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Eldas 2.0

Installation Guide

edikt::Eldas 2.0 Installation Guide

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Introduction

Overview

Enterprise Level Data Access Services (Eldas) 2.0 enables database access using Web and Grid services.

Eldas is Java 2 Enterprise Edition (J2EE) based and is built upon the Open Grid Service Infrastructure (OGSI).

Using this Guide

This guide is intended to be easy to follow and use. The icons listed below are used to help you quickly identify key features of the documentation.



Quick start tips.



Information/downloads from the World Wide Web.



Points to Note or Remember.



Information contained on your file system.



Actions/Information relating to running a Java application.



Actions/Information relating to a Database.



Windows Specific commands.



Solaris/Linux specific commands.

Screen shots included in this guide are for the Windows XP version of Eldas 2.0. **Please note** that the same functionality is available under Windows, Solaris and Linux platforms.

Related Documentation

The **Eldas 2.0 User's Guide** is a companion manual to this document and provides:

- A detailed overview of Eldas.
- Instructions to run the Eldas server, command line clients and the graphical query tool.
- A description of the Eldas API.

The **Eldas 2.0 User's Guide** is available from the Eldas website: <http://www.edikt.org/eldas>.

Software Overview

Eldas

Distribution

Eldas 2.0 is released as a single distribution covering Eldas Server, Eldas Clients and Eldas Security:

1. **Eldas 2.0 Server** , which contains:
 - Eldas Server for Web and Grid Services.
 - Eldas Server Deploy Tool.

The Eldas 2.0 distribution may be deployed in two different ways:

- **Eldas 2.0 for Grid and Web Services.** This option requires the Globus Toolkit to be downloaded and unpacked as one of the pre-requisites. Eldas Web Service Clients and Grid Service clients may be used.
 - **Eldas 2.0 for Web Services.** This option does not require the Globus Toolkit distribution. Eldas Web Service Clients may be used.
2. **Eldas 2.0 Clients**, which contains:
 - Eldas Clients Install Tool.
 - Eldas Grid Service client, a grid service client which returns results from the server to the client as a single batch.
 - Eldas Streaming Client, a streaming grid service client which returns results from the server to the client in a stream. This is useful for transferring large result sets.
 - Eldas Web Service client, a non-streaming web client.
 - Eldas Query Tool, a graphical query tool for Eldas Grid Services.
 3. **Eldas 2.0 Security**, which contains:
 - Eldas Security Configuration Tool.

The Security Configuration Tool may be used to:

- **Secure Eldas Grid Services.** This option requires prior deployment of Eldas 2.0 for Grid Services. This option provides secure Eldas Grid Client and secure Eldas Streaming Client.
- **Secure Eldas Web Services.** This option requires prior deployment of Eldas 2.0 for Web Services. This option provides a secure Eldas Web Client.

Supported Systems

Eldas 2.0 is supported on the following platforms:

- Windows XP
- Linux
- Solaris

Supported Databases

Eldas 2.0 currently supports connection to MySQL, Oracle, DB2, SQLServer and PostgreSQL databases. This assumes that the user either has access to existing, or intends to create, new databases. The accompanying User's Guide details how to create samples tables and test Eldas for the expected results.

Pre-requisites

The following software **must** be available before Eldas 2.0 can be used.

Java

Eldas 2.0 relies on Java Technologies. A Java JRE (or SDK containing a JRE) **must** be installed on all machines that will run Eldas server side and client side software.

Download



Download and install the **Java 1.4.1 JRE** from:

<http://java.sun.com>

Enterprise Java Bean Container

Eldas uses the **JBoss 3.2.2** Enterprise Java Bean Container. JBoss 3.2.2 **must** be unpacked on the machine that will run Eldas server side software.

Download



Download and unpack **JBoss 3.2.2**.

The Windows distribution is available from:

<http://prdownloads.sourceforge.net/jboss/jboss-3.2.2.zip?download>



The Unix distribution is available from:

<http://prdownloads.sourceforge.net/jboss/jboss-3.2.2.tgz>

Further information on JBoss can be found at:

<http://www.jboss.org>

Open Grid Services Infrastructure

Eldas 2.0 is compliant with OGSi Grid Services. If you wish to use Grid Services with Eldas you **must** download and unpack the Globus Toolkit 3.0.2 on all machines that will run Eldas server side and client side software.

Download



Download and unpack the **Globus Toolkit 3.0.2**:

<http://www-unix.globus.org/ftppub/gt3/3.0/3.0.2/gt3.0.2-core-bin.tar.gz>



Further information on Globus can be found at:

<http://www.globus.org>

Database Drivers

Eldas supports connection to MySQL, Oracle, DB2, SLQServer and PostgreSQL databases using the appropriate “connector” drivers. These drivers **must** be downloaded and the relevant jar files made available to the Eldas server. The (where declared) version number indicates the driver version with which Eldas has been tested and is known to work. If the precise version number is unavailable, it is advisable to at find the closest version possible.

Download



MySQL driver, (version 3.0.8).

Navigate to:

<http://www.mysql.com/get/Downloads/Connector-J/mysql-connector-java-3.0.8-stable.tar.gz/from/pick> for Unix/Linux or;

<http://www.mysql.com/get/Downloads/Connector-J/mysql-connector-java-3.0.8-stable.zip/from/pick> for Windows.



The specific file required is **mysql-connector-java-3.0.8-stable-bin.jar**. Download and, if necessary, unpack.

Download



DB2 driver, (JDBC Type 4).

Navigate to:

<http://www-106.ibm.com/developerworks/db2/library/techarticle/0307zikopoulos/0307zikopoulos.html>



The specific file required is **db2jcc.jar**. Download a suitable DB2 application as described to obtain this JDBC Type 4 driver.

Download



Oracle driver, (version 9.2.0.1).

Navigate to:

http://www.oracle.com/technology/software/tech/java/sqlj_jdbc/index.html

The specific file required is “Oracle9i 9.2.0.1 JDBC Drivers” **ojdbc14.jar**. Download and, if necessary, rename as a .jar file.

Download



SQL Server driver, (version 2.2.0029).

Navigate to:

<http://www.microsoft.com/downloads/search.aspx?displaylang=en>

The specific files required are **mssqlserver.jar**, **msbase.jar** and **msutil.jar**. Search for “SQL Server 2000 Driver for JDBC Service Pack 1”, download and setup/install as appropriate.

Download



PostgreSQL driver, (version 7.4 Build 213).

Navigate to:

<http://jdbc.postgresql.org/download.html>

The specific file required is JDBC 3 driver, **pg74.213.jdbc3.jar**. Download and, if necessary, rename as a .jar file.

At this stage no other actions are required with the database drivers. The user is asked to identify the appropriate jar file when configuring a database. Full Instructions are given in the Section “Configuring Databases (post-deployment)”.

Downloading Eldas 2.0

Obtaining and unpacking Eldas 2.0 is a simple process, as described below.

Downloading and Unpacking Eldas 2.0

Important



Ensure all pre-requisite software is available (as described in the “Pre-requisites” Section) before progressing any further.

Download



Unpack



Important



1. Navigate to <http://www.edikt.org/eldas>
2. Select “**Download Eldas 2.0**” to download the **UnpackEldas.jar** file.
3. Save the file to an appropriate directory.
4. To run **UnpackEldas.jar**, move to the location where the distribution is saved and use the command:

```
java -jar UnpackEldas.jar
```

Follow the prompts to unpack Eldas. A new directory called “**Eldas**” will be created as a result of this process.

Running Eldas 2.0

Running Eldas 2.0

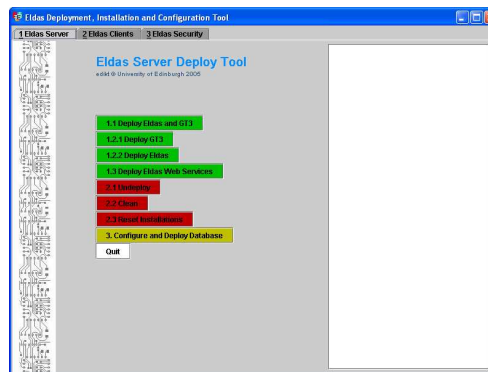


1. Ensure that you are in the **Eldas** directory created when Eldas 2.0 was unpacked.

2. Run Eldas 2.0 using the command:

```
java -jar InstallEldas.jar
```

3. The diagram below shows the **Eldas Deployment, Installation and Configuration Tool**. This tool can be used to: configure and deploy the Eldas Server within a JBoss Application Server; install the Eldas Clients; configure Eldas Security.



Deploying Eldas Server

The following assumes that Eldas 2.0 has been downloaded and unpacked. If this is not the case, please see the Section “Downloading Eldas 2.0”. See the same section for how to start the **Eldas Deployment, Installation and Configuration Tool**.

Deployment Overview



The simplest way to deploy Eldas is to perform the tasks listed below. Note that this stage is also a prerequisite for securing the Eldas server.

1. **Deploy Eldas and GT3.** Follow the instructions in the section “Deploying Eldas and GT3”.
2. **Configure databases to be used with Eldas.** Follow the instructions in the Section “Configuring Databases (post-deployment)”.
3. **Start JBoss (and Eldas).** See Appendix A for full details.
4. **Check the WSDL files describing Eldas grid and web services are available.** The format of the URLs should be:

<http://<server>:<port>/ogsa/services/eldas/Edsf?wsdl>

<http://<server>:<port>/eldas/services/EldasWdsPort?wsdl>
5. **Use sample clients to perform database queries.** Information on using the client can be found in the **Eldas User Manual**.

The simplest way to remove Eldas is to perform the following tasks:

1. **Stop JBoss (and Eldas)** if running. See Appendix A for full details.
2. **Undeploy Eldas and GT3 from the JBoss Application Server.** Follow the instructions in the Section “Undeploying Eldas and GT3”.
3. **If necessary remove the “Eldas” directory**, created during the Section “Downloading and Unpacking Eldas 2.0”.
4. **If necessary remove all pre-requisite software**, listed in Section “Pre-requisites”.

Eldas Server Deploy Tool

The **Eldas Server Deploy Tool** is a graphical tool to help you deploy Eldas.

Running the Tool

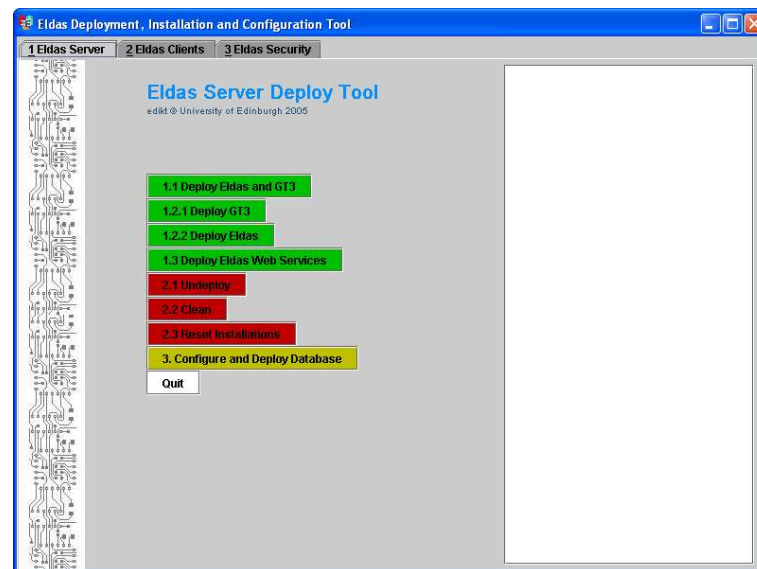


1. Move to the location where Eldas was unpacked. Move into the **Eldas** directory.
2. Run the graphical **Eldas Deployment, Installation and Configuration Tool** using the command:

```
java -jar InstallEldas.jar
```

3. Navigate to the **1 Eldas Server Deploy Tool** tab shown below. This can be used to configure and deploy Eldas within the JBoss Application Server.

The **left-hand side** of the GUI provides a number of buttons to **configure and deploy** Eldas. The **right-hand area** of the deploy tool provides **output** produced during configuration and deployment. The configuration and deployment options are described in detail below.



Detailed Deployment Information

This section explains how to use the Eldas Server Deploy Tool in detail. Refer to the “Deployment Overview” section for a high level view of the simplest way to deploy Eldas.

Deploying Eldas and GT3



This option will deploy **both** GT3 and Eldas into the JBoss Application Server. Use this option if you want to be able to run both Eldas Grid and Web services.

1. If the JBoss Application server is running, use the instructions in Appendix A to stop the server.
2. Select the **“1.1 Deploy Eldas and GT3”** button (shown below) from the Eldas Server Deploy Tool.

1.1 Deploy Eldas and GT3

Deploy the Eldas server and OGSA GT3 to the JBoss application Server.

3. You will be prompted to select the location of the GT3 distribution. **“Browse”** then select and confirm the GT3 home directory.
4. You will then be prompted to select the location of the JBoss distribution. **“Browse”** then select and confirm the JBoss home directory.
5. Once the deployment is complete a message will be output confirming the deployment process has finished. Select **“OK”** to return to the main menu.

Deploying GT3



This option will deploy **only** GT3 within the JBoss Application server. Use this option if you want to change an initial GT3 deployment without affecting the Eldas deployment.

1. If the JBoss Application server is running, use the instructions in Appendix A to stop the server.
2. Select the **“1.2.1 Deploy GT3”** button (shown below) from the Eldas Server Deploy Tool.

1.2.1 Deploy GT3

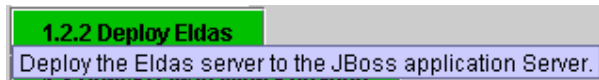
Deploy the OGSA GT3 to the JBoss application Server.

3. You will be prompted to select the location of the GT3 distribution. **“Browse”** then select and confirm the GT3 home directory.
4. You will then be prompted to select the location of the JBoss distribution. Select **“Browse”** and select the JBoss home directory.
5. Once the deployment is complete a message will be output confirming the deployment process has finished. Select **“OK”** to return to the main menu.

Deploying Eldas

This option will deploy **only** Eldas within the JBoss Application server. Use this option if you want to deploy Eldas alongside an existing GT3 deployment. Note that this option requires a prior deployment of GT3.

1. If the JBoss Application server is running, use the instructions in Appendix A to stop the server.
2. Select the **“1.2.2 Deploy Eldas”** button (shown below) from the Eldas Server Deploy Tool.

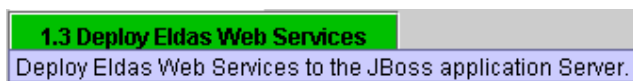


3. You will be prompted to select the location of the GT3 distribution. **“Browse”** then select and confirm the GT3 home directory.
4. You will then be prompted to select the location of the JBoss distribution. **“Browse”** then select and confirm the JBoss home directory.
5. Once the deployment is complete a message will be output confirming the deployment process has finished. Select **“OK”** to return to the main menu.

**Deploying Eldas
Web Services**

This option will deploy Eldas within the JBoss Application server. Use this option if you want to be able to use the Eldas web client and do not require to use Eldas grid services or clients.

1. If the JBoss Application server is running, use the instructions in Appendix A to stop the server.
2. Select the **“1.3 Deploy Eldas Web Services”** button (shown below) from the Eldas Server Deploy Tool.



3. You will then be prompted to select the location of the JBoss distribution. **“Browse”** then select and confirm the JBoss home directory.
4. Once the deployment is complete a message will be output confirming the deployment process has finished. Select **“OK”** to return to the main menu.

Undeploying Eldas and GT3

This option will remove any Eldas and/or GT3 deployments from the JBoss Application server.

1. If the JBoss Application server is running, use the instructions in Appendix A to stop the server.
2. Select the **“2.1 Undeploy”** button (shown below) from the Eldas Server Deploy Tool.

2.1 Undeploy

Undeploy the Eldas server and OGSA GT3 from the JBoss application Server.

3. A message will then be output confirming Eldas and/or GT3 has been undeployed. Select **“OK”** to return to the main menu.

Clean Installation

This option will return the EldasServer directory to its initial state when it was created. In addition, any configured JBoss and GT3 directory paths will be cleared. Note that the Eldas Server Deployment Tool must be restarted for these changes to take effect.

1. Select the **“2.2 Clean”** button (shown below) from the Eldas Server Deploy Tool.

2.2 Clean

Deletes all created files from previous tasks.

Reset Installation Paths

This option will prompt you for new GT3 and/or JBoss paths, depending on the option previously selected. Note that the Eldas Server Deployment Tool must be restarted for these changes to take effect.

1. Select the **“2.3 Reset Installations”** button (shown below) from the Eldas Server Deploy Tool.

2.3 Reset Installations

Resets GT3 and JBoss environment variables (needs a restart).

**Configuring
Databases (post
deployment)**

Use this option to add databases to Eldas **after** Eldas has been deployed. In order for Eldas to read the new configuration the JBoss server must be restarted as described in Appendix A.

1. Select the **“3. Configure and Deploy Database”** button (shown below) from the Eldas Server Deploy Tool.

3. Configure and Deploy Database

Sets up and deploys a configuration file to register a database with EldasServer.

2. Enter the name of the target database and select **“OK”**.
3. Choose the type of database (**mysql**, **db2**, **oracle**, **postgresql** or **sqlserver**) and select **“OK”**.
4. Enter the IP address or DNS name of the machine the database is running on and select **“OK”**.
5. Enter the port number the database uses and select **“OK”**.
6. You will then be prompted to select the appropriate driver jar file. **“Browse”** then select and confirm the jar file.
7. A message will then be output confirming that the configuration process has been completed. Select **“OK”**.
8. You can configure further databases by repeating these steps.

Note on **sqlserver** : When selecting **mysql**, **db2**, **oracle** or **postgresql** in step 2, the Eldas Server Deploy Tool will expect a file in step 6. When selecting **sqlserver**, however, step 6 will expect a directory. This is because the **sqlserver** driver is composed of multiple jar files, whereas the other database drivers require only one.

Installing Eldas Clients

The following assumes that Eldas 2.0 has been downloaded and unpacked. If this is not the case, please see the Section “Downloading Eldas 2.0”. See the same section for how to run the **Eldas Deployment, Installation and Configuration Tool**.

Installation Overview



The simplest way to install Eldas clients is to either:

1. **Install Eldas Grid and Web Services Clients.** Follow the instructions in the Section “Installing Eldas Grid and Web Services Clients”.
2. **Install Eldas Web Services Client** Follow the instructions in the section “Installing Eldas Web Services Client”.

The simplest way to remove Eldas clients is to perform the following task:

1. **Uninstall Clients.** Follow the instructions in the Section “Uninstall Eldas Clients”.
2. **If necessary remove the “EldasClients” directory,** created during the Section “Downloading and Unpacking Eldas 2.0”.

If necessary remove all pre-requisite software, listed in Section “Pre-requisites”.

Eldas Clients Install Tool

Use the **Eldas Clients Install Tool** to install Eldas 2.0 applications on a client machine.

Running the Tool

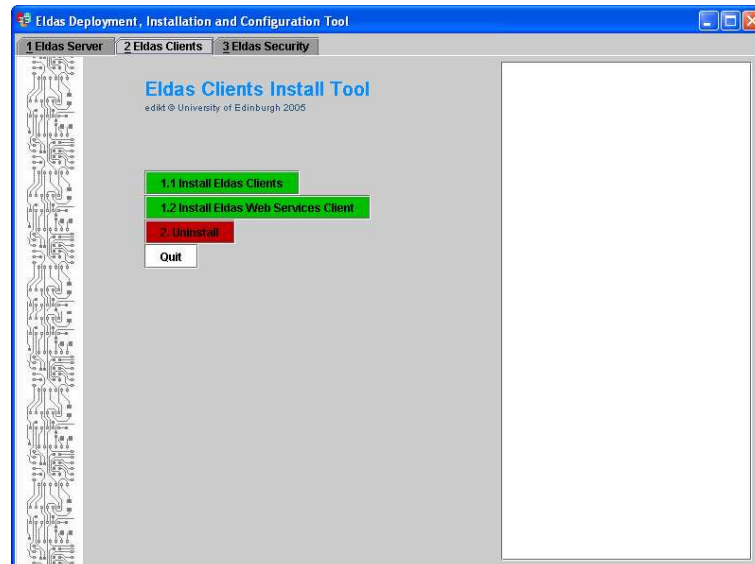


1. Move to the location where Eldas was unpacked. Move into the **Eldas** directory.
2. Run the graphical **Eldas Deployment, Installation and Configuration Tool** using the command:

```
java -jar InstallEldas.jar
```

3. Navigate to the **2 Eldas Clients Install Tool** tab shown below. This can be used to install the Eldas clients on your local machine.

The **left-hand side** of the GUI provides a number of buttons to **install** the Eldas clients. The **right-hand area** of the install tool provides **output** produced during installation. The installation options are described in detail below.



Detailed Installation Information

This section explains how to use the Eldas Clients Install Tool in detail. Refer to the “Installation Overview” section for a high level view of the simplest way to install the Eldas Clients.

Installing Eldas Grid and Web Services Clients



This option will install **both** Grid and Web Services enabled clients. Note that it requires a distribution of GT3.

1. Select the **“1.1 Install Eldas Clients”** button (shown below) from the Eldas Clients Install Tool.



2. You will be prompted to select the location of the GT3 distribution. **“Browse”** then select and confirm the GT3 home directory.
3. You will then be prompted to select a location for the installation of the Eldas clients. **“Browse”** then select and confirm an installation directory.
4. Once the deployment is complete a message will be output confirming the installation process has finished. Select **“OK”** to return to the main menu.

The clients application directories EldasQueryTool, EldasGridClient and EldasWebClient will be installed and ready to run under the following directory.

```
<ELDAS_CLIENT_INSTALL>/EldasClients
```

Installing Eldas Web Services Clients



This option will install **only** a Web Services enabled client. Note that this does not require a distribution of GT3.

1. Select the **“1.2 Install Eldas Web Services Client”** button (shown below) from the Eldas Clients Install Tool.



2. You will be prompted to select a location for the installation of the Eldas Web Services client. **“Browse”** then select and confirm the installation directory.
3. Once the deployment is complete a message will be output confirming the installation process has finished. Select **“OK”** to return to the main menu.

The clients application directory EldasWebClient will be installed and ready to run under the following directory:

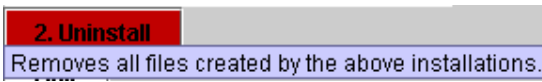
```
<ELDAS_CLIENT_INSTALL>/EldasClients
```

**Uninstall Eldas
Clients**



This option will remove **any** installed Eldas Clients.

1. Select the **“2. Uninstall”** button (shown below) from the Eldas Clients Install Tool.



2. You will be prompted to select a location where the Eldas clients have been installed. **“Browse”** then select and confirm the directory in which the **EldasClients** directory resides.
3. On completion, a message will be output confirming the process has finished. Select **“OK”** to return to the main menu.

Configuring Eldas Security

The following assumes that Eldas 2.0 has been downloaded, unpacked and the grid/web servers and clients have been deployed. If this is not the case, please see the Section “Downloading Eldas 2.0”. See the same section for how to run the **Eldas Deployment, Installation and Configuration Tool**.

Configuration Overview



The simplest way to configure Eldas security is to either:

1. **Secure Eldas Grid Services Server.** This assumes that appropriate X.509 certificates and proxies are available as a prerequisite. Follow the instructions in the Section “Securing Eldas Grid Services Server”.
 - a. Note that the Eldas Grid Clients need no additional security configuration.
2. **Secure Eldas Web Services Server.** This enables the user to generate X.509 certificates via Java’s “keytool”. Follow the instructions in the section “Securing Eldas Web Services Server”.
 - a. Note that the Eldas Web Client will need additional security configuration.

The simplest way to undo Eldas security is to either:

1. **Undo Eldas Grid Services Server Security.** Follow the instructions in the Section “Undoing Eldas Grid Services Server Security”.
2. **Undo Eldas Web Services Server Security.** Follow the instructions in the Section “Undoing Eldas Web Services Server Security”.

Eldas Security Configuration Tool

Use the **Eldas Security Configuration Tool** to configure security for Eldas 2.0 server and client applications.

Running the Tool

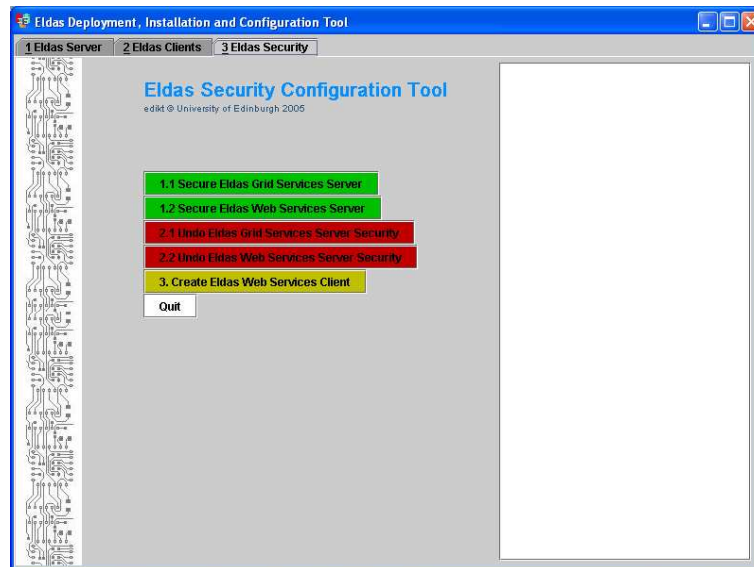


1. Move to the location where Eldas was unpacked. Move into the **Eldas** directory.
2. Run the graphical **Eldas Deployment, Installation and Configuration Tool** using the command:

```
java -jar InstallEldas.jar
```

3. Navigate to the **3 Eldas Security Configuration Tool** tab shown below. This can be used to configure security for Eldas servers or clients on a local machine.

The **left-hand side** of the GUI provides a number of buttons to **configure** the Eldas server or clients. The **right-hand area** of the install tool provides **output** produced during configuration. The configuration options are described in detail below.



Detailed Configuration Information

This section explains how to use the Eldas Server Configuration Tool in detail. Refer to the “Configuration Overview” section for a high level view of the simplest way to configure Eldas security for the server or for clients.

Securing Eldas Grid Services Server



This option will configure security for the Grid Services server deployed within JBoss. If Eldas has not previously been deployed, see the Section “Deploying Eldas and GT3”. If the JBoss Application server is running, use the instructions in Appendix A to stop the server. Note that this assumes that the appropriate X.509 certificates and proxies are available as a prerequisite to this stage – further details on certificates and proxies are contained within the “Eldas Security” section of the User’s Guide.

1. Select the “**1.1 Secure Eldas Grid Services Server**” button (shown below) from the Eldas Server Configuration Tool.

1.1 Secure Eldas Grid Services Server

Modify the Eldas Grid Services Server to use a stored X509 certificate.

2. You will be prompted to select the location of the JBoss distribution. “**Browse**” then select and confirm the JBoss home directory.
3. Once the deployment is complete a message will be output confirming the configuration process has finished. Select “**OK**” to return to the main menu.

The Eldas deployment within JBoss has now been configured to use X.509 certificates.

Securing Eldas Web Services Server



This option will configure security for the Web Services server deployed within JBoss. If Eldas has not previously been deployed, see the Section “Deploying Eldas Web Services”. If the JBoss Application server is running, use the instructions in Appendix A to stop the server. Note that the process described below encapsulates the use of Java’s “keytool” application in order to generate certificates and keys. The actual interaction with “keytool” is transparent to the user. Further details on Eldas web service security are contained within the “Eldas Security” section of the User’s Guide.

1. Select the “**1.2 Secure Eldas Web Services Server**” button (shown below) from the Eldas Server Configuration Tool.

1.2 Secure Eldas Web Services Server

Modify the Eldas Web Services Server to use a stored X509 certificate.

2. You will be prompted to select the location of the JBoss distribution. “**Browse**” then select and confirm the JBoss home directory.
3. You will be prompted for the following:
 - a. “a name for your web service”;

Securing Eldas Web Services Server (cont.)



- b. “keystore password” – this **must** be 6, or more, characters in length;
 - c. “your machine address, CN”;
 - d. “your organisational unit, OU”;
 - e. “your organisation, O”;
 - f. “your city/locality, L”;
 - g. “your state/province, ST”;
 - h. “your two-letter country code, C”.
4. Once the deployment is complete a message will be output confirming the configuration process has finished. Select **“OK”** to return to the main menu. A certificate “eldasServer.cer” and key “serverKeys.jks” will have been generated in the default location:

`<JBOSS_HOME>/server/default/conf`

A copy of the “eldasServer.cer” certificate is required to secure any client wanting to run the secured Eldas Web Service.

The Eldas deployment within JBoss has now been configured to use X.509 certificates. See the User’s Guide for more details. Note that Steps 3. c. – 3. h. are parameters making up the distinguished name (DN) on an X.509 certificate (format: CN; OU; O; L; ST; C).

Undoing Eldas Grid Services Server Security



This option will undo security for the Grid Services server deployed within JBoss. If the JBoss Application server is running, use the instructions in Appendix A to stop the server.

1. Select the **“2.1 Undo Eldas Grid Services Server Security”** button (shown below) from the Eldas Security Configuration Tool.

2.1 Undo Eldas Grid Services Server Security

Undo the Eldas Grid Services security for the server - resets to unsecured state.

2. You will be prompted to select the location of the JBoss distribution. **“Browse”** then select and confirm the JBoss home directory.
3. A message will then be output confirming that security has been removed from the Eldas Grid Services server. Select **“OK”** to return to the main menu.

Undoing Eldas Web Services Server Security



This option will undo security for the Web Services server deployed within JBoss. If the JBoss Application server is running, use the instructions in Appendix A to stop the server.

1. Select the **“2.2 Undo Eldas Web Services Server Security”** button (shown below) from the Eldas Security Configuration Tool.

2.2 Undo Eldas Web Services Server Security

Undo the Eldas Web Services security for the server - resets to unsecured state.

2. You will be prompted to select the location of the JBoss distribution. **“Browse”** then select and confirm the JBoss home directory.
3. A message will then be output confirming that security has been removed from the Eldas Web Services server. Select **“OK”** to return to the main menu.

Configuring Eldas Secure Grid Services Client



Using Eldas Secure Grid Services Clients assumes the user has created the appropriate X.509 certificates and proxies. Further details are contained within the **“Using Eldas Eith Grid Service Interfaces”** and **“Eldas Security”** sections of the User’s Guide.

Configuring Eldas Secure Web Services Client



The process of configuring the Eldas Secure Web Services Client uses Java’s keytool application to generate a X.509 key. This process also assumes that the user has access to, or a copy of, the certificate, eldasServer.cer, generated when securing the server – see Section **“Securing Eldas Web Services Server”**.

1. Select the **“3. Create Eldas Web Services Client”** button (shown below) from the Eldas Security Configuration Tool.

3. Create Eldas Web Services Client

Create a Eldas Web Services Client which uses a stored X509 certificate.

4. You will be prompted to select a location where the Eldas clients have been installed. **“Browse”** then select and confirm the directory in which the **EldasClients** directory resides.
5. You will then be asked to select the “eldasServer.cer” X.509 certificate - either that deployed when securing the Eldas server (located in `<JBOSS_HOME>/server/default/conf`) or a copy perhaps requested by e-mail. Select **“Browse”** and then choose and confirm the file.
6. Finally you will be prompted for the following:
 - a. “a name for your web service”;
 - b. “keystore password” – this **must** be 6, or more, characters in length.

Neither the name nor the password, are related to the name and password used in securing the server. The client is now configured to use the X.509 certificate for security.

Future Releases

News of future releases of Eldas can be found on our website, <http://www.edikt.org/eldas/>

Further Help

www



See <http://www.edikt.org/eldas> for further help.

E-mail



support@edikt.org can be e-mailed with questions regarding supported Eldas platforms.

Appendix A Running JBoss

Running JBoss on Solaris/Linux

Eldas is run within the JBoss application server. This section provides basic information describing how to start and stop Eldas using JBoss. For detailed information consult the JBoss documentation and web site (<http://www.jboss.org>).

Starting JBoss

To start the JBoss server (and Eldas), run the following commands:

```
cd <JBOSS_HOME>/bin
./run.sh
```

Examine the output from the “**run.sh**” command and the log files described in Section “Logging” to verify there have been no problems when starting JBoss.

Stopping JBoss

To stop the JBoss server (and Eldas), run the following commands:

```
cd <JBOSS_HOME>/bin
./shutdown.sh -S
```

Running JBoss on Windows

Eldas is run within the JBoss application server. This section provides basic information describing how to start and stop Eldas using JBoss. For detailed information consult the JBoss documentation and web site (<http://www.jboss.org>).

Starting JBoss

In order to start JBoss server run the following commands:

```
cd <JBOSS_HOME>/bin
run.bat
```

Examine the output from the “**run.bat**” command and the log files described in Section “Logging” to verify there have been no problems when starting JBoss.

Stopping JBoss

To stop the JBoss server, run the following commands:

```
cd <JBOSS_HOME>/bin
shutdown.bat -S
```

Logging

The following server log files can be examined in the event of a problem with the Eldas server or to investigate an error reported by a client:

```
<JBASS_HOME>/server/default/log/boot.log (JBoss startup information)
<JBASS_HOME>/server/default/log/server.log (Main log file)
```

The Eldas logging level can be modified by editing the file:

```
<JBASS_HOME>/server/default/conf/log4j.xml
```

Add the following lines:

```
<category name="org.edikt.eldas">
  <priority value="INFO"/>
  <appender-ref ref="ELDAS"/>
</category>
```

The priority element may have one of the following values: **DEBUG**, **INFO**, **WARN**, **ERROR**, **FATAL**. These levels are ordered as follows: **DEBUG** < **INFO** < **WARN** < **ERROR** < **FATAL**, where **DEBUG** is the lowest level of logging (outputs the most logging details) and **FATAL** is the highest. For more information on logging see <http://logging.apache.org/log4j/docs/manual.html>.