



# Readme for DFM 3.1.2 Service Pack with SNMPv3 Support on Windows

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This Readme is for CiscoWorks Device Fault Manager (DFM) 3.1.2 Service Pack with SNMPv3 AuthPriv and NoAuthNoPriv Support on Windows.

SNMPv3 AuthNoPriv is already supported in the earlier release of DFM.

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# Description

CiscoWorks Device Fault Manager 3.1.2 is a Service Pack.

In this release, DFM provides support for two new types of SNMPv3 modes:

- Importing Devices with SNMPv3 NoAuthNoPriv credentials
- Importing Devices with SNMPv3 AuthPriv credentials

AuthNoPriv is already supported in the earlier release of DFM.

This release also contains solutions for defects that existed in earlier releases.

DFM 3.1.2 can be installed on DFM 3.1 (LMS 3.1) and DFM 3.1.1.

DFM 3.1.2 supports 5000 SNMPv3 devices on a Standalone server.

- The recommended server hardware requirements are 4 CPUs with 8 GB RAM memory.

If the hardware configuration of the server is 2 CPUs with 4 GB RAM memory, you can either:

- Configure DFM to manage upto 1500 SNMPv3 devices alone.

Or

- Configure DFM to manage 1000 SNMPv3 devices and 4000 SNMPv2 devices.

## Related Documentation



### Note

We sometimes update the printed and electronic documentation after original publication. Therefore, you should also review the documentation on Cisco.com for any updates.

[Table 1](#) describes the related documentation that is available for DFM 3.1.2.

**Table 1**      **Related Documentation**

Document Title	Available Formats
<i>User Guide for CiscoWorks Device Fault Manager 3.1</i>	<ul style="list-style-type: none"> <li>• On Cisco.com at <a href="http://www.cisco.com/en/US/products/sw/cscowork/ps2421/products_user_guide_list.html">http://www.cisco.com/en/US/products/sw/cscowork/ps2421/products_user_guide_list.html</a></li> <li>• As context-sensitive Online help.</li> </ul>
<i>Release Notes for CiscoWorks Device Fault Manager 3.1</i>	<ul style="list-style-type: none"> <li>• On Cisco.com at <a href="http://www.cisco.com/en/US/products/sw/cscowork/ps2421/prod_release_notes_list.html">http://www.cisco.com/en/US/products/sw/cscowork/ps2421/prod_release_notes_list.html</a></li> </ul>
<i>User Guide for CiscoWorks Common Services 3.2</i>	<ul style="list-style-type: none"> <li>• On Cisco.com at <a href="http://www.cisco.com/en/US/products/sw/cscowork/ps3996/products_user_guide_list.html">http://www.cisco.com/en/US/products/sw/cscowork/ps3996/products_user_guide_list.html</a></li> <li>• As context-sensitive Online help</li> </ul>
<i>Installing and Getting Started With CiscoWorks LAN Management Solution 3.1</i>	<ul style="list-style-type: none"> <li>• On Cisco.com at <a href="http://www.cisco.com/en/US/products/sw/cscowork/ps2425/prod_installation_guides_list.html">http://www.cisco.com/en/US/products/sw/cscowork/ps2425/prod_installation_guides_list.html</a></li> </ul>

**Note**

You should print out and read this document before installing DFM 3.1.2.

## Hardware and Software Requirements

To use CiscoWorks Device Fault Manager (DFM) 3.1.2 Service Pack, you should have installed DFM 3.1 (LMS 3.1) or DFM 3.1.1.

The hardware and software requirements are the same as the requirements for CiscoWorks LAN Management Solution (LMS) 3.1.

For information on the available documents, see the [Related Documentation, page 2](#).Hii

## Downloading DFM 3.1.2

You can download CiscoWorks Device Fault Manager 3.1.2 from Cisco.com.

DFM 3.1.2 files are downloaded in a compressed form. To prevent overwriting of files in existing directories and to ensure that adequate disk space is available, download the files to a temporary working area of your server, and then uncompress the files.

**Note**

You can also use the Common Services Device Update function to download DFM 3.1.2. For more information, from the Common Services Home Page, select **Software Center > Software Update** and click **Help**.

To download CiscoWorks Device Fault Manager 3.1.2:

- Step 1** Make sure you have adequate free space.
- Step 2** Go to the DFM download page at <http://www.cisco.com/cgi-bin/tablebuild.pl/cw2000-dfm> and click the link to `cwdfm3_1_2_win.zip`.
- Step 3** Follow the instructions to download the zip file to a temporary working area of your server.
- Step 4** Unzip all files into the temporary working area.

# Installing DFM 3.1.2

**Caution**

You cannot remove the DFM 3.1.2 patch after installing it. To return to your original configuration, you must uninstall and reinstall DFM. Therefore, you should save your configuration before installing DFM 3.1.2 as described in [Step 1](#).

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- Step 1** Make sure that you have a backup of your configuration, in case you need to revert back to it. (DFM 3.1.2 patch cannot be uninstalled.)
- Step 2** Verify that DFM 3.1 (LMS 3.1) or DFM 3.1.1 is installed:
- From the Common Services Home Page, select **Software Center > Software Update**.
  - In the Products Installed table, verify that the Device Fault Manager row lists the required version.
- Step 3** Move to the directory in which the unzipped DFM files reside, and run the installation script by double-clicking `cd3fm3_1_2_win.exe`.
- Step 4** Follow the prompts in the installation script.
- The options displayed by the installation script depend on your configuration.
- Step 5** When the installation has completed, click **Finish** to exit the installer.
- Step 6** Verify the installation:
- From the Common Services Home Page, select **Software Center > Software Update**.
  - In the Products Installed table, click **Device Fault Manager**.
  - In the Patches Installed table, verify that the version corresponding to Device Fault Manager is 3.1.2.
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## Configuring SNMPv3

After installing the Service Pack, do the following to manage a device with SNMPv3 credentials:

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- Step 1** Add the device with SNMPv3 credentials to DCR.
- Step 2** Import the device into DFM using the Device Management page.
- The device will be discovered and moved to the Known state.
- If the device is moved to the Unknown state, check whether the imported device is configured with auth and priv algorithms that are supported by DFM. If not, you have to import devices with the DFM-supported auth and priv algorithms.
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The following are the ways in which DFM reacts when a device is imported into DCR with SNMPv3 Credentials:

- **SNMPv3AuthPriv**  
When a device with SNMPv3AuthPriv username, password, Auth algorithm, Privacy password, and Privacy algorithm is imported into DFM from DCR, DFM discovers the device successfully and the device is grouped under All Known Devices in Inventory Group.
- **SNMPv3NoAuthNoPriv**  
When a device with SNMPv3 username is imported into DFM from DCR, DFM discovers the device successfully and the device is grouped under All Known Devices in Inventory Group.
- **SNMPv3AuthNoPriv**  
When a device, with SNMPv3 username, password, and Auth algorithm is imported into DFM from DCR, DFM discovers the device successfully and the device is grouped under All Known Devices in Inventory Group.

The details of the algorithms supported in DFM 3.1.2 are:

- **AuthNoPriv Mode** — Supported Auth Algorithm: MD5 and SHA
- **AuthPriv Mode**
  - Supported Auth Algorithm: MD5 and SHA
  - Supported Privacy Algorithm: DES and AES128
  - Unsupported Privacy Algorithm: 3DES, AES192, and AES256

## Configuring AuthPriv, AuthNoPriv, and NoAuthNoPriv Modes on the Device

SNMPv3 AuthPriv, AuthNoPriv, and NoAuthNoPriv modes can be configured only on the Device and not in the application.

The following are the methods to configure AuthPriv, AuthNoPriv, and NoAuthNoPriv modes.

### AuthPriv

To configure AuthPriv mode enter:

```
snmp-server group group_Name v3 priv read Read_View_Name write Write_View_Name
snmp-server user User_Name Group_Name v3 auth Auth_Algr Auth_Passwd priv Priv_Algr
Priv_Passwd
snmp-server view Read_View_Name OID_Hierachy included
snmp-server view Write_View_Name OID_Hierachy included
```

For example,

```
snmp-server group authprivgroup V3 priv read view1 write view2
snmp-server user authprivuser authprivgroup V3 auth MD5 authpwd priv DES privpwd
snmp-server view view1 dod included
snmp-server view view2 dod included
```

**AuthNoPriv**

To configure AuthNoPriv mode enter:

```
snmp-server group group_Name v3 priv read Read_View_Name write Write_View_Name
snmp-server user User_Name Group_Name v3 auth Auth_Algr Auth_Passwd
snmp-server view Read_View_Name OID_Hierachy included
snmp-server view Write_View_Name OID_Hierachy included
```

For example,

```
snmp-server group authnoprivgroup v3 auth read view1 write view2
snmp-server user authnoprivuser authnoprivgroup v3 auth MD5 authpwd
snmp-server view view1 dod included
snmp-server view view2 dod included
```

**NoAuthNoPriv**

To configure NoAuthNoPriv mode enter:

```
snmp-server group group_Name v3 priv read Read_View_Name write Write_View_Name
snmp-server user User_Name Group_Name
snmp-server view Read_View_Name OID_Hierachy included
snmp-server view Write_View_Name OID_Hierachy included
```

For example,

```
snmp-server group noauthnoprivgroup v3 noauth read view1 write view2
snmp-server user noauthnoprivuser noauthnoprivgroup
snmp-server view view1 dod included
snmp-server view view2 dod included
```

## DFM 3.1.2 Upgrade Path

DFM 3.1.2 requires CiscoWorks Common Services Software (CS) 3.2 as a prerequisite for upgrade.

[Table 2](#) lists the various upgrade paths.

**Table 2** Upgrade Paths for DFM 3.1.2

Existing Software	DFM Version	Supported Upgrades to DFM 3.1.2
LMS 3.1	DFM 3.1	Remote upgrade is supported. Inline upgrade is supported if both servers have the same operating system (OS).
	DFM 3.1.1	Remote upgrade supported. Inline upgrade is supported if both servers have the same operating system (OS).

## Known DFM 3.1.2 Problems

The following table describe the known problems in DFM 3.1.2. Unless otherwise specified, there is no workaround for these problems.

For a list of known problems in Device Fault Manager 3.1 and 3.1.1, see the Release Notes and the Readmes. You can view them on Cisco.com by going to:

[http://www.cisco.com/en/US/products/sw/cscowork/ps2421/prod\\_installation\\_guides\\_list.html](http://www.cisco.com/en/US/products/sw/cscowork/ps2421/prod_installation_guides_list.html)

For the status of other DFM bugs that are caused by device-specific problems, see the documents on Cisco.com at this URL:

[http://www.cisco.com/en/US/products/sw/cscowork/ps2421/prod\\_release\\_notes\\_list.html](http://www.cisco.com/en/US/products/sw/cscowork/ps2421/prod_release_notes_list.html).

**Table 3** Known Problems in DFM 3.1.2

Bug ID	Summary	Explanation
CSCsw45584	DFM3.1.2: Event status should be disabled in NOS	From Notification services, go to Notification Group and click the Add button. If you select the event set as None in NOS, the Event status should be disabled. But it is still in enabled state.
CSCsv59291	CWA does not support the installed version of DFM 3.1.1	When CiscoWorks with LMS 3.1 is installed, and DFM is upgraded to 3.1.1, the Device Troubleshooting reports in CWA does not support the installed DFM 3.1.1 version.
CSCsw98711	ICMP and SNMP requests are sent during the rediscovery of an unreachable device	During the rediscovery of a device which is down, Incharge continues to send ICMP and SNMP requests to the unreachable device.
CSCsw98735	DFM Incharge polls the SNMP timed out devices even after rediscovery	During the rediscovery of the devices that are SNMP timed out, Incharge engine polls those devices using the existing old data.
CSCsw90690	No popup message is displayed regarding the licence while importing devices into DFM	When you import devices more than the license limit into DFM, no popup message is displayed regarding the license information.
CSCsw90699	Devices get Data Collector timedout after the Incharge engine completes the discovery	When 5k devices are discovered in DFM, few devices get Data Collector Request timed out after the discovery is completed by the Incharge engine.
CSCsx72359	DFM312: SNMP requests are delayed when DFM is managing 1500 SNMPv3 devices, and you have set the polling interval to 60 seconds.	<p>This problem occurs when you:</p> <ol style="list-style-type: none"> <li>1. Manage 1500 SNMPv3 devices in DFM3.1.2.</li> <li>2. Set the Polling settings to 60 seconds for all components and apply the changes.</li> </ol> <p>There is a delay between two polling cycles for SNMP requests. However ICMP polling works correctly.</p> <p>Polling works correctly when there are only a few devices or when you set the polling interval to the default value.</p>

## Resolved DFM Problems

The following tables describe DFM problems that are resolved in DFM 3.1.2.

**Table 4** *Problems Resolved in DFM 3.1.2*

Bug ID	Summary	Explanation
CSCso68258	DFM polled ASA for cpmCPUTotal5minRev object. However, ASA supports only cpmCPUTotal5min object.	This problem has been resolved.
CSCsr53905	DFM could not detect low memory in switches.	This problem has been resolved.
CSCsr25953	DFM could not manage certain ATM interfaces.	This problem has been resolved.
CSCs152191	CUOM did not increment the icmp sequence number in its requests.	This problem has been resolved.
CSCsr08903	2955 devices did not generate temperature out-of-range events.	This problem has been resolved.
CSCsv07021	IDU21: While migrating into DFM304, oid2type_Cisco.conf file was overwritten.	This problem has been resolved.

## Obtaining Documentation and Submitting a Service Request

For information on obtaining documentation, submitting a service request, and gathering additional information, see the monthly *What's New in Cisco Product Documentation*, which also lists all new and revised Cisco technical documentation, at:

<http://www.cisco.com/en/US/docs/general/whatsnew/whatsnew.html>

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