

Installing certificates on a HA pair of CAS or CAM

It is recommended to have the same identity certificate installed on both peers of a HA pair. The certificate should be issued to the service or virtual IP address of the HA pair. If you are generating certificates for DNS FQDN of the device, make sure that name resolves to the service IP. You can generate the certificate on one of the pair, export it, and then import it on the other peer of the pair.

With CCA version 4.7 and above, the HA traffic between the peers in a HA CAM or CAS pair is also encrypted. The encryption mechanism used is an IPSEC tunnel, which is formed between the peers using the identity certificates of each device.

For this document, we assume the following:

CAS A – 14.36.147.46
CAS B – 14.36.147.47
Service IP for CAS – 14.36.147.45

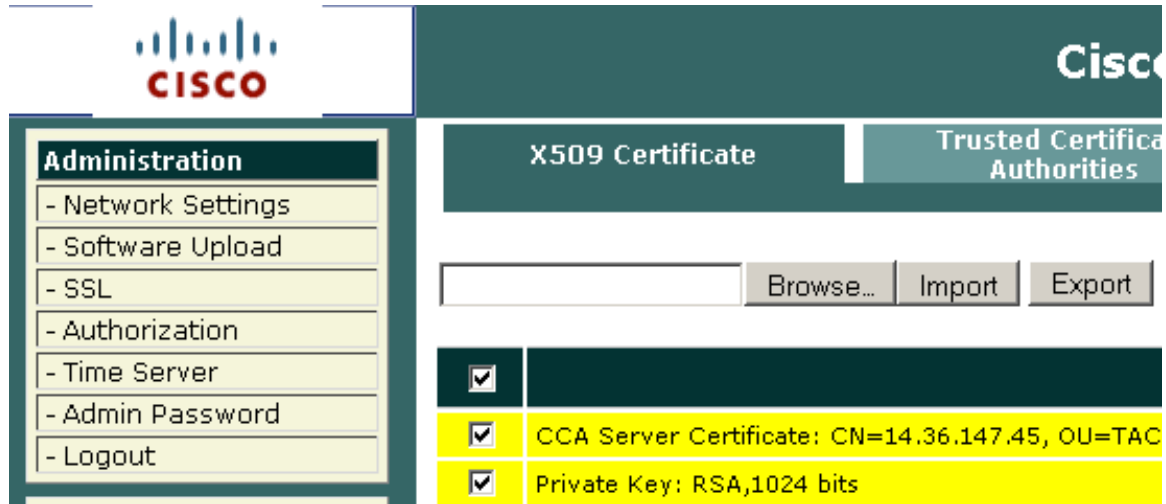
CAM A – 14.36.147.51
CAM B – 14.36.147.52
Service IP for CAM – 14.36.147.50

On CAS A, open the SSL page, and click on Generate and fill out the information for the certificate. Note the service IP in the first field:

The screenshot shows the Cisco management interface for SSL configuration. On the left is a navigation menu with 'Administration' and 'Monitoring' sections. The 'Administration' section includes: Network Settings, Software Upload, SSL, Authorization, Time Server, Admin Password, and Logout. The 'Monitoring' section includes: Active VPN Clients and Support Logs. The main content area is titled 'X509 Certificate' and 'Trusted Certificate Authority'. It features a 'Browse...' button, an 'Import' button, and an 'Export' button. Below these are two checkboxes: 'CCA Server Certificate: CN=14.36.147.45, O=...' and 'Private Key: RSA,1024 bits'. A 'Hide' button is present above the form fields. The form fields are: Full Domain Name or IP * (14.36.147.45), Organization Unit Name (TAC), Organization Name (TAC), City Name (Cisco), State Name (RTP), 2-letter Country Code (NC), and RSA Key Size (1024). A 'Generate' button is at the bottom of the form.

Once you click on generate, a new certificate with the CN name of 14.36.147.45 will be generated and installed on CAS A.

Now Checkmark both the boxes for the Certificate, and the private key, and click on Export:



Save the file as CASServiceIP.pem

Open CAS B and click on SSL. Click on Import, select the CASServiceIP.pem file, and click on import.

This will install the certificate on CAS B also.

Now both the CAS's will have the same certificate and the IPSEC tunnel for HA will come up fine (assuming all other settings are correct). Reboot the CASs one by one to ensure the new certs take effect

For HA CAMs the procedure is the same. To generate a certificate, click on CCA Manager -> SSL -> Generate temporary Certificate and fill out the information. Click on Generate:

The screenshot shows the Cisco CCA Manager web interface. On the left is a navigation menu with sections: OOB Management (Profiles, Devices), User Management (User Roles, Auth Servers, Local Users), Monitoring (Summary, Online Users, Event Logs, SNMP), and Administration (CCA Manager, User Pages, Admin Users, Backup). The main content area has tabs for Network, Failover, and System. Under the Network tab, there is a sub-tab for 'X509 Certificate' and 'Trusted Certificate Auth'. Below this is a 'Browse...' button and an 'Import' button. There are two checkboxes: 'CCA Manager Certificate: CN=14.36.147.50, ...' and 'Private Key: RSA,1024 bits'. A 'Hide' button is present. Below are input fields for: Full Domain Name or IP * (14.36.147.50), Organization Unit Name (TAC), Organization Name (TAC), City Name (RTP), State Name (NC), 2-letter Country Code (US), and RSA Key Size (1024). A 'Generate' button is at the bottom.

Once the cert is installed, highlight both the certificate and the key, and click on Export. Save the file as ServiceCAMIP.pem

Now open CAM B and click on Browse (CCA Manager -> SSL -> Browse), select the ServiceCAMIP.pem file, and click on import. This will import the certificate on the other CAM.