

Data Domain eLicense Conversion Tool

Help Guide

Customer Edition

Revision 07

Table of Contents

Introduction	3
Upgrading Data Domain OS to Version 6.0.....	3
Data Domain Automated Conversion Process.....	3
Step 1: Download the Data Domain eLicense Conversion Tool.....	3
Step 2: Search.....	3
Step 3: Details	3
Step 4: Connect to EMC	4
Step 5: License.....	4
Step 6: Complete.....	4
Steps to Complete:.....	5
Abbreviated Automated Process	12
Data Domain Manual Upload Process	15
Error and Warning Messages.....	21
Error 1:	21
Error 2:	21
Error 3:	21
Error 4:	22
Warning 1:.....	22
Error 5:	22
Error 6:	23
Error 7:	23
Error 8:	23
Error 9:	24

Introduction

The Data Domain eLicense Conversion Tool supports conversions of licenses from Data Domain OS versions 5.6 and 5.7 to version 6.0 electronic licensing (eLicensing). You can complete the process automatically through a six step process or you can perform a manual upload.

If you previously converted your licenses using the Data Domain eLicense Conversion Tool, and subsequently upgraded your Data Domain OS to version 6.0, then you can complete the abbreviated set of steps provided below.

Note:

1. You can upgrade to DDOS 6.0 and still use 5.6 and 5.7 licensing keys.
2. Upgrades to eLicensing are done for all licenses existing in the system. Having both traditional licensing and eLicensing on the same system is not supported.
3. Once licenses are converted to eLicensing, future software (SW) attainment must be via eLicensing. Do not purchase traditional licenses for systems that are using eLicensing.
4. Confirm that the platform you are running on is supported by 6.0. Platforms not supported by 6.0 cannot convert SW licenses to eLicensing.

Upgrading Data Domain OS to Version 6.0

For detailed instructions on how to upgrade a Data Domain OS, refer to *Chapter 3 Upgrade system management* in the *EMC Data Domain Operating System Administration Guide*. Note that such upgrades are performed using the Data Domain System Manager or CLI.

Data Domain Automated Conversion Process

This process involves six steps:

Step 1: Download the Data Domain eLicense Conversion Tool

Navigate to the Data Domain OS page of the EMC support site, and then download and install the Data Domain eLicense Conversion Tool.

Step 2: Search

Provide the host name and credentials to your existing Data Domain 5.6 or 5.7 installations. The Data Domain eLicense Conversion Tool searches for all of the installed Data Domain OS software.

Step 3: Details

Review the details of the Data Domain OS features on your machine.

Step 4: Connect to EMC

Connect to EMC to convert your Data Domain OS software features to Data Domain OS version 6.0.

Step 5: License

Review the details of your new license, and then upload the license file to your Data Domain OS server.

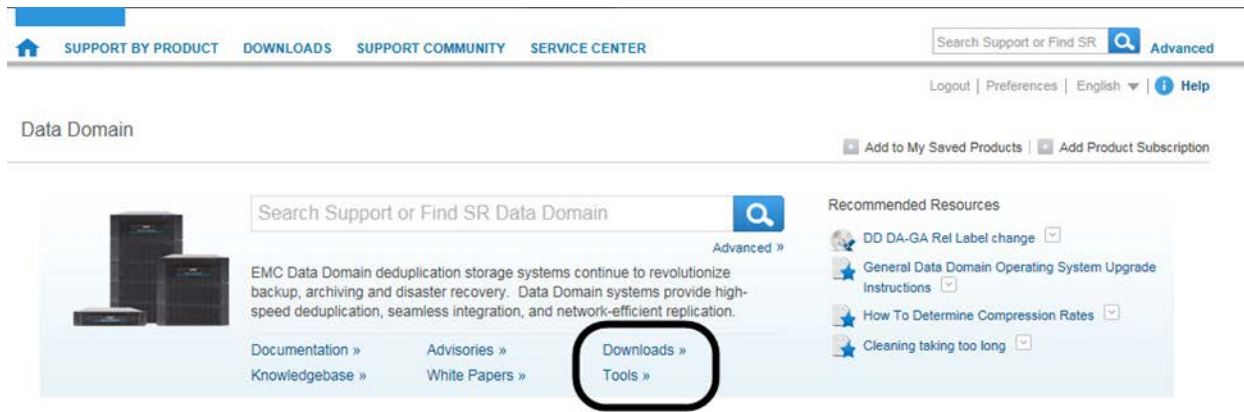
Step 6: Complete

Review important information relating to your Data Domain Version 6.0 Operating System, and either close the Data Domain eLicense Conversion Tool or convert another system.

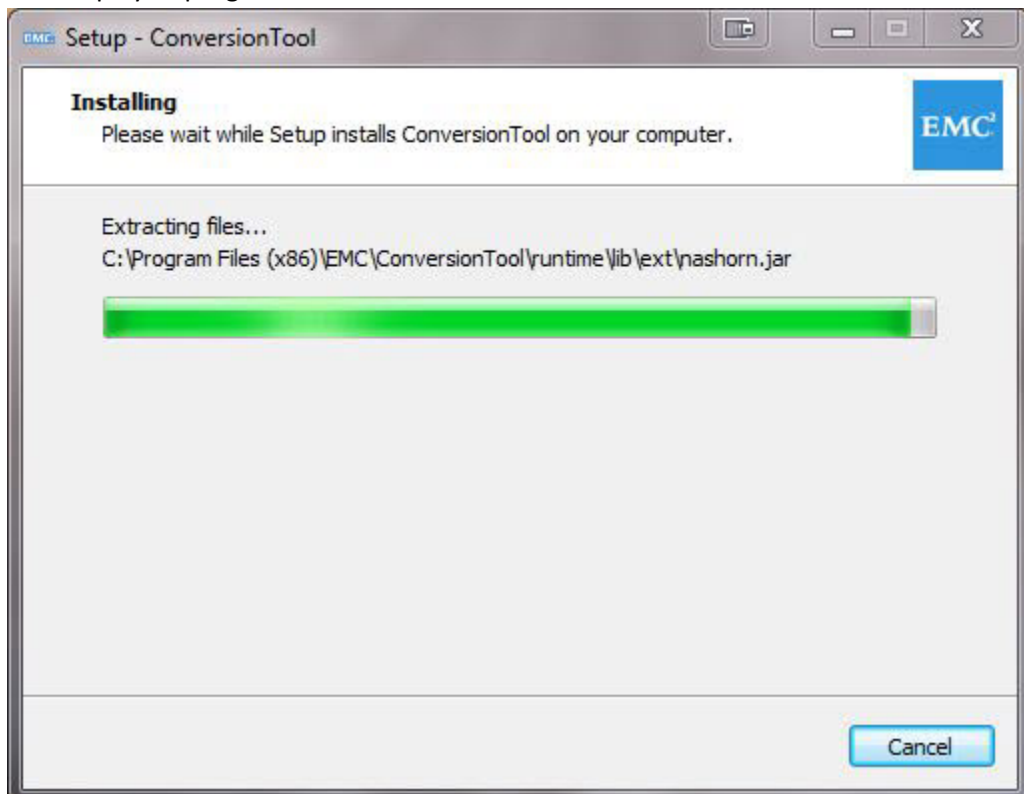
Steps to Complete:

Complete the following steps to automatically upload your Data Domain OS 6.0 license file.

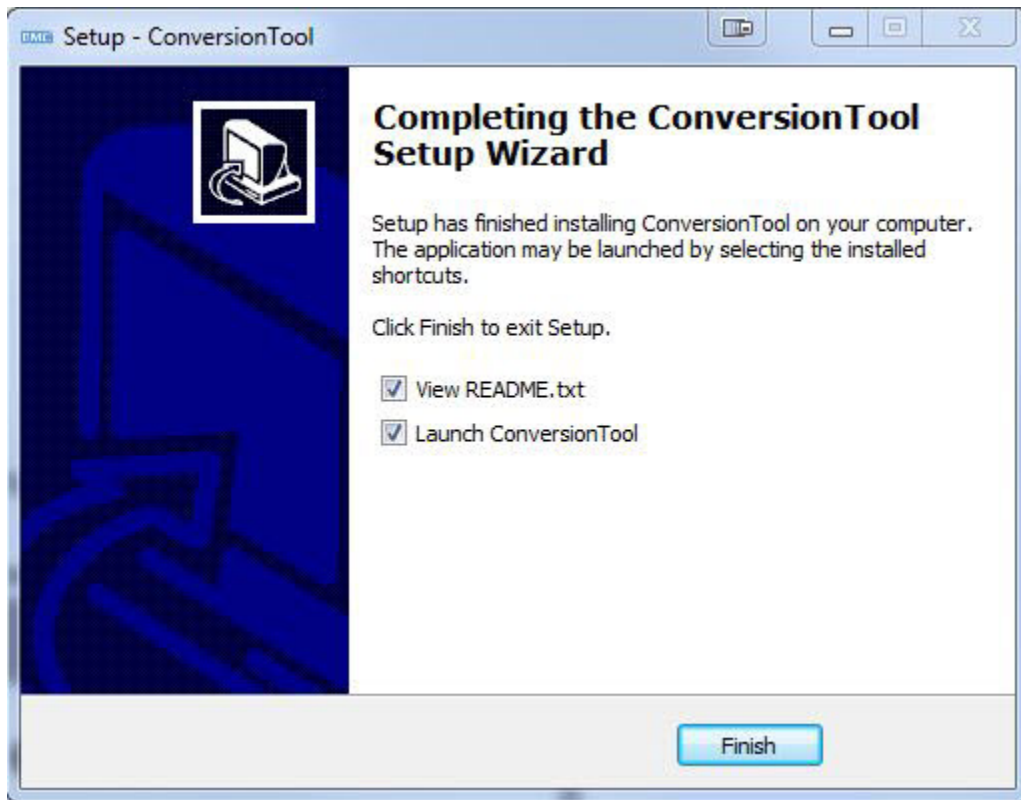
1. Go to URL: https://support.emc.com/products/9012_Data-Domain. Select **Tools**, and then select the Data Domain eLicense Conversion Tool to download it. Once the download is complete, the conversion tool begins to install.



The screens displayed for this installation process vary, depending on your operating system. The following process pertains to a Windows operating system. The installation begins with a Setup window that displays a progress bar.



When the installation is complete, the Setup page refreshes. Click **Finish**.

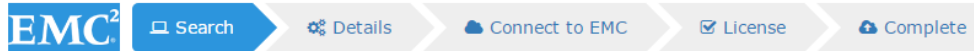


After several seconds, a narrow launch progress window opens.



When the Data Domain eLicense Conversion Tool finishes opening, you will see the Search page displaying the five conversion steps: Search, Details, Connect to EMC, License, and Complete.

2. On the Connect to Data Domain system page, enter the host name, your username, and your password, and then click **Search**. The Data Domain eLicense Conversion Tool searches the specified host for Data Domain OS features and displays them for your review. The Data Domain eLicense Conversion Tool also automatically saves an XML file of the features onto your computer.



Connect to Data Domain system

Enter the Host ID, the Username, and the Password associated with the Data Domain OS within your network, and then click **Search**.

Host:

Username:

Password:

© 2016 EMC Corporation. All rights reserved. Data Domain Conversion Tool.

- On the Data Domain system information page, review the Data Domain OS features to ensure that they are what you expect, and then click **Continue**. The screen displays a login page for connecting to EMC.

EMC² Search Details Connect to EMC License Complete

Data Domain system information

The Data Domain OS system details that were found are shown below. If details below are the correct features to be converted, then click **Continue**.

Data Domain OS Details

Conversion Date: 2016-06-02	Serial Number: FLA00151900093	Version: 5.7.1.0- 518497	Model: DD4200	Machine: test
---------------------------------------	---	------------------------------------	----------------------	----------------------

License Features

Feature	Shelf Model	Quantity
ARCHIVESTORE		1
BLOCK-SERVICES-PROTECTPOINT		1
CAPACITY-ACTIVE	ES20	48
CAPACITY-ACTIVE	ES30	84
CAPACITY-RETENTION	ES30	132
CONTROLLER-COD		1
DDBOOST		1
DLM		1
ENCRYPTION		1
EXPANDED-STORAGE		1
EXTENDED-RETENTION		1
GATEWAY-EXPANDED-STORAGE-LEVEL-2		1
GATEWAY-EXPANDED-STORAGE-LEVEL-3		1
KEYMANAGER		1
REPLICATION		1
RETENTION-LOCK-COMPLIANCE		1
RETENTION-LOCK-GOVERNANCE		1
VTL		1

[Continue >](#)

4. On the Connect to EMC page, enter your EMC Single Sign On credentials, and then click **Connect to EMC**. You connect directly to EMC and your Data Domain OS features are converted to version 6.0.

Specifically, the Data Domain eLicense Conversion Tool first automatically 'passes' the XML file saved in Step 3 to EMC. Next the Data Domain eLicense Conversion Tool automatically creates version 6.0 entitlements for the Data Domain OS features in the XML file. EMC then activates the entitlements and generates a version 6.0 license file and 'passes' the file back to the Data Domain eLicense Conversion Tool. Finally, EMC emails an Activation Certificate to the user who logged in during Step 4, and the Data Domain eLicense Conversion Tool saves the license file to your computer.

Note: This entire process may take a few minutes.

EMC² Search Details **Connect to EMC** License Complete

Connect to EMC ?

Provide your EMC Single Sign-on credentials below. If you do not have an account with EMC, please sign up at support.emc.com.

Username:

Password:

EMC **Connected**

© 2016 EMC Corporation. All rights reserved. Data Domain Conversion Tool.

5. On the License information page, the Data Domain eLicense Conversion Tool displays the version 6.0 License Details. Review the details, and then click **Load License file to DDOS Server**. The Data Domain eLicense Conversion Tool automatically loads the version 6.0 license file onto your Data Domain OS host.



License information

License Details

Machine name: localhost
Serial number: FLA00151900093

EMC License

```
#####  
# EMC License File  
# Activation Date: Apr 26, 2016 10:05:14 AM  
# Activated By: Novopashin Anton  
# Type:UNSERVED  
#####  
INCREMENT DD_DDBOOST EMCLM 1 permanent uncounted \  
  VENDOR_STRING="LOCKING_ID=ABCDE111121145;PLATFORM=4200;PRODUCT_LINE=Data \  
  Domain OS;FEATURE_NAME=DDBOOST;UOM_CODE=IA;UOM_NAME=Instance \  
  per Server;PLC=DDOS" HOSTID=ANY dist_info="ACTIVATED TO \  
  1003802264 SAVVIS COMMUNICATIONS 1 SOLUTIONS PARKWAY \  
  CHESTERFIELD MO US 63017" ISSUER=EMC ISSUED=26-Apr-2016 \  
  NOTICE="ACTIVATED TO License Site Number: 1003802264" \  
  SN=2671526 SIGN="00E1 9E75 85F6 8C1A 4A6E 4D7E F800 2100 608D \  
  F4D3 3140 02C1 A71C 92D2 2EF8"
```

[Load License File to DDOS Server >](#)

- Once the new license file has loaded, the Data Domain eLicense Conversion Tool displays the Data Domain Version 6.0 Operating System information with a message: Your version 6.0 OS file was installed successfully.

The screenshot shows the EMC Software Licensing Central interface. At the top, there is a navigation bar with the following steps: Search, Details, Connect to EMC, License (checked), and Complete. Below the navigation bar, the main content area is titled "Data Domain V6 system information". A green message box states: "Your Data Domain OS v6.0 license file has been installed successfully." Below this, there is a section for "Data Domain OS Version 6 Details" with the following information:

Locking ID: FLA00151900093	Version: 6.0.11.7- 522234	Machine: localhost	Last Modified Date: 30/05/16 07:39:21
--------------------------------------	-------------------------------------	---------------------------	---

Below the details section, there is a "License Features" section with a table:

Feature	Shelf Model	Quantity
GATEWAY-EXPANDED-STORAGE-LEVEL-2		1
GATEWAY-EXPANDED-STORAGE-LEVEL-3		1

At the bottom right of the interface, there are two buttons: "Close Conversion Tool" and "Convert Another Data Domain OS System".

Click either **Close Conversion Tool** or **Convert another DDOS System**. If you click **Close Conversion Tool**, then the Data Domain eLicense Conversion Tool closes. If you click **Convert another DDOS System**, then you start the process over beginning with the Search page (Connect to Data Domain system).

Abbreviated Automated Process

If you previously used the Data Domain eLicense Conversion Tool to convert your licenses, and you subsequently installed DDOS version 6.0, then use this quick process to load your license file.

1. Launch the Data Domain eLicense Conversion Tool using the icon on your desktop. The Connect to Data Domain system page displays.

The screenshot shows the Data Domain eLicense Conversion Tool interface. At the top, there is a navigation bar with the EMC logo and five steps: Search, Details, Connect to EMC, License, and Complete. The 'Connect to EMC' step is currently active. Below the navigation bar, the main content area is titled 'Connect to Data Domain system'. It contains a form with three input fields: 'Host' (containing 'Your Host'), 'Username' (containing 'Your Username'), and 'Password' (containing 'Your Password'). A 'Search >' button is located below the password field. A small help icon is visible in the top right corner of the form area.

© 2016 EMC Corporation. All rights reserved. Data Domain Conversion Tool.

2. On the Connect to Data Domain system page, enter the host name, your username, and your password, and then click **Search**. The Data Domain OS will search for and recognize your version 6.0 license file and will skip to the License information page, where your license key will be displayed.

3. On the License information page, the Data Domain eLicense Conversion Tool lists your machine name, your Serial Number, and the contents of your EMC License. Click **Load License File to DDOS Server**.

The screenshot displays the EMC Software Licensing Central interface. At the top, there is a navigation bar with the EMC logo and five steps: Search, Details, Connect to EMC, License (highlighted in blue), and Complete. Below the navigation bar is a section titled "License information" with a help icon. A green notification box states: "Your previously converted license has been found. You may apply it to your Data Domain OS." Below this, the "License Details" section shows: "Machine name: localhost" and "Serial number: FLA00151900093". The "EMC License" section is partially visible at the bottom.

- On the Data Domain V6 system information page, the Data Domain eLicense Conversion Tool lists details relating to your DDOS Version 6.0 and your license features. You can either close the Data Domain eLicense Conversion Tool or convert another system.

The screenshot shows the EMC Software Licensing Central interface. At the top, there is a navigation bar with the EMC logo and a progress indicator with steps: Search, Details, Connect to EMC, License, and Complete. The main content area is titled "Data Domain V6 system information" and includes a green success message: "Your Data Domain OS v6.0 license file has been installed successfully." Below this, there is a section for "Data Domain OS Version 6 Details" with the following information:

Locking ID: FLA00151900093	Version: 6.0.11.7- 522234	Machine: localhost	Last Modified Date: 30/05/16 07:39:21
--------------------------------------	-------------------------------------	---------------------------	---

Below the details is a section for "License Features" with a table:

Feature	Shelf Model	Quantity
GATEWAY-EXPANDED-STORAGE-LEVEL-2		1
GATEWAY-EXPANDED-STORAGE-LEVEL-3		1

At the bottom right of the interface, there are two buttons: "Close Conversion Tool" and "Convert Another Data Domain OS System".

Data Domain Manual Upload Process

Following are the steps for a manual process for uploading your Data Domain license file.

Note: You must have a valid EMC account to perform this process.

1. Go to https://support.emc.com/products/9012_Data-Domain. Under **Tools**, select the Data Domain eLicense Conversion Tool for downloading. When the download completes, the Data Domain eLicense Conversion Tool opens to the Search page.

The screenshot shows the EMC Support website for Data Domain. The navigation bar includes links for SUPPORT BY PRODUCT, DOWNLOADS, SUPPORT COMMUNITY, and SERVICE CENTER. A search bar is present with the text 'Search Support or Find SR Data Domain'. Below the search bar, there is a description of EMC Data Domain deduplication storage systems. A navigation menu is visible with links for Documentation, Advisories, Knowledgebase, White Papers, Downloads, and Tools. The 'Downloads' link is circled in red. To the right, there are recommended resources such as 'DD DA-GA Rel Label change', 'General Data Domain Operating System Upgrade Instructions', 'How To Determine Compression Rates', and 'Cleaning taking too long'.

2. On the Connect to Data Domain system page, type the host name, your username, and your password, and then click **Search**.

The screenshot shows the 'Connect to Data Domain system' page. At the top, there is a progress bar with five steps: Search, Details, Connect to EMC, License, and Complete. The 'Search' step is currently active. Below the progress bar, there is a form with the following fields and a button:

- Host:**
- Username:**
- Password:**
- Search** button with a right-pointing arrow.

Below the form, there is a copyright notice: © 2016 EMC Corporation. All rights reserved. Data Domain Conversion Tool.

3. The Data Domain eLicense Conversion Tool searches the host specified for the Data Domain OS features and displays them for your review. The Data Domain eLicense Conversion Tool also automatically saves an XML file of these features on the machine on which you installed the Data Domain eLicense Conversion Tool. Depending on the OS of the machine and where you

chose to install the Data Domain eLicense Conversion Tool, the file is saved to different directories as follows:

Windows: The base path is the path to the directory in which you installed the Data Domain eLicense Conversion Tool. Within this 'ConversionTool' directory is an application jar directory called 'apps', and within the 'apps' directory is a 'conversions' directory that contains your XML file. An example of a typical path is:

```
C:\Program Files (x86)\EMC\ConversionTool\app\conversions\<DDOS_host>_conversion.xml
```

Mac: The Data Domain eLicense Conversion Tool is typically installed in the 'Applications' directory and the typical default path is:

```
/Applications/ConversionTool.app/Contents/Java/conversions/<DDOS_host>_conversion.xml
```

Linux: The typical path is: opt\ConversionTool\app\conversions**<DDOS_host>**_conversion.xml

In all three cases, **<DDOS_host>** is the name of the host on which your DDOS is installed.

Note: If you are a customer at a dark site, then complete the following instructions. All other end users should proceed to Page 16.

1. Go to the following support site: <https://support.emc.com/servicecenter/createSR/>
2. Select **Install > Impl.**
3. In Problem Summary field, type **License request – Conversion Tool XML File Manual Upload.**
4. Click **Submit.**
5. Attach the XML file, which you created in step 5.

Review the Data Domain OS features to ensure that they are what you expect.


[Search](#)
[Details](#)
[Connect to EMC](#)
[License](#)
[Complete](#)

Data Domain system information

The Data Domain OS system details that were found are shown below. If details below are the correct features to be converted, then click **Continue**.

Data Domain OS Details

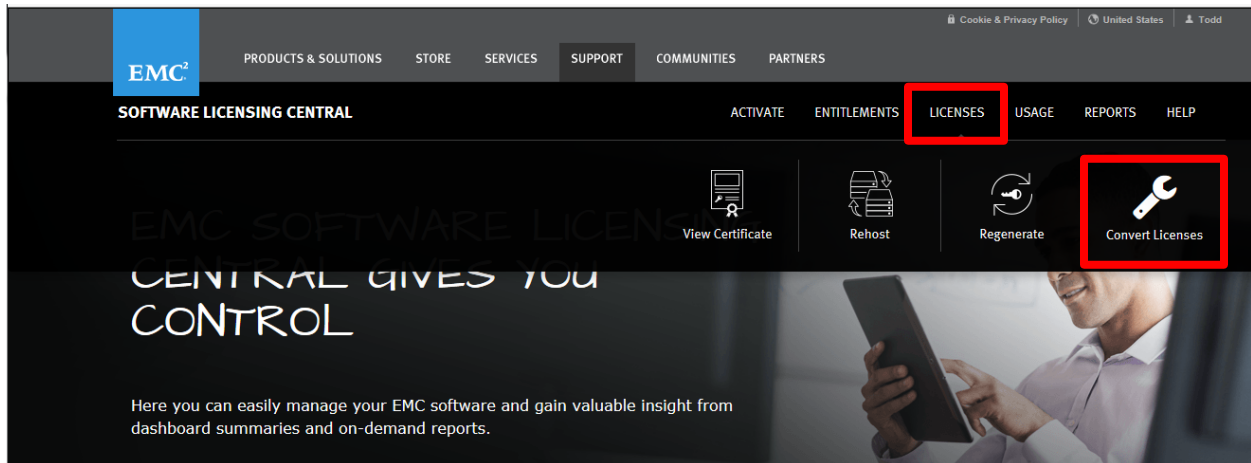
Conversion Date: 2016-06-02
Serial Number: FLA00151900093
Version: 5.7.1.0-518497
Model: DD4200
Machine: test

License Features

Feature	Shelf Model	Quantity
ARCHIVESTORE		1
BLOCK-SERVICES-PROTECTPOINT		1
CAPACITY-ACTIVE	ES20	48
CAPACITY-ACTIVE	ES30	84
CAPACITY-RETENTION	ES30	132
CONTROLLER-COD		1
DDBOOST		1
DLM		1
ENCRYPTION		1
EXPANDED-STORAGE		1
EXTENDED-RETENTION		1
GATEWAY-EXPANDED-STORAGE-LEVEL-2		1
GATEWAY-EXPANDED-STORAGE-LEVEL-3		1
KEYMANAGER		1
REPLICATION		1
RETENTION-LOCK-COMPLIANCE		1
RETENTION-LOCK-GOVERNANCE		1
VTL		1

[Continue >](#)

4. Navigate to Software Licensing Central at <https://licensing.emc.com/>. Select LICENSES from the submenu, and then select Convert Licenses. The Data Domain License Conversion Upload page appears. (**Note:** You may need to first login using your credentials for your EMC account.)



5. On the Data Domain License Conversion Upload page, carefully read the 'Before you start' message. Browse to the XML file that was saved in Step 3, and then click **UPLOAD**.

The screenshot shows the 'Data Domain License Conversion Upload' page in the EMC2 Software Licensing Central interface. The page has a dark header with the EMC2 logo and navigation links: ACTIVATE, ENTITLEMENTS, LICENSES, USAGE, REPORTS, and HELP. A 'MENU' icon is also present. Below the header, the page title is 'DATA DOMAIN LICENSE CONVERSION UPLOAD' with a 'VIEW PREVIOUSLY CONVERTED LICENSES' button to the right. The main content area contains a paragraph explaining the conversion process, followed by instructions under 'Before you start' and 'Uploading'. At the bottom, there is a 'Select a file' label, a 'Browse' button with a file icon, and an 'UPLOAD' button.

Home ▶

DATA DOMAIN LICENSE CONVERSION UPLOAD

[VIEW PREVIOUSLY CONVERTED LICENSES](#)

This page supports the conversion of a Data Domain OS license file, for version 5.6 or higher, to a Data Domain OS license file for version 6.0.

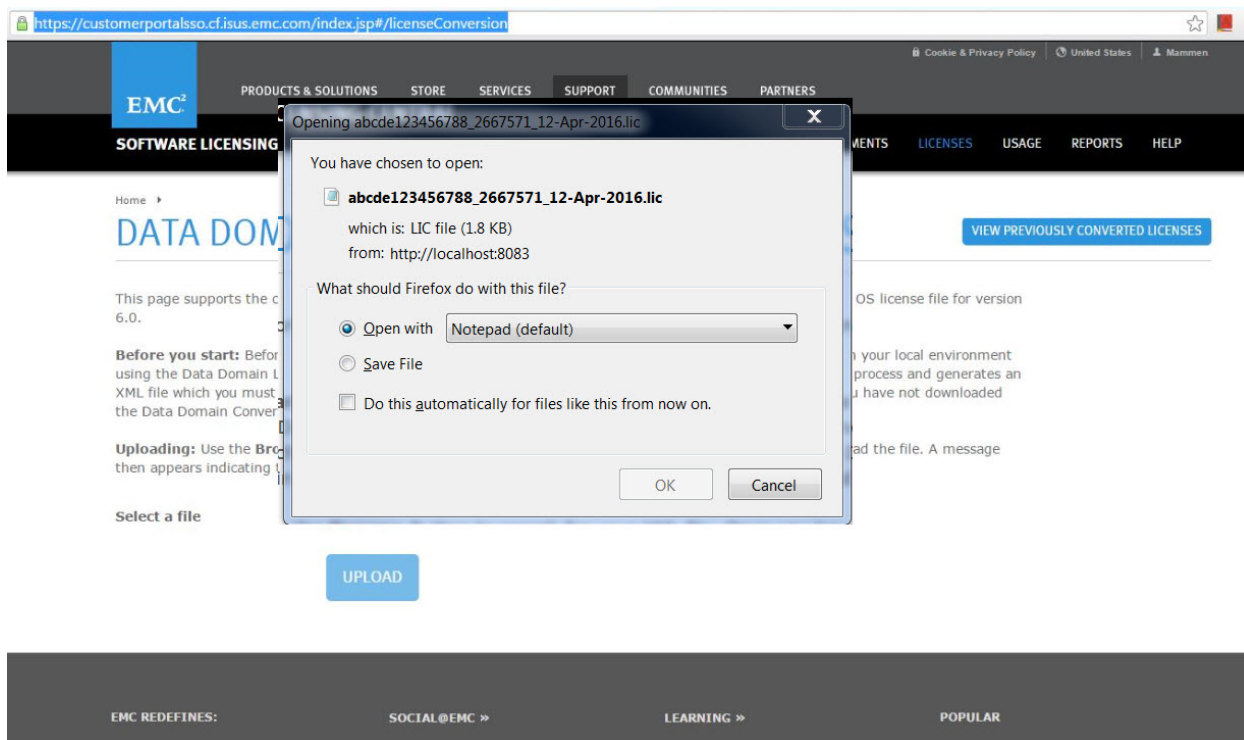
Before you start: Before performing a conversion, you must first perform the license conversion process within your local environment using the Data Domain License Conversion Tool. The Data Domain License Conversion Tool performs a discovery process and generates an XML file which you must save and then upload below to complete the Data Domain OS license conversion. If you have not downloaded the Data Domain Conversion Tool, go to support.emc.com/products/9012_Data-Domain/Tools and download it.

Uploading: Use the **Browse** button to search for your XML file. Once you select the **UPLOAD** button, the file will be processed and you will receive a new license file. This may take a few moments. You must save the newly generated license file and then upload it onto your Data Domain system.

Select a file [Browse](#)

UPLOAD

- As a result, the System automatically processes the conversion of your version 5.6 or 5.7 license features. Entitlements are created and activated, and a version 6.0 license file is generated. When this process has completed (after a few minutes), the system displays a pop-up window in which you can open and save the DDOS version 6.0 license file. Save the file to a location from which you can upload it onto the host that you specified in Step 2. Manually upload the license file. **Note:** The license file saved can only work on the host specified in Step 2.



To manually convert another Data Domain OS system, return to Step 2 of this process and enter another host.

Error and Warning Messages

You may encounter one or more of the following messages. Follow the instructions provided to resolve them.

Error 1:

Page: Connect to Data Domain system

Error:

The Data Domain software version on this host is not at 5.6 or higher. Access support.emc.com for information on upgrading your software to version 6.0. Once upgraded to version 6.0, execute the tool again on this host.

Resolution: You must upgrade to either version 5.6 or 5.7 by following the instructions provided at https://support.emc.com/products/9012_Data-Domain.

Error 2:

Page: Connect to Data Domain system

Error:

An error has occurred. The host specified will not allow the Data Domain OS Conversion Tool to access and read your Data Domain OS features. Contact your site administrator for assistance. ✕

Resolution: You must contact your site administrator to obtain valid credentials.

Error 3:

Page: Connect to Data Domain system

Error:

An error has occurred. No Data Domain OS features were found on the host provided. Try entering a different host. ✕

Resolution: You have entered a host that does not appear to have any Data Domain OS software features. You must enter a different host that has Data Domain OS features. For assistance, contact your site administrator.

Error 4:

Page: Data Domain system information

Error:

❗ ERROR: The Data Domain OS features found on the specified host have High Availability (HA) features that cannot be converted to version 6.0 via this tool. For information on how to convert these features to version 6.0, call the EMC Worldwide Licensing Support team at 1-800-782-4362. ✕

Resolution: Contact the EMC Worldwide Licensing Support team. A member of the Licensing Support team will assist you with upgrading your HA features.

Warning 1:

Page: Data Domain system information

Error:

⚠ WARNING: If you need to perform an online storage migration after converting your licenses to Software Licensing Central, then contact the EMC Worldwide Licensing Support team at 1-800-782-4362. ✕

You may continue to convert the other features on this OS to version 6.0 by clicking *Continue*.

Resolution: Contact the EMC Worldwide Licensing Support team. A member of the Licensing Support team will assist you with upgrading your storage migration features.

Error 5:

Page: Connect to EMC

Error:

❗ An error has occurred. The Conversion Tool was not able to connect to EMC. Check your Internet connection OR complete the Manual Conversion Process. ✕

Resolution: If your Internet connection is working normally, then you need to complete the Manual Conversion Process described on pages 14-19 of this document.

Error 6:

Page: Connect to EMC

Error:

An error has occurred. Your Username and/or Password was not recognized. Re-enter your credentials and try to connect to EMC again. If this issue persists, call the EMC Worldwide Licensing Support team at 1-800-782-4362. ✕

Resolution: Try entering your credentials again. If you still cannot connect to EMC, then contact the Licensing Support team. A member of the team can either validate your credentials or reset them.

Error 7:

Page: Data Domain V6 system information

Error:

An error occurred. Your Data Domain OS server is not configured for version 6.0. For assistance with upgrading to version 6.0, go to https://support.emc.com/products/9012_Data-Domain ✕

Resolution: You must upgrade to Data Domain OS version 6.0. If you are using a version earlier than 5.6, then you must upgrade first to 5.6, then to 5.7 prior to upgrading to version 6.0. Follow the instructions provided on https://support.emc.com/products/9012_Data-Domain.

Error 8:

This error occurs if you try to convert one of the following licenses:

- GATEWAY-EXPANDED-STORAGE-LEVEL-2
- GATEWAY-EXPANDED-STORAGE-LEVEL-3
- KEYMANAGER

Page: Connect to Data Domain system

Error:

Data Domain system information

Notice: The Data Domain license files found on the specified host are no longer available in DDOS 6.0. Click **Continue** to complete your conversion.
 GATEWAY-EXPANDED-STORAGE-LEVEL-3
 GATEWAY-EXPANDED-STORAGE-LEVEL-2
 KEYMANAGER

Data Domain OS Details

Conversion Date: 2016-09-20	Serial Number: FLA00151900093	Version: 5.7.1.0-518497	Model: DD4200	Machine: localhost
---------------------------------------	---	-----------------------------------	----------------------	---------------------------

License Features

Feature	Shelf Model	Quantity
ARCHIVESTORE		1
BLOCK-SERVICES-PROTECTPOINT		1
CAPACITY-ACTIVE	ES20	48
CAPACITY-ACTIVE	ES30	84
CAPACITY-RETENTION	ES30	132
CONTROLLER-COD		1
DDBOOST		1
DLM		1

Resolution: Contact the EMC Worldwide Licensing Support team at 1-800-782-4362. A member of the team will assist you with upgrading your features. Note that it may not be possible to upgrade certain features.

Error 9:

This error occurs if you try to run the tool a second time.

Error:

Connect to EMC

An error has occurred. License Conversion already happened on this LockingId.

Provide your EMC Single Sign-on credentials below. If you do not have an account with EMC, please sign up at support.emc.com.

Username:

Password:

EMC Connected

Resolution: Log in using your EMC Single Sign-on credentials, as directed. If you do not have an account, create one at support.emc.com.