

caAERS can be installed three different ways:

- Part of the CCTS Suite
- Stand-alone Application
- Manual Installation

Troubleshooting information is the same across the different methods of installation and can be located in the Troubleshooting section of each respective document above.

After caAERS is installed, additional configuration must occur before you can start using it. Please see Configuring caAERS for additional information.

IMPORTANT! When two instances of caAERS are running on two separate tomcats in the same machine, please see the checklist of items that need to be taken care of.

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Preliminary Considerations

BEFORE YOU BEGIN	<p>caAERS has been tested with the operating systems and hardware specified in the Minimal Requirements Installation guide. Although we have made an effort to develop caAERS as a platform-independent application, we cannot guarantee that it will work if you are using variations of these operating systems and/or hardware.</p> <p>Installing caAERS on a system already setup with the proper versions of the JDK, database, and Tomcat can take a few minutes. Installation from scratch could take several hours. For installation on Windows, an account with administrative privileges must be used.</p>
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Important: Before installing caAERS you will need to install JDK and Tomcat and then create your database. Please follow the steps outlined in the sections below.

Installing JDK

Step	Action
1	Download Java Standard Edition 5.0 or higher from http://java.sun.com/javase/downloads/index.jsp .
2	Install Java. Make sure neither the directory where you install java or the parent directories contain a white space in between any characters in the name of the directory. Note: Throughout this guide the java installation directory will be referred as \${java.dir} .
3	Add the \${java.dir}\bin to your system PATH.
4	Set a new environment variable named JAVA_HOME , whose value equals \${java.dir} .

Installing Tomcat

Step	Action
1	Download Apache Tomcat version 5.5.23 or higher from http://tomcat.apache.org/download-55.cgi . Add a new environment variable CATALINA_HOME, whose value must be set to \${tomcat.dir}
2	Install the Tomcat application in a convenient location. Note: Throughout this guide the Tomcat installation directory will be referred as \${tomcat.dir} .
3	Configure server.xml in the \${tomcat.dir}/conf to enable https connections on port 8443 or 443.
4	Generate an SSL certificate using the instructions at http://tomcat.apache.org/tomcat-5.5-doc/ssl-howto.html . Save the generated certificate in your c:\ directory.

Installing the Database

Note: caAERS supports two databases, Oracle and PostgreSQL. To successfully deploy caAERS, you need to have one of these databases installed on your system. The instructions for installing an Oracle or Postgres database product are beyond the scope of this document. Refer to the installation documents that accompany these databases for step-by-step instructions.

In your database management system, create a new database named caaers. To do so, follow the steps outlined here.

Installing caAERS

Step	Action
1	Install the preferred database product (PostgreSQL 8.1.9 or Oracle 10g)
2	Create an empty database for caAERS to use. You may give your database any valid name, but this guide will use "caaers" as the name in each example

SUGGESTION: To best understand the installation procedures for the caAERS, it is recommended that you follow the procedures described in this section with minimal deviation.

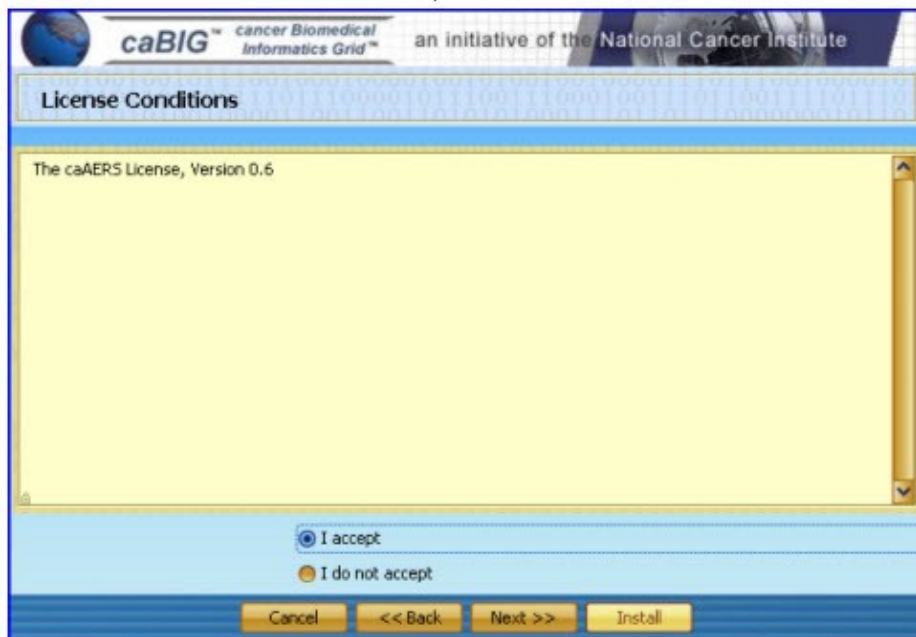
Step	Action
1	Verify that the server.xml in the <code>\${tomcat.dir}/conf</code> is enabled for https connections on either port 8443 or 443.
2	Verify that there is a database called caaers created in Postgres and the owner is set to postgres .
3	Go to http://sbdev1000.semanticbits.com:8030/installer/ and click Installer Website . This should automatically save caAERSInstaller.jar to your machine and open up the installer wizard. Note: If the Installer Website link does not work, right click on caAERSInstaller.jar to save the jar file to your machine manually. Once it has been saved, double-click the jar file to begin the installation process.
4	The caAERS Installer will begin extracting files need to complete the process. The following screen will be displayed as it is extracting. 

- 5 Once the installer has finished extracting, this page will be displayed:



Click the **Next >>** button to move forward in the process. The **<< Back** and **Install** buttons will be grayed out.

- 6 Select the radio button next to "I Accept." And then click **Next >>**.



- 7 Select the database to be used with caAERS and then **click Next >>**.



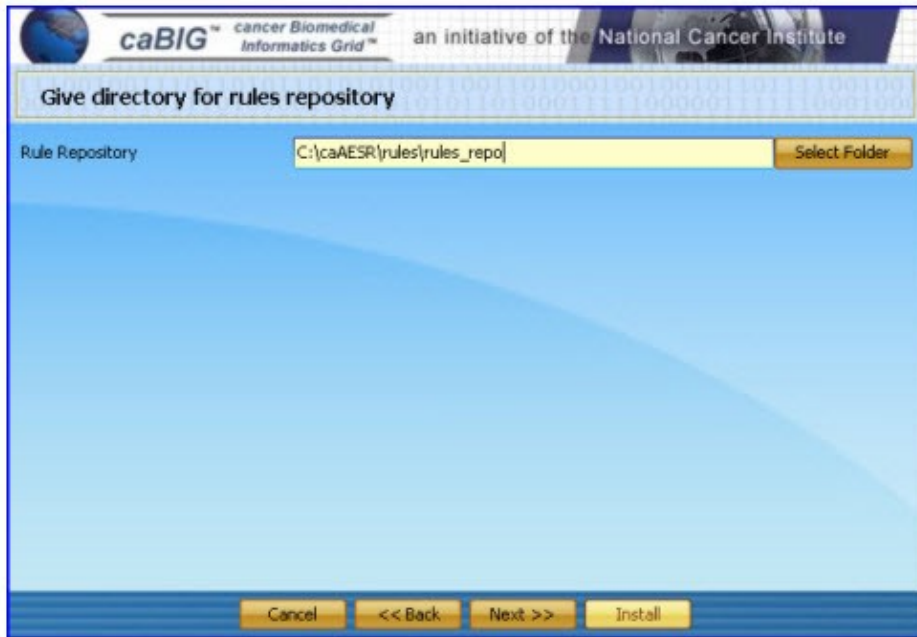
The screenshot shows the 'Choose database vendor' window of the caBIG installation wizard. The window has a blue header with the caBIG logo and text: 'caBIG™ cancer Biomedical Informatics Grid™ an initiative of the National Cancer Institute'. Below the header, the title bar reads 'Choose database vendor'. The main area is light blue and contains the text 'Database Type:' followed by two radio buttons. The first radio button is selected and labeled 'Postgres'. The second radio button is labeled 'Oracle'. At the bottom of the window, there are four buttons: 'Cancel', '<< Back', 'Next >>', and 'Install'.

- 8 To install caAERS successfully, you need to have the database's parameters, including name, host name, port address, and a valid user id and password. Enter the appropriate information in all of the fields and then click **Next >>**.



The screenshot shows the 'Provide database parameters' window of the caBIG installation wizard. The window has a blue header with the caBIG logo and text: 'caBIG™ cancer Biomedical Informatics Grid™ an initiative of the National Cancer Institute'. Below the header, the title bar reads 'Provide database parameters'. The main area is light blue and contains five text input fields. The first field is labeled 'Database Name' and contains the text 'caaers'. The second field is labeled 'Host Name' and contains the text 'localhost'. The third field is labeled 'Port Address' and contains the text '5432'. The fourth field is labeled 'User Id' and contains the text 'postgres'. The fifth field is labeled 'Password' and contains the text 'postgres'. Below the fields, there is a bold instruction: 'Make sure the database is up and running'. At the bottom of the window, there are four buttons: 'Cancel', '<< Back', 'Next >>', and 'Install'.

- 9 Enter {**a folder location**} for the Rules Repository for caAERS to use. Either type in the location, or browse to it clicking **Select Folder** and navigating to it. After entering the folder, click **Next >>**.(If the folder does not exist, the installer will prompt the user & create one)



- 10 Select the authentication mode and then make any necessary changes. Additional information on what should be entered is included below:

- *WebSSO server URL*: Modified to define the server name/port that is hosting WebSSO
- *The WebSSO server certificate*: This is the path/filename of the certificate that was created for WebSSO during the installation of the WebSSO software.

Note: It may be necessary to make a local copy of this certificate on the caAERS server if file permissions prohibit reading this file directly from where it resides within the WebSSO server.

- *The Host Certificate and Host Key*: Enter the certificate and key files (normally ending in a .pem filename extension) created for caAERS using the GAARDS UI program on the Dorian Server_. (Refer to the CCTS 1.0 Installation Guide for information on generating certificate and key files for each CCTS application component)_
- *Acegi URL*: _Update the server/port assignment to define the server name/port where caAERS will be running. The remainder of the path details, `/caAERS/j_acegi_cas_security_check`, should not be modified.
- *Study Consumer URL*: If using a standard configuration, this default path should be correct. You can update it directly in the config file at a later point if changes are required.
- *Registration Consumer URL*: If using a standard configuration, this default path should be correct. You can update it directly in the config file at a later point if changes are required.

Configuration for web sso

CCTS UserName: octs_user

Password: octs_user

WebSSO server URL: https://cbvapp-d1017.nci.nih.gov:48443/cas

WebSSO server certificate: /Users/Moni

Host certificate: /Users/Moni

Host Key: /Users/Moni

Acegi URL: http://localhost:8080/caaers/j_acegi_cas_security_check

Study Consumer URL: /wsrf/services/caqrid/StudyConsumer

Registration Consumer URL: /wsrf/services/caqrid/RegistrationConsumer

Buttons: Cancel, << Back, Next >>, Install

- 11 Verify the components that are to be installed, and then click **Next >>**.

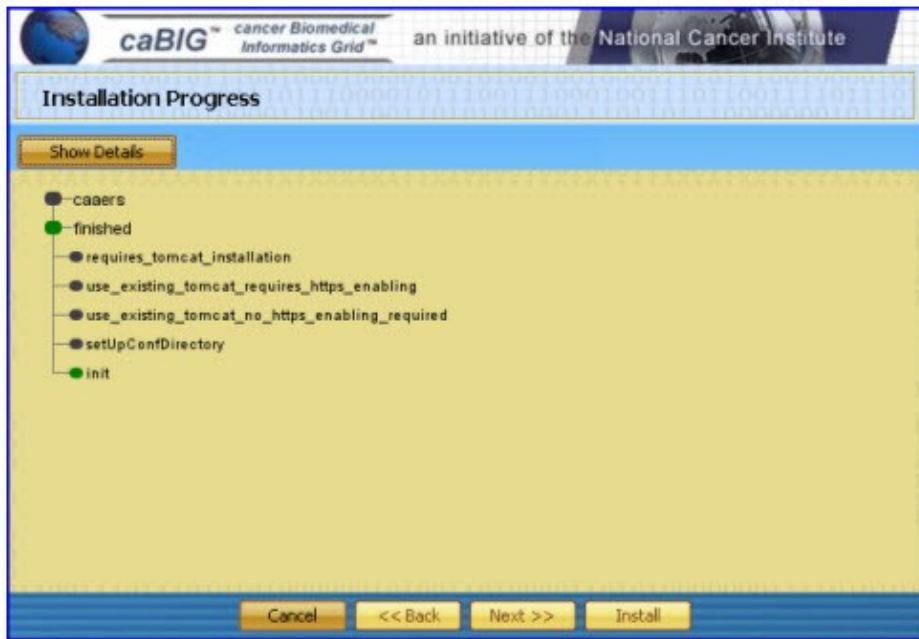
Components to Install

The following components will be installed

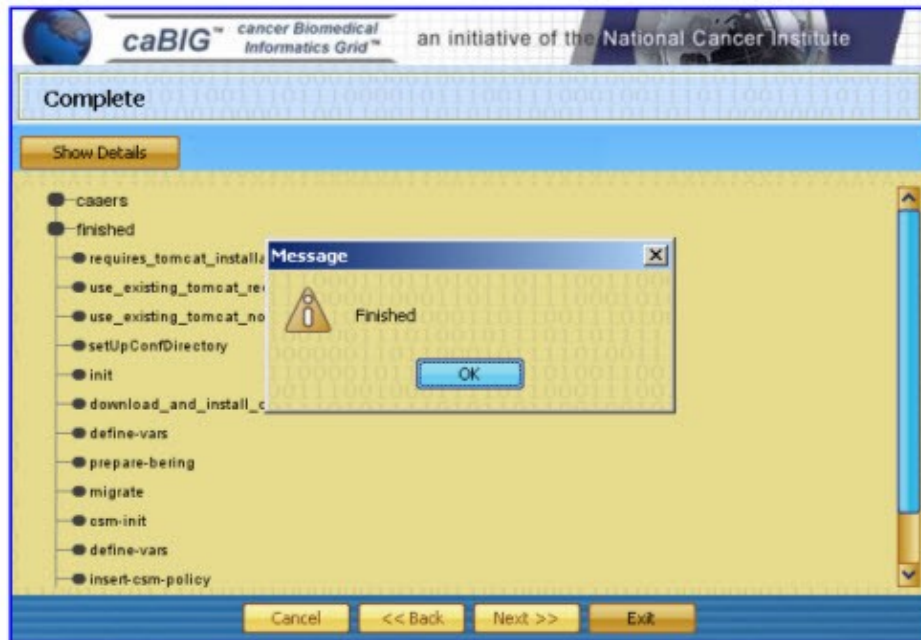
caAERS Installation and Setup ☒

Buttons: Cancel, << Back, Next >>, Install

- 12 Click **Install** to start the installation process. This will initiate the installation and display the installation's status. The status screen will be displayed as shown for some time while the install continues. It is not complete until you receive the **Finished** pop-up window as shown in step 13. Be patient and do not hit the **Cancel** button.



- 13 When the process has completed, click **OK** and then click **Exit**.



Installing caAERS Services and ESB

Regardless of the type of installation (stand-alone, part of CCTS, or manual), complete the following steps before testing and running caAERS.

Install the Globus Toolkit

To use any of the grid service, the globus toolkit must be available on tomcat. The following instructions pertain to installation of globus on tomcat.

Note: If you've installed caAERS as part of CCTS, globus will already be installed, so move directly to Setting up the Secure Data Grid Service.

Step	Action
1	Download the following toolkit: http://www-unix.globus.org/toolkit/survey/index.php?download=ws-core-4.0.3-bin.zip
2	Unzip the compressed folder in to an appropriate directory
3	Open the command prompt and navigate to the unzipped directory (it should be ws-core-4.0.3)
4	On the command line type ant -f share\globus_wsrf_common\tomcat\tomcat.xml deployTomcat -Dtomcat.dir = tomcat_home where tomcat home would be the directory where tomcat is installed
5	If the build is successful, navigate to the webapps folder of tomcat and make sure the wsrf folder has been created

Install the caAERS Data Grid Service

Step	Action
1	Assumptions: A) It is assumed that the target machine has JDK 5.0 or higher installed on it. B) The environment variable CATALINA_HOME is pointing to the targeted tomcat in the machine. C) The environment variable GLOBUS_LOCATION is set and pointing to globus installation location. Download the zip file (CaaersDataService.zip) from the following location <<<<URL>>>> and unzip to any location , which creates a folder named "CaaersDataService"
2	Edit CaaersDataService/service.properties file to replace the following properties with appropriate values. cqlQueryProcessorConfig_gridGrouperUrl= <URL to GRID GROUPE> cqlQueryProcessorConfig_gridGrouperGroup= <GROUP NAME>
3	Edit CaaersDataService/etc/serviceMetadata.xml file to enter the research center information as shown below <ns1:hostingResearchCenter>

	<pre> <ns9:ResearchCenter displayName="" shortName="" xmlns:ns9="gme://caGrid.caBIG/1.0/gov.nih.nci.cagrid.metadata.common"> <ns9:Address country="" locality="" postalCode="" stateProvince="" street1="" street2=""/> <ns9:pointOfContactCollection> <ns9:PointOfContact affiliation="" email="" firstName="" lastName="" phoneNumber="" role=""/> </ns9:pointOfContactCollection> </ns9:ResearchCenter> </ns1:hostingResearchCenter> </pre>
4	Open the command prompt and navigate to CaaersDataService folder and type "ant all" Once the above step is completed, execute "ant deployTomcat" If you don't see any error message/s then it indicates that service has been successfully deployed in targeted tomcat.
5	<p>If you have already configured datasource.properties in \$CATALINA_HOME/conf/caaers leave it like that . If not then</p> <ul style="list-style-type: none"> • download datasource.properties from https://gforge.nci.nih.gov/plugins/scmsvn/viewcvs.php/deliverables/Phase%202/1.1.2/?root=caaersappd • edit with right values • and copy it to \$CATALINA_HOME/conf/caaers. Start tomcat
6	<p>To check if the caAERS data service is up and running , type the following URL in the web browser <a href="https://<<HOST_NAME>>:8443/wsrf/services/cagrid/Caaers?wsdl">https://<<HOST_NAME>>:8443/wsrf/services/cagrid/Caaers?wsdl</p> <p>This should show the wsdl for the caAERS data service (it is just an xml) in the web browser.</p>

Preparation for using grid client

The grid client is used to access the caAERS Data Service. This requires that the grid service is correctly configured. See Figure 2 below for an overview of a grid service configuration.

Configuration

The following requirements are assumed to be true in order for configuration to be performed:

1. The grid security infrastructure is in place [Dorian, syncGTS, IDP].
2. For an existing infrastructure, the following information needs to be known\extracted:

- The URL for Dorian
- The root certificate [CA] of Dorian

Step	Action
1	Copy the root certificate of Dorian on the client machine under the following directory: \$user_home/.globus/certificates. Make sure the extension of the certificate is ".0" ("dot zero").
2	Copy the root certificate into the userhome where the caaers data grid service is running. Note: It is important that the certificate should be applied in the userhome of the user account under which tomcat is running.
3	<p>Modify the following properties in run-tools.xml. The screenshot shows a sample of the file with the changes made.</p> <ul style="list-style-type: none"> • <i>service.url</i>: The URL where the service is located <p>Example: https://localhost:8443/wsrf-ds/services/cagrid/Caaers</p> <ul style="list-style-type: none"> • <i>dorian.url</i>: The URL where Dorian is located <p>Example: https://localhost:8443/wsrf-ds/services/cagrid/Caaers</p> <ul style="list-style-type: none"> • <i>uid and pwd</i>: The user id and password for an existing user account in Dorian IDP <pre> <project name="run-tools file" basedir="." default="runClient"> <target name="runClient" depends="checkGlobus, defineClasspaths" description="Run the sample Client"> <property name="service.url" value="data service url " /> <property name="dorian.url" value="dorian url" /> <property name="uid" value="userid" /> <property name="pwd" value="password" /> <echo message="Connecting to service: \${service.url}" /> <java classname="gov.nih.nci.cagrid.caaers.client.ClientTest" classpathref="run.classpath" fork="no"> <jvmarg value="-DGLOBUS_LOCATION=\${ext.globus.dir}" /> <arg value="\${service.url}" /> <arg value="\${dorian.url}" /> <arg value="\${uid}" /> </pre>

```

<arg value="${pwd}" />

</java>

</target>

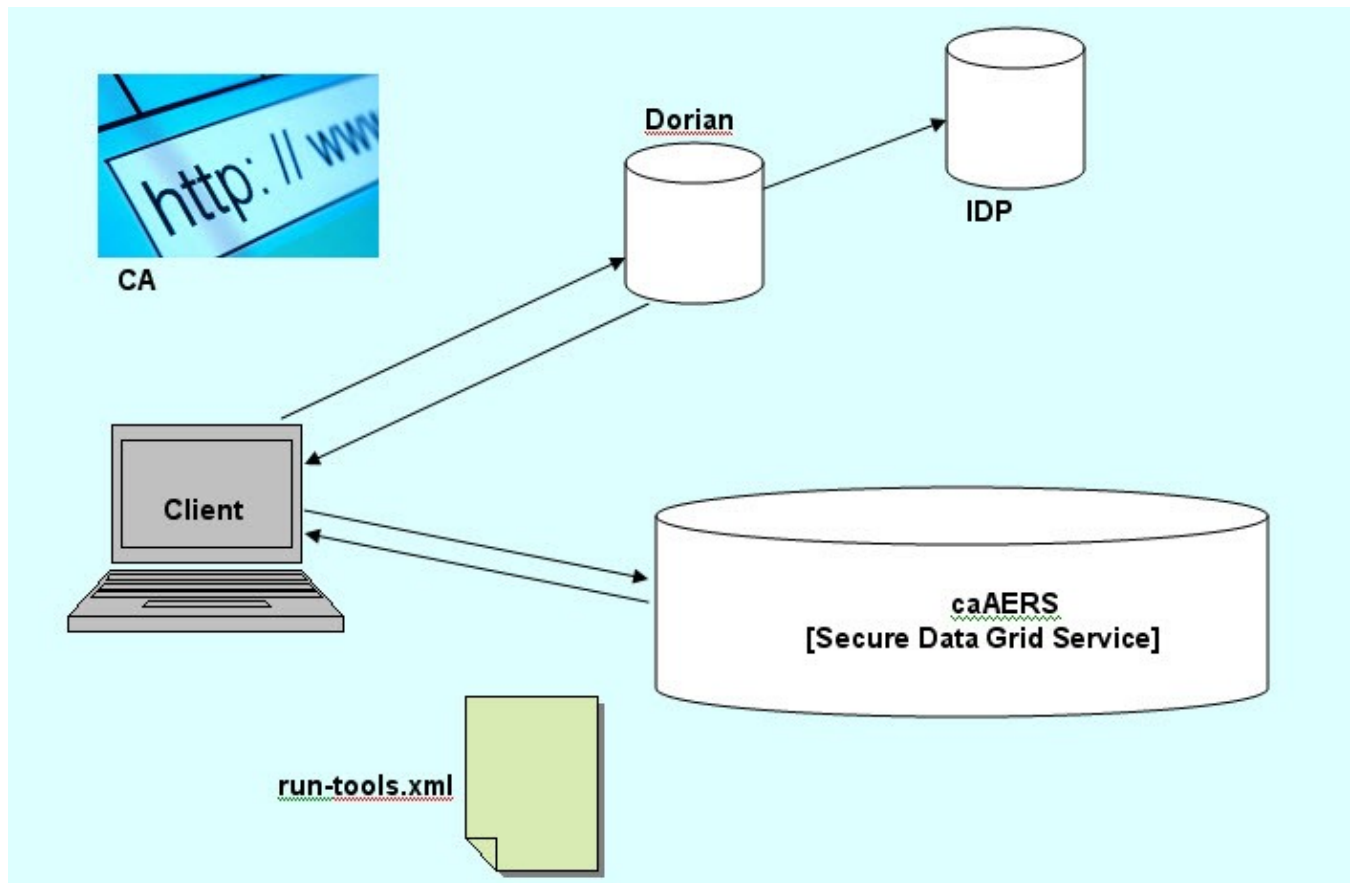
</project>

```

Running the grid client

After suitable setup of the run-tools.xml, the caAERS data service can be accessed. Use the following steps to access the grid client:

Step	Action
1	From the command prompt, navigate to the folder where caAERSDataService.zip was unzipped
2	Type: <i>ant runClient</i> The client should run and be able to successfully connect to the caAERS data service



Install the caAERS Adverse Event Consumer Grid Service

Step	Action
1	Locate AdverseEventConsumerService.zip in the caaers-1-0 folder.
2	Unzip AdverseEventConsumerService.zip to a local drive. This will create a folder named "AdverseEventConsumerService"
3	<p>If you have Maven and Ant available in your machine, type</p> <pre>mvn install -Dmaven.test.skip=true</pre> <p>If you only have ant available in your machine, type <i>ant deployTomcat</i></p> <p>Note: Make sure CATALINA_HOME is pointing to the appropriate tomcat</p>
4	If the deployment was successful, start tomcat
5	To check if the caAERS Adverse Event Consumer service is up and running, access <a href="https://<host name>:8443/wsrf/services/cagridAdverseEventConsumer?wsdl">https://<host name>:8443/wsrf/services/cagridAdverseEventConsumer?wsdl . This should show the wsdl (it is just an xml) in the browser.

Install the caAERS Registration Consumer Grid Service Implementation

Note: The Registration Consumer Grid Service globus skeleton webservice must be available in \$CATALINA_HOME/webapps/\$wsrf.

Step	Action
1	Go to the caaers-1-0 folder. Locate the required-jars subfolder. Open this folder and select all the files.
2	Move or copy the files to \$CATALINA_HOME/webapps/\$wsrf/WEB-INF/lib Note: Override existing files
3	Enable auditing by editing the \$CATALINA_HOME/webapps/caaers-wsrf/WEB-INF/etc/cagrid_RegistrationConsumer/server-config.w to include the highlight lines, as shown in Figure 3 below

```
<?xml version="1.0" encoding="UTF-8"?>
<deployment xmlns="http://xml.apache.org/axis/wsdd/"
  xmlns:aggr="http://mds.globus.org/aggregator/types"
  xmlns:java="http://xml.apache.org/axis/wsdd/providers/java"
  xmlns:xsd="http://www.w3.org/2001/XMLSchema"
  name="defaultServerConfig">
  <handler name="auditInfoRequestHandler"
    type="java:gov.nih.nci.cabig.caaers.grid.AuditInfoRequestHandler"/>

  <handler name="auditInfoResponseHandler"
    type="java:gov.nih.nci.cabig.caaers.grid.AuditInfoResponseHandler"/>

  <service name="cagrid/RegistrationConsumer" provider="Handler" use="literal"
    style="document">
    <parameter ...../>
    <parameter ...../>
    <parameter ...../>
    <parameter ...../>
    .....
    .....
    .....
    <requestFlow>
      <handler type="auditInfoRequestHandler"/>
    </requestFlow>
    <responseFlow>
      <handler type="auditInfoResponseHandler"/>
    </responseFlow>
  </service>
  .....

  <!--ccts addition-->
  .....
  .....
  .....
```

Install the caAERS Study Consumer Grid Service Implementation

Note: The Study Consumer Grid Service globus skeleton webservice must be available in \$CATALINA_HOME/webapps/\$wsrf.

Step	Action
1	Go to the caaers-1-0 folder. Locate the required-jars subfolder. Open this folder and select all the files. Note: If you just completed this step above as part of installing the caAERS Registration Consumer Grid Service you can skip directly to step 3 below.
2	Move or copy the files to \$CATALINA_HOME/webapps/\$wsrf/WEB-INF/lib Note: Override existing files
3	Enable auditing by editing the \$CATALINA_HOME/webapps/caaers-wsrf/WEB-INF/etc/cagrid_RegistrationConsumer/server-config.w to include the highlight lines, as shown in Figure 4 below


```

<?xml version="1.0" encoding="UTF-8"?>
<deployment xmlns="http://xml.apache.org/axis/wsdd/"
  xmlns:aggr="http://mds.globus.org/aggregator/types"
  xmlns:java="http://xml.apache.org/axis/wsdd/providers/java"
  xmlns:xsd="http://www.w3.org/2001/XMLSchema" name="defaultServerConfig">
  <handler name="auditInfoRequestHandler"
    type="java:gov.nih.nci.cabig.caaers.grid.AuditInfoRequestHandler"/>

  <handler name="auditInfoResponseHandler"
    type="java:gov.nih.nci.cabig.caaers.grid.AuditInfoResponseHandler"/>

  <service name="cagrid/StudyConsumer" provider="Handler" use="literal"
    style="document">
    <parameter ...../>
    <parameter ...../>
    <parameter ...../>
    <parameter ...../>
    .....
    .....
    .....

    <requestFlow>
      <handler type="auditInfoRequestHandler"/>
    </requestFlow>

    <responseFlow>
      <handler type="auditInfoResponseHandler"/>
    </responseFlow>

  </service>

  <!--ccts addition-->
  .....
  .....
  .....

</deployment>

```

Install ESB for caAERS-AdEERS Integration

Note: Only complete this section if there will be caAERS-AdEERS integration. If not, continue to Test.

Step-A) Installing ServiceMix ESB

IMPORTANT! This is a one time installation. If servicemix is already installed , skip this step and go to Step-B

Step	Action
1	Download the following file from https://gforge.nci.nih.gov/plugins/scmcs/cvsweb.php/ccts/releases/1.0rc2/caaers-1-0/?cvsroot=ccts 1. apache-servicemix-3.1.2-windows-service.zip
2	Uzip apache-servicemix-3.1.2-windows-service.zip file onto the server. Example: c:/apache-servicemix-3.1.2
3	Create the environment variable SERVICEMIX_HOME and point it to the directory you used in step 2
4	<p>WINDOWS BASED SERVERS ONLY.</p> <ul style="list-style-type: none"> • modify %SERVICEMIX_HOME%/conf/wrapper.conf file. <ul style="list-style-type: none"> ◆ Open wrapper.conf file and edit line number 6. Replace with the location of your java command: wrapper.java.command=C:/jdk1.5.0_10/bin/java • Install ServiceMix as Windows Service <ul style="list-style-type: none"> ◆ Execute %SERVICEMIX_HOME%/Install-ServiceMix-As-Service.bat ◆ Please check windows services for newly installed service "Servicemix Service Bus". ◆ Check the properties of this service and make it to start "Auto" , so that service will be started with server. ◆ We need to know the User who own this windows service. If needed to you can make changes to "Log On" tab in service properties. ◆ Test the the service by starting and stopping it. <p>NIX based SERVERS ONLY</p> <ul style="list-style-type: none"> • Service can be started using unix executable %SERVICEMIX_HOME%/bin/servicemix. • Try starting and stopping the service (Run service in back ground)

Step-B) Deploying caAERS-AdEERS service assembly to ESB.

Step	Action
1	Download the following files from https://gforge.nci.nih.gov/plugins/scmsvn/viewcvs.php/deliverables/Phase%202/1.1.3/?root=caaersappdev

	1. caaers-adeers-sa-3.1.2-incubating.zip 2. caAERs-AdEERS
2	Copy caaers-adeers-sa-3.1.2-incubating.zip to <i>SERVICEMIX_HOME/deploy</i> and <i>SERVICEMIX_HOME/bin/deploy</i> Copy caAERs-AdEERS to User home (**User who owns the ServiceMix service/process)
3	nix based Servers: Start service mix ESB from \$SERVICEMIX_HOME/bin/servicemix.sh
4	Windows based servers start "Servicemix Service Bus" windows service.

Test

Step	Action
1	Go to https://localhost:8443/caaers/ . This should bring up the log in page. Note: Replace <i>localhost</i> with the server name where caAERS has been installed
2	Login with the following information <ul style="list-style-type: none"> • Username = SYSTEM_ADMIN • Password = system_admin

If the steps above do not work, there may be some additional configuring you need to complete before caAERS can be accessed. See Troubleshooting for more information.

NOTE: Refer to the caAERS Administration Guide or the caAERS QuickStart Guide to set up the required information to use the application.

Troubleshooting

These troubleshooting steps may resolve your issues. If they do not please Contact Technical Support.

caAERS doesn't work after the installation is complete

Problem with rules.repository= file

It's possible the installation was complete but the the datasource.properties file in `${tomcat.dir}/conf/caaers` is not configured correctly. The rules.repository= file may need to be modified to work correctly in a Windows environment. It must be modified to only contain 1 include and 2 backslashes instead of forward slashes if it is a Windows operating system.

Step	Action
1	Go to <code>/usr/local/\${tomcat.dir}/conf/caAERS</code>
2	Ensure the rules.repository line is updated to only include one / at the beginning of the file= path location: Example: <code>rules.repository=file:/local/home/tomcat-app/caAers/rules</code>
3	Go to https://localhost:8443/caaers/ . This should bring up the log in page. Note: Replace <i>localhost</i> with the server name where caAERS has been installed
4	Login with the following information <ul style="list-style-type: none"> • Username = SYSTEM_ADMIN • Password = system_admin

The secure tomcat container is missing files

The procedure to build the secure tomcat container may not have copied the two .jar files into the lib folder. caAERS requires these 2 .jar files in order to function.

Step	Action
1	Go to the Dorian server and download the cog-jglobus.jar and log4j-1.2.8.jar files <code>%> cd \$CATALINA_HOME/common/lib</code>
2	Upload these files to the \$CATALINA_HOME/common/lib folder on the caAERS server Example: path on the caAERS server: <code>/usr/local/jakarta-tomcat-5.0.28-8080/common/lib</code>
3	Go to https://localhost:8443/caaers/ . This should bring up the log in page. Note: Make sure to replace localhost with the server name where caAERS has been installed.
4	Go to https://localhost:8443/caaers/ . This should bring up the log in page.

Note: Replace localhost with the server name where caAERS has been installed

Contacting Technical Support

caAERS Application Support	Please e-mail the Project Manager of the caAERS Development team Edmond Mulaire, edmond.mulaire@semanticbits.com or the caAERS Technical Listserv caasersappdev-technical@gforge.nci.nih.gov.
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Introduction

This installation guide outlines the supported configurations and installing, setting up, and configuring the Cancer Adverse Event Reporting System (caAERS) application.

We use linux for CCTS, not Windows

All of the examples and screenshots included in this chapter are Windows specific. If you are using a different platform, then modify the information as appropriate for your system.

caAERS Minimal System Requirements

Please make sure these are incorporated into the main CCTS hardware requirements document and then remove this section

Minimal System Requirements	<ul style="list-style-type: none"> • Internet connection • Firefox 1.5 or higher or Internet Explorer 7.0
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caAERS has been tested on the platforms shown below:

	Solaris	Windows
Model	Xserve G4	Dell Dimension 8200

CPU	2 x 1 GHz PowerPC G4	1 x Intel® Pentium? Processor 1.80GHz
Memory	2 GB	1 GB
Local Disk	System 2 x 180 GB	System 1 x 36GB
OS	OSX 10.4	Windows XP

caAERS Software and Technology Requirements

Software Requirements

Please make sure these are incorporated into the main CCTS hardware requirements document and then remove this section

Required Software---Not Included in the caAERS	You must download and install a set of required software that is not included w application software bundle. The software name, version, description, and URL (download) are listed in Table 3.
---	---

Software Name	Version	Description	
Java SE Development Kit	JDK 5.0 or higher	The Java SE development kit with JRE, compilers and debuggers	http://java.sun.com/j
Apache Tomcat	5.5.23 or higher	Servlet container for JSP	http://tomcat.apache

Database Software	The caAERS application requires access to a properly-configured database. JDBC drivers for HSQLD been included. If your site is using an Oracle database, you will need to obtain the necessary Oracle dr the db/lib directory. caAERS is built with database-independence in mind and has been tested on the c below.
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Database Name	Version	Description	URL
PostgreSQL	8.19 or higher	PostgreSQL is a powerful, open source relational database system.	http://www.postgresql.org/download/
Oracle	10g Release 2 or higher	Industry-leading, commercial database product.	http://www.oracle.com/technology/software/p

Preliminary Considerations

.This disclaimer is probably fine, though I would remove "page 2"

BEFORE YOU BEGIN	<p>caAERS has been tested with the operating systems and hardware specified on page 2 of this guide. Although we have made an effort to develop caAERS as a platform-independent application, we cannot guarantee that it will work if you are using variations of these operating systems and/or hardware.</p> <p>Installing caAERS on a system already setup with the proper versions of the JDK, database, and Tomcat should require only about 30 minutes; installation from scratch could take several hours. For installation on Windows, an account with administrator privileges must be used.</p>	<p>Note: The instructions here assume the CCTS 1.0 Distribution Package, caaers-1-0 folder. Unless otherwise specified, this folder contains the files needed for the application and the grid services required for the CCTS 1.0 system.</p>
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In addition, it is assumed that you have already reviewed the CCTS 1.0 Installation Guide and completed all the required, preliminary CCTS integrated installation steps. The CCTS Installation Guide will walk you through the process of setting up JDK and Tomcat, which are needed by caAERS.

Before you begin the installation of the caAERS application, you need to create a database for caAERS. The instructions for creating the database are found below.

Installing the Database

Databases already installed previously, please remove or heavily change this section

NOTE: caAERS supports two databases, Oracle and PostgreSQL. To successfully deploy caAERS, you need to have one of these databases installed on your system. The instructions for installing an Oracle or PostgreSQL database product are beyond the scope of this document. Refer to the installation documents that accompany these databases for step-by-step instructions.

In your database management system, create a new database. To do so, follow the steps outlined here.

Step	Action
1	Install the preferred database product (PostgreSQL 8.1.9 or Oracle 10g)
2	Create an empty database for caAERS to use. You may give your database any valid name, but this guide will use the name specified in each example

Installing caAERS

You will need to change the "download" instructions to point to the location in the CCTS package

Put in example fields and paths for caGrid-related items (e.g. certificate location). You can find these in the main CCTS section of the main install doc.

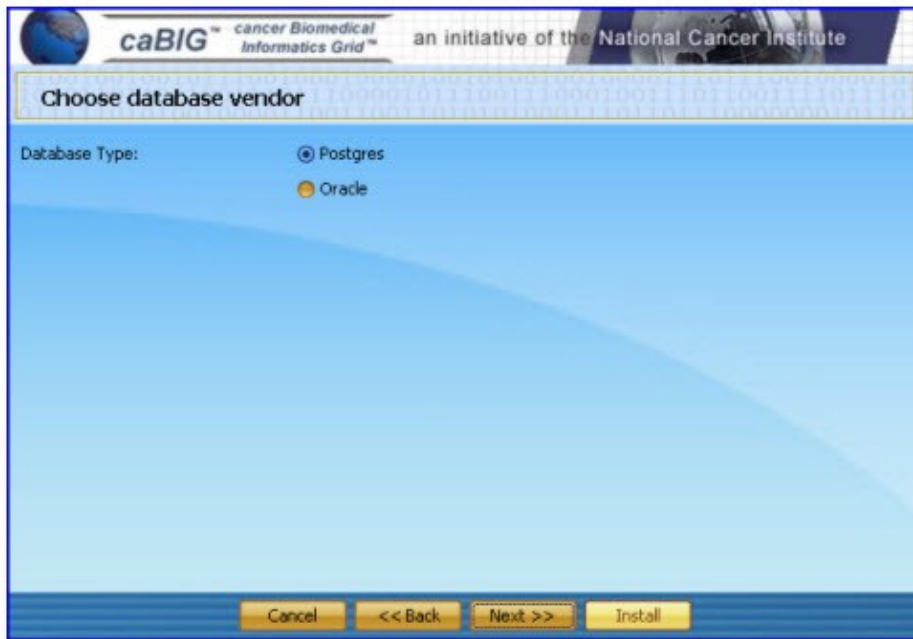
Database field screenshot needs to be updated with CCTS examples

Rules screenshot needs to be updated with CCTS paths

WebSSO screenshot needs to be updated with CCTS paths/values

SUGGESTION: To best understand the installation procedures for the caAERS, it is recommended that you follow the procedures described in this section with minimal deviation.

Step	Action
1	Verify that there is a database called caaers created in Postgres and the owner is set to postgres.
2	Download the installer jar caAERSInstaller.jar from https://gforge.nci.nih.gov/plugins/scmsvn/viewcvs.php/deliverables/Phase%202/1.1.4/caAERSInstaller.jar?root= to the app node in the ccts user account, e.g. /usr/local/ccts/caaersInstaller.
3	Go to the above folder in command prompt and type the command <code>java -jar caAERSInstaller.jar</code> , this will start t
4	On the welcome page, Click Next
5	Accept the license agreement and click Next
6	Select the database to be used with caAERS and then click Next

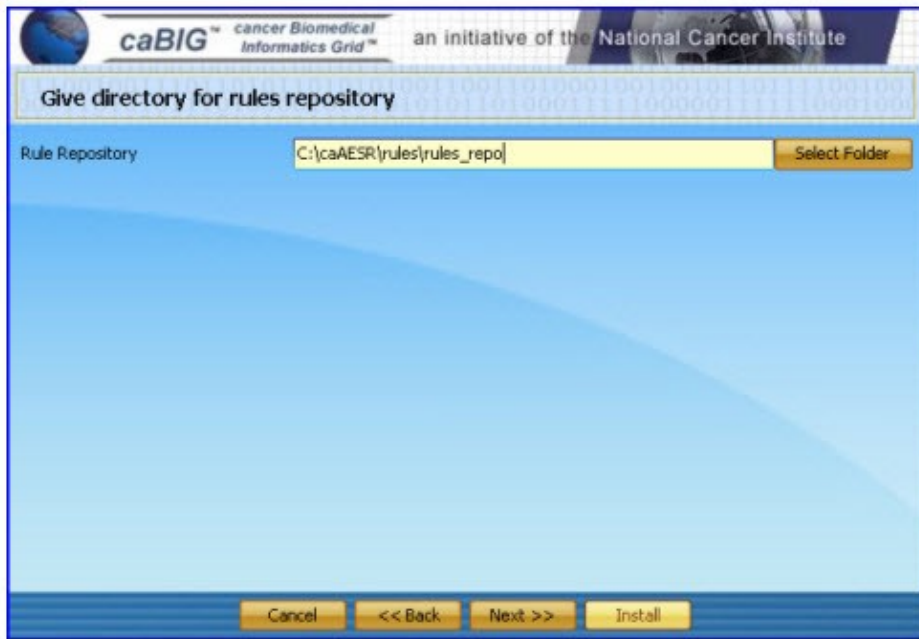


- 7 To install caAERS successfully, you need to have the database's parameters, including name, host name, port address, and password.

Enter the database details for the caAER postgres database and click Next

A screenshot of the 'Provide database parameters' window from the caBIG installation wizard. The window has a blue header with the caBIG logo and text: 'cancer Biomedical Informatics Grid™ an initiative of the National Cancer Institute'. Below the header, the title bar says 'Provide database parameters'. The main area is light blue and contains five text input fields: 'Database Name' (filled with 'caaers'), 'Host Name' (filled with 'localhost'), 'Port Address' (filled with '5432'), 'User Id' (filled with 'postgres'), and 'Password' (filled with 'postgres'). Below these fields is the text 'Make sure the database is up and running'. At the bottom of the window, there are four buttons: 'Cancel', '<< Back', 'Next >>', and 'Install'.

- 8 Create a rules repository directory accessible by tomcat Eg: /usr/local/ccts/caaers-rules and select the folder by clicking on it. Then click Next



- 9 Select the authentication mode WebSSO and then make any necessary changes. Additional information on what below:
- *WebSSO server URL*: Modified to define the server name/port that is hosting WebSSO
 - *The WebSSO server certificate*: This is the path/filename of the certificate that was created for WebSSO WebSSO software. **Note**: It may be necessary to make a local copy of this certificate on the caAERS server to prohibit reading this file directly from where it resides within the WebSSO server.
 - *The Host Certificate and Host Key*: Enter the certificate and key files (normally ending in a .pem filename) on the caAERS using the GAARDS UI program on the Dorian Server_. (Refer to the CCTS 1.0 Installation Guide for generating certificate and key files for each CCTS application component)_
 - *Acegi URL*: _Update the server/port assignment to define the server name/port where caAERS will be running. The path details, /caaers/j_acegi_cas_security_check, should not be modified.
 - *Study Consumer URL*: If using a standard configuration, this default path should be correct. You can update the config file at a later point if changes are required.
 - *Registration Consumer URL*: If using a standard configuration, this default path should be correct. You can update the config file at a later point if changes are required.

Configuration for web sso

Authentication Mode: ☐ Local ☒ WebSSO

WebSSO server URL:

WebSSO server certificate:

Host certificate:

Host Key:

Acegi URL:

Study Consumer URL:

Registration Consumer URL:

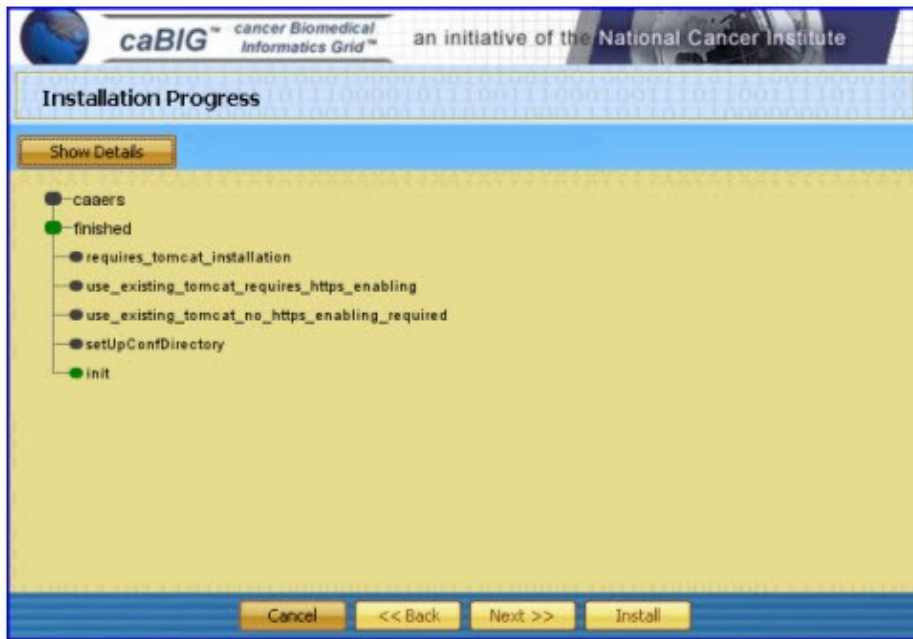
- 10 Verify the components that are to be installed, and then **click Next >>**.

Components to Install

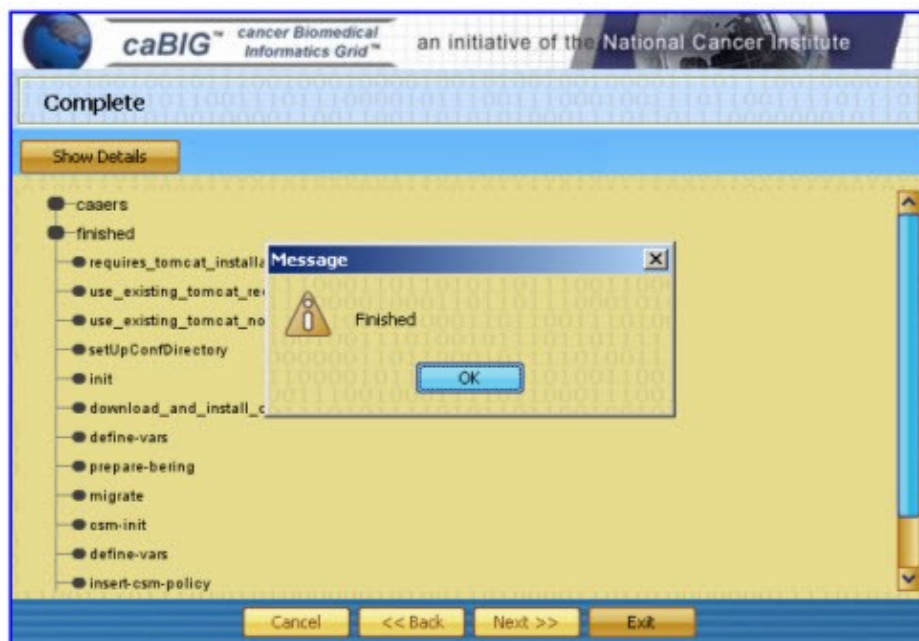
The following components will be installed

caAERS Installation and Setup ☒

- 11 Click **Install** to start the installation process. This will initiate the installation and display the installation's status displayed as shown for some time while the install continues. It is not complete until you receive the **Finished** pop-up message in step 13. Be patient and do not hit the **Cancel** button.



- 12 When the process has completed, click **OK** and then click **Exit**.



Test

Need to include happy.jsp smoke test

Step	Action
1	Go to <u><host-name>:8443/caaers/</u> . This should bring up the list of services. Note: Replace host-name with the server name where caAERS has been installed
2	Go to <u><host-name>:8443/caaers/</u> . This should bring up the log in page. Note: Replace host-name with the server name where caAERS has been installed
3	Login with the following information <ul style="list-style-type: none"> • Username = cctsdemo1@nci.nih.gov • Password = !Ccts1

If the steps above do not work, there may be some additional configuring you need to complete before caAERS can be accessed. See Troubleshooting for more information.

NOTE: Refer to the caAERS Administration Guide or the caAERS QuickStart Guide to set up the required information to use the application.

Troubleshooting

These troubleshooting steps may resolve your issues. If they do not please Contact Technical Support.

caAERS doesn't work after the installation is complete

Problem with rules.repository= file

Need path to correspond to CCTS install path

It's possible the installation was complete but the the datasource.properties file in `${tomcat.dir}/conf/caaers` is not configured correctly. The rules.repository= file may need to be modified to work correctly in a Windows environment. It must be modified to only contain 1 include and 2 backslashes instead of forward slashes if it is a Windows operating system.

Step	Action
1	Go to <code>/usr/local/\${tomcat.dir}/conf/caAERS</code>
2	Ensure the rules.repository line is updated to only include one / at the beginning of the file=path l

	Example: rules.repository=file:/local/home/tomcat-app/caAers/rules
3	Go to https://localhost:8443/caaers/ . This should bring up the log in page. Note: Replace localhost with the server name where caAERS has been installed
4	Login with the following information <ul style="list-style-type: none"> • Username = SYSTEM_ADMIN • Password = system_admin

The secure tomcat container is missing files

The procedure to build the secure tomcat container may not have copied the two .jar files into the lib folder. caAERS requires these 2 .jar files in order to function.

Step	Action
1	Go to the Dorian server and download the cog-jglobus.jar and log4j-1.2.8.jar files %> cd \$CATALINA_HOME/common/lib
2	Upload these files to the \$CATALINA_HOME/common/lib folder on the caAERS server Example: path on the caAERS server: /usr/local/jakarta-tomcat-5.0.28-8080/common/lib)
3	Go to https://localhost:8443/caaers/ . This should bring up the log in page. Note: Make sure to replace localhost with the server name where caAERS has been installed
4	Go to https://localhost:8443/caaers/ . This should bring up the log in page. Note: Replace localhost with the server name where caAERS has been installed

Contacting Technical Support

Need to update this contact info

caAERS Application Support	Please e-mail the Project Manager of the caAERS Development team Edmond Mulaire, edmond.mulaire@semanticbits.com or the caAERS Technical Listserv caaersappdev-technical
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 - ◇ 5.11.2 Step-B) Deploying caAERS-AdEERS service assembly to ESB.
 - ◇ 5.11.3 Test
- 6 Troubleshooting
 - ◆ 6.1 caAERS doesn't work after the installation is complete
 - ◆ 6.2 The secure tomcat container is missing files
- 7 Contacting Technical Support

Preliminary Considerations

BEFORE YOU BEGIN	<p>caAERS has been tested with the operating systems and hardware specified in the Minimal Requirements Installation guide. Although we have made an effort to develop caAERS as a platform-independent application, we cannot guarantee that it will work if you are using variations of these operating systems and/or hardware.</p> <p>Installing caAERS on a system already setup with the proper versions of the JDK, database, and Tomcat can take a few minutes. Installation from scratch could take several hours. For installation on Windows, an account with administrative privileges must be used.</p>
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Important: Before installing caAERS you will need to install JDK and Tomcat and then create your database. Please follow the steps outlined in the sections below.

Installing JDK

Step	Action
1	Download Java Standard Edition 5.0 or higher from http://java.sun.com/javase/downloads/index.jsp .
2	<p>Install Java. Make sure neither the directory where you install java or the parent directories contain a white space in between any characters in the name of the directory.</p> <p>Note: Throughout this guide the java installation directory will be referred as <code>\${java.dir}</code>.</p>
3	Add the <code>\${java.dir}\bin</code> to your system PATH.
4	Set a new environment variable named <code>JAVA_HOME</code> , whose value equals <code>\${java.dir}</code> .

Installing Tomcat

Step	Action
1	<p>Download Apache Tomcat version 5.5.23 or higher from http://tomcat.apache.org/download-55.cgi. Add a new environment variable <code>CATALINA_HOME</code>, whose value must be set to <code>\${tomcat.dir}</code></p>
2	<p>Install the Tomcat application in a convenient location.</p> <p>Note: Throughout this guide the Tomcat installation directory will be referred as <code>\${tomcat.dir}</code>.</p>
3	Configure <code>server.xml</code> in the <code>\${tomcat.dir}/conf</code> to enable https connections on port 8443 or 443.
4	Generate an SSL certificate using the instructions at http://tomcat.apache.org/tomcat-5.5-doc/ssl-howto.html . Save the generated

certificate in your c:\ directory.

Installing an SVN Client

To checkout the latest code, you need to have a Subversion (SVN) client installed on your system. Download and install the Subversion client provided below.

- Windows stand alone: <http://tortoissvn.tigris.org/>
- Mac stand alone: http://www.apple.com/downloads/macosx/development_tools/svnx.html

Download the Latest Source Code

Step	Action
1	Once the SVN client is installed, create a directory in a convenient location to checkout the caAERS source code. Note: Throughout this guide the source code directory will be referred as \${workspace} .
2	Right-click \${workspace} , select SVN Checkout and enter the following repository URL: https://gforge.nci.nih.gov/svnroot/caaersappdev/trunk/

Download the Latest Compiled .war file

Step	Action
1	Go to the caAERS Subversion repository, located at http://gforge.nci.nih.gov/frs/?group_id=249
2	From here, download the latest compiled .war file, caaers-20070412.zip, from the caAERS project site.
3	Unzip the file contents into a convenient location. Note: this directory will be referred as \${caAERS}

Installing and Configuring the Database

caAERS supports two databases, Oracle and PostgreSQL. To successfully deploy caAERS, you need to have one of these databases installed on your system.

Note: The instructions for installing an Oracle or Postgres database are beyond the scope of this document. Refer to the installation documents that accompany these databases for step-by-step instructions.

Installing the Database

Complete the following steps to prepare the database for caAERS:

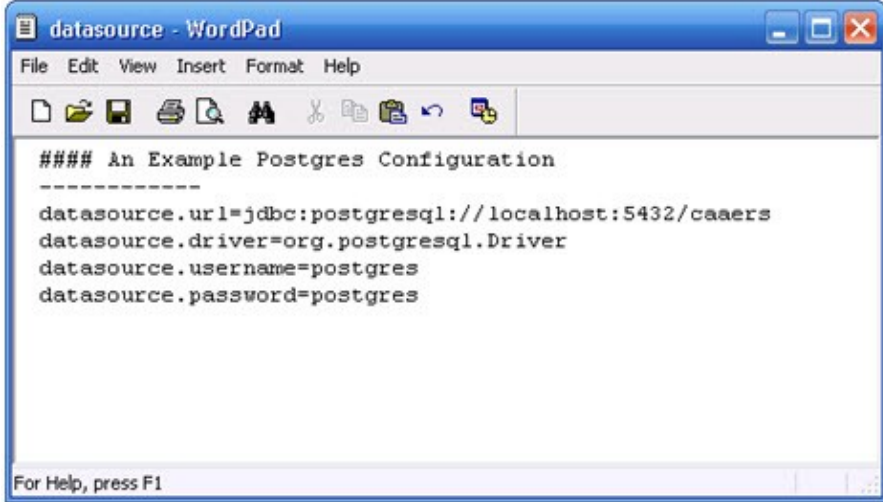
Step	Action
1	Install the preferred database product (PostgreSQL 8.1.9 or Oracle 10g)
2	Create an empty database for caAERS to use. You may give your database any valid name, but this guide will use "caaers" as the name in each example
3	Create a schema named "caaers" in the database
4	Create a superuser with privileges to access the database created in step 2

Note: There is a readme.database in \caaers\projects\core that provides more details on how to do the configuration with Postgres and Oracle databases.

Configuring the Database for Use with caARES

The following steps explain how to set up an etc/caaers directory, for the Postgres database.

Step	Action
1	Create the directory: c:*etc*
2	Create a subfolder: caaers
3	Go to \${workspace}\caaers\projects\rules\db
4	Copy caaers.properties.sample into c:\etc\caaers* and rename it *datasource.properties

5	<p>Edit datasource.properties attributes to match the "caaers" database.</p> <ul style="list-style-type: none"> • Set `datasource.url` to the JDBC URL for your database • Set the username and password to use to access this URL • Uncomment the database configuration block that corresponds to your database type 
---	--

Configuring Tomcat

Please follow the steps below to configure Tomcat:

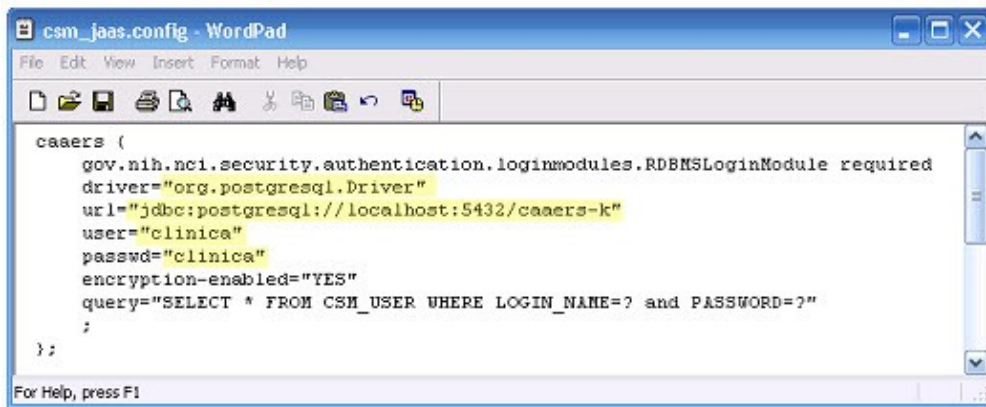
Step	Action
1	<p>Add the following lines in <code>\${tomcat.dir}/conf/catalina.properties</code></p> <p>Note: Every file referenced below will be contained in the <code>\${tomcat.dir}/conf/cabig/</code> folder</p> <pre>gov.nih.nci.security.configFile= \${tomcat.dir}/conf/cabig/ApplicationSecurityConfig.xml java.security.auth.login.config= \${tomcat.dir}/conf/cabig/csm_jaas.config</pre>
2	Create a new folder: <code>\${tomcat.dir}/conf/cabig</code>
3	<p>Copy all the files in <code>\${workspace}/projects/core/tools/csm/conf/cabig</code> to <code>\${tomcat.dir}/conf/cabig</code></p> <p>4 From the cabig folder, open ApplicationSecurityConfig.xml and caaers.hibernate.cfg.xml in a text editor and make the following changes:</p>

- Replace @csm.context.name@ with caaers
- Replace @tomcat.security.dir@ with \${tomcat.dir}/conf/cabig

5 From the cabig folder, open the csm_jaas.config and change the following fields (as highlighted in the screenshot):

- driver
- url
- user
- passwd

Note: This is the csm_jaas.config file for Postgres. If you are using Oracle, make the appropriate changes.



6 From the cabig folder, open caaers.hibernate.cfg.xml and change the following datasource related properties (as shown in the screenshot)

- username
- password
- url
- driver_class
- dialect

Note: This is for Postgres. If you are using Oracle, make the appropriate changes

```
<?xml version='1.0' encoding='utf-8'?>
<!DOCTYPE hibernate-configuration PUBLIC
    "-//Hibernate/Hibernate Configuration DTD//EN"
    "http://hibernate.sourceforge.net/hibernate-configuration-3.0.dtd">
<hibernate-configuration>
  <session-factory>
    <property name="connection.username">postgres</property>
    <property name="connection.password">postgres</property>
    <property name="connection.url">jdbc:postgresql://localhost:5432/caaers-k</property>
    <property name="connection.driver_class">@datasource.driver@</property>
    <property name="dialect">gov.nih.nci.cabig.caaers.tools.hibernate.ImprovedPostgreSQLDialect</property>
    <property name="hibernate.show_sql">true</property>
    <property name="hibernate.cache.provider_class">org.hibernate.cache.HashtableCacheProvider</property>
    <mapping resource="gov/nih/nci/security/authorization/domainobjects/Privilege.hbm.xml"/>
    <mapping resource="gov/nih/nci/security/authorization/domainobjects/Application.hbm.xml"/>
    <mapping resource="gov/nih/nci/security/authorization/domainobjects/Role.hbm.xml"/>
  </session-factory>
</hibernate-configuration>
```

Enabling SSL

Generate a Certificate

Step	Action
1	From the command prompt, switch to <code>\${tomcat.dir}/conf/cabig</code>
2	Run the following command: <code>keytool -genkey -alias tomcat -keyalg RSA -keystore caaers_keystore</code> This will generate a file, <code>caaers_keystore</code> , in the active directory
3	The keytool command will request the following information: Store password <ul style="list-style-type: none"> • Firstname • Last name • Dns • Key password <p>Complete each field</p>

Please refer to the detailed instructions available in <http://tomcat.apache.org/tomcat-5.0-doc/ssl-howto.html>, to enable SSL.

Updating the server.xml

Step	Action
1	Switch to <code>\${tomcat.dir}/conf</code> , open the <code>server.xml</code> in a text editor
2	Search for '
3	Update the <code><Connector></code> element by un-commenting it and specifying the relative directory of the keystore (as shown in the sample file) <div> <pre><!-- Define a SSL Coyote HTTP/1.1 Connector on port 8443 --> <Connector className="org.apache.coyote.tomcat5.CoyoteConnector" port="8443" minProcessors="5" maxProcessors="75" enableLookups="true" disableUploadTimeout="true" acceptCount="100" debug="0" scheme="https" secure="true"; clientAuth="false" sslProtocol="TLS" keystoreFile="conf/cabig/caaers_keystore"/></pre> </div>

Loading the Database with the Schema/Deploying the caAERS.war

Step	Action
1	Copy the caaers.war file from the directory <code>\${caAEERS}</code>
2	<p>Start Tomcat, by executing the startup.bat or startup.sh file located in <code>\${tomcat.dir}/bin</code></p> <p>Note: Starting Tomcat will automatically deploy the caaers.war file, this will create a /caers directory within <code>\${tomcat.dir}/webapps</code> and load the schema into the caaers database</p>
3	<p>Go to https://localhost:8443/caaers/. This should bring up the log in page.</p> <p>Note: Replace <i>localhost</i> with the server name where caAERS has been installed</p>
4	<p>Login with the following information</p> <ul style="list-style-type: none"> • Username = SYSTEM_ADMIN • Password = system_admin

Installing caAERS Services and ESB

Regardless of the type of installation (stand-alone, part of CCTS, or manual), complete the following steps before testing and running caAERS.

Install the Globus Toolkit

To use any of the grid service, the globus toolkit must be available on tomcat. The following instructions pertain to installation of globus on tomcat.

Note: If you've installed caAERS as part of CCTS, globus will already be installed, so move directly to Setting up the Secure Data Grid Service.

Step	Action
1	<p>Download the following toolkit:</p> <p>http://www-unix.globus.org/toolkit/survey/index.php?download=ws-core-4.0.3-bin.zip</p>
2	Unzip the compressed folder in to an appropriate directory
3	Open the command prompt and navigate to the unzipped directory (it should be ws-core-4.0.3)

4	On the command line type ant -f share\globus_wsrf_common\tomcat\tomcat.xml deployTomcat -Dtomcat.dir = tomcat_home where tomcat home would be the directory where tomcat is installed
5	If the build is successful, navigate to the webapps folder of tomcat and make sure the wsrf folder has been created

Install the caAERS Data Grid Service

Step	Action
1	Assumptions: A) It is assumed that the target machine has JDK 5.0 or higher installed on it. B) The environment variable CATALINA_HOME is pointing to the targeted tomcat in the machine. C) The environment variable GLOBUS_LOCATION is set and pointing to globus installation location. Download the zip file (CaaersDataService.zip) from the following location <<<<URL>>>> and unzip to any location , which creates a folder named "CaaersDataService"
2	Edit CaaersDataService/service.properties file to replace the following properties with appropriate values. cqIQueryProcessorConfig_gridGrouperUrl= <URL to GRID GROUPER> cqIQueryProcessorConfig_gridGrouperGroup= <GROUP NAME>
3	Edit CaaersDataService/etc/serviceMetadata.xml file to enter the research center information as shown below <ns1:hostingResearchCenter> <ns9:ResearchCenter displayName="" shortName="" xmlns:ns9="gme://caGrid.caBIG/1.0/gov.nih.nci.cagrid.metadata.common"> <ns9:Address country="" locality="" postalCode="" stateProvince="" street1="" street2=""/> <ns9:pointOfContactCollection> <ns9:PointOfContact affiliation="" email="" firstName="" lastName="" phoneNumber="" role=""/> </ns9:pointOfContactCollection> </ns9:ResearchCenter> </ns1:hostingResearchCenter>
4	Open the command prompt and navigate to CaaersDataService folder and type "ant all" Once the above step is completed, execute "ant deployTomcat" If you don't see any error message/s then it indicates that service has been successfully deployed in targeted tomcat.

5	<p>If you have already configured datasource.properties in \$CATALINA_HOME/conf/caaers leave it like that . If not then</p> <ul style="list-style-type: none"> • download datasource.properties from https://gforge.nci.nih.gov/plugins/scmsvn/viewcvs.php/deliverables/Phase%202/1.1.2/?root=caaersappd • edit with right values • and copy it to \$CATALINA_HOME/conf/caaers. Start tomcat
6	<p>To check if the caAERS data service is up and running , type the following URL in the web browser <a href="https://<<HOST_NAME>>:8443/wsrf/services/cagrid/Caaers?wsdl">https://<<HOST_NAME>>:8443/wsrf/services/cagrid/Caaers?wsdl</p> <p>This should show the wsdl for the caAERS data service (it is just an xml) in the web browser.</p>

Preparation for using grid client

The grid client is used to access the caAERS Data Service. This requires that the grid service is correctly configured. See the [figure](#) below for an overview of a grid service configuration.

Configuration

The following requirements are assumed to be true in order for configuration to be performed:

1. The grid security infrastructure is in place [Dorian, syncGTS, IDP].
2. For an existing infrastructure, the following information needs to be known\extracted:
 - The URL for Dorian
 - The root certificate [CA] of Dorian

Step	Action
1	Copy the root certificate of Dorian on the client machine under the following directory: \$user_home/.globus/certificates. Make sure the extension of the certificate is ".0" ("dot zero").
2	<p>Copy the root certificate into the userhome where the caaers data grid service is running.</p> <p>Note: It is important that the certificate should be applied in the userhome of the user account under which tomcat is running.</p>
3	<p>Modify the following properties in run-tools.xml. The screenshot shows a sample of the file with the changes made.</p> <ul style="list-style-type: none"> • <i>service.url</i>: The URL where the service is located

Example: <https://localhost:8443/wsrf-ds/services/cagrid/Caaers>

- *dorian.url*: The URL where Dorian is located

Example: <https://localhost:8443/wsrf-ds/services/cagrid/Caaers>

- *uid and pwd*: The user id and password for an existing user account in Dorian IDP

```
<project name="run-tools file" basedir="." default="runClient">

<target name="runClient" depends="checkGlobus, defineClasspaths" description="Run the sample
Client">

<property name="service.url" value="data service url " />

<property name="dorian.url" value="dorian url" />

<property name="uid" value="userid" />

<property name="pwd" value="password" />

<echo message="Connecting to service: ${service.url}" />

<java classname="gov.nih.nci.cagrid.caaers.client.ClientTest" classpathref="run.classpath" fork="no">

<jvmarg value="-DGLOBUS_LOCATION=${ext.globus.dir}" />

<arg value="${service.url}" />

<arg value="${dorian.url}" />

<arg value="${uid}" />

<arg value="${pwd}" />

</java>

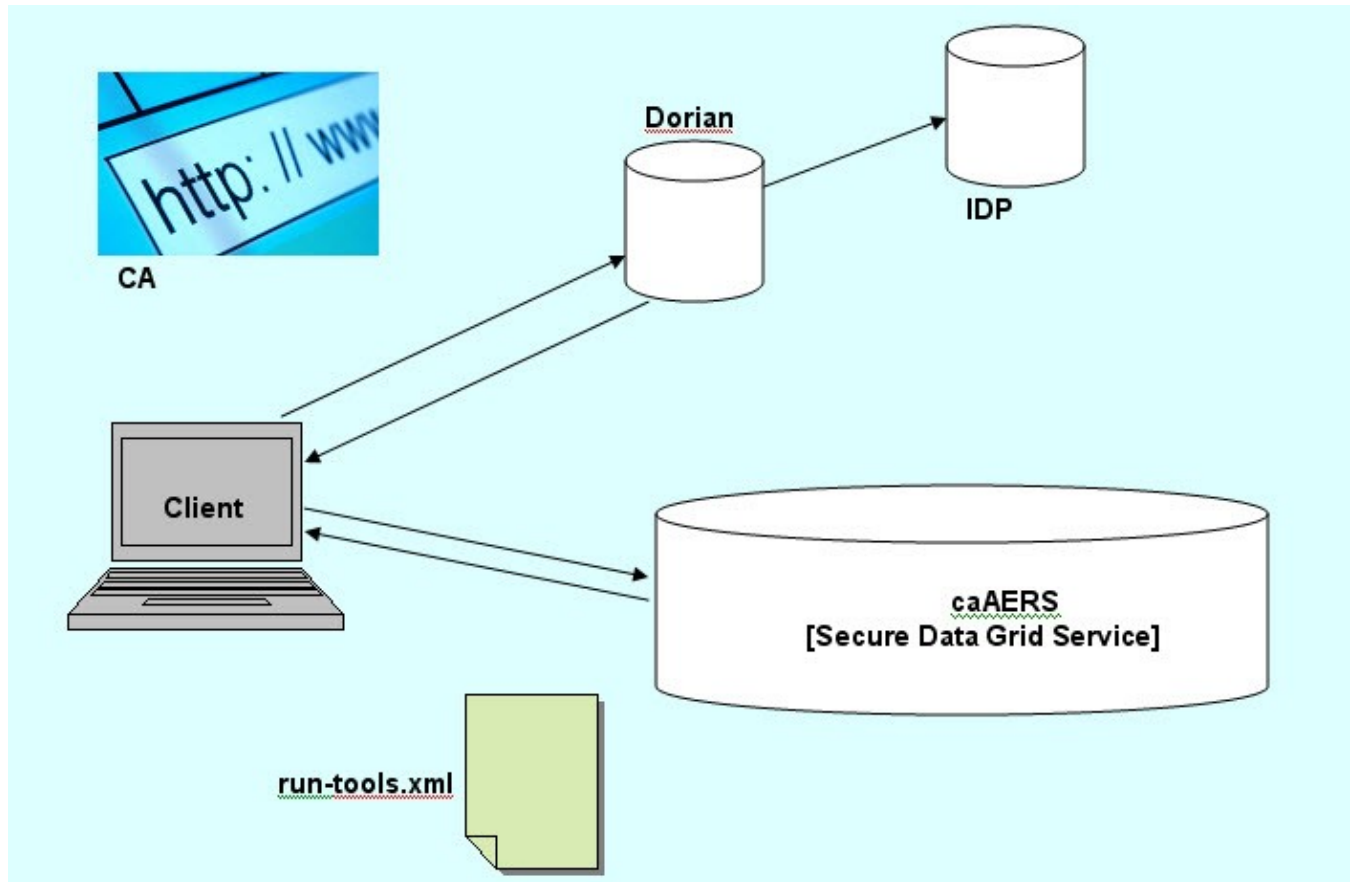
</target>

</project>
```

Running the grid client

After suitable setup of the run-tools.xml, the caAERS data service can be accessed. Use the following steps to access the grid client:

Step	Action
1	From the command prompt, navigate to the folder where caAERSDataService.zip was unzipped
2	Type: <i>ant runClient</i> The client should run and be able to successfully connect to the caAERS data service



Install the caAERS Adverse Event Consumer Grid Service

Step	Action
1	Locate AdverseEventConsumerService.zip in the caaers-1-0 folder.
2	Unzip AdverseEventConsumerService.zip to a local drive. This will create a folder named "AdverseEventConsumerService"
3	If you have Maven and Ant available in your machine, type <i>mvn install -Dmaven.test.skip=true</i>

	If you only have ant available in your machine, type <i>ant deployTomcat</i> Note: Make sure CATALINA_HOME is pointing to the appropriate tomcat
4	If the deployment was successful, start tomcat
5	To check if the caAERS Adverse Event Consumer service is up and running, access <a href="https://<host name>:8443/wsrf/services/cagridAdverseEventConsumer?wsdl">https://<host name>:8443/wsrf/ services/cagridAdverseEventConsumer?wsdl . This should show the wsdl (it is just an xml) in the browser.

Install the caAERS Registration Consumer Grid Service Implementation

Note: The Registration Consumer Grid Service globus skeleton webservice must be available in \$CATALINA_HOME/webapps/\$wsrf.

Step	Action
1	Go to the caaers-1-0 folder. Locate the required-jars subfolder. Open this folder and select all the files.
2	Move or copy the files to \$CATALINA_HOME/webapps/\$wsrf/WEB-INF/lib Note: Override existing files
3	Enable auditing by editing the \$CATALINA_HOME/webapps/caaers-wsrf/WEB-INF/etc/cagrid_RegistrationConsumer/server-config.w to include the highlight lines, as shown in the figure below.

```

<?xml version="1.0" encoding="UTF-8"?>
<deployment xmlns="http://xml.apache.org/axis/wsdd/"
  xmlns:aggr="http://mds.globus.org/aggregator/types"
  xmlns:java="http://xml.apache.org/axis/wsdd/providers/java"
  xmlns:xsd="http://www.w3.org/2001/XMLSchema"
  name="defaultServerConfig">
  <handler name="auditInfoRequestHandler"
    type="java:gov.nih.nci.cabig.caaers.grid.AuditInfoRequestHandler"/>

  <handler name="auditInfoResponseHandler"
    type="java:gov.nih.nci.cabig.caaers.grid.AuditInfoResponseHandler"/>

  <service name="cagrid/RegistrationConsumer" provider="Handler" use="literal"
    style="document">
    <parameter .....>/>
    <parameter .....>/>
    <parameter .....>/>
    <parameter .....>/>
    .....
    .....
    .....
    <requestFlow>
      <handler type="auditInfoRequestHandler"/>
    </requestFlow>
    <responseFlow>
      <handler type="auditInfoResponseHandler"/>
    </responseFlow>
  </service>

  .....
  .....
  .....

<!--ccts addition-->
  .....
  .....
  .....

```

Install the caAERS Study Consumer Grid Service Implementation

Note: The Study Consumer Grid Service globus skeleton webservice must be available in \$CATALINA_HOME/webapps/\$wsrf.

Step	Action
1	Go to the caaers-1-0 folder. Locate the required-jars subfolder. Open this folder and select all the files. Note: If you just completed this step above as part of installing the caAERS Registration Consumer Grid Service you can skip directly to step 3 below.
2	Move or copy the files to \$CATALINA_HOME/webapps/\$wsrf/WEB-INF/lib Note: Override existing files
3	Enable auditing by editing the \$CATALINA_HOME/webapps/caaers-wsrf/WEB-INF/etc/cagrid_RegistrationConsumer/server-config.w

to include the highlight lines, as shown in the figure below.

```
<?xml version="1.0" encoding="UTF-8"?>
<deployment xmlns="http://xml.apache.org/axis/wsdd/"
xmlns:aggr="http://mds.globus.org/aggregator/types"
xmlns:java="http://xml.apache.org/axis/wsdd/providers/java"
xmlns:xsd="http://www.w3.org/2001/XMLSchema" name="defaultServerConfig">
  <handler name="auditInfoRequestHandler"
    type="java:gov.nih.nci.cabig.caaers.grid.AuditInfoRequestHandler"/>
  <handler name="auditInfoResponseHandler"
    type="java:gov.nih.nci.cabig.caaers.grid.AuditInfoResponseHandler"/>

  <service name="cagrid/StudyConsumer" provider="Handler" use="literal"
style="document">
    <parameter ...../>
    <parameter ...../>
    <parameter ...../>
    <parameter ...../>
    .....
    .....
    .....

    <requestFlow>
      <handler type="auditInfoRequestHandler"/>
    </requestFlow>

    <responseFlow>
      <handler type="auditInfoResponseHandler"/>
    </responseFlow>

  </service>

  <!--ccts addition-->
  .....
  .....
  .....

</deployment>
```

Install ESB for caAERS-AdEERS Integration

Note: Only complete this section if there will be caAERS-AdEERS integration. If not, continue to Test.

Step-A) Installing ServiceMix ESB

IMPORTANT! This is a one time installation. If servicemix is already installed , skip this step and go to Step-B

Step	Action
1	Download the following file from https://gforge.nci.nih.gov/plugins/scmcs/cvsweb.php/ccts/releases/1.0rc2/caaers-1-0/?cvsroot=ccts 1. apache-servicemix-3.1.2-windows-service.zip
2	Uzip apache-servicemix-3.1.2-windows-service.zip file onto the server. Example: c:/apache-servicemix-3.1.2
3	Create the environment variable SERVICEMIX_HOME and point it to the directory you used in step 2
4	<p>WINDOWS BASED SERVERS ONLY.</p> <ul style="list-style-type: none"> • modify %SERVICEMIX_HOME%/conf/wrapper.conf file. <ul style="list-style-type: none"> ◆ Open wrapper.conf file and edit line number 6. Replace with the location of your java command: wrapper.java.command=C:/jdk1.5.0_10/bin/java • Install ServiceMix as Windows Service <ul style="list-style-type: none"> ◆ Execute %SERVICEMIX_HOME%/Install-ServiceMix-As-Service.bat ◆ Please check windows services for newly installed service "Servicemix Service Bus". ◆ Check the properties of this service and make it to start "Auto" , so that service will be started with server. ◆ We need to know the User who own this windows service. If needed to you can make changes to "Log On" tab in service properties. ◆ Test the the service by starting and stopping it. <p>NIX based SERVERS ONLY</p> <ul style="list-style-type: none"> • Service can be started using unix executable %SERVICEMIX_HOME%/bin/servicemix. • Try starting and stopping the service (Run service in back ground)

Step-B) Deploying caAERS-AdEERS service assembly to ESB.

Step	Action
1	Download the following files from https://gforge.nci.nih.gov/plugins/scmsvn/viewcvs.php/deliverables/Phase%202/1.1.3/?root=caaersappdev 1. caaers-adeers-sa-3.1.2-incubating.zip 2. caAERs-AdEERS
2	Copy caaers-adeers-sa-3.1.2-incubating.zip

	to <i>SERVICEMIX_HOME/deploy</i> and <i>SERVICEMIX_HOME/bin/deploy</i> Copy caAERS-AdEERS to User home (**User who owns the ServiceMix service/process)
3	nix based Servers: Start service mix ESB from \$SERVICEMIX_HOME/bin/service mix.sh
4	Windows based servers start "Servicemix Service Bus" windows service.

Test

Step	Action
1	Go to https://localhost:8443/caaers/ . This should bring up the log in page. Note: Replace <i>localhost</i> with the server name where caAERS has been installed
2	Login with the following information <ul style="list-style-type: none"> • Username = SYSTEM_ADMIN • Password = system_admin

If the steps above do not work, there may be some additional configuring you need to complete before caAERS can be accessed. See Troubleshooting for more information.

NOTE: Refer to the caAERS Administration Guide or the caAERS QuickStart Guide to set up the required information to use the application.

Troubleshooting

These troubleshooting steps may resolve your issues. If they do not please Contact Technical Support.

caAERS doesn't work after the installation is complete

Problem with rules.repository= file

It's possible the installation was complete but the the datasource.properties file in \${**tomcat.dir**}/conf/caaers is not configured correctly. The rules.repository= file may need to be modified to work correctly in a Windows environment. It must be modified to only contain 1 include and 2 backslashes instead of forward

slashes if it is a Windows operating system.

Step	Action
1	Go to /usr/local/\${tomcat.dir}/conf/caAERS
2	Ensure the rules.repository line is updated to only include one / at the beginning of the file= path location: Example: rules.repository=file:/local/home/tomcat-app/caAers/rules
3	Go to https://localhost:8443/caaers/ . This should bring up the log in page. Note: Replace <i>localhost</i> with the server name where caAERS has been installed
4	Login with the following information <ul style="list-style-type: none"> • Username = SYSTEM_ADMIN • Password = system_admin

The secure tomcat container is missing files

The procedure to build the secure tomcat container may not have copied the two .jar files into the lib folder. caAERS requires these 2 .jar files in order to function.

Step	Action
1	Go to the Dorian server and download the cog-jglobus.jar and log4j-1.2.8.jar files %> cd \$CATALINA_HOME/common/lib
2	Upload these files to the \$CATALINA_HOME/common/lib folder on the caAERS server Example: path on the caAERS server: /usr/local/jakarta-tomcat-5.0.28-8080/common/lib)
3	Go to https://localhost:8443/caaers/ . This should bring up the log in page. Note: Make sure to replace localhost with the server name where caAERS has been installed.
4	Go to https://localhost:8443/caaers/ . This should bring up the log in page. Note: Replace localhost with the server name where caAERS has been installed

Contacting Technical Support

caAERS Application Support	Please e-mail the Project Manager of the caAERS Development team Edmond Mulaire, edmond.mulaire@semanticbits.com or the caAERS Technical Listserv caaersappdev-technical@gforge.nci.nih.gov .
---	---

Configuring caAERS

After the installation is complete, you can start configuring it. All of these steps need to be completed before you can start using caAERS. The configuration should be completed in the order listed since many steps are prerequisites for steps that follow.

Task	Method 1	Method 2
Configure the Application	Manual Configuration	
Verify Organization List	Manual Verification	
Verify IND list	Manual Verification	
Set up Report Definitions	Enter Manually	
Set up Rules	Import	Enter Manually
Set up Vocabulary (MedDRA)	Import	
Set up Investigators	Import	Enter Manually
Set up Research Staff	Import	Enter Manually
Set up IND #	Enter Manually	
Set up Studies	Import	Enter Manually
Set up Patients	Import	Enter Manually
Assign Patients to Studies	Import	Enter Manually
Import Routine AEs	Import	

Configure caAERS Reporting Definitions

When you first install caAERS and add the Rules files we provide, caAERS will create skeleton Reporting Definitions for CTEP and DCP reports. If the rules state that a report is required, a skeleton Report Definition will be created. These skeleton reporting definitions do not include all the necessary information. For example, it won't have

- Information to electronically submit reports to AdEERS
- Notifications that are sent to interested parties
- Defined mandatory fields to assist the users with creating expedited reports.

The attached spreadsheet provides a matrix on how to configure the Reporting Definitions. Some note about the spreadsheet:

- The first tab of the spreadsheet includes information from the first three tabs of the setup process.

Page Section SubSection	Field	CTEP 5 calendar day SAE Report	CTEP 10 calendar day SAE Report
Basic Details			
	Organization	Cancer Therapy Evaluation Program (CTEP)	Cancer Therapy Evaluation Program (CTEP)
	Name	CTEP 5 Calendar Day SAE Report	CTEP 10 Calendar Day SAE Report
	Description - can be modified	Five Calendar Day SAE Report	
	Amendable?	Yes	Yes
	Attribution Required?	Yes	Yes
	Time Scale UOM	Day	Day
	Time until report due	5	10
Delivery Details			
Email recipients - can be modified			
	name	reporter	PI
	role/EmailAddress	Reporter	Principal Investigator
	name		AE
	role/EmailAddress		Adverse Event Coordinator
system recipients - do not modify if sending to AdEERS			
	name	AdEERS	AdEERS Staging System
	username	ADEERSBETA	ADEERSBETA
	password	testadeers1#	testadeers1#
	url	https://capps- ctep.nci.nih.gov/adeersw s10gbeta/services/AERe portXMLService	https://capps- ctep.nci.nih.gov/adeersw s10gbeta/services/AERepo rtXMLService
Mandatory Fields do not modify			
Course and agent			
	treatment assignment code		
	description of treatment assignment or dose level		
	Start date of first course		

Page Section SubSection	Field	CTEP 5 calendar day SAE Report	CTEP 10 calendar day SAE Report
	Start date of course associated with expedited report		
	Course number on which event occurred		
	Total number of courses to date		
	Study Agent	✓	✓
	Total Dose administered this course	✓	✓
	Unit of measure	✓	✓
	Date last administered		
	Administration Delay amount		
	adminstration delay units		
	comments		
	modified dose amount		
	modified dose units		
Reporter			
<i>Reporter details</i>			
	First name	✓	✓
	Middle name		
	Last name	✓	✓
	E-mail address	✓	✓
	Phone	✓	✓
	Fax	✓	✓
<i>Physicians details</i>			
	First name	✓	✓
	Middle name		
	Last name	✓	✓
	E-mail address	✓	✓
	Phone	✓	✓
	Fax		
Describe event			
	Description	✓	✓
	Present status	✓	✓
	Date of recovery or death Has the participant been re-treated?	✓	✓
	Was blind broken due to event?		

Page Section SubSection	Field	CTEP 5 calendar day SAE Report	CTEP 10 calendar day SAE Report
	Was Study Drug stopped/interrupted/reduc ed in response to event If reduced, specify: New dose Date of recovery or death If interrupted, specify total number of days not given Did event abate after study drug was stopped or dose reduced? Did event reappear after study drug was reintroduced?		
Patient details			
	Baseline performance		
	Disease name	✓	✓
	Primary site of disease	✓	✓
	Date of initial diagnosis		
	Weight Quantity	✓	✓
	Weight Units	✓	✓
	Height Quantity	✓	✓
	Height Units	✓	✓
Metastatic disease information			
	Site Name	✓	✓
Pre-existing conditions			
	Pre-existing condition	✓	✓
Prior Therapy			
	Priory Therapy	✓	✓
	Comments		
	Therapy start date		
	Therapy end Date		
Concomitant Medications			
	Medication	✓	✓
Other contributing causes			
	Cause	✓	✓
Intervention information			

Page		CTEP 5 calendar	CTEP 10 calendar
Section		day SAE Report	day SAE Report
SubSection	Field		
<i>Radiation intervention</i>			
	Type of radiation administration	✓	✓
	Dosage	✓	✓
	Dosage unit	✓	✓
	Last treatment date	✓	✓
	Schedule number of fractions	✓	✓
	Elapsed days	✓	✓
	Adjustment	✓	✓
<i>Surgery intervention</i>			
	Intervention site	✓	✓
	Intervention date	✓	✓
<i>Medical devices</i>			
	Brand name		
	Common name		
	Device type		
	Manufacturer name		
	Manufacturer city		
	Manufacturer state		
	Model number		
	Lot number		
	Catalog number		
	Expiration date		
	Serial number		
	Other number		
	Device operator		
	Other device operator		
	If implanted, enter a date		
	If explanted, enter a date		
	Device reprocessed		
	Reprocessor name		
	Reprocessor address		
	Evaluation availability		
	Return Date		
<i>Labs</i>			
	Lab test name	✓	✓
	Units		
	Site		
	date		
	Infectious agent		
	Baseline value		
	Baseline date		

Page Section SubSection		CTEP 5 calendar day SAE Report	CTEP 10 calendar day SAE Report
Field			
Worst value			
Worst date			
Recovery value			
Recovery date			

Page Section SubSection	Field	CTEP 24 Hour SAE Notification	48 Hour SAE Report to NCI Medical Monitor & CCSA
Basic Details			
	Organization	Cancer Therapy Evaluation Program (CTEP)	Division of Cancer Prevention (DCP)
	Name	CTEP 24 Hour SAE Notification	48-Hour SAE Report to NCI Medical Monitor and CCSA
	Description - can be modified		
	Amendable?	No	Yes
	Attribution Required?	No	Yes
	Time Scale UOM	Hour	Hour
	Time until report due	24	48
Delivery Details			
Email recipients - can be modified			
	name	reporter	
	role/EmailAddress	reporter	
	name		
	role/EmailAddress		
system recipients - do not modify if sending to AdEERS			
	name	AdEERS	
	username	ADEERSBETA	
	password	testadeers1#	
	url	https://capps- ctep.nci.nih.gov/adeersws 10gbeta/services/AERep ortXMLService	
Mandatory Fields do not modify			
Course and agent			
	treatment assignment code		
	description of treatment assignment or dose level		
	Start date of first course		✓

Page Section SubSection	Field	CTEP 24 Hour SAE Notification	48 Hour SAE Report to NCI Medical Monitor & CCSA
	Was Study Drug stopped/interrupted/reduc ed in response to event If reduced, specify: New dose Date of recovery or death If interrupted, specify total number of days not given Did event abate after study drug was stopped or dose reduced? Did event reappear after study drug was reintroduced?		
Patient details			
	Baseline performance		
	Disease name	✓	
	Primary site of disease	✓	
	Date of initial diagnosis		
	Weight Quantity	✓	
	Weight Units	✓	
	Height Quantity	✓	
	Height Units	✓	
Metastatic disease information			
	Site Name		
Pre-existing conditions			
	Pre-existing condition		
Prior Therapy			
	Priory Therapy		
	Comments		
	Therapy start date		
	Therapy end Date		
Concomitant Medications			
	Medication		
Other contributing causes			
	Cause		
Intervention information			

Page Section SubSection	Field	CTEP 24 Hour SAE Notification	48 Hour SAE Report to NCI Medical Monitor & CCSA
<i>Radiation intervention</i>			
	Type of radiation administration		
	Dosage		
	Dosage unit		
	Last treatment date		
	Schedule number of fractions		
	Elapsed days		
	Adjustment		
<i>Surgery intervention</i>			
	Intervention site		
	Intervention date		
<i>Medical devices</i>			
	Brand name		
	Common name		
	Device type		
	Manufacturer name		
	Manufacturer city		
	Manufacturer state		
	Model number		
	Lot number		
	Catalog number		
	Expiration date		
	Serial number		
	Other number		
	Device operator		
	Other device operator		
	If implanted, enter a date		
	If explanted, enter a date		
	Device reprocessed		
	Reprocessor name		
	Reprocessor address		
	Evaluation availability		
	Return Date		
<i>Labs</i>			
	Lab test name		
	Units		
	Site		
	date		
	Infectious agent		
	Baseline value		
	Baseline date		

Page Section SubSection		CTEP 24 Hour SAE Notification	48 Hour SAE Report to NCI Medical Monitor & CCSA
	Field		
	Worst value		
	Worst date		
	Recovery value		
	Recovery date		

Page Section SubSection	Field	10 Day Report Submission to AdEERS
Basic Details		
	Organization	Division of Cancer Prevention (DCP)
	Name	10-day Report
	Description - can be modified	Submission to AdEERS
	Amendable?	Yes
	Attribution Required?	Yes
	Time Scale UOM	Day
	Time until report due	2
Delivery Details		
Email recipients - can be modified		
	name	reporter
	role/EmailAddress	Reporter
	name	
	role/EmailAddress	
system recipients - do not modify if sending to AdEERS		
	name	AdEERS
	username	ADEERSBETA
	password	testadeers1#
	url	https://capps- ctep.nci.nih.gov/adee rsws10gbeta/services /AEReportXMLServic e
Mandatory Fields do not modify		
Course and agent		
	treatment assignment code	✓
	description of treatment assignment or dose level	
	Start date of first course	✓

Page Section SubSection	Field	10 Day Report Submission to AdEERS
	<p>Was Study Drug stopped/interrupted/reduced in response to event If reduced, specify: New dose</p> <p>Date of recovery or death</p> <p>If interrupted, specify total number of days not given Did event abate after study drug was stopped or dose reduced? Did event reappear after study drug was reintroduced?</p>	
Patient details		
	<p>Baseline performance</p> <p>Disease name</p> <p>Primary site of disease</p> <p>Date of initial diagnosis</p> <p>Weight Quantity</p> <p>Weight Units</p> <p>Height Quantity</p> <p>Height Units</p>	<p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p>
Metastatic disease information		
	Site Name	✓
Pre-existing conditions		
	Pre-existing condition	✓
Prior Therapy		
	<p>Priory Therapy</p> <p>Comments</p> <p>Therapy start date</p> <p>Therapy end Date</p>	✓
Concomitant Medications		
	Medication	✓
Other contributing causes		
	Cause	✓
Intervention information		

Page Section SubSection	Field	10 Day Report Submission to AdEERS
<i>Radiation intervention</i>		
	Type of radiation administration	✓
	Dosage	✓
	Dosage unit	✓
	Last treatment date	✓
	Schedule number of fractions	✓
	Elapsed days	✓
	Adjustment	✓
<i>Surgery intervention</i>		
	Intervention site	✓
	Intervention date	✓
<i>Medical devices</i>		
	Brand name	
	Common name	
	Device type	
	Manufacturer name	
	Manufacturer city	
	Manufacturer state	
	Model number	
	Lot number	
	Catalog number	
	Expiration date	
	Serial number	
	Other number	
	Device operator	
	Other device operator	
	If implanted, enter a date	
	If explanted, enter a date	
	Device reprocessed	
	Reprocessor name	
	Reprocessor address	
	Evaluation availability	
	Return Date	
<i>Labs</i>		
	Lab test name	✓
	Units	
	Site	
	date	
	Infectious agent	
	Baseline value	
	Baseline date	

Page		10 Day Report Submission to AdEERS
Section	Field	
<i>SubSection</i>		
	Worst value	
	Worst date	
	Recovery value	
	Recovery date	

Note: Notifications can be modified at the organization's discretion

CTEP 5 calendar day SAE Report

Day 0

Recipients

email

role

Subject line

Reporter

5 Calendar Day Report for \${patientId} on \${study.primaryIdentifier.value} initiated in caAERS

This is a system generated email. Please do not respond to this email.

A 5 Calendar report has been initiated in caAERS.

The 5 Calendar Day report must be completed and sent to CTEP, NCI within 5 Calendar Days of knowledge of the AE. This report is accessible in caAERS via the 'Manage Reports' pathway.

To retrieve the report enter the exact combination of the Study and Subject. It is very important to save this information for every report created. Print this page and keep it as a reference.

Subject Id: \${patientId}

Study Short Title: \${study.shortTitle}

Study primary Identifier: \${study.primaryIdentifier.value}

To access caAERS, see <https://sbdev1000.semanticbits.com:8031/caaers/public/login>.

Thank you,

caAERS Notification System

Message

CTEP 10 calendar day SAE Report

Day 0

Recipients

email

role

Subject line

Reporter

10 Calendar Day Report for \${patientId} on \${study.primaryIdentifier.value} initiated in caAERS

This is a system generated email. Please do not respond to this email.

A 10 Calendar report has been initiated in caAERS.

The 10 Calendar Day report must be completed and sent to CTEP, NCI within 10 Calendar Days of knowledge of the AE. This report is accessible in caAERS via the 'Manage Reports' pathway.

To retrieve the report enter the exact combination of the Study and Subject. It is very important to save this information for every report created. Print this page and keep it as a reference.

Subject Id: \${patientId}

Study Short Title: \${study.shortTitle}

Study Primary Identifier: \${study.primaryIdentifier.value}

To access caAERS, see <https://sbdev1000.semanticbits.com:8031/caaers/public/login>.

Thank you,

caAERS Notification System

Message

CTEP 24 Hour SAE Notification**Hour** 0**Recipients***email**role*

Reporter

Subject line

CTEP 24 Hour SAE Notification has been created in sb demo details:

patientId: \${patientId}

reportURL: \${reportURL}

study.shortTitle: \${study.shortTitle}

Message

study.primaryIdentifier.value: \${study.primaryIdentifier.value}

10 Day Report Submission to AdEERS**Day** 0**Recipients***email**role*

Reporter

Subject line

10 Calendar Day Report for \${patientId} on \${study.primaryIdentifier.value} (DCP study) initiated in caAERS

This is a system generated email. Please do not respond to this email.

A 10 Calendar report has been initiated in caAERS.

The 10 Calendar Day report must be completed and sent to DCP, NCI within 10 Calendar Days of knowledge of the AE. This report is accessible in caAERS via the 'Manage Reports' pathway.

To retrieve the report enter the exact combination of the Study and Subject. It is very important to save this information for every report created. Print this page and keep it as a reference.

Subject Id: \${patientId}

Study Short Title: \${study.shortTitle}

Study Primary Identifier: \${study.primaryIdentifier.value}

To access caAERS, see <https://sbdev1000.semanticbits.com:8031/caaers/public/login>.*Message*Thank you,
caAERS Notification System

48 Hour SAE Report to NCI Medical Monitor & CCSA

Hour
Recipients

0

email

role

Subject line

Reporter

Notification: Expedited AE Report Due for \${patientId} on \${study.primaryIdentifier.value}

MESSAGE FROM CAAERS REGARDING \${study.primaryIdentifier.value}

An AE requiring expedited reporting to NCI DCP has been entered into the caAERS system.

Actions You Must Take:

-- WITHIN 24 HOURS, notify by Phone or Fax the Medical Monitor and/or CCSA.

Call 1-800-555-5555 to report the event or Fax a report to 1-555-555-5599

-- WITHIN 48 HOURS, submit the NCI DCP SAE form to Medical Monitor and CCSA.

Information about the Trial and Subject:

Study Title: \${study.shortTitle}

Study ID: \${study.primaryIdentifier.value}

Patient ID: \${patientId}

For assistance, please contact the Medical Monitor or CCSA representative at DCPReportHelp@testemail.com or 1-555-555-5555.

Message

Thank you,

The caAERS Notification System

Hour
Recipients

24

email

role

Subject line

Reporter

48 Hour SAE Report is Due for \${patientId} on \${study.primaryIdentifier.value}

MESSAGE FROM CAAERS REGARDING \${study.primaryIdentifier.value}

An AE requiring expedited reporting to NCI DCP was entered into the caAERS system 24 hours ago.

Actions You Must Take:

-- If you have not done so already, immediately notify by Phone or Fax the Medical Monitor and/or CCSA.

Call 1-800-555-5555 to report the event or Fax a report to 1-555-555-5599

-- By this time tomorrow, submit the NCI DCP SAE form to Medical Monitor and CCSA.

Information about the Trial and Subject:

Study Title: \${study.shortTitle}

Study ID: \${study.primaryIdentifier.value}

Patient ID: \${patientId}

For assistance, please contact the Medical Monitor or CCSA representative at DCPReportHelp@testemail.com or 1-555-555-5555.

Message

Thank you,

The caAERS Notification System

Configuring_caAERS

- The second tab provides the notifications we've set up for the reports.
- The file displays the information for the AdEERS staging system. To submit an expedited report to this site, the study must already be entered in the staging system. To have this done, contact ?
- Some of the information listed in the spreadsheet is suggested data while other sections are 100% define. View the page/section column to determine what can be modified (Delivery Details for example) and what must be entered as displayed (Mandatory Fields for example).

In addition, if your organization has other reporting requirements, you can use the spreadsheet as a reference sheet to help configure the report definitions.

To configure reporting definitions:

1. Log in to caAERS using an account with access to the Administration area
2. Go to rules
3. Select List Reporting Definitions
4. Select a Report and modify the information

CaAERS_Checklist

The following is the checklist of items that need to be taken care of when you have two instances of caaers running on two separate tomcats in the same machine:

1. Make sure the DB schema names are distinct. For example:

```
*caaers_demo" for demo
*caaers_dev" for dev
```

2. Make sure you restore the from the correct version of DB to pre-populate the DB.

3. Change datasource.properties to reflect the DB name. For example:

```
*datasource.url=jdbc:postgresql://10.10.10.220:5432/caaers_demo for demo a
*datasource.url=jdbc:postgresql://10.10.10.220:5432/caaers_dev for dev
```

4. Change csm_jaas.config to reflect the DB name. For example:

```
*url="jdbc:postgresql://10.10.10.220:5432/caaers_demo" for demo and
*url="jdbc:postgresql://10.10.10.220:5432/caaers_dev" for dev.
```

5. Set the correct folder name for tomcat. For example:

```
*C:\QA\tomcats\caaers\postgres-caaers-tomcat-demo for demo and,
*C:\QA\tomcats\caaers\postgres-caaers-tomcat-dev for dev.
```

6. Change/add the following line in catalina.bat:

```
*set CATALINA_HOME=C:\QA\tomcats\caaers\postgres-caaers-tomcat-demo for de
*set CATALINA_HOME=C:\QA\tomcats\caaers\postgres-caaers-tomcat-dev for dev
```

7. change/add the following line in startup.bat:

```
*title caAERS-Tomcat-Postgres-demo for demo and,
*title caAERS-Tomcat-Postgres-dev for dev.
```

8. Change/ add the following lines in refresh script:

- for demo:

```
set TOMCAT_HOME=C:\QA\tomcats\caaers\postgres-caaers-tomcat-demo
taskkill /F /FI "WINDOWTITLE eq caAERS-Tomcat-Postgres-demo" /T
```

- for dev:

```
set TOMCAT_HOME=C:\QA\tomcats\caaers\postgres-caaers-tomcat-dev
taskkill /F /FI "WINDOWTITLE eq caAERS-Tomcat-Postgres-dev" /T
```

In addition, depending on the version of caAERS, you may need to call maven [caAERSv1.1.3] or ant [caAERSv1.3] to build caaers.

CaAERS_Checklist

9. Change the port numbers in server.xml. For demo and dev: [the bolded text should be different for each version of caaers]

```
* <Server port="8005" shutdown="SHUTDOWN">
* <Connector acceptCount="100" connectionTimeout="20000" disableUploadTime
enableLookups="false" maxHttpHeaderSize="8192" maxSpareThreads="75" maxThr
port="8080" redirectPort="8443"/>
* <Connector port="8443" maxHttpHeaderSize="8192" maxThreads="150" minSpar
maxSpareThreads="75" enableLookups="false" disableUploadTimeout="true" acc
secure="true" clientAuth="false" sslProtocol="TLS" />
```

10. Change debug port in catalina.bat:

```
set DEBUG_OPTS=-Xdebug -Xrunjdwp:transport=dt_socket,address=9999,server=y
```

11. Set up distinct rules folders in datasource.properties file. For example:

```
*rules.repository=file://C:/rules_repo/postgres/demo for demo and,
*rules.repository=file://C:/rules_repo/postgres/dev for dev
```