Deployment Instructions For Upgrading On-Prem Environments to 12.10.0

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Overview

This article provides deployment instructions to upgrade licensed environments from 12.9.0 to 12.10.0. This includes files that are updated in the patch and deployment instructions. Adobe Connect 12.10.0 is distributed as a patch that can only be added on an existing Adobe Connect 12.9.0. Enhanced Audio Video Patch however, can be installed on top of any previously running version.

Deployment Impacted Components

Adobe Connect Server Components

Connect Servers	Service/App	Updated	To be Stopped	To be Restarted
AEM Author	Author	✗	✓	✓
AEM Publisher	Publisher	✗	✓	✓
Connect App	CPS	✓	✓	✓
Connect App	Adobe Media Server	✓	✓	✓
Connect App	Adobe Media Administration Server	✓	✓	✓
Connect App	Telephony Service	✓	✓	✓
Connect App	Tomcat	✓	✓	✓
Connect App	JRE	✓	✓	✓
Connect App (TS)	Arkadin TA	✗	✗	✗
Connect App (TS)	Conference America	✓	✓	✓
Connect App (TS)	Intercall TA	✗	✗	✗
Connect App (TS)	MeetingOne TA	✗	✗	✗
Connect App (TS)	Premiere TA	✗	✗	✗
DB	DB	✓	✗	✗
Download	Connect Addin (Win)	✗	✗	n/a
Download	Connect Addin (Mac)	✗	✗	n/a
AMG	FMG	✗	✗	✗
ACTS	ACTS	✗	✗	✗

Enhanced Audio Video Server

Connect Servers	Fresh Deploy	To be Stopped	To be Restarted
CAS	✓	✓	✓
Config	✓	✓	✓

API Gateway	✅	✅	✅
WebRTC Liveswitch	❌	❌	❌
WebRTC Client	✅	✅	✅
Recording	✅	✅	✅
ASR	✅	✅	✅

Target version: 12.9.0

These instructions are for Licensed servers running 12.9.0. Please ensure the environment is appropriate for this upgrade.

1. Bill of Materials

S.No.	Adobe connect Server Patch
1.	update_12.9.0_12.10.0_licensed_signed.exe
2.	update_jre_tomcat_12.9.0_12.10.0_licensed_signed.exe
3.	telephony_12.9.0_12.10.0_licensed_signed.exe
4.	update_12_9_0_1.sql
5.	update_12_10_0_0.sql
6.	onboarding_1.0.0_signed.zip

S.No.	Enhanced Audio Video Patch
1.	Patch_ACS_12_10_0_EnhancedAV.zip

2. Backup Folders

- Take backup of following folders on all CPS Server Nodes

<Connect_Installation_Dir>appserv
<Connect_Installation_Dir>comserv
<Connect_Installation_Dir>jre
<Connect_Installation_Dir>tomcat
<Connect_Installation_Dir>TelephonyService

- Before executing the update script, take a backup of DB.
- Rename or take backup of ncc-onprem-installer folder or the current installation directory on Enhanced Audio/Video servers.

3. In Deployment Window

Adobe Connect Servers:

1. Stop all the Adobe Connect services on CPS servers. Make sure all the services are stopped. Make sure pptConverter.exe is not running in task manager.

Execute the patch files (run as administrator):

- *update_12.9.0_12.10.0_licensed_signed.exe* on each of the CPS nodes . Provide the Connect Installation root directory when prompted (e.g. e:\connect\12.7.0). The patch file execution should show success prompt on completion.
- *update_jre_tomcat_12.9.0_12.0.0_licensed_signed.exe* on each of the CPS nodes . Provide the Connect Installation root directory when prompted (e.g. e:\connect\12.7.0). The patch file execution should show success prompt on completion.
- *telephony_12.9.0_12.10.0_licensed_signed.exe* on each of the CPS nodes . Provide the Connect Installation root directory when prompted (e.g. e:\connect\12.7.0). The patch file execution should show success prompt on completion.

2. Execute *update_12_9_0_1.sql* and *update_12_10_0_0.sql* scripts to update database version.

NOTE - 12.10.0 has updates in java so if you are using custom cacerts available at location /jre/lib/security, keep a copy of old cacerts and overwrite the new one at location /java/lib/security post *update_jre_tomcat_12.9.0_12.0.0_licensed_signed.exe* execution.

NEW: If you have Conference America audio provider configured, make below changes to add support of mixed audio in breakouts using CA

3. Make changes in the telephony_settings.xml file under the TelephonyService/conf folder as described below:

Under the **com.conferenceamerica.adobeconnect.telephony.Adaptor** telephony-adaptor:
(Add these tags)
```
<setting id="MAX_SUB_CONFS">9</setting>
<setting id="MAX_USERS_PER_SUB_CONF">100</setting>
```

4. Make changes in the telephony-capabilities.xml file under the TelephonyService/conf folder as described below:

Under the **com.conferenceamerica.adobeconnect.telephony.Adaptor** telephony-adaptor:
(Need to replace existing flag (false) to true)
```
<capability enabled="true" id="breakout-room"/>
<capability enabled="true" id="web-audio-breakouts"/>
```

5. Start all services on all CPS nodes to finish LCC installation

AEM Servers:

NOTE - If AEM and CPS are on the same node, you need to follow below steps to have working AEM:

1. Stop both AEM services
2. Create new folder with name **aemjava** under the **java** folder which is located in Connect\12.7.0\ folder
3. Files from **jre** folder backed up in Step 2. copy to **aemjava** folder
4. Make below changes in CQAuthorSvc.conf file located in C:\Connect\12.7.0\AEM\AEM-Author\service-wrapper folder:
   (Need to replace existing path)
   wrapper.java.command=C:\Connect\12.7.0\java\aemjava\bin\java
5. Make below changes in CQPublishSvc.conf file located in C:\Connect\12.7.0\AEM\AEM-Publish\service-wrapper folder:
   (Need to replace existing path)
   wrapper.java.command=C:\Connect\12.7.0\java\aemjava\bin\java
6. Start both AEM services

NEW: If you want to enable Adobe Connect Learn Hub Feature, please follow below steps:

1. Extract onboarding_1.0.0_signed.zip file and copy the **onboarding** folder located inside to appserv/common folder

2. Add below flag to **custom.ini** file to enable Learner Hub:

   LEARNER_HUB_CDN_LINK=/common/onboarding/12.10.0/

3. Execute config-settings-reload API:
   http://localhost:8510/api/xml?action=config-settings-reload

NOTE - To enable Enhanced Audio/Video capabilities, follow the installation instructions provided below. If you are using the standard only installer, you can skip this section.

Enhanced Audio/Video servers:

Technical Specifications:

- OS – Red Hat Enterprise Linux 64-bit version 9.6 and onwards
- The following 3rd party libraries (Open source) need to be installed on servers. Most of these will be installed using the installation script:
  - Virtualenv 20.23.0,
  - Python 3.9,
  - Podman 4.9.4 or 5.x,
  - Python libraries (pydantic, pyhocon, docker, python-dotenv, redis etc.)
  - PostgreSQL 16
  - Redis server 7

NOTE ->

- If installation was done using offline mode in previous versions, make sure to use offline mode in 12.10 as well to avoid installation issues.
- If you have configured **TURNS** and **SIP**, make sure to save these settings from the **LiveSwitch Admin Console** before performing the upgrade. You will need to **reconfigure them after upgrading to 12.10**.

Deployment Instructions -

1. Copy the Patch_ACS_12_10_0_EnhancedAV.zip on all signalling, Media Server and Recording Nodes and ASR nodes.
2. Extract the ZIP.

3. Traverse to installer directory : cd ncc-onprem-installer/
4. Make sure that the files have appropriate permissions. Use the commands to make these files executables.
   sudo chmod +x ExternalDependencies/install.sh
   sudo chmod +x MainInstall.sh , sudo chmod +x Uninstall.sh , sudo chmod +x check-connectivity.sh
   sudo chmod +x ExternalDependencies/package-util.sh
5. Add these entries in hosts files on signalling node if not already present:
   <private-ip> cas.ncc.svc.cluster.local gw.1.fm.ncc.internal config.ncc.svc.cluster.local pi.ncc.svc.cluster.local auth.ncc.svc.cluster.local
6. Add these entries in hosts file of ASR node if not already present: <private-ip of signalling node> gw.1.fm.ncc.internal
7. Edit the configuration file, present in, Config/config.conf. The instructions to edit the file are added as comments in the config file.
8. Edit Config/containers.conf.
9. If you are doing the installation on a locked down environment make sure the server is updated by running sudo yum update -y . Please reboot the instance after update.
10. To install the required dependencies, follow one of the options below:

    a. **For locked-down network installations:**

        i. On **RHEL 8**, run: *bash ExternalDependencies/package-util.sh --install --rhel8*
        ii. *On **RHEL 9**, run: bash ExternalDependencies/package-util.sh --install --rhel9*
        iii. *If you encounter a **"Failed dependencies"** error on a **RHEL 8** machine, try installing the latest dependencies using: bash ExternalDependencies/package-util.sh --install --rhel9*

    b. ***For general installation:***

        i. *Run the following command to install all required external dependencies: bash ExternalDependencies/install.sh*
11. Execute the main installer script, bash MainInstall.sh
12. All steps from step 2 to Step 11 needs to be repeated on all nodes
13. Run docker ps to check all the containers are up and running.
14. Please refer to Adobe Connect helpx documentation for detailed steps.

Please refer to Adobe Connect helpx documentation for detailed steps - https://helpx.adobe.com/in/adobe-connect/installconfigure/adobe-connect-12-7-installation-guide.html

Rollback Adobe Connect Service

1. Stop these services on AC servers: ams, amsadmin, connectpro, cptelephonyservice.
2. Ensure all services have stopped and no zombie processes are running.
3. Restore backed up folders and database using the backup created from Step 3 in the Backup Folders section.
4. Start Services.
5. On AC servers, start these services: ams, amsadmin, connectpro, cptelephonyservice.
6. Ensure all services have started.
7. On Enhanced Audio/Video Servers. Run uninstall.sh to uninstall all running containers.
8. Traverse to backed up ncc-onprem-installer folder.
9. Execute bash ExternalDependencies/install.sh. This will install all required external dependencies on the box.
10. Activate Virtual Env by executing command : source bin/activate
11. Execute the main installer script, bash MainInstall.sh
12. All steps from step 2 to Step 8 needs to be repeated on all nodes
13. Run docker ps to check all the containers are up and running.