Manage Certificates on the FindIT Network Manager

Objective

A digital certificate certifies the ownership of a public key by the named subject of the certificate. This allows relying parties to depend upon signatures or assertions made by the private key that corresponds to the public key that is certified. Upon installation, the FindIT Network Manager generates a self-signed certificate to secure web and other communication with the server. You can choose to replace this certificate with the one signed by a trusted certificate authority (CA). To do this, you will need to generate a certificate signing request (CSR) for signing by the CA.

You can also choose to generate a certificate and the corresponding private key completely independent of the Manager. If so, you can combine the certificate and private key into a Public Key Cryptography Standards (PKCS) #12 format file prior to upload.

The FindIT Network Manager only supports .pem format certificates. If you get other certificate formats, you need to convert the format or request for the .pem format certificate again from the CA.

This article provides instructions on how to manage certificates on FindIT Network Manager.

Applicable Devices

• FindIT Network Manager

Software Version

• 1.1

Manage Certificates on FindIT Network Manager

Generate a CSR

Step 1. Log in to the Administration GUI of your FindIT Network Manager then choose **Administration > Certificate**.



Step 2. In the CSR area, click the **Create** button.

| Certificate | | | | |
|--------------------|----------|------|----------|--------|
| HTTPS Certificate: | Deployed | View | Download | Update |
| CSR: | N/A | | | Create |
| | | | | |

The values entered in the Certificate form will be used to construct the CSR, and will be contained in the signed certificate you receive from the CA.

<u>Step 3</u>. Enter the IP address or domain name in the *Full qualified domain name* field. In this example, hostname.cisco.com is used.

| Full qualified domain name | hostname.cisco.com | | |
|----------------------------|--------------------|--|--|
|----------------------------|--------------------|--|--|

Step 4. Enter the country code in the *Country* field. In this example, US is used.

| Country | usj | ~ |
|---------|-----|---|
| | | |

Step 5. Enter the state code in the State field. In this example, CA is used.

| State | ~ |
|-------|---|
|-------|---|

Step 6. Enter the city in the *City* field. In this example, Irvine is used.

| City | Irvine | 4 |
|------|--------|---|
| | | |

Step 7. Enter the organization name in the Org field. In this example, Cisco is used.

| Org | Cisco | ~ |
|-----|-------|---|
| | | |

Step 8. Enter the organization units in the *Org Units* field. In this example, Small Business is used.

| Org Units | Small Business | ~ |
|-----------|----------------|---|
| | | |

Step 9. Enter your email address in the *Email* field. In this example, <u>ciscofindituser@cisco.com</u> is entered.

| Email | ciscofindituser@cisco.com | ~ |
|-------|---------------------------|---|
| | | |

Step 10. Click Save.

| Certificate | |
|---|--|
| Note: When you create the CS issue, and then upload the issue | R file successfully, please send the downloaded file to a Certificate Authority to ued certificate to system by operation (Update/Upload Cert). |
| Full qualified domain name | hostname.cisco.com |
| Country | US 🗸 |
| State | CA 🖌 |
| City | Irvine 🗸 |
| Org | Cisco 🖌 |
| Org Units | Small Business |
| Email | ciscofindituser@cisco.com |
| | Save |
| | |

The CSR file will be automatically downloaded to your computer. In this example, system.csr.pem file is generated.

| Platform Settings | |
|-------------------|--------------|
| Logging Settings | |
| Local Probe | |
| | |
| system.csr.pem | ▲ Show All × |

Step 11. (Optional) In the CSR area, the status will be updated from N/A to Created. To download the created CSR, click the **Download** button.

| Certificate | | | | |
|--------------------|----------|------|----------|--------|
| HTTPS Certificate: | Deployed | View | Download | Update |
| CSR: | Created | | Download | Update |
| | | | | |

Step 12. (Optional) To update the created CSR, click the **Update** button then return to <u>Step</u> $\underline{3}$.

| Certificate | | | | |
|--------------------|----------|------|----------|--------|
| HTTPS Certificate: | Deployed | View | Download | Update |
| CSR: | Created | | Download | Update |
| | | | | |

You should now have successfully generated a CSR on your FindIT Network Manager. You can now send the downloaded CSR file to the CA.

Upload a Signed Certificate from the CA

Once you receive the signed CSR from the CA, you can now upload it to the Manager.

Step 1. Log in to the Administration GUI of your FindIT Network Manager then choose **Administration > Certificate**.

| ٥ | Administration |
|---|-------------------|
| | User Management |
| | Change Password |
| | License |
| | Certificate |
| | Backup & Restore |
| | Platform Settings |
| | Logging Settings |
| | Local Probe |

Step 2. In the HTTPS Certificate area, click the **Update** button.

| Certificate | | | | |
|--------------------|----------|------|----------|--------|
| HTTPS Certificate: | Deployed | View | Download | Update |
| CSR: | Created | | Download | Update |
| | | | | |

Step 3. Click the **UploadCert** radio button.

| Certificate | | | | | |
|--------------------------|--------------|-----------------|--|--|--|
| O Renew Self-signed Cert | OUpload Cert | O Upload PKCS12 | | | |

Note: Alternatively, you can upload a certificate with the associated private key in PKCS#12 format by choosing the **Upload PKCS12** radio button. The password to unlock the file should be specified in the *Password* field provided.

| O Upload Cert | | ad PKCS12 |
|---------------|--|-----------|
| Password: | | |

Step 4. Drop the signed certificate on the target area, or click the target area to browse the file system then click **Open**. The file should be in .pem format.

| | 000 ~ | Downloads | ٢ | | Q Search | |
|----------|------------|--------------------|---------------|--------|----------|----|
| Name | | | | | | D |
| | signed-sys | stem.csr.pem | | | | T |
| <u> </u> | WAP361_V | VAP150_1.1.0.5.tar | | | | Ye |
| L. | image_tesl | a_Sx250-350_Sx350X | -550X_2.3.0.1 | 30.bin | | Ju |
| S | backup-20 | 17-07-12-11-09-28 | GMT.zip | | | Jı |
| - | backup-20 | 17-07-12-11-06-290 | GMT.zip | | | Jı |
| (m | 2017-07- | 07_1349-1.png | | | | JL |
| (Income) | 2017-07- | 07_1349.png | | | | Ju |
| - | 2017-07- | 07_1348.png | | | | Jı |
| | 2017-07- | 07_1350.png | | | | Ju |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | Format: | All Files | | | | |
| | | 7411100 | | | | |
| | | | | | | |
| | | | | Canc | el Open | |

Note: In this example, signed-system.csr.pem is used.

Step 5. Click Upload.



You should now have successfully uploaded a signed certificate to the FindIT Network Manager.

Manage Current Certificate

Step 1. Log in to the Administration GUI of your FindIT Network Manager then choose **Administration > Certificate**.



Step 2. In the HTTPS Certificate area, click the View button.

| Certificate | | | | | |
|--------------------|----------|------|----------|--------|--|
| HTTPS Certificate: | Deployed | View | Download | Update | |
| CSR: | Created | | Download | Update | |
| | | | | | |

Step 3. The current certificate will be displayed in plain text format in a new browser window. Click the **x** or **Cancel** button to close the window.

Certificate Detail

```
Certificate:
Data:
           Version: 3 (0x2)
           Serial Number: 12413718218424877098 (0xac4662f2ef02802a)
Signature Algorithm: sha256WithRSAEncryption
           Issuer: C=US, ST=CA, 0=Cisco, OU=Small Business, CN=cisco.com/emailAddress=ciscofindituser@cisco.com/emailAddress=ciscofindituser@cisco.com/emailAddress=ciscofindituser@cisco.com/emailAddress=ciscofindituser@cisco.com/emailAddress=ciscofindituser@cisco.com/emailAddress=ciscofindituser@cisco.com/emailAddress=ciscofindituser@cisco.com/emailAddress=ciscofindituser@cisco.com/emailAddress=ciscofindituser@cisco.com/emailAddress=ciscofindituser@cisco.com/emailAddress=ciscofindituser@cisco.com/emailAddress=ciscofindituser@cisco.com/emailAddress=ciscofindituser@cisco.com/emailAddress=ciscofindituser@cisco.com/emailAddress=ciscofindituser@cisco.com/emailAddress=ciscofindituser@cisco.com/emailAddress=ciscofindituser@cisco.com/emailAddress=ciscofindituser@cisco.com/emailAddress=ciscofindituser@cisco.com/emailAddress=ciscofindituser@cisco.com/emailAddress=ciscofindituser@cisco.com/emailAddress=ciscofindituser@cisco.com/emailAddress=ciscofindituser@cisco.com/emailAddress=ciscofindituser@cisco.com/emailAddress=ciscofindituser@cisco.com/emailAddress=ciscofindituser@cisco.com/emailAddress=ciscofindituser@cisco.com/emailAddress=ciscofindituser@cisco.com/emailAddress=ciscofindituser@cisco.com/emailAddress=ciscofindituser@cisco.com/emailAddress=ciscofindituser@cisco.com/emailAddress=ciscofindituser@cisco.com/emailAddress=ciscofindituser@cisco.com/emailAddress=ciscofindituser@cisco.com/emailAddress=ciscofindituser@cisco.com/emailAddress=ciscofindituser@cisco.com/emailAddress=ciscofindituser@ciscofindituser@ciscofindituser@ciscofindituser@ciscofindituser@ciscofindituser@ciscofindituser@ciscofindituser@ciscofindituser@ciscofindituser@ciscofindituser@ciscofindituser@ciscofindituser@ciscofindituser@ciscofindituser@ciscofindituser@ciscofindituser@ciscofindituser@ciscofindituser@ciscofindituser@ciscofindituser@ciscofindituser@ciscofindituser@ciscofindituser@ciscofindituser@ciscofindituser@ciscofindituser@ciscofindituser@ciscofindituser@ciscofindituser@ciscofindituser@ciscofindituser@ciscofindituser@ciscofindituser@ciscofindituser@ciscofi
           Validity
                     Not Before: Jul 13 00:00:00 2017 GMT
                    Not After : Aug 13 00:00:00 2017 GMT
           Subject: C=US, ST=CA, O=Cisco, OU=Small Business, CN=cisco.com/emailAddress=ciscofindituser@cisco.
           Subject Public Key Info:
                     Public Key Algorithm: rsaEncryption
                                Public-Key: (2048 bit)
                                Modulus:
                                          00:a7:e4:c4:d5:46:cb:aa:e3:8d:72:b8:71:5a:b9:
                                          14:ef:5c:3b:bf:a6:08:32:d4:1f:f0:0e:db:34:85:
                                          3a:91:1a:e0:fa:03:78:7a:b9:d0:5f:d5:f3:e6:db:
                                          45:a9:92:cb:36:31:58:32:18:64:18:59:e1:d9:24:
                                           07:dd:f8:a0:2e:c0:7a:1c:fc:13:d0:c9:14:0c:52:
                                          28:29:7d:e1:40:a6:3d:f4:52:1b:3c:56:5a:d0:21:
                                          eb:3f:f6:f1:e8:6f:cc:bd:72:0d:fe:a1:b6:bb:82:
                                          3f:89:e9:9f:cb:b3:f6:a0:fb:d7:d8:d9:1b:0f:a2:
                                          1e:64:53:38:a8:10:a9:6e:03:f9:78:a6:d0:2f:49:
                                           42:c6:5f:24:52:15:36:0d:b8:85:df:b7:6d:fb:c6:
                                           be:c8:69:2b:89:b7:d0:f4:64:44:b8:a8:79:fa:02:
                                          3f:8a:08:5e:32:71:5c:7f:1c:c9:80:51:1c:a7:01:
                                          6a:f3:43:4e:3c:1c:df:06:ff:91:33:ae:d0:34:8d:
                                          c7:87:e7:da:36:72:d5:6e:70:56:41:6e:cc:78:44:
                                          8b:ed:1c:a2:37:98:af:57:25:48:79:34:0e:2a:cd:
```

Step 4. (Optional) To download a copy of the current certificate, click the **Download** button in the HTTPS Certificate area.

| Certificate | | | | |
|--------------------|----------|------|----------|--------|
| HTTPS Certificate: | Deployed | View | Download | Update |
| CSR: | Created | | Download | Update |
| | | | | |

You should now have successfully managed the current certificate on your FindIT Network Manager.