

Built In Diagnostic Tools

Various tools are available for testing and troubleshooting the sipXecs systems. Samples of the screens for these tools along with a brief discription are provided below.

Registrations

The *Registrations* screen allows you to check currently registered end points (phones and terminal adaptors). The registration created by a phone is used by sipXecs to determine where to send calls for the address of the line on the phone.

URI	Contact	Expiration [s]
sip:200@us.calivia.com	sip:200@192.168.5.148	726
sip:207@us.calivia.com	sip:207@192.168.5.151:5060	2622
sip:206@us.calivia.com	sip:206@192.168.5.151:5060	2648
sip:205@us.calivia.com	sip:205@192.168.5.151:5060	2656
sip:202@us.calivia.com	sip:202@192.168.5.132:5060	2769
sip:204@us.calivia.com	sip:204@192.168.5.132:5060	2803
sip:203@us.calivia.com	sip:203@192.168.5.132:5060	2807
<sip:208@us.calivia.com>;transport=udp	<sip:208@192.168.5.137:2057;line=ve2hx04v>	3260
<sip:209@us.calivia.com>;transport=udp	<sip:209@192.168.5.137:2057;line=qv2h08ad>	3260
sip:210@us.calivia.com	sip:210@192.168.5.136:9582	2451

If you have an HA cluster (more than one system with the SIP Router role), there will be a Load Balancing number displayed above the table of registrations. This number measures how evenly the registrations of your phones are distributed between the SIP Routers, and should be within a few tenths of the number of SIP Router systems you have (assuming that they are, as by default, equal priority). All of the SIP Routers have the same data at all times - this number actually measures how well your phones are doing at randomly selecting between servers. If one of your SIP Routers is inaccessible for some time, it may take several hours for this measurement to return to normal after it is restored.

Job Status

A *Job* means the creation of a configuration profile for a particular phone or gateway. Using the *Job Status* window allows you to verify that profiles were created successfully. Limited error messages are printed should there be any.

Job	Start Time	Stop Time	Status	Error
Projection for phone 000413232069	11/5/05 9:40 PM	11/5/05 9:40 PM	Completed	
Projection for phone 0002b9eb07b0	11/5/05 9:40 PM	11/5/05 9:40 PM	Completed	
Projection for phone 0004f2022d45	11/5/05 9:40 PM	11/5/05 9:40 PM	Completed	
Projection for phone 0004f202a7b0	11/5/05 9:40 PM	11/5/05 9:40 PM	Completed	

Services

The *Services* screen provides the current status of all services and allows you to selectively stop or restart individual services. The Services screen can be found under Systems/Servers. Select the Server you wish to reset services for. At times, configuration changes to sipXecs will require the Restart of services.

Name	Status	Role
Park	Running	Primary SIP Router
Statistics	Running	Management
Configuration	Running	Management
Media Services	Running	Conferencing, Primary SIP Router
Voicemail	Running	Voicemail
Voicemail MWI	Running	Voicemail
SIP Trunking	Running	SIP Trunking
Paging	Running	Primary SIP Router
Media Relay	Running	Primary SIP Router
SIP Registrar	Running	Primary SIP Router
CDR	Running	Management
SIP Proxy	Running	Primary SIP Router
Presence	Running	Primary SIP Router
Auto Attendant	Running	Primary SIP Router

Restart Refresh

Snapshot

The *Snapshot* allows you to capture the system's state and send the output to a technician or to a developer for additional investigation of system issues or concerns.

Snapshot

Credentials



Leave unset to remove configuration passwords from the snapshot. Only set if diagnosing a particular problem requires that the real credential information be included.

Device Profiles



Leave unset to exclude generated profiles from the snapshot. Any passwords or other confidential information in these files will be included in the snapshot. Only set if diagnosing a particular problem requires that the full generated profiles be included.

Call Detail Records



If set the Call Detail Records are included in the snapshot. Call records contain privacy-sensitive information: use this option only if diagnosing a problem related to CDR generation.

Logs



If set the PBX and Apache logs are included in the snapshot.

Time filter



Time filter to limit log size.

Start date

18 Jan 2010 10:34 PM

End date

19 Jan 2010 1:34 AM

Apply

Snapshots are used for system diagnostics and troubleshooting purposes by a trained technician. Snapshots contain all the relevant information to diagnose a problem you might experience with the system. Dependent on the configured log level of the system, more or less data is collected and made available in a snapshot. Since log files can be fairly large, it is possible to specify a date and time range of interest.

Configuration Tests

The *Configuration Tests* allows you to test the configuration of the system to ensure the primary components are configured correctly and working as a system. It should be ran on all new systems as a first task before configuring the system. This tool will test each component and provide a status of the test, along with a link for additional information should a test fail. On the right hand column, a link to Preflight Test is provided. This tool should be downloaded with the link provided and installed on a separate machine. Preflight does extensive testing of the system configuration, especially the DNS settings which are critical to a successful deployment of sipXecs.

Configuration Diagnostic Tests

Refresh every 5 seconds

Test Name	Last Time Run	Status
DNS IP:Name resolver	1/8/10 10:17 PM	✓ Success
SSL certificate	1/8/10 10:17 PM	✓ Success
SELinux	1/8/10 10:17 PM	✓ Success
Configuration files consistency	1/8/10 10:17 PM	✓ Success
'localhost' configuration	1/8/10 10:17 PM	✓ Success
127.0.0.1 configuration	1/8/10 10:17 PM	✓ Success
Temporary directory	1/8/10 10:17 PM	✓ Success
Apache HTTP server	1/8/10 10:17 PM	✓ Success
Hostname	1/8/10 10:17 PM	✓ Success
DHCP Test Show Detailed Help	1/8/10 10:17 PM	✓ Success
DHCP (Option 120) Test	1/8/10 10:18 PM	✓ Success
DNS Test	1/8/10 10:18 PM	✓ Success
NTP Test	1/8/10 10:18 PM	✓ Success
TFTP Test	1/8/10 10:18 PM	✓ Success
FTP Test	1/8/10 10:18 PM	✓ Success
HTTP Test	1/8/10 10:19 PM	✓ Success

Run All Tests

Refresh

Quick Links

[Download preflight installer](#)

"Preflight" is a test tool that allows running several configuration and network services related tests. Following the link above a Windows version can be downloaded to run on your laptop. For best results run the tests on the same subnet where your phones are connected. All the tests have to pass for the system to work.

This page will refresh automatically. You can switch automatic refreshing off by clearing the *Refresh* checkbox. You can also modify the refresh interval by clicking on the current interval and then enter a new value.

DNS Advisor

The *DNS Advisor Tool* tests the systems DNS settings and ensures correct connectivity and configuration of the systems DNS resources. Extensive details are provided to assist in troubleshooting DNS issues.

DNS Advisor

Provide DNS Indicates that the DNS service is to be hosted on the callserver systems

Run DNS Advisor

• DNS Configuration SUCCESS

Indicates if the DNS configuration is valid or not

[Show details](#)

[Show Detailed Help](#)

This page provides some guidance to network administrators in how to configure an external DNS server for sipXecs purposes. The script will analyse the current DNS entries and suggest correction if necessary.

For configuring a MS Windows DNS Server please click the "Detailed Help" link.

Please note that DNS test will always fail on Windows DNS due to missing NAPTR records.

For more information, see [DNS Concepts for sipXcom](#).