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Preface

The preface describes the content and organization of this guide, how to find additional product information, and how to contact Infoblox Technical Support. It includes the following topics:

- **Document Overview** on page 2
  - **Documentation Organization** on page 2
  - **Conventions** on page 2
- **Related Documentation** on page 3
- **Customer Care** on page 4
  - **User Accounts** on page 4
  - **Software Upgrades** on page 4
  - **Technical Support** on page 4
**DOCUMENT OVERVIEW**

This guide introduces the Infoblox Data Connector.
For complete information about administering Infoblox appliances, refer to the *Infoblox NIOS Administrator Guide*. For the latest Infoblox documentation, visit the Infoblox Support web site at https://support.infoblox.com.

**Documentation Organization**

This guide covers the following topics:

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Deploying the Infoblox Data Connector</strong> on page 5</td>
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</tr>
<tr>
<td><strong>Configuring NIOS for Data Connector</strong> on page 27</td>
<td>Information about how to configure NIOS to work with the Data Connector.</td>
</tr>
<tr>
<td><strong>Configuring Data Connector for Infoblox ActiveTrust Cloud Destination</strong> on page 37</td>
<td>Information about how to configure the Data Connector to send data to Infoblox cloud destinations.</td>
</tr>
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</table>

**Conventions**

This guide follows the Infoblox documentation style conventions, as listed in the following table.

<table>
<thead>
<tr>
<th>Style</th>
<th>Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>bold</strong></td>
<td>Indicates anything that you input by clicking, choosing, selecting, typing or by pressing on the keyboard.</td>
</tr>
<tr>
<td><strong>input</strong></td>
<td>Signifies command line entries that you type.</td>
</tr>
<tr>
<td><strong>variable</strong></td>
<td>Signifies variables typed into the GUI that you need to modify specifically for your configuration, such as command line variables, file names, and keyboard characters.</td>
</tr>
</tbody>
</table>

**Navigation**

Infoblox technical documentation uses an arrow “→” to represent navigation through the GUI. For example, to access member information, the description is as follows:

From the **Grid** tab, select the **Grid Manager** tab → **Members** tab.
**RELATED DOCUMENTATION**

Other NIOS appliance documentation:
- *Infoblox NIOS Administrator Guide*
- *Infoblox CLI Guide*
- *Infoblox API Documentation*
- *Infoblox CSV Import Reference*
- *Infoblox Installation Guide for the Trinzic 100 Appliance*
- *Infoblox Installation Guide for the 800 Series Platforms*
- *Infoblox Installation Guide for the 1400 Series Platforms*
- *Infoblox Installation Guide for the 2200 Series Platforms*
- *Infoblox Installation Guide for the 4000 Series Platforms*
- *Infoblox Installation Guide for the Infoblox-4010 Appliance*
- *Infoblox Installation Guide for the IB-4030 and IB-4030-10GE Appliances*
- *Infoblox DNS Cache Acceleration Administrator Guide*
- *Infoblox Installation Guide for vNIOS Software on Riverbed Services Platforms*
- *Infoblox Installation Guide for Installing vNIOS Software on Cisco Platforms*
- *Infoblox Installation Guide for vNIOS Software on VMware*
- *Infoblox Installation Guide for vNIOS on Microsoft 2008 R2 for Hyper-V*
- *Infoblox Installation Guide for vNIOS for KVM Hypervisor and KVM-based OpenStack*
- *Infoblox Safety Guide*

To provide feedback on any of the Infoblox technical documents, please e-mail techpubs@infoblox.com.
**CUSTOMER CARE**

This section addresses user accounts, software upgrades, licenses and warranties, and technical support.

**User Accounts**

The Infoblox appliance ships with a default user name and password. Change the default admin account password immediately after the system is installed to safeguard its use. Make sure that the appliance has at least one administrator account with superuser privileges at all times, and keep a record of your account information in a safe place. If you lose the admin account password, and did not already create another superuser account, the system will need to be reset to factory defaults, causing you to lose all existing data on the appliance. You can create new administrator accounts, with or without superuser privileges.

**Software Upgrades**

Software upgrades are available according to the Terms of Sale for your system. Infoblox notifies you when an upgrade is available. Register immediately with Infoblox Technical Support at http://www.infoblox.com/support/customer/evaluation-and-registration to maximize your Technical Support.

**Technical Support**

Infoblox Technical Support provides assistance via the Web, e-mail, and telephone. The Infoblox Support web site at https://support.infoblox.com provides access to product documentation and release notes, but requires the user ID and password you receive when you register your product online at: http://www.infoblox.com/support/customer/evaluation-and-registration.
Chapter 1  Deploying the Infoblox Data Connector

This chapter provides information about the Infoblox Data Connector VM and how to deploy it with your Infoblox Grid to collect DNS query and response data. It also provides information about upgrades, VLAN tagging support, health monitoring, and commonly used CLI commands.

It includes the following sections:

- **About Infoblox Data Connector** on page 6
- **Requirements** on page 7
  - **Data Connector Specifications** on page 7
- **Deploying the Data Connector Virtual Appliance** on page 8
  - **Installing the Data Connector Virtual Appliance** on page 8
  - **Configuring the Virtual NIC** on page 9
  - **Powering on the Data Connector Virtual Appliance** on page 9
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- **Upgrading the Infoblox Data Connector** on page 15
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About Infoblox Data Connector

The Infoblox Data Connector is a utility designed to collect DNS query and response data from the Infoblox Grid, and then transfers the data to destinations such as the Infoblox ActiveTrust Cloud, NIOS reporting server, and third-party Splunk Indexer. The Data Connector filters data based on user criteria (thus reducing data quantity) and converts the data to a format that can be securely transferred to the supported destinations. It acts as a central point for data collection across your network devices, which reduces the impact of data exchange and improves your Grid performance.

The Data Connector collects DNS query and response data from the Grid members that are answering queries, and then forwards this data to the NIOS reporting server and third-party indexers through the SCP protocol. Similarly, it collects RPZ Hits, DHCP Leasing Information and IPAM, User Info data if available, from the Grid members, generates parquet files and sends the parquet files to the Infoblox ActiveTrust Cloud destination via HTTP requests.

The Data Connector is designed to run on VMware ESXi servers. You can install the Data Connector VM software package on a host with VMware ESXi 5.x or later installed, and then configure it as a virtual appliance. After configuring the Data Connector VM, you must register it with the Infoblox Grid and configure certain NIOS parameters before it can collect DNS query and response data from the Grid. Note that you can register only one Data Connector with a Grid running NIOS 7.3.0 and later.

When you set up a Data Connector VM, you use it solely for collecting DNS data from the Grid and sending the data to the desired destination. You cannot add licenses to run other services, such as DNS and DHCP.

Note: When upgrading NIOS appliances in your Grid, it is not required that you upgrade the Data Connector VM.

The following are some key features for using the Data Connector:

- The Data Connector collects DNS query data from the NIOS Grid and forwards this data to the NIOS reporting server through the SCP protocol and to the Infoblox cloud destination via HTTP requests.
- To ensure confidentiality, all protocol exchanges to and from the Data Connector VM are encrypted.
- The Data Connector VM has firewall enabled.
- You can make a remote serial connection to the Data Connector VM using SSH port 2020. Example: `ssh admin@DCVM_IP -p 2020`.
- Infoblox Technical Support can use port 2222 to access the Data Connector VM. Example: `ssh dcadmin@DCVM_IP -p 2222`.

Figure 1.1 illustrates the basic concept of the data collection process, which includes collecting query and response data from Grid members, storing them, and sending it back to the supported destinations. You can then monitor the trend of DNS queries by client, domain, time, record type, query type, and DNS view. For more information, see Viewing DNS Query Capture Reports on page 34.
Figure 1.1 Data Connection Process

**Requirements**

The following are required for the installation of the Data Connector VM on a VMware ESXi server:

- **The Data Connector VM software package**: Contact your Infoblox representative to obtain the Data Connector VM software package, which consists of a template file with an .ova extension. You can deploy the Data Connector VM from a remote web server or a local file system accessible from your management system.

- **A management system** that has vSphere Client installed.

- **If your Grid is running NIOS 7.3 or later**, you must install the **Security Ecosystem** license on your Grid to configure the Splunk destination.

- **For upgrades only**: To upgrade your Data Connector, obtain the latest Data Connector VM software package from your Infoblox representative and then follow the upgrade procedures described in *Upgrading the Infoblox Data Connector* on page 15. Note that your Data Connector must have software version 1.1.0 and later running in order to upgrade to future releases and hotfixes.

**Data Connector Specifications**

The following are specifications for the Data Connector VM:

- **Image Specifications**
  - The Data Connector VM image is an OVA package file that is compatible with VMware ESXi 5.x and later versions.

- **VM Hardware Specifications**
  - The Data Connector VM is configured with the following components:
    - **Virtual Machine** Minimum 4 cores, 8 GB memory, and 500GB disk.
      - CPU: 1 socket, 4 cores
      - Memory: 8 GB
      - Network: Single NIC connected to the network
      - Hard disk drives: 500 GB
Deploying the Infoblox Data Connector

The Data Connector VM has two hard disk drives: Hard Disk 1 and Hard Disk 2. Hard Disk 2 is used for data storage, and you may substitute it for a larger drive to expand the data storage space.

**Note:** If you substitute Hard Disk 2 with another drive, the disk will be formatted by the Data Connector VM during the next reboot.

---

**DEPLOYING THE DATA CONNECTOR VIRTUAL APPLIANCE**

You can deploy the Data Connector VM from a remote web server or a local file system accessible from your management system. Instructions in this section assume that you have configured the server on your network, and that you are able to connect to it from your management system.

To deploy the Data Connector VM, log in to the vSphere Client, connect to the ESXi 5.x server, and then complete the following:

1. Obtain the Data Connector virtual machine image file from Infoblox. For more information, see **Requirements** on page 7.
2. Install the Data Connector VM on the ESXi server, as described in **Installing the Data Connector Virtual Appliance** on page 8.
3. Configure the NIC (Virtual Network Adapter) for the Data Connector VM, as described in **Configuring the Virtual NIC** on page 9.
4. Power on the Data Connector VM, as described in **Powering on the Data Connector Virtual Appliance** on page 9.
5. Configure the Data Connector VM to collect DNS data from the Infoblox Grid, as described in **Configuring the Data Connector Virtual Appliance** on page 10.

**Installing the Data Connector Virtual Appliance**

To install the Data Connector VM:

1. Obtain the Data Connector VM image file from Infoblox.
2. Download the .OVA package file(s) for the Data Connector VM.
3. From the vSphere Client, click **File -> Deploy OVF Template** to start the **Deploy OVF Template** wizard, as shown in Figure 1.2. You use this feature to open the .OVA file to deploy your Data Connector VM.
4. Depending on the download location of the Data Connector VM, select **Deploy from file** to deploy the .OVA file from a local file system, or select **Deploy from URL** to deploy from a remote web server. Locate the .OVA file or enter the URL of the file, and then click **Next**.

5. Verify the .OVA package file details and click **Next**.

6. Specify a name for the Data Connector VM instance and click **Next**.

7. Select the network for the Data Connector VM instance and click **Next**.

8. Verify the information in the summary screen and click **Finish**.
   
   The Data Connector VM installation begins. The **Deployment Completed Successfully** dialog box appears after the installation is complete.

9. Click **Close** to close the dialog box.

10. To verify the installation of the Data Connector VM, click the **Virtual Machines** tab in the vSphere Client.

## Configuring the Virtual NIC

1. From the vSphere Client, select the newly deployed Data Connector VM instance.

2. Click **Inventory** -> **Virtual Machine** -> **Edit Settings**.

3. In the **Virtual Machine Properties** dialog box, select the **Hardware** tab.

4. From the Hardware list, select the network interface that the Data Connector VM uses to communicate with the Grid.

5. Click **OK**.

## Powering on the Data Connector Virtual Appliance

1. From the vSphere Client, select the Data Connector VM instance.

2. Click **Inventory** -> **Virtual Machine** -> **Power** -> **Power On**.

**Note:** After you power on the Data Connector VM, it may take a few minutes for the CLI prompt to appear while the appliance initializes.
Configuring the Data Connector Virtual Appliance

After you have successfully installed the Data Connector VM software package on the ESXi server, power on the Data Connector VM and configure the Data Connector VM. You can configure the Data Connector VM using a Wizard or CLI commands. For more information, see Configuring the Data Connector Virtual Appliance using a Wizard on page 10. For more information, see Configuring the Data Connector Virtual Appliance using the CLI on page 14.

The data source, which is an Infoblox Grid, is connected to the Infoblox Data Connector VM that collects DNS data from the Grid and transfers it to the destination, either a Reporting member, Splunk Indexer or an ActiveTrust Cloud. You must configure the following in order to transfer data through the Data Connector VM:

1. Configure the source.
2. Configure the destination.
3. Add SCP users who can upload files to the Data Connector VM.
4. Configure the Data Connector VM.

For an ActiveTrust Cloud destination, the Data Connector VM also collects additional data from the Grid for reporting and analytics. You can view these reports using the ActiveTrust Cloud portal when you configure Unified Reporting. For more information, see Configuring ActiveTrust Cloud Destination on page 37.

Note: You must register a Data Connector VM with the Grid Master to forward output files to a Reporting destination. However, registration is not required for forwarding these files to an Infoblox ActiveTrust Cloud or a Splunk destination.

To reduce data transfer between the Grid, Data Connector and ActiveTrust Cloud, enable the NIOS Object Change Tracking feature. When you enable this feature, the appliance tracks the changes that are made to NIOS objects and periodically synchronizes changed objects, through Data Connector, with the ActiveTrust Cloud destination. For more information, refer to the Infoblox NIOS Administrator Guide.

Note that you must configure the NIOS appliance to send syslog messages to an external Data Connector VM over TCP. By default, the NIOS appliance sends these messages over UDP. To configure the NIOS appliance to send messages over TCP, log in to Grid Manager and from the Grid tab -> select the Grid Manager tab -> Members tab, and then click Grid Properties -> Edit from the Toolbar. In the Grid Properties editor, select the Monitoring tab, select the Log to External Syslog Servers check box, click the Add icon and specify the IP address of the Data Connector VM. Next, select Secure TCP or TCP as the Transport option. For more information about syslog, refer to the Infoblox NIOS Administrator Guide.

Configuring the Data Connector Virtual Appliance using a Wizard

Complete the following to configure the Data Connector VM with the Infoblox Grid:

1. Connect to the CLI using the following command:

```
ssh admin@vm_ip_address -p 2020
```

```
admin@<vm_ip_address>'s password: password
```

Name: DataCollector

Version: 2.0.0-348708

Infoblox Data Collection Virtual Machine

In the above command, the variable `vm_ip_address` is the IP address of the Data Connector VM. You can get the IP address from the VM console on the VMware ESXi server. The default username is admin and the default password is infoblox.

2. You can run the `wizard` command to configure of the Data Connector VM. Using the `wizard` command, you can configure network settings, register the Data Connector VM with the Infoblox Grid, and add an SCP user who is allowed to upload files to the Data Connector VM. Note that you can register only one Data Connector VM with the NIOS Grid.
Note: Ensure that your network configuration allows data exchange between the Data Connector VM and the destination, which can be the Reporting member, Splunk, or an Infoblox ActiveTrust Cloud.

Note that the following wizard output contains configuration of all the destinations as an example. To configure a Reporting destination, see Configuring Reporting Destination on page 33. For information about configuring a Splunk destination, see Configuring Splunk Destination on page 35. To configure an ActiveTrust Cloud, see Configuring ActiveTrust Cloud Destination on page 37.

Run the wizard command as follows and enter the information as prompted:

```
> wizard
Do you want to configure admin network settings y/n [y]:
y
Please use: '?' for help on available command options.
Please enter IPv4 configuration in format: 'mode [gateway address mask vlanid]'
Current settings are [ static 10.36.0.1 10.36.130.1 255.255.0.0 0 ]:
static 10.36.0.1 10.36.130.1 255.255.0.0 0
ok
Please enter dns configuration[ 10.0.0.0 ]:
10.0.0.0
DNS servers obtained by DHCP (if any) have higher precedence
ok
Please enter domain configuration[ dc-xyz.com ]:
dc-xyz.com
ok
Please enter hostname configuration[ dc-xyz ]:
dc-xyz
ok
Configured System Setting:
gateway: 10.36.0.1
mask: 255.255.0.0
mode: static
address: 10.36.130.1
vlanid: 0
vlan configuration is only in effect in the static mode.
Configured DNS Setting:
Dns Server(s): ['10.0.0.0']
domain: dc-xyz.com
hostname: dc-xyz
Is it correct? y/n [y]:
y
Do you want to configure data output cloud registration settings y/n [y]:
y
Please use: '?' for help on available command options.
Please enter cloud url[ https://usa-va.csp.infoblox.com/dnslog ]:
Settings unchanged.
Please enter api_key[ 1234 ]:
```
Deploying the Infoblox Data Connector

Settings unchanged.
Please enter agent_id[ 8 ]:
Settings unchanged.
url: https://usa-va.csp.infoblox.com/dnslog
api_key: 1234
agent_id: 8
Is it correct? y/n [y]:
y
Do you want to configure data output cloud settings y/n [y]:
y
Please use: '?' for help on available command options.
Please enter Output cloud mode configuration[ hold ]:
hold
ok
The output mode is hold
Is it correct? y/n [y]:
y
Do you want to configure data output splunk settings y/n [y]:
y
Please use: '?' for help on available command options.
Please enter splunk indexers[ 10.10.1.2 ]:
y
'y' is not a valid IP address
Please enter splunk indexers[ 10.10.1.2 ]:
10.10.1.2
Indexer 10.10.1.2 already defined
Please enter splunk indexers[ 10.10.1.2 ]:
10.10.1.3
ok
Do you want to add more values? y/n [n]:
n
Please enter splunk index name[ xyz ]:
xyz
ok
Please enter splunk source type[ ib:dns:captures ]:
Settings unchanged.
Please enter splunk default indexer port[ 9997 ]:
Settings unchanged.
Please enter splunk mode[ disabled ]:
hold
ok
Indexers:

    10.10.1.2
    10.10.1.3

Index name is xyz
Source type is ib:dns:captures
Default indexer port is 9997
The output mode is hold
Is it correct? y/n [y]:
y
Do you want to configure admin system settings y/n [y]:
y
Please use: '?' for help on available command options.
Please enter Greeting banner text[ This is Infoblox Data Connection Virtual Machine ]:
This is Infoblox Data Connector VM.
ok
This is Infoblox Data Connector VM.
Is it correct? y/n [y]:
y
Do you want to configure data input scp settings y/n [y]:
y
Please use: '?' for help on available command options.
Please enter SCP users[ dc_scp_user ]:
dc_scp_user
Enter password for user dc_scp_user:
Enter again:
ok
Do you want to add more values? y/n [n]:
n
Registered user(s):
    admin
    user123
    dc_scp_user
Is it correct? y/n [y]:
y
Do you want to configure data input grid settings y/n [y]:
y
Please use: '?' for help on available command options.
Enter the IP address (or FQDN) of the NIOS Grid Master[ 10.35.5.49 ]:
Settings unchanged.
Enter the NIOS admin username[ admin ]:
Settings unchanged.
10.35.5.49
admin
Is it correct? y/n [y]:
y
Do you want to configure data output reporting settings y/n [y]:
y
Please use: '?' for help on available command options.
Please enter reporting mode[ hold ]:
Settings unchanged.
The output mode is hold
Is it correct? y/n [y]:
Y
Setup wizard finished successfully

3. After successfully completing the configuration for the Data Connector VM, you can log in to the NIOS Grid and enable the Grid to start capturing DNS queries and/or DNS responses to be sent to the Data Connector VM. For more information, see Configuring DNS Queries and Responses on page 28. You can configure the Data Connector VM to send additional information, such as the DNS RPZ events from a Grid syslog, Microsoft Active Directory user name and other IPAM/lease information, to the Cloud destination.

4. You must also add the IP address of the Data Connector VM and the user credentials of the SCP user to the Logging tab → Advanced tab of the Grid DNS Properties editor. For more information, refer to the Infoblox NIOS Administrator Guide.

Note: You must add user credentials of only superuser administrators.

5. For Reporting destinations, use the following command to register the Data Connector VM with the Grid Master:

data.destination.reporting.registration > register
Getting Grid Data Connector information... done.
Generating certificate for Splunk forwarder... done.
Signing Splunk forwarder certificate with the Grid... done.
Registering Data Connector with the Grid... done.
Saving changes to database... done.

Configuring the Data Connector Virtual Appliance using the CLI

Besides the wizard, you can execute the following commands in the CLI to configure the Data Connector VM for respective output destinations:

1. Connect to the CLI using the following command:

   ssh admin@vm_ip_address -p 2020
   admin@<vm_ip_address>'s password: password
   Name: DataCollector
   Version: 2.0.0-348708
   Infoblox Data Collection Virtual Machine

   In the above command, the variable vm_ip_address is the IP address of the Data Connector VM. You can get the IP address from the VM console on the VMware ESXi server. The default username is admin and the default password is infoblox.

2. Configure the data source for the Data Connector VM to collect DNS query and response data. Next, configure relevant output destinations. An output destination can be a Reporting member, Splunk Indexer or an ActiveTrust Cloud. For more information about configuring the source and Reporting destination for a Data Connector VM, see Configuring Reporting Destination on page 33. To configure the source and Splunk destination, see Configuring Splunk Destination on page 35. For more information about configuring the source and Infoblox ActiveTrust Cloud destination, see Configuring ActiveTrust Cloud Destination on page 37.

3. Add SCP user details on the Grid members to allow them to upload files to the Data Connector VM. For information, see Configuring NIOS for Data Connector on page 27.

4. Configure Data Connector VM for output destination. For more information about configuring the Reporting destination, see Configuring Reporting Destination on page 33. To configure the Splunk destination, see Configuring Splunk Destination on page 35. For more information about configuring the Infoblox ActiveTrust Cloud destination, see Configuring ActiveTrust Cloud Destination on page 37.
Upgrading the Infoblox Data Connector

**Note:** Your Data Connector must be running software version 1.1.0 or later in order to support installing future upgrades and hotfixes.

Depending on your deployment requirements, you can install the upgrade package using one of the following methods:

- **In-place Upgrade:** Upgrading the existing Data Connector by uploading a new software package to replace the existing software.
- **External Upgrade:** Deploy a new Data Connector, install the latest .OVA package file on the new Data Connector, back up the configuration file from the old Data Connector, shut down the old Data Connector, and then move the configuration file over to the new Data Connector.

For more information, see *Installing the Upgrade Package* on page 15.

**Upgrade Prerequisites**

Ensure that you have completed the following before upgrading:

- Contact your Infoblox representative about how to obtain the upgrade software package.
- Ensure that you have properly set up and configure an external server to which you upload the upgrade package. The Data Connector supports SCP and FTP servers.
- Check the connection between the Data Connector and the external server to which you plan to upload the upgrade package.
- Ensure that the connection between the Data Connector and the destination server (Infoblox reporting server and Infoblox cloud destination) is up and running.

**Installing the Upgrade Package**

Follow these procedures to install the software upgrade package on the Infoblox Data Connector:

1. Upload the upgrade packet to an external SCP or FTP server.
2. Log in to the Data Connector CLI.
3. Download the upgrade package from the external server using the `admin.system.upgrade > load` CLI command.

   **Example:**
   ```
   admin.system.upgrade > load scp|ftp://loginname@serverIP:[port:]path
   ```
   
   where `path` is the `<path of the upgrade package>`

   **Note:** This operation might take a longer time depending on network conditions.

   Enter Password:
   
   Received upgrade package. Validating...
   
   Upgrade package is ready
   
   ok

   **Note:** `<path of the upgrade package>` is the absolute path to the file on the server.

4. Before you upgrade, you can check the current status of the upgrade package using the `admin.system.upgrade > status` CLI command.
Example:
admin.system.upgrade > status
System version: 1.1.0-123456
Upgrade version: 2.0.0-348708
Upgrade package: DataConnector_2.0.0-123456_2016-04-13-12-01-01_x86_64.upg
No upgrade or revert operation is running
ok

5. Obtain a manual backup of the existing configuration file on the Data Connector and export it to an external server of your choice, as follows:
admin.system > backup <scp|ftp>://loginname@serverIP:[port:]path

Note: If you are performing an external upgrade, you must restore this backup file on the new Data Connector. For an in-place upgrade however, backing up the configuration file is a best practice.

Example:
admin.system > backup scp://jdoe@10.0.1.1/DataCollector-7.3/backup-restore
Enter password:
Backup file dc_backup_dc-xyz_dc-xyz.com_20170324090152.tgz is created.
Uploaded backup to jdoe@10.0.1.1
ok
The backup file is created in this format: dc_backup_dc-infoblox__yyyymmddhhmmss.tgz

6. Optionally, use the data.destination > stats CLI command to view pipeline statistics and the number of output files in queue waiting to be transferred to the destination server (such as the Infoblox reporting or Infoblox cloud server). If there are a lot of output files, the Data Connector might not be able to transfer all the data to the destination servers before the configured timeout period. In this case, you can decide whether to terminate the upgrade when the timeout period expires or continue with the upgrade. If you select to continue with the upgrade, the Data Connector proceeds to transfer the remaining output files to the destination server after the upgrade is complete. If desired, you can also force an upgrade on the Data Connector after the timeout period. However, be aware that data loss might happen if there are still output files waiting to be transferred when you force an upgrade after the timeout period expires.

Note: A large number of output files in queue, could be an indication that the Infoblox reporting or Infoblox cloud server is busy or the connection is down. Check the connections between the Data Connector and these servers to ensure that the connections are up and running.

Example:
data.destination > stats
Cloud output stats:

<table>
<thead>
<tr>
<th># of files</th>
<th>Size in kb</th>
<th>Oldest file</th>
</tr>
</thead>
<tbody>
<tr>
<td>pending</td>
<td>pending</td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>0.000</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Reporting output stats:

<table>
<thead>
<tr>
<th># of files</th>
<th>Size in kb</th>
<th>Oldest file</th>
</tr>
</thead>
<tbody>
<tr>
<td>pending</td>
<td>pending</td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>0.000</td>
<td>N/A</td>
</tr>
</tbody>
</table>

7. Apply the uploaded upgrade package and perform the upgrade using the following CLI command:
admin.system.upgrade > apply [timeout] [force]

where
timeout is the number of seconds the system waits for the output files in the Splunkforwarder and dc_cloud_out containers to be transferred to the corresponding destination servers before starting an upgrade. The default is 600 seconds. Note that if there are still output files in queue on the Data Connector when the timeout expires, the upgrade will terminate. However, if you choose to continue with the upgrade, Data
Upgrading the Infoblox Data Connector

Connector disables the data source so there is no new data being collected. After the upgrade is complete, Data Connector resumes the data transfer for the output files that are remained in the containers. force is used to perform a force upgrade when necessary.

Example:
```
admin.system.upgrade > apply 300
Upgrading from version 1.1.0-cloud-xxxxxx to version 2.0.0-xxxxxx
Wait up to 300 sec. to forward all files
***UPGRADE WILL BE CANCELLED*** after wait time is expired if data are not completely forwarded.
Proceed with upgrade? (y/n): y
27% complete Data forwarding
```

8. To verify that the upgrade package has been installed successfully, use the admin.system.upgrade > status command to check the system versions.

Example:
```
admin.system.upgrade > status
System version: 2.0.0-348708
Revert version: 1.1.0-123456
No upgrade or revert operation is running
ok
```

9. This step applies only to an external upgrade in which you have configured a new Data Connector and need to move the configuration file from the old Data Connector to the new one. For an in-place upgrade, this step is not necessary because the restoration of the configuration file is automatically performed during the upgrade. After you have successfully installed the upgrade package on the new Data Connector, use the admin.system > restore commands to restore the configuration file you obtained earlier from the previous version of Data Connector.

Example:
```
admin.system > restore scp://jdoe@10.0.0.10:/DataConnector-7.3/backup-restore/dc-backup-20160411173718.tgz
Enter password:
```
```
Received backup package from jdoe@10.0.1.1:
```
```
admin.system > restore
The following backup file(s) in the system:
dc-backup-20160411173718.tgz
dc-backup-20160322303030.tgz
dc-backup-20160211101010.tgz
```
```
admin.system > set restore dc-backup-20160411173718.tgz
File dc-backup-20160411173718.tgz is restored
ok
```

Note: Note that after upgrading the Data Connector to version 2.0.0, you must manually reconfigure the Data Connector and register the Data Connector with the NIOS Grid. For more information, see Configuring the Data Connector Virtual Appliance on page 10.
Reverting the Data Connector to the Previous Version

You can revert the Data Connector to a version that it was previously running. Before reverting, you can use the `admin.system.upgrade > status` command to find out if there is a software version to which you can revert and confirm its version number. Note that when you revert the Data Connector to a previous version, any changes made since the last upgrade will be lost.

You can use the following CLI command to revert the Data Connector to a previous version:

```
admin.system.upgrade > revert [timeout] [force]
```

where

- `timeout` is the number of seconds the system waits for the output files to be transferred to the corresponding destination servers before starting the revert operation. The default is 600 seconds. Note that if there are still output files in queue on the Data Connector when the timeout expires, the revert operation is terminated.
- `force` is used to force the revert operation when necessary.

Example:

```
admin.system.upgrade > revert 300
Wait up to 300 sec. to forward all files
***REVERT WILL BE CANCELLED*** after wait time is expired if data are not completely forwarded.
Proceed with revert? (y/n): y
Disabling data source.
Total # of files will be forwarded before revert are 0
Data forwarding complete, continue reverting
The session will be terminated while reverting
ok
```

Verifying the Registered Data Connector

After you configure and register the Data Connector VM with the Grid, you can log in to Grid Manager to verify the registered Data Connector VM.

To verify the Data Connector VM:

1. Log in to Grid Manager.
2. Navigate to the Grid tab -> Grid Manager tab, and then click Data Collection from the Toolbar.
3. In the Data Connector VMs editor, you can view the details of the registered Data Connector VM in the Data Connector Cluster tab, as shown in Figure 1.3. For more information, see Viewing Registered Data Connector Details on page 32.
VLAN Tagging Support

VLAN tagging involves adding a VLAN tag or ID to the header of an IP packet in order to identify the VLAN to which the packet belongs. You can configure a VLAN ID from 2 to 4094. By default, the VLAN ID is set to 0.

Note: VLAN tagging is supported only in static mode.

To configure the VLAN tag or ID, you can log in to the Data Connector CLI and run the following command:

```
admin.network > set ip4 mode [gateway address mask vlanid]
```

To view the VLAN tag or ID, you can run the following command:

```
admin.network > ip4
Actual System Settings:
gateway: 10.36.0.1
mask: 255.255.0.0
mode: dynamic
address: 10.36.122.9
vlanid: 3635
Configured System Setting:
gateway: 10.36.0.1
mask: 255.255.0.0
mode: static
address: 10.36.117.17
vlan id: 3636
```

VLAN configuration is only in effect in the static mode.
## Configuring Data Retention Period

The Data Connector retains data in its output folders for a limited period due to limited file system space. You can define global data retention period that is applicable to all data destinations. By default, the Data Connector can hold data in its output folders for four hours. You can configure the retention period from a minimum of one hour up to 720 hours (30 days).

To configure the global data retention period, you can log in to the Data Connector CLI and run the following command:

```
data.destination.global > set retention <Enter the duration in hours or days>
```

**Example**

```
data.destination.global > set retention 4h
ok
```

To view the configured data retention period, you can run the following command:

```
data.destination.global > show retention
4 hours
```

## Events Tagging

Currently, the Data Connector supports only the `dns_view` tag. DNS views provide the ability to serve one version of DNS data to one set of clients and another version to another set of clients. With DNS views the Data Connector can provide different answer to the same DNS query, depending on the source of the query. You can set either `Internal` or `External` as the default value for the `dns_view` tag.

To configure the event tag, you can log in to the Data Connector CLI and execute the following:

1. Use the `data.destination.global.tags.dns_view > set default` command to set either `Internal` or `External` as the default value for `dns_view` tag.

   **Example:**

   ```
data.destination.global.tags.dns_view > set default External
ok
```

   To view the default value set for `dns_view` tag, run the following command:

   ```
data.destination.global.tags.dns_view > show default
External
```

2. Configure the extensible attribute value using the `data.destination.global.tags.dns_view > set ext_attribute` command. You must configure the same extensible attribute that has been configured on NIOS.

   **Example:**

   ```
data.destination.global.tags.dns_view > set ext_attribute dns_role
ok
```

   To view the configured extensible attribute, run the following command:

   ```
data.destination.global.tags.dns_view > show ext_attribute
dns_role
```
Changing the Destination Mode

By default, the destination mode is set to **Disabled** for all destinations. You can change the default destination mode to one of the following:

- **Forward**: When the destination mode is set to **Forward**, the data files are generated for the output and forwarded to the remote host. The data files are deleted after successful transfer of the data files to the destination. If transfer of any data file fails, then such file is deleted when the disk space of the Data Connector is low and when the file is older than the retention period.
- **Hold**: Data files are generated for the specific destination, but the data files are not forwarded to the remote host. The data files are deleted as soon as they get older than the retention period.
- **Disabled**: Generation of data files will be disabled for the destination.

To change the default mode for Infoblox cloud destination, you can log in to the Data Connector CLI and run the following command:

```
data.destination.cloud > set mode [forward|hold|disabled]
```

To change the default mode for Infoblox reporting destination, you can log in to the Data Connector CLI and run the following command:

```
data.destination.reporting > set mode [forward|hold|disabled]
```

To change the default mode for Splunk destination, you can log in to the Data Connector CLI and run the following command:

```
data.destination.splunk > set mode [forward|hold|disabled]
```

To view the destination mode, you can run the following command:

- For Infoblox cloud destination:
  ```
data.destination.cloud > show mode
```
  The output mode is forward

- For Infoblox reporting destination:
  ```
data.destination.reporting > show mode
```
  The output mode is hold

- For Splunk destination:
  ```
data.destination.splunk > show mode
```
  The output mode is hold

Purge the Data

You can use the `purge` command to delete the output files that are in queue waiting to be transferred to the destination.

To purge the output data waiting to be transferred to the Infoblox cloud destination, you can log in to the Data Connector CLI and run the following command:

```
data.destination.cloud > purge
```

To purge the output data waiting to be transferred to the Infoblox reporting destination, you can log in to the Data Connector CLI and run the following command:

```
data.destination.reporting > purge
```

To purge the output data waiting to be transferred to the Splunk destination, you can log in to the Data Connector CLI and run the following command:

```
data.destination.splunk > purge
```
Configuring Data Filters

You can configure data filters in order to filter certain events from the generated output. When you configure data filters, the Data Connector excludes those events that match the data filter from the DNS query/response events, IP meta data, and RPZ events. You can globally configure data filters that are applied to all the destinations or you can configure filters specifically for Infoblox reporting output, Infoblox cloud output, and Splunk output. This section describes how to add, import, export and delete data filters. It includes the following sections:

- Adding Data Filters on page 22
- Importing Data Filters on page 23
- Exporting Data Filters on page 24
- Viewing Data Filters on page 24
- Deleting Data Filters on page 24

Adding Data Filters

You can globally add the data filters that are applicable to all the configured destinations or you can add destination specific filters. The Data Connector supports the following types of data filters:

- **client_ip**: The client_ip data filter is applied to DNS query/response events, IP meta data, and RPZ events. You can specify the query source IP address when the event is a query and the destination IP address when the event is a response. You can specify the client_ip filter in the following formats:
  - IPv4 or IPv6 address. Example: 10.10.1.0, 2620:10a:6000:661e::523, etc.
  - Range of IPv4 addresses. This is applicable to IPv4 addresses only. IPv6 address uses CIDR notation. Example: 10.10.1.0-10.10.2.35
  - Network/Mask. This is applicable to IPv4 addresses only. Example: 10.10.1.0/255.255.255.0
  - CIDR block. Example: 10.10.0.1/15, 2001:cdba:9abc:5678::/64, etc.

- **dns_view**: The dns_view data filter is applied to DNS query/response events and RPZ events. Valid values are Internal or External. You can just specify 'I' or 'E' also.

- **member**: The member data filter is applied to DNS query/response events and RPZ events. Specify the Grid member name that processed the query.

- **query FQDN**: The query FQDN data filter is applied to DNS query/response events and RPZ events. A query filter is a combination of valid FQDN and wildcards.

Note the following about wildcards:

- You can specify a wildcard either on the left or on the right side of the domain name.
- A rule can have either 0, 1, or 2 wildcards.
- If a rule has 2 wildcards, they have to be on the opposite ends of the FQDN.
- A wildcard on the left side must be followed by a dot (.), except for the ‘?’ wildcard.
- A wildcard on the right side must be preceded by a dot (.) except for the ‘?’ wildcard.

<table>
<thead>
<tr>
<th>Wildcard</th>
<th>Description</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>*</td>
<td>Applicable for zero or more domain name labels. It can be specified only on the left side of the domain name.</td>
<td>*.foo.com</td>
</tr>
<tr>
<td>#</td>
<td>Applicable for one or more domain name labels. It can be specified only on the left side of the domain name.</td>
<td>#.foo.com</td>
</tr>
<tr>
<td>?</td>
<td>For exactly one domain name label. It can be specified either on the left or right side of the domain name.</td>
<td>?.foo.com, ?, ?, xyz.?, test.?, etc.</td>
</tr>
</tbody>
</table>
To configure global filters, you can log in to the Data Connector CLI and run the following commands for the respective filter type:

For client_ip filter type:
```
data.destination.global.filters.client_ip > add <ip|ip/cidr|ip4/netmask|first_ip4-last_ip4>
```
Example:
```
data.destination.global.filters.client_ip > add 10.1.0.1
Filter added
```

For dns_view filter type:
```
data.destination.global.filters.dns_view > add <Internal|External>
```
Example:
```
data.destination.global.filters.dns_view > add Internal
Filter added
```

For member filter type:
```
data.destination.global.filters.member > add member_regular_expression
```
where `member_regular_expression` is the Grid member name.
Example:
```
data.destination.global.filters.member > add ns2.site1.xyz.com
Filter added
```

For query filter type:
```
data.destination.global.filters.query > add fqdn_with_wildcards
```
Example:
```
data.destination.global.filters.query > add *.foo.com
Filter added
```

**Importing Data Filters**

You can define data filters in a CSV file and import the data filter file from your local management system, a SCP server, or an FTP server. When you import the file, it overrides all existing imported and manually added data filters. The Data Connector validates the imported data filters after a successful import and if the validation fails, the Data Connector displays an error message.

**Note:** When you define data filters in a CSV file, you can enter a comment preceded by a semicolon (;). A semicolon (;) denotes the start of a comment in the data filter file.

To import the data filters from a local file or from a remote host, you can log in to the Data Connector CLI and run the following commands for the respective filter types:

For client_ip filter type:
```
data.destination.global.filters.client_ip > import <scp|ftp>://loginname@serverIP:[port:]path
```

For dns_view filter type:
```
data.destination.global.filters.dns_view > import <scp|ftp>://loginname@serverIP:[port:]path
```

For member filter type:
```
data.destination.global.filters.member > import <scp|ftp>://loginname@serverIP:[port:]path
```

For query filter type:
```
data.destination.global.filters.query > import <scp|ftp>://loginname@serverIP:[port:]path
```
Exporting Data Filters

You can export the data filters, which includes both the previously imported data filter files and the manually added data filters to a remote host in .csv format. The CSV file can be exported to a SCP server or an FTP server.

To export the data filters to a remote host, you can log in to the Data Connector CLI and run the following commands for the respective filter types:

For client_ip filter type:
```
data.destination.global.filters.client_ip > export <scp|ftp>://loginname@serverIP:[port:]:path
```

For dns_view filter type:
```
data.destination.global.filters.dns_view > export <scp|ftp>://loginname@serverIP:[port:]:path
```

For member filter type:
```
data.destination.global.filters.member > export <scp|ftp>://loginname@serverIP:[port:]:path
```

For query filter type:
```
data.destination.global.filters.query > export <scp|ftp>://loginname@serverIP:[port:]:path
```

Viewing Data Filters

To view all the imported and manually added data filters, you can log in to the Data Connector CLI and run the following commands for the respective filter types:

For client_ip filter type:
```
data.destination.global.filters.client_ip > show filters
```

For dns_view filter type:
```
data.destination.global.filters.dns_view > show filters
```

For member filter type:
```
data.destination.global.filters.member > show filters
```

For query filter type:
```
data.destination.global.filters.query > show filters
```

You can run `show imported` command to view the timestamp and the source of the last imported data filter.

Deleting Data Filters

You can delete all the imported and manually added data filters or delete any specific manually added data filter.

To delete data filters, you can log in to the Data Connector CLI and run the following command for the respective filter type:

For client_ip filter type:
```
data.destination.global.filters.client_ip > delete <filter|all>
```

For dns_view filter type:
```
data.destination.global.filters.dns_view > delete <filter|all>
```

For member filter type:
```
data.destination.global.filters.member > delete <filter|all>
```

For query filter type:
```
data.destination.global.filters.query > delete <filter|all>
```

Note the following:
- `delete all`: Deletes all the imported and manually added data filters.
- `delete <filter>`: Deletes only a specific data filter that is added manually.
HEALTH MONITORING

You can monitor the health state of the Data Connector through the `admin.system.performance` commands. You can monitor the CPU usage, memory usage, disk usage, network interfaces, etc.

Log in to the Data Connector CLI and run the following commands to get the corresponding health information of the Data Connector.

**CPU**

Use the `cpu` command to view the percentage of CPU that is in use.

**Syntax**
```
admin.system.performance > cpu
```

**Example**
```
admin.system.performance > cpu
CPU Load, % : 1.9
```

**Disk**

Use the `disk` command to view information about the hard disk that is currently in use.

**Syntax**
```
admin.system.performance > disk
```

**Example**
```
admin.system.performance > disk
Block read, kbps : 0.0
Block write, kbps : 6.2
Disk space usage:
    /                      2.0%
    /boot                  15.9%
    /infoblox/data         0.0%
```

**Memory**

Use the `memory` command to view the percentage of memory that is currently in use.

**Syntax**
```
admin.system.performance > memory
```

**Example**
```
admin.system.performance > memory
Memory usage, % : 2.8
```

**Network**

The `network` command provides information about the network interfaces.

**Syntax**
```
admin.system.performance > network
```

**Example**
```
admin.system.performance > network
Network receive, kbps : 20.2
Network send, kbps : 1.2
Network interfaces statistics
        RX     RX Drop  RX Error  TX     TX Drop  TX Error
  eth0   88848      0       0   2430       0       0
```
Chapter 2  Configuring NIOS for Data Connector

Before you can capture DNS query and response data from the Infoblox Grid, you must configure certain settings in NIOS to ensure that the Data Connector can collect DNS data from the respective Grid members, and then send the data to designated destinations. This chapter walks you through these procedures.

It includes the following sections:

- [Configuring DNS Queries and Responses](#) on page 28
  - [Capturing DNS Queries](#) on page 28
  - [Capturing DNS Responses](#) on page 29
- [Viewing Registered Data Connector Details](#) on page 32
Configuring DNS Queries and Responses

After you set up your Data Connector virtual appliance, you must set up certain configuration so the Data Connector can gather relevant information from the Grid members, and then send the data to the destination.

When configuring the Grid to capture DNS queries and responses, you can choose to save the capture file locally on your appliance, or configure a SCP (Secure Copy) server and provide the credentials for the users configured on the Data Connector.

Note: The DNS queries and responses captured on an IB-4030 appliance does not contain cached query information.

A capture file for logging DNS queries and responses is rolled over based on the configured time limit or when the file reaches 100 MB in size, whichever is sooner. The default time limit is 10 minutes. The capture file is automatically saved and exported to a SCP server based on your configuration. When you configure the appliance to save the capture file locally and later enable SCP, the appliance copies all the data starting with the oldest data. Infoblox recommends that you constantly monitor the SCP server to ensure that it has sufficient disk space. DNS queries and responses are stored on the appliance if the SCP server becomes unreachable. The maximum storage capacity varies based on the appliance model. After reaching the maximum limit, the appliance overwrites the old data with the new one. For information about the maximum hard drive space, see Maximum Hard Drive Space used for DNS queries and Responses on page 31. The amount of data captured depends on the DNS query rate and the domains that are included in or excluded from the capture. For information about how to exclude domains, see Viewing Registered Data Connector Details on page 32.

Capturing DNS Queries

You can capture queries to all domains or limit the capture to specific domains. You can also apply the Bulk Add Domains feature to tailor query capture to a desired subset of domains or zones. When capturing DNS queries, NIOS matches the specified domain name(s) and everything that belongs to the domain. For example, when you specify ‘foo.com’ as the domain, NIOS captures queries sent to ‘foo.com,’ ‘mail.foo.com,’ and ‘ftp.foo.com.’ NIOS captures queries to domains for which a name server is authoritative; it also captures recursive queries. Note that this feature does not support wildcard characters or regular expressions.

DNS Query Message Format

The DNS query generates a query message in the following format:

<dd-mmm-YYYY HH:MM:SS.uuu> <client IP>#<port> query: <query_Domain name> <class name> <type name> <- or +>[SETDC] <(name server ip)>

where
+ = recursion
- = no recursion
S = TSIG
E = EDNS option set
T = TCP query
D = EDNS 'DO' flag set
C = ‘CD’ message flag set

Following is a sample DNS query message:

30-Apr-2013 13:35:02.187 client 10.120.20.32#42386: query: foo.com IN A + (100.90.80.102)
Capturing DNS Responses

You can capture DNS responses for the DNS queries sent to the server. The amount of data captured depends on the domains that are included in or excluded from the capture. A DNS response is based on a query generated for a domain. In the response message, NIOS captures the TTL value of a resource record, the resource record type, and resource data.

Following are characteristics of the response messages:

- They log only the answer section and do not include the authority and additional sections.
- Responses to all queries are logged, including queries with the type “ANY.”
- The RR (resource record) list is not available at the end of a response message if rcode has a value other than NOERROR or if the response is NOERROR (nodata).
- Responses to all RR types, including those records not managed by NIOS such as HINFO records, are logged. However, there are few exceptions for some of the scenarios with DNSSEC records.
- Responses containing DNSSEC RRs (DNSKEY, DS, NSEC, NSEC3, NSEC3PARAM, RRSIG) when queried for non-DNSSEC RRs are not logged. However, responses are logged if a DNSSEC RR is explicitly queried.
- DNS updates are not logged in responses.

DNS Response Message Format and Examples

The DNS query generates a response message in the following format:

<ddmmmYYYY HHMMSS.uuu> client <client ip>#port <UDP or TCP>: [view: DNS view] query: <queried domain name> <class name> <type name> response: <rcode> <flags> [<RR in text format>; [<RR in text format>;] ...

Flags = <- or +>[ATEDVL]

where

- = recursion not available
+ = recursion available (from DNS message header)
A = authoritative answer (from DNS message header)
t = truncated response (from DNS message header)
E = EDNS OPT record present (from DNS message header)
D = DNSSEC OK (from EDNS OPT RR)
V = responding server has validated DNSSEC records
L = response contains GSLB synthetic record

Following are some DNS response samples:

Example 1: When querying an A record
07-Apr-2013 20:16:49.083 client 10.120.20.198#57398 UDP: query: a2.foo.com IN A response: NOERROR +AED a2.foo.com. 28800 IN A 1.1.1.2;

Example 2: When querying an AAAA record
07-Apr-2013 20:16:49.083 client 10.120.20.198#57398 UDP: query: a4.foo.com IN AAAA response: NOERROR +AED a4.foo.com. 28800 IN AAAA ab::ab;

Example 3: When querying an A record over IPv6

Example 4: When querying an A record over TCP
07-Apr-2013 20:16:49.083 client 10.120.20.198#57398 TCP: query: a2.foo.com IN A response: NOERROR +ED a2.foo.com. 28800 IN A 1.1.1.2;

Example 5: When querying ANY record
07-Apr-2013 20:16:49.083 client 10.120.20.198#57398 UDP: query: a2.foo.com IN ANY response: NOERROR +ED a2.foo.com. 28800 IN A 1.1.1.2;

Example 6: When querying an A record with multiple addresses
07-Apr-2013 20:16:49.083 client 10.120.20.198#57398 UDP: query: a1.foo.com IN A response: NOERROR +ED a1.foo.com. 28800 IN A 1.1.1.1; a1.foo.com. 28800 IN A 11.1.1.1;
Example 7: When querying an aliased A record

Example 8: When querying an NXDOMAIN
07-Apr-2013 20:16:49.083 client 10.120.20.198#57398 UDP: query: non-exist.foo.com IN A response: NXDOMAIN +ED

Example 9: Response message for NOERROR/nodata
07-Apr-2013 20:16:49.083 client 10.120.20.198#57398 UDP: query: al.foo.com IN SRV response: NOERROR +ED

Example 10: Response message for refused query
07-Apr-2013 20:16:49.083 client 10.120.20.198#57398 UDP: query: refused.com IN A response: REFUSED +ED

Example 11: Response message when server fails
07-Apr-2013 20:16:49.083 client 10.120.20.198#57398 UDP: query: servfail.com IN A response: SERVFAIL +E

Example 12: Response message when query A record in a signed zone
07-Apr-2013 20:16:49.083 client 10.120.20.198#57398 UDP: query: a1.signed.com IN A response: NOERROR +ED a1.signed.com. 28800 IN A 1.1.1.1;

Example 13: Response message for explicit query to DNSSEC RRs
07-Apr-2013 20:16:49.083 client 10.120.20.198#57398 UDP: query: a1.signed.com IN RRSIG response: NOERROR +ED a1.signed.com. 28800 IN RRSIG A 5 3 28800 20130616004903 20130611234903 4521 signed.com. evRQk7RbnkjjFTsumT3Jjg76bduFLFdeEEnszitXHQCbVYBS5rDy+qBU HcquD/1dCmTJbQq8Meuatzfms/2Y5k2u677P9y6GkOxMz2TlcUjBm/YqrYlZB6GkpLp6j0pxK0513xxqw8xUStUEjxKfuzcKSY6jaSduQI1FL v6A=; a1.signed.com. 900 IN RRSIG NSEC 5 3 900 20130616004903 20130611234903 4521 signed.com. CnFmXMx9D+ZkDsztQbW2xx8XCRQGNMBp0baxFXS/Pxwhg4Pcq581aI97y2Xgswwn/wKNhY8p9hkes5+6t/ihCOIbwFryxdivPfYYFf3jafedFN ymZu05KbYufCuZ2GiclRzoJYhxM7xFT8fMvxni9ngsBlym82TqVNua 6wU=;

Configuring DNS Queries and Responses on NIOS

To configure DNS queries and responses:

1. Grid: From the Data Management tab, select the DNS tab, expand the Toolbar and click Grid DNS Properties.
   - Member: From the Data Management tab, select the DNS tab and click the Members tab -> member check box -> Edit icon.

2. In the Grid DNS Properties or Member DNS Properties editor, click Toggle Advanced Mode and select the Logging tab.

3. Under Data Connection for all DNS Queries/Responses to a Domain, complete the following:
   - Select the Capture DNS Queries check box to start capturing DNS queries. This enables the feature set for configuration. When you enable this option at the member level, the appliance captures DNS queries for the selected members only.
   - Select the Capture DNS Responses check box to start capturing DNS responses. This enables the feature set for configuration. When you enable this option at the member level, the appliance captures DNS responses for the selected members only.

Note: Enabling the logging of queries and responses at the same time can increase disk space usage and adversely affect DNS services and performance. Infoblox recommends that you do not configure both logging at the same time.

- Select Capture queries/responses for all domains to capture queries and responses to all domains and zones.
- Select Limit capture to these domains to capture DNS queries and responses to domains and zones one at a time.
— Specify domains for DNS capture operations in the Domain table by clicking the Add icon, and choosing Add Domain or Bulk Add Domains from the menu.
— To define the destination for capture files, do the following:
  — Retain captured queries on the local disk: Select this check box to save the DNS queries on the appliance. In addition to the local disk, you can select to export the DNS queries to the Data Connector by selecting SCP in the Export to drop-down list.
  — Export to: From the drop-down list, select SCP to back up the DNS queries on the Data Connector and None to save queries only on the appliance. To save the captured DNS queries on both the appliance and the Data Connector, select the Retain captured queries on the local disk check box and SCP from the Export to drop-down list.

**Note:** When you configure an SCP server and enable the MGMT port, the NIOS appliance uses SSH for data transfer. It uses the same authentication and provides the same security as SSH. SCP uses the LAN1 port to communicate with the external servers.

— When you select SCP from the Export to drop-down list, complete the following:
  • In the Directory Path field, enter the directory to which the capture file will be saved on the server. Infoblox recommends that you use the ~ symbol for the Data Connector VM.
  • In the Server Address field, enter the IP address of the Data Connector VM to which the capture files will be saved.
  • Enter the file server account Username and Password values.
  — Limit query data collected per file to minutes or 100MB (whichever comes first): This option limits the collection of query data per capture file. A capture file for logging DNS queries and responses is rolled over based on the configured time limit or when the file reaches 100 MB in size, whichever is sooner. The default time limit is 10 minutes. You can enter a value from 1 to 10.

4. Save the configuration.

*Table 2.1* lists the maximum hard drive space required for capturing DNS queries and responses for supported Infoblox appliance models.

**Table 2.1  Maximum Hard Drive Space used for DNS queries and Responses**

<table>
<thead>
<tr>
<th>Supported Infoblox Appliances</th>
<th>Maximum Hard Drive Space for DNS Query /Response Capture (MB)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trinzic 100</td>
<td>400</td>
</tr>
<tr>
<td>Trinzic 810</td>
<td>900</td>
</tr>
<tr>
<td>Trinzic 815 and IB-V815</td>
<td>900</td>
</tr>
<tr>
<td>Trinzic 820</td>
<td>3100</td>
</tr>
<tr>
<td>Trinzic 825 and IB-V825</td>
<td>3100</td>
</tr>
<tr>
<td>Trinzic 1410</td>
<td>6000</td>
</tr>
<tr>
<td>Trinzic 1415 and IB-V1415</td>
<td>6000</td>
</tr>
<tr>
<td>Trinzic 1420</td>
<td>10000</td>
</tr>
<tr>
<td>Trinzic 1425 and IB-V1425</td>
<td>10000</td>
</tr>
<tr>
<td>Trinzic 2210</td>
<td>12000</td>
</tr>
<tr>
<td>Trinzic 2215 and IB-V2215</td>
<td>12000</td>
</tr>
<tr>
<td>Trinzic 2220</td>
<td>28000</td>
</tr>
</tbody>
</table>
Configuring NIOS for Data Connector

To view detailed information about the registered Data Connector:

1. From the Grid tab, select the Grid Manager tab → Members tab, and then click Data Collection from the Toolbar.
2. The appliance displays the following information in the Data Connector VMs editor:
   - **Cluster Unique ID**: The unique ID of the Data Connector VM.
   - **Name**: The name of the Data Connector VM.
   - **Registration Time**: The timestamp when the Data Connector VM was initially registered with the Infoblox Grid.
   - **Last Activation Time**: The timestamp when the Data Connector last contacted the Infoblox Grid.
   - **Comment**: Displays additional information about the Data Connector.
   - **VMs in Cluster**: Displays the following information:
     - **VM IP Address**: Displays the IP address of the Data Connector VM.
     - **NAT Enabled**: Not supported in this release.
     - **NAT IP Address**: Not supported in this release.
     - **NAT Group**: Not supported in this release.
   - **Disable Cluster**: Indicates whether this Data Connector VM should be deleted and moved to the list of deleted clusters so you can allow another Data Connector VM to register with the Grid.

**Note:** The Data Connector VMs tab appears only for users with read-only and read-write permission. Users with read-only permission can only view the Data Connector information. For information about administrative permissions, refer to the Infoblox NIOS Administrator Guide.

<table>
<thead>
<tr>
<th>Supported Infoblox Appliances</th>
<th>Maximum Hard Drive Space for DNS Query/Response Capture (MB)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trinzic 2225 and IB-V2225</td>
<td>28000</td>
</tr>
<tr>
<td>Infoblox-4010</td>
<td>40000</td>
</tr>
<tr>
<td>IB-VM-100</td>
<td>400</td>
</tr>
<tr>
<td>IB-VM-2000 (120G)</td>
<td>15000</td>
</tr>
<tr>
<td>IB-VM-810 (120G)</td>
<td>900</td>
</tr>
<tr>
<td>IB-VM-820</td>
<td>3100</td>
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<tr>
<td>IB-VM-1410 (120G)</td>
<td>6000</td>
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<td>IB-VM-1420 (120G)</td>
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<tr>
<td>IB-VM-2210 (120G)</td>
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<tr>
<td>IB-VM-4010 (120G)</td>
<td>40000</td>
</tr>
<tr>
<td>PT-1400</td>
<td>10000</td>
</tr>
<tr>
<td>PT-1405</td>
<td>10000</td>
</tr>
<tr>
<td>PT-2200</td>
<td>28000</td>
</tr>
<tr>
<td>PT-2205</td>
<td>28000</td>
</tr>
<tr>
<td>PT-4000</td>
<td>40000</td>
</tr>
</tbody>
</table>
Chapter 3 Configuring Data Connector for Reporting Destination

This chapter explains how to configure the Infoblox Data Connector so it can forward DNS query and response data gathered from the Infoblox Grid to a reporting server.

**CONFIGURING REPORTING DESTINATION**

After you set up your Data Connector virtual appliance, you must set up certain configurations so the Data Connector can gather relevant information from the Grid members, and then send the data to the reporting server.

*Note:* The Data Connector VM and the reporting member must be on the same network so that the data exchange between them will not be blocked by firewalls.

To configure the Data Connector to send DNS data to a reporting server, you can log in to the Data Connector CLI and complete the following:

1. Enable DNS service on the Grid Master. For information about enabling DNS service on the Grid Master, refer to the *Infoblox NIOS Administrator Guide*.
2. Configure and register the Data Connector, as described in *Deploying the Data Connector Virtual Appliance* on page 8.
3. Configure the Grid to capture DNS queries and responses, as described in *Configuring DNS Queries and Responses on NIOS* on page 30.
4. Log in to the Data Connector CLI.
5. Verify the configured network settings of the Data Connector using the `admin.network > ip4 get` command. 
   Example:
   ```
   admin.network > ip4 get
   Configured System Setting:
   gateway: 10.35.0.1
   mask: 255.255.0.0
   mode: static
   address: 10.35.1.1
   vlanid: 0
   vlan configuration is only in effect in the static mode.
   ```
6. **Use the** `data.source.grid > set address` **command to set the Grid IP, admin username, and password.**
   Example:
   ```
   data.source.grid > set address 10.0.0.22
   ```
Command applied successfully.
data.source.grid > set username admin
Command applied successfully.
data.source.grid > password
Enter the NIOS admin's password:
Enter again:
Password updated

7. Use the `data.destination.reporting.registration > register` command to register the Data Connector with the NIOS Grid, as follows:

data.destination.reporting.registration > register
Getting Grid Data Connector information... done.
Generating certificate for Splunk forwarder... done.
Signing Splunk forwarder certificate with the Grid... done.
Registering Data Collector with the Grid... done.
Saving changes to database... done.

8. Configure a reporting server as the destination using `data.destination.reporting > set mode` command and set the reporting output mode to `forward`, as follows:

data.destination.reporting > set mode forward
Data will start transmitting immediately

or

You can run the `wizard` command while configuring the Data Connector VM. Using the `wizard` command, you can configure the network settings, register the Data Connector VM with the Infoblox Grid, and add an SCP user who is allowed to upload files to the Data Connector VM. For more information, see `Configuring the Data Connector Virtual Appliance` on page 10. Note that you can register only one Data Connector VM with the NIOS Grid. For information, see `Configuring the Data Connector Virtual Appliance` on page 10.

**Viewing DNS Query Capture Reports**

In a Grid that includes a reporting server, you can view reports that contain information about the client IP addresses or domains being queried in your network. For more information about the reporting and analytics service and reports, refer to the `Infoblox NIOS Administrator Guide`.

**Note:** Information in the following DNS Query Capture reports is displayed only if a Data Connector VM is registered with the Infoblox Grid and options for capturing DNS queries and DNS responses are enabled.

- **DNS Domain Query Trend**
  The **DNS Domain Query Trend** dashboard shows the trend of DNS queries for specific domains. This dashboard displays the DNS query trends for queries generated from both the internal and external sources.

- **DNS Domains Queried by Client**
  The **DNS Domain Queried by Client** dashboard shows the DNS domains being queried by the client. This dashboard displays the DNS domains that are being queried from both the internal and external sources.

- **Top DNS Clients by Query Type**
  The **Top DNS Clients by Query Type** dashboard lists the top DNS resource records that have been queried per client. This dashboard displays the DNS records query trends for queries that originate from both the internal and external sources.

- **Top DNS Clients Querying MX Records**
  The **Top DNS Clients Querying MX Records** dashboard lists the top MX records that have been queried per client. This dashboard displays the MX records query trends for queries that originate from both the internal and external sources.
Chapter 4  Configuring Data Connector for Splunk Destination

This chapter explains how to configure the Infoblox Data Connector so it can forward DNS query and response data gathered from the Infoblox Grid to Splunk destination.

**CONFIGURING SPLUNK DESTINATION**

After you set up your Data Connector virtual appliance, you must set up certain configurations so the Data Connector can gather relevant information from the Grid members, and then send the data to the Splunk destination. The following are required to configure a Splunk destination:

- Data Connector version 2.0 and later
- **Security Ecosystem** license installed on your NIOS Grid, if the Grid is running version NIOS 7.3 or later.

To configure the Data Connector to send DNS data to a Splunk destination, you can log in to the Data Connector CLI and complete the following:

1. Add one or more Splunk indexers to which the Data Connector sends DNS data. Enter a valid indexer IP address and (optionally) enter the indexer port number between 1 and 65536. The default indexer port number is 9997. If you do not specify the port number in this step, you can configure it later using the `set port <number>` command.

   Run the following command to add Splunk indexers:

   ```bash
   data.destination.splunk > add indexer <address>[:optional_port]
   ```

   Example:

   ```bash
   data.destination.splunk > add indexer 10.1.1.0
   ok
   data.destination.splunk > add indexer 10.1.1.2
   ok
   ```

2. Specify the index name where the DNS data will be saved. You can get the index name from your Splunk administrator. Run the following command to specify the index name:

   ```bash
   data.destination.splunk > set indexname <string>
   ```

   Example:

   ```bash
   data.destination.splunk > set indexname xyz
   ok
   ```
3. Optionally, specify the Splunk sourcetype. The Splunk sourcetype is used to tag DNS data. The default sourcetype is `ib:dns:captures`. Run the following command:

   ```
data.destination.splunk > set sourcetype <string>
   Example:
data.destination.splunk > set sourcetype ib:dns:captures
   ok
   ```

4. Upload the Certification Authority bundle in .PEM format which is used to authenticate Splunk forwarder traffic with Splunk indexers. You can get the Certification Authority bundle from your Splunk administrator. Run the following command to import the Certification Authority bundle from a SCP server or an FTP server:

   ```
data.destination.splunk > cacertificate import <scp|ftp>://loginname@serverIP:[port:]path
   Example:
data.destination.splunk > cacertificate import scp://root@10.2.1.1:999/DB1/
   ```

5. Generate a certificate request in .PEM format. This certificate request must be signed by the third-party Certification Authority to get a Forwarder Certificate. Run the following command:

   ```
data.destination.splunk > certificate request
   Generating Forwarder Private key... Done
   Below is Certificate Request.
   -----BEGIN CERTIFICATE REQUEST-----
   CUEybjcJD/4+Q8cSHmMU7VOpp1VEs9W4Fwi5QHtn0/zz4a2bEi1J/
   -----END CERTIFICATE REQUEST-----
   ok
   ```

   You must send the generated certificate request to the Certification Authority for signing and get the Forwarder Certificate.

6. Upload the Forwarder Certificate signed by the third-party Certification Authority. Run the following command to import the Forwarder Certificate from a SCP server or an FTP server:

   ```
data.destination.splunk > certificate import <scp|ftp>://loginname@serverIP:[port:]path>
   Example:
data.destination.splunk > certificate import scp://root@10.2.1.1:999/DC2/
   ```

7. Change the default output mode for the Splunk output. By default, the Splunk output mode is set to ‘disabled’. You can change the Splunk output mode to ‘forward’ only after you have configured all the above parameters. Run the following command to change the default output mode:

   ```
data.destination.splunk > set mode [forward|hold|disabled]
   Example:
data.destination.splunk > set mode forward
   Data will start transmitting immediately
   ok
   ```

   For information about changing the output mode, see `Changing the Destination Mode` on page 21.
Chapter 5 Configuring Data Connector for Infoblox ActiveTrust Cloud Destination

This chapter explains how to configure the Infoblox Data Connector so it can forward DNS query and response data gathered from the Infoblox Grid to Infoblox ActiveTrust Cloud destination.

Infoblox ActiveTrust Cloud is an extension of the ActiveTrust Suite that provides visibility into infected and compromised off-premise devices, roaming users, and branch and remote offices. You can subscribe to Infoblox ActiveTrust Cloud and use its functionality to mitigate and control malware as well as provide unprecedented insight into your network security posture and enable timely action. ActiveTrust Cloud also offers unified policy management, reporting, and threat analytics across the entire spectrum. For more information about ActiveTrust Cloud, visit the Infoblox website at [www.infoblox.com](http://www.infoblox.com).

You can also configure and enable Threat Insight to block malicious domains on a cloud destination. For more information, see Configuring Threat Insight for Cloud Destination on page 40.

---

**CONFIGURING ACTIVE TRUST CLOUD DESTINATION**

After you set up your Data Connector virtual appliance, you must set up certain configurations so the Data Connector can gather relevant information from the Grid members, and then send the data to the Infoblox ActiveTrust Cloud destination.

You must have Data Connector version 2.0 and later installed in order to support Infoblox ActiveTrust Cloud configuration. You can either configure a new Data Connector using the correct version or upgrade your existing Data Connector to 2.0 or later. For information about new installation, see Deploying the Data Connector Virtual Appliance on page 8. To upgrade an existing Data Connector, see Upgrading the Infoblox Data Connector on page 15.

After you have the latest software version installed and the Data Connector is up and running, perform the following to set up your cloud environment to receive data from the Data Connector. To configure Data Connector VM to send DNS data from Infoblox Grid to ActiveTrust Cloud, complete the following:

1. Configure the Grid to capture DNS queries and responses, as described in Configuring DNS Queries and Responses on NIOS on page 30. Next, add the SCP user details on the Grid members to send DNS log data to the Data Connector VM. For information, see Configuring NIOS for Data Connector on page 27.

2. Configure the Data Connector as an external syslog server, so that the Grid members can send syslog to the Data Connector VM using TCP. Select DNS RPZ and Threat Protection as the logging category while configuring the Data Connector as an external syslog server. For information about configuring external syslog servers in NIOS, refer to the Infoblox NIOS Administrator Guide.
3. Enable DNS service on the Grid members.
4. Log in to the Data Connector CLI.
5. Configure the Data Connector, as described in Deploying the Data Connector Virtual Appliance on page 8.
6. Verify the configured network settings of the Data Connector using the `admin.network > ip4 get` command.
   
   **Example:**
   ```bash
   admin.network > ip4 get
   Configured System Setting:
gateway: 10.36.0.1
mask: 255.255.0.0
mode: static
address: 10.36.130.1
vlanid: 0
vlan configuration is only in effect in the static mode.
```
7. Use the `data.source.grid > set address` command to set the Grid IP, admin username, and password.
   
   **Example:**
   ```bash
   data.source.grid > set address 10.0.0.22
   Command applied successfully.
   data.source.grid > set username admin
   Command applied successfully.
   data.source.grid > password
   Enter the NIOS admin's password:
Enter again:
Password updated
```
8. Configure ActiveTrust Cloud as destination using `data.destination.cloud.registration > set` command and set the URL, Agent ID, and API key for the ActiveTrust Cloud output, as follows:

   **Note:** In order to get the ActiveTrust cloud configuration parameters such as the URL, Agent ID, and API key, you can log in to your ActiveTrust cloud portal and navigate to Administration tab -> Unified Reporting tab. In the Unified Reporting panel, the values for Agent ID, URL, and API key are displayed in the Name, URL, and API Access Key columns of the Data Collectors table respectively.

   ```bash
   data.destination.cloud.registration > set agent_id <Your_Agent_ID>
   ok
   data.destination.cloud.registration > set url https://usa-va.csp.infoblox.com/dnslog
   ok
   data.destination.cloud.registration > set api_key <Your_API_Key>
   ok
   ```

   **Note:** You must specify the same agent_id and api_key that you specify in the Cloud Services Portal (ActiveTrust Cloud Portal -> Administration -> Unified Reporting) where Name is the agent_id and API Access Key is the api_key.

   After setting the URL, Agent ID, and API key for the ActiveTrust Cloud output, you can use the `ping` or `account` command to verify, as follows:
   ```bash
   data.destination.cloud.registration > ping
   Cloud server "usa-va.csp.infoblox.com" is available
   ```
9. Use the `data.destination.cloud > set mode` command and set the cloud output mode to forward, as follows:
   
   ```
   data.destination.cloud > set mode forward
   Data will start transmitting immediately
   ok
   ```

10. Configure Infoblox Grid as source of DNS data and RPZ logs using `data.source.grid > set username` command and set the address, username, and password, as follows:

   ```
   data.source.grid > set username admin
   Command applied successfully.
   data.source.grid > set address 10.0.0.22
   Command applied successfully.
   data.source.grid > password
   Enter the NIOS admin's password:
   Enter again:
   Password updated
   ```

   After setting the address, username, and password, you can use the `data.source.grid > sync` command to verify, as follows

   ```
   data.source.grid > sync
   Reregistering Data Collector with the Grid... done.
   Updating Grid configuration... done.
   This function will synchronize NIOS Grid state with the Data Connector VM.
   ```

11. Use the `data.source.syslog > set mode` command and configure the mode to send the RPZ logs, as follows:

   ```
   data.source.syslog > set mode secure
   ok
   data.source.syslog > set mode unencrypted
   ok
   data.source.syslog > set mode both
   ok
   ```

12. Generate a certificate request in .PEM format. This certificate request must be signed to get an operable syslog certificate. Run the following command:

   ```
   data.source.syslog > certificate request
   You can self-sign the generated certificate or send it to the Certification Authority for signing and get the operable Syslog Certificate.
   ```

13. Upload the signed Syslog Certificate. Run the following command to import the certificate from a SCP server or an FTP server:

   ```
   data.source.syslog > certificate import <scp|ftp>://loginname@serverIP:[port:]path
   Example:
   data.source.syslog > certificate import scp://root@10.1.1.1:999/DC2/
   ```

   **Note:** The secure port number must be the same secure TCP port number configured on NIOS.

14. Configure Infoblox Grid as source of IP Metadata using `data.source.grid > set query` command, as follows:

   ```
   data.source.grid > set query userinfo enabled
   ok
   data.source.grid > set query ipam enabled
   ok
   ```
Configuring Data Connector for Infoblox ActiveTrust Cloud Destination

```
data.source.grid > set query lease enabled
ok
```

```
data.source.grid > query
userinfo: enabled
ipam: enabled
lease: enabled
```

**Note:** Note that `userinfo` is available only if the Grid is running NIOS 7.2.0 or later.

15. Specify the poll period for query Grid IPAM information in seconds, minutes, or hours. The minimum is 1 minute, the maximum is 365 days, and the default is 5 minutes.
```
data.source.grid > set poll 6m
ok
```

Optionally, you can set the API address, as follows:
```
data.source.grid > set apiaddress grid|auto|<ip_addr>
```

**Example:**
```
data.source.grid > set apiaddress 10.0.0.22
ok
```

**Note:** In order to query the IP metadata, you must specify the IP address of the Grid Master Candidate or you can specify ‘auto’, so that the Data Connector can automatically determine the IP address.

The Data Connector VM transfers DNS query and response data and DNS Firewall CEF logs to ActiveTrust Cloud. To view these data in the form of reports, log in to the ActiveTrust Cloud portal, navigate to Analyze tab and select either Activity reports (for DNS query and response data) or Security reports (for DNS Firewall CEF logs). Note that to view the Data Connector VM data in these reports, you must select the check box Include on-Prem Data. For information about the reports generated based on data sent from Data Connector, refer Infoblox ActiveTrust Cloud Administrator Guide.

**Configuring Threat Insight for Cloud Destination**

Infoblox enables you to configure Threat Insight on the cloud client to detect and block blacklisted domains. Threat Insight uses analytics algorithms to detect DNS tunneling by analyzing incoming DNS queries and responses. With Threat Insight, you can also configure a whitelist and include trusted domains for NIOS to allow DNS traffic. Note that Threat Insight for the cloud destination through the Data Connector are valid for local RPZ zones only. When you configure Response Policy Zones for a Grid, you can also define rules to block DNS resolution for malicious domains or redirect such clients. Infoblox allows you to configure only one cloud client per Grid and you must first request an API key through the Cloud Services Portal to authorize Threat Insight requests from the cloud client.

Note that you must configure the Infoblox Data Connector to transport data from the Grid to ActiveTrust Cloud and you can use this feature only when an RPZ license is installed in the Grid. When you configure Threat Insight for cloud destination, the threat insight domains that are added in the Cloud Services Portal for the respective user gets synchronized with the RPZ zone that you add to the list. This synchronization happens periodically based on the interval that you define.

If your Grid is running NIOS version 8.2.0, you can configure the Grid to retrieve blacklisted domains, which are detected by the Threat Insight feature, from the cloud destination and block traffic using Response Policy Zones. For more information about Response Policy Zones, refer to the NIOS Administrator Guide.

To configure Threat Insight for Cloud Destination:

1. From the Data Management tab, select the DNS tab -> Response Policy Zones tab, and then click Threat Insight in the Cloud Client from the Toolbar.
2. Complete the following in the Threat Insight in the Cloud Integration Client wizard:
   - **Enable Cloud Client**: Select this check box to enable Threat Insight in the cloud client.
   - **API Key**: You must request an API key to establish an authorized connection with the cloud client through the Data Connector. Click **Request API Key** to request an API key. Do the following in the **Request API Key from the Cloud Services Portal** dialog box:
     - **Email**: Enter the email address that is registered in the Infoblox Cloud Services Portal.
     - **Password**: Enter the password that is registered in the Infoblox Cloud Services Portal.
     An API key is displayed in the API Key text box only when you enter the correct email address and password. An error message is displayed for an invalid email address and password.
   - **Interval**: You can specify how often to request Threat Insight results from the cloud client in seconds or minutes. The default is 10 minutes.
   - **The list of Response Policy Zones to use for blacklisted domains**: Click the Add icon to add an RPZ to the list. When there are multiple zones, Grid Manager displays the Zone Selector dialog box from which you can select one. You can add an RPZ from different network and DNS views. Whenever a new RPZ is added and the cloud client requests data, Grid Manager displays a Warning dialog box to confirm that you wish to request all detected domains by Threat Insight in the cloud client. Even if you have clicked **No** in the Warning dialog box, you can use the `set cloud_services_portal_force_refresh` CLI command in maintenance mode and set the flag to request all domains detected in the cloud client.

3. Click **Save & Close**.
Appendix A CLI Commands

The following are some of the most commonly used CLI commands for the Data Connector VM:

Note: The CLI commands, info, stats, and wizard are general commands that are available at different levels depending on whether they are applicable to that level or not.

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## CLI Commands

**admin > wizard**

The `admin > wizard` command allows you to configure the network settings.

**Syntax**

```plaintext
admin > wizard
```

**Example**

```plaintext
admin > wizard
```

Please use: '?' for help on available command options.

Do you want to configure admin network settings y/n [y]:

```plaintext
y
```
Please use: '?' for help on available command options.
Please enter IPv4 configuration in format: 'mode [gateway address mask vlanid]'
Current settings are [dynamic]:
static 10.36.0.1 10.36.130.1 255.255.0.0 0
ok
Please enter dns configuration[ 10.0.0.0 ]:
10.0.0.0
DNS servers obtained by DHCP (if any) have higher precedence
ok
Please enter domain configuration[static[gateway=10.36.0.1 address=10.36.130.1 mask=255.255.0.0 vlanid=0]]:
Settings unchanged.
Please enter hostname configuration[hostname.com ]:
hostname.com
ok
Configured System Setting:
gateway: 10.36.0.1
mask: 255.255.0.0
mode: static
address: 10.36.130.1
vlanid: 0
Vlan configuration is only in effect in the static mode.
Network configuration in progress...
Configured DNS Setting:
Dns Server(s): ['10.0.0.0']
domain: static[gateway=10.36.0.1 address=10.36.130.12 mask=255.255.0.0 vlanid=1 0.2.3.4]
hostname: hostname.com
Is it correct? y/n [y]:
y
Updating network interface configuration is in progress (It may take few seconds)... Do you want to configure admin system settings y/n [y]:
y
Please use: '?' for help on available command options.
Please enter Greeting banner text[Configured System Setting: ]:
This is Infoblox Data Connection Virtual Machine
ok
This is Infoblox Data Connection Virtual Machine
Is it correct? y/n [y]:
y
Setup wizard finished successfully
admin.network > set dns
The `admin.network > set dns` command enables you to set the IP address of the DNS server.

Syntax
```
admin.network > set dns <address>
```

Example
```
admin.network > set dns 10.0.2.35
DNS servers obtained by DHCP (if any) have higher precedence
ok
```

admin.network > show dns
The `admin.network > show dns` command displays the IP address of the DNS server.

Syntax
```
admin.network > show dns
```

Example
```
admin.network > show dns
Actual DNS Setting:
Dns Server(s): 10.0.2.20 10.0.2.35 10.0.2.60
Configured DNS Setting (DNS servers obtained by DHCP have higher precedence):
Dns Server(s): ['10.0.2.35']
```

admin.network > delete dns
The `admin.network > delete dns` command enables you to delete the IP address of the DNS server.

Syntax
```
admin.network > delete dns <address>
```

Example
```
admin.network > delete dns 10.0.2.35
ok
```

admin.network > set domain
The `admin.network > set domain` command enables you to set the domain name of the DNS server.

Syntax
```
admin.network > set domain <domainname>
```

Example
```
admin.network > set domain foo.com
ok
```

admin.network > show domain
The `admin.network > show domain` command displays the domain name of the DNS server.

Syntax
```
admin.network > show domain
```

Example
```
admin.network > show domain
domain: foo.com
```
admin.network > set hostname

The `admin.network > set hostname` command enables you to set the host name of the Data Connector.

Syntax

```
admin.network > set hostname <hostname>
```

Example

```
admin.network > set hostname dc.com
ok
```

admin.network > show hostname

The `admin.network > show hostname` command displays the host name of the Data Connector.

Syntax

```
admin.network > show hostname
```

Example

```
admin.network > show hostname
hostname: dc.com
```

admin.network > add route

The `admin.network > add route` command enables you to set or modify the static route configuration.

Syntax

```
admin.network > add route address=<IP address> mask=<Netmask> gateway=<Gateway address>
```

Example

```
admin.network > add route address=10.34.28.9 mask=255.255.255.255 gateway=10.34.28.1
ok
```

admin.network > show route

The `admin.network > show route` command displays the static route configuration.

Syntax

```
admin.network > show route
```

Example

```
admin.network > show route
address: 10.34.28.9
mask: 255.255.255.255
gateway: 10.34.28.1
```

admin.network > delete route

The `admin.network > delete route` command deletes the current static route.

Syntax

```
admin.network > delete route address=<IP address> mask=<Netmask> gateway=<Gateway address>
```

Example

```
admin.network > delete route address=10.34.28.9 mask=255.255.255.255 gateway=10.34.28.1
ok
```

admin.network > show ip4

The `admin.network > show ip4` command displays the IPv4 network address.

Syntax

```
admin.network > show ip4
```

Example

```
admin.network > show ip4
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```
CLI Commands

Example
admin.network > show ip4
Configured System Setting:
gateway: 10.36.0.1
mask: 255.255.0.0
mode: static
address: 10.36.130.1
vlanid: 0
vlan configuration is only in effect in the static mode.

admin.network > set ip4 mode
The admin.network > set ip4 mode command enables you to configure the IPv4 network address.

Syntax
set ip4 mode [gateway address mask vlanid]
mode=static|dynamic
gateway=<IP>
address=<IP>
mask=<IP>
vlanid=<0,2..4094>

Example
admin.network > set ip4 static 10.36.0.1 10.36.117.17 255.255.0.0 0
Updating network interface configuration is in progress (It may take few seconds)...

admin.network > ping
The admin.network > ping command allows you to verify if the network is accessible and active.

Syntax
admin.network > ping <address|fqdn>

Example
admin.network > ping 10.120.20.170
PING 10.120.20.170 (10.120.20.170) 56(84) bytes of data.
64 bytes from 10.120.20.170: icmp_seq=1 ttl=59 time=11.3 ms
64 bytes from 10.120.20.170: icmp_seq=2 ttl=59 time=11.0 ms
64 bytes from 10.120.20.170: icmp_seq=3 ttl=59 time=13.9 ms
64 bytes from 10.120.20.170: icmp_seq=4 ttl=59 time=9.93 ms
64 bytes from 10.120.20.170: icmp_seq=5 ttl=59 time=11.6 ms
--- 10.120.20.170 ping statistics ---
5 packets transmitted, 5 received, 0% packet loss, time 4005ms
rtt min/avg/max/mdev = 9.932/11.593/13.965/1.321 ms

admin.network > resolve
The admin.network > resolve command enables you to view the network information, such as IP address, hostname, etc.

Syntax
admin.network > resolve [Fqdn]
Example

admin.network > resolve www.google.com
Server: 10.0.2.20
Address: 10.0.2.20#53
Non-authoritative answer:
Name: www.google.com
Address: 74.125.28.105
Name: www.google.com
Address: 74.125.28.147
Name: www.google.com
Address: 74.125.28.99
Name: www.google.com
Address: 74.125.28.104
Name: www.google.com
Address: 74.125.28.106
Name: www.google.com
Address: 74.125.28.103

admin.network > wizard

The admin.network > wizard command enables you to configure the network settings.

Syntax

admin.network > wizard

Example

admin.network > wizard
Do you want to configure admin network settings y/n [y]:
y
Please use: '?' for help on available command options.
Please enter IPv4 configuration in format: 'mode [gateway address mask vlanid]' 
Current settings are [ dynamic ]:
static 10.36.0.1 10.36.130.12 255.255.0.0 3625
  ok
Please enter dns configuration:
10.0.0.0
DNS servers obtained by DHCP (if any) have higher precedence
  ok
Please enter domain configuration[ infoblox.com ]:
  ok
Please enter hostname configuration[ dc-infoblox ]:
  ok
Configured System Setting:
gateway: 10.36.0.1
mask: 255.255.0.0
mode: static
address: 10.36.130.12
vlanid: 3625
vlan configuration is only in effect in the static mode.
Network configuration in progress...
Configured DNS Setting:
Dns Server(s): ['10.0.0.0']
domain: infoblox.com
hostname: dc-infoblox
Is it correct? y/n [y]:
Updating network interface configuration is in progress (It may take few seconds)...

admin.support > set access

The `admin.support > set access` command enables or disables support access for the Data Connector VM.

Syntax
```
admin.support > set access {on|off}
```

Example
```
admin.support > set access on
Access code (Expires at 24:00 of Mar 23, 2017): 4U5YA7UZ
Current time is Wed Mar 22 09:14:53 UTC 2017
ok
```

admin.support > show access

The `admin.support > show access` displays whether support access is enabled or disabled.

Syntax
```
admin.support > show access
```

Example
```
admin.support > show access
Support access is on
Access code (Expires at 24:00 of Mar 23, 2017): 4U5YA7UZ
Current time is Wed Mar 22 09:15:35 UTC 2017
```

admin.support > set debug

The `admin.support > set debug` command enables or disables the debug mode.

Syntax
```
admin.support > set debug {on|off}
```

Example
```
admin.support > set debug on
ok
```

admin.support > show debug

The `admin.support > show debug` command displays whether debug mode is enabled or disabled.

Syntax
```
admin.support > show debug
```

Example
```
admin.support > show debug
Debug mode is on
```
admin.support > getbundle

The `admin.support > getbundle` command enables you to generate and upload the support bundle to the specified location.

Syntax
```
admin.support > getbundle <scp|ftp>://loginname@serverIP:[port:]path
```

Example
```
admin.support > getbundle scp://root@10.32.2.26/path/file
Enter Password:
Bundle file
dc_bundle_dc-infoblox__20160413105208.tgz is created.
Uploaded bundle to root@10.32.1.107
ok
```

admin.system > set banner

The `admin.system > set banner` command enables you to set a greeting banner for the Data Connector VM. Note that the banner message can be up to 64 characters long.

Syntax
```
admin.system > set banner <banner-text>
```

Example
```
admin.system > set banner Infoblox Data Connection Virtual Machine
ok
```

admin.system > show banner

The `admin.system > show banner` command displays the greeting banner of the Data Connector VM.

Syntax
```
admin.system > show banner
```

Example
```
admin.system > show banner
Infoblox Data Connection Virtual Machine
```

admin.system > password

The `admin.system > password` command sets the password for admin.

Syntax
```
admin.system > password
```

Example
```
admin.system > password
Enter password:
Enter again:
password is changed.
ok
```

admin.system > show uuid

The `admin.system > show uuid` command displays the unique ID of the Data Connector VM.

Syntax
```
admin.system > show uuid
```
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Example

```
admin.system > show uuid
564DDD78-06A3-84FD-8EFC-36F30E9E39FD
```

```
admin.system > version
The admin.system > version command displays the current version of the Data Connector VM.
Syntax
admin.system > version
Example
admin.system > version
Name:           DataCollector
Version:        2.0.0-348708
```

```
admin.system > restart
The admin.system > restart command restarts the Data Connector VM. Default timeout value is 600 seconds.
Syntax
admin.system > restart [timeout] [force]
Example
admin.system > restart 300 force
Wait up to 300 sec. to forward all files
Proceed with restart after wait time is expired.
Some data may be lost.
Proceed with restart? (y/n): y
Disabling data input.
Total # of files will be forwarded before restart are 0
Data forwarding complete, continue restart the system
ok
```

```
admin.system > backup
The admin.system > backup command enables to back up the configuration file and export it to an external server.
Syntax
admin.system > backup <scp|ftp>://loginname@serverIP:[port:]path
Example
admin.system > backup scp://jdoe@10.0.1.1/DataCollector-7.3/backup-restore
Enter password:
Backup file dc_backup_dc-xyz_dc-xyz.com_20170324090152.tgz is created.
Uploaded backup to jdoe@10.0.1.1
ok
```

```
admin.system > restore
The admin.system > restore command enables to import the backup configuration file from the external server.
Syntax
admin.system > restore <scp|ftp>://loginname@serverIP:[port:]path
```
Example

```
admin.system > restore
scp://jdoe@10.0.1.1/DataCollector-7.3/backup-restore/dc-backup-20160411173711.tgz
```

Enter password:
Received backup package from jdoe@10.0.1.1.
The following backup file(s) in the system:
dc-backup-20160411173711.tgz

```
admin.system > set restore
```

The `admin.system > set restore` command restores the Data Connector configuration from the backup file.

Syntax

```
admin.system > set restore <backupfile_name>
```

Example

```
admin.system > set restore dc-backup-20160411173711.tgz
```

File dc-backup-20160411173711.tgz is restored
ok

```
admin.system > show restore
```

The `admin.system > show restore` command lists all the backup files currently on the Data Connector VM.

Syntax

```
admin.system > show restore
```

Example

```
admin.system > show restore
The following backup file(s) in the system:
dc-backup-20160411173718.tgz
dc-backup-20160322303030.tgz
dc-backup-20160211101010.tgz
```

```
admin.system > delete restore
```

The `admin.system > delete restore` command deletes the backup file.

Syntax

```
admin.system > delete restore <backupfile_name>
```

Example

```
admin.system > delete restore dc_backup_hostname2.com_com.domain.com_20160518093241.tgz
```

File dc_backup_hostname2.com_com.domain.com_20160518093241.tgz is deleted
ok

```
admin.system > info
```

The `admin.system > info` command displays information such as banner, UUID, and current version of the Data Connector.

Syntax

```
admin.system > info
```

Example

```
admin.system > info
Greeting banner:
Infoblox Data Connection Virtual Machine
UUID value:
```

```
```
CLI Commands

admin.system > shutdown

The `admin.system > shutdown` command enables to shutdown the Data Connector VM. Default timeout value is 600 seconds.

Syntax

```
admin.system > shutdown [timeout] [force]
```

Example

```
admin.system > shutdown 300 force

Wait up to 600 sec. to forward all files
***SHUTDOWN WILL BE CANCELLED*** after wait time is expired
if data are not completely forwarded.
Proceed with shutdown? (y/n): y
Disabling data input.
Total # of files will be forwarded before shutdown are 0
Data forwarding complete, continue shutdown the system
ok
```

admin.system > show time

The `admin.system > show time` command displays current date and time settings.

Syntax

```
admin.system > show time
```

Example

```
admin.system > show time

2017-04-14 18:01:33 +00:00

admin.system > wizard

The `admin.system > wizard` command allows you to configure the system settings.

Syntax

```
admin.system > wizard
```

Example

```
admin.system > wizard

Do you want to configure admin system settings y/n [y]: y
Please use: '?' for help on available command options.
Please enter Greeting banner text[ Infoblox Data Connection Virtual Machine ]:
This is Infoblox Data Connection Virtual Machine
ok
This is Infoblox Data Connection Virtual Machine
Is it correct? y/n [y]: y
Setup wizard finished successfully
```
admin.system.performance > cpu

The `admin.system.performance > cpu` command displays the CPU usage.

Syntax

```
admin.system.performance > cpu
```

Example

```
admin.system.performance > cpu
CPU Load, % : 1.7
```

admin.system.performance > disk

The `admin.system.performance > disk` command displays the disk storage utilization.

Syntax

```
admin.system.performance > disk
```

Example

```
admin.system.performance > disk
Block read, kbps : 0.0
Block write, kbps : 14.0
Disk space usage:
  /                     1.9%
  /boot                 15.9%
  /infoblox/data        0.0%
```

admin.system.performance > memory

The `admin.system.performance > memory` command displays the memory utilization.

Syntax

```
admin.system.performance > memory
```

Example

```
admin.system.performance > memory
Memory usage, % : 10.0
```

admin.system.performance > network

The `admin.system.performance > network` command displays the network interface statistics.

Syntax

```
admin.system.performance > network
```

Example

```
admin.system.performance > network
Network receive, kbps : 24.2
Network send, kbps : 0.0
Network interfaces statistics
  Name  RX   RX Drop RX Error  TX  TX Drop TX Error
  eth0  7626   0      0       154  0      0
```

admin.system.performance > stats

This `admin.system.performance > stats` command displays system performance/statistics.

Syntax

```
admin.system.performance > stats
admin.system.performance > stats reset
admin.system.performance > stats detailed
```
Example

```
admin.system.performance > stats
CPU stats:
CPU Load, % : 8.4
Disk stats:
Block read, kbps : 0.0
Block write, kbps : 35.3
Disk space usage:
  / 1.9%
  /boot 15.9%
  /infoblox/data 0.0%
Memory stats:
Memory usage, % : 9.9
Network stats:
Network receive, kbps : 36.9
Network send, kbps : 0.0
Network interfaces statistics
     Name   RX  RX Drop  RX Error    TX  TX Drop  TX Error
    eth0   8013       0       0    163        0       0
```

**admin.system.upgrade > load**

The `admin.system.upgrade > load` command downloads the upgrade package from an external server to the Data Connector VM. The previous upgrade package file is overwritten when you load a new upgrade file.

**Syntax**

```
admin.system.upgrade > load <scp|ftp>://loginname@serverIP:[port:]path
```

**Example**

```
admin.system.upgrade > load
scp://jdoe@10.0.1.1/DataCollector7.3/DataCollector_1.1.0-123456_2016-04-13-12-01-01_x86_64.upg
Enter Password:
Received upgrade package. Validating...
Upgrade package is ready
ok
```

**admin.system.upgrade > status**

The `admin.system.upgrade > status` command allows you to check the current status of the upgrade package. It displays the following details:

- current software version.
- version to possibly upgrade to if an upgrade file is successfully loaded after the most recent upgrade or initial VM installation.
- version to possibly revert to if there was a successful recent upgrade.
- if an upgrade or revert is currently in progress.

**Syntax**

```
admin.system.upgrade > status
```

**Example**

```
admin.system.upgrade > status
System version: 2.0.0-348708
Revert version: 1.1.0-123456
No upgrade or revert operation is running
```
admin.system.upgrade > apply
The admin.system.upgrade > apply command initiates upgrade to the previously loaded upgrade file. timeout is the number of seconds the system waits until the Data Connector transfers the output files to the corresponding destination servers before starting an upgrade. Default timeout value is 600 seconds.

Syntax

```
admin.system.upgrade > apply [timeout] [force]
Default: timeout = 600 sec, and no force
```

Example

```
admin.system.upgrade > apply 200
Upgrading from version 1.1.0-cloud-xxxxxx to version 1.1.0-xxxxxx
Wait up to 200 sec. to forward all files
***UPGRADE WILL BE CANCELLED*** after wait time is expired if data are not completely forwarded.
Proceed with upgrade? (y/n): y
27% complete Data forwarding
Data forwarding complete, continue upgrading
```

admin.system.upgrade > revert
The admin.system.upgrade > revert command reverts the most recent software upgrade.

Syntax

```
admin.system.upgrade > revert [timeout] [force]
Default: timeout = 600 sec, and no force
```

Example

```
admin.system.upgrade > revert 20 force
Reverting from version 9.0.2- to version 1.1.0-328409
Wait up to 20 sec. to forward all files
***REVERT WILL BE CANCELLED*** after wait time is expired if data are not completely forwarded.
Proceed with revert? (y/n): y
Disabling data source.
Total # of files will be forwarded before revert are 0
Data forwarding complete, continue reverting
The session will be terminated while reverting
ok
```

data > wizard
The data > wizard command configures the cloud destination, SCP users, and reporting output for Data Connector.

Syntax

```
data > wizard
```

Example

```
data > wizard
Do you want to configure data output cloud registration settings y/n [y]: y
Please use: '?' for help on available command options.
Please enter cloud url[ https://usa-va.csp.infoblox.com/dnslog ]:
Settings unchanged.
```
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Please enter api_key[ 1234 ]:
Settings unchanged.
Please enter agent_id[ 8 ]:
Settings unchanged.
url: https://usa-va.csp.infoblox.com/dnslog
api_key: 1234
agent_id: 8
Is it correct? y/n [y]:
y
Do you want to configure data output cloud settings y/n [y]:
y
Please use: '?' for help on available command options.
Please enter Output cloud mode configuration[ hold ]:
Settings unchanged.
The output mode is hold
Is it correct? y/n [y]:
Do you want to configure data output splunk settings y/n [y]:
y
Please use: '?' for help on available command options.
Please enter splunk indexers[ 10.10.1.2, 10.10.1.3 ]:
Settings unchanged.
Please enter splunk index name[ xyz ]:
Settings unchanged.
Please enter splunk source type[ ib:dns:captures ]:
Settings unchanged.
Please enter splunk default indexer port[ 9997 ]:
Settings unchanged.
Please enter splunk mode[ hold ]:
Settings unchanged.
Indexers:

  10.10.1.2
  10.10.1.3
Index name is xyz
Source type is ib:dns:captures
Default indexer port is 9997
The output mode is hold
Is it correct? y/n [y]:
y
Do you want to configure data output reporting settings y/n [y]:
y
Please use: '?' for help on available command options.
Please enter reporting mode[ hold ]:
Settings unchanged.
The output mode is hold
Is it correct? y/n [y]:

Do you want to configure data input scp settings y/n [y]:
y
Please use: '? ' for help on available command options.

Please enter SCP users[ dc_scp_user_1 ]:
Enter password for user dc_scp_user_1:
Enter again:
ok

Registered user(s):
  admin1
  user123
  dc_scp_user
  dc_scp_user_1

Is it correct? y/n [y]:
y
Do you want to configure data input grid settings y/n [y]:
y
Please use: '? ' for help on available command options.
Enter the IP address (or FQDN) of the NIOS Grid Master[ 10.35.5.49 ]:
Settings unchanged.
Enter the NIOS admin username[ admin ]:
Settings unchanged.
10.35.5.49
admin

Is it correct? y/n [y]:
y
Setup wizard finished successfully

data.source.grid > set address

The data.source.grid > set address command sets the IP address or FQDN of the NIOS Grid.

Syntax
  data.source.grid > set address <IP/FQDN>

Example
  data.source.grid > set address 10.0.0.22
  Command applied successfully.

data.source.grid > show address

The data.source.grid > show address command displays the IP address of the Grid Master.

Syntax
  data.source.grid > show address

Example
  data.source.grid > show address
  10.0.0.22

data.source.grid > set username

The data.source.grid > set username command sets the username of the NIOS administrator.

Syntax
  data.source.grid > set username <username>
CLI Commands

Example
  data.source.grid > set username admin
  Command applied successfully.

**data.source.grid > show username**

The `data.source.grid > show username` command displays the username of NIOS administrator.

**Syntax**
  data.source.grid > show username

**Example**
  data.source.grid > show username
  admin

**data.source.grid > password**

The `data.source.grid > password` command sets the password of NIOS administrator.

**Syntax**
  data.source.grid > password

**Example**
  data.source.grid > password
  Enter the NIOS admin's password: ******
  Enter again: ******
  Password updated

**data.source.grid > set refresh**

The `data.source.grid > set refresh` command sets the refresh time interval. It is the time interval for synchronizing NIOS Grid data with the Data Connector.

**Syntax**
  data.source.grid > set refresh <duration(m,h,or d)>

**Example**
  data.source.grid > set refresh 1h
  Command applied successfully.

**data.source.grid > show refresh**

The `data.source.grid > show refresh` command displays the refresh time interval. It is the time interval for synchronizing NIOS Grid data with the Data Connector.

**Syntax**
  data.source.grid > show refresh

**Example**
  data.source.grid > show refresh
  1 hour

**data.source.grid > status**

The `data.source.grid > status` command displays the current NIOS Grid registration data.

**Syntax**
  data.source.grid > status

**Example**
  data.source.grid > status
  Grid Master address: 10.35.5.49
  Grid admin username: admin
Grid admin password:  ********
Grid access is:       Verified
Grid state refresh interval:  1 hour
Grid registration time:  Fri Mar 24 08:42:03 2017
Grid registration uuid:  564DDD7806A384FD8EFC36F30E9E39FD
DC address registered:  10.36.130.1
Cached Grid member timezones:
  infoblox.localdomain: (UTC) Coordinated Universal Time, None
  reporting-1.com: (UTC) Coordinated Universal Time, None
  member.com: (UTC) Coordinated Universal Time, None
Cached Grid views:
  0: default, None
  1: default.MS-2016, None
  2: default.MS-2012, None
  3: default.MS-2008, None

data.source.grid > test

The `data.source.grid > test` command accesses the NIOS Grid using the current Grid registration data.

**Syntax**
```
data.source.grid > test
```

**Example**
```
data.source.grid > test
Grid member time zones:
  xyz.localdomain: (UTC) Coordinated Universal Time
  reporting_member.com: (UTC) Coordinated Universal Time
DNS views:
  0: default
Splunk indexers: 10.35.117.17:9997
Splunk index information:
  index: ib_dns_capture
  source: query_capture
  sourcetype: ib:dns:capture
```

data.source.grid > sync

The `data.source.grid > sync` command synchronizes NIOS Grid state with the Data Connector VM. This function will synchronize the following data with the NIOS Grid:

- Grid member timezones cached on Data Collector.
- Updates Grid registration if Data Connector VM IP address has changed.
- Updates DNS view names cached on VM.
- Updates Splunk forwarder configuration if the list of indexers on the Grid has changed.
- Generates and signs new certificate for the Splunk forwarder if reporting root CA certificate of the Grid has changed.

**Note:** You can use the `sync all` command to force the regeneration of all of the above.

**Syntax**
```
data.source.grid > sync
```
Example
```
data.source.grid > sync
Reregistering Data Collector with the Grid... done.
Updating Grid configuration... done.
```

data.source.grid > set apiaddress

The `data.source.grid > set apiaddress` command sets the API address. You can configure which member in the Grid must be queried to obtain the information enabled by query.

Syntax
```
data.source.grid > set apiaddress [ grid | auto | <ip_addr> ]
```

- **grid**: use the same member as configured by address configuration item. This is selected by default.
- **auto**: automatically find a Grid Master Candidate enabled for Read-Only API access in the configured Grid.
- **address**: explicitly use the given address to query. Must be a Grid Master Candidate enabled for Read-Only API access.

Example
```
data.source.grid > set apiaddress grid
ok
```
```
data.source.grid > set apiaddress 10.0.0.22
ok
```

data.source.grid > show apiaddress

The `data.source.grid > show apiaddress` command displays the API address.

Syntax
```
data.source.grid > show apiaddress
```

Example
```
data.source.grid > show apiaddress
API address: grid
```

data.source.grid > set poll

The `data.source.grid > set poll` command sets the poll period for query Grid IPAM information in seconds, minutes, or hours. Minimum value is one minute, the maximum value is 365 days, and the default value is five minutes.

Syntax
```
data.source.grid > set poll <duration(s,m,h)>
```

Example
```
data.source.grid > set poll 6m
ok
```

data.source.grid > show poll

The `data.source.grid > show poll` command shows the poll period set for query Grid IPAM information.

Syntax
```
data.source.grid > show poll
```

Example
```
data.source.grid > show poll
poll period: 6 minutes
```
**data.source.grid > set query**

The `data.source.grid > set query` command sets the query configuration and allows you to enable or disable specific category of information from the Grid. All categories are enabled by default. Note that data is queried only if cloud destination mode is set to hold or forward.

**Syntax**

```
data.source.grid > set query [userinfo|ipam|lease] [enabled|disabled]
```

- **lease**: allows to query lease related information such as hostname and MAC address.
- **userinfo**: allows to query user identity mapping information.
- **ipam**: allows to query IP related information such as Extensible Attributes.

**Example**

```
data.source.grid > set query userinfo enabled
ok

data.source.grid > set query ipam enabled
ok
```

**data.source.grid > show query**

The `data.source.grid > show query` command displays whether query is enabled for lease, userinfo and ipam related information.

**Syntax**

```
data.source.grid > show query
```

**Example**

```
data.source.grid > show query
userinfo: enabled
ipam: enabled
lease: disabled
```

**data.source.grid > info**

The `data.source.grid > info` command displays actual configuration according to the current CLI context.

**Syntax**

```
data.source.grid > info
```

**Example**

```
data.source.grid > info
IP address or DNS name for the NIOS Grid:
10.35.1.18
Grid IPAM information API address:
API address: grid
Grid IPAM information poll period:
poll period: 6 minutes
Grid IPAM information query types:
userinfo: enabled
ipam: disabled
lease: disabled
NIOS Grid admin user name:
admin
```
**data.source.scp > add user**

The `data.source.scp > add user` command adds a SCP user.

**Syntax**

```
data.source.scp > add user <username>
```

**Example**

```
data.source.scp > add user admin1
Enter password for user admin1:********
Enter again:********
ok
```

**data.source.scp > set user**

The `data.source.scp > set user` command enables you to update the SCP user details.

**Syntax**

```
data.source.scp > set user <username>
```

**Example**

```
data.source.scp > set user admin1
Enter password:********
Enter again:********
ok
```

**data.source.scp > show user**

The `data.source.scp > show user` command displays the registered SCP users.

**Syntax**

```
data.source.scp > show user
```

**Example**

```
data.source.scp > show user
Registered user(s): admin1
```

**data.source.scp > delete user**

The `data.source.scp > delete user` command deletes the SCP user.

**Syntax**

```
data.source.scp > delete user <username>
```

**Example**

```
data.source.scp > delete user admin1
Do you want to delete scp user admin1? y/n [y]: y
ok
```

**data.source.scp > wizard**

The `data.source.scp > wizard` command allows you to configure an SCP user.

**Syntax**

```
data.source.scp > wizard
```

**Example**

```
data.source.scp > wizard
Please enter SCP users[ dc_scp_user ]:
admin1
Enter password for user admin1:
```
Enter again:
ok

Do you want to add more values? y/n [n]:
n
Registered user(s):
    admin1

Is it correct? y/n [y]:
y

Setup wizard finished successfully

data.source.scp > stats
The `data.source.scp > stats` command displays the number of files in queue waiting to be transferred to the destination.

Syntax
```
data.source.scp > stats
data.source.scp > stats reset
data.source.scp > stats detailed
```

Example
```
data.source.scp > stats
Input stats:
# of files  Size in kb  # of files  Size in kb  Oldest
processed  processed  pending  pending  file
0        0.000        0        0.000  N/A
```

data.source.scp > info
The `data.source.scp > info` command displays the registered SCP users.

Syntax
```
data.source.scp > info
```

Example
```
data.source.scp > info
SCP users configuration:
Registered user(s): admin1
```

data.source.syslog > certificate
The `data.source.syslog > certificate` command displays the certificate in .PEM format that is used to encrypt the syslog traffic.

Syntax
```
data.source.syslog > certificate
```

Example
```
data.source.syslog > certificate
```

data.source.syslog > show certificate
The `data.source.syslog > show certificate` command displays the syslog certificate information.

Syntax
```
data.source.syslog > show certificate
```

Example
```
data.source.syslog > show certificate
```
**data.source.syslog > print certificate**

The `data.source.syslog > print certificate` command prints the syslog certificate in .PEM format.

**Syntax**

```
data.source.syslog > print certificate
```

**Example**

```
data.source.syslog > print certificate
-----BEGIN CERTIFICATE-----
MIICyjCCAbICCQDewaCSeKibWjANBgkqhkiG9w0BAQUFADBCMQswCQYDVQQGEwJYElQNiI6IN8YghmnTfUEMvyGQyBCEpg==
-----END CERTIFICATE-----
```

**data.source.syslog > certificate request**

The `data.source.syslog > certificate request` command gets the certificate request in .PEM format and generates a Certificate Signing Request. This certificate request must be signed by a third party Certification Authority to get an operable Syslog Certificate.

**Syntax**

```
data.source.syslog > certificate request
```

**Example**

```
data.source.syslog > certificate request
Below is Certificate Request.
Please pass it to your Certification Authority for signing to get Syslog Certificate.
-----BEGIN CERTIFICATE REQUEST-----
MIICUzCCATsCAQAwDjEMMAoGA1UEAwwDeHl6MIIBIjANBgkqhkiG9w0BAQEFAAOC AoI=
-----END CERTIFICATE REQUEST-----
ok
```

**data.source.syslog > certificate import**

The `data.source.syslog > certificate import` command enables you to upload a Syslog Certificate that is signed by a third party Certification Authority. This certificate must be generated from Certificate Request created using the `certificate request` command.

**Syntax**

```
data.source.syslog > certificate import <scp|ftp>://loginname@serverIP:[port:]path
```

**Example**

```
data.source.syslog > certificate import scp://root@10.1.1.1:999/DC2/
```

**data.source.syslog > certificate export**

The `data.source.syslog > certificate export` command enables you to export a certificate in .PEM format to an external server.

**Syntax**

```
data.source.syslog > certificate export <scp|ftp>://loginname@serverIP:[port:]path
```

**Example**

```
data.source.syslog > certificate export scp://root@10.1.1.1:999/DC2/
```
**data.source.syslog > exit**

The `data.source.syslog > exit` command enables you to exit the current CLI level or logout from the top level.

**Syntax**

```
data.source.syslog > exit
```

**Example**

```
data.source.syslog > exit
```

**data.source.syslog > info**

The `data.source.syslog > info` command displays an actual syslog configuration.

**Syntax**

```
data.source.syslog > info
```

**Example**

```
data.source.syslog > info
```

```
Data source syslog certificate CN:
  cn: xyz
Data source syslog mode:
  mode: disabled
Data source syslog port:
  port: 514
Data source syslog secure port:
  secure port: 6514
```

**data.source.syslog > port**

The `data.source.syslog > port` or `data.source.syslog > show port` command displays the port number or sets a syslog port.

**Syntax**

```
data.source.syslog > port
```

```
data.source.syslog > show port
```

**Example**

```
data.source.syslog > port
  port: 514
```

```
data.source.syslog > show port
  port: 514
```

**data.source.syslog > set port**

The `data.source.syslog > set port` command allows you to configure the port to listen on for unencrypted connections. The default value is 514.

**Syntax**

```
data.source.syslog > set port <1..65535>
```

**Example**

```
data.source.syslog > set port 254
```

```
ok
```
data.source.syslog > set cn
The `data.source.syslog > set cn` command sets a CN(Common Name) for a syslog certificate request.

Syntax
```bash
data.source.syslog > set cn <common_name>
```

Example
```bash
data.source.syslog > set cn xyz
ok
```

data.source.syslog > show cn
The `data.source.syslog > show cn` command displays the CN(Common Name) of a syslog certificate.

Syntax
```bash
data.source.syslog > show cn
```

Example
```bash
data.source.syslog > show cn
cn: xyz
```

data.source.syslog > set mode
The `data.source.syslog > set mode` command allows you to configure the syslog listener on the DC VM to the following:

- **disabled**: turns off syslog listening. This is selected by default.
- **secure**: turns on syslog listening, allowing only TLS connections on the configured secureport. Note that to set the mode to secure, you must set a valid certificate.
- **unencrypted**: turns on syslog listening, allowing only unencrypted connection on the configured port.
- **both**: enables both secure and unencrypted simultaneously.

Syntax
```bash
data.source.syslog > set mode <secure|unencrypted|both|disabled>
```

Example
```bash
data.source.syslog > set mode disabled
ok
```

data.source.syslog > show mode
The `data.source.syslog > show mode` command displays the syslog mode.

Syntax
```bash
data.source.syslog > show mode
```

Example
```bash
data.source.syslog > show mode
mode: disabled
```

data.source.syslog > set secureport
The `data.source.syslog > set secureport` command allows you to configure the port to listen on for encrypted connections. The default value is 6514.

Syntax
```bash
data.source.syslog > set secureport <1..65535>
```

Example
```bash
data.source.syslog > set secureport 6514
ok
```
**data.source.syslog > show secureport**

The `data.source.syslog > show secureport` command displays the syslog port number that is used for secure connections.

**Syntax**

```
data.source.syslog > show secureport
```

**Example**

```
data.source.syslog > show secureport
secure port: 6514
```

**data.destination > wizard**

The `data.destination > wizard` command enables you to configure the cloud and reporting destination for Data Connector.

**Syntax**

```
data.destination > wizard
```

**Example**

```
data.destination > wizard
Do you want to configure data output cloud registration settings y/n [y]:
y
Please use: '?' for help on available command options.
Please enter cloud url[ https://usa-va.csp.infoblox.com ]:
Settings unchanged.
Please enter api_key[ <Your_API_Key> ]:
Settings unchanged.
Please enter agent_id[ <Your_Agent_ID> ]:
Settings unchanged.
url: https://usa-va.csp.infoblox.com
api_key: <Your_API_Key>
agent_id: <Your_Agent_ID>
Is it correct? y/n [y]:
y
Do you want to configure data output cloud settings y/n [y]:
y
Please use: '?' for help on available command options.
Please enter Output cloud mode configuration[disabled ]:
forward
Data will start transmitting immediately
ok
The output mode is forward
Is it correct? y/n [y]:
y
Do you want to configure data output splunk settings y/n [y]:
y
Please use: '?' for help on available command options.
Please enter splunk indexers:
10.10.1.2
ok
Do you want to add more values? y/n [n]:
n
Please enter splunk index name:
test
ok
Please enter splunk source type[ ib:dns:captures ]:
Settings unchanged.
Please enter splunk default indexer port[ 9997 ]:
Settings unchanged.
Please enter splunk mode[ disabled ]:
Settings unchanged.
Indexers:
   10.10.1.2
Index name is test
Source type is ib:dns:captures
Default indexer port is 9997
The output mode is disabled
Is it correct? y/n [y]:
y
Do you want to configure data output reporting settings y/n [y]:
y
Please use: '?' for help on available command options.
Please enter reporting mode[ disabled ]:
forward
Data will start transmitting immediately
ok
The output mode is forward
Is it correct? y/n [y]:
y
Setup wizard finished successfully

data.source > wizard

The data.source > wizard command allows you to configure the data source SCP settings.

Syntax
   data.source > wizard

Example
   data.source > wizard
Do you want to configure data input scp settings y/n [y]:
y
Please use: '?' for help on available command options.
Please enter SCP users[ dc_scp_user ]:
admin
Enter password for user admin:
Enter again:
Error: Password doesn't match
Please enter SCP users[ dc_scp_user ]:
  admin
Enter password for user admin:
Enter again:
  ok
Do you want to add more values? y/n [n]:
  y
Please enter SCP users[ dc_scp_user ]:
  user1
Enter password for user user1:
Enter again:
  ok
Do you want to add more values? y/n [n]:
  n
Registered user(s):
  admin
  user1
Is it correct? y/n [y]:
  y
Do you want to configure data input grid settings y/n [y]:
  y
Please use: '?' for help on available command options.
Enter the IP address (or FQDN) of the NIOS Grid Master[ 127.0.0.1 ]:
  ok
Enter the NIOS admin username[ admin ]:
Enter the NIOS admin's password:
Enter again:
  ok
  127.0.0.1
  admin
Is it correct? y/n [y]:
  y
Setup wizard finished successfully

**data.destination.cloud > wizard**

The **data.destination.cloud > wizard** command allows you to configure the cloud destination for Data Connector.

**Syntax**

```
data.destination.cloud > wizard
```

**Example**

```
data.destination.cloud > wizard
  Do you want to configure data output cloud registration settings y/n [y]:
    y
```
CLI Commands

Please use: '?' for help on available command options.
Please enter cloud url[ https://usa-va.csp.infoblox.com/dnslog ]:
Settings unchanged.
Please enter api_key[ 1234 ]:
Settings unchanged.
Please enter agent_id[ 2345 ]:
Settings unchanged.
url: https://usa-va.csp.infoblox.com/dnslog
api_key: 1234
agent_id: 2345
Is it correct? y/n [y]:
y
Do you want to configure data output cloud settings y/n [y]:
y
Please use: '?' for help on available command options.
Please enter Output cloud mode configuration[ forward ]:
hold
ok
The output mode is hold
Is it correct? y/n [y]:
y
Setup wizard finished successfully

data.destination.cloud > stats

The `data.destination.cloud > stats` command displays the number of output files in queue waiting to be transferred to the cloud server.

Syntax

data.destination.cloud > stats

Example

data.destination.cloud > stats
Cloud output stats:

<table>
<thead>
<tr>
<th># of files</th>
<th>Size in kb</th>
<th># of files</th>
<th>Size in kb</th>
<th>Oldest file</th>
</tr>
</thead>
<tbody>
<tr>
<td>processed</td>
<td>processed</td>
<td>pending</td>
<td>pending</td>
<td>N/A</td>
</tr>
<tr>
<td>0</td>
<td>0.000</td>
<td>0</td>
<td>0.000</td>
<td></td>
</tr>
</tbody>
</table>

data.destination.cloud > purge

The `data.destination.cloud > purge` command deletes all the output files in queue waiting to be transferred to the cloud server.

Syntax

data.destination.cloud > purge

Example

data.destination.cloud > purge
Delete all cloud output files? y/n [y]:
y
Cloud output files are deleted
ok
**data.destination.cloud > set mode**
The `data.destination.cloud > set mode` command sets the cloud output mode.

**Syntax**
```
data.destination.cloud > set mode <forward|hold|disabled>
```

**Example**
```
data.destination.cloud > set mode hold
   ok
```

**data.destination.cloud > show mode**
The `data.destination.cloud > show mode` command displays the cloud output mode.

**Syntax**
```
data.destination.cloud > show mode
```

**Example**
```
data.destination.cloud > show mode
   The output mode is hold
```

**data.destination.cloud.registration > set agent_id**
The `data.destination.cloud.registration > set agent_id` command allows you to set the cloud agent ID.

**Syntax**
```
data.destination.cloud.registration > set agent_id <agent_id>
```

**Example**
```
data.destination.cloud.registration > set agent_id <Your_Agent_ID>
   ok
```

**data.destination.cloud.registration > show agent_id**
The `data.destination.cloud.registration > show agent_id` command displays the cloud agent ID.

**Syntax**
```
data.destination.cloud.registration > show agent_id
```

**Example**
```
data.destination.cloud.registration > show agent_id
   agent_id: <Your_Agent_ID>
```

**data.destination.cloud.registration > delete agent_id**
The `data.destination.cloud.registration > delete agent_id` command deletes the cloud agent ID.

**Syntax**
```
data.destination.cloud.registration > delete agent_id
```

**Example**
```
data.destination.cloud.registration > delete agent_id
   ok
```

**data.destination.cloud.registration > set api_key**
The `data.destination.cloud.registration > set api_key` command allows you to set the cloud API key.

**Syntax**
```
data.destination.cloud.registration > set api_key <api_key>
```
CLI Commands

Example

```
data.destination.cloud.registration > set api_key <Your_API_Key>
ok
```

**data.destination.cloud.registration > show api_key**

The `data.destination.cloud.registration > show api_key` command displays the cloud API key.

Syntax
```
data.destination.cloud.registration > show api_key
```

Example
```
data.destination.cloud.registration > show api_key
api_key: <Your_API_Key>
```

**data.destination.cloud-registration > delete api_key**

The `data.destination.cloud-registration > delete api_key` command deletes the cloud API key.

Syntax
```
data.destination.cloud-registration > delete api_key
```

Example
```
data.destination.cloud-registration > delete api_key
ok
```

**data.destination.cloud-registration > set url**

The `data.destination.cloud-registration > set url` command sets the cloud URL.

Syntax
```
data.destination.cloud-registration > set url <url>
```

Example
```
data.destination.cloud-registration > set url https://usa-va.csp.infoblox.com/dnslog
ok
```

**data.destination.cloud-registration > show url**

The `data.destination.cloud-registration > show url` command displays the cloud URL.

Syntax
```
data.destination.cloud-registration > show url
```

Example
```
data.destination.cloud-registration > show url
url: https://usa-va.csp.infoblox.com/dnslog
```

**data.destination.cloud-registration > delete url**

The `data.destination.cloud-registration > delete url` command deletes the cloud URL.

Syntax
```
data.destination.cloud-registration > delete url
```

Example
```
data.destination.cloud-registration > delete url
ok
```
data.destination.cloud.registration > ping

The `data.destination.cloud.registration > ping` command allows you to verify if the cloud server is accessible and active.

Syntax

```
data.destination.cloud.registration > ping
```

Example

```
data.destination.cloud.registration > ping
Cloud server "usa-va.csp.infoblox.com" is available
```

data.destination.cloud.filters.client_ip > add

The `data.destination.cloud.filters.client_ip > add` command allows you to add a filter to the end of the list after filtering the list by Client IP address.

Syntax

```
data.destination.cloud.filters.client_ip > add
  ip|ip/cidr|ip4/netmask|first_ip4-last_ip4
```

Example

```
data.destination.cloud.filters.client_ip > add 10.36.130.1
Filter added
```

data.destination.cloud.filters.client_ip > delete

The `data.destination.cloud.filters.client_ip > delete` command allows you to delete a specific filter or all filters from the list of Client IP addresses. To delete a manually added filter, execute the `delete <filter>` command. When you execute the `delete all` command, all filters (including filters that are imported) are deleted after confirmation. You can only delete a manually added filter, but cannot delete a filter from the list of imported filters.

Syntax

```
data.destination.cloud.filters.client_ip > delete <filter|all>
```

Example

```
data.destination.cloud.filters.client_ip > delete 10.36.130.1
Filter 10.36.130.1 deleted
data.destination.cloud.filters.client_ip > delete all
Do you want to delete all filters? y/n [y]:
y
  Filters deleted
```

data.destination.cloud.filters.client_ip > show

The `data.destination.cloud.filters.client_ip > show` command displays all filters. You can either use `show` or `show filters` to view the list of imported filters and manually added filters. To view the source and timestamp of the last imported file, use the `show imported` command.

Syntax

```
data.destination.cloud.filters.client_ip > show
```

Example

```
data.destination.cloud.filters.client_ip > show
; Manually added filters
  10.36.130.12
  10.36.130.1
; Imported filters
  1.1.1.1
```
CLI Commands

1.1.1.2
1.1.1.3
1.1.1.4
1.1.1.5
1.1.1.6
1.1.1.7
1.1.1.8
1.1.1.9
1.1.1.10

data.destination.cloud.filters.client_ip > show filters

data.destination.cloud.filters.client_ip > show imported

data.destination.cloud.filters.client_ip > import

The `data.destination.reporting.filters.client_ip > import` command allows you to import filters from a local or a remote file. When you import a file, it overwrites all existing imported and manually entered filters after confirmation. Note that parsing and validation are invoked after the file is imported successfully. The imported file is rejected and an error message is displayed in case of any validation error.

Note the following:

- Import a single IPv4 or IPv6 address. Example: 10.10.1.0 or 2620:10a:6000:661e::523.
- Import a range of IPv4 addresses: two single IPs with a dash between them, no spaces. Example: 10.10.1.0-10.10.2.35. This format is applicable to IPv4 address format only as IPv6 uses CIDR notation.
- Import a Network/Mask, that is, a single IPv4 address followed by a slash and mask without spaces. Example: 10.10.1.0/255.255.255.0. This format is applicable to IPv4 address format only.
- Import a CIDR block, that is, a single IPv4 or IPv6 address followed by a slash and a number without spaces. Example: 10.10.0.1/15 and 2001:cdba:9abc:5678::/64

Syntax

data.destination.cloud.filters.client_ip > import
<scp|ftp>://loginname@serverIP:[port:]path

Example

data.destination.cloud.filters.client_ip > import
scp://john@10.32.1.63:/import/qaddi/DATACOLLECTOR/Filters/client_ip_10.csv

Import will remove all previously imported and added filters. Are you sure you want to proceed? y/n [y]:

y

Enter password:

Filters imported

data.destination.cloud.filters.client_ip > export

The `data.destination.cloud.filters.client_ip > export` command allows you to export filters to a remote file. Note that the manually added filters are appended to the end of exported csv file whereas imported filter files are exported along with comments and white spacing.

Syntax

data.destination.cloud.filters.client_ip > export
<scp|ftp>://loginname@serverIP:[port:]path
Example

```bash
data.destination.cloud.filters.client_ip > export
scp://john@10.32.1.63:/import/qaddi/DATACOLLECTOR/Filters/client_ip_10.csv
Enter password:
Filters exported
```

**data.destination.cloud.filters.client_ip > help**

The `data.destination.cloud.filters.client_ip > help` command allows you to view the list of commands that can be executed at the current CLI level.

**Syntax**

```bash
data.destination.cloud.filters.client_ip > help
```

**Example**

```bash
data.destination.cloud.filters.client_ip > help
```

**data.destination.cloud.filters.client_ip > exit**

The `data.destination.cloud.filters.client_ip > exit` command allows you to exit from the current CLI level or logout from the top level.

**Syntax**

```bash
data.destination.cloud.filters.client_ip > exit
```

**Example**

```bash
data.destination.cloud.filters.client_ip > exit
```

**data.destination.cloud.filters.dns_view > add**

The `data.destination.cloud.filters.dns_view > add` command allows you to add a filter to the end of the list. Note that you can add only one filter.

**Syntax**

```bash
data.destination.cloud.filters.dns_view > add Internal|I|External|E
```

**Example**

```bash
data.destination.cloud.filters.dns_view > add I
```

**data.destination.cloud.filters.dns_view > delete**

The `data.destination.cloud.filters.dns_view > delete` command allows you to delete a specific filter or all filters. To delete a manually added filter, execute the `delete <filter>` command. When you execute the `delete all` command, all filters (including filters that are imported) are deleted after confirmation. You can only delete a manually added filter, but cannot delete a filter from the list of imported filters.

**Syntax**

```bash
data.destination.cloud.filters.dns_view > delete <filter|all>
```

**Example**

```bash
data.destination.cloud.filters.dns_view > delete I
Filter I deleted
data.destination.cloud.filters.dns_view > delete all
Do you want to delete all filters? y/n [y]:
y
Filters deleted
```
**data.destination.cloud.filters.dns_view > show**

The `data.destination.cloud.filters.dns_view > show` command displays the list of filters. You can either use `show` or `show filters` to view the list of imported filters and manually added filters. To view the source and timestamp of the last imported file, use the `show imported` command.

**Syntax**

```
data.destination.cloud.filters.dns_view > show
```

**Example**

```
data.destination.cloud.filters.dns_view > show
; Manually added filters
I
```

**data.destination.cloud.filters.dns_view > import**

The `data.destination.cloud.filters.dns_view > import` command allows you to import filters from a local or a remote file. When you import a file, it overwrites all existing imported and manually entered filters after confirmation. Note that parsing and validation are invoked after the file is imported successfully. The imported file is rejected and an error message is displayed in case of any validation error.

**Syntax**

```
data.destination.cloud.filters.dns_view > import
<scp|ftp>://loginname@serverIP:[port:]path
```

**Example**

```
data.destination.cloud.filters.dns_view > import
scp://john@10.32.1.63:/import/qaddi/DATACOLLECTOR/Filters/dns_view_10.csv
```

Import will remove all previously imported and added filters. Are you sure you want to proceed? y/n [y]:

```
y
```

Enter password:

Filters imported

**data.destination.cloud.filters.dns_view > export**

The `data.destination.cloud.filters.dns_view > export` command allows you to export filters to a remote file. Note that the manually added filters are appended to the end of exported .csv file whereas imported filter files are exported along with comments and white spacing.

**Syntax**

```
data.destination.cloud.filters.dns_view > export
<scp|ftp>://loginname@serverIP:[port:]path
```

**Example**

```
data.destination.cloud.filters.dns_view > export
scp://john@10.32.1.63:/import/qaddi/DATACOLLECTOR/Filters/dns_view_10.csv
```

Enter password:

Filters exported
data.destination.cloud.filters.dns_view > help

The `data.destination.cloud.filters.dns_view > help` command allows you to view the list of commands that can be executed at the current CLI level.

Syntax
```
data.destination.cloud.filters.dns_view > help
```

Example
```
data.destination.cloud.filters.dns_view > help
```

data.destination.cloud.filters.dns_view > exit

The `data.destination.cloud.filters.dns_view > exit` command allows you to exit from the current CLI level or logout from the top level.

Syntax
```
data.destination.cloud.filters.dns_view > exit
```

Example
```
data.destination.cloud.filters.dns_view > exit
```

data.destination.cloud.filters.member > add

The `data.destination.cloud.filters.member > add` command allows you to add a filter to the end of the list.

Syntax
```
data.destination.cloud.filters.member > add member_regular_expression
```

Example
```
data.destination.cloud.filters.member > add 10.36.130.1
Filter added
```

data.destination.cloud.filters.member > delete

The `data.destination.cloud.filters.member > delete` command allows you to delete a specific filter or all filters. To delete a manually added filter, execute the `delete <filter>` command. When you execute the `delete all` command, all filters (including filters that are imported) are deleted after confirmation. The delete operation does not affect imported filters. You can only delete a manually added filter, but cannot delete a filter from the list of imported filters.

Syntax
```
data.destination.cloud.filters.member > delete <filter|all>
```

Example
```
data.destination.cloud.filters.member > delete 10.36.130.1
Filter 10.36.130.1 deleted
data.destination.cloud.filters.member > delete all
Do you want to delete all filters? y/n [y]:
y
Filters deleted
```

data.destination.cloud.filters.member > show

The `data.destination.cloud.filters.member > show` command displays the list of existing filters. You can either use `show` or `show filters` to view the list of imported filters and manually added filters. To view the source and timestamp of the last imported file, use the `show imported` command.

Syntax
```
data.destination.cloud.filters.member > show
```
CLI Commands

Example

```
data.destination.cloud.filters.member > show
; Manually added filters
10.36.130.1
data.destination.cloud.filters.member > show filters
; Manually added filters
10.36.130.1
data.destination.cloud.filters.member > show imported
```

**data.destination.cloud.filters.member › import**

The **data.destination.cloud.filters.member › import** command allows you to import filters from a local or a remote file. When you import a file, it overwrites all existing imported and manually entered filters after confirmation. Note that parsing and validation are invoked after the file is imported successfully. The imported file is rejected and an error message is displayed in case of any validation error.

**Syntax**

```
data.destination.cloud.filters.member > import <scp|ftp>://loginname@serverIP:[port:]path
```

**Example**

```
data.destination.cloud.filters.member > import scp://john@10.32.1.63:/import/qaddi/DATACOLLECTOR/Filters/member_10.csv
```

Import will remove all previously imported and added filters. Are you sure you want to proceed? y/n [y]:

Y

Enter password:

Filters imported

**data.destination.cloud.filters.member › export**

The **data.destination.cloud.filters.member › export** command allows you to export filters to a remote file. Note that the manually added filters are appended to the end of exported .csv file whereas imported filter files are exported along with comments and white spacing.

**Syntax**

```
data.destination.cloud.filters.member > export <scp|ftp>://loginname@serverIP:[port:]path
```

**Example**

```
data.destination.cloud.filters.member > export scp://john@10.32.1.63:/import/qaddi/DATACOLLECTOR/Filters/member_10.csv
```

Enter password:

Filters exported

**data.destination.cloud.filters.member › help**

The **data.destination.cloud.filters.member › help** command allows you to view the list of commands that can be executed at the current CLI level.

**Syntax**

```
data.destination.cloud.filters.member > help
```

**Example**

```
data.destination.cloud.filters.member > help
```
data.destination.cloud.filters.member > exit

The `data.destination.cloud.filters.member > exit` command allows you to exit from the current CLI level or logout from the top level.

Syntax
```
data.destination.cloud.filters.member > exit
```

Example
```
data.destination.cloud.filters.member > exit
```

data.destination.cloud.filters.query > add

The `data.destination.cloud.filters.query > add` command allows you to add a filter to the end of the list.

Syntax
```
data.destination.cloud.filters.query > add fqdn_with_wildcards
```

— Note the following about wildcards:
— * - zero or more domain name labels; can be on the left side only
— # - one or more domain name labels; can be on the left side only
— ? - exactly one domain name label; can be on the right or left side

Example
```
data.destination.cloud.filters.query > add 10.36.130.1
Filter added
```
```
data.destination.cloud.filters.query > add abc.com
Filter added
```

data.destination.cloud.filters.query > delete

The `data.destination.cloud.filters.query > delete` command allows you to delete a specific filter or all filters. To delete a manually added filter, execute the `delete <filter>` command. When you execute the `delete all` command, all filters (including filters that are imported) are deleted after confirmation. The delete operation does not affect imported filters. You can only delete a manually added filter, but cannot delete a filter from the list of imported filters.

Syntax
```
data.destination.cloud.filters.query > delete <filter|all>
```

Example
```
data.destination.cloud.filters.query > delete 10.36.130.1
Filter 10.36.130.1 deleted
```
```
data.destination.cloud.filters.query > delete all
Do you want to delete all filters? y/n [y]:
```
```
y
Filters deleted
```

data.destination.cloud.filters.query > show

The `data.destination.cloud.filters.query > show` command displays the list of existing filters. You can either use `show` or `show filters` to view the list of imported filters and manually added filters. To view the source and timestamp of the last imported file, use the `show imported` command.

Syntax
```
data.destination.cloud.filters.query > show
```

Example
```
data.destination.cloud.filters.query > show
```

```
CLI Commands

**Example**
```
data.destination.cloud.filters.query > show
  ; Manually added filters
  xyz.com
  abc.com
  10.36.130.12
  10.36.130.1
data.destination.cloud.filters.query > show filters
  ; Manually added filters
  xyz.com
  abc.com
  10.36.130.12
  10.36.130.1
data.destination.cloud.filters.query > show imported
```

**data.destination.cloud.filters.query > import**

The `data.destination.cloud.filters.query > import` command allows you to import filters from a local or a remote file. When you import a file, it overwrites all existing imported and manually entered filters after confirmation. Note that parsing and validation are invoked after the file is imported successfully. The imported file is rejected and an error message is displayed in case of any validation error.

**Syntax**
```
data.destination.cloud.filters.query > import
<scp|ftp>://loginname@serverIP:[port:]path
```

**Example**
```
data.destination.cloud.filters.query > import
scp://john@10.32.1.63:/import/qaddi/DATACOLLECTOR/Filters/query_10.csv
Import will remove all previously imported and added filters. Are you sure you want to proceed? y/n [y]:
y
Enter password:
Filters imported
```

**data.destination.cloud.filters.query > export**

The `data.destination.cloud.filters.query > export` command allows you to export filters to a remote file. Note that the manually added filters are appended to the end of exported .csv file whereas imported filter files are exported along with comments and white spacing.

**Syntax**
```
data.destination.cloud.filters.query > export
<scp|ftp>://loginname@serverIP:[port:]path
```

**Example**
```
data.destination.cloud.filters.query > export
scp://john@10.32.1.63:/import/qaddi/DATACOLLECTOR/Filters/query_10.csv
Enter password:
Filters exported
```
**data.destination.cloud.filters.query > help**

The `data.destination.cloud.filters.query > help` command allows you to view the list of commands that can be executed at the current CLI level.

**Syntax**

```
data.destination.cloud.filters.query > help
```

**Example**

```
data.destination.cloud.filters.query > help
```

**data.destination.cloud.filters.query > exit**

The `data.destination.cloud.filters.query > exit` command allows you to exit from the current CLI level or logout from the top level.

**Syntax**

```
data.destination.cloud.filters.query > exit
```

**Example**

```
data.destination.cloud.filters.query > exit
```

**data.destination.global.tags > info**

The `data.destination.global.tags > info` command displays the member and view type tag configuration.

**Syntax**

```
data.destination.global.tags > info
```

**Example**

```
data.destination.global.tags > info
```

Default value for the `dns_view` tag:
- Internal

Grid ext_attribute name for the `dns_view` tag:
- `dns_role`

**data.destination.global.tags > dns_view**

The `data.destination.global.tags > dns_view` command displays the view tag configuration of the NIOS Grid. To view or set a default value for the output, use the `dns_view` command. You can use the `ext_attribute` command to view or set an external attribute name for the DNS view.

**Syntax**

```
data.destination.global.tags.dns_view > default
```

```
data.destination.global.tags.dns_view > ext_attribute
dns_role
```

**Example**

```
data.destination.global.tags.dns_view > default
```

```
data.destination.global.tags.dns_view > ext_attribute
dns_role
```
CLI Commands

**data.destination.global.filters.client_ip > add**

The `data.destination.global.filters.client_ip > add` command allows you to add a filter to the end of the list.

**Syntax**

```
data.destination.global.filters.client_ip > add ip|ip/cidr|ip4/netmask|first_ip4-last_ip4
```

**Example**

```
data.destination.global.filters.client_ip > add 10.36.130.1
Filter added
```

**data.destination.global.filters.client_ip > delete**

The `data.destination.global.filters.client_ip > delete` command allows you to delete a specific filter or all filters. To delete a manually added filter, execute the `delete <filter>` command. When you execute the `delete all` command, all filters (including filters that are imported) are deleted after confirmation. You can only delete a manually added filter, but cannot delete a filter from the list of imported filters.

**Syntax**

```
data.destination.global.filters.client_ip > delete <filter|all>
```

**Example**

```
data.destination.global.filters.client_ip > delete 10.36.130.1
Filter 10.36.130.1 deleted
data.destination.global.filters.client_ip > delete all
Do you want to delete all filters? y/n [y]:
Y
Filters deleted
```

**data.destination.global.filters.client_ip > show**

The `data.destination.global.filters.client_ip > show` command displays all filters. You can either use `show` or `show filters` to view the list of imported filters and manually added filters. To view the source and timestamp of the last imported file, use the `show imported` command.

**Syntax**

```
data.destination.global.filters.client_ip > show
```

**Example**

```
data.destination.global.filters.client_ip > show
; Manually added filters
10.36.130.12
10.36.130.1
; Imported filters
1.1.1.1
1.1.1.2
1.1.1.3
1.1.1.4
1.1.1.5
1.1.1.6
1.1.1.7
1.1.1.8
1.1.1.9
1.1.1.10
data.destination.global.filters.client_ip > show filters
data.destination.global.filters.client_ip > show imported
```
**data.destination.global.filters.client_ip > import**

The `data.destination.global.filters.client_ip > import` command allows you to import filters from a local or a remote file. When you import a file, it overwrites all existing imported and manually entered filters after confirmation. Note that parsing and validation are invoked after the file is imported successfully. The imported file is rejected and an error message is displayed in case of any validation error.

Note the following:

- Import a single IPv4 or IPv6 address. Example: 10.10.1.0 or 2620:10a:6000:661e::523.
- Import a range of IPv4 addresses: two single IPs with a dash between them, no spaces. Example: 10.10.1.0-10.10.2.35. This format is applicable to IPv4 address format only as IPv6 uses CIDR notation.
- Import a Network/Mask, that is, a single IPv4 address followed by a slash and mask without spaces. Example: 10.10.1.0/255.255.255.0. This format is applicable to IPv4 address format only.
- Import a CIDR block, that is, a single IPv4 or IPv6 address followed by a slash and a number without spaces. Example: 10.10.0.1/15 and 2001:cdba:9abc:5678::/64

**Syntax**

```
data.destination.global.filters.client_ip > import
<scp|ftp>://loginname@serverIP:[port:]path
```

**Example**

```
data.destination.global.filters.client_ip > import
scp://john@10.32.1.63:/import/qaddi/DATACOLLECTOR/Filters/client_ip_10.csv
```

Import will remove all previously imported and added filters. Are you sure you want to proceed? y/n [y]:

```
y
```

Enter password:

Filters imported

**data.destination.global.filters.client_ip > export**

The `data.destination.global.filters.client_ip > export` command allows you to export filters to a remote file. Note that the manually added filters are appended to the end of exported csv file whereas imported filter files are exported along with comments and white spacing.

**Syntax**

```
data.destination.global.filters.client_ip > export
<scp|ftp>://loginname@serverIP:[port:]path
```

**Example**

```
data.destination.global.filters.client_ip > export
scp://john@10.32.1.63:/import/qaddi/DATACOLLECTOR/Filters/client_ip_10.csv
```

Enter password:

Filters exported

**data.destination.global.filters.client_ip > help**

The `data.destination.global.filters.client_ip > help` command allows you to view the list of commands that can be executed at the current CLI level.

**Syntax**

```
data.destination.global.filters.client_ip > help
```

**Example**

```
data.destination.global.filters.client_ip > help
```
CLI Commands

**data.destination.global.filters.client_ip > exit**

The `data.destination.global.filters.client_ip > exit` command allows you to exit from the current CLI level or logout from the top level.

**Syntax**

```
data.destination.global.filters.client_ip > exit
```

**Example**

```
data.destination.global.filters.client_ip > exit
```

**data.destination.global.filters.dns_view > add**

The `data.destination.global.filters.dns_view > add` command allows you to add a filter to the end of the list. Note that you can add only one filter.

**Syntax**

```
data.destination.global.filters.dns_view > add Internal|I|External|E
```

**Example**

```
data.destination.global.filters.dns_view > add I
```

**data.destination.global.filters.dns_view > delete**

The `data.destination.global.filters.dns_view > delete` command allows you to delete a specific filter or all filters. To delete a manually added filter, execute the `delete <filter>` command. When you execute the `delete all` command, all filters (including filters that are imported) are deleted after confirmation. You can only delete a manually added filter, but cannot delete a filter from the list of imported filters.

**Syntax**

```
data.destination.global.filters.dns_view > delete <filter|all>
```

**Example**

```
data.destination.global.filters.dns_view > delete I
Filter I deleted
data.destination.global.filters.dns_view > delete all
Do you want to delete all filters? y/n [y]: 
y
Filters deleted
```

**data.destination.global.filters.dns_view > show**

The `data.destination.global.filters.dns_view > show` command displays the list of filters. You can either use `show` or `show filters` to view the list of imported filters and manually added filters. To view the source and time stamp of the last imported file, use the `show imported` command.

**Syntax**

```
data.destination.global.filters.dns_view > show
```

**Example**

```
data.destination.global.filters.dns_view > show
; Manually added filters
I
data.destination.global.filters.dns_view > show filters
; Manually added filters
I
data.destination.global.filters.dns_view > show imported
```
data.destination.global.filters.dns_view > import

The data.destination.global.filters.dns_view > import command allows you to import filters from a local or a remote file. When you import a file, it overwrites all existing imported and manually entered filters after confirmation. Note that parsing and validation are invoked after the file is imported successfully. The imported file is rejected and an error message is displayed in case of any validation error.

Syntax

data.destination.global.filters.dns_view > import
<scp|ftp>://loginname@serverIP:[port:]path

Example

data.destination.global.filters.dns_view > import
scp://john@10.32.1.63:/import/qaddi/DATACOLLECTOR/Filters/dns_view_10.csv

Import will remove all previously imported and added filters. Are you sure you want to proceed? y/n [y]:
y
Enter password:
Filters imported

data.destination.global.filters.dns_view > export

The data.destination.global.filters.dns_view > export command allows you to export filters to a remote file. Note that the manually added filters are appended to the end of exported .csv file whereas imported filter files are exported along with comments and white spacing.

Syntax

data.destination.global.filters.dns_view > export
<scp|ftp>://loginname@serverIP:[port:]path

Example

data.destination.global.filters.dns_view > export
scp://john@10.32.1.63:/import/qaddi/DATACOLLECTOR/Filters/dns_view_10.csv

Enter password:
Filters exported

data.destination.global.filters.dns_view > help

The data.destination.global.filters.dns_view > help command allows you to view the list of commands that can be executed at the current CLI level.

Syntax

data.destination.global.filters.dns_view > help

Example

data.destination.global.filters.dns_view > help

data.destination.global.filters.dns_view > exit

The data.destination.global.filters.dns_view > exit command allows you to exit from the current CLI level or logout from the top level.

Syntax

data.destination.global.filters.dns_view > exit

Example

data.destination.global.filters.dns_view > exit
CLI Commands

data.destination.global.filters.member > add
The `data.destination.global.filters.member > add` command allows you to add a filter to the end of the list.

**Syntax**
```
data.destination.global.filters.member > add member_regular_expression
```

**Example**
```
data.destination.global.filters.member > add 10.36.130.1
Filter added
```

data.destination.global.filters.member > delete
The `data.destination.global.filters.member > delete` command allows you to delete a specific filter or all filters. To delete a manually added filter, execute the `delete <filter>` command. When you execute the `delete all` command, all filters (including filters that are imported) are deleted after confirmation. The delete operation does not affect imported filters. You can only delete a manually added filter, but cannot delete a filter from the list of imported filters.

**Syntax**
```
data.destination.global.filters.member > delete <filter|all>
```

**Example**
```
data.destination.global.filters.member > delete 10.36.130.1
Filter 10.36.130.1 deleted
data.destination.global.filters.member > delete all
Do you want to delete all filters? y/n [y]: y
Filters deleted
```

data.destination.global.filters.member > show
The `data.destination.global.filters.member > show` command displays the list of existing filters. You can either use `show` or `show filters` to view the list of imported filters and manually added filters. To view the source and timestamp of the last imported file, use the `show imported` command.

**Syntax**
```
data.destination.global.filters.member > show
```

**Example**
```
data.destination.global.filters.member > show
; Manually added filters
10.36.130.1
data.destination.global.filters.member > show filters
; Manually added filters
10.36.130.1
data.destination.global.filters.member > show imported
```

data.destination.global.filters.member > import
The `data.destination.global.filters.member > import` command allows you to import filters from a local or a remote file. When you import a file, it overwrites all existing imported and manually entered filters after confirmation. Note that parsing and validation are invoked after the file is imported successfully. The imported file is rejected and an error message is displayed in case of any validation error.

**Syntax**
```
data.destination.global.filters.member > import <scp|ftp>://loginname@serverIP:[port:]path
```
Example

data.destination.global.filters.member > import
scp://john@10.32.1.63:/import/qaddi/DATACOLLECTOR/Filter/member_10.csv

Import will remove all previously imported and added filters. Are you sure you want to proceed? y/n [y]:

Y

Enter password:
Filters imported

data.destination.global.filters.member > export

The data.destination.global.filters.member > export command allows you to export filters to a remote file. Note that the manually added filters are appended to the end of exported .csv file whereas imported filter files are exported along with comments and white spacing.

Syntax

data.destination.global.filters.member > export
<scp|ftp>://loginname@serverIP:[port:]path

Example

data.destination.global.filters.member > export
scp://john@10.32.1.63:/import/qaddi/DATACOLLECTOR/Filter/member_10.csv

Enter password:
Filters exported

data.destination.global.filters.member > help

The data.destination.global.filters.member > help command allows you to view the list of commands that can be executed at the current CLI level.

Syntax

data.destination.global.filters.member > help

Example

data.destination.global.filters.member > help

data.destination.global.filters.member > exit

The data.destination.global.filters.member > exit command allows you to exit from the current CLI level or logout from the top level.

Syntax

data.destination.global.filters.member > exit

Example

data.destination.global.filters.member > exit

data.destination.global.filters.query > add

The data.destination.global.filters.query > add command allows you to add a filter to the end of the list.

Syntax

data.destination.global.filters.query > add fqdn_with_wildcards

— Note the following about wildcards:
— * - zero or more domain name labels; can be on the left side only
— # - one or more domain name labels; can be on the left side only
— ? - exactly one domain name label; can be on the right or left side
CLI Commands

Example

```
data.destination.global.filters.query > add 10.36.130.1
Filter added
```
```
data.destination.global.filters.query > add abc.com
Filter added
```

```
data.destination.global.filters.query > delete
```

The `data.destination.global.filters.query > delete` command allows you to delete a specific filter or all filters. To delete a manually added filter, execute the `delete <filter>` command. When you execute the `delete all` command, all filters (including filters that are imported) are deleted after confirmation. The delete operation does not affect imported filters. You can only delete a manually added filter, but cannot delete a filter from the list of imported filters.

Syntax

```
data.destination.global.filters.query > delete <filter|all>
```

Example

```
data.destination.global.filters.query > delete 10.36.130.1
Filter 10.36.130.1 deleted
```
```
data.destination.global.filters.query > delete all
Do you want to delete all filters? y/n [y]:
y
Filters deleted
```

```
data.destination.global.filters.query > show
```

The `data.destination.global.filters.query > show` command displays the list of existing filters. You can either use `show` or `show filters` to view the list of imported filters and manually added filters. To view the source and timestamp of the last imported file, use the `show imported` command.

Syntax

```
data.destination.global.filters.query > show
```

Example

```
data.destination.global.filters.query > show
; Manually added filters
xyz.com
abc.com
10.36.130.12
10.36.130.1
```
```
data.destination.global.filters.query > show filters
; Manually added filters
xyz.com
abc.com
10.36.130.12
10.36.130.1
```

```
data.destination.global.filters.query > import
```

The `data.destination.global.filters.query > import` command allows you to import filters from a local or a remote file. When you import a file, it overwrites all existing imported and manually entered filters after confirmation. Note that parsing and validation are invoked after the file is imported successfully. The imported file is rejected and an error message is displayed in case of any validation error.
Syntax

data.destination.global.filters.query > import
<scp|ftp>://loginname@serverIP:[port:]path

Example

data.destination.global.filters.query > import
scp://john@10.32.1.63:/import/qaddi/DATACOLLECTOR/Filters/query_10.csv

Import will remove all previously imported and added filters. Are you sure you want to proceed? y/n [y]:
y
Enter password:
Filters imported

data.destination.global.filters.query > export

The data.destination.global.filters.query > export command allows you to export filters to a remote file. Note that the manually added filters are appended to the end of exported .csv file whereas imported filter files are exported along with comments and white spacing.

Syntax

data.destination.global.filters.query > export
<scp|ftp>://loginname@serverIP:[port:]path

Example

data.destination.global.filters.query > export
scp://john@10.32.1.63:/import/qaddi/DATACOLLECTOR/Filters/query_10.csv

Enter password:
Filters exported

data.destination.global.filters.query > help

The data.destination.global.filters.query > help command allows you to view the list of commands that can be executed at the current CLI level.

Syntax

data.destination.global.filters.query > help

Example

data.destination.global.filters.query > help

data.destination.global.filters.query > exit

The data.destination.global.filters.query > exit command allows you to exit from the current CLI level or logout from the top level.

Syntax

data.destination.global.filters.query > exit

Example
data.destination.global.filters.query > exit

data.destination.reporting > info

The data.destination.reporting > info command displays information about the reporting output configuration.

Syntax

data.destination.reporting > info

Example
data.destination.reporting > info

Reporting mode configuration:
The output mode is forward

Reporting mode registration:

Grid Master address:         10.35.5.49
Grid admin username:         admin
Grid admin password:         ********
Grid access is:              Verified
Grid state refresh interval: 1 hour
Grid registration time:      Fri Mar 24 00:36:02 2017
Grid registration uuid:      564DDD7806A384FD8EFC36F30E9E39FD
DC address registered:       10.36.130.1

Cached Grid member timezones:
  infoblox.localdomain: (UTC) Coordinated Universal Time, None
  reporting-1.com: (UTC) Coordinated Universal Time, None
  member.com: (UTC) Coordinated Universal Time, None

Cached Grid views:
  0: default, None
  1: default.MS-2016, None
  2: default.MS-2012, None
  3: default.MS-2008, None

Reporting indexers:
  10.35.2.59:9997     Connected

**data.destination.reporting > wizard**

The `data.destination.reporting > wizard` command allows you to configure the reporting output settings.

**Syntax**

```
data.destination.reporting > wizard
```

**Example**

```
data.destination.reporting > wizard
Do you want to configure data output reporting settings y/n [y]:
y
Please use: '?' for help on available command options.
Please enter reporting mode[ forward ]:
hold
ok
The output mode is hold
Is it correct? y/n [y]:
y
Setup wizard finished successfully
```

**data.destination.reporting > stats**

The `data.destination.reporting > stats` command displays the number of output files in queue waiting to be transferred to the reporting server.

**Syntax**

```
data.destination.reporting > stats
data.destination.reporting > stats reset
data.destination.reporting > stats detailed
```
Example

```
data.destination.reporting > stats
```
Reporting output stats:

<table>
<thead>
<tr>
<th># of files</th>
<th>Size in kb</th>
<th># of files</th>
<th>Size in kb</th>
<th>Oldest processed</th>
<th>processed</th>
<th>pending</th>
<th>pending</th>
<th>file</th>
</tr>
</thead>
<tbody>
<tr>
<td>1798</td>
<td>40960.216</td>
<td>0</td>
<td>0.000</td>
<td>N/A</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

```
data.destination.reporting > stats reset
```
Do you want to reset all statics on this level? y/n [y]:
y
Reporting output stats:

```
data.destination.reporting > purge
```
The `data.destination.reporting > purge` command deletes all the output files in queue waiting to be transferred to the reporting server.

**Syntax**
```
data.destination.reporting > purge
```

**Example**
```
data.destination.reporting > purge
```
Delete all reporting output files? y/n [y]:
y
Reporting output files are deleted
ok

```
data.destination.reporting > set mode
```
The `data.destination.reporting > set mode` command sets the reporting output mode.

**Syntax**
```
data.destination.reporting > set mode <forward|hold|disabled>
```

**Example**
```
data.destination.reporting > set mode forward
```
Data will start transmitting immediately
ok

```
data.destination.reporting > show mode
```
The `data.destination.reporting > show mode` command displays the reporting output mode.

**Syntax**
```
data.destination.reporting > show mode
```

**Example**
```
data.destination.reporting > show mode
```
The output mode is forward
**data.destination.reporting.registration > register**

The **data.destination.reporting.registration > register** command registers the Data Connector VM with the Reporting Server.

**Syntax**
```
data.destination.reporting.registration > register
```

**Example**
```
data.destination.reporting.registration > register
Getting Grid Data Connection information... done.
Generating certificate for Splunk forwarder... done.
Signing Splunk forwarder certificate with the Grid... done.
Registering Data Collector with the Grid... done.
Saving changes to database... done.
```

**data.destination.reporting.registration > unregister**

The **data.destination.reporting.registration > unregister** command unregisters the Data Collector VM from Reporting Server.

**Syntax**
```
data.destination.reporting.registration > unregister
```

**Example**
```
data.destination.reporting.registration > unregister
Unregistering Data Collector from the Grid... done.
Saving changes to database... done.
```

**Note:** When you use the **register** and **unregister** commands, the Data Connector VM is registered/unregistered against the Grid, if the Grid is running NIOS 7.3 or later. The **register** command does not configure reporting on the Grid and you cannot enable reporting until you configure a target Grid. When you enable the output, the target Grid reporting member accepts the Data Connector VM as the source for reporting destination.

**data.destination.reporting.registration > info**

The **data.destination.reporting.registration > info** command displays configuration details for the reporting output mode.

**Syntax**
```
data.destination.reporting.registration > info
```

**Example**
```
data.destination.reporting.registration > info
```

**data.destination.reporting.filters.client_ip > add**

The **data.destination.reporting.filters.client_ip > add** command allows you to add a filter to the end of the list.

**Syntax**
```
data.destination.reporting.filters.client_ip > add
ip|ip/cidr|ip4/netmask|first_ip4-last_ip4
```

**Example**
```
data.destination.reporting.filters.client_ip > add 10.36.130.1
Filter added
```
data.destination.reporting.filters.client_ip > delete

The `data.destination.reporting.filters.client_ip > delete` command allows you to delete a specific filter or all filters. To delete a manually added filter, execute the `delete <filter>` command. When you execute the `delete all` command, all filters (including filters that are imported) are deleted after confirmation. You can only delete a manually added filter, but cannot delete a filter from the list of imported filters.

**Syntax**
```
data.destination.reporting.filters.client_ip > delete <filter|all>
```

**Example**
```
data.destination.reporting.filters.client_ip > delete 10.36.130.1
Filter 10.36.130.1 deleted
data.destination.reporting.filters.client_ip > delete all
Do you want to delete all filters? y/n [y]: y
Filters deleted
```

data.destination.reporting.filters.client_ip > show

The `data.destination.reporting.filters.client_ip > show` command displays all filters. You can either use `show` or `show filters` to view the list of imported filters and manually added filters. To view the source and timestamp of the last imported file, use the `show imported` command.

**Syntax**
```
data.destination.reporting.filters.client_ip > show
```

**Example**
```
data.destination.reporting.filters.client_ip > show
 ; Manually added filters
 10.36.130.12
 10.36.130.1
 ; Imported filters
 1.1.1.1
 1.1.1.2
 1.1.1.3
 1.1.1.4
 1.1.1.5
 1.1.1.6
 1.1.1.7
 1.1.1.8
 1.1.1.9
 1.1.1.10
```
```
data.destination.reporting.filters.client_ip > show filters
```
```
data.destination.reporting.filters.client_ip > show imported
```

data.destination.reporting.filters.client_ip > import

The `data.destination.reporting.filters.client_ip > import` command allows you to import filters from a local or a remote file. When you import a file, it overwrites all existing imported and manually entered filters after confirmation. Note that parsing and validation are invoked after the file is imported successfully. The imported file is rejected and an error message is displayed in case of any validation error.

**Note the following:**
- Import a single IPv4 or IPv6 address. Example: 10.10.1.0 or 2620:10a:6000:661e::523.
- Import a range of IPv4 addresses: two single IPs with a dash between them, no spaces. Example: 10.10.1.0-10.10.2.35. This format is applicable to IPv4 address format only as IPv6 uses CIDR notation.
- Import a Network/Mask, that is, a single IPv4 address followed by a slash and mask without spaces. Example: 10.10.1.0/255.255.255.0. This format is applicable to IPv4 address format only.
- Import a CIDR block, that is, a single IPv4 or IPv6 address followed by a slash and a number without spaces. Example: 10.10.0.1/15 and 2001:cdba:9abc:5678::/64

**Syntax**
```
data.destination.reporting.filters.client_ip > import
<scp|ftp>://loginname@serverIP:[port:]path
```

**Example**
```
data.destination.reporting.filters.client_ip > import
scp://john@10.32.1.63:/import/qaddi/DATACOLLECTOR/Filters/client_ip_10.csv
```
Import will remove all previously imported and added filters. Are you sure you want to proceed? y/n [y]:
y
Enter password:
Filters imported

**data.destination.reporting.filters.client_ip > export**

The data.destination.reporting.filters.client_ip > export command allows you to export filters to a remote file. Note that the manually added filters are appended to the end of exported csv file whereas imported filter files are exported along with comments and white spacing.

**Syntax**
```
data.destination.reporting.filters.client_ip > export
<scp|ftp>://loginname@serverIP:[port:]path
```

**Example**
```
data.destination.reporting.filters.client_ip > export
scp://john@10.32.1.63:/import/qaddi/DATACOLLECTOR/Filters/client_ip_10.csv
```
Enter password:
Filters exported

**data.destination.reporting.filters.client_ip > help**

The data.destination.reporting.filters.client_ip > help command allows you to view the list of commands that can be executed at the current CLI level.

**Syntax**
```
data.destination.reporting.filters.client_ip > help
```

**Example**
```
data.destination.reporting.filters.client_ip > help
```

**data.destination.reporting.filters.client_ip > exit**

The data.destination.reporting.filters.client_ip > exit command allows you to exit from the current CLI level or logout from the top level.

**Syntax**
```
data.destination.reporting.filters.client_ip > exit
```

**Example**
```
data.destination.reporting.filters.client_ip > exit
```
data.destination.reporting.filters.dns_view > add

The `data.destination.reporting.filters.dns_view > add` command allows you to add a filter to the end of the list. Note that you can add only one filter.

**Syntax**
```
data.destination.reporting.filters.dns_view > add Internal|I|External|E
```

**Example**
```
data.destination.reporting.filters.dns_view > add I
```

data.destination.reporting.filters.dns_view > delete

The `data.destination.reporting.filters.dns_view > delete` command allows you to delete a specific filter or all filters. To delete a manually added filter, execute the `delete <filter>` command. When you execute the `delete all` command, all filters (including filters that are imported) are deleted after confirmation. You can only delete a manually added filter, but cannot delete a filter from the list of imported filters.

**Syntax**
```
data.destination.reporting.filters.dns_view > delete <filter|all>
```

**Example**
```
data.destination.reporting.filters.dns_view > delete I
Filter I deleted

data.destination.reporting.filters.dns_view > delete all
Do you want to delete all filters? y/n [y]:
y.Filters deleted
```

data.destination.reporting.filters.dns_view > show

The `data.destination.reporting.filters.dns_view > show` command displays the list of filters. You can either use `show` or `show filters` to view the list of imported filters and manually added filters. To view the source and timestamp of the last imported file, use the `show imported` command.

**Syntax**
```
data.destination.reporting.filters.dns_view > show
```

**Example**
```
data.destination.reporting.filters.dns_view > show
 ; Manually added filters
 I

data.destination.reporting.filters.dns_view > show filters
 ; Manually added filters
 I

data.destination.reporting.filters.dns_view > show imported
```

data.destination.reporting.filters.dns_view > import

The `data.destination.reporting.filters.dns_view > import` command allows you to import filters from a local or a remote file. When you import a file, it overwrites all existing imported and manually entered filters after confirmation. Note that parsing and validation are invoked after the file is imported successfully. The imported file is rejected and an error message is displayed in case of any validation error.

**Syntax**
```
data.destination.reporting.filters.dns_view > import <scp|ftp>://loginname@serverIP:[port:]path
```
CLI Commands

**Example**

```
data.destination.reporting.filters.dns_view > import
scp://john@10.32.1.63:/import/qaddi/DATACOLLECTOR/Filter/dns_view_10.csv
```

Import will remove all previously imported and added filters. Are you sure you want to proceed? y/n [y]:

```
y
```
Enter password:

```
Filters imported
```

**data.destination.reporting.filters.dns_view > export**

The `data.destination.reporting.filters.dns_view > export` command allows you to export filters to a remote file. Note that the manually added filters are appended to the end of exported .csv file whereas imported filter files are exported along with comments and white spacing.

**Syntax**

```
data.destination.reporting.filters.dns_view > export
<scp|ftp>://loginname@serverIP:[port:]path
```

**Example**

```
data.destination.reporting.filters.dns_view > export
scp://john@10.32.1.63:/import/qaddi/DATACOLLECTOR/Filter/dns_view_10.csv
```
Enter password:

```
Filters exported
```

**data.destination.reporting.filters.dns_view > help**

The `data.destination.reporting.filters.dns_view > help` command allows you to view the list of commands that can be executed at the current CLI level.

**Syntax**

```
data.destination.reporting.filters.dns_view > help
```

**Example**

```
data.destination.reporting.filters.dns_view > help
```

**data.destination.reporting.filters.dns_view > exit**

The `data.destination.reporting.filters.dns_view > exit` command allows you to exit from the current CLI level or logout from the top level.

**Syntax**

```
data.destination.reporting.filters.dns_view > exit
```

**Example**

```
data.destination.reporting.filters.dns_view > exit
```

**data.destination.reporting.filters.member > add**

The `data.destination.reporting.filters.member > add` command allows you to add a filter to the end of the list.

**Syntax**

```
data.destination.reporting.filters.member > add member_regular_expression
```

**Example**

```
data.destination.reporting.filters.member > add 10.36.130.1
Filter added
```
data.destination.reporting.filters.member > delete

The `data.destination.reporting.filters.member > delete` command allows you to delete a specific filter or all filters. To delete a manually added filter, execute the `delete <filter>` command. When you execute the `delete all` command, all filters (including filters that are imported) are deleted after confirmation. The delete operation does not affect imported filters. You can only delete a manually added filter, but cannot delete a filter from the list of imported filters.

**Syntax**

```
data.destination.reporting.filters.member > delete <filter|all>
```

**Example**

```
data.destination.reporting.filters.member > delete 10.36.130.1
Filter 10.36.130.1 deleted
```
```
data.destination.reporting.filters.member > delete all
Do you want to delete all filters? y/n [y]:
```
```
y
Filters deleted
```

**data.destination.reporting.filters.member > show**

The `data.destination.reporting.filters.member > show` command displays the list of existing filters. You can either use `show` or `show filters` to view the list of imported filters and manually added filters. To view the source and timestamp of the last imported file, use the `show imported` command.

**Syntax**

```
data.destination.reporting.filters.member > show
```

**Example**

```
data.destination.reporting.filters.member > show
; Manually added filters
10.36.130.1
```
```
data.destination.reporting.filters.member > show filters
; Manually added filters
10.36.130.1
```
```
data.destination.reporting.filters.member > show imported
```

**data.destination.reporting.filters.member > import**

The `data.destination.reporting.filters.member > import` command allows you to import filters from a local or a remote file. When you import a file, it overwrites all existing imported and manually entered filters after confirmation. Note that parsing and validation are invoked after the file is imported successfully. The imported file is rejected and an error message is displayed in case of any validation error.

**Syntax**

```
data.destination.reporting.filters.member > import <scp|ftp>://loginname@serverIP:[port:]path
```

**Example**

```
data.destination.reporting.filters.member > import scp://john@10.32.1.63:/import/qaddi/DATACOLLECTOR/Filters/member_10.csv
Import will remove all previously imported and added filters. Are you sure you want to proceed? y/n [y]:
y
Enter password:
Filters imported
```
data.destination.reporting.filters.member > export

The data.destination.reporting.filters.member > export command allows you to export filters to a remote file. Note that the manually added filters are appended to the end of exported .csv file whereas imported filter files are exported along with comments and white spacing.

Syntax

```
data.destination.reporting.filters.member > export
<scp|ftp>://loginname@serverIP:[port:]path
```

Example

```
data.destination.reporting.filters.member > export
scp://john@10.32.1.63:/import/qaddi/DATACOLLECTOR/Filters/member_10.csv
Enter password:
Filters exported
```

data.destination.reporting.filters.member > help

The data.destination.reporting.filters.member > help command allows you to view the list of commands that can be executed at the current CLI level.

Syntax

```
data.destination.reporting.filters.member > help
```

Example

```
data.destination.reporting.filters.member > help
```

data.destination.reporting.filters.member > exit

The data.destination.reporting.filters.member > exit command allows you to exit from the current CLI level or logout from the top level.

Syntax

```
data.destination.reporting.filters.member > exit
```

Example

```
data.destination.reporting.filters.member > exit
```

data.destination.reporting.filters.query > add

The data.destination.reporting.filters.query > add command allows you to add a filter to the end of the list.

Syntax

```
data.destination.reporting.filters.query > add fqdn_with_wildcards
```

— Note the following about wildcards:
— * - zero or more domain name labels; can be on the left side only
— # - one or more domain name labels; can be on the left side only
— ? - exactly one domain name label; can be on the right or left side

Example

```
data.destination.reporting.filters.query > add 10.36.130.1
Filter added
data.destination.reporting.filters.query > add abc.com
Filter added
```
The `data.destination.reporting.filters.query > delete` command allows you to delete a specific filter or all filters. To delete a manually added filter, execute the `delete <filter>` command. When you execute the `delete all` command, all filters (including filters that are imported) are deleted after confirmation. The delete operation does not affect imported filters. You can only delete a manually added filter, but cannot delete a filter from the list of imported filters.

**Syntax**
```
data.destination.reporting.filters.query > delete <filter|all>
```

**Example**
```
data.destination.reporting.filters.query > delete 10.36.130.1
Filter 10.36.130.1 deleted

data.destination.reporting.filters.query > delete all
Do you want to delete all filters? y/n [y]:
y
Filters deleted
```

The `data.destination.reporting.filters.query > show` command displays the list of existing filters. You can either use `show` or `show filters` to view the list of imported filters and manually added filters. To view the source and timestamp of the last imported file, use the `show imported` command.

**Syntax**
```
data.destination.reporting.filters.query > show
```

**Example**
```
data.destination.reporting.filters.query > show
 ; Manually added filters
 xyz.com
 abc.com
 10.36.130.12
 10.36.130.1

data.destination.reporting.filters.query > show filters
 ; Manually added filters
 xyz.com
 abc.com
 10.36.130.12
 10.36.130.1

data.destination.reporting.filters.query > show imported
```

The `data.destination.reporting.filters.query > import` command allows you to import filters from a local or a remote file. When you import a file, it overwrites all existing imported and manually entered filters after confirmation. Note that parsing and validation are invoked after the file is imported successfully. The imported file is rejected and an error message is displayed in case of any validation error.

**Syntax**
```
data.destination.reporting.filters.query > import <scp|ftp>://loginname@serverIP:[port:]path
```

**Example**
```
data.destination.reporting.filters.query > import scp://john@10.32.1.63:/import/qaddi/DATACOLLECTOR/Filters/query_10.csv
```
Import will remove all previously imported and added filters. Are you sure you want to proceed? y/n [y]:

y

Enter password:

Filters imported

data.destination.reporting.filters.query > export

The `data.destination.global.filters.query > export` command allows you to export filters to a remote file. Note that the manually added filters are appended to the end of exported .csv file whereas imported filter files are exported along with comments and white spacing.

Syntax

```
data.destination.reporting.filters.query > export
<scp|ftp>://loginname@serverIP:[port:]path
```

Example

```
data.destination.reporting.filters.query > export
scp://john@10.32.1.63:/import/qaddi/DATACOLLECTOR/Filters/query_10.csv
```

Enter password:

Filters exported

data.destination.reporting.filters.query > help

The `data.destination.reporting.filters.query > help` command allows you to view the list of commands that can be executed at the current CLI level.

Syntax

```
data.destination.reporting.filters.query > help
```

Example

```
data.destination.reporting.filters.query > help
```

data.destination.reporting.filters.query > exit

The `data.destination.reporting.filters.query > exit` command allows you to exit from the current CLI level or logout from the top level.

Syntax

```
data.destination.reporting.filters.query > exit
```

Example

```
data.destination.reporting.filters.query > exit
```

data.destination.splunk > wizard

The `data.destination.splunk > wizard` command allows you to configure the Splunk output settings.

Syntax

```
data.destination.splunk > wizard
```

Example

```
data.destination.splunk > wizard
```

Do you want to configure data output splunk settings y/n [y]:

y

Please use: '?' for help on available command options.

Please enter splunk indexers:

```
10.1.1.0
```

ok

Do you want to add more values? y/n [n]:

n
Please enter splunk index name [ xyz ]: 

abc

ok

Please enter splunk source type [ ib:dns:captures ]: 
Settings unchanged.

Please enter splunk default indexer port [ 9997 ]:

9997

ok

Please enter splunk mode [ disabled ]: 

hold

ok

Indexers:

10.1.1.0

Index name is abc
Source type is ib:dns:captures
Default indexer port is 9997
The output mode is hold
Is it correct? y/n [ y ]:

y

Setup wizard finished successfully

**data.destination.splunk > add indexer**

The **data.destination.splunk > add indexer** command enables you to add Splunk indexers to send DNS captures.

**Syntax**

```
data.destination.splunk > add indexer <address>[:optional_port]
```

**Example**

```
data.destination.splunk > add indexer 10.1.1.0
ok
```

**data.destination.splunk > show indexer**

The **data.destination.splunk > show indexer** command displays the list of Splunk indexers.

**Syntax**

```
data.destination.splunk > show indexer
```

**Example**

```
data.destination.splunk > show indexer
Indexers:

10.10.1.2
10.1.1.0
```

**data.destination.splunk > delete indexer**

The **data.destination.splunk > delete indexer** command deletes Splunk indexers.

**Syntax**

```
data.destination.splunk > delete indexer <address>[:optional_port]
```

**Example**

```
data.destination.splunk > delete indexer 10.1.1.0
ok
```
data.destination.splunk > set indexname
The `data.destination.splunk > set indexname` command allows you to specify the Splunk index name.

Syntax
```
data.destination.splunk > set indexname <string>
```

Example
```
data.destination.splunk > set indexname xyz
ok
```

data.destination.splunk > show indexname
The `data.destination.splunk > show indexname` command displays the Splunk index name.

Syntax
```
data.destination.splunk > show indexname
```

Example
```
data.destination.splunk > show indexname
Index name is xyz
```

data.destination.splunk > set port
The `data.destination.splunk > set port` command sets the Splunk default indexer port. This port is used if an indexer lacks port specification.

Syntax
```
data.destination.splunk > set port <number>
```

Example
```
data.destination.splunk > set port 9997
ok
```

data.destination.splunk > show port
The `data.destination.splunk > show port` command displays the Splunk default indexer port.

Syntax
```
data.destination.splunk > show port
```

Example
```
data.destination.splunk > show port
Default indexer port is 9997
```

data.destination.splunk > set sourcetype
The `data.destination.splunk > set sourcetype` command allows you to specify the Splunk source type.

Syntax
```
data.destination.splunk > set sourcetype <string>
```

Example
```
data.destination.splunk > set sourcetype ib:dns:captures
ok
```

data.destination.splunk > sourcetype
The `data.destination.splunk > sourcetype` command displays the Splunk source type.

Syntax
```
data.destination.splunk > sourcetype
```

Example
```
data.destination.splunk > sourcetype
Source type is ib:dns:captures
```
**data.destination.splunk > cacertificate import**

The `data.destination.splunk > cacertificate import` command enables you to upload the Certification Authority bundle in .PEM format which is used to authenticate Splunk forwarder traffic with Splunk indexers.

**Syntax**

```
data.destination.splunk > cacertificate import <scp|ftp>://loginname@serverIP:[port:]path
```

**Example**

```
data.destination.splunk > cacertificate import scp://root@10.2.1.1:999/DB1/
```

**data.destination.splunk > show cacertificate**

The `data.destination.splunk > show cacertificate` command prints the Certification Authority bundle information such as subject, expiry date, fingerprint etc.

**Syntax**

```
data.destination.splunk > show cacertificate
```

**Example**

```
data.destination.splunk > show cacertificate
```

**data.destination.splunk > print cacertificate**

The `data.destination.splunk > print cacertificate` command enables you to print the Certification Authority bundle in .PEM format.

**Syntax**

```
data.destination.splunk > print cacertificate
```

**Example**

```
data.destination.splunk > print cacertificate
```

-----BEGIN CERTIFICATE-----
MIIDrDCCApQCCQChUsCxG18wzMABgkqhkiG9w0BAQsFADCBizELMAkGA1UEBhMCbXM xDTBjC0NjM3MjEwMTEwMDAwMF0xIzAEBgcNMTcWEzARB
-----END CERTIFICATE-----

**data.destination.splunk > certificate request**

The `data.destination.splunk > certificate request` command enables you to generate a certificate request in .PEM format that must be signed by a third party certification authority to get a Forwarder certificate.

**Syntax**

```
data.destination.splunk > certificate request
```

**Example**

```
data.destination.splunk > certificate request
Generating Forwarder Private key... Done
Below is Certificate Request.
-----BEGIN CERTIFICATE REQUEST-----
CUEybJcJD/4+Q8cSHmMU7VOpp1VEs9W4Fwi5QHtn0/zz4a2bEIlJ/
-----END CERTIFICATE REQUEST-----
ok
```
CLI Commands

**data.destination.splunk > certificate import**
The `data.destination.splunk > certificate import` command imports the Forwarder Certificate that is signed by a third party certification authority from an SCP server or an FTP server.

**Syntax**
```
data.destination.splunk > certificate import <scp|ftp>://loginname@serverIP:[port:]path
```

**Example**
```
data.destination.splunk > certificate import scp://root@10.2.1.1:999/DC2/
```

**data.destination.splunk > show certificate**
The `data.destination.splunk > show certificate` command prints the certificate information, such as subject, expiry date, fingerprint etc, after it is generated and imported.

**Syntax**
```
data.destination.splunk > show certificate
```

**Example**
```
data.destination.splunk > show certificate
```

**data.destination.splunk > print certificate**
The `data.destination.splunk > print certificate` command prints the certificate information in .PEM format.

**Syntax**
```
data.destination.splunk > print certificate
```

**Example**
```
data.destination.splunk > print certificate
-----BEGIN CERTIFICATE-----
MIIDMjCCAhoCCQDyctaScOw5CDANBgkqhkiG9w0BAQsFADCB1zELMAkGA1UEBhMC
dXMjCCAgMCMnEzCgYIKoZIzj0CAQYIKoZIzj4XDAkGBAQVMAkGA1UEBhMC
-----END CERTIFICATE-----
```

**data.destination.splunk > set mode**
The `data.destination.splunk > set mode` command enables you to change the default output mode for the Splunk output.

**Syntax**
```
data.destination.splunk > set mode [forward|hold|disabled]
```

**Example**
```
data.destination.splunk > set mode forward
Data will start transmitting immediately
ok
```

**data.destination.splunk > show mode**
The `data.destination.splunk > show mode` command displays the output mode for the Splunk output.

**Syntax**
```
data.destination.splunk > show mode
```

**Example**
```
data.destination.splunk > show mode
The output mode is forward
```
**data.destination.splunk > stats**

The `data.destination.splunk > stats` command displays system performance/statistics.

**Syntax**

```
data.destination.splunk > stats
data.destination.splunk > stats [get]
data.destination.splunk > stats reset
data.destination.splunk > stats detailed
```

**Example**

```
data.destination.splunk > stats
Splunk output stats:

<table>
<thead>
<tr>
<th># of files</th>
<th>Size in kb</th>
<th># of files</th>
<th>Size in kb</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oldest</td>
<td>processed</td>
<td>processed</td>
<td>pending</td>
</tr>
<tr>
<td>file</td>
<td>0</td>
<td>0.000</td>
<td>0</td>
</tr>
<tr>
<td>N/A</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

data.destination.splunk > stats reset
Do you want to reset all statics on this level? y/n [y]:

y

Splunk output stats:

<table>
<thead>
<tr>
<th># of files</th>
<th>Size in kb</th>
<th># of files</th>
<th>Size in kb</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oldest</td>
<td>processed</td>
<td>processed</td>
<td>pending</td>
</tr>
<tr>
<td>file</td>
<td>0</td>
<td>0.000</td>
<td>0</td>
</tr>
<tr>
<td>N/A</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

data.destination.splunk > stats detailed
Splunk output stats:

No pending files
```

**data.destination.splunk > purge**

The `data.destination.splunk > purge` command enables you to delete all the output files in queue waiting to be transferred to the Splunk destination. When you provide the regexp parameter, all files matching the provided parameter are deleted. If you do not provide the parameter, only pending output files are deleted.

**Syntax**

```
data.destination.splunk > purge [regexp]
regexp - regular expression with posix-egrep syntax.
```

**Example**

```
data.destination.splunk > purge
Delete all splunk output files? y/n [y]:

y

Splunk output files are deleted
```

ok
**CLI Commands**

**data.destination.splunk > info**

The `data.destination.splunk > info` command displays actual configuration of the Splunk destination.

**Syntax**

```
data.destination.splunk > info
```

**Example**

```
data.destination.splunk > info
Splunk indexers:
No indexers defined
Splunk index name:
Index name is xyz
Splunk mode configuration:
The output mode is disabled
Splunk default indexer port:
Default indexer port is 9997
Splunk source type:
Source type is ib:dns:captures
```

**data.destination.splunk.filters.client_ip > add**

The `data.destination.splunk.filters.client_ip > add` command allows you to add a filter to the end of the list after filtering the list by Client IP address.

**Syntax**

```
data.destination.splunk.filters.client_ip > add
ip|ip/cidr|ip4/netmask|first_ip4-last_ip4
```

**Example**

```
data.destination.splunk.filters.client_ip > add 10.36.130.1
Filter added
```

**data.destination.splunk.filters.client_ip > delete**

The `data.destination.splunk.filters.client_ip > delete` command allows you to delete a specific filter or all filters from the list of Client IP addresses. To delete a manually added filter, execute the `delete <filter>` command. When you execute the `delete all` command, all filters (including filters that are imported) are deleted after confirmation. You can only delete a manually added filter, but cannot delete a filter from the list of imported filters.

**Syntax**

```
data.destination.splunk.filters.client_ip > delete
<filter|all>
```

**Example**

```
data.destination.splunk.filters.client_ip > delete 10.36.130.1
Filter 10.36.130.1 deleted
```

*Do you want to delete all filters? y/n [y]:

```
y
Filters deleted
```

**data.destination.splunk.filters.client_ip > show**

The `data.destination.splunk.filters.client_ip > show` command displays all filters. You can either use `show` or `show filters` to view the list of imported filters and manually added filters. To view the source and timestamp of the last imported file, use the `show imported` command.

**Syntax**

```
data.destination.splunk.filters.client_ip > show
```
Example

data.destination.splunk.filters.client_ip > show
; Manually added filters
10.36.130.12
10.36.130.1
; Imported filters
1.1.1.1
1.1.1.2
1.1.1.3
1.1.1.4
1.1.1.5
1.1.1.6
1.1.1.7
1.1.1.8
1.1.1.9
1.1.1.10

data.destination.splunk.filters.client_ip > show filters

data.destination.splunk.filters.client_ip > show imported

data.destination.splunk.filters.client_ip > import

The data.destination.reporting.filters.client_ip > import command allows you to import filters from a local or a remote file. When you import a file, it overwrites all existing imported and manually entered filters after confirmation. Note that parsing and validation are invoked after the file is imported successfully. The imported file is rejected and an error message is displayed in case of any validation error.

Note the following:

- Import a single IPv4 or IPv6 address. Example: 10.10.1.0 or 2620:10a:6000:661e::523.
- Import a range of IPv4 addresses: two single IPs with a dash between them, no spaces. Example: 10.10.1.0-10.10.2.35. This format is applicable to IPv4 address format only as IPv6 uses CIDR notation.
- Import a Network/Mask, that is, a single IPv4 address followed by a slash and mask without spaces. Example: 10.10.1.0/255.255.255.0. This format is applicable to IPv4 address format only.
- Import a CIDR block, that is, a single IPv4 or IPv6 address followed by a slash and a number without spaces. Example: 10.10.0.1/15 and 2001:cdba:9abc:5678::/64

Syntax

data.destination.splunk.filters.client_ip > import <scp|ftp>://loginname@serverIP:port/path

Example

data.destination.splunk.filters.client_ip > import scp://john@10.32.1.63:/import/qaddi/DATACOLLECTOR/ Filters/client_ip_10.csv

Import will remove all previously imported and added filters. Are you sure you want to proceed? y/n [y]:

Y

Enter password:

Filters imported

data.destination.splunk.filters.client_ip > export

The data.destination.splunk.filters.client_ip > export command allows you to export filters to a remote file. Note that the manually added filters are appended to the end of exported csv file whereas imported filter files are exported along with comments and white spacing.
CLI Commands

Syntax
```
data.destination.splunk.filters.client_ip > export
<scp|ftp>://loginname@serverIP:port:path
```

Example
```
data.destination.splunk.filters.client_ip > export
scp://john@10.32.1.63:/import/qaddi/DATACOLLECTOR/Filters/client_ip_10.csv
```
Enter password:
Filters exported

```
data.destination.splunk.filters.client_ip > help
```
The `data.destination.splunk.filters.client_ip > help` command allows you to view the list of commands that can be executed at the current CLI level.

Syntax
```
data.destination.splunk.filters.client_ip > help
```

Example
```
data.destination.splunk.filters.client_ip > help
```

```
data.destination.splunk.filters.client_ip > exit
```
The `data.destination.splunk.filters.client_ip > exit` command allows you to exit from the current CLI level or logout from the top level.

Syntax
```
data.destination.splunk.filters.client_ip > exit
```

Example
```
data.destination.splunk.filters.client_ip > exit
```

```
data.destination.splunk.filters.dns_view > add
```
The `data.destination.splunk.filters.dns_view > add` command allows you to add a filter to the end of the list. Note that you can add only one filter.

Syntax
```
data.destination.splunk.filters.dns_view > add Internal|I|External|E
```

Example
```
data.destination.splunk.filters.dns_view > add I
```

```
data.destination.splunk.filters.dns_view > delete
```
The `data.destination.splunk.filters.dns_view > delete` command allows you to delete a specific filter or all filters. To delete a manually added filter, execute the `delete <filter>` command. When you execute the `delete all` command, all filters (including filters that are imported) are deleted after confirmation. You can only delete a manually added filter, but cannot delete a filter from the list of imported filters.

Syntax
```
data.destination.splunk.filters.dns_view > delete <filter|all>
```

Example
```
data.destination.splunk.filters.dns_view > delete I
Filter I deleted
```
```
data.destination.splunk.filters.dns_view > delete all
Do you want to delete all filters? y/n [y]:
y
Filters deleted
```
**data.destination.splunk.filters.dns_view › show**

The `data.destination.splunk.filters.dns_view › show` command displays the list of filters. You can either use `show` or `show filters` to view the list of imported filters and manually added filters. To view the source and timestamp of the last imported file, use the `show imported` command.

**Syntax**

```
data.destination.splunk.filters.dns_view › show
```

**Example**

```
data.destination.splunk.filters.dns_view › show
; Manually added filters
I
data.destination.splunk.filters.dns_view › show filters
; Manually added filters
I
data.destination.splunk.filters.dns_view › show imported
```

**data.destination.splunk.filters.dns_view › import**

The `data.destination.splunk.filters.dns_view › import` command allows you to import filters from a local or a remote file. When you import a file, it overwrites all existing imported and manually entered filters after confirmation. Note that parsing and validation are invoked after the file is imported successfully. The imported file is rejected and an error message is displayed in case of any validation error.

**Syntax**

```
data.destination.splunk.filters.dns_view › import
<scp|ftp>://loginname@serverIP:[port:]path
```

**Example**

```
data.destination.splunk.filters.dns_view › import
scp://john@10.32.1.63:/import/qaddi/DATACOLLECTOR/Filters/dns_view_10.csv
```

Import will remove all previously imported and added filters. Are you sure you want to proceed? y/n [y]:

```
y
```

Enter password:

Filters imported

**data.destination.splunk.filters.dns_view › export**

The `data.destination.splunk.filters.dns_view › export` command allows you to export filters to a remote file. Note that the manually added filters are appended to the end of exported .csv file whereas imported filter files are exported along with comments and white spacing.

**Syntax**

```
data.destination.splunk.filters.dns_view › export
<scp|ftp>://loginname@serverIP:[port:]path
```

**Example**

```
data.destination.splunk.filters.dns_view › export
scp://john@10.32.1.63:/import/qaddi/DATACOLLECTOR/Filters/dns_view_10.csv
```

Enter password:

Filters exported
**data.destination.splunk.filters.dns_view › help**

The `data.destination.splunk.filters.dns_view › help` command allows you to view the list of commands that can be executed at the current CLI level.

**Syntax**
```
data.destination.splunk.filters.dns_view › help
```

**Example**
```
data.destination.splunk.filters.dns_view › help
```

**data.destination.splunk.filters.dns_view › exit**

The `data.destination.splunk.filters.dns_view › exit` command allows you to exit from the current CLI level or logout from the top level.

**Syntax**
```
data.destination.splunk.filters.dns_view › exit
```

**Example**
```
data.destination.splunk.filters.dns_view › exit
```

**data.destination.splunk.filters.member › add**

The `data.destination.splunk.filters.member › add` command allows you to add a filter to the end of the list.

**Syntax**
```
data.destination.splunk.filters.member › add member_regular_expression
```

**Example**
```
data.destination.splunk.filters.member › add 10.36.130.1
Filter added
```

**data.destination.splunk.filters.member › delete**

The `data.destination.splunk.filters.member › delete` command allows you to delete a specific filter or all filters. To delete a manually added filter, execute the `delete <filter>` command. When you execute the `delete all` command, all filters (including filters that are imported) are deleted after confirmation. The delete operation does not affect imported filters. You can only delete a manually added filter, but cannot delete a filter from the list of imported filters.

**Syntax**
```
data.destination.splunk.filters.member › delete <filter|all>
```

**Example**
```
data.destination.splunk.filters.member › delete 10.36.130.1
Filter 10.36.130.1 deleted
```

```
data.destination.splunk.filters.member › delete all
```

```
Do you want to delete all filters? y/n [y]:
```

```
y
```

```
Filters deleted
```

**data.destination.splunk.filters.member › show**

The `data.destination.splunk.filters.member › show` command displays the list of existing filters. You can either use `show` or `show filters` to view the list of imported filters and manually added filters. To view the source and timestamp of the last imported file, use the `show imported` command.

**Syntax**
```
data.destination.splunk.filters.member › show
```

```
```
Example

data.destination.splunk.filters.member > show
; Manually added filters
10.36.130.1
data.destination.splunk.filters.member > show filters
; Manually added filters
10.36.130.1
data.destination.splunk.filters.member > show imported

data.destination.splunk.filters.member > import

The `data.destination.splunk.filters.member > import` command allows you to import filters from a local or a remote file. When you import a file, it overwrites all existing imported and manually entered filters after confirmation. Note that parsing and validation are invoked after the file is imported successfully. The imported file is rejected and an error message is displayed in case of any validation error.

Syntax

data.destination.splunk.filters.member > import <scp|ftp://loginname@serverIP:[port:]path

Example

data.destination.splunk.filters.member > import scp://john@10.32.1.63:/import/qaddi/DATACOLLECTOR/Filters/member_10.csv
Import will remove all previously imported and added filters. Are you sure you want to proceed? y/n [y]:
y
Enter password:
Filters imported

data.destination.splunk.filters.member > export

The `data.destination.splunk.filters.member > export` command allows you to export filters to a remote file. Note that the manually added filters are appended to the end of exported .csv file whereas imported filter files are exported along with comments and white spacing.

Syntax

data.destination.splunk.filters.member > export <scp|ftp://loginname@serverIP:[port:]path

Example

data.destination.splunk.filters.member > export scp://john@10.32.1.63:/import/qaddi/DATACOLLECTOR/Filters/member_10.csv
Enter password:
Filters exported

data.destination.splunk.filters.member > help

The `data.destination.splunk.filters.member > help` command allows you to view the list of commands that can be executed at the current CLI level.

Syntax

data.destination.splunk.filters.member > help

Example

data.destination.splunk.filters.member > help
data.destination.splunk.filters.member > exit

The `data.destination.splunk.filters.member > exit` command allows you to exit from the current CLI level or logout from the top level.

Syntax
```
data.destination.splunk.filters.member > exit
```

Example
```
data.destination.splunk.filters.member > exit
```

data.destination.splunk.filters.query > add

The `data.destination.splunk.filters.query > add` command allows you to add a filter to the end of the list.

Syntax
```
data.destination.splunk.filters.query > add fqdn_with_wildcards
```

— Note the following about wildcards:
— * - zero or more domain name labels; can be on the left side only
— # - one or more domain name labels; can be on the left side only
— ? - exactly one domain name label; can be on the right or left side

Example
```
data.destination.splunk.filters.query > add 10.36.130.1
Filter added
```
```
data.destination.splunk.filters.query > add abc.com
Filter added
```

data.destination.splunk.filters.query > delete

The `data.destination.splunk.filters.query > delete` command allows you to delete a specific filter or all filters. To delete a manually added filter, execute the `delete <filter>` command. When you execute the `delete all` command, all filters (including filters that are imported) are deleted after confirmation. The delete operation does not affect imported filters. You can only delete a manually added filter, but cannot delete a filter from the list of imported filters.

Syntax
```
data.destination.splunk.filters.query > delete <filter|all>
```

Example
```
data.destination.splunk.filters.query > delete 10.36.130.1
Filter 10.36.130.1 deleted
```
```
data.destination.splunk.filters.query > delete all
Do you want to delete all filters? y/n [y]:
```
```
y
Filters deleted
```

data.destination.splunk.filters.query > show

The `data.destination.splunk.filters.query > show` command displays the list of existing filters. You can either use `show` or `show filters` to view the list of imported filters and manually added filters. To view the source and timestamp of the last imported file, use the `show imported` command.

Syntax
```
data.destination.splunk.filters.query > show
```
**Example**

data.destination.splunk.filters.query > show

; Manually added filters
xyz.com
abc.com
10.36.130.12
10.36.130.1

data.destination.splunk.filters.query > show filters

; Manually added filters
xyz.com
abc.com
10.36.130.12
10.36.130.1

data.destination.splunk.filters.query > show imported

data.destination.splunk.filters.query > import

The data.destination.splunk.filters.query > import command allows you to import filters from a local or a remote file. When you import a file, it overwrites all existing imported and manually entered filters after confirmation. Note that parsing and validation are invoked after the file is imported successfully. The imported file is rejected and an error message is displayed in case of any validation error.

**Syntax**

data.destination.splunk.filters.query > import
<scp|ftp>://loginname@serverIP:[port:]path

**Example**

data.destination.splunk.filters.query > import
scp://john@10.32.1.63:/import/qaddi/DATACollector/Filters/query_10.csv

Import will remove all previously imported and added filters. Are you sure you want to proceed? y/n [y]:

y

Enter password:

Filters imported

data.destination.splunk.filters.query > export

The data.destination.splunk.filters.query > export command allows you to export filters to a remote file. Note that the manually added filters are appended to the end of exported .csv file whereas imported filter files are exported along with comments and white spacing.

**Syntax**

data.destination.splunk.filters.query > export
<scp|ftp>://loginname@serverIP:[port:]path

**Example**

data.destination.splunk.filters.query > export
scp://john@10.32.1.63:/import/qaddi/DATACollector/Filters/query_10.csv

Enter password:

Filters exported

data.destination.splunk.filters.query > help

The data.destination.splunk.filters.query > help command allows you to view the list of commands that can be executed at the current CLI level.

**Syntax**

data.destination.splunk.filters.query > help
CLI Commands

Example

```
data.destination.splunk.filters.query > help
```

**data.destination.splunk.filters.query > exit**

The `data.destination.splunk.filters.query > exit` command allows you to exit from the current CLI level or logout from the top level.

**Syntax**

```
data.destination.splunk.filters.query > exit
```

**Example**

```
data.destination.splunk.filters.query > exit
```

**exit**

The `exit` command terminates the command line interface and halts the CLI session.

**Syntax**

```
> exit
```

**Examples**

```
admin.network > exit
admin > exit
```

**help**

The `help` command displays information about a specified CLI command. If you do not specify a command, a list of all available commands is shown.

**Syntax**

```
> help
```

**Examples**

```
> help
Available commands:
===================
add     data     exit     help     info    request   show    wizard
admin   delete   export   import   print   set       stats
> help admin
admin: DC management configuration
Supported arguments:
    network: Admin network configuration
    support: Admin support configuration
    system: System Configuration for Data Collector
admin > help
Available commands:
===================
add     exit     info     set     stats    system
delete   help     network   show    support   wizard
admin > network
admin.network > help
Available commands:
===================
add     dns     exit     hostname     ip4     resolve     set     stats    system
delete   domain   help     info     ping     route     show
```
info

The info command displays information about the Data Connector VM.

Syntax

> info

Example

> info

DNS configuration:
   Actual DNS Setting:
   Dns Server(s): 10.0.2.20 10.0.2.35 10.0.2.60
   Configured DNS Setting (DNS servers obtained by DHCP have higher precedence):
   There is no DNS server

Domain configuration:
   domain: None

Hostname configuration:
   hostname: None

IPv4 configuration:
   Actual System Settings:
   gateway: 10.36.0.1
   mask: 255.255.0.0
   mode: dynamic
   address: 10.36.130.1
   vlanid: 0
   Configured System Setting:
   gateway: None
   mask: None
   mode: dynamic
   address: None
   vlanid: 0
   Vlan configuration is only in effect in the static mode.

Static routes configuration:
   There is no static route configured

Greeting banner:
   This is Infoblox Data Connection Virtual Machine
   UUID value:
   564DDD78-06A3-84FD-8EFC-36F30E9E39FD
   Current version:
   Name: DataCollector
   Version: 2.0.0-348708
   Output cloud mode configuration:
   The output mode is hold
   agent_id configuration:
   agent_id: None
   api_key configuration:
   api_key: None
CLI Commands

Cloud url configuration:
url: None
RetentionPolicy in hours:
4 hours
Default value for the dns_view tag:
Internal
Grid ext_attribute name for the dns_view tag:
dns_role
Reporting mode configuration:
The output mode is hold
Reporting mode registration:
Grid Master address: 10.35.5.49
Grid admin username: admin
Grid admin password: ********
Grid access is: Verified
Grid state refresh interval: 1 hour
Grid registration time: Fri Mar 24 04:39:02 2017
Grid registration uuid: 564DDD7806A384FD8EFC36F30E9E39FD
DC address registered: 10.36.130.1
Cached Grid member timezones:
   infoblox.localdomain: (UTC) Coordinated Universal Time, None
   reporting-1.com: (UTC) Coordinated Universal Time, None
   member.com: (UTC) Coordinated Universal Time, None
Cached Grid views:
   0: default, None
   1: default.MS-2016, None
   2: default.MS-2012, None
   3: default.MS-2008, None
Reporting indexers:
   10.35.2.59:9997
Splunk indexers:
Indexers:
   10.10.1.2
Splunk index name:
Index name is xyz
Splunk mode configuration:
The output mode is disabled
Splunk default indexer port:
Default indexer port is 9997
Splunk source type:
Source type is ib:dns:captures
IP address or DNS name for the NIOS Grid:
10.35.5.49
Grid IPAM information API address:
API address: grid
Grid IPAM information poll period:
poll period: 6 minutes
Grid IPAM information query types:
userinfo: enabled
ipam: disabled
lease: disabled
NIOS Grid admin user name:
admin
SCP users configuration:
Registered user(s):
  admin1
  user123
Data source syslog certificate CN:
cn: None
Data source syslog mode:
mode: disabled
Data source syslog port:
port: 514
Data source syslog secure port:
secure port: 6514

stats
The stats command displays the system statistics.

Syntax
  > stats

Example
  > stats
  CPU stats:
  CPU Load, % : 15.9
  Disk stats:
  Block read, kbps : 0.0
  Block write, kbps : 19.6
  Disk space usage:
    / : 2.0%
    /boot : 15.9%
    /infoblox/data : 0.0%
  Memory stats:
  Memory usage, % : 19.9
  Network stats:
  Network receive, kbps : 45.5
  Network send, kbps : 0.0
  Network interfaces statistics
    Name    RX   RX Drop  RX Error    TX   TX Drop  TX Error
    eth0    2307067   0    0    488359   0    0
  Cloud output stats:
  # of files  Size in kb  # of files  Size in kb  Oldest
wizard

The `wizard` command enables you to configure the Data Connector VM.

Syntax

```
> wizard
```

Example

```
> wizard
Do you want to configure admin network settings y/n [y]:
y
Please use: '?' for help on available command options.
Please enter IPv4 configuration in format: 'mode [gateway address mask vlanid]'
Current settings are [ static 10.36.0.1 10.36.130.1 255.255.0.0 0 ]:
static 10.36.0.1 10.36.130.1 255.255.0.0 0
ok
Please enter dns configuration[ 10.0.0.0 ]:
10.0.0.0
DNS servers obtained by DHCP (if any) have higher precedence
ok
Please enter domain configuration[ dc-xyz.com ]:
dc-xyz.com
ok
Please enter hostname configuration[ dc-xyz ]:
dc-xyz
ok
Configured System Setting:
gateway: 10.36.0.1
mask: 255.255.0.0
mode: static
address: 10.36.130.1
vlanid: 0
vlan configuration is only in effect in the static mode.
Configured DNS Setting:
```
Dns Server(s): ['10.0.0.0']
domain: dc-xyz.com
hostname: dc-xyz
Is it correct? y/n [y]:
y
Do you want to configure data output cloud registration settings y/n [y]:
y
Please use: '?' for help on available command options.

Please enter cloud url[ https://usa-va.csp.infoblox.com/dnslog ]:
Settings unchanged.
Please enter api_key[ 1234 ]:
Settings unchanged.
Please enter agent_id[ 8 ]:
Settings unchanged.
url: https://usa-va.csp.infoblox.com/dnslog
api_key: 1234
agent_id: 8
Is it correct? y/n [y]:
y
Do you want to configure data output cloud settings y/n [y]:
y
Please use: '?' for help on available command options.
Please enter Output cloud mode configuration[ hold ]:
hold
ok
The output mode is hold
Is it correct? y/n [y]:
y
Do you want to configure data output splunk settings y/n [y]:
y
Please use: '?' for help on available command options.
Please enter splunk indexers[ 10.10.1.2 ]:
10.10.1.3
ok
Do you want to add more values? y/n [n]:
n
Please enter splunk index name[ xyz ]:
xyz
ok
Please enter splunk source type[ ib:dns:captures ]:
Settings unchanged.
Please enter splunk default indexer port[ 9997 ]:
Settings unchanged.
Please enter splunk mode[ disabled ]:
hold
Indexers:
  10.10.1.2
  10.10.1.3
Index name is xyz
Source type is ib:dns:captures
Default indexer port is 9997
The output mode is hold
Is it correct? y/n [y]:
y
Do you want to configure admin system settings y/n [y]:
y
Please use: '?' for help on available command options.
Please enter Greeting banner text[ This is Infoblox Data Connection Virtual Machine ]:
This is Infoblox Data Connector VM.
y
This is Infoblox Data Connector VM.
Is it correct? y/n [y]:
y
Do you want to configure data input scp settings y/n [y]:
y
Please use: '?' for help on available command options.
Please enter SCP users[ dc_scp_user ]:
dc_scp_user
Enter password for user dc_scp_user:
Enter again:
y
Do you want to add more values? y/n [n]:
n
Registered user(s):
  admin
  user123
  dc_scp_user
Is it correct? y/n [y]:
y
Do you want to configure data input grid settings y/n [y]:
y
Please use: '?' for help on available command options.
Enter the IP address (or FQDN) of the NIOS Grid Master[ 10.35.5.49 ]:
Settings unchanged.
Enter the NIOS admin username[ admin ]:
Settings unchanged.
10.35.5.49
admin
Is it correct? y/n [y]:
y
Do you want to configure data output reporting settings y/n [y]:
y
Please use: '?' for help on available command options.
Please enter reporting mode[ hold ]:
Settings unchanged.
The output mode is hold
Is it correct? y/n [y]:
y
Setup wizard finished successfully
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VersioN 3, 29 June 2007

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