

## Security, Internet Access, and Communication Ports

To safeguard the ASA FirePOWER module, you should install it on a protected internal network. Although the ASA FirePOWER module is configured to have only the necessary services and ports available, you must make sure that attacks cannot reach it from outside the firewall.

Also note that specific features of the ASA FirePOWER module require an Internet connection. By default, the ASA FirePOWER module is configured to directly connect to the Internet. Additionally, the system requires certain ports remain open for secure appliance access and so that specific system features can access the local or Internet resources to operate correctly.

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## **Internet Access Requirements**

By default, the ASA FirePOWER module is configured to directly connect to the Internet on ports 443/tcp (HTTPS) and 80/tcp (HTTP), which are open by default on the ASA FirePOWER module; see Communication Ports Requirements, on page 2.

The following table describes the Internet access requirements of specific features of the ASA FirePOWER module.

| Feature                                | Internet access is required to  |
|--|---|
| intrusion rule, VDB, and GeoDB updates | download or schedule the download of a intrusion rule, GeoDB, or VDB update directly to an appliance. |
| network-based AMP                      | perform malware cloud lookups.  |
| Security Intelligence filtering        | download Security Intelligence feed data from an external source, including the Intelligence Feed.    |
| system software updates                | download or schedule the download of a system update directly to an appliance.                        |

| Feature       | Internet access is required to  |  |  |
|---------------|---|--|--|
| URL filtering | download cloud-based URL category and reputation data for access control, and perform lookups for uncategorized URLs. |  |  |
|               | https://regsvc.sco.cisco.com  |  |  |
|               | https://est.sco.cisco.com   |  |  |
|               | https://updates-talos.sco.cisco.com   |  |  |
|               | http://updates.ironport.com   |  |  |
|               | IPV4:   |  |  |
|               | • 146.112.62.0/24   |  |  |
|               | • 146.112.63.0/24   |  |  |
|               | • 146.112.255.0/24  |  |  |
|               | • 146.112.59.0/24   |  |  |
|               | IPv6  |  |  |
|               | • 2a04:e4c7:ffff::/48   |  |  |
|               | • 2a04:e4c7:fffe::/48   |  |  |
| whois         | request whois information for an external host.   |  |  |

## **Communication Ports Requirements**

Open ports allow:

- access to an appliance's user interface
- · secure remote connections to an appliance
- certain features of the system to access the local or Internet resources they need to function correctly

In general, feature-related ports remain closed until you enable or configure the associated feature.

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Caution Do not close an open port until you understand how this action will affect your deployment.

For example, closing port 25/tcp (SMTP) outbound on a manage device blocks the device from sending email notifications for individual intrusion events (see Configuring External Alerting for Intrusion Rules).

The following table lists the open ports required so that you can take full advantage of ASA FirePOWER module features.

| Port     | Description         | Direction     | Is Open to  |
|----------|---------------------|---------------|---|
| 22/tcp   | SSH/SSL             | Bidirectional | allow a secure remote connection to the appliance.                        |
| 25/tcp   | SMTP                | Outbound      | send email notices and alerts from the appliance.                         |
| 53/tcp   | DNS                 | Outbound      | use DNS.  |
| 67/udp   | DHCP                | Outbound      | use DHCP.   |
| 68/udp   |                     |               | <b>Note</b> These ports are <b>closed</b> by default.                     |
|          |                     | Bidirectional | update custom and third-party Security Intelligence feeds via HTTP.       |
|          |                     |               | download URL category and reputation data (port 443 also required).       |
| 161/udp  | SNMP                | Bidirectional | allow access to an appliance's MIBs via SNMP polling.                     |
| 162/udp  | SNMP                | Outbound      | send SNMP alerts to a remote trap server.                                 |
| 389/tcp  | LDAP                | Outbound      | communicate with an LDAP server for external authentication.              |
| 636/tcp  |                     |               |   |
| 389/tcp  | LDAP                | Outbound      | obtain metadata for detected LDAP users.                                  |
| 636/tcp  |                     |               |   |
| 443/tcp  | HTTPS               | Inbound       | access an appliance's user interface.                                     |
| 443/tcp  | HTTPS               | Bidirectional | obtain:   |
|          | cloud comms.        |               | <ul> <li>software, intrusion rule, VDB, and GeoDB updates</li> </ul>      |
|          |                     |               | • URL category and reputation data (port 80 also required)                |
|          |                     |               | • the Intelligence Feed and other secure Security Intelligence feeds      |
|          |                     |               | • malware dispositions for files detected in network traffic              |
|          |                     | 1             | download software updates using the device's local user interface.        |
| 514/udp  | syslog              | Outbound      | send alerts to a remote syslog server.                                    |
| 8305/tcp | appliance<br>comms. | Bidirectional | securely communicate between appliances in a deployment. <b>Required.</b> |
| 8307/tcp | host input client   | Bidirectional | communicate with a host input client.                                     |

Table 2: Default Communication Ports for ASA FirePOWER module Features and Operations