



# **Configuring Acquisition Units**

## **Cloud Insights**

Tony Lavoie  
August 26, 2021

This PDF was generated from [https://docs.netapp.com/us-en/cloudinsights/task\\_configure\\_acquisition\\_unit.html](https://docs.netapp.com/us-en/cloudinsights/task_configure_acquisition_unit.html) on October 26, 2021. Always check docs.netapp.com for the latest.

# Table of Contents

- Configuring Acquisition Units ..... 1
  - Adding a Linux Acquisition Unit ..... 1
  - Adding a Windows Acquisition Unit ..... 3
  - Uninstalling an Acquisition Unit ..... 5
  - Reinstalling an Acquisition Unit ..... 5
  - Viewing AU Details ..... 6

# Configuring Acquisition Units

Cloud Insights collects device data using one or more Acquisition Units installed on local servers. Each Acquisition Unit can host multiple Data Collectors, which send device metrics to Cloud Insights for analysis.

This topic describes how to add Acquisition Units and describes additional steps required when your environment uses a proxy.



For accurate audit and data reporting, it is strongly recommended to synchronize the time on the Acquisition Unit machine using **Network Time Protocol (NTP)** or **Simple Network Time Protocol (SNTP)**.

## Adding a Linux Acquisition Unit

### Before you begin

- If your system is using a proxy, you must set the proxy environment variables before the acquisition unit is installed. For more information, see [Setting proxy environment variables](#).

### Steps for Linux Acquisition Unit Installation

1. Log in as Administrator or Account Owner to your Cloud Insights environment.
2. Click **Admin > Data Collectors > Acquisition Units > +Acquisition Unit**

The system displays the *Install Acquisition Unit* dialog. Choose Linux.

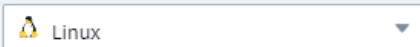


ONTAP Data  
Management  
Software

### Install Acquisition Unit

Cloud Insights collects device data via one or more Acquisition Units installed on local servers. Each Acquisition Unit can host multiple Data Collectors, which send device metrics to Cloud Insights for analysis.

#### What Operating System or Platform Are You Using?



[Linux Versions Supported](#) ⓘ [Production Best Practices](#) ⓘ

#### Installation Instructions

[Need Help?](#)

##### 1 [Copy Installer Snippet](#)

*This snippet has a unique key valid for 24 hours for this Acquisition Unit only.*

[+ Reveal Installer Snippet](#)

##### 2 Paste the snippet into a bash shell to run the installer.

##### 3 Waiting for Acquisition Unit to connect...

1. Verify that the server or VM hosting the Acquisition Unit meets the recommended system requirements.
2. Verify that the server is running a supported version of Linux. Click *OS Versions Supported (i)* for a list of supported versions.

3. Copy the Installation command snippet in the dialog into a terminal window on the server or VM that will host the Acquisition unit.
4. Paste and execute the command in the Bash shell.

#### After you finish

- Click **Admin > Data Collectors > Acquisition units** to check the status of Acquisition Units.
- You can access the Acquisition Unit logs at `/var/log/netapp/cloudinsights/acq/acq.log`
- Use the following script to control the Acquisition Unit:
  - `cloudinsights-service.sh` (stop, start, restart, check the status)
- Use the following script to uninstall the Acquisition Unit:
  - `cloudinsights-uninstall.sh`

## Setting proxy environment variables

For environments that use a proxy, you must set the proxy environment variables before you add the Acquisition Unit. The instructions for configuring the proxy are provided on the *Add Acquisition Unit* dialog.

1. Click + in *Have a Proxy Server?*
2. Copy the commands to a text editor and set your proxy variables as needed.

Note: Be aware of restrictions on special characters in proxy username and password fields: '%' and '!' are allowed in the username field. ':', '%', and '!' are allowed in the password field.

3. Run the edited command in a terminal using the Bash shell.
4. Install the Acquisition Unit software.

## Proxy Configuration

The Acquisition Unit uses 2-way/mutual authentication to connect to the Cloud Insights server. The client certificate must be passed to the Cloud Insights server to be authenticated. To accomplish this, the proxy must be set up to forward the https request to the Cloud Insights server without decrypting the data.

The simplest way to do this is to specify wildcard configuration in your proxy/firewall to communicate with Cloud Insights, for example:

```
*.cloudinsights.netapp.com
```



The use of an asterisk (\*) for wildcard is common, but your proxy/firewall configuration may use a different format. Check with your proxy documentation to ensure correct wildcard specification in your environment.

## Viewing Proxy URLs

You can view your proxy endpoint URLs by clicking the **Proxy Settings** link when choosing a data collector during onboarding, or the link under *Proxy Settings* on the **Help > Support** page. A table like the following is displayed.

**i** If your organization requires proxy usage for internet access, you need to understand your organization's proxy behavior and seek certain exceptions for Cloud Insights to work. The simplest way is to add the following domains to the exception list:

Hostname	Port	Protocol	Methods	Endpoint URL Purpose
qtrjkso.proxyserver.cloudinsights-dev.netapp.com	443	https	GET, POST, PATCH, PUT, DELETE	Tenant
00b1100.1234.abcd.12bc.a1b2c3ef56a7.proxyserver.cloudinsights-dev.netapp.com	443	https	GET, POST, PATCH, PUT, DELETE	Acquisition Unit Ingestion
aulogin.proxyserver.cloudinsights-dev.netapp.com	443	https	GET, POST, PATCH, PUT, DELETE	Acquisition Unit Authentication
portal.proxy.cloud.netapp.com	443	https	GET, POST, PATCH, PUT, DELETE	Gateway

Close

## Adding a Windows Acquisition Unit

### Steps for Windows Acquisition Unit Installation


1. Log in to the Acquisition Unit server/VM as a user with Administrator permissions.
2. On that server, open a browser window and log in to your Cloud Insights environment as Administrator or Account Owner.
3. Click **Admin > Data Collectors > Acquisition Units > +Acquisition Unit**.

The system displays the *Install Acquisition Unit* dialog. Choose Windows.

### Install Acquisition Unit

Cloud Insights collects device data via one or more Acquisition Units installed on local servers. Each Acquisition Unit can host multiple Data Collectors, which send device metrics to Cloud Insights for analysis.

#### What Operating System or Platform Are You Using?

 Windows ▼

Windows Versions Supported **i**

Production Best Practices **i**

#### Installation Instructions

[Need Help?](#)

**1** [Download Installer \(Windows 64-bit\)](#)

**2** [Copy Access Key](#)

*This access key is a unique key valid for 24 hours for this Acquisition Unit only.*

[+ Reveal Access Key](#)

**3** Paste access key into installer when prompted.

**4** Please ensure you have copied and pasted the access key into the installer.

[+ Have a Proxy Server?](#)

1. Verify that the server or VM hosting the Acquisition Unit meets the recommended system requirements.
2. Verify that the server is running a supported version of Windows. Click *OS Versions Supported (i)* for a list of supported versions.

3. Click the **Download Installer (Windows 64-bit)** button.
4. Copy the Access Key. You will need this during the Installation.
5. On the Acquisition Unit server/VM, execute the downloaded installer.
6. Paste the Access Key into the installation wizard when prompted.
7. During installation, you will be presented with the opportunity to provide your proxy server settings.

#### After you finish

- Click **Admin > Data Collectors > Acquisition units** to check the status of Acquisition Units.
- You can access the Acquisition Unit log in <install dir>\Cloud Insights\Acquisition Unit\log\acq.log
- Use the following script to stop, start, restart, or check the status of the Acquisition Unit:

```
cloudinsights-service.sh
```

## Proxy Configuration

The Acquisition Unit uses 2-way/mutual authentication to connect to the Cloud Insights server. The client certificate must be passed to the Cloud Insights server to be authenticated. To accomplish this, the proxy must be set up to forward the https request to the Cloud Insights server without decrypting the data.

The simplest way to do this is to specify wildcard configuration in your proxy/firewall to communicate with Cloud Insights, for example:

```
*.cloudinsights.netapp.com
```



The use of an asterisk (\*) for wildcard is common, but your proxy/firewall configuration may use a different format. Check with your proxy documentation to ensure correct wildcard specification in your environment.

## Viewing Proxy URLs

You can view your proxy endpoint URLs by clicking the **Proxy Settings** link when choosing a data collector during onboarding, or the link under *Proxy Settings* on the **Help > Support** page. A table like the following is displayed.

#### Proxy Settings



**i** If your organization requires proxy usage for internet access, you need to understand your organization's proxy behavior and seek certain exceptions for Cloud Insights to work. The simplest way is to add the following domains to the exception list:

Hostname	Port	Protocol	Methods	Endpoint URL Purpose
qtrjkso.proxyserver.cloudinsights-dev.netapp.com	443	https	GET, POST, PATCH, PUT, DELETE	Tenant
00b1100.1234.abcd.12bc.a1b2c3ef56a7.proxyserver.cloudinsights-dev.netapp.com	443	https	GET, POST, PATCH, PUT, DELETE	Acquisition Unit Ingestion
aulogin.proxyserver.cloudinsights-dev.netapp.com	443	https	GET, POST, PATCH, PUT, DELETE	Acquisition Unit Authentication
portal.proxy.cloud.netapp.com	443	https	GET, POST, PATCH, PUT, DELETE	Gateway

Close

# Uninstalling an Acquisition Unit

To uninstall the Acquisition Unit software, do the following:

## Windows:

1. On the Acquisition Unit server/VM, open Control Panel and choose **Uninstall a Program**. Select the Cloud Insights Acquisition Unit program for removal.
2. Click Uninstall and follow the prompts.

## Linux:

1. On the Acquisition Unit server/VM, run the following command:

```
sudo cloudinsights-uninstall.sh -p
```

2. For help with uninstall, run:

```
sudo cloudinsights-uninstall.sh --help
```

## Both:

1. After uninstalling the AU software, go to **Admin > Data Collectors** and select the **Acquisition Units** tab.
2. Click the Options button to the right of the Acquisition Unit you wish to uninstall, and select *Delete*. You can delete an Acquisition Unit only if there are no data collectors assigned to it.

NOTE: You cannot delete the default Acquisition Unit. Select another AU as the default before deleting the old one.

# Reinstalling an Acquisition Unit

To re-install an Acquisition Unit on the same server/VM, you must follow these steps:

## Before you begin

You must have a temporary Acquisition Unit configured on a separate server/VM before re-installing an Acquisition Unit.

## Steps

1. Log in to the Acquisition Unit server/VM and uninstall the AU software.
2. Log into your Cloud Insights environment and go to **Admin > Data Collectors**.
3. For each data collector, click the Options menu on the right and select *Edit*. Assign the data collector to the temporary Acquisition Unit and click **Save**.

You can also select multiple data collectors of the same type and click the **Bulk Actions** button. Choose *Edit* and assign the data collectors to the temporary Acquisition Unit.

4. After all of the data collectors have been moved to the temporary Acquisition Unit, go to **Admin > Data Collectors** and select the **Acquisition Units** tab.

5. Click the Options button to the right of the Acquisition Unit you wish to re-install, and select *Delete*. You can delete an Acquisition Unit only if there are no data collectors assigned to it.
6. You can now re-install the Acquisition Unit software on the original server/VM. Click **+Acquisition Unit** and follow the instructions above to install the Acquisition Unit.
7. Once the Acquisition Unit has been re-installed, assign your data collectors back to the Acquisition Unit.

## Viewing AU Details

The Acquisition Unit (AU) detail page provides useful detail for an AU as well as information to help with troubleshooting. The AU detail page contains the following sections:

- A **summary** section showing the following:
  - **Name** and **IP** of the Acquisition Unit
  - Current connection **Status** of the AU
  - **Last Reported** successful data collector poll time
  - The **Operating System** of the AU machine
  - Any current **Note** for the AU. Use this field to enter a comment for the AU. The field displays the most recently added note.
- A table of the AU's **Data Collectors** showing, for each data collector:
  - **Name** - Click this link to drill down into the data collector's detail page with additional information
  - **Status** - Success or error information
  - **Type** - Vendor/model
  - **IP** address of the data collector
  - Current **Impact** level
  - **Last Acquired** time - when the data collector was last successfully polled

### Acquisition Unit Summary

<b>Name</b> xp-linux <b>IP</b> 10.197.120.145	<b>Connection Status</b> OK - <a href="#">Need Help?</a> <b>Last Reported</b> 2 minutes ago	<b>Operating System</b> Linux	<b>Note</b> <div></div>
--	--	----------------------------------	----------------------------

### Data Collectors (3)

[+ Data Collector](#)
[Bulk Actions](#)

<input type="checkbox"/>	Name ↑	Status	Type	IP	Impact	Last Acquired	
<input type="checkbox"/>	<a href="#">foo</a>	<span>Inventory failed</span>	NetApp Data ONTAP 7-Mode	foo	Low	Never	⋮
	<a href="#">xp-cisco</a>	All successful	Cisco MDS Fabric Switches	10.197.136.66		2 minutes ago	⋮
<input type="checkbox"/>	<a href="#">xpcdot26</a>	All successful	NetApp ONTAP Data Management Software	10.197.136.26		8 minutes ago	⋮

For each data collector, you can click on the "three dots" menu to Clone, Edit, Poll, or Delete the data collector. You can also select multiple data collectors in this list to perform bulk actions on them.

To restart the Acquisition Unit, click the **Restart** button at the top of the page. Drop down this button to attempt to **Restore Connection** to the AU in the event of a connection problem.



## Copyright Information

Copyright © 2021 NetApp, Inc. All rights reserved. Printed in the U.S. No part of this document covered by copyright may be reproduced in any form or by any means-graphic, electronic, or mechanical, including photocopying, recording, taping, or storage in an electronic retrieval system-without prior written permission of the copyright owner.

Software derived from copyrighted NetApp material is subject to the following license and disclaimer:

THIS SOFTWARE IS PROVIDED BY NETAPP "AS IS" AND WITHOUT ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, WHICH ARE HEREBY DISCLAIMED. IN NO EVENT SHALL NETAPP BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

NetApp reserves the right to change any products described herein at any time, and without notice. NetApp assumes no responsibility or liability arising from the use of products described herein, except as expressly agreed to in writing by NetApp. The use or purchase of this product does not convey a license under any patent rights, trademark rights, or any other intellectual property rights of NetApp.

The product described in this manual may be protected by one or more U.S. patents, foreign patents, or pending applications.

RESTRICTED RIGHTS LEGEND: Use, duplication, or disclosure by the government is subject to restrictions as set forth in subparagraph (c)(1)(ii) of the Rights in Technical Data and Computer Software clause at DFARS 252.277-7103 (October 1988) and FAR 52-227-19 (June 1987).

## Trademark Information

NETAPP, the NETAPP logo, and the marks listed at <http://www.netapp.com/TM> are trademarks of NetApp, Inc. Other company and product names may be trademarks of their respective owners.