COMMERCE ONE®

# XML PORTAL CONNECTOR (XPC)™

## INSTALLATION AND ADMINISTRATION GUIDE FOR NT/ WIN2K

Version 4.1

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XPC Installation and Administration Guide for NT/ Windows 2000, Version 4.1

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COMMERCE ONE, Inc. Information in this document is subject to change without notice. Companies, names, and data used in examples herein are fictitious unless otherwise noted.

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# Preface

## Purpose of This Guide

XML Portal Connector (XPC) is a platform for applications and trading partners to exchange documents over MarketSite. XPC manages a secure MarketSite connection for runtime document exchange. XPC can run:

- Within a marketplace to connect hosted applications and business services.
- At a trading partner site to connect enterprise applications to MarketSite.

For integration development, XPC provides a component-based architecture with an extensible, plug-and-play environment that trading partners can tailor to their specific needs.

The *XPC 4.1 Installation and Administration Guide for NT/Windows 2000* provides information necessary to install, configure, and maintain XPC at a Trading Partner site. It does not address installing and maintaining XPC with a marketplace. For information using XPC within a marketplace, refer to *MarketSite 4.1 Installation Guide for NT.*

This guide includes:

- Instructions for installing XPC
- Instructions for connecting to MarketSite
- Information for maintaining and troubleshooting the installation.

## Audience

This book is for administrators responsible for installing and managing XPC 4.1. It assumes administrators are familiar with MarketSite, xCBL documents, and the environment in which they are installing XPC.

## Related Information

The following manuals are available on your XPC installation CD or from the Internet.

| Document | Description |
|---|---|
| *XPC Developer Guide and API Reference* | General information about XPC and information about customizing XPC installations. |
| *XML Interconnectivity Guide* | Information about the structure of Commerce One's xCBL business documents. |
| *XDK Pro Developer Guide* | Documents how to use Commerce One XML Parser (CXP), how to use the SOX to Java compiler, and how to interface with CXP through SAX |
| *xCBL Online Reference Guide* is available at *www.xcbl.org* | Documents xCBL 3.0 |
| *HotFS Installation and Configuration Guide* | Describes how to install and configure HotFS including XCC configuration, sample scenarios, and client and service setup and execution. |

## How to Use This Guide

The information in this book is organized for the installation and configuration of XPC for trading partners. The following table describes each chapter in this guide:

| Chapter | Description |
|---|---|
| **1** | Requirements and instructions for installing locally. |
| **2** | Registrations and configurations for connecting to MarketSite. |
| **3** | Security, firewalls, and authentication. |
| **4** | Advanced configuration for special options. |
| **5** | DMZ Support for Sonic Broker |

| Chapter | Description |
|---|---|
| **6** | Administration, maintenance, and pending documents. |
| **7** | Reading event logs and troubleshooting. |

## Documentation Conventions

This guide follows these typographical conventions:

| Convention | Meaning / Example(s) |
|---|---|
| <install:root> | All pathnames are expressed relative to the root directory of the XPC installation. |
| *italics* | Indicates emphasis, a book name, or the name of a variable.<br>Emphasis example:<br>■ Do *not* perform this procedure until you have backed up your data.<br>■ Back up your data *before* performing this operation.<br>Book name example:<br>■ *Enterprise Buyer Administration Guide*<br>Variable name in text:<br>■ Enter the *servername* in the Server field. |
| `monospace text` | Indicates file and path names, printed or displayed computer output, code samples, or text you type at the keyboard.<br>Text typed at the keyboard is not case sensitive unless so noted, such as when typing commands at a terminal window on Solaris or UNIX operating systems. |
| `[ ]` | Text enclosed in brackets denotes a variable name in code. These are often represented as separate words with underscores to denote one continuous string:<br>■ `http://www.[site_name].com/` |

<table>
<tr><th>Convention</th><th>Meaning / Example(s)</th></tr>
<tr><td>{ }<br>and<br>|</td><td>Curly braces ({and}) and vertical bars (|) are used together to separate options:<br>■ {true | false}<br>■ {on | off}<br>■ {low | medium | high}<br>In addition, vertical bars are used in text to denote menu paths:<br>■ File | Import... | File...</td></tr>
<tr><td>/ \</td><td>Slashes (/) are used to separate directory names on Solaris and other UNIX operating systems. Backslashes (\) are used to separate directory names on Windows NT and Windows 2000.</td></tr>
</table>

## If You Need Help

If you have purchased XPC software directly from Commerce One, Commerce One Technical Support is available to you by contacting one of the following:

- csc@commerceone.com
- By fax at 925-520-6060
- Hotline at 925-520-5959 or 800-949-8939
- http://www.commercecone.com/services/support.htm

If you purchased XPC software from a different source, such as your GMP or Systems Integration Partner, contact that source for technical support.

# 1 Installing XPC on Windows NT/Win2K

This chapter provides the steps required to install and test connections for XPC 4.1 on Windows NT/Win2K. Information on installing the XPC4.1 patch is presented. Additionally, complete information and instructions for installing XPC 4.1 are also provided for your convenience. The following information can be found in the sections indicated below:

- Installing the XPC 4.1 Patch on page 1-1
- Summary of Setup Steps on page 1-4
- System Requirements on page 1-5
- Removing a Previous XPC Installation on page 1-6
- Adding JDK to Path Variable on page 1-6
- Installing XPC on page 1-7
- Testing the Installation Locally on page 1-8

*Note* .......... If your XPC installation is to be fully integrated with MarketSite 3.x or MarketSite 4, use the MarketSite documentation to install XPC as part of your MarketSite installation.

## Installing the XPC 4.1 Patch

***Warning!*** Before installing the XPC 4.1 Patch, you **MUST BACKUP YOUR CURRENT XPC INSTALLATION, ALL PROPERTY FILES AND ALL CONFIGURATIONS. THIS IS VERY IMPORTANT!**

> Upgrading to XPC 4.1 will overwrite these values, so if you do not backup, you will not be able to revert back to XPC 4.0. After the upgrade, you will have to re customize your property files.

XPC 4.1 is installed using an Install Shield wizard. You must have a working installation of XPC 4.0 before you can apply the 4.1 patch. For your convince, complete installation instructions for XPC 4.0 are included in this chapter.

## Pre-Requisites

The following are pre-requisites for XPC 4.1:

- XPC 4.0
- JDK 1.3

## Installation

Using your installation CD, follow these steps to install XPC 4.1 on a Windows NT/ Win2K system.

1. Find the **setup.exe** file and double-click on it.

   The **InstallShield Wizard** Welcome Window is displayed.

2. To proceed with the installation, click **Next.**

   The **License Agreement** Window is displayed.

3. Review the terms of the agreement. If you agree with the terms of the License Agreement, click **Yes.**

   The **Customer Information** dialog is displayed.

4. Enter your User Name and Company Name and click **Next** to continue.

   The **Find Java Virtual Machine** dialog is displayed.

5. Select or browse to a different directory to select a JVM executable and click **Next**. The installer checks the version. If it is not the correct version, a message is displayed.

   When the correct version of JVM has been found, the **Change Password** dialog is displayed.

6. Enter a new password and confirm it; click **Next** to continue.

   The **Start Copying Files** screen is displayed.

7. The **Start Copying Files** window requests that you review your selections before

continuing. When you are satisfied with your settings, click **Next.**

8. The wizard will now install XPC 4.1. After a few minutes, the **InstallShield Wizard Complete** Window is displayed.
9. Click **Finish** to complete the installation.

## Change Password or Remove Program

XPC 4.1 provides a GUI interface to remove the 4.1 patch or change your password for the encryption broker.ini file. If you wish to change the password or remove the patch, this wizard can be reached from **Start | Settings | Control Panel | Add/Remove Programs**. Alternatively, if you launch **setup.exe** from the Installation CD once XPC 4.1 is installed, you will have these options.

### To change your password:

1. Launch the Change Password and Remove program using **Add/Remove Programs**, or by double clicking on **setup.exe** on your Installation CD.

   The **Welcome** screen will display.
2. Choose **Change Password** and click **Next** to continue.

   The **Change Password** screen will display.
3. Enter your old password, then a new password. Confirm the new password, click **Next** to continue.

   The **Maintenance Complete** screen will display.
4. Click **Finish** to close the maintenance program.

### To remove XPC 4.1:

1. Launch the Change Password and Remove program using **Add/Remove Programs**, or by double clicking on **setup.exe** on your Installation CD.

   The **Welcome** screen will display.
2. Choose **Remove XML Portal Connector 4.1** and click **Next** to continue.

   The **Change Password** screen will display.
3. Enter your current password to authorize the program removal, and click **Next** to continue.

The **Maintenance Complete** screen will display.

4. Click **Finish** to close the maintenance program.

## Summary of Setup Steps

The steps for setting up a test installation include installing locally and connecting with MarketSite. For a production installation, configure for security and configure advance options as needed.

All Setup Steps are listed in this table; refer to the last column of the table for locations of complete instructions.

| Step | Action | Reference |
|---|---|---|
| **1** | Verify that your XPC server is ready for installation. | System Requirements on page 1-5 |
| **2** | Remove previous XPC 3.2 installation, if it exists. | Removing a Previous XPC Installation on page 1-6 |
| **3** | Install the files from your XPC CD. | Adding JDK to Path Variable on page 1-6 |
| **4** | Use the XPC Invoker to verify the local installation. | Testing the Installation Locally on page 1-8 |
| **5** | Register in MarketSite 3.x and configure for https.<br>or<br>Register in MarketSite 4.1 and configure for SonicMQ. | Connecting to MarketSite on page 2-1 |
| **6** | Configure and restart XPC. | Configuring XPC on page 2-8 |
| **7** | Send a round-trip ping to MarketSite. | Testing Your Configuration on page 2-10 |
| **8** | **This completes testing of your basic installation and MarketSite communication.** | |
| **9** | Add security for your Production installation. | Security for Production Systems on page 3-1 |
| **10** | Plan and configure advanced options in your Production installation. | Advanced Configuration on page 4-1 |

| Step | Action | Reference |
|---|---|---|
| **11** | Test your Production installation. | Testing Your Production Installation on page 3-13 |
| **12** | Review Administration and Troubleshooting methods. | Administration on page 6-1 and Troubleshooting on page 7-1. |

# System Requirements

The hardware and software requirements are listed in this section. The example environment described in this section is used to test XPC at Commerce One.

Verify that you have the system requirements before following installation instructions.

## Hardware Requirements

The current release of XPC with SonicMQ (when both are run as NT Services) will occupy a minimum memory footprint of about 120 MB and a disk footprint of about 500kb. The memory footprint includes the entire Java runtime environment and the XPC server. System requirements include:

- Memory: 512 MB minimum
- Diskspace: 100 MB minimum

*Note* .......... The default heap (-mx ) requirement for JVM is 512M. If large messages are sent frequently, increase the JVM -mx to 1024M.

## Software Prerequisites

Commerce One certifies XPC 4.0 for the following environment:

- Windows NT 4.x Server with Service Pack 6a
- If you plan to use https transport, it must be installed. SonicMQ 3.0 reliable messaging is bundled with XPC and is used internally in the XPC server, whether you use https and/or SonicMQ to connect to MarketSite.
- 128 bit or 56 bit encryption with Secure Socket Layer (SSL), X.509 certificate
- XPC 4.0 requires and supports JDK 1.2.2_006 or higher without HotSpot. It does not support JDK 1.3. Sun makes the JDK 1.2.2_006 version available at http://java.sun.com/products/archive/j2se/1.2.2_006/index.html.

You must add the JDK bin directory to your system environment Path variable before installing XPC (refer to Adding JDK to Path Variable on page 1-6). If it is not present, a message such as *Unable to open Password file* or *Unable to open broker.key file* displays and SonicMQ, an integral feature of XPC 4.0, will not install.

*Note* .......... You can have multiple JVMs on your machine, and also have HotSpot VM installed. The installer will ask you for the location of a 1.2.2_006 (or higher within the 1.2.2_006 series of the Sun JVM) version of java.exe. It will then place this absolute PATH into the XPC invocations of java. XPC's invocations of java also use the **-classic** option to force the use of the Classic VM, even if the HotSpot VM is present.

## Removing a Previous XPC Installation

Before beginning the installation procedure, you must first **Stop** and **Unregister** the XCC server and then remove any existing XPC installations from your computer. Follow these steps to remove any XCC and XPC installation files.

1. To stop XPC, select **Start | Programs | commerceone | XML Portal Connector 3.2 | Stop**.
2. To unregister the XCC server, select **Start | Programs | commerceone | XML Portal Connector 3.2 | Unregister**.
3. Select **Start | Settings | Control Panel**. Double-click on the **Add/Remove Programs** icon on the Control Panel. The **Add/Remove Programs Properties** dialog is displayed. Select the **Install/Uninstall** tab, find and select **XML Portal Connector 3.2**. Then click on the **Add/Remove** button from the dialog box. (Commerce One does not support the Repair and Update options.)
4. Manually delete the transmitter\ccs\certs directory and all its subdirectories and files in the commerceone directory.

*Note* .......... If you try to install XPC without first deleting the transmitter\ccs\certs directory, the initsecureclient script will fail.

## Adding JDK to Path Variable

Because XPC requires Java, you must add the JDK location to the Path Variable.

1. From the **Start** menu, select **Setting | Control Panel | System**. The **System Properties** window is displayed.

2. Select the **Advanced** tab and then **Environment Variables**.
3. In the **System variables** section of the **Environment Variables** dialog, select **Path** and click on the **Edit...** button.
4. Add the JDK bin location, usually c:\jdk1.2.2_006\bin, to the semi-colon delimited Path string. Click **OK** buttons on the Edit, Environment Variables, and System Properties windows to save your new Path variable.

## Installing XPC

Before installing, determine:

- The name of your XPC server.
- XPC location. You can install in the default location or specify another directory for XPC files. The default location is recommended.
- Location for SonicMQ source directory.

Using your installation CD, follow these steps to install XPC on a Windows NT system.

1. Find the **setup.exe** file and double-click on it.

   The **InstallShield Wizard** Welcome Window is displayed.
2. To proceed with the installation, click **Next.**

   The **License Agreement** Window is displayed.
3. Review the terms of the agreement. If you agree with the terms of the License Agreement, click **Yes.**

   The **Find Java Virtual Machine** dialog is displayed.
4. Select or browse to a different directory to select a JVM executable. The installer checks the version. If it is not the correct version, a message is displayed.

   When the correct version of JVM has been found, the **XPC Server Name** Window is displayed.
5. Enter the name of your XPC server and click **Next**.

   The **Destination Location** Window is displayed. The Destination Folder is the location where XPC is to be stored.
6. If you click **Next,** the wizard installs XPC in **c:\commerceone\Xpc**. If you prefer to change the XPC location, **Browse** to a different directory to select another location and click **Next**.

*Note* .......... If you choose to enter a directory, be aware that blank spaces are not allowed. For example, the path **c:\Program Files\XPC** is invalid.

The **Choose Source Directory** window prompts you to enter the location for SonicMQ installer files.

7. Enter the directory for SonicMQ installer files.

   The **Start Copying Files** window is displayed.

8. The **Start Copying Files** window requests that you review your selections before continuing. When you are satisfied with your settings, click **Next.**

9. The wizard installs XPC and displays the progress on the **Setup Status** window. During this time, your xCBL schema and event catalog structures are established, several transmission and security processes are enabled, and property files are updated with the <install:root> directory you entered as your Destination Location and XPC Location.

   Setup message dialogs display messages about the SonicMQ installation process.

   After a few minutes, the **InstallShield Wizard Complete** Window is displayed.

10. The **InstallShield Wizard Complete** Window asks you to choose whether or not to restart your computer now. Before using XPC, you must restart your computer. Choose to restart your computer now or later, and click **Finish**.

    You have completed the XPC installation. After your computer is restarted, proceed to the next steps to verify that your settings are correct.

11. To verify your installation, after rebooting, select **Start |Settings | Control Panel**. Click on the **Services** icon. On the **Services** window, verify that **CCSNTService** (XPC) and **SonicMQService** are started.

## Testing the Installation Locally

Before connecting to MarketSite, follow these instructions to verify a correct local installation.

1. To verify your communication, select **Start** | **Programs | XML Portal Connector 4.0 | Invoker.** The **XPC Invoker** window is displayed.
2. On the **XPC Invoker Window**, click on the **Ping** button in the lower left corner.
3. The installation is successful if the response message, similar to the response shown here, ends with **Pong**.

```
<?soxtype urn:x-
commerceone:document:com:commerceone:ccs:doclet:ping:Ping.sox$1.0?><?import
```

```
urn:x-commerceone:document:com:commerceone:ccs:doclet:ping:Ping.sox$1.0?>
<Pong><PingInfo>nr=0</PingInfo>
<ServerTime>Tue Feb 06 21:49:59 PST 2001</ServerTime>
<ServerConfig>VeoServer</ServerConfig>
<ServerUser><UserName>SYSTEM</UserName>
<UserTimezone>America/Los_Angeles</UserTimezone>
<UserRegion>US</UserRegion>
<UserLanguage>en</UserLanguage>
<UserHomeDir>C:\commerceone\Xpc\runtime\servers\defaultserver</UserHomeDir>
<UserCurrentDir>C:\WINNT\system32</UserCurrentDir>
</ServerUser>
<ServerHost><HostName>cingersoll-lt</HostName>
<HostAddress>10.10.9.188</HostAddress>
</ServerHost>
<ServerOS><OSName>Windows NT</OSName>
<OSVersion>4.0</OSVersion>
<OSArch>x86</OSArch>
</ServerOS>
<ServerConnection><ConnectionPort>Unknown Port</ConnectionPort>
<ConnectionPath>Unknown Path</ConnectionPath>
<ConnectionProtocol>Unknown Protocol</ConnectionProtocol>
<ConnectionMethod>Unknown Method</ConnectionMethod>
<ConnectionQuery>Unknown Query</ConnectionQuery>
<ConnectionAuthType>Unknown Auth Type</ConnectionAuthType>
<ConnectionClientAgent>Unknown Agent</ConnectionClientAgent>
</ServerConnection>
<ServerJava><JavaVersion>1.2.2</JavaVersion>
<JavaVendor>Sun Microsystems Inc.</JavaVendor>
<JavaCompiler>symcjit</JavaCompiler>
<JavaJRE>false</JavaJRE>
</ServerJava>
<ServerSecurity><SecurityServerRealm>No Realm</SecurityServerRealm>
<SecurityServerCertificate>No Server Certificate</
```

```
SecurityServerCertificate>
<SecurityUserKeyStore>No Keystore</SecurityUserKeyStore>
</ServerSecurity>
<ServerQoS><PerformanceMetric>0.0</PerformanceMetric>
<NetworkMetric>0.0</NetworkMetric>
<MemoryAvailable>7522272</MemoryAvailable>
<DiskAvailable>0</DiskAvailable>
</ServerQoS>
</Pong>
```

4. If the response is unsuccessful, the response is similar to the following. In this case, access the systemStartup or debug files in the `<install:root>\runtime\servers\<SERVERNAME>\logs` directory and read the error messages.

```
<?soxtype urn:x-
commerceone:document:com:commerceone:ccs:doclet:error:Error.sox$1.0?><?impo
rt urn:x-
commerceone:document:com:commerceone:ccs:doclet:error:Error.sox$1.0?>
<Error><Code>INVOKER_ERRORGENERIC</Code>
<DefaultMessage><Message><MessageString>ERROR:
com.commerceone.ccs.excp.comm.communicator.TimeoutException: !!!
sendAndReceive: Timeout &apos;10000&apos; expired</MessageString>
<LanguageCode>en</LanguageCode>
</Message>
</DefaultMessage>
<Severity>Error</Severity>
</Error>
```

# 2 Connecting to MarketSite

This chapter provides the steps required to connect to MarketSite and test the communication between your XPC installation and MarketSite. Information and instructions are given as listed in the table of steps.

The following SonicMQ-related terms are used in this chapter.

| | |
|---|---|
| **Inter- Broker port** | Port on which the local sonic broker listens for connections from the portal sonic broker. |
| **Sonic to Broker port** | Port on which the local sonic broker listens for connections from sonic clients running in either the local XPC server or the Invoker. |
| **Sonic Node Name** | The node name for the local sonic installation. This name is chosen by the trading partner and submitted to MarketSite Builder (MSB). Must be unique within a particular portal. |
| **Sonic Queue Name** | The queue name for the local sonic installation. This name is chosen by the trading partner and submitted to MarketSite Builder (MSB). Must be unique within a broker. |
| **Portal Node Name** | SonicMQ node name for the portal’s sonic installation. |
| **Portal Address** | Address for the portal’s SonicMQ installation. |
| **Portal Port** | Port on which the portal’s sonic broker listens for connections from other sonic brokers. |

| | |
|---|---|
| **Production Mode** | A mode of sonic configuration that uses certificates for broker-to-broker authentication. |
| **Test Mode** | A mode of sonic configuration that uses userid and password for broker-to-broker authentication. |

| Step | Action | Reference |
|---|---|---|
| **1** | Determine which version of MarketSite with which to connect. | Which Version of MarketSite? on page 2-2 |
| **2** | Register yourself as a Trading Partner on MarketSite. In MarketSite3.x, also register the Trading Partner destination address. Trading Partner will receive registration email. In MarketSite 4.1, self register the Trading Partner destination address by using the information in the email. | Registering in MarketSite 3.x on page 2-3 or Registering in MarketSite 4.1 on page 2-3 |
| **3** | For MarketSite 4.1, register Sonic MQ broker and receive Sonic MQ Broker registration confirmation email. | SonicMQ Broker Registration Confirmation on page 2-7 |
| **4** | Configure XPC for communication with the Marketsite you registered with at Step 2. | Configuring XPC on page 2-8 |
| **5** | Test the configuration by running the pingMarketSite script. | Testing Your Configuration on page 2-10 |

## Which Version of MarketSite?

Will you connect with MarketSite 3.x or MarketSite 4.1?

| MarketSite 3.x | MarketSite 4.1 |
|---|---|
| MarketSite operator registration | Trading Partner self-registration or MarketSite operator registration |
| https transport | SonicMQ transport and/or https |

## Registering in MarketSite 3.x

You provide the Trading Partner information, the IP address of  your XPC installation machine, and its HTTPS Port to register with MarketSite3.x. The default port value is 4433, which is created at installation. If you wish to change this port before registering,  refer to Configuring XPC on page 2-8. This change is optional and not normally recessary.

After registration, you will receive a Trading Partner registration email.

## Registering in MarketSite 4.1

Here are the defaults for the data you need to register with MarketSite 4.1. These defaults are created when XPC is installed. If you wish to change any of this information before registering, refer to Configuring XPC on page 2-8. This is optional and not normally necessary.

- **HTTPS Port** is 4433
- **Inter-Broker Port** is 2506
- **Sonic Node Name** is the <fully-qualified hostname> of the machine on which XPC has been installed. For example, if XPC has been installed on venus.commerceone.com, the sonic node name will default to venus.commerceone.com.
- **Sonic Queue Name** is XPC_<fully-qualified hostname>_ConnectorInbound with any dots in hostname replaced by underscore'_'. For example, if XPC has been installed on venus.commerceone.com, the queue name will default to XPC_venus_commerceone_com_ConnectorInbound.

Request a copy of *MarketSite Builder User Guide: Trading Partners for MarketSite4.1* from your MarketSite operator. This manual gives the details you need to use MarketSite Builder for:

- Trading Partner Registration
  - Log in as guest for self-registration or contact MarketSite operator to register.
  - Select **Register TP.**
  - Enter information such as Org Id, Company Name, User Id, Last Name, First Name, and so on.
  - Wait to receive Trading Partner Registration email.
- Manage Document Destination

  - Log in using the User Id/Org Id/Password that you received in the Trading Partner Registration email.
  - Select **Manage Doc Destinations.**
  - On the **Destination Address** window, provide the https information (https://XpcInstallationMachine:HTTPS Port/xcc), and the sonic information (Sonic Node Name::Sonic Queue Name).

- Manage Sonic MQ Broker
  - Log in using the User Id/Org Id/Password that you received in Trading Partner Registration email.
  - Select **Register Sonic MQ Broker.**
  - Enter the information for Node Name (Sonic Node Name), IP Address (IP of XPC installation machine), Port Number (Inter-Broker Port), and Queue Name (Sonic Queue Name).
  - Wait to receive Sonic MQ Broker Registration Confirmation email.

# Receiving Confirmation Emails

After registering with MarketSite, you will receive a Trading Partner Registration email and, for MarketSite 4.1 only, a SonicMQ Broker Registration Confirmation email.

## Trading Partner Registration Email

Here is an example trading partner email for MarketSite4.1. The information from this email that is needed in Configuring XPC on page 2-8 is highlighted in **bold**.

```
TP Administrator:

Login information:

    User Id: TPTestAdmin
    Organization Id: TPTest
    Password: j7R766a6

Your company registration has been completed with the following
information:
    Company name: TPTest.com
    Contact name: Mark Peterson
    Contact Email address: mark.peterson@TPTest.com

    TPID: dbf029ac-7812-1000-aeb1-0a0a01090001
    Authorizing Entity ID: dbf029ac-7812-1000-aeb1-0a0a01090001
    DUNS:
    EANID:
    LegacyId0:
    LegacyId1:

Basic business profile information:

    Visibility Code: NMM
    Commodity Code (Buy):
    Commodity Code (Supply):
    URL:
    Logo URL:
    Description:
    Terms and Conditions:

    Phone number:
    Fax number:
    Street:
    City: San Francisco
    State:
    Postal Code:
    Country: US
    Language: en
    Timezone: PST
    Currency: USD

Administrator contact information:
    Name: Mark Peterson
    Title:
    Email address: mark.peterson@TPTest.com
    Phone number:
    Fax number:
    Street:
    City: San Francisco
    State:
    Postal Code:
    Country: US
    Language: en
    Timezone: PST
    Currency: USD

Business contact information:

    Name: Mark Peterson
    Title:
    Email address: mark.peterson@TPTest.com
    Phone number:
    Fax number:
    Street:
    City: San Francisco
    State:
    Postal Code:
    Country: US
    Language: en
    Timezone: PST
    Currency: USD


System configuration information:
```

Portal MPID: b2b7a208-780e-1000-9b62-0a0a09340001

Profile service MPID: 4f19337a-7812-1000-b12f-0a8203670001

**System account ID: TPTest**

**System account password: gg62aNJ3**

Portal URL: test.commerceone.com

## SonicMQ Broker Registration Confirmation

For MarketSite 4.1, you will receive an email confirming your SonicMQ registration. The information from this email that you use in Configuring XPC on page 2-8 is highlighted in **bold**.

Your sonic MQ broker registration has been completed with the following information:

**Node name: xpcmachine.TPTest.com**

Address type: CertAddress

**IP address: 12.12.12.1**

**Port number: 2506**

**Queue name: XPC_xpcmachine_TPTest_com_ConnectorInbound**

Queue type: queuetype

The following is the information for the portal node:

**Portal node name:  commerceone.com**

**Portal IP address: test.commerceone.com**

**Portal port number: 2506**

Portal IP address (backup):

Portal port number (backup):

Thank you.

# Configuring XPC

With XPC installed and the Trading Partner registration and administration with MSB completed, follow these steps to configure XPC for communication with the MarketSite with which you registered.

*Note* .......... Make sure the XPC Server is started before you begin these steps. If the XPC Server is not running,, the Configure XPC tool cannot connect to the SonicMQ broker to retrieve and save SonicMQ routing information.

1. From the **Start** menu, select **Programs |XML Portal Connector 4.1 | Configure**. The **Configure XPC** window is displayed with the following sections:
   - XPC Server
   - Local Communication
   - Portal Communication
   - Transport Preferences
   - Sonic / Https Communication
   - Proxy Configuration
2. The **XPC Server** box contains defaults created during your installation session of the machine on which you have installed XPC. These are described in Configuring Additional Options on page 4-5.
3. The **Local Communications** section contains the defaults created during your installation. The defaults and examples are given in Registering in MarketSite 3.x on page 2-3 and Registering in MarketSite 4.1 on page 2-3.

***Warning!*** If you change **Local Communications** information after having registered with MarketSite, you will need to amend your MarketSite registration.

4. For **Portal Communication**, the first box is **Trading Partner Information**.·
   - For **TPID**, enter the value of your TPID (for MarketSite4.1) or the value of your MarketParticipantID (MPID for MarketSite3.x). The TPID value is given in your Trading Partner registration email.
   - For **System Account Id**, enter the value of your System account ID (for MarkteSite4.1) or the value of your System ID (for MarketSite3.x). The System Account ID is given in your Trading Partner registration email.
   - For **System Account Password**, enter the value of your System account password (for MarketSite4.1), or the value of your System Password (for MarketSite3.x). The password is given in your Trading Partner registration

email.

Ignore the **Certificate Manager** button at this time. You will use it to configure security for production mode; refer to Security for Production Systems on page 3-1 for details.

5. To configure your **Transport Preferences**, select Preference1 or Preference2 for sonic and/or https. You must select here the same choice(s) as you entered in MarketSite Builder (Manage Document Destination).

6. If you are using SonicMQ, select the **sonic** tab. What you enter here determines a routing connection from your XPC installation to the MarketSite where you are registered.

   - For the **Production Mode** checkbox, certificates are used to authenticate between Portal and Trading Partner brokers if it is checked; otherwise userid/ password is used for authentication to Portal from Trading Partner. If you have registered with a test MarketSite, this checkbox should be unchecked.
   - For **Portal Address**, enter the Portal IP address from your Sonic MQ Broker registration email.
   - For **Portal Port**, enter the Portal port number from your Sonic MQ Broker registration email.
   - The **Portal Node Name**, enter the Portal Node Name from your Sonic MQ Broker registration email.

7. If you are using https, select the **https** tab. Your XPC server properties are updated with the information you enter here.

   - **Portal Address -**obtain this information from the Portal Document Destinnation Address in the Trading Partner registration email.
   - **Portal Port -** obtain this information from the Portal Document Destinnation Address in the Trading Partner registration email.

8. If you wish to configure a Proxy Server at this time, refer to Configuring Additional Options on page 4-5.

9. Review your entries. If you find an error, press either the Clear button or the Reset button at the bottom of the window and re-enter your data.

   - The **Clear** button clears all data.
   - The **Reset** button reverts to the previously saved settings.

   When you have verified that the information is correct, press the **Save** button to update the property files.

   A message dialogs reminds you to restart the XPC Server.

**10.** To exit the Configure XPC window, press the **Exit** button.

**11.** For your settings to take effect, stop and restart the XPC server (from the **Start** menu, **Programs | XML Portal Connector 4.1 | Stop** and then **Programs | XML Portal Connector 4.1 | Start.**

## Testing Your Configuration

To test the communication between your XPC server and MarketSite, run PingMarketSite, as in these steps.

1. Run <install:xpc>\bin\pingMarketSite.bat:

   ```
   cd <install:xpc>\bin
   pingMarketSite
   ```

   A self-addressed ping document is sent to MarketSite.

2. MarketSite routes the ping document to the Trading Partner destination address that you registered, your XPC address.
3. A ping service run on your XPC server receives the ping document and generates a pong document and sends the pong document to MarketSite.
4. MarketSite routes the pong document to your address.
5. Upon receipt of the pong document, you have successfully completed the test of your MarketSite configuration. The self-addressed ping tests the registration of Trading Partner, Document Destination, and SonicMQ Broker, if SonicMQ is used.

You can also send the ping document to MarketSite with the ping service running, and receive the pong document from MarketSite. To do this, you can add one argument of -recipient <MarketSite MPID for MarketSite3.x/Portal MPID for MarketSite4.1 from Trading Partner Registration email> in <install:xpc>\bin\pingMarketSite.bat script. The ping sent to MarketSite ping service tests only the registration of Trading Partner and SonicMQ Broker, only if SonicMQ is used; it does not test Document Destination.

Because this script uses the com.commerceone.sample.xpc.docsender.DocSender class, you can find the detail information how to invoke this class in the README.txt under <install:xpc>\sample\com\commerceone\sample\docsender.

# 3 Security for Production Systems

This chapter describes how to set up XPC for production on Windows NT. It includes the following sections:

- Firewall and Network Requirements on page 3-1
- Certificate Manager on page 3-3
- Authentication for Production Using https on page 3-3
- Authentication for Production Using SonicMQ on page 3-9
- Testing Your Production Installation on page 3-13.

## Firewall and Network Requirements

This section details security considerations forn deploying the XPC Server and applications into a Trading Partner (TP) site with existing security, firewall, and proxy policies, and LAN topologies. The XPC adminstrator must use the firewall and network information given here while considering local Information Technology (IT) practices.

XPC 4.1 Server and SonicMQ Broker cannot currently be deployed in the DMZ due to a XPC 4.1 installation limitation.

XPC 4.1 supports two transfer or transport protocols, HTTP/S and JMS-based SonicMQ over Secure Sockets Layer (SSL):

- Inbound/Outbound https traffic from the internet is always to/from a MarketSite Portal Router. The message size (envelope including attachements) for https has a 10MB limit.
- Inbound/Outbound JMS/Sonic MQ over SSL traffic is always to/from a MarketSite

Sonic MQ Broker. The message size (envelope including attachements) for Sonic has a 10MB limit. SonicMQ is automatically installed during XPC installation.

## Planning for XPC Deployment

In planning for XPC Deployment, note that:

- The XPC server and its SonicMQ Broker must be installed on the same NT machine in an internal protected network, that is, behind the firewall.
- In addition to having the XPC Server in a protected network, Commerce One strongly recommends that passwords stored in application property files be protected by encryption. All passwords used by the XPC server and Sonic MQ Broker are encrtypted for you by XPC.
- Correct Microsoft NT Lock Down procedures are strongly recommended. Refer to Microsoft Secure NT documentation in http://www.microsoft.com/ntserver/security/exec/overview/Secure_NTInstall.asp.

## Internal Firewall Requirements

The following table summarizes the requirements for the XPC and transport connections.

| | **https** | **SonicMQ** |
|---|---|---|
| Target server | XPC https server | SonicMQ Broker SSL server |
| Protocol | https | ssl |
| Firewall TCP Port | 4433 | 4433 |

## Proxy Firewall Requirements

If you are using the Proxy option (refer to Using Forward Proxy on page 4-2), the firewall requirements are as follows.

XPC applications can optionally connect to MarketSite through a local forward (SSL) proxy over both https and SonicMQ/SSL Transport. Commerce One supports both standard https and SSL Proxies. It is recommended that the Proxy Server address can be resolved by the local DNS available to the XPC application. If local DNS cannot resolve the proxy address, then configure the explicit IP address of the proxy Server in the XPC application in the Proxy Host field of the Configure XPC window. For more information on Forward and Reverse Proxy, see Firewall and Network Requirements on page -7

# Certificate Manager

Commerce One products use a web protocol to communicate with each other. As a web server, a Commerce One product uses the Secure Sockets Layer (SSL) to encrypt transactional data that travels outside of its own Local Area Network (LAN).

The Certificate Manager is a Commerce One tool for you to use to manage your KeyStore file, request and import a Certificate Authority root as Trusted Root, import a Server Certificate, and import a MarketSite Server Certificate as Trusted Client.

The authentication procedure differs between https and SonicMQ.

# Authentication for Production Using https

Acquiring authentication requires pre-planning. It is recommended that you review the preparation and steps before you begin the steps.

## Preparation for Authentication

Start now to arrange for your server certificate so that you are not delayed by Step 5. Contact your Certificate Authority and determine how much time their process requires.

## Following the Steps

The steps detailed in this section for setting up security for https are summarized in this table. Note that to perform Steps 1 and 12, the XPC Server must be stopped. To stop the XPC Server, select **Start | Program | XML Portal Connector 4.1 | Stop**. .

| Step | Description |
|---|---|
| **1.** | With the XPC server stopped, make a backup of keystore. |
| **2.** | Create a new server entry. |
| **3.** | Create a certificate request. |
| **4.** | Submit that certificate request |

| Step | Description |
|---|---|
| **5.** | Receive server certificate from your Certificate Authority (CA). |
| **6.** | Import the certificate. |
| **7.** | Set the entry as active. |
| **8.** | Optionally, configure trusted CA root certificates. |
| **9.** | Trust your MarketSite. |
| **10.** | Enable Client Authentication. |
| **11.** | Change the keystore password. |
| **12.** | With XPC Server stopped, make a new backup of keystore. |

1. To make a backup copy of keystore, find the serverstore file in the <install:root>\runtime\servers\<your server name>\certs directory. Make a copy of that file and save it with a different name, such as **xpc_serverstore_default.**

   a) From the **Configure XPC** window, click the **Certificate Manager**button in the center of the window. The **Certificate Manager** window is displayed.

   b) In the **Certificate Manager** window, enter the following information:

   - **Server** - Choose the server where the keystore is located. The Certificate Manager will auto populate this field with your options; choose the correct one from the drop-down menu.
   - **Password** - The password for the KeyStore you will open. The password for default test Keystore is *admin*; you change this password in task 11.

   b) Click **Open a Keystore**. This opens the main window for the Certificate Manager.

2. To create a new server entry, select the **Configure Server Entries** tab. Then click **Create**. The **Create Certificate Entry** dialog is displayed.

   a) Complete these fields in the Create Certificate Entry dialog.

| Field Name | Description |
|---|---|
| **Certificate Entry Name** | The name you choose for your new entry. |

| Field Name | Description |
|---|---|
| **Algorithm Type** | For algorithm type, RSA is the default. Choose **RSA** for an RSA keypair. Choose **DSA** for a DSA keypair. |
| **Key Size** | This determines the size of the keys.<br>**56-bit** version has a default of 1024 bit, but can also be 512 bit.<br>**128-bit** version has a default of 1024 bit, but can also be 512 bit or 2048 bit. |

b) Click the **Create Certificate Entry** button.

c) A window shows confirmation that your server entry was created successfully. Click the **OK** button.

d) The **Configure Server Entries** window displays your new entry. The Certificate Details section lists *Dummy Certificate!*

**3.** To create a certificate request, select the **Create Certificate Request** tab. The **Create Certificate Request** window is displayed.

a) Complete all fields marked with a *****. Remaining fields are optional.

***Caution*** .... The Certificate Manager requires a minimum of fields. Some Certificate Authorities require more fields than others and the format of each field may vary depending on the Certificate Authorities. Please refer to your Certificate Authorities documentation to determine which fields you need.

| Field Name | Description |
|---|---|
| **Certificate Entry Name** | From the drop down menu, select the entry for which you are creating a certificate. |
| ***Common Name** | This is the common name of the entry or server name, such as MyServer.CommerceOne.com. Be aware that SonicMQ requires a different format for common name. |
| **Email Address** | Email address of the server administrator. |
| ***Organization** | Your company name. |
| **Organizational Unit** | Your organization within your company. |

| **Field Name** | **Description** |
|---|---|
| **Locality** | Your city. |
| **State** | Your state. This must be the full name, not the abbreviation. For example, use *California* not *CA*. |
| ***Country** | Two-letter country code for your country. For example, US for United States. |
| **Algorithm Type** | The algorithm type you chose when you created the entry. This field will auto populate. |
| **Key Size** | The key size you chose when you created the entry. This field will auto-populate. |

b) With the fields completed, click **Create Certificate Request**.

c) You are prompted to enter a name and location for the certificate request file you are creating. The default is **certreq.p10**. The extension p10 indicates these files are in PKCS10 format. Make any changes as needed, and click **Save** to continue.

d) The Save certificate request prompt confirms that the request file has been generated. Select **Copy to System Clipboard** to copy the request to the clipboard where it is easily accessible when you submit the request, or **Done** to finish and save the file.

**4.** In this step, you submit the certificate request you created in the previous step to a Certificate Authority (CA) to have the security certificate generated. Each CA has its own method for fulfilling certificate requests. The instructions here outline the online system used by Verisign OnSite. For more information about Verisign services, visit their web site at *http://www.verisign.com*.

a) When a company registers with Verisign, Verisign assigns a special Secure Server Enrollment web page for that company. The company’s administrator submits certificate requests at this page.

b) For each certificate request, the Verisign certificate request wizard asks for the exact server and directory name where the keystore was created.

c) The wizard requests that you cut and paste the entire contents of your certificate request file into the **Enter CSR Information** text box. To do this, open your certificate request file in an ASCII text editor such as Notepad (do not use a word processor such as Word that inserts formatting or control characters). Copy the entire contents and paste the entire contents including the
----BEGIN NEW CERTIFICATE REQUEST---- and

----END NEW CERTIFICATE REQUEST---- markers.

d) When you and the Verisign wizard are finished, the Verisign system generates the certificate. The certificate is sent to the administrator's email address.

**5.** Receive server certificate from your Certificate Authority, either by email as in the Verisign example, or by some other method.

**6.** To import the certificate, select the **Configure Server Entries** tab. Then click to select the entry where you wish the certificate imported. With the entry selected, click **Import**. The available import formats are:

- Base 64
- DER
- PEM
- PKCS7
- PKCS12

***Note***.......... The certificate must match the keypair stored in that entry and generated based on a certificate request for that entry.

***Note***.......... The Certificate Manager will dynamically determine the format of the file you are importing, therefore the extension of the file is not important.

a) From the resulting browser window, choose the certificate file you want to import and click **Open**.

b) If the trusted root for this certificate authority is not yet within your keystore, a dialog prompts you to trust the Root certificate. Click **Yes** to continue.

c) When the certificate has been imported, a confirmation window is displayed. Click **OK** to finish.

***Caution*** .... If the trusted root certificate is not available within the file being imported, you may need to import the root certificate separately first. To do so, follow the steps listed in Task 8, Configure Trusted CA Root Certificates.

**7.** Marking an entry as active indicates to your XPC server to use that entry from the keystore during startup. To set an entry as active, click on its name in the Entries dialog to select it, then click **Set as Active**. A confirmation screen is displayed when the entry is set as active. Click **OK**. A * precedes the name of an active entry in the Entries dialog.

***Note***.......... You must restart the server after you have set an entry as active in order for the change to take effect.

**8.** Configuring a trusted CA root certificate is not necessary if the trusted root certificate is included in the certificate you import from your Certificate Authority.

To configure a trusted root, select the **Configure Trusted Root** tab and click **Import**. The **Select certificate file to import** dialog is displayed. Select the Trusted Root CA file to import and click **Open**. When the operation is complete, a confirmation dialog is displayed. Click **OK**.

**9.** To trust a MarketSite, get a copy of the MarketSite certificate from your MarketSite operator, typically by email.

***Note*** .......... The certificate must be in PKCS7 format.

a) Go to the **Configure Trusted Client** tab. Click **Import**. The **Select certificate file to import** dialog is displayed.

b) Select the Trusted client file and click **Open**. When the operation is complete, confirmation dialog is displayed. Click **OK**.

**10.** With XPC in Test mode, Client Authentication should be disabled. With XPC in Production mode, it should be enabled. To enable or disable Client Authentication, select the **Configure Trusted Client** tab. Click on disable or enable to change the setting.

*Note* .......... You must restart the server after you have enabled or disabled Client Authentication in order for the change to take effect.

**11.** To change a keystore password, select the **Change Password** tab. Then:

a) Enter your old password.

b) Enter the new password.

c) Re-type the new password to confirm it.

c) Click **Change KeyStore Password**.

**12.** Ensure that the XPC Server is stopped. To make a new backup copy of keystore, find the serverstore file in the <install:root>\runtime\servers\<your server name>\certs directory. Make a copy of that file and save it with a different name, such as xpc_serverstore_https_production.

a) In the **Certificate Manager** window, enter the following information:

- **Server** - Choose the server where the keystore is located. The Certificate Manager will auto populate this field with your options; choose the correct one from the drop down menu.
- **Password** - The password for the KeyStore you will open.

b) Click **Open a KeyStore**.

# Authentication for Production Using SonicMQ

Acquiring authentication requires pre-planning. It is recommended that you review the preparation and steps before you follow the steps.

## Preparation for Authentication

Start now to arrange for your server certificate so that you are not delayed by Step 5. Contact your Certificate Authority and determine how much time their process requires.

## Following the Steps

The steps detailed in this section for setting up security for SonicMQ are summarized here..

| Step | Description |
|---|---|
| **1.** | Create a new server entry. |
| **2.** | Create a certificate request. |
| **3.** | Submit that certificate request. |
| **4.** | Receive server certificate from your Certificate Authority (CA). |
| **5.** | Import the certificate. |
| **6.** | Configure SonicMQ Broker. |
| **7.** | Import Trusted CA Root Certificate from MarketSite (optional). |
| **8.** | Make a backup file of the keystore file. |
| **9** | Stop and restart SonicMQ Broker. |

Follow these steps to set up authentication for production using the Certificate Manager.

1. From the **Configure XPC** window, press the **Manage Certificate** button at the bottom of the window. The **Certificate Manager** window is displayed. If this is the first time you access this window, enter **admin** for the password and then set your own password. If you changed this password while performing the https steps, use

the new password now.

2. To create a new server entry, select the **Configure Server Entries** tab. Then click **Create**. The **Create Certificate Entry** dialog is displayed.

   a) Complete these fields in the Create Certificate Entry dialog.

| Field Name | Description |
|---|---|
| **Certificate Entry Name** | The name you choose for your new entry. |
| **Algorithm Type** | For algorithm type, RSA is the default. Choose **RSA** for an RSA keypair. Choose **DSA** for a DSA keypair. |
| **Key Size** | This determines the size of the keys.<br>**56-bit** version has a default of 1024 bit, but can also be 512 bit.<br>**128-bit** version has a default of 1024 bit, but can also be 512 bit or 2048 bit. |

   b) Click the **Create Certificate Entry** button.

   c) A window shows confirmation that your server entry was created successfully. Click the **OK** button.

   d) The **Configure Server Entries** window displays your new entry. The Certificate Details section lists *Dummy Certificate!*

3. To create a certificate request, select the **Create Certificate Request** tab. The **Create Certificate Request** window is displayed.

   a) Complete all fields marked with a *****. Remaining fields are optional.

***Caution*****.....** The Certificate Manager requires a minimum of fields. Some Certificate Authorities require more fields. Please refer to your Certificate Authorities documentation to determine which fields you need.

***Caution*** **.** The Common Name of the certificate must be the same as the XPC Broker node name for authentication to proceed correctly.

| Field Name | Description |
|---|---|
| **Certificate Entry Name** | From the drop down menu, select the entry for which you are creating a certificate. |
| ***Common Name** | This is the common name of the certificate and must be the same as XPC broker node name. |
| **Email Address** | Email address of the server administrator. |
| ***Organization** | Your company name. |
| **Organizational Unit** | Your organization within your company. |
| **Locality** | Your city. |
| **State** | Your state. This must be the full name, not the abbreviation. For example, use *California* not *CA*. |
| ***Country** | Two-letter country code for your country. For example, US for United States. |
| **Algorithm Type** | The algorithm type you chose when you created the entry. This field will auto populate. |
| **Key Size** | The key size you chose when you created the entry. This field will auto-populate. |

b) With the fields completed, click **Create Certificate Request**.

c) You are prompted to enter a name and location for the certificate request file you are creating. The default is **certreq.p10**. The extension *p10* indicates these files are in PKCS10 format. Make any changes as needed, and click **Save** to continue.

d) The **Save certificate request** prompt confirms that the request file has been generated. Select **Copy to System Clipboard** to copy the request to the clipboard where it is easily accessible when you submit the request, or **Done** to finish and save the file.

**4.** In this step, you submit the certificate request you created in the previous step to a Certificate Authority (CA) to have the security certificate generated. Each CA has its own method for fulfilling certificate requests. The instructions here outline the online system used by Verisign OnSite. For more information about Verisign services, visit their web site at *http://www.verisign.com*.

a) When a company registers with Verisign, Verisign assigns a special Secure Server Enrollment web page for that company. The company's administrator submits certificate requests at this page.

b) For each certificate request, the Verisign certificate request wizard asks for the exact server and directory name where the keystore was created.

c) The wizard requests that you cut and paste the entire contents of your certificate request file into the **Enter CSR Information** text box. To do this, open your certificate request file in an ASCII text editor such as Notepad (do not use a word processor such as Word that inserts formatting or control characters). Copy the entire contents and paste the entire contents including the
----BEGIN NEW CERTIFICATE REQUEST---- and
----END NEW CERTIFICATE REQUEST---- markers.

d) When you and the Verisign wizard are finished, the Verisign system generates the certificate. The certificate is sent to the administrator's email address.

**5.** Receive server certificate from your Certificate Authority, either by email as in the Verisign example, or by some other method.

To import the certificate, select the **Configure Server Entries** tab. Then click to select the entry where you wish the certificate imported. With the entry selected, click **Import**. The available import formats are:

- Base 64
- DER
- PEM
- PKCS7
- PKCS12

***Note*** .......... The certificate must match the keypair stored in that entry and generated based on a certificate request for that entry.

***Note*** .......... The Certificate Manager dynamically determines the format of the file you are importing; therefore the extension of the file is not important.

a) From the resulting browser window, choose the certificate file you want to import and click **Open**.

b) If the trusted root for this certificate authority is not yet within your keystore, a dialog prompts you to trust the Root certificate. Click **Yes** to continue.

c) When the certificate has been imported, a confirmation window is displayed. Click **OK** to finish.

***Caution*** ..... If the trusted root certificate is not available within the file being imported, you may need to import the root certificate separately first. To do so, follow the steps listed in Step 8 of HTTPS section.

6. Select the **Configure SonicMQ Broker** tab. Enter the password in the **Broker Keystore Password** field and re-enter the password in the **Confirm Password** field. Click **Configure**.

*Note* .......... You can enter any value you would like for the password. It is used for encryption of the certificate file.

7. Select the **Configure SonicMQ Broker** tab. Click **Import Trusted Root**. Select the trusted root certificate file from File Browser, and click **OK**.

8. To make a new backup copy of keystore, find the serverstore file in the <install:root>\runtime\servers\<your servername>\certs directory. Make a copy of that file and save it with a different name, such as xpc_serverstore_https_sonic_production. (If you chose to go through HTTPS steps first and then the SonicMQ steps, at this point, the keystore contains certificate information for both HTTPS and SonicMQ).

9. Stop and restart SonicMQ Broker Service. Using **Start | Settings | Control Panel | Services**, stop then restart SonicMQService.

*Note* .......... Note... SonicMQService needs to be restarted in order for the newly installed certificate to take effect.

## Testing Your Production Installation

To test the communication between your XPC server and MarketSite, contact your MarketSite operator and request a Ping test. When the MarketSite operator pings your XPC installation and receives a response, your installation is verified as communicating correctly.

# 4 Advanced Configuration

This chapter provides the steps for adding special options to a production installation of XPC on Windows NT. The steps include:

1. Configure advanced options and restart XPC. Refer to Configuring Additional Options on page 4B-5.
2. Request your MarketSite operator complete a Ping test. Refer to Testing Your Production Installation on page 3B-13.

## Planning for Special Options

Items in this section address unique or special situations that require advance planning. These items are optional.

### Adjusting Java Heap Size

XPC 4.1 requires and supports JDK 1.3 without HotSpot. Sun makes the JDK 1.3 version available at http://java.sun.com/products/archive/j2se/1.3/index.html.

The size of the Java heap is a significant performance factor. The recommended java heap size for the XPC 4.1 is 512 MB. If you plan to send or receive very large messages or have multiple concurrent sessions in your application, you should increase the java memory for the client machine accordingly, keeping your available memory in mind:

- The more memory you set, the less Java uses garbage cleanup, which results in better performance.
- If the Java heap size is too high and it exceeds the memory available to the JVM process, performance can significantly degrade as a result of page swapping in the

underlying operating system. The memory available to the JVM might not match the total memory in the server machine due to the memory requirements of other processes.

If you choose to modify the java heap size, use the **-Xms** option for setting the minimum heap size for use by the Java VM. Set the parameter in these files:

- <install:root>\bin\ccsntservice.prop
- <install:root>\bin\launch.bat
- <install:root>\runtime\servers\defaultserver\config\startup\exec.prop

Then restart the XPC server.

## Using Forward Proxy

Outbound (forward) http and https traffic headed to MarketSite can be routed through a proxy server located in the demilitarized zone (DMZ). Outbound communications through a proxy server provides support for any http/https based proxy server that follows the standard HTTP1.1 proxy connection protocol. More information on Forward Proxy can be found in Firewall and Network Requirements on page B-7.

You enter the Proxy Host and Proxy Port settings on the **Configure XPC** window (**Start | Program | XML Portal Connector 4.1 | Configure**). The settings can be changed anytime after initial installation.

## Using the Versioning Library

The Versioning Library is a set of Java classes that transforms a given xCBL document from one version to other.  It is integrated and shipped with XPC 4.1. The Versioning Library Service is installed as an XPC Auxiliary Service as part of the XPC installation.

The Commerce One application listed in the first column uses the xCBL version listed in the second column.

| **Application** | **xCBL Version** |
|---|---|
| BuySite 6.x | 2.0 |
| SupplyOrder 2.x | 2.0 |
| XPC 3.x | 2.0 |

| Application | xCBL Version |
|---|---|
| Galerie 3.x | 2.0 |
| Enterprise Buyer Desktop (EBD) 2.0 (formerly BuySite 7.0) | 2.2 |
| SupplyOrder 3.0 | 2.2 |
| MarketSet Connector | 3.0 |
| XPC 4.14.1 | 3.0 |

You and your trading partner can exchange any of the documents listed here. The Versioning Library transforms the documents in either direction.

| xCBL Document | | xCBL Document |
|---|---|---|
| 2.0 Purchase Order | ↔ | 2.2 PurchaseOrder |
| 2.0 PurchaseOrder Response | ↔ | 2.2 OrderResponse |
| 2.0 StatusResult | ↔ | 2.2 OrderStatusResult |
| | | |
| 2.2 PurchaseOrder | ↔ | 3.0 Order |
| 2.2 OrderResponse | ↔ | 3.0 OrderResponse |
| 2.2 ChangeOrder | ↔ | 3.0 ChangeOrder |
| 2.2 ChangeOrderResponse | ↔ | 3.0 OrderResponse |
| | | |
| 2.0/2.2 PriceCheck | ↔ | 3.0 PriceCheck |
| 2.0/2.2 PriceCheckResult | ↔ | 3.0 PriceCheckResult |
| 2.0/2.2 AvailabilityCheck | ↔ | 3.0 AvailabilityCheck |
| 2.0/2.2 AvailabilityCheckResult | ↔ | 3.0 AvailabilityCheckResult |

| xCBL Document | | xCBL Document |
|---|---|---|
| 2.0/2.2 OrderStatus | ↔ | 3.0 OrderStatus |
| | | |
| 2.0 OrderStatusResult | ↔ | 3.0 OrderStatusResult |
| 2.2 Invoice | ↔ | 3.0 Invoice |
| 2.2 ASN | ↔ | 3.0 ASN |

For information on disabling the Versioning Library as an Auxiliary Service, refer to Administration on page 6B-1.

The Versioning Library is installed with default properties, as listed here. If you need to change these settings, refer to Troubleshooting on page 7B-1 for more information.

| Property | Your Data | Description | Values and Default |
|---|---|---|---|
| transformation.registry | | Full path name of the TransformRegistry.xml file, which has meta data about transformations. | transformation.registry=c:\commerceone\xpc\schema\TransformRegistry.xml<br>By default, the file is installed under <install:root>\schema. |
| transformation.internalversion | | The xCBL version supported by the Application. Incoming documents are converted to this before application recieves it. For example, Buysite 7.0, EBD 2.0, and SupplyOrder 3.x support xCBL version 22 and use transformation.internalversion=22 | Valid values are xCBL versions, 20\|22\|30. The default is 30: transformation.internalversion=30 |
| transformation.externalversion | | Lowest xCBL version supported by any Trading Partner sending you transactions. | Valid values are xCBL versions, 20\|22\|30. The default is 20: transformation.externalversion=20 |

## Enabling and Disabling the Versioning Library

**To enable** the Versioning Library transformations, edit the file <install:root>\runtime\servers\defaultserver\config\startup\service-start.prop. Find the line that begins **startup.aux.services=** and add **XCBLTransformService** to that line.

**To disable** the Versioning Library transformations, set the configuration **transformation.internalversion** and **transformation.externalversion** to the same version as your applications.

For example, to disable transformation for SupplyOrder 3.0, set transformation.internalversion=22 and transformation.externalversion=22. Because SupplyOrder 3.0 supports xCBL version 2.2, outgoing transmissions will not be transformed.  If an incoming document is not xCBL 2.2, it is transformed to xCBL 2.2.

Note that there is no transformation available from xCBL 2.2 Invoice Document to xCBL 2.0 because there is no Invoice document in xCBL 2.0. If there is no transformation available, then the document is unchanged.

Similarly, if you are testing and using XPC 4.1, set transformation.internalversion=30 and transformation.externalversion=30.  This disables transformation for testing.

## Configuring Additional Options

Using your worksheet, enter your advanced options using the Configure XPC user interface.

1. Select **Start | Programs | XML Portal Connector 4.1 | Configure.** The **Configure XPC** window is displayed. The name of your XPC server is shown in the middle of the title bar.
2. Review the **XPC Server** information in the first box and edit as needed. To adjust your message level, consider these debug levels:
   - 0 Debug. All messages are saved, including those intended for developers.
   - 1 Information
   - 2 Warning
   - 3 Error
   - 4 Critical
   - 5 Fatal. Only information about Fatal errors are saved.

3. Ignore the **Preconfigure Trading Partner** button. This is used by the developers.
4. The **Local Communication** box is described in Configuring XPC on page 2B-8.
5. The **Portal Communication** box is described in Configuring XPC on page 2B-8.
6. If you are using Forward Proxy, click the **Enable Proxy** button in the **Proxy** box. Then enter the **Host** and **Port** of your Proxy Server.
7. Review your entries. If you need to recover the original entries, click on **Reset**. To clear the entries, click on **Clear**. When you are finished, click on **Save** and then **Exit**.

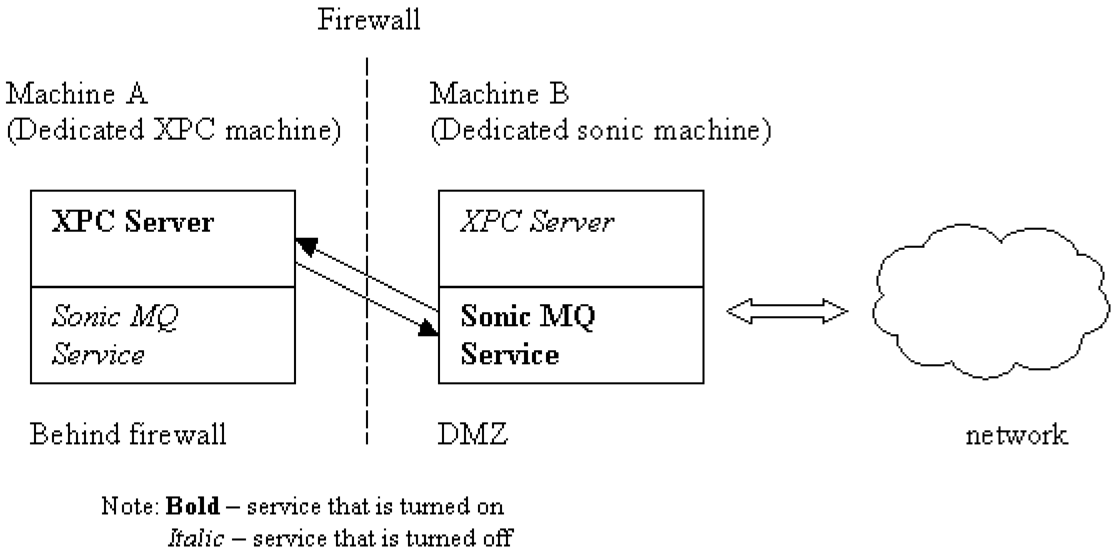
# 5 DMZ Support of SonicMQ

XPC 4.1 provides DMZ Support for Sonic Broker on the Trading Partner side. This means that the Sonic Broker runs on a machine separate from the machine where XPC server is installed, either within or across the firewall. This setup improves scalability and performance due to better load balancing. It also enhances security by allowing SonicMQ to be run in the DMZ while having the XPC server behind a firewall.

This chapter provides instructions on how to setup Sonic MQ in the DMZ.

## Pre-requisites

Two machines must be allocated for this setup and both must have XPC 4.1 installed. One machine will run *only* SonicMQ service, and the other machine will run *only* the XPC server. To better illustrate the environment, please see the following diagram:



As shown in the figure above, Machine A is a dedicated XPC machine running behind a firewall. On this machine, the Sonic MQ service will be turned off, and the XPC server will be turned on. Machine B is a dedicated Sonic MQ machine running in DMZ. On this machine, the XPC server will be turned off, and Sonic MQ service will be turned on. You can easily turn services on/off using the NT service panel.

In summary, here are the pre-requisite steps:

- Install XPC 4.1 on both machines.
- Turn off SonicMQ service and turn on XPC server on the dedicated XPC machine.
- Turn off XPC server and turn on SonicMQ service on the dedicated SonicMQ machine.

## XPC-to-Sonic Configuration

The next step is to establish communication between the XPC server and the Sonic Broker on the separate machines. Following is a summary of the steps needed to configure XPC-to-Sonic. Each step will be described in detail in this chapter.

- On the Sonic-dedicated machine, configure the port, node name, queue name and portal node name of the local Sonic Broker’. Confirm that **Remote Sonic**

**Mode** is turned off.

- On the XPC-dedicated machine configure the address, port, queue name and portal node name of the remote Sonic Broker. Confirm that **Remote Sonic Mode** is turned on

## Configure the Sonic Machine

You must configure the Sonic Broker residing locally on this machine.

1. Start the setupUI on the SonicMQ-dedicated machine (Machine B in the diagram).
2. Confirm that **Remote Sonic Mode** is *not* selected, which forces the machine to treat Sonic as a local entity to that machine.
3. Go to the Local Communication tab. Configure and make note of the following Sonic configuration values:
    - **Sonic Broker Port** - 2508 (by default)
    - **Sonic Node Name** - <fully qualified machine name> (ex: gyue.commerceone.com)
    - **Sonic Queue Name** - XPC_<fully qualified machine name, replacing "." with "_">_ConnectorInbound (ex: XPC_gyue_commerceone_com_ConnectorInbound)
4. Go to the Sonic tab of the Portal Communication section. Configure and make note of the following Sonic configuration value; it will be the Sonic node name of the MarketSite:
    - Portal Node Name

If any modifications are made, click **Save** before exiting setupUI.

These values will be needed when you run the setupUI on the XPC-dedicated machine.

## Configure the XPC Machine

You must configure the Sonic Broker on the other machine as a remote entity to this machine.

1. Start the setupUI on the XPC-dedicated machine (Machine A in the diagram).
2. Select **Remote Sonic Mode**. Once you select this option, you should see that the following fields are disabled:
    - **Inter-Broker Port** (under Local Communication)

- **Sonic Node Name** (under Local Communication)
- **Sonic Portal Address** (under Portal Communication)
- **Sonic Portal Port** (under Portal Communication)

*Note* .......... These two fields are not modifiable from this machine because they are directly related to the configuration of Sonic Broker, and changing these fields results in access to the broker.ini file. Since we've assumed connectivity to the remote Sonic Broker from this machine, we will disallow modification of remote Sonic Broker and the broker.ini file. If you need to change the above fields, you must to run the setupUI on the Sonic-dedicated machine, where Sonic Broker is local.

When you choose **Remote Sonic Mode**, you will see the following field enabled:

- **Remote Broker Address**

3. In this field, specify the full-qualified name of the Sonic-dedicated machine where SonicMQ is started and running. This field is necessary, since it tells the XPC server where to connect when locating the Sonic Broker.
4. Next, you must modify the following field to store the name of the Sonic inbound queue for the remote Sonic Broker, not the local one:
   - **Sonic Queue Name**
5. Go to the Sonic tab of the Portal Communication section and modify the following field:
   - **Portal Node Name**

   This information comes from the Portal Node Name field in the setupUI of the Sonic-dedicated machine.

*Note* .......... These two Portal Node Name fields must be consistent in order to have proper communication.

6. After all the fields have been entered, click **Save**. The setupUI will use the information you supplied to modify the service-start.prop, server-start.prop, etc/config/client.prop, and bin/client.prop property files appropriately.
7. Restart the XPC server.

You can verify the XPC-Sonic Configuration setup by using Invoker to send a Ping document to the local XPC server.

# Effects to other standalone clients

The following table shows how this DMZ support could affect other standalone clients that are packaged in the installation:

| | **Running on XPC-dedicated machine** | **Running on Sonic-dedicated machine** |
|---|---|---|
| Setup UI | Supported<br>Modifies server property files ONLY, does NOT modify local sonic broker.ini file | Supported<br>Modifies local sonic broker.ini file ONLY as well as server property files |
| XPC Manager (accessing local host server) | Supported<br>Modifies both server property files and remote sonic queues information | Not Supported *(requires XPC server to be running, which is not the case here)* |
| Invoker (sending to local host) | Supported<br>Same as before | Not Supported *(requires XPC server to be running, which is not the case here)* |

# 6 Administration

This chapter describes the XPC administration tasks. The sections in this chapter include the following:

- Starting and Stopping the XPC Server on page 6-1
- Backing Up SonicMQ Keystore on page 6-2
- Using the XPC Invoker on page 6-4
- Working with Pending Documents on page 6-8
- Maintaining the XPC Server on page 6-9.

## Starting and Stopping the XPC Server

When making any changes to the XPC installation or when maintaining the XPC server, you will need to stop and restart the server. The recommended way to start and stop the server is:

- **To stop the XPC server,** select **Start | Programs | XML Portal Connector 4.1 | Stop**. This stops both XPC and SonicMQ.
- **To start the XPC server**, select **Start | Programs | XML Portal Connector 4.1 | Start**. This starts both XPC and SonicMQ.

### Running XPC as an NT Service

CCSNTService and SonicBroker service must be started to start XPC, and they can be started in any sequence. The XPC defaults with these services are set to start automatically upon system startup.

However, if the default system account does not have sufficient permissions, privileges, or resources to run the XPC, configure these services as follows.

1. To access the services control panel, select **Start | Settings | Control Panel | Services**. **SonicMQService** and **CCSNTService** are displayed on the Services panel.
2. Click on **SonicMQService** and then click **Startup** and configure according to your site requirements:
    - To prevent NT from starting XPC automatically, set **Startup Type** to **Manual** instead of Automatic.
    - To configure an account for running XPC, configure **Log On As** section. Provide a valid NT user name and password with required rights.
3. Click on **CCSNTService** and then click **Startup** and configure according to your site requirements:
    - To prevent NT from starting XPC automatically, set **Startup Type** to **Manual** instead of Automatic.
    - To configure an account for running XPC, configure **Log On As** section. Provide a valid NT user name and password with required rights.

Here is a summary of methods for starting and stopping the XPC Server.

| **Method** | **To Start:** | **To Stop:** |
|---|---|---|
| Start menu | **Start \| Programs \| XML Portal Connector 4.1 \| Start** | **Start \| Programs \| XML Portal Connector 4.1 \| Stop** |
| Command line | a) **cd <install:root>\SonicMQ\bin; startbr**<br>b) **cd <install:root>\bin; ccsserver_<SERVERNAME>** | Ctrl-C in the DOS window |
| From .bat file | **cd <install:root>\bin; StartService** | **cd <install:root>\bin; StopService** |

## Backing Up SonicMQ Keystore

Make copies of the SonicMQ keystore to avoid recovery difficulties. If your keystore should corrupt and you do not have a backup, follow the recovery instructions in Certificate Manager Keystore on page 7-11.

# XPC Envelope Archive

XPC archives envelopes exchanged with MarketSite for asynchronous transactions. Both incoming and outgoing messages are stored under the <install:root>\messagestore directory:

- Inbound envelopes are archived immediately upon receipt in the server. Any transformation of the envelope, such as changing to the xCBL internal version, occurs *after* archiving. The Inbound archive thus contains the external envelope.
- Outbound envelopes issued through a timed service are archived *before* a version transformation. The Outbound archive thus contains the internal envelope.

Outbound envelopes transmitted through a stand-alone transmitter are not stored in the XPC archive.

Archived outbound and inbound envelopes are associated with one another as part of the same document exchange. Such a transaction consists of a request plus its response envelope. Two envelope header properties link the response to the request:

- Both have the same **Correlation_ID** property value.
- The response identifies the **Message_ID** property of the request in its **Reference_ID** property.

From the archive, the status of a transaction can be inferred based on the following cases:

- Pending: A request envelope with no response envelope
- Completed: A request envelope with a business response
- Error: A request envelope with an error response

## XPC Invoker and the Envelope Archive

Use the XPC Invoker to view the Envelope Archive and perform the following administrative tasks as needed:

- List historical transactions for a specific document type
- Display the request and response envelopes of a transaction including header properties, primary document, and attachments.
- Display the status of the transaction, which can be Pending, Completed, or Error
- Reissue a transaction.

# Using the XPC Invoker

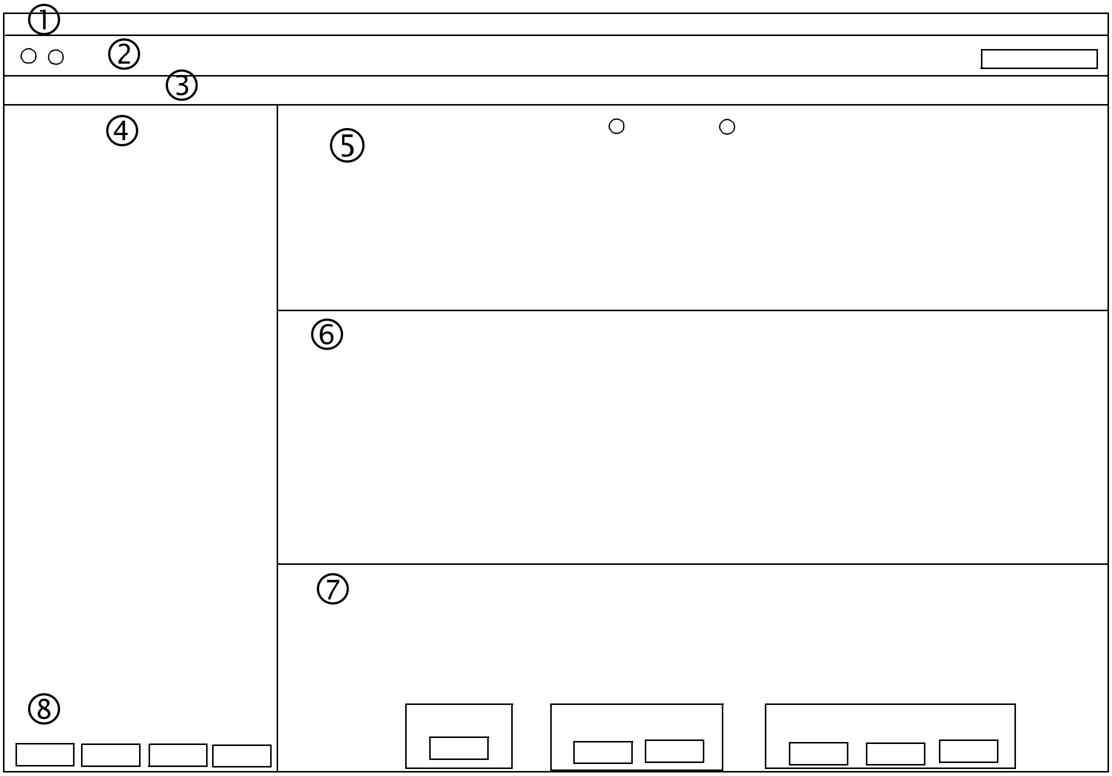
The Invoker has two modes: Test and Production. Developers use the Test mode to verify that the their changes are working correctly.

As an XPC administrator, use the Production mode to monitor and maintain a *live* XPC installation. Maintenance includes resubmitting *pending* purchase orders. Purchase orders are considered pending when no response has been received.

## XPC Invoker User Interface

The XPC Invoker User Interface is composed of these sections:

1. Title bar with Commerce One logo
2. Mode selection, Archive directory, and Refresh button
3. Transaction Filter
4. Transaction Table
5. Envelope
6. Document
7. Attachments
8. Action buttons



To switch between Test and Production mode in Section 2, click on the Mode radio buttons at the top left corner of the **XPC Invoker** window:

- In **Test** mode, all functions are available.
- In **Production** mode, the Invoker cannot create new transactions, delete transactions, browse to a new archive directory, save, or edit envelopes. Only Asynchronous transactions are available for display. Here, the Invoker defaults to the XPC file system envelope archive specified in the **Archive Directory** field of the **Configure XPC** window (**Start | Programs | XML Portal Connector 4.1 | Configure**).

### Transaction Filter

For ease of viewing, the Invoker filters the views of the archive by Transaction Type (Price Check, Purchase Order, Availability Check, and Order Status). You can change the view by selecting a different transaction in the drop down box containing all known transaction types in Section 3. If envelopes are found in the archive that are not part of a specified transaction type, they are placed in the type *Unknown*.

### Archive Display

The Archive Display shows the currently viewed archive path and allows you to refresh the view of the archive or select a new archive. See Section 2.

In Production Mode, you cannot browse to a new directory or directly edit the directory path; only the refresh button is available. The Invoker defaults to the XPC file system envelope archive specified in the **Archive Directory** field of the **Configure XPC** window (**Start | Programs | XML Portal Connector 4.1 | Configure**).

### Transaction Table

The Transaction Table, Section 4, lists all transactions located in the selected directory. A transaction consists of a request envelope and its response envelope.

This table contains two columns: Date Requested and Status:

- **Date Requested**—is the date that the envelope was sent, thus, initiating the transaction.
- **Status**—is the status of the transaction. These statuses are: **New**, **Pending**, and **Completed**.
  - **New**—a transaction has been created but has not been initiated. The request has not been sent out.
  - **Pending**—the request envelope has been queued for transmission.
  - **Completed**—a transaction has been created, the request has been sent out, and the response has been received.

The transaction buttons include:

- **New—**allows you to create a new transaction by selecting a document template. Document templates are out-of-the-box xCBL documents.

  Selecting this button brings up a file selection dialog box. When you select a file, the Invoker creates a new transaction of the appropriate type, selects the archive of the newly created transaction, and displays the newly created envelope. This envelope is not yet saved. If you want to save it, click the **Save** button.

- **Send**—sends the request envelope of a selected transaction. The request envelope is always saved on transmission.
  For synchronous transactions, the Invoker waits for a response and automatically displays the response if the transaction type is still selected.
- **Delete**—deletes the transaction selected in the archive display. The Invoker deletes both the request and response of the transaction.

## Envelope

Use the Request/Response buttons in Section 5 to view either the request envelope or the response envelope for a transaction.

The envelope header properties include:

| Header Property | Description |
|---|---|
| Sender ID | Identifies the sender of the envelope. |
| Receiver ID | Identifies the recipient of the envelope. This field can be edited in Test mode. |
| Message ID | The unique identifier of the envelope. |
| Document Type | Type of document, such as PriceCheckRequest or PriceCheckResult, carried by the envelope. |
| Request Mode | Mode of transmission for the envelope. Valid request modes are sync, peer-peer, and oneway. |
| Date Sent | Date the envelope was sent. |
| Correlation ID | The unique identifier used to associate a request envelope with the corresponding response envelope. |

To edit the Document, select the **Edit** button. To select a new document, click the **Change** button. A file selection dialog box is displayed; select a new xCBL document from the list. If the XML file you select is not valid, an error message is displayed.

The Envelope buttons in Section 7 allow you to save, change, add, and remove attachments from the envelope.

- **Save—**allows you to save the currently displayed envelope. If the envelope has been edited, the edited envelope is saved as a new transaction and a new row appears in the transaction display. If you do not save the old envelope, it will be lost. This function is only available in Test Mode.

- **Change**—selects an xCBL document from the file system. The selected document is displayed, but a new transaction is not created until the envelope is saved or sent out. This function is only available in Test Mode. If the selected xCBL document is different from the original envelope's document type, then the new transaction and envelope are displayed in the appropriate archive upon saving or sending the edited envelope.
- **Add—**selects a file from the file system and attaches it to the envelope. This function is only available in Test Mode.
- **Remove—**removes a selected attachment from the envelope. This function is only available in Test Mode.
- **Name**—specifies a URI for an attached file. You must select a file from the attachment display and then select the **Name** button. This action launches a dialog box which takes your input for the attachment name. All attachment names must be properly formed URIs. If the attachment is already named, this name is displayed in the dialog box. This function is only available in Test Mode.

## Working with Pending Documents

The Invoker correlates and displays envelopes within the XPC archive and displays the dates and status. Transactions that contain a request and response pair are considered complete and display the status of **Completed**. If a transaction contains only the sent request, the status is **Pending**. If the request has not been sent out, the status is **New**.

If a transaction has been pending for an extended period of time, the transaction is considered *stale* and the administrator can resend the request.

Because the Invoker does not contain a server, it cannot receive asynchronous responses. To accommodate this needed functionality, a special mechanism has been put in place. When XPC receives an envelope whose sender is TEST, XPC *transmits* the response to the file system. This location is specified in the default.prop file of the TransmitterService.

The Invoker polls the file system for asynchronous responses. The location the Invoker polls in Test mode is specified in <install:root>\etc\config\client.prop with the xpc.invoker.asyncReceptionDirectory variable. The default value for this variable is <install:root>\asyncDir. All the envelopes placed in this directory are considered by the Invoker as an asynchronous response of some kind and are matched with its request using the envelope's correlation ID. For asynchronous reception of documents, the Invoker must look in the same directory as the TransmitterService transmitted to.

In Production mode, the Invoker polls the archive of the XPC-asynchronous requests and responses to the file system. The xpc.invoker.production.archiveDirectory of the XPC Invoker must be set to the same value in the default.prop file of the MessageStoreService. The default value for both is <install:root>\messagestore. For all asynchronous services, archiving must be turned on.

# Maintaining the XPC Server

The tasks for maintaining the XPC Server include clearing the:

- XPC log files
- SonicMQ files
- Archive directory.

## Clearing the XPC Log Files

The logs are created in the directory:

```
<Install:root>\runtime\servers\<SERVERNAME>\logs
```

where SERVERNAME is the name of the XPC server you assigned during installation, such as defaultserver.

When you stop the XPC Server for maintenance, delete the log files or archive for future use. How often you need to the clean logs directory depends on high low you set the Debug level. The lower the Debug level, the larger the files become. To reset the Debug level, select **Start | Programs | XML Portal Connector 4.1 | Configure**. On the **Configure XPC** window, change the first field, the **Debug Level** field.

If you delete unused files while the server is running, you cannot delete the file currently being used. If you attempt to do so, you will get an error message stating that the file is locked and cannot be deleted.

### Clearing the Archive Directory

Clear the archive directory periodically, as the traffic requires. Before moving files from the archives, make sure they are not a pending transaction. To do so, access the Invoker in Production mode and check the status.

## Checking Security Certificate for Expiration

All certificates have a valid period. Be sure to view the **Configure Server Entries** tab of the Certificate Manager tool to determine the expiration date of your original certificate entry. Note this date in a reminder file.

***Caution*.....** **Before a certificate expires, you must replace it with a valid certificate.** Replace the expiring certificate with a valid certificate 14 days before the expiration date of the certificate. If you do not, XPC will stop working.

To replace an expiring certificate with a valid certificate, follow the steps as you did initially; refer to Authentication for Production Using https on page 3-3 or Authentication for Production Using SonicMQ on page 3-9. That is:

- For https, create a new server entry, create and submit a certificate request,and import the certificate.
- For SonicMQ, create a new server entry, create and submit a certificate request, and import the certificate.

*Note* .......... After you import the new certificate, be sure to stop and start the SonicMQ Broker using **Start | Settings | Control Panel | Services**.

# 7 Troubleshooting

This chapter describes various XPC troubleshooting methods and includes these sections:

- XPC Logging on page 7-2
- XPC Invoker Connection Refused on page 7-6
- Troubleshooting the Versioning Library Service on page 7-7
- Certificate Manager Keystore on page 7-11

If you have purchased XPC software directly from Commerce One, Commerce One Technical Support is available to you by contacting one of the following:

- csa@commerceone.com
- By fax at 925-520-6060
- Hotline at 925-520-5959 or 800-949-8939
- http://www.commercecone.com/solution/tech.htm

If you purchased XPC software from a different source, such as your GMP or Systems Integration Partner, contact that source for technical support.

## Checking XPC or SonicMQ Services

If you encounter a problem with either the XPC service or the SonicMQ service, stop the service and restart. Restart them either from the Start Menu or command line, as described in Administration on page 6-1. In this way, you will see the output on the console window.

# XPC Logging

XPC has three key logs: System Startup, Event, and Invoker. If you experience problems with starting XPC, sending events, or using the XPC Invoker, check the XPC log files.

The following table lists the logs with their file names and descriptions.

| Log | File Name | Description |
|---|---|---|
| System Startup | runtime\servers\defaultserver\logs\systemStartupLog_*timestamp* | Contains information describing the startup of XPC. If a particular service is not starting up, inspect this file. |
| Event | runtime\servers\defaultserver\logs\eventlog_*timestamp* | Contains event logs generated by XPC or specific components. If a component throws an exception, the XPC default exception handler will add a new entry in this file. |
| Invoker | bin\clienteventlog | Contains information about the Invoker. If the Invoker has errors, they are stored in this file. |
| Debug | runtime\servers\defaultserver\logs\debut-default | This file has debug trace messages. |

## Reading Debug Messages

Developers insert debug messages into the code for both their own use and yours. These messages can be filtered by severity to give useful information about the server.

Debug message syntax is simply a string that can contain substitution variables provided at runtime. Debug messages are in English only and can have misspellings or grammatical errors. Each message is placed in the file on a separate line. Here is an example debug message from the debug log:

```
April 18, 2000 5:17:00 PM GMT-07:00: Debug.DEBUG: Configuration is:
localhost=jmiller.commerceone.com archive=archive user=xccarchiver
```

Breaking up the message, it reads as follows:

| | |
|---|---|
| April 18, 2000 5:17:00 PM GMT-07:00: | Time when message is generated in system local time. |
| Debug.DEBUG: | Label that lists the debugging level of the message. The lower the number, the more messages are displayed:<br>0 Debug.DEBUG<br>1 Debug.INFO<br>2 Debug.WARNING<br>3 Debug.ERROR<br>4 Debug.CRITICAL<br>5 Debug.FATAL<br>If the debugging level is set to 0, all messages are seen. If set to 2, only warnings messages and higher-level messages are seen. |
| Configuration is: localhost=dbmachine.commerceone.com archive=archive user=xccarchiver | Text of the debug message, with parameters filled in. For example, the previous message includes the configuration information of the machine name where the message store archive is, the name of the archive, and the user name. |

Tip: To quickly review a log, search for the words WARNING or ERROR. Expect to find CRITICAL and FATAL errors at the end of the file, when the server probably stopped or crashed.

## Reading Event Output

Events are formatted into XML syntax, which is defined in event catalogs. Events can be localized into different languages. Each Event message is logged onto a separate line of the file. Here is an example event item from an Event Log.

```
<EVENT><TIME>November 9, 1999 3:49:33 PM GMT-08:00</TIME>
<MILLIS>942191373381</MILLIS>
<KEY>CCS_COMM_TRANSMITTER_3041_TransmitterCreationSuccessful</KEY>
<TEXT>Transmitter creation successful.Transmitter Type = http.</TEXT>
<CAT>CCS_COMM</CAT><SUBCAT>TRANSMITTER</SUBCAT><NUMID>3041</NUMID>
<SEV>0</SEV><TYPE>STATUS</TYPE><LANG>en</LANG><PARM>http</PARM></EVENT>
```

In addition to the syntax for the event from the catalog, the example message includes:

- <TIME>, a date/time stamp in local time
- <MILLIS>, the date/time in milliseconds
- <LANG>, the language the text is generated in
- <PARM>, a single parameter

Here is the example message, explained item by item.

| **Item** | **Explanation** |
|---|---|
| <EVENT> | Beginning of the event. |
| <TIME>November 9, 1999 3:49:33 PM GMT-08:00</TIME> | Date/time stamp in local time when event was generated |
| <MILLIS>942191373381</MILLIS> | Date/time in milliseconds when event was generated |
| <KEY>CCS_COMM_TRANSMITTER_3041_TransmitterCreationSuccessful</KEY> | The *event key* is essentially the name of the event. Note that an event number is embedded in the name of the event. |
| <TEXT>Transmitter creation successful. Transmitter Type = http.</TEXT> | The event message with parameter values. In this example, the 'Type = +1' has become 'Type = http' due to parameter substitution. A second parameter would be noted by a +2, a third by +3, and so on. |

| Item | Explanation |
|---|---|
| <CAT>CCS_COMM</CAT> | Category of the event. In this example this is a communications event. The event name begins with this value. |
| <SUBCAT>TRANSMITTER</SUBCAT> | Subcategory of the event. This event is from the transmitter subcategory, so was probably generated from the Transmitter service. This is also part of the event name. |
| <NUMID>3041</NUMID> | Event number that was embedded in the event name. |
| <SEV>0</SEV> | Severity of the event. A severity of 0 means this is a normal event, showing normal operation. |
| <TYPE>STATUS</TYPE> | Type of event. This is a status event, used to provide information on the operation of the server. Other types are AUDIT or DEBUG.. |
| <LANG>en</LANG> | Language used to generate this event. Event catalogs are intended for localization and this value should match the language of <TEXT>. |
| <PARM>http</PARM> | Parameter passed to <TEXT>. This can be repeated for additional parameters. |
| </EVENT> | End of the event. |

## Avoiding Known Problems

Review this table to ensure that you have completed all known installation and administration tasks required for keeping your XPC installation running smoothly.

| | Description | Solution or Explanation |
|---|---|---|
| **XPC Startup fails** | If you have not configured otherwise, NT uses default system account, which might not have proper permission and resources. | Refer to Running XPC as an NT Service on page 6-1 for instructions to set the Log On As properties. |
| **classpath directory** | The **default** file in the **etc\classpath** directory requires a carriage return or a blank space at the end of the last line. | If you do not use the carriage return or a blank space, the line is not read. |

| | | |
|---|---|---|
| **XPC fails after months of running successfully** | The Authentication Certificate has expired. | Refer to Checking Security Certificate for Expiration on page 6-10. |
| **Envelope Size** | | Envelopes have a 10 MB size limit including attachments for both Sonic & https. |
| **Installation** | You cannot install to a directory that contains a blank space in the name (for example, File Name). | It is recommended that you install XPC to the <drive>commerceone\xpc directory on NT. |
| **Invoker Error Message** | If you select invalid xCBL documents, an error message is displayed. | |
| **Invoker Response Attachments** | Response envelopes have an attachment identified by message ID. This attachment is the security credential information provided in the reply. | |
| **XPC is processing documents too slowly** | If your Java heap size is set above the available memory on your machine, decrease it to improve performance. By default, heap size is set at 512K. | Refer to Adjusting Java Heap Size on page 4-1. |
| **Java Heap Size** | An out of memory error occurs when the heap size is not large enough. The recommended java heap size is 512MB. | Refer to Adjusting Java Heap Size on page 4-1. |
| **SonicMQ/XPC Installation stops** | An error message such as *Unable to open broker.key file* or *Unable to open Password file* is displayed. | Ensure that the JDK bin directory is in the PATH environment variable before you begin installation. |

# XPC Invoker Connection Refused

An error message like the one below indicates that the Invoker is not authorized to communicate with XPC. Verify that the Invoker’s security properties have been properly configured.

```
<?soxtype urn:x-
commerceone:document:com:commerceone:ccs:doclet:error:Error.sox$1.0?>
<?import urn:x-
commerceone:document:com:commerceone:ccs:doclet:error:Error.sox$1.0?>
<Error><Code>INVOKER_ERRORGENERIC</Code>
```

```
<DefaultMessage><Message><MessageString>ERROR:
com.commerceone.xdk.excp.metadox.send.TransferException: Error while
silently connecting: org.w3c.www.protocol.http.HttpException:
java.net.ConnectException: Connection refused</MessageString>
<LanguageCode>en</LanguageCode>
</Message>
</DefaultMessage>
<Severity>Error</Severity>
</Error>
```

## Troubleshooting the Versioning Library Service

Versioning Library parameters are stored in:

```
<install:root>\runtime\servers\<servername>\config\service\AuxiliaryService
.XCBLTransformService.XCBLTransformService\default.prop
```

### Verifying Versioning Library

To verify that VL is running on XPC server, follow these steps.

1. Access the directory:
`<install:root>\runtime\servers\<servername>\config\startup`

   where <install:root> is the directory where XPC is installed and <servername> is the name of the XPC server.

2. Locate the file named **service-start.prop** and open it in Notepad or any text editor.

3. Verify that the entries shown in **bold** are present.

```
startup.aux.services=EventManager,LogService,XCBLTransformService
```

4. Verify that the following entry is present.  It starts the xCBLTransformService.

```
service.XCBLTransformService.code=com.commerceone.versiongateway.service.XC
BLTransformService
```

## Versioning Library Transformations

The Versioning Library transforms to the closest possible version. For example, if requested to transform an xCBL 3.0 Invoice to xCBL 2.0, it will transform it to xCBL 2.2, because Invoice is not defined in xCBL 2.0.

Note that the Versioning Library will not transform the envelope/document if:

- There is no valid transformation available, such as from INVOICE document from xCBL 22 to xCBL 20 since there is no INVOICE document defined in xCBL 20.
- The document being passed to Versioning Library is not xCBL document.
- The document is not in one of the following namespaces:

```
urn:x-commerceone:document:com:commerceone:CBL01:CBL01.sox$1.0
urn:x-commerceone:document:com:commerceone:CBL:CBL.sox$1.0
urn:x-commerceone:document:com:commerceone:XCBL30:XCBL30.sox$1.0
```

To verify that the transformations are being made as intended, test the transformation using the Transformation Test tools shipped with XPC, as described in Testing Versioning Library Transformations on page 7-8. If there is no transformation available, transform.bat tool displays the exception NoTransformationFound.

## Testing Versioning Library Transformations

Use the Transformation Test tools shipped with XPC to confirm that your transformations work as you expect. The document transformation tool, transform.bat, transforms xCBL documents. The envelope transformation tool, transformEnv.bat, transforms xCBL documents inside envelopes.

The two tools run as command-line applications from the XPC server. You can use these tools to test the Versioning Library without running the XPC Server and using the XPC Invoker.

### Document Transformation Tool

This tool, transform.bat, transforms an xCBL document from one version to another. To execute:

**1.** Change to the XPC bin directory, for example:

```
cd <install:root>\bin
```

**2.** Execute the tool using the following format:

```
transform.bat <destination CBL version> <CBL document1> [<CBL document2> …]
```

where the destination xCBL version is the target  xCBL version; supported values are 20, 22, and 30. To transform more than one CBL document to the destination version, specify up to seven file names, separating the names with spaces. All transformed files are placed in the <install:root>\out directory with a prefix of o_ on the original name. For example:

```
transform.bat 30 c:\temp\PriceCheckResult.xml
```

transforms the document PriceCheckResult.xml to xCBL version 3.0.  If PriceCheckResult.xml is already in version 3.0, no transformation is done.  The transformed file will be in <install:root>\out\o_PriceCheckResult.xml.

To edit transform.bat to add or delete file names or change the default output directory, as described in Customizing Transform.bat on page 7-9.

### Customizing Transform.bat

Transform.bat uses XPC launch.bat to set the classpath, then launches the jvm to start the transformation-testing tool class. To customize the Document Transformation Tool, edit transform.bat, which is in this format:

```
call launch -Dout.directory=%XPCROOT%\out -Dschema=%XPCROOT%\schema
com.commerceone.versiongateway.tools.transformation.Transform %1 %2 %3 %4
%5 %6 %7 %8
```

where:

**out.directory** specifies the output directory of the transformed documents.

**schema** specifies the directory where the sox schema for xCBL 2.0, xCBL 2.2, xCBL 3.0, and the Versioning Library is located. The schema directory also stores the TransformRegistry.xml file.

**%1 %2 …** specifies the standard input to the class file.  %1 is the destination version. %2 is the first xCBL document to transform.  %1 and %2 are mandatory.  %3 and higher are additional, optional xCBL documents.

## Envelope Transformation Tool

The Envelope Transformation Tool, transformEnv.bat, transforms xCBL documents that are inside envelopes. This tool calls the transformIn API when receiving documents and the transformOut API when sending out documents. You can use transformEnv.bat to:

- Create an envelope
- Transform an envelope in the inbound direction
- Transform an envelope in the outbound direction.

To run the Envelope Transformation Tool, follow these steps.

**1.** To execute, you must be in the XPC bin directory, for example:

```
cd <install:root>\bin
```

**2.** Enter the name of the file and options in the format shown here. The options are defined in the following table.

```
transformEnv.bat [-options]
```

| Option | Description |
|---|---|
| **sender** | Sender for envelope creation. Default is Sender. |
| **receiver** | Receiver for envelope creation. Default is Receiver. |
| **destination** | Destination of output. |
| **p** | Schema path. |
| **create <CBL document>** | Create an envelope for the CBL document specified. |
| **i <envelope>** | Transform the envelope in the inbound direction in the version specified by -j. |
| **o <envelope>** | Transform the envelope in the outbound direction in the version specified by -k. |
| **j <internal version>** | Specify the internal version. Supported values are 20, 22, 30. If not specified, defaults to 22. |
| **k <external version>** | Specify the external version. Supported values are 20, 22, 30. If not specified, defaults to 20. |
| **?** | Command syntax |

In the following examples, all use the defaults for sender and receiver, which are Sender and Receiver.

In this example, the specified PurchaseOrder is in the directory d:\commerceone\xpc\out with a file name of o_PurchaseOrder.xml.txt:

```
TransformEnv -p d:/commerceone/xpc/schema -c d:/temp/
PurchaseOrder.xml -d d:/commerceone/xpc/out
```

The next example uses the Versioning API transformIn to transform the envelope d:\temp\PurchaseOrder.txt into the internal xCBL version 2.2.

```
TransformEnv -p d:/commerceone/xpc/schema -i d:/temp/
PurchaseOrder.txt -d d:/commerceone/xpc/out -j 22
```

The API will try to extract the xCBL document version 22 from the main document or from the list of attachments. If it does not exist, the API will then try to transform the document to 2.2. The output will be a new envelope with an xCBL 2.2 document as the main document. The new file is named o_PurchaseOrder.txt.

The last example uses the transformOut API to transform the envelope d:\temp\PurchaseOrderResponse.txt to xCBL version 2.0. All intermediate transformations are stored as attachments. The output will be an envelope with the new transformed xCBL 2.0 document stored as the main document and the original xCBL 2.2 document stored as an attachment. The new file is named o_PurchaseOrderResponse.txt.

```
TransformEnv -p d:/commerceone/xpc/schema -o d:/temp/
PurchaseOrderResponse.txt -d d:/commerceone/xpc/out -k 20
```

## Certificate Manager Keystore

If your keystore file becomes corrupt and you have a backup file for your keystore file, simply replace the corrupt file with your backup file.

If you do not have a keystore backup file, follow these instructions to create a new keystore.

1. Access the XPC bin directory, for example, <install:root>\bin.
2. From the bin directory, start the script **CertMgrCreateNewKeyStore.bat.** A **Certificate Manager** dialog is displayed, showing a **Create a new KeyStore** button.
3. Enter the password for the new keystore and click on the **Create a new KeyStore** button. The **Warning** dialog displays the message: New Keystore was successfully

created. But there is no server entries, please create a server entry first.

4. Click on the **OK** button. The **Certificate Manager** window is displayed with the **Configure Server Entries** tab selected.

5. From this point, complete the authentication for https or SonicMQ as you did initially; refer to Authentication for Production Using https on page 3-3 or Authentication for Production Using SonicMQ on page 3-9. That is:

   - For https, create a new server entry, create and submit a certificate request, import the certificate, and set the entry as active.
   - For SonicMQ, create a new server entry, create and submit a certificate request, import the certificate, and configure the SonicMQ Broker.

# A XPC 4.1 Server Core Events

This appendix lists events logged by the XPC 4.1 server.

The **Description** and **Action** columns suggest an explanation or resolution for the event. Numerical symbols, such as +1, indicate parameters that will be inserted into the message text.

The Severity (**Sev**) column refers to the level of severity:

| | |
|---|---|
| **0** | Success |
| **10** | Informational |
| **20** | Warning |
| **30** | Diagnostic |
| **40** | Error |

| # | Event | Description | Sev | Action |
|---|---|---|---|---|
| 1 | CCS_ADM_1000_LogMgrErr | Could not instantiate LogManager object | 40 | Examine the error message included with the event. Usually this is a result of being unable to open the log file for logging event messages. |

| | | | | |
|---|---|---|---|---|
| 2 | CCS_ADM_1005_BadDocErr | +1 : got bad document: +2 | 40 | Generic error message for a bad document. Examine the error for the action to take. |
| 3 | CCS_ADM_1010_ProcRunning | A process named [ +1 ] is already running: +2 | 40 | The daemon server will not be able to start a new server, because a process is already running. Correct by killing the process and restarting the daemon server. |
| 4 | CCS_ADM_1015_ProcTblFull | The process table is full. Can’t run process [ +1 ]: +2 | 40 | Stop the daemon server and kill all of the associated java processes. This should not happen under normal circumstances. |
| 5 | CCS_ADM_1016_ProcNotManaged | The server [ +1 ] is not managed by this management server | 40 | Stop the daemon server and kill all of the associated java processes. This should not happen under normal circumstances. |
| 6 | CCS_ADM_1017_ProcStartTimeout | Timeout while trying to start server [ +1 ] | 40 | Timeout occurred during the start of the server. Stop the daemon, remove all java processes, and try again. |
| 7 | CCS_ADM_1020_HttpdFatal | *** [httpd]: fatal error, exiting ! | 40 | Unused event |
| 8 | CCS_ADM_1025_HttpdInitErr | Couldn’t initialize HTTP server: +1 | 40 | Could not initialize the server. Fatal error, stop the daemon, remove all java processes, and try again. |
| 9 | CCS_ADM_1030_ProcIntr | Interrupted in Process.waitFor(): +1 | 40 | Interrupt was sent to the server while being managed by the daemon. No corrective action possible. |
| 10 | CCS_ADM_1035_ProcDbgIntr | Process debugger thread interrupted: +1 | 40 | Debugging event should not be seen in the field. |
| 11 | CCS_ADM_1040_ProcDbgIsNull | The debugged Process instance is null. Can’t debug | 40 | Debugging event should not be seen in the field. |

|  |  |  |  |  |
|---|---|---|---|---|
| 12 | CCS_ADM_1045_ProcDbgIOErr | Caught IOException while debugging subprocess [ +1 ]: +2 | 40 | IOException occurred during debugging.  Not an event that should be seen in the field. |
| 13 | CCS_ADM_1050_ProcStartIOErr | Caught IOException while trying to start subprocess [ +1 ]: +2 | 40 | IOException occurred. Examine event message for root cause and correct. |
| 14 | CCS_ADM_1055_ProcStartSecurityErr | Caught SecurityException while trying to start subprocess [ +1 ]: +2 | 40 | Security Error occurred when trying to start the server from the daemon. Daemon process may not have sufficient permissions to run sub processes.  May need to modify security on system so that daemon can run with sufficient permissions. |
| 15 | CCS_ADM_1060_ProcUnkillableErr | Couldn’t kill process [ +1 ]: +2 | 40 | Error occurred while trying to kill a server through the daemon.  May need to kill the server directly through the task manager or process manager. |
| 16 | CCS_ADM_1065_McastInstErr | Couldn’t instantiate IP multicast service: +1 | 40 | Error occurred during a multicast daemon discovery in the Admin Console.  No longer used |
| 17 | CCS_ADM_1070_McastAddrErr | Couldn’t create IP Multicast socket: +1 | 40 | Error occurred during a multicast daemon discovery in the Admin Console.  No longer used |
| 18 | CCS_ADM_1075_McastIOErr | Couldn’t send document to IP Multicast address [ +1 ]: +2 | 40 | Error occurred during a multicast daemon discovery in the Admin Console.  No longer used. |
| 19 | CCS_ADM_1080_XMLConvErr | Couldn’t convert XML string [ + 1 ] to a document bean: +2 | 40 | Unused event |
| 20 | CCS_ADM_1085_XMLStreamErr | Couldn’t write XML string to output stream: +1 | 40 | Unused event |

| | | | | |
|---|---|---|---|---|
| 21 | CCS_ADM_1090_URNCatLoadErr | Syntax error in urncatalog: + 1 | 40 | Unused event |
| 22 | CCS_ADM_1095_CouldntLoadProps | Unable to load properties from file [ + 1 ]. Exception text: +2 | 40 | Error message in event should suggest the needed remedy.  For example, if the property file was not readable, then it is possible that the permissions on the file or directory may need to be changed. |
| 23 | CCS_ADM_1100_RemoteCmdErr | Caught Exception while retrieving result from remote command: + 1 | 40 | Unused event. |
| 24 | CCS_ADM_1105_MalformedURLErr | Malformed URL [ +1 ]: +2 | 40 | Unused event. |
| 25 | CCS_ADM_1110_SerializableErr | Couldn't de-serialize +1 object: +2 | 40 | Unused event. |
| 26 (*) | CCS_ADM_1115_NoServerSelected | No server selected | 40 | |
| 27 (*) | CCS_ADM_1120_NoServiceSelected | No service selected | 40 | |
| 28 | CCS_ADM_1125_StartSvcErr | WARNING! Couldn't START/STOP service [ service name ] | 40 | |
| 29 (*) | CCS_ADM_1130_StartSrvErr | WARNING! Couldn't START/STOP server [ +1 ] | 40 | |
| 30 | CCS_ADM_1135_NoServerInfoErr | WARNING! No configuration information available for servers. Can't start any servers! | 40 | Check the server config directory path. |
| 31 (*) | CCS_ARCHIVE_STORE_100_Test | A sample archive store - event error message  +1 +2. | 40 | Not used |
| 32 | CCS_ARCHIVE_STORE_1000_ArchiveInitialized | Document archiving initialized to: <Machinename>, storage file location: <StorageLoc> | 40 | Event indicates that the archive has been initialized normally. Parameters are the database name and the machine name where the database exists. |

|  |  |  |  |  |
|---|---|---|---|---|
| 33 | CCS_ARCHIVE_STORE_1010_InitializationFailed | Could not open data storage: <Machinename>, <DBName>, <DBUser>, <DBPassword>, <ErrorMsg> | 40 | Parameters include the host name, database name, user name, an empty string instead of the password, and the message from the exception that was thrown when initialization failed. Verify that the connection can be made with these values using a database tool like SQL Query analyzer |
| 34 | CCS_ARCHIVE_STORE_1020_ErrorInDocumentRetrieval | Error in document <DocId> retrieval: <ErrorMsg> | 40 | Verify from a SQL client if the document with the given id can be fetched. |
| 35 | CCS_ARCHIVE_STORE_1030_ErrorInDocumentStorage | Error in document <DocId> storage: <ErrorMsg> | 40 | Verify from a SQL client if the document with the given id can be fetched. |
| 36 (*) | CCS_ARCHIVE_STORE_1040_CanNotCreateDirectory | Could not create directory <Directory> | 40 | **DEPRECATED –** Signals that the directory needed to store the documents could not be created. |
| 37 (*) | CCS_UTL_QUEUE_8010_QueueExistsInfo | Queue: +1 : already exists. | 10 |  |
| 38 (*) | CCS_UTL_QUEUE_8015_IllegalQueueNameError | Illegal Queue Name: +1 . | 40 |  |
| 39 (*) | CCS_UTL_QUEUE_8020_QueueCreationError | Queue: +1 : creation error, +2 | 40 |  |
| 40 (*) | CCS_UTL_QUEUE_8025_QueueDeletionError | Queue: +1 : deletion error, +2 | 40 |  |
| 41 (*) | CCS_UTL_QUEUE_8026_QueueReceiveError | Queue: +1 : receive error, +2 | 40 |  |
| 42 (*) | CCS_UTL_QUEUE_8027_QueueSendError | Queue: +1 : send error, +2 | 40 |  |
| 43 (*) | CCS_UTL_QUEUE_8028_QueueReplyError | Cannot send reply message as no reply queue info. was supplied | 40 |  |

| | | | | |
|---|---|---|---|---|
| 44 (*) | CCS_UTL_QUEUE_8029_QueueCloseError | Queue: +1 : close error, +2 | 40 | |
| 45 | CCS_BLOX_SVC_2100_ServiceStarted | Service <fully qualified service name> started. | 0 | |
| 46 | CCS_BLOX_SVC_2101_ServiceStopped | Service <fully qualified service name> stopped. | 0 | |
| 47 | CCS_BLOX_SVC_2102_ServiceInitialized | Service <fully qualified service name> initialized. | 0 | |
| 48 | CCS_BLOX_SVC_2103_ServiceDestroyed | Service <fully qualified service name> destroyed. | 0 | |
| 49 | CCS_BLOX_SVC_2104_InvalidQueueConfiguration | Invalid service configuration:<br><service name: cannot specify a queue name for a memory queue><br><service name: queue owner has to be service><br><service name: queue type must be either sonic or memory><br><service name: memory queue cannot have SonicThreadedEnvelopeQueue as queue code><br><service name: sonic queue has to have sonic threaded envelope queue as queue code> | 40 | Check the service queue configuration based on the event message generated. |
| 50 | CCS_BLOX_SVC_2105_UseDefaultQueueConfiguration | Use Default Configuration:<br><use default queue code\|type\|owner> | 10 | |
| 51 | CCS_BLOX_DOC_2110_DocumentReplyPublished | Document Reply successfully published. | 0 | No action |
| 52 | CCS_BLOX_DOC_2111_DocumentSuccessfullyReceived | Document successfully received (Abstract Document Service). | 0 | No action |
| 53 | CCS_BLOX_DOC_2112_DocumentReceiveFailed | Failed to handle document: <CCSEnvelopeEventContext> | 40 | Check the corresponding ID in the document and the LDAP entry. |

|  |  |  |  |  |
|---|---|---|---|---|
| 54 | CCS_BLOX_PROT_2113_StartingDocumentSecurityCheck | Starting document security check. | 10 | No action |
| 55 | CCS_BLOX_PROT_2114_BadProtectionRef | Service had bad protection reference. | 40 | Verify that the service is in the right category. |
| 56 | CCS_BLOX_PROT_2115_ServiceAuthorizationFailed | Service authorization failed. | 30 | Check the userId and password for the service in the corresponding property file. |
| 57 | CCS_BLOX_COMM_2116_ClassNotFound | Failed to find <CommAgentImpl> class | 40 | Check the corresponding jar files is in the folder and the jar file name is in the classpath in the script. |
| 58 | CCS_BLOX_MGR_2117_FactoryCreationFailure | Failed to instantiate factory <Comm Agent factory>, <class name>, <ClassNotFoundException > | 40 | Verify the service name is correct in the service-start.prop. |
| 59 | CCS_BLOX_MGR_2118_RouterCreationFailure | Failed to instantiate router <class name>, <ClassNotFoundException > | 40 | Verify the jar files are in the right folder and classpath. |
| 60 | CCS_BLOX_MGR_2119_ServiceInitFailure | Service initialization failed: <FileNotFoundException> | 40 | Service init failed, check the service name is correct in the service-start.prop and the corresponding jar file is in right folder and the classpath is correct. |
| 61 | CCS_BLOX_MGR_2120_NoServiceClass | No class specified for service <service_name> | 40 | Verify the service name is correct in the service-start.prop and the corresponding jar file is in the right folder and the classpath set correctly. |
| 62 | CCS_BLOX_MGR_2121_ServiceClassNotFound | Failed to find class <class_name> for service <service name> | 40 | Check the service name is correct and the corresponding jar files is in the folder and in the classpath. |

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| 63 | CCS_BLOX_MGR_2122_ServiceInitFailed | Initialization of service <service_name> failed | 40 | Service init failed, check the corresponding requirement for the service, such as the required queue name or file existing or not, etc. and other related exception. |
| 64 | CCS_BLOX_MGR_2123_ServiceCreationFailed | Creation of service < service_name> failed, <class name>, <exception> | 40 | Service creation failed. Check for correct service name, the corresponding requirement for the service, such as the required queue name or file existing or not, other related exceptions and so on. |
| 65 | CCS_BLOX_MGR_2124_FileNotFound | <service startup properties> file < service startup file> not found | 40 | Check that the service-start.prop files are in the right folder, or the root path is correct. |
| 66 | CCS_BLOX_MGR_2125_FileNotLoaded | Failed to load <service startup properties> file < service startup file>: <IOException> | 40 | Files could not be found or open. Check if the service-start.prop files exist or not. |
| 67 | CCS_BLOX_DOC_2126_ClassNotFound | Failed to find < Envelope> class <com.commerceone.xdk.swi.metadox.meta.Envelope> | 40 | Check if required jar files are in the right folder. |
| 68 | CCS_BLOX_SVC_2127_TimeoutFailed | Failed to handle timeout: <Exception> | 40 | Timout happened, check the network connection and other exception. |
| 69 | CCS_BLOX_DOC_2128_NoHandlerMethod | No service method to handle document | 40 | Check the doc corresponding app service is in the service-start.prop. |
| 70 | CCS_BLOX_DOC_2129_ReplyToOnewayRequestIgnored | Reply to one-way request ignored. | 10 | Cannot deliver a response to ONEWAY document; check the document sending mode. |
| 71 | CCS_BLOX_MGR_2130_SvcMgrInitFailed | Service Manager initialization failed, exiting.... | 40 | Shut down the server, check configuration and restart the server. |

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| 72 | CCS_BLOX_PROT_2200_ServiceAuthorizationSuccess | Service authorization success. | 0 | No action |
| 73 | CCS_BLOX_SVC_2210_CanNotGenerateError | Can not generate Error | 40 | Check the senderID of the original document. |
| 74 | CCS_BLOX_SERVER_10010_ServerNameNotSet | Server Name not set | 40 | Check and set the Server Name in server-start.prop. |
| 75 | CCS_BLOX_SERVER_10020_ServerIDNotSet | Server ID not set | 40 | Check and set the Server ID in server-start.prop. |
| 76 | CCS_BLOX_SERVER_10030_ServerTypeNotSet | Server Type not set | 40 | |
| 77 | CCS_BLOX_SERVER_10040_ServerGroupNotSet | Server Group not set | 40 | |
| 78 | CCS_BLOX_SERVER_10035_ServerModeInvalid | Server Mode is Invalid | 40 | Make sure that ccs.server.mode in the server-start.prop is either service_loopback or real. |
| 79 | CCS_BLOX_SERVER_10000_ServerInitFailed | Server Initialization Failed!! | 40 | Not used |
| 80 | CCS_BLOX_SVC_10040_ServerNameIDTypeSet | Server Name, ID, Type set.<br>Server Name : <ServerName><br>Server ID : <ServerId><br>Server Type : <ServerType> | 40 | No action |
| 81 | CCS_BLOX_SERVER_10050_ServerSonicSyncResponseQueueNotSet | Server Sonic MQ Sync Response Queue Name is not set. | 10 | No action |
| 82 | CCS_BLOX_SERVER_10050_ServerSonicEnabledAndSonicSyncResponseQueueNotSet | Server is Sonic Enabled and the Server Sonic MQ Sync Response Queue Name is not set. | 40 | Make sure that the property ccs.server.sonicmq.syncresponsequeue.name in the server_start.prop has the sync response queue name. |
| 83 | CCS_BLOX_SERVER_10060_ServerSonicEnabledKeyNotSet | Server Sonic MQ Enabled Key is not set. Setting it to false. | 10 | No action |
| 84 | CCS_BLOX_SERVER_10061_ServerSonicEnabledFalse | Server Sonic MQ Enabled Key is set to FALSE. | 0 | No action |

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| 85 | CCS_BLOX_SERVER_10062_ServerSonicEnabledTrue | Server Sonic MQ Enabled Key is set to TRUE. | 0 | No action |
| 86 | CCS_BLOX_SERVER_10063_Caught_DocumentExchangeException | A DocumentExchangeException is caught by ADS. <Error Message>. The message is rolled back." | 40 |  |
| 87 | CCS_BLOX_SERVER_10064_Caught_Exception | An exception is caught by the ADS. <Error Message>. The message is rolled back. | 40 |  |
| 88 | CCS_COMM_AGENT_3001_AgentInitialized | Comm Agent initialized. | 0 | No action |
| 89 | CCS_COMM_AGENT_3002_AgentStarted | Comm Agent started. | 0 | No action |
| 90 | CCS_COMM_AGENT_3003_AgentStopped | Comm Agent stopped. | 0 | No action |
| 91 | CCS_COMM_AGENT_3004_AgentDestroyed | Comm Agent destroyed. | 0 | No action |
| 92 | CCS_COMM_AGENT_3005_ReplyFailure | Failed to send reply: +1 | 30 | Not used |
| 93 | CCS_COMM_AGENT_3006_SecondaryReply | Secondary reply received; ignoring. | 30 | Not used |
| 94 | CCS_COMM_AGENT_3007_NotAReply | Not a reply document; ignoring. | 30 | Something failed while creating the reply for a synchronous request. The request needs to be sent again. |
| 95 | CCS_COMM_AGENT_3008_NO_MESSAGE_STORE_FOUND | No message store found for archive: service type <type>, name <name> | 30 | If archiving is desired, then a MessageStoreService must be configured for this server. |
| 96 | CCS_COMM_AGENT_3009_MESSAGE_STORE_FOUND | Message store found for archive | 0 | No action |

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| 97 | CCS_COMM_SERVLET_3011_HttpdInitFail | Failed to initialize http daemon. | 40 | This is a critical error. If the daemon doesn't start, the server will not start. Try starting it again, manually. If it fails, call customer support. |
| 98 | CCS_COMM_SERVLET_3012_ReplyTimedOut | No reply document generated before timeout, envelope id = <Envelope Id> | 40 | The reply was not generated before timeout for this sync request specified by the envelope id. The request needs to be sent again. |
| 99 | CCS_COMM_JMS_3013_ReplyTimedOut | No reply document generated before timeout, envelope id = <envelopeId>. | 40 | |
| 100 | CCS_COMM_JMS_3014_DocumentExchangeError | Document Exchange Error in the JMS CommService. <exception>. | 40 | |
| 101 | CCS_COMM_SERVLET_3015_DocumentExchangeError | Document Exchange Error in the CommHttpServlet. <exception> | 40 | |
| 102 | CCS_COMM_SERVLET_3016_GeneralError | CommHttpServlet Error. <exception>. | 40 | |
| 103 | CCS_COMM_SERVLET_3017_FailedToStoreMessage | Failed to archive message as requested | 40 | |
| 104 | CCS_COMM_SERVLET_3018_RequestTimedout | Request timed out | 20 | |
| 105 | CCS_COMM_SERVLET_3019_IOError | IO Related Error | 40 | |
| 106 | CCS_COMM_SERVLET_3020_MessageTooBig | Message too big. Size = <size>, Limit = <limit>. | 40 | |
| 107 | CCS_COMM_TRANSMITTER_3040_TransmitterCreationFailed | Transmitter creation failed.Transmitter Type = <protocol, exception> | 40 | |
| 108 | CCS_COMM_TRANSMITTER_3041_TransmitterCreationSuccessful | Transmitter creation successful.Transmitter Type = <protocol> | 0 | |

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| 109 | CCS_COMM_TRANSMITTER_3042_ResourceCreationFailed | Resource creation failed in <serviceName> method = <method> | 40 |  |
| 110 | CCS_COMM_TRANSMITTER_3043_TransmitterPropertyError | Transmitter Property Error. Resource creation failed in <serviceName> method = <method> | 40 |  |
| 111 | CCS_COMM_TRANSMITTER_3044_NoTradingPartnerFound | No Trading Partner found. Service Name : <serviceName>. Method : <method>. Trading Partner Not found : <exception> | 40 |  |
| 112 | CCS_COMM_TRANSMITTER_3050_DocumentListenerCreationFailed | Transmitter creation failed. Transmitter Type = +1. (TYPE IS NOT SPECIFIED IN CODE) | 40 |  |
| 113 | CCS_COMM_TRANSMITTER_3051_DocumentListenerCreationSuccessful | Transmitter creation successful. Transmitter Type = +1. **(NOT USED ENYWHERE)** | 0 |  |
| 114 | CCS_COMM_TRANSMITTER_3060_DocumentResponderCreationFailed | Transmitter creation failed. Transmitter Type = +1. (TYPE IS NOT SPECIFIED IN CODE) | 40 |  |
| 115 | CCS_COMM_TRANSMITTER_3061_DocumentResponderCreationSuccessful | Transmitter creation successful. Transmitter Type = +1. **(NOT USED ENYWHERE)** | 0 |  |
| 116 | CCS_COMM_TRANSMITTER_3070_DocumentServantCreationFailed | Transmitter creation failed. Transmitter Type = +1. (NOT USED ENYWHERE) | 40 |  |
| 117 | CCS_COMM_TRANSMITTER_3071_DocumentServantCreationSuccessful | Transmitter creation successful. Transmitter Type = +1. **(NOT USED ENYWHERE)** | 0 |  |
| 118 | CCS_COMM_TRANSMITTER_3080_TransmitterCachingState | Transmitter Caching State : <cache value> | 10 |  |

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| 119 | CCS_COMM_TRANSMITTER_3081_TransmitterCachingRefreshRate | Transmitter Caching RefreshRate : <refreshRate>. | 10 |  |
| 120 | CCS_COMM_TRANSMITTER_3090_TransmitterInfoInitializationError | TransmitterInfo initialization error | 40 |  |
| 121 | CCS_COMM_TRANSMITTER_3091_TransmitterCacheSuccessful | Using cached Transmitter. | 0 |  |
| 122 | CCS_COMM_JMS_ENVELOPEPUBLISHED_3092 | Envelope published from JMS queue into router. | 10 |  |
| 123 | CCS_COMM_JMS_JMSPUBLISHED_3093 | Envelope published from router into JMS queue. | 10 |  |
| 124 | CCS_COMM_AGENT_ENVELOPEPUBLISHED_3094 | Envelope published from Communication input into router. | 10 |  |
| 125 | CCS_COMM_AGENT_COMMPUBLISHED_3095 | Envelope published from router into communication synch response. | 10 |  |
| 126 | CCS_COMM_MCAST_3100_FailedToStartService | Couldn't start Multicast listener on [+1:+ 4: +5] + 6 | 40 | Look in event log and/or debug-default as to why the MulticastListener could not be created, taking note of the address and port #. |
| 127 | CCS_COMM_MCAST_3110_CommAgentProcessingTimeout | Timeout in CommAgent while processing document: +1 + 4 | 40 | Look in event log and/or debug-default as to why it timed out, taking note of the stackTrace. |
| 128 | CCS_COMM_JMS_3120_FailedToCreateConnection | Failed to create JMS connection | 40 | Look in event log and/or debug-default as to why it was not able to connect to the Sonic Broker, taking note of the broker URL and the username/password used. |

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| 129 | CCS_COMM_JMS_3121_FailedToCreateQueue | Failed to create JMS queue | 40 | Look in event log and/or debug-default as to why it was not able to create the queue identity, taking note of the queueName passed in. |
| 130 | CCS_COMM_SONIC_COMM_SERVICE_3150_NO_MESSAGE_STORE_FOUND | No message store found for archive: service type <type>, name <name> | 40 | The message store was not among the list of known services. Check the service-start.prop to ensure it has been turned on. |
| 131 | CCS_COMM_SONIC_COMM_SERVICE_3151_MESSAGE_STORE_FOUND | Message store found for archive | 0 | The message store was found.  If the system was configured to start with a message store then this is good.  However if it was configured to start without one then check the service-start.prop to ensure that it was not turned on. |
| 132 | CCS_COMM_SONIC_COMM_SERVICE_3152_INVALID_SONIC_HEADER | Invalid Sonic header | 40 | |
| 133 | CCS_COMM_SONIC_COMM_SERVICE_3153_ENVELOPE_CONSTRUCTION_FAILED | Envelope construction failed, error: +1 | 40 | Look in event log and/or debug-default as to why it was not able to create the envelope out of the byte message, taking note of the stackTrace. |
| 134 | CCS_COMM_SONIC_COMM_SERVICE_3154_AUTHENTICATION_FAILED | Authentication failed, error: +1 | 40 | Look in event log and/or debug-default as to why the client could not be authenticated, taking note of the username/password used. |
| 135 | CCS_COMM_SONIC_COMM_SERVICE_3155_HANDLE_TO_ROUTER_QUEUE_FAILED | Handle to router failed, error: +1 | 40 | Look in event log and/or debug-default as to why we got this event, taking note of the stackTrace. |
| 136 | CCS_COMM_SONIC_COMM_SERVICE_3156_MESSAGE_TOO_BIG | Message is too big size = +1, max = +2 | 40 | Message is too big. |

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| 137 | CCS_COMM_SONIC_COMM_SERVICE_3157_ENVELOPE_ARCHIVING_FAILED | Envelope archiving failed, error: +1 | 40 | Failed to archive envelope. Check if DB is up, check on disk space. |
| 138 | CCS_COMM_SONIC_COMM_SERVICE_3158_COMMIT_FAILED | Commit failed, error: +1 | 40 | Look in event log and/or debug-default as to why not able to commit the transaction, taking note of the stackTrace. |
| 139 | CCS_COMM_SONIC_COMM_SERVICE_3159_SEND_ERROR_REPLY_FAILED | Send error-reply failed, error: +1 | 40 | Look in event log and/or debug-default as to why not able to send the Error reply, taking note of the stackTrace. |
| 140 | CCS_COMM_SONIC_COMM_SERVICE_3160_INITIALISATION_FAILED | SonicCommService initialisation failed error <error> | 40 | Look in event log and/or debug-default as to why the SonicCommService was not able to initialize, taking note of the stackTrace. |
| 141 | CCS_COMM_SONIC_COMM_SERVICE_3161_READING_JMS_HEADER_FAILED | Reading property from jms header failed, error: +1 | 40 | Look in event log and/or debug-default as to why we had a hard time reading the JMS header, taking note of the stackTrace. |
| 142 | CCS_COMM_SONIC_COMM_SERVICE_3162_PROPERTY_NOT_SET_IN_JMS_HEADER | Property +1 not set in jms header | 40 | Look in event log as to which property was not set in the JMS header. |
| 143 | CCS_COMM_SONIC_COMM_SERVICE_3163_ROLLBACK_FAILED | Rollback failed, error: +1 | 40 | Look in event log and/or debug-default as to why we had a hard time rolling back the transaction, taking note of the stackTrace. |
| 144 | CCS_COMM_SONIC_COMM_SERVICE_3164_ERROR_READING_BYTES_FROM_JMS_MESSAGE | Error reading bytes from jms message, error: +1 | 40 | Look in event log and/or debug-default as to why we had a hard time reading the bytes from the JMS message, taking note of the stackTrace. |

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| 145 | CCS_COMM_SONIC_COMM_SERVICE_3165_JMS_MESSAGE_IS_NOT_BYTES_MESSAGE_TYPE | JMS Message is not BytesMessage type | 40 | Look in event log and/or debug-default as to why the JMS message was not an instance of ByteMessage, taking note of the stackTrace. And then take a look in the DMQ for the message. |
| 146 | CCS_COMM_SONIC_COMM_SERVICE_3166_SEND_TO_DEAD_MESSAGE_QUEUE_FAILED | Send to SonicMQ.deadMessage failed, error: +1 | 40 | Look in event log and/or debug-default as to why we had a hard time sending the message to the DMQ, taking note of the stackTrace. |
| 147 | CCS_COMM_SONIC_COMM_SERVICE_3167_XCBL_VERSION_TRANSFORMATION_IN_FAILED | XCBLVersion transformation ’in’ failed, error: +1 | 40 | Look in event log and/or debug-default as to why the xCBL version transformer burped on a transform in, taking note of the stackTrace. |
| 148 | CCS_COMM_SONIC_COMM_SERVICE_3168_XCBL_VERSION_TRANSFORMATION_IN_SUCCEEDED | XCBLVersion transformation ’in’ succeeded | 0 | Transformation on an inbound message was successful. |
| 149 | CCS_COMM_SONIC_TRANSMITTER_3200_PROPERTY_NOT_SET_IN_JMS_HEADER | Property +1 not set in jms header | 40 | Look in event log as to which property was not set in the JMS header. |
| 150 | CCS_COMM_SONIC_TRANSMITTER_3201_READING_JMS_HEADER_FAILED | Reading property from jms header failed, error: <ErrorMsg> | 40 | |
| 151 | CCS_COMM_SONIC_TRANSMITTER_3202_AUTHENTICATION_FAILED | Authentication failed, error: <ErrorMsg> | 40 | Look in LDAP and make sure the security settings are correct. (Note: from the event, the operator will not be able to find out the sender ID. If possible we may want to augment this event with senderid information). |
| 152 | CCS_COMM_SONIC_TRANSMITTER_3203_XCBL_VERSION_TRANSFORMATION_OUT_FAILED | XCBLVersion transformation ’out’ failed, error: +1 | 40 | Not Used |

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| 153 | CCS_COMM_SONIC_TRANSMITTER_3204_XCBL_VERSION_TRANSFORMATION_IN_FAILED | XCBLVersion transformation ’in’ failed, error: <ErrorMsg> | 40 | The CBL schema may be missing or you may have an incorrect version. |
| 154 | CCS_COMM_SONIC_TRANSMITTER_3205_XCBL_VERSION_TRANSFORMATION_OUT_SUCCEEDED | XCBLVersion transformation ’out’ succeeded | 0 | Not Used<br>(No action required) |
| 155 | CCS_COMM_SONIC_TRANSMITTER_3206_XCBL_VERSION_TRANSFORMATION_IN_SUCCEEDED | XCBLVersion transformation ’in’ succeeded | 0 | Not Used<br>(No action required) |
| 156 | CCS_COMM_HTTP_TRANSMITTER_3250_XCBL_VERSION_TRANSFORMATION_OUT_FAILED | XCBLVersion transformation ’out’ failed, error: +1 | 40 | Not Used |
| 157 | CCS_COMM_HTTP_TRANSMITTER_3251_XCBL_VERSION_TRANSFORMATION_IN_FAILED | XCBLVersion transformation ’in’ failed, error: +1 | 40 | Not Used |
| 158 | CCS_COMM_HTTP_TRANSMITTER_3252_XCBL_VERSION_TRANSFORMATION_OUT_SUCCEEDED | XCBLVersion transformation ’out’ succeeded | 0 | Not Used<br>(No action required) |
| 159 | CCS_COMM_HTTP_TRANSMITTER_3253_XCBL_VERSION_TRANSFORMATION_IN_SUCCEEDED | XCBLVersion transformation ’in’ succeeded | 0 | Not Used<br>(No action required) |
| 160 | CCS_COMM_AGENT_TRANSMITTER_3300_XCBL_VERSION_TRANSFORMATION_OUT_FAILED | XCBLVersion transformation ’out’ failed, error: <ErrorMsg> | 40 | The CBL schema may be missing or you may have an incorrect version. |
| 161 | CCS_COMM_AGENT_TRANSMITTER_3301_XCBL_VERSION_TRANSFORMATION_IN_FAILED | XCBLVersion transformation ’in’ failed, error: <ErrorMsg> | 40 | The CBL schema may be missing or you may have an incorrect version. |

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| 162 | CCS_COMM_AGENT_TRANSMITTER_3302_XCBL_VERSION_TRANSFORMATION_OUT_SUCCEEDED | XCBLVersion transformation ’out’ succeeded | 0 | No action required. |
| 163 | CCS_COMM_AGENT_TRANSMITTER_3303_XCBL_VERSION_TRANSFORMATION_IN_SUCCEEDED | XCBLVersion transformation ’in’ succeeded | 0 | No action required |
| 164 | CCS_DCLT_1_Test | A sample utility CCS_DCLT - event error message +1 +2. | 40 | Not Used |
| 165 | CCS_DCLT_4010_XmlConversionError | XML conversion error. | 40 | Not Used |
| 166 | CCS_DCLT_4015_UnsupportedEncodingError | UTF8 encoding not supported. | 40 | Not Used |
| 167 | CCS_KRNL_5010_QueueCreationError | Failed to create a Queue using class: <cls_name> | 40 | |
| 168 | CCS_KRNL_5015_ServiceQueueingError | Failed to queue envelope to service | 40 | |
| 169 | CCS_KRNL_5025_GoodwillServiceWarning | GoodwillService: Got <message id>. | 20 | |
| 170 | CCS_KRNL_5026_SyncDocumentNoSubscriberWarning | Sync Document has no subscruber: Envelope Id: <message id>. | 40 | |
| 171 | CCS_KRNL_5028_AsyncDocumentNoSubscriberWarning | Async Document has no subscriber: Envelope Id: <message id>. | 40 | |
| 172 | CCS_KRNL_5027_SyncDocumentErrorDropped | Sync Document dropped: Envelope Id: <message id>. | 40 | |
| 173 | CCS_KRNL_5029_ServerCannotSendErrorDocumentOutForSyncRequest | Server cannot send Error document out as response to sync request : Envelope Id: <message id>. | 40 | |
| 174 | CCS_KRNL_5130_PublishError | Publish Error!! | 40 | |

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| 175 | CCS_KRNL_5131_CAUGHT_DOCUMENT_EXCHANGE_EXCEPTION | Router catches a DocumentExchangeException. <exception message>. The message is rolled back | 40 | |
| 176 | CCS_KRNL_5132_CAUGHT_EXCEPTION | The router catches an exception. " + <exception message> + ". The message is rolled back." | 40 | |
| 177 | CCS_KRNL_5210_ | | 40 | |
| 178 | CCS_KRNL_5250_QueueCreationSuccess | MSMQ : <name> created successfully. Journal = <on/off> , Delivery = <express/recoverable> | 0 | |
| 179 | CCS_KRNL_5255_QueueExistsInfo | MSMQ : Queue: <name> already exists. Journal = <on/off> , Delivery = <express/recoverable> | 10 | |
| 180 | CCS_KRNL_5260_IllegalQueueNameError | MSMQ: Illegal Queue Name: <name> . | 40 | |
| 181 | CCS_KRNL_5265_QueueCreationError | MSMQ: Queue: <name> creation error! | 40 | |
| 182 | CCS_KRNL_5270_QueueReceiveError | MSMQ: MsmqDequeue: Message receives error. | 40 | |
| 183 | CCS_KRNL_5271_QueueReceiveSuccessful | MSMQ:MsmqDequeue: Message receives successful. | 0 | |
| 184 | CCS_KRNL_5275_QueueSendError | MSMQ: MsmqEnqueue: Message sends error. | 40 | |
| 185 | CCS_KRNL_5276_QueueSendSuccessful | MSMQ: MsmqEnqueue: Message send successful. | 0 | |
| 186 | CCS_KRNL_THREAD_5310_ServiceThreadException | Unhandled exception in service thread: <service thread information> <Java StringWriter information> | 40 | |
| 187 | CCS_KRNL_5410_ | | 40 | |

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| 188 | CCS_KRNL_SONICMQ_6000_CONNECTION_FAILED | | 40 | |
| 189 | CCS_KRNL_SONICMQ_6001_InitDefaultQueueError | In SonicThreadedEnvelopeQueue:initDefaultQueue can create default queue resource, <JMSException> | 40 | |
| 190 | CCS_KRNL_SONICMQ_6002_QueueBrowserError | In SonicThreadedEnvelopeQueue:<br>isEmpty Queue browser error. < JMSException > | 40 | |
| 191 | CCS_KRNL_SONICMQ_6003_QueueSendError | In SonicThreadedEnvelopeQueue:<br>enQueue Message Send Error. < JMSException > | 40 | |
| 192 | CCS_KRNL_SONICMQ_6004_Receive_NULL_JMS_Message | In SonicThreadedEnvelopeQueue:deQueue A Null JMS message is received. Possible reason is connection dropped during the receive. | 40 | |
| 193 | CCS_KRNL_SONICMQ_6005_QueueReceiveError | In SonicThreadedEnvelopeQueue:deQueue cannot receive message. < JMSException > | 40 | |
| 194 | CCS_KRNL_SONICMQ_6006_GET_MSG_LEN_PROP_FAILED | In SonicThreadedEnvelopeQueue:deQueue cannot receive message. < JMSException > | 40 | |
| 195 | CCS_KRNL_SONICMQ_6007_CREATE_QUEUE_RESOURCE_FAILED | In SonicThreadedEnvelopeQueue:createQueue, queue resource creation failed. <Exception> | 40 | |
| 196 | CCS_KRNL_SONICMQ_6008_COMMIT_FAILED | In SonicThreadedEnvelopeQueue:commitTransaction commit failed. <JMSException> | 40 | |

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| 197 | CCS_KRNL_SONICMQ_6009_ROLLBACK_FAILED | In SonicThreadedEnvelopeQueue :rollbackTransaction rollback failed. <JMSException> | 40 |  |
| 198 | CCS_KRNL_SONICMQ_6010_ROLLBACK_FAILED | 40"<br>In SonicThreadedEnvelopeQueue :rollbackTransaction rollback failed | 40 |  |
| 199 | CCS_KRNL_SONICMQ_6011_INVALID_ROUTER_SERVICE_QUEUE_CONF | Invalid queue configuration. If router queue is memory, service queue must be memory queue | 40 |  |
| 200 | CCS_KRNL_SONICMQ_6012_UNKNOWN_QUEUE_OWNER | The queue configuration specifies an unknown queue owner | 40 |  |
| 201 | CCS_KRNL_SONICMQ_6013_CONNECTION_INIT_FAILED | SonicMQ connection initialization failed | 40 |  |
| 202 | CCS_KRNL_SONICMQ_6014_RECEIVE_EXCEPTION_OnException | In OnException, receive exception in the JMS exception listener. +1 | 40 |  |
| 203 | CCS_KRNL_SONICMQ_6015_CONNECTION_DROPPED | SonicMQ broker connection dropped unexpectedly. +1 | 40 |  |
| 204 | CCS_KRNL_SONICMQ_6016_CONNECTION_DROPPED | SonicMQ broker connection dropped unexpectedly | 40 |  |
| 205 | CCS_KRNL_SONICMQ_6017_CREATE_QUEUE_FAILED | In JMSQueuePasser:setNextQueue, set next queue failed. +1 | 40 |  |
| 206 | CCS_KRNL_SONICMQ_6018_SEND_QUEUE_FAILED | In JMSQueuePasser:enqueue, send queue failed. +1 | 40 |  |
| 207 | CCS_KRNL_SONICMQ_6019_NON_SESSIONTHREAD_PASSED | In ThreadedEnvelopeQueue :initQueue, a non sessionThread is passed to initQueue. | 40 |  |

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| 208 | CCS_KRNL_SONICMQ_6020_NON_SESSIONTHREAD_PASSED | In ThreadedEnvelopeQueue :getEnvelopeListener, a non sessoinThread is passed to initQueue. | 40 | |
| 209 | CCS_KRNL_SONICMQ_6021_NON_SESSIONTHREAD_PASSED | In BasicEnvelopeQueue :getEnvelopeListener, a non sessionThread is passed to initQueue. | 40 | |
| 210 | CCS_KRNL_SONICMQ_6022_NON_SESSIONTHREAD_PASSED | In BasicEnvelopeQueue :getEnvelopeListener, a non sessionThread is passed to initQueue. | 40 | |
| 211 | CCS_KRNL_SONICMQ_6023_NON_INTEGER_TIMETOLIVE | Sonic Interface: envelope time to live parameter is not integer. +1 | 40 | |
| 212 | CCS_KRNL_SONICMQ_6024_CONNECT_TO_BROKER | Connect to broker: +1 as +2 | 40 | |
| 213 | CCS_KRNL_SONICMQ_6025_SESSIONTHREAD_INIT_FAILED | JMS QueueSessionThread init failed: +1 | 40 | |
| 214 | CCS_KRNL_SONICMQ_6026_INVALID_QUEUE_CONFIGURATION | Invalid Queue Configuration: +1. | 40 | |
| 215 | CCS_KRNL_SONICMQ_6027_NULL_QUEUE_PASSER | NULL Value: +1. | 40 | |
| 216 | CCS_KRNL_SONICMQ_6028_CAN_NOT_CREATE_ENVELOPE | | 40 | |
| 217 | CCS_KRNL_SONICMQ_6029_MESSAGE_TO_DEADLETTER_QUEUE | | 20 | |
| 218 | CCS_KRNL_SONICMQ_6030_MESSAGE_TO_DEADLETTER_QUEUE_FAILED | | 40 | |
| 219 | CCS_SEC_1_Test | A sample utility CCS_SEC_CONN - event error message +1 +2. | 40 | |

|  |  |  |  |  |
|---|---|---|---|---|
| 220 | CCS_SEC_CONN_6010_ClientConnectionSucceeded | This event indicates that the HTTPS/JMS Client connection has succeeded and application level authentication of has completed.<br>Event Parameters (only for HTTPS client):<br>- ***ConnectionName*** Remote Host Name of HTTPS client connecting to HTTPS Server.<br>- ***Fixed Message*** (for both HTTPS and JMS connections): "Client connection succeeded." | 0 | No action.<br>Informational Event. |

|  |  |  |  |  |
|---|---|---|---|---|
| 221 | CCS_SEC_CONN_6020_AuthenticationFailed | This event indicates that the application level authentication of Trading Partner (TP) Client has Failed.<br>Event Parameters:<br>HTTPS Connections:<br>***ConnectionName***HTTP/S Client RemoteUserName<br>TargetName<br>Target Resource URL being<br>Accessed on the HTTPS Server<br>State<br>General HTTP/S based TP<br>Authentication Error message<br>ErrorDetails<br>Specific run-time error message for TP Authentication Failure over HTTPS connections.<br>For JMS/SonicMQ Broker based TP connections, following events attributes are available:<br>***State*** General JMS-based TP Authentication Error message<br>***ErrorDetails*** Specific run-time error message for TP Authentication Failure over JMS/SonicMQ connections. | 40 | Check if the TP application is connecting multiple times with same authentication failure result, possibly due to incorrect {MPID, UserId, Password}.<br>Notify TP organization that they may need to reset their password if they have forgotten the right password or use correct password.<br>Possible Denial-of-service attack. Need to use correct safety measures and network monitoring to track possible illegal client connections. |

|  |  |  |  |  |
|---|---|---|---|---|
| 226 | CCS_SEC_CONN_6050_ServerLDAPConnectionFailed | Connection to LDAP Server Failed (during TP Password Authentication).<br>Event Parameters:<br>***LDAPSERVER*** LDAP Host Name.<br>***2) USERNAME*** LDAP Connection UserId (used by the Security Subsystem) | 40 | Check if the Netscape LDAP Server HostName, UserId, Password are correctly configured in the *security.prop* file. Check that the LDAP Server is alive. |
| 227 | CCS_SEC_REG_ENVELOPECONTEXT_3000 | REG Envelope Context. | 10 | 227 |
| 228 | CCS_SEC_REG_INITSTART_3010 | REG Init Start. | 10 | 228 |
| 229 | CCS_SEC_REG_INITCOMPLETE_3015 | REG Init Complete. | 10 | 229 |
| 230 | CCS_SEC_REG_HANDLEBASICTPSTART_3020 | REG Handle Basic TP Profile Start. | 10 | 230 |
| 231 | CCS_SEC_REG_HANDLEBASICTPCOMPLETE_3025 | REG Handle Basic TP Profile Complete. | 10 | 231 |
| 232 | CCS_SEC_REG_HANDLEBASICTPLDAPSTART_3030 | REG Handle Basic TP Profile LDAP Start. | 10 | 232 |
| 233 | CCS_SEC_REG_HANDLEBASICTPLDAPCOMPLETE_3035 | REG Handle Basic TP Profile LDAP Complete. | 10 | 233 |
| 234 | CCS_SEC_REG_HANDLEBASICTPMEMBERSTART_3040 | REG Handle Basic TP Member Profile Start. | 10 | 234 |
| 235 | CCS_SEC_REG_HANDLEBASICTPMEMBERCOMPLETE_3045 | REG Handle Basic TP Member Profile Complete. | 10 | 235 |
| 236 | CCS_SEC_REG_HANDLEBASICTPMEMBERLDAPSTART_3050 | REG Handle Basic TP Member Profile LDAP Start. | 10 | 236 |
| 237 | CCS_SEC_REG_HANDLEBASICTPMEMBERCOMPLETE_3055 | REG Handle Basic TP Member Profile LDAP Complete. | 10 | 237 |

| | | | | |
|---|---|---|---|---|
| 238 | CCS_SEC_REG_HANDLEUPDATETPSTART_3060 | REG Handle Update TP Start. | 10 | 238 |
| 239 | CCS_SEC_REG_HANDLEUPDATETPCOMPLETE_3065 | REG Handle Update TP Complete. | 10 | 239 |
| 240 | CCS_SEC_REG_HANDLEUPDATETPMEMBERSTART_3070 | REG Handle Update Member Start. | 10 | 240 |
| 241 | CCS_SEC_REG_HANDLEUPDATETPMEMBERCOMPLETE_3075 | REG Handle Update Member Complete. | 10 | 241 |
| 242 | CCS_SEC_REG_NODEPROFILEINITSTART_3080 | REG Node profile Init Start. | 10 | 242 |
| 243 | CCS_SEC_REG_NODEPROFILEINITCOMPLETE_3085 | REG Node Profile Init Complete. | 10 | 243 |
| 244 | CCS_SEC_REG_HANDLELOOKUPTPSTART_3090 | REG Handle Basic TP Lookup Start. | 10 | 244 |
| 245 | CCS_SEC_REG_HANDLELOOKUPTPCOMPLETE_3095 | REG Handle Basic TP Lookup Complete. | 10 | 245 |
| 247 | CCS_SEC_CONN_CONNCONSTRUCTSTART_3010 | This event indicates a new TP HTTPS/JMS Connection creation event.<br>Event Parameters:<br>- No variable parameters;<br>- Fixed message:<br>"Conn Constructor Start." | 10 | Informational event. No action. |
| 248 | CCS_SEC_CONN_CONNCONSTRUCTCOMPLETE_3015 | This event indicates a new TP HTTPS/JMS Connection creation was completed.<br>Event Parameters:<br>- No variable parameters;<br>- Fixed message:<br>“Conn Constructor Complete.” | 10 | Informational event. No action. |

| | | | | |
|---|---|---|---|---|
| 249 | CCS_SEC_CONN_CONNVALIDATESTART_3020 | This event indicates start of a new TP/JMS Authentication event.<br>Event Parameters:<br>- No variable parameters;<br>- Fixed message:<br>"Conn Validate Start." | 10 | Informational event. No action. |
| 250 | CCS_SEC_CONN_CONNVALIDATECOMPLETE_3025 | This event indicates start of a new TP/JMS Authentication event.<br>Event Parameters:<br>- No variable parameters;<br>- Fixed message:<br>"Conn validate end." | 10 | Informational event. No action. |
| 251 | CCS_SEC_CONN_CONNKEYSTORE_3090_OPENFAILURE | This event indicates problems in opening the HTTPS Server keystore file.<br>Event Parameters:<br>- ***KeystoreFilePath***<br>Fully-qualified path of the server keystore file.<br>- ErrorDetails<br>Run-time error message during keystore opening failure. | 40 | Check if the HTTPS Server keystore file exists in the <KeystoreFilePath>. If not, check if the *https-server.prop* file has the correct keystore file name in the property *iaik.jigsaw.ssl.keystore* Check if the password of the keystore is properly configured in the https-Server.prop file in the property *iaik.jigsaw.ssl.keystore.password* (and also encrypt the password before going to Production). |

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|---|---|---|---|---|
| 252 | CCS_SEC_CONN_CONNKEYSTORE_3095_PWDDECRYPTIONERROR | This event indicates problems in opening the HTTPS Server keystore file due to the keystore password not successfully decrypted.<br>Event Parameters:<br>- ***KeystoreFilePath***<br>Fully-qualified path of the server keystore file.<br>- ErrorDetails<br>Specific run-time error message during keystore password decryption failure. | 40 | Check to make sure that keystore file is not corrupt; refer to Certificate Manager Keystore on page 7-11.<br>Was the keystore file migrated from another installation? We do not support re-use of keystores migrated from 40-bit installations to 128-bit installations.<br>Re-create keystore and re-install HTTPS server certificate. |
| 253 | CCS_SEC_CONN_6060_SetJMSClientSSLPropSucceeded | This event indicates that the properties for SonicMQ JMS client SSL connection in the client.prop have been successfully set. | 0 | No action.<br>Informational Event. |
| 254 | CCS_SEC_CONN_6065_SetJMSClientSSLPropFailed | This event indicates problems in setting the properties for SonicMQ JMS client SSL connection in the client.prop.<br>Event Parameters:<br>- ***EXCEPTIONMESSAGE***<br>Specific exception message. | 40 | Check the following properties in security.prop:<br>- jms.client.ssl.enable<br>- jms.client.ssl.provider.class<br>-jms.client.ssl.cipher.suites<br>- jms.client.ssl.client.requireTrustedRoot<br>- jms.client.ssl.client.trustedRoot.dir<br>Check if any properties above are missing or have an invalid value. |

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| 255 | CCS_SEC_HTTPSSERVER_6060_UnTrustedCARootClientConnectionEstablished | This event indicates that the HTTPS Client connecting to the HTTPS Server has untrusted CA Root certificate, but by default configuration we are accepting the HTTPS connection (since the client certificate is unexpired and signature is valid.)<br><br>Event Parameters:<br>- SubjectDN<br>Subject Name of HTTPS Client Certificate<br>- IssuerDN<br>Issuer Name (i.e., CA Name) of HTTPS Client Certificate<br>- Fixed Message:<br>"HTTPS Client’s Cert has untrusted CA Root, client connection succeeded:” | 0 | Informational event. No action. |

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| 256 | CCS_SEC_HTTPSSERVER_6065_UnTrustedCARootClientConnectionFailed | This event indicates that the HTTPS Client connecting to the HTTPS Server has untrusted CA Root certificate, and due to HTTPS Server configuration requiring client certificates to be issued from Trusted CAs, the connection is rejected at SSL handshake time.<br><br>Event Parameters:<br>- SubjectDN<br>Subject Name of HTTPS Client Certificate<br>- IssuerDN<br>Issuer Name (that is, CA Name) of HTTPS Client Certificate<br>- Fixed Message:<br>"HTTPS Client's Cert has untrusted CA Root, client connection failed:” | 40 | Using the Certificate Manager, check if IssuerDN matches one of the trusted CAs in the Server Keystore. If the IssuerDN does not match one of the trusted CAs, decide if that CA should be trusted and acquire the Trusted CA Root from the client site.<br>Re-configure the HTTPS Server to not require Trusted CA root from clients by changing the https-server.prop file property *iaik.jigsaw.ssl.client.requireTrustedRoot* to false.<br>**Note:**<br>Option 2 is not recommended during normal production, only during testing deployment. |

| | | | | |
|---|---|---|---|---|
| 257 | CCS_SEC_HTTPSCLIENT_6065_UnTrustedServerCARootAndClientConnectionFailed | This event indicates that the HTTPS Client application while connecting to a HTTPS Server has detected that the HTTPS Server certificate has been issued by UnTrusted CA and hence the HTTPS Client has aborted the connection due its CA Trust Policy not allowing such Untrusted Server connection.<br>Event Parameters:<br>- SubjectDN<br>Suibject Name of HTTPS Server Certificate<br>- IssuerDN<br>Issuer Name (that is, CA Name) of HTTPS Server Certificate | 40 | Check if the target HTTPS Server's issuing CA is trusted by the HTTPS Client keystore. Normally if the HTTPS Client is running as part of HTTPS Server servlet application, the effective Trusted CA will be in the Server keystore. Hence, using Certificate Manager, check if the CA is trusted. If not, acquire the CA Root of the target HTTPS Server and import it as a Trusted CA Root.<br>By default, enforcing Trusted CA Policies for target HTTPS Servers is disabled. Decide if default behavior is appropriate. For example, a HTTPS Client running inside a HTTPS Server based Async or SyncTransmission Service can disable Trusted CA requirement from its target HTTPS Server by changing the *security.prop* file property *Security.httpServerTrustedRoot.required* to *false.* |

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|---|---|---|---|---|
| 258 | CCS_SEC_HTTPSSERVER_6065_NoServerCertificateFoundInKeyStore | This event indicates that the HTTPS Server failed to bootstrap due to server certificate not available in the Server Keystore.<br>Event Parameters:<br>***-ServerCertificateEntryName***<br>Entry Name of HTTPS Server certificate entry in the ***https-server.prop*** file property:<br>***iaik.jigsaw.ssl.rsa.keyAndCertificate***<br>- KeyStoreFilePath<br>Fully-qualified file path to HTTPS Server keystore file. | 40 | Check if the https-server.prop file has the correct certificate entry name in the *https-server.prop* file (that is, entry name corresponds to the real HTTPS Server certificate that is imported into the keystore using the Certificate Manager).<br>2) Check if the keystore file name is correct in *https-server.prop* file. |
| 259 | CCS_SEC_DOCUMENTSERVICE_6065_DataDecryptionError | This event indicates that a data decryption error occurred.<br>Event Parameters:<br>- Fixed Message:<br>“Data Decryption Error:”<br>- ErrorDetails<br>Specific run-time failure reasons. | 40 | Report error details to Commerce One Tech Support. |
| 260 | CCS_SEC_REG_SONICBROKERCREATIONFAILED_6070 | Creation Of Broker +< TPBROKERURL>, For Site Node < SITENODENAME>, Failed | 40 | 260 |
| 261 | CCS_SEC_REG_SONICBROKERWARNING_6075 | Broker < TPBROKERURL > For Site Node < SITENODENAME> is of Local Address Type. Not Creating Entry in Portal’s Config Server | 20 | 261 |
| 262 | CCS_SEC_REG_SONICBROKERDELETIONFAILED_6080 | Deletion Of Broker +1 , For Site Node + 2, Failed | 40 | |
| 263 | CCS_SVC_LOSTANDFOUND_7000_GotDocument | Lost and Found service got document : +1 | 30 | N/A |

| | | | | |
|---|---|---|---|---|
| 264 | CCS_SVC_LOSTANDFOUND_7001_SYNC | Lost and found got sync request, sending back error | 30 | Service Router – No service is subscribing to this document. Hence, this synchronous request is ending up in the L&F. The client should see an exception. Check if all the services are up and running. Portal Router – The synch transmitter service cannot send the request out to the XPC. Check the transmission settings for the SyncTransmitterService |
| 265 | CCS_SVC_LOSTANDFOUND_7002_ASYNC | Lost and found got async document. | | The AsyncTransmitterService cannot send the asynchronous document out. Check the transmission settings for the AsyncTransmitterService. |
| 266 | CCS_SVC_LOSTANDFOUND_7003_NO_MESSAGE_STORE_FOUND | No message store found for lost and found: service type <type>, name <name> | 30 | N/A |
| 267 | CCS_SVC_LOSTANDFOUND_7004_MESSAGE_STORE_FOUND | Message store found for lost and found service | 0 | N/A |
| 268 | CCS_SVC_REMOTESUBSCRIPTION_7010_SubscriptionSuccess | Remote Subscription from Node : +1 is successful with id = +2 | 10 | N/A |
| 269 | CCS_SVC_REMOTESUBSCRIPTION_7011_UnSubscriptionSuccess | Node : +1 , with id = +2 successfully unsubscribed | 10 | N/A |
| 270 | CCS_SVC_VIRTUALNODE_7012_QueueCreateFail | Queue : +1 could not be created using class : +2 for the Node : +3 | 40 | N/A |
| 271 | CCS_SVC_SUBSCRIPTION_7013_SendSubscription | Sending Remote Subscription to Main CCS Server | 20 | N/A |

| | | | | |
|---|---|---|---|---|
| 272 | CCS_SVC_SUBSCRIPTION_7014_SubscriptionSuccess | Subscription Successful with Main CCS Server , Id = +1 | 20 | N/A |
| 273 | CCS_SVC_SUBSCRIPTION_7015_SubscriptionFail | Remote Subscription Un-Successful with Main CCS Server, Returned : +1 | 40 | N/A |
| 274 | CCS_SVC_SUBSCRIPTION_7016_Unsubscribe | UnSubcribing from Main CCS Server | 10 | N/A |
| 275 | CCS_SVC_SUBSCRIPTION_7017_UnsubscribeSuccess | UnSubscribe successful from Main CCS Server | 10 | N/A |
| 276 | CCS_SVC_SUBSCRIPTION_7018_UnsubscribeFail | UnSubscribe unsuccessful with Main CCS Server, Returned : +1 | 40 | N/A |
| 277 | CCS_SVC_FACTORY_7019_CreationFailure | Failed to create +1 using +2: +3 | 40 | This message could be seen at server startup when the server is loading the different factory objects that are internal to the server. The message should indicate the corresponding factory object that it is failing to load. This event should not arise and if it does, indicates a serious internal problem. |
| 278 | CCS_SVC_TRANSMITTER_7020_TransmitFailure | Failed to transmit envelope id = +1: +2 | 40 | There is an error in transmitting a document from the (A)syncTransmitterService. The error could be due a misconfiguration of the corresponding service, or an error in the underlying transport mechanism (Sonic or HTTPS). |
| 279 | CCS_SVC_FORWARD_7021_DocumentForwarded | Document <documentname> from <sender> forwarded to <receiver> | 10 | N/A |

| | | | | |
|---|---|---|---|---|
| 280 | CCS_SVC_FORWARD_7022_ForwardingFailed | Document < documentname> from < sender> failed to forward to < receiver>: <reason> | 40 | N/A |
| 281 | CCS_SVC_PING_7023_PingSent | Ping document sent | 10 | N/A |
| 282 | CCS_SVC_PING_7024_PongReceived | Pong document received | 10 | N/A |
| 283 | CCS_SVC_VIRTUALNODE_7025_InitFailed | Initialization failed for node +1: +2 | 40 | N/A |
| 284 | CCS_COMM_SONIC_COMM_SERVICE_7026_XCBL_VERSION_TRANSFORMATION_OUT_FAILED | XCBLVersion transformation ’out’ failed, error: +1 | 40 | There was an error in transforming the envelope from one version of CBL to the other. Check if the transformation service is up and running and if it is then it is configured correctly. |
| 285 | CCS_SVC_SyncTransmitterService_7030_NotFound | Sync Transmitter Service not found in ServiceRegistry. Server unusable. | 40 | The SyncTransmitterService is not specified in the service-start.prop file for the server. Make sure that there is a specification for the SyncTransmitterService in the file. |
| 286 | CCS_SVC_SyncTransmitterService_7031_EnvelopeTransmitted | Envelope successfully transmitted from SyncTransmitterService | 10 | N/A |
| 287 | CCS_SVC_AsyncTransmitterService_7040_NotFound | Async Transmitter Service not found in ServiceRegistry. Server unusable. | 40 | N/A |
| 288 | CCS_SVC_AsyncTransmitterService_7041_EnvelopeTransmitted | Envelope successfully transmitted from AsyncTransmitterService | 10 | N/A |

| | | | | |
|---|---|---|---|---|
| 289 | CCS_SVC_TRANSMITTER_9000_ErrorForAnError | Got an Error for an Error document. EnvelopeId: +1. ReferenceId: +2. Exception: +3" | 40 | This event is generated when there is an error while transmitting an error document from the AsyncTransmitterService. Check the transmission settings and the underlying transport (HTTPS or Sonic) settings for the AsyncTransmitterService. |
| 290 | CCS_SVC_TRANSMITTER_9050_ErrorForAnErrorIgnored | Cannot deliver and error for an error. Error document ignored. EnvelopeId: +1. ReferenceId: +2. Exception: +3 | 40 | This event is usually preceded by the previous one and just indicates that in case when there is an error in transmitting an error document for the AsyncTransmitterService, the platform drops the error document. |
| 291 | CCS_SVC_TRANSMITTER_9051_EnvelopeDroppedBecauseMatchedExcludeAddress | +1: Envelope dropped because excludeAddress = +2 | 10 | This event is generated when the (A)syncTransmitterService receives an envelope that was sent from an address that this server is configured to reject. |
| 289 | CCS_UTL_URI_1_Test | A sample utility URI - event error message  +1 +2. | 40 | N/A |

# B Advanced Security

This appendix covers advanced security topics. It discusses optional Client-side Trusted CA Validation, presents a table of all pre-installed Trusted CA roots, and contains information on Trading Partner passwords.

## Client-side Trusted CA Validation

### CA Trust Policies on the HTTPS Client

When HTTPS client applications (such as XPC 4.1, the Async Tranmission Service, Sync Tranmission Service) make connections to target HTTPS Servers, you can use an optional security policy to verify that the target HTTPS Server is identifying itself with a SSL Server certificate that was issued by a trusted third party CA.

By default, the HTTPS client will accept any server certificate CA to be trusted. Further details are discussed below.

Enforcing CA trust policies on the HTTPS client-side can further improve the security of the HTTPS client applications. This is because it only allows connections to servers that use an SSL certificate issued by a third party CA that is trusted by the HTTPS client application.

### Configuring CA Trust Policies for HTTPS Client

For XPC HTTPS client applications, the setting of this CA trust policy option is defined in <install:root>/runtime/servers/<servername>/config/startup/security.prop as follows:

```
security.httpsServerTrustedRoot.required=false
```

this is default value.

To enable this security policy option, we can configure this property as:

```
security.httpsServerTrustedRoot.required=true
```

all target server CAs must be trusted

If you choose this option, you must determine if your target HTTPS Server(s) will be configured with a SSL Server certificate issued by a trusted CA. For example, for XPC Servers running at a BuySite or at an NMM site, they will only connect back to MarketSite and hence only MarketSite's Server CA needs to be trusted. However, at a MarketSite, all CAs for all target HTTPS Servers must be configured to be trusted.

## Default HTTPS Client-side Behavior

The default is set to false because of configuration complexity of "registering" all target HTTPS Servers CAs to be trusted. However, the HTTPS client applications will always validate that the target server certificate chain signatures are valid and certificates are not expired.

## Managing CA Trust Policies of Target HTTPS Server

If this option is enabled, your XPC operator must verify that the issuing CA of the target HTTPS Server certificate is trusted. If the CA of the target server is not trusted by the XPC installation and this CA Trust Policy is enabled, then you must complete the following steps:

**1.** Acquire CA Root of Target Server

The operator must acquire that CA root from the target site. The CA certificate of the target server may be acquired via an e-mail from target sites.

**2.** Trust the new CA Root

Use the Certificate Manager tool to import the CA root certificate that needs to be trusted by that HTTPS client domain.

## Detecting Un-Trusted CA Validation

When the CA root certificate is not trusted, you will get the following run-time error message:

**HTTPS Client application has detected a server certificate by an untrusted CA Root, therefore client connection failed.**

Additionally, an event is logged that the HTTPS client has refused to connect to the target HTTPS Server because the CA of the target server is not trusted. An event of this form will be logged in the event log file:

```
<EVENT><TIME>November 15, 2000 9:38:33 PM GMT-08:00</
TIME><MILLIS>974353113473</
MILLIS><KEY>CCS_SEC_HTTPSCLIENT_6065_UnTrustedServerCARootAndCl
ientConnectionFailed</KEY><TEXT>: HTTPS Client application has
detected a server certificate by an untrusted CA Root, therefore
client connection failed: subject:
C=US,ST=California,OU=MarketSiteOps,O=MarketSitePartnerCompany,
L=Mountain View,EMail=admin@yourmarketsite.com,CN=rsa-user ,
issuer: CN=Commerce One (Local) Self-signed CA,OU=Market Site -
Server Security,O=Commerce One Certificate Server -
CA,L=Mountain View,C=USA</TEXT><CAT>CCS_SEC</
CAT><SUBCAT>SECURITY</SUBCAT><NUMID>6065</NUMID><SEV>40</
SEV><TYPE>STATUS</TYPE><LANG>en</
LANG><PARM>C=US,ST=California,OU=MarketSiteOps,O=MarketSitePart
nerCompany,L=Mountain
View,EMail=admin@yourmarketsite.com,CN=rsa-user</
PARM><PARM>CN=Commerce One (Local) Self-signed CA,OU=Market
Site - Server Security,O=Commerce One Certificate Server -
CA,L=Mountain View,C=USA</PARM></EVENT>
```

## Pre-installed Trusted CA Root Certificates

MarketSite HTTPS and SonicMQ Broker have a SSL Server supporting Trusted CA Roots for the following Certificate Authorities: Baltimore, Entrust, Thawte and Verisign. Details of these Trusted CAs are provided in the following table.

| Third Party CA Name | Friendly Name | Trusted CA Root DN |
|---|---|---|
| Baltimore/ GTE Cybertrust | BTCTRoot_12-20-00 | CN=Baltimore CyberTrust Root, OU=CyberTrust,<br>O=Baltimore, C=IE |
| Entrust | Entrust2048CA | CN=Entrust.net Certification Authority (2048), OU=(c) 1999<br>Entrust.net Limited, OU=www.entrust.net/CPS_2048 incorp. by ref. (limits liab.), O=Entrust.net |
| Entrust | EntrustGss164 | CN=Entrust.net Secure Server Certification Authority,<br>OU=(c) 2000 Entrust.net Limited, OU=www.entrust.net/SSL_CPS incorp. by ref. (limits liab.),<br>O=Entrust.net |
| Entrust | EntrustServerCA | CN=Entrust.net Secure Server Certification Authority, OU=(c) 1999<br>Entrust.net Limited, OU=www.entrust.net/CPS incorp. by ref. (limits liab.), O=Entrust.net, C=US |
| Baltimore/ GTE Cybertrust | GTECTGlobalRoot_12-20-00 | CN=GTE CyberTrust Global Root, OU=GTE CyberTrust Solutions, Inc.,<br>O=GTE Corporation, C=US |
| Baltimore/ GTE Cybertrust | GTECTRoot_12-20-00 | CN=GTE CyberTrust Root, O=GTE Corporation, C=US |
| Thawte | ThawtePremiumServerCA | EMail=premium-server@thawte.com,CN=Thawte Premium Server CA,<br>OU=Certification Services Division, O=Thawte Consulting cc, L=Cape Town,ST=Western Cape, C=ZA |

| Third Party CA Name | Friendly Name | Trusted CA Root DN |
|---|---|---|
| Thawte | ThawteServerCA | EMail=server-certs@thawte.com,CN=Thawte Server<br>CA,OU=Certification Services Division,O=Thawte Consulting cc,L=Cape Town,ST=Western Cape,C=ZA |
| Verisign | VerisignC1G2 | OU=VeriSign Trust Network,OU=(c) 1998 VeriSign, Inc. - For<br>authorized use only,OU=Class 1 Public Primary Certification Authority - G2,O=VeriSign, Inc.,C=US |
| Verisign | VerisignC1G3 | CN=VeriSign Class 1 Public Primary Certification Authority -<br>G3,OU=(c) 1999 VeriSign, Inc. - For authorized use only,OU=VeriSign Trust Network,O=VeriSign, Inc.,C=US |
| Verisign | VerisignC2G2 | OU=VeriSign Trust Network,OU=(c) 1998 VeriSign, Inc. - For<br>authorized use only,OU=Class 2 Public Primary Certification Authority - G2,O=VeriSign, Inc.,C=US |
| Verisign | VerisignC2G3 | CN=VeriSign Class 2 Public Primary Certification Authority -<br>G3,OU=(c) 1999 VeriSign, Inc. - For authorized use only,OU=VeriSign Trust Network,O=VeriSign, Inc.,C=US |
| Verisign | VerisignC3G2 | OU=VeriSign Trust Network,OU=(c) 1998 VeriSign, Inc. - For<br>authorized use only,OU=Class 3 Public Primary Certification Authority - G2,O=VeriSign, Inc.,C=US |
| Verisign | VerisignC3G3 | CN=VeriSign Class 3 Public Primary Certification Authority -<br>G3,OU=(c) 1999 VeriSign, Inc. - For authorized use only,OU=VeriSign Trust Network,O=VeriSign, Inc.,C=US |
| Verisign | VeriSignC4G2 | OU=VeriSign Trust Network,OU=(c) 1998 VeriSign, Inc. - For<br>authorized use only,OU=Class 4 Public Primary Certification Authority - G2,O=VeriSign, Inc.,C=US |

| Third Party CA Name | Friendly Name | Trusted CA Root DN |
|---|---|---|
| Verisign | VerisignC4G3 | CN=VeriSign Class 4 Public Primary Certification Authority -<br>G3,OU=(c) 1999 VeriSign, Inc. - For authorized use only,OU=VeriSign Trust Network,O=VeriSign, Inc.,C=US |
| Verisign | VeriSignIntlRoot | OU=www.verisign.com/CPS Incorp.by Ref. LIABILITY LTD.(c)97<br>VeriSign,OU=VeriSign International Server CA - Class 3,OU=VeriSign, Inc.,O=VeriSign Trust Network |
| Verisign | VeriSignPubC1 | OU=Class 1 Public Primary Certification Authority,O=VeriSign,<br>Inc.,C=US |
| Verisign | VeriSignPubC2 | OU=Class 2 Public Primary Certification Authority,O=VeriSign,<br>Inc.,C=US |
| Verisign | VeriSignPubC3 | OU=Class 3 Public Primary Certification Authority,O=VeriSign,<br>Inc.,C=US |
| Verisign | VerisignRSACA | OU=Secure Server Certification Authority,O=RSA Data Security,<br>Inc.,C=US |

## Trading Partner Password Authentication Protocol

The Trading Partner client, such as an EBD client or other XPC client using JMS/SonicMQ or HTTPS protocol, sends the authentication data as part of SSL encrypted connection. The authentication data contains three fields that are included in the HTTP/S header or JMS/SonicMQ message header.

The specific authentication fields are described below:

| Authentication Data | Description | HTTP/S Header Field | JMS/SSL Header Field |
|---|---|---|---|
| User ID | The registered userid of the sender who is a member of a registered trading partner at MarketSite; this is typically the friendly name or shortname of the Trading Partner. | RFC 2617Standard HTTP Basic Authentication {UserId/ Password}Header Data. | Application-level JMS/SonicMQ header key: "BasicUser" |
| Password | The password of the member; this is typically the Password of Trading Partner organization since we support only one password per Trading Partner.<br>*Note:* The minimum character length of a password is 8 characters. | RFC 2617 Standard HTTP Basic Authentication {UserId/ Password}Header data. | Application-level JMS/SonicMQ header key: "BasicPassword |
| MarketParticipant ID (MPID) | A Globally unique ID of the trading partner organization that is issued at registration time to the Buyer or Supplier trading organization registered at MarketSite. MPIDs are immutable across time and space and are issued to identify a Trading Partner at authentication time.<br>*Note*: MPID is IETF standard compliant UUIDs that are generated as 16-bytes UUIDs, but stored/transmitted in their 36-character string representation format. | Application-level HTTP header key: "marketparticipantid" | Application-level JMS/SonicMQ header key: "marketparticipantid" |

## Firewall and Network Requirements

XPC 4.0 supports two transfer or transport protocols, HTTP/S and JMS-based SonicMQ over Secure Sockets Layer (SSL):

- Inbound/Outbound HTTPS traffic from the internet is always to/from MarketSite Portal RouterMaximum document size for https is 4 MB. You must have https installed to use it with XPC.

- Inbound/Outbound JMS/Sonic MQ over SSL traffic is always to/from MarketSite Sonic MQ Broker. Maximum document size for SonicMQ is 10 MB. SonicMQ is automatically installed during XPC installation.

In planning for Local Area Network, note that:

- The XPC server and its SonicMQ Broker must be installed on the same NT machine in an internal protected network, that is, behind the firewall.
- In addition to having the XPC Server in a protected network, Commerce One strongly recommends that passwords stored in application property files and the SoniCMQ Broker be protected by encryption.
- Proper Microsoft NT Lock Down procedures are strongly recommended. Refer to Microsoft Secure NT documentation in http://www.microsoft.com/ntserver/security/exec/overview/Secure_NTInstall.asp.

All Secure Sockets Layer (SSL) traffic initiated by the XPC Server application, whether SonicMQ or HTTPS, uses port 433. Configure:

- SSL Proxy properties for XPC HTTPS client in Transmitter client.prop file in <install:root>/etc/config.
- XPC SonicMQ Clients in SonicMQ broker.ini property file

If you are using the Proxy option, the firewall requirements are as follows.

**For the Forward Proxy option**, XPC applications can optionally connect to MarketSite through a local forward (SSL) proxy over both HTTPS and SonicMQ/SSL Transport.Commerce One supports both standard HTTPS and SSL Proxies. It is recommended that the Proxy Server address can be resolved by the local DNS available to the XPC application. If local DNS cannot resolve the proxy address, then configure the explicit IP address of the proxy Server in the XPC application, in the client.prop file or broker.ini file.

**For complete information on Reverse Proxy, see Appendix C, Reverse Proxy Support on page C-1.**

**For the Reverse Proxy option**, XPC 4.0 Server has been tested with Netscape Reverse Proxy Server, which supports standard SSL v3 and HTTP 1.1 Protocol, but only for XPC HTTPS Server applications.  Commerce One recommends that:

- Inbound, internet connections over HTTPS from MarketSite are processed by the Netscape Reverse Proxy Server. Configure the Reverse Proxy Server to require SSL client certificate-based authentication of MarketSite connections.

- To forward the MarketSite HTTPS message to the XPC Server target "/xcc" Servlet, configure the XPC Server to support authentication of incoming clients and the Reverse Proxy Server to make connections to its internal XPC Server using a Reverse Proxy SSL Certificate.  Or, optionally allow anonymous HTTPS connections.

## Using Forward and Reverse Proxy

Outbound (forward) http and https traffic headed to MarketSite can be routed through a proxy server located in the demilitarized zone (DMZ). Outbound communications through a proxy server provides support for any http/https based proxy server that follows the standard HTTP1.1 proxy connection protocol.

Similarly, inbound connection to MarketSite through a reverse proxy in the DMZ is supported. **For complete information on Reverse Proxy, see Appendix C, Reverse Proxy Support on page C-1.**

You enter the Proxy Host and Proxy Port settings on the Setup UI. The settings can be changed anytime after initial installation.

Whether you are using a standalone transmitter or the Transmitter Service, you enter the following settings into the client.prop or default.prop file for either the proxyHost or the https.proxyHost as follows:

| Parameter | Description |
|---|---|
| proxyHost | Name of ProxyServer in HTTP mode |
| proxyPort | Port of ProxyServer in HTTP mode |
| https.proxyHost | Name of ProxyServer in HTTPS mode |
| https.proxyPort | Port of ProxyServer in HTTPS mode |

Here are example lines that enable the Proxy Server:

```
# Settings for Proxy Server
proxySet=true
proxyHost=<IP or DNS name of your proxy server>
proxyPort=<port number for HTTP connections for your
proxy server>
https.proxyHost=<IP or DNS name of your proxy server>
https.proxyPort=<port number for HTTPS connections for
your proxy server>
```

To disable the Proxy Server, change the first line to:

```
proxySet=false
```

Make these settings in any/all of three files:

```
<install root>/bin/client/prop
<install root>/runtime/daemon/config/service/
DocumentService.TransmitterService.TransmitterService.1_0/default.prop
<install root>/runtime/servers/defaultserver/config/service/
DocumentService.TransmitterService.TransmitterService.1_0/default.prop
```

# C  Reverse Proxy Support

## In This Appendix

This appendix describes the communication between a MarketSite Portal Router and a Trading Partner XPC using a Netscape Reverse Proxy Server. This configuration uses the Verisign Global certificate authority (CA) for the Secure Socket Layer (SSL) and client authentication requests. For MarketSite 4.1, this is the supported mechanism for reverse proxy server support; Netscape Proxy Server 3.52 is the only officially supported proxy server.

This appendix describes this officially supported topology for reverse proxy servers, offers reasons why this topology is supported and lists the steps necessary to achieve it.

Detailed instructions for setting up and configuring the security needed to perform SSL encryption using HTTPS protocol with the Reverse Proxy Server are provided. Configuration error messages and recommended actions to correct those errors are also included.

For the purposes of this document, a security lab environment is used to demonstrate the communication between the two components over a Reverse Proxy Server. The server names are for illustration purposes only.

***Note*** .......... This document will not describe how to configure a MarketSite Portal Router or a Trading Partner XPC.  To configure those components, consult the MarketSite and the XPC installation and administration guides.

The following table offers an overview of the tasks needed to correctly configure the Netscape Reverse Proxy Server to work with the MarketSite Portal Router and Trading Partner XPC servers.Each of these tasks are discussed step by step in this document.

| ✓ | Task | Description |
|---|---|---|
|  | 1 | Setup Netscape Reverse Proxy Server |
|  | 2 | Configure Netscape Reverse Proxy Server |
|  | 3 | Enable SSL Encryption on the Proxy Server, ensuring that the entire CA certificate chain is installed. |
|  | 4 | Install Server Certificate on the Trading Partner XPC Server |
|  | 5 | Test Reverse Proxy Server |
|  | 6 | Enable Client Authentication |

## Systems Overview

The figure below shows the networking topology between the MarketSite Portal Router 4.1, Trading Partner XPC 4.1, and Netscape Reverse Proxy Server systems hardware and software:

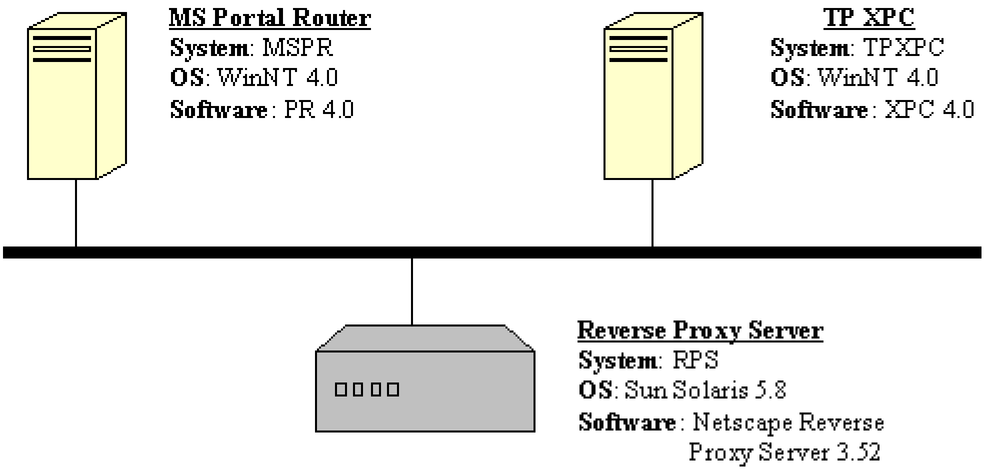


*Figure 1 Network Topology*

## Understanding the SSL handshake

Following are the general steps of SSL communication:

1. The client sends a request to connect to a secure server (https).
2. The server sends its own pre-signed certificate to the client.
3. The client determines if the certificate was issued by a CA it trusts. If not, the client cancels the connection. Otherwise, it proceeds to the next step.
4. The client compares the information in the certificate with the information it received from the server (i.e. domain name, public key). If the information matches, the client accepts the site as authenticated.
5. The client then tells the server what ciphers or type of encryption keys it can communicate with.
6. The server chooses the strongest common cipher and informs the client.
7. Using that cipher, the client generates a session key and encrypts it using the server's public key.
8. The client sends the encrypted session key to the server.
9. The server receives the encrypted session key and decrypts it using its private key.
10. The client and the server use the session key to encrypt and decrypt the data they send to each other.

## Relationship of the Reverse Proxy Server and a MarketSite Portal Router and Trading Partner XPC

The communication between the MarketSite Portal Router and the Proxy Server is HTTPS and the communication between the Proxy Server and the Trading Partner XPC server is HTTPS.

In this example, the Trading Partner XPC client in the Portal initiates the connection request to the reverse proxy server. Upon receiving the request, the Proxy server acts as a client and sends the request to the Trading Partner XPC server. Therefore, a trust server certificate must be installed on both the Proxy Server and the Trading Partner XPC server.

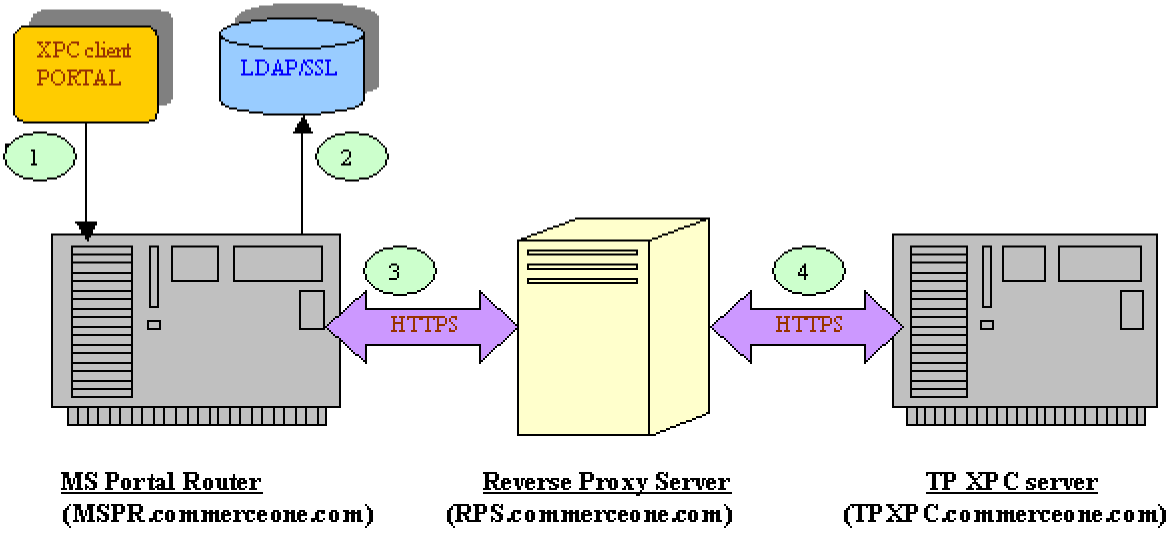


*Figure 2 Connectivity and protocol*

The following steps occur:

1. the Trading Partner XPC client sends a request to the Trading Partner XPC server.
2. The MarketSite Portal Router searches in the LDAP to find the destination address. The destination Trading Partner URL should be set to the proxy server address.
3. The MarketSite Portal Router finds the Proxy Server and sends the request.
4. The Proxy Server uses the regular mapping address and sends the client's request through a specified passage to the Trading Partner XPC server. The Trading Partner XPC server passes the result through the passage back to the Proxy Server. The Proxy Server then sends the retrieved information to the Trading Partner XPC client.

## Netscape Reverse Proxy Server Setup

The reverse proxy setup requires both regular mappings and reverse mappings. Regular mappings re-map the requested URL to the actual origin server. Reverse mappings re-map the location header coming back from the destination server to the proxy server. For example, if the client requests a document that has been moved or does not exist, the web content server will return an error message to the client. In that returned message, the web content server adds an HTTP header that lists a URL where the moved file is located. In order to maintain the privacy of the internal web content server, the proxy can redirect the URL using a reverse mapping.

As illustrated in Figure 2, the Proxy Server needs to know the location of the destination server. In this example, the Trading Partner XPC Server listening at port 4433 on the TPXPC machine is the destination. Therefore, the table below shows the regular mappings and the reverse mappings.

| | **Regular Mapping** | **Reverse Mapping** |
|---|---|---|
| **Source Prefix** | https://RPS.commerceone.com:8090 | https://TPXPC.commerceone.com:4433/xcc |
| **Source Destination** | https://TPXPC.commerceone.com:4433/xcc | https://RPS.commerceone.com:8090 |

Additional default regular mapping created automatically by the Proxy Server is shown in the table below.

| | **Regular Mapping** |
|---|---|
| **Source Prefix** | / |
| **Source Destination** | https://TPXPC.commerceone.com:4433/xcc |

To configure a Netscape Reverse Proxy server, complete the following steps:

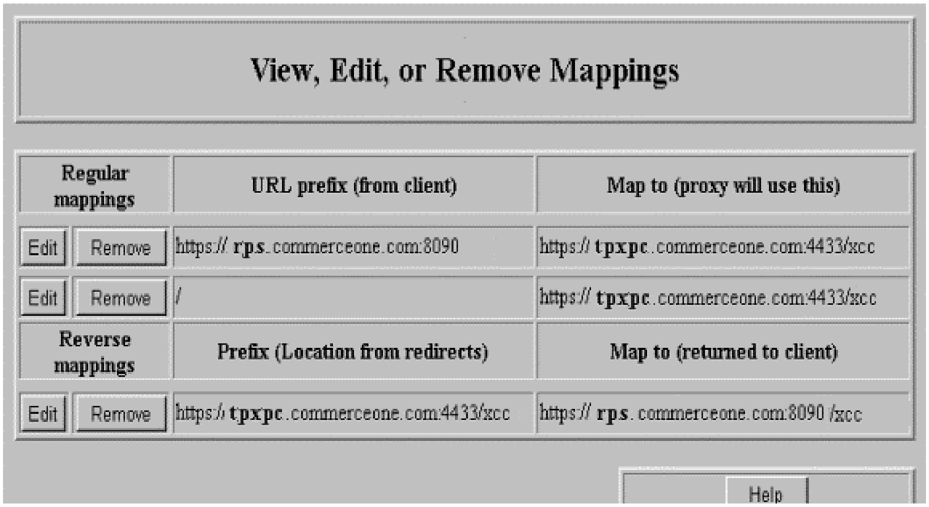
**1.** Run Server Manager.

**2.** Select the URL tab.

**3.** Click **Create Mappings** on the left hand bar.

**4.** On the URL mappings screen, click **Regular** for regular mappings and **Reverse** for reverse mappings.

The figure below shows the Reverse Proxy and Trading Partner XPC server configuration.



View, Edit, or Remove Mappings

| Regular mappings | URL prefix (from client) | Map to (proxy will use this) |
|---|---|---|
| Edit Remove | https:// **rps**.commerceone.com:8090 | https:// **tpxpc**.commerceone.com:4433/xcc |
| Edit Remove | / | https:// **tpxpc**.commerceone.com:4433/xcc |
| **Reverse mappings** | **Prefix (Location from redirects)** | **Map to (returned to client)** |
| Edit Remove | https:/ **tpxpc**.commerceone.com:4433/xcc | https:// **rps**. commerceone. com:8090 /xcc |

*Figure 3 Reverse Proxy & Trading Partner XPC server configuration*

# Install Server Certificates

As discussed earlier, the connection between the Portal Router and the Proxy Server is HTTPS; the Portal Router machine is the SSL client and the Proxy Server is the SSL server. Therefore, a server digital certificate needs to be installed on the Proxy Server.

The same HTTPS protocol applies for the connection between the Proxy Server (SSL client) and the Trading Partner XPC (SSL server), so a server digital certificate needs to be installed on the Trading Partner XPC server as well.

## Enabling SSL encryption on the Proxy Server

To enable SSL on the Proxy Server, the following steps must be completed. Each step is described in detail.

1. Generate server key-pair file (public and private keys).
2. Generate a certificate request (PKCS #10).
3. Request a certificate from a Certificate Authority (CA).
4. Install the certificate received from the CA.
5. Install the certificate chain.

6. Enable SSL encryption.

### Step 1: Generate server key-pair file

To generate the server key-pair file, run the **sec-key** tool from a Sun window. Assume the server root directory is **/usr/netscape/suitespot**

From the Unix command line type the following:

**/usr/netscape/suitespot/bin/admin/admin/bin/sec-key**

When prompted, type an alias name for the new key-pair file. The default key file will be stored under directory **/usr/netscape/suitespot/alias/<alias name>-key.db**

When prompted, type any random keys at different speeds until the meter is full. The time between each of your keystrokes will be used to generate a random number for the unique key-pair file.

When prompted, type a password and confirm. Make sure you memorize this password, as it is used to open the key-pair file during the secure proxy server start up.

### Step 2: Generate a certificate request

After a key-pair file is created, you can generate a certificate request from the **Server Manager** form. Go to:

**Server Manager | Keys and Certificates | Request Certificate.**

Provide all necessary information about the system and make sure the **Alias** field contains the alias name created in Step 1. When you are finished, a base64 certificate request format is generated and saved in a local directory. The certificate request looks similar to the following:

-----BEGIN NEW CERTIFICATE REQUEST-----

MIIB6TCCAVICAQAwgaoxIDAeBgNVBAMTF2R0cnVvbmcuY29tbWVyY2Vvb
mUuY29tMarketSiteswKQYJKoZIhvcNAQkBFhxkYXZpZC50cnVvbmdAY29tbW
VyY2VvbmUuY29tMRQw45u+yERF+yEUuRAVpaF2MlG3bVikU4+c9+6YPkAuo
QbyaXZ0YToMk0j1AEV33EhG5FniLi2VW/
U91reH1lstuGSHROtlYGlxGWnLVidLwL93/
ol24ocR7CUZW5hOgbqZFDf+4Moqm1SXOM7H7w==

-----END NEW CERTIFICATE REQUEST-----

## Step 3: Request a certificate from a CA

Each Certificate Authority (CA) will have its own method of fulfilling certificate requests. The example discussed in this document uses Verisign CA. Verisign provides a certificate request wizard interface to help the user generate a signed certificate. The certificate request wizard requires that the user cut and paste the entire contents of the certificate request file created in Step 2 into the **Enter CSR Information** text box. That information is then sent to the CA. The certificate signed by the CA will be sent to user through email.

## Step 4: Install server certificate from CA

After you receive the CA certificate, go to:

**Server Manager | Keys and Certificates | Install Certificate.**

In the install certificate screen, click **This Server**, click **Message Text**, and paste the certificate to the message text area. Make sure the alias name matches the certificate request alias name.

***Note*** .......... If the certificate is in PEM format, you can use an Internet Explorer browser to convert to Base64 format. To convert to Base64 format, import the PEM certificate to the Internet Explorer browser, then export it in Base64 format.

## Step 5: Install certificate chain

In order for the SSL handshake to work properly with the MarketSite Portal Router, the proxy server must install a full certificate chain. For example, on RPS proxy server machine, the table below shows the installed certificates.

| | Subject DN Name | Issuer DN Name |
|---|---|---|
| (1) Server Certificate | CN=RPS.commerceone.com<br>OU=VeriSign International Server CA - Class 3<br>O=VeriSign Trust Network | OU=www.verisign.com/CPS Incorp.by.Ref.LIABILITY LTD.(c)97 VeriSign<br>OU=VeriSign International Server CA - Class 3<br>OU=VeriSign, Inc.<br>O=VeriSign Trust Network |
| (2) Intermediate Certificate | OU=www.verisign.com/CPS Incorp.by.Ref.LIABILITY LTD.(c)97 VeriSign<br>OU=VeriSign International Server CA - Class 3<br>OU=VeriSign, Inc.<br>O=VeriSign Trust Network | OU=Class 3 Public Primary Certification Authority<br>O=VeriSign, Inc.<br>C=US |
| (3) Root Certificate | OU=Class 3 Public Primary Certification Authority<br>O=VeriSign, Inc.<br>C=US | OU=Class 3 Public Primary Certification Authority<br>O=VeriSign, Inc.<br>C=US |

During the installation of certificates on the Proxy Server, please note that:

- Click **This Server** button for the server certificate labeled (1) above.
- Click **Server Certificate Chain** for the intermediate certificate labeled (2) above.
- Click **Trusted Certificate Authority** (CA) for the root certificate labeled (3) above.

If the proxy server does not have either the intermediate or root certificate installed, during an SSL handshake the MarketSite Portal Router will generate an error exception "Peer certificate chain is not verifiable" and terminate the connection.

***Warning!*** There is currently a limitation in the HTTPS client certificate processing logic in a MarketSite Portal Router. The SSL client code expects an SSL server to always send a complete certificate chain as part of the SSL handshake. However, some proxy servers only send the single server certificate. Since the SSL current code can not process this correctly, the handshake will fail. On a Netscape Proxy Server, this will not be an issue if the entire certificate chain is installed on the proxy server.

### Enable SSL encryption

After the server certificate is installed, go to the **Server Manager** form and select the Reverse Proxy Server where you want to enable SSL. Click **Encryption On/Off** in the left hand panel. In the **Encryption on/off** screen, click on and make sure the port number and alias name are correct.

***Note*** .......... The reverse proxy server needs to be restarted to take in the new value. During server start up, it will ask for the password to open the key-pair file. Without the password, the server won't start.

## Installing server certificate on the Trading Partner XPC Server

To install the server certificate on the Trading Partner XPC server, perform the following steps, each of which is discussed individually:

1. Generate a certificate request (PKCS #10)
2. Request a certificate from a Certificate Authority (CA)
3. Install the certificate that the CA returns

### Step 1: Generate a certificate request

Generating a certificate request for the Trading Partner XPC server requires that you run the Certificate Manager tool from the Setup UI application. Please refer to XPC security documentation on how to create a certificate request.

### Step 2: Request a certificate from a Certificate Authority (CA)

Each Certificate Authority (CA) will have its own method of fulfilling certificate requests. The example discussed in this document uses Verisign CA. Verisign provides a certificate request wizard interface to help the user generate a signed certificate. The certificate request wizard requires that the user cut and paste the entire contents of the certificate request file created in Step 2 into the **Enter CSR Information** text box. That information is then sent to the CA. The certificate signed by the CA will be sent to user through email.

### Step 3: Install the certificate that the CA returns

Using the Certificate Manager tool as described in the XPC documentation, you can install the certificate to the server store. Go to the **Configure Server Entries** tab in the Certificate Manager tool, highlight the certificate entry, then click **Set Active**.

***Note*** .......... The Trading Partner XPC server must be restarted in order for it to accept the new value.

# Ping Test Reverse Proxy Server

Before we can ping test the reverse proxy server, the Portal Router LDAP (MSPR machine in the example) must be configured to point to the Proxy Server (RPS in the example). To do so, open the LDAP directory service on the Portal Router. Under the **Directory** tab, expand the following directory:

**Commerceone/CoreTrading PartnerProfiles/com/commerceone/marketsite/MarketParticipants/pingtest/incomingtransmission/&/https**

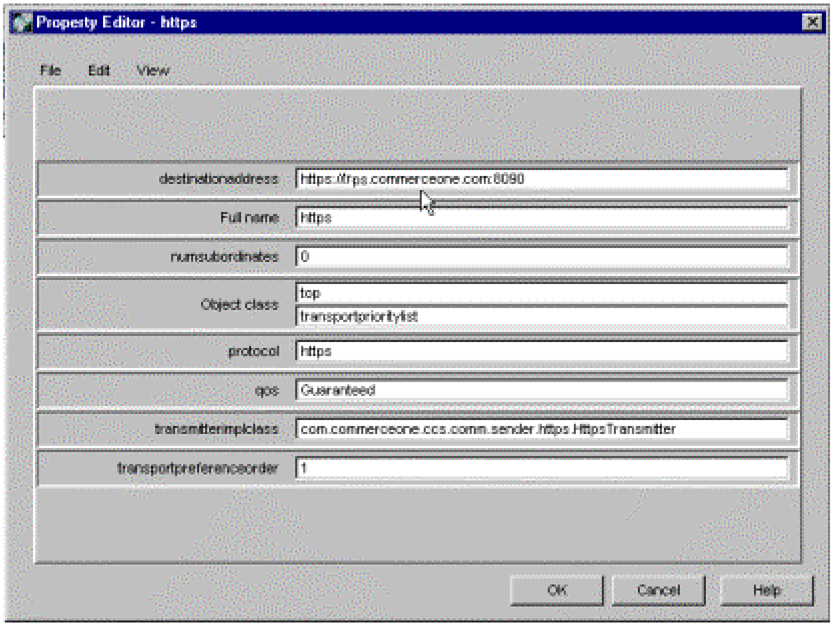
In the **Property Editor - https** form, configure the **destinationaddress** to the proxy server host name and port number, for example:

https://RPS.commerceone.com:8090

and make sure the protocol field shows https. The figure below shows this directory service on the Portal Router machine.

***Note*** .......... The Reverse Proxy Server is listening at port 8090.

To run the ping client in the Portal, use the **<XPCRoot>/bin/pingMarketSite** script and make appropriate change for the parameter in the script.



| | |
|---|---|
| destinationaddress | https://trps.commerceone.com:8090 |
| Full name | https |
| numsubordinates | 0 |
| Object class | top<br>transportprioritylist |
| protocol | https |
| qos | Guaranteed |
| transmitterimplclass | com.commerceone.ccs.comm.sender.https.HttpsTransmitter |
| transportpreferenceorder | 1 |

*Figure 4 Property Editor on Portal Router*

# Enable client authentication

In addition to secure communication protocol (SSL), the Proxy Server can have client authentication enabled to verify the MarketSite Portal Router identity. The Trading Partner XPC server can have client authentication enabled to verify the Proxy Server identity.

## Understanding client authentication handshake

Following are the general steps of client authentication:

1. A client requests a connection to the server (Proxy Server)
2. The server sends back the certificate request.
3. The client signs but does not encrypt its certificate and sends it over to the server.
4. The server uses the client’s public key included in the certificate file to verify that the owner of the certificate is the same one who signed it (verify signature).

5. The server then tries to match the CA to a trusted CA. If the client's CA is not listed as a trusted CA, the server will terminate the transaction. Otherwise, the server will fulfill the transaction.

### Enable Proxy Server client authentication

Before you enable proxy server client authentication, make sure the client's CA (MSPR) certificate is installed on the proxy server (RPS) as a Trusted Client CA. Please refer to the information provided earlier in this document on how to install a certificate as Trusted Client CA.

After the trusted client CA certificate installed, client authentication can be turned on using the Server Manager. Go to the **Server Manager** form and select the Reverse Proxy Server where you wish to enable client authentication. Click **Encryption Preferences** from the left hand panel then click **Yes** for **Require Client Certificates**.

***Note***.......... The Proxy Server must be restarted to take the new value.

### Enable Trading Partner XPC client authentication

To enable Trading Partner XPC client authentication, make sure the client's SSL (RPS) certificate is installed on the Trading Partner XPC server store (TPXPC). To turn on client authentication, under Certificate Manager tool, click Configure Trusted Client tab then click Enable Client Authentication.

***Note***.......... The Trading Partner XPC server needs to be restarted to take the new value.

## Error messages

The following table contains error messages that could be encountered during reverse proxy set up, and possible reasons for those errors:

| Error Messages | Reasons |
|---|---|
| *Peer certificate chain is not verifiable* appears in the log on MarketSite Portal Router. | Server doesn't have full certificate chain installed |
| *Exception: Error while silently connecting: Alert Fatal: bad certificate* appears in the log on MarketSite Portal Router | Client authenticate enable/ Server has not trusted client's certificate. Client certificate chain needs to install on the server trust folder. |

| Error Messages | Reasons |
|---|---|
| *The security library has experienced a database error. You probably will not be able to connect to this site securely* appears in the Proxy Server error log. | Client’s CA trusted certificate installed on the server is expired.<br>**Note:** Most embedded CA certificates installed on the proxy server 3.52 are expired. You need to renew the certificate. |
| *Proxy server is unable to locate the server <Hostname>. The server does not have a DNS entry. Check the server name in the Location URL and try again* appears in the Proxy Server error log. | Wrong spelling of the server name. |
| *Proxy server’s network connection was refused by the server: TPXPC.commerceone.com:4433. The server may not be accepting connections or may be busy. Try connecting again later* appears in the Proxy Server error log. | Regular and reverse mappings are set incorrectly. |
| *Proxy retrieve failed: The certificate issuer for this server is not recognized by Netscape. The security certificate may or may not be valid. Netscape refuses to connect to this server* appears in the Proxy Server error log. | The wrong CA certificate is installed on the server. There is a mismatch of the CA certificate. |
| *Proxy retrieve failed: The server’s certificate has an invalid signature. You will not be able to connect to this site securely* appears in the Proxy Server error log. | Destination server has the wrong server certificate installed and the Proxy Server doesn’t trust that certificate. Replace the certificate on the Trading Partner XPC server with a Verisign Global certificate trusted by the Proxy Server. |

# D Property Files

This appendix describes how property files are used in XPC 4.1. Only properties related to XPC are listed. It is highly recommended that the properties should not be changed directly. Instead, tools such as **Configure XPC**, **XPC Manager**, or **Certificate Manager** should be used to make any change to the properties.

*Note* .......... **Configure XPC** and **Certificate Manager** are documented in this manual and **XPC Manager** is documented in the *XPC Developer Guide and API Reference*.

Key property files are listed in this table. Locations for these property files vary and are listed throughout this appendix. You can edit properties that are highlighted by changing them on the Configure XPC window, as described in Configuring XPC on page 2-8 and Configuring Additional Options on page 4-5.

| **Property File** | **Description** |
|---|---|
| http-runner.prop | Holds some basic information including the http port and the debug level information; also indicates whether the server is run securely. |
| https-server.prop | Holds the https port and security information. |
| security.prop | Security information needed by the server. |
| server-start.prop | Information used by the server at startup time. |
| service-start.prop | Information on each of the services to be run on this server. |

| Property File | Description |
|---|---|
| default.prop | Each service has its own property file, usually named default.prop. |
| client.prop | Client property file for the client software, usually named client.prop. |

# Server Configuration Files

The initial XPC server configuration is done when you install XPC. After you install, use tools such as **Configure XPC, XPC Manager,** and **Certificate Manager**. The properties in the server files set up the port numbers and file locations, specify services to run, and give code locations.

Property files are located in the runtime directory installation for each server and the daemon server as shown:

```
<install:root>\runtime\daemon\config\startup
<install:root>\runtime\servers\<ServerName>\config\startup
```

where:

```
<install:root> refers to the XPC root, which is
c:\commerceone\ by default.
<ServerName> refers to the XPC server, which is
defaultserver by default.
```

## http-runner.prop

This is the smallest property file. It holds initial properties such as the unsecure http port and the security switch for the server.

| Properties | Value | Description |
|---|---|---|
| org.w3c.jigsaw.port | Any available port<br>Default is 8008 | Port opened for the http connection, even if the server is run securely. So the port should haven’t been used. Do not change this property. |

| | | |
|---|---|---|
| ccs.server.security | true/false<br>Default is true | If set to true, the server will also read https-server.prop and security.prop, start an https connection, for the port specified in the org.w3c.jigsaw.port of https-server.prop file and the server is designated a secure server. Do not change this property. |
| ccs.server.debug.level | 0-6<br>where:<br>0=debug, 1=info, 2=warning, 3=error, 4=critical, 5=fatal | This property sets the debugging level for the server. In full production systems, set to a high level to avoid a lot of messages. For debugging a faulty server, particularly during an initial installation, set to a low number. Use Configure XPC to change the value. |
| ccs.server.xdk.dir | Default is<install:root>\schema | This property indicates a local file system for schema resolution and is used if local file based schema resolution is used, which is specified in ccs.server.entitymgr.fs of server-start.prop. Do not change this property. |
| ccs.server.debug.filename | Default is <install:root>\runtime\servers\<ServerName>\logs\debug-default | This property indicates a local file for debug messages. If not used, messages go to standard out and are displayed on the screen if the server is run in isolation, which is useful for initial debugging of a server. Do not change this property. |
| ccs.server.debug.file.overwrite | true/false | If set to true, the debug log is overwritten with every start of the system. Defaults to false. Do not change this property. |

## https-server.prop

This file contains properties for the https connections.

| Properties | Value | Description |
|---|---|---|
| org.w3c.jigsaw.port | Any available port<br>Default is 4433. | Port opened for the https connection. This is set during the installation. Use Configure XPC to change the value. |
| org.w3c.jigsaw.client.bufsize | 8192 | Output buffer size. Do not change this property. |
| org.w3c.jigsaw.request.timeout | 3000000 | https server request timeout property. Do not change this property. |

| | | |
|---|---|---|
| iaik.jigsaw.ssl.enabled | true | Server running with SSL. Do not change this property. |
| iaik.jigsaw.ssl.security.provider | iaik.security.provider.IAIK | IAIK is the security provider. Do not change this property. |
| iaik.jigsaw.ssl.tempRSAKey | Generate | Part of SSL bootstrapping. Do not change this property. |
| iaik.jigsaw.ssl.dhPararmeters | Pre-generated | Part of SSL bootstrapping. Do not change this property. |
| iaik.jigsaw.ssl.keystore | Default is serverstore. | Default keystore to use to start the server. Use the Certificate Manager to change the value. |
| iaik.jigsaw.ssl.keystore.password | | Default password for default keystore; should be encrypted after install. The default password is:<br>*admin*<br>Clear text should be used only for testing. Can be encrypted 128bit or 56bit. Use the Certificate Manager to change the value. |
| iaik.jigsaw.ssl.rsa.keyAndCertificate | Default is Test-ServerCert | Default entry name for keystore needed to connect to the keystore. In the daemon this is rsa-user-daemon. Do not change this property. |
| Cipher suites is not being displayed due to length | | Do not change this property. |

Below are the authentication flags in the same file, https-server.prop. The values differ between Test and Production modes.

| **Properties** | **Value** | **Description** |
|---|---|---|
| iaik.jigsaw.ssl.client.authentication | true/false | The default for Production mode is true--client authenticate using certificate or uid/pswd.<br>The default for Test mode is false--client authenticate using only uid/pswd.<br>You can change the value with Configure XPC by enabling client authentication (Production mode) or disabling client authentication (Test mode). |

| | | |
|---|---|---|
| iaik.jigsaw.ssl.client.requireCertificate | true/false<br>Default is false | The default for Production mode is true--requires certificate from client.<br>The default for Test mode is false--does not require certificate from client.<br>You can change the value with Configure XPC by enabling client authentication (Production mode) or disabling client authentication (Test mode). |
| iaik.jigsaw.ssl.client.requireTrustedRoot | true/false<br>Default is false | For true, check to see if client certificate's root is trusted.<br>For false, the default, do not check to see if client certificate's root is trusted.<br>??? You can change the value to true in Production mode (optional). |

## security.prop

This file is for additional security properties, other than the certificates and other jigsaw information in the https-server.prop file.

| **Properties** | **Value** | **Description** |
|---|---|---|
| jms.client.ssl.enable | true | SonicMQ JMS client SSL connection. Do not change this property. |
| jms.client.ssl.provider.class | Progress.message.net.ssl.iaik.iaikSSLImpl | IAIK is the security provider. Do not change this property. |
| jms.client.ssl.cipher.suites | Not listed | Define all cipher suites used by sonic ssl. Do not change this property. |
| jms.client.ssl.client.requireTrustedRoot | false | Use trust root certificates to verify server certificates. Do not change this property. |
| jms.client.ssl.client.trustedRoot.dir | <CADir> | Directory to store trusted root certificates. Do not change this property. |

The values differ between Test and Production modes as enforced by the Certificate Manager.

| **Properties** | **Value** | **Description** |
|---|---|---|

| | | |
|---|---|---|
| security.httpsServerTrustedRoot.required | true/false<br>Default is false | For true, check whether server root certificate is trusted.<br>For false, the default, do not check whether server root certificates is trusted. |
| **security.anonymousclients.allowed** | true/false<br>Default is true | The default for Test mode is true--allow anonymous clients.<br>The default for Production mode is false, do not allow anonymous clients.<br>You can change the value with Certificate Manager by enabling client authentication (Production mode) or disabling client authentication (Test mode). |
| **security.clientauth.disable** | true/false | The default for Test mode is true--disable client authentication.<br>The default value for Production mode is false--enable client authentication.<br>You can change the value in Certificate Manager by enabling client authentication (Production mode) or disabling client authentication (Test mode). |

## server-start.prop

This property file contains startup information for the server itself.

| **Properties** | **Value** | **Description** |
|---|---|---|
| serverstartup.logfile.dir | Default is \logs, the directory of <install:root>\runtime\servers\<ServerName>\ogs | Directory from the servers runtime root directory for startup log information. The root directory is <install:root>\runtime\servers\<ServerName>. Do not change this property. |
| serverstartup.logfile.allevents | Default is systemStartupLog, which is <install:root>\runtime\servers\<ServerName>\logs\systemStartupLog | Event subscription to all events go in this file under the serverstartup.logfile.dir. Do not change this property. |

| | | |
|---|---|---|
| serverstartup.default.lang | en<br>Default is en | The default language for the server. The default is English. Do not change this property. |
| serverstartup.default.eventcatalog.dir | Default is \eventcatalog, the directory of <install:root>\runtime\servers\<ServerName>\eventcatalog | Directory from the server runtime root directory for the event catalog. The root directory is <install:root>\runtime\servers\<ServerName>. Do not change this property. |
| ccs.server.entitymgr.fs | true/false<br>Default is *true* for file system resolution. | A boolean flag for using the Filesystem for Schema resolution or not. Do not change this property. |
| ccs.server.entitymgr.ldap | true/false<br>Default is false. | A boolean flag for using the ldap for Schema resolution or not. Do not change this property. |
| ccs.server.router.impl.code | Default is com.commerceone.ccs.kernel.router.ServiceRouter | Routing component. Do not change this property. |
| ccs.server.router.impl.args | Default is initialThreads=1,maximumThreads=9,queueCode=com.commerceone.ccs.kernel.sonicmq.SonicThreadedEnvelopeQueue,queueType=sonic,queueOwner=router | These are the arguments of the Document Router code. Valid arguments include:<br>queueOwner=router<br>queueName = <some name><br>queueType=sonic<br>queueCode=<br>com.commerceone.ccs.kernel.sonicmq.SonicThreadedEnvelopeQueue for sonic queueType<br>Do not change this property. |
| ccs.server.sonicmq.enabled | true/false<br>Default is true. | For true, indicates server is using Sonic queues as the transport and internal queuing mechanism. Do not change this property. |
| ccs.server.sonicmq.syncresponsequeue.name | Default is XPC_<servername>_SyncResponse | Name of the response queue needed for synchronous messages. This needs to be set if ccs.server.sonicmq.enabled is true. Do not change this property. |

## service-start.prop

There are two sections to this file:

- Top section lists services to be run on the server.
- Bottom section contains a listing for each service of the class name to be instantiated to create this service, and the configuration to be passed into the service.

### Service startup list section

The following are the properties of the service start section.

| Properties | Value | Description |
|---|---|---|
| startup.base.services | Default is ConfigurationService,AdminService,AsyncTransmitterService,SyncTransmitterService | Base services. Do not change this property. |
| startup.comm.services | Default is CommServletService,SonicCommService | Communication services. Use Configure XPC to modify. |
| startup.aux.services | Default is EventManager,LogService,MessageStoreService,XCBLTransformService | Auxiliary services. Do not change this property. |
| startup.application.services | Default is PingService | Application services. Use XPC Manager to define additional document and timed services. |

Services are categorized and are started in this order of the categories:

1. Base services
2. Auxiliary (aux) services
3. Application services
4. Communication (comm) services.

This prevents documents from being received at a server before all services are up and available to receive them. Most business services run as application services. A service will not be started on a server, unless it is named in the lists of services to be started.

### Service definition section

The **Service definition** section includes entries for all of the services named in the start section. For each service a code property is specified to tell the server what class implements the service. The name used as part of the property key is the same name used in the service startup list. A line specifying the arguments to be passed to the service can be added. For most services that use queues to receive documents, this requires a specification of the queue code to be used.

It is possible to specify service definitions even if the services are not listed in the startup section. If the service is not listed in the startup section, the entries are ignored. For XPC document and timed services, the Args are defined by the XPC Manager.

The first entries here specify the code for the CommServletService and the code for the SonicCommService. In addition, the argument queueName, and number of threads are listed for the SonicCommService, which tells the SonicCommService to use a Sonic queue for its input queue.

| **Properties** | **Value** | **Description** |
|---|---|---|
| service.CommServletService.code | Default is com.commerceone.ccs.comm.receiver.servlet.CommServletService | Class used to create the CommServletService. Do not change this property. |
| service.SonicCommService.code | Default is com.commerceone.ccs.comm.receiver.sonic.SonicCommService | Class used to create the SonicCommService. Do not change this property. |
| service.SonicCommService.args | Default is initialThreads=4,maximumThreads=9,queueName=XPC_<sonicnodename>_ConnectorInbound | Arguments for SonicCommService. Can be odified by Configure XPC to match the sonic inbound queue name specified. |
| service.LostAndFoundService.code | Default is com.commerceone.ccs.service.LostAndFoundService | Code for LostAndFoundService. Do not change this property. |

| | | |
|---|---|---|
| service.LostAndFoundService.arg | Default is LostAndFound message could also go to dead message queue with the args of store=file, initial Threads=4, maximumThreads=9,queueCode=com.commerceone.ccs.kernel.sonicmq.SonicThreadedEnvelopeQueue.queueType=sonic,queueOwner=service.queueName=SonicMQ,deadMessage, readonly=false | Valid arguments for LostAndFound Service include:<br>store=file<br>queueOwner=service OR router, queueName=<some name>, required only if queueType=sonic<br>queueType=memory OR sonic<br>queueCode=com.commerceone.ccs.kernel.sonicmq.SonicThreadedEnvelopeQueue if queueType=sonic<br>queueCode=com.commerceone.ccs.kernel.queue.ThreadedEnvelopeQueue if queueType=memory<br>The service writer can add additional arguments. Do not change this property. |
| service.ConfigurationService.code | Default is com.commerceone.ccs.service.config.ConfigurationManager | Code for Configuration Service. Do not change this property. |
| service.ConfigurationService.args | Default is initialThreads=0,maximumThreads=1,queueCode=com.commerceone.ccs.kernel.queue.ThreadedEnvelopeQueue,queueType=memory, queueOwner=service | Valid arguments for Configuration Service include:<br>queueOwner= service OR router<br>queueName = <some name>, required only if queueType=sonic<br>queueType= memory OR sonic<br>Do not change this property. |
| service.AdminService.code | Default is com.commerceone.ccs.service.admin.AdminService | Code for AdminService. Do not change this property. |
| service.AdminService.args | Default is initialThreads=0,maximumThreads=1,queueCode=com.commerceone.ccs.kernel.queue.ThreadedEnvelopeQueue,queueType=memory, queueOwner=service | Valid arguments for AdminService include:<br>queueOwner= service OR router<br>queueName = <some name>, required only if queueType=sonic<br>queueType= memory OR sonic<br>Do not change this property. |

| | | |
|---|---|---|
| service.EventManager.code | Default is com.commerceone.ccs.service.event.EventManager | Code for EventManager. Do not change this property. |
| service.LogService.code | Default is com.commerceone.ccs.service.log.LogService | Code for LogService. Do not change this property. |
| service.XCBLTransformService.code | Default is com.commerceone.versiongateway.service.XCBLTransformService | Code for XCBLTransformService. Do not change this property. |

# Service Property Files

Service default.prop configuration files are located in a directory for each service to run on the server. The directory name is created from the type of service, the name of the service, and the name of the class as in this example:

```
<install:root>\runtime\servers\<ServerName>\config\servic
es\AuxiliaryService.MessageStoreService.MessageStoreServi
ce.1_0 \default.prop
```

## LostAndFound default.prop File

The following property is set in the default.prop file of LostAndFound to define the location for messages going to LostAndFound.

| **Properties** | **Value** | **Description** |
|---|---|---|
| ccs.archive.filestore.loc | Default is <install:root>\errormessagestore | Needed for file-based storage. Do not change this property. |

## Log Service default.prop File

The following properties are set in the default.prop file of the LogService. This service subscribes to all events, writing them out to a server.

| Properties | Value | Description |
|---|---|---|
| event.logfile.dir | Default is <install:root>\runtime\servers\<ServerName>\logs | Directory where the event logs are stored. |

| | | |
|---|---|---|
| event.logfile.allevents | Default is eventlog which is <install:root>\runtime\servers\<ServerName>\logs\eventlog | Send all events to the event.logfile.dir directory with the given name, including ccs events. Each log file name is appended with the timestamp for when the log started. Do not change this property. |
| event.logfile.ccsevents | Default is ccslog which is <install:root>\runtime\servers\<ServerName>\logs\ccslog | Send only the ccs events to the given filename with timestamp appended. Do not change this property. |

## AsyncTransmitter and SyncTransmitter Service default.prop file

The default.prop file contains information on how the server identifies itself when making a connection, and the location of destinations it is trying to reach. The Transmitter services use this authentication information while making connections to other locations.

| **Properties** | **Value** | **Description** |
|---|---|---|
| marketparticipantid | Example: 55d8d1d6-77b1-1000-87d6-0a0000200001 | MPID is obtained through MSB registration or MPID for test. Use Configure XPC to change this property, which is called TPID in Configure XPC. |
| authpref | uidpswd | Authentication preference for http/https. When Trading Partner connects to Portal Router, uidpswd (with user level userid/password authentication) is used. Do not change this property. |
| userid | | ID used by the service when making the connection. Use Configure XPC to edit this property, which is called System Account ID in Configure XPC. |
| password | | Encrypted (for production) or clear text (for test only) password used for authentication. Use Configure XPC to change the password, named System password in Configure XPC. |

| | | |
|---|---|---|
| sonicmq.authpref | uidpswd | Authentication preference for the sonic connection. When Trading Partner connects to Portal Router, uidpswd (with user level authentication of userid/password) is used. Do not change this property. |

The following properties are the source of transmission information.

| Properties | Value | Description |
|---|---|---|
| ccs.comm.tx.fs | true | Always true; the file system is used for transmission information. Do not change this property. |
| ccs.comm.tx.ldap | false | Always false. The ldap is not used for transmission information. Do not change this property. |

To send a document, the following transmission properties must be available.

| Properties | Value | Description |
|---|---|---|
| ccs.comm.transmitter.destination .name | Example: 55d8d1d6-77b1-1000-87d6-0a0000200001,+ | List of destination MPID separated by comma (,). Do not change this property. |
| +.+ | Example: Ping | List of doc type separated by comma (,). Do not change this property. |
| +.+.docformat | xml | List of doc format separated by comma (,). Do not change this property. |
| +.+.protocols | http or/and ,https or/and ,sonic | List of protocols separated by comma (,). Do not change this property. |

| | | |
|---|---|---|
| +.+.protocol.http.args | Example:<br>preference=3,destinationaddress=http://localhost:8080/xcc,qos=guaranteed,code=com.commerceone.ccs.comm.sender.http.HttpTransmitter | Arguments for http:<br>Valid arguments include:<br>preference= 1 OR 2 OR 3 with 1 highest preference<br>destinationaddress=http(s) URL or global queue<br>qos=guaranteed<br>code= com.commerceone.ccs.comm.sender.http.HttpTransmitter<br>Do not change this property. |
| +.+.protocol.https.args | Example:<br>preference=2,destinationaddress=https://localhost:4433/xcc,qos=guaranteed,code=com.commerceone.ccs.comm.sender.https.HttpsTransmitter | Arguments for https:<br>Valid arguments include:<br>preference= 1 OR 2 OR 3 with 1 highest preference<br>destinationaddress=http(s)URL or global queue<br>qos=guaranteed<br>code= com.commerceone.ccs.comm.sender.https.HttpsTransmitter<br>Do not change this property. |
| +.+.protocol.sonic.args | Example:<br>preference=1,destinationaddress=PortalInbound | Arguments for sonic<br>Valid arguments include:<br>preference= 1 OR 2 OR 3 with 1 the most preferred choice<br>destinationaddress=<NodeName>::<QueueName><br>Do not change this property. |

## client.prop Property File

This property file is in the directory where the client application is started, or where it is specified when a TransmitterFactory object is instantiated. There are two client.prop files that are configured by changes to Configure XPC.

<install:root>\bin contains an Outbound client.prop. This client.prop picks up the MarketSite connectivity configuration in Configure XPC. PingMarketSite and DocSender use this client.prop.

<install:root>\etc\config contains a client.prop that is pointed Inbound. It picks up the local configurations in Configure XPC. The XPC Invoker uses this client.prop.

Most properties in this file are set during the installation of the server and many of them are duplicates of properties that are listed in the server property files.

| Properties | Value | Description |
|---|---|---|
| ccs.comm.em.fs | true | Always true; the filesystem is used for schema resolution. Do not change this property. |
| ccs.comm.em.fs.path | <install:root>\schema | If the above is set to true, this is the path where the schema documents are located. Do not change this property. |
| ccs.comm.em.ldap | false | Always false; the ldap is not used schema resolution. Do not change this property. |

Client code can use events. The following parameters direct the event handling.

| Properties | Value | Description |
|---|---|---|
| ccs.comm.event.language | en<br>Default is en | Language to be used. Default is English. Do not change this property. |
| ccs.comm.event.catalogloaddir | Default is <install:root>\runtime\servers\<ServerName>\eventcatalog\ | Location of the event catalogs (a local directory). Do not change this property. |
| ccs.comm.event.outputfile | Default is <install:root>\runtime\servers\<ServerName>\logs\clienteventlog | Location of the file where events from the client are placed. Do not change this property. |

The following specify the source of transmitter properties.

| Properties | Value | Description |
|---|---|---|
| ccs.comm.tx.fs | true | Always true; the filesystem is used for transmission information. Do not change this property. |
| ccs.comm.tx.ldap | false | Always false; the ldap is not used for transmission information. Do not change this property. |

The following specify the cache information for transmitter:

| Properties | Value | Description |
|---|---|---|
| ccs.comm.transmitter.cache | true/false | Use cache or not for transmitter including http(s), sonic. Do not change this property. |
| ccs.comm.transmitter.cache.refresh | Example: 100 | Time in second to cache the transmitter information. Do not change this property. |

To send a document, the following transmission properties must be available.

| Properties | Value | Description |
|---|---|---|
| ccs.comm.transmitter.destination.name | Example: 55d8d1d6-77b1-1000-87d6-0a0000200001,+ | List of destination MPIDs separated by comma (,). Do not change this property. |
| +.+ | Example: Ping | List of document types separated by comma (,). Do not change this property. |
| +.+.docformat | xml | Format used by the document, usually xml. Do not change this property. |
| +.+.protocols | http and/or ,https and/or ,sonic | Protocols for sending the document. Do not change this property. |
| +.+.protocol.http.args | Example: preference=3,destinationaddress=http://localhost:8008/xcc,qos=guaranteed,code=com.commerceone.ccs.comm.sender.http.HttpTransmitter | There should be one of these entries for each protocol type, including a preference count to help direct the transmitter to using the preferred protocol. Do not change this property. |
| +.+.protocol.https.args | Example: preference=1,destinationaddress=https://localhost:443/xcc,qos=guaranteed,code=com.commerceone.ccs.comm.sender.https.HttpsTransmitter | There should be one of these entries for each protocol type, including a preference count to help direct the transmitter to using the preferred protocol. Do not change this property. |

| | | |
|---|---|---|
| +.+.protocol.sonic.args | Example: preference=2,destinationaddress=<nodename>::<queuename> | This is the syntax of the sonic transport. Do not change this property. |

### Versioning Properties in client.prop

| Key | Value | Description |
|---|---|---|
| transformation.registry | Full Path of TransformRegistry.xml file Default is <install:root>/schema/TransformRegistry.xml | TransformRegistry.xml file has meta data about transformations. Do not change this property. |
| transformation.internalversion | 20\|22\|30 | The xCBL version supported by the client program. All incoming documents are converted to this xCBL version (if transformation exists) before client handles it. Do not change this property. |
| transformation.externalversion | 20\|22\|30 | The lowest xCBL version supported by a Trading Partner your application transacts with. If the value of this key is the same as the value of above, the transformation is disabled. Do not change this property. |

### Sonic Properties in client.prop

Sonic properties to set up by the Sonic Transport.

| **Properties** | **Value** | **Description** |
|---|---|---|
| +.+.protocols | sonic | Designates SonicMQ as the available protocol. Use Configure XPC to modify. |
| +.+.protocol.sonic.args | preference=1,destinationaddress=<nodename>::<queuename> | The destinationaddress is the destination queue name. Use Configure XPC to modify. |

Sonic broker connection parameters required.

| Properties | Value | Description |
|---|---|---|
| sonicmq.broker.url | <ssl>://<BrokerMachine>:<BrokerPort4Client> | </ssl>://<BrokerMachine>:<BrokerPort4Client><br>Use Configure XPC to change the broker port. |
| sonicmq.broker.username | | User id needed to connect to the broker as a JMS client. Do not change this property. |
| sonicmq.broker.password | | This is the encrypted password for the above user name. Do not change this property. |
| sonicmq.syncresponsequeue.name | | This is the response queue for the client to use to receive responses for synchronous requests sent. Do not change this property. |

These close modes are supported for SonicMQ.

| Properties | Value | Description |
|---|---|---|
| sonicmq.connection.close | idle:<NumOfSeconds>/ always/never<br>Default is idle:30 | The idle mode closes connection idle for specified number of seconds.<br>The idle timeout is in seconds, and should not be set lower than 30.<br>The always mode always closes a connection after document send and reopens it before the next send.<br>The never mode never closes the connection. Do not change this property. |

The following specify the sonic authentication preference.

*Note* ..........This also can be set through Properties object instead of in client.prop.

| Properties | Value | Description |
|---|---|---|
| sonicmq.authpref | uidpswd/none<br>Default is uidpswd. | Authentication preference for the sonic connection. This can be uidpswd (with user level authentication of userid/password) or none. When Trading Partner connects to Portal Router, uidpswd should be used. Do not change this property. |

If sonicmq.broker.url (described above) is defined as SSL, then these additional SSL parameters are required.

| **Properties** | **Value** | **Description** |
|---|---|---|
| jms.client.ssl.enable | true | Enables SonicMQ JMS client SSL connection. Do not change this property. |
| jms.client.ssl.provider.class | Progress.message.net.ssl.iaik.iaikSSLImpl | Implementation class for the SSL provider. Do not change this property. |
| jms.client.ssl.cipher.suites | SSL_RSA_WITH_3DES_EDE_CBC_SHA,SSL_RSA_WITH_RC4_MD5,SSL_RSA_WITH_RC4_SHA,SSL_RSA_WITH_IDEA_CBC_SHA,SSL_RSA_WITH_DES_CBC_SHA,SSL_DH_DSS_WITH_3DES_EDE_CBC_SHA,SSL_DH_DSS_WITH_DES_CBC_SHA,SSL_DH_RSA_WITH_3DES_EDE_CBC_SHA,SSL_DH_RSA_WITH_DES_CBC_SHA,SSL_DHE_DSS_WITH_3DES_EDE_CBC_SHA,SSL_DHE_DSS_WITH_DES_CBC_SHA,SSL_DHE_RSA_WITH_3DES_EDE_CBC_SHA,SSL_DHE_RSA_WITH_DES_CBC_SHA,SSL_RSA_EXPORT1024_WITH_DES_CBC_SHA,SSL_DHE_DSS_EXPORT1024_WITH_DES_CBC_SHA,SSL_RSA_EXPORT1024_WITH_RC4_56_SHA,SSL_DHE_DSS_EXPORT1024_WITH_RC4_56_SHA,SSL_RSA_EXPORT_WITH_RC4_40_MD5,SSL_RSA_EXPORT_WITH_RC2_CBC_40_MD5,SSL_RSA_EXPORT_WITH_DES40_CBC_SHA,SSL_DH_DSS_EXPORT_WITH_DES40_CBC_SHA,SSL_DH_RSA_EXPORT_WITH_DES40_CBC_SHA,SSL_DHE_DSS_EXPORT_WITH_DES40_CBC_SHA,SSL_DHE_RSA_EXPORT_WITH_DES40_CBC_SHA | Cipher suites<br>Do not change this property. |

| | | |
|---|---|---|
| jms.client.ssl.client.requireTrustedRoot | true/false | Use trust root certs to verify server certs. If false, the client is not required to have the trusted root of the server's certificate. Otherwise, the client needs to have the root of the server certificate. Do not change this property. |
| jms.client.ssl.client.trustedRoot.dir | Example: <install:root>\certs\ca | Directory to store trusted root certificates, required only if jms.client.ssl.client.requireTrustedRoot is true. Do not change this property. |

The following properties are set at the bottom of the **Configure XPC** user interface. When XPC makes outbound connection to MarketSite, the document could be routed through a proxy server located in the DMZ (demilitarized zone).

Outbound communications through a proxy server provide support for any http/https based proxy server that follows the standard HTTP 1.1. Use Configure XPC to edit.

| **Properties** | **Value** | **Description** |
|---|---|---|
| proxySet | true/false<br>Default is false | If true, outbound connection are routed to proxy server. If false, outbound connection is not routed to proxy server. If false, the following four properties keys are ignored. Use Configure XPC to modify. |
| proxyHost | <ProxyMachine> | Host machine where proxy server is installed. This value must be the fully qualified network address of the proxy server host machine.<br>Example:<br>,proxyHost=sslproxy.mycompany.com<br>This value should be the same as https.proxyHost below. Use Configure XPC to modify. |

| | | |
|---|---|---|
| proxyPort | <ProxyPort> | Http port where proxy server is configured to allow http connection. This value should be the same as https.proxyPort below.<br>Note: This port needs to be configured correctly on proxy server to allow successful outbound connection on that port. See your chosen proxy server's documentation on how to configure ports. Use Configure XPC to modify. |
| https.proxyHost | <ProxyMachine> | Host machine where proxy server is installed. This value must be the fully qualified network address of the proxy server host machine.<br>Example:<br>,https.proxyHost=sslproxy.mycompany.com<br>This value should be the same as proxyHost above. Use Configure XPC to modify. |
| https.proxyPort | | Https port where proxy server is configured to allow https connection. This value should be the same as proxyPort above.<br>Note: This port needs to be configured correctly on proxy server to allow successful outbound connection on that port. See your chosen proxy server's documentation on how to configure ports. Use Configure XPC to modify. |