Troubleshooting Sun Java System Communications Express

Sun Java™ Enterprise System Technical Note

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Troubleshooting Sun Java System Communications Express

This technical note describes how to troubleshoot common installation and configuration problems for Sun Java System Communications Express 6 2005Q4.

The component products affected by this technical note are:

- Sun Java System Access Manager 7 2005Q4
- Sun Java System Calendar Server 6 2005Q4
- Sun Java System Communications Express 6 2005Q4
- Sun Java System Directory Server 5 2005Q4
- Sun Java System Messaging Server 6 2005Q4
- Sun Java System Web Server 6.1 2005Q4 SP5

This technical note contain the following sections:

- "Technical Note Revision History" on page 3
- "Troubleshooting Communications Express Installation and Configuration" on page 4
- "Documentation, Support, and Training" on page 11

Technical Note Revision History

Date	Description of Changes
August 2, 2006	Corrected Web Server parameters in the `amconfigcommx` file. Corrected file name to `/etc/opt/SUNWam/config/AMConfig.properties` and parameter to `com.iplanet.am.directory.host=DS_SERVER_HOSTNAME_FQDN` in Step 5 of the task "To Troubleshoot Communications Express."
June 2, 2006	Re-issue of this technical note for Sun Java Enterprise System 2005Q4.

Troubleshooting Communications Express Installation and Configuration

Currently, installing and configuring Communications Express is not trouble-free. This seems especially true for a two-tiered deployment, with Communications Express on a front-end host separate from a back-end Access Manager host.

The following problem topics will aid you in troubleshooting your deployment:

- "Problem: Unable to Configure Messaging Server" on page 4
- "Problem: Web Server Exceptions" on page 5
- "Problem: User Authentication Failed" on page 8
- "Problem: Communications Express Login Page Redirects to the Messenger Express Login Page" on page 10
- "Problem: Unable to Access the Calendar Tab" on page 10
- "Problem: Log Files Do Not Appear in the /var/opt/SUNWuwc/logs Directory" on page 11

Problem: Unable to Configure Messaging Server

Solution: Check that DNS is running and configured properly.

▼ To Troubleshoot DNS

1 **Make sure that the `/etc/resolv.conf` file has name server entries with the IP addresses of valid name servers. For example:**

```
nameserver 192.168.100.22
nameserver 192.168.100.23
nameserver 192.168.100.24
nameserver 192.168.100.25
```

2 **Make sure that the `/etc/hosts` file has an entry for the fully qualified host name of the server. This fully qualified host name should be listed before the non fully qualified host name. For example:**

```
10.1.82.52 host1.red.example.com host1 loghost
```

Solaris™ 10 Operating System (OS) hosts: Make sure the `/etc/inet/ipnodes` file also has an entry for the fully qualified host name of the server.

3 **Make sure that the `/etc/nsswitch.conf` file is configured to use `files` first to resolve host names. The hosts line in the `nsswitch.conf` file should list `files` first in its entry:**

```
hosts: files dns nis [NOTFOUND=return]
# OR (if NIS is not used)
hosts: files dns
```

Verify that you can resolve a host name to an IP address.

For example:

```
# nslookup host1.red.example.com
Server:         192.168.100.161
Address:        192.168.100.161#53
Name: host1.red.example.com
Address: 10.1.82.52
```

Solaris 10 hosts: Add this additional line to the `/etc/nsswitch.conf` file:

```
ipnodes: files dns nisplus [NOTFOUND=return]
```

Problem: Web Server Exceptions

Solution: Verify the Web Server and Access Manager SDK configuration.

When configuring Communications Express in a two-tiered deployment, the following steps are involved:

1. Configuring the Communications Express web container's (Sun Java System Web Server 6.1 2005Q4 SP5) `server.xml` file with all required jar file settings
2. Pointing the Communications Express Identity SSO to the external Access Manager from the `uwcauth.properties` file
3. Installing the Access Manger SDK on the same Web Server instance where the Communications Express application is running (that is, on the front-end host)

   If you see errors such as the following for Web Server, then use the troubleshooting steps that follow.

```
[30/Jun/2005:11:05:33] failure (13862): WebModule[/uwc]: WEB2680: Exception starting filter
IdentitySSOAuthFilter
```

▼ To Troubleshoot Communications Express

1 Check if the Web Server runtime owner is `root:other`. That is, the runtime owner should be the same for Access Manager, Access Manager SDK, and Communications Express. It is preferred that the runtime owner be `root:other`.

If the runtime owner for Web Server is not `root` (but `webservd`), then do the following:

a. Change the ownership of the `/opt/SUNWwbsvr/https-`*host*`.`*domain* directory to `root:other` (recursively).

b. Edit the `/opt/SUNWwbsvr/https-`*host*`.`*domain*`/config/magnus.conf` file and change the line containing "`user webservd`" to "`user root`".

c. Restart Web Server.

2 Check the Access Manager SDK by running the following command from the front-end AM SDK location (host).

```
cd /opt/SUNWam/bin

./amadmin -u amadmin -w password -m http://host:80
```

You should see output similar to the following:

```
Get Sessions: Server Name = http://host1.red.siroe.com:80
[Current Session] User Id: amAdmin Time Remain: 120 Max Session Time: 120 Idle Time: 0 Max Idle Time: 30
To invalidate sessions, enter the index numbers
[CR without a number to exit]:
Success 0: Successfully completed
```

3 If Step 2 does not work as expected, then check that the Access Manager SDK classpath is correct in the Web Server on the Communications Express host (that is, the front end).

Make sure that `/opt/SUNWam/lib/am_services.jar`, `/opt/SUNWam/lib/am_sdk.jar`, and `/opt/SUNWam/lib/am_sso_provider.jar` are in the classpath suffix of the `/opt/SUNWwbsvr/https-`*host*`.`*domain*`config/server.xml` file.

Note – Manually editing the `server.xml` file is generally not recommended. The correct way is to use the `/opt/SUNWam/bin/amconfig` command. See "Problem: Web Server Exceptions" on page 5.

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4 Create a new state file similar to the following for the Access Manager SDK configuration.

a. Change to the directory that contains the `amconfig` input file template, `amsamplesilent`.

```
# cd /opt/SUNWam/bin
```

b. Copy the input template file to a new file.

```
# cp amsamplesilent amconfigcommx
```

c. Edit the `amconfigcommx` file to set the Access Manager SDK configuration parameters as follows (non-default values are shown in bold):

DEPLOY_LEVEL=4
SERVER_PROTOCOL=http `#### (If you need secure access, change to https)`
SERVER_NAME=*AM_SERVER_HOSTNAME* `#### (Access Manager hostname)`
SERVER_HOST=*AM_SERVER_HOSTNAME_FQDN* `#### (Access Manager fully qualified domain name)`
SERVER_PORT=*AM_SERVER_WEB_CONTAINER_PORT*
ADMIN_PORT=*AM_SERVER_WEB_ADMIN_PORT*
DS_HOST=*DS_HOSTNAME_FQDN* `#### (Directory Server fully qualified domain name)`
`DS_DIRMGRPASSWD=DM_PASSWORD`
ROOT_SUFFIX=*UG_SUFFIX*
ADMINPASSWD=*AMADMIN_PASSWORD*
AMLDAPUSERPASSWD=*AMLDAPUSERPASSWORD*
COOKIE_DOMAIN=*.example.com* `#### (Modify to reflect default domain)`
AM_ENC_PWD=`"myQDWqCBhvI0bfp/BF/1b7+k/BiEpVcY"`
`#### Get from AMConfig.properties file of fully installed Access Manager host`

NEW_OWNER=root
NEW_GROUP=other
WEB_CONTAINER=WS6

SSL_PASSWORD="*ssl_password*" #### (If SSL used)

```
BASEDIR=/opt/SUNWam

CONSOLE_HOST=$SERVER_HOST
CONSOLE_PORT=$SERVER_PORT
CONSOLE_PROTOCOL=$SERVER_PROTOCOL
```

CONSOLE_REMOTE=true

```
SERVER_DEPLOY_URI=/amserver
if [ $DEPLOY_LEVEL -eq 2 -o $DEPLOY_LEVEL -eq 12 ]; then
   CONSOLE_DEPLOY_URI=$SERVER_DEPLOY_URI
else
   CONSOLE_DEPLOY_URI=/amconsole
fi
PASSWORD_DEPLOY_URI=/ampassword
COMMON_DEPLOY_URI=/amcommon

DIRECTORY_MODE=4  ####
DS_PORT=389
DS_DIRMGRDN="cn=Directory Manager"
USER_NAMING_ATTR=uid
ORG_NAMING_ATTR=o
ORG_OBJECT_CLASS=sunismanagedorganization
USER_OBJECT_CLASS=inetorgperson
DEFAULT_ORGANIZATION=

JAVA_HOME=/usr/jdk/entsys-j2se
```

AM_REALM=disabled #### (For legacy use)

```
PLATFORM_LOCALE=en_US

XML_ENCODING=ISO-8859-1

NEW_INSTANCE=false

############### Required for Web Server  ###############################

WS61_INSTANCE=https-COMMS_EX_HOSTNAME_FQDN ####Modify to reflect front-end hostname
WS61_HOME=/opt/SUNWwbsvr
WS61_PROTOCOL=$SERVER_PROTOCOL
WS61_HOST=COMMS_EX_HOST ####NOT $SERVER_HOST in an AM SDK remote AM Server configuration
```

```
WS61_PORT=COMMS_EX_PORT ####NOT $SERVER_PORT in an AM SDK remote AM Server configuration
WS61_ADMINPORT=$ADMIN_PORT
WS61_ADMIN="admin"
WS61_IS_SECURE=false

DIRECTORY_MODE=4
DS_PORT=389
DS_DIRMGRDN="cn=Directory Manager"
USER_NAMING_ATTR=uid
ORG_NAMING_ATTR=o
ORG_OBJECT_CLASS=sunismanagedorganization
USER_OBJECT_CLASS=inetorgperson
DEFAULT_ORGANIZATION=

JAVA_HOME=/usr/jdk/entsys-j2se
AM_REALM=disabled
```

5. **Make a backup copy of the `/etc/opt/SUNWam/config/AMConfig.properties` file. Check the content of the following lines in that file:**

```
com.iplanet.am.directory.host=DS_SERVER_HOSTNAME_FQDN
com.iplanet.am.server.host=AM_SERVER_HOSTNAME_FQDN
com.iplanet.am.console.host=AM_SERVER_HOSTNAME_FQDN
com.iplanet.am.profile.host=AM_SERVER_HOSTNAME_FQDN

com.iplanet.am.naming.url=http://AM_SERVER_HOSTNAME_FQDN:WEBCONTAINER_PORT/amserver/namingservice

com.iplanet.am.notification.url=http://COMMS_EX_HOSTNAME_FQDN:WEBCONTAINER_PORT/notificationservice
```

6. **Run the following command:**

   `/opt/SUNWam/bin/amconfig -s` *Newly_Created_AMSAMPLESILENT*

7. **Make sure the default domain contains the Core and LDAP services, which you can find in the Access Manager console under the Services tab.**

8. **Make sure that the `uwcauth.properties` reads the complete dn for the variable `uwcauth.identity.binddn` as shown below:**

```
!Bind DN of AdmAdmin
uwcauth.identity.binddn=uid=amadmin,ou=people,o=usergroup
```

Problem: User Authentication Failed

Solution: Verify operation of Directory Server, availability of user, baseDN, and LDAP service property values.

▼ To Troubleshoot Authentication Problems

1. **Verify that the Directory Server is running.**

   For example:

```
# /usr/bin/ps -ef | grep slapd
./ns-slapd -D /var/opt/mps/serverroot/slapd-host1 -i /var/opt/mps/serverroot/slapd-host1
```

2. **If necessary, start Directory Server using one of the following commands:**

   For example, if Directory Server 5.2 is the default version:

   On Solaris: `/usr/sbin/directoryserver start`

   On Linux: `/opt/sun/sbin/directoryserver start`

3. **Check that the user ID in question exists in the directory.**

   For example:

   `ldapsearch -h` *host* `-p` *port* `-D` *dn* `-w` *password* `-s sub -b` *basedn* `"uid=`*uid*`"`

   This will return the user entry, if it exists, or 'No such object' if the entry does not exist.

4. **Check the `uwcauth.properties` file is using the correct baseDN and credentials.**

   See the following for more information:

   "Communications Express Configuration Files" in *Sun Java System Communications Express 6 2005Q4 Administration Guide*

5. **In an Access Manager deployment, check that the LDAP service property values are valid.**

   a. **Log in to the Access Manager console as `amAdmin`.**

   b. **Under Identity Management, click the appropriate organization.**

   c. **Choose Services from the View menu.**

      The services list should have at a minimum Authentication Configuration, and Authentication Modules Core and LDAP. Click the LDAP Properties arrow and verify the information that appears in the Data pane.

   d. **If the service is not added, continue with the steps that follow.**

   e. **Click Add in the Navigation pane.**

      A list of available services is displayed in the Data pane.

   f. **Select the checkbox for Authentication Configuration and click OK.**

      The Authentication Configuration service will appear in the Navigation pane assuring you that it has been added.

g. Click the Authentication Configuration Properties arrow.

The Service Instance List is displayed in the in the Data pane.

h. Click New to add the service instance.

Type the name and click Submit.

Problem: Communications Express Login Page Redirects to the Messenger Express Login Page

Solution: Most likely there is a misconfiguration. Verify the SSO settings. See the following for more information:

Chapter 1, "Overview of Communications Express," in *Sun Java System Communications Express 6 2005Q4 Administration Guide*

Problem: Unable to Access the Calendar Tab

Solution: Verify that Calendar Server is running, and that the `ics.conf` file is properly configured.

▼ To Verify that Calendar Server is Running

1 Verify that the Calendar Server processes are running.

For example:

```
# /usr/bin/ps -ef | grep cal
/opt/SUNWics5/cal/lib/cshttpd -d 3
/opt/SUNWics5/cal/lib/enpd -p 57997 -c config/ics.conf
/opt/SUNWics5/cal/lib/csadmind
/opt/SUNWics5/cal/lib/csnotifyd
```

2 If necessary, start Calendar Server.

a. Change to the `sbin` directory.

On Solaris: `/opt/SUNWics5/cal/sbin`

On Linux: `/opt/sun/calendar/cal/sbin`

b. Enter the following command to start Calendar Server.

```
./start-cal
```

▼ To Verify the ics.conf File Configuration

1. **Change to the** `/etc/opt/SUNWics5/cal/config` **directory.**
2. **In the** `ics.conf` **file, verify that the** `service.http.allowadminproxy` **parameter is set to** `"yes"`**.**
3. **Check if the virtual domain is either set to** `"yes"` **or** `"no"` **in both the** `ics.conf` **and** `uwcauth.properties` **files. It cannot be** `"yes"` **in one file and** `"no"` **in the other file.**
4. **If you make edits to either the** `ics.conf` **or the** `uwcauth.properties` **files, restart Calendar Server.**

Problem: Log Files Do Not Appear in the /var/opt/SUNWuwc/logs Directory

Solution: Enable logging. See the following for more information:

"Log Files" in *Sun Java System Communications Express 6 2005Q4 Administration Guide*

Further Reading

Refer to Chapter 5, "Troubleshooting," in *Sun Java System Communications Express 6 2005Q4 Administration Guide*.

Refer to Chapter 1, "Access Manager 7 2005Q4 Configuration Scripts," in *Sun Java System Access Manager 7 2005Q4 Administration Guide*, for more information on Access Manager SDK-only configuration installation notes.

Documentation, Support, and Training

The Sun web site provides information about the following additional resources:

- Documentation (`http://www.sun.com/documentation/`)
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- Training (`http://www.sun.com/training/`)

Third-Party Web Site References

Third-party URLs are referenced in this document and provide additional, related information.

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