



Expressway System Configuration

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Task 3: Setting the System Name

The **System name** defines the name of the Expressway. It appears in various places in the web interface and is also used by Cisco TMS. We recommend using a name that lets you easily and uniquely identify the Expressway.

To Configure the System Name:

Step 1 Go to **System > Administration**.

Step 2 Configure the **System name** as follows:

	Expressway-C	Expressway-E
System name	Enter EXPc	Enter EXPe

Step 3 Click **Save**.

Figure 1: Expressway-E

System administration You are here: [System](#) > [Administration](#)

System name

System name ⓘ

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Task 4: Configuring DNS

System Host Name

The **System host name** defines the DNS hostname that this system is known by. This is not the fully-qualified domain name, just the host label portion.



Note <System host name>.<Domain name> = FQDN of this Expressway.

To Configure the System Host Name:

Step 1 Go to **System > DNS**.

Step 2 Configure the **System host name** as follows:

	Expressway-C	Expressway-E
System host name	Enter <code>expc</code>	Enter <code>expe</code>

Step 3 Click **Save**.

Domain Name

The **Domain name** is the name to append to an unqualified host name before querying the DNS server.

To Configure the Domain Name:

Step 1 Go to **System > DNS**.

Step 2 Configure the **Domain name** as follows:

	Expressway-C	Expressway-E
Domain name	Enter <code>internal-domain.net</code>	Enter <code>example.com</code>

Step 3 Click **Save**.

The fully qualified domain name for the Expressway-C is now `expc.internal-domain.net`

The fully qualified domain name for the Expressway-E is now `expe.example.com`

DNS Servers

The DNS server addresses specify the IP addresses of up to five domain name servers to be used for resolving domain names. In either of the following cases you must specify at least one default DNS server for address resolution:

- To use fully qualified domain names instead of IP addresses when specifying external addresses. For example, for LDAP and NTP servers, neighbor zones and peers.
- To use features such as URI dialing or ENUM dialing.

The Expressway queries one server at a time. If that server is unavailable the Expressway tries another server from the list.

In the example deployment two DNS servers are configured for each Expressway, which provides a level of DNS server redundancy. The Expressway-C is configured with DNS servers which are located on the internal network. The Expressway-E is configured with DNS servers which are publicly routable.

To Configure the Default DNS Server Addresses:

Step 1 Go to **System > DNS**.

Step 2 Configure the DNS server **Address** fields as follows:

	Expressway-C	Expressway-E
Address 1	Enter 10.0.0.11	Enter 194.72.6.57
Address 2	Enter 10.0.0.12	Enter 194.73.82.242

Step 3 Click **Save**.

Expressway-C has a fully qualified domain name of `expc.internal-domain.net`

Expressway-E has a fully qualified domain name of `expe.example.com`

Task 5: Replacing the Default Server Certificate

For extra security, you may want to have the Expressway communicate with other systems (such as LDAP servers, neighbor Expressways, or clients such as SIP endpoints and web browsers) using TLS encryption.

For this to work successfully in a connection between a client and server:

- The server must have a certificate installed that verifies its identity. The certificate must be signed by a Certificate Authority (CA).
- The client must trust the CA that signed the certificate used by the server.

The Expressway lets you install a certificate that can represent the Expressway as either a client or a server in connections using TLS. The Expressway can also authenticate client connections (typically from a web

browser) over HTTPS. You can also upload certificate revocation lists (CRLs) for the CAs used to verify LDAP server and HTTPS client certificates.

The Expressway can generate server certificate signing requests (CSRs). This removes the need to use an external mechanism to generate certificate requests.

For secure communications (HTTPS and SIP/TLS), we recommend that you replace the Expressway default certificate with a certificate generated by a trusted certificate authority.

Table 1: Expressway Role in Different Connection Types

In connections...	The Expressway acts as...
To an endpoint	TLS server.
To an LDAP server.	Client.
Between two Expressway systems.	Either Expressway may be the client. The other Expressway is the TLS server.
Over HTTPS.	Web browser is the client. Expressway is the server.

TLS can be difficult to configure. For example, when using it with an LDAP server we recommend verifying that the system works correctly over TCP, before you attempt to secure the connection with TLS. We also recommend using a third-party LDAP browser to verify that your LDAP server is correctly configured for TLS.



Note Be careful not to allow your CA certificates or CRLs to expire. This may cause certificates signed by those CAs to be rejected.

To load the trusted CA list, go to **Maintenance > Security > Trusted CA certificate**.

To generate a CSR and/or upload the Expressway's server certificate, go to **Maintenance > Security > Server certificate**.

Additional server certificate requirements apply when configuring your Expressway system for Unified Communications. For full information, see *Expressway Certificate Creation and Use Deployment Guide* on the [Expressway Configuration Guides](#) page.

Task 6: Configuring NTP Servers

The **NTP server** address fields set the IP addresses or Fully Qualified Domain Names (FQDNs) of the NTP servers to be used to synchronize system time. The **Time zone** sets the local time zone of the Expressway.



Note You can synchronize the Expressway-C and Expressway-E with different NTP servers, if the result is that the Expressway traversal pair are synchronized.

To Configure the NTP Server Address and Time Zone:

Step 1 Go to **System > Time**.

Step 2 Configure the fields as follows, on both Expressway-C and Expressway-E:

	Expressway-C	Expressway-E
NTP server 1	Enter pool.ntp.org	Enter pool.ntp.org
Time zone	GMT in this example	GMT in this example

Step 3 Click **Save**.

Time You are here: [System](#) > [Time](#)

NTP servers

NTP server 1	Address: pool.ntp.org	Authentication: Disabled
NTP server 2	Address:	Authentication: Disabled
NTP server 3	Address:	Authentication: Disabled
NTP server 4	Address:	Authentication: Disabled
NTP server 5	Address:	Authentication: Disabled

Time zone

Time zone: GMT

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Task 7: Configuring SIP Domains

The Expressway acts as a SIP Registrar for configured SIP domains, accepting registration requests for any SIP endpoints attempting to register with an alias that includes these domains.

- Registration restriction (Allow or Deny) rules can be configured to limit acceptable registrations. See [Task 18: Configuring Registration Restriction Policy \(Optional\)](#).
- If authentication is enabled, only devices that can properly authenticate themselves will be allowed to register.

To Configure a SIP Domain:

Step 1 Go to **Configuration > Domains**.

Step 2 Click **New**.

Step 3 Enter the domain name into the **Name** field (on both Expressway-C and Expressway-E):

To Configure a SIP Domain:

	Expressway-C	Expressway-E
Name	Enter example.com	Enter example.com

Step 4 Click **Create domain**.

Step 5 The **Domains** page displays all configured SIP domain names.

The screenshot shows the 'Domains' configuration page. At the top, there is a breadcrumb trail: 'You are here: Configuration > Domains > New'. Below this, there is a 'Configuration' tab. The main area contains a 'Domain name' label followed by a text input field containing 'example.com'. To the right of the input field is an information icon. Below the input field are two buttons: 'Create domain' and 'Cancel'.

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What to do next

The Expressway system configuration is now complete. Go to the next section, [Routing Configuration](#).