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About this Book

The NetIQ Identity Manager (4.8.5.0100) resolves some of the previous issues. This document outlines the instructions on how you can apply this patch.

IMPORTANT: In addition to the patch update, Identity Manager 4.8.5 Patch 1 Common Dependencies patch contain updates to NICI and OpenSSL components. For more information, see the NetIQ Identity Manager 4.8.5 Patch 1 Common Dependencies Release Notes.
What’s New and Changed?

Identity Manager 4.8.5.0100 provides the following enhancements and fixes in this release:

- “Component Updates” on page 7
- “Software Fixes” on page 7

Component Updates

This release adds support for NetIQ Self Service Password Reset (SSPR) 4.5.0.5-1, which now supports Apache log4j 2.x.

Software Fixes

This release contains software fixes for issues detected in Identity Manager components using Micro Focus Fortify Static Code Analyzer. A security vulnerability in a component that uses a third-party library and impacts deprecated Identity Manager functionality has also been fixed.


In addition, NetIQ Identity Manager provides the following software fixes that resolve previous issues in the Identity Applications component:

The Usage of Extended Characters in User Entity’s DN Attribute No Longer Results in a Request Form Error

When the DN attribute of a User entity contains Cyrillic or other non-Latin characters (such as Swedish), the IDVault.get or utils.get functions successfully populate that entity’s data in the request form fields. (Defect 489163)

Roles are Listed Alphabetically on the Users Page

This release resolves an issue on the Dashboard’s Users page wherein the roles of a User were not sorted alphabetically after updating Identity Manager to 4.8.4 and 4.8.5 versions. (Defect 495060)
**IDVault.get() Function Using a REST Access API call to GET /entities/list Works as Expected**

The issue with JSON Forms failing when using the `IDVault.get` function in Identity Manager 4.8.5 has been resolved. Instead of entity key, Identity Applications uses the LDAP class associated with the entity key as the objectClass in an LDAP filter. *(Defect 494201)*

**When CEF Auditing is Enabled, eDirectory Shutdown no Longer Creates Core Dump**

When Common Event Format (CEF) auditing is enabled, the eDirectory shut down does not result in creating core dump. *(Defect 329481)*
Updating Identity Manager to This Patch

When two or more Identity Manager components are installed on the same server, you must stop the corresponding services before updating to this patch. For example, if Identity Vault and iManager are installed on the same server, you must stop the Identity Vault and the iManager Tomcat services before performing an update.

NOTE: You must be on Identity Manager 4.8.5 with Identity Manager 4.8.5 Patch 1 Common Dependencies patch at a minimum to apply this patch.

- “Updating This Patch on Linux” on page 9
- “Updating this Patch on Windows” on page 14

Updating This Patch on Linux

This patch requires you to update the following components based on your requirement:

- “Updating Identity Manager Engine” on page 9
- “Updating Remote Loader” on page 11
- “Updating Fanout Agent” on page 11
- “Updating Identity Applications” on page 12
- “Updating the SSPR” on page 13
- “Updating the iManager” on page 13
- “Updating Identity Manager Third Party License” on page 14

Updating Identity Manager Engine

1 (Conditional) If you are running this patch as a root user, perform the following steps:

1a Run the following command to stop the Identity Vault instance:

```
ndsmanage stopall
```

1b Download the Identity_Manager_4.8.5_P1_Engine.zip file.

1c Extract the Identity_Manager_4.8.5_P1_Engine.zip file.

1d Navigate to the <extracted location>/Engine/Linux/x64 folder and run the following commands:

```
rpm -Uvh novell-DXMLbasenoarch-4.8.5-0100.x86_64.rpm
rpm -Uvh novell-DXMLengnx-4.8.5-0100.x86_64.rpm
rpm -Uvh novell-DXMLeventx-4.8.5-100.x86_64.rpm
```

1e (Conditional) If you are running this patch on OES Operating System, navigate to the <extracted location>/Linux/x64 and run the following commands:
Updating Identity Manager to This Patch

1f Run the following command to start the Identity Vault instance:

```
ndsmanage startall
```

2 (Conditional) If you are running this patch as a non-root user, perform the following steps:

2a Download the `Identity_Manager_4.8.5_P1_Engine.zip` file.

2b Extract the `Identity_Manager_4.8.5_P1_Engine.zip` file.

2c Run the following command to stop the Identity Vault instance:

```
ndsmanage stopall
```

2d Set the root directory path for Identity Vault.

```
export ROOTDIR='<root directory path>'
```

For example,

```
export ROOTDIR='/home/idvault'
```

2e Upgrade the RPMs using the following command:

```
rpm --dbpath $ROOTDIR/rpm -Uvh --relocate=/usr=$ROOTDIR/opt/novell/ eDirectory --relocate=/etc=$ROOTDIR/etc --relocate=/opt/novell/ eDirectory=$ROOTDIR/opt/novell/eDirectory --relocate=/opt/novell/ dirxml=$ROOTDIR/opt/novell/dirxml --relocate=/var=$ROOTDIR/var -- badreloc --nodeps --replacefiles /<path to the new rpms>
```

For example:

```
rpm --dbpath /home/idvault/rpm -Uvh --relocate=/usr=/home/idvault/ opt/novell/eDirectory --relocate=/etc=/home/idvault/etc -- relocate=/opt/novell/eDirectory=/home/idvault/opt/novell/eDirectory --relocate=/home/idvault/opt/novell/dirxml --relocate=/var=/home/idvault/var --badreloc --nodeps --replacefiles /<path to the new rpms>
```

```
Run the following command to start the Identity Vault instance:

```
ndsmanage startall
```

### Updating Remote Loader

**NOTE:** Before updating the Remote Loader, ensure that the following components are stopped:

- Remote Loader instance
- Driver instance running with the Remote Loader
- Remote Loader Console

1. Download and extract the `Identity_Manager_4.8.5_P1_Engine.zip` file.
2. Navigate to the `<extracted location>/RL/Linux` directory.
3. (Conditional) If you are running a 64-bit Remote Loader, navigate to the `x64` directory and run the following commands:
   ```
   rpm -Uvh novell-DXMLbasenoarch-4.8.5-0100.i586.rpm
   rpm -Uvh novell-DXMLrdxml-4.8.5-0100.i586.rpm
   ```
4. (Conditional) If you are running a 32-bit Remote Loader, navigate to the `x86` directory and run the following command:
   ```
   rpm -Uvh novell-DXMLbasenoarch-4.8.5-0100.i586.rpm
   rpm -Uvh novell-DXMLrdxml-4.8.5-0100.i586.rpm
   ```
5. Start the Remote Loader instance and the driver instance.

**NOTE:** If Remote Loader and Identity Vault are installed on the same machine, you must ensure to upgrade the Identity Vault.

### Updating Fanout Agent

**NOTE:** Before updating the Fanout Agent, ensure that the following components are stopped:

- Fanout Agent instance
- Driver instance

1. Download and extract the `Identity_Manager_4.8.5_P1_Engine.zip` file.
2. Navigate to the `<extracted location>/FanoutAgent/Linux/x64` directory.
3. Run the following command to update the rpms below:
   ```
   rpm -Uvh novell-DXMLbasenoarch-4.8.5-0100.x86_64.rpm
   rpm -Uvh novell-DXMLfanoutagent-1.2.6-0100.noarch.rpm
   ```
4. Start the Fanout Agent instance and the driver instance.

**NOTE:** You must ensure to upgrade Engine to support the upgraded Fanout Agent.
Updating Identity Applications

1. Stop the Tomcat, NGINX, and Golang services by executing the following commands:
   ```
   systemctl stop netiq-tomcat.service
   systemctl stop netiq-nginx.service
   systemctl stop netiq-golang.service
   ```

2. Download and extract the `Identity_Manager_APPS_4.8.5_P1.zip` file.

3. Navigate to the `<extracted location>/Linux` directory.

4. Back up the `IDMProv.war` and `workflow.war` files from the `<Identity Applications Tomcat installed location>/webapps` directory.

5. Run the following commands:
   ```
   rpm -Uvh netiq-userapp-4.8.5-0100.noarch.rpm
   rpm -Uvh netiq-workflow-1.5.0.0100-1.noarch.rpm
   rpm -Uvh netiq-forms-1.0.5.0100-1.noarch.rpm
   ```

6. (Conditional) If you install the rpm as root, navigate to the `/opt/netiq/idm/apps/tomcat/webapps/` directory and run the following commands to add execute permission and user rights for the replaced war files:
   ```
   chmod +x IDMProv.war idmadmin.war idmappsdoc.war idmdash.war workflow.war
   chown -R novlua:novlua IDMProv.war idmadmin.war idmappsdoc.war idmdash.war workflow.war
   chown -R novlua:novlua /opt/netiq/idm/apps/tomcat/conf
   chown -R novlua:novlua /opt/netiq/idm/apps/sites
   ```

7. Delete the following from the `<Identity Applications Tomcat installed location>/webapps` directory:
   ```
   * IDMProv folder
   * workflow folder
   ```

8. Delete all the files and directories from the `<Identity Applications Tomcat installed location>/temp` and `<Identity Applications Tomcat installed location>/work` directories.

9. Start the Golang and NGINX services by executing the following commands:
   ```
   systemctl start netiq-golang.service
   systemctl start netiq-nginx.service
   ```

10. (Conditional) If you are using the PostgreSQL database shipped with Identity Manager, run the following command to restart PostgreSQL.
    ```
    systemctl restart netiq-postgresql.service
    ```

11. Start the Tomcat service:
    ```
    systemctl start netiq-tomcat.service
    ```
Updating the SSPR

**NOTE:** Use this method if SSPR is:

- Installed on a different server than the Identity Applications server.

1. Stop the Tomcat service:
   ```bash
   systemctl stop netiq-tomcat.service
   ```
2. Download and extract the `Identity_Manager_SSPR_4.8.5_P1.zip` file.
3. Navigate to the `<extracted location>/Linux` directory.
4. Run the following command:
   ```bash
   rpm -Uvh netiq-sspr-4.5.0.5-1.noarch.rpm
   ```
5. (Conditional) If you install the rpm as root, run the following commands to execute permissions and user rights for the replaced war files:
   - `chmod +x sspr.war`
   - `chown -R novlua:novlua sspr.war`
6. Start the Tomcat service:
   ```bash
   systemctl start netiq-tomcat.service
   ```

Updating the iManager

**NOTE:** This update procedure is optional if the version of iManager is other than 3.2.6.0200.

1. Download and extract the `iMan_326_P2_linux_x86_64.tgz` file from the Download site.
2. Navigate to the `<extracted location>/iManager\installs\linux` directory.
3. Run the installer using the following command:
   ```bash
   ./iManagerInstallLinux.bin
   ```

Post-Update Steps for iManager

To update the Identity Manager plug-ins from iManager, perform the following actions:

1. Log in to iManager.
2. Navigate to **Configure > Plug-in Installation > Available NetIQ Plug-in Modules**.
3. Select the **NetIQ Identity Manager iManager 3.2 Plug-ins for IDM 4.8.5.0100** and click **Install**.
4. Restart the Tomcat.
Updating Identity Manager Third Party License

1. Navigate to the Identity Manager installed folder on your machine, find the IdentityManager-3rdParty-license.txt file location. For example, /opt/netiq/idm/IdentityManager-3rdParty-license.txt.

2. Download and extract the Identity_Manager_4.8.5_P1_Engine.zip file.

3. Navigate to the <extracted location>/license directory.

4. Copy the IdentityManager-3rdParty-license.txt file and replace it with the file in the location specified in Step 1.

Updating this Patch on Windows

This patch requires you to update the following components based on your requirement:

- “Updating Identity Manager Engine” on page 14
- “Updating Remote Loader” on page 15
- “Updating Fanout Agent” on page 16
- “Updating Identity Applications” on page 16
- “Updating the SSPR” on page 17
- “Updating the iManager” on page 17
- “Updating Identity Manager Third Party License” on page 18

Updating Identity Manager Engine

1. Stop the Identity Vault service.

2. Download the Identity_Manager_4.8.5_P1_Engine.zip file.

3. Extract the Identity_Manager_4.8.5_P1_Engine.zip file.

4. Navigate to the location where Identity Vault is installed. For example, C:\NetIQ\IDM\NDS\.

5. Back up the dxevent.dll and dirxml.dlm files.

6. Navigate to the lib folder located inside the directory where Identity Vault is installed. For example, C:\NetIQ\IDM\NDS\lib.

7. Take a back up of the dirxml_misc.jar, dirxml_remote.jar, and jetty-all-*.jar files and delete the jetty-all-*.jar file.

8. Navigate to the Identity_Manager_4.8.5_P1_Engine.zip\Identity_Manager_4.8.5_P1_Engine\Engine\Windows\64-bit folder.

9. Copy the dxevent.dll and dirxml.dlm files to the location where Identity Vault is installed. For example, C:\NetIQ\IDM\NDS\.

10. Copy the dirxml_misc.jar, dirxml_remote.jar, and jetty-all-*.jar files to the lib folder located inside the directory where Identity Vault is installed. For example, C:\NetIQ\IDM\NDS\lib.

11. Start the Identity Vault service.
Updating Remote Loader

**NOTE:** Before updating the Remote Loader, ensure that you perform the following steps:

- Stop the Remote Loader instance
- Stop the Driver instances running with the Remote Loader
- Close the Remote Loader Console

1. Download and extract the `Identity_Manager_4.8.5_P1_Engine.zip` file.

2. (Conditional) If you are running a 64-bit Remote Loader, perform the following steps:
   2a. Download and extract the `Identity_Manager_4.8.5_P1_Engine` file.
   2b. Navigate to Remote Loader 64 bit location and backup the `dirxml_remote` files. For example, `C:\NetIQ\IDM\RemoteLoader\64bit\`.
   2c. Navigate to Remote Loader 64 bit library location and backup the `dirxml_misc.jar`, `dirxml_remote.jar` and `jetty-all-*.jar` files. For example, `C:\NetIQ\IDM\RemoteLoader\64bit\lib`
   2d. Navigate to the `<extracted location>\RL\Windows\64-bit` folder.
   2e. Copy `dirxml_remote` file to the Remote Loader 64 bit location. For example, `C:\NetIQ\IDM\RemoteLoader\64bit`.
   2f. Navigate to the Remote Loader 64 bit library location and delete the `jetty-all-*.jar` file. For example, `C:\NetIQ\IDM\RemoteLoader\64bit\lib`.
   2g. Copy lib files from `<extracted location>\RL\Windows\lib` folder to the Remote Loader 64 bit library location. For example, `C:\NetIQ\IDM\RemoteLoader\64bit\lib`.

3. (Conditional) If you are running a 32-bit Remote Loader, perform the following steps:
   3a. Download and extract the `Identity_Manager_4.8.5_P1_Engine` file.
   3b. Navigate to 32 bit Remote Loader location and backup the `dirxml_remote` files. For example, `C:\NetIQ\IDM\RemoteLoader\.Net`.
   3c. Navigate to 32 bit Remote Loader library location and backup the `dirxml_misc.jar`, `dirxml_remote.jar`, and `jetty-all-*.jar` files. For example, `C:\NetIQ\IDM\RemoteLoader\.Net\lib`.
   3d. Navigate to the `<extracted location>\RL\32-bit` folder.
   3e. Copy `dirxml_remote` file to the Remote Loader 32 bit location. For example, `C:\NetIQ\IDM\RemoteLoader\32bit`.
   3f. Navigate to the Remote Loader 32 bit library location and delete the `jetty-all-*.jar` file. For example, `C:\NetIQ\IDM\RemoteLoader\32bit\lib`.
   3g. Copy lib files from `<extracted location>\RL\Windows\lib` folder to the Remote Loader 32 bit library location. For example, `C:\NetIQ\IDM\RemoteLoader\32bit\lib`.

4. (Conditional) If you are running .Net Remote Loader, perform the following steps:
   4a. Download and extract the `Identity_Manager_4.8.5_P1_Engine` file.
   4b. Navigate to .NET Remote Loader location and backup the `dirxml_remote.exe`, `DXMBase.dll`, `DXMLRemote.dll`, `RemoteLoader.exe`, and `RemoteLoaderSvc.exe` files. For example, `C:\NetIQ\IDM\RemoteLoader\.Net`.
4c Navigate to .NET Remote Loader library location and backup the dirxml_misc.jar file. For example, C:\NetIQ\IDM\RemoteLoader\Net\lib.

4d Navigate to the <extracted location>\RL.NET\Windows\64-bit folder.

4e Copy dirxml_remote.exe, DXMLBase.dll, DXMLRemote.dll, RemoteLoader.exe, and RemoteLoaderSvc.exe files to the .NET location. For example, C:\NetIQ\IDM\RemoteLoader\.Net

4f Navigate to the <extracted location>\RL.NET\Windows\lib folder. For example, C:\NetIQ\IDM\RemoteLoader\RL.NET\Windows\lib.

4g Copy lib files from <extracted location>\RL.NET\Windows\lib folder to the .NET library location. For example, C:\NetIQ\IDM\RemoteLoader\.Net\lib

5 Start the Remote Loader instance and the driver instance.

NOTE: If Remote Loader and Identity Vault are installed on the same machine, you must ensure to upgrade the Identity Vault.

Updating Fanout Agent

This procedure applies only if Fanout Agent is installed on a standalone server.

NOTE: Before updating the Fanout Agent, ensure that the following components are stopped:

- Fanout Agent instance
- Driver instance

1 Download and extract the Identity_Manager_4.8.5_P1_Engine file.

2 Navigate to the <extracted location>\FanoutAgent\Windows\lib directory.

3 Copy all the library files to the Fanout Agent Library location. For example, C:\NetIQ\IDM\FanoutAgent\lib

4 Start the Fanout Agent instance and the driver instance.

NOTE: You must ensure to upgrade Engine to support the upgraded Fanout Agent.

Updating Identity Applications

1 On your Identity Applications server, press Windows + R on your keyboard, type services.msc and select OK to open the Windows Services interface. From the Windows services, stop the IDM Apps Tomcat Service, NetIQ Nginx Service, and NetIQ IGA Form Renderer Service.

2 Back up the IDMProv.war and workflow.war files from the <Identity Applications Tomcat installed location>\webapps\ folder.

3 Delete the following from the <Identity Applications Tomcat installed location>\webapps\ folder:

- IDMProv.war
- IDMProv folder
• workflow.war
• workflow folder

4 Download and extract the Identity_Manager_APPS_4.8.5_P1.zip file.

5 Copy the IDMProv.war and workflow.war files from the extracted location to <Identity Applications Tomcat installed location>\webapps\ folder.

6 Copy the IGA-form-renderer-server.exe from the extracted location to C:\netiq\idm\apps\sites\ folder.

7 Delete all the files and folders from the <Identity Applications Tomcat installed location>\temp and <Identity Applications Tomcat installed location>\work folders.

8 (Optional) Navigate to the C:\NetIQ\idm\apps\tomcat\conf\ folder and set com.netiq.idm.rbpm.updateConfig-On-StartUp flag to true in the ism-configuration.properties file.

9 From the Windows services, start the NetIQ IGA Form Renderer Service, NetIQ Nginx Service, and IDM Apps Tomcat Service on your Identity Applications server.

### Updating the SSPR

**NOTE:** Use this method if SSPR is:

• Installed on a different server than the Identity Applications server.
• Installed in a Standard Edition.

1 From the Windows services, stop the Tomcat Service running on your SSPR server.

2 Back up the sspr.war file from the <Identity Applications Tomcat installed location>\webapps\ folder.

3 Download and extract the Identity_Manager_SSPR_4.8.5_P1.zip file.

4 Navigate to the <extracted location>/windows directory.

5 Copy the sspr.war file from the extracted location to <Identity Applications Tomcat installed location>\webapps\ folder.

6 Delete all the files and folders from the <Identity Applications Tomcat installed location>\temp and <Identity Applications Tomcat installed location>\work folders.

7 From the Windows services, start the IDM Apps Tomcat Service on your Identity Applications server.

### Updating the iManager

**NOTE:** This update procedure is optional if the version of iManager is other than 3.2.6.0200.

1 Download and extract the iMan_326_P2_win_x86_64.tgz file from the Download site.

2 Navigate to the <extracted location>\iManager\installs\win directory.

3 Run the iManagerInstall.exe file.
Post-Update Steps for iManager

To update the Identity Manager plug-ins from iManager, perform the following actions:

1. Log in to iManager.
3. Select the NetIQ Identity Manager iManager 3.2 Plug-ins for IDM 4.8.5.0100 and click Install.
4. Restart the Tomcat.

Updating Identity Manager Third Party License

1. Navigate to the Identity Manager installed folder on your machine, find the IdentityManager-3rdParty-license.txt file location. For example, C:\NetIQ\IDM\IdentityManager-3rdParty-license.txt
2. Download and extract the Identity_Manager_4.8.5_P1_Engine.zip file.
3. Navigate to the <extracted location>\license folder.
4. Copy the IdentityManager-3rdParty-license.txt file and replace it with the file in the location specified in Step 1.
You must be on Designer 4.8.5 at a minimum to apply this update. The update process includes the following tasks:

**Online Update (using the Auto Update feature)**

You can apply this update using the built-in auto-update feature of Designer. The auto-update feature notifies you of new features available at the Designer Download Site. This feature allows you to download Designer package and software updates when the computer that has Designer installed is connected to the Internet.

1. Launch Designer.
2. From Designer’s main menu, click Help > Check for Designer Updates.
3. Click Yes to accept the Designer updates.
4. Restart Designer for the changes to take effect.

**Offline Update (Using the download page to apply the update)**

This service pack includes a Identity_Manager_4.8.5_P1_Designer.zip file for updating Designer. You also can perform an offline update of Designer when the computer that has Designer installed is not connected to the Internet. To perform an offline update, first download this service pack on a local or remote computer and then point Designer to the directory containing the downloaded files.

To update Designer in an offline mode, create an offline copy of the Designer update files and then configure Designer to read the patch updates from the files copied to the local directory.

**To create an offline copy of the Designer update files:**

1. Log in to the computer where Designer is installed.
2. Download the Identity_Manager_4.8.5_P1_Designer.zip file from the downloads site.
3. Extract the downloaded files into a local directory.

**To configure Designer to read the patch updates from the local directory:**

1. Launch Designer.
2. From Designer’s main menu, click Windows > Preferences.
3. Click NetIQ > Identity Manager and select Updates.
4. For URL, specify file:///media/<path_to_update_file>/updatesite1_0_0/
   For a Linux mounted ISO, use the following URL format:
5 Click Apply, then click OK.
6 From Designer's main menu, click Help > Check for Designer Updates.
7 Select the required updates and click Yes to accept and update the Designer.
8 Restart Designer for the changes to take effect.
Updating Identity Manager Containers

This section provides information on updating individual containers of Identity Manager. The procedures for updating containers are described in subsequent sections.

- “Prerequisites for Updating Containers” on page 21
- “Updating Containers on Distributed Servers” on page 21
- “Updating Containers on a Single Server” on page 26

**NOTE:** You must be on Identity Manager 4.8.5 at a minimum to apply this patch.

Prerequisites for Updating Containers

Perform the following steps before you update each of the Identity Manager containers.

1. (Conditional) Copy the required dependent files to the mount directory. For more information, see Handling RPM Updates and Third Party Files.
2. Stop all the Identity Manager containers.
   
   `docker stop <container name>`
   
   For example,
   
   `docker stop engine-container`
3. Take a backup of the shared directory. The examples in the guide assume `/data` as the shared directory.
4. Delete all the Identity Manager containers.
   
   `docker rm <container name>`
   
   For example,
   
   `docker rm engine-container`
5. (Conditional) Delete all obsolete Docker images.
   
   `docker rmi <image ID>`

Updating Containers on Distributed Servers

The containers must be updated in the following order:

- “Updating Identity Manager Engine Container” on page 22
- “Updating Remote Loader Container” on page 22
- “Updating Fanout Agent Container” on page 23
Updating Identity Manager Engine Container

1 Create a credentials.properties file under the shared directory /data with the following content.

   ID_VAULT_ADMIN="<ID_VAULT_ADMIN>"
   ID_VAULT_PASSWORD="<ID_VAULT_PASSWORD>"

   where, ID_VAULT_ADMIN must be in dot format.
   For example,

   ID_VAULT_ADMIN="admin.sa.system"
   ID_VAULT_PASSWORD="novell"

2 (Conditional) To handle any driver RPM updates or third-party files, perform the steps mentioned in Handling RPM Updates and Third Party Files.

3 Navigate to the location where you have extracted the Identity_Manager_4.8.5_P1_Containers.tar.gz file.

4 Navigate to the docker-images directory.

5 Run the following command to load the image:

   docker load --input IDM_485_P1_identityengine.tar.gz

6 Update the container using the following command if you are deploying the Identity Manager Engine using the overlay network:


   Update the container using the following command if you are deploying the Identity Manager Engine using the host network:

   docker run -d --network=host --name=engine-container -v /etc/hosts:/etc/hosts -v /data:/config -e SILENT_INSTALL_FILE=/config/credentials.properties --stop-timeout 100 identityengine:idm-4.8.5.0100

Updating Remote Loader Container

1 (Conditional) To handle any driver RPM updates or third-party files, perform the steps mentioned in Handling RPM Updates and Third Party Files.

2 (Conditional) To start Remote Loader instances automatically with the container, perform the steps mentioned in Starting Remote Loader Instances Automatically With Remote Loader Container Deployment.
Updating Identity Manager Containers

3 Navigate to the location where you have extracted the Identity_Manager_4.8.5_P1_Containers.tar.gz file.

4 Navigate to the docker-images directory.

5 Run the following command to load the image:

docker load --input IDM_485_P1_remoteloader.tar.gz

6 Deploy the container by running the following command:

docker run -d --ip=192.168.0.2 --network=idmoverlaynetwork --hostname=remoteloader.example.com -p 8090:8090 --name=rl-container -v /etc/hosts:/etc/hosts -v /data:/config --stop-timeout 100 remoteloader:idm-4.8.5.0100

   The driver files can be found at the /opt/novell/eDirectory/lib/dirxml/classes/ directory of the container.

7 (Conditional) If the Remote Loader instances are not running, start the Remote Loader instances.

Updating Fanout Agent Container

1 Navigate to the location where you have extracted the Identity_Manager_4.8.5_P1_Containers.tar.gz file.

2 Navigate to the docker-images directory.

3 Run the following command to load the image:

docker load --input IDM_485_P1_fanoutagent.tar.gz

4 Update the container using the following command:

   docker run -d --ip=192.168.0.3 --network=idmoverlaynetwork --hostname=fanoutagent.example.com --name=foa-container -v /etc/hosts:/etc/hosts -v /data:/config --stop-timeout 100 fanoutagent:idm-4.8.5.0100

5 Start Fanout Agent.

Updating iManager Container

1 Navigate to the location where you have extracted the Identity_Manager_4.8.5_P1_Containers.tar.gz file.

2 Navigate to the docker-images directory.

3 Run the following command to load the image:

docker load --input iManager_326_P2.tar.gz

4 Ensure that the iManager.env file is created and present in the /data directory.
# Certificate Public Key Algorithm
# Allowed Values: RSA, ECDSA256, ECDSA384
CERTIFICATE_ALGORITHM=RSA

# Cipher Suite
# Allowed Values:
# For RSA - NONE, LOW, MEDIUM HIGH
# For ECDSA256 - SUITEB128ONLY
# For ECDSA384 - SUITEB128, SUITEB192
CIPHER_SUITE=NONE

# Tomcat Server HTTP Port
TOMCAT_HTTP_PORT=8080

# Tomcat Server SSL Port
TOMCAT_SSL_PORT=8743

# iManager Authorized User (admin_name.container_name.tree_name)
AUTHORIZED_USER=

5 Update the container using the following command:

```
docker run -d --ip=192.168.0.4 --name=iman-container --network=idmoverlaynetwork --hostname=imanager.example.com -v /etc/hosts:/etc/hosts -v /data:/config -v /data/iManager.env:/etc/opt/novell/iManager/conf/iManager.env -p 8743:8743 --stop-timeout 100 imanager:3.2.6-p2
```

6 (Conditional) If you have already installed Identity Manager, run the following command to check whether the plug-ins are loaded.

```
docker log <container name>
```

For example,

```
docker log <iman-container>
```

7 To install the Identity Manager plug-ins, perform the following steps:

7a Log in to iManager.

```
https://imanager.example.com:8743/nps/
```

7b Click Configure.

7c Click Plug-in Installation and then click Available NetIQ Plug-in Modules.

7d Select the NetIQ Identity Manager iManager 3.2 Plug-ins for IDM 4.8.5.0100 and click Install.

To obtain the plug-ins offline, perform the following steps:

1. Download the Identity_Manager_4.8.5_Linux.iso from the NetIQ Downloads website.
2. Mount the downloaded .iso.
3. From the mounted location, navigate to the /iManager/plugins directory and obtain the required plug-ins.

Alternatively, you can install the plug-ins from the iManager plug-ins website.

8 Restart the iManager container.

```
docker restart iman-container
```
Updating Identity Applications Container

1. Navigate to the location where you have extracted the Identity_Manager_4.8.5_P1_Containers.tar.gz file.
2. Navigate to the docker-images directory.
3. Run the following command to load the image:

   docker load --input IDM_485_P1_identityapplication.tar.gz

4. Update the container using the following command:

   docker run -d --ip=192.168.0.7 --network=idmoverlaynetwork --hostname=identityapps.example.com -p 18543:18543 --name=idapps-container -v /etc/hosts:/etc/hosts -v /data:/config --stop-timeout 100 identityapplication:idm-4.8.5.0100

Updating Form Renderer Container

1. Navigate to the location where you have extracted the Identity_Manager_4.8.5_P1_Containers.tar.gz file.
2. Navigate to the docker-images directory.
3. Run the following command to load the image:

   docker load --input IDM_485_P1_formrenderer.tar.gz

4. Update the container using the following command:

   docker run -d --ip=192.168.0.8 --network=idmoverlaynetwork --hostname=formrenderer.example.com -p 8600:8600 --name=fr-container -v /etc/hosts:/etc/hosts -v /data:/config --stop-timeout 100 formrenderer:idm-4.8.5.0100

Updating SSPR Container

1. Navigate to the location where you have extracted the Identity_Manager_4.8.5_P1_Containers.tar.gz file.
2. Navigate to the docker-images directory.
3. Run the following command to load the image:

   docker load --input IDM_485_P1_sspr.tar.gz

4. Update the container using the following command:

   docker run -d --ip=192.168.0.11 --network=idmoverlaynetwork --hostname=sspr.example.com --name=sspr-container -v /etc/hosts:/etc/hosts -v /data/sspr:/config -p 8443:8443 --stop-timeout 100 sspr/sspr-webapp:latest
Updating Containers on a Single Server

The containers must be updated in the following order:

- “Updating Identity Manager Engine Container” on page 26
- “Updating Remote Loader Container” on page 26
- “Updating Fanout Agent Container” on page 27
- “Updating iManager Container” on page 27
- “Updating Identity Applications Container” on page 28
- “Updating Form Renderer Container” on page 29
- “Updating SSPR Container” on page 29

Updating Identity Manager Engine Container

1. Create a credentials.properties file under the shared directory /data with the following content.

   ID_VAULT_ADMIN="<ID_VAULT_ADMIN>"
   ID_VAULT_PASSWORD="<ID_VAULT_PASSWORD>"

   where, ID_VAULT_ADMIN must be in dot format.

   For example,

   ID_VAULT_ADMIN="admin.sa.system"
   ID_VAULT_PASSWORD="novell"

2. (Conditional) To handle any driver RPM updates or third-party files, perform the steps mentioned in Handling RPM Updates and Third Party Files.

3. Navigate to the location where you have extracted the Identity_Manager_4.8.5_P1_Containers.tar.gz file.

4. Navigate to the docker-images directory.

5. Run the following command to load the image:

   ```
   docker load --input IDM_485_P1_identityengine.tar.gz
   ```

6. Update the container using the following command:

   ```
   docker run -d --network=host --name=engine-container -v /etc/hosts:/etc/hosts -v /data:/config -e SILENT_INSTALL_FILE=/config/credentials.properties --stop-timeout 100 identityengine:idm-4.8.5.0100
   ```

Updating Remote Loader Container

1. (Conditional) To handle any driver RPM updates or third-party files, perform the steps mentioned in Handling RPM Updates and Third Party Files.

2. (Conditional) To start Remote Loader instances automatically with the container, perform the steps mentioned in Starting Remote Loader Instances Automatically With Remote Loader Container Deployment.
3 Navigate to the location where you have extracted the 
Identity_Manager_4.8.5_P1_Containers.tar.gz file.

4 Navigate to the docker-images directory.

5 Run the following command to load the image:
   
docker load --input IDM_485_P1_remoteloader.tar.gz

6 Update the container using the following command:
   
docker run -d --network=host --name=rl-container -v /data:/config --stop-timeout 100 remoteloader:idm-4.8.5.0100

   For example:
   
docker run -d --network=host --name=rl-container -v /data:/config --stop-timeout 100 remoteloader:idm-4.8.5.0100

   The driver files can be found at the /opt/novell/eDirectory/lib/dirxml/classes/directory of the container.

7 (Conditional) If the Remote Loader instances are not running, start the Remote Loader instances.

### Updating Fanout Agent Container

1 Navigate to the location where you have extracted the 
Identity_Manager_4.8.5_P1_Containers.tar.gz file.

2 Navigate to the docker-images directory.

3 Run the following command to load the image:
   
docker load --input IDM_485_P1_fanoutagent.tar.gz

4 Update the container using the following command:
   
docker run -d --network=host --name=foa-container -v /data:/config --stop-timeout 100 fanoutagent:idm-4.8.5.0100

5 Start Fanout Agent.

### Updating iManager Container

1 Navigate to the location where you have extracted the 
Identity_Manager_4.8.5_P1_Containers.tar.gz file.

2 Navigate to the docker-images directory.

3 Run the following command to load the image:
   
docker load --input iManager_326_P2.tar.gz

4 Ensure that the iManager.env file is created and present in the /data directory.
# Certificate Public Key Algorithm
# Allowed Values: RSA, ECDSA256, ECDSA384
CERTIFICATE_ALGORITHM=RSA
# Cipher Suite
# Allowed Values:
# For RSA - NONE, LOW, MEDIUM, HIGH
# For ECDSA256 - SUITEB128ONLY
# For ECDSA384 - SUITEB128, SUITEB192
CIPHER_SUITE=NONE
# Tomcat Server HTTP Port
TOMCAT_HTTP_PORT=8080
# Tomcat Server SSL Port
TOMCAT_SSL_PORT=8743
# iManager Authorized User (admin_name.container_name.tree_name)
AUTHORIZED_USER=

5 Update the container using the following command:

docker run -d --network=host --name=iman-container -v /data:/config -v /data/iManager.env:/etc/opt/novell/iManager/conf/iManager.env --stop-timeout 100 imanager:3.2.6-p2

6 To install the Identity Manager plug-ins, perform the following steps:
6a Log in to iManager.
   https://identitymanager.example.com:8743/nps/
6b Click Configure.
6c Click Plug-in Installation and then click Available NetIQ Plug-in Modules.
6d Select the NetIQ Identity Manager iManager 3.2 Plug-ins for IDM 4.8.5.0100 and click Install.

To obtain the plug-ins offline, perform the following steps:
1. Download the Identity_Manager_4.8.5_Linux.iso from the NetIQ Downloads website.
2. Mount the downloaded .iso.
3. From the mounted location, navigate to the /iManager/plugins directory and obtain the required plug-ins.
   Alternatively, you can install the plug-ins from the iManager plug-ins website.
7 Restart the iManager container.

    docker restart iman-container

Updating Identity Applications Container

1 Navigate to the location where you have extracted the
   Identity_Manager_4.8.5_P1_Containers.tar.gz file.
2 Navigate to the docker-images directory.
3 Run the following command to load the image:

    docker load --input IDM_485_P1_identityapplication.tar.gz
4 Update the container using the following command:

   docker run -d --network=host --name=idapps-container -v /data:/config --stop-timeout 100 identityapplication:idm-4.8.5.0100

Updating Form Renderer Container

1 Navigate to the location where you have extracted the
   Identity_Manager_4.8.5_P1_Containers.tar.gz file.
2 Navigate to the docker-images directory.
3 Run the following command to load the image:

   docker load --input IDM_485_P1_formrenderer.tar.gz

4 Update the container using the following command:

   docker run -d --network=host --name=fr-container -v /data:/config --stop-timeout 100 formrenderer:idm-4.8.5.0100

Updating SSPR Container

1 Navigate to the location where you have extracted the
   Identity_Manager_4.8.5_P1_Containers.tar.gz file.
2 Navigate to the docker-images directory.
3 Run the following command to load the image:

   docker load --input IDM_485_P1_sspr.tar.gz

4 Update the container using the following command:

   docker run -d --network=host --name=sspr-container -v /data/sspr:/config --stop-timeout 100 sspr/sspr-webapp:latest
5 Updating Identity Manager Containers on Microsoft Azure

This section provides information on updating the Identity Manager containers to this patch on Azure.

**IMPORTANT:** You must have a machine with docker installed and running, Azure-CLI installed to perform the following steps.

1. Download the `Identity_Manager_4.8.5_P1_Containers.tar.gz` file.
2. Run the following command to extract the `.tar.gz` file:
   ```
tar -zxvf Identity_Manager_4.8.5_P1_Containers.tar.gz
   ```
3. Upload images to Azure Container Registry using the following command:
   ```
   Run ACRUpdate.sh
   ```
4. Upgrade Engine Container.
   1. To connect to Engine virtual machine through Bastion service, perform the following steps:
      a. Create Bastion service.
         i. Go to the Azure portal, and click All Resources.
         ii. Select the Identity Engine associated with your Resource Group.
         iii. Click Connect.
         iv. Click Bastion.
         v. Once the subnet is created, click Create Azure Bastion using default values.
      b. Access Engine virtual machine password.
         i. Open Key vault in your resource group.
         ii. Go to Secrets > Settings.
         iii. Click slesvmpwd.
         iv. Click on the current version.
         v. Copy the secret value.
      c. Connect to bastion.
         i. Select Engine virtual machine in your Resource Group.
         ii. Select operations > bastion.
         iii. After creating the bastion, enter "azureuser" as username
         iv. Paste the copied password and click Connect.
      d. Run bash as superuser using the following command:
         ```
sudo bash
```
2. Connect to Azure Container Registry using the following command:
   
   ```
   docker login <ACR_url> -u <ACR_user> -p <ACR_password>
   ```

3. Pull Engine 4.8.5.0100 images from Azure Container Registry using the following command:

   ```
   docker pull <ACR_url>/identityengine:idm-4.8.5.0100
   ```

4. Stop Engine Container using the following command:

   ```
   docker stop engine-container
   ```

5. Remove Engine Container and image using the following commands:

   ```
   docker rm engine-container
docker rmi <ACR_url>/identityengine:idm-4.8.5
   ```

6. Start Engine Container using the following command:

   ```
   docker run -d --network=host --name=engine-container --hostname=<VM_hostname> --restart=unless-stopped -v /data:/config -e SILENT_INSTALL_FILE=/config/silent.properties <ACR_url>/identityengine:idm-4.8.5.0100
   ```

7. Delete Bastion and the associated IP.

5 Upgrade components in Kubernetes.

1. Upload Helm Charts to Azure portal.

2. Run the Helm Chart using the following command:

   ```
   helm upgrade identity-manager helmcharts/identity-manager-1.0.1.tgz --namespace <Kubernetes namespace> --values values.yaml
   ```
Known Issues

NetIQ Corporation strives to ensure our products provide quality solutions for your enterprise software needs. There are no new issues other than the issues mentioned in NetIQ Identity Manager 4.8.5 Release Notes. If you need further assistance with any issue, contact Technical Support.