this report and the All Attempts report together to see how often success is attained on the first attempt as opposed to second, third etc. attempts.

Figure 2-49 shows a sample view of Success Rate - First Attempt report.

Figure 2-49 Success Rate - First Attempt report

The following are details associated with the Success Rate – First Attempt report:

<table>
<thead>
<tr>
<th>Report Name</th>
<th>Success Rate - First Attempt</th>
</tr>
</thead>
<tbody>
<tr>
<td>Report Category</td>
<td>Backup</td>
</tr>
</tbody>
</table>
Where to Locate: Report > Report Templates > Backup > Status & Success Rate > Success Rate > Success Rate - First Attempt

Report Purpose: This report shows the success rate by first job attempt level across products, domains, clients, policies and business level views.

Supported products: NetBackup, NetBackup Master Appliance, Backup Exec, NetBackup PureDisk

Applicable View: Master Server, Client

Report Display: Historical (Chart)

Drill down report: No

Can be scheduled: Yes

Supported export formats: CSV, HTML, PDF, XML, TSV

Mapping with VBR report: Backups > Success Rate > Success Rate - First Attempt

The following table shows the filters for Success Rate – First Attempt report and how you can use these filters to view specific data in the report.

<table>
<thead>
<tr>
<th>Filter</th>
<th>Column</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>View</td>
<td>Master Server</td>
<td>Select a view to show data for the selected view in the report. By default All My Views is selected.</td>
</tr>
<tr>
<td>Master Server</td>
<td>Master Server</td>
<td>Select one or more master servers to view data for the selected master servers in the report. All master servers that are added to the OpsCenter console are shown in the Value dropdown list.</td>
</tr>
<tr>
<td>Media Server</td>
<td>Media Server</td>
<td>Select one or more media servers to view data for the specific media servers in the report. All media servers that are attached to the master servers in the OpsCenter console are shown in the Value dropdown list.</td>
</tr>
<tr>
<td>Client</td>
<td>Client Name</td>
<td>Select one or more clients to view data for the selected clients in the report. All clients that are protected by the master servers in the OpsCenter console are listed.</td>
</tr>
<tr>
<td></td>
<td>Client OS</td>
<td>Select one or more client OS to view data for the selected client OS in the report.</td>
</tr>
<tr>
<td>Filter</td>
<td>Column</td>
<td>Description</td>
</tr>
<tr>
<td>-------------</td>
<td>-----------------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Policy</td>
<td>Policy Data Classification Name</td>
<td>Select one or more policy data classification names to view data for the selected policy data classification names.</td>
</tr>
<tr>
<td>Policy</td>
<td>Policy Keyword</td>
<td>Select one or more policy keyword to view data for the policies having the selected keyword.</td>
</tr>
<tr>
<td>Policy</td>
<td>Policy Name</td>
<td>Select one or more policy names to view data for the selected policies.</td>
</tr>
<tr>
<td>Policy</td>
<td>Policy Type</td>
<td>Select one or more policy types to view data for the selected policy types.</td>
</tr>
<tr>
<td>Schedule</td>
<td>Schedule Level Type</td>
<td>Select one or more schedule types like CINC, Copy, Daily etc. to view data for the selected schedule types.</td>
</tr>
<tr>
<td>Schedule</td>
<td>Schedule Name</td>
<td>Select one or more schedule names to view data for the selected schedule names.</td>
</tr>
<tr>
<td>Job</td>
<td>Job Status</td>
<td>Select one or more Job Status like Failed, Missed, Partially Successful etc. to view data for the selected job status in the report.</td>
</tr>
<tr>
<td>Job</td>
<td>Job Transport Type</td>
<td>Select one or more transport types like FT, LAN, or Unknown to view data for the jobs that have the selected transport type.</td>
</tr>
<tr>
<td>Job</td>
<td>Job Type</td>
<td>The value selection for Job Type is mandatory. By default, Backup jobs are shown in the report. You can select one or more job types like Archive, Backup, Restore etc. to view data for the selected job types.</td>
</tr>
<tr>
<td></td>
<td>Product Type</td>
<td>Select one or more backup products to view data for the selected products.</td>
</tr>
<tr>
<td>Success Rate</td>
<td>Consider Partially Successful Job as</td>
<td>The default selection is Yes. Select No if you do not want to consider partially successful jobs as successful.</td>
</tr>
<tr>
<td></td>
<td>Successful</td>
<td>Selecting Yes or No may impact the Success Rate percentage that is shown in the report. Consider a policy that has 5 successful jobs, 3 partially successful jobs, and 2 failed jobs for the first job attempt. If you select the value as Yes, the Success Rate is 80%. However if you select the value as No, the Success Rate is 50%.</td>
</tr>
</tbody>
</table>

**Examples of filter usage:** You can run this report for a few master servers for which you want to view the success rate for the first attempt.

The following report enhancements have been made for Success Rate - First Attempt report:
The unit **Years** has been added for Relative Timeframe selection. You can now view data for the last x years.

The option **Next** has been removed from the drop-down menu for Relative Timeframe. You now cannot enter a relative timeframe like Next 2 weeks. This is because the report does not support any futuristic data.

The following options have been removed from **Time Frame Group By** selection:

- Days of week Average
- Days of week total
- Hours of day Average
- Hours of day Total
- Minutes
- Month of year Average
- Month of year total
- Quarter
- Quarter of year Average
- Quarter of year total

The following **Report On** options have been added under Backup Job Attributes:

- Job Status (Complete and Partial only)
- Job Status (Complete only)

Two new filters called **Schedule** and **Success Rate** have been added.

A new checkbox named **Target Performance** has been added in the **Modify Display Options** page under **Timeline Chart Properties**. You can use the **Target Performance** option to specify where a report draws the target line, with which you can compare the actual performance shown. The **Target Performance** option allows you to specify the target for Y1 axis. In case you set a value of say 100 for Y1 axis and run the report, you will see a straight line parallel to X-axis and the value as 100 on Y1 axis. Using this option, you can easily compare the actual performance with the target performance.

**Status & Success Rate > Success Rate > Success Rate - Line report**

This report is a historical report that shows success rate across products, domains, clients, policies, and business level views. This report simply aggregates jobs according to success rate and shows these across a timeline. Filtering is available
on all components and attributes. The primary use case of the report is verification of trends and the days that are exception to the norm. The report is highly effective for presenting long-term historical data on one of the most fundamental metrics of managing a backup operation.

Figure 2-50 shows a sample view of the Success Rate Line report.

The following are details associated with the Success Rate Line report:

- **Report Name**: Success Rate Line report
- **Report Category**: Backup
- **Where to Locate**: Report > Report Templates > Backup > Status & Success Rate > Status > Success Rate Line
- **Report Purpose**: This report shows job success rate density over time.
- **Supported products**: NetBackup, NetBackup Appliance, Backup Exec, NetBackup PureDisk
- **Applicable View**: Master Server, Client
- **Report Display**: Historical (Chart)
- **Drill down report**: No
Can be scheduled: Yes

Supported formats: PDF, CSV, TSV, XML, HTML

Mapping with VBR report: Backups > Success Rate > Success Rate Line

The following table shows the filters for Success Rate Line report and how you can use these filters to view specific data in the report.

<table>
<thead>
<tr>
<th>Filter</th>
<th>Column</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>View</td>
<td>View</td>
<td>Select a view to show data for the selected view in the report. By default <strong>All My Views</strong> is selected.</td>
</tr>
<tr>
<td>Master Server</td>
<td>Master Server</td>
<td>Select one or more master servers to view data for the selected master servers in the report. All master servers that are added to the OpsCenter console are shown in the <strong>Value</strong> drop-down list.</td>
</tr>
<tr>
<td>Policy</td>
<td>Policy Name</td>
<td>Select one or more policy names to view data for the selected policies.</td>
</tr>
<tr>
<td>Job</td>
<td>Job Type</td>
<td>Select one or more job types like Archive, Backup, Restore etc. to view data for the selected job types.</td>
</tr>
<tr>
<td></td>
<td>Status Code</td>
<td>Select one or more status codes to view data for the selected status codes.</td>
</tr>
</tbody>
</table>
Select **Aggregation Level** to consider the kind of jobs for the specified time frame. For example, if you select **First Job Success Rate** then the report shows only the first job for the combination of master server, client, policy, and schedule.

Select **Full Days** to specify the list of days to be considered for Full backups.

Select **Full Window Parameter** to specify the start time for the full backup window.

Select **Metric Type** to calculate the success rate based on clients or jobs.

Select **Full for Duration of (In Hours)** to calculate the end time for the incremental backup window. Backup window end time is equal to the duration from the start time of the backup window.

Select **Increment Days** to specify the list of days to be considered for Incremental backups.

Select **Increment Window Parameter** to specify the start time for the incremental backup window.

Select **Increment for Duration of (In Hours)** to calculate the end time for the incremental backup window. Backup window end time is equal to the duration from the start time of the backup window.

Select **Count Partially Successful Job as Successful** to count partially successful jobs as successful while calculating the Success Rate.

Example of filter usage: Run the Success Rate Line report for a specific job type like Restore to get an idea of the success rate for restore operations.

The following report enhancements have been made for the Success Rate Line report:

- The unit **Years** has been added for Relative Timeframe selection. You can now view data for the last x years.

- The option **Next** has been removed from the drop-down menu for Relative Timeframe. You now cannot enter a relative timeframe like Next 2 weeks. This is because the report does not support any futuristic data.
About Catalog reports in OpsCenter

This section describes catalog reports for all NetBackup Catalog backup operations for both NetBackup and NetBackup Appliances.

Cold catalog backup report

This report shows the count of cold NetBackup catalog backups and information about the media that NetBackup uses for offline backups.

Tool tips in the bar chart show the report name and backup count. The table in the report also lists the media that NetBackup uses for the backups for each master server.

About Chargeback reports in OpsCenter

This section provides descriptions of chargeback reports for estimating the specific costs of providing backup services and storage consumed (with and without deduplication) to provide chargeback billing of these costs.

Deduplication Chargeback report

See “Deduplication Chargeback report” on page 200.

Cost Tabular report

See “Cost Tabular report” on page 205.

Chargeback report

See “Backup Chargeback report” on page 205.

Deduplication Chargeback report

This report shows the savings that is achieved because of the deduplication technology.

To generate this report, you first need to have a cost variable of Protected Job Size.

The deduplication technology can identify files and the data segments that contain identical data and treats them as a single instance of the file, which it backs up only once. For example, PureDisk has backed up 100 MB data, in which 20 MB of data is duplicate or identical. PureDisk protects the same data but eliminates the duplicity using deduplication. Therefore, the data that is protected is 100 MB, but the actual data that is backed up by PureDisk is 80 MB, as 20 MB of data is duplicate data. This results in saving 20 MB of data. You can generate the Deduplication Chargeback report that shows the amount you have saved using deduplication.

The Deduplication Chargeback report is available in Distribution, Historical, and Ranking views.
Figure 2-51 shows a sample distribution view of the Deduplication Chargeback report.

**Figure 2-51** Deduplication Chargeback - Distribution view

Figure 2-52 shows a sample historical view of the Deduplication chargeback report.
Figure 2-53 shows a sample ranking view of the Deduplication chargeback report.
The following are details associated with the Deduplication Chargeback Report:

- **Report Name**: Deduplication Chargeback Report
- **Report Category**: Chargeback Reports
- **Where to Locate**: Report > Report Templates > Chargeback > Deduplication Chargeback Report
- **Report Purpose**: This report shows the savings that is achieved because of the deduplication technology.
- **Supported products**: NetBackup, NetBackup Appliance, Backup Exec, NetBackup PureDisk
- **Applicable View**: Master Server, Client
- **Report Display**: Distribution, Historical, and Ranking
- **Drill down report**: No
- **Can be scheduled**: Yes
- **Supported export formats**: CSV, HTML, PDF, XML, TSV
- **Mapping with VBR report**: Costs > Saving Reports
The following table shows the filters for Deduplication Chargeback report and how you can use these filters to view specific data in the report.

<table>
<thead>
<tr>
<th>Filter</th>
<th>Column</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>View</td>
<td></td>
<td>Select a view to show data for the selected view in the report. By default <strong>All My Views</strong> is selected.</td>
</tr>
<tr>
<td>Master Server</td>
<td>Master Server</td>
<td>Select one or more master servers to view data for the selected master servers in the report. All master servers that are added to the OpsCenter console are shown in the <strong>Value</strong> dropdown list.</td>
</tr>
</tbody>
</table>

**Example of filter usage:** Run the Deduplication chargeback report for a specific master server to view the cost savings for the specific master server.

The following report enhancements have been made for Deduplication Chargeback report:

- The unit **Years** has been added for Relative Timeframe selection. You can now view data for the last x years.

- The option **Next** has been removed from the drop-down menu for Relative Timeframe. You now cannot enter a relative timeframe like Next 2 weeks. This is because the report does not support any futuristic data.

- The following options have been removed from **Time Frame Group By** selection:
  - Days of week Average
  - Days of week total
  - Hours of day Average
  - Hours of day Total
  - Minutes
  - Month of year Average
  - Month of year total
  - Quarter
  - Quarter of year Average
  - Quarter of year total

- The following **Report On** options have been added under Backup Job Attributes:
  - Job Status (Complete and Partial only)
  - Job Status (Complete only)

- The **Master Server Operating system** filter has been removed.
The following **Report On** options have been removed:

- Backup Image Copy Is Currently Expired
- Backup Image Copy Media Server
- Backup Image Encryption State
- Backup Image Fragment Is Currently Expired
- Backup Image Is Currently Expired
- Backup Image Type
- Data Classification Master Server
- Data Classification Name

**Cost Tabular report**

This report shows the chargeback of your backup services in a tabular form. OpsCenter provides organizations with a tool to evaluate the cost of the IT services they consume, which is called Chargeback. You can create cost variables and the formulas that enable you to run the reports that show costs of backup services.

To generate the Cost report you need to have a cost formula created.

**Backup Chargeback report**

This report shows the chargeback of your backup services in Historical and Ranking views. You need to have a cost formula created to generate this report.

*Figure 2-54* shows a sample Historical view of the Backup Chargeback report:
Figure 2-54 shows a sample Rankings view of the Backup Chargeback report.
Figure 2-55  Backup Chargeback report - Rankings view

The following are details associated with the Backup Chargeback Report:

<table>
<thead>
<tr>
<th>Description</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Report Name</td>
<td>Backup Chargeback Report</td>
</tr>
<tr>
<td>Report Category</td>
<td>Chargeback Reports</td>
</tr>
<tr>
<td>Where to Locate</td>
<td>Report &gt; Report Templates &gt; Chargeback &gt; Backup Chargeback Report</td>
</tr>
<tr>
<td>Report Purpose</td>
<td>This report shows the chargeback of your backup services.</td>
</tr>
<tr>
<td>Supported products</td>
<td>NetBackup, NetBackup Appliance, Backup Exec, NetBackup PureDisk</td>
</tr>
<tr>
<td>Applicable View</td>
<td>Master Server, Client</td>
</tr>
<tr>
<td>Report Display</td>
<td>Historical, Ranking</td>
</tr>
</tbody>
</table>
Drill down report: No
Can be scheduled: Yes
Supported export formats: CSV, HTML, PDF, XML, TSV
Mapping with VBR report: Costs > Cost Reports

The following table shows the filters for Backup Chargeback report and how you can use these filters to view specific data in the report.

<table>
<thead>
<tr>
<th>Filter</th>
<th>Column</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>View</td>
<td>View</td>
<td>Select a view to show data for the selected view in the report. By default <strong>All My Views</strong> is selected.</td>
</tr>
<tr>
<td>Master</td>
<td>Master</td>
<td>Select one or more master servers to view data for the selected master servers in the report. All master servers that are added to the OpsCenter console are shown in the <strong>Value</strong> dropdown list.</td>
</tr>
</tbody>
</table>

Example of filter usage: Run the Backup Chargeback report for a specific master server to view the cost savings for the specific master server.

The following report enhancements have been made for Backup Chargeback report:

- The option **Next** has been removed from the drop-down menu for Relative Timeframe. You now cannot enter a relative timeframe like Next 2 weeks.
- The following options have been removed from Time Frame Group By selection:
  - Days of week Average
  - Days of week total
  - Hours of day Average
  - Hours of day Total
  - Minutes
  - Month of year Average
  - Month of year total
  - Quarter
  - Quarter of year Average
  - Quarter of year total
- The unit **Years** has been added for Relative Timeframe selection. You can now view data for the last x years.
The following Report On options have been added under Backup Job Attributes:

- Job Status (Complete and Partial only)
- Job Status (Complete only)

The following Report On options have been removed:

- Backup Image Copy Is Currently Expired
- Backup Image Copy Media Server
- Backup Image Encryption State
- Backup Image Fragment Is Currently Expired
- Backup Image Is Currently Expired
- Backup Image Type
- Data Classification Master Server
- Data Classification Name

The Master Server Operating System filter has been removed.

About Client reports in OpsCenter

This section provides and describes the status reports of all NetBackup Clients (physical and virtual) including at risk vs unprotected vs protected Clients and Bare Metal Recovery (BMR) status.


Risk Analysis > Recovery Point Objective  See “Risk Analysis > Recovery Point Objective report” on page 221.

About clients not backed up report  See “Clients Not Backed up report” on page 225.

Virtual Client Summary  See “Virtual Client Summary report” on page 227.

About job success by client report  See “Job Success by Client report” on page 231.

Risk Analysis > Client Risk Analysis report

Risk Analysis provides reports on the NetBackup Clients at risk for being un-protected or under-protected based on their Recovery Point Objectives (RPO’s).

The Client Risk Analysis report identifies the backup clients that have gone without a successful backup for a specified period of time and hence are at risk from a restore standpoint or recoverability standpoint. The “specified period of time” is user-defined along with several other variables for filtering purposes. The report is interpreted as all client or policy combinations that have gone x hours, days, weeks, or months without a successful backup.

The level of granularity is at a client level or policy level and exposes the clients that have multiple backup policies where one of them may repeatedly fail. The primary use case is to show that all clients have been backed up as of the last x hours and all clients have a full backup not more than x days ago. The report also has an “Is Active” filter to include only those that are currently active as well as the capability to count partial successes as success and vice versa.

Figure 2-56 shows a sample view of the Client Risk Analysis report.
The following table provides details on each column that is displayed in the report:

- **Client Name**: Name of the client that is at risk because of unsuccessful backup.
- **Server Name**: Name of the server associated with this client.
- **Policy Name**: Name of the associated policy.
- **Last Successful Job Ended**: Date and time when this client was successfully backed up.
- **Last Full Job Ended**: Date and time when the last full backup job ended.
The following are details associated with the Client Risk Analysis Report:

- **Report Name**: Client Risk Analysis Report
- **Report Category**: Client Reports
- **Where to Locate**: Report > Report Templates > Client Reports > Client Risk Analysis Report
- **Report Purpose**: The report takes a look at all of the clients configured and determines if the client has had a full successful backup in the time frame specified. If not, it will be called out as a Risk so that action can be taken to get a successful full backup.
- **Supported products**: NetBackup, NetBackup Appliance, Backup Exec, NetBackup PureDisk
- **Applicable View**: Master Server, Client
- **Report Display**: Tabular
- **Drill down report**: No
- **Can be scheduled**: Yes
- **Supported export formats**: CSV, HTML, PDF, XML, TSV
- **Mapping with VBR report**: Backups > Risk Analysis > Client Risk Analysis

The following table shows the filters for Client Risk Analysis report and how you can use these filters to view specific data in the report.

<table>
<thead>
<tr>
<th>Filter</th>
<th>Column</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>View</td>
<td></td>
<td>Select a view to show data for the selected view in the report. By default <strong>All My Views</strong> is selected.</td>
</tr>
</tbody>
</table>
**Filter** | **Column** | **Description**
--- | --- | ---
Master Server | Master Server | Select one or more master servers to view data for the selected master servers in the report. All master servers that are added to the OpsCenter console are shown in the Value dropdown list.
Client | Client is Active | The default selection is Yes. By default, active clients are displayed in the report. Hence the clients that are not actively backed up are omitted by default. Select No if you want to view the report for all the clients.
Schedule | Schedule/Level Type | Select one or more schedule types like Full, Incremental etc. to view data for the selected schedule types.
Job | Job Status | Select a Job Status like Successful or Partially Successful or both to view data for the selected job status in the report.

**Example of filter usage:** Run the Client Risk Analysis report to include all clients (both active and non-active) by selecting **Client is Active** as **No**.

The following enhancements have been made in the Client Risk Analysis report:

- The unit **Years** has been added for Relative Timeframe selection. You can now view data for the last x years.
- The option **Next** has been removed from the drop-down menu for Relative Timeframe. You now cannot enter a relative timeframe like Next 2 weeks.
- Earlier there was a **Host** filter with **Host is Active** column. The **Host** filter has been removed. The **Host is Active** column is now renamed as **Client is Active** column and exists under the **Client** filter. The default value of **Client is Active** column is **Yes**.
- The default value of **Job Status** column under **Job** filter has been changed to **Successful**.

**Risk Analysis > Client Coverage report**

This is a report where a .CSV file can be imported and compared to the existing backup solution to determine if there are systems that are not being protected correctly. The purpose of this report is to show what hosts are not backed up because the backup application is not even aware of them. The report compares what OpsCenter hosts are known to be backed up with an external list that is fed in by .csv file. The list can come from a content management database (CMDB), DNS listings or any other authoritative source of what hosts should be backed up. The report works across all backup applications and shows you what backup application and policy executed the backup and the time of the last full or incremental backup.
The Client Coverage report tells you whether all clients in your environment are being backed up or not. OpsCenter can only report on clients that have already been defined and configured for backups. This report helps you to identify the clients that are a part of your environment but are not known to OpsCenter. These clients may not be getting backed up because of backup software not being installed or the clients not being configured for backups.

To run this report, you must specify a CSV file (comma-separated value) that contains a complete and authoritative inventory of all servers across the enterprise. Some of the independent sources of server inventory across the enterprise which can be used to generate a CSV file are the following:

- Configuration Management Database (CMDB)
- Asset Management System
- Domain Name System (DNS)
- Homegrown databases
- Spreadsheet

OpsCenter imports data from the CSV file and compares the list of clients (available in CSV) with the clients known to OpsCenter. The clients which are present in CSV but not in OpsCenter can be easily identified from this report.

**Figure 2-57** shows a sample view of the Client Coverage report.

**Figure 2-57**  
Client Coverage report

---

**Note:** The CSV file must be located on the machine from where you are running the Client Coverage report. See “About comparison of clients listed in CSV and OpsCenter” on page 220, for more information on how the comparison takes place.
The following table provides details on each column that is displayed in the report:

<table>
<thead>
<tr>
<th>Column</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>External Client</td>
<td>Name of the client that appears in the CSV file.</td>
</tr>
<tr>
<td></td>
<td><strong>Note</strong>: A client may be known by multiple names and all the names may be documented in the CSV file. The name that appears in the External Client column is the first name that is documented in the CSV file. For example, if a CSV file lists multiple names for a client such as, myhost, myhost.symantec.com, myhost.veritas.com, then myhost appears in the External Client column.</td>
</tr>
<tr>
<td>Backed Up Client</td>
<td>Name of the backed up client in OpsCenter</td>
</tr>
<tr>
<td>Message</td>
<td>The result of comparison. The following are the possible messages:</td>
</tr>
<tr>
<td></td>
<td>■ Match - Direct</td>
</tr>
<tr>
<td></td>
<td>■ Match - FQDN vs. Short name</td>
</tr>
<tr>
<td></td>
<td>■ In External List And Not In Backup</td>
</tr>
<tr>
<td>Product</td>
<td>A list of backup products used for backing up the client, such as, NetBackup or Backup Exec.</td>
</tr>
<tr>
<td>Policy Full Name</td>
<td>The backup policy associated with the client when the last full backup was successful</td>
</tr>
<tr>
<td>Last Full Job Time</td>
<td>This is the time when the last full backup was successful for the specific client.</td>
</tr>
<tr>
<td>Policy Name Incremental</td>
<td>The backup policy associated with the client when the last incremental backup was successful.</td>
</tr>
<tr>
<td>Last Incremental Job Time</td>
<td>This is the time when the last incremental backup was successful for the specific client.</td>
</tr>
</tbody>
</table>

The following are details associated with the Client Coverage report:

<table>
<thead>
<tr>
<th>Report Name</th>
<th>Client Coverage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Report Category</td>
<td>Client</td>
</tr>
<tr>
<td>Where to Locate</td>
<td>Report &gt; Report Templates &gt; Client Reports &gt; Risk Analysis &gt; Client Coverage</td>
</tr>
</tbody>
</table>
Report Purpose: This report shows a comparison of the list of clients being backed up against an independently-sourced list (like CMDB, third party and homegrown asset management systems) of clients.

Supported products: Symantec NetBackup, Symantec NetBackup Master Appliance, Backup Exec, NetBackup PureDisk

Applicable View: Client

Report Display: Tabular

Drill down report: No

Can be scheduled: No

Supported export formats: PDF, CSV, TSV, HTML, XML

Mapping with VBR report: Backups > Risk Analysis > Client Risk Analysis > Client Coverage

The following table shows the filters for Client Coverage report and how you can use these filters to view specific data in the report.

**View Selection**

Select a view from the **Select View Name** drop-down list. This can be done to view the report for a specific location, department etc. In case you select a specific view, you must create the CSV file that contains the clients in the particular view only. For example, if you want to see the Client Coverage report for HR department in Canada, then the CSV file must contain the client list specific to the HR department in Canada.

**Additional Parameters**
Client Selection Criteria
All

- **All**: This is selected by default. Comparison results for all the clients are displayed.

- **In external list but was never backed up**: Select this option if you want to view the clients that are present in your environment but are not known to OpsCenter. You must verify if these clients are being backed up.

- **Getting backed up but not in external list**: Select this option if you want to view the clients that are known to OpsCenter but not present in the CSV file. This may be due to several reasons like machine not being available in the network or machine not registered in the DNS, and so on.

- **Is matching (Direct)**: Select this option if you want to view the clients for which host name in CSV is exactly the same as the host name in OpsCenter. For example, myhost.symantec.com in CSV and myhost.symantec.com in OpsCenter.

- **Is matching (FQDN vs Short Name)**: Select this option if you want to view the clients for which the host name is an FQDN in CSV and a short name in OpsCenter or a short name in CSV and an FQDN in OpsCenter. For example, if the CSV file contains myhost.veritas.com and OpsCenter contains myhost, then the comparison result is Match - FQDN vs. Short Name. Similarly, if the CSV file contains myhost and OpsCenter contains myhost.veritas.com, then the client is displayed in the report.

- **Was getting backed up but not in external list**: Select this option if you want to view the clients that were being backed up earlier but not present in the CSV file.

- **Was matching (Direct)**: Select this option if you want to view the clients for which host name in CSV was exactly the same as the host name in OpsCenter. For
example, myhost.symantec.com in CSV and myhost.symantec.com in OpsCenter.

- **Was matching (FQDN vs Short Name):** Select this option if you want to view the clients for which the host name was an FQDN in CSV and a short name in OpsCenter or a short name in CSV and an FQDN in OpsCenter.

### Wild Card

You can specify a part of the backed up client name so that the report shows data only for the specific backed up clients that are of your interest. For example, to see details of all backed up servers running Oracle which are known to have a string "ora" somewhere in the host name, you can type the following:

- `%ora%` - Include or exclude all backed up clients with 'ora' anywhere in the host name
- `ora` - Include or exclude all backed up clients named ora.
- `ora%` - Include or exclude all backed up clients whose names start with ora.
- `%ora` - Include or exclude all backed up clients whose names end with ora.
- Similarly, you can specify multiple search strings as follows:
  - `%ora%, %syb%` - Include or exclude all OpsCenter hosts with Ora or Syb anywhere in the backed up client name.

**Note:** This search is applicable only for Backed up clients and not the External Clients.

**Note:** The search is not case-sensitive. For example, if you search for Ora, you may find results like ora, Ora, oRa, and so on.

### Display Options

Type a report description.

Select the number of rows you want displayed on a single page.
**Example of filter usage:** To view details of all backed up servers running VMWare that are known to have 'vm' somewhere in the host name, type %vm% in the Wild Card text box.

**About CSV formats**

The CSV file required as an input to the Client Coverage report can be created using a text editor or Microsoft Excel application.

A typical CSV file format is as follows:

<table>
<thead>
<tr>
<th>Host1_name1,Host1_name2,Host1_name3,Host1_name4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Host2</td>
</tr>
<tr>
<td>Host3</td>
</tr>
</tbody>
</table>

**Note:** Host1_name1, Host1_name2, Host1_name3, Host1_name4 are multiple names of the same machine. Multiple names for the same machine may exist due to many reasons like because of a machine having multiple Network Interface Cards etc.

**Note:** Each host machine exists in a new line. For example, Host1, Host2, and Host3 all exist in three separate lines.

Here is a sample CSV format:

```
css-bin3,css-bin3.symantec.com
macy.symantec.com,macy,macy.veritas.com
css-bin10.symantec.com
```

**Note:** There is no space after the comma in the CSV file.

**About comparison of clients listed in CSV and OpsCenter**

OpsCenter imports data from the CSV file and compares the list of clients (available in CSV) with the clients known to OpsCenter.

The Client Coverage report shows any or all of the following outcomes after comparison:
This means that a client exists in both the CSV file and OpsCenter database.

**Note:** In case multiple names for a system are present in CSV and OpsCenter, then all the names present in CSV are compared with each name in OpsCenter till a match is obtained.

The comparison results in this case may be one of the following:

- Match - Direct: This happens when the host name in CSV is exactly the same as the host name in OpsCenter. For example, myhost.symantec.com in CSV and myhost.symantec.com in OpsCenter.

- Match - FQDN vs. Short Name: This happens when the host name is an FQDN in CSV and a short name in OpsCenter or a short name in CSV and an FQDN in OpsCenter. For example, if the CSV file contains myhost.veritas.com and OpsCenter contains myhost, then the comparison result is Match - FQDN vs. Short Name. Similarly, if the CSV file contains myhost and OpsCenter contains myhost.veritas.com, then the comparison result is Match - FQDN vs. Short Name.

The Client Coverage report helps you to identify these clients which are present in your environment but are not known to OpsCenter. You must verify if these clients are being backed up.

This happens when the host name is known to OpsCenter but not present in the CSV file. This may be due to several reasons like computer not being available in the network or computer not registered in the DNS, and so on.

**Risk Analysis > Recovery Point Objective report**

Recovery Point Objective (RPO) and Recovery Time Objective (RTO) have emerged as generally accepted metrics for client recoverability. This report ranks all clients by the amount of time that is elapsed since their last successful backup. The report shows how long it has been since each system has had a successful backup and therefore would have difficulty meeting a Recovery Point. In larger environments being able to run this report on a weekly basis will quickly show where there is risk due to systems that have not been backed up in a pre-determined amount of time.

In contrast to the Client Risk Analysis report, the level of granularity is the client level and thus clients with multiple backup policies are represented by the policy with most recent success. It is recommended that this report not be used for multi-policy clients. The client “IsActive” filter allows for those hosts that are not actively being backed up to be omitted. The elapsed time in the report is always
between now and the last successful backup. The report is effective in its graphical rankings format placing the clients with longest elapsed time at the top. Figure 2-58 shows a sample view of the Recovery Point Objective report.

In the example, no backups have been run for nearly 10 hours for all the clients. This means that for the five systems on the report, the best RPO possible would be nearly 10 hours. If you have committed to an 8 hour RPO, then these systems need to be backed up quickly to be able to meet that SLA.

The following are details associated with the Recovery Point Objective report:

<table>
<thead>
<tr>
<th>Report Name</th>
<th>Recovery Point Objective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Report Category</td>
<td>Client Reports</td>
</tr>
<tr>
<td>Where to Locate</td>
<td>Report &gt; Report Templates &gt; Client Reports &gt; Risk Analysis &gt; Recovery Point Objective</td>
</tr>
<tr>
<td>Report Purpose</td>
<td>User-configurable threshold-based rankings report of clients exceeding their recovery point objectives.</td>
</tr>
</tbody>
</table>
Symantec NetBackup, Symantec NetBackup Master Appliance, Symantec Backup Exec, NetBackup PureDisk

Applicable View Master Server, Client

Report Display Rankings (Chart)

Drill down report No

Can be scheduled Yes

Supported export formats PDF, CSV, TSV, HTML, XML

Mapping with VBR report Backups > Risk Analysis > Recovery Point Objective - RPO

The following table shows the filters for Recovery Point Objective report and how you can use these filters to view specific data in the report.

<table>
<thead>
<tr>
<th>Filter</th>
<th>Column</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>View</td>
<td>View</td>
<td>Select a view to show data for the selected view in the report. By default All My Views is selected.</td>
</tr>
<tr>
<td>Master Server</td>
<td>Master Server</td>
<td>Select one or more master servers to view data for the selected master servers in the report. All master servers that are added to the OpsCenter console are shown in the Value drop-down list.</td>
</tr>
<tr>
<td>Media Server</td>
<td>Media Server</td>
<td>Select one or more media servers to view data for the specific media servers in the report. All media servers that are attached to the master servers in the OpsCenter console are shown in the Value drop-down list.</td>
</tr>
<tr>
<td>Client</td>
<td>Client is Active</td>
<td>The default selection is Yes. By default, Active Clients are displayed in the report. Hence the clients that are not actively backed up are omitted by default. Select No if you want to view the report for all the clients. Select one or more clients to view data for the selected clients in the report. All clients that are protected by the master servers in the OpsCenter console are listed.</td>
</tr>
<tr>
<td></td>
<td>Client Name</td>
<td>Select one or more client OS to view data for the selected client OS in the report.</td>
</tr>
<tr>
<td></td>
<td>Client OS</td>
<td></td>
</tr>
</tbody>
</table>
**Filter**  **Column**  **Description**

| Policy | Policy Keyword | Select one or more policy keyword to view data for the policies having the selected keyword.  
| Policy Name | Select one or more policy names to view data for the selected policies.  
| Policy Type | Select one or more policy types to view data for the selected policy types.  

| Schedule | Schedule Level Type | Select one or more schedule types like CINC, Copy, Daily etc. to view data for the selected schedule types.  
| Schedule Name | Select one or more schedule names to view data for the selected schedule names.  

| Job | Job Status | Select one or more Job Status like Failed, Missed, Partially Successful etc. to view data for the selected job status in the report.  
| Job Transport Type | Select one or more transport types like FT, LAN, or Unknown to view data for the jobs that have the selected transport type.  
| Job Type | The value selection for Job Type is mandatory. By default, Backup jobs are shown in the report. You can select one or more job types like Archive, Backup, Restore etc. to view data for the selected job types.  

**Example of filter usage:** You may run the report for specific master servers to view details for the clients backed up by specific master servers.

The following enhancements have been made in the Stored Backup Images on Media report:

- You can now click (drill down) the bar for each client and view Recovery Point Objective report for job type, schedule/level type and policy name.

- The **Job Type** column has been added under the **Job** filter.

- For the **Policy** filter, the following columns have been added:
  - Policy Keyword
  - Policy Type

- The **Schedule** filter has been added.

- The following **Report On** parameters have been added:
  - Job Type
  - Policy Name
Schedule/Level Type

Earlier there was a Host filter with Host is Active column. The Host filter has been removed. The Host is Active column is now renamed as Client is Active column and exists under the Client filter. The default value of Client is Active column is Yes.

Clients Not Backed up report

This report provides a list of NetBackup clients that have not been backed up or clients for which all backups failed during the reporting period.

You can determine if all jobs of a policy and client combination have failed or have not been initiated during the reporting period. You can filter by type of policy like SharePoint, Oracle, Windows NT and so on.

The client name is displayed multiple times in the report if the client has multiple NetBackup policies that are associated with it and none of the policies are run during the reporting period. The report shows details like policy name, schedule name, and date of the last successful backup.

You can now view data in this report for a specific client view by selecting a client view from the View filter. Earlier you could only filter the report data for a master server view.

Figure 2-59 shows a sample view of the Clients not backed up report.

The following are details for the Clients Not Backed up report:

![Clients Not Backed up report](image-url)
Report Name: Clients Not Backed up

Report Category: Client Reports

Where to Locate: Report > Report Templates > Client Reports > Clients Not Backed up

Report Purpose: This report lists all the clients that are not backed up in the selected timeframe.

Supported products: Symantec Backup Exec, NetBackup, NetBackup Master Appliance, NetBackup PureDisk

Applicable View: Master Server, Client

Report Display: Tabular

Drill down report: No

Can be scheduled: Yes

Supported export formats: PDF, CSV, TSV, XML, HTML

Mapping with NOM report: All Reports > Standard Reports > Client > Clients Not Backed up

Deviation from NOM: Last Successful Backup column shows the job end time in OpsCenter. However, this column shows the job start time in NOM.

The following table shows the filters for Clients not backed up report and how you can use these filters to view specific data in the report.

<table>
<thead>
<tr>
<th>Filter</th>
<th>Column</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>View</td>
<td></td>
<td>Select a view to show data for the selected view in the report. By default All My Views is selected.</td>
</tr>
<tr>
<td>Policy</td>
<td>Policy Type</td>
<td>Select one or more policy types like NDMP, FlashBackup etc. to view data for the selected policy types.</td>
</tr>
</tbody>
</table>

**Example of filter usage:** You may run the Clients not Backed up report for a specific policy type like FlashBackup to view backup details for the specific policy type.

The following enhancements have been made in the Clients Not Backed up report:

- The unit **Years** has been added for Relative Timeframe selection. You can now view data for the last x years. You can also see the **Years** tab on top-right corner of the Tabular Backup Report.
UNKNOWN has been added as a value for Policy Type column in the Policy filter. You can now filter report data for policy types that are unknown. In earlier versions of OpsCenter, the unknown policy types were shown as blank.

Virtual Client Summary report

The Virtual Client Summary report shows details of all virtual clients of a NetBackup master server. Using this report, you can determine whether these virtual clients were backed up by NetBackup or not. Thus, you can report on the virtual clients that need to be protected. It also shows at a glance that last time the client was backed up.

You can also drill down in this report to see the job details of a specific virtual client.

OpsCenter can poll the vCenter or Hyper-V server to determine what systems have been configured and compare that with the NetBackup policies that have been created. This helps to track those virtual machines that are not being protected by any NetBackup policies.

**Note:** Checking that the virtual machine is added in the is possible only when the policy is manually created or when successful backup has happened for the virtual machine.

Figure 2-60 shows a sample view of the Virtual Client Summary report.

The sample report shows an example of vCenter server that has a number of VMs configured. Most of the virtual clients do not exist in any NetBackup policy and need
It also shows at a glance the last time the system was backed up (from the Last Successful Backup Time column).

The Virtual Client Summary report shows the following columns:

<table>
<thead>
<tr>
<th>Column Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Virtual Server Name</td>
<td>Name of the virtual server host such as VMware or Hyper-V server</td>
</tr>
<tr>
<td>Data Store</td>
<td>Data store associated with the virtual client. Data Store is where virtual machine configuration files are stored.</td>
</tr>
<tr>
<td>Host</td>
<td>Name of the backup host.</td>
</tr>
<tr>
<td>Virtual Client Name</td>
<td>Display name of the virtual client running on a virtual server.</td>
</tr>
<tr>
<td>UUID</td>
<td>BIOS UUID for the virtual client.</td>
</tr>
<tr>
<td>VM Host Name</td>
<td></td>
</tr>
<tr>
<td>Instance ID</td>
<td>IP address of the virtual client</td>
</tr>
<tr>
<td>Type</td>
<td>Type of the virtual server that this client belongs to, such as VMware or Hyper-V</td>
</tr>
<tr>
<td>Server Name</td>
<td>Name of the NetBackup Master Server, which backs up this virtual client.</td>
</tr>
<tr>
<td>Exists in a Policy</td>
<td>This status field that describes whether backing up this virtual client is defined in any NetBackup policy or not</td>
</tr>
</tbody>
</table>

Note: Click the virtual client name link to view its job details.
Last Backup Time: Time when this virtual client was backed up last. This field displays ‘-’ if the client is not defined in a backup policy or it is yet to be backed up.

The following are details for the Virtual Client Summary report:

- **Report Name**: Virtual Client Summary
- **Report Category**: Client Reports
- **Where to Locate**: Report > Report Templates > Client Reports > Virtual Client Summary
- **Report Purpose**: This report shows details of the VMware or Hyper-V servers that you have configured with NetBackup. It also shows whether these virtual machines are protected by NetBackup or not.
- **Supported products**: NetBackup, NetBackup Master Appliance
- **Applicable View**: Master Server, Client
- **Report Display**: Tabular
- **Drill down report**: Yes  
  See “Virtual Client Job Details” on page 230.
- **Can be scheduled**: Yes
- **Supported export formats**: PDF, CSV, TSV, XML, HTML
- **Mapping with NOM report**: All Reports > Standard Reports > Client > Virtual Client Summary

The following table shows the filters for Virtual Client Summary report and how you can use these filters to view specific data in the report.

<table>
<thead>
<tr>
<th>Filter</th>
<th>Column</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>View</td>
<td></td>
<td>Select a view to show data for the selected view in the report. By default <strong>All My Views</strong> is selected.</td>
</tr>
<tr>
<td>Master</td>
<td>Master</td>
<td>Select one or more master servers to view data for the virtual clients backed up by the selected master servers in the report. All master servers that are added to the OpsCenter console are shown in the <strong>Value</strong> dropdown list.</td>
</tr>
</tbody>
</table>
**Example of filter usage:** You may run the Virtual Client Summary report for a specific client view to view details for the specific clients.

**Virtual Client Job Details**

This drilldown report is obtained when you click a virtual client name (link) from the Virtual Summary report. This report shows details for a virtual client like policies, schedules, backup start and end time, data backed up etc.

Figure 2-61 shows a sample view of the Virtual Client Job Details report.

**Figure 2-61** Virtual Client Job Details

<table>
<thead>
<tr>
<th>Server Name</th>
<th>Client Name</th>
<th>Job ID</th>
<th>Policy Name</th>
<th>Schedule Name</th>
<th>Status Code</th>
<th>Start Time</th>
<th>End Time</th>
<th>Data Backed up(GB)</th>
</tr>
</thead>
</table>

The following are details associated with the Virtual Client Job Details report:

<table>
<thead>
<tr>
<th>Report Name</th>
<th>Virtual Client Job Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Report Category</td>
<td>Client Reports</td>
</tr>
<tr>
<td>Where to Locate</td>
<td>Report &gt; Report Templates &gt; Client Reports &gt; Virtual Client Summary (click the virtual client name) &gt; Virtual Client Job Details</td>
</tr>
<tr>
<td>Report Purpose</td>
<td>This report shows the details of selected virtual machine.</td>
</tr>
<tr>
<td>Supported products</td>
<td>NetBackup, NetBackup Appliance</td>
</tr>
<tr>
<td>Applicable View</td>
<td>Master Server, Client</td>
</tr>
<tr>
<td>Report Display</td>
<td>Tabular</td>
</tr>
<tr>
<td>Drill down report</td>
<td>None</td>
</tr>
<tr>
<td>Can be scheduled</td>
<td>Yes</td>
</tr>
</tbody>
</table>
The following table shows the filters for Virtual Client Job Details report and how you can use these filters to view specific data in the report.

<table>
<thead>
<tr>
<th>Filter</th>
<th>Column</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>View</td>
<td></td>
<td>Select a view to show data for the selected view in the report. By default <strong>All My Views</strong> is selected.</td>
</tr>
<tr>
<td>Master</td>
<td>Master Server</td>
<td>Select one or more master servers to view data for the virtual clients backed up by the selected master servers in the report. All master servers that are added to the OpsCenter console are shown in the <strong>Value</strong> drop-down list.</td>
</tr>
<tr>
<td>Client</td>
<td>Client Name</td>
<td>Select one or more clients to view data for the selected clients in the report. All clients that are protected by the master servers in the OpsCenter console are listed.</td>
</tr>
</tbody>
</table>

**Example of filter usage:** You may run the Virtual Client Job Details report for a specific client to view details for the specific clients.

**Job Success by Client report**

This report shows the rate of success for client jobs.

The bar chart shows totals for successful, partially successful, and failed jobs for each client that is backed up by the selected master servers. Tool tips in the bars show these job counts. The tool tips for each client also include links to a drill-down report showing details for all job types.

Click **Show Chart as Table** link to display job counts of successful, partially successful, or failed jobs for each client in the selected timeframe.

**Figure 2-62** shows a sample view of the Job Success by Client report.
Figure 2-62  Job Success by Client report

The following are details for the Job Success by Client report:

<table>
<thead>
<tr>
<th>Report Name</th>
<th>Job Success by Client</th>
</tr>
</thead>
<tbody>
<tr>
<td>Report Category</td>
<td>Client Reports</td>
</tr>
<tr>
<td>Where to Locate</td>
<td>Report &gt; Report Templates &gt; Client Reports &gt; Job Success by Client</td>
</tr>
</tbody>
</table>
This report shows the job success by client. This report is valid for NetBackup and NetBackup Appliance.

**Report Purpose**

- NetBackup, NetBackup Master Appliance

**Supported products**

- NetBackup, NetBackup Master Appliance

**Applicable View**

- Master Server, Client

**Report Display**

- Historical (Chart)

**Drill down report**

- Job Details by Client

**Can be scheduled**

- Yes

**Supported export formats**

- PDF, CSV, TSV, XML, HTML

**Mapping with NOM report**

- All Reports > Standard Reports > Client > Job Success by Client

The following table shows the filters for Job Success by Client report and how you can use these filters to view specific data in the report.

<table>
<thead>
<tr>
<th>Filter</th>
<th>Column</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>View</td>
<td></td>
<td>Select a view to show data for the selected view in the report. By default <strong>All My Views</strong> is selected.</td>
</tr>
<tr>
<td>Master</td>
<td>Master</td>
<td>Select one or more master servers to view data for the clients backed up by the selected master servers in the report. All master servers that are added to the OpsCenter console are shown in the <strong>Value</strong> drop-down list.</td>
</tr>
</tbody>
</table>

**Example of filter usage:** You may run the Job Success by Client report for a specific master server to view job success details for the clients that are protected by the specific master server.

The following enhancements have been made for the Job Success by Client report:

- You can now drill down by clicking the bars in the report. A drill-down report called Job Details by Client is available.
- The Report On parameter that let you group the report by Exit Status has been removed from the **Modify Display Options** page.

**Job Details by Client**

This report can be drilled down either by clicking the bar charts in Jobs Success by Client report or from the **Client Name** column in Jobs Success by Client (Tabular) report. This drilldown report lists details of all the jobs for the selected client and time frame.
The table includes details like Job type, status code, and media server name.

The report now also displays the **Media Server** column.

**Figure 2-63** shows a sample view of the Job Details by Client report.

**Figure 2-63**  Job Details by Client

The following is more information on the Job Details by Client report:

- **Report Name**: Job Details by Client
- **Report Category**: Client Reports
- **Where to Locate**: Report > Report Templates > Client Reports > Job Success by Client (click the bar chart) or Job Success by Client (Tabular) (click the **Client Name** column)
Report Purpose: This report lists job details for client. This report is valid for NetBackup and NetBackup Appliance.

Supported products: NetBackup, NetBackup Master Appliance

Applicable View: Master Server, Client

Report Display: Tabular

Drill down report: No

Can be scheduled: Yes

Supported export formats: PDF, CSV, TSV, XML, HTML

Mapping with NOM report: All Reports > Standard Reports > Client > Job Success by Client > Job Details by Client

The following table shows the filters for Job Details by Client report and how you can use these filters to view specific data in the report.

<table>
<thead>
<tr>
<th>Filter</th>
<th>Column</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>View</td>
<td>All My Views</td>
<td>Select a view to show data for the selected view in the report. By default All My Views is selected.</td>
</tr>
<tr>
<td>Master Server</td>
<td>Master Server</td>
<td>Select one or more master servers to view data for the clients backed up by the selected master servers in the report. All master servers that are added to the OpsCenter console are shown in the Value drop-down list.</td>
</tr>
<tr>
<td>Client</td>
<td>Client Name</td>
<td>Select one or more clients to view data for the selected clients in the report. All clients that are protected by the master servers in the OpsCenter console are listed.</td>
</tr>
</tbody>
</table>

**Example of filter usage:** You may run the Job Details by Client report for specific clients or master servers.

**Job Success by Client (Tabular) report**

This report shows the rate of success for client jobs. The tabular report shows totals for successful, partially successful, and failed jobs for each client that is backed up by the selected master servers.

You can also drill-down from the following columns in the table:

- **Client Name**
- **Number of Successful Jobs**
- Number of Partially Successful Jobs
- Number of Failed Jobs

Figure 2-64 shows a sample view of the Job Success by Client (Tabular) report.

The following are details for the Job Success by Client (Tabular) report:

- **Report Name**: Job Success by Client
- **Report Category**: Client Reports
- **Where to Locate**: Report > Report Templates > Client Reports > Job Success by Client (Tabular)
- **Report Purpose**: This report shows the job success by client. This report is valid for NetBackup and NetBackup Appliance.
- **Supported products**: NetBackup, NetBackup Master Appliance
- **Applicable View**: Master Server, Client
- **Report Display**: Tabular
- **Drill down report**: Job Details for Client, Successful Job Details for Client, Partially Successful Job Details for Client, Failed Job Details for Client
- **Can be scheduled**: Yes
- **Supported export formats**: PDF, CSV, TSV, XML, HTML
Mapping with NOM report  All Reports > Standard Reports > Client > Job Success by Client

The following table shows the filters for Job Success by Client report and how you can use these filters to view specific data in the report.

<table>
<thead>
<tr>
<th>Filter</th>
<th>Column</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>View</td>
<td></td>
<td>Select a view to show data for the selected view in the report. By default <strong>All My Views</strong> is selected.</td>
</tr>
<tr>
<td>Master</td>
<td>Master</td>
<td>Select one or more master servers to view data for the clients backed up by the selected master servers in the report. All master servers that are added to the OpsCenter console are shown in the <strong>Value</strong> drop-down list.</td>
</tr>
<tr>
<td>Client</td>
<td>Client Name</td>
<td>Select one or more clients to view data for the clients.</td>
</tr>
</tbody>
</table>

**Example of filter usage:** You may run the Job Success by Client (Tabular) report for specific clients to view job success details for the selected clients.

**Client summary dashboard report**

This report summarizes several parameters for each client for the selected server context and acts as a dashboard of NetBackup activities. You can use drilldown links to view client detail reports for many of the columns in the table.

The drilldown reports provide information about the client and answer the following questions:

- What is the server name, IP address, and operating system type?
- How much volume for a client is backed up?
- How many successful, partially successful, and failed jobs for the client?
- What is the number of restore jobs that run for the client?
- What is the average job throughput?

You can now view data in this report for a specific client view by selecting a client view from the View filter. Earlier you could only filter the report data for a master server view.

The report can also be used as a tool to monitor the health of backup activities for your managed clients.
<table>
<thead>
<tr>
<th>Report Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total jobs for client report</strong></td>
<td>This drilldown report from the <strong>Number of Total Jobs</strong> column lists all the jobs for the selected client and time frame. The job details include policy name, schedule name, and throughput (KB/sec). This drilldown report uses the run time parameters that are passed from the main report.</td>
</tr>
<tr>
<td><strong>Successful jobs for client report</strong></td>
<td>This drilldown report from the <strong>Number of Successful Jobs</strong> column lists the successful jobs for the selected client and time frame. The report lists job details, such as, job type, policy name, start and end times, and job duration. This drilldown report uses the run time parameters that are passed from the main report.</td>
</tr>
<tr>
<td><strong>Partially successful jobs for client report</strong></td>
<td>This drilldown report from the <strong>Number of Partial Successful Jobs</strong> column shows the partially successful jobs for the selected client and time frame. The report lists job details, such as, job type, policy name, start and end times, and job duration. This drilldown report uses the run time parameters that are passed from the main report.</td>
</tr>
<tr>
<td><strong>Failed jobs for client report</strong></td>
<td>This drilldown report from the <strong>Number of Failed Jobs</strong> column lists the failed jobs for the selected client and time frame. Any jobs with an exit status other than 0 or 1 are considered to be failed jobs. The report lists job details, such as, job type, policy name, start and end times, and job duration. This drilldown report uses the run time parameters that are passed from the main report.</td>
</tr>
<tr>
<td><strong>Restore jobs for client report</strong></td>
<td>This drilldown report from the <strong>Number of Restore Jobs</strong> column lists restores job details for the selected client. It provides details like policy name, schedule name, and throughput (KB/sec). This drilldown report uses the run time parameters that are passed from the main report.</td>
</tr>
</tbody>
</table>

**BMR client configuration backup failures report**

If a NetBackup policy has the Collect BMR Info flag set, the job backs up BMR (Bare Metal Restore) client configuration. This job type starts one or more dependant jobs to back up the client data.
This report shows all jobs that failed to completely back up a BMR client configuration, but their related child jobs (client data backup jobs) were partially or fully successful.

You can now view data in this report for a specific client view by selecting a client view from the View filter. Earlier you could only filter the report data for a master server view.

**Jobs by application report**

This report uses the NetBackup policy type to simulate an application level report. For example, an Oracle policy type implies an Oracle application. The report then lets you see all Oracle backups.

The table in this report organizes jobs in the table by server, client, and application and includes the backup size in MBs and the number of files. The Application (policy type) column provides a drilldown link to job details for the respective application.

There is a drilldown report available from the Application column of the table of the main report. This drilldown report lists all the jobs for the selected client and policy type. The table includes job details such as, job ID, exit status, and job start and end times, and a count of files.

This drilldown report uses the run time parameters that are passed from the main report.

**SAN client jobs report**

This report shows all the jobs for selected Fiber Transport (FT) media servers and selected SAN clients.

The report answers the following questions and provides the following information:

- Did the job run on a LAN or an FT pipe?
- Are two different clients backed up by a single media server, thus reducing the throughput?
- A list of all the FT media servers
- A list of all the SAN clients.

**About Cloud reports**

Cloud reports provide information for the NetBackup data written to a cloud storage location including storage forecasting, trending, throughput performance, and chargeback costs of storing NetBackup data in a specific cloud storage provider.

Cloud reports are only for NetBackup servers that have Cloud configured on them.
The following Cloud reports are available:

- **Job Success Rate**  
  See “Job Success Rate report” on page 240.

- **Data Expiring in Future**  
  See “Data Expiring in Future” on page 243.

- **Cloud Metering**  
  See “Cloud Metering” on page 246.

- **Average Data Transfer Rate**  
  See “Average Data Transfer Rate” on page 248.

- **Cloud Metering Chargeback**  
  See “Cloud Metering Chargeback” on page 251.

### Job Success Rate report

This report gives the success rate of backup jobs on the Cloud for each configured Cloud storage provider. It also helps you to compare job success rates for different Cloud storage providers.

You can also view the Success Rate (%) for a specific job end date or time in a tabular format. Click **Show Table** to view the details in a tabular format.

The X-axis shows the Job end time and date and Y-axis shows the Job Success Rate in percentage. The Legend defines different colors for specific storage providers.

Click **Show Chart as Table** to view details in the tabular format.

*Figure 2-65* is a sample view of the Job Success Rate report.
The following are details associated with the Job Success Rate report:

**Report Name**: Job Success Rate

**Report Category**: Cloud Reports

**Where to Locate**: Report > Report Templates > Cloud Reports > Job Success Rate

**Report Purpose**: Success rate by job level across products, domains, clients, policies and business level views.

**Supported products**: Symantec NetBackup, Symantec NetBackup Master Appliance
Applicable View: Master Server, Client

Report Display: Historical

Drill down report: None

Can be scheduled: Yes

Supported formats: PDF, CSV, TSV, XML, HTML

You can edit the report and configure the timeframe or run the report for specific views, clients, or master servers.

The following table shows the filters for Job Success Rate report and how you can use these filters to view specific data in the report.

<table>
<thead>
<tr>
<th>Filter</th>
<th>Column</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>View</td>
<td></td>
<td>Select a view to show data for the selected view in the report. By default <strong>All My Views</strong> is selected.</td>
</tr>
<tr>
<td>Master Server</td>
<td>Master Server</td>
<td>Select one or more master servers to view data for the selected master servers in the report. All master servers that are added to the OpsCenter console are shown in the <strong>Value</strong> drop-down list.</td>
</tr>
<tr>
<td>Media Server</td>
<td>Media Server</td>
<td>Select one or more media servers to view data for the specific media servers in the report. All media servers that are attached to the master servers in the OpsCenter console are shown in the <strong>Value</strong> drop-down list.</td>
</tr>
<tr>
<td>Client</td>
<td>Client is Active</td>
<td>The default selection is Yes. By default, Active Clients are displayed in the report. Hence the clients that are not actively backed up are omitted by default. Select <strong>No</strong> if you want to view the report for all the clients.</td>
</tr>
<tr>
<td></td>
<td>Client Name</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Client OS</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Select one or more clients to view data for the selected clients in the report. All clients that are protected by the master servers in the OpsCenter console are listed.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Select one or more client OS to view data for the selected client OS in the report.</td>
</tr>
</tbody>
</table>
Filter | Column | Description
--- | --- | ---
Policy | Policy Data Classification Name | Select one or more policy data classification names to view data for the selected policy data classification names.
Policy Keyword | Select one or more policy keyword to view data for the policies having the selected keyword.
Policy Name | Select one or more policy names to view data for the selected policies.
Policy Type | Select one or more policy types to view data for the selected policy types.
Schedule | Schedule/Level Type | Select one or more schedule types like CINC, Copy, Daily etc. to view data for the selected schedule types.
Job | Job Status | Select one or more Job Status like Failed, Missed, Partially Successful etc. to view data for the selected job status in the report.
Job Transport Type | Select one or more transport types like FT, LAN, or Unknown to view data for the jobs that have the selected transport type.
Product Type | Select one or more backup products to view data for the selected products.
Success Rate | Client Name | Select one or more clients to view data for the selected clients in the report. All clients that are protected by the master servers in the OpsCenter console are listed.

**Example of filter usage:** You may run the Job Success Rate report for specific clients to view details only for the specific clients.

You can also select time interval for which you want to group the records. For example, if you select 1 month as the Time Frame and 10 days as the Group By interval, the report shows records in three chunks of data grouped by 10 days.

**Data Expiring in Future**

The report shows how much data on the Cloud is going to expire for each Cloud provider. By default, the report shows the data expiring each day for the next seven days.

The report shows the total expired backup size and also the number of images that are going to expire in the next seven days for each Cloud provider. The Y1 axis gives the total expired backup size and the Y2 axis indicates the number of images that are going to expire. Click **Show Chart as Table** to view the data in a tabular format.

**Figure 2-66** shows a sample view of the Data Expiring in Future report.
The following are details associated with the Data Expiring in Future report:

- **Report Name**: Data Expiring in Future
- **Report Category**: Cloud Reports
- **Where to Locate**: Report > Report Templates > Cloud Reports > Data Expiring in Future
- **Report Purpose**: This report shows the data expiring each day for the next 7 days.
Supported products: Symantec NetBackup, Symantec NetBackup Master Appliance

Applicable View: Master Server

Report Display: Historical

Drill down report: None

Can be scheduled: Yes

Supported formats: PDF, CSV, TSV, XML, HTML

You can edit the report and configure the timeframe or run the report for specific views, clients, or master servers.

The following table shows the filters for Data Expiring in Future report and how you can use these filters to view specific data in the report.

<table>
<thead>
<tr>
<th>Filter</th>
<th>Column</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>View</td>
<td></td>
<td>Select a view to show data for the selected view in the report. By default All My Views is selected.</td>
</tr>
<tr>
<td>Master Server</td>
<td>Master Server</td>
<td>Select one or more master servers to view data for the selected master servers in the report. All master servers that are added to the OpsCenter console are shown in the Value drop-down list.</td>
</tr>
<tr>
<td>Media Server</td>
<td>Media Server</td>
<td>Select one or more media servers to view data for the specific media servers in the report. All media servers that are attached to the master servers in the OpsCenter console are shown in the Value drop-down list.</td>
</tr>
<tr>
<td>Client</td>
<td>Client is Active</td>
<td>The default selection is Yes. By default, Active Clients are displayed in the report. Hence the clients that are not actively backed up are omitted by default. Select No if you want to view the report for all the clients.</td>
</tr>
<tr>
<td></td>
<td>Client Name</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Client OS</td>
<td>Select one or more clients to view data for the selected clients in the report. All clients that are protected by the master servers in the OpsCenter console are listed. Select one or more client OS to view data for the selected client OS in the report.</td>
</tr>
<tr>
<td>Filter</td>
<td>Column</td>
<td>Description</td>
</tr>
<tr>
<td>----------------</td>
<td>-------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Policy</td>
<td>Policy Data Classification Name</td>
<td>Select one or more policy data classification names to view data for the selected policy data classification names.</td>
</tr>
<tr>
<td></td>
<td>Policy Keyword</td>
<td>Select one or more policy keyword to view data for the policies having the selected keyword.</td>
</tr>
<tr>
<td></td>
<td>Policy Name</td>
<td>Select one or more policy names to view data for the selected policies.</td>
</tr>
<tr>
<td></td>
<td>Policy Type</td>
<td>Select one or more policy types to view data for the selected policy types.</td>
</tr>
<tr>
<td>Schedule</td>
<td>Schedule/Level Type</td>
<td>Select one or more schedule types like CINC, Copy, Daily etc. to view data for the selected schedule types.</td>
</tr>
<tr>
<td>Job</td>
<td>Job Status</td>
<td>Select one or more Job Status like Failed, Missed, Partially Successful etc. to view data for the selected job status in the report.</td>
</tr>
<tr>
<td></td>
<td>Job Transport Type</td>
<td>Select one or more transport types like FT, LAN, or Unknown to view data for the jobs that have the selected transport type.</td>
</tr>
<tr>
<td></td>
<td>Job Type</td>
<td>Select one or more job types like Archive, Backup, Restore etc. to view data for the selected job types.</td>
</tr>
<tr>
<td></td>
<td>Product Type</td>
<td>Select one or more backup products to view data for the selected products.</td>
</tr>
</tbody>
</table>

**Example of filter usage:** You may run the Data Expiring in Future report for specific clients to view details only for the specific clients.

**Cloud Metering**

This report shows the data written to the cloud. It also shows forecast and trend. Figure 2-67 shows a sample view of the Cloud Metering report.
The following are details associated with the Cloud Metering report:

**Report Name**: Cloud Metering

**Report Category**: Cloud Reports

**Where to Locate**: Report > Report Templates > Cloud Reports > Cloud Metering

**Report Purpose**: Historical view of data written to cloud per Cloud Provider.
Supported products    Symantec NetBackup

**Note:** Symantec NetBackup Appliance is not supported.

Applicable View    Master Server

Report Display    Historical

Drill down report    None

Can be scheduled    Yes

Supported formats    PDF, CSV, TSV, XML, HTML

You can edit the report and configure the timeframe or run the report for specific views or media servers.

The following table shows the filters for the Cloud Metering report and how you can use these filters to view specific data in the report.

<table>
<thead>
<tr>
<th>Filter</th>
<th>Column</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>View</td>
<td></td>
<td>Select a view to show data for the selected view in the report. By default <strong>All My Views</strong> is selected.</td>
</tr>
<tr>
<td>Media Server</td>
<td>Media Server</td>
<td>Select one or more media servers to view data for the specific media servers in the report. All media servers that are attached to the master servers in the OpsCenter console are shown in the <strong>Value</strong> drop-down list.</td>
</tr>
</tbody>
</table>

**Example of filter usage:** You may run the Cloud Metering report for specific media servers to view details only for the specific media servers.

**Average Data Transfer Rate**

You can see the Cloud job count and throughput in KB/sec. The bars represent job count while the lines represent throughput.

This report gives an insight on the throughput for each Cloud Provider. If you are using services from multiple Cloud providers, you can compare and identify the Cloud provider that is providing a better throughput.

**Figure 2-68** shows a sample view of the Average Data Transfer Rate report.
The following are details associated with the Average Data Transfer Rate report:

- **Report Name**: Average Data Transfer Rate
- **Report Category**: Cloud Reports
- **Where to Locate**: Report > Report Templates > Cloud Reports > Average Data Transfer Rate
- **Report Purpose**: Data expiring each day for the next 7 days.
Supported products: Symantec NetBackup, Symantec NetBackup Master Appliance

Applicable View: Master Server

Report Display: Historical

Drill down report: None

Can be scheduled: Yes

Support formats: PDF, CSV, TSV, XML, HTML

You can edit the report and configure the timeframe or run the report for specific views, clients, or master servers.

The following table shows the filters for Average Data Transfer Rate report and how you can use these filters to view specific data in the report.

<table>
<thead>
<tr>
<th>Filter</th>
<th>Column</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>View</td>
<td></td>
<td>Select a view to show data for the selected view in the report. By default All My Views is selected.</td>
</tr>
<tr>
<td>Master Server</td>
<td>Master Server</td>
<td>Select one or more master servers to view data for the selected master servers in the report. All master servers that are added to the OpsCenter console are shown in the Value drop-down list.</td>
</tr>
<tr>
<td>Media Server</td>
<td>Media Server</td>
<td>Select one or more media servers to view data for the specific media servers in the report. All media servers that are attached to the master servers in the OpsCenter console are shown in the Value drop-down list.</td>
</tr>
<tr>
<td>Client</td>
<td>Client is Active</td>
<td>The default selection is Yes. By default, Active Clients are displayed in the report. Hence the clients that are not actively backed up are omitted by default. Select No if you want to view the report for all the clients.</td>
</tr>
<tr>
<td>Client Name</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Client OS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Client OS</td>
<td></td>
<td>Select one or more clients to view data for the selected clients in the report. All clients that are protected by the master servers in the OpsCenter console are listed.</td>
</tr>
<tr>
<td>Client OS</td>
<td></td>
<td>Select one or more client OS to view data for the selected client OS in the report.</td>
</tr>
<tr>
<td>Filter</td>
<td>Column</td>
<td>Description</td>
</tr>
<tr>
<td>---------</td>
<td>-------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Policy</td>
<td>Policy Data Classification Name</td>
<td>Select one or more policy data classification names to view data for the selected policy data classification names.</td>
</tr>
<tr>
<td></td>
<td>Policy Keyword</td>
<td>Select one or more policy keyword to view data for the policies having the selected keyword.</td>
</tr>
<tr>
<td></td>
<td>Policy Name</td>
<td>Select one or more policy names to view data for the selected policies.</td>
</tr>
<tr>
<td></td>
<td>Policy Type</td>
<td>Select one or more policy types to view data for the selected policy types.</td>
</tr>
<tr>
<td>Schedule</td>
<td>Schedule Name</td>
<td>Select one or more schedule names to view data for the selected schedules.</td>
</tr>
<tr>
<td>Job</td>
<td>Job Status</td>
<td>Select one or more Job Status like Failed, Missed, Partially Successful etc. to view data for the selected job status in the report.</td>
</tr>
<tr>
<td></td>
<td>Job Transport Type</td>
<td>Select one or more transport types like FT, LAN, or Unknown to view data for the jobs that have the selected transport type.</td>
</tr>
<tr>
<td></td>
<td>Product Type</td>
<td>Select one or more backup products to view data for the selected products.</td>
</tr>
</tbody>
</table>

**Example of filter usage:** You may run the Average Data Transfer Rate report for specific master servers to view details only for the specific master servers.

**Cloud Metering Chargeback**

This report is valid for Symantec NetBackup OpsCenter Analytics (a licensed version of OpsCenter). To run this report, you need a cost formula based on a cost variable that uses the **Storage Server** variable metric. To do this, first create a cost variable based on a variable metric named **Storage Size** and then create a cost formula based on this cost variable. Only the cost formulae that are based on the **Storage Server** variable metric appear in the **Cost Formula** drop-down list.

The Cloud Metering Chargeback report calculates how much you need to pay to the Cloud provider on a specific date. The forecast and trendlines help you understand how much you are going to spend on a particular Cloud provider in the future.

The Ranking view shows the amount you pay to each Cloud-provider. From the Ranking view, you can compare the price that you pay to each Cloud provider.

**Figure 2-69** shows a sample view of the Cloud Metering Chargeback report.
Figure 2-69  Cloud Metering Chargeback report

The following are details associated with the Cloud Metering Chargeback report:

- **Report Name**: Cloud Metering Chargeback
- **Report Category**: Cloud Reports
- **Where to Locate**: Report > Report Templates > Cloud Reports > Cloud Metering Chargeback
- **Report Purpose**: Metering Chargeback
Symantec NetBackup

**Note:** Symantec NetBackup Appliance is not supported.

**Supported products**  
Symantec NetBackup

**Applicable View**  
Master Server

**Report Display**  
Historical, Ranking

**Drill down report**  
None

**Can be scheduled**  
Yes

**Supported formats**  
PDF, CSV, TSV, XML, HTML

You can edit the report and configure the timeframe or run the report for specific views or media servers.

The following table shows the filters for the Cloud Metering Chargeback report and how you can use these filters to view specific data in the report.

<table>
<thead>
<tr>
<th>Filter</th>
<th>Column</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>View</td>
<td>Select a view to show data for the selected view in the report. By default <strong>All My Views</strong> is selected.</td>
<td></td>
</tr>
<tr>
<td>Media Server</td>
<td>Media Server</td>
<td>Select one or more media servers to view data for the specific media servers in the report. All media servers that are attached to the master servers in the OpsCenter console are shown in the <strong>Value</strong> drop-down list.</td>
</tr>
</tbody>
</table>

**Example of filter usage:** You may run the Cloud Metering Chargeback report for specific media servers to view details only for the specific media servers.

### About Disk and Tape Device Activity reports in OpsCenter

Disk and tape device activity reports provide information for all the NetBackup disk, tape, and SAN Client storage units showing utilization and free space available in each storage device for each master server

- **Current Disk Pool Usage report**  

- **NetBackup Disk Pool Capacity report**  
  See “NetBackup Disk Pool Capacity report” on page 256.

- **NetBackup Disk Pool Size vs. Percentage Full report**  
  See “NetBackup Disk Pool Size vs. Percentage Full report” on page 256.
Library Summary report  See “Library Summary report” on page 256.


Drive Throughput report  See “Disk and Tape Device Activity > Tape Drive Throughput” on page 257.

Drive Utilization report  See “Disk and Tape Device Activity > Tape Drive Utilization Report” on page 260.


Storage Unit Usage report  See “Storage Unit Usage report” on page 265.

Disk and Tape Device Activity > Current Disk Pool Usage Report

This report shows a comprehensive utilization of disk by pool and type for each master server that has configured disk pools. It provides details about the disk pool usage and also about the free space available in the disk pool.

*Figure 2-70* shows a sample view of Current Disk Pool Usage Report.

*Figure 2-70*  Current Disk Pool Usage Report

The following are the details that are associated with the *Current Disk Pool Usage report*:

- **Report Name**: Current Disk Pool Usage
- **Report Category**: Disk and Tape Device Activity
Comprehensive utilization report by disk pool and disk type for each master server for NetBackup and NetBackup Appliance.

**Report Purpose**

Symantec NetBackup, Symantec NetBackup Master Appliance

**Supported products**

Master Server

**Applicable View**

Tabular

**Report Display**

Drill down report: Yes

Can be scheduled: Yes

**Supported formats**

PDF, CSV, TSV, XML, HTML

**Mapping with NOM report**

You can edit the Current Disk Pool Usage report to show or hide the columns that you are interested in. All the columns are shown by default. You can also filter the report to view reports of specific master servers. The following table shows the filters for Current Disk Pool Usage report and how you can use these filters to view specific data in the report.

<table>
<thead>
<tr>
<th>Filter</th>
<th>Column</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>View</td>
<td>Select a view to show data for the selected view in the report. By default All My Views is selected.</td>
<td></td>
</tr>
<tr>
<td>Master Server Master Server</td>
<td>Select one or more master servers to view data for the virtual clients that are backed up by the selected master servers in the report. All master servers that are added to the OpsCenter console are shown in the Value drop-down list.</td>
<td></td>
</tr>
</tbody>
</table>

**Example of filter usage:** Run the Current Disk Pool Usage report for a specific master server to view the used disk space for that master server.

The following report enhancements have been made for the Current Disk Pool Usage report:

- **Job Transport Type** column has been added to the Job filter. For example, you can view report data for jobs for which the Job transport type is FT or LAN.
- The column heading **Server Type** has been modified to **Disk Type**.
- New columns **Configured for Snapshots** and **Replication** are added in the report table.
NetBackup Disk Pool Capacity report

This report is specific to NetBackup 6.5 and above which introduced “Disk Pools” as a type of Storage Unit. The basic version of this report shows the total amount of space that is occupied by backups across all NetBackup 6.5 Disk Pools which would include OpenStorage Devices, PureDisk deduplication option storage, SharedDisk, or even AdvancedDisk pools. Along with usage the average of the high and the low water mark is taken for each disk pool and drawn on the graph. Since this is an average it should not be used for planning purposes but rather estimation. In actual usage this report should be filtered on a specific Disk Pool to show the exact high and low water mark. Finally the forecast is shown so that it can be determined when capacity needs to be added or backups expired to maintain operations.

NetBackup Disk Pool Size vs. Percentage Full report

This report is specific to NetBackup 6.5 and above which has new devices and storage units called “Disk Pools”. A Disk Pool may be an OpenStorage device, a PureDisk Deduplication system, SharedDisk, or a group of local or network disk volumes that are pooled together. The bars represent the total number of available bytes across all disk pools with the colors representing the total amount of space per disk pool. The lines represent the percentage full each disk pool is. So this report can help identify how much disk space is used for backups, which pools are the largest, which ones are near capacity and how the backup environment is load balancing across disk storage.

Library Summary report

This report provides a current point in time inventory of library capacity. The reports list the libraries name, Volume DB Server, used/available/total slot count, and used or available or total capacity. Two calculated columns show the % utilization of slots and library capacity. The report provides a rich selection of filters enabling users with a diverse tape library environment to zoom in on any segment of their tape library population.

Note: The Library Summary report might display some negative values. These negative values are a result of negative slot counts. If the user added -1 NetBackup is unable to connect to the media. If the slot count is 0 NetBackup only calculates data for TLD and TLD8 media leading to negative values in the report. The user must enter the media slot count from Settings > Configuration > Tape Library.
Library Capacity Forecast report

This report provides a capacity forecast of Tape Libraries. A libraries’ capacity is calculated by multiplying Slot Count by Slot Capacity. Slot capacity is the capacity of the tape in the slot. As no standard exists for measuring library capacity, the report enables several methods by which an individual tapes capacity is determined. These consist of using the maximum, the minimum and the average size of full tapes to determine tape capacity. Additionally, user-defined capacity for tape types is available in the report parameter selection UI. The report extrapolates out the trend line through the forecast period using classic linear regression and also plots the libraries capacity. At the date in which the library capacity line intersects the capacity forecast line is when the libraries capacity is reached.

Disk and Tape Device Activity > Tape Drive Throughput

This report shows the speed (KB/Sec) at which data backups flow through the tape drives. The report uses the “heat map” concept and depicts ranges of speeds (slow to fast) through configurable shades of green color. Reports are generated based on either Hours-of-Day or Days-of-Week. Advanced averaging logic is used to determine the throughput values for each cell in the report. The averaging is done at an image fragment level ensuring granularity and precision in calculations. The reports can be aggregated and filtered at the Tape Library, Media Server, Drive Type, Logical Drive, and Physical Drive levels. The sort options allow intuitive presentation of voluminous data. These reports are important sources of information for performance analysis and capacity planning activities.

As an example on the analysis that can be performed on this report, suppose you look at an LTO4 drive that can run at 120+MB/sec, having a report that shows only 5 -6 MB/sec would indicate that the drives are not even close to being at the maximum capacity. Adding drives in an environment such as this would not impact the backup window. We see a lot of money being spent on new tape drives when customers have trouble pushing tape drives from years ago. If you cannot push an LTO2 drive, then upgrading to an LTO4 will not benefit you (unless you wanted the hardware encryption option of course). These reports are important sources of information for performance analysis and capacity planning activities.

Note that the Tape Drive Throughput report displays data only till 1 A.M. and not till the time when you run the report. This is because OpsCenter collects data for Tape Drive Throughput report once per day at 1 A.M. after midnight. Therefore the Tape Drive Throughput report is only able to report on data up until 1 AM on that day, even when run with a relative timeframe of Previous 24 hours. Similarly if you run Tape Drive Throughput report at 2 P.M. in the afternoon, the reports display data collected till 1 A.M. only.
Note: Symantec recommends that you configure the retention period of error logs in NetBackup as more than 1 day. If the retention period of error logs is less than 24 hours, it may result in data loss for some reports like Drive Throughput.

Figure 2-71 shows a sample view of Drive Throughput Report.

Tape Drive Throughput Report

<table>
<thead>
<tr>
<th>Avg (Kb/sec)</th>
<th>Library</th>
<th>Media Server</th>
<th>Drive Name</th>
<th>DispMonTues</th>
</tr>
</thead>
<tbody>
<tr>
<td>790</td>
<td>52e230003739a0969096548</td>
<td>rtpq29.punin.sen.symantec.comrajani.ranpunin.sen</td>
<td>QUANTUM.DT7000.D</td>
<td>37954</td>
</tr>
<tr>
<td>31028</td>
<td>7dfe49f6e4b1a98096548</td>
<td>omwin3.vmindia.veritas.com</td>
<td>QUANTUM.DT7000.D</td>
<td>32064</td>
</tr>
<tr>
<td>21872</td>
<td>7dfe49f6e4b1a98096548</td>
<td>omwin3.vmindia.veritas.com</td>
<td>QUANTUM.DT7000.D</td>
<td>30782</td>
</tr>
<tr>
<td>30882</td>
<td>ALL DRIVES AVERAGE</td>
<td>ALL DRIVES AVERAGE</td>
<td>ALL DRIVES AVERAGE</td>
<td>30882</td>
</tr>
</tbody>
</table>

The following are the details that are associated with the Tape Drive Throughput report:

- **Report Name**: Tape Drive Throughput
- **Report Category**: Disk and Tape Device Activity
- **Where to Locate**: Report > Report Templates > Disk and Tape Device Activity > Tape Drive Throughput report.
- **Report Purpose**: A heat-map report showing drive throughput by library, media server, tape drive and drive type. Darker the color, higher is the throughput for that particular time, for NetBackup servers.
- **Supported products**: Symantec NetBackup, Symantec NetBackup Master Appliance
- **Applicable View**: Master Server
- **Report Display**: Tabular
- **Drill down report**: None
- **Can be scheduled**: Yes
- **Supported formats**: HTML
- **Mapping with VBR report**: All Reports > Standard Reports > Backups > Tape Devices > Drive Throughput
You can edit the Drive Throughput report to show or hide the columns that you are interested in. All the columns are shown by default. You can also filter the report to view reports of specific master servers. The following table shows the filters for Drive Throughput report and how you can use these filters to view specific data in the report.

<table>
<thead>
<tr>
<th>Filter</th>
<th>Column</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>View</td>
<td>View</td>
<td>Select a view to show data for the selected view in the report. By default <strong>All My Views</strong> is selected.</td>
</tr>
<tr>
<td>Master</td>
<td>Master Server</td>
<td>Select one or more master servers to view data for the virtual clients that are backed up by the selected master servers in the report.</td>
</tr>
<tr>
<td>Policy</td>
<td>Policy Name</td>
<td>Select one or more policy names to view data for the selected policies.</td>
</tr>
<tr>
<td>Schedule</td>
<td>Schedule/Level</td>
<td>Select one or more schedule or level types to view the data for the configured schedules.</td>
</tr>
<tr>
<td>Job</td>
<td>Job Type</td>
<td>Select one or more job types as Archive, Backup, or Restore to view data for the selected job types.</td>
</tr>
<tr>
<td>Drive</td>
<td>Drive</td>
<td>Select one or more drives to view the specific data on those drives.</td>
</tr>
<tr>
<td>Tape</td>
<td>Tape Library</td>
<td>Select one or more tape library serial numbers to view the data specific for those tapes.</td>
</tr>
</tbody>
</table>

**Example of filter usage:** You may run the report for specific policy data classification names to view details only for the specific policy classifications. You may run the report for a specific job type like Backup to view drive throughput details for the backup jobs.

The following report enhancements have been made for the Drive Throughput report:

- The option **Next** has been removed from the drop-down menu for Relative Timeframe. You now cannot enter a relative timeframe like next 2 weeks. This is because the report does not support any futuristic data.

The following filter enhancements have been made for the Drive Throughput report:

- Job types which are not applicable for this report are removed from the filter. The supported job types are Backup, Archive, Restore, Backup from Snapshot, Snapshot, Duplicate, and Replication.
UNKNOWN has been added as a value for Schedule Level/Type column in the Schedule filter. You can now filter report data for Schedule Level/Type that is UNKNOWN.

**Disk and Tape Device Activity > Tape Drive Utilization Report**

Tape drives are still very popular as backup destinations and are moderately expensive especially if new drives are purchased each time a new update is available such as moving from LTO3 to LTO4. Many times when backup windows are not being met the first thing suggested is more tape drives. What we have found is that in most cases customers are under-utilizing the tape drive investment either due to time of day considerations – i.e. backups cannot run during the day due to performance issues – or they simply have too few Media Servers. OpsCenter and OpsCenter Analytics have a number of drive utilization and throughput reports that can show at a glance when tape drives are being used, and if there are large gaps in usage that could be filled up with changes to the backup Policies. This can help not only fully utilize the drives, but defer a hardware purchase since it is easy to see when the drives have open cycles.

This report shows the utilization (0 – 100%) of tape drives. The report uses the “heat map” concept and depicts ranges of utilization (low to high) through configurable shades of blue for example. Reports are based on either Hour-Of-Day or Day-of-Week. Advanced logic is used to determine the utilization values for each cell in the report. Utilization is calculated off a per minute basis ensuring precision in calculations versus traditional methods of periodic polling of the devices. The reports can be aggregated and filtered at the Tape Library, Media Server, Drive Type, Logical Drive, and Physical Drive levels. The sort options allow for intuitive presentation of voluminous data. These reports are important sources of information for performance analysis and capacity planning activities.

Note that the Tape Drive Utilization report displays data only till 1 A.M. and not till the time when you run the report. This is because OpsCenter collects data for Tape Drive Utilization report once per day at 1 A.M..after midnight. Therefore the Tape Drive Utilization report is only able to report on data up until 1 AM on that day, even when run with a relative timeframe of Previous 24 hours. Similarly if you run Tape Drive Utilization report at 2 P.M. in the afternoon, the reports display data collected till 1 A.M. only.

*Figure 2-72* shows a sample view of Tape Drive Utilization Report.
Drive Utilization Report

The following are the details that are associated with the Drive Utilization report:

- **Report Name**: Tape Drive Utilization
- **Report Category**: Disk and Tape Device Activity
- **Where to Locate**: Report > Report Templates > Disk and Tape Device Activity > Tape Drive Utilization.
- **Report Purpose**: A heat-map report showing drive utilization by library, media server, tape drive and drive type. Darker colour signifies higher utilization of drive for a particular time.
- **Supported products**: Symantec NetBackup, Symantec NetBackup Master Appliance
- **Applicable View**: Master Server
- **Report Display**: Tabular
- **Drill down report**: None
- **Can be scheduled**: Yes
- **Supported formats**: HTML
- **Mapping with VBR report**: All Reports > Standard Report > > Backups > Tape Device Activity > Drive Utilization

You can edit the Drive Utilization report to show or hide the columns that you are interested in. All the columns are shown by default. You can also filter the report to view reports of specific master servers. The following table shows the filters for Drive Utilization report and how you can use these filters to view specific data in the report.
Filter | Column | Description
--- | --- | ---
View | | Select a view to show data for the selected view in the report. By default **All My Views** is selected.
Master Server | Master Server | Select one or more master servers to view data for the virtual clients that are backed up by the selected master servers in the report. All master servers that are added to the OpsCenter console are shown in the **Value** drop-down list.
Policy | Policy Name | Select one or more policy names to view data for the selected policies.
Job | Job Type | Select one or more job types as Archive, Backup, or Restore to view data for the selected job types.
Drive | Drive | Select one or more drives to view the specific data on those drives.
Tape Library | Tape Library Serial Number | Select one or more tape library serial numbers to view the data specific for those tapes.

**Example of filter usage:** You may run the report for specific policy names to view the details only for a specific policy. You may run the report for tape drive utilization for a specific job type like Backup to view the details.

The following report enhancements have been made for the Drive Utilization report:

- The option **Next** has been removed from the drop-down menu for **Relative Timeframe**. You now cannot enter a relative timeframe like next 2 weeks. This is because the report does not support any futuristic data.

The following filter enhancements have been made for the Tape Drive Utilization report:

- Job types which are not applicable for this report are removed from the filter. The supported job types are Backup, Archive, Restore, Backup from Snapshot, Snapshot, Duplicate, and Replication.

- **UNKNOWN** has been added as a value for Schedule Level/Type column in the Schedule filter. You can now filter report data for Schedule Level/Type that is UNKNOWN.

**Disk Usage report**

This report shows disk usage for the selected server and time frame. The table in the report provides details such as total number of jobs, total volume processed...
(KB), average throughput (KB/sec), duration of activity, and percentage utilization in terms of duration.

**Figure 2-73** shows a sample view of the Disk Usage report.

**Figure 2-73**  
Disk Usage report

<table>
<thead>
<tr>
<th>Disk Name</th>
<th>Server Name</th>
<th>Media Server Name</th>
<th>Total Job Attempt Count</th>
<th>Volume (KB)</th>
<th>Throughput (KB/sec)</th>
<th>Activity Duration</th>
<th>% Utilization in Terms of Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>D1</td>
<td>pmwin8</td>
<td>Any Available</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>0:00:04:46</td>
<td>0.02</td>
</tr>
<tr>
<td>D2</td>
<td>pmwin8</td>
<td>Any Available</td>
<td>3</td>
<td>38</td>
<td>0.02</td>
<td>0:00:32:47</td>
<td>0.16</td>
</tr>
<tr>
<td>D3</td>
<td>pmwin8</td>
<td>Any Available</td>
<td>23</td>
<td>0</td>
<td>0</td>
<td>20:24:05</td>
<td>6.07</td>
</tr>
<tr>
<td>D4</td>
<td>sampras</td>
<td>sampras.vxindia.veritas.com</td>
<td>7</td>
<td>600,311</td>
<td>1159.6</td>
<td>0:00:04:02</td>
<td>0.02</td>
</tr>
<tr>
<td>D5</td>
<td>pmwin8</td>
<td>pmwin8</td>
<td>4</td>
<td>143</td>
<td>0.03</td>
<td>0:00:24:23</td>
<td>0.12</td>
</tr>
<tr>
<td>D6</td>
<td>pmwin8</td>
<td>pmwin8</td>
<td>6</td>
<td>30</td>
<td>0.00</td>
<td>0:00:37:32</td>
<td>0.19</td>
</tr>
<tr>
<td>D7</td>
<td>pmwin8</td>
<td>pmwin8</td>
<td>4</td>
<td>4</td>
<td>0.00</td>
<td>0:00:25:38</td>
<td>0.01</td>
</tr>
<tr>
<td>D8</td>
<td>pmwin8</td>
<td>pmwin8</td>
<td>8</td>
<td>1,128</td>
<td>0.11</td>
<td>0:01:50:00</td>
<td>0.55</td>
</tr>
<tr>
<td>D9</td>
<td>pmwin8</td>
<td>pmwin8</td>
<td>8</td>
<td>4</td>
<td>0.00</td>
<td>0:00:25:38</td>
<td>0.01</td>
</tr>
<tr>
<td>D10</td>
<td>pmwin8</td>
<td>pmwin8</td>
<td>6</td>
<td>342,702</td>
<td>2389.21</td>
<td>0:00:01:56</td>
<td>0.01</td>
</tr>
</tbody>
</table>

The **Disk Name** and **Media Server Name** columns of the table contain drilldown links to detailed throughput and disk usage reports.

**Disk Throughput**  
This drilldown report from the **Disk Name** column shows the data transfer rate (throughput) for a disk storage unit for the selected server or server groups.

This drilldown report uses the run time parameters that are passed from the main report.

**Disk Usage Details**  
This drilldown report from the **Media Server Name** column shows the usage details for all the disk storage units for the selected media server.

This drilldown report uses the run time parameters that are passed from the main report.

The Disk cell in each row of the report table is a link to a drill-down report. The rest of the cells indicate whether the disk was in use or not during the time slot.

The following are the details that are associated with the Disk Usage report:

| Report Name | Disk Usage |
Report Category: Performance Reports

Where to Locate: Report > Report Templates > Performance Reports > Disk Usage

Report Purpose: This report shows the disk usage of a master server.

Supported products: NetBackup, NetBackup Appliance

Applicable View: Master Server

Report Display: Tabular

Drill down report: Yes

Can be scheduled: Yes

Supported formats: PDF, CSV, TSV, XML, HTML

Mapping with NOM report: Reporting > All Reports > Standard Reports > Performance Report > Disk Usage

The following table shows the filters for Disk Usage report and how you can use these filters to view specific data in the report.

<table>
<thead>
<tr>
<th>Filter</th>
<th>Column</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>View</td>
<td></td>
<td>Select a view to show data for the selected view in the report. By default All My Views is selected.</td>
</tr>
<tr>
<td>Master Server</td>
<td>Master Server</td>
<td>Select one or more master servers to view disk usage for the selected master servers in the report. All master servers that are added to the OpsCenter console are shown in the Value dropdown list.</td>
</tr>
</tbody>
</table>

**Example of filter usage:** You may run the Disk Usage report for specific master servers to view the disk usage of the specific master servers.

The following report enhancements have been made for the Successful Jobs of a Server report:

- The unit **Years** has been added for Relative Timeframe selection. You can now view data for the last x years.

- The option **Next** has been removed from the drop-down menu for Relative Timeframe. You now cannot enter a relative timeframe like Next 2 weeks. This is because the report does not support any futuristic data.
Storage Unit Usage report

This report shows storage unit usage for a selected master server and time frame. The first column of each row of the report table lists a storage unit. The storage unit name is also a drilldown link to a detailed report. The media server name in the second column is also a drilldown link.

The rest of the row provides details such as total number of jobs, total volume processed (KB), average throughput (KB/sec), duration of activity and percentage of utilization in terms of duration.

Storage unit throughput report

This drilldown report from the Storage Unit column shows the data transfer rate (throughput) of the selected storage unit.

This drilldown report uses the run time parameters that are passed from the main report.

Storage unit usage details for media server report

This drilldown report from the Media Server Name column shows the usage details for all of the storage units of the selected media server.

This drilldown report uses the run time parameters that are passed from the main report.

The Storage unit column of the report table is a link to a drilldown throughput report. The rest of the cells indicate whether the storage unit was in use or not during the time slot.

About Media reports in OpsCenter

This section describes media reports that provide information for all the NetBackup media status, expiration, and availability, including tape, disk, Appliances, and the optional NetBackup Vault feature for offsite media tracking.

Media State report

See "Media Reports > Media State" on page 266.

Available Media report

See "Available Media report" on page 267.

Drives in Use report

See "Drives in Use report" on page 267.

Full Media Capacity report

See "Full Media Capacity report" on page 268.

Media Summary by Media Server report

See "Media Summary by Media Server report" on page 268.
Media Utilization report  See “Media Reports > Media Utilization” on page 268.

Tape Count report  See “Tape Count report” on page 270.

Tapes Expiring in Future report  See “Tapes Expiring in Future report” on page 270.


Media Expiration Schedule report  See “Media Reports > Media Expiration Schedule” on page 271.

Media Reports > Media State

This report displays the media status and count (per media type) for each master server and media server combination. Media state can be frozen, active, off-site, and so on.

Figure 2-74 shows a sample view of Media State Report.

![Figure 2-74](image)

The following are the details that are associated with the Media State report:

- **Report Name**: Media State
- **Report Category**: Media Reports
- **Where to Locate**: Report > Report Templates > Media Reports > Media State
- **Report Purpose**: Lists number of media in each media status per media type and per media server.
You can edit the Media State report to show or hide the columns that you are interested in. All the columns are shown by default. You can also filter the report to view reports of specific master servers. The following table shows the filters for Media State report and how you can use these filters to view specific data in the report.

<table>
<thead>
<tr>
<th>Filter</th>
<th>Column</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>View</td>
<td>Select a view to show data for the selected view in the report. By default All My Views is selected.</td>
<td></td>
</tr>
<tr>
<td>Master Server</td>
<td>Master Server</td>
<td>Select one or more master servers to view data for the virtual clients that are backed up by the selected master servers in the report. All master servers that are added to the OpsCenter console are shown in the Value drop-down list.</td>
</tr>
</tbody>
</table>

Example of filter usage: Run the Media State report for a specific master server to view the media state for that master server.

Available Media report

This report lists the media that is available for use by NetBackup for each master server that is selected.

The report table provides information, such as, media server, media status, robot type, volume group and pool, and the time assigned.

Drives in Use report

This report shows the drive usage for the selected server. The report table provides details for the drive, for example, drive name and type, robot number and type, and assigned host.
Full Media Capacity report

This report shows the average amount of protected data (in kilobytes) on a tape for each master server and media type. These are the tapes that NetBackup marked as full.

The bar chart depicts the amount of data (in kilobytes) per media type. The report table is organized by server, media type and count, and shows the size and number of images on the tape.

Media Summary by Media Server report

For each media server, this report provides the number of tapes and images, the last written date, and amount of data on the tapes. The name of the media server is also a drilldown link to a detailed report for media.

Media summary by media status for a media server report

This drilldown report from the Media Server column provides a media status summary for a selected media server. This report displays media status, number of tapes and images, the last written date, and amount of data on tapes.

This drilldown report uses the run time parameters that are passed from the main report.

Media details of media status for a media server report

This drilldown report from the Media Status column provides media details for the selected media server and selected media status. Media status can be Active, Frozen, Full, Invalid, or Suspended.

This drilldown report uses the run time parameters that are passed from the main report.

The report displays media ID, type, volume pool, last written date, expiration date, number of images, and the amount of data on tape.

Media Reports > Media Utilization

This report shows the number of media in use for a server per date. The columns in the table show assigned, unassigned, frozen, full, off-site, or suspended media states. The data for this report is only calculated once in a day. So the report shows the summary till the previous date. The data for today reflects in the report that you generate tomorrow. The table in the report is organized by date and server, and shows counts for each media state.

Figure 2-75 shows a sample view of Media Utilization Report.
The following are the details that are associated with the Media Utilization report:

<table>
<thead>
<tr>
<th>Report Name</th>
<th>Media Utilization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Report Category</td>
<td>Media Reports</td>
</tr>
<tr>
<td>Report Purpose</td>
<td>Lists tabular details of media count by media status and media type.</td>
</tr>
<tr>
<td>Supported products</td>
<td>Symantec NetBackup, Symantec NetBackup Master Appliance</td>
</tr>
<tr>
<td>Applicable View</td>
<td>Master Server</td>
</tr>
<tr>
<td>Report Display</td>
<td>Tabular</td>
</tr>
<tr>
<td>Drill down report</td>
<td>None</td>
</tr>
<tr>
<td>Can be scheduled</td>
<td>Yes</td>
</tr>
<tr>
<td>Supported formats</td>
<td>PDF, CSV, TSV, XML, HTML</td>
</tr>
<tr>
<td>Mapping with NOM report</td>
<td>All Reports &gt; Standard Report &gt; Media and Devices &gt; Media Utilization</td>
</tr>
</tbody>
</table>

You can edit the Media Utilization report to show or hide the columns that you are interested in. All the columns are shown by default. You can also filter the report to view reports of specific master servers. The following table shows the filters for...
Media Utilization report and how you can use these filters to view specific data in the report.

<table>
<thead>
<tr>
<th>Filter</th>
<th>Column</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>View</td>
<td></td>
<td>Select a view to show data for the selected view in the report. By default All My Views is selected.</td>
</tr>
<tr>
<td>Master</td>
<td>Master</td>
<td>Select one or more master servers to view data for the virtual clients that are backed up by the selected master servers in the report. All master servers that are added to the OpsCenter console are shown in the Value drop-down list.</td>
</tr>
</tbody>
</table>

**Example of filter usage:** Run the Media Utilization report for a one week timeframe and for a single master server.

The following report enhancements have been made for the Media State report:

- The unit **Years** has been added for **Relative Timeframe** selection. You can now view data for the last X years. You can also select Year from the top-right corner of the report.
- The option **Next** has been removed from the drop-down menu for Relative Timeframe. You now cannot enter a relative timeframe like Next 2 weeks.

**Tape Count report**

This report shows tape count for the following **Report On** parameters:

- Backup Media Retention Level
- Tape Type
- Volume Pool Name

In Veritas Backup Reporter (VBR), there was a separate report for each of these parameters. In OpsCenter, the three reports are merged into one report.

The Tape Count report is available in the Distribution view.

**Tapes Expiring in Future report**

This report shows the number of media that expire at each day in the upcoming seven days. This time frame can be changed to show more in to the future. The report is helpful in determining if a large quantity of media may become free in the future which could justify delaying the purchase of more media.
Note: The filter Backup Media Role applied to the Tape Expiring Now report does not return any data.

Tapes Expiring Now report

This report lists the media that are about to expire. The Volume Pool Name, Media ID, and Media Barcode that are listed make it easy to locate the media. The default time frame when the report is clicked will show what is expiring in the next 24 hours. That time frame can be changed to show media expiring in the next week, month, or any future time window desirable.

Vault Media Usage report

This report shows off-site media trends for selected vaults and current off-site media count. The report consists of two component reports, a bar chart and a table.

This report helps understand your off-site media trends.

Questions like the following are answered by this report:

- How does the off-site media count vary for each vault?
- What are the details of the current off-site media?

The bar chart shows the weekly trend of off-site media counts for selected vaults. While running the report you select the vaults for which you want to run this report. The report shows a weekly line trend for selected vault. This chart is a good indication of how the off-site media count varies over the period of time. You can compare the media counts of different vaults to see which vault is consuming more media and how it varies.

The report table provides the details of vaulted media for the selected vaults. When you run the report you specify the vault names. The report provides important media details like media ID, off-site slot number, container ID, expiration date, barcode, and so on.

Media Reports > Media Expiration Schedule

This report gives graphical representation of the expiration schedule for media. The report predicts the availability of media based on the expiration date of the media. Using this report you can determine what media will be available for reuse. The stacked bars represent the number of media of a specific type that are expired or going to expire on a particular day. Different colors are used in the bars for different media types. Tool tips for the bar segments provide the media type and count of the media that is available on that day.

Figure 2-76 shows a sample view of Media Expiration Schedule Report.
The following are the details that are associated with the Media Expiration Schedule report:

- **Report Name**: Media Expiration Schedule
- **Report Category**: Media Reports
- **Where to Locate**: Report > Report Templates > Media Reports > Media Expiration Schedule
- **Report Purpose**: Stacked bars representing number of media getting expired on a particular reporting day.
- **Supported products**: Symantec NetBackup, Symantec NetBackup Master Appliance
- **Applicable View**: Master Server
- **Report Display**: Historical
- **Drill down report**: Yes. See Media Expiration Details.
- **Can be scheduled**: Yes
- **Supported formats**: PDF, CSV, TSV, XML, HTML
- **Mapping with NOM report**: All Reports > Standard Report > Media and Devices > Media Expiration Schedule

You can edit the Media Expiration Schedule report to show or hide the columns that you are interested in. All the columns are shown by default. You can also filter
the report to view reports of specific master servers. The following table shows the filters for Media Expiration Schedule report and how you can use these filters to view specific data in the report.

<table>
<thead>
<tr>
<th>Filter</th>
<th>Column</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>View</strong></td>
<td></td>
<td>Select a view to show data for the selected view in the report. By default All My Views is selected.</td>
</tr>
<tr>
<td>Master Server</td>
<td>Master Server</td>
<td>Select one or more master servers to view data for the virtual clients that are backed up by the selected master servers in the report. All master servers that are added to the OpsCenter console are shown in the Value drop-down list.</td>
</tr>
</tbody>
</table>

**Example of filter usage:** Run the Media Expiration Schedule report for a specific master server to view the expiration schedule of media for that master server.

The following report enhancements have been made for the Media Expiration Schedule report:

- A new drilldown report named Media Expiration Details has been added.
- The unit **Years** has been added for Relative Timeframe selection. You can now view data for the last X years. You can also select Year from the top-right corner of the report.
- The following options have been removed from **TimeFrameGroupBy selection:**
  - Days of week Average
  - Days of week total
  - Hours of day Average
  - Hours of day Total
  - Minutes
  - Month of year Average
  - Month of year total
  - Quarter of year Average
  - Quarter of year total

*Figure 2-1* shows a sample view of Media Expiration Schedule Report.
The following are the details that are associated with the **Media Expiration Details** report:

- **Report Name**: Media Expiration Details
- **Report Category**: Media reports (Drill down)
- **Where to Locate**: Report > Report Templates > Media Reports > Media Expiration Schedule (click the bar in the historical graph)
- **Report Purpose**: Details regarding number of media getting expired on a particular reporting day along with media details
- **Supported products**: Symantec NetBackup, Symantec NetBackup Master Appliance
- **Applicable View**: Master Server
- **Report Display**: Tabular
- **Drill down report**: None
- **Can be scheduled**: Yes
- **Supported formats**: PDF, CSV, TSV, XML, HTML
- **Mapping with NOM report**: All Reports > Standard Report > Backup Media Reports > Media Expiration Schedule (click the bar in the historical graph)

You can edit the **Media Expiration Details** report to show or hide the columns that you are interested in. All the columns are shown by default. You can also filter the report to view reports of specific master servers. The following table shows the filters for **Media Expiration Details** report and how you can use these filters to view specific data in the report.

<table>
<thead>
<tr>
<th>Filter</th>
<th>Column</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>View</td>
<td>View</td>
<td>Select a view to show data for the selected view in the report. By default <strong>All My Views</strong> is selected.</td>
</tr>
</tbody>
</table>
Filter | Column | Description
--- | --- | ---
Master Server | Master Server | Select one or more master servers to view data for the virtual clients that are backed up by the selected master servers in the report. All master servers that are added to the OpsCenter console are shown in the Value drop-down list.

**Example of filter usage:** Run the Media Expiration Details report for a specific master server to view the media expiration details for that master server.

### About Performance reports in OpsCenter

This section describes performance reports that provide information for overall performance and throughput statistics on NetBackup Master and Media Servers.

- **Master Server Job Throughput report**
  
  See "Master Server Job Throughput report" on page 275.

- **Media Server Job Throughput**
  
  See "Media Server Job Throughput report" on page 280.

- **NetBackup SAN Client Performance report**
  
  See "NetBackup SAN Client Performance report" on page 281.

### Master Server Job Throughput report

This report provides a tool to compare performance of various master servers. The table of this report displays throughput and job success information for each master server. It shows job count and job success rate, and enables you to compare throughputs of different servers to identify any servers that are performing poorly.

*Figure 2-78* shows a sample view of the Master Server Job Throughput report.

*Figure 2-78*  

Master Server Job Throughput report

<table>
<thead>
<tr>
<th>Server Name</th>
<th>Total Job Count</th>
<th>Volume(MB)</th>
<th>Throughput (MB/sec)</th>
<th>Number of Successful Jobs</th>
<th>Success Rate (%)</th>
<th>Last Job</th>
</tr>
</thead>
<tbody>
<tr>
<td>Display Name</td>
<td>1,450</td>
<td>1,850</td>
<td>0.75</td>
<td>1123</td>
<td>67</td>
<td>09/01/2019 11:30:20 PM</td>
</tr>
<tr>
<td>cc4s-ol-s-17</td>
<td>3,567</td>
<td>101,086</td>
<td>59.11</td>
<td>123,345</td>
<td>88</td>
<td>09/01/2019 11:30:20 PM</td>
</tr>
<tr>
<td>epamserver-world</td>
<td>364</td>
<td>7</td>
<td>0.00</td>
<td>56</td>
<td>56</td>
<td>09/01/2019 11:30:20 PM</td>
</tr>
<tr>
<td>pven61</td>
<td>2,452</td>
<td>2,452</td>
<td>0.56</td>
<td>123</td>
<td>65</td>
<td>09/01/2019 11:30:20 PM</td>
</tr>
<tr>
<td>puranstor</td>
<td>34,187</td>
<td>62,842,671</td>
<td>0.49</td>
<td>123</td>
<td>46</td>
<td>09/01/2019 11:30:20 PM</td>
</tr>
</tbody>
</table>

Drilldown links for the server name, number of total and successful jobs columns are also provided.
Total jobs of a server report

This drilldown report from the **Total Job Count** column lists the details for all jobs for a selected server. The report details include details like job type and status, policy and schedule names, and start time.

This drilldown report uses the run time parameters that are passed from the main report.

Successful jobs of a server report

This drilldown report from the **Number of Successful Jobs** column shows details for successful jobs for a given server. The report provides details like job type, policy and schedule names, volume, and file counts.

This drilldown report uses the run time parameters that are passed from the main report.

The following are the details that are associated with the Master Server Job Throughput report:

<table>
<thead>
<tr>
<th>Report Name</th>
<th>Master Server Job Throughput</th>
</tr>
</thead>
<tbody>
<tr>
<td>Report Category</td>
<td>Performance Reports</td>
</tr>
<tr>
<td>Where to Locate</td>
<td>Report &gt; Report Templates &gt; Performance Reports &gt; Master Server Job Throughput</td>
</tr>
<tr>
<td>Report Purpose</td>
<td>This report shows the performance of a master server.</td>
</tr>
<tr>
<td>Supported products</td>
<td>NetBackup, NetBackup Appliance</td>
</tr>
<tr>
<td>Applicable View</td>
<td>Master Server</td>
</tr>
<tr>
<td>Report Display</td>
<td>Tabular</td>
</tr>
<tr>
<td>Drill down report</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>See “Total Jobs of a Server report” on page 277.</td>
</tr>
<tr>
<td></td>
<td>See “Successful Jobs of a Server” on page 279.</td>
</tr>
<tr>
<td>Can be scheduled</td>
<td>Yes</td>
</tr>
<tr>
<td>Supported formats</td>
<td>PDF, CSV, TSV, XML, HTML</td>
</tr>
<tr>
<td>Mapping with NOM report</td>
<td>Reporting &gt; All Reports &gt; Standard Reports &gt; Performance Report &gt; Master Server Job Throughput</td>
</tr>
</tbody>
</table>

The following table shows the filters for Master Server Job Throughput report and how you can use these filters to view specific data in the report.
Filter  Column  Description

View  Select a view to show data for the selected view in the report. By default **All My Views** is selected.

Master Server  Master Server  Select one or more master servers to view data for the clients backed up by the selected master servers in the report. All master servers that are added to the OpsCenter console are shown in the **Value** drop-down list.

**Example of filter usage:** You may run the Master Server Job Throughput report for a specific master servers to view the performance of the specific master servers.

The following report enhancements have been made for the Master Server Job Throughput report:

- The unit **Years** has been added for Relative Timeframe selection. You can now view data for the last x years.

- The option **Next** has been removed from the drop-down menu for Relative Timeframe. You now cannot enter a relative timeframe like Next 2 weeks. This is because the report does not support any futuristic data.

**Total Jobs of a Server report**

This tabular report shows the job information run for a master server i.e. Client Name, Job Type, Job Status, Policy Name, Schedule Name etc.

**Figure 2-79** shows a sample view of Total Jobs of a Server report.

**Figure 2-79** Total Jobs of a Server report

The following are the details that are associated with the Total Jobs of a Server report:

| Report Name | Total Jobs of a Server |
Report Category: Performance Reports

Where to Locate: Report > Report Templates > Performance Reports > Master Server Job Throughput (drill down from **Total Job Count** column) > Total Jobs of a Server

Report Purpose: This report shows the job information for a master server.

Supported products: NetBackup, NetBackup Appliance

Applicable View: Master Server

Report Display: Tabular

Drill down report: No

Can be scheduled: Yes

Supported formats: PDF, CSV, TSV, XML, HTML

Mapping with NOM report: Reporting > All Reports > Standard Reports > Performance Report > Master Server Job Throughput (drill down on Number of Successful Jobs column) > Total Jobs of a Server

The following table shows the filters for Total Jobs of a Server report and how you can use these filters to view specific data in the report.

<table>
<thead>
<tr>
<th>Filter</th>
<th>Column</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>View</td>
<td></td>
<td>Select a view to show data for the selected view in the report. By default <strong>All My Views</strong> is selected.</td>
</tr>
<tr>
<td>Master</td>
<td>Master</td>
<td>Select one or more master servers to view data for the clients backed up by the selected master servers in the report. All master servers that are added to the OpsCenter console are shown in the <strong>Value</strong> drop-down list.</td>
</tr>
<tr>
<td>Server</td>
<td>Server</td>
<td></td>
</tr>
</tbody>
</table>

The following report enhancements have been made for the Backup Job Size Variance report:

- The unit **Years** has been added for Relative Timeframe selection. You can now view data for the last x years.
- The option **Next** has been removed from the drop-down menu for Relative Timeframe. You now cannot enter a relative timeframe like Next 2 weeks. This is because the report does not support any futuristic data.
Successful Jobs of a Server

This drilldown report is obtained when you click number of successful jobs (link) from the Master Server Job Throughput report. This tabular report shows details of all successful jobs of a Server. It shows information like Client Name, Policy Name, Schedule Name, Start Time, Number of Files, Duration, Volume, Throughput etc.

Figure 2-80 shows a sample view of the Successful Jobs of a Server report.

<table>
<thead>
<tr>
<th>Job ID</th>
<th>Server Name</th>
<th>Client Name</th>
<th>Job Type</th>
<th>Policy Name</th>
<th>Schedule Name</th>
<th>Start Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>182410</td>
<td>p101.engba.symantec.com</td>
<td>appesx29-vm1</td>
<td>Backup</td>
<td>linux_gendata_1</td>
<td>Full</td>
<td>Jul 21, 2013 6:38:12 AM</td>
</tr>
<tr>
<td>182411</td>
<td>p101.engba.symantec.com</td>
<td>appesx29-vm1</td>
<td>Backup</td>
<td>linux_gendata_2</td>
<td>Full</td>
<td>Jul 21, 2013 6:38:13 AM</td>
</tr>
</tbody>
</table>

The following are the details that are associated with the Successful Jobs of a Server report:

- **Report Name**: Successful Jobs of a Server
- **Report Category**: Performance Reports
- **Where to Locate**: Report > Report Templates > Performance Reports > Master Server Job Throughput (drill down from Number of Successful Jobs column) > Successful Jobs of a Server
- **Report Purpose**: This report shows the successful jobs for a master server.
- **Supported products**: NetBackup, NetBackup Appliance
- **Applicable View**: Master Server
- **Report Display**: Tabular
- **Drill down report**: No
- **Can be scheduled**: Yes
The following table shows the filters for Successful Jobs of a Server report and how you can use these filters to view specific data in the report.

<table>
<thead>
<tr>
<th>Filter</th>
<th>Column</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>View</td>
<td>Master Server</td>
<td>Select a view to show data for the selected view in the report. By default All My Views is selected.</td>
</tr>
<tr>
<td></td>
<td>Master Server</td>
<td>Select one or more master servers to view data for the clients that are backed up by the selected master servers in the report. All master servers that are added to the OpsCenter console are shown in the Value drop-down list.</td>
</tr>
</tbody>
</table>

The following report enhancements have been made for the Successful Jobs of a Server report:

- The unit **Years** has been added for Relative Timeframe selection. You can now view data for the last x years.
- The option **Next** has been removed from the drop-down menu for Relative Timeframe. You now cannot enter a relative timeframe like Next 2 weeks. This is because the report does not support any futuristic data.

**Media Server Job Throughput report**

This report provides details of data that is backed up by NetBackup media servers and shows server throughput. The report is a useful tool to compare performance of the media servers that are present in your NetBackup environment.

The pie chart provides a breakdown of the volume of data that is processed for each media server. A drilldown detail link for throughput details is provided from each volume pie slice.

**Job details for client and media server report**

This drilldown report from the client name column provides details for a given client, job type, job status, and media server. The report details include job ID, job type, exit status, start time, and duration in seconds.

This drilldown report uses the run time parameters that are passed from the parent report.
Media server throughput for media server report

You can use this drill-down report from the Throughput (KB/sec) column to see the variation of throughput per day. The throughput is represented by a bar for each day of the reporting period.

This drill-down report uses the run time parameters that are passed from the main report.

NetBackup SAN Client Performance report

This report is specific to NetBackup 6.5 and above which features Fibre Channel connected clients called “SAN Clients”. The blue and the yellow bars for example are stacked together to show the total number of jobs per day. The blue bars represent the jobs that ran over the LAN and the yellow is jobs ran over the SAN. The purple and the yellow lines show the total job throughput for all those jobs that ran that day. The purple represents total job throughput by LAN and the yellow represents total job throughput by SAN. This report helps identify what ratio of LAN to SAN traffic for backups are run and what performance benefit is gained by doing so.

About Policy reports in OpsCenter

This section describes policy reports that provide information for the NetBackup Policy information including Policies consuming the most storage space.

Top 10 Policies Using Most Server Space report


Job Success Rate by Policy Type report

See “Job Success Rate by Policy Type report” on page 285.

Policy Change report

See “Policy Change report” on page 286.

Policy Summary Dashboard report

See “Policy Summary Dashboard report” on page 287.

Top 10 Policies Using Most Server Space report

This report displays the 10 policies that have backed up the most data in your NetBackup environment. You can edit the report and run it for one or more master servers.

Tool tips appear when you point at each colored bar chart. The tool tip shows the master server, policy, and also shows the volume of data in MB.
Click **Show Chart as Table** link at the bottom of the report to view the report details in a tabular format. The table lists the volume of data in MB for each policy.

A new drilldown report named Job Details for Policy is now available from the main report. This drilldown report from the colored bars in the chart provides details about all jobs for a selected policy. The drilldown report includes information, such as, job type, status code, client name, and volume in KB.

**Figure 2-81** shows a sample view of the Top 10 Policies Using Most Server Space report.

**Figure 2-81**  Top 10 Policies Using Most Server Space report

![Chart showing Top 10 Policies Using Most Server Space report]

The following are details associated with the Top 10 Policies using most server space report:

| Report Name | Top 10 Policies Using Most Server Space |
Policy Report Category

Where to Locate

Report Purpose
This report shows a ranking of backup policies by space consumption. This report is valid for NetBackup and NetBackup Appliance.

Supported products
Symantec NetBackup, Symantec NetBackup Master Appliance

Applicable View
Master Server

Report Display
Ranking (Chart)

Drill down report
Job Details for Policy
See “Job Details for Policy” on page 284.

Can be scheduled
Yes

Supported export formats
PDF, CSV, TSV, XML, HTML

Mapping with NOM report
All Reports > Standard Reports > Policy > Top 10 Policies using most Server Space

The following table lists the filters for Top 10 Policies using most server space report and how you can use these filters to view specific data in the report.

<table>
<thead>
<tr>
<th>Filter</th>
<th>Column</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>View</td>
<td>Select a view to show data for the selected view in the report. By default All My Views is selected.</td>
<td></td>
</tr>
<tr>
<td>Master Server</td>
<td>Select one or more master servers to view data for the selected master servers in the report. All master servers that are added to the OpsCenter console are shown in the Value drop-down list.</td>
<td></td>
</tr>
<tr>
<td>Job</td>
<td>Select one or more job types like Archive, Backup, Restore etc. to view data for the selected job types. By default, the report displays information for the following types of jobs:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Backup</td>
<td>You must select at least one job type from the Value list.</td>
</tr>
<tr>
<td></td>
<td>Catalog Backup</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Vault</td>
<td></td>
</tr>
</tbody>
</table>
Example of filter usage: You may run the Top 10 Policies using most server space report for specific master servers or views to view details only for the specific master servers or views.

Job Details for Policy

A new drilldown report named Job Details for Policy is available when you click the colored bars from the Top 10 Policies Using Most Server Space report. This drilldown report provides details about all jobs for a selected policy.

This drilldown report uses the run time parameters that are passed from the main report. The drilldown report includes information, such as, job type, status code, client name, and volume in KB.

Figure 2-82 shows a sample view of the Job Details for Policy report.

The following are details associated with the Job Details for Policy report:

<table>
<thead>
<tr>
<th>Report Name</th>
<th>Job Details for Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Report Category</td>
<td>Drill down report</td>
</tr>
<tr>
<td>Where to Locate</td>
<td>Report &gt; Report Templates &gt; Policy Reports &gt; Top 10 Policies Using most Server Space (click the colored bars)</td>
</tr>
</tbody>
</table>
This report lists all jobs for the selected policy. This report is valid for NetBackup and NetBackup Appliance.

**Report Purpose**
Symantec NetBackup, Symantec NetBackup Master Appliance

**Applicable View**
Master Server

**Report Display**
Tabular

**Drill down report**
No

**Can be scheduled**
Yes

**Supported export formats**
PDF, CSV, TSV, XML, HTML

**Mapping with NOM report**
All Reports > Standard Reports > Policy > Top 10 Policies using most Server Space > Job Details for Policy

The following table lists the filters for Job Details for Policy report and how you can use these filters to view specific data in the report.

<table>
<thead>
<tr>
<th>Filter</th>
<th>Column</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>View</td>
<td></td>
<td>Select a view to show data for the selected view in the report. By default <em>All My Views</em> is selected.</td>
</tr>
<tr>
<td>Policy</td>
<td>Policy Data Classification Name</td>
<td>Select one or more policy data classification names like Gold, Silver, Bronze etc. to view data for the policies having the selected data classification names.</td>
</tr>
<tr>
<td></td>
<td>Policy Name</td>
<td>Select one or more policy names to view data for the selected policies.</td>
</tr>
</tbody>
</table>

**Example of filter usage:** You may run the report for specific policy data classification names to view details only for the specific policy classifications.

**Job Success Rate by Policy Type report**
This report provides a quick view of the status of jobs by policy type. The report shows the job success rate for clients, server, and job policy type.

The bar chart shows the count of successful, partially successful, and failed jobs per policy type. The tool tips in the colored bars provide job counts and also are drilldown links to view the details for the policy.

The table in the report displays job information, such as, client name, policy type, and the success rate.
Note: This report may not show appropriate data for duplication jobs that are associated with SLP policy.

This issue occurs because the duplication jobs do not have a policy type. The job batches duplication of images that are created from possibly different policies and policy types. The duplication job itself has an internal policy that is created but this internal policy does not have the policy type set because this is not a backup job.

Job details for policy type report

This drilldown report from the Policy Type column and the colored bars in the chart provides details about all jobs for a selected policy type.

This drilldown report uses the run time parameters that are passed from the main report.

The table includes information, such as, exit status, client name, volume in KB, and count of files.

Successful, partially successful, and failed job details for policy type report

There are three drilldown reports from the Number of Successful Jobs, Number of Partially Successful Jobs, or Number of Failed Jobs columns. The job exit status is used as a filter for the reports. These reports are similar and provide details for all jobs for a selected client and policy type.

This drilldown report uses the run time parameters that are passed from the main report.

The table in this report provides details like, policy and schedule name, start and end times, and duration for the job. The table for failed jobs also includes a column for the job exit status.

Policy Change report

This report shows a count of the changes that were made to job policies in a given time frame for the selected servers.

The pie chart shows the number of policy changes (a policy can change multiple times) for each master server. (Each different server appears in a different color in the chart.) Tool tips in the chart provide a count of the changes.

The table in the report displays the count of changes that were made to each policy for each server.
Policy Summary Dashboard report

This report acts as a dashboard of activities that are summarized by your policies. It gives an overview of activities and can be used as a tool to troubleshoot and manage by exception using the drilldown links to other detail reports.

It provides answers for some of the following questions for each policy:

- What is the total number of jobs?
- How many jobs were successful?
- How many jobs were partially successful?
- How many jobs failed?

The table in this report shows information per policy like policy name and type, job volume in MB, job count, and counts for job exit status. You can also drill down from the job exit status counts in the columns and view individual policy details based on exit status and job policy and type.

There are drilldown reports available from the Total Jobs, Number of Successful Jobs, Number of Partially Successful Jobs, or Number of Failed Jobs columns of the main report. These drilldown reports provide an overview of all jobs for the selected policy name, server, and time frame based on the job status.

These drilldown reports use the run time parameters that are passed from the main report.

Figure 2-83 shows a sample view of the Policy Summary Dashboard report.

The following are details associated with the Policy Summary Dashboard report:
Report Name: Policy Summary Dashboard

Report Category: Policy


Report Purpose: Tabular report summarizing size, throughput, job counts and success rate by master server, policy and policy type.

Supported products: Symantec NetBackup, Symantec NetBackup Master Appliance

Applicable View: Master Server, Client

Report Display: Tabular

Drill down report: Yes

Can be scheduled: Yes

Supported export formats: PDF, CSV, TSV, XML, HTML

Mapping with NOM report: All Reports > Standard Reports > Policy > Policy Summary Dashboard

The following table lists the filters for Policy Summary Dashboard report and how you can use these filters to view specific data in the report.

<table>
<thead>
<tr>
<th>Filter</th>
<th>Column</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>View</td>
<td></td>
<td>Select a view to show data for the selected view in the report. By default All My Views is selected.</td>
</tr>
<tr>
<td>Master Server</td>
<td>Master Server</td>
<td>Select one or more master servers to view data for the selected master servers in the report. All master servers that are added to the OpsCenter console are shown in the Value dropdown list.</td>
</tr>
</tbody>
</table>
The default selection is Yes.

Select No if you do not want to consider partially successful jobs as successful.

Selecting Yes or No may impact the Success Rate percentage that is shown in the report. Consider a policy that has 5 successful jobs, 3 partially successful jobs and 2 failed jobs. If you select the value as Yes, the Success Rate column shows 80%. However if you select the value as No, the Success Rate column shows 50%.

**Example of filter usage:** You may run the Policy Summary Dashboard report for specific master servers or views to view details only for the specific master servers or views.

**Total Jobs for Policy**

This drilldown report is available when you click a value (link) from the Total Jobs column of the Policy Summary Dashboard report. This drilldown report provides an overview of all jobs for the selected policy name, server, and time frame. This drilldown report uses the run time parameters that are passed from the main report. The report provides details like schedule name, start times, and duration of the job etc.

Figure 2-84 shows a sample view of the Total Jobs for Policy report.
The following are details associated with the Total Jobs for Policy report:

<table>
<thead>
<tr>
<th>Report Name</th>
<th>Total Jobs for Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Report Category</td>
<td>Policy (Drill down report)</td>
</tr>
<tr>
<td>Report Purpose</td>
<td>This report lists all jobs of the selected policy. This report is valid for NetBackup and NetBackup Appliance.</td>
</tr>
<tr>
<td>Supported products</td>
<td>Symantec NetBackup, Symantec NetBackup Master Appliance</td>
</tr>
<tr>
<td>Applicable View</td>
<td>Master Server, Client</td>
</tr>
<tr>
<td>Report Display</td>
<td>Tabular</td>
</tr>
<tr>
<td>Drill down report</td>
<td>No</td>
</tr>
<tr>
<td>Can be scheduled</td>
<td>Yes</td>
</tr>
</tbody>
</table>
The following table lists the filters for Total Jobs for Policy report and how you can use these filters to view specific data in the report.

<table>
<thead>
<tr>
<th>Filter</th>
<th>Column</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>View</td>
<td>Select a view to show data for the selected view in the report. By default <strong>All My Views</strong> is selected.</td>
<td></td>
</tr>
<tr>
<td>Master Server</td>
<td>Master Server</td>
<td>Select one or more master servers to view data for the selected master servers in the report. All master servers that are added to the OpsCenter console are shown in the <strong>Value</strong> dropdown list.</td>
</tr>
<tr>
<td>Policy</td>
<td>Policy Name</td>
<td>Select one or more policy names to view data for the selected policies.</td>
</tr>
<tr>
<td>Policy</td>
<td>Policy Type</td>
<td>Select one or more policy types to view data for the selected policy types.</td>
</tr>
</tbody>
</table>

**Example of filter usage:** You may run the Total Jobs for Policy report for specific policies to view details only for the specific policies.

**Successful Jobs for Policy**

This drilldown report is available when you click the successful jobs (link) from the Policy Summary Dashboard report. This drilldown report provides an overview of all the successful jobs for the selected policy name, server, and time frame. This drilldown report uses the run time parameters that are passed from the main report. The report provides details like schedule name, start times, and duration of the job etc.

**Figure 2-85** shows a sample view of the Successful Jobs for Policy report.
The following are details associated with the Successful Jobs for Policy report:

**Report Name**
Successful Jobs for Policy

**Report Category**
Policy (Drill down report)

**Where to Locate**

**Report Purpose**
This report lists all the successful jobs of the selected policy. This report is valid for NetBackup and NetBackup Appliance.

**Supported products**
Symantec NetBackup, Symantec NetBackup Master Appliance

**Applicable View**
Master Server, Client

**Report Display**
Tabular

**Drill down report**
No

**Can be scheduled**
Yes
The following table lists the filters for Successful Jobs for Policy report and how you can use these filters to view specific data in the report.

<table>
<thead>
<tr>
<th>Filter</th>
<th>Column</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>View</td>
<td></td>
<td>Select a view to show data for the selected view in the report. By default All My Views is selected.</td>
</tr>
<tr>
<td>Master Server</td>
<td>Master Server</td>
<td>Select one or more master servers to view data for the selected master servers in the report. All master servers that are added to the OpsCenter console are shown in the Value drop-down list.</td>
</tr>
<tr>
<td>Policy</td>
<td>Policy Name</td>
<td>Select one or more policy names to view data for the selected policies.</td>
</tr>
<tr>
<td>Policy</td>
<td>Policy Type</td>
<td>Select one or more policy types to view data for the selected policy types.</td>
</tr>
</tbody>
</table>

**Example of filter usage:** You may run the Successful Jobs for Policy report for specific policies to view details only for the specific policies.

**Partial Jobs for Policy report**

This drilldown report is available when you click a value (link) from the Number of Partially Successful Jobs from the Policy Summary Dashboard report. This drilldown report provides an overview of all the partially successful jobs for the selected policy name, server, and time frame. This drilldown report uses the run time parameters that are passed from the main report. The report provides details like schedule name, start times, and duration of the job etc.

**Figure 2-86** shows a sample view of the Successful Jobs for Policy report.
The following are details associated with the Partially Successful Jobs for Policy report:

- **Report Name**: Partially Successful Jobs for Policy
- **Report Category**: Policy (Drill down report)
- **Report Purpose**: This report lists all the partially successful jobs of the selected policy. This report is valid for NetBackup and NetBackup Appliance.
- **Supported products**: Symantec NetBackup, Symantec NetBackup Master Appliance
- **Applicable View**: Master Server, Client
- **Report Display**: Tabular
- **Drill down report**: No
- **Can be scheduled**: Yes
The following table lists the filters for Partial Jobs for Policy report and how you can use these filters to view specific data in the report.

<table>
<thead>
<tr>
<th>Filter</th>
<th>Column</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>View</td>
<td>Column</td>
<td>Select a view to show data for the selected view in the report. By default All My Views is selected.</td>
</tr>
<tr>
<td>Master Server</td>
<td>Master Server</td>
<td>Select one or more master servers to view data for the selected master servers in the report. All master servers that are added to the OpsCenter console are shown in the Value drop-down list.</td>
</tr>
<tr>
<td>Policy</td>
<td>Policy Name</td>
<td>Select one or more policy names to view data for the selected policies.</td>
</tr>
<tr>
<td></td>
<td>Policy Type</td>
<td>Select one or more policy types to view data for the selected policy types.</td>
</tr>
</tbody>
</table>

**Example of filter usage:** You may run the Partial Jobs for Policy report for specific policies to view details only for the specific policies.

**Failed Jobs for Policy**

This drilldown report is available when you click a value (link) from the Number of Failed Jobs column of the Policy Summary Dashboard report. This drilldown report provides an overview of all the failed jobs for the selected policy name, server, and time frame. This drilldown report uses the run time parameters that are passed from the main report. The report provides details like schedule name, start times, and duration of the job etc.

*Figure 2-87* shows a sample view of the Failed Jobs for Policy report.
The following are details associated with the Failed Jobs for Policy report:

**Report Name**  Failed Jobs for Policy

**Report Category**  Policy (Drill down report)


**Report Purpose**  This report lists all the failed jobs of the selected policy. This report is valid for NetBackup and NetBackup Appliance.

**Supported products**  Symantec NetBackup, Symantec NetBackup Master Appliance

**Applicable View**  Master Server, Client

**Report Display**  Tabular

**Drill down report**  No

**Can be scheduled**  Yes
The following table lists the filters for Failed Jobs for Policy report and how you can use these filters to view specific data in the report.

<table>
<thead>
<tr>
<th>Filter</th>
<th>Column</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>View</td>
<td></td>
<td>Select a view to show data for the selected view in the report.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>By default <strong>All My Views</strong> is selected.</td>
</tr>
<tr>
<td>Master Server</td>
<td>Master Server</td>
<td>Select one or more master servers to view data for the selected master servers in the report. All master servers that are added to the OpsCenter console are shown in the Value drop-down list.</td>
</tr>
<tr>
<td>Policy</td>
<td>Policy Name</td>
<td>Select one or more policy names to view data for the selected policies.</td>
</tr>
<tr>
<td></td>
<td>Policy Type</td>
<td>Select one or more policy types to view data for the selected policy types.</td>
</tr>
</tbody>
</table>

**Example of filter usage:** You may run the Failed Jobs for Policy report for specific policies to view details only for the specific policies.

### About Restore reports in OpsCenter

This section describes restore job reports that provide information for all the NetBackup restore and recovery operations. These reports are applicable only for NetBackup.

- **Restore Job Summary by Job Count report**
  - See “Restore > Restore Job Attempt Summary by Job Count” on page 297.

- **Restore Job Summary by Volume Restored report**
  - See “Restore > Restore Job Attempt Summary by Volume Restored” on page 300.

- **Restore Job Details report**
  - See “Restore > Restore Job Details” on page 303.

- **Client Restore report**
  - See “Client Restore report” on page 305.

### Restore > Restore Job Attempt Summary by Job Count

This report shows graphical summary of number of restore jobs per day.
Figure 2-88 shows a sample view of Restore Job Attempt Summary by Job Count Report.

In addition, you can view the report in a tabular format.

Figure 2-89 shows a sample view of Restore Job Attempt Summary by Job Count Report.
The following are the details that are associated with the **Restore Job Attempt Summary by Job Count** report:

<table>
<thead>
<tr>
<th>Report Name</th>
<th>Restore Job Attempt Summary by Job Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Report Category</td>
<td>Backup</td>
</tr>
<tr>
<td>Where to Locate</td>
<td>All Reports &gt; Report Templates &gt; Restore &gt; Restore Job Summary by Job Count report.</td>
</tr>
<tr>
<td>Report Purpose</td>
<td>Graphical summary of number of jobs per day.</td>
</tr>
<tr>
<td>Supported products</td>
<td>Symantec NetBackup, Symantec NetBackup Master Appliance</td>
</tr>
<tr>
<td>Applicable View</td>
<td>Master Server, Client</td>
</tr>
<tr>
<td>Report Display</td>
<td>Historical</td>
</tr>
<tr>
<td>Drill down report</td>
<td>Yes. See Restore Job Attempt Details</td>
</tr>
<tr>
<td>Can be scheduled</td>
<td>Yes</td>
</tr>
<tr>
<td>Supported formats</td>
<td>PDF, CSV, TSV, XML, HTML</td>
</tr>
<tr>
<td>Mapping with NOM report</td>
<td>All Reports &gt; Standard Reports &gt; Restore Job Summary</td>
</tr>
</tbody>
</table>

You can edit this report to show or hide the columns that you are interested in. All the columns are shown by default. You can also filter the report to view reports of specific master servers. The following table shows the filters for the report and how you can use these filters to view specific data in the report.
<table>
<thead>
<tr>
<th>Filter</th>
<th>Column</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>View</td>
<td></td>
<td>Select a view to show data for the selected view in the report. By default <strong>All My Views</strong> is selected.</td>
</tr>
<tr>
<td>Master Server</td>
<td>Master Server</td>
<td>Select one or more master servers to view data for the virtual clients that are backed up by the selected master servers in the report. All master servers that are added to the OpsCenter console are shown in the <strong>Value</strong> drop-down list.</td>
</tr>
</tbody>
</table>

**Example of filter usage:** Run the report for a specific master server to view the restore jobs per day for that master server.

**Restore > Restore Job Attempt Summary by Volume Restored**

This report shows graphical summary of volume of restore jobs per day.

*Figure 2-90* shows a sample view of Restore Job Attempt Summary by Volume Restored Report.
In addition, you can view the historical report in tabular format.

**Figure 2-91** shows a sample view of Restore Job Attempt Summary by Volume Restored Report.
### Restore Job Attempt Summary by Volume Restored Report (Tabular)

<table>
<thead>
<tr>
<th>Job End Time</th>
<th>Volume (MB)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jul 15, 2013</td>
<td>0</td>
</tr>
<tr>
<td>Jul 16, 2013</td>
<td>0</td>
</tr>
<tr>
<td>Jul 17, 2013</td>
<td>22,579.75</td>
</tr>
<tr>
<td>Jul 18, 2013</td>
<td>10,460.1</td>
</tr>
<tr>
<td>Jul 19, 2013</td>
<td>0</td>
</tr>
<tr>
<td>Jul 20, 2013</td>
<td>0</td>
</tr>
<tr>
<td>Jul 21, 2013</td>
<td>0</td>
</tr>
<tr>
<td>Jul 22, 2013</td>
<td>7.93</td>
</tr>
<tr>
<td>Jul 23, 2013</td>
<td>0</td>
</tr>
</tbody>
</table>

The following are the details that are associated with the Restore Job Attempt Summary by Volume Restored report:

- **Report Name**: Restore Job Attempt Summary by Volume Restored
- **Report Category**: Restore
- **Where to Locate**: All Reports > Report Templates > Restore > Restore Job Summary by Volume Restored report.
- **Report Purpose**: Graphical summary showing number of restore jobs per day.
- **Supported products**: Symantec NetBackup, Symantec NetBackup Master Appliance
- **Applicable View**: Master Server, Client
- **Report Display**: Historical
- **Drill down report**: Yes. See Restore Job Attempt Details
- **Can be scheduled**: Yes
- **Supported formats**: PDF, CSV, TSV, XML, HTML
- **Mapping with NOM report**: All Reports > Standard Reports > Restore Job Summary

You can edit this report to show or hide the columns that you are interested in. All the columns are shown by default. You can also filter the report to view reports of specific master servers. The following table shows the filters for the report and how you can use these filters to view specific data in the report.
Filter | Column | Description
--- | --- | ---
View |  | Select a view to show data for the selected view in the report. By default **All My Views** is selected.

Master Server | Master Server | Select one or more master servers to view data for the virtual clients that are backed up by the selected master servers in the report. All master servers that are added to the OpsCenter console are shown in the Value drop-down list.

**Example of filter usage:** Run the report for a specific master server to view the Restore Job Summary by Volume Restored for that master server.

Following filter enhancements have been done for the report:
- New supported formats TSV, XML, PDF, and HTML are added.

**Restore > Restore Job Details**

This report lists all the completed restore jobs for a selected timeframe.

**Figure 2-92** shows a sample view of Restore Job Details Report.

**Figure 2-92**  
Restore Job Details Report

<table>
<thead>
<tr>
<th>Job ID</th>
<th>Server Name</th>
<th>Type</th>
<th>Client Name</th>
<th>Media Server</th>
<th>Start Time</th>
<th>End Time</th>
<th>Attempt Number</th>
<th>Size(KB)</th>
<th>Count of Files</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>nbapp141.eng</td>
<td>Restore</td>
<td>nbapp141</td>
<td>nbapp141</td>
<td>Jul 17, 2013 8:58:14 AM</td>
<td>Jul 17, 2013 8:58:20 AM</td>
<td>1</td>
<td>30</td>
<td>1</td>
</tr>
<tr>
<td>12</td>
<td>nbapp141.eng</td>
<td>Restore</td>
<td>nbapppoc07</td>
<td>nbapppoc07</td>
<td>Jul 17, 2013 12:31:00 PM</td>
<td>Jul 17, 2013 12:31:05 PM</td>
<td>1</td>
<td>30</td>
<td>1</td>
</tr>
</tbody>
</table>

The following are the details that are associated with the **Restore Job Details** report:

| Report Name | Restore Job Details |
You can edit the Restore Job Details report to show or hide the columns that you are interested in. All the columns are shown by default. You can also filter the report to view reports of specific master servers. The following table shows the filters for Restore Job Details report and how you can use these filters to view specific data in the report.

<table>
<thead>
<tr>
<th>Filter</th>
<th>Column</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>View</td>
<td></td>
<td>Select a view to show data for the selected view in the report. By default All My Views is selected.</td>
</tr>
<tr>
<td>Master Server</td>
<td>Master Server</td>
<td>Select one or more master servers to view data for the virtual clients that are backed up by the selected master servers in the report. All master servers that are added to the OpsCenter console are shown in the Value drop-down list.</td>
</tr>
</tbody>
</table>

**Example of filter usage:** Run the Restore Job Details report for a specific master server to view the completed restore jobs for that master server.

The following report enhancements have been made for the Restore Job Details report:

- The unit Years has been added for Relative Timeframe selection. You can now view data for the last x years. You can also see the Years tab on top-right corner of the Tabular Backup Report.
- The default Relative Timeframe for this report was 28 days now it is changes to next 2 weeks.
The following filter enhancements have been made for the Restore Job Details report:

- The units **Weeks**, **Months** and **Years** have been added for Relative Timeframe selection. You can now view data for the last X years.
- The default Relative Timeframe for this report is changed to **Previous 14 days**.
- The column **Elapsed Time** has been removed.
- New supported formats like TSV, XML, PDF & HTML added.
- Rows per page parameter value were 20 now it is set to 100.

**Client Restore report**

This report provides restore job details for a specified client. The table in the report contains information, such as, master and media server names, and start and end times.

You can edit the report to show or hide the columns that you are interested in. All the columns are shown by default. You can also filter the report to show activity for a limited sample set, such as one or more clients or views.

*Figure 2-93* shows a sample view of the Client Restore report.

*Figure 2-93*  
Client Restore report

<table>
<thead>
<tr>
<th>Job ID</th>
<th>Server Name</th>
<th>Client Name</th>
<th>Media Server</th>
<th>Start Time</th>
<th>End Time</th>
<th>Size(KB)</th>
<th>Count of Files</th>
</tr>
</thead>
</table>

The following are details associated with the Client Restore Report:

<table>
<thead>
<tr>
<th>Report Name</th>
<th>Client Restore</th>
</tr>
</thead>
<tbody>
<tr>
<td>Report Category</td>
<td>Client Reports</td>
</tr>
</tbody>
</table>
Where to Locate

Report > Report Templates > Client Reports > Client Restore

Report Purpose

Lists all the restore jobs of the given client.

Supported products

NetBackup, NetBackup Master Appliance, NetBackup PureDisk

Applicable View

Master Server, Client

Report Display

N.A.

Drill down report

None

Can be scheduled

Yes

Supported formats

PDF, CSV, TSV, XML, HTML

Mapping with NOM report

All Reports > Standard Reports > Client > Client Restore

The following table shows the filters for Client Restore report and how you can use these filters to view specific data in the report.

<table>
<thead>
<tr>
<th>Filter</th>
<th>Column</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>View</td>
<td>Select a view</td>
<td>Show data for the selected view in the report. By default All My Views is selected.</td>
</tr>
<tr>
<td>Client</td>
<td>Client Name</td>
<td>Select one or more clients to view data for the selected clients in the report. All clients that are protected by the master servers in the OpsCenter console are listed.</td>
</tr>
</tbody>
</table>

Example of filter usage: You may run the Clients Restore report for specific clients to view details only for the specific clients.

The unit Years has been added for Relative Timeframe selection. You can now view data for the last x years. You can also select Year from the top-right corner of the report.

About Storage Lifecycle Policy reports

This section describes the Storage Lifecycle policy reports that provide information about the NetBackup Storage Lifecycle Policies (SLP's) and NetBackup Auto Image Replication (AIR). It also includes detailed information on SLP sizes, progress, and backlog per Master.

The Storage Lifecycle Policy reports in OpsCenter help you gain an end-to-end visibility across destinations in a storage lifecycle policy. With the Auto Image Replication functionality, you can replicate images from one NetBackup domain to
another NetBackup domain. You can specify a different master server as a storage destination in an SLP. The SLP reports in OpsCenter show an end-to-end view of the SLP process that includes backup to import of duplicated image into different NetBackup domains. The SLP reports help you to verify if each step in the SLP is executed and identify the possible bottlenecks.

The Storage Lifecycle Policy reports in OpsCenter help you find answers to the following questions:

- Is the SLP performing according to schedule?
- Have the 2nd, 3rd… Copies been made? Does the original image still exist?
- Am I at a risk of data loss? A copy at a certain phase is about to expire and the subsequent phase’s copy has not been made.
- What is my backlog? Is it getting steadily worse?

Review the following points about SLP reports:

- The SLP reports are applicable only to NetBackup.
- The SLP reports can be run only for 7.1 or higher master servers. If you upgrade from 7.0 (or 7.0.1) to a 7.1 master server, the SLP reports also show the images for 7.0 or 7.0.1 master servers.

  If you upgrade NetBackup from 7.0 or 7.0.1 to 7.1 and the SLP definition contains multiple backup operations, then the first copy is marked as "Backup" and the remaining are marked as "Duplication". For example, if you created an SLP that contains four destinations where two destinations are for backup and two are for duplication, then image copy data marks the first copy as Backup and remaining for Duplication.

- The data that is shown in the SLP reports is collected from the NetBackup catalog and the SLP worklist by NBSL. Once the initial data collection is complete, the updated data is collected from the NetBackup catalog in every 15 minutes and from the SLP worklist in every 10 minutes. The SLP worklist is located in the EMM and contains metadata like how many copies need to be created, where they need to be created, when they are completed etc.

  The data that is displayed in the SLP reports is based on the image data that exists in the SLP worklist and the NetBackup catalog.

- The effects of deduplication, compression, or optimized deduplication on image or copy size are not considered in the SLP reports.

- By default, data for SLP reports is purged from the OpsCenter database after 90 days. You can also customize the purge interval for SLP images from Settings > Configuration > Data Purge.

- In general, the copy data in the SLP reports (like Copies Completed column) is based on the data that is collected from the SLP worklist. EMM creates the SLP
worklist once a backup is complete. OpsCenter collects this data in every 10 minutes and shows it in the SLP reports. Depending on when the SLP worklist is created and also the OpsCenter data collection cycle, the OpsCenter reports show details for the copy data.

- The timeframe filter for all SLP reports is based on the time when the primary backup image (and not an image copy) was created. For example, if you view the SLP Status by Image Copy report between 7'th May 1:00 P.M. to 8'th May 1:00 P.M., then the copies that got created for an SLP after 8'th May 1:00 P.M. may be displayed. These copies may be displayed as the timeframe filter is based on the time when the primary backup image was created and not on the copy creation time.

- SLP reports do not consider non-SLP based duplications.

- Creating custom reports for SLP’s is not supported.

The following are two high-level SLP reports:

SLP Status report See “SLP Status report” on page 309.

SLP Backlog report See “SLP Backlog report” on page 313.

Before using the SLP reports, you must understand the SLP and Auto Image Replication concepts in NetBackup.

See “About SLP and Auto Image Replication” on page 308.

**About SLP and Auto Image Replication**

This section gives a brief overview about SLP and Auto Image Replication in NetBackup.

A Storage Lifecycle Policy (SLP) is a storage plan that specifies where data will be stored and for how long. The SLP determines where the backup image is initially written and where it is subsequently duplicated. With NetBackup 7.1, you can also duplicate backup image or duplicate copies from one storage domain to another for business continuity planning purposes. This means that you can now copy backup images from one master server to another master server, and also specify a different master server as a storage destination in an SLP.

The SLP and Auto Image Replication functionality in NetBackup allow you to move data to tiers of storage on different master servers commensurate with the value of the data as it ages.

More information about SLP and Auto Image Replication functionality is available in the *Symantec NetBackup Administrator’s Guide*. 
SLP Status report

The SLP Status report provides a summary of lifecycle policies that are associated with a master server. The SLP Status report is a tabular report that lets you know the current progress of SLPs in the selected timeframe for each master server that is added to the OpsCenter console.

The SLP status report gives a quick summary of the SLP activity and lets you identify the SLPs that are incomplete. You can see if all your duplications (copies) are complete or not.

By clicking the links in the SLP Status report, you can drill down to more detailed reports. You can use the drill-down reports to focus on SLP’s, images, or the image copies that are incomplete. You can also view SLP status for each destination and also for each SLP.

From the SLP Status report, you can drill down to the following reports:

- **SLP Status by SLP report**
  See “SLP Status by SLP report” on page 314.
  From the SLP Status by SLP report, you can drill down to the following reports:
  - SLP Status by Destinations report
    See “SLP Status by Destinations report” on page 333.
  - SLP Duplication Progress report
    See “SLP Duplication Progress report” on page 337.

- **SLP Status by Client report**
  See “SLP Status by Client report” on page 319.

- **SLP Status by Image report**
  See “SLP Status by Image report” on page 324.

- **SLP Status by Image Copy report**
  See “SLP Status by Image Copy report” on page 329.

The SLP Status report comprises of the following columns:

<table>
<thead>
<tr>
<th>Master Server (where the SLP lives)</th>
<th>Name of the master server (link) where the SLP runs. The SLP may run on the origin master server or any of the destination master servers (in case of Auto Image Replication). The NetBackup master server must be of 7.1 or a later version and also added to the OpsCenter console. This column is mandatory and cannot be removed when you edit the report.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Click on the master server (link) to see the drilldown report named SLP Status by SLP.</td>
</tr>
</tbody>
</table>
**Oldest Unfinished Image**
This column tells you about the oldest image that is SLP-incomplete for the selected master server. This column represents the image end time (and date). The data from this column helps you to identify the possible bottlenecks in the SLP process.

This column is mandatory and cannot be removed when you edit the report.

**Total Clients**
Number of the unique clients that are backed up by the SLP for the selected master server. Note that if the same client is backed up twice or thrice by the SLP, the client is counted only once. Click the number (link) to view the SLP Status by Client report.

This column is mandatory and cannot be removed when you edit the report.

**Total Existing Images**
Total number of the images that are present in the OpsCenter database for SLP’s on the selected master server (includes both SLP-complete images and SLP-incomplete images). Click the number (link) to view the SLP Status by Image report for the specific master server. This report displays details of images in the OpsCenter database that are associated with the SLP’s on the selected master server.

This column is mandatory and cannot be removed when you edit the report.

**Images % SLP Complete**
Percentage of images in the OpsCenter database that are SLP-complete for the selected master server. This column is calculated using data from the following columns of the SLP Status report:

- Images SLP Complete
- Total Existing Images

The contents of Images % SLP Complete column is calculated by using the following formula:

\[ \text{Images SLP Complete} / \text{Total Existing Images} \times 100 \]

This column is mandatory and cannot be removed when you edit the report.
Images SLP Complete
Number of images in the OpsCenter database that are SLP-complete for the specific SLP on the selected master server. You can remove this column when you edit the report.

Click the number (link) to view the SLP Status by Image report. A filtered view of the report appears that displays details of images in the OpsCenter database that are SLP-complete for the specific SLP.

Images Not SLP Complete
Number of images in the OpsCenter database that are SLP-incomplete for the specific SLP on the selected master server. This column is mandatory and cannot be removed when you edit the report.

Click the number (link) to view the SLP Status by Image report. A filtered view of the report appears that displays details of images in the OpsCenter database that are SLP-incomplete.

Total Expected Copies
Total number of image copies in the OpsCenter database for the specific SLP on the selected master server (includes both complete copies and incomplete copies). This column is mandatory and cannot be removed when you edit the report.

Click the number (link) to view the SLP Status by Image Copy report.

% Copy Complete
Percentage of completed copies in the OpsCenter database for the specific SLP on the selected master server. This column is mandatory and cannot be removed when you edit the report. The data for this column is calculated by using data from the following columns of the SLP Status By SLP report:

- Copies Completed
- Total Expected Copies

The contents of % Copy Complete column is calculated by using the following formula:

Copies Completed / Total Expected Copies * 100

Copies Completed
Number of the completed copies that are present in the OpsCenter database for SLP's on the selected master server. You can remove this column when you edit the report.
<table>
<thead>
<tr>
<th>Column Description</th>
<th>Description</th>
</tr>
</thead>
</table>
| Copies Not Complete | Number of incomplete copies in the OpsCenter database for SLP’s on a selected master server. This column is calculated using the following formula:  
\[
\text{Copies Not Complete} = \text{Total Expected Copies} - \text{Copies Completed}
\]  
Click the number (link) to view the SLP Status by Image Copy report. A filtered view of the report appears that displays details for image copies in the OpsCenter database that are incomplete for the selected master server.  
This column is mandatory and cannot be removed when you edit the report. |
| Total Expected Size - all copies (MB) | Expected aggregate size of all copies for SLP’s on the selected master server that are present in the OpsCenter database. This column is mandatory and cannot be removed when you edit the report.  
The Total Expected Size for all copies is calculated by using the following formula:  
\[
\text{Total Expected Size for all copies} = (\text{Number of copies}) \times (\text{backup copy size})
\]  
**Note:** The total expected size for all copies is a front-end size and is derived from the number of copies multiplied by the size of backup copy. The effects of deduplication, compression, or optimized deduplication on the Total Expected Size – all copies are not considered in the SLP reports. |
| Completed Copy Size (%) | Percentage of completed copy size for the selected master server. This column is mandatory and cannot be removed when you edit the report.  
The Completed Copy Size (%) for the specific master server is calculated using data from the following columns of the SLP Status report:  
- Completed Copy Size  
- Total Expected Size – all copies  
The contents of Completed Copy Size (%) column is calculated for each master server by using the following formula:  
\[
\text{Completed Copy Size} / \text{Total Expected Size} – \text{all copies} \times 100
\] |
**Completed Copy Size (MB)**  
Aggregate size of all the completed copies in the OpsCenter database for the selected master server. You can remove this column when you edit the report. Note: The Completed Copy Size is a front-end size. The effects of deduplication, compression, or optimized deduplication on completed copy size are not considered in the SLP reports.

**Remaining Copy Size (MB)**  
Aggregate size of all remaining copies that are to be created for the selected master server. This column is mandatory and cannot be removed when you edit the report.

The Remaining Copy Size (MB) for a specific master server is calculated in the following manner:

\[(\text{Remaining Copy Count}) \times (\text{Size of Backup Copy1})\]

**Note:** The remaining copy size is a front-end size and is derived from the number of remaining copies multiplied by the size of backup copy 1. The effects of deduplication, compression, or optimized deduplication on remaining copy size are not considered in the SLP reports.

You can use filters to view specific data in the SLP Status report. The following filters are available when you edit the SLP Status report:

- **Views**: Select a particular view to see data for the selected view.
- **Master Server**: Select one or more master servers to see data for the selected master servers.

**SLP Backlog report**

The SLP Backlog report lets you monitor the overall SLP backlog in a glance. This report shows the trend of images created vs. the images which are SLP incomplete in a line chart format. This report illustrates what the SLP backlog looks like against the image creation volume for the selected timeframe and the selected SLP’s. By comparing the line charts in this report, you can understand the rate at which copies are created vs. the rate at which images requiring copies are created. This report provides you with empirical evidence on how efficiently the SLP performs and visibility into its capacity (i.e. at what point does the outflow begin to fall steadily behind).

Data for the SLP Backlog report is collected from the OpsCenter database at midnight (12:00 A.M. by the OpsCenter Server clock). The data collection for the SLP Backlog report occurs after every 24 hours. This report is available in both graphical (chart) and tabular formats. To view the report details in a tabular format, click the link **Show Chart as Table** at the bottom of the report.
You can edit the report to view specific data in the report. You can also save this report. Note that when you save the SLP Backlog report and run the saved report after some time, the report displays current data. You can export or email this report for reference.

Note that the data that is shown in the SLP Backlog report (images that are created and unfinished images) is in GB by default. You can edit the report and change the units to KB, MB, or TB. The default timeframe for the SLP Backlog report is last two weeks.

While editing the SLP Backlog report, you can group the timeframe for which you want to see data. However, the time frame grouping for the SLP Backlog report is supported for the following intervals only:

- one day
- one week
- one month

The SLP Backlog report does not support any other time frame grouping (like two days, three months, 1 minute, or four weeks).

You can use filters to view specific data in the SLP Backlog report. The following filters are available when you edit the SLP Backlog report:

**Views**
Select a particular view to see data for the selected view.

**Master Server**
Select one or more master servers to see data for the selected master servers.

**Storage Lifecycle Policy**
Select one or more SLP’s to see data for the selected SLP’s.

**SLP Status by SLP report**
You can view the SLP status by SLP report when you click the master server (link) in the SLP report. It provides detailed information on the status of each SLP that is configured on the selected master server.

The SLP status by SLP report lets you monitor the progress of each SLP and also quickly identify the possible bottlenecks.

The SLP Status by SLP report comprises of the following columns:
### Master Server (where the SLP lives)
Name of the master server where the SLP runs. The SLP may run on the origin master server or any of the destination master servers (in case of Auto Image Replication). The NetBackup master server must be of 7.1 or a later version and also added to the OpsCenter console.

This column is mandatory and cannot be removed when you edit the report.

### SLP Name
Name of the SLP (link) that is configured on the master server. This column is mandatory and cannot be removed when you edit the report.

Click the name (link) to view the SLP Status by Destinations report.

### SLP Version
Version (link) that is associated with the specific SLP on the selected master server. This column is mandatory and cannot be removed when you edit the report.

Click the version (link) to view the SLP Duplication Progress report.

### Oldest Unfinished Image
The oldest image that is not SLP-complete for the specific SLP on the selected master server. This column represents the image end time (and date). This data helps you to identify the possible bottlenecks for the specific SLP.

This column is mandatory and cannot be removed when you edit the report.

### Total Clients
Number of unique clients (link) that are backed up by the specific SLP. Note that if the same client is backed up twice or thrice by the SLP, the client is counted only once. This column is mandatory and cannot be removed when you edit the report.

Click the number (link) to view the SLP Status by Client report.

### Total Existing Images
The total number of images that are present in the OpsCenter database for the specific SLP on the selected master server. This includes both SLP-complete images and SLP-incomplete images. This column is mandatory and cannot be removed when you edit the report.

Click the number (link) to view the SLP Status by Image report for the specific SLP on the selected master server. This report displays details of images in the OpsCenter database that are associated with the SLP’s on the selected master server.
<table>
<thead>
<tr>
<th>Column Name</th>
<th>Description</th>
</tr>
</thead>
</table>
| Images % SLP Complete   | Percentage of images in the OpsCenter database that are SLP-complete for the specific SLP on the selected master server. This column is mandatory and cannot be removed when you edit the report. The data for this column is calculated using data from the following columns of the SLP Status by SLP report:  
  - Images SLP Complete  
  - Total Existing Images  
  The contents of Images % SLP Complete column is calculated by using the following formula:  
  Images SLP Complete / Total Existing Images * 100 |
| Images SLP Complete     | Number of images in the OpsCenter database that are SLP-complete for the specific SLP on the selected master server. You can remove this column when you edit the report. Click the number (link) to view the SLP Status by Image report. A filtered view of the report appears that displays details of images in the OpsCenter database that are SLP-complete for the specific SLP. |
| Images Not SLP Complete | Number of images in the OpsCenter database that are SLP-incomplete for the specific SLP on the selected master server. This column is mandatory and cannot be removed when you edit the report. Click the number (link) to view the SLP Status by Image report. A filtered view of the report appears that displays details of images in the OpsCenter database that are SLP-incomplete. |
| Total Expected Copies   | Total number of image copies in the OpsCenter database for the specific SLP on the selected master server (includes both complete copies and incomplete copies). This column is mandatory and cannot be removed when you edit the report. Click the number (link) to view the SLP Status by Image Copy report. |
| **% Copy Complete** | Percentage of completed copies in the OpsCenter database for the specific SLP on the selected master server. This column is mandatory and cannot be removed when you edit the report.

The data for this column is calculated by using data from the following columns of the SLP Status By SLP report:

- Copies Completed
- Total Expected Copies

The contents of % Copy Complete column is calculated by using the following formula:

\[
\text{Copies Completed} / \text{Total Expected Copies} \times 100
\]

| **Copies Completed** | The number of completed copies that are present in the OpsCenter database for the specific SLP on the selected master server. You can remove this column when you edit the report.

Click the number (link) to view the SLP Status by Image Copy report. A filtered view of the report appears that displays details for copies in the OpsCenter database that are complete for the selected master server.

| **Copies Not Complete** | Shows the number of incomplete copies in the OpsCenter database for the specific SLP on the selected master server. This column is mandatory and cannot be removed when you edit the report.

The data for this column is calculated by using the following formula:

\[
\text{Copies Not Complete} = \text{Total Expected Copies} - \text{Copies Completed}
\]

Click the number (link) to view the SLP Status by Image Copy report. A filtered view of the report appears that displays details for copies in the OpsCenter database that are incomplete for the selected SLP.|
### Total Expected Size - all copies (MB)

Expected aggregate size of all copies for the selected SLP that are present in the OpsCenter database. This column is mandatory and cannot be removed when you edit the report.

The data for this column is calculated by using the following formula:

\[
\text{Total Expected Size for all copies} = (\text{Number of copies for the specific SLP}) \times (\text{backup copy size for the specific SLP})
\]

**Note:** The total expected size for all copies is a front-end size and is derived from the number of copies multiplied by the size of backup copy. The effects of deduplication, compression, or optimized deduplication on the Total Expected Size – all copies are not considered in the SLP reports.

### Completed Copy Size (%)

Percentage of completed copy size for the specific SLP on the selected master server. This column is mandatory and cannot be removed when you edit the report.

The data for this column is calculated from the following columns of the SLP Status By SLP report:

- Completed Copy Size
- Total Expected Size – all copies

The contents of **Completed Copy Size (%)** column is calculated by using the following formula:

\[
\frac{\text{Completed Copy Size}}{\text{Total Expected Size – all copies}} \times 100
\]

### Completed Copy Size (MB)

Aggregate size of all the completed copies in the OpsCenter database for the specific SLP on the selected master server. You can remove this column when you edit the report.

**Note:** The Completed Copy Size is a front-end size. The effects of deduplication, compression, or optimized deduplication on completed copy size are not considered in the SLP reports.
**Remaining Copy Size (MB)** Aggregate size of all remaining copies that are to be created for the specific SLP on the selected master server. This column is mandatory and cannot be removed when you edit the report.

The data for this column is calculated in the following manner:

(Remaining Copy Count for the specific SLP) x (Size of backup copy for the specific SLP)

**Note:** The remaining copy size is a front-end size and is derived from the number of remaining copies multiplied by the size of backup copy 1. The effects of deduplication, compression, or optimized deduplication on remaining copy size are not considered in the SLP reports.

You can use filters to view specific data in the SLP Status by SLP report. The following filters are available when you edit the SLP Status by SLP report:

- **Views**
  Select a particular view to see data for the selected view.

- **Master Server**
  Select one or more master servers to see data for the selected master servers.

- **Storage Lifecycle Policy**
  Select one or more SLP’s to see data for the selected SLP’s.

The default timeframe for this report is based on what timeframe is selected for the top-level report.

**SLP Status by Client report**

The SLP Status by Client report is available as a drill-down report from the SLP Status and SLP Status by SLP report. You can view the SLP status by Client report when you click the links in the Total Clients column in the following reports:

- SLP Status
- SLP Status by SLP (a filtered view of the SLP status by Client report is shown)

The SLP Status by Client report lets you monitor the SLP progress for each client that is associated with the SLP. This report helps you to know details about the SLPs that protect the clients.

This report also provides details about origin master server (master server where the data is backed up) and the master server where the SLP is running currently. These two master servers may be different when in case of Auto Image Replication.
The SLP Status by Client report comprises of the following columns:

<table>
<thead>
<tr>
<th>Column</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Master Server (where the SLP lives)</td>
<td>Name of the master server where the SLP that is associated with the client exists. The SLP may run on the origin master server or any of the destination master servers (in case of Auto Image Replication). The NetBackup master server must be of 7.1 or a later version and also added to the OpsCenter console. This column is mandatory and cannot be removed when you edit the report.</td>
</tr>
<tr>
<td>SLP Name</td>
<td>Name of the SLP that is associated with the selected master server and client. This column is mandatory and cannot be removed when you edit the report.</td>
</tr>
<tr>
<td>SLP Version</td>
<td>Version that is associated with the specific SLP. This column is mandatory and cannot be removed when you edit the report.</td>
</tr>
<tr>
<td>Client Name</td>
<td>Client name (link) that is backed up by the specific SLP on the selected master server. This column is mandatory and cannot be removed when you edit the report. Click the client name (link) to view the SLP Status by Image report. The SLP Status by Image report is filtered for the specific client and the specific SLP.</td>
</tr>
<tr>
<td>Origin Master Server (created the image)</td>
<td><em>Origin Master Server</em> is where the primary backup copy resides. The SLP may run on the origin master server or any of the destination master servers (in case of Auto Image Replication). The <em>Origin Master Server</em> must be a NetBackup 7.1 or later master server and also added to the OpsCenter console. This column is mandatory and cannot be removed when you edit the report.</td>
</tr>
<tr>
<td>Oldest Unfinished Image</td>
<td>This column tells you about the oldest image that is not SLP-complete for the selected master server, SLP, and client. This column represents the image end time (and date). This data helps you to identify the possible bottlenecks for the specific SLP. This column is mandatory and cannot be removed when you edit the report.</td>
</tr>
<tr>
<td>Column Name</td>
<td>Description</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Total Existing Images</strong></td>
<td>The total number of images that are present in the OpsCenter database for the specific SLP and client on the selected master server. This includes both SLP-complete images and SLP-incomplete images. This column is mandatory and cannot be removed when you edit the report. Click the number (link) to view the SLP Status by Image report for the specific SLP on the selected master server. This report displays details of images in the OpsCenter database that are associated with the SLP’s and client on the selected master server.</td>
</tr>
<tr>
<td><strong>Images % SLP Complete</strong></td>
<td>Percentage of images in the OpsCenter database that are SLP-complete for the specific SLP and client on the selected master server. This column is mandatory and cannot be removed when you edit the report. The data for this report is calculated from the following columns of the SLP Status by Client report: Images SLP Complete, Total Existing Images. The data in the Images % SLP Complete column is calculated by using the following formula: Images SLP Complete / Total Existing Images * 100</td>
</tr>
<tr>
<td><strong>Images SLP Complete</strong></td>
<td>Number of images in the OpsCenter database that are SLP-complete for the specific SLP and client on the selected master server. You can remove this column when you edit the report. Click the number (link) to view the SLP Status by Image report. A filtered view of the report appears that displays details of images in the OpsCenter database that are SLP-complete for the specific SLP and client.</td>
</tr>
<tr>
<td><strong>Images Not SLP Complete</strong></td>
<td>Number of images in the OpsCenter database that are SLP-incomplete for the specific SLP and client on the selected master server. This column is mandatory and cannot be removed when you edit the report. Click the number (link) to view the SLP Status by Image report. A filtered view of the report appears that displays details of images in the OpsCenter database that are SLP-incomplete.</td>
</tr>
</tbody>
</table>
### Total Expected Copies

Total number of copies expected in the OpsCenter database for the specific SLP and client on the selected master server (includes both complete copies and incomplete copies). This column is mandatory and cannot be removed when you edit the report.

Click the number (link) to view the SLP Status by Image Copy report.

### % Copy Complete

Percentage of completed copies in the OpsCenter database for the specific SLP and client on the selected master server. This column is mandatory and cannot be removed when you edit the report.

The data for this column is calculated from the following columns of the SLP Status by Client report:

- Copies Completed
- Total Expected Copies

The contents of % **Copies Complete** column is calculated by using the following formula:

\[
\text{Copies Completed} \div \text{Total Expected Copies} \times 100
\]

### Copies Completed

The number of completed copies that are present in the OpsCenter database for the specific SLP and client on the selected master server. You can remove this column when you edit the report.

Click the number (link) to view the SLP Status by Image Copy report. A filtered view of the report appears that displays details for copies in the OpsCenter database that are complete for the selected master server.

### Copies Not Complete

Shows the number of incomplete copies in the OpsCenter database for the specific SLP and client on the selected master server. This column is mandatory and cannot be removed when you edit the report.

The data for this column is calculated by the following formula:

\[
\text{Copies not Complete} = \text{Total Expected Copies} - \text{Copies Completed}
\]

Click the number (link) to view the SLP Status by Image Copy report. A filtered view of the report appears that displays details for copies in the OpsCenter database that are incomplete for the selected SLP.
<table>
<thead>
<tr>
<th>Column</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Expected Size - all copies (MB)</strong></td>
<td>Expected aggregate size of all copies for the selected SLP and client that are present in the OpsCenter database. This column is mandatory and cannot be removed when you edit the report. The data for this column is calculated by the following formula: Total Expected Size for all copies = (Number of copies) * (backup copy size)</td>
</tr>
<tr>
<td><strong>Note:</strong></td>
<td>The total expected size for all copies is a front-end size and is derived from the number of copies multiplied by the size of backup copy. The effects of deduplication, compression, or optimized deduplication on the Total Expected Size – all copies are not considered in the SLP reports.</td>
</tr>
<tr>
<td><strong>Completed Copy Size (%)</strong></td>
<td>Percentage of completed copy size for the specific SLP and client on the selected master server. This column is mandatory and cannot be removed when you edit the report. The data for this column is calculated from the following columns of the SLP Status by Client report:</td>
</tr>
</tbody>
</table>
|                                            | ■ Completed Copy Size  
|                                            | ■ Total Expected Size – all copies  
|                                            | The contents of Completed Copy Size (%) column is calculated by using the following formula: Completed Copy Size / Total Expected Size – all copies * 100 |
| **Completed Copy Size (MB)**              | Aggregate size of all the completed copies in the OpsCenter database for the specific SLP and client on the selected master server. You can remove this column when you edit the report.  |
| **Note:**                                 | The Completed Copy Size is a front-end size. The effects of deduplication, compression, or optimized deduplication on completed copy size are not considered in the SLP reports. |
**Remaining Copy Size (MB)** Aggregate size of all remaining copies that are to be created for the specific SLP and client on the selected master server. This column is mandatory and cannot be removed when you edit the report.

The column content is calculated in the following manner:

(Remaining Copy Count) x (Size of Backup Copy1)

**Note:** The remaining copy size is a front-end size and is derived from the number of remaining copies multiplied by the size of backup copy 1. The effects of deduplication, compression, or optimized deduplication on remaining copy size are not considered in the SLP reports.

You can use filters to view specific data in the SLP Status by Client report. The following filters are available when you edit the SLP Status by Client report:

- **Views** Select a particular view to see data for the selected view.
- **Master Server** Select one or more master servers to see data for the selected master servers.
- **Storage Lifecycle Policy** Select one or more SLP’s to see data for the selected SLP’s.
- **Client** Select one or more clients to see data for the selected clients.

The default timeframe for this report is based on what timeframe is selected for top-level report.

**SLP Status by Image report**

The SLP Status by Image report is available as a drill-down report from the SLP Status, SLP Status by SLP, and SLP Status by Client report. You can view the SLP Status by Image report when you click the links in the following columns:

- Total Existing Images
- Images SLP Complete (filtered view of the SLP Status by Image report is shown)
- Images Not SLP Complete (filtered view of the SLP Status by Image report is shown)

The SLP Status by Image report lets you monitor the lifecycle for the images that are associated with the SLP. This report helps you to know which images are complete and incomplete for a specific SLP and identify bottlenecks in the SLP process. This report gives an idea of how a specific image is duplicated across master servers and also provides specific details about the image like backup time, SLP completion time, copies associated with each image and it's status etc. The
SLP status by Image report can help you to identify the image IDs that are not SLP-complete.

The SLP Status by Image report comprises of the following columns:

**Master Server (where the SLP lives)**
Name of the master server where the SLP runs. The SLP may run on the origin master server or any of the destination master servers (in case of Auto Image Replication). The NetBackup master server must be of 7.1 or a later version and also added to the OpsCenter console.

This column is mandatory and cannot be removed when you edit the report.

**SLP Name**
Name of the SLP that is associated with the selected master server and image.

This column is mandatory and cannot be removed when you edit the report.

**SLP Version**
Version (link) that is associated with the specific SLP. This column is mandatory and cannot be removed when you edit the report. Click the version (link) to view the SLP Duplication Progress report.

**Policy Name**
Policy that is associated with the SLP. This column is mandatory and cannot be removed when you edit the report.

**Schedule Name**
Schedule that is associated with the policy. You can remove this column when you edit the report.

**Client Name**
Client name that is backed up by the SLP for the selected master server.

This column is mandatory and cannot be removed when you edit the report.

**Origin Master Server (created the image)**
Origin Master Server is where the primary backup copy resides. The SLP may run on the origin master server or any of the destination master servers (in case of Auto Image Replication). The origin master server and master server where the SLP lives (or is running currently) may be different if you use Auto Image Replication.

The Origin Master Server must be a NetBackup 7.1 or later master server and also added to the OpsCenter console. This column is mandatory and cannot be removed when you edit the report.
Image ID

Image ID (link) associated with the image. The Image ID is unique for each image. Click the image ID (link) to view the SLP Status by Image Copy report.

This column is mandatory and cannot be removed when you edit the report.

Backup Time

Date and time when the primary backup is completed.

This column is mandatory and cannot be removed when you edit the report.

SLP Completion Time

Date and time when the image is SLP-complete. This column is mandatory and cannot be removed when you edit the report.

Lag Time (SLP Completion Time – Backup Time)

The Lag Time gives you an idea of how much time was required to complete the SLP and judge how fast or slow duplications occur. The Lag time is displayed in seconds.

The Lag time for a specific image copy is computed by using data from the following columns and by using the following formula:

Lag Time = SLP Completion Time – Backup Time

This column is mandatory and cannot be removed when you edit the report.

Total Expected Copies

Total number of copies expected in the OpsCenter database for the specific SLP and image on the selected master server (includes both complete copies and incomplete copies).

Click the number (link) to view the SLP Status by Image Copy report. This column is mandatory and cannot be removed when you edit the report.

Copies Completed

The number of completed copies that are present in the OpsCenter database for the specific SLP and image on the selected master server.

Click the number (link) to view the SLP Status by Image Copy report. A filtered view of the report appears that displays details for copies in the OpsCenter database that are complete for the selected master server.

You can remove this column when you edit the report.
**Copies Not Complete**

Shows the number of incomplete copies in the OpsCenter database for the specific SLP and image on the selected master server. This column is mandatory and cannot be removed when you edit the report.

The data for this column is calculated by the following formula:

\[
\text{Copies not Complete} = \text{Total Expected Copies} - \text{Copies Completed}
\]

Click the number (link) to view the SLP Status by Image Copy report. A filtered view of the report appears that displays details for copies in the OpsCenter database that are incomplete for the selected SLP.

**% Copy Complete**

Percentage of completed copies in the OpsCenter database for the specific SLP and image on the selected master server. This column is mandatory and cannot be removed when you edit the report.

The data for this column is calculated from the following columns of the SLP Status by Image report:

- Copies Completed
- Total Expected Copies

The contents of this column is calculated by using the following formula:

\[
\text{Copies Completed} / \text{Total Expected Copies} \times 100
\]

**Total Expected Size - all copies (MB)**

Expected aggregate size of all copies for the selected SLP and image that are present in the OpsCenter database. This column is mandatory and cannot be removed when you edit the report. The data for this column is calculated by the following formula:

\[
\text{Total Expected Size for all copies} = (\text{Number of copies}) \times (\text{backup copy size})
\]

**Note:** The total expected size for all copies is a front-end size and is derived from the number of copies multiplied by the size of backup copy. The effects of deduplication, compression, or optimized deduplication on the Total Expected Size – all copies are not considered in the SLP reports.
**Completed Copy Size (MB)** Aggregate size of all the completed copies in the OpsCenter database for the specific SLP and image on the selected master server. You can remove this column when you edit the report.

**Note:** The Completed Copy Size is a front-end size. The effects of deduplication, compression, or optimized deduplication on completed copy size are not considered in the SLP reports.

**Completed Copy Size (%)** Percentage of completed copy size for the specific SLP and image on the selected master server. This column is mandatory and cannot be removed when you edit the report.

The data for this column is calculated from the following columns of the SLP Status By Image report:

- Completed Copy Size
- Total Expected Size – all copies

The contents of Completed Copy Size (%) column is calculated by using the following formula:

\[
\text{Completed Copy Size / Total Expected Size – all copies} \times 100
\]

**Remaining Copy Size (MB)** Aggregate size of all remaining copies that are to be created for the specific SLP and image on the selected master server. This column is mandatory and cannot be removed when you edit the report.

The data for this column is calculated in the following manner:

\[(\text{Remaining Copy Count}) \times (\text{Size of Backup Copy 1})\]

**Note:** The remaining copy size is a front-end size and is derived from the number of remaining copies multiplied by the size of backup copy 1. The effects of deduplication, compression, or optimized deduplication on remaining copy size are not considered in the SLP reports.

You can use filters to view specific data in the SLP Status by Image report. The following filters are available when you edit the SLP Status by Image report:

**Views** Select a particular view to see data for the selected view.

**Master Server** Select one or more master servers to see data for the selected master servers.
You can select the following columns:

- **SLP Name**: Select one or more SLP’s to view data for the selected SLP’s.
- **SLP status**: Select SLP status for which you want to view data.

Select one or more policies to see data for the selected policies.

Select one or more schedules to see data for the selected schedules.

Select one or more clients to see data for the selected clients.

The default timeframe for this report is based on what timeframe is selected for the top-level report.

**SLP Status by Image Copy report**

The SLP status by Image Copy report is available as a drill-down report from the SLP Status, SLP Status by SLP, and SLP Status by Image report. You can view the SLP Status by Image Copy report when you click the links in the following columns:

- Total Expected Copies
- Copies Completed (filtered view of the SLP Status by Image Copy report is shown)
- Copies Not Complete (filtered view of the SLP Status by Image Copy report is shown)

The SLP status by Image Copy report shows how the image copies are created for different SLP destinations across different master servers. This report provides detailed information about the image copies that the SLP creates. This report provides details such as which copy is complete, which SLP is not complete and the specific copy operations that are pending.

The SLP Status by Image Copy report comprises of the following columns:
**Master Server (where the SLP lives)**
Name of the master server where the SLP runs. The SLP may run on the origin master server or any of the destination master servers (in case of Auto Image Replication). The NetBackup master server must be of 7.1 or a later version and also added to the OpsCenter console.
This column is mandatory and cannot be removed when you edit the report.

**SLP Name**
Name of the SLP that is associated with the selected master server.
This column is mandatory and cannot be removed when you edit the report.

**SLP Version**
Version (link) that is associated with the specific SLP. This column is mandatory and cannot be removed when you edit the report.
Click the version (link) to view the SLP Duplication Progress report.

**Data Classification**
Data classification that is associated with the SLP.
This column is mandatory and cannot be removed when you edit the report.

**Policy Name**
Policy that is associated with the SLP. This column is mandatory and cannot be removed when you edit the report.

**Schedule Name**
Schedule that is associated with the NetBackup policy. You can remove this column when you edit the report.

**Client Name**
Client name that is backed up by the SLP for the selected master server. This column is mandatory and cannot be removed when you edit the report.

**Image ID**
Image ID associated with the image. The image ID is unique for each image. This column is mandatory and cannot be removed when you edit the report.
Click the image ID (link) to view the SLP Status by Image Copy report.

**Job ID**
Job ID associated with the specific operation. This column is mandatory and cannot be removed when you edit the report.
**Origin Master Server (created the image)**

*Origin Master Server* is where the primary backup copy resides. The SLP may run on the origin master server or any of the destination master servers (in case of Auto Image Replication). The origin master server and master server where the SLP lives (or is running currently) may be different if you use Auto Image Replication.

The *Origin Master Server* must be a NetBackup 7.1 or later master server and also added to the OpsCenter console. This column is mandatory and cannot be removed when you edit the report.

**Operation**

The operation that is performed on an image copy like Duplication, Backup, Import etc.

This column is mandatory and cannot be removed when you edit the report.

**State**

Current status of the copy like Complete, Not Started, In Process, Deleted, Paused. You can remove this column when you edit the report.

**Format**

The *Format* column helps to differentiate between the NetBackup image format and the snapshot copy. This report shows the details of any snapshot copy that is a part of the storage lifecycle policy.

**Destination**

Destination where a copy should reside as per the SLP definition. This column is mandatory and cannot be removed when you edit the report.

**Expiration Time**

Time when the copy expires. You can remove this column when you edit the report.

**Copy/Import Completion Time**

Time when the copy is completed. This column is mandatory and cannot be removed when you edit the report.

**Lag Time (Copy Time – Backup Time)**

The Lag Time gives you an idea of how fast or slow duplications occur. The Lag time is displayed in seconds.

This column is mandatory and cannot be removed when you edit the report.
**Completed Copy Size (MB)**  Aggregate size of all the completed copies in the OpsCenter database for the specific SLP and image on the selected master server. This column is mandatory and cannot be removed when you edit the report.

**Note:** The Completed Copy Size is a front-end size. The effects of deduplication, compression, or optimized deduplication on completed copy size are not considered in the SLP reports.

You can use filters to view specific data in the SLP Status by Image Copy report. The following filters are available when you edit the SLP Status by Image Copy report:

**Views**

Select a particular view to see data for the selected view.

**Master Server**

Select one or more master servers to see data for the selected master servers.

**Storage Lifecycle Policy**

You can select the following parameters:

- **Replication to Remote Master:** If the value is Yes, then copy details for replication jobs are displayed.
- **Operation:** Select one or more operations that you want to view.
- **SLP name:** Select one or more SLP's that you want to view.
- **State:** Select one or more states that you want to view.

**Example:** If you want to view all pending import operations, select the following parameters:

- **Operation = Import**
- **State = Not Started**

**Example:** If you want to view the replication status for jobs, select the following parameters:

- **Replication to Remote Master = Yes**
- **Operation = Duplication**

**Policy**

Select one or more policies to see data for the selected policies.
Select one or more schedules to see data for the selected schedules.

Select one or more clients to see data for the selected clients.

Enter the image ID for which you want to view data.

The default timeframe for this report is based on what timeframe is selected for the top-level report.

**SLP Status by Destinations report**

The SLP Status by Destinations report is available as a drill-down report from the SLP Status by SLP report. You can view the SLP Status by Destinations report when you click the SLP name (link) in the SLP Status by SLP report.

The SLP Status by Destinations report provides a summary of all the destinations for a specific SLP. You can view the SLP status by Destinations report to monitor the SLP progress for each SLP destination. For example, you may want to know the image copies that are not complete for a specific SLP destination.

The SLP Status by Destinations report comprises of the following columns:

| **Master Server (where the SLP lives)** | Name of the master server where the SLP runs. The SLP may run on the source master server or any of the destination master servers (in case of Auto Image Replication). The NetBackup master server must be of 7.1 or a later version and also added to the OpsCenter console.
This column is mandatory and cannot be removed when you edit the report. |
| **SLP Name** | Name of the SLP that you selected. This column is mandatory and cannot be removed when you edit the report. |
| **SLP Version** | Version that is associated with the SLP. This column is mandatory and cannot be removed when you edit the report. |
| **Data Classification** | Data classification that is associated with the SLP destination. This column is mandatory and cannot be removed when you edit the report. |
| **Origin Master Server** (created the image) | Origin Master Server is where the primary backup copy resides. The SLP may run on the origin master server or any of the destination master servers (in case of Auto Image Replication). The origin master server and master server where the SLP lives (or is running currently) may be different in case of Auto Image Replication. The Origin Master Server must be a NetBackup 7.1 or later master server and also added to the OpsCenter console. This column is mandatory and cannot be removed when you edit the report. |
| **Operation** | The operation that is performed on an image copy like Duplication, Backup, Import etc. for the specific SLP destination. This column is mandatory and cannot be removed when you edit the report. |
| **Retention** | Retention period that is associated with the specific SLP destination. This column is mandatory and cannot be removed when you edit the report. |
| **Destination** | Destination where an image should reside as per the SLP definition. This column is mandatory and cannot be removed when you edit the report. |
| **Average Lag Time (Copy Time – Backup Time)** | The Average Lag Time gives you an idea of how much time is required to duplicate the primary copy to a particular destination for a specific SLP and judge how fast or slow duplications occur. The Average Lag Time is displayed in seconds. This column is mandatory and cannot be removed when you edit the report. |
| **Total Expected Copies** | Total number of copies in the OpsCenter database for the SLP and the specific SLP destination (includes both complete copies and incomplete copies). This column is mandatory and cannot be removed when you edit the report. |
| **Copies Completed** | The number of completed copies that are present in the OpsCenter database for the SLP and the specific SLP destination. You can remove this column when you edit the report. |
| **% Copy Complete** | Percentage of completed copies in the OpsCenter database for the SLP and the specific SLP destination. The column contents are calculated using data from the following columns of the SLP Status by Destinations report:
- Copies Completed
- Total Expected Copies

The contents of % Copies Complete column is calculated by using the following formula:

\[
\text{Copies Completed} / \text{Total Expected Copies} \times 100
\]

This column is mandatory and cannot be removed when you edit the report.

| **Total Expected Size - all copies (MB)** | Expected aggregate size of all copies for SLP and the specific SLP destination that are present in the OpsCenter database. This column is mandatory and cannot be removed when you edit the report. The column contents are calculated by using the following formula:

\[
\text{Total Expected Size for all copies} = (\text{Number of copies}) \times (\text{backup copy size})
\]

**Note:** The total expected size for all copies is a front-end size and is derived from the number of copies multiplied by the size of backup copy. The effects of deduplication, compression, or optimized deduplication on the Total Expected Size – all copies are not considered in the SLP reports.

| **Completed Copy Size (MB)** | Aggregate size of all the completed copies in the OpsCenter database for the SLP and the specific SLP destination. You can remove this column when you edit the report.

**Note:** The Completed Copy Size is a front-end size. The effects of deduplication, compression, or optimized deduplication on completed copy size are not considered in the SLP reports. |
**Completed Copy Size (%)**  
Percentage of completed copy size for the SLP and the specific SLP destination. This column is mandatory and cannot be removed when you edit the report.

The data for this column is calculated from the following columns of the SLP Status by Destinations report:

- Completed Copy Size
- Total Expected Size – all copies

The contents of Completed Copy Size (%) column is calculated by using the following formula:

\[
\text{Completed Copy Size / Total Expected Size – all copies} \times 100
\]

**Remaining Copy Size (MB)**  
Aggregate size of all remaining copies that are to be created for the SLP and the Size (MB) specific SLP destination. This column is mandatory and cannot be removed when you edit the report. The data for this column is calculated in the following manner:

\[(\text{Remaining Copy Count}) \times (\text{Size of Backup Copy1})\]

**Note:** The remaining copy size is a front-end size and is derived from the number of remaining copies multiplied by the size of backup copy 1. The effects of deduplication, compression, or optimized deduplication on remaining copy size are not considered in the SLP reports.

You can use filters to view specific data in the SLP Status by Image Copy report. The following filters are available when you edit the SLP Status by Image Copy report:

**View**  
Select a particular view to see data for the selected view.

**Master Server**  
Select one or more master servers to see data for the selected master servers.

**Storage Lifecycle Policy**  
You can select the following columns:

- **Replication to Remote Master:** If the value is **Yes**, then SLP’s that duplicate across master servers are displayed.
- **Operation:** Select one or more operations that you want to view
- **SLP name:** Select one or more SLP’s that you want to view.
The default timeframe for this report is based on what timeframe is selected for the top-level report.

**SLP Duplication Progress report**

The SLP Duplication Progress report is available as a drill-down report from the SLP Status by SLP report. You can view the SLP Duplication Progress report when you click the SLP version (link) in the SLP Status by SLP report.

The SLP Duplication Progress report is a graphical report that shows how the image copies are created for an SLP on a specific master server. This indicates how duplications are progressing for an SLP on a specific master server.

The SLP Duplication Progress report is in a bar chart format and shows the following data for each axis:

- X axis shows all duplication destinations that are associated with the SLP
- Y1 axis bar charts show the percentage of images that are completed
- Y2 axis shows how many images are created.

---

**Note:** The SLP Duplication Progress report shows data for only one master server where that SLP version is running.

You can also view the report data in a tabular format. To view the report details in a tabular format, click the link **Show Chart as Table** at the bottom of the report.

You can edit the report to view specific data in the report. You can also save this report for reference.

You can use filters to view specific data in the SLP Duplication Progress report. The following filters are available when you edit the SLP Duplication Progress report:

- **View**
  - Select a particular view to see data for the selected view.

- **Master Server**
  - Select one or more master servers to see data for the selected master servers.

- **Storage Lifecycle Policy**
  - Select an SLP to see data for the selected SLP. You can select only one SLP.

The default timeframe for this report is based on what timeframe is selected for the top-level report.
Limitations of SLP reports

The data that is shown in the SLP reports is collected primarily from the EMM worklist and also from the NetBackup catalog. Hence it is important to understand how the EMM worklist functions. The functionality of the EMM worklist affects the data that is displayed in the SLP reports.

The following sections provide an insight on SLP and EMM functionality and also list some limitations that are associated with the SLP reports.

About storage lifecycle policy retention

While creating a storage lifecycle policy in NetBackup, you can specify the destinations where copies should be created. For an SLP, an image can be written to the initial destination as part of the following operations:

- Backup
- Import

You can define the Retention type for each SLP destination. You can select many retention types like Fixed (1, 2, 3 weeks), Expire after Copy, Staged capacity managed etc. The following table explains the meaning of Fixed and Expire after Copy retention types:

<table>
<thead>
<tr>
<th>Retention Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fixed</td>
<td>Fixed retention type means that the backup data is retained for a specific length of time before the backups are expired. When the retention period is reached, NetBackup deletes information about the expired backup.</td>
</tr>
<tr>
<td>Expire after Copy</td>
<td>Expire after Copy retention type means that the image expires after the dependent duplication is complete.</td>
</tr>
</tbody>
</table>

When you are creating a NetBackup policy, the SLP that you created (like SLP1) can be selected as Policy Storage (storage unit). The SLP (SLP1) is executed when the policy runs.

About data collection from EMM

The SLP1 performs the following operations:

data that is shown in the SLP reports is collected from the EMM worklist and the NetBackup catalog. The worklist is located in the EMM and contains metadata like how many copies need to be created, where they need to be created, when they are completed etc. In general, the copy data that is shown in the SLP reports (like Copies Completed, Completed Copy Size columns etc.) is based on the EMM
worklist. EMM creates the worklist after a backup is complete based on lifecycle configuration parameters.

Consider a case when you configure an SLP named SLP1:

- Backup (Stu1)
- Duplication (Stu2)
- Duplication (Stu3)

After the backup is complete, a worklist that contains an entry for each copy is created in the EMM database. In this example, the EMM worklist has three copy entries (corresponding to the number of copies that are defined in the SLP). The EMM worklist is updated as and when a duplication job is processed (for example, State for the copy changes from Not Started to In Process to Complete).

SLP reporting limitations

OpsCenter collects data for SLP reports in the following phases:

<table>
<thead>
<tr>
<th>Table 2-1</th>
<th>SLP data collection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Serial No.</td>
<td>Phase</td>
</tr>
<tr>
<td>1.</td>
<td>Initial Data Collection</td>
</tr>
<tr>
<td>2.</td>
<td>Periodic Data Collection</td>
</tr>
</tbody>
</table>

OpsCenter depends on the EMM worklist for SLP reporting. The following EMM behavior affects the data that is shown in the SLP reports:

- If the Retention type of the SLP destination is Expire after Copy, then EMM deletes the copy entry from the EMM worklist after duplication is complete. This behavior affects the initial data collection and periodic data collection for SLP reports. See “Issues associated with initial data collection” on page 340. See “Issues associated with periodic data collection” on page 341.
- If the Retention type of the SLP destination is Fixed, then EMM deletes the copy entry based on the Retention period that is specified in the policy. This behavior affects the initial data collection and periodic data collection for SLP reports.
If the SLP images reside on a tape drive, then EMM deletes the copy entry when the particular SLP is complete. This behavior affects the initial data collection and periodic data collection for SLP reports.

See “Issues associated with initial data collection” on page 340.
See “Issues associated with periodic data collection” on page 341.

If you cancel an SLP that is in progress, then all the copy entries that are associated with this SLP image are deleted from the EMM worklist. This behavior affects the periodic data collection for SLP reports.

See “Issues associated with periodic data collection” on page 341.

Issues associated with initial data collection

For initial data collection, the following potential issues can be seen in SLP reports due to the EMM behavior.

Since initial data collection loads all the data from the EMM, it may have an image entry with missing copy entries. It is possible that the copy entries in the EMM worklist are deleted due to the following factors:

- If the Retention type of an SLP destination is Expire after Copy or Fixed.
- If duplications happen on a tape drive

The deletion of copies has the following affect on the data that is shown in specific SLP reports:

- The SLP Duplication Progress report is in a bar chart format. The X axis shows all duplication destinations associated with the SLP; Y1 axis bar charts show the percentage of images completed (% Images Count) and Y2 axis shows how many images are actually created (Completed Images Count). If a backup copy is deleted from the EMM worklist, then this report may show that the backup copy count is less than the duplication count. This is misleading. It is expected that when an SLP is complete, same number of copies should be created on all the destinations. Similarly the % Size Completed computation is inaccurate for this report.

- If a backup copy entry is deleted from the EMM worklist, the SLP Duplication Progress report will not show the backup bar chart. Similarly, if a duplication copy entry is deleted, the Duplication Progress report will not show the duplication bar chart.

- The SLP Status by Destination report will show incorrect copy sizes across destinations. The following columns of the SLP Status by Destination report show incorrect data:
Issues associated with periodic data collection

When OpsCenter collects data periodically after every 10 minutes, the following potential problems can be seen in SLP reports.

Consider a scenario when OpsCenter has collected the data for all copies associated with SLP1 which is in progress. However, before the next data collection happens one of the copy entries is removed from the EMM worklist (due to the EMM behavior). In this scenario, OpsCenter marks such copy entries as Complete if the image is SLP-complete during the next data collection cycle.

In this example scenario, you may see the following issues:

- For all such copies that OpsCenter marks complete, the SLP Status by Image Copy report does not show any value for the Lag Time and the Copy End Time.
- If the last copy entry for an SLP is removed from the EMM worklist (due to EMM behavior), then the SLP Completion Time that is shown in the SLP Status by Image report is inaccurate.

**Note:** The same issues are seen if you cancel an SLP that is in progress (like SLP1). These issues occur because all the copy entries associated with this SLP image are deleted from the EMM worklist.

Known Issues with SLP reports

The following known issues are associated with the SLP reports:

- When there are multiple copies in an SLP and two or more copies share the same destination, then only one bar chart is shown for such copies in the SLP Duplication Progress report.
- The size of image copies for which Import is in a Not Started state, is not considered. Because of this behavior, the SLP Status, SLP Status by SLP, SLP Status by Client reports may display **Completed Copy Size %** as 100% while in reality there may be image copies for which the Import operation is in a Not Started state.
- If the Import is in a Not Started state for some image copies, the SLP Status by Destination report may show two rows for the same storage destination. This data is shown because there is insufficient data for image copies for which Import is in a Not Started state. The additional row is not shown once the Import operation is complete for all image copies.
About Workload Analyzer reports in OpsCenter

This section provides descriptions on the Workload Report Templates available in OpsCenter. The reports are in a graphical format and provide details on the overall past, current, and projected workload of your NetBackup environment including job counts, sizes, throughput, and scheduled job queues.

Workload Analyzer report

The Workload Analyzer is a report that gives information about the activities that are done across a period of seven days. The activities are number of jobs running at a given period of time and the amount of data that is transferred during this period. The report contains 168 data points of analysis in terms of the activities that are done for each hour for a period of seven days.

The report is comprised of four reports that are based on time, data transfer, job queue, and job throughput. Time is the point from when the jobs start, the periods for which the jobs are active, and the point when the jobs end. Job queue is based on the length of time, a job is in queue before the job is initiated. Job size is the amount of data that is moved from the target to the destination depending on the job type. Job size is also based on how much data is broken down and moved in a given hour. Job throughput is based on the data transmission rate.

The Workload Analyzer reports consider only the jobs done for calculating and generating the report. The calculation can result in a difference in data for the current hour and date. For example, a job that started in the past, and is in the queued state for a long time is not considered in the job queue report. It is considered only when it is complete.

See “Workload Analyzer subreports: Job Count, Size, Queue, and Throughput” on page 342.

See “Generating a Workload Analyzer report” on page 349.

Workload Analyzer subreports: Job Count, Size, Queue, and Throughput

The Workload Analyzer reports are based on time, queue, size, and throughput. The following reports are a part of the Workload Analyzer report:

- **Job Count Workload Analyzer**: This report is based on the number of jobs running at a given period of time. The purpose of this report is to display the data that is based on time and load. You can determine the time for the job count on the basis of the start and end time of the job. Data for load is determined based on how many jobs are active during a given period of time. Calculations are done to determine the number of jobs that are active during a given period of time.
For example, the following figure displays the job counts for a given period of time. (A) shows the jobs that start before the time interval and end after the time interval. (B) shows the jobs that start before the time interval and end during the time interval. (C) shows the jobs that start and end during the time interval. (D) shows the jobs that start during the time interval and end after the time interval.

### Job Size Workload Analyzer

This report is based on the amount of data that is transferred during a given period of time. The calculation is based on the total amount of data that is backed up by the jobs divided by the time period. For example, in the following figure there are four jobs that have different durations across a four hour time period. The left-hand side displays the amount of data that's transferred during the four hour time period. The right-hand side of the report displays the start time and end time for each job, amount of data transferred, and duration. Job A is active for a period of four hours, it starts at 1:20 P.M. and ends at 4:20 P.M. During that period the total data that is transferred is 80,000 MB. You can calculate data transfer rate, multiply data transfer rate by the number of minutes during each hour when there is job activity. Job activity in the first hour is 20 minutes, in the second and third hour it is 60 minutes, and fourth hour it is 20 minutes. Jobs B, C, and D follow a similar pattern. Load is the sum of loads of all jobs during that hour. The yellow slot shows maximum activity and the data that is transferred is 115960 KB.
Job Queue Workload Analyzer: This report is based on the period for which jobs are in a queue state before data back up begins. Queue time is calculated through the use of timestamps such as time taken to initiate the job, time taken to start and end the job. Jobs that have a high queue time are identified to reduce scenarios where many jobs with high queue time are initiated at the same time. The queuing is calculated at individual job level and then aggregated to the level where the report is generated.
Job Throughput Workload Analyzer: This report is based on the rate in Mbytes/sec at which the data is transferred. This calculation provides an important indicator to understand the performance. The throughput report is based on cross-hour calculation. The report displays accurate analysis of the data. Compared to the other workload reports, the totals for the rows of this report are averaged.

The Start Write time ensures that the speed is only measured against the time in which, the actual data transfer takes place. This calculation ensures that the queue time is not considered. The queue report calculates the queue time. In the following figure, the throughput is calculated across four jobs that span for a period of three hours. One job belongs to Policy B and three jobs belong to Policy A. The green boxes indicate the time in which the write job occurs.

Workload Analyzer report template options

The Workload Analyzer report template is a pre-fixed 168 hour reporting template. The template makes extensive use of color to display the analyzed data through the heat map technology. You can configure the color range. Report categories that include attributes such as backup server, media server, client, policy, provide a good means to understand the basics of workload and performance. All the reports that comprise the workload analyzer report template are based on time. The following figure is a sample report template.
The highlights of the workload analyzer report template are as follows:

- You can hover the mouse on each cell in the report to get details such as date, time, hour, and actual value of the hour.

- You can configure the range for each color. The color depicts the density of the jobs running at that hour. It also displays the number of minutes of queue time, the amount of data transferred, and the throughput rate. The deeper the color of the cell, the higher is the value in the cell.

- You can use the Report on feature to select entities for which, you require the data. For example, if you select Report on for a master server, the second column in the report displays data for the master server only. The entities include Backup Server, Media Server, Backup Client, Policy, Policy Type, Schedule, Job Type, Job Level, Job Error Code, Exit Status, Job Exit Code, Job Transport Type, Schedule\Level Type, and Storage Unit.

- You can drill down to the next level in the report. The second column is hyper linked and provides the drill-down option. For example, from the master server you can drill down to client. A drill-down report is launched. You can drill down to clients from the media server, policy, policy schedule, schedule, job type, job error code, job status, job level, transport type. Other drill-down options are policy type to policy, job status to job error code, view to next level down the view hierarchy.

- The last row on the report shows the total values of all the rows for the entire time span. The first column shows data for the entire week, whereas the hour column shows data for that particular hour for all entities.

- You can use various filters in the report. The filters include:
## Filter type

<table>
<thead>
<tr>
<th>Filter Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time Filter</td>
<td>Filter on Absolute or Relative time filter</td>
</tr>
<tr>
<td>View</td>
<td>Filter on any view.</td>
</tr>
<tr>
<td>Master Server, media server</td>
<td>Filter on available master servers and media servers.</td>
</tr>
<tr>
<td>Client</td>
<td>Filter on available client.</td>
</tr>
<tr>
<td>Policy</td>
<td>Filter on name and type of policy.</td>
</tr>
<tr>
<td>Schedule</td>
<td>Filter on schedules</td>
</tr>
<tr>
<td>Job</td>
<td>Filter on status, status code, transport type, type, and schedule or level type.</td>
</tr>
<tr>
<td>Storage unit</td>
<td>Filter on the name.</td>
</tr>
<tr>
<td>Workload</td>
<td>Filter on duration threshold and time basis.</td>
</tr>
</tbody>
</table>

- You can use the **Report on** feature for different variables. The variables include **Backup Server, Media Server, Backup Client, Policy, Policy Type, Schedule, Job Type, Job Level, Job Error Code, and Storage Unit**.
- You can drill down on any cell to know the details about the data.

The following drill-down options are available for all the Workload Analyzer reports.
- Master Server to Client
- Media server to Client
- Policy Type to Policy
- Policy to Client
- Policy Schedule to Client
- Schedule to Client
- Job Type to Client
- Job Error Code to Client
- Job Status to Client (when Job Status <> Failure)
- Job Status to Job Error Code (when Job Status = Failure)
- Job Level to Client
- Transport Type to Client
- View to Next level down the view hierarchy

The colors in the report represent different data values, the information is available in the following table.

<table>
<thead>
<tr>
<th>Color range</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Idle</td>
<td>Displays the cells that are gray, which means there are no active jobs assigned.</td>
</tr>
<tr>
<td>1 - 10</td>
<td>Displays value for the data that has the color range between 1 - 10, the light yellow cells represent these values.</td>
</tr>
<tr>
<td>11 - 50</td>
<td>Displays value for the data that has the color range between 11 - 50, the dark yellow cells represent these values.</td>
</tr>
<tr>
<td>51 - 100</td>
<td>Displays value for the data that has the color range between 51 - 100, the orange cells represent these values.</td>
</tr>
<tr>
<td>More than 100</td>
<td>Displays the value for data that has the color range that is greater than 100, the red cells represent these values.</td>
</tr>
</tbody>
</table>

See “Workload Analyzer subreports: Job Count, Size, Queue, and Throughput” on page 342.
Generating a Workload Analyzer report

You can generate the Workload Analyzer report using the Workload Analyzer report template from the reports tree. The report comprises of four reports that are based on time, data transfer, queue time, and throughput speed.

To generate the workload analyzer report

1. In the OpsCenter console, click Reports.

2. On the Reports Template tab, click Create New Report. The reports are also available under the reports tree as shown in the following figure.


4. From the Select Report Template list, select the Workload Analyzer report you want to create and click Next.
5 Select the time frame from the **Relative TimeFrame (beginning at)** or **Absolute TimeFrame (beginning at)** options.

The Timeframe option displays the output for seven days for the previous week or the next week. The Relative Timeframe option also displays data from the date you choose, it can also be from the middle of a week. Absolute Timeframe displays data for a week for the date you select. For example, if you select today’s date, the data that is displayed is for the next week including today’s date. The selection is for a week and there is no end time provided for selection.

<table>
<thead>
<tr>
<th>Time Frame</th>
</tr>
</thead>
<tbody>
<tr>
<td>This report displays data for the 7 days. Specify for which period you want to view the data.</td>
</tr>
<tr>
<td>Relative TimeFrame (beginning at)</td>
</tr>
<tr>
<td>Absolute TimeFrame (beginning at)</td>
</tr>
</tbody>
</table>

6 Select the required filters and click **Next**.

7 View the report and click **Next**.

8 Enter a name and description in the **Report name** and **Description** text boxes. Select the location and click **Save** to save the report.

---

**Note:** Open the saved report. Use the options **Previous Week** and **Next Week** to view data for the previous seven days or next seven days.

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**About exporting and emailing the Workload Analyzer report**

The Workload Analyzer report can be exported in the HTML format. You can set the export location through the **Report Export Location** tab.

The report can be emailed only in the HTML format.

**Note:** When the Workload Analyzer report is emailed for Outlook Express, it does not show the correct alignment of the cells of the report.
Custom reports in OpsCenter Analytics

This chapter includes the following topics:

- Creating a custom report in OpsCenter
- Creating an OpsCenter report using SQL query

Creating a custom report in OpsCenter

In addition to using the reports that come by default with OpsCenter, you can use the Custom Report Wizard to create custom reports that are unique to your installation.

After creating a custom report, you can modify the report, print, save, and email it.

As you work with different report categories, the Report Wizard displays different parameters. Many of the parameters are used for multiple report categories, and they appear in different combinations for each type.

Note: Starting with version 7.7, Symantec NetBackup OpsCenter no longer supports Search & Hold. Therefore, the Indexing, Index Server Name, and Indexing enabled for Schedule columns are deprecated and may not show correct or updated data in the saved custom reports and custom SQL reports.

Symantec recommends that you delete these columns from the saved reports.

You can create a custom report by using the parameters that are available in the Custom Report Wizard.

To create a custom report

1. In the OpsCenter console, click **Reports > Report Templates**.
2. Click **Create New Report**.
3. On the **Select Report Creation Option** page, click **Create a Custom Report** to start the Custom Report Wizard.
4. Select a report category from the **Category** drop-down list:
   - **Agent**: Select this category if you want to know about the configured Agents on the OpsCenter Server.
   - **Backup/Recovery**: Select this category to create reports on jobs, disk pool, logs, image, media, tape drive etc.
The Subcategories appear as per what you select from the Category drop-down list. From the Subcategory drop-down list, select one of the following report subcategories:

The following subcategory appears when you select **Agent** as the main category:

**Agent Status**
Select to view information specific to the Agent. For example, you can create a report that shows the configured Agents on the OpsCenter Server and the Agent status.

The following subcategories appear when you select **Backup/Recovery** as the main category:

**Disk Pool**
Select to view a consolidated report related to disk pool.

**Job/Image/Media/Disk**
Select to view job, image, media, or disk data. The reports based on this subcategory provide a consolidated view of job, image, media, and disk. For example, you can create a custom report that tells the number of images per job type or a tabular report that tells which image is backed up on which media.

With OpsCenter 7.5, you can also view the backups that are taken on the disk.

**Log**
Select to view logs that are generated as a result of backup and recovery activity in NetBackup and Backup Exec.

**Media**
Select to view reports on media like tape media etc.

**Tape Drive**
Select to view reports on tape drives. This subcategory does not show reports related to media servers. The associated filter parameters, such as Tape Drive Device Host or Tape Drive Type appear.

**Scheduled Jobs**
Generate reports on Scheduled Jobs using this category. For example you can create a report that compares the scheduled time and the actual time for scheduled jobs.
6 Select a report format from the following formats in the View Type drop-down list:

- **Distribution**: Display groupings or objects or resources in a pie chart.
- **Ranking**: Display a horizontal bar graph showing all the data for each view level object, from greatest to the least, within the selected time frame.
- **Historical**: Display a stacked (segmented) bar graph with a trendline superimposed over it showing the average upward and downward trends of the data over time.
- **Tabular**: Display data in the form of a table.

7 Click **Next**.

8 In the Select Parameters panel of the Custom Report Wizard, select values for one or more report parameters. The report parameters that appear depend on the report category and the view type that you selected.

   See “Configuring timeframe parameters” on page 358.


   As you select parameters, the Content pane may refresh to display additional selections. For example, when you select a view filter, you are then given a choice of items on which to filter the report display.

9 Click **Next**.

10 In the Modify Display Options panel, define the measurements to be collected for historical, ranking, tabular, and distribution reports. Different display options are displayed for different view types.

   See “About display options” on page 361.

   Click **Next**.

11 In the View Report Data panel, you can view the report that is created as per your selection.

   Click **Next**.

   To return to the Custom Report Wizard and make changes to the report, click **Back**.

12 Save the report. Enter a report name, a description (optional), and location where you want to save the report.

   Click **Save**.
Example 1: You may want to create a custom report based on your specific requirements. For example, you may want to create a daily status report of the clients that are backed up everyday.

This report gives the detailed tabular information of the jobs directory being backed up, its status (if it’s successful, partially successful or failed), Level Type (Incremental, Full, Differential Incremental), the job file count and job size in the datacenter. You can enhance this report by adding more available columns based on the report requirement.

See the procedure to know how you can create a daily status report of the clients that are backed up everyday.

To create a daily status report of the clients that are backed up everyday

1. In the OpsCenter console, click Reports.
3. On the Report Wizard, select the Create a custom report option and click Next.
5. Select the Report View type as Tabular.
   Click Next.
6. Select the appropriate timeframe for which you want to view the data.
7. Select the Job filter. Select the Column as Backup Job data type, Operator as =, and Value as Yes. Click Add.
8. Click Next.
10. Select Available columns from the list that appears:
    - Backup Job File Count
    - Backup Job Size
    - Job Directory
    - Job End Time
    - Job Start Time
    - Job Status
    - Job Status Code
Custom reports in OpsCenter Analytics
Creating a custom report in OpsCenter

- Job Type
- Master Server
- Schedule Name
- Schedule/Level Type

Click Add.

11 Click Next to run the report.

Example 2: You may want to create a report that examines the number of tapes in each status category and its percentage.

To report on the distribution of tape status in your environment
1 In the OpsCenter console, click Reports.
3 On the Report Wizard, select the Create a custom report option and click Next.
4 Select the Report Category as Backup/Recovery and the Subcategory as Media.
5 Select the Report View type as Distribution.
   Click Next.
6 Select the appropriate timeframe for which you want to view the data. You can also select No Time Basis.
7 Optionally, select any filters based on your requirement.
   Click Next.
8 In the Distribution Chart Properties section, make the following selections:

   Chart Type       Pie Chart
   Report On        Media History Status
   Report Data      Media ID
                    Count

9 Click Next.

Example 3: You may want to create a custom tabular report that shows the following information:

- Know what jobs were successful in the past week for a specific master server
Show the amount of time the backup took
Show how large the backup was

To create a report showing successful backup job details for a master server

1. In the OpsCenter console, click Reports.
3. On the Report Wizard, select the Create a custom report option and click Next.
5. Select the Report View type as Tabular.
6. Change Relative Time Frame to Previous 1 Week
7. Under Filters, select Job. In the Column area, select Job Type, select the = Operator and choose a value of Backup.
   Click Add.
8. Back under the Column heading, select Job Status leave the Operator at “=” and choose Successful as the value
   Click Add.
9. Click Next.
10. Select the Time Basis as Job Start Time
11. You may change the Display Unit or Time Duration. For example if the master server takes smaller backups, then you may change the Display Unit to MB.
12. From the Available Columns list, select the following:
   - Backup Job Size
   - Client Name
   - Job Duration
   Click Add to move them under the Selected Columns area.
13. In the Selected Column area, perform the following operations for each of the rows:
   - Click the check box next to Client Name on the right and click Move Up to make it the first row.
   - On the Job Duration row, change Operation to Total.
On the Job Size row, change Sort Order to **Descending** and Operation to **Total**.

14. Click **Next**.

**About Custom Report Wizard parameters**

The Custom Report Wizard displays a set of parameters that varies depending on the report type. The following topics describe all the available parameters:

- Define Time frame parameters
  See “**Configuring timeframe parameters**” on page 358.

- About display options
  See “**About display options**” on page 361.

- Report conditions
  See “**Defining report conditions**” on page 365.

- Filter parameters
  See “**Selecting and using filter parameters**” on page 360.

**Configuring timeframe parameters**

You use the Time Frame parameters to define the report’s overall time frame and the intervals for which data is reported.

You can specify absolute or relative time frame for a report.

You can select the following timeframe parameters:

- **Relative Timeframe**
  Select **Previous** or **Next** from the drop-down list (wherever applicable), and then specify the number of hours, days, weeks, months, quarters, or years to define the period. The report displays data collected within the specified time period, for example, data of the previous 3 months.

  The Relative Timeframe is especially useful for reports that you plan to generate on a regular basis. Such reports always show data collected over the most recent time interval.
This applies only to Relative time frames. In Start from the beginning of *<selected unit>* the *<selected unit>* may stand for Hours, Days, Weeks, Months, Quarters, or Years depending on what unit you select as a Relative Timeframe.

If you specify a relative timeframe and check **Start from the beginning of <selected unit>**, the Relative timeframe is calculated starting from the first day for week, month, quarter, or year selection, from 12 A.M. for day selection, and from the earliest whole number (no minutes or seconds) for hour selection. Do not select the **Start from the beginning of <unit>** check box if you want to view data for the entire period specified in Relative Timeframe.

**Examples:**

- **The current date is June 13, 2010.** If you select the Relative Timeframe as Previous 1 Month and do not select the **Start from the beginning of Month** check box, the report shows data from May 14, 2010 to June 13, 2010. However if you select the **Start from the beginning of Month** check box, the report shows data from June 1, 2010 to June 13, 2010.

- **The current date and time is September 13, 10:30 PM.** If you select the Relative Timeframe as Previous 2 Days and do not select the **Start from the beginning of Days** check box, the report shows data from September 11, 10:30 P.M. to September 13, 10:30 P.M. However if you select the **Start from the beginning of Days** check box, the report shows data from September 12, 12 A.M. to September 13, 10:30 P.M.

- **The current time is 4:25 P.M.** If you select the Relative Timeframe as Previous 2 Hours and do not select the **Start from the beginning of Hour** check box, the report shows data from 2:25 P.M. to 4:25 P.M. However if you select the **Start from the beginning of Hours** check box, the report shows data from 3 P.M. to 4:25 P.M.

  **Note:** If you specify relative time frame and check **Start from the beginning of <selected unit>**, the report is configured to display data collected over the interval ending at the current date. This is effectively equivalent to specifying an absolute time frame; the report’s contents remain static whenever you display it.

**Absolute Timeframe**

Define the beginning and end of the time interval to be covered by the report. When you enter absolute dates, the report’s contents remain static whenever you display it.
Ignore From Date  This applies only to Absolute timeframes. Check this option to view all the data on and before the To date that you enter in the Absolute timeframe.

Example: Suppose you specify an absolute timeframe: From March 1, 2004, 12:00 A.M. to April 30, 2004, 12:00 A.M. The report displays data from the time period between the start and end dates. Now if you check Ignore From Date, the report ignores the From Date and displays all data after April 30, 2004, 12:00 A.M.

Ignore To Date  This applies only to Absolute timeframes. Check this option to view all data on and after the From date that you enter in the Absolute timeframe.

Example: Suppose you specify an absolute timeframe: From March 1, 2004, 12:00 A.M. to April 30, 2004, 12:00 A.M. The report displays data from the time period between the start and end dates. Now if you check Ignore To Date, the report ignores the To Date and displays all data on and after March 1, 2004, 12:00 A.M.

No Time Basis  This signifies that the data shown should not be grouped with time. The report includes all the data in the OpsCenter database irrespective of time. The timeframe grouping is not applicable.

Day Window  Day Window is applicable when you specify an Absolute or Relative timeframe. From the Day Window, you can specify the time interval that constitutes one day. Select values from the From and To drop-down lists.

Example: 6:00 PM to 6:00 AM
Example: 12:00 AM (midnight) to 12:00 PM (noon)

Report Time Frame Grouping  This option appears only when you select a Historical view type.

Select the time interval by which you want to group the records. For example, if you selected 1 month as the Report Time Frame and 10 days as the Group By interval, the report shows records in three chunks of data grouped by 10 days.

Selecting and using filter parameters

You can use filter parameters to obtain additional filtering capability for the report that you want to display. For example depending on the category or subcategory that you select, you may filter on the following:

- Client Operating System
- Client is Active
Policy Active: Select Yes to view policies that are active. Select No to view policies that are not active.

Media is On Hold column has been added under the Media filter.

Image is on hold and Image Copy is on hold columns have been added under the Image filter.

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**Note:** Starting with version 7.7, Symantec NetBackup OpsCenter no longer supports Search & Hold. Therefore, the Indexing, Index Server Name, and Indexing enabled for Schedule columns are deprecated and may not show correct or updated data in the saved custom reports and custom SQL reports.

Symantec recommends that you delete these columns from the saved reports.

- Index Server Name, Metadata Indexing Enabled have been added for the Policy filter.
- Indexing enabled for schedule column has been added under the Schedule filter.

To specify additional filtering criteria

1. On the Custom Reports Wizard, select a report category, subcategory and view type. Click Next.

2. On the Select Parameters panel, the respective filters appear in the Filters section.

   The list of filters that appear depend on the report category and view type that you select.

3. Click the filter that you want to use, and then specify one or more values using the fields provided.

**About display options**

Use the Modify Display Options panel to define the measurements to be collected for historical, ranking, tabular, and distribution reports. Different display options are displayed for different view types.

**About Historical view display options**

The following display options are available for historical reports. The following parameters are displayed:
| **Report On** | Define the report’s scope using the drop-down list. This field denotes the entity on which grouping is required. For example, when you select the Report On parameter as Client, the Y-axis report data is grouped per client. 

Example: Job Status, Image type etc. |
| **Description** | Description to display along with the report. If you leave this field blank, no description is provided by default. |
| **X-Axis** |  |
| **Display Name** | For Historical reports, a label for the horizontal (X) axis. If you leave this field blank, a default label is provided. |
| **Report Data** | The metric used to define the graph’s horizontal (X) axis. 

**Examples:** Attempt End Time, Client Name |

If you choose a Report Data parameter like Client Name which is not time-based, another parameter called Time Basis appears. |
| **Time Basis** | This parameter appears if you select a Report Data parameter like Client Name that is not related to time. Time Basis resembles the time attribute on which time filter is applied as criteria. This attribute is not shown if you select No Time Basis while configuring the timeframe in the Wizard. Time Basis is the metric used for assigning a time to each item in the report, if not specified by the Report Data parameter. 

Example: The start time or the end time for each backup job. |
| **Y1 or Y2 -Axis** |  |
| **Display Name** | For Historical reports, a label for the horizontal (Y1 or Y2) axis. If you leave this field blank, a default label is provided. |
| **Report Data** | For Historical reports, the metric used to define the graph’s vertical (Y1 or Y2) axis. 

**Examples:** Job Size, Status Code etc. |
| **Display Unit** | For numeric data types, such as Job Size, the units in which to display the data. This is applicable only for size-related attributes like Job size, image size, fragment size etc. 

**Examples:** MB, GB. |
| **Chart Type** | The report format. Additional formats may be available depending on the values specified in Report Data. |
Use the Trendline and Forecast parameters to project future trends by averaging actual data from the recent past. Check **Show forecast with forecast periods**, and use the drop-down list to specify a number of forecast periods (intervals). This displays a forecast line extending to future dates, using linear regression to predict values based on the trend of data within the report’s time frame.

Example: 12 shows forecast data for the next 12 months (if the Time Frame Group By is 1 month).

The following Web site helps in calculating the forecast:


Use the Trendline parameter to indicate a general pattern or direction by averaging actual data from the recent past. Check **Show trendline with moving average**, and use the drop-down list to specify the number of data points to factor into the average. At each interval on the graph, the trendline shows a moving average of the most recent data points.

Example: 3 displays a trendline that, at each interval, shows the average of the current data point and the two previous data points.

For Historical reports, select the **Target Performance** checkbox and then either Y1 or Y2-Axis radio button. Type a value in the text box to include a target level or threshold in the report display. The target value appears as a horizontal line, useful for making quick visual comparisons between the target value and the actual values being reported.

**About Ranking chart display options**

The following display options are available for Ranking reports. The following parameters are displayed:

**Chart Type**
Select **Bar Chart** from the drop-down list.

**Report On**
Select the entity that you want to see in the report like Image Type.

**Display**
Select how many rankings you want to see and how you want them arranged (in Ascending or descending order).

**Y-Axis Display Name**
Enter a label for the Y-Axis.

**Report Data**
This is the data that should be plotted on the Y-axis.
Time Basis  Metric used for assigning a time to each item in the report, if not specified by the Report Data parameter.  
   Example: The start time or the end time for each backup job.
Description  Description to display along with the report. If you leave this field blank, no description is provided by default.

About Distribution chart display options
The following display options are available for Distribution reports:

Chart Type  Select Pie Chart from the drop-down list.
Report On  Select the entity that you want to see in the report like Attempt Status.
Report Data  This is the data that should be plotted on the pie chart.
Time Basis  Metric used for assigning a time to each item in the report, if not specified by the Report Data parameter.
   Example: The start time or the end time for each backup job.
Description  Description to display along with the report. If you leave this field blank, no description is provided by default.

About Tabular display options
Use the Modify Display Options panel to establish the column titles for a tabular report.

The following display options appear for a tabular report:

Time Basis  From the Time Basis drop-down list, select a time basis like Job End Time or Job Start Time.
   Time Basis is used to assign a time to each item in the report.
Description  Enter a description for the report. This is optional.
Display Unit  From the Display Unit drop-down list, select one of the following units:
   • B
   • KB
   • MB
   • GB
   • TB
From the Time Duration drop-down list, select one of the following time intervals:
- Seconds
- Minutes
- Hours
- Days
- Weeks
- Months
- Years

From the Available Columns list, select one or more values for table columns, for example, Client Name, Status, Job Group ID. Click Add.

The columns selected from the Available Columns list are added to the Selected Columns, which you can rearrange as you want them to be displayed on reports.

The columns selected from the Available Columns list are added to the Selected Columns, which you can rearrange as you want them to be displayed on reports using the following controls:
- Sort order
- Operation
- Move Up
- Move Down
- Remove

All the columns from the Selected Columns list are displayed in the report.

From the Rows Per Page drop-down list, select number of rows of records that you want to display on one report page.

When you select this option, all duplicate rows are replaced by a single row in the report and only distinct records are shown. Duplicate rows generally appear if the rows do not have a unique ID.

Defining report conditions
In the Conditions section of the Modify Display Options panel, specify exception conditions for notification. Exception conditions represent potential problems, for example an unusually high percentage of backup job failures or an unusually low quantity of data being backed up. Each condition is defined by assigning threshold values for a particular metric, such as Success Rate or Total Backup Job Size. You can set a low threshold, a high threshold, or both. The conditions are applicable only for numeric values like Job Size (and not for values like Job Type, Master
Server). You can apply condition for attributes like Job type or Master server provided you have applied a function like Count, Distinct Count etc. on it.

After you specify your conditions, you can create a report schedule so that when a condition is true, an email notification is sent or the report is exported, or both. The conditions are applied only when a report is scheduled.

Creating an OpsCenter report using SQL query

This section provides the procedure to create a report using SQL query.

Only Symantec NetBackup OpsCenter Analytics users can access the custom SQL query function.

See “About custom SQL query in OpsCenter Analytics” on page 13.

Note: OpsCenter provides detailed information about the OpsCenter database schema that you may want to know before running any SQL query to generate reports. On the Report Wizard > SQL Query page, click the following link to open the PDF that contains all relevant information: Refer to the OpsCenter Database Schema Document

Note: OpsCenter Reporter and Restore Operator do not have access to the custom SQL query option.

To create a report using SQL query

1. In the OpsCenter console, click Reports.
3. On the Report Wizard, select the Create a report using SQL Query option and click Next.
4 On the SQL Query page, enter an SQL query to view the required data.

For example, to view all NetBackup master servers that monitored and managed by OpsCenter, enter the following SQL query: select * from domain_masterserver

5 Click Next.

You can view all master server details that are stored in the domain_masterserver database table.

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**Note:** When you run a stored procedure that has multiple result sets, then output of only the first result set is displayed on the GUI. The output of other result sets is not shown on the GUI.

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Note that Opscenter stores most of the time fields in Gregorian. If you want to see the value for a given Gregorian date field in a timezone that is configured on the OpsCenter host, you should use \texttt{utcbiginttonomtime(gregorianDatefield)} function, where \texttt{gregorianDatefield} is any time value in gregorian. The function \texttt{utcbiginttonomtime} function cannot consider DST time offset. Hence it ignores any DST offset while showing the date and time value.

You must not use \texttt{utcbiginttoutctime()} function as it does not show time in a time zone that is configured on your OpsCenter host.
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