# Configuring Local Authentication and Authorization

# 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.

**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.

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 local**
6. **aaa authorization network 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** |
|---|---|---|
| **Step 1** | **enable**<br><br>**Example:**<br><br>Switch> **enable** | Enables privileged EXEC mode. Enter your password if prompted. |
| **Step 2** | **configure terminal**<br><br>**Example:**<br><br>Switch# **configure terminal** | Enters the global configuration mode. |
| **Step 3** | **aaa new-model**<br><br>**Example:**<br><br>Switch(config)# **aaa new-model** | Enables AAA. |
| **Step 4** | **aaa authentication login default local**<br><br>**Example:**<br><br>Switch(config)# **aaa authentication login default local** | Sets the login authentication to use the local username database. The **default** keyword applies the local user database authentication to all ports. |
| **Step 5** | **aaa authorization exec local**<br><br>**Example:**<br><br>Switch(config)# **aaa authorization exec local** | Configures user AAA authorization, check the local database, and allow the user to run an EXEC shell. |
| **Step 6** | **aaa authorization network local**<br><br>**Example:**<br><br>Switch(config)# **aaa authorization network local** | Configures user AAA authorization for all network-related service requests. |
| **Step 7** | **username** *name* [**privilege** *level*] {**password** *encryption-type password*}<br><br>**Example:**<br><br>Switch(config)# **username your_user_name privilege 1 password 7 secret567** | Enters the local database, and establishes a username-based authentication system.<br><br>Repeat this command for each user.<br><br>• For *name*, specify the user ID as one word. Spaces and quotation marks are not allowed.<br><br>• (Optional) For *level*, specify the privilege level the user has after gaining access. The range is 0 to 15. |

| | Command or Action | Purpose |
|---|---|---|
| | | Level 15 gives privileged EXEC mode access. Level 0 gives user EXEC mode access.<br><br>• For *encryption-type*, enter 0 to specify that an unencrypted password follows. Enter 7 to specify that a hidden password follows.<br><br>• For *password*, 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 **username** command. |
| Step 8 | **end**<br><br>Example:<br><br>`Switch(config)# end` | Returns to privileged EXEC mode. |
| Step 9 | **show running-config**<br><br>Example:<br><br>`Switch# show running-config` | Verifies your entries. |
| Step 10 | **copy running-config startup-config**<br><br>Example:<br><br>`Switch# copy running-config startup-config` | (Optional) Saves your entries in the configuration file. |

**Related Topics**

SSH Servers, Integrated Clients, and Supported Versions

TACACS+ and Switch Access

RADIUS and Switch Access

Setting Up the Switch to Run SSH

SSH Configuration Guidelines

# Monitoring Local Authentication and Authorization

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

# Additional References

**Error Message Decoder**

| Description | Link |
|---|---|
| To help you research and resolve system error messages in this release, use the Error Message Decoder tool. | https://www.cisco.com/cgi-bin/Support/Errordecoder/index.cgi |

**MIBs**

| MIB | MIBs Link |
|---|---|
| All the supported MIBs for this release. | To locate and download MIBs for selected platforms, Cisco IOS releases, and feature sets, use Cisco MIB Locator found at the following URL:<br><br>http://www.cisco.com/go/mibs |

**Technical Assistance**

| Description | Link |
|---|---|
| The Cisco Support website provides extensive online resources, including documentation and tools for troubleshooting and resolving technical issues with Cisco products and technologies.<br><br>To receive security and technical information about your products, you can subscribe to various services, such as the Product Alert Tool (accessed from Field Notices), the Cisco Technical Services Newsletter, and Really Simple Syndication (RSS) Feeds.<br><br>Access to most tools on the Cisco Support website requires a Cisco.com user ID and password. | http://www.cisco.com/support |

# Feature Information for Local Authentication and Authorization

| Release | Feature Information |
|---|---|
| Cisco IOS 15.0(2)EX1 | This feature was introduced. |