



CHAPTER 17

Configuring Digest Authentication for the SIP Trunk

When you configure digest authentication for SIP trunks, Cisco Unified Communications Manager challenges the identity of the SIP user agent when it receives a SIP request on the SIP trunk. The SIP user agent, in turn, can challenge the identity of Cisco Unified Communications Manager when Cisco Unified Communications Manager sends a SIP request to the trunk. For additional information on how digest authentication works for SIP trunks, see the [“Digest Authentication” section on page 1-18](#).

This chapter contains information on the following topics:

- [SIP Trunk Digest Authentication Configuration Checklist, page 17-1](#)
- [Configuring Digest Authentication Enterprise Parameters, page 17-2](#)
- [Configuring the Digest Credentials in the Application User Configuration Window, page 17-2](#)
- [Application User Digest Credential Configuration Settings, page 17-3](#)
- [Finding a SIP Realm, page 17-3](#)
- [Configuring a SIP Realm, page 17-4](#)
- [SIP Realm Configuration Settings, page 17-5](#)
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SIP Trunk Digest Authentication Configuration Checklist

[Table 17-1](#) describes the tasks to configure digest authentication for SIP trunks.

Table 17-1 *SIP Trunk Security Configuration Checklist*

Configuration Steps		Related Procedures and Topics
Step 1	Configure the SIP trunk security profiles; make sure that you check the Enable Digest Authentication check box.	• Configuring the SIP Trunk Security Profile, page 16-3 • Digest Authentication, page 1-18
Step 2	Apply a SIP trunk security profile to the trunk.	Applying a SIP Trunk Security Profile, page 16-7

Table 17-1 SIP Trunk Security Configuration Checklist (continued)

Configuration Steps		Related Procedures and Topics
Step 3	Configure the enterprise parameter, Cluster ID, if not configured. This parameter supports Cisco Unified Communications Manager challenges to the identity of the SIP user agent sending a SIP request on the SIP trunk.	Configuring Digest Authentication Enterprise Parameters, page 17-2
Step 4	If Cisco Unified Communications Manager challenges the identity of SIP user agents sending SIP requests on the SIP trunk, configure the digest credentials for the application user in the Application User Configuration window.	• Configuring the Digest Credentials in the Application User Configuration Window, page 17-2 • Application User Digest Credential Configuration Settings, page 17-3
Step 5	If Cisco Unified Communications Manager responds to challenges from a trunk peer, configure the SIP realm.	• Digest Authentication, page 1-18 • Configuring a SIP Realm, page 17-4 • SIP Realm Configuration Settings, page 17-5

Configuring Digest Authentication Enterprise Parameters

To configure the enterprise parameter, Cluster ID, for digest authentication, choose **System > Enterprise Parameters** in Cisco Unified Communications Manager Administration. Locate the Cluster ID parameter and update the value, as described in the Help for the parameter. This parameter supports Cisco Unified Communications Manager challenges to the identity of the SIP user agent sending a SIP request on the SIP trunk.



Tip

To access the Help for the parameter, click the question mark that displays in the Enterprise Parameters Configuration window or click the parameter link.

Configuring the Digest Credentials in the Application User Configuration Window

If Cisco Unified Communications Manager challenges the identity of a SIP user agent, you must configure the digest credentials for the application user in the Application User Configuration window in Cisco Unified Communications Manager Administration. Cisco Unified Communications Manager uses these credentials to verify the identity of SIP user agents that are sending requests through the SIP trunk.

To configure the digest credentials for an application user, perform the following procedure:

Procedure

- Step 1** Find the application user, as described in the *Cisco Unified Communications Manager Administration Guide*.

- Step 2** Click the application user link.
- Step 3** After the specific Application User Configuration window displays, enter the appropriate settings, as described in [Table 17-3](#).
- Step 4** Click **Save**.

Additional Information

See the [“Related Topics” section on page 17-6](#).

Application User Digest Credential Configuration Settings

[Table 17-3](#) describes the settings for the digest credential settings in the Application User Configuration window in Cisco Unified Communications Manager Administration. For related information and procedures, see the [“Related Topics” section on page 17-6](#).

Table 17-2 *Digest Authentication Credentials*

Setting	Description
Digest Credentials	Enter a string of alphanumeric characters.
Confirm Digest Credentials	To confirm that you entered the digest credentials correctly, enter the credentials in this field.

Finding a SIP Realm

To find a SIP Realm, perform the following procedure:

Procedure

- Step 1** In Cisco Unified Communications Manager Administration, choose **User Management > SIP Realm**. The Find and List window displays. Records from an active (prior) query may also display in the window.
- Step 2** To find all records in the database, ensure the dialog box is empty; go to [Step 3](#).
To filter or search records
- From the first drop-down list box, choose a search parameter.
 - From the second drop-down list box, choose a search pattern.
 - Specify the appropriate search text, if applicable.



Note To add additional search criteria, click the + button. When you add criteria, the system searches for a record that matches all criteria that you specify. To remove criteria, click the – button to remove the last added criterion or click the **Clear Filter** button to remove all added search criteria.

- Step 3** Click **Find**.

All matching records display. You can change the number of items that display on each page by choosing a different value from the Rows per Page drop-down list box.

- Step 4** From the list of records that display, click the link for the record that you want to view.



Note To reverse the sort order, click the up or down arrow, if available, in the list header.

The window displays the item that you choose.

Next Steps

If you have not already done so, configure the Cluster ID enterprise parameter, as described in the [“Configuring Digest Authentication Enterprise Parameters”](#) section on page 17-2.

Additional Information

See the [“Related Topics”](#) section on page 17-6.

Configuring a SIP Realm

If Cisco Unified Communications Manager responds to challenges from one or more trunk peers, you must configure SIP Realm for each SIP trunk user agent that can challenge Cisco Unified Communications Manager.

To add or update a SIP Realm, perform the following procedure:

Procedure

- Step 1** In Cisco Unified Communications Manager Administration, choose **User Management > SIP Realm**.
- Step 2** Perform one of the following tasks:
- To add a new SIP Realm, click **Add New** in the Find window. (You can also display a SIP realm and then click **Add New**.) The configuration window displays with the default settings for each field.
 - To copy an existing record, locate the appropriate record as described in [“Finding a SIP Realm”](#) section on page 17-3 and click the **Copy** icon for that record in the Copy column. (You can also display a SIP Realm and then click **Copy**.) The configuration window displays with the configured settings.
 - To update an existing record, locate and display the appropriate SIP Realm, as described in [“Finding a SIP Realm”](#) section on page 17-3. The configuration window displays with the current settings.
- Step 3** Enter the appropriate settings as described in [Table 17-3](#).
- Step 4** Click **Save**.
- Step 5** Perform the procedure for all realms that you must add or update.

Next Steps

To ensure that digest authentication is successful, verify that the same settings that you configured in Cisco Unified Communications Manager are configured on the SIP user agent.

Additional Information

See the [“Related Topics” section on page 17-6](#).

SIP Realm Configuration Settings

The SIP Realm provides the trunk-side credentials when Cisco Unified Communications Manager gets challenged by a trunk peer.

[Table 17-3](#) describes the settings for the SIP Realm. For related information and procedures, see the [“Related Topics” section on page 17-6](#).

Table 17-3 *SIP Realm Security Profile*

Setting	Description
Realm	Enter the domain name for the realm that connects to the SIP trunk; for example, SIPProxy1_xyz.com. You can use alphanumeric characters, period, dash, underscore, and space.
User	Enter the user name for the SIP user agent in this realm; for example, enter the Cisco Unified Communications Manager server name. The SIP trunk uses this user name to challenge this Cisco Unified Communications Manager.
Digest Credentials	Enter the password that Cisco Unified Communications Manager uses to respond to a challenge for this realm and user.
Confirm Digest Credentials	Re-enter the password for verification.

Deleting a SIP Realm

This section describes how to delete a SIP Realm from the Cisco Unified Communications Manager database.

Procedure

- Step 1** Find the SIP Realm by using the procedure in the [“Finding a SIP Realm” section on page 17-3](#).
- Step 2** Perform one of the following tasks:
 - To delete multiple SIP Realms, perform one of these tasks in the Find and List window:
 - Check the check boxes next to the realms that you want to delete; then, click **Delete Selected**.
 - You can delete all configurable records for this selection by clicking **Select All** and then clicking **Delete Selected**.
 - To delete a single SIP Realm, perform one of these tasks in the Find and List window:
 - Check the check box next to the realm that you want to delete; then, click **Delete Selected**.
 - Click the **Name** link for the realm. After the specific SIP Realm Configuration window displays, click **Delete Selected**.

- Step 3** When prompted to confirm the delete operation, click **OK** to delete or **Cancel** to cancel the delete operation.
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Additional Information

See the [“Related Topics”](#) section on page 17-6

Where to Find More Information

Related Topics

- [Digest Authentication, page 1-18](#)
- [SIP Trunk Digest Authentication Configuration Checklist, page 17-1](#)
- [Configuring Digest Authentication Enterprise Parameters, page 17-2](#)
- [Configuring the Digest Credentials in the Application User Configuration Window, page 17-2](#)
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- [Finding a SIP Realm, page 17-3](#)
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