Cisco Meeting Server

Installation Assistant 3.0 Installation and Configuration

September 23, 2020

Contents

Change History	4
Introduction	5
Prerequisites Client computer requirements Cisco Meeting Server requirements External Dependencies	6 6
Installation	
Running the software	
Running the utility	
Closing the utility Persistent file storage	
r ersistent hie storage	
Configuring a Meeting Server using Installation Assistant	11
New Meeting Server Instances Existing Meeting Server Instances	
License File	
Meeting Server DNS Entries	
Configuring a server	
After pushing the configuration	13
Running the tool multiple times	14
Troubleshooting	14
Closing Installation Assistant	
Uninstalling the software	15
Panel Reference	16
Certificate	
CA Signed Certificate	16
Use Existing Certificate and Key	
Self Signed Certificate	19
License	21
PAK License	21

Uploading the license	21
Using an existing license	22
Smart Licensing	22
Network	23
Deleting a DNS or NTP server	24
Call Bridge	24
Conferencing User	25
Customizing the LDAP Search and user mappings	26
Web Bridge	28
Security	28
Push Configuration	29
Cisco Legal Information	30
Cisco Trademark	31
2 Glossary	32

Change History

Table 1: Change History

Date	Change	Reason
September 23, 2020	Release of software	Version 3.0

Introduction

The Installation Assistant is a tool to simplify the creation of a simple Cisco Meeting Server installation for demonstrations, lab environments, or as the starting point for basic installations. The tool configures Meeting Server based on the best practice deployment described in the Cisco Meeting Server Single Server Simplified Deployment guide. It is a standalone tool that uses a browser interface to collect information about your setup and then pushes that configuration to the server without you needing to use utilities to access the API, sFTP or the Meeting Server's command line interface.

Installation Assistant configures Meeting Server to be a SIP MCU capable of making and receiving calls and optionally enables the web based Cisco Meeting App. The app allows users to join meetings using just a browser.

Note: For Cisco Meeting App, guest access alone can be enabled or optionally imported LDAP users can also be enabled.

Installation Assistant is intended to be used on an empty, non-configured Meeting Server. It is not a management tool for Meeting Server, nor is it for re-configuring existing Meeting Server installations. The tool is built for configuring Meeting Server 3.0 virtual machines only. It is not for use with the X-series products or the Cisco Meeting Server 2000 platform.

Prerequisites

Client computer requirements

The Installation Assistant must be run on a computer separate from Meeting Server

Operating System	Browser	Disk space	Remarks
Windows 10 Windows Server 2012/2016/2019	Edge, Chrome and Firefox	150 MB	Requires Microsoft C++ 2017/2019 Runtime Distributable installed. Download from Microsoft link, https://support.microsoft.com/en-us/help/2977003/the- latest-supported-visual-c-downloads.
			Windows 10 computers should have the C++ runtime engine already enabled and do not need a separate installation. If the Installation Assistant tool crashes at startup, check that the redistributable is available on the computer.
Apple OSX Mojave Apple OSX Catalina	Safari, Chrome and Firefox	150 MB	NA

Table	2:	Software	requirements	for	client computer
-------	----	----------	--------------	-----	-----------------

In addition:

- The client computer should not have any services that would conflict with TCP port 8000 running locally,
- The client computer must be able to reach the Meeting Server to be configured over the network, using the following ports:
 - TCP 22
 - TCP 443
 - TCP Port to be configured for Webadmin (recommend 445)

Cisco Meeting Server requirements

- Meeting Server must be a Cisco Meeting Server 1000 or Virtual Machine instance. Installation Assistant is not compatible for use with Cisco Meeting Server 2000 or Acano platforms.
- Meeting Server must be running software 3.0.x (any maintenance release of 3.0). Newer or older versions are not supported for Installation Assistant 3.0.

 Meeting Server must be a default setup that has not yet been configured except for its network address and administrator account.

External Dependencies

To complete the installation tasks you will also need:

- Addresses for your network's DNS and NTP servers
- The address of the SIP Proxy you will use with Meeting Server
- The SIP domain picked out that you will use with Meeting Server
- The license file from Cisco or your Partner for your Meeting Server instance
- If configuring user imports, you will need the connection details to your network's LDAP directory including location, credentials, and LDAP user location details.
- If configuring the server with certificates (recommended) you should have a FQDN picked for the Meeting Server and defined in your DNS server records.
- If configuring the server with certificates (recommended) you will need to have your certificate request signed by your Certificate Authority of choice. The Installation Assistant can help generate the certificate request or you can use an existing certificate and key pair.

Installation

Installing the software

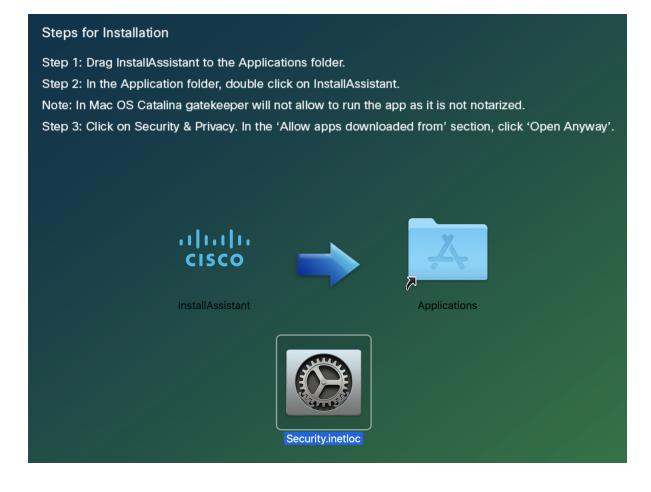
The Installation Assistant must be installed on a computer separate from the Meeting Server, and is used locally on that computer. See the "Client computer requirements" on page 6.

Windows Installation:

 Download and extract the compressed version of the product that is InstallAssistant for your operating system to its own folder.
 Note: It is recommended to un-compress the zip archive using the native tool provided along with Windows.

Apple OSX Installation:

- 1. Download the InstallAssistantOSX.dmg file to your computer. Double click InstallAssistantOSX.dmg to mount and open the disk image.
- 2. Drag the Cisco InstallAssistant icon to your Applications folder.



- 3. In the Application folder, double click on InstallAssistant **Note**: In Mac OS Catalina, gatekeeper will not allow to run the Installation Assistant app as it is not notarized.
- 4. Click on 'Security & Privacy' . In the 'Allow apps downloaded from' section, click 'Open Anyway'

Running the software

The Installation Assistant is a stand-alone utility using your web browser for its user interface. The software uses an application window where the software runs, and automatically opens your web browser to view the software's interface. (On Windows, this application window will be a terminal window).

Running the utility

Windows – Double click the 'server.exe' icon in the folder of extracted Installation Assistant files. The Installation Assistant tool opens a console window which runs the utility and automatically opens your default browser to https://localhost:8000 to view the tool's interface

Apple OSX – Double click the InstallAssistant3 icon in your Applications folder. The Installation Assistant will open an application window which runs the utility and automatically opens your default browser to https://localhost:8000 to view the tool's interface

Note: Starting with the Catalina (10.15.3) operating system version, opening the application may take more time with a '**Verifying...**' status message before the application opens. You may get an exception saying that the app cannot be opened because Apple cannot scan it for malicious software. This notice is due to the packaging of the software and is expected. To proceed, click '**Ok**' and open your '**Security & Privacy**' Control panel. There will be a notice that the Installation Assistant was blocked, click '**Open Anyway**' and click '**Open**' when prompted.

Closing the utility

Close your browser's window and click the close icon on the application window that was opened. **Note:** you must manually close the application window, just closing the browser will not quit the Installation Assistant process

Persistent file storage

The Installation Assistant is intended to be a stand-alone utility without any configuration of its own. But to support the ability to close and return to the utility later to complete tasks, certificate and license file details will be saved in an encrypted format to the client machine in the User's directory. Once a configuration is completed, or you are no longer going to use the Installation Assistant, these files can be removed.

Windows User Storage Location: C:\Users\<username>\InstallAssistant3

Apple OSX User Storage Location: /Users/<username>/Library/Application Support/InstallAssistant3

Configuring a Meeting Server using Installation Assistant

Staging

Installation Assistant is only for configuring new, empty servers. Before a Meeting Server can be used with Installation Assistant, three tasks must be addressed:

- ensure the Meeting Server is empty
- obtain the license file
- configure the Meeting Server DNS entries

New Meeting Server Instances

The Meeting Server must have its Virtual Machine deployed and running, an admin account enabled, and it's IPV4 'a' interface configured. No other configuration should be performed. The 'Installation Guide for Cisco Meeting Server 1000 and Virtualized Deployments' describes how to deploy a Meeting Server instance or configure a Cisco Meeting Server 1000 appliance. Chapter 3 in the guide describes configuring the server, DO NOT go beyond configuring the 'a' interface (step 2). The server can have a Cisco Meeting Server license loaded, but is not required.

Existing Meeting Server Instances

If a Meeting Server instance has been previously configured or has been used with the Installation Assistant tool but not completed its configuration successfully, it must be factory reset and set to the same configuration state as a new server before it can be used with the Installation Assistant. You cannot use Installation Assistant on top of a prior configuration. To reset the server:

- 1. Retrieve your existing Cisco Meeting Server license by SFTPing to the server and retrieve the cms.lic file from the server so you have a local copy
- 2. Log into the MMP interface of Meeting Server with an administrator account and issue the command **factory_reset full** and confirm when prompted. The server will reset itself to default configuration and reboot.
- 3. Log into the MMP interface of the Meeting Server and login with username **admin** password **admin**.
- 4. Set a new admin password when prompted.
- 5. Configure the ipv4 settings for the 'a' interface. See the 'Installation Guide for Cisco Meeting Server 1000 and Virtualized Deployments.'

Note: When following the configuration steps in the above guide, DO NOT go beyond configuring the 'a' interface.

License File

License files are fulfilled by using the Cisco Licensing Portal, using your PAK information from your order and your virtual machine's MAC address. For evaluation/demo licenses, you will be supplied the license directly as a compressed license file. Installation Assistant helps you load the license file to the Meeting Server, but obtaining the file is done external to the tool. You can connect to a Meeting Server without a license file, but you will not be able to move to configuration until a license file is successfully loaded to Meeting Server.

Meeting Server DNS Entries

Installation Assistant only configures the Meeting Server, it does not configure external systems like DNS or SIP proxies. If certificates or hostnames are to be used with Meeting Server, it is recommended you have these DNS entries added to your DNS servers before attempting to use the Installation Assistant.

Configuring a server

The following outlines the major steps to configure a server. For more details about an individual panel or setting, refer to the **Panel Reference** portion of this guide.

- 1. Open the Installation Assistant utility on your client computer, the tool's interface will open in your web browser's window.
- 2. Click 'Configure Server' to provide the address and login details to your Meeting Server.
 - a. In the **Configure Server** screen, enter the Meeting Server's address.
 - b. Enter the username configured on the Meeting Server.

Note: By default, 'admin' is used as the username.

- c. Enter your password configured on the Meeting Server.
- d. Enter a passphrase which will be used to securely store the files that the Installation Assistant handles. This passphrase is needed if you close and re-launch the Installation Assistant.

Note: If you re-open the tool after a previous attempt, re-enter the passphrase used previously, otherwise, enter a passphrase of your choice. If you forget your passphrase, delete your files and start again.

Note: It is important that you remember your passphrase. If you forget the passphrase, you must delete the contents from: Windows user: C:\Users\<username>\InstallAssistant MAC user: /Users/<username>/InstallAssistant and start a new configuration.

3. Click Connect

Note: The Connect button is enabled, only after the server address, username and password details are given.

4. Select the licensing mode (Smart Licensing or Cisco PAK Files), deployment type and click **Start Configuration**.

Based on your selection of deployment type, the server is configured and a wizard based interface is defined and displayed.

The following options are available:

- If the first option is selected, all the options in the wizard are displayed.

- If the second option is selected, all the options in the wizard are displayed. except the Web Bridge.

- If the third option is selected, all the options in the wizard are displayed except the Conferencing User.

- If the fourth option is selected, all the options in the wizard are displayed. except Web Bridge and Conferencing User.

- 5. Navigate through the wizard and complete the fields as prompted.
- 6. Validate the field details, the **Next** button is enabled and by clicking on it you are navigated to the next panel, based on your chosen deployment.
- 7. Review your settings and when ready, click '**Push Configuration**' to push the configuration to the server.

Note: If there is a problem pushing the configuration to the server, a log page is displayed to aid in support of diagnosing the issues.

8. After the configuration is complete, Click **Exit** and you can close the browser window and the console window to exit the tool. Do not forget to close the console window, else the tool's background services will continue to run.

After pushing the configuration

1. Once push configuration is successful, the services that you chose to configure will be configured and enabled. You can access the Web Admin via https://fqdn:<webadminport>.

If Web Bridge was enabled then it can be accessed via https://fqdn and a Test space called TestCospace is created on Meeting Server.

- 2. Ensure you can connect into the Web Admin interface of the server and login. The default is https://fqdn:445.
- 3. Ensure your Call Control is configured to send and receive calls from Meeting Server using the domain names that you have configured.
- 4. You have a test space defined on the server, update the URI via the Web Admin interface, dial in from an endpoint and test it.
- 5. If you have enabled Web Bridge, then users can browse to https://fqdn to join the meetings.

Running the tool multiple times

Once a configuration has been pushed to a server, the Installation Assistant must not be used to push configuration to the server again unless the server has been factory reset. With the exception of the license file, the Installation Assistant does not change the Meeting Server's configuration until the **Push Configuration** button is clicked. So starting and stopping the tool and connecting to the same Meeting Server is acceptable as long as push configuration has not been attempted.

Troubleshooting

For troubleshooting, you can use the logs which are stored in the following path

Windows: \C:\Users\<username>\InstallAssistant3\logs on your machine.

Apple OSX: /Users/<username>/Library/Application Support/InstallAssistant3/logs/

Please refer to this link for troubleshooting information <u>https://meeting-</u> infohub.cisco.com/faq/category/25/cisco- meeting-server.html

Note: You will be able to download a log bundle as a zip archive rather than a single file. This accounts for the possibility of Installation Assistant logs overflowing into multiple files over a period of time.

Note: If the user interface or Installation Assistant tool is non-responsive for a long time especially while connecting to a Cisco Meeting Server or at the start of the **Push Configuration** phase, then close the Installation Assistant tool and restart it.

Closing Installation Assistant

Windows: Close the command prompt window.

Apple OSX: Close the Installation Assistant window.

Uninstalling the software

To remove the Installation Assistant software from the local computer, delete the **InstallAssistant3** directory from:

Windows user: C:\Users\<username>/

Apple OSX user: /Users/<username>/Library/Application Support

Panel Reference

Certificate

The Certificate panel allows you to select which method to specify the X.509 certificate necessary for Meeting Server, and provides a guided process to create new certificate requests for those looking to create new certificates. The Installation Assistant supports using both certificates signed by a Certificate Authority and the use of self-signed certificates. The certificates panel will automatically adapt the options shown based on your selection of using CA signed certificates or self-signed certificates.

Note: Self-signed certificates are not supported for all functionality, they are a security risk and are not recommended.

The recommended path is to use a X.509 certificate signed by a Certificate Authority trusted by your organization. The Certificate Authority can be an internal or public certificate authority. For more details on how Meeting Server uses certificates and their requirements, please refer to the Cisco Meeting Server, Certificate Guidelines Single Combined Server Deployments Guide.

CA Signed Certificate

When the CA Signed Certificate method is selected, there are two available paths:

- New Certificate via CSR The Installation Assistant will guide you through creating a certificate signing request to supply to your Certificate Authority, and they in turn will supply you with a signed certificate.
- Supply an existing certificate and key Upload an existing certificate and key pair you have prepared external to Installation Assistant.

New certificate via CSR

This option guides you through creating a new certificate by creating a Certificate Signing Request (CSR) to provide to your Certificate Authority.

Completing this process requires:

- 1. Providing details for the certificate in the Installation Assistant and downloading the resulting CSR file.
- 2. Supplying the CSR to your Certificate Authority and they will return a signed certificate. You will also need the chain of public certificates that represents the Certificate Authority, which they will provide.
- 3. The resulting files are then uploaded to the Installation Assistant which will handle configuring Meeting Server with the supplied files.

Note: You are free to close the Installation Assistant tool after downloading your CSR. Once you have obtained the signed certificate from the Certificate Authority, relaunch the Installation Assistant and return to the Certificate panel to complete the upload process (see step 4 below).

Steps for creating a new certificate request (CSR):

- 1. In the Certificates Panel, select Certificate Type 'CA Signed' and under Certificate Upload Options select 'New Certificate via CSR'.
- 2. Complete the fields with the details to use for your Meeting Server. The fields are described below. When complete, click the '**Next**' button to return to the certificate panel. The **Next** button is only enabled after you have entered all the required details.

Note: If there is an existing generated certificate, and you click '**Regenerate CSR**' then the existing file will be over written with the new details, as Installation Assistant does not allow multiple CSR files to be generated.

Field Name	Description	Values
FQDN for Meeting Server	It is the CN value for your certificate and must be defined in the DNS server.	Enter the FQDN of the server.
SIP domain for Meeting Server	It is recommended to use a sub-domain.	Enter the SIP domain of the server to align with the routing rules.

Table 3: Fields required for a Certificate Signing Request

- 3. The completed CSR will be shown in the Certificate Panel. Click **Download CSR** to save the resulting CSR to a file on your local drive.
- 4. Give the CSR to your Certificate Authority to be signed. They will return a signed certificate file. You will also need the certificate chain bundle for that Certificate Authority.
- 5. Once you have your signed certificate and certificate chain files, return to the Certificate Panel if necessary and select 'Upload Files' to upload the Certificate/ Bundle. Two fields are shown to specify the certificate and CA certificate chain. Use the 'Select File' link to locate the specific file on your local computer. The certificate files must have one of the following extensions (CER,CRT,PEM,DER) and must be encoded as PEM or DER.
- 6. Once both files are specified, click '**Next**' button and the files will be sent to the Installation Assistant and validated.
- 7. If successful, the certificate and its details will be shown under 'Available Certificates' and the Certificate Panel will be marked as complete in the wizard.

Error Scenarios

An error message is displayed and the 'Next' button is disabled in case of the following scenarios:

- If the upload fails due to server/ technical issue.
 Solution: You must re-upload the certificate files.
- If the given certificate is incorrect.
 Solution: You have to select and upload the correct certificate and CA certificate chain.
- If the certificate fails to upload.
 Solution: Re-upload the certificate with the correct FQDN/SIP domain or correct key usage.
- If the certificate chain fails to upload.
 Solution: Re-uplaod the certificate chain with the correct FQDN/SIP domain or correct key usage.

Use Existing Certificate and Key

Installation Assistant provides you with an option to utilize an existing private key and signed certificate for the Meeting Server, rather than generate a CSR via the tool. This is done by using the option **Supply an existing certificate and key**.

You are required to provide the certificate, private key, and CA certificate chain. The certificate files must have one of the following extensions (CER,CRT,PEM,DER) and must be encoded as PEM or DER.

Steps for using an existing certificate:

- 1. In the Certificates Panel, select Certificate Type 'CA Signed' and under Certificate Upload Options select 'Supply an existing certificate and key'
- 2. Five fields are shown for specifying the FQDN for Meeting Server, SIP domain for Meeting Server, Certificate, Private key, and CA certificate chain. Use the **Select File**' link to locate the specific file on your local computer. The certificate files must have one of the following extensions (CER,CRT,PEM,DER) and must be encoded as PEM or DER.
- 3. Once all five files are specified, the '**Next**' button is enabled. Click **Next** and the files will be sent to the Installation Assistant and validated.

If successful, the certificate and its details will be shown under **Available Certificate** and the Certificate Panel will be marked as complete in the wizard.

Note: In the Supply an existing certificate and key option, you have to press **Next** one more time after successfully generating or uploading the certificate to proceed to the **License** option. After successful generation / upload, the certificate stepper status is updated. The FQDN and SIP Domain Fields are cleared. This allows you to either review or repeat the step before proceeding to the next step.

Error Scenarios

An error message is displayed and the 'Next' button is disabled in case of the following scenarios:

- If the upload fails due to server/ technical issue Solution: You must re-upload the certificate files.
- If the given certificate is incorrect, the **Upload** button is disabled. Solution: You have to select and upload the correct certificate and CA certificate chain.
- If the provided FQDN is incorrect. Solution: You must enter a valid FQDN.
- If the provided SIP domain is incorrect. Solution: You must enter a valid SIP domain.

Self Signed Certificate

Self signed certificates are certificates that are signed by the local entity. There is no governing authority validating the certificate. Self-signed certificates are valid, but not recommended due to lack of security. For more information on how Meeting Server uses certificates and their requirements, please refer to the <u>Cisco Meeting Server Certificate Guidelines</u>.

Note: Self signed certificate details are not stored by the tool, hence it is recommended that you complete the configuration in one go.

Note: If you are using self-signed certificates to configure the Meeting Server, ensure that the Meeting Server time is the current time. If the Meeting Server time is not in sync with the actual time, then an error is displayed. You must set the time correctly by using the date MMP command. The default system time is in UTC.

Steps for using a self-signed certificate:

- 1. In the Certificate panel, select **Self signed**.
- 2. Enter the FQDN of the server.
- 3. Enter the SIP domain of the server to align with the routing rules.
- 4. The **Next** button is only enabled after you have entered all the required details. Click **Next** and the files will be sent to the Installation Assistant and validated.

Note: In the Self Signed Certificate option, you have to press Next one more time after successfully generating or uploading the certificate to proceed to the License option. After successful generation / upload, the certificate stepper status is updated. The FQDN and SIP Domain Fields are cleared. This allows you to either review or repeat the step before proceeding to the next step.

Error Scenarios

An error message is displayed and the 'Next' button is disabled in case of the following scenarios:

- If the provided FQDN is incorrect.
 Solution: You must enter a valid FQDN.
- If the provided SIP domain is incorrect.
 Solution: You must enter a valid SIP domain.

License

An active license file is required to enable the features of Cisco Meeting Server.

There are two licensing modes:

Smart Licensing

Smart Licensing mode is for deployments that use Cisco Smart Licensing or a trial instance of Meeting Server. For more information, refer to the "Smart Licensing" on the next page section.

Note: After configuring the Meeting Server, it has to be connected to a Meeting Management Instance and the licensing mode should be set as traditional.

• PAK License

License files are obtained from the Cisco Licensing Portal using your server's MAC address and the PAK information from your Meeting Server purchase. This is the traditional method to upload a license file. For more information, refer to the "Uploading the license" below section.

PAK License

This is the traditional method to upload a license file. License files are obtained from the Cisco Licensing Portal using your server's MAC address and the PAK information from your Meeting Server purchase.

As per configurations, you have the following options:

- If you are a new user, you are able to upload a new license, For more information, refer to "Uploading the license" below section.
- If you are existing user, you are able to add more license/s or upload another license file. For more information, refer to "Using an existing license" on the next page section.

Uploading the license

Note: You will receive the xxxx.lic file in a .zip format via email. You must unzip the file before uploading to Installation Assistant.

In the License panel you must upload the active license that must be run on the Cisco Meeting Server. By default, 'Upload a new license file' option is selected. The **Select License** option allows you to locate and upload a new license file. Also, you have the option to use an exiting license file or upload another license file.

1. Click Select license file.

After the license file is selected and only if the file format is in supported format is the file uploaded.

Note: The license file name is automatically renamed to the supported format i.e. cms.lic.

- 2. You can view the available service details after providing the correct file in **Features for new** License section.
- 3. Click '**Next**' to view the license status, save the new license file to the server and you are navigated to the next panel based on your chosen deployment.

Error Scenarios

An error message is displayed and the 'Next' button is disabled in case of the following scenarios:

- If you have uploaded invalid contents or given an incorrect file extension in the license file. Solution: You must ensure the file contents are valid or provide correct file extension.
- If any services of the featured license is not active. Solution: You must ensure all services of the featured license file are active.
- If any of the mandatory features of the license file have expired. Solution: You must ensure the mandatory feature of the featured license file is active.
- If the MAC address of the license file does not match that of the Cisco Meeting Server. Solution: You must provide the correct MAC address of the Cisco Meeting Server.
- If there is a technical error while uploading the license file. Solution: Re-upload the license file.

Using an existing license

f you are an existing user and want to add more license/ s or upload another license file:

1) Select 'Use an existing license file' option.

2) The existing files are displayed and follow the steps **1-3** given in "Uploading the license" on the previous page section. The license is uploaded to the server and you can view the status of the present licenses along-with the newly added license.

Smart Licensing

Smart Licensing mode is for deployments that use Cisco Smart Licensing or a trial instance of Meeting Server.

In Smart Licensing Mode all license entitlements for Meeting Server are managed via Cisco's Smart Licensing system rather than local license files loaded to your server. Meeting Server instances get their license details through a Cisco Meeting Management server connected to the Cisco Smart License Manager (Cisco SSM) service. After using the Installation Assistant your server must be added to a Meeting Management instance to complete the setup. Your new Meeting Server will be in an expired license state, until it has been connected to a Meeting Management server. Once it is connected to the Meeting Management instance, the server will be activated if the licenses are available or put them into a timed trial mode until licenses have been applied. For more information about Cisco Meeting Management installation instructions, refer to the <u>Cisco Meeting Management Installation and Configuration Guide</u>.

Click 'Next' and you will be navigated to Network panel.

Network

The Network panel allows you to configure the core network settings for the server.

Note: You may need to contact your network administrator for guidance on these settings.

Fieldname	Description	Action
NTP Server	You need to configure at least one NTP server by giving either FQDN or IP address.	Click ' Add server '. The address of your NTP server is added to Cisco Meeting Server
	Note : You can configure up to 5 NTP servers.	
Time zone	Local time zone of your server	Select your preferred timezone.
DNS server	You need to configure at least one DNS server by giving the IP address. Note : You can configure up to 5 DNS servers.	Enter the IP address of the server and click ' Add server '. The address of your DNS server is added to Cisco Meeting Server
Webadmin port	Configure the TCP port number that the Meeting Server Web Admin Interface listens on.	Enter the port number.
	If you are using a deployment that includes Web bridge then you are not allowed to use port 443.	

1. Configure the following :

2. Ensure that all the details are entered and the configuration of the Network panel is successfully completed. The 'Next' button is enabled and the network settings are saved, click on it and you are navigated to next panel based on your chosen deployment.

Deleting a DNS or NTP server

1. Click \bigcirc to delete the DNS/ NTP server.

Error Scenarios

An error message is displayed and the '**Next**' button is disabled in case of the following scenarios:

- If an already entered NTP server address is provided. Solution: You must provide a valid IP address/ FQDN.
- If an incorrect DNS server address is provided. Solution: You must provide a valid IP address.
- If an incorrect port number is provided. Solution: You must enter a valid port number.
- If an already entered NTP server address is provided. Solution: You must provide a different IP address/ FQDN.
- If an already entered DNS server address is provided. Solution: You must provide a different IP address.

Call Bridge

The Call Bridge panel allows you to configure the settings for the Call Bridge service.

1. Enter the following details:

Field Name	Action
SIP Proxy	Enter the FQDN or IP address of the SIP Proxy that will receive outbound calls from the Meeting Server.
Encryption	Select the encryption mode (TLS) for the connection.
Media encryption for SIP calls	Select the required option from the drop-down list.
ActiveControl	Enable ActiveControl permissions for all the participants.
	When this option is enabled, it creates a callLegProfile and systemProfile to enable ActiveControls for participants by default. Note: these settings are not enabled by default in the Meeting Server.

2. When the correct details are provided, the configuration of the Call Bridge panel is

successfully completed.

Note: Ensure that all the details are entered to save your settings successfully.

3. The **Next** button is enabled and by clicking on it, you are navigated to the next panel, based on your chosen deployment.

Error Scenario

An error message is displayed and the 'Next' button is disabled in case of the following scenario:

• If the entered SIP Proxy detail is incorrect. Solution: You must provide a valid IP address/ FQDN.

Conferencing User

The Conferencing user panel allows you to import LDAP users to log into the Cisco Meeting Web App.

Creating user accounts requires:

- Defining the connection properties to connect to your Active Directory server. By default, LDAPS option is selected.
- Defining the search filter and field mapping values with which users are created on a Meeting Server. Installation Assistant has default values that works for most environments, but you have the option to override those defaults if necessary.

If you wish to create user accounts :

1. Fill in the LDAP Connection Settings fields with the values for connecting to your Active Directory controller. A Next button will be displayed once all required fields are completed.

Details on each setting are provided in the following table:

Table 4: Configuring the LDAP connection

Field Name	Description	Inputs
Server address	The network address of the LDAP server to connect to.	The FQDN or IP Address of your LDAP server
Port	The TCP port on the LDAP server to connect to.	A valid port number. The default value is 636 for LDAPS and 389 for LDAP.

Field Name	Description	Inputs
Username	The username of the user that will connect to the LDAP server. This user only needs read rights to the directory.	The LDAP Distinguished Name (DN) or UPN of the user to authenticate with.
		This field cannot be left blank
Password	The password of the user specified.	Password of the user.
		This field cannot be left blank.
Search base	The location in the LDAP directory from where import search queries will start from. For assistance with this value, contact your Domain Administrator.	The LDAP Distinguished Name (DN) of the directory location where searches should start. This field cannot be left blank
Assign PMP licenses to users	If enabled, imported users will be marked to be entitled to a PMP+ license. Do not enable if you have not purchased PMP+ licenses for all users being imported.	Enable to tag each imported user as having a PMP+ entitlement.
Override default user filter and field mapping details	Installation Assistant uses a default LDAP Search Filter and user field mappings that should work for most environments. This option when enabled, offers you the ability to view and customize these settings to fit your environment.	Enable to view or customize the LDAP search filter, and or LDAP user field mappings.

The Next button is enabled. Click Next

Note: Ensure that all the details are entered to save your settings successfully. If you are modifying the default values, ensure to use valid LDAP expressions used for the mapping.

Customizing the LDAP Search and user mappings

Installation Assistant uses a default LDAP Search Filter and user field mappings that should work for most environments. The default, filters on users that have an email address defined, a username, and will set their Meeting Server username to their meeting address.

Enabling the override option will display the individual configuration fields used for import and show the settings Installation Assistant is using by default. When Override is enabled, users have the ability to customize these values to fit their environment.

The user mapping expressions define how to set the properties of a user when importing them into Meeting Server. The expressions use variables along with static text so that a user's properties in LDAP can be used when creating the user in Meeting Server. The use of LDAP properties is critical to ensure properties that are required to be unique per user (such as username or URI) are not duplicated. LDAP properties are referenced by their property name enclosed with the \$ symbol. Example: The LDAP property 'mail' is referenced by \$mail\$ in the field mapping expressions.

Table 5: LDAP Import settings

Field Name	Description	Inputs
LDAP search filter	Defines the criteria of which LDAP users will be matched to be imported.	LDAP search string. Must use LDAP search syntax
Display name	The name shown for the user in directories and searches.	Mapping expression. Example: \$cn\$
User name	The username that the user will use to log into Cisco Meeting Web App. The resulting value must be unique across all users and spaces.	Mapping expression. Example: \$sAMAccountName\$@company.com This field cannot be blank and the result must be unique for each imported user
Space name	Label given to space automatically created for user. Leave blank if not creating spaces for imported users.	Mapping expression. Example: \$cn\$ Meeting space
Space URI	Left hand portion of URI for the space automatically created for the user. Result must be unique per user and not conflict with usernames or other spaces. Leave blank if not creating spaces for imported users	Mapping expression. Example: \$cn\$.space
Space secondary URI	Left hand portion of a second URI for the space automatically created for the user. Result must be unique per user and not conflict with usernames or other spaces. Optional field. Leave blank if not creating spaces for imported users.	Mapping expression. Example: \$cn\$.room
Space callD	Sets the call ID for the space automatically created for the user. Result must be unique across all spaces. Optional field, Cisco Meeting Server will assign IDs automatically if left blank. Leave blank if not creating spaces for imported users.	Mapping expression.
Authentication ID mapping	Mapping property assigned to the imported user. Used in smartcard login scenarios. Leave blank unless specifically deploying certificate based logins.	Mapping expression. Example: \$userPrincipalName\$

1. The **Next** button is enabled. Click **Next** and the login credential is created, saved and you are navigated to next panel based on your chosen deployment.

Note: Ensure that all the details are entered to save your settings successfully.

Error Scenarios:

An error message is displayed and the '**Next**' button is disabled in case of the following scenarios:

- If the entered server address detail is incorrect. Solution: You must provide a valid IP address/ FQDN.
- If the entered port number is incorrect. Solution: You must provide correct and only numeric values.

Web Bridge

The Web Bridge panel allows you to configure the Cisco Meeting Server Web App by opening the port that allows the Call Bridge to connect to the Web Bridge.

- 1. Enter the Call Bridge to Web Bridge (c2w) listening port. By default, the port number is 9999.
- 2. When the correct details are provided, the configuration of the Web Bridge panel is successfully completed.
- 3. The **Next** button is enabled and by clicking on it, you are navigated to the next panel based on your chosen deployment.

Error Scenario

An error message is displayed and the 'Next' button is disabled in case of the following scenario:

 If the entered Call Bridge to Web Bridge (c2w) port detail is incorrect. Solution: You must provide a valid port number.
 Note: It should not be 443 or the webadmin port.

Security

The Security panel allows you to create another user in the Meeting Server, if you lose access to your default administrator account.

- 1. Select ' Create backup user account' to create a recovery account.
- 2. Provide the new username, password and confirm the password.

Note: The password must not be blank and username should not be admin.

3. The **Next** button is enabled. Click **Next** and the login credential is created, saved and you are navigated to next panel based on your chosen deployment.

Error Scenarios:

An error message is displayed and the '**Next**' button is disabled in case of the following scenarios:

- If the entered username is incorrect.
 Solution: You must provide a valid username.
 Note: Enter an alphanumeric value other than 'admin'.
- If the entered password and confirmation passwords do not match.
 Solution: Re-enter the same passwords in both the fields.
 Note: You must provide only alphanumeric values.

Push Configuration

The Push Configuration panel allows you to review all the details of the respective panels that you have configured on Installation Assistant.

- 1. Click **Next** button to send your details to the Cisco Meeting Server to complete the configuration process.
- Once the configuration is pushed successfully to Cisco Meeting Server, the Installation Assistant displays the summary details. You can then download/ view the logs/ exit the tool. The Exit button is displayed.

Note: If the push configuration to the Cisco Meeting Server is unsuccessful, you must check the log details for more information. Click **Download logs** to download and view the log details file.

Note: If push configuration fails and you wish to reuse the Installation Assistant on a server that has already been configured, then you must factory reset the Meeting Server and re-configure the IP address, before using the Installation Assistant again on the same server. Factory reset is done by logging into the MMP command line of the server using **ssh**, and issuing the '**factory_ reset full**' command. The Factory reset command will remove the license file and network configuration, so ensure that the information is captured before factory resetting the server.

Cisco Legal Information

THE SPECIFICATIONS AND INFORMATION REGARDING THE PRODUCTS IN THIS MANUAL ARE SUBJECT TO CHANGE WITHOUT NOTICE. ALL STATEMENTS, INFORMATION, AND RECOMMENDATIONS IN THIS MANUAL ARE BELIEVED TO BE ACCURATE BUT ARE PRESENTED WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED. USERS MUST TAKE FULL RESPONSIBILITY FOR THEIR APPLICATION OF ANY PRODUCTS.

THE SOFTWARE LICENSE AND LIMITED WARRANTY FOR THE ACCOMPANYING PRODUCT ARE SET FORTH IN THE INFORMATION PACKET THAT SHIPPED WITH THE PRODUCT AND ARE INCORPORATED HEREIN BY THIS REFERENCE. IF YOU ARE UNABLE TO LOCATE THE SOFTWARE LICENSE OR LIMITED WARRANTY, CONTACT YOUR CISCO REPRESENTATIVE FOR A COPY.

The Cisco implementation of TCP header compression is an adaptation of a program developed by the University of California, Berkeley (UCB) as part of UCB's public domain version of the UNIX operating system. All rights reserved. Copyright © 1981, Regents of the University of California.

NOTWITHSTANDING ANY OTHER WARRANTY HEREIN, ALL DOCUMENT FILES AND SOFTWARE OF THESE SUPPLIERS ARE PROVIDED "AS IS" WITH ALL FAULTS. CISCO AND THE ABOVE-NAMED SUPPLIERS DISCLAIM ALL WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, WITHOUT LIMITATION, THOSE OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT OR ARISING FROM A COURSE OF DEALING, USAGE, OR TRADE PRACTICE.

IN NO EVENT SHALL CISCO OR ITS SUPPLIERS BE LIABLE FOR ANY INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES, INCLUDING, WITHOUT LIMITATION, LOST PROFITS OR LOSS OR DAMAGE TO DATA ARISING OUT OF THE USE OR INABILITY TO USE THIS MANUAL, EVEN IF CISCO OR ITS SUPPLIERS HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

Any Internet Protocol (IP) addresses and phone numbers used in this document are not intended to be actual addresses and phone numbers. Any examples, command display output, network topology diagrams, and other figures included in the document are shown for illustrative purposes only. Any use of actual IP addresses or phone numbers in illustrative content is unintentional and coincidental.

All printed copies and duplicate soft copies of this document are considered uncontrolled. See the current online version for the latest version.

Cisco has more than 200 offices worldwide. Addresses and phone numbers are listed on the Cisco website at <u>www.cisco.com/go/offices.</u>

© 2020 Cisco Systems, Inc. All rights reserved.

Cisco Trademark

Cisco and the Cisco logo are trademarks or registered trademarks of Cisco and/or its affiliates in the U.S. and other countries. To view a list of Cisco trademarks, go to this URL: <u>www.cisco.com/go/trademarks</u>. Third-party trademarks mentioned are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (1721R)