

CUPS XMPP Federation Quick Start

XMPP federation is designed to enable organizations to communicate over the Internet. Message routing between organizations is handled by DNS lookup for the domain, which is included along with the user ID. When your XMPP client (Jabber) sends a message to user1@remotedomain.com. Your XMPP server (CUPS) will look up the XMPP service record (SRV) for remotedomain.com with DNS and forward your message to the remote organization.

To enable XMPP for your organization you need to do four things.

1. Configure DNS
2. Enable XMPP Federation
3. Activate Service
4. Allow XMPP Through Firewall

Step 1. Configure DNS

Because XMPP Federation is heavily dependent on DNS, your DNS server must have an XMPP SRV record for your domain, which resolves to your presence server.

Example:

This example shows an nslookup, this nslookup does the same DNS query as your XMPP server (CUPS) is doing to know where to send messages. Here we see the XMPP DNS SRV record “[_xmpp-server._tcp.exampledomain.com](#)” points to a server named [presence01.exampledomain.com](#) and port TCP [5269](#).

```
nslookup -type=srv \_xmpp-server.\_tcp.exampledomain.com
;; Truncated, retrying in TCP mode.
Server:                <removed_ip>
Address:               <removed_ip>#53

Non-authoritative answer:
\_xmpp-server.\_tcp.exampledomain.com.com    service = 0 1 5269
presence01.exampledomain.com.
```

Notice, we don't have an IP address to send the XMPP message to, yet. The FQDN must also have an A record which resolves to the presence server's IP address. In this example it resolves to [192.168.0.1](#).

```
nslookup presence01.exempldomain.com
```

```
Server: <removed_ip>
```

```
Address: <removed_ip>#53
```

```
Non-authoritative answer:
```

```
presence01.exempldomain.com canonical name =
```

```
presence01.exempldomain.com.
```

```
Name: presence01.exempldomain.com
```

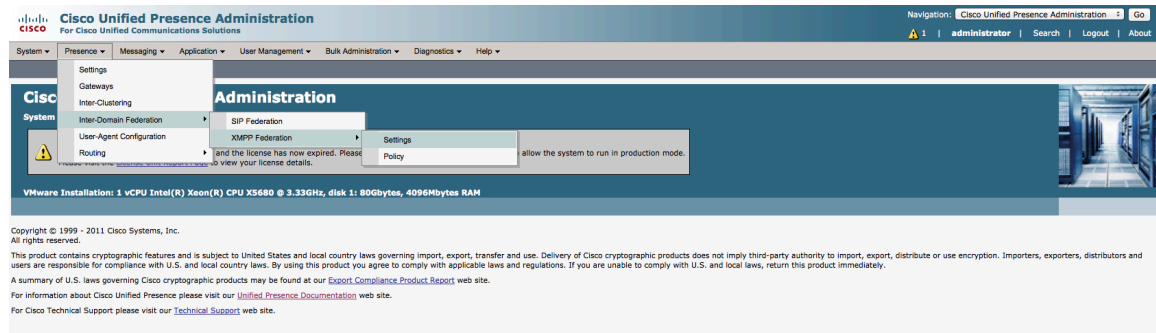
```
Address: 192.168.0.1
```

The details for configuring your DNS server, is beyond the scope of this document. I hope the previous example helps the DNS admin to know what is needed. Following is a document with detailed directions for configuring DNS in a Windows Domain.

http://www.cisco.com/en/US/docs/voice_ip_comm/cups/8_6/english/integration_notes/Federation/XMPPConfig_chapter.html#wp1054623

Step 2. Enable XMPP Federation

To enable XMPP Federation on your presence server, go to the XMPP Federation Settings Page.



There are a lot of options here. The following settings will get you started and should work with most organizations. For more information about these settings try the built-in help menu option.

- Set **XMPP Federation Node Status = On**
- Leave default **Security Mode = TLS Optional**
- Enter your **Dialback Secret**
- Click Save.

Cisco Unified Presence Administration
For Cisco Unified Communications Solutions

Navigation: Cisco Unified Presence Administration Go

f 0 | administrator | Search | Logout | About

System Presence Messaging Application User Management Bulk Administration Diagnostics Help

XMPP Federation Settings Related Links: Find/List CUPC Support Domain(s) Go

Save

Status
Update successful

General Settings
Cisco Unified Presence can be configured to dynamically federate (inter-domain federation) with Cisco Unified Presence 8.0, WebEx, IBM and any XMPP standards-compliant server.

XMPP Federation Node Status* On

Security Settings

Security Mode* TLS Optional

Require client-side security certificates

Enable SASL EXTERNAL on all incoming connections

Enable SASL EXTERNAL on all outgoing connections**

Dialback Secret*

Confirm Dialback Secret*

CUPC 7.0 Supported XMPP Federated Domains

Number of XMPP Federated Domains (0)*** [Configure for Domain\(s\)](#)

Save

i * Indicates required item.
i ** Only required for foreign federated domains for which SASL EXTERNAL is made available
i *** Only required for CUPC 7.0 support

Step 3. Activate Service

Go to the Service Activation page.

Cisco Unified Serviceability
For Cisco Unified Communications Solutions

Navigation: Cisco Unified Serviceability Go

administrator | About | Logout

Alarm Trace Tools Ermp Help

Cisco Unified Serviceability

System version: (R) CPU X5680 @ 3.33GHz, disk 1: 80Gbytes, 4096Mbytes RAM

VMware Install Serviceability Reports Archive

Service Activation
Control Center - Feature Services
Control Center - Network Services
Serviceability Reports Archive

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A summary of U.S. laws governing Cisco cryptographic products may be found at our [Export Compliance Product Report](#) web site.

For information about Cisco Unified Presence please visit our [Unified Presence Documentation](#) web site.

For Cisco Technical Support please visit our [Technical Support](#) web site.

Activate the Cisco XMPP Federation Connection Manager service.

Cisco Unified Serviceability
For Cisco Unified Communications Solutions

Navigation: Cisco Unified Serviceability [Go]
administrator | About | Logout

Home | Trace | Tools | Groups | Help

Service Activation Related Links: Control Center - Feature Services [Go]

Save Set to Default Refresh

Status
Status: Ready

Select Server
Server* cup [Go]
 Check All Services

CUP Services		
	Service Name	Activation Status
<input checked="" type="checkbox"/>	Cisco UP SIP Proxy	Deactivated
<input checked="" type="checkbox"/>	Cisco UP Presence Engine	Deactivated
<input checked="" type="checkbox"/>	Cisco UP Sync Agent	Activated
<input checked="" type="checkbox"/>	Cisco UP XCP Text Conference Manager	Activated
<input checked="" type="checkbox"/>	Cisco UP XCP Web Connection Manager	Activated
<input checked="" type="checkbox"/>	Cisco UP XCP Connection Manager	Activated
<input checked="" type="checkbox"/>	Cisco UP XCP SIP Federation Connection Manager	Activated
<input checked="" type="checkbox"/>	Cisco UP XCP XMPP Federation Connection Manager	Activated
<input checked="" type="checkbox"/>	Cisco UP XCP Message Archiver	Activated
<input checked="" type="checkbox"/>	Cisco UP XCP Directory Service	Activated
<input checked="" type="checkbox"/>	Cisco UP XCP Authentication Service	Activated

Database and Admin Services		
	Service Name	Activation Status
<input checked="" type="checkbox"/>	Cisco AXL Web Service	Activated
<input checked="" type="checkbox"/>	Platform SOAP Services	Activated
<input checked="" type="checkbox"/>	Cisco Bulk Provisioning Service	Activated

Performance and Monitoring Services		
	Service Name	Activation Status
<input checked="" type="checkbox"/>	Cisco Serviceability Reporter	Activated

Save Set to Default Refresh

i * indicates required item.

Step 4. Allow XMPP Through Firewall

Allow port TCP 5269 through your firewall. Details for configuring your firewall is also beyond the scope of this document. If you have a Cisco ASA, this link should help.

http://www.cisco.com/en/US/docs/voice_ip_comm/cups/8_6/english/integration_notes/Federation/XlatesConfig_appendix.html

Summary

At this point XMPP federation should work with many organizations. You can test by simply sending an Instant Message (IM) to and from a user at the remote domain. If it doesn't work, double DNS for both parties using nslookup.

Next Steps

Next you may want to consider enhancing security by enabling TLS.

http://www.cisco.com/en/US/docs/voice_ip_comm/cups/8_6/english/integration_notes/Federation/XMPPCertConfig_chapter.html

Or maybe turn on email for XMPP.

http://www.cisco.com/en/US/docs/voice_ip_comm/cups/8_6/english/integration_notes/Federation/XMPPConfig_chapter.html#wpxref14661

References

Cisco Unified Communication System 8.x SRND, Cisco Unified Presence, Federated Deployment

http://www.cisco.com/en/US/docs/voice_ip_comm/cucm/srnd/8x/presence.html#wp1084557

Integration Guide for Configuring Cisco Unified Presence Release 8.6 for Interdomain Federation

http://www.cisco.com/en/US/docs/voice_ip_comm/cups/8_6/english/integration_notes/Federation/CUP_8.6_Interdomain_Federation.html