



# Configuring Local Authentication and Authorization

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## How to Configure Local Authentication and Authorization

### Configuring the Switch for Local Authentication and Authorization

You can configure AAA to operate without a server by setting the switch to implement AAA in local mode. The switch then handles authentication and authorization. No accounting is available in this configuration.



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**Note** To secure the switch for HTTP access by using AAA methods, you must configure the switch with the **ip http authentication aaa** global configuration command. Configuring AAA authentication does not secure the switch for HTTP access by using AAA methods.

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Follow these steps to configure AAA to operate without a server by setting the switch to implement AAA in local mode:

#### SUMMARY STEPS

1. **enable**
2. **configure terminal**
3. **aaa new-model**
4. **aaa authentication login default local**
5. **aaa authorization exec default local**
6. **aaa authorization network default local**
7. **username** *name* [**privilege level**] {**password** *encryption-type password*}
8. **end**
9. **show running-config**
10. **copy running-config startup-config**

## DETAILED STEPS

	Command or Action	Purpose
<b>Step 1</b>	<b>enable</b> <b>Example:</b> Device> <b>enable</b>	Enables privileged EXEC mode. <ul style="list-style-type: none"> <li>• Enter your password if prompted.</li> </ul>
<b>Step 2</b>	<b>configure terminal</b> <b>Example:</b> Device# <b>configure terminal</b>	Enters global configuration mode.
<b>Step 3</b>	<b>aaa new-model</b> <b>Example:</b> Device (config)# <b>aaa new-model</b>	Enables AAA.
<b>Step 4</b>	<b>aaa authentication login default local</b> <b>Example:</b> Device (config)# <b>aaa authentication login default local</b>	Sets the login authentication to use the local username database. The <b>default</b> keyword applies the local user database authentication to all ports.
<b>Step 5</b>	<b>aaa authorization exec default local</b> <b>Example:</b> Device (config)# <b>aaa authorization exec default local</b>	Configures user AAA authorization, check the local database, and allow the user to run an EXEC shell.
<b>Step 6</b>	<b>aaa authorization network default local</b> <b>Example:</b> Device (config)# <b>aaa authorization network default local</b>	Configures user AAA authorization for all network-related service requests.
<b>Step 7</b>	<b>username name [privilege level] {password encryption-type password}</b> <b>Example:</b> Device (config)# <b>username your_user_name privilege 1 password 7 secret567</b>	Enters the local database, and establishes a username-based authentication system.  Repeat this command for each user. <ul style="list-style-type: none"> <li>• For <i>name</i>, specify the user ID as one word. Spaces and quotation marks are not allowed.</li> <li>• (Optional) For <i>level</i>, specify the privilege level the user has after gaining access. The range is 0 to 15.</li> </ul>

	Command or Action	Purpose
		<p>Level 15 gives privileged EXEC mode access. Level 0 gives user EXEC mode access.</p> <ul style="list-style-type: none"> <li>For <i>encryption-type</i>, enter 0 to specify that an unencrypted password follows. Enter 7 to specify that a hidden password follows.</li> <li>For <i>password</i>, specify the password the user must enter to gain access to the switch. The password must be from 1 to 25 characters, can contain embedded spaces, and must be the last option specified in the <b>username</b> command.</li> </ul>
Step 8	<p><b>end</b></p> <p><b>Example:</b></p> <pre>Device(config)# end</pre>	Returns to privileged EXEC mode.
Step 9	<p><b>show running-config</b></p> <p><b>Example:</b></p> <pre>Device# show running-config</pre>	Verifies your entries.
Step 10	<p><b>copy running-config startup-config</b></p> <p><b>Example:</b></p> <pre>Device# copy running-config startup-config</pre>	(Optional) Saves your entries in the configuration file.

## Monitoring Local Authentication and Authorization

To display Local Authentication and Authorization configuration, use the **show running-config** privileged EXEC command.

## Feature History for Local Authentication and Authorization

This table provides release and related information for features explained in this module.

These features are available on all releases subsequent to the one they were introduced in, unless noted otherwise.

Release	Feature	Feature Information
Cisco IOS XE Everest 16.5.1a	Local Authentication and Authorization	This feature helps AAA to operate without a server by setting the device to implement AAA in local mode.  Support for this feature was introduced on all the models of the Cisco Catalyst 9500 Series Switches.
Cisco IOS XE Fuji 16.8.1a	Local Authentication and Authorization	Support for this feature was introduced on the C9500-32C, C9500-32QC, C9500-48Y4C, and C9500-24Y4C models of the Cisco Catalyst 9500 Series Switches.

Use Cisco Feature Navigator to find information about platform and software image support. To access Cisco Feature Navigator, go to <http://www.cisco.com/go/cfn>.