Asigra Cloud Backup v14.2 DS-NOC User Guide

December 2023



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4711 Yonge St, Suite 10098, North York, Ontario, Canada M2N 6K8

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Document history

Version	Date	Summary
1.0	August 31, 2020	Released for General Availability.
1.1	July 9, 2021	When creating a custom scheduled report in the DS-NOC, users can now select a dynamic date range (last 24 hours, last 7 days, or last 30 days) for the Connection Log start session time (log_start_session_time) field. Requires DS-NOC v14.2.0.2 or later.
1.2	February 1, 2022	The version of the log4j component used by DS-NOC has been updated to the latest version to ensure our software is not flagged by any scanning tools. Requires DS-NOC v14.2.0.4 or later.
1.3	August 29, 2022	Updated DS-NOC to address hardening changes implemented by Microsoft in DCOM (KB5004442) that were required for CVE-2021-26414. Requires DS-NOC 14.2.0.5 or later.
		Updated third-party components used by DS-NOC to the latest version to improve performance and security. Requires DS-NOC v14.2.0.5 or later.
1.4	April 10, 2023	Updated third-party components used by DS-NOC to address potential security vulnerabilities. Requires DS-NOC 14.2.0.6 or later.
1.5	December 4, 2023	Users can no longer manage Microsoft 365 and Google Workspace backups from DS-NOC. We strongly recommend using Management Console to manage Microsoft 365 backups and DS-User to manage Google Workspace backups. Requires DS-NOC 14.2.0.7 or later.
		DS-NOC now supports backup set names with up to 255 characters.Requires DS-NOC 14.2.0.7 or later.
		DS-NOC now supports the Transport Layer Security (TLS) v1.3 encryption protocol. Requires DS-NOC 14.2.0.7 or later.
		Updated third-party components used by DS-NOC to address potential security vulnerabilities. Requires DS-NOC 14.2.0.7 or later.

1 Getting started

The DS-NOC (Network Operation Center) is an optional component that allows you to configure and monitor DS-License Servers, DS-Systems, DS-Clients, BLM Archivers, and DS-Billing servers remotely through a web-based interface.

DS-NOC can be installed on any platform that supports PostgreSQL, Java Runtime Environment (JRE), and Apache Tomcat.

DS-NOC is designed for three types of users: service providers, sales groups, and end users.

1.1 Logging on to DS-NOC

- 1. Connect to the DS-NOC using a web browser and click Login.
- 2. On the Login page, enter your Username, Password, and then click Login.
- 3. On the **Dashboard** page, click **My Profile** to view the current profile. On this page, you can Edit Profile, Modify Password, and reset forgotten passwords.

1.2 Configuring your user profile

To configure your user profile:

- 1. On the Dashboard page, click My Profile.
- 2. On the My Profile page, click Edit Profile.
- 3. On the **Edit Profile** page, do the following:
 - a) In the User Name section, edit the Full Name.
 - b) In the **Address** section, edit the required fields for contact information and select the required time zone.
 - c) In the **DS-Client Notification** section, select the parameters for sending email notifications.
 - d) In the **Advanced** section, select the required option for *Account#*. You can configure an editable *Customer Account ID number*.
 - Default: Automatically assign the Account ID by combining part of the Organization Name (entered in the "New DS-Client - Address" page) with a number.
 - **Use template**: Define a template using any combination of letters, numbers, and at least one 'wildcard' character representing a variable.
 - Custom: Enter the exact customer account ID.
- 4. Click **Submit** to update your profile.

1.3 Changing your password

A DS-NOC administrator or a user with permissions to edit users or groups can also change the password.

The password for a user is set, when the user registers with the DS-NOC (Registration) or when you click **Add User** on the *User Management* page (**Configurations** > **Setup Permissions** > **Users**).

On the *User Management* page, a DS-NOC Administrator can select the option **User cannot change password** to enable this feature.

To change your password:

- 1. On the dashboard page, click **My Profile**, and then click **Change Password**.
- 2. On the **Change Password** page, do the following:
 - In the **Old Password** box, type your current password.
 - In the **New Password** box, type your new password.
 - In the **Confirm Password** box, re-type your new password.
- 3. Click Submit.

1.4 Configuring password options

To reset a forgotten password:

- 1. On the DS-NOC login page, click the **Forgot your password?** link.
- 2. On the **Reset Your Password** page, enter your user account name in the corresponding field, and then click **Next**.
- 3. Provide the correct answer to your Secret Question (if it has been configured on the *My Profile* page *Forgotten Password Options*) and click **Finish**.

Your password is reset and the new password is sent to the email configured on the *My Profile* page.

1.5 Downloading installation packages

The upload directory is configured by the DS-NOC Administrator (see: Section 3.2.1, "Configuring the upload settings") and individual items are placed there from **Dashboard > Configurations > DS-NOC Configuration > Upload Software** (see: Section 3.2, "Configuring the upload and download settings").

To access the Software Download page:

- Connect to the DS-NOC with your web browser. Click **Download** (when no login is required)
 - If the Download button does not appear, you must login to the DS-NOC to access it. (This is configured by the DS-NOC Administrator from Configurations > DS-NOC Configuration > Download Options.)
- Create a new account / DS-Client. The **Software Download** page appears after you finish creating a DS-Client in the DS-Client Management section of the DS-NOC.
- 3. On the **Software Download** page click the download icon beside the installation package that you want to download.

Once the download is complete, follow the instructions in the corresponding DS-Client Installation Guide to install the required package.

1.6 Using the DS-NOC API

This section describes how to use the DS-NOC API, which requires the **nocapi.wsdl** file available on the installation DVD in the \Software\DS-NOC folder.

You can use the DS-NOC API to connect to the DS-NOC and perform limited system management tasks on DS-Systems, BLM Archivers, and DS-Billing servers that are registered with the DS-NOC.

NOTE: The DS-NOC version must be compatible with the version of DS-System that it works with.

You can integrate the DS-NOC into an existing website or application to allow for the development of a custom interface to manage the DS-Systems registered with the DS-NOC and allow for a large number of repetitive operations to be executed using a script.

The API is designed as a web service on the DS-NOC side. Any development tool that supports web services can be used to connect and use the DS-NOC API. The DS-NOC API is based on the SOAP protocol.

IMPORTANT: If you are using the DS-NOC on Linux and integrating with third-party tools that require PHP to communicate with the DS-NOC API, you must install the php-soap rpm package for the operating system hosting the DS-NOC.

Once the DS-NOC receives a request, it authenticates the user credentials and connects to the DS-System, BLM Archiver, or DS-Billing server to perform the requested action. The DS-NOC API returns the result from the DS-System in case of success or throws an exception in case of failure.

To use the DS-NOC API:

- 1. Install the DS-NOC and configure it properly.
- 2. Create users that the application will use to connect to the DS-NOC and assign them the correct permissions to have rights to use the DS-NOC API.
- 3. Use the following URL to obtain the web service description file:

```
http://<server_name>[:<port>]/noc/services/
PortalApiService?wsdl
```

where <server_name> and <port> specify the DNS name or IP address and port number of your DS-NOC server.

- 4. Convert the **nocapi.wsdl** file with your developer tools to a source code that you can use.
- 5. Once the conversion is finished, the DS-NOC API functions can be used from within your application.

NOTE: The DS-NOC API documentation is available in JavaDoc format in the \Documentation\API\DS-NOC\ folder on the DVD. To view the documentation, open the index.html file in a web browser.

1.7 Logging out of DS-NOC

To logout of DS-NOC, click **Logout** on the DS-NOC dashboard page.

2 Using the dashboard

The main DS-NOC web page is called the **Dashboard**. Once you have configured the DS-NOC to monitor Cloud Backup software, the dashboard gives a quick summary of the status of those monitored objects.

If you have sufficient permissions, you can also view the dashboard tabs, which present information from the various products configured for monitoring by this DS-NOC server.

- The tabs appear depending on permissions and if the DS-NOC is setup to monitor objects that generate corresponding data.
- In general, the information displayed in these dashboard tabs is read only.
- To view the Recovery Tracker (RLM related pages and information), you must be logged in with a user account that:
 - has Recovery Tracker enabled (Dashboard > Configurations > Setup Permissions > Users: Advanced tab).
 - has at least one of the permissions to Browse DS-System, BLM Data Access, or DS-License Server Status.
- If the tab contains a **Select by** section, you can change the information that is
 displayed on the tab by selecting from the available drop-down boxes and then
 clicking **Show**.

2.1 Viewing DS-License Server CLM information

This displays information (read only) from DS-License Servers using the Capacity License Model (CLM).

To display the DS-License Server Status page, click **Details.** For more information, see Section 7.5, "Viewing the status of a DS-License Server".

2.2 Viewing DS-License Server RLM information

This shows information (read only) from DS-License Servers using the Recovery License Model (RLM).

 To display the DS-License Server Status page, click **Details**. For more information, see Section 7.5, "Viewing the status of a DS-License Server".

2.3 Viewing backup activities from DS-Systems

This tab displays the latest backup activities from DS-Systems monitored by this DS-NOC and this information is read only.

2.4 Viewing RLM Recovery Tracker information

This tab displays *Recovery Tracker* information (read only) from each DS-License Server (RLM) that is monitored by this DS-NOC or from a DS-System that is licensed from the corresponding license server.

- In the section Select by, you can choose what to view with the drop-down lists.
- At the License Server level, you can view Recovery Tracker information for the entire DS-License Server (RLM).
- At the DS-System level, you can view Recovery Tracker information at each level, down to the DS-Client level.

2.5 Viewing RLM Recovery Details information

This tab displays *Recovery Tracker* information (read only) from each DS-License Server (RLM) that is monitored by this DS-NOC or from a DS-System that is licensed from the corresponding license server.

- In the section Select by, you can choose what to view with the drop-down lists.
- This page will display information at the same level you were viewing in the Viewing RLM Recovery Tracker information.
- At the License Server level, you can view Recovery Tracker information for the entire DS-License Server (RLM).
- At the DS-System level, you can view Recovery Tracker information at each level, down to the DS-Client level.

2.6 Viewing RLM DR Drill information

This tab displays *Disaster Recovery (DR) Drill* information from each DS-License Server (RLM) that is monitored by this DS-NOC, or from a BLM Archiver or DS-System that is licensed from the corresponding license server.

- At the License Server level, you can view Recovery Tracker information about all DR Drills for the selected DS-License Server (RLM).
- At the License Server level, you can view DR Drill information for the entire DS-License Server (RLM).
- At the DS-System and BLM Archiver levels, you can view DR Drill information for the corresponding product.
- Click New DR Drill Request to open a popup window and request a DR Drill for a backup on the corresponding DS-System or BLM Archiver.

2.7 Viewing RLM Waiver information

This tab displays recovery event *Waiver* information from each DS-License Server (RLM) that is monitored by this DS-NOC and is read only.

2.8 Viewing Comparison information

This tab displays information and trends about customer environment and behavior with respect to DS-Client installations, general customer profiles and restore activities.

- **Stats**: Click to save a .CSV file containing the data from this page in table format (non-graphical).
- There are two views of this tab: one for the service provider and another for end-customer DS-Client users.

The information displayed in this tab is gathered from the Asigra Master License Server, which compiles the data from all the DS-License Server RLM installations it licenses. This allows Cloud Backup users to compare themselves to their peers (companies of the same size / industry) or to the best performers in their industry.

The MSP/Administrator view of this tab includes the following charts and information:

- Recovery rate comparison for the last 12 months.
- Recovery usage over time for the last 12 months.
- Reasons for recovery for the last 12 months.
- · Breakdown by industry verticals.
- · Client and industry recovery trends.

The end-user/reseller view will include the following charts and information (only available if the user has been granted the DS-System Level Permission > DS-Client > DS-System: "Browse DS-System"):

- Recovery rate comparison for the last 12 months.
- Recovery usage over time for the last 12 months.
- Reasons for recovery for the last 12 months.
- Source of recoveries for the last 12 months.
- Goal setting area.

Using the dashboard

Viewing Comparison information

3 Configuring the DS-NOC settings

This section contains instructions for DS-NOC Administration. You need to login to the DS-NOC as a member of the Administrators Group or a user with equivalent permissions.

3.1 Configuring the sessions and display settings

This section describes how you can configure the sessions and display settings. To configure these settings, login as DS-NOC Administrator or user with equivalent permissions.

3.1.1 Configuring the session settings

On this page, you can configure various settings for a session.

- 1. On the Configurations menu, click DS-NOC Configuration.
- 2. On the **DS-NOC Configuration** page, under **Session and Display Settings**, click **Session Settings**.
- 3. Select the time (in minutes) after which a login session to the DS-NOC will timeout if no activity has occurred. The default time is 30 minutes.
- 4. Click Save Changes.

3.1.2 Configuring the display settings

On this page, you can configure the display settings.

- 1. On the Configurations menu, click DS-NOC Configuration.
- 2. On the **DS-NOC Configuration** page, under **Session and Display Settings**, click **Display Settings**.
- On the **Display Settings** page, select the maximum number of rows per page for various DS-NOC pages, the maximum number of logs per query, and the maximum number of page links.
- 4. Click Save Changes.

3.1.3 Configuring the branding settings

The branding settings is an optional feature. By default, the DS-NOC has Asigra's branding and Look & Feel.

- 1. On the Configurations menu, click DS-NOC Configuration.
- 2. On the **DS-NOC Configuration** page, under **Session and Display Settings**, click **Branding Settings**.
- 3. On the **Brand Settings** page, you can do the following:
 - a) Current Logo Select **Default Logo** to proceed without changes or select **Custom Logo** to upload a new logo.
 - b) Alternative Text: Enter text that will be used if the logo cannot be displayed in a browser or when the mouse pointer is hovered over the logo.
 - c) Menu position: Select the default position of the menu.
 - d) Report address: Enter the company address to be displayed in the reports.
 - e) Report Logo: Select the logo to be displayed on reports generated from DS-NOC.
 - f) CSS in use: Select from three options to apply a CSS.
 - Default Theme
 - Customize Default CSS: You can select a theme, browse and upload a background image and change the design colors.
 - Custom CSS File: Browse and upload a custom CSS file.
- 4. Click Save Changes.

3.1.4 Configuring the PDF document settings

On this page, you can select the font that will be used when you generate PDF files of logs and reports.

- 1. On the **Configurations** menu, click **DS-NOC Configuration**.
- 2. On the **DS-NOC Configuration** page, under **Session and Display Settings**, click **PDF Document Settings**.
- 3. On the **PDF Document Settings** page, select **Default Font** or select **Custom Font** to browse and select a particular font.
- 4. Click Save changes.

3.1.5 Configuring the security settings

On this page you can select the options that control the behavior of DS-NOC pages.

- 1. On the Configurations menu, click DS-NOC Configuration.
- 2. On the **DS-NOC Configuration** page, under **Session and Display Settings**, click **Security Options**.
- 3. To prevent the DS-NOC from displaying similar entries that were previously entered, select the **Turn off auto-complete** check box.
- 4. To protect your data from being accidentally deleted, select the **Require** password when deleting data check box.
 - To enforce the requirement of a password to configure account and DS-Client management options, select the Require password for all Account/DS-Client management options check box.
- 5. Click Save Changes.

3.1.6 Configuring the dashboard settings

On this page, you can configure display options for the Dashboard.

- 1. On the **Configurations** menu, click **DS-NOC Configuration**.
- 2. On the **DS-NOC Configuration** page, under **Session and Display Settings**, click **Dashboard Settings**.
- 3. On the **Dashboard Settings** page, select a filter, and then click **Save Changes.**
 - Backup Log Filter: Select the filters that will be applied to the backup log displayed.
 - Backup Log Period: Select the time-frame (in hours) for which the backup log will be displayed on the dashboard.
 - Backup Log Columns: Select the columns of the backup log that will be displayed on the dashboard.
- 4. Click Save changes.

3.1.7 Configuring the auto sign on settings

An Auto sign on ticket is a 32-character text string that is generated on demand by the DS-NOC. The API requester can then map this string to a URL that skips the login page and allows immediate access to the DS-NOC.

- 1. On the **Configurations** menu, click **DS-NOC Configuration**.
- 2. On the **DS-NOC Configuration** page, under **Session and Display Settings**, click **Auto Sign On Settings**.
- 3. On the Auto Sign On Settings page, you can do the following:
 - Ticket Expires: This is the time (in seconds) before the generated ticket expires.
 - Options: Select to allow users belonging to the administrator's group to use the auto sign on ticket.

3.2 Configuring the upload and download settings

This section describes how you can configure the setting for uploading or downloading software using DS-NOC.

3.2.1 Configuring the upload settings

On this page, you can configure software upload settings.

- 1. On the Configurations menu, click DS-NOC Configuration.
- 2. On the **DS-NOC Configuration** page, under **Upload and Download Settings**, click **Upload Options**.
- 3. On the **Upload Options** page, enter the path for the **Upload Directory**, where DS-NOC will save uploaded software, branding, DS-Client LAN Discovery reports, and the PDF font file.
- 4. Click Save Changes.

3.2.2 Configuring the download settings

On this page, you can configure software download settings.

- 1. On the **Configurations** menu, click **DS-NOC Configuration**.
- 2. On the **DS-NOC Configuration** page, under **Upload and Download Settings**, click **Download Options**.
- 3. On the **Download Options** page, select **Require login to download software** if you do not want a user to download software without logging in.
- 4. Click Save Changes.

3.2.3 Uploading software

This section describes how you can upload DS-Client and DS-Tools installation packages to the DS-NOC server or remove software. You can also upload additional software.

- 1. On the Configurations menu, click DS-NOC Configuration.
- 2. On the **DS-NOC Configuration** page, under **Upload and Download Settings**, click **Upload Software**.
- 3. To upload software, do the following:
 - a) Click the associated icon in the Upload column.
 - b) Select the required file, and then click **Upload**.
 - c) In the upload confirmation screen, click Close.
- 4. To delete software, do the following:
 - a) Click the associated icon in the **Delete** column.
 - b) In the **Delete Software** pop-up screen, click **Yes** to confirm delete.
- 5. To upload additional software, do the following:
 - a) Under Additional Software, click Add.
 - b) Select the required file, and then click **Upload**.
- 6. To add a new section, do the following:
 - a) On the **Upload Software** page, click **New File Section**.
 - b) In the **New File Section** pop-up screen, enter the section name, and then click **OK**.

NOTE: To add software to a section, click **Add** beside the section, select the required software, and then click **Upload**.

- 7. To edit an existing section, do the following:
 - a) On the Upload Software page, click Edit File Section.
 - b) In the **Edit File Section** pop-up screen, select the file section to edit, enter a new section name, and then click **OK**.
- 8. To delete an existing section, do the following:
 - a) On the Upload Software page, click Delete Section.
 - b) In the **Delete File Section** pop-up screen, select a file section, and then click **Delete**.

NOTE: When you delete a section, all uploaded files under that section will also be deleted.

- 9. To add software to a section, do the following:
 - a) Click Add beside the section.
 - b) In the **Upload Software** pop-up screen, select the required software and click **Upload**.

3.3 Configuring the DS-NOC Access settings

This section describes how you can configure how many failed login attempts are permitted before an account is locked out, the account password policy, columns to be displayed in user reports, and forgotten password options.

3.3.1 Configuring the account settings

- 1. On the Configurations menu, click DS-NOC Configuration.
- On the DS-NOC Configuration page, under DS-NOC Access Settings, click Account Settings.
- Beside Account Lockout Policy, select Enable Account Lockout Policy to activate this option, and then specify the parameters for locking out an account after a specific number of unsuccessful login attempts. The account lockout is based on remote IP address.
- 4. Beside **Account Password Policy**, select the criteria for setting the complexity of passwords for new user accounts. Existing user accounts will continue to maintain their old passwords. If an existing user changes the password, the new password will have to satisfy the set criteria.
- 5. Beside **User Report Options**, select the information that will be displayed in reports generated by DS-NOC.

- Beside Forgotten Password Options, specify whether you want to enable forgotten password options.
- 7. To update the DS-NOC settings, click Save Changes.

3.3.2 Configuring the email settings

This section describes how you can configure the email settings for DS-NOC.

NOTE: These email settings are valid only when accessing the DS-NOC through the main path (http://server_name/noc/).

- 1. On the Configurations menu, click DS-NOC Configuration.
- On the DS-NOC Configuration page, under DS-NOC Access Settings, click E-Mail Settings.
- 3. On the **E-Mail Settings** page, do the following:
 - a) In the **SMTP Host** box, enter the IP address of the SMTP Host. This is the server that the DS-NOC will use to send emails.
 - b) In the **SMTP Port** box, enter the port number of the SMTP host.
 - To send emails using a secure connection (SSL/TLS), select SMTP server requires a secure connection (SSL/TLS).
 - To use the StartTLS protocol to inform the email server that the email client wants to upgrade from an insecure connection to a secure one using TLS or SSL, select **Enable StartTLS**. The default port is 587.
 - c) If the SMTP server requires authentication, beside SMTP Authentication, select This SMTP server requires authentication, and then enter the required credentials.
 - d) In the **E-Mail** box, enter the email address of the service provider to which all confirmation messages for DS-NOC Account creation and New DS-Client creation will be sent.
 - e) In the **E-Mail Signature** box, enter a signature that will be automatically applied apply to all emails sent by the DS-NOC.
 - f) To save the SMTP debug logs in the web server logs, beside **SMTP Debug**, select **Save SMTP debug logs in Web Server logs**.
 - g) To send an email when a new user has registered, select the recipients. To customize the email, click **Customize**, make the required changes, and then click **Submit**.
 - h) To send an email when a new DS-Client has been created on the DS-System, select the recipients. To customize the email, click **Customize**, make the required changes, and then click **Submit**.

- To send an email when a new DR Drill Request has been created for the DS-System, select the recipients. To customize the email, click Customize, make the required changes, and then click Submit.
- To send an email when a new BLM DR Drill Request has been created for the BLM Archiver, select the recipients. To customize the email, click Customize, make the required changes, and then click Submit.
- 4. To verify the email settings, click **Test E-mail**, and then click **Save Changes**.

3.3.3 Configuring the new DS-Client settings

This section describes the parameters you can configure when creating new DS-Clients through DS-NOC.

- 1. On the Configurations menu, click DS-NOC Configuration.
- On the DS-NOC Configuration page, under DS-NOC Access Settings, click New DS-Client Settings.
- Beside Permission Settings, select the permissions that can be granted by default to a new user who registers with DS-NOC and creates at least one DS-Client on a DS-System that is registered with the DS-NOC.
- Beside **DS-Client Bandwidth**, specify if DS-Clients created via the DS-NOC will have the customer's default bandwidth settings or the DS-System's global bandwidth settings.
- Beside **DS-Client Storage Quota**, specify if DS-Clients created via the DS-NOC will have the customer's default storage quota settings or the global storage quota settings of the DS-System.
- 6. Beside **DS-Client Storage Groups**, specify if DS-Clients created via the DS-NOC will use the Customer's storage group on the DS-System or the default storage group of the DS-System. This setting is applicable only if DS-NOC is not configured with any DS-Billing servers or the Sales Group is not assigned to a specific Storage Group from a DS-System.
- 7. Beside **DS-Client Tools**, select which DS-Client Tools will be automatically assigned to DS-Clients created via the DS-NOC.
- 8. Beside **DS-Client Tools Settings**, do the following:
 - To allow the user creating a DS-Client to selectively assign DS-Client Tools, select Allow end-user to change DS-Client tools.
 - In the Maximum Local-Only Capacity per DS-Client box, enter the maximum amount that can be allocated for the Local-only Capacity Tool per DS-Client.
 - In the Maximum Local DS-VDR allocation per DS-Client box, enter the maximum number of Local DS-VDR license counts that can be allocated per DS-Client.

- In the Maximum Remote DS-VDR allocation per DS-Client box, enter the maximum number of Remote DS-VDR license counts that can be allocated per DS-Client.
- In the Maximum VM replication capacity per DS-Client box, specify the maximum amount of VM replication capacity that can be allocated per DS-Client.
- Beside Service Period, specify the time frame (days, weeks, months, years) after which the DS-System will stop accepting requests from the DS-Client.
 The DS-Billing administrator must manually reset (extend) the service period.
 For unlimited service period, enter the value = 0.
- 10. Beside **Promotion**, select one of the following options to define the type of promotion a new DS-Client created through DS-NOC would be entitled to:
 - Allow evaluation for a period As specified in the evaluation period.
 - Stop service after evaluation period The DS-Client service period will end the same day the evaluation period ends.
 - Set evaluation by default when creating new DS-Client DS-Clients created via the DS-NOC will always initially be evaluation versions.
- 11. Beside **Evaluation Period**, specify the time frame for the DS-Client evaluation period.
- 12. To use the DS-Client as a RLM trial DS-Client if the DS-System is using a RLM license, beside RLM Trial DS-Client, select **Set new DS-Client as RLM trial DS-Client if DS-System is using RLM license**.

3.3.4 Configuring the subscription ID settings

A subscription ID identifies the sales account and the sales representative that will be associated with the registered user.

- 1. On the **Configurations** menu, click **DS-NOC Configuration**.
- 2. On the **DS-NOC Configuration** page, under **DS-NOC Access Settings**, click **Subscription ID Settings**.
- 3. On the **Subscription ID Settings** page, do the following:
 - Allow usage of default subscription ID: Select this option to allow users to create new accounts/DS-Clients using the default subscription ID on any DS-System that is registered with DS-NOC.
 - Default Subscription ID: Enter the name for the default subscription ID. If
 this field contains 'DEFAULT', new user accounts will belong to the "In
 House" Sales Group. If this field contains a valid Subscription ID, new user
 accounts will belong to the Sales Group and Sales Representative
 associated with that Subscription ID.
- 4. Click Save changes.

3.3.5 Configuring additional features

This section describes the usage of service levels and DS-Billing.

- On the DS-NOC Configuration page, under DS-NOC Access Settings, click Additional Features.
- 2. On the Additional Features page, do the following:
 - Select Allow usage of Service Levels to allow Service Levels to be defined, edited, and applied to DS-Clients through the DS-NOC.
 - Select **DS-Billing** to configure DS-NOC to communicate with DS-Billing servers. You can then register a DS-Billing server with DS-NOC and enable billing related configurations for customers and DS-Clients.
- 3. Click **Save changes**.

3.4 Configuring the DS-NOC log settings

This section describes how to manage the log settings.

3.4.1 Configuring the log settings

- On the DS-NOC Configuration page, under DS-NOC Log Settings, click Log Options.
- 2. On the Log Options page, do the following:
 - Select Enable file restore audit trail for DS-NOC to generate a log every time a user initiates and individual file restore using the Restore Generation feature. This log is saved in the DS-NOC Audit Trail.
- 3. Click Save Changes.

3.4.2 Deleting logs

This section describes how you can configure the deletion of event logs and audit trails.

- On the DS-NOC Configuration page, under DS-NOC Log Settings, click Delete Logs.
- 2. On the **Delete Logs** page, do the following:
 - DS-NOC Audit Trail: To delete logs older than a specific time period, specify the number of months.
 - DS-NOC Event Log: To delete logs older than a specific time period, specify the number of months.
- 3. Click Delete.

3.5 Configuring the database dump settings

This section describes how to schedule and configure a DS-NOC database dump.

- 1. On the **Configurations** menu, click **DS-NOC Configuration**.
- 2. On the **DS-NOC Configuration** page, under **DS-NOC Database Settings**, click **Database Dump Settings**.
- 3. In the **Directory of pg_dump binary file** box, enter the directory containing the PostgreSQl pg_dump binary file.
- In the **Database Dumps directory** box, enter the directory where to save the database dumps. This directory should be accessible from DS-NOC and the PostgreSQL user account.
- 5. In the **Database Dumps retention period** box, enter the number of days to retain the database dumps. Days when there are no database dumps, are not counted for retention. Retention is performed at the end of a scheduled dump. Dumps outside the retention period are deleted and each dump file is time stamped.

NOTE: The **pg_dump** utility must be installed on the DS-NOC server in order for DS-NOC to be able to perform dumps of the DS-NOC database ("asigraweb"). This is included if you install PostgreSQL locally, but if you install a remote database, you must also install at least this utility on the DS-NOC server.

6. Click Save Changes.

3.6 Configuring the geolocation and map settings

This page allows you to select the vendors of geolocation and maps services to be used for the feature device tracking. On this page, you can also provide the credentials required for accessing these services.

- 1. On the Configurations menu, click DS-NOC Configuration.
- 2. On the **DS-NOC Configuration** page, under **Geolocation Settings**, click **Geolocation and Map Settings**.
- 3. On the **Geolocation and Map Settings** page, do the following:
 - Geolocation API: Select the vendor for the API.
 - Maps API: Select the vendor for the API.
- 4. Click Save Changes.

4 Configuring DS-NOC permissions

This chapter describes how to configure users and groups and assign permissions for accessing the DS-NOC server.

4.1 Creating a DS-NOC user account

You can use the Web-based registration feature to create new DS-Clients on a DS-System through DS-NOC. Web-based registration allows regular customers or Sales Groups to access the DS-System for the basic function of creating an account/DS-Client without the need to contact their service provider.

The wide set of permissions available in the DS-NOC allows user access to be limited or extended, depending on the administrator's configuration.

You can create a new DS-NOC user account using the *Register Online* function. From there, you can log in and create new DS-Clients.

This account will allow you to connect to the DS-NOC, create new DS-Clients, and other features you are granted permission to perform.

- 1. Connect to the DS-NOC with your web browser, and then click **Registration**.
- 2. On the Registration page, select a Username and Password.
- 3. Enter your contact information, and then click **Register**.
 - If you are required to enter a Subscription ID, you must obtain this number from your service provider.
 - Type the security string displayed on the current page.
- 4. In the confirmation dialog box, click Confirm.

Depending on the DS-NOC configuration or Sales Group configuration, an email confirming the registration will be sent to:

• the service provider; the sales group; the user.

The SMTP Host must be configured to send the email. (See: Section 3.1, "Configuring the sessions and display settings")

Service providers / Sales Groups or users with sufficient permissions can create user accounts manually for their customers using the User Management function.

4.2 Configuring users

This section describes how you can manage users accessing DS-NOC. The features available to each user depends on the permissions granted directly or through their User Group. Some features also depend on the permissions granted to the user's Sales Group.

To manage users accessing DS-NOC, login as DS-NOC Administrator or user with equivalent permissions.

4.2.1 Adding a user

To add a new user:

- On the Configurations menu, point to Setup Permissions, and then click Users.
- 2. On the User Management page, click Add User.
 - a) On the Add User page, in the section Step 1: Profile, enter all the required information.
 - User cannot change password: Select this option to prevent the user from changing their own password.
 - Subscription ID: Enter **DEFAULT** or an existing Subscription ID.
 - Click Next.
 - b) On the **Add User** page, in the section **Step 2: Group**, select the required Group(s), assign the user to these groups, and then click **Next**.

IMPORTANT: If a user is assigned to the *Administrator's Group*, all other permissions are ignored and the user will have full access on this DS-NOC.

- c) On the **Add User** page, in the section **Step 3: Advanced**, configure the parameters for the user, and then click **Finish**.
 - Set the maximum number of Accounts and DS-Clients that this user can create and select the report options for this user.

4.2.2 Editing a user

- On the Configurations menu, point to Setup Permissions, and then click Users.
- 2. On the **User Management** page, in the column **Edit**, click the icon in the corresponding user row to open the **Edit User** page.
- 3. On the **Edit User** page, you can edit the information under the following tabs:
 - Profile: Same page as in Add User. Edit the required parameters, click
 Apply, and then click OK.
 - Advanced: Same page as in Add User. Edit the required parameters, click
 Apply, and then click OK.
 - DS-Client: This page displays a list of DS-Clients for which this user has the Manage DS-Client permission. Click Status Sync to update the Status column, click Apply, and then click OK.
 - Lockout: This page displays the IP address(es) for which the user is locked out as defined in the Account Lockout Policy. Click Delete to remove the lock, click Apply, and then click OK.
 - Software: This page displays a list of software available for download. By default, the user's private software folder on the Web server is:
 %TomcatInstallation%\portal-config\software\users\username.
 Only this user can access these files.
 - You can copy the files to the directory C:\Program Files\Apache Software Foundation\Tomcat 7.0\portal-config\software\users\root', or click **Upload**.
 - Click the associated icon in the **Edit** column to change the file name.
 - Click **Delete** to remove the software from the list.
 - The user can also access files from the private software folder with a direct URL using the exact filename to be downloaded along with their login credentials in the URL. Security restrictions require the URL in the following format:

```
http://<DS-NOC-ADDRESS>/noc/downloadfile?username=<USER>&password=<PASSWORD>&userid=<ID#>&filename=<FILENAME>.
```

- If the file is provided to a group of users, substitute the userid with groupid. The userid and groupid can be obtained using the DS-NOC API.
- 4. Click **Apply**, and then click **OK**.

4.2.3 Searching for a user

- On the Configurations menu, point to Setup Permissions, and then click Users.
- 2. On the User Management page, click Search User.
- 3. On the **Search User** page select the required search parameters, and then click **OK**.

4.2.4 Changing the user password

- On the Configurations menu, point to Setup Permissions, and then click Users.
- 2. On the **User Management** page, click the associated icon in the **Password** column.
- 3. On the **Change User Password** page, edit the information as required, and then click **Save Changes**.

4.2.5 Deleting a user

- On the Configurations menu, point to Setup Permissions, and then click Users.
- 2. On the **User Management** page, click the associated icon in the **Delete** column.
- 3. On the **Delete User** page, click **Delete**.

4.3 Configuring groups

This section describes how you can add, edit, delete a group, and set up the permissions for the group.

4.3.1 Adding a group

- 1. On the **Configurations** menu, point to **Setup Permissions**, and then click **Groups**.
- 2. On the Group Management page, click Add Group.
- 3. Enter a name for the **Group** and click **Add**.

The **Group Management** page appears with the new group in the list.

4.3.2 Editing a group

- 1. On the **Configurations** menu, point to **Setup Permissions**, and then click **Groups**. On the **Group Management** page, in the column **Edit**, click the icon beside the corresponding group.
- 2. On the **Edit Group** page, you can edit the information under the following tabs:
 - Profile: On this page, you can edit the name of the group. Click Apply, and then click OK.
 - Software: On this page click Upload, select the required file, and then click Upload.

By default, the private software folder for a group on the Web server is - %TomcatInstallation%\portal-config\software\groups\groupname.Only users belonging to this group can access the files.

3. Click Apply, and then click OK.

4.3.3 Deleting a group

- 1. On the **Configurations** menu, point to **Setup Permissions**, and then click **Groups**.
- 2. On the **Group Management** page, click the associated icon in the **Delete** column.
- 3. On the **Delete Group** page, click **Delete** to confirm the deletion of the group.

4.4 Configuring sales groups

Sales Groups are either individuals or organizations that sell Asigra Cloud Backup™ services on behalf of the service provider. Since the Sales Groups can have several sales staff, each is distinguished by a unique Subscription ID.

By default, there is an *In House* Sales Group that cannot be deleted. It will be assigned to all new DS-Clients not linked to a Subscription ID. You can add, edit or delete Sales Groups.

4.4.1 Adding a sales group

- 1. On the **Configurations** menu, point to **Setup Permissions**, and then click **Sales Groups**.
- 2. On the **Sale Group Management** page, click **Add Sales Group** to add a new sales group, and then associate it with a DS-Billing server.
- 3. On the Sales Group Management page, do the following:
 - Enter a name for the sales group.
 - Select the type of sales group, whether VAR or a referral.
 - Specify an E-Mail address for notifications and if this Sales Group must create DS-Clients based on Service Levels.
 - If you want to enforce usage of service levels when creating new DS-Clients, select this option.
- 4. Click Add.
- 5. On the **Edit Sales Group** page, you can modify various parameters of the sales group. See *Editing a Sales Group*.

4.4.2 Adding a sales group from DS-Billing

- On the Configurations menu, point to Setup Permissions, and then click Sales Groups.
- 2. On the Sale Group Management page, click Add Sales Group from DS-Billing.
- On the Add Sales Group from DS-Billing page, select a DS-Billing server (press Ctrl to select multiple sales groups), select a sales group, and then click Next.

The **Add Sales Groups from DS-Billing** page displays the list of sales groups added.

4. On the **Sales Group Parameters** page, click on each sales group to define the billing scales, click **Save Changes**, and then click **Finish**.

4.4.3 Editing a sales group

- 1. On the **Configurations** menu, point to **Setup Permissions**, and then click **Sales Groups**.
- 2. On the **Sales Group Management** page, click the associated icon in the **Edit** column.
- 3. On the **Edit Sales Group** page, click **Modify** for the corresponding section:
 - Sales Group's Profile: You can modify the group's name, type, email address, options, and then click **Save changes**.
 - Sales Group's Branding: In this section you can modify the sales group's branding.
 - URL Path: Specify the path for this Sales Group's branded DS-NOC.
 - Current Logo: Select the image for the logo.
 - Alternative Text: Enter the text (maximum 100 characters) that will be used with the logo.
 - Menu Position: Select the position for the menu.
 - Report Address: Enter the address that you want to appear on the reports generated by DS-NOC
 - Report Logo: Select a picture for the logo that you want to appear on the reports generated by DS-NOC.
 - CSS in Use: You can edit the default CSS used by the DS-NOC to modify the Look & Feel.
 - Sales Group's Configuration:
 - a) On the Sales Group's Configuration page click the associated icon in the **Edit** column for the corresponding DS-Billing server.
 - b) On the **Modify DS-Billing** page, modify/edit the required fields and click **Save Changes**.
 - Sales Group's Software: In this section you can upload branded software versions for individual sales groups. Select Use Global Software Settings to use software uploaded to the DS-NOC.
 - Sales Group's E-Mail Settings: In this section you can customize the email template that will be used for individual sales groups.
 - Sales Group's Storage Group: On this page, you can customize/add the default storage group that will be used for individual sales groups.

A Storage Group defined in this section will be hidden (and un-usable) if the corresponding DS-Billing is removed from the "Sales Group's Configuration" section.

NOTE: If you remove a DS-System from this list, the DS-Clients created with this Sales Group will use that DS-System's default storage group (the <DEFAULT> group which cannot be deleted).

4.4.4 Deleting a sales group

Click the associated icon in the **Delete** column of a sales group and on the **Delete Sales Group** page, click **Delete** to confirm deletion of the sales group.

4.5 Configuring subscription IDs

A Subscription ID identifies the Sales Group sales account that will be associated with a registered DS-NOC user. This section describes how you can configure, add, edit, and delete a subscription ID.

4.5.1 Adding a subscription ID

- 1. On the **Configurations** menu, point to **Setup Permissions**, and then click **Subscription ID**.
- 2. On the Subscription ID Management page, click Add Subscription ID.
- 3. On the Add Subscription ID page, in Step 1, do the following:
 - Subscription ID: An ID number is randomly assigned. You can also manually assign an ID number.
 - Sales Group: Select the sales group that will be associated with this ID.
 - Maximum Users: Specify the maximum number of accounts (DS-NOC users, accounts, and DS-Clients) that can be created for this Subscription ID
 - Maximum Creatable Accounts: Specify the maximum number of Accounts that can be created by a DS-NOC user associated with this Subscription ID.
 - Maximum Creatable DS-Clients: Specify the maximum number of DS-Clients that can be created by a DS-NOC user associated with this Subscription ID.
 - Storage Quota: Select **Enable storage quota management** to enforce a policy for storage quota management.

- Automatically calculate DS-Client storage quota: Allocates an equal quota to each DS-Client based on the Customer Quota divided by maximum number of DS-Clients. This option requires the Maximum Accounts to be limited to [1].
- Calculation Method: Quota will be calculated based on total DS-Client storage measured by Protected Size, Stored Size, or Native Size.
- Customer Quota: Limits the total storage for all DS-Clients belonging to the same customer account.
- DS-Client Quota: Limits the total storage for each DS-Client to the specified amount.
- 4. Click Next.
- 5. In Step 2, do the following, and then click Finish.
 - User's Maximum Creatable Accounts: Select No Limit or specify the maximum number of Accounts that can be created by this DS-NOC user.
 - User's Maximum Creatable DS-Clients: Select No Limit or specify the maximum number of DS-Clients that can be created by this DS-NOC user.
 - DS-Client Tools Settings: If you select Use global DS-Client tools settings, new DS-Clients will receive all the available DS-Tools. If you do not select this option, you can select specific DS-Tools to assign to DS-Clients created through DS-NOC and associated with a particular subscription ID.

NOTE: If the Subscription ID list is large, you can use the **Select by** section to search for a specific name or pattern.

4.5.2 Editing a subscription ID

- 1. On the **Configurations** menu, point to **Setup Permissions**, and then click **Subscription ID**.
- 2. On the **Subscription ID Management** page, click the associated icon in the column **Edit**.
- 3. On the tab **Subscription ID's Info**, edit the information as required.
- 4. On the tab **New User Settings**, edit the information as required, click **Apply**, and then click **OK**.

4.5.3 Configuring a subscription ID

You must define the Subscription ID by associating it with a specific Sales Person from each DS-Billing server you want it to cover. This Subscription ID can then be given by the Sales Person to new customers, and they will automatically be associated with that Sales Person when they create accounts/DS-Clients using the DS-NOC.

- 1. On the **Configurations** menu, point to **Setup Permissions**, and then click **Subscription ID**.
- On the Subscription ID Management page, click the associated icon in the column Config.
- 3. On the **Subscription ID Configuration** page, you can add, edit or delete links to DS-Billing servers.
 - a) Click Add DS-Billing to add a DS-Billing server.
 - b) On the **Add DS-Billing** page, do the following and then click **Save Changes.**
 - Select a DS-Billing server, a Sales Rep from that DS-Billing server, and a Billing Scale.
 - Select an Expires on date for the Billing Scale. [Optional]
 - Select a billing scale to replace the earlier billing scale that is no longer valid after the specified date.[Optional]
 - Select from BLM Billing Scale, Local-Only Billing Scale, Recovery Billing Scale. [Optional]
 - Select a service start date and a service end date. [Optional]
 - c) Click the associated icon in the Edit column for the corresponding DS-Billing.
 - d) On the Modify DS-Billing page, edit the required information and click Save Changes. The Subscription ID, DS-Billing, and Sales Group cannot be modified.
 - Select a sales rep, a billing scale, and a date after which this billing scale will not be applicable.
 - Select a billing scale to replace the earlier billing scale that is no longer valid after the specified date.[Optional]
 - Select from BLM Billing Scale, Local-Only Billing Scale, Recovery Billing Scale. [Optional]
 - Select a service start date and a service end date. [Optional]
 - Delete: Click the associated icon in the Delete column for the corresponding DS-Billing from the list. On the Delete Subscription ID Configuration page, click Delete to confirm deletion.

4.5.4 Deleting a subscription ID

- On the Configurations menu, point to Setup Permissions, and then click Subscription ID.
- 2. On the **Subscription ID Management** page, click the associated icon in the **Delete** column for the corresponding Subscription ID from the list.
- 3. On the **Delete Subscription ID** page, click **Delete** to confirm.

4.6 Configuring user and group permissions

NOTE: If the IP address of any DS-System or BLM Archiver is changed after it has been registered with this DS-NOC and you have granted specific permissions for that DS-System or BLM to a user or group, you must manually remove and re-apply any existing permissions granted to specific groups or individual DS-NOC users.

Permissions are either inherited from Group membership, or applied directly at the User level. This section describes different levels where permissions can be applied.

- 1. On the **Configurations** menu, point to **Setup Permissions**, and then click **Users** or **Groups**.
- Click the **Permissions** icon in the corresponding User / Group row to display the **Permission Management** page with a list of the existing permissions for the User / Group.
 - For individual User Permissions, see Section 4.2, "Configuring users"
 - For Group Permissions, see Section 4.3, "Configuring groups"
- 3. To add new permissions, click **Add Permissions**. The New Permission Wizard appears. On the **Select Permission Level** page, select the level.

I-		
DS-NOC Level Permissions This grants the User / Group rights on the entire DS-NOC. • Each permission must be added one at a time.		
Web	Add permission(s) for activities on the entire DS-NOC.	
Sales Group	Add permission(s) for activities on a specific Sales Group.	
Subscription ID (User only)	Add permission(s) for activities on a specific Subscription ID.	
DS-System Level Permissions This grants the User / Group the selected permissions on the DS-System \ Account \ DS-Client \ Backup Set specified. • Each permission must be added one at a time.		
DS-System	-System Add DS-System Level permission for a specific DS-System.	

Table 1 DS-NOC level permissions

Account	Add DS-System Level permission for a specific account.	
DS-Client	Add DS-System Level permission for a specific DS-Client.	
Backup Set	Add DS-System Level permission for a specific backup.	
BLM Archiver Level Permissions This grants the User / Group the selected permissions on the BLM Archiver \ DS-System \ Account \ DS-Client \ Backup Set specified. • Each permission must be added one at a time.		
BLM Archiver	Add BLM Archiver Level permission for a specific BLM Archiver.	
DS-System	Add BLM Archiver Level permission for a specific DS-System.	
Account	Add BLM Archiver Level permission for a specific account.	
DS-Client	Add BLM Archiver Level permission for a specific DS-Client.	
Backup Set	Add BLM Archiver Level permission for a specific backup.	
DS-Billing Level Permissions This grants the User / Group the selected permissions on the DS-Billing \ DS-System \ Account \ DS-Client \ Backup Set specified. • Each permission must be added one at a time.		
DS-Billing	Add DS-Billing Level permission for a specific DS-Billing server.	
DS-System	Add DS-Billing Level permission for a specific DS-System.	
Account	Add DS-Billing Level permission for a specific account.	
DS-Client	Add DS-Billing Level permission for a specific DS-Client.	
Backup Set	Add DS-Billing Level permission for a specific backup.	
 DS-License Server Level Permissions This grants the User / Group the selected permissions on the DS-License Server specified. 		
DS-License Server	Add permission for a specific DS-License Server. This can be performed as many times as needed for as many DS-License Server as needed.	

Table 1 DS-NOC level permissions

4. Click Next.

- Depending on the permission level selected, the wizard will guide you through the selection of DS-Billing server, DS-System, Account, DS-Client, etc.
- You can only make one selection on each page of the wizard, since you
 are explicitly adding a permission for a specific object.
- Make your selection on each page, and then click **Next**.
- 5. On the final wizard page select the permissions available for the object and click **Finish**.

4.6.1 Configuring permissions at DS-NOC level

The following table lists the permissions at the DS-NOC level.

WEBIf you select th DS-NOC itself.	is radio button, you are assigning permissions to perform tasks on the
Configurations	DS-NOC Configuration
	Manage DS-License Server(s)
	Manage DS-Billing(s)
	Manage DS-System(s)
	Manage BLM Archiver(s)
	Manage User(s)-Group(s)
	Manage Sales Groups
	Manage Subscription ID
	Manage Service Levels
	DS-System Notification
	BLM Archiver Notification
	DS-Client Notification
	Manage Schedules
	Manage Customized Reports
DS-License Server	DS-License Server Status
DS-System	DS-System Status
	Browse DS-System
	DS-System DR Drill Request
	DS-Client Reports
	DS-System Reports
	Recovery Reports
	View Customized Reports
	Activity Log
	Event Log
	Audit Trail
	DS-System N+1 Log
	Recovery Log
	Associated BLM Data Access (Browse/Search/Restore/Logs)
	Associated BLM DR Drill Request

DS-Client Management	Manage DS-Client
Management	New DS-Client
	Lock/unlock account
	Remove account from DS-System
	Lock/unlock DS-Client
	Deactivate/reactivate DS-Client
	Check/uncheck DS-Client request registration option
	Hardware Registration
	Remove DS-Client from DS-System
BLM Archiver	BLM Archiver Status
	BLM Data Access (Browse/Search/Restore/Logs)
	Confirm Data Destruction
	BLM Archiver Reports
DS-Billing	DS-Billing Status
	Invoice
	Sales Group Reports (Monthly Report, Storage Usage, Additional Charges, Backup Status)
	Storage Size Reports (Storage Trend, Backup Sets, Global List of Customers)
	DS-Billing Logs
DS-Client	Monitor DS-Client
	View DS-Client Configuration
	Edit DS-Client Configuration
	Manage LAN Discovery Reports
	View LAN Discovery Reports
	View Statistical Summary Reports
DS-NOC	Use DS-NOC API
	Create Auto Sign On Ticket The user that connects to the DS-NOC API to request an Auto-Login Ticket must have this permission.
	DS-NOC Reports/Logs
 Sales Group If you select this radio button, you are assigning permissions for a specific Sales Grout Users who are members of this group will automatically inherit these permissions. 	
Configurations	Manage Sales Groups
	Manage Subscription ID
	Manage Schedules
DS-System	Browse DS-System
	DS-System DR Drill Request
	DS-Client Reports
	DS-System Reports
	Recovery Reports

DS-Client	Manage DS-Client
Management	New DS-Client
	Lock/unlock account
	Remove account from DS-System
	Lock/unlock DS-Client
	Deactivate/reactivate DS-Client
	Check/uncheck DS-Client request registration option
	Hardware Registration
	Remove DS-Client from DS-System
DS-Billing	Invoice
	Sales Group Reports (Monthly Report, Storage Usage, Additional Charges, Backup Status)
	Storage Size Reports (Storage Trend, Backup Sets, Global List of Customers)
DS-Client	Monitor DS-Client
	View DS-Client Configuration
	Edit DS-Client Configuration
	Manage LAN Discovery Reports
	View LAN Discovery Reports
	View Statistical Summary Reports
	Device Tracking
	Device Remote Wipe
DS-NOC	Use DS-NOC API
	Create Auto Sign On Ticket
ID. Users who a	s radio button, you are assigning permissions for a specific Subscription are associated with this Subscription ID will inherit the permission (which create a new DS-Client.)
DS-Client Management	New DS-Client

4.6.2 Configuring permissions at DS-System level

The following table lists the permissions at the DS-System level.

DS-System	DS-System Status
	Browse DS-System
	DS-System DR Drill Request
	DS-Client Reports
	DS-System Reports
	Recovery Reports
	Activity Log
	Event Log
	Audit Trail
	DS-System N+1 Log
	Recovery Log
	Associated BLM Data Access (Browse/Search/Restore/Logs)
	Associated BLM DR Drill Request
DS-Client Management	Manage DS-Client
	Lock/unlock account
	Remove account from DS-System
	Lock/unlock DS-Client
	Deactivate/reactivate DS-Client
	Check/uncheck DS-Client request registration option
	Hardware Registration
	Remove DS-Client from DS-System
DS-Client	Monitor DS-Client
	View DS-Client Configuration
	Edit DS-Client Configuration
	Manage LAN Discovery Reports
	View LAN Discovery Reports
	View Statistical Summary Reports
	Device Tracking
	Device Remote Wipe

 If you select this radio button, you are assigning permissions for a specific Customer account on a DS-System.

DS-System	DS-System Status	
Do-System		
	Browse DS-System	
	DS-System DR Drill Request DS Client Departs	
	DS-Client Reports	
	DS-System Reports	
	Recovery Reports (Restore Activity by Account / DS-Client Reports Only)	
	Activity Log	
	Associated BLM Data Access (Browse/Search/Restore/Logs)	
	Associated BLM DR Drill Request	
DS-Client	Manage DS-Client	
Management	New DS-Client	
	Lock/unlock account	
	Remove account from DS-System	
	Lock/unlock DS-Client	
	Deactivate/reactivate DS-Client	
	Check/uncheck DS-Client request registration option	
	Hardware Registration	
	Remove DS-Client from DS-System	
DS-Client	Monitor DS-Client	
	View DS-Client Configuration	
	Edit DS-Client Configuration	
	Manage LAN Discovery Reports	
	View LAN Discovery Reports	
	View Statistical Summary Reports	
	Device Tracking	
	Device Remote Wipe	
 DS-Client If you select this radio button, you are assigning permissions for a specific DS-Client of a DS-System. 		
DS-System	DS-System Status	
	Browse DS-System	
	DS-System DR Drill Request	
	DS-Client Reports	
	DS-System Reports	
	Recovery Reports (Restore Activity by DS-Client Report Only)	
	Activity Log	
	Associated BLM Data Access (Browse/Search/Restore/Logs)	
	Associated BLM DR Drill Request	

Configuring DS-NOC permissions

Configuring user and group permissions

DS-Client Management Management Lock/unlock DS-Client
Deactivate/reactivate DS-Client Check/uncheck DS-Client request registration option Hardware Registration Remove DS-Client from DS-System DS-Client Monitor DS-Client View DS-Client Configuration
Check/uncheck DS-Client request registration option Hardware Registration Remove DS-Client from DS-System DS-Client Monitor DS-Client View DS-Client Configuration
Hardware Registration Remove DS-Client from DS-System DS-Client Monitor DS-Client View DS-Client Configuration
Remove DS-Client from DS-System DS-Client Monitor DS-Client View DS-Client Configuration
DS-Client Monitor DS-Client View DS-Client Configuration
View DS-Client Configuration
9
Edit DS-Client Configuration
Edit Do-Olicit Corniguration
Manage LAN Discovery Reports
View LAN Discovery Reports
View Statistical Summary Reports
Device Tracking
Device Remote Wipe
Backup Set If you select this radio button, you are assigning permissions for the selected backup
DS-System Browse DS-System
DS-System DR Drill Request
DS-Client Reports (Backup Status Report Only)
DS-System Reports (Backup Sets Report Only)
Activity Log
Associated BLM Data Access (Browse/Search/Restore/Logs)
Associated BLM DR Drill Request

4.6.3 Configuring permissions at BLM Archiver level

The following table lists the permissions at the BLM Archiver level.

BLM Archiver • If you select this radio button, you are assigning permissions for an entire BLM Archiver.		
BLM Archiver	BLM Archiver Status	
	BLM Data Access (Browse/Search/Restore/Logs)	
	BLM DR Drill Request	
	Confirm Data Destruction	
	BLM Archiver Reports	
 DS-System If you select this radio button, you are assigning permissions for an entire DS-System' data on the BLM Archiver. 		
BLM Archiver	BLM Data Access (Browse/Search/Restore/Logs)	
	Confirm Data Destruction	
	BLM Archiver Reports	
 If you select this 	essions are the same as above for "DS-System". By radio button, you are assigning permissions for a specific Customer on the BLM Archiver.	
	ssions are the same as above for "DS-System". radio button, you are assigning permissions for a specific DS-Client's Archiver.	
Backup Set If you select this radio button, you are assigning permissions for a specific backup's data on the BLM Archiver.		
BLM Archiver	BLM Data Access (Browse/Search/Restore/Logs)	
	Confirm Data Destruction	
	BLM Archiver Reports (Excluding Storage Usage Report)	

4.6.4 Configuring permissions at DS-Billing level

The following table lists the permissions at the DS-Billing level.

 DS-Billing If you select this radio button, you are assigning permissions for the entire DS-Billing server. 		
DS-Billing	DS-Billing Status	
	Invoice	
	Storage Size Reports (Storage Trend, Backup Sets, Global List of Customers)	
	DS-Billing Logs	
 DS-System If you select this radio button, you are assigning permissions for a specific DS-System's information on the DS-Billing server. 		
DS-Billing	Invoice	
	Storage Size Reports (Storage Trend, Backup Sets, Global List of Customers)	
 If you select this 	ssions are the same as above for "DS-System". radio button, you are assigning permissions for a specific Customer lation on the DS-Billing server.	
 DS-Client Available permissions are the same as above for "DS-System". If you select this radio button, you are assigning permissions for a specific DS-Client's information on the DS-Billing server. 		
Backup Set If you select this radio button, you are assigning permissions for a specific backup's information on the DS-Billing server.		
DS-Billing	Invoice	
	Storage Size Reports (Storage Trend, Backup Sets)	

4.6.5 Configuring permissions at DS-License Server level

The following table lists the permissions at the DS-License Server level.

DS-License Serve If you select this server.	radio button, you are assigning permissions for the entire DS-License
DS-License Server Status Server	

4.6.6 Configuring permissions at user level

The following table lists the permissions at the user level.

 Recovery License Model (RLM) If you select this radio button, you are assigning the permission to the selected user or group. 		
Recovery License Model View Recovery Tracker (RLM)		
Remote Wipe If you select this radio button, you are assigning the permission to the selected user or group.		
Remote Wipe	Manage authorization codes	
 Mass Deployment If you select this radio button, you are assigning the permission to the selected user or group. 		
Mass Deployment Initiate Mass Deployment Process		

Configuring DS-NOC permissions

Configuring user and group permissions

5 Configuring DS-NOC schedules

DS-NOC schedules can be used to automate tasks such as sending reports through E-Mail, cleaning the Audit Trail or Event Log, and synchronizing DS-NOC with its registered DS-Systems.

The operations related to schedules are logged in the DS-NOC Audit Trail.

- If multiple schedules are programmed to start at the same time, they will be launched in alphabetic order, at one-minute intervals.
- For schedules with a Send Reports task, if any of the scheduled reports
 cannot be sent, the schedule fails after having tried 3 times to send the reports.
 All these attempts will be recorded in the Audit Trail.
- For schedules that failed, you can click the corresponding **Edit** icon on the **Schedules** page to view a more detailed reason for the failure.

To configure DS-NOC schedules, login to DS-NOC as the Administrator or user with equivalent permissions.

5.1 Creating a schedule

Creating a schedule consists of two steps: creating the schedule details, then selecting the schedule task.

- 1. On the **Configurations** menu, click **Schedules**.
 - You can filter the display by using the search parameters in the **Select by** section and then click **Search** to update the display.
- 2. On the **Schedules** page, click **New**.
- 3. On the New Schedule page, enter the required details.
 - Schedules can have the following frequency types: one time, daily, weekly, and monthly. The screen will change depending on the one you select.
- 4. To activate the schedule, select the **Activate** check box.
- 5. Click Next.
- 6. In the **Task Type** prompt, select the required tasks (listed in the table below), and then click **Finish**.

Send reports	Note: The E-Mail Settings for the DS-NOC must be configured in order to send the reports by E-Mail. 1. Choose the Report Language, then click New. The New Schedule Report page appears. 2. Enter a report Description 3. Enter the destination E-Mail address: • Multiple E-Mail addresses can be entered, if separated by a semicolon. 4. Choose the Report Source: DS-System or DS-Billing. • DS-Billing: Select a specific Sales Group (or <all>). • DS-Billing: Select the DS-Billing server. 5. Select the DS-System: • Any DS-System registered with the DS-NOC can be selected. The DS-System must be online at the moment the schedule runs. 6. Choose a Report Format: HTML, PDF, CSV, DOCX, RTF, XLS, or ODT. 7. Select the Report Logo (if applicable) • The drop-down list shows all the Sales Groups defined on the DS-NOC. The Report Logo will correspond to what is configured in the Edit Sales Group page of the selected Sales Group's. 8. Select the Report type and corresponding Report options. 9. Click OK. The New Schedule page returns with the added Report Task. 10. Repeat steps 1-9 above to send multiple reports in this task. 11. Click Finish to create the Schedule. The Schedules page appears with the newly created schedule in the list.</all>
Clean Audit Trail	This task allows the automation of the Delete Logs function (for Audit Trail). Choose the number of months to keep in the Log.
Clean Event Log	This task allows the automation of the Delete Logs function (for Event Log). Choose the number of months to keep in the Log.
Synchronize with DS-System	 When this task runs, the DS-NOC compares its database with all the DS-Systems listed in the DS-System Management page (Configurations > Setup Products > DS-System). Selecting this will update the DS-Client Status column for each DS-Client listed in the DS-Client Management page (DS-System > Manage DS-Client). To actually synchronize, you must manually remove any obsolete entries.
Database Dump	This task allows scheduling dumps of the DS-NOC database. • You must configure the DS-NOC before scheduling this task. (Section 3.5, "Configuring the database dump settings")

5.2 Editing a schedule

- 1. On the Configurations menu, click Schedules.
- 2. On the **Schedules** page, click the Edit icon beside the corresponding schedule.
- 3. On the **Edit Schedule** page, on the **Schedule** tab, you can change the Schedule name, frequency, Detail Period, Start Time and Activate setting.
- 4. On the **Task** tab, you can modify details about a task (except for the task type).
 - If the task belongs to the 'Send reports' type, reports can be added or deleted, E-Mail addresses can be changed; and selection criteria for reports can be modified.
- 5. Click **Apply** to save your change(s).

5.3 Cloning a schedule

This feature allows you to quickly copy any existing schedule (including all its defined tasks) to a new schedule.

- 1. On the **Configurations** menu, click **Schedules**.
- 2. On the Schedules page, click Clone Schedule.
- 3. On the Clone Schedule page, enter the required details, and then click Clone.
 - Schedule Name: Assign a unique name to the new schedule you are creating.
 - Clone from Schedule: Select an existing schedule that will be cloned.
- 4. On the **Edit Schedule** page, you can edit the new schedule as required. By default, cloned schedules are suspended (Activate is unchecked).

5.4 Deleting a schedule

- 1. On the **Configurations** menu, click **Schedules**.
- 2. On the **Schedules** page, click the associated icon in the **Delete** column.
- 3. On the **Delete Schedule** page, click **Delete** to confirm.

Configuring DS-NOC schedules

Deleting a schedule

6 Configuring DS-NOC custom reports

DS-NOC can be used to access the Custom Report feature available on DS-System. For details, refer the section *Generating a customized report in the DS-System User Guide.*

This requires a third-party application called JasperReports, which means you must have the development resources to create and compile custom report templates.

Once you have defined a data set or uploaded a *.jasper* template, you can use the DS-NOC to query the DS-System database to generate a data set or produce a custom report from an uploaded *.jasper* template.

To configure DS-NOC custom reports, login to DS-NOC as the Administrator or user with equivalent permissions.

6.1 Creating a data set

- 1. On the Configurations menu, click Custom Reports.
- 2. On the Custom Reports page, click New Data Set.
- On the New / Edit Data Set page, specify the Data Set Name, and then click Next to display a list of data fields that can be selected. This list is based on the selected Data View.
 - (Optional) Add a description of what this Data Set is.
 - Select the type of report (Client Report, System Report). This will affect users who have limited permissions to view the specified report types.
 - Select the Data View. This is a pre-defined grouping of logs.
- 4. In the **Display Columns** section:
 - Use the[>>] button to move all the data fields that you want to include from the Available Columns to the Selected Columns list on the right-side.
 - Use the **Up** and **Down** buttons to place the selected fields in the required order. This is the order in which the data fields will be written.
- 5. In the **Order by Columns** section:
 - Add as many sort fields as you require.
 - Select the sort priority with the Up and Down buttons.
 - This is the order in which the data set will be sorted.
 - If you do not make a selection, data will be written as it is read from the database. This sort order is not used by JasperReport.
- 6. Click **Next** to display a summary of the Data Set specifications.
- 7. Click **Finish** to display the **Custom Reports** page with the new Data Set in the list. You can now generate a Data Set.

6.2 Uploading a custom report template

- 1. On the Configurations menu, click Custom Reports.
- 2. On the Custom Reports page, click New Jasper Report.
- 3. On the **New Report** page, do the following:
 - · Specify the Custom Report name.
 - (Optional) Add a description of what this Custom Report is about.
 - Select the type of report this is (Client Report, System Report)
 - Select the location of the jasper file. This is the compiled custom report template file.
- 4. Click **Add** to display the Custom Reports page with the new Custom Report Template in the list.

NOTE: Do not use any custom report templates that contain images inserted from the local machine (where the *.jasper* file was compiled). If the custom report template contains inserted images, they will most likely not work when viewed from the DS-NOC (errors will appear even before the report is displayed because the path to the images will not be accessible).

6.3 Viewing customized reports

All DS-System reports accessed through the DS-NOC display data received directly from the corresponding DS-System. The report data is not saved in the DS-NOC database.

NOTE: These reports may take longer to display because of the required data transfer between DS-System and DS-NOC.

- On the **DS-System** menu, click **View Reports** to display the *DS-System Reports* page with a list of the *Customized Reports* available to the user who has logged in There are two types:
 - Data Set: Will query a DS-System database for the defined data fields and generate an XML or CSV file.
 - Custom Report: Will generate a report from a DS-System using the custom report template.
- 2. Click the item you wish to view / generate to display the corresponding *Report* page. Select the following and click **View Report**:
 - The DS-System
 - The Report Format
 - The Maximum number of records to return in the report.

The reports are generated as follows:

- For a Data Set: The data set will be generated in the format you specify.
- For Custom Report: The Report is generated in the format you specify.
- 3. To send the report in an email, click **Send E-Mail**.
- 4. In the popup window enter the required details and then click **Submit**.

Configuring DS-NOC custom reports

Viewing customized reports

7 Managing DS-License Servers

This section describes how you can manage the DS-License Server(s) that will interface with the DS-NOC.

7.1 Adding a DS-License Server

This section describes how you can add a new DS-License server to the DS-NOC.

- On the Configurations menu, point to Setup Products and then click DS-License Server.
- 2. On the **DS-License Server Management** page, click **Add DS-License Server**.
- 3. On the Add DS-License Server page, do the following:
 - a) In the **Server Name** box, type a name for the DS-License Server.
 - b) In the License Server Type box, select Capacity License Model (CLM) or Recovery License Model (RLM)
 - c) In the **IP Address/DNS Name** box, type the IP address or the DNS name of the DS-License Server.
 - d) In the **TCP Port** box, type the port that DS-NOC will use to communicate with the DS-License server.

NOTE: The default port number is 4418. Retain this value unless you have a specific requirement to change it.

- e) To enable the DS-License server to authenticate licenses immediately, click **Yes**.
- In the **Location** box, type the physical address where the DS-License server is located.
- g) In the **Phone**, **Fax**, and **Contact Name** boxes, type the appropriate contact details and then click **Next**.
- h) In the **User Name, Password,** and **Login From** boxes, type the credentials required to login to the production license server.
- i) To verify the user name and password with the DS-License Server, select the **Verify Credentials** check box, and then click **Finish**.

7.2 Editing a DS-License Server

This section describes how you can edit the parameters of an existing license server.

- 1. On the **Configurations** menu, point to **Setup Products**, and then click **DS-License Server**.
- 2. On the **DS-License Server Management** page, click the associated icon in the **Edit** column for the DS-License server you want to edit.
- 3. On the Edit DS-License Server page, do the following:
 - a) On the **Profile** tab, edit the required profile information, click **Apply** and then click **OK**.
 - b) On the **Server** tab, edit the required server details, click **Apply** and then click **OK**.

7.3 Updating DS-License Server credentials

This section describes how you can update the license server credentials.

- On the Configurations menu, point to Setup Products, and then click DS-License Server.
- 2. On the **DS-License Server Management** page, click the associated icon in the **Credentials** column for the DS-License server you want to update.
- 3. On the **Edit DS-License Server Credentials** page, update the information, as required and click **Save Changes**.

7.4 Deleting a DS-License Server

This section describes how you can remove a license server from DS-NOC.

- 1. On the **Configurations** menu, point to **Setup Products**, and then click **DS-License Server**.
- On the DS-License Server Management page, click the associated icon in the Delete column beside the DS-License Server you want to remove from the DS-NOC.
- On the **Delete DS-License Server** page click **Delete** to confirm removal of the license server from DS-NOC.

7.5 Viewing the status of a DS-License Server

This section describes how you can view the status of a DS-License server registered with the DS-NOC, categories of licenses allocated, and used. The number of DS-License Servers visible depends on your user permissions (DS-NOC user account).

- 1. On the **DS-License Server** menu, click **DS-License Server Status** to display a list of monitored DS-License Servers
- To view the storage trend information for a DS-License Server, click the associated icon in the **Storage Trend** column for the required DS-License Server.
 - To search DS-License Servers by specific criteria, in the section Select by, specify the search criteria and click Show.
 - b) To view the storage trend for a particular type of system or capacity, select the required item in the section **Series**.
- 3. To expand and view more details, click the associated icon in the **Details** column for the required DS-License Server.
- 4. On the **DS-License Server Details** page, you can do the following:
 - a) To search DS-License Servers by specific criteria, in the section **Select by**, specify the search criteria and click **Search**.
 - b) To modify the columns displayed, select the required columns in the **Show Columns** section, and then click **Refresh**.

Managing DS-License Servers

Viewing the status of a DS-License Server

8 Managing DS-Systems

This section describes how you can add, edit, and delete a DS-System registered with DS-NOC. You can also manage the customer accounts and DS-Clients on a DS-System.

8.1 Configuring a DS-System

This section describes how you can add, edit, update, and delete a DS-System. To configure a DS-System, login to DS-NOC as the Administrator or user with equivalent permissions.

8.1.1 Adding a DS-System

This section describes how you can add a DS-System to the DS-NOC.

- On the Configurations menu, point to Setup Products, and then click DS-System.
- 2. On the **DS-System Management** page, click **Add DS-System**.
- On the Add DS-System page, in Step 1, enter all the required information for the DS-System.
- 4. Select **Yes** for *Allow Web Registration* so that users can create accounts and DS-Clients for the corresponding DS-System and then click **Next**.
- In Step 2, enter the IP address or DNS name of the DS-System and then click Next. To add multiple IP addresses/DNS names, click New IP Address/DNS Name.
- 6. In Step 3, enter the credentials for the DS-System. Select **Verify Credentials** if required and then click **Finish**.

8.1.2 Editing a DS-System

This section describes how you can modify the parameters of a DS-System.

- 1. On the **Configurations** menu, point to **Setup Products**, and then click **DS-System**.
- 2. On the **DS-System Management** page, click the associated icon in the **Edit** column for the corresponding DS-System.
- 3. On the **Edit DS-System** page, in the tab Profile, edit the required information, click **Apply**, and then click **OK**.
- 4. In the tab **Server**, edit the IP address/DNS name, click **Apply**, and then click **OK**. To add new IP addresses/DNS names, click **New IP Address/DNS Name**.

NOTE: Depending on the path used to access the DS-NOC, a CRI file with a specific IP address is generated and can be downloaded. Each Sales Group can use this feature to configure different external IP addresses / DNS names for their customers' DS-Clients to access the DS-System.

8.1.3 Updating DS-System credentials

- On the Configurations menu, point to Setup Products, and then click DS-System.
- 2. On the **DS-System Management** page, click the associated icon in the **Credentials** column for the corresponding DS-System.
- 3. On the **Edit DS-System Credentials** page, edit the required information, and then click **Save Changes**.

8.1.4 Deleting a DS-System

This section describes how you can delete a DS-System from DS-NOC.

- On the Configurations menu, point to Setup Products, and then click DS-System.
- On the DS-System Management page, click the associated icon in the Delete column for the corresponding DS-System.
- 3. On the **Delete DS-System** page, click **Delete** to confirm removal of the DS-System from DS-NOC.

8.2 Viewing the status of a DS-System

You can view the list of DS-Systems registered with the DS-NOC, their status, and any current activities running on the DS-System. For an N+1 DS-System, you can view the activities running on all the nodes of the N+1.

The number of DS-Systems visible depends on your user permissions (DS-NOC user account).

- 1. On the DS-System menu, click DS-System Status.
- 2. On the DS-System Status and Activities in Progress page:
 - Click the [+] icon to expand the details for each monitored DS-System.
 - For N+1 DS-Systems, click View under the N+1 Status column to open a windows with visual display of the N+1 (nodes, director and database).

8.3 Configuring DS-System notifications

DS-System notification configurations determine how often the DS-NOC connects to DS-Systems to obtain information.

- 1. On the **Configurations** menu, point to **Notifications**, and then click **DS-System Notification**.
- 2. On the **DS-System Notification Settings** page, do the following:
 - a) In the E-Mail Notification box, select Send E-Mail Notification.
 - In the Destination E-Mail box, select Global E-Mail Address if you are using one E-Mail for all notification types, or select Separate
 E-Mail Address if you want a separate E-Mail for each notification type.
 - b) In the **E-Mail Format** box, select the format in which you want to sent the email.
 - c) In the **Report Language** box, select the language in which you want the report to be generated.
 - d) In the **Send daily report at** box, type the time at which you want to send the daily report.
 - e) In the **SNMP Trap** box, select **Send SNMP Traps** (optional), and then configure the following:
 - Destination Host
 - SNMP Version
 - Send SNMP heartbeat

NOTE: Your DS-NOC must be able to connect to an SNMP server.

- f) In the 24-hour period starting box, type the time to mark the beginning of the 24 hour period for which Reports will be sent.
- g) In the **Keep DS-System events for** box, select the retention period.
- h) In the **Connect to DS-System** box, select the frequency at which the DS-NOC will connect to monitored DS-Systems.
- 3. Click Next.
- 4. On the **DS-System Event Settings** page, select the events you want to monitor, configure the Event Code and Notification Frequency for DS-Client Events, DS-System Events, and License Events.
- 5. Click Next.
- 6. On the **Monitored DS-System** page, select the DS-System(s) you want to monitor, and then click **Finish**.

8.4 Browsing a DS-System

Using DS-NOC you can browse the Backup Set Tree of each registered DS-System. The items displayed depends on your user permissions (DS-NOC user account).

- 1. On the **DS-System** menu, click **Browse DS-System**.
- On the Browse DS-System page, in the Navigation window, browse through the DS-Systems, Accounts, DS-Clients, and Backup sets you are permitted to view. Select a specific item in the backup tree to display its latest information in the Browse Details Window (on the right).

NOTE: Click the **Find Account / DS-Client** icon to open a popup where you can search for a specific DS-System \ Customer \ Account # \ DS-Client # \ Description.

The **Browse Details** window shows details corresponding to the item selected in the Navigation Window.

- All DS-Systems: Displays the total number of DS-Systems, number of
 monitored DS-Systems (click the icon beside it to see more details), total
 number of events (click the icon beside it to see more details), reset all
 DS-Systems (resets the number of total new events to zero).
- DS-Systems: Displays the DS-System ID, the name of the DS-System, IP address of the DS-System, whether it is monitored or not, and the activity log. Click View beside activity log to display more details.
- Account: Displays the account number, the customer name, activity log (click View for more details). You can also mange the account (click Manage and on the Manage Account page, configure the selected account.)

- DS-Client: Displays the DS-Client number, description, computer name, service start date, service end date, status, protected size (in bytes), stored size (in bytes), and activity log (click View for more details). You can also manage the DS-Client (click Manage and on the Manage DS-Client page, select the required options to configure the DS-Client).
- Backup Set: Displays the backup name, the user, time and date of the last backup, protected size (in MB), stored size (in MB), activity log (click View for more details), and the backup content (click Browse to view the backup files down to a specific generation). You can then highlight a generation to view it's details and use the file level restore feature.

8.5 Managing a customer account

This section describes how you can manage the settings for existing customers on the available DS-Systems.

- 1. On the **DS-System** menu, click **Browse DS-System**.
- 2. On the **Browse DS-System** page, select the account on the left, and then click **Manage** in the section on the right.
- 3. On the **Manage Account** page, select one of the following, and then click **OK** to update the account.
 - Lock/Unlock: To lock or unlock DS-Clients belonging to a particular account. If it is locked, all the DS-Clients belonging to this account will not be able to connect with the DS-System.
 - Remove Account: You can remove the customer account from the DS-NOC database. For this option to be enabled, the account should not have any DS-Client associated with it.

8.5.1 Creating a DS-Client account

This section describes how you can create new DS-Clients on a DS-System registered with the DS-NOC.

The DS-System must be configured to **Allow Web Registration**. These steps depend on the login account used or if the service provider has made specific DS-NOC configurations that affect the user interface.

1. On the DS-System menu, click Manage DS-Client.

NOTE: Click **Status Sync** to synchronize the DS-Client information with DS-System for accurate information on DS-Client status.

- a) To add a new DS-Client to a particular DS-System, click **Search**.
- b) On the **Search DS-Client** page, specify the search parameters, and then click **OK**.
- 2. On the DS-Client Management page, click New.
- 3. On the **New DS-Client Select Sales Group** page, select a **Sales Group** assigned to the DS-Client (for billing purposes).
- 4. Select a **Service Level** if applicable and then click **Next**.

NOTE: You must configure the DS-NOC in Additional Features: Allow Usage of Service Levels.

- 5. On the New DS-Client Select DS-System page, do the following:
 - a) In the **DS-System** box, select the DS-System assigned to the Sales Group you selected.
 - b) In the **Account #** box, add the DS-Client to an existing customer account, or create a new one.
 - c) In the **Promotion** box, select the promotional scheme.
 - d) In the Billing Scale box, select the Billing scale according to which the Online storage for the DS-Client will be charged.
 - e) In the **Expires On** box, select the date when the Billing Scale will expire (if applicable).
 - f) In the **Replaced with** box, select the Billing scale that will replace the one that has expired (if an Expires On date is specified.).
 - g) In the **BLM Billing Scale** box, select the scale according to which the BLM Archiver storage for the DS-Client will be charged.

- h) In the **Local-Only Billing Scale** box, select the scale according to which the Local-Only storage for the DS-Client will be charged.
- i) In the Sales Rep box, select the sales representative responsible for the DS-Client account.
- 6. Click Next.
- On the New DS-Client Address page (populated with information specific to the current account) make the necessary corrections, input the required data, and then click Next.
- On the New DS-Client DS-Client Tools page (contains the default settings for new DS-Clients from the selected DS-System) make the required corrections, click Next, and then click Finish.
- 9. On the **Software Download** page, select the type of DS-Client package to download.
 - To download a .CRi file for an existing DS-Client, click the associated icon in the CRI File column for the corresponding DS-System.
 - To download the installation configuration as an .xml file, click the associated icon in the **Installation Configuration** column for the corresponding DS-System.

8.5.2 Managing a DS-Client account

This section describes how you can create and configure a DS-Client on a DS-System that is registered with the DS-NOC.

- 1. On the **DS-System** menu click **Browse DS-System**.
- 2. On the **Browse DS-System** page, select the DS-Client on the left, and then click **Manage** in the section on the right.
- 3. On the Manage DS-Client page, select one of the following:
 - **Lock/Unlock**: Locks or unlocks a DS-Client. If an account is locked, then that particular DS-Client will not be able to connect with DS-System.
 - Deactivate/Reactivate: Deactivates or reactivates a DS-Client. If you
 deactivate a DS-Client, it will not be able to connect to the DS-System and
 you can delete it's backup data from the DS-System.
 - Check/Uncheck requires registration: DS-System requires the corresponding DS-Client to authenticate its hardware signature with the DS-System.
 - **DS-Client hardware registration**: Unregisters the DS-Client and allow it to register it's hardware signature with the DS-System within a specified time frame. Coordinate this process with the DS-Client administrator.

Viewing the status of a DS-Client account

 Remove DS-Client: Deletes the selected DS-Client and all its backed up files/backups.

You must deactivate the DS-Client for this option to be available.

4. Click OK.

8.6 Viewing the status of a DS-Client account

This section describes how you can view the present status of a DS-Client account.

On the **DS-System** menu, click **Manage DS-Client** to open the **DS-Client Management** page which displays the status of every DS-system registered with DS-NOC in the column **Status**.

8.7 Working with DS-Client reports

This section describes how you can generate various reports for the DS-Client.

The DS-Client Info Report is a configurable report that is generated on demand to show the current snapshot of information about the DS-Clients associated with a DS-System.

8.7.1 Generating a Backup Status Report

The Backup Status Report displays a summary of the backup status at Customer, DS-Client, and backup levels. It can be generated for a specific time period for all customers (macro report), or for a specific customer / DS-Client (micro report).

The report displays a list of the customer's DS-Clients, their description, version and status.

- 1. On the **DS-System** menu, click **View Reports**.
- 2. On the **DS-System Reports** page, click **Backup Status** in the DS-Client Reports section.
- 3. On the **DS-System Backup Status Report** page, select the DS-System, the account or DS-Client for which you would like to generate the report.
- 4. Specify the date and time from which you would like to generate the report, select the report format, report options, and then click **View Report**.

Click [+] against each item to drill down further for more details.

The explanations for the colored status icons are as follows:

· Backup Set level

- Green: During the report period, the backup ran at least one backup activity, and the last backup activity was successful.
- Blue: During the report period, the backup was still running.
- Yellow: During the report period, the backup ran at least one backup activity, but finished with warnings or was stopped by a user.
- Red: During the report period, the backup either did not have any activities or the backup ran at least one backup activity that ended with the status 'with errors'.

DS-Client level

DS-Client inherits the most severe status from all it's backups.

- Green: During the report period, all the backups belonging to the DS-Client had a 'green' status (or the DS-Client had no backups).
- Blue: During the report period, at least one of the DS-Client's backups had a 'blue' status (and the rest had a 'green' status).
- Yellow: During the report period, at least one of the DS-Client's backups had a 'yellow' status (which was the most severe status).
- Red: During the report period, at least one of the DS-Client's backups had a 'red' status.

Customer/Account level

Customer inherits the most severe status from all it's DS-Clients.

- Green: During the report period, all the DS-Clients belonging to the Customer had a 'green' status.
- Blue: During the report period, at least one of the customer's DS-Clients had a 'blue' status (and the rest had a 'green' status).
- Yellow: During the report period, at least one of the customer's DS-Clients had a 'yellow' status (which was the most severe status).
- Red: During the report period, at least one of the customer's DS-Clients had a 'red' status.

8.7.2 Generating a Storage Quotas Report

The Storage Quotas report displays the storage quota for the customer and each of its DS-Clients.

- 1. On the **DS-System** menu, click **View Reports**.
- 2. On the **DS-System Reports** page, click **Storage Quotas** in the *DS-Client Reports* section.
- 3. On the **DS-System Storage Quotas Report** page, select the DS-System, the account or DS-Client for which you would like to generate the report.
- 4. Select the report format, report options to be included in the report, and then click **View Report**. Click [+] against each item to drill down further for more details.

8.8 Working with DS-System reports

This section describes how you can generate various reports for the DS-System.

All DS-System reports accessed through the DS-NOC display data received directly from the corresponding DS-System. The report data is not saved in the DS-NOC database.

8.8.1 Generating a Backup Sets Report

The Backup Sets Report displays a summary of the backups for a specific DS-Client or customer. The report displays the DS-Client number, the backup name, and the online amount in MB.

- 1. On the **DS-System** menu, click **View Reports**.
- 2. On the **DS-System Reports** page, click **Backup Sets** in the *DS-System Reports* section.
- 3. On the **DS-System Backup Sets Report** page, select the DS-System, the account or DS-Client for which you would like to generate the report.
- 4. Select the report format, report options, and then click **View Report**.

To send the report in an email, click Email.

8.8.2 Generating Backup/Restore Report

The Backup / Restore Report displays a summary of the backup and restore activities for a specified period. It can be generated for all customers (macro report), or for a specific customer / DS-Client (micro report).

- 1. On the **DS-System** menu, click **View Reports**.
- 2. On the **DS-System Reports** page, click **Backup/Restore** in the *DS-System Reports* section.
- On the DS-System Backup/Restore Report page, select the DS-System, the account or DS-Client and the time frame for which you would like to generate the report.
- 4. Select the report format, report options, and then click **View Report**.

To send the report in an email, click Email.

 On the E-mail page, enter the required information, select the report format, and then click Send E-Mail.

8.8.3 Generating a DS-Client Info Report

- 1. On the **DS-System** menu, click **View Reports**.
- 2. On the **DS-System Reports** page, click **DS-Client Info** in the *DS-System Reports* section.
- On the DS-System DS-Client Info Report page, select the DS-System, the
 account or DS-Client and select the parameter by which you would like the
 report to be sorted.
- 4. Select the report format, report options, columns to be displayed, and then click **View Report**.

To send the report in an email, click Email.

8.8.4 Generating a DS-Client Version Report

The DS-Client Version report shows a summary of DS-Clients and their version. It can be generated for all DS-Clients, or for a specific customer or DS-Client. You can sort the report entries by DS-Client number, customer name or DS-Client Type.

- 1. On the **DS-System** menu, click **View Reports**.
- 2. On the **DS-System Reports** page, click **DS-Client Version** in the *DS-System Reports* section.
- 3. On the **DS-System DS-Client Version Report** page, select the DS-System, the account or DS-Client for which you would like to generate the report and select the parameter by which you would like the report to be sorted.
- 4. Select the report format and click View Report.

To send the report in an email, click Email.

 On the E-mail page, enter the required information, select the report format, and then click Send E-Mail.

8.8.5 Generating a DS-VDR Usage Report

The DS-VDR Usage report shows a summary of DS-VDR Tool count and allocation per DS-Client on this DS-System.

- 1. On the **DS-System** menu, click **View Reports**.
- 2. On the **DS-System Reports** page, click **DS-VDR Usage** in the *DS-System Reports* section.
- On the DS-System DS-VDR Usage Report page, select the DS-System, the account or DS-Client and select the parameter by which you would like the report to be sorted.
- 4. Select the report format and click View Report.

To send the report in an email, click **Email**.

8.8.6 Generating a Enabled Tools Report

The Enabled Tools report shows a summary of tools enabled for DS-Clients. It can be generated for all DS-Clients, or for a specific customer / DS-Client. The report shows the DS-Client number, the customer name, and a list of all tools enabled for that DS-Client. You can order the report entries by DS-Client number or customer name.

- 1. On the **DS-System** menu, click **View Reports**.
- 2. On the **DS-System Reports** page, click **Enabled Tools** in the *DS-System Reports* section.
- On the DS-System Enabled Tools Report page, select the DS-System, the
 account or DS-Client and select the parameter by which you would like the
 report to be sorted.
- 4. Select the report format and click **View Report**.

To send the report in an email, click **Email**.

 On the E-mail page, enter the required information, select the report format, and then click Send E-Mail.

8.8.7 Generating a Local-Only Capacity Report

The Local-Only Capacity report displays all DS-Clients that have Local-Only Capacity allocated by their DS-System. The report shows the DS-Client number, the customer name, the last validation time, the allocated Quota and the Used Quota.

- 1. On the **DS-System** menu, click **View Reports**.
- 2. On the **DS-System Reports** page, click **Local Only capacity** in the *DS-System Reports* section.
- On the DS-System Local Only Capacity Report page, select the DS-System, the account or DS-Client and select the parameter by which you would like the report to be sorted.
- 4. Select the report format and click View Report.

To send the report in an email, click Email.

8.8.8 Generating a Storage Trend Report

The Storage Trend displays the information gathered by a DS-System / BLM Archiver on individual DS-Clients. The frequency of information is based on their Storage History Settings (To set the frequency, navigate to DS-Operator > DS-Client Menu > Edit > DS-Client Profile: Advanced Tab).

- 1. On the **DS-System** menu, click **View Reports**.
- 2. On the **DS-System Reports** page, click **Storage Trend in the DS-System Reports** section.
- On the DS-System Storage Trend Report page, select the DS-System, the
 account or DS-Client, the time frame for which you would like to generate the
 report and select the parameter by which you would like the report to be sorted.
- 4. Select the report format, report options, and then click **View Report**.

To send the report in an email, click Email.

 On the E-mail page, enter the required information, select the report format, and then click Send E-Mail.

8.8.9 Generating a Storage Usage Report

The Storage Usage Report displays the current storage used on DS-System. You can generate the report for a specific customer or for a specific DS-Client.

- 1. On the **DS-System** menu, click **View Reports**.
- 2. On the **DS-System Reports** page, click **Storage Usage** in the *DS-System Reports* section.
- On the DS-System Storage Usage Report page, select the DS-System, the
 account or DS-Client for which you would like to generate the report and how
 it should be sorted.
- 4. Select the report format, report options, and then click **View Report**.

To send the report in an email, click Email.

8.9 Working with Recovery reports

This section describes how you can generate and view various recovery based reports DS-Systems, DS-Clients, and customer accounts. The reports are generated based on data gathered from the DS-Client(s). Each DS-Client requires registration of certain demographic information and on each restore request, users are required to specify the reason.

8.9.1 Generating a Restore Activity by Account Report

The report displays the number of restores per day for the selected customer accounts for a specified date range.

- 1. On the **DS-System** menu, click **View Reports**.
- 2. On the **DS-System Reports** page, click **Restore Activity by Account** in the *Recovery Reports* section.
- 3. On the **Restore Activity by Account Report** page, select the DS-System, and the time frame for which you would like the report to be generated.
- 4. Select the report format, chart type, and click **View Report**.

To send the report in an email, click Email.

 On the E-mail page, enter the required information, select the report format, and then click Send E-Mail.

8.9.2 Generating a Restore Activity by DS-Client Report

This report displays the number of restores per day for the selected DS-Clients for a specified date range.

- 1. On the **DS-System** menu, click **View Reports**.
- On the DS-System Reports page, click Restore Activity by DS-Client in the Recovery Reports section.
- On the Restore Activity by DS-Client Report page, select the DS-System, the DS-Client, and the time frame for which you would like the report to be generated.
- 4. Select the report format, chart type, and then click View Report.

To send the report in an email, click Email.

8.9.3 Generating a Restore Activity by DS-System Report

This report displays the number of restores per day for the selected DS-Systems for a specified date range.

- 1. On the **DS-System** menu, click **View Reports**.
- 2. On the **DS-System Reports** page, click **Restore Activity by DS-System** in the *Recovery Reports* section.
- 3. On the **Restore Activity by DS-System Report** page, select the DS-System, and the time frame for which you would like the report to be generated.
- 4. Select the report format, chart type, and then click **View Report**.

To send the report in an email, click Email.

 On the E-mail page, enter the required information, select the report format, and then click Send E-Mail.

8.9.4 Generating a Restore Activity by Industry Vertical Report

This report displays the number of restores per day for the selected vertical industries across a selection of DS-Systems for a specified date range.

- 1. On the **DS-System** menu, click **View Reports**.
- 2. On the **DS-System Reports** page, click **Restore Activity by Industry Vertical** in the *Recovery Reports* section.
- On the Restore Activity by Industry Vertical Report page, select the DS-System, the industry vertical, and the time frame for which you would like the report to be generated.
- 4. Select the report format, chart type, and click **View Report**.

To send the report in an email, click **Email**.

8.9.5 Generating a Restore Summary by Industry Vertical Report

This report displays the total number of restores for each vertical industry in a DS-System over a specified date range.

- 1. On the **DS-System** menu, click **View Reports**.
- 2. On the **DS-System Reports** page, click **Restore Summary by Industry Vertical** in the *Recovery Reports* section.
- On the Restore Summary by Industry Vertical Report page, select the DS-System and the time frame for which you would like the report to be generated.
- 4. Select the report format and click View Report.

To send the report in an email, click Email.

 On the E-mail page, enter the required information, select the report format, and then click Send E-Mail.

8.10 Viewing DS-System Logs

This section describes how you can generate and view various logs for the DS-System.

8.10.1 Viewing the Activity Log

The DS-NOC retrieves the DS-System Activity Log from the corresponding DS-System's database. DS-NOC does not store any of this information in the DS-NOC database.

The DS-System Activity Log displays the length of the connections established by an activity, a description of the activity, the amount of data transferred during the activity, whether or not any errors occurred, and other relevant information.

- 1. On the **DS-System** menu, point to **View Logs**, and then click **Activity Log**.
- 2. On the **DS-System Activity Log** page, select the time frame for which you want to view the log, select the **DS-System** and use the filter to view the log for an account or DS-Client or a backup.
- 3. Select the activity type, for N+1 systems select the N+1 node, and then click **Find**.

8.10.2 Viewing the Event Log

The DS-System Event Log displays records of network activity, error messages, and other information items related to DS-System activities or other internal processes of that DS-System.

- 1. On the DS-System menu, point to View Logs, and then click Event Log.
- 2. On the **DS-System Event Log** page, select the time frame for which you want to view the log, select the **DS-System** and the **Category**.
- Select the event type (information, warning, or error), and enter the event ID to search.
- 4. Select a user, the event number, and then click **Find**.

8.10.3 Viewing the Audit Trail

The DS-System Audit Trail is a log that displays records of all changes made to the DS-System database. It shows the user that made a change, the time of the change, and a description of the change.

- 1. On the **DS-System** menu, point to **View Logs**, and then click **Audit Trail**.
- 2. On the **DS-System Audit Trail** page, select the time frame for which you want to view the audit trail, select the **DS-System** and the **Table**.
- 3. Select an Operation, a User, and then click Find.

8.10.4 Viewing the N1 log

Logs are displayed only for N+1 DS-Systems even though all DS-Systems registered with DS-NOC are listed in the DS-System drop down list.

- 1. On the **DS-System** menu, point to **View Logs**, and then click **N+1 Log**.
- 2. On the **DS-System N+1 Log** page, select the time frame for which you want to view the log, select the **DS-System** and the **Type**.
- 3. Select a N+1 Node, the Event #, and then click Find.

8.10.5 Viewing the Recovery Log

The DS-System Recovery Log displays records of all recovery activities made from DS-System online storage (DS-Systems using DS-License Server RLM only).

- 1. On the **DS-System** menu, point to **View Logs**, and then click **Recovery Log**.
- 2. On the **DS-System Recovery Log** page, select the time frame for which you want to view the log, select the **DS-System** and the **Restore Type**.
- Select an Account or DS-Client, select the type of log to be displayed, and then click Find.

9 Managing BLM Archivers

These functions allow you to view the status and logs of BLM Archiver(s) registered with the DS-NOC, browse or delete Archive Packages, search for specific information about an Archive Package, create and download Restorable Images, and view reports.

9.1 Configuring a BLM Archiver

This section describes how you can configure a BLM archiver to interface with DS-NOC.

9.1.1 Adding a BLM Archiver

- On the Configurations menu, point to Setup Products, and then click BLM Archiver.
- 2. On the BLM Archiver Management page, click Add BLM Archiver.
- 3. Under Step 1, do the following:
 - a) In the **Server Name** box, type the name of the BLM Archiver.
 - b) In the **IP Address/DNS Name** box, type the IP address or DNS name of the BLM Archiver.

NOTE: The TCP port number (4402) cannot be changed as it is the port used by the DS-NOC to connect to BLM Archiver.

- c) In the **Connection Protocol** box, select one of the following:
 - Encrypted All the data between the BLM Archiver GUI and the BLM Archiver service will be encrypted with a random encryption key at every connection.
 - Standard This option if offered only for backwards compatibility with old service or daemon versions that do not have the encryption feature.
- d) In the **Restorable Image Save Path on BLM Archiver** box, specify the path where the restorable image will be saved.

NOTE: This path must be on the BLM Archiver computer or a UNC path that the BLM Archiver service account can access.

e) In the **Restorable Image Maximum Size** box, specify the amximum size of the restorable image.

NOTE: Consider the 4 GB web browser file download limit and the space available in your restorable image buffer for your BLM Archiver.

- f) Click Next.
- 4. Under Step 2, do the following:
 - a) In the **User Name** box, type the user name required to log on to the BLM Archiver.
 - b) In the **Password** box, type the password required to log on to the BLM Archiver.
 - c) In the **Re-type Password** box, retype the password.
 - d) In the **Login From** box, specify the domain or server on which the credentials will be verified.
 - e) To verify the credentials, select the **Verify Credentials** check box.
 - f) Click Finish.

9.1.2 Editing a BLM Archiver

- 1. On the **BLM Archiver Management** page, click the associated icon in the **Edit** column for the BLM Archiver you want to modify.
- 2. On the **Edit BLM Archiver** page, update the information in the Profile and Server tabs, click **Apply**, and then click **OK**.

9.1.3 Migrating a BLM Archiver

This option is required in situations where you are using BLM Archiver Replication and have switched the primary BLM Archiver with the Replication BLM Archiver (that is, you have reconfigured your DS-System to send BLM Archiver data to what was previously your Replication BLM Archiver).

If any *BLM Archiver Level Permissions* have been defined for the old BLM Archiver, you must perform this migration on the DS-NOC to correct the mapping for the current BLM Archiver that is in use.

 On the BLM Archiver Management page, click the associated icon in the Migrate column for the BLM Archiver you want to migrate.

The **BLM Archiver Migration** page displays a list of all DS-Systems with DS-NOC permissions you can migrate. The section on the left displays the 'Old BLM Archiver' and a list of each DS-Systems. The section on the right is the New BLM Archiver with a corresponding drop down list of DS-Systems and options.

- For each DS-System, select the corresponding DS-System on the new BLM where the permissions will be migrated. Normally, you can just select the DS-System with the same name. (You can Disable, Keep or Delete the permissions that have been granted for the selected object.)
- 3. Click **Finish** if only DS-System level permissions were granted.
 - If permissions are more specific, click Next to display the BLM Archiver Migration page with a list of all customers. Select the mapping option for each customer.
- 4. Continue clicking **Next** and making selections and then click **Finish**.

9.1.4 Updating BLM Archiver credentials

- On the Configurations menu, point to Setup Products, and then click BLM Archiver.
- 2. On the **BLM Archiver Management** page, click the associated icon in the **Credentials** column for the BLM Archiver you want to update.
- 3. On the **Edit BLM Archiver credentials** page, make the required changes and click **Save Changes**.

9.1.5 Deleting a BLM Archiver

- On the Configurations menu, point to Setup Products, and then click BLM Archiver.
- 2. On the **BLM Archiver Management** page, click the associated icon in the **Delete** column for the BLM Archiver you want to remove from the DS-NOC.
- 3. On the **Delete BLM Archiver** page, click **Delete** to confirm the request.

9.2 Viewing the status of a BLM Archiver

You can view the BLM Archivers registered with the DS-NOC Tool, their status, and any current processes. The number of visible BLM Archivers depends on the permissions defined for the DS-NOC user account.

- 1. On the BLM Archiver menu, click BLM Archiver Status.
- On the BLM Archiver Status and Activities page, click the (+) icon against the BLM Archiver to view any activities running on the corresponding BLM Archiver.

9.3 Configuring BLM Archiver notifications

BLM notification configurations determine how often the DS-NOC connects to BLM Archivers to obtain information.

- On the Configurations menu, point to Notifications, and then click BLM Archiver Notification.
- 2. On the **BLM Archiver Notifications** page in **Step 1**, specify the notification settings, and then click **Next**.

NOTE: SNMP Trap will require further configuration and the DS-NOC must be able to connect to an SNMP server.

- In Step 2: BLM Archiver Events Settings, select the events you want to monitor, configure the Event Code and Notification Frequency for each event, and then click Next.
- 4. On the **Monitored BLM Archiver(s)** page, select the BLM Archiver(s) you want to monitor and click **Finish**.

9.4 Browsing a BLM Archiver

This section describes how you can browse the archive package tree of each registered BLM Archiver. The items displayed depends on the permissions defined for the DS-NOC user account.

- On the BLM Archiver menu, click Browse BLM Archiver.
- On the Browse BLM Archiver page, in the Navigation window on the left, you
 can browse and drill-down to the archive packages.

NOTE: In the navigation window, click the **Find Account / DS-Client** icon to open a popup window, where you can search for a specific BLM Archiver \ DS-System \ Customer (Account #) \ DS-Client # \ Description.

 Highlight an item in the Navigation window to view it's details in the Browse Details window on the right.

9.5 Working with archive packages

The DS-NOC allows the user to browse archive packages, request package destruction or confirm package delete.

9.5.1 Performing an archive search

Archive searches are defined search criteria that allow you to search through a large BLM Archive.

- 1. On the **BLM Archiver** menu, click **Archive Searches**.
- On the Select BLM Archive Searches, specify the BLM Archiver, the time when the archive was created, the filter (DS-System/Account#/DS-Client#/ Backup Set), and then click Find.
- 3. On the **BLM Archive Searches** screen displaying the Archive Searches according to the search criteria, you can edit, start, view results, delete an Archive Search from the list, or create a new one.

9.5.2 Browsing an archive package

This section describes how you can browse for a particular archive package.

- On the BLM Archiver menu, point to Archive Data Packages, and then click Browse.
- On the Select BLM Archive Package page, select the BLM Archiver, the time when it was created, criteria for the selection and filter (DS-System \ Account# \ DS-Client# \ Backup Set) and click Find.
- 3. On the **BLM Archive Package Browse** page, click the browse icon on the right to view the package details.

On the navigation screen, you can view the details of your selection and add items to a restorable image (new or existing).

9.5.3 Destroying an archive package

- On the BLM Archiver menu, point to Archive Data Packages, and then click Data Destruction Request.
- 2. On the **Data Destruction Request** page, select the BLM Archiver, the time when it was created, and filter (DS-System \ Account# \ DS-Client# \ Backup Set) whose archived packages you want to delete and then click **Next**.
- 3. On the next page, select the **Destruction Type**, and then click **Next**.
- 4. On the next page enter the required details and then click **Finish**. (The User name and phone number are of the user logged in to the DS-NOC.)

9.5.4 Confirming a data destruction request

- 1. On the **BLM Archiver** menu, point to **Archive Data Packages**, and then click **Confirm Data Destruction**.
- On the Confirm Data Destruction page, select the BLM Archiver, the time when the destruction request was placed, and filter (DS-System \ Account# \ DS-Client# \ Backup Set) whose archived packages you want to confirm for destruction, and then click Next.
- On the Confirm Data Destruction page select the packages from the list and click Confirm Destruction to have the packages deleted. If you want to invalidate a destruction request, select the package(s), and then click Cancel Destruction.

9.6 Working with restorable images

This section describes how you can perform various functions with a restorable image.

9.6.1 Searching for a restorable image

- 1. On the BLM Archiver menu, click Restorable Images.
- On the BLM Restorable Images Search page, specify the BLM Archiver, the time period, filter (DS-System \ Account# \ DS-Client# \ Backup Set), and then click Find.

On the **BLM Restorable Images** page, you can create a new image, edit image, write, delete, download. After downloading the image, you can restore the files using the BLM Restore option on DS-User.

NOTE: You must have a DS-Client installed and configured with the same Private and Account encryption keys that were used to encrypt the data in order to restore from the Restorable Image.

3. Click **Refresh** to update your view with new images meeting the selection criteria, or to update the Status.

9.6.2 Configuring a restorable image

- 1. On the BLM Archiver menu, click Restorable Images.
- On the BLM Restorable Images Search page, enter the required details and click Find.
- 3. On the **BLM Restorable Images** page you can do the following:
 - Add a new BLM Restorable image:
 - a) Click **New** to add a BLM restorable image.
 - b) On the **Add BLM Restorable Image** page, enter the required information and click **Add**.
 - Edit a BLM Restorable Image
 - a) Click the associated icon in the Edit column to modify a restorable image.
 - b) On the **Edit BLM Restorable Image** page, in the **Image Info** tab, enter a description and then click **Apply**.
 - c) In the **Selected Items** tab, click **Add** to add restorable image item(s).
 - d) On the **Package Details** page, select the required item, and then click **Add Selection to Restorable Image**.
 - e) To modify a *BLM Restorable Image*, click the associated icon in the **Edit** column to display the **Edit BLM Restorable Image Item** screen.
 - f) Select the required option and then click Save Changes.
 - Delete a BLM Restorable Image Item
 - a) Click the associated icon in the **Delete** column to display the delete confirmation screen.
 - b) Click **OK** to proceed with deleting the selected *BLM Restorable Image Item*.
 - c) Click Apply and then click OK.

9.6.3 Writing a restorable image

- 1. On the BLM Archiver menu, click Restorable Images.
- On the BLM Restorable Images Search page, enter the required details and click Find.
- 3. On the **BLM Restorable Images** page, click the associated icon in the **Write** column against the required restorable image.
- 4. On the Write BLM Restorable Image screen, select a Reason for restore and click Write.

9.6.4 Downloading a restorable image

- 1. On the BLM Archiver menu, click Restorable Images.
- On the BLM Restorable Images Search page, enter the required details, and then click Find.
- 3. On the **BLM Restorable Images** page, click the associated icon in the **Download** column against the required restorable image.
- 4. On the BLM Restorable Image Download page, click Download.

NOTE: You will need to extract the files from the ZIP image before you can restore.

- 5. To download individual files of the restorable image, click [+] against **Individual Image Files** to display the list of files in the image.
- 6. Click **Download** against the required file name to download individual files.

9.6.5 Deleting a restorable image

- 1. On the **BLM Archiver** menu, click **Restorable Images**.
- On the BLM Restorable Images Search page, enter the required details, and then click Find.
- 3. On the **BLM Restorable Images** page, click the associated icon in the **Delete** column against the required restorable image.
- 4. On the **Delete BLM Resotrable Image** page, click **Delete** to confirm deletion of the selected BLM Restorable Image.

9.7 Working with BLM Archiver reports

This section describes how you can view BLM Archiver reports.

All BLM reports accessed through the DS-NOC display data received directly from the corresponding BLM Archiver. The report data is not saved in the DS-NOC database.

NOTE: Generation of these reports may take time because the required data has to be transfer between BLM Archiver and DS-NOC.

9.7.1 Generating an Archive Packages Report

The BLM Archiver Archive Packages Report displays a list of packages it contains. For each archive package, it lists information about the source (DS-System \ Account \ DS-Client \ Backup set), together with the Status, Number of files, Number of Library files, Protected Size and Stored Size, Creation date and Consolidation date.

- 1. On the BLM Archiver menu, click View Reports.
- 2. On the BLM Archiver Reports page, click Archive Packages.
- 3. On the **BLM Archiver Archive Packages Reports** page, select a **BLM Archiver**.
- 4. In the field **Filter**, select the detail level for the report (All \ DS-System \ Account #\ DS-Client #\ Backup Set) and select the time frame for which the report is required.
- 5. Select the report format and click View Report.

To send the report in an email, click Email.

9.7.2 Generating a Destruction Certificates Report

The BLM Archiver Destruction Certificates Report shows destruction certificates that were generated during the report period. It can display information at DS-System, account, DS-Client or backup level.

- 1. On the **BLM Archiver** menu, click **View Reports**.
- 2. On the BLM Archiver Reports page, click Destruction Certificates.
- On the BLM Archiver Destruction Certificates Reports page, select a BLM Archiver.
- 4. In the field **Filter**, select the detail level for the report (All \ DS-System \ Account # \ DS-Client # \ Backup Set).
- 5. Select the reporting period, the report format, and then click **View Report**.

To send the report in an email, click Email.

 On the E-mail page, enter the required information, select the report format, and then click Send E-Mail.

9.7.3 Generating a Global List of Backup Sets Report

The BLM Archiver Global List of Backup Sets Report displays a list of backups it contains. For each backup, it lists additional information about the corresponding DS-System \Account \DS-Client number, the number of packages, the number of files, and the Stored Size and Protected Size.

- 1. On the **BLM Archiver** menu, click **View Reports**.
- 2. On the BLM Archiver Reports page, click Global List of Backup Sets.
- On the BLM Archiver Global List of Backup Sets Report page, select a BLM Archiver and select a filter to define the level of detail in the report (All \ DS-System \ Account # \ DS-Client # \ Backup Set).
- Select a report format, select criteria for sorting the information: (DS-Client #\
 Customer Name \ Protected Size \ Stored Size \ DS-System Name), and click
 View Report.

To send the report in an email, click **Email**.

9.7.4 Generating a Storage Usage Report

The BLM Archiver Storage Usage Report displays records at DS-System, Account, DS-Client # or Backup Set level. It displays information about Stored Size and Protected Size, and additional information about the DS-System that sent the data.

- 1. On the **BLM Archiver** menu, click **View Reports**.
- 2. On the BLM Archiver Reports page, click Storage Usage.
- 3. On the BLM Archiver Storage Report Usage page, Select a BLM Archiver.
- 4. In the field **Filter**, select the detail level for the report (All \ DS-System \ Account #\ DS-Client #).
- 5. Select the report format, additional information to include in the report, and click **View Report**.

To send the report in an email, click Email.

 On the E-mail page, enter the required information, select the report format, and then click Send E-Mail.

9.8 Viewing BLM Archiver Logs

This section describes how you can generate and view BLM Archiver logs. The DS-NOC retrieves all the data for the logs from the corresponding DS-Billing server's database and does not store any of this information in the DS-NOC database.

9.8.1 Viewing the Activity Log

The BLM Archiver Activity Log displays the length of the connections, a description of the activity, the amount of data stored and protected, whether or not any errors occurred, and other information.

- 1. On the **BLM Archiver** menu, point to **View Logs**, and then click **Activity Log**.
- 2. Select the BLM Archiver and the time frame.
- 3. Select a filter (DS-System \ Account #\ DS-Client #\ Backup Set), select the **Activity Type**, and then click **Find**.
- 4. On the Activity Log page, you can do the following:
 - To save the log as a PDF document or .CSV format, click the associated icon
 - To send an email, click the corresponding icon.

9.8.2 Viewing the Event Log

The BLM Archiver Event Log displays records of network activity, error messages, and other information items related to BLM activities or other internal processes of the BLM Archiver.

- 1. On the **BLM Archiver** menu, point to **View Logs**, and then click **Event Log**.
- 2. Select the time frame and the **BLM Archiver**.
- 3. Select the **Category** (in what context did the event occur) and the **Type** (information, warning or error) and click **Find**.

To further refine the search, enter the event number (or click the number in the **Event#** column) and the event ID.

- 4. On the **Event Log** page, you can do the following:
 - To save the log as a PDF document or .CSV format, click the corresponding icon.
 - To send an email, click the corresponding icon.

9.8.3 Viewing the Data Destruction Log

The BLM Archiver Data Destruction Log displays records of all completed destruction requests, destruction time and type, number of files destroyed, the protected and stored size of those files, based on the filter chosen.

- 1. On the **BLM Archiver** menu, point to **View Logs**, and then click **Data Destruction Log**.
- 2. Select the time frame and the **BLM Archiver**.
- 3. Select a filter (DS-System \ Account #\ DS-Client #\ Backup Set).
- 4. Select the **Destruction Type** and click **Find**.
- 5. On the **Data Destruction Log** page, you can do the following:
 - To save the log as a PDF document or .CSV format, click the corresponding icon.
 - To send an email, click the corresponding icon.

9.8.4 Viewing the Recovery Log

The BLM Archiver Recovery Log displays records of all Restorable Image Write activities made from BLM Archiver storage. [BLM Archivers using DS-License Server RLM only]

- On the BLM Archiver menu, point to View Logs, and then click Recovery Log.
- 2. Select the time frame and the BLM Archiver.
- 3. Select a filter (DS-System \ Account #\ DS-Client #\ Backup Set).
- 4. Select the type of log and click **Find**.
- 5. On the **Recovery Log** page, you can do the following:
 - To save the log as a PDF document or .CSV format, click the corresponding icon.
 - To send an email, click the corresponding icon.

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10 Managing DS-Billing Servers

This chapter describes how you can manage DS-Billing Servers that interface with DS-NOC.

NOTE: You must configure DS-Billing Usage in the DS-NOC Configuration Additional Features page.

10.1 Configuring a DS-Billing Server

This section describes how to configure the DS-Billing server.

10.1.1 Adding a DS-Billing Server

- On the Configurations menu point to Setup Products, and then click DS-Billing.
- 2. On the DS-Billing Management page, click Add DS-Billing.
- 3. On the **Add DS-Billing** page in **Step 1**, enter all the required information, select the connection protocol, and then click **Next**.
 - Server Name: Unique name to identify this DS-Billing in the DS-NOC.
 - IP Address / DNS name: The IP address (or DNS name) that DS-NOC will use to connect to the DS-Billing.
 - TCP Port: 4416 (This port number cannot be changed. It is the port used by the DS-NOC to connect to DS-Billing.)
 - Connection Protocol: Encrypted or Standard (for communications between DS-NOC and the DS-Billing).
 - Location: Physical address where the DS-Billing is located.
- 4. On the **Add DS-Billing** page in **Step 2**, enter the required information and click **Finish**.
 - The Username and Password must be valid to login to that DS-Billing.
 - In the Login From field, enter the domain or server on which the user name and password will be verified. (i.e. DS-Billing validates the given credentials with this domain or server.)
 - Select the option **Verify Credentials** to verify the user name and password with the DS-Billing server.

10.1.2 Editing a DS-Billing Server

This section describes how you can edit the DS-Billing information.

- On the Configurations menu, point to Setup Products, and then click DS-Billing.
- 2. On the **DS-Billing Management** page, click the associated icon in the **Edit** column for the DS-Billing you want to change.
- 3. On the **Edit DS-Billing** page update the required information in the Profile and Server tabs, click **Apply** and then click **OK**.

10.1.3 Updating DS-Billing credentials

This section describes how you can update the DS-Billing credentials.

- On the Configurations menu, point to Setup Products, and then click DS-Billing.
- 2. On the **DS-Billing Management** page, click the associated icon in the **Credentials** column for the DS-Billing you want to edit.
- 3. On the **Edit DS-Billing Credentials** page update the information, as required and click **Save Changes**.

10.1.4 Deleting a DS-Billing Server

This section describes how you can delete a DS-Billing Server.

- On the Configurations menu, point to Setup Products, and then click DS-Billing.
- On the **DS-Billing Management** page, click the associated icon in the **Delete** column for the DS-Billing you want to remove from the DS-NOC.
- 3. On the **Delete DS-Billing** page, click **Delete** to confirm the deletion.

10.2 Viewing the status of a DS-Billing Server

This displays a list of DS-Billing (server) registered with the DS-NOC, their status, and any current processes. The number of visible DS-Billing servers depends on your user permissions (DS-NOC user account).

- 1. On the **DS-Billing** menu, click **DS-Billing Status**.
- On the DS-Billing Status and Activities in Progress page, click [+] against
 a DS-Billing Name to view activities running on the corresponding DS-Billing
 server.

10.3 Working with DS-Billing reports

This section describes how you can generate and view DS-Billing reports.

All DS-Billing reports accessed through the DS-NOC display data received directly from the corresponding DS-Billing server. The report data is not saved in the DS-NOC database.

NOTE: These reports may take time to display because of the required data transfer between DS-Billing and DS-NOC.

10.3.1 Generating an Additional Charges Report

This report displays the Additional Charges billed for each month and corresponds to the report on the DS-System.

- 1. On the **DS-Billing** menu, click **View Reports**.
- 2. On the **DS-Billing Reports** page, click **Additional Charges**.
- 3. On the **DS-Billing Additional Charges Report** page, select a DS-Billing server, a sales group, and the period for which the report is required.
- 4. Select the report format, the option to be included in the report, and then click **View Report**.

To send the report as an email, click **Send E-Mail**.

 On the E-mail page, enter the required information, select the report format, and then click Send E-Mail.

10.3.2 Generating a Backup Sets Report

This report displays a summary of the backups for a specific DS-Client or customer and corresponds to the report on the DS-System.

- 1. On the **DS-Billing** menu, click **View Reports**.
- 2. On the **DS-Billing Reports** page, click **Backup Sets**.
- 3. On the **DS-Billing Backup Sets Report** page, select a sales group, select a DS-Billing server, and a DS-System.
- 4. Select a report format, the options to be included in the report, and then click **View Report**.

To send the report as an email, click **Send E-Mail**.

10.3.3 Generating a Backup Status Report

This report displays a summary of backup status for the DS-Clients on the DS-System.

- 1. On the **DS-Billing** menu, click **View Reports**.
- 2. On the **DS-Billing Reports** page, click **Backup Status**.
- 3. On the **DS-Billing Backup Status Report** page, select a sales group, select a DS-Billing server, and a DS-System.
- 4. Select a period for which the report is required, and the report format.
- 5. Select the options to be included in the report and click **View Report**.

To send the report as an email, click Send E-Mail.

 On the E-mail page, enter the required information, select the report format, and then click Send E-Mail.

10.3.4 Generating a Global List of Customers Report

This report displays the monthly storage for each DS-Client on the corresponding DS-System and is the same as the report on the DS-System.

- 1. On the **DS-Billing** menu, click **View Reports**.
- 2. On the **DS-Billing Reports** page, click **Global List of Customers**.
- 3. On the **DS-Billing Global List of Customers Report** page, select a sales group, select a DS-Billing server, and a DS-System.
- 4. Select a report format, select a parameter to sort the report, select the options to be included in the report, and then click **View Report**.

To send the report as an email, click **Send E-Mail**.

 On the E-mail page, enter the required information, select the report format, and then click Send E-Mail.

10.3.5 Generating an Invoice Report

This section describes how you can generate and view an invoice report.

- 1. On the **DS-Billing** menu, click **View Reports**.
- 2. On the **DS-Billing Reports** page, click **Invoice**.
- 3. On the **DS-Billing Invoice Report** page, enter the required parameters, select the report format, and then click **View Report**.

To send the report as an email, click Send E-Mail.

10.3.6 Generating a Sales Group Monthly Report

This section describes how you can generate and view a Sales Group Monthly report.

In order to have access to this report, the user must be a DS-NOC Administrator/ equivalent user or configured with DS-NOC Level permissions for Sales Group Reports.

This report shows the sales generated by a particular Sales Group. If the selected Sales Group is configured to show commissions, this report will include a breakdown of the commissions generated by each Sales Representative.

- 1. On the **DS-Billing** menu, click **View Reports**.
- 2. On the **DS-Billing Reports** page, click **Sales Group Monthly Report**.
- On the DS-Billing Sales Group Monthly Report page, select the required parameters, select the report format, the options to be included in the report, and then click View Report.

To send the report as an email, click Send E-Mail.

 On the E-mail page, enter the required information, select the report format, and then click Send E-Mail.

10.3.7 Generating a Sales Group Recovery Report

This report displays the current recovery used on DS-System. To access this report, you need to be a DS-NOC Administrator/equivalent user or have DS-NOC Level permissions for Sales Group Reports.

- 1. On the **DS-Billing** menu, click **View Reports**.
- 2. On the **DS-Billing Reports** page, click **Sales Group Recovery Report**.
- 3. On the **DS-Billing Sales Group Recovery Report** page, select a DS-Billing server and a sales group.
- 4. Select a report format, a period for which the report is required, the options to be included in the report, and then click **View Report**.

To send the report as an email, click Send E-Mail.

10.3.8 Generating a Sales Group Storage Usage Report

This report displays the current storage used on DS-System. To access this report, you need to be a DS-NOC Administrator/equivalent user or have DS-NOC Level permissions for Sales Group Reports.

- 1. On the **DS-Billing** menu, click **View Reports**.
- 2. On the DS-Billing Reports page, click Sales Group Storage Usage.
- 3. On the **DS-Billing Sales Group Storage Usage Report** page, specify the DS-Billing server, and select a sales group.
- 4. Select a report format, the options to be included in the report, and then click **View Report**.

To send the report as an email, click **Send E-Mail**.

 On the E-mail page, enter the required information, select the report format, and then click Send E-Mail.

10.3.9 Generating a Storage Trend Report

The DS-Billing Storage Trend displays the storage used by DS-Systems and BLM Archivers over time.

- 1. On the **DS-Billing** menu, click **View Reports**.
- 2. On the DS-Billing Reports page, click Storage Trend.
- 3. On the **DS-Billing Storage Trend Report** page, select a sales group, a DS-Billing server and the DS-System.
 - Select a report format, and the period for which the report is required.
 - Select the options to be included in the report and click View Report.

To send the report as an email, click **Send E-Mail**.

10.4 Viewing DS-Billing Logs

This section describes how you can generate and view DS-Billing logs. The DS-NOC retrieves all the data for the logs from the corresponding DS-Billing server's database and does not store any of this information in the DS-NOC database.

10.4.1 Viewing the Activity Log

To view the Activity Log:

The DS-Billing Activity Log displays the length of the connections, a description of the activity, and whether or not any errors occurred.

- 1. On the **DS-Billing** menu, point to **View Logs**, and then click **Activity Log**.
- 2. On the **DS-Billing Activity Log** page, select the required time frame, the DS-Billing server, the type of activity, and then click **Find**.
- 3. On the **DS-Billing Activity Log** page, you can do the following:
 - To save the log as a PDF document or .CSV format, click the corresponding icon.
 - To send an email, click the corresponding icon.

10.4.2 Viewing the Event Log

To view the Event Log:

The DS-Billing Event Log displays records of network activity, error messages, and other information items related to DS-Billing activities or other internal processes of that DS-Billing server.

- 1. On the **DS-Billing** menu, point to **View Logs**, and then click **Event Log**.
- 2. On the **DS-Billing Event Log** page, select the required time frame, the DS-Billing server, and the event category.
- 3. Select the type of activity and click Find.
- To further refine the search, enter the Event#, the ID (event ID), and then click Find.
- 5. On the **DS-Billing Event Log** page, you can do the following:
 - To save the log as a PDF document or .CSV format, click the corresponding icon.
 - To send an email, click the corresponding icon.

10.4.3 Viewing the Audit Trail

To view the Audit Trail:

The DS-Billing Audit Trail displays records of all changes made to the DS-Billing database. It shows the user that made a change, the time of the change, and a description of the change.

- 1. On the **DS-Billing** menu, point to **View Logs**, and then click **Audit Trail**.
- 2. On the **DS-Billing Audit Trail** page, select the required time frame, the DS-Billing server, and the table to include in the log.
- 3. Select the type of operation, a user, and then click **Find**.
- 4. On the **DS-Billing Event Log** page, you can do the following:
 - To save the log as a PDF document or .CSV format, click the corresponding icon.
 - To send an email, click the corresponding icon.

10.4.4 Viewing the Recovery Log

To view the Recovery Log:

The DS-Billing Recovery Log displays records of all recovery activities logged from DS-Systems and BLM Archivers using the DS-Billing server.

- 1. On the **DS-Billing** menu, point to **View Logs**, and then click **Recovery Log**.
- 2. On the **DS-Billing Recovery Log** page, select the required time frame, a sales group, and the DS-Billing server.
- 3. Select a DS-System, the account/DS-Client, the log type, and restore type.
- 4. Select which logs to display and click **Find**.
- 5. On the **DS-Billing Event Log** page, you can do the following:
 - To save the log as a PDF document or .CSV format, click the corresponding icon.
 - To send an email, click the corresponding icon.

10.4.5 Viewing the DR Drill Request Log

To view the DR Drill Request Log:

The DS-Billing DR Drill Request Log displays records of all scheduled DR Drill Requests made from DS-Systems and BLM Archivers using the DS-Billing server.

- 1. On the **DS-Billing** menu, point to **View Logs**, and then click **DR Drill Request Log**.
- 2. On the **DS-Billing DR Drill Request Log** page, select the required time frame, a sales group, and the DS-Billing server.
- 3. Select a Ds-System, the account/DS-Client, the log type, and then click **Find**.
- 4. On the **DS-Billing Event Log** page, you can do the following:
 - To save the log as a PDF document or .CSV format, click the corresponding icon.
 - To send an email, click the corresponding icon.

Managing DS-Billing Servers

Viewing DS-Billing Logs

11 Managing DS-Clients

These functions allow you to view the status, logs, and reports of DS-Clients belonging to DS-Systems registered with the DS-NOC.

11.1 Configuring the DS-Client settings

Using DS-NOC you can view and edit the configuration of DS-Clients it is monitoring. This feature is supported by the following DS-Clients:

- FullFeatured Windows DS-Client
- FullFeatured Linux DS-Client
- FullFeatured Mac DS-Client
- DS-Mobile Client (Windows)
- DS-Notebook Client (Mac)

NOTE: You cannot define some configurations via DS-NOC. You can perform these from the DS-User GUI (refer the DS-Client User Guide).

Requirements:

- The DS-Client must be configured for monitoring (Dashboard > Configurations > Notifications: DS-Client Notification. Section 11.2, "Configuring DS-Client notifications").
- User must be a DS-NOC administrator or have permission to "View DS-Client Configuration" or "Edit DS-Client Configuration" (Configurations > Setup Permissions).

Editing any DS-Client configuration setting is performed by the DS-NOC saving a "config-update-noc.xml" for a monitored DS-Client (Dashboard > Configurations > Notifications: DS-Client Notification. Section 11.2, "Configuring DS-Client notifications").

The next time the DS-Client connects to DS-NOC, it will save the *config-update-noc.xml* to its installation folder. DS-Client will apply the update, then rename the file to **config-update-noc_nnn.xml**, where **nnn** is an incremental number.

NOTE: Since you must wait until DS-Client connects to DS-NOC to download any XML configuration updates, there is some lag time before the DS-Client setting(s) are actually updated.

11.1.1 Configuring a DS-Client

- 1. On the menu bar, point to **DS-Client**, and then click **Configuration**.
 - The *DS-Client Configuration* page is divided into the **Navigation** section and the **Browse Details** section. The *Browse Details* section displays detailed information of an item highlighted in the navigation section. The details displayed will depend on the configured permissions for each user.
- 2. Highlight the required DS-Client and in the **Browse Details-DS-Client** section, click **View** against **DS-Client Configuration**.
- 3. In the **DS-Client Configuration** dialog box, enter/select all the required information in the various tabs, click **Apply**, and then click **OK**.

Modifications made will be updated the next time DS-Client connects to the DS-NOC.

11.1.2 Configuring the DS-Client backup policy

This feature involves setting up generic DS-Client configuration settings to be used with the DS-Client Backup Policy. Affected DS-Clients will connect to DS-NOC and download the XML policy changes and apply them.

NOTE: Any configurations you make here are generic to the level where you are defining the DS-Client Backup Policy. Be careful at the higher levels (<All DS-Systems>), since you will be instructing DS-NOC to change multiple DS-Clients' configurations. If a DS-Client cannot apply a change, it will be ignored.

- 1. On the menu bar, point to **DS-Client**, and then click **Configuration**.
- 2. Highlight the required DS-Client and in the **Browse Details-DS-Client** section, click **Edit** against **DS-Client Backup Policy**.
- 3. In the **DS-Client Backup Policy** dialog box, do one of the following:
 - Select Inherit to apply a backup policy from the account level or DS-System level.
 - Select None, if you do not want any backup policy to be applied.
 - Select **Define a new backup policy** and then click **Edit** to modify a backup policy. Refer DS-Client User Guide for details.
- 4. Click Save Changes.

11.1.3 Configuring the bandwidth throttle settings

This section describes how you can apply a *throttle* to the outgoing and incoming bandwidth used by this DS-Client. (refer the DS-Client User Guide for details.)

- 1. On the menu bar, point to **DS-Client**, and then click **Configuration**.
- 2. Highlight the required DS-Client and in the **Browse Details-DS-Client** section, click **View** against **Bandwidth Throttle**.
- 3. In the **Bandwidth Throttle** dialog box, select the required parameters and click **OK**.

11.1.4 Configuring the system activities settings

- 1. On the menu bar, point to **DS-Client**, and then click **Configuration**.
- 2. Highlight the required DS-Client and in the **Browse Details-DS-Client** section, click **View** against **System Activities**.

This is the same screen as you see in the DS-User GUI (Setup menu > System Activities). Refer the DS-Client User Guide for details.

NOTE: Because the DS-NOC updates are not immediate, you cannot perform tasks like "Disable" on Scheduled / Demand Activities or "Run Now" on Daily / Weekly Admin.

11.1.5 Viewing or downloading an XML configuration file

- 1. On the menu bar, point to **DS-Client**, and then click **Configuration**.
- in the Browse Details-DS-Client section, against XML Configuration, click View to display the file, click Download to save the configuration file or click DTD to view the DTD version of the configuration file.
- Against XML Configuration (Modified) click View to display the configuration file if it has been modified by DS-NOC; click Reset if you wan to reset the DS-Client XML Configuration update.

11.2 Configuring DS-Client notifications

This section describes how you can configure various DS-Client notifications.

To configure DS-Client notifications:

- 1. On the **Configurations** menu, point to **Notifications**, and then click **DS-Client Notification**.
- On the DS-Client Notification page, in Step 1: DS-NOC Settings for DS-Client Notification, select the connection protocol.
- 3. In the field **DS-NOC Address**, enter the external IP address or DNS name that will be used by DS-Clients to connect to this DS-NOC server.
- 4. Enter the port number, select the frequency (in minutes or hours) at which a monitored DS-Client will connect with the DS-NOC.
- 5. Select the number of attempts and their frequency in case connection is not established and click **Next**.
- In Step 2: DS-Client Notification Settings, do the following, and then click Next:
 - Destination E-Mail Notification: Select Send E-Mail Notification and enter the email address to which the email notification will be sent.
 - Select the E-Mail format (HTML or plain text).
 - Select the language in which the reports will be sent.
 - Select the option to include in the report.
 - End User E-Mail Notification: select to send an email notification to the end user.
 - Select the time at which the daily report should be sent.
 - Select the time frame for which the daily report should be sent
 - SNMP Trap: Select to send a SNMP Trap.
 - Select the time period for which the DS-Client logs should be retained.
 - Select the time period for which the DS-Client statistics should be retained.
 - Frequently Off-line DS-Clients: Configure separate notifications for the selected types of DS-Clients.
 - DS-Client Device Remote Control: Select the options to enable device tracking or remote wipe.
- In Step 3: DS-Client Events Settings, select the events you want to monitor, configure the Event Code and Notification Frequency for each event, and then click Next.
- 8. In **Step 4: Monitored DS-Clients**, review the list of monitored DS-Clients. Click the associated icon in the **Edit** column to add or delete DS-Clients, and then click **Finish**.

11.3 Configuring the DS-Client backup properties

This section describes how you can update the properties of a backup from DS-NOC. Depending on the DS-Client and where the backup is defined, you may be able to configure different sets of tabs and options.

NOTE: Since DS-NOC cannot browse a backup's target server, any path or name configurations must be entered manually. If any path or name that is changed through DS-NOC does not exist or is incorrect, the configuration will not function for that backup.

- 1. On the **DS-Client** menu, click **Configuration**.
- 2. On the **DS-Client Configuration** page, in the navigation section, drill down and highlight the required backup.
- 3. In the **Browse Details-Backup Set** section, click **View** against properties.
- 4. In the **Backup Set Properties** dialog box, edit the required settings, click **Apply**, and then click **OK**. (Refer the DS-Client User Guide for details.)

11.4 Configuring the DS-Client backup schedule

This section describes how you can modify/create a DS-client backup schedule from DS-NOC.

- 1. On the **DS-Client** menu, click **Configuration**.
- 2. In the **Navigation** section, select a DS-System and drill down to **Backup Schedules**.
- 3. In the **Backup Schedule** section, click the associated icon in the **Edit** column for a backup schedule.
- 4. In the **Schedule** dialog box, click **New** to create a new schedule or edit the required parameters for the schedule, and then click **OK**.(Refer DS-Client User Guide for details.)

11.5 Configuring the DS-Client retention rules

This section describes how you can modify a DS-client retention rule from DS-NOC.

- 1. On the **DS-Client** menu, click **Configuration**.
- 2. In the **Navigation** section, select a DS-System and drill down to **Retention Rules**.
- 3. In the **Retention Rules** section, click the associated icon in the **Edit** column for a particular rule.
- 4. In the **Retention Rule** dialog box, modify the required parameters, and then click **OK**. (Refer DS-Client User Guide for details.)

11.6 Configuring the DS-Client event filter

All events have a default severity, which determines the color that is displayed for the corresponding DS-System \ Customer \ DS-Client \ Backup Set when that event occurs.

The Events Filter helps DS-NOC administrators to customize their own environment by re-defining the importance and severity of specific events that occur.

On this page you can view and configure the events being filtered. DS-NOC will use the new severity settings (overwrite the default severity) of any configured events when it displays the status of DS-System \ Customer \ DS-Client \ Backup Set.

- 1. On the **DS-Client** menu, click **Events Filter**.
- On the Events Filter page, click Show to display filters that have already been defined and are being applied to the monitoring of DS-Systems \ Accounts \ DS-Clients.
- 3. In the **Select by** section, you can modify the search parameters to display the required events.
- 4. Click **Add** to specify new filters.
- 5. In the **Add DS-Client Event Filter** dialog box, specify the required parameters, and then click **Add**.

11.7 Viewing the DS-Client backup status

This section describes how you can view DS-Clients registered with the DS-NOC Tool, their status, and any current processes. The visible DS-Clients depends on your user permissions (DS-NOC user account).

NOTE: Status columns are based on the event status. If the highest event severity is *Critical*, then the status icon is red. If the highest event severity is *Medium*, then the status icon is yellow. If the highest event severity is *Normal*, then the status icon is green. If there is no event for the object, the status icon is blue.

- 1. On the **DS-Client** menu, click **Backup Status**.
- On the **Ds-Client Backup Status** page, select the time frame and if you want to exclude suspended backups, click the corresponding option and then click **Show**.

The backup status is displayed at the DS-System \ Customer \ DS-Client \ Backup Set levels.

The following table explains the colored icons against the DS-System \ Customer \ DS-Client \ Backup Set:

Green:	Normal - Backup finished successfully.	
Yellow:	Medium - Backup finished with intermediate errors.	
Red:	Critical - Backup finished with critical errors. Scheduled backup was not triggered. Enterprise DS-Client did not connect. Frequently Offline DS-Client did not connect.	
Blue:	No information available.	

- 3. On the **DS-Client Backup Status** page, you can do the following:
 - Click [+] to view details of activities for a DS-System \ DS-Client \ Backup Set.
 - Click the associated icon in the Browse column to view the DS-Client Backup Activities page, where you can search for a particular activity.
 - Click the associated icon in the Statistics column to view the DS-Client Backup Statistics page for the corresponding item from the DS-Client Backup Status list.
 - Click the number in the column Events to view the DS-Client Backup Activities page, where you can view the activities that have occurred.
 - Click the associated icon in the Usage column to view the Modify
 DS-Clients Usage page, where you can apply the usage type.
 - For a backup, you can click the importance level to view the Modify
 Backup Set Importance dialog box, where you can modify the importance level.

11.8 Viewing the DS-Client backup activities

This section describes how to view the Activity Logs for all monitored DS-Clients.

- 1. On the **DS-Client** menu, click **Backup Activities**.
- 2. On the **DS-Client Backup Activities** page modify the required parameters to narrow the search, and then click **Show** to update the page.
 - For any activity, click the corresponding Event Log icon to open the View Event Logs page for that item.
 - In both the **DS-Client Backup Activities** and **View Event Logs** pages, you can also save or email the contents in PDF or CSV format.

11.9 Working with DS-Client reports

This section describes how you can view various DS-Client reports.

11.9.1 Generating a Statistical Summary Report

This report displays useful statistics and compression ratios4 for backups performed by the DS-Client. It is useful in conjunction with the Statistical Backup Set feature to estimate backup times and amounts.

This report displays statistics per backup. You can view all the backups on a DS-System, backups for a customer, backups for a DS-Client, or an individual backup.

- 1. On the **DS-Client** menu, click **View Reports**.
- 2. On the DS-Client Reports page, click Statistical Summary Report.
- 3. On the **DS-Client Statistical Summary Report** page, select a DS-System, account/DS-Client, and a backup.
- 4. Select the time frame and a report frame.
- 5. Select an option to group the report, select the types of backups to include in the report, and then click **View Report**.

11.9.2 Generating a LAN Discovery Report

This section describes how you can view a LAN Discovery Report using DS-NOC. This report has to be generated in DS-User and uploaded to a directory where DS-NOC will access it. (Refer *DS-Client User Guide* for details on how to generate this report.)

- 1. On the **DS-Client** menu, click **View Reports**.
- 2. On the DS-Client Reports page, click LAN Discovery Report.
- 3. On the **DS-Client LAN Discovery Report** page, select **View Report** for the parameter **Type**.
- 4. Select a DS-System, select a DS-Client, and then click View Report.

11.9.3 Uploading a LAN Discovery Report

- 1. On the **DS-Client** menu, click **View Reports**.
- On the DS-Client Reports page, click LAN Discovery Report.
- 3. On the **DS-Client LAN Discovery Report** page, for the parameter **Type**, select **Upload Report**.
- 4. Select a DS-System, select a DS-Client, select the file to upload, and then click **Upload Report**.

11.9.4 Deleting a LAN Discovery Report

- 1. On the **DS-Client** menu, click **View Reports**.
- 2. On the DS-Client Reports page, click LAN Discovery Report.
- On the DS-Client LAN Discovery Report page, select Delete Report for the parameter Type.
- 4. Select a DS-System, select a DS-Client, and then click **Delete Report**.

11.10 Deploying multiple DS-Mobile Clients

The Mass Deployment functionality in DS-NOC enables you to prepare DS-Mobile Clients for mass deployment.

The two main parts of a Mass Deployment are the Installation and Configuration of the DS-Mobile Clients.

The installation of DS-Mobile Client is done using an **MST** file containing application specific information [Account No., DSC No., DSS IP, Encryption keys (both account and private), etc.]. You can configure DS-Mobile Clients using a configuration file that contains information regarding Backup Sets, Schedules and Retention Rules.

The process of Mass Deployment in DS-NOC consists of 4 stages:

- 1. Create the Installation File
- 2. Create the Configuration File
- 3. Configure Active Directory
- 4. Monitor your deployments

You must have the required permissions to access the *Mass Deployment* interface. (Refer *DS-Client User Guide* for details on how to assign the required permissions.)

Show Downloadable Files

On the Mass Deployment home page, click **Show History** to view all the Mass Deployment files generated on this DS-NOC.

- Each line corresponds to file(s) generated in either Stage 1 or 2.
- The following files are available on this page:
 - DS-Mobile Client MSI installation packages
 - The MST file (generated by DS-NOC)
 - The DS-Client configuration files (generated by DS-NOC)

NOTE: These files are stored on the DS-NOC server and you can selectively delete them by clicking the delete icon beside each selected file.

11.10.1 Creating an installation file

This section describes how you can create an installation file.

11.10.1.1 Step 1 Add New / Existing Template DS-Client

Before you start, ensure that you have a DS-System registered with the DS-NOC.

- 1. Login as a DS-NOC administrator, or as a user with the required permissions for *Mass Deployment* and *Manage DS-Client* at the DS-System **Account** level.
- 2. On the **DS-Client** menu, click **Mass Deployment**.
- 3. On the Mass Deployment page, click Stage 1.
- 4. On the Installation File page, click Start Process.
- 5. Enter all the required information for all the fields marked **Mandatory** and then click **Next**.
 - Sales Group: These are the Sales Groups as defined in DS-NOC. The template DS-Client created in this step belongs to the selected Sales Group. You can also select <None>. This option is available only when DS-System is not registered with DS-Billing. When DS-NOC is configured without DS-Billing, this section is not displayed.
 - Service Level: [Optional] You must first define a Service Level in DS-NOC before you can select it here. A Service Level is a package of predefined parameters (account settings like storage quota, available DS-Client tools, billing scales, service period and installation settings like encryption type, initial backup).
 - Template DS-Client#: If you have an existing Template DS-Client which
 you want to reuse, then select it from the list. Otherwise, select New to
 create a new Template DS-Client.
 - Auto-registration counter: This is the number of DS-Clients that can register with the DS-System using the DS-Client number defined in "Template DS-Client #". The default value is 10.
 - Fill up description with DS-Client computer name: If you select this
 check box, the name of each DS-Client machine will be automatically sent
 and stored in DS-System as the "Description" for that DS-Client.

Once DS-Billing is set up in DS-NOC and assigned to the DS-System you selected, DS-Billing settings will be displayed. You can set up DS-Clients to transition from one Online Billing Scale to another on an expiry date or you can set it to start with an ongoing Online Billing Scale without an expiry date. Before applying billing scales on this page, you must do the following:

- · Define billing scales in DS-Billing
- Every DS-Client being deployed belongs to a particular Sales Group. You can
 add billing scales to a Sales Group using DS-NOC (Configurations > Setup
 Permissions > Sales Groups > Edit: Sales Group > Modify: Sales Group's
 Configuration > Edit: DS-Billing).

- Evaluation for a month: Select this check box to facilitate backup activities free of charge for one month after DS-Client is deployed. Invoices will be generated along with a credit note.
- Billing Scale: Select the online billing scale that will be activated immediately.
- Expires on: Enter an expiry date to create a promotional offer. The active
 Online Billing Scale above will continue till this date.
- Replaced with: Select an Online Billing Scale that will become active on the expiry date, if a date has been entered for Expires on.
- Select a billing scale that will be activated as soon as DS-Client is deployed.
- Sales Rep: Select the sales representative who will be associated with the DS-Clients you are deploying. Sales representatives are defined in DS-Billing and selected in DS-NOC.

The **Address** information is imported as **Location** information in DS-Billing for each DS-Client being deployed.

11.10.1.2 Step 2 Upload MSI file

Upload the corresponding MSI file available on the installation DVD, at the following location:

\Software\Tools\Mass_Deployment\DS-Mobile_Client_Mass_Deployment\Package

11.10.1.3 Step 3 Encryption Type / Keys

The keys and parameters you select will be used for all DS-Mobile Clients that were installed using the generated Mass Deployment package. Enter all the required parameters and click **Next**.

- Account Key Encryption Type: Set an Account Key which will be used to
 encrypt common data across multiple DS-Clients belonging to the same
 account. Select Account Key Encryption Type and the Account Key
 matching those of the account where the DS-Clients are created, if DS-Clients
 are already installed in that account.
- Encryption Key Forwarding Allow encryption key forwarding to DS-System: Select to forward the keys to DS-System. which remain encrypted on the DS-System and you will be able to create a valid .CRI file containing the encrypted keys. You can use this file to re-create a working version of the DS-Client.

11.10.1.4 Step 4 Confirmation

Review all the details you have entered and click **Finish**. DS-NOC will create a Template DS-Client and generate an MST file for the DS-Client installation(s) you have selected. Click **Back** to edit any information if required.

11.10.1.5 Step 5 Download MST file(s)

- Click the link and save the MST file.
- Deploy DS-Mobile Client via Active Directory using the corresponding MST files and MSI files.

11.10.2 Creating an XML configuration file

You can define backups, schedules, and retention rules that will be saved in the configuration file. This stage is optional; you can modify these configuration parameters at a later stage using DS-NOC.

11.10.2.1 Step 1 Create a backup

The same backups are created for each DS-Mobile Client that is deployed using a particular configuration file.

- 1. On the **DS-Client** menu, click **Mass Deployment**.
- 2. On the Mass Deployment page, click Stage 2.
- 3. On the Configuration File page, click Start Process.
- 4. Enter all the required information and click **Next**. Following is some important information:
 - Domain/Computer Name: Enter the Domain or Computer Name where the user account of the Backup Set Owner is defined (if it is a domain user account).
 - Backup Set Owner: Specify the owner of the backup. This user can be a local user on the target DS-Mobile Client or a domain user.
 - Use Service Account: Select to use the log on credentials of the DS-Mobile Client service to create the backup. This option is available only when creating a backup for the local DS-Client machine.
 - Enter Credentials: Specify the credentials that DS-Mobile Client will require to access the source location of the backup being created.
 - DS-System: Select to send backup data to DS-System only.
 - DS-System and Local Storage: Select to send backup data to DS-System and to a specified local storage location.

 Exclude file extensions [When "All files" is ON]: Specify the file extension(s) you want to exclude Use semi-colon to separate multiple extensions.

11.10.2.2 Step 2 Configure schedule

This step is optional. If you do not want to specify any schedule for the backup, select **Not Scheduled** and click **Next** or define a new schedule.

11.10.2.3 Step 3 Configure retention rule

Ensure that you configure a retention rule for each backup. Following is some important information:

Backup Set Retention Rules Specify what data is retained. Data that is not retained will be removed permanently.			
Field / Option	Tips		
If files are removed from source	Optional. If selected, and DS-Client detects that a backed up file has been deleted from the backup source, retention will be applied to that file based on two settings. • After: Specify the time to wait after the file was removed from the backup source before applying the retention. • Keep generations: When retention is applied, keep this number of the latest generation(s) online and delete the rest.		
Keep all generations for [x] day(s) (Backup Location must be configured with "DS-System and Local Storage")	 Optional. Select if you want to save backup data in Local Storage. You must ensure there is sufficient Local Storage space. DS-Mobile Client will do the following: Keep all generations of a file in Local Storage for the specified number of days. Always keep the latest generation of a file in Local Storage. 		

11.10.2.4 Step 4 Summary and download configuration file

On this page a summary is displayed with the details of the backup.

- On this page, you can click the corresponding button or link to add/edit/delete a backup or proceed to Stage 3.
- Download the Configuration file:

config-update.xml

Refer *DS-Mobile Client Mass Deployment Guide* for details on how to deploy the DS-Mobile Client via Active Directory.

11.10.3 Configuring the Active Directory

- 1. On the **DS-Client** menu, click **Mass Deployment**.
- 2. On the Mass Deployment page, click Stage 3.
- 3. On the **Active Directory Configuration** page, follow the instructions and click **Proceed to Stage 4**.

The instructions describe how you can configure the GPO for each MSI installation package in Active Directory and provide the MST file and (if applicable) XML configuration file.

- 1. Copy the following files to a shared folder on the Domain Computer
 - The MST file generated in Stage 1.
 - The DS-Client auto-configuration file generated in Stage 2 (config-update.xml).
 - The corresponding MSI installation package from the Asigra DVD.
- 2. Create an individual Organizational Unit in Active Directory for each Asigra package you would like to mass deploy.
- 3. Create a Group Policy Object for each Organizational Unit and ensure the following:
 - The Domain Computers have READ and APPLY GROUP POLICY rights (Properties for the Group Policy Object, Security).
 - The computers are under corresponding Organizational Units.
- 4. Configure the Group Policy Object.
 - Expand the Group Policy Object tree and select:

```
Computer Configuration\Software\Policies\Software Settings\Software Installations.
```

- In the right panel, click the context menu New > package...
- Select a package that you want to deploy. Ensure the deployment path is a UNC path (e.g. \myserver\MSI\$\mypackage.MSI). A UNC path cannot contain an IP address (installation will not work).
- In the **Deploy Software** dialog box, select **Advanced**.
- In the GPO Properties dialog box, click Modification.
- Add the MST file that you want to use to transform the package, and then click **OK**.
- 5. Ensure that all changes to the GPO are replicated to all Domain Controllers.

11.10.4 Monitoring the deployed DS-Mobile Clients

You can use DS-NOC to view the deployment status of the DS-Mobile Clients created using Mass Deployment from the DS-System.

- 1. On the **DS-Client** menu, click **Mass Deployment**.
- 2. On the Mass Deployment page, click Stage 4.
- On the Monitoring page review the status of DS-Clients deployed using the template DS-Client page, follow the instructions, and then click Proceed to Stage 4.

Expand a Template DS-Client to see the list of DS-Clients that were created using the MST file.

4. Click Schedule Backup Set or Reschedule Backup Set after you have specified the users and/or sites that you need to back up, the backup schedule, the required credentials, and the DS-Clients to be used for this cloud service domain.

DS-NOC will update the XML configuration file for each DS-Client in which backups need to be created.

Each updated XML configuration file describes the specifications for a particular DS-Client to create backups for the users and/or sites that you have selected. DS-Client will download this file the next time it communicates with DS-NOC, which will be the earlier of these instances:

- When DS-NOC and the monitored DS-Client automatically connect according to the specified Connection Frequency under DS-Client Notification settings
- When you or another user make an on-demand connection request from the monitored DS-Client: In DS-User, on the Setup menu, click DS-NOC Settings. In the DS-NOC Settings screen, click Connect to DS-NOC.

11.11 Managing remote DS-Clients

The *Geolocation* module offers device tracking and remote wipe features to help prevent data breach and identity theft should mobile devices be lost or stolen. You can use these features in the *DS-Client Device Remote Control* page in DS-NOC.

Device tracking and Remote wipe are available on smartphones, laptops, tablets, and any computer with a DS-Client installation that supports this feature.

NOTE: To enable device tracking or remote wipe, you need to log on to DS-NOC as a DS-NOC Administrator.

11.11.1 Enabling geolocation features

A number of prerequisites must be fulfilled before device tracking and remote wipe can be used in *DS-Client Device Remote Control*. The following instructions are intended for administrators.

Perform all of the following tasks in the recommended order.

Order	Task	from / via	Details
1	Obtain licenses for geolocation and maps services. Supported geolocation vendors: Google Skyhook Supported maps vendors: Google Maps HERE Maps	Geolocation and maps providers	Geolocation and maps services are required for device tracking only. Upon purchase of geolocation and maps services, vendors should provide you with access credentials.
2	Obtain the license for the Geolocation module, which is a DS-Tool.	Asigra	The Geolocation module is required for both device tracking and remote wipe. If your existing Recovery License does not include the Geolocation module, contact Asigra. For information on upgrading a Recovery License, see DS-License Server RLM Manual.
3	Verify that the Geolocation module has been licensed as a DS-Tool in DS-System Configuration.	DS-System	When the Geolocation module is licensed, <i>GEO Location</i> will be listed as an available DS-Tool in DS-System Configuration. For information on DS-Tools, see the DS-System Operator Manual.
4	Enable device tracking and remote wipe in DS-Client Notification settings in DS-NOC.	DS-NOC	In DS-Client Notification settings, for DS-Client Device Remote Control, ensure that the option(s) that you need are selected. Device tracking and remote wipe can be enabled separately. For instructions see, Section 11.11.2, "Enabling device tracking" and/or Section 11.11.3, "Enabling remote wipe".
5	Ensure that the DS-Client(s) of devices that require device tracking and/or remote wipe have been added to be managed in DS-NOC.	DS-NOC	For device tracking and/or remote wipe to be available to an individual DS-Client, the DS-Client must be listed as a monitored DS-Client in DS-Client Notification settings. A DS-Client is monitored when it has been added to be managed in DS-NOC.

Order	Task	from / via	Details
6	Provide the access credentials you have obtained from vendors of geolocation and maps services.	DS-NOC	Access credentials to geolocation and maps services must be provided in the <i>Geolocation and Map Settings</i> page in DS-NOC before device tracking can be used.
7	Ensure that device tracking and/or remote wipe is enabled in DS-Client Configuration for all DS-Clients of devices that require these features.	DS-NOC	Each geolocation feature must be enabled on each DS-Client that requires the feature. By default, all DS-Clients inherit the Device Tracking and Remote Wipe settings from the next level above (which can be DS-NOC, DS-System, or Customer Account). In DS-Client Configuration, you can enable device tracking and/or remote wipe for one individual DS-Client, or simultaneously for all DS-Clients under a customer, under a DS-System, or under all DS-Systems in DS-NOC. For instructions, see Section 11.11, "Managing remote DS-Clients"
8	Grant the Device Tracking permission to the user accounts of end users who need to track a device.	DS-NOC	For an end user to track the location of a device, the user account must have the <i>Device Tracking</i> permission for the DS-Client of the device. The permission <i>Device Tracking</i> allows a user to track the location of devices per individual DS-Clients. The following is the extent to which you can grant this permission to a user account: • To all DS-Clients in a sales group; see Section 4.6.1, "Configuring permissions at DS-NOC level". • To all DS-Clients in all DS-Systems; see Section 4.6.2, "Configuring permissions at DS-System level". • To all DS-Clients in one DS-System; see Section 4.6.2, "Configuring permissions at DS-System level". • To one DS-Client; see Section 4.6.2, "Configuring permissions at DS-System level". For instructions on granting user permissions, see Section 4.6, "Configuring user and group permissions".

Order	Task	from / via	Details
9	If a device to be tracked is behind a proxy server, configure the DS-Client of the device to connect to DS-NOC via a proxy server.	DS-Client	For instructions, see the DS-Client User Guide.
10	Grant the <i>Device Remote</i> Wipe permission to the user accounts of end users who need to perform remote wipes.	DS-NOC	For an end user to perform a remote wipe on a device, two things are required: • The user account must have the Device Remote Wipe permission to the DS-Client of the device. • The user also needs to enter an authorization code.
11	Ensure that the user accounts that has the permission to perform remote wipes do not have the permission to generate authorization codes.	DS-NOC	Only DS-NOC Administrators, or users that have the permission <i>Manage authorization codes</i> , can generate authorization codes. Recommendation: Do not grant any individual user account both the permission to perform remote wipes and the permission to generate authorization codes. If necessary, designate specific user accounts
12	If necessary, grant designated user accounts the permission <i>Manage authorization codes</i> but without the permission <i>Device Remote Wipe.</i>	DS-NOC	solely for generating authorization codes. The permission <i>Device Remote Wipe</i> allows a user to perform remote wipes on devices per individual DS-Clients. The following is the extent to which you can grant this permission to a user account: • To all DS-Clients in a sales group; see Section 4.6.1, "Configuring permissions at DS-NOC level". • To all DS-Clients in all DS-Systems; see Section 4.6.2, "Configuring permissions at DS-System level". • To all DS-Clients in one DS-System; see Section 4.6.2, "Configuring permissions at DS-System level". • To one DS-Client; see Section 4.6.2, "Configuring permissions at DS-System level". • To one DS-Client; see Section 4.6.2, "Configuring permissions at DS-System level". The permission <i>Manage authorization codes</i> allows a user to generate authorization codes. See Section 4.6.6, "Configuring permissions at user level".

11.11.2 Enabling device tracking

You can track end-point devices and view their exact geographical location on a map along with other details. If you are an administrator, you can view the status of all devices that are being tracked by users in DS-NOC.

The *Device Tracking* tab allows you to modify two settings for DS-Clients on trackable devices:

- Enable and disable device tracking for one or multiple DS-Clients.
- Modify the frequency at which location information is collected from a tracked device.

To enable device tracking for one or multiple DS-Clients

- 1. On the **DS-Client** menu, click **Configuration**.
- On the **DS-Client Configuration** page, in the **Navigation** window, browse to
 one of the available levels or items for which you want to modify settings for
 device tracking.
- 3. Beside DS-Client Device Remote Control, click Edit.
- 4. In the **DS-Client Device Remote Control** dialog box, click the **Device Tracking** tab.
- 5. Beside **Default Settings**, specify whether you want to use the default settings of the level above.

NOTE: By default, this check box is selected so that all DS-Clients inherit the Device Tracking settings from the level above (which can be DS-NOC, DS-System, or Customer Account). You will not be able to modify the **Enable Device Tracking** option if this check box is selected.

- 6. To enable device tracking, select **Yes**, and then do the following:
 - a) Beside **Collect Location Frequency**, specify how often you want to collect location information for the device.
 - b) To indicate that you agree to the collection, use, and storage of location information on your devices, select the I understand and accept this notice check box.
 - c) Click OK.
- If you have selected a level higher than an individual DS-Client in the Remote
 Device Control Options dialog box, select the appropriate option to apply the
 Device Tracking settings to all DS-Clients that belong to this customer, and
 then click OK.

11.11.3 Enabling remote wipe

You can remotely remove data on a device and lock a DS-Client after wipe execution, blocking the connection to DS-System. This prevents malicious access to backed up data. After you have requested a remote wipe on a device, you can view the status of the wipe. If you are an administrator, you can view the status of all remote wipes that have been requested by users.

To enable or disable remote wipe for one or multiple DS-Clients

- 1. On the **DS-Client** menu, click **Configuration**.
- On the **DS-Client Configuration** page, in the **Navigation** window, browse to one of the available levels or items for which you want to modify remote wipe settings:
- 3. Beside DS-Client Device Remote Control, click Edit.
- 4. In the **DS-Client Device Remote Control** dialog box, click the **Remote Wipe**
- Beside **Default Settings**, specify whether you want to use the default settings of the level above.

NOTE: By default, this check box is selected so that all DS-Clients inherit the Remote Wipe settings from the level above (which can be DS-NOC, DS-System, or Customer Account). You will not be able to modify the **Enable Remote Wipe** option if this check box is selected.

6. To enable **Remote Wipe**, select **Yes**, and then click **OK**.

NOTE: If you have selected a level higher than an individual DS-Client in the Navigation window, the *Remote Device Control Options* window appears.

If you have selected a level higher than an individual DS-Client, in the Remote
 Device Control Options dialog box, select the appropriate option to apply the
 remote wipe settings to all DS-Clients that belong to this customer, and then
 click OK.

11.11.4 Creating remote wipe authorization codes

An authorization code is required to perform a remote wipe on a device. Authorization codes can be generated by a DS-NOC Administrator or by a user that has the permission *Manage authorization codes*.

Authorization codes are valid for 24 hours only. Each authorization code can be used for only one remote wipe execution. All active and expired authorization codes that you have historically generated are displayed in *View Remote Wipe Authorization Codes*.

- 1. On the **DS-Client** menu, click **Authorization Codes**.
- 2. On the View Remote Wipe Authorization Codes page, click New.
- 3. In the **Create new authorization code** dialog box, enter a description for the new authorization code, and then click **Generate**.

To view a list of existing authorization codes, on the **Dashboard** page, point to **DS-Client**, and then click **Authorization Codes**.

11.11.5 Searching for a device

If several devices are managed in DS-NOC, you can search for the DS-Client of a specific device to use geolocation features on the device and view status information.

NOTE: For a device to be listed, the DS-Client of the device must have already been added to be managed in DS-NOC. For details, see Section 11.11.1, "Enabling geolocation features".

To search for a device:

- 1. On the **DS-Client** menu, click **Remote Control Status**.
- On the **DS-Client Device Remote Control** pages, use the search filter in the section *Select by* to find the DS-Client of a device. The following search criteria are available:
 - DS-System: Select from this menu to show only DS-Clients that were created in a specific DS-System
 - Account/DS-Client: Click the Browse button and then select to show DS-Clients that belong to a specific Customer Account or to show a specific DS-Client.
 - Last Connection is After: Select the check box, click the Calendar icon, and specify a cutoff date and time to show only DS-Clients that have last connected with DS-NOC after the cutoff date and time.

- **Device Tracking**: Select from this menu to show DS-Clients that are in a specific *Device Tracking* status.
- Remote Wipe: Select from this menu to show DS-Clients that are in a specific Remote Wipe status.
- 3. Click **Find** to see DS-Clients that match your selected criteria. DS-Clients that are found are listed in the table in the lower section of *DS-Client Device Remote Control*.

11.11.6 Tracking the location of a device

To track the location of a device, ensure that the following requirements have been met.

- Enable location services on the device so that the device can report its location information.
- Ensure that the browser that you will use for logging on to DS-NOC has Internet access.
- Log on to DS-NOC as a DS-NOC Administrator or as a user that has been granted the *Device Tracking* permission to the DS-Client of the device.
- Ensure that device tracking is enabled for the DS-Client of the device you want to track.

NOTE: For more information, see Section 11.11.1, "Enabling geolocation features".

The **Device Location Summary** panel displays the geographical locations of tracked devices on a map. To view the map in a larger window, click **Expand Map**. The following details of a tracked device are displayed:

- Status: This column displays whether device tracking is enabled or disabled
 on the device and, if enabled, whether the location has been tracked. N/A
 indicates that device tracking is not enabled for a device. Enabled indicates
 that device tracking is enabled, but the location of the device has not been
 successfully tracked yet. Tracked indicates that device tracking is enabled, and
 the location of the device has been successfully tracked at least once.
- Method: This column displays the geolocation method by which the location of a device has been determined, which can be one of the following: Wi-Fi, GSM, GPS, or IP address.
- Location: This column displays the geographical location of a tracked device in text format.

To track the location of a device:

- 1. On the **DS-Client** menu, click **Remote Control Status**.
- 2. In the **DS-Client Device Remote Control** dialog box, find the DS-Clients of the devices for which you want to view or modify device tracking settings.
- 3. Select the required DS-Client(s) and click **Device Tracking**.
- 4. In the **Device Tracking** dialog box, modify the following settings, as required and click **OK**.
 - Enable Device Tracking: If Yes is selected, device tracking is enabled on the selected DS-Client or DS-Clients; if No is selected, device tracking is disabled.
 - Collection Location Frequency: This setting shows the time interval at which the location of the tracked devices is collected.

NOTE: (To administrators) Changes made to each DS-Client using the above instructions are equivalent to changes made to each DS-Client using the instructions described in Section 11.11, "Managing remote DS-Clients".

11.11.7 Performing a remote wipe of a device

To perform a remote wipe of a device, ensure that the following requirements have been met:

- Log on to DS-NOC as a DS-NOC Administrator or as a user that has been granted the *Device Remote Wipe* permission to the DS-Client of the device.
- Obtain an authorization code from a DS-NOC Administrator or from a designated user that has the *Manage authorization code* permission.
- If you plan to remove data of a specific user on a device with FullFeatured Windows DS-Client or DS-Mobile Client, you have to provide the user name and password of the user account.

The **Remote Wipe Status** panel displays a color-coded progress report of remote wipe activities on a pie chart. You can cancel a remote wipe only while the remote wipe activity is still in *Initialized* status. Select the DS-Client of the device on which you have just requested a remote wipe and click **Cancel**.

- Purple indicates that a remote wipe activity has been initialized but is not yet in progress.
- Orange indicates that a remote wipe activity has been initialized and is in progress but has not been completed yet.
- Blue indicates that a remote wipe activity has already been completed.

- **Status**: This column displays the most recent status of a remote wipe activity, which is equivalent to the status indicated in the pie chart in *Remote Wipe Status*.
- Errors: This column displays the number of errors that occurred while a remote wipe activity was being completed. To obtain details regarding the errors, see the Event Log of the DS-Client of the device using DS-User.
- Completed Time: This column displays the time at which a remote wipe activity was completed.

To perform a remote wipe of a device:

- 1. On the **DS-Client** menu, click **Remote Control Status**.
- 2. On the **DS-Client Device Remote Control** page, find the DS-Client of the device on which you need to perform a remote wipe. For instructions, see Section 11.11.5, "Searching for a device".
- 3. Select the check box that corresponds to the DS-Client of the device, and click **Remote Wipe**. You can issue a remote wipe for only one DS-Client, that is, one device, at a time.
- 4. In the **Remote Wipe** window, verify that **Yes** is selected for *Enable Remote Wipe*. If **No** is selected, ensure that requirements have been fulfilled as described in Section 11.11.1, "Enabling geolocation features".
- 5. Select the wipe method.
 - Wipe backed up files from DS-Client computer: Select this option to delete data files on the source that have already been backed up to DS-System.
 - Wipe specific user files (applicable to FullFeatured Windows DS-Client and DS-Mobile Client only): Select this option to delete files from a specified user account's Windows profile folder, which is usually at this location: C:\Documents and Settings\UserName. Credentials to the user account are required.
- To block the connection to the DS-System and prevent malicious access to backed up data after the data has been deleted by the remote wipe, select Lock DS-Client on DS-System after Remote Wipe is finished.
- 7. To back up data on the device before performing the remote wipe, select **Perform backup before starting remote wipe**. This backup will be performed based on the backup that is already configured.
- 8. Complete the CAPTCHA verification.
- 9. Enter the authorization code that you have obtained from a DS-NOC Administrator or from a user that has the *Manage authorization code* permission and click **OK**.

Managing DS-Clients

Managing remote DS-Clients

12 Managing DS-NOC

This chapter describes how you can view DS-NOC server logs and reports. To access the DS-NOC Reports, do the following in a log:

- E-Mail Logs: Send a copy in PDF or CSV format by E-Mail (as an attachment).
- Save Logs As PDF/CSV Files: Save the log as a PDF or a CSV file.
- Sort Logs: Sort the logs as required.

12.1 Viewing the web server information

This page shows basic information about the DS-NOC database, and the versions of third-party application used by the DS-NOC.

 Login as a DS-NOC administrator or a user with the required permissions and on the DS-NOC menu, click Web Server Information.

12.2 Searching for DS-Clients

This section describes how you can search for DS-Clients created using DS-NOC.

- 1. On the **DS-NOC** menu, select **DS-Client Ownership**.
- 2. Specify the required criteria and then click View Report.

NOTE: You can use the Asterisk (*) or Question Mark (?) as a wildcard for searches.

12.3 Viewing the Event Log

The DS-NOC Event Log displays events from the DS-NOC database. This report can be filtered by Report Period, Event Type, or the text in the **Event Source** column.

• On the **DS-NOC** menu, select **Event Log**.

12.4 Viewing the Audit Trail

By default, the page displays all of the transactions that occurred during the report period from the DS-NOC database. The Audit Trail can be filtered based on the Operation type, the user who performed the operation, and the IP address of the machine that sent the transaction request.

• On the **DS-NOC** menu, select **Audit Trail**.

12.5 Viewing the web server logs

This section describes how you can view DS-NOC server and Apache Tomcat server logs.

- 1. On the **DS-NOC** menu, select **Web Server Logs**.
- 2. On the **Web Server Logs** page, select the time frame for which you want to view the logs, and then click **Find**.
- 3. Click the file name to view a detailed log.