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EQUELLA®

Installation and Administration Guide

Version 6.4

Document History

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Installing and administering EQUELLA overview

The purpose of this guide is to provide system administrators with an understanding of the EQUELLA installation process and a summary of institution management.

EQUELLA can be installed on Windows™ or Linux™. After installation EQUELLA can be customised to suit. Multiple institutions can be configured and institutions can be cloned, deleted, disabled, exported and imported. Additionally, multiple databases can be used, and institutions can be configured to a specific database. Server messages that display at the top of each page in the EQUELLA Digital Repository and the Server administration account can also be added.

Installing EQUELLA overview

EQUELLA has a step-by-step wizard that guides administrators through the installation process. To run the installation wizard successfully, some preparatory work is required. EQUELLA requires a server licence, a graphical user interface, ImageMagick™ for images, Libav for video files, a database for storing information and Oracle Java JDK™ to provide the low level structure on which EQUELLA runs.

Installation prerequisites

EQUELLA installation involves the following steps:

1. Apply for an EQUELLA server licence and an upgrade username and password.
2. Ensure a graphical user interface (GUI) is available (Windows, X-windows or equivalent).
3. Ensure a suitable database or databases are available for EQUELLA.
4. Ensure that Oracle Java JDK 8 is installed on the server.
5. Ensure ImageMagick is installed on the server.
6. If using video file attachments (other than streaming media) and require thumbnails and previews for those files, ensure Libav is installed on the server.
7. Install EQUELLA.
8. Ensure the installation is functioning correctly.

EQUELLA licence and upgrade details

EQUELLA licence and upgrade details are required to access EQUELLA after installation. The specific requirements to request are provided in the Request licence and upgrade details section on page 7.

Graphical user interface

EQUELLA requires a graphical user interface (GUI).

EQUELLA databases

EQUELLA is supported on the following database servers:

- Oracle™ 10g, 11g and 12c
- Microsoft SQL Server™ 2008, 2008 R2 or 2012 and 2014
- PostgreSQL™ 8 or higher.

During installation the name and location of a database is needed to properly configure EQUELLA. The database can be on an existing database server or a server can be installed for the purpose. Database-specific installation requirements are provided in Install a database section on page 7.

Oracle Java JDK™

EQUELLA requires Oracle Java 8 JDK to be installed. The installation of the JDK is described in Install the Oracle Java JDK on page 9.

ImageMagick

EQUELLA requires a third party tool called ImageMagick to be installed on the server. The installation of ImageMagick is described in the Install ImageMagick section on page 9.

Libav

EQUELLA requires a free, third party tool called Libav to be installed on the server to generate thumbnails and previews for video files uploaded as attachments. The installation of Libav is described in the Install Libav on page 10.

Request licence and upgrade details

A licence can be requested from EQUELLA Client Support and is linked to the EQUELLA server host name.

A username and password are also required to access the EQUELLA upgrade server.

Request an EQUELLA licence and upgrade details

To apply for an EQUELLA server licence and upgrade username and password details:

1. Contact Client Support with the hostname of your EQUELLA server to obtain licence and upgrade details. EQUELLA will forward a new licence key based on the hostname and a username and password for the upgrade server.

The upgrade username and password details need to be entered to access the EQUELLA upgrade server. After installation the licence details are required to start the EQUELLA server successfully.

Contact Client Support

EQUELLA support is available to registered users at http://equella.custhelp.com/.

Install a database

No step-by-step guide is provided, however the following section describes important issues specific to each database.

Database notes

All databases must be able to store character data using UTF-8 encoding.

A database must be configured for use by EQUELLA with EQUELLA being the owner or having complete control of the database.

NOTE: When using multiple databases, only databases from one vendor may be used. For example, two Microsoft SQL Server databases could be used, but NOT a Microsoft SQL Server and a PostgreSQL Server database. The database vendor is selected when the EQUELLA system is first installed, and the database configured during the EQUELLA installation wizard is the default system database.

Create an Oracle database instance for EQUELLA

Creating a database instance on Oracle should be managed by an experienced Oracle DBA. No step-by-step guide is provided, however to successfully install EQUELLA on an Oracle database (10g, 11g and 12c) the EQUELLA user (in the default install this is '*equellauser*') must have the following:

- **Permissions**: to create, modify and delete tables, indexes and constraints and to run, select, insert, delete and update queries.
- **Database Name**: the name must not exceed 20 characters.
- **Database Username**: the name must not exceed 20 characters.
- **Character Encoding**: the character encoding must be set to Use Unicode (AL32UTF8).

EQUELLA will use the default schema for this user, which will be the same as the username unless configured. This can be changed by creating an **AFTER LOGON** trigger to run **ALTER SESSION SET CURRENT_SCHEMA = myschema**

EQUELLA uses the default **Users Tablespace** that must have an **<unlimited> Quota Size** and the **OPEN_CURSORS** parameter should be set to **1000**.

Create a Microsoft SQL Server database instance for EQUELLA

If you are using Microsoft SQL Server 2008, 2012 or 2014, please ensure that the TCP/IP protocol has been enabled. The EQUELLA user (the installer default value is '*equellauser*') must have the following:

- **Permissions**: to create, modify and delete tables, indexes and constraints and to run, select, insert, delete and update queries.
- **Database Name**: the installer default name is '*equella*'.
- **Database Role**: the database user must be the database owner. For the EQUELLA user login select *'db_owner'*.

It is required that Microsoft SQL Server databases have **READ_COMMITTED_SNAPSHOT** enabled to avoid possible deadlocks. See http://msdn.microsoft.com/en-us/library/ms173763.aspx for more information. The following statement will enable this setting for a given database:

```
ALTER DATABASE MyEquellaDatabase SET READ_COMMITTED_SNAPSHOT ON;
```

Create a PostgreSQL database instance for EQUELLA

Installations using a PostgreSQL (8.0 or higher) database must create an EQUELLA database before installing EQUELLA. The EQUELLA user (in the default install this is '*equellauser'*) must have the following:

- **Permissions**: to create, modify and delete tables, indexes and constraints and to run, select, insert, delete and update queries.
- **Database Name**: the default name used is *'equella'*.
- **Database Owner**: the default name used is '*equellauser'*.
- **Tablespace**:'*pg_default'.*

The database can now be used for an installation of EQUELLA.

Install the Oracle Java JDK

Installation of the Oracle Java 8 JDK is required for the correct operation of EQUELLA.

Installation procedures

The JDK can be obtained from Oracle at http://www.oracle.com/technetwork/java/javase/downloads/index.html. Installation instructions are available for all platforms by following the appropriate Oracle documentation. We recommend installing the latest point release of Java 8 JDK.

During installation the name and location of the folder in which the JDK is installed is needed to properly configure and run EQUELLA.

The next step in the installation is to install ImageMagick.

Install ImageMagick

A third party tool called ImageMagick must be installed on the server for use by EQUELLA. ImageMagick provides functionality for image viewing within EQUELLA.

Installation procedures

ImageMagick can be obtained from http://www.imagemagick.org/ . Download the platform-specific installer. EQUELLA requires version 6.4 or greater to be installed.

NOTE: EQUELLA requires Imagemagick version 6.8.9 or higher for digital camera RAW image files. Additionally, a third party plugin called **Ghostscript** *is required by Imagemagick to enable the generation of thumbnails for some file types (for example, pdfs). Go to http://ghostscript.com to download and install.*
For a full list of image file types supported by Imagemagick, go to http://imagemagick.sourceforge.net/http/www/formats.html.

Install the program, taking note of the name and location of the folder in which ImageMagick is installed as the EQUELLA installation will require these details to properly configure and run EQUELLA.

Install Libav

Video files uploaded to EQUELLA as file attachments require the free, third party product called Libav to be installed. EQUELLA uses this product to produce thumbnails and previews for video files uploaded to EQUELLA during contribution (that is, video files that are not streamed).

NOTE: This is not a compulsory step if video file attachments will not be used in your institution or you don't require them to display in the Videos gallery view. You do not need to install Libav to display streaming media video (e.g. Kaltura, YouTube) thumbnails and previews on the Videos page.

Install the program, taking note of the name and location of the folder in which the *avconv* and *avprobe* executable files have been installed, as the EQUELLA installation will require these details to properly configure and run EQUELLA.

To install Libav for Windows

1. Go to *http://builds.libav.org/windows/release-gpl/* and download the relevant release build. Contact EQUELLA support if you're not sure which build to download.
2. Unzip to a directory of choice (*e.g. Program Files)* taking note of the name and location of the folder in which the *avconv.exe* and *avprobe.exe* files have been installed, as the EQUELLA installation will require these details to properly configure and run EQUELLA.

To install and configure Libav for Linux

1. Install Libav from *https://libav.org/download.html*
   libvo_aacenc and *libx264* dependencies are also required for video previews to be generated correctly. Take note of the name and location of the folder in which the *avconv* and *avprobe* executables have been installed, as the EQUELLA installation will require these details to properly configure and run EQUELLA.

Detailed steps for installing *Libav*, *libvo_aacenc* and *libx264* per Linux distribution can be found on the EQUELLA Support site.

The next step in the installation is to install the EQUELLA application.

Install EQUELLA

When installing EQUELLA, a wizard is provided that gathers information for the installation and initiates the installation process once sufficient information has been provided. If the installation fails to complete due to inappropriate initialisation of the wizard, all partially installed components are removed and the wizard closes leaving the system as it was, prior to the installation attempt.

An installation troubleshooting section is provided in Appendix A: Troubleshoot an unsuccessful installation section on page 64.

Before you install: important network configuration

EQUELLA has an inbuilt web server that stores content, and as such requires a port number to listen on. Additionally, EQUELLA needs to know the full URL by which linked content will be accessed.

When installing EQUELLA on a server running another web server, there are two options:

2. Assign a second IP Address to the Server for EQUELLA (*recommended*)—Assuming your machine already has one assigned IP address, such as 10.0.0.1, assign a second IP address to the same machine, for example 10.0.0.2, then create a DNS entry for this second IP address, such as EQUELLA.myinstitute.edu.au. This enables both EQUELLA and any other web server to run on port 80 and coexist on the same server.
3. Install EQUELLA to another server port (*not recommended*)—EQUELLA can be installed on another port, however this is not recommended as many firewall/proxy configurations will prevent access to this port.

For either option, you will need to make sure that your firewall/proxy will let all users of the system have access to the chosen port on the assigned IP address.

Since material created in EQUELLA is linked to content stored on the EQUELLA server, students as well as educators will need indirect access to this server. Usually users will be unaware of this access.

Installation procedures

EQUELLA provides files for installation that can be used on all platforms. The installation process gathers the following information and settings:

- the directory in which to install EQUELLA
- database access information
- web server information
- EQUELLA administration settings

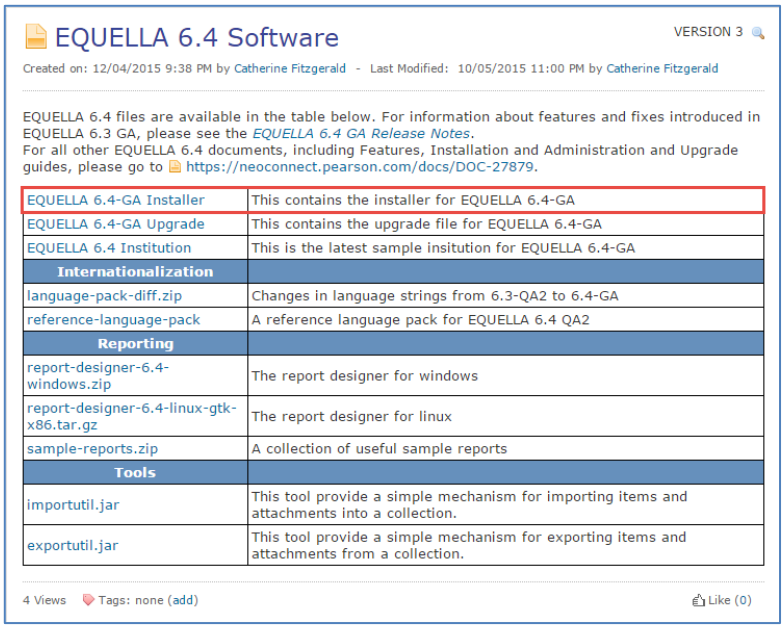
This information is required to successfully install EQUELLA. Incomplete details will cause the installation to fail.

Download the installation files

The installation files can be obtained from the International EQUELLA User Community portal on NeoConnect.

1. Go to https://neoconnect.pearson.com/docs/DOC-30196. The EQUELLA 6.4 Software page displays, as shown in Figure 1.

NOTE: To access this link, you must be registered as an EQUELLA User Community member. If you are not currently registered, please contact the User Community administrators.



EQUELLA 6.4 Software

VERSION 3

Created on: 12/04/2015 9:38 PM by Catherine Fitzgerald - Last Modified: 10/05/2015 11:00 PM by Catherine Fitzgerald

EQUELLA 6.4 files are available in the table below. For information about features and fixes introduced in EQUELLA 6.3 GA, please see the *EQUELLA 6.4 GA Release Notes*.
For all other EQUELLA 6.4 documents, including Features, Installation and Administration and Upgrade guides, please go to https://neoconnect.pearson.com/docs/DOC-27879.

EQUELLA 6.4-GA Installer	This contains the installer for EQUELLA 6.4-GA
EQUELLA 6.4-GA Upgrade	This contains the upgrade file for EQUELLA 6.4-GA
EQUELLA 6.4 Institution	This is the latest sample insitution for EQUELLA 6.4-GA
Internationalization	
language-pack-diff.zip	Changes in language strings from 6.3-QA2 to 6.4-GA
reference-language-pack	A reference language pack for EQUELLA 6.4 QA2
Reporting	
report-designer-6.4-windows.zip	The report designer for windows
report-designer-6.4-linux-gtk-x86.tar.gz	The report designer for linux
sample-reports.zip	A collection of useful sample reports
Tools	
importutil.jar	This tool provide a simple mechanism for importing items and attachments into a collection.
exportutil.jar	This tool provide a simple mechanism for exporting items and attachments from a collection.

4 Views Tags: none (add) Like (0)

Figure 1 EQUELLA 6.4 Software page

The section at the top has links to the:

- **equella-6.4-GAx** or **equella-6.4-QAx Installer** file (depending on the latest version)—used in the Install EQUELLA section on page 11.
- **EQUELLA 6.4 Institution**—used in the Import a new institution section on page 26.

Install EQUELLA

This procedure describes installing EQUELLA using a graphical interface. The examples shown are using Windows although other GUIs such as X-windows will be similar. The wizard pages provide information on the required details. Read each page before entering information.

To install EQUELLA

1. From the EQUELLA 6.4 Software page (https://neoconnect.pearson.com/docs/DOC-27853), download the **equella-6.4-GAx** or **equella-6.4-QAx Installer** file.
2. Extract the **equella-6.4 -installer-20XXxxxx.zip** file to a temporary directory.

3. Navigate to the installer temporary directory and double-click on the **enterprise-install** file to start the installation.

The Installer wizard introduction page is displayed as shown in Figure 2.

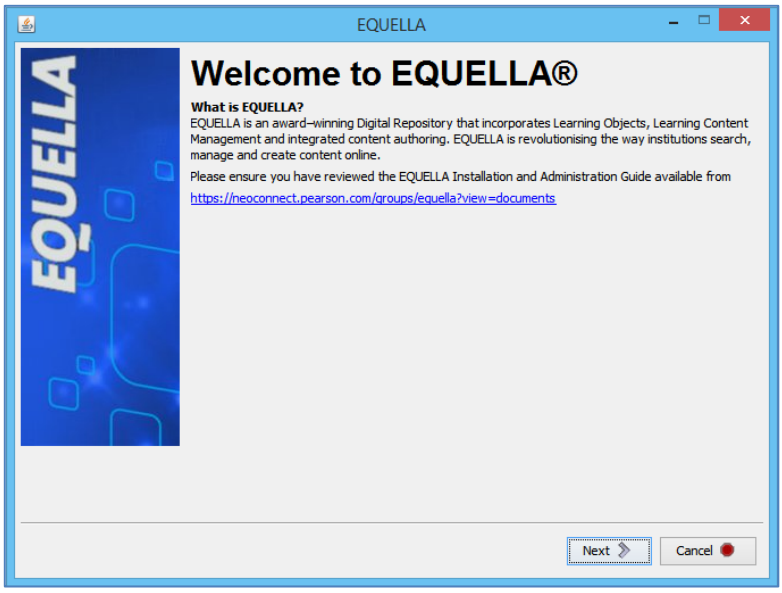


Figure 2 EQUELLA Installer introduction page

4. Click Next to display the **Java Development Kit** page.
5. Click Browse and navigate to the directory in which the JDK is installed. An example is shown in Figure 3.

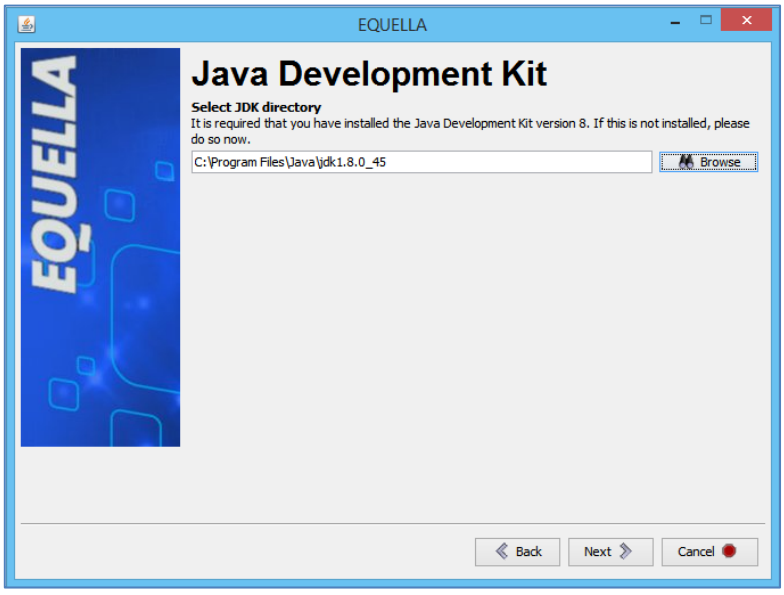


Figure 3 Select the JDK directory

6. Click Next to display the **Install Directory** page.
7. Click Browse to select the location where EQUELLA will be installed (e.g. '*c:\equella*') as shown in Figure 4.

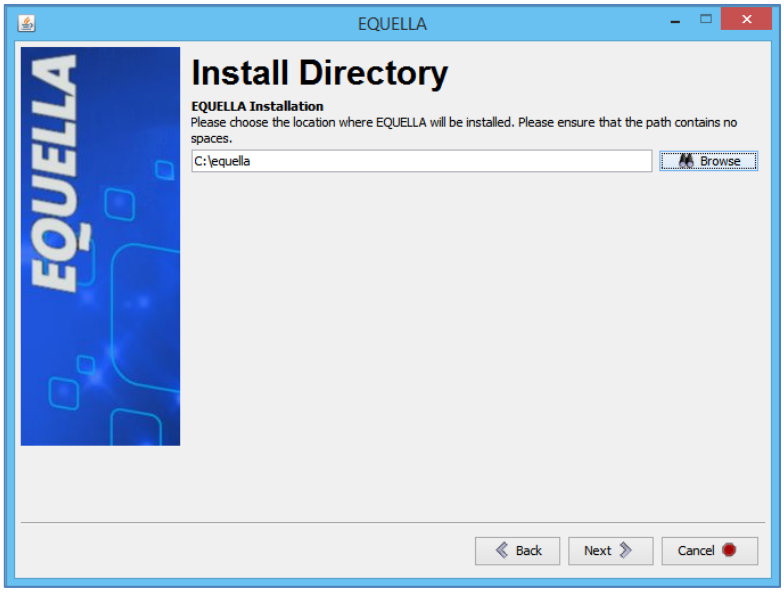


Figure 4 Install Directory page

8. Click Next to display the **Database Server** page.

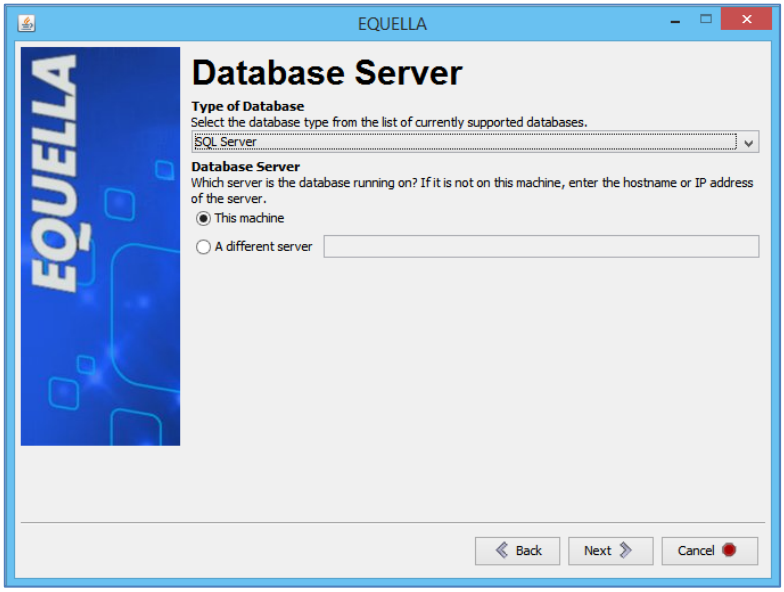


Figure 5 Database Server page

The database server group and database type must be entered to configure EQUELLA with an empty database ready for use.

9. Select the database type from the drop-down list (e.g. '*SQL Server*'). An example is shown in Figure 5.
10. Select a **Database Server** from the following options:
    - **This machine**—select this option if the database server is on the local machine.
    - **A different server**—select this option if the database server is not on this machine and enter the IP address or hostname of the server.

11. Click Next to display the **Database Authentication** page. An example is shown in Figure 6.

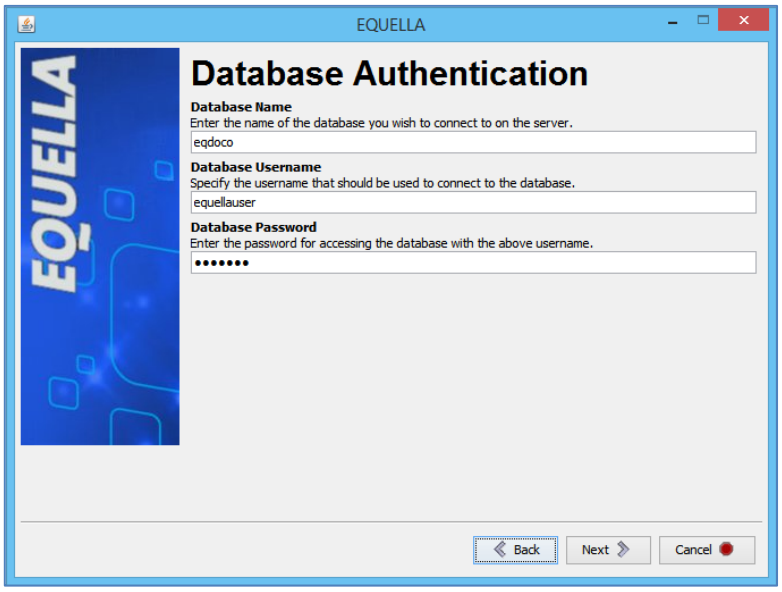


Figure 6 Database Authentication page – SQL Server and PostgreSQL

An example of the **Database Authentication** page for Oracle is shown in Figure 7.

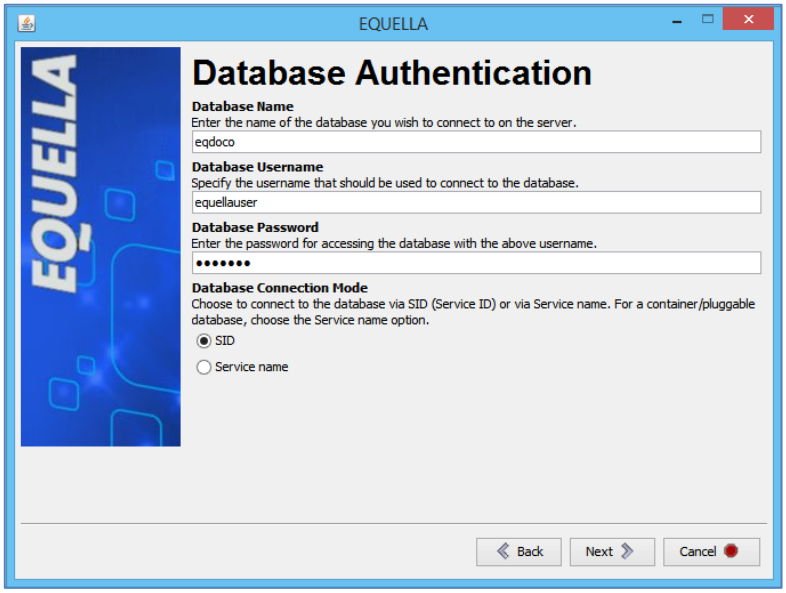


Figure 7 Database Authentication page - Oracle

12. Enter the EQUELLA **Database Name** (the default value is '*equella*').
13. Enter the **Database Username** (the default value is 'equellauser').

(NOTE: For Oracle the database username must start with an alphabetic character.)

14. Enter the **Database Password** used to access the database. This is the password used to set up the database. A confirmation dialog is displayed.
15. Re-enter the password to confirm the password is correct.
16. Click Next to display the **Web Server Settings** page.

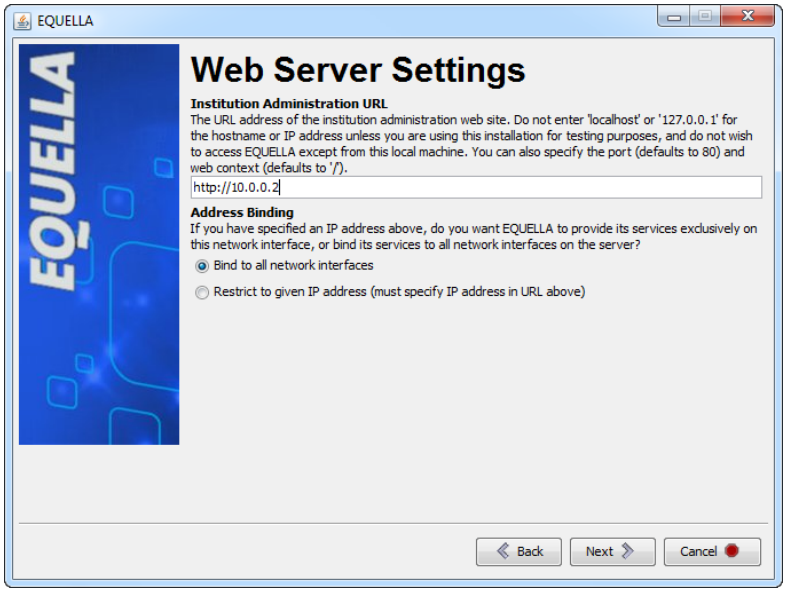


Figure 8 Web Server Settings page

The web server settings are used to allow web access to EQUELLA. An example is shown in Figure 8.

17. Enter the **Institution Administration URL—**enter the DNS name or IP address and port as described in the Before you install: important network configuration section on page 11.
18. Select an **Address Binding** from the following options:
    - **Bind to all network interfaces**—select this option if EQUELLA is the only web server running on the machine.
    - **Restrict to given hostname or IP address**—select this option if EQUELLA is sharing the machine with other web servers.
19. Click Next to display the **EQUELLA Manager** page.

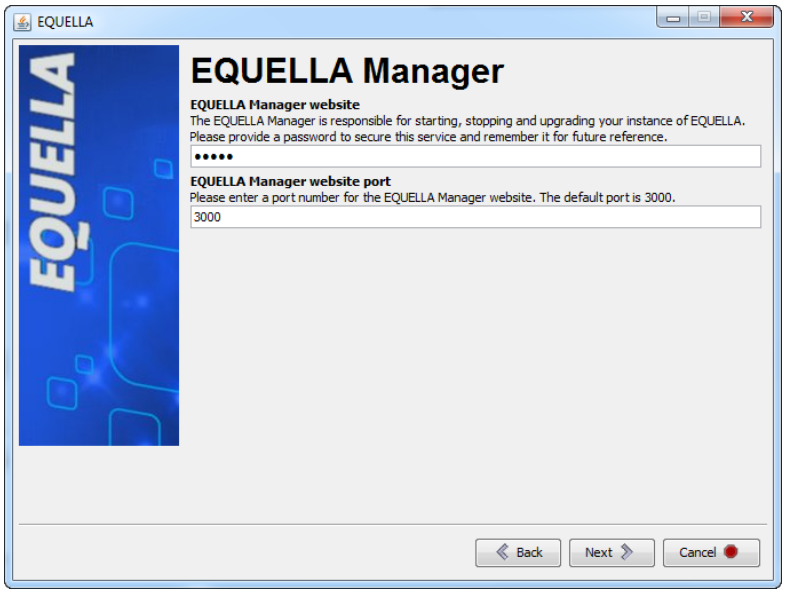


Figure 9 EQUELLA Manager page

The EQUELLA Manager is a separate service with its own authentication and port number.

After installation, the EQUELLA Manager can be accessed and EQUELLA can be easily upgraded. Further information is provided in the *EQUELLA Upgrade Guide.*

20. Enter the password for the **EQUELLA Manager website**—choose a password to secure the EQUELLA Manager and note the password for future upgrades.
21. Enter the **EQUELLA Manager website port** number—3000 is the default value. If this port is currently used set the port value to any unused port number.
22. Click Next to display the **Proxy Server Settings** page, shown in Figure 10.

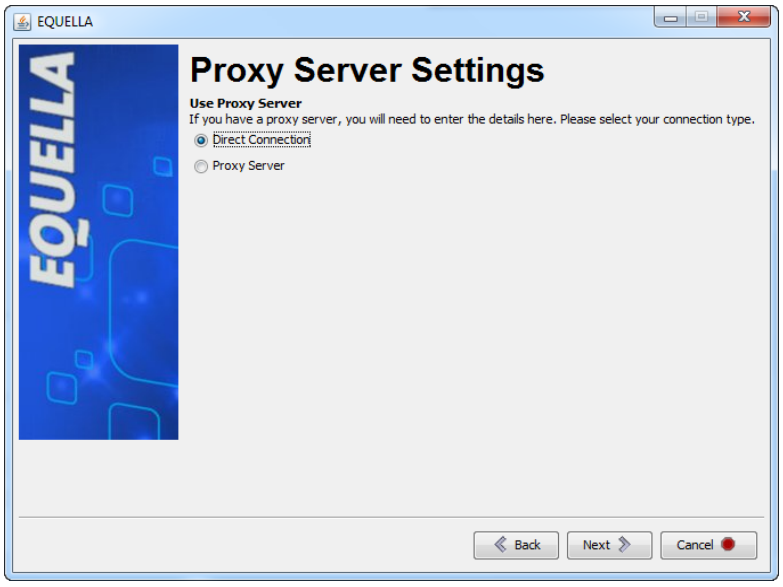


Figure 10 Proxy Server Settings page

23. Specify whether the EQUELLA server uses a proxy server to provide external access. Select from the following options:
    - **Direct Connection**—select if no proxy server is used then select the **Next** button to skip the **Proxy Server Configuration** page and display the **Memory Management** page, shown in Figure 12.
    - **Proxy Server**—select then select the **Next** button to display the **Proxy Server Settings** page, shown in Figure 11.

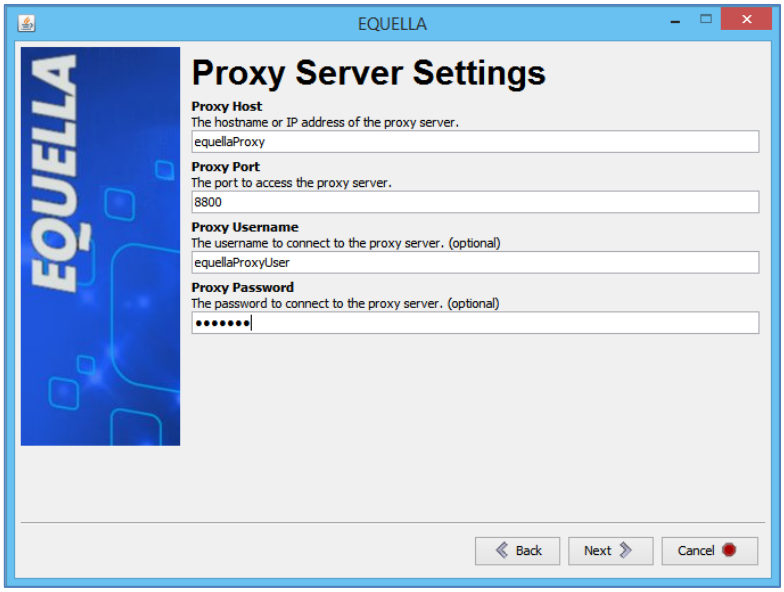


Figure 11 Proxy Server Settings page

To enter Proxy Server Settings

a. Enter the **Proxy Host** and **Proxy Port.**

b. Enter the **Proxy Username** and **Proxy Password** for proxy authentication. Leave blank if there is none.

c. Click Next to display the **Memory Management** page shown in Figure 12.

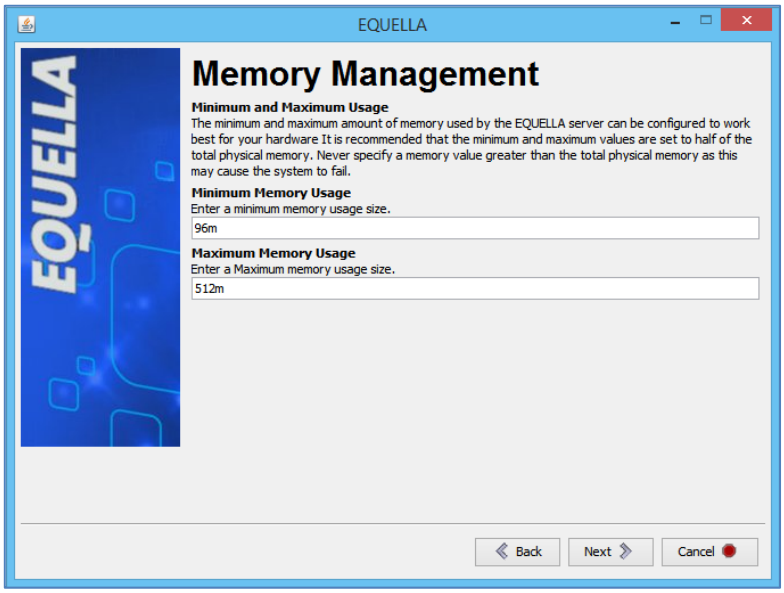


Figure 12 Memory Management page

The memory usage of EQUELLA can be set on this page. It is *recommended* that the default settings **Minimum Memory Usage**: **96m** (MB) and **Maximum Memory Usage**: **512m** (MB) are used. These provide suitable settings for machines with 1024 MB of memory where EQUELLA is the only application running.

The Minimum Memory Usage should never be less than 96 MB nor should the Maximum Memory exceed the amount of physical RAM available on the server. Memory should be allocated to allow sufficient memory for all applications being run on the server.

(NOTE: For 32-bit systems, Java processes on Windows are limited to 1536 MB.)

24. Click Next to display the **ImageMagick** page.

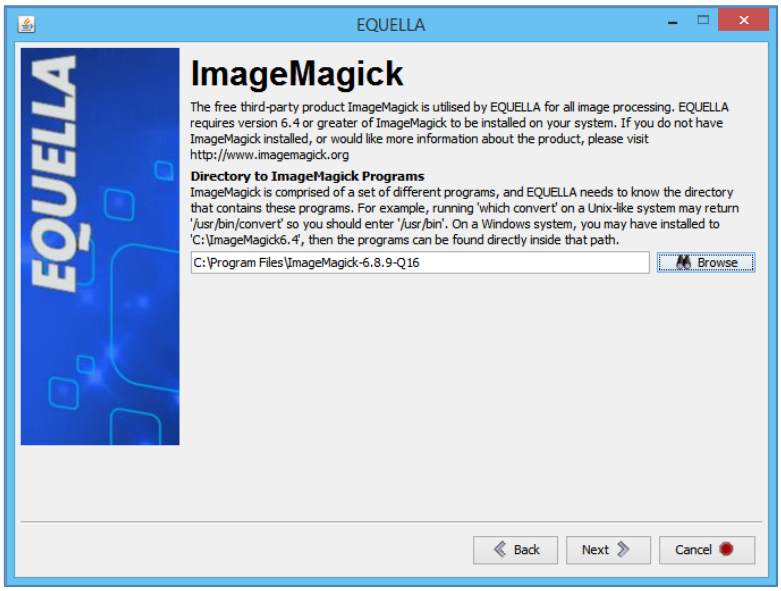


Figure 13 ImageMagick page

25. Click Browse and navigate to the directory that contains the ImageMagick files. An example is shown in Figure 13.
26. Click Next to display the **Libav** page, shown in Figure 14.

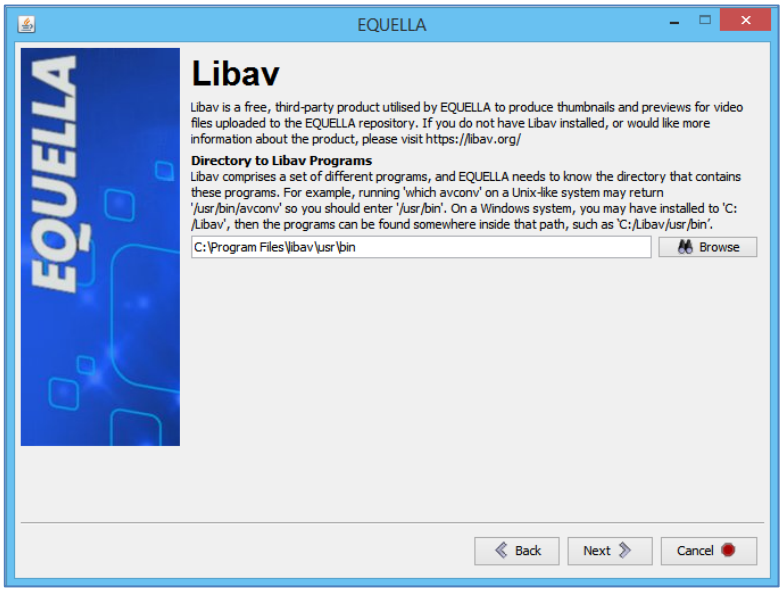


Figure 14 Libav page

27. If you have installed Libav to create thumbnails and previews for video files uploaded as attachments (see Install Libav on page 10), click Browse and navigate to the

directory that contains the Libav files *avconv.exe* and *avprobe.exe*. An example is shown in Figure 14. Otherwise leave the field blank. A confirmation dialog displays to confirm that Libav is not required. An example is shown in Figure 15.

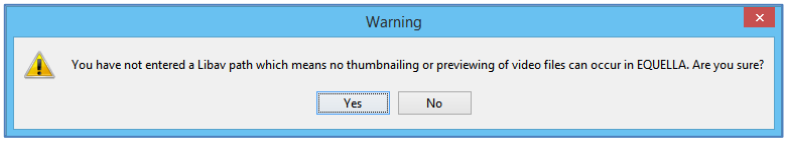


Figure 15 Confirmation dialog when Libav not being used

28. Click Next to display the **Ready to Install** page, shown in Figure 16.

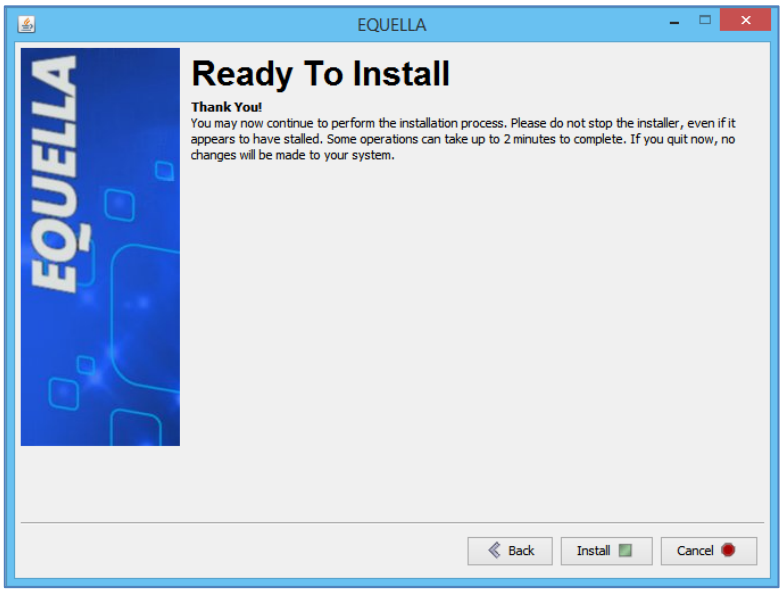


Figure 16 Ready to Install page

29. Click Install to begin the installation process. The **Installing...** progress dialog may take a few moments to appear.
30. When completed select OK to confirm.

EQUELLA is now installed and the server is ready to be registered and started.

Register the EQUELLA server

Windows

To register the EQUELLA server as a Windows service

1. Navigate to the **Manager** folder (the default installation folder is *C:\equella\manager*).

In the 'config' files, details for the services can be edited (this is optional.) The details that can be changed include:

- logging properties
- service names and descriptions

- whether the service should auto start.

To change the details (optional)

1. Navigate to the **manager** folder (<path-to-equella>**manager**\).
2. Edit the **manager-config** and/or **equellaserver-config** files as required.

To register the EQUELLA server with Windows:

3. Open a command prompt in the **Manager** folder (**Shift / right click**, then **Open command window here**) and enter:

```
manager install
equellaserver install
```

Start the EQUELLA server

To start the service without restarting the machine either

1. Navigate to the **manager** folder (the default installation folder is C:\equella\manager), open a command prompt (**Shift / right click**, then **Open command window here**) and enter:

```
manager start
equellaserver start
```

Or

1. In Windows™ on the EQUELLA server, go to the **Control Panel**, **Administrative Tools** then double click **Services**.
2. Find the EQUELLA services (by default the names are **EQUELLA App Server** and **EQUELLA Manager**) in the list of services, right click and select the **Start**. An example is shown in Figure 17.

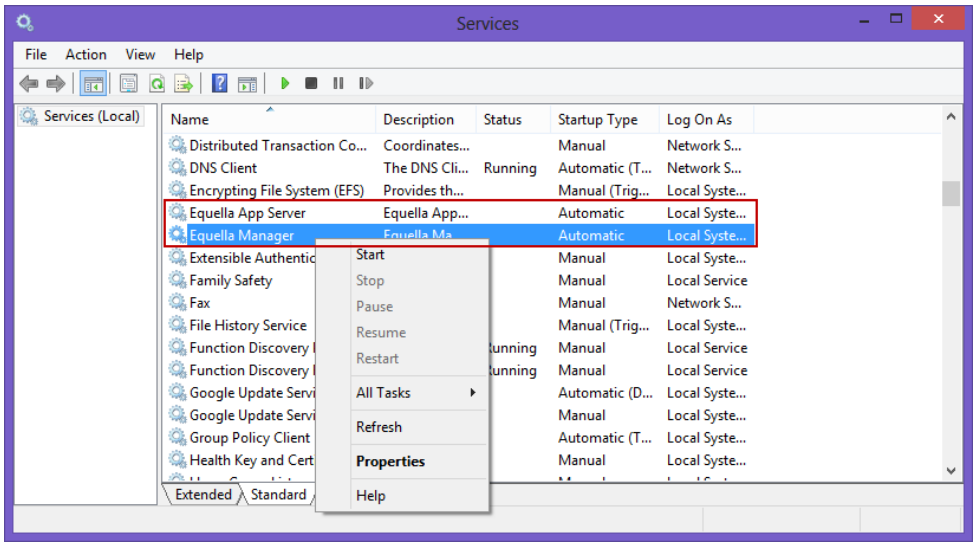


Figure 17 Services window

The EQUELLA server is now started but may take a few minutes to be operational.

Once the server has been registered and started, the success of the installation can be checked by opening the Server administration account.

Linux

Linux installations

To change directory to the installation directory

1. Open a command prompt and run the following commands:

```
cd <path-to-equella>/manager
chmod 755 manager jsvc equellaserver
```

To start the service

1. Navigate to the EQUELLA install directory, then the manager folder (e.g. *<path-to-equella>/manager*).
2. From this folder, the server can be started by running the commands:

```
./manager start
./equellaserver start
```

Once the server has been started, the success of the installation can be checked by opening the Server administration account.

Stop the EQUELLA server

To stop the EQUELLA server using Windows

1. Go to the **Start** menu, **Control Panel**, **Administrative Tools** then double click **Services**.
2. Find EQUELLA in the list of services (by default, the names are *EQUELLA App Server* and *EQUELLA Manager*), right click and select **Stop**.

To stop the EQUELLA server on other platforms

1. Navigate to the **Manager** folder (the default installation folder is */usr/local/equella*), open a command prompt and enter:

```
./manager stop
./equellaserver stop
```

The services have now stopped.

EQUELLA Server administration account

A standard EQUELLA licence provides three institutions, typically for test, staging and live environments. Further institutions can be licensed and installed with the only constraint on the number of institutions being the server's ability to perform. Institutions can be imported from another server. Further information is provided in Import a new institution on page 26 .

EQUELLA Server administration account

The EQUELLA Server administration account is hidden from casual users and is displayed by entering a special URL created from the server's base URL.

To open the Server administration account page

1. Open a browser and enter the EQUELLA address of the hosting server with *'/institutions.do?method=admin'* appended to the URL. (e.g. *'http://equella.myinstitution.edu/logon.do'* would become '*http://equella.myinstitute.edu/institutions.do?method=admin'*).
2. The **Server administration - Welcome** page displays, as shown in Figure 18.

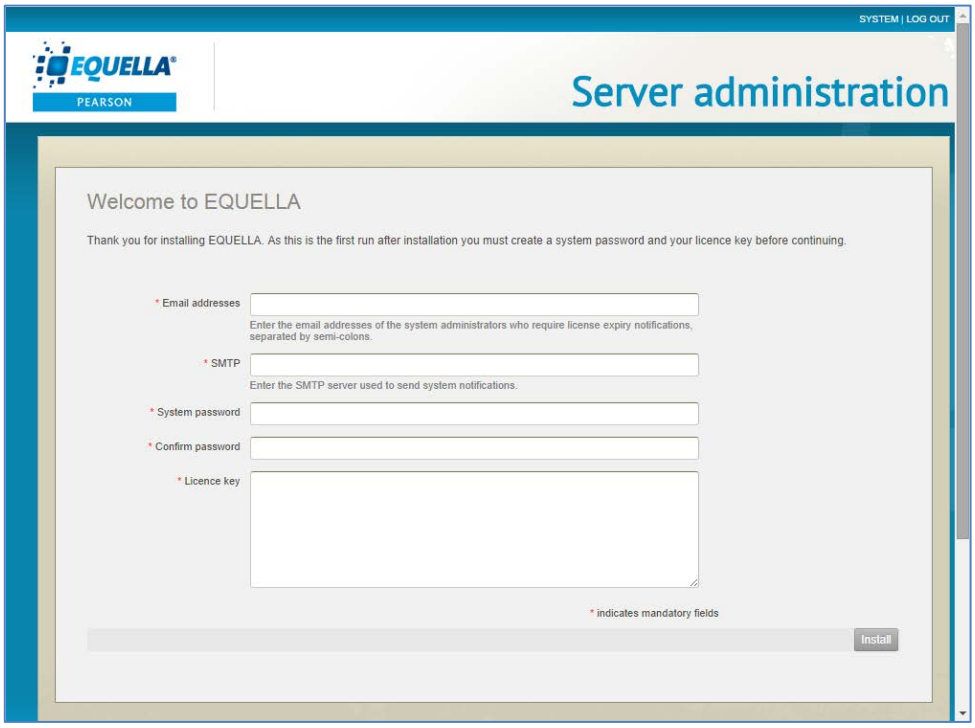


Figure 18 Server administration page - Welcome to EQUELLA

3. Enter the **Email addresses** of the administrators at your institution who need to be notified when your EQUELLA licence is due to expire. Separate each email address with a semicolon.
4. Enter the **SMTP** server to be used for system email notifications.
5. Enter a **System password**, then **Confirm password**. This password is used to access the Server administration function in future.
6. Enter your EQUELLA **Licence key**. An example is shown in Figure 19. Further information on licence details is provided in the Request licence and upgrade details section on page 7.

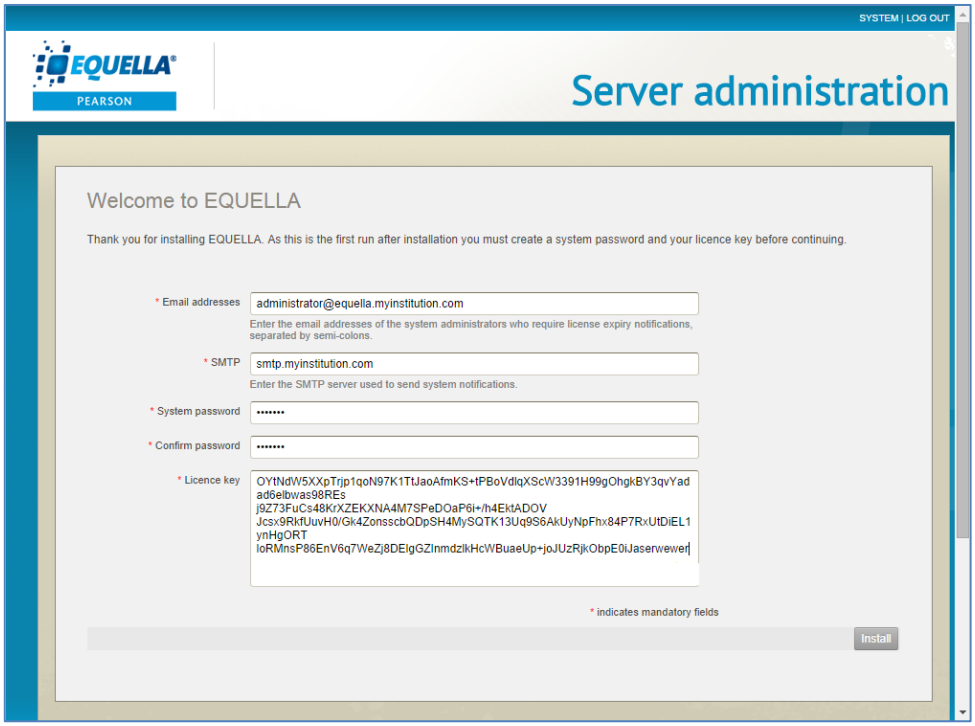


Figure 19 Enter System password and Licence key

7. Click Install. The **Databases** page displays, with the system database listed. An example is shown in Figure 20.

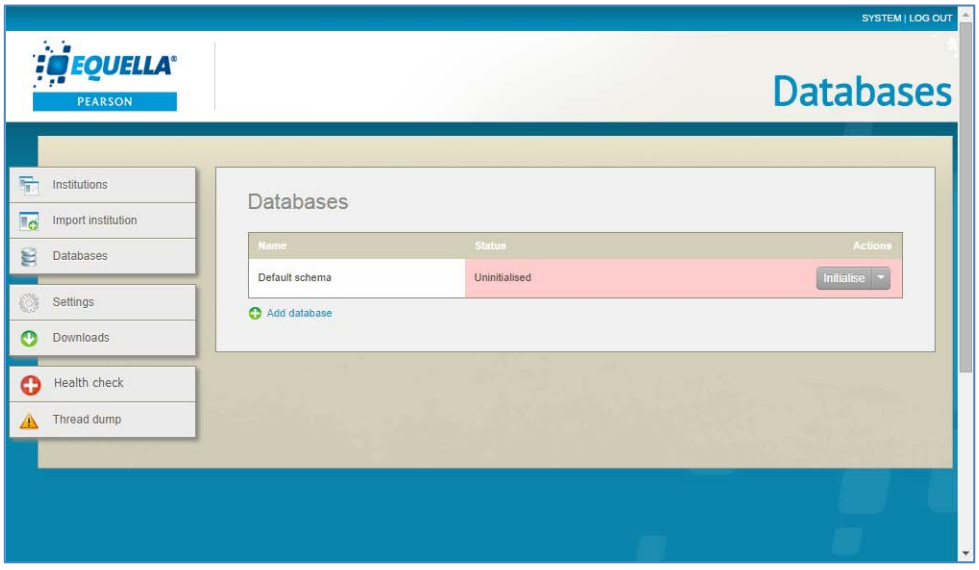


Figure 20 Databases page with uninitialised system database

8. Click the **Initialise** link to start the database initialisation process. The progress percentage displays on the page. An example is shown in Figure 21.

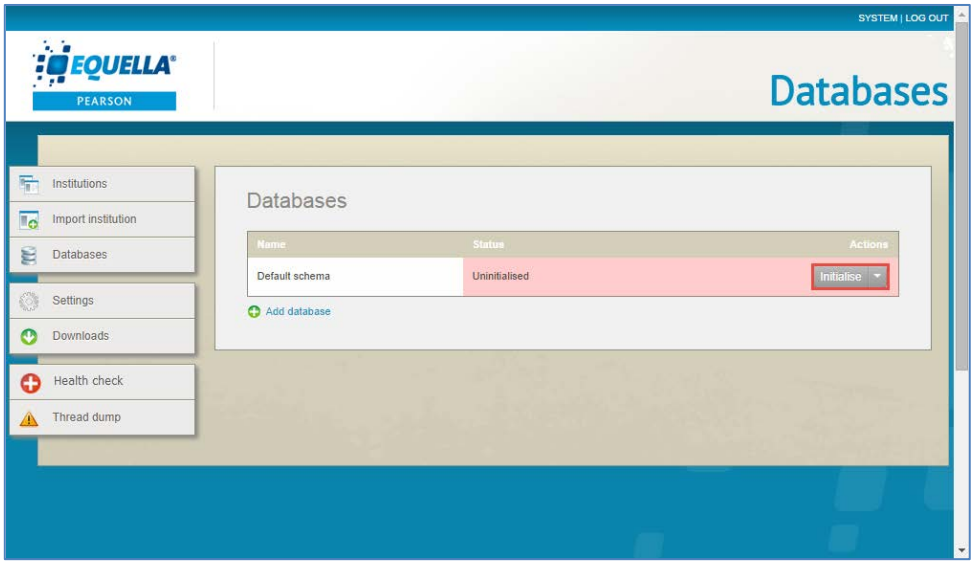


Figure 21 Database initialisation progress

During the initialisation process, the button changes to **Progress.** Click this button to view the progress dialog. An example is shown in Figure 22.

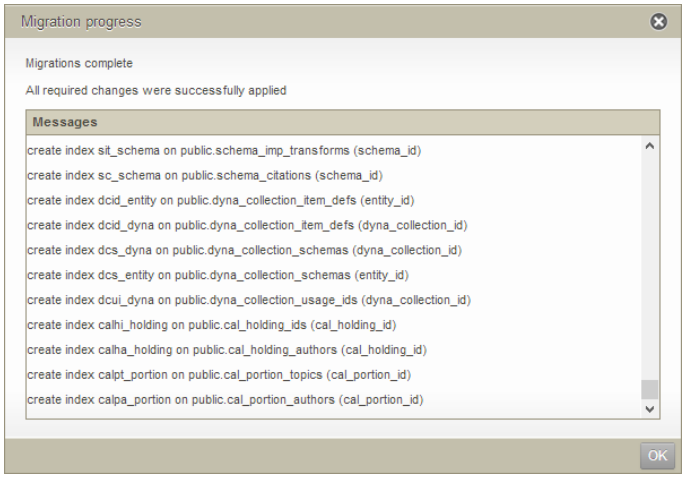


Figure 22 Migration progress dialog

9. When the initialisation process is complete, the database status changes to '*Online'.* An example is shown in Figure 23.

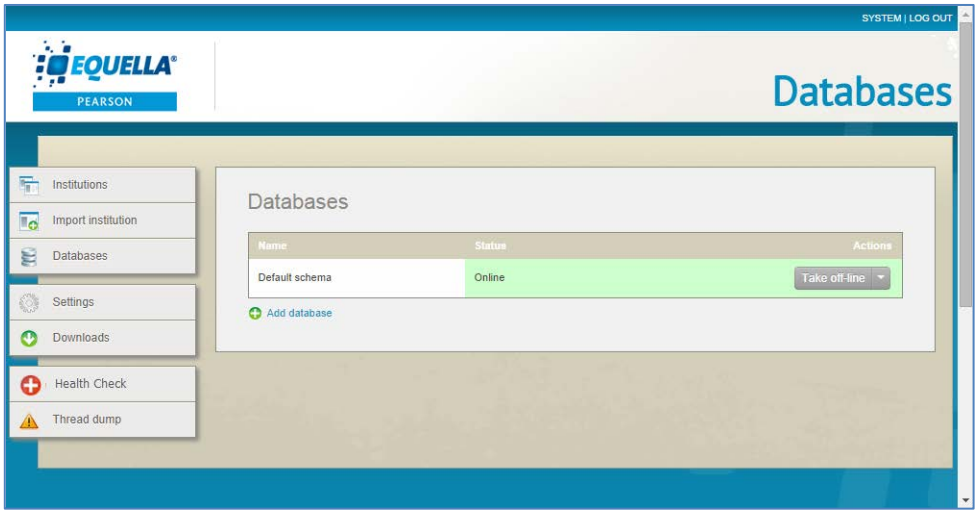


Figure 23 Databases page with online database

Import a new institution

To complete a working installation of EQUELLA, an institution must be imported to the server. The complete reference for importing institutions is provided in the Import an institution section on page 42.

NOTE: If multiple databases are to be used on the system, see the Use multiple databases section on page 29 before proceeding to import an institution.

NOTE: Your EQUELLA consultant will organize access to a 'vanilla' institution with basic schemas, collections etc. at installation time.

To import an institution

1. Select **Import institution** from the navigation menu to display the **Import new institution** page, as shown in Figure 24.

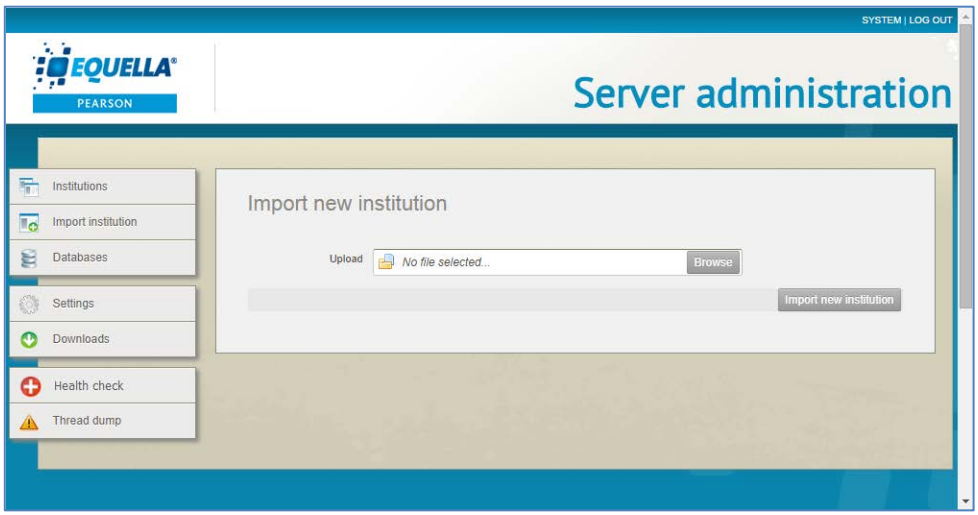


Figure 24 Import new institution page

2. Click Browse to select the institution zip file to import (e.g. *insitution-6.4-20XX-XX-XX.tar.bz2)*. (This would be done in conjunction with your EQUELLA consultant.)
3. Click Import new institution to start the importation. The **Import new institution** page displays. An example is shown in Figure 25.

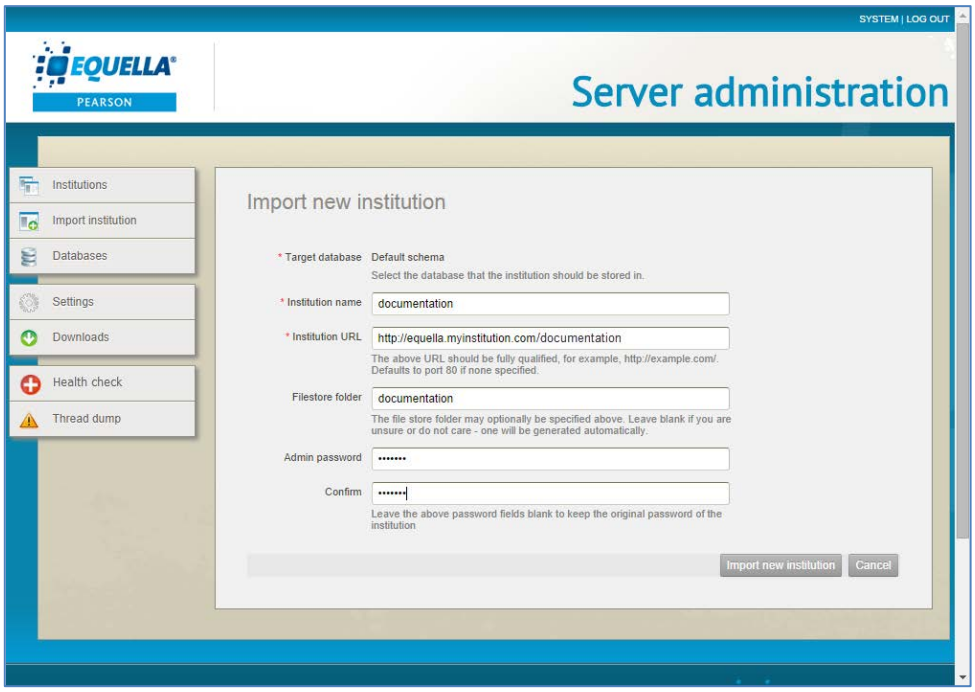


Figure 25 Import new institution page

The **Import New Institution** page allows for arbitrary base URLs and the renaming of the institution.

To continue the importation

4. If multiple databases have been configured, click Select database and select the required database in the **Target database** field. (See the Use multiple databases section on page 29 for more detail). Otherwise the system defaults to the database set up during installation.
5. Enter an **Institution name** for the institution. The institution name must be unique for the EQUELLA server.
6. Enter an **Institution URL** for the institution.

Arbitrary institution URLs

Server administrators are able to give institutions an arbitrary base URL. This URL may contain a base URL context. For example, the following base URLs would be valid for institutions on the same server:

- http://some.host.com/
- http://another.host.com/
- http://another.host.com/with/a/context/
- http://another.host.com/with/another/context/

- http://on.a.different.port:8080/

The arbitrary base URL can be entered in the **Institution URL** edit box. The Institution URL should be fully qualified. It is not possible to overwrite the other institution's URL space, for example: '*http://equella.myinstitution:4012/doco/qa2/*' will conflict with '*http://equella.myinstitution:4012/doco/*'. This will be disallowed and will result in the following message:

'URL must not 'overwrite' an existing institution's URL space, in this case http://equella.myinstitution:4012/doco/qa2/. This may cause this institution to work incorrectly'.

To complete the importation

7. Enter a unique **Filestore folder** name**.** This is optional; if a name is not entered a folder with a randomly generated name will be automatically generated for the institution in the <path-to-equella>**filestore****Institutions** folder.
8. Enter a new **Admin password** for the institution administrator. If left blank, the institution will inherit the password from the imported institution. (*NOTE: This password is used to log in to the Institution using the TLE_ADMINISTRATOR login.*)
9. **Confirm** the password.
10. Click Import new institution then click OK to confirm. An **Importing...** progress dialog that indicates the importation progress is displayed. When importation is complete the Return to Institution Management ➔ button becomes active.
11. Click Return to Institution Management ➔ to view the new institution on the **Institutions** page. An example is shown in Figure 26.

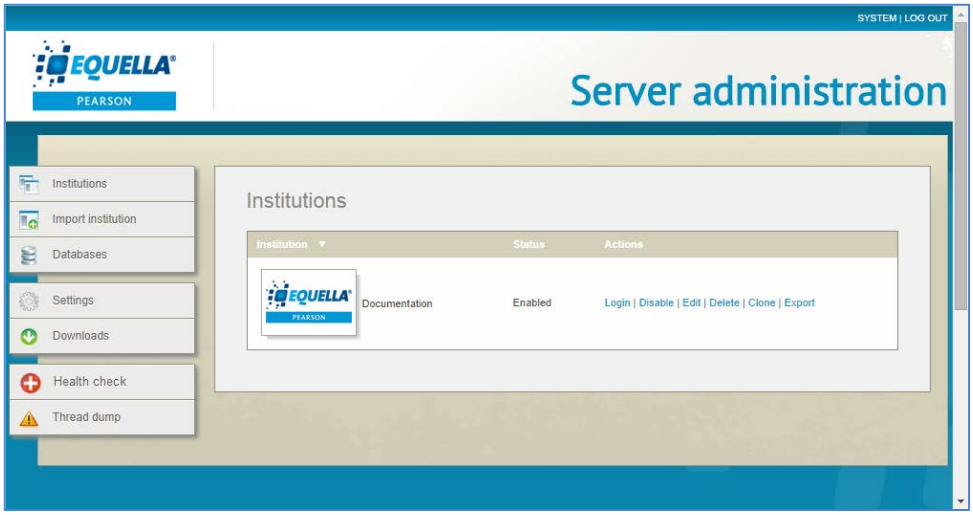


Figure 26 Imported Institution

Installation of the EQUELLA server is now complete. Login to the institution as the TLE_ADMINISTRATOR to administer and configure the institution.

Installation troubleshooting information is provided in the Appendix A: Troubleshoot an unsuccessful installation section on page 64.

Information on using a proxy server is provided in the Use a reverse proxy server with EQUELLA section on page 35.

Use multiple databases

EQUELLA provides the ability to use multiple databases, allowing each institution to have its own database. This improves both security and performance.

Add a new database to EQUELLA procedure

Configuring multiple databases involves the following steps:

1. Install a new database.

NOTE: When using multiple databases, only databases from one vendor may be used. For example, two Microsoft SQL Server databases could be used, but NOT a Microsoft SQL Server and a PostgreSQL Server database. The database vendor is selected when the EQUELLA system is first installed.

2. Configure the new database in EQUELLA. (See Add a database to EQUELLA below.)
3. Clone or import an institution, specifying the new database. (See Import a new institution on page 26 and Clone an institution on page 43.)

Install a new database

See the Install a database section on page 7 for more information.

Add a database to EQUELLA

Databases are managed through the **Databases** function, accessed from the Server Administration page.

To add a new database

1. Select **Databases** from the Server Administration page navigation menu. The **Databases** page displays, as shown in Figure 27.

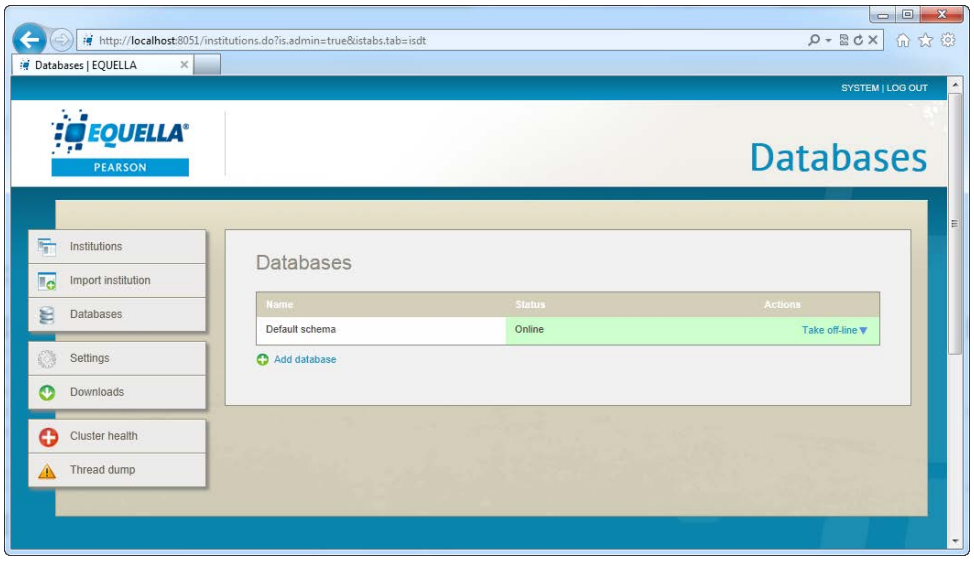


Figure 27 Databases page

2. Click the **Add database** link to display the **Add database** dialog, as shown in Figure 28.

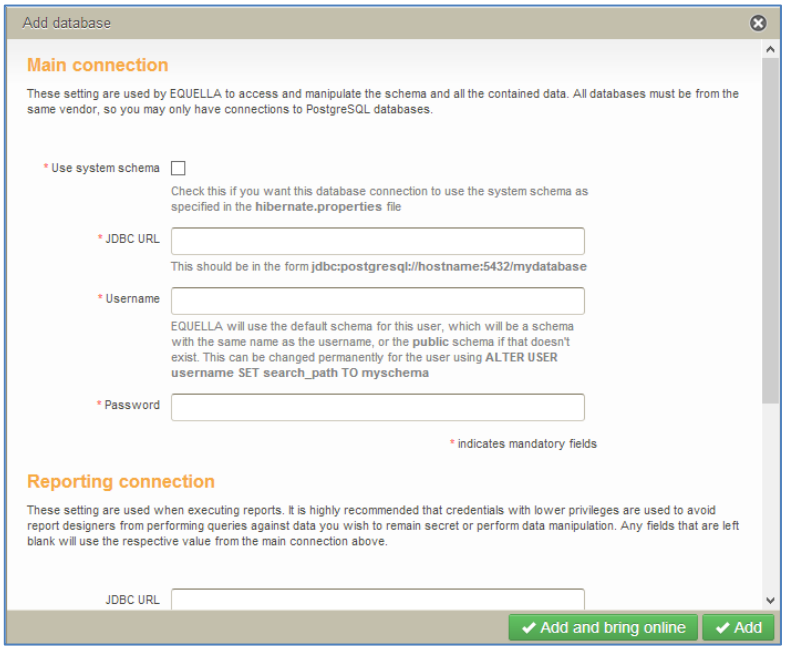


Figure 28 Add database dialog

Main connection

3. The **Use system schema** checkbox is only selected to default to the database specified in the hibernate.properties file.

NOTE: Selecting this checkbox disables the remaining fields.

4. Enter the new database **JDBC URL.** In this example, the existing EQUELLA database is PostgresSQL, so the system prompts a PostgreSQL example. If using MS SQL or Oracle, a relevant example is shown.
   The existing database **JDBC URL** can be found in *<path-to-equella>\learningedge-config\hibernate.properties*, and the structure is
   jdbc:<databasetype>://<host>:<port>/<database_name>.
   For example, *jdbc:postgresql://localhost:5432/equella51.*
   Change the *<database_name>* to the new database name. For example, *jdbc:postgresql://localhost:5432/Equella2*
5. Enter the database **Username** and **Password.** An example is shown in Figure 29.

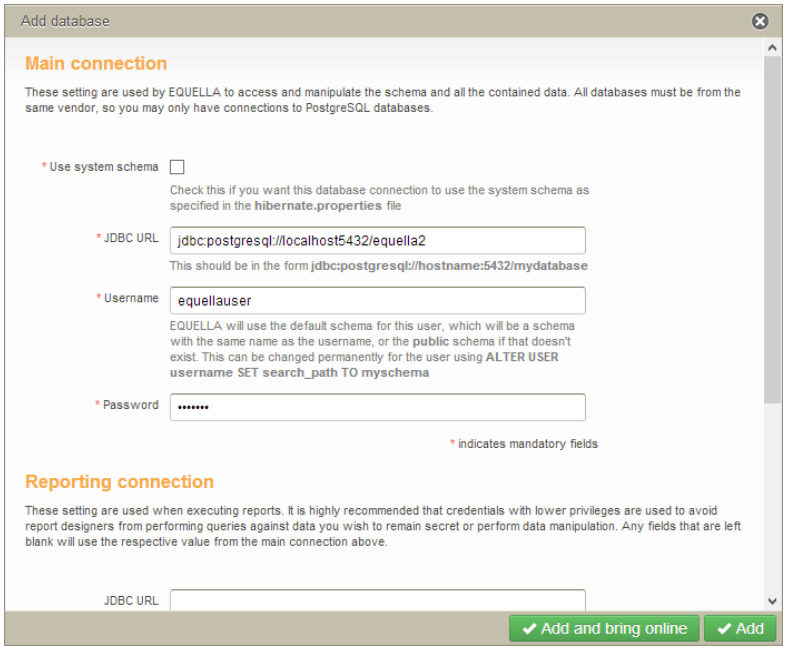


Figure 29 Add database – details

6. Click ✔ Add and bring online to save the **Main connection** details. The Database page displays, and the new database starts an automatic initialisation process with a progress bar. Once completed, the new database displays with a status of **Online**. An example is shown in Figure 30.

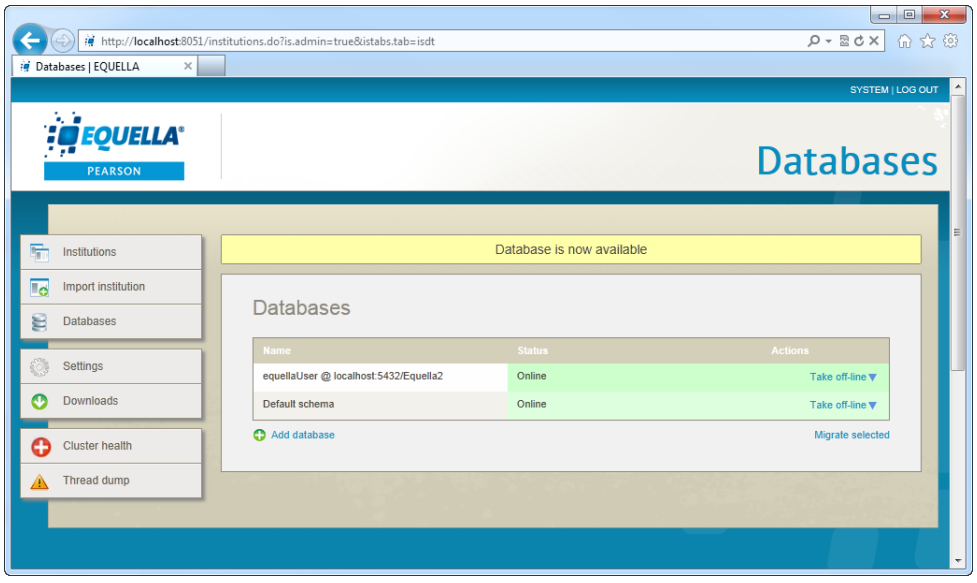


Figure 30 Database page with new database displayed

Reporting connection

The reporting connection section allows a separate database login for users who have reporting/read-only privileges.

To configure Reporting connection settings

1. Enter the **JDBC URL**, if relevant.

NOTE: This would only be different from the Main connection JDBC URL if data was transferred to a separate database for reporting purposes. Leave blank to use the Main connection JDBC URL.

2. Enter the **Username** and **Password**.
3. Click Save to save the details.

Other details

The **Other Details** section of the screen provides a text box for entering a description. The default description is the database URL.

Take a database offline

Databases can be taken offline if required. For example, for database maintenance or to take down a group of institutions.

To take a database off-line

1. From the **Databases** page, click Take off-line. A warning/confirmation dialog displays, as shown in Figure 31.

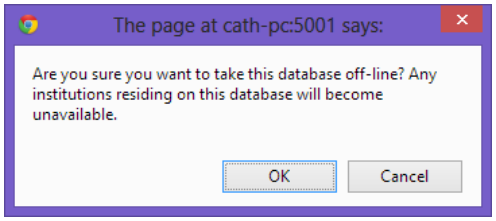


Figure 31 Warning/confirmation dialog

2. Click OK to confirm. The database Status is now *Offline.* An example is shown in Figure 32.

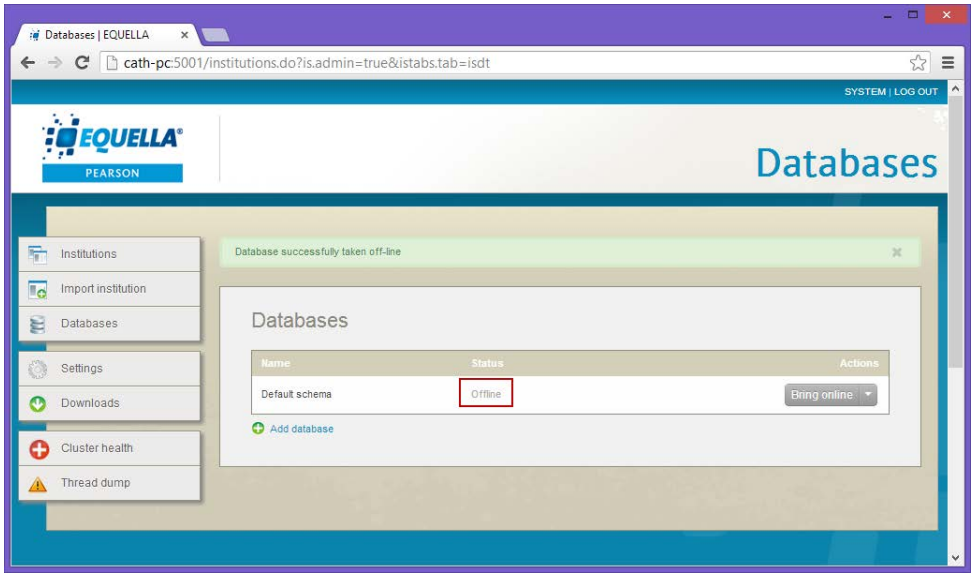


Figure 32 Database page with offline database

Bring a database online

If a database has been taken off-line, it must then be brought back online for use.

To bring a database on-line

1. From the **Databases** page, click Bring online. The database Status is now *Online.* An example is shown in Figure 33.

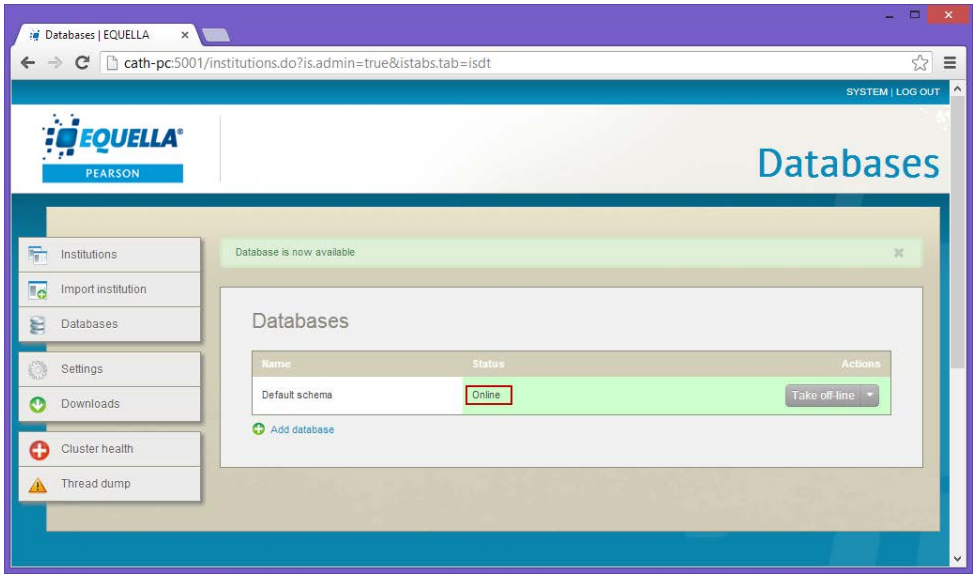


Figure 33 Database page with online database

Edit database settings

Database settings can be accessed for editing. Generally settings won't be changed, but a Reporting connection or description might be added at a later date.

To edit the database settings

NOTE: The database must be Offline *for the settings to be edited. See* *To take a database off-line on page 32.*

1. From the **Databases** page, click the drop-down in the relevant database's **Actions** column to view menu options.
2. Select the **Edit database settings** link to display the **Edit database** page.
3. Make the relevant changes, then click ✔ Save.

Delete a database

On rare occasions, it may be required to delete a database that may no longer be used.

To delete a database

NOTE: The database must be Offline *before it can be deleted. See* *To take a database off-line on page 32.*

1. From the **Databases** page, click the drop-down in the relevant database's **Actions** column to view menu options.
2. Select the **Remove this database** link. A warning/confirmation dialog displays, as shown in Figure 34.

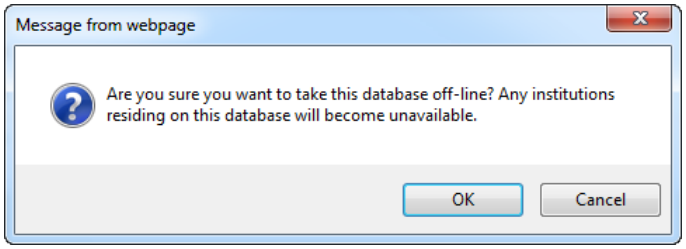


Figure 34 Warning/confirmation dialog

3. Click OK to confirm.

Reload database state

The **Reload database state** function checks the database state and reloads if required. This function might be used if changes had been made to a database, or if a database had become unavailable to EQUELLA due to technical issues, but is again available.

To reload database state

1. From the **Databases** page, click the drop-down in the relevant database's **Actions** column to view menu options.
2. Select the **Reload database state** link.

Use a reverse proxy server with EQUELLA

This section describes how to configure EQUELLA to run with a reverse proxy. If your installation does not have a reverse proxy this section can be skipped.

A reverse proxy is a gateway for servers enabling one web server to provide transparent access to content from multiple servers and also provides controlled access from the Internet. Possible reasons for running EQUELLA from a reverse proxy include:

- providing all services through a single server
- providing an EQUELLA service on the default HTTP port (or any below 1024) but running the service as a non-privileged user
- increasing the security of your services by running Apache or Squid
- you want to use SSL with EQUELLA

The following section provides an example installation using Apache. This is indicative of the process required for other web servers.

Configure a reverse proxy

To configure a reverse proxy server

1. Ensure the Apache modules **mod_proxy** and **mod_proxy_http** have been installed.
2. Open the Apache **httpd.conf** file and add a 'ProxyPass' directive to the <**VirtualHost**> element:

```
<VirtualHost *:80>
  ServerName <external-server-name>
  ProxyPass / http://<equellahost>:<http.port>/ nocanon
  ProxyPreserveHost On
</VirtualHost>
```

Where:

- '<external-server-name>' must be either the hostname of an institution, or the hostname in mandatory-config.properties.
- '*equellahost*' is the host with the EQUELLA installation (if it is on the same machine as the apache server, this would normally be *localhost*).
- '*http.port*' is the property specified in mandatory-config.properties (defaults to port 80).
- *'nocanon'* ensures URLs are passed through to the host without processing.

An example directive is:

```
<VirtualHost *:80>
   ServerName www.equella.com
   ProxyPass / http://equellahost:80/ nocanon
   ProxyPreserveHost On
</VirtualHost>
```

Configure EQUELLA with SSL

To configure EQUELLA with SSL

1. Open **mandatory-config.properties** and ensure the **https.port** is enabled (uncommented).
2. Ensure the Apache modules **mod_proxy** and **mod_proxy_http** have been installed.
3. Open the Apache **httpd.conf** file and add a 'ProxyPass' directive to the <**VirtualHost**> element, and the additional SSL directives:

```
<VirtualHost *:443>
   ServerName <external-server-name>
   ProxyPass / http://<equellahost>:<https.port>/ nocanon
   ProxyPreserveHost On

##SSL
   SSLEngine on
   SSLProxyEngine on
   SSLCertificateFile    <path-to-cert.pem>
   SSLCertificateKeyFile <path-to-cert.key>
</VirtualHost>
```

Where:

- '<external-server-name>' must be either the hostname of an institution, or the hostname in mandatory-config.properties.
- '*equellahost*' is the host with the EQUELLA installation (if it is on the same machine as the apache server, this would normally be *localhost*).
- '*https.port*' is the property specified in mandatory-config.properties (defaults to port 8443).
- *'nocanon'* ensures URLs are passed through to the host without processing.

An example directive is:

```
<VirtualHost *:443>
   ServerName www.equella.com
   ProxyPass / http://equellahost:8443/ nocanon
   ProxyPreserveHost On

##SSL
   SSLEngine on
   SSLProxyEngine on
```

```
        SSLCertificateFile    <path-to-cert.pem>
        SSLCertificateKeyFile <path-to-cert.key>
    </VirtualHost>
```

4. Update the institution URL for *https://...* (e.g. *https://equella.com*).

NOTE: The above examples are for Apache HTTPD, but hardware SSL terminators (e.g. F5 load balancer*) or other software terminators (e.g.* Nginx*) may be used.*

Upgrade EQUELLA

Information on upgrading EQUELLA is provided in the *EQUELLA 6.4 Upgrade Guide*.

Customise the EQUELLA Digital Repository

After the initial setup, EQUELLA features are managed through the Administration Console, a comprehensive tool that enables ongoing customisation and administration of the EQUELLA Digital Repository.

To access EQUELLA

1. Select the **Login** link for the new institution in the **Institutions** dialog (shown in Figure 26) to display the **Welcome** page (shown in Figure 35).

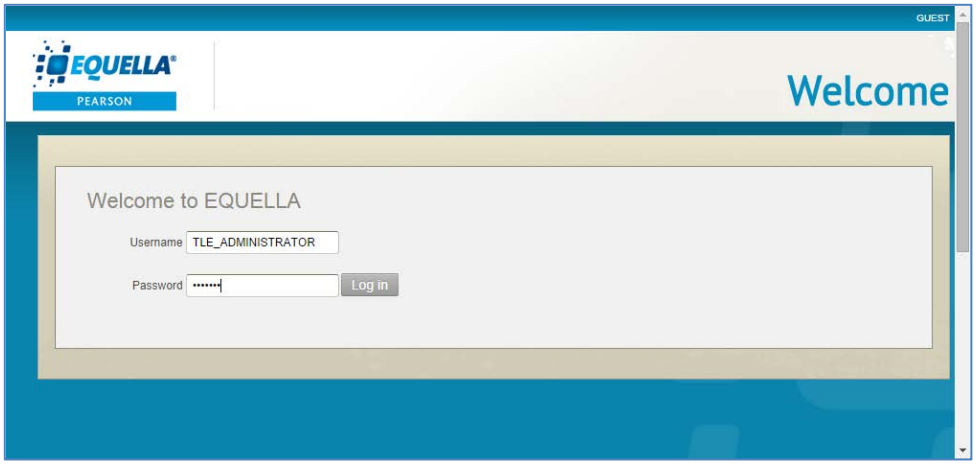


Figure 35 Welcome page

2. Login to the institution using the institution administrator (TLE_ADMINISTRATOR) login and password (this is the login set when the institution was imported), then click Log in. The **Dashboard** page displays. An example is shown in Figure 36.

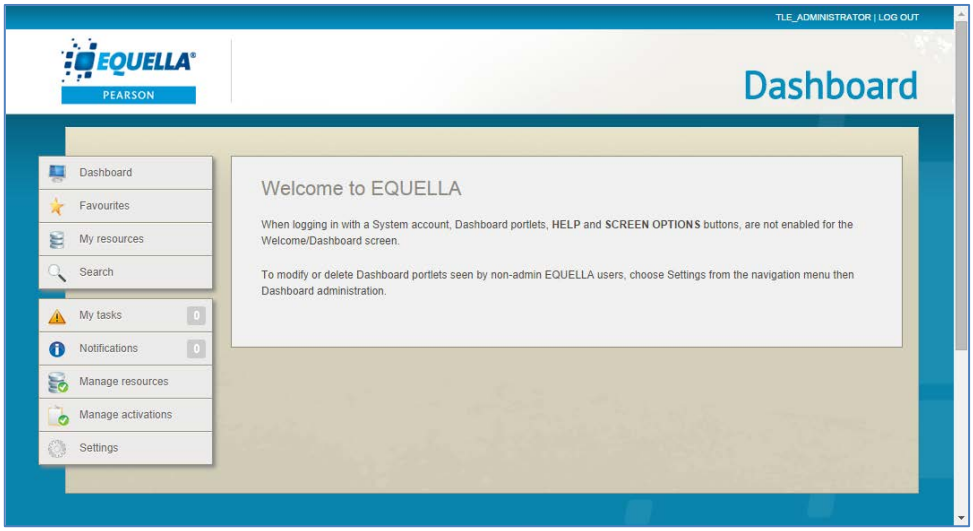


Figure 36 Dashboard page

To open the Administration Console

1. Select **Settings** from the navigation menu on the left-hand side of the page to display the **Settings** page, then select the **Administration console** link. An example is shown in Figure 37.

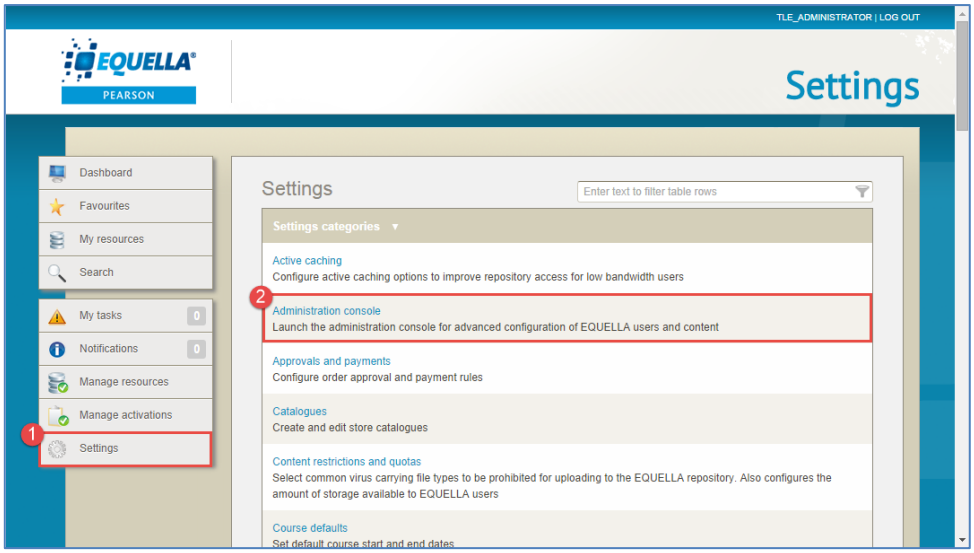


Figure 37 Settings page

The **Administration Console** displays, as shown in Figure 38.

Figure 38 Administration Console

To access the EQUELLA Digital Repository, users, roles and groups will need to be defined. Further information on user management is provided in the *EQUELLA User Management Configuration Guide.*

Further information on security is provided in the *EQUELLA Security Administration Guide.*

Manage EQUELLA institutions

The Server administration account allows for the convenient hosting of institutions. Institutions are created by cloning an existing server institution or importing an institution. Both processes create independent copies of the parent institution although initially the cloned institutions may appear identical to the parent. Institutions can also be exported, deleted or disabled.

The Server administration account

To access the Server administration account

1. Open a browser and enter the EQUELLA address of the hosting server with '/institutions.do?method=admin' appended to the URL. (e.g. '*http://equella.myinstitution.edu/logon.do*' would become '*http://equella.myinstitute.edu/institutions.do?method=admin'*) to display the **Log In** page, shown in Figure 39.

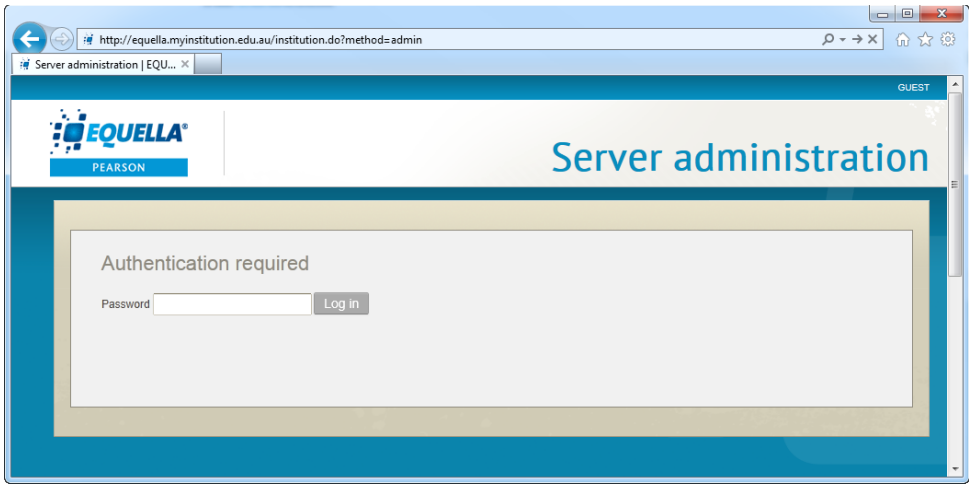


Figure 39 Login to the EQUELLA Server administration account

2. Enter the **Password** used by the EQUELLA server administrator (this is set in the **System password** section after installation; refer to the Passwords section on page 42 for more information).
3. Click Log in to display the **Server administration** page. An example is shown in Figure 40.

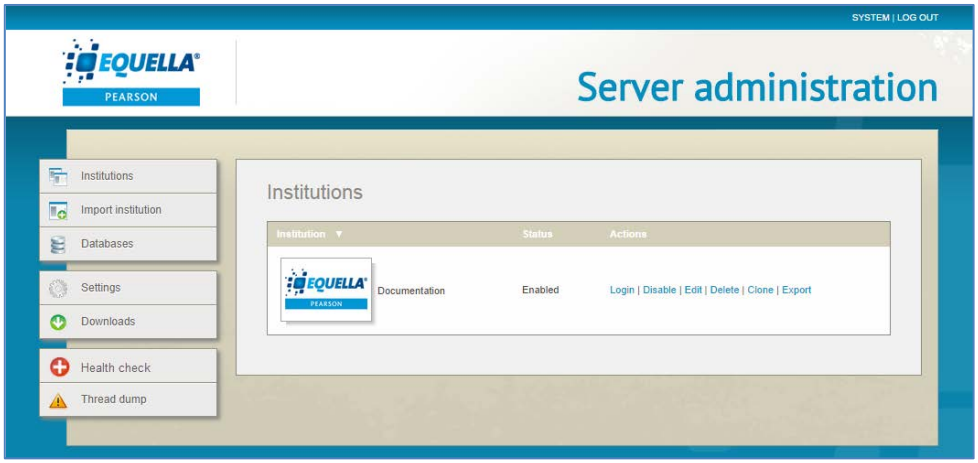


Figure 40 Server administration page—Institutions dialog

Institutions can be imported or cloned to create a new institution. Once created the new institutions are independent of the parent institution.

Passwords

There are two passwords that can be changed in the Server administration account.

- The server administrator password is changed in the **System password** section of the **Settings** dialog. Refer to the System password section on page 50 for more information.
- The institution administrator (*TLE_ADMINISTRATOR*) password is set for each institution on the Institution **Edit** page. Refer to the Edit an institution section on page 44 for more information

Institutions

Import an institution

EQUELLA provides a facility for importing institutions to an EQUELLA server. This facility is typically used for migrating institutions from test environments to staging or production by exporting the test institution and importing it to the staging or production server.

Importing an institution using the Server administration account is a simple process that comprises:

- selection of an institution file
- validation of the institution file
- creation of the institution using the provided data.

Configurations from the parent institution can be selectively exported or imported, allowing a complete copy of the parent institution or just replication of the data. Refer to the Export an institution section on page 46 for institution export configuration.

To import an institution

See To import an institution on page 26 for instructions on this procedure.

Clone an institution

EQUELLA provides a **Clone** option that condenses an institution's export and import to the same EQUELLA server, to a single step process.

It is advised that the institution be disabled before cloning. Doing so removes access to the institution. This reduces the chance of data becoming corrupted or lost while cloning, as changes cannot be made to the institution while it is disabled. More information is provided in the Disable an institution section on page 48.

When the licensed institution limit is reached, institutions may still be cloned but will be prevented from becoming enabled. An existing institution must be deleted to enable the new one.

To clone an institution

1. Select the **Institutions** link to navigate to the **Institutions** page, shown in Figure 40.
2. Select **Disable** from the links beside the relevant institution.
3. Select **Clone** from the links beside the relevant institution, to display the **Clone institution** dialog. An example is shown in Figure 41.

Figure 41 Clone institution dialog

This dialog is similar to the **Import new institution** dialog.

4. If multiple databases have been configured, click Select database and select the required database in the **Target database** field. (See the Use multiple databases section on page 29 for more detail). Otherwise the system defaults to the database set up during installation.
5. Enter a unique **Institution name** for the cloned institution.
6. Enter a unique **Institution URL** for the cloned institution.
7. Enter a unique **Filestore folder** name. This is optional. If a name is not entered a folder will be automatically generated for the institution in the <path-to-equella>**filestore****Institutions** folder.
8. Enter a new **Admin password** for the institution administrator (*TLE_ADMINISTRATOR*). If left blank, the cloned institution will inherit the password from the original institution.
9. **Confirm** the password.
10. Check the **Options** checkboxes to include items, attachments and audit logs, if required.
11. Click Clone institution then click OK to confirm. A **Cloning...** progress dialog indicates the cloning progress displays. When importation is complete the Return to Institution Management button becomes active.
12. Click Return to Institution Management to view the cloned institution on the **Institutions** page.

NOTE: Users will not be able to access institution items until after all items of the cloned institution have been indexed. This process starts automatically and typically completes within several minutes of the institution being cloned.

Edit an institution

Some of the institution details can be edited.

To edit an institution

1. Select **Institutions** to navigate to the **Institutions** page, shown in Figure 40.
2. Select **Edit** from the links beside the institution to display the editable institution values. An example is shown in Figure 42.

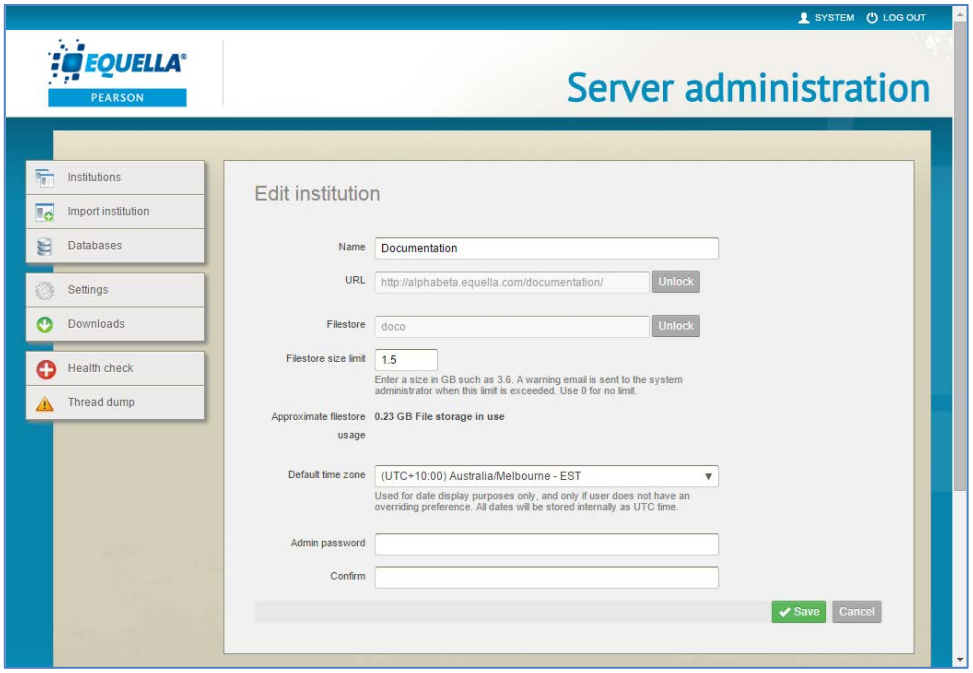


Figure 42 Edit institution dialog

The institution data comprises the:

- **Institution name**—is enabled by default and must be unique for the EQUELLA server.
- **URL**—the URL is locked by default as changes to the URL will cause the server to modify all institution resource URLs with the new URL (invalidating external links to these resources). The processing time required for the URL modification is dependent on the number of items in the institution.
- **Filestore** – the Filestore is locked by default as an incorrect folder name could cause the content of the institution to become unavailable.
- **Filestore size limit** – a filestore size limit can be set per institution. Once the filestore exceeds the limit, the system administrator/s are notified by email.
- **Approximate filestore usage** – the approximate amount of space currently used in the filestore.
- **Default time zone**—a time zone can be set for each institution. Additionally, users can select an individual time zone. If the user has not selected a time zone, then the time zone chosen for the institution is used. If this has also not been chosen, then the application will fall back to the server time zone. All dates will be stored internally as Coordinated Universal Time (UTC) time.
- **Admin password**—the institution administrator (*TLE_ADMINISTRATOR*) password, which only needs to be entered when it is being changed.

To edit the institution name

1. Enter the required name in the **Name** field.

To edit the URL

1. Click Unlock to display a warning dialog.

2. Confirm by clicking OK to enable the field.
3. Enter the new **URL**.

To alter the time zone

1. Select the required time zone from the **Default time zone** drop-down list.

To edit the password

1. Enter a new **Admin Password** for the institution administrator.
2. **Confirm** the password.

To save the changes

1. Click Save and confirm the save to complete editing these values.

Attempts to login after the institution URL has been modified may cause an error message to be displayed while the server is processing the URLs. When processing is complete, the error will no longer be displayed and users can login as usual.

Export an institution

EQUELLA institutions can be exported as a single zip archive providing a simple method for reproducing institutions. The institution export archive contains a hierarchy of the data and configuration settings selected during the export process. Exported institutions can be imported to any EQUELLA server that has enabled institutions.

It is advised that an institution be disabled before exporting. Doing so removes access to the institution. This reduces the chance of data becoming corrupted or lost during an export, as changes cannot be made to the institution while it is disabled. More information is provided in the Disable an institution section on page 48.

To export an institution

1. Select the **Institutions** link to navigate to the **Institutions** dialog, shown in Figure 40.
2. Select **Disable** from the links beside the institution to prevent changes to the institution corrupting the export. If this step is missed, a red warning is displayed at the top of the **Export** page.
3. Select the **Export** link beside the relevant institution to display the **Export institution** page with the data from the parent institution. An example is shown in Figure 43.

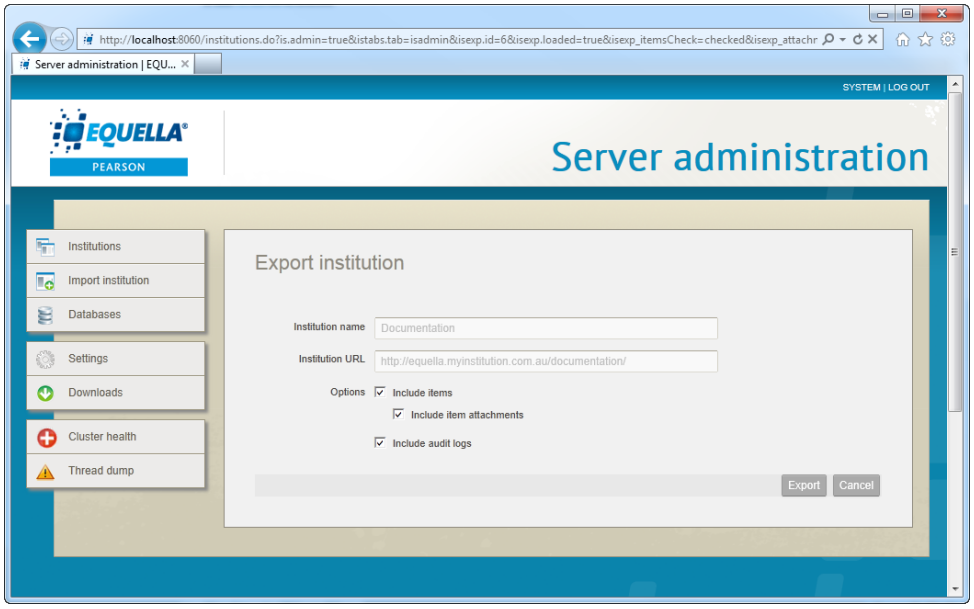


Figure 43 Export institution page

The **Institution Name** and **Institution URL** fields are disabled during export. The fields contain the values that will be exported. The institution name and URL can be changed once the institution is imported.

Currently, removing options from the exported file default options is only recommended for experienced administrators as many of the options are interdependent and will produce side effects in institutions created by importing this file. If options must be removed:

- Uncheck the **Options** checkboxes to exclude items, attachments and audit logs, if required.

To complete exporting the institution

4. Click Export then OK to confirm the export to display the **Exporting...** progress dialog.

The export process may take several minutes to complete and is dependent on how much data is being exported.

After the file has been created a link to the exported zip file is displayed at the bottom of the progress page.

5. Select the **Download institution export file** link to display the File Download dialog.
6. Select a download directory for the exported institution then click Save.

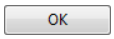
Once saved, the export process is complete.

7. Click Return to Institution Management to display the Institutions page.

Delete an institution

Deleting an institution is not reversible and a wise precaution is to backup your database and/or export the institution before deleting it.

To delete an institution

1. Select the **Institutions** link to navigate to the **Institutions** dialog, shown in Figure 40.
2. Select the **Delete** link beside the relevant institution.
3. Click 

to confirm the deletion and display a **Delete…** progress page. When complete the 

button is displayed.
4. Click 

to display the Institutions page.

Disable an institution

When an institution has been disabled, it is temporarily inoperative and is displayed on the **Institutions** dialog but cannot be accessed until it is enabled.

It is advised that an institution be disabled before cloning or exporting. Doing so removes access to the institution. This reduces the chance of data becoming corrupted or lost during an export, as work cannot be carried out in the institution while it is exporting.

A warning message will appear on the page if an export or clone is attempted without first disabling the institution.

To disable an institution

1. From the **Institutions** page, select the **Disable** link beside the relevant institution to disable the institution and display an **Enable** link.

To enable an institution

1. From the **Institutions** page, select the **Enable** links beside the relevant institution to enable the institution and display a **Disable** link.

Set a filestore size limit

Administrators can set a institution filestore size limit to monitor their usage and size. Setting a limit allows system administrators to be notified by email when the limit is exceeded. Additionally, the current filestore size can be monitored.

To set a filestore size limit

1. Select **Institutions** to navigate to the **Institutions** page, shown in Figure 40.
2. Select **Edit** from the links beside the institution to display the editable institution values. An example is shown in Figure 44.

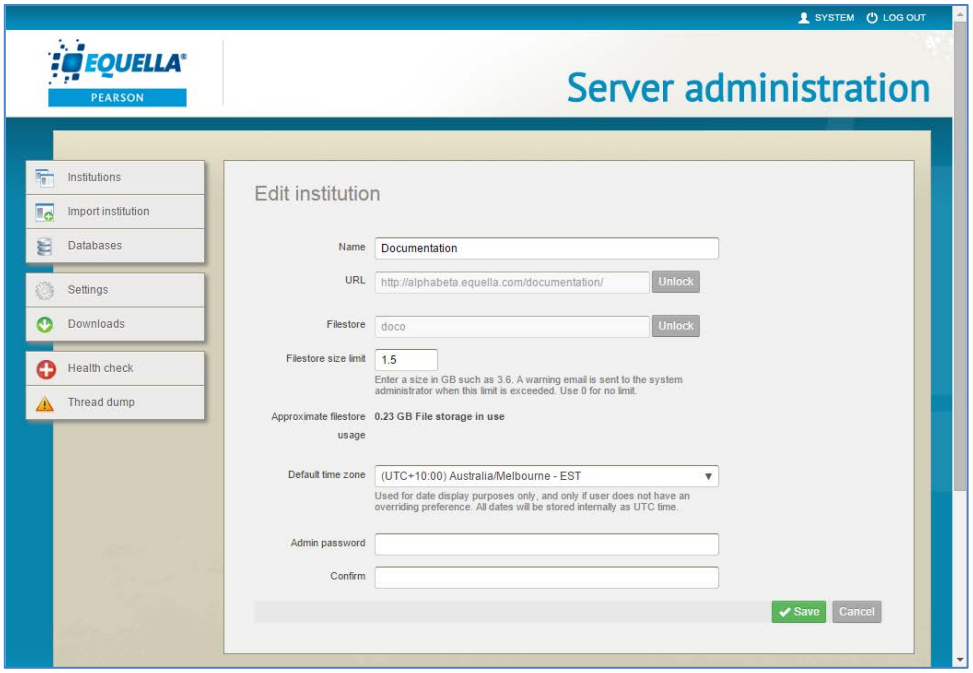


Figure 44 Edit institution dialog

3. Enter the **Filestore size limit** (GB). An email notification is sent to the system administrators if this limit is exceeded (see System notifications on page 50 for information on how to configure administrator emails for system notifications). The **Approximate filestore usage** field shows the current usage.
4. Click Save.

Server settings

The **Settings** page contains the **Server message**, **System password** (server administrator password) and **Licence management** sections.

To access the server settings

1. Select **Settings** from the navigation menu to display the **Server administration** page.

Server message

The **Server message** section is optional. The administrator can enter a server message to be displayed at the top of each page of the EQUELLA Digital Repository and the Server administration account.

To display a server message

1. Enter a **Message** then select the **Enable message** checkbox. An example is shown in Figure 45.

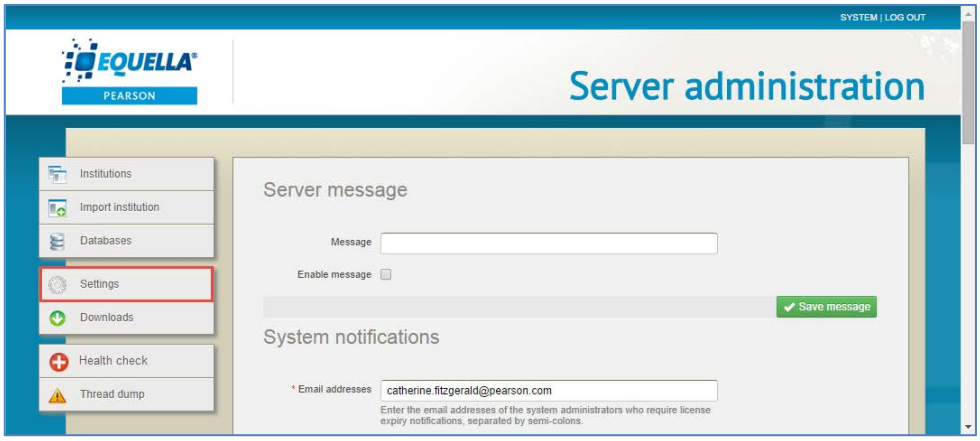


Figure 45 Server message section

2. Click Save message to save the settings.

The server message is displayed at the top of each page of the EQUELLA Digital Repository and the Server administration account. An example is shown in Figure 46.

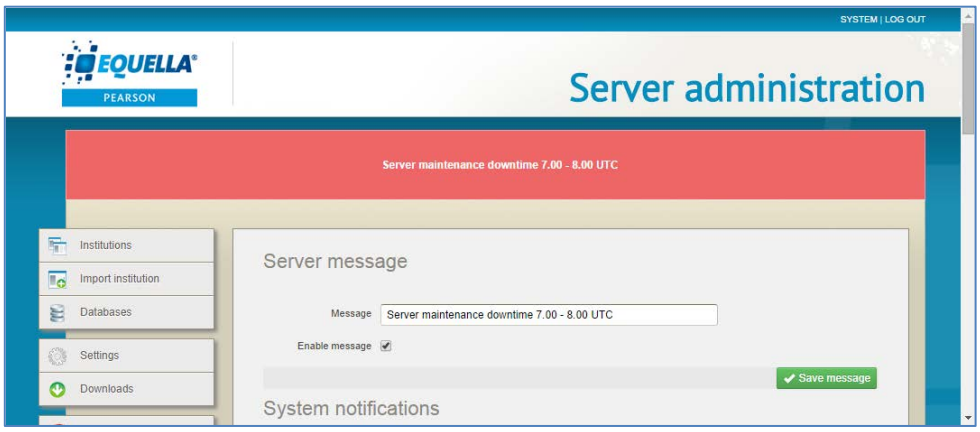


Figure 46 Server administration account with server message displayed

To disable a server message

1. Uncheck the **Enable message** checkbox.

System notifications

The System notifications section on the Setting page enables administrators to enter the email addresses of relevant administration staff who need to be notified by email one month prior to the EQUELLA licence expiry date. This allows them to take action to renew the licence before the expiry date arrives. An example is shown in

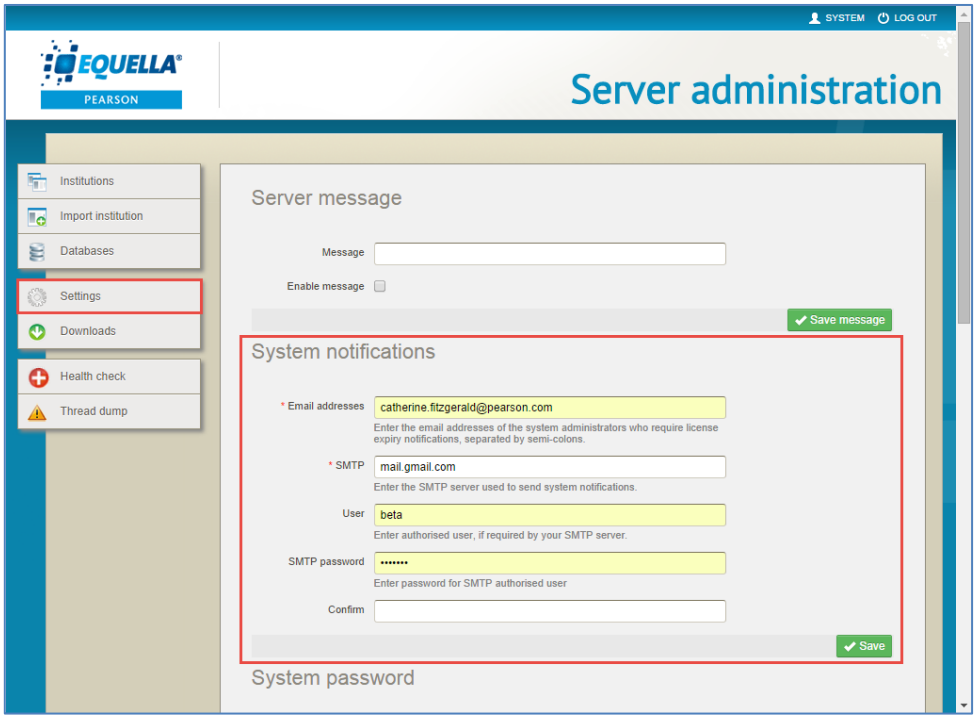


Figure 47 Settings - System notifications section

To edit System notification details

1. Enter or change the **Email addresses**, separating multiple addresses using a semicolon.
2. Enter or change the **SMTP** server used to send system notifications.
3. Enter the authorized **User**, if required by your SMTP server.
4. Enter the SMTP authorized user's **SMTP password.**
5. Click Save.

System password

The System password is the password used by the server administrator and is changed in the **System password** section.

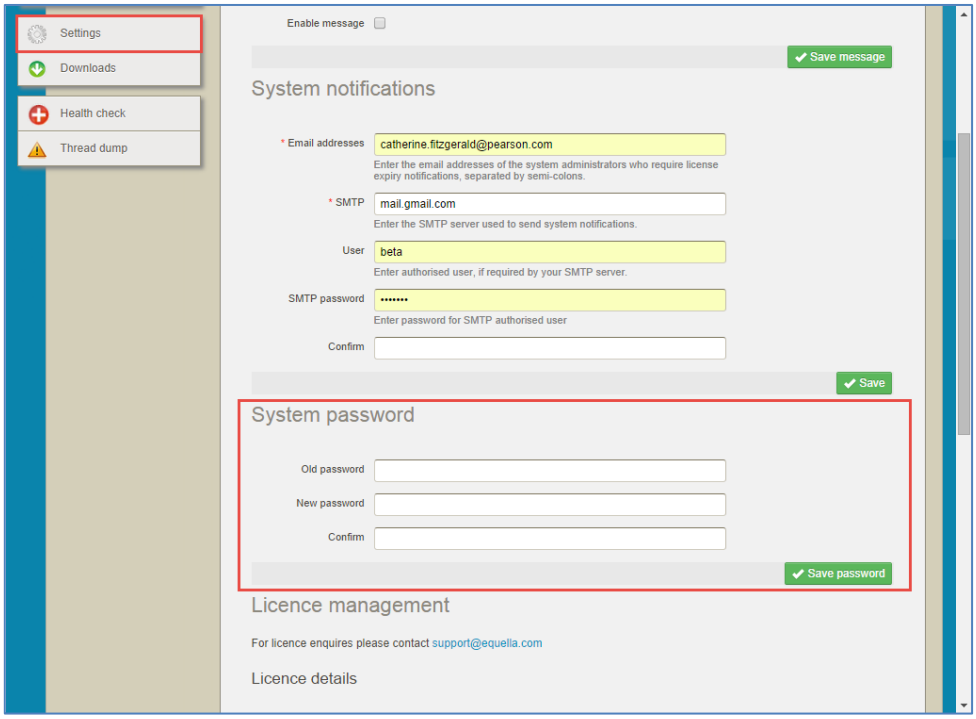


Figure 48 Settings—System Password section

To change the password

1. Enter the current server administrator password in the **Old password** field.
2. Enter and confirm the new password.
3. Click Save password to save the new password.

(NOTE: The new password is required next time the server administrator logs in to the Server administration account.)

Licence management

A licence can be requested from EQUELLA Client Support and is linked to the EQUELLA server host name. Refer to the Request licence and upgrade details section on page 7 for more information.

When a licence is about to expire a login warning citing one of the following reasons for the licence expiry, is displayed in EQUELLA:

- **A changed host name for EQUELLA**—the system will only allow a server administrator to login and enter a new licence code to restore the system. Reinstating the licensed host name will also restore the system.
- **The number of institutions has been exceeded**—the system will only allow an administrator to login and enter a new licence code or delete or disable an institution.
- **The licence period is about to expire**—the system provides a warning at login to indicate the imminent licence expiry.
- **The licence has expired**—the system will only allow an administrator to login and enter a new licence code to restore the system.

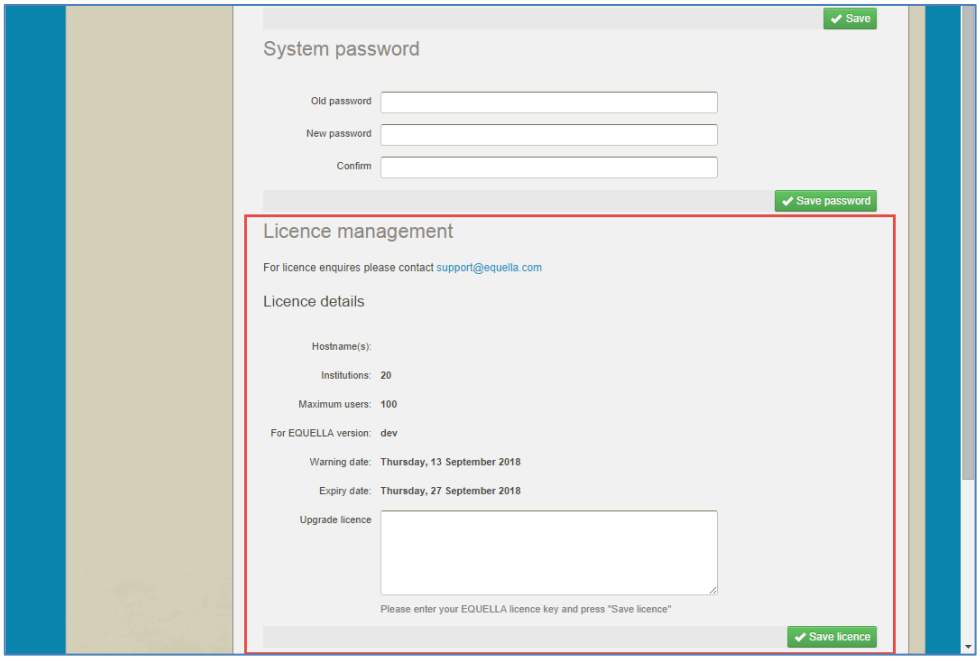


Figure 49 Settings page—Licence Management section

To enter the new licence key

1. Copy and paste the licence key from the new licence email into the licence text box.
2. Click Save licence.

A message is displayed confirming the licence has been updated successfully.

Download integrations

The **Downloads** page provides connectors and tools to integrate EQUELLA with other systems including:

- **Blackboard Building Block**—that works with Blackboard Learn v9.1 SP14, v9.1 April 2014 and v9.1 October 2014.
- **Moodle Module**—that works with Moodle v2.7x, v2.8x and v2.9x.
- **EQUELLA Integration Pack**—that contains documentation and example applications for the EQUELLA SOAP API, EQUELLA REST API, documentation for the EQUELLA Script API and EQUELLA HTML Editor Plug-in plus a sample HTML Editor plug-in (*bacon-example*).
- **EQUELLA Active Cache tool** – helps populate cache servers with EQUELLA content for improved responsiveness.
- **EQUELLA HTML Editor Plugins** – provides some sample third party plug-ins that can be uploaded into the HTML Editor.

To download a connector or tool

1. Select **Downloads** from the navigation menu to display the **Downloads** page, as shown in Figure 50.

Figure 50 Downloads page

Each connector and tool has a download link and description.

2. Select the required download link and save the files.

Thread dump

The **Thread Dump** page provides information about the threads that are running, processing and being accessed. This information is used to help the system administrator identify problems.

To debug the server

1. Select **Thread dump** from the navigation menu to display the **Thread dump** page. An example is shown in Figure 51.

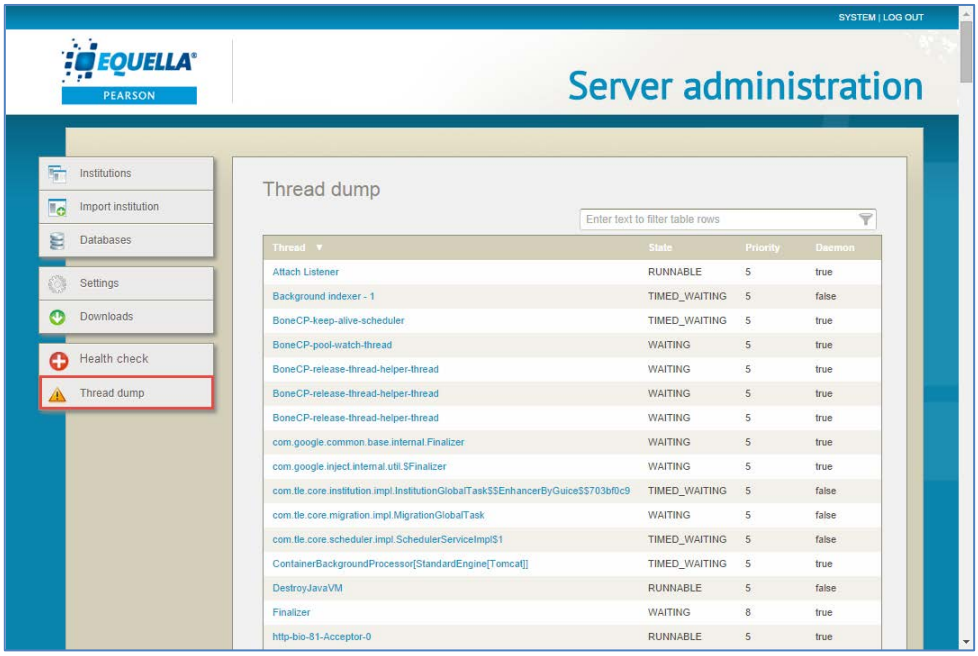


Figure 51 Thread dump page

Health check

The **Health check** page provides system service information for services required by EQUELLA, as well as a list of currently running tasks. If clustering is configured for a system, the service and task information is provided for each cluster node. An example with a three node cluster is shown in Figure 52.

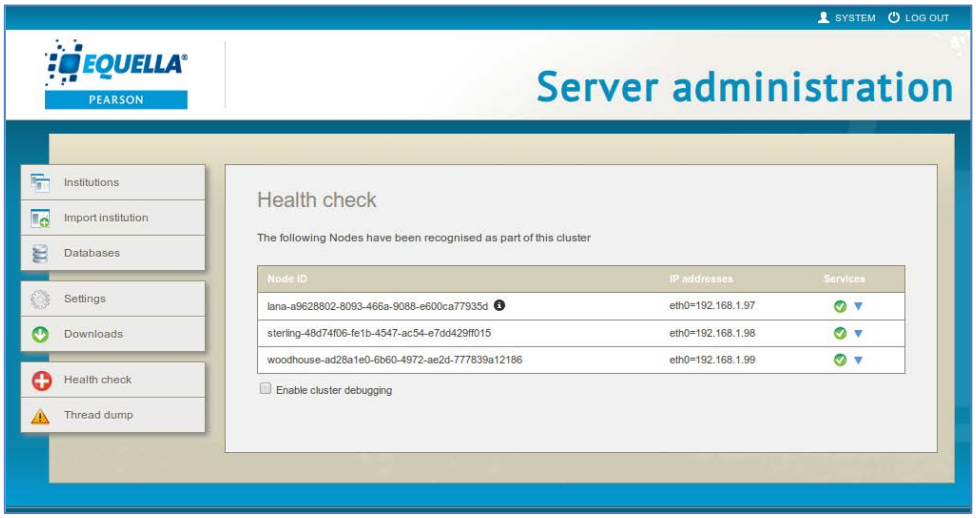


Figure 52 Health check page - three node cluster

As well as the status of each service, the following information is provided:

Filestore – location, total space and free space.

Image Magick – location, version, copyright information and features.

Lucene index – index location.

Additionally, where institution filestore size restrictions have been configured, an **Institution filestore usage** section displays, showing the *Limit* and the *Approximate usage*. (See Set a filestore size limit on page 48). An example is shown in Figure 53.

To access the Health check page

1. From the navigation menu, select **Health check**. The **Health check** page displays. An example is shown in Figure 52 . An example with no clustering enabled is shown in Figure 53.

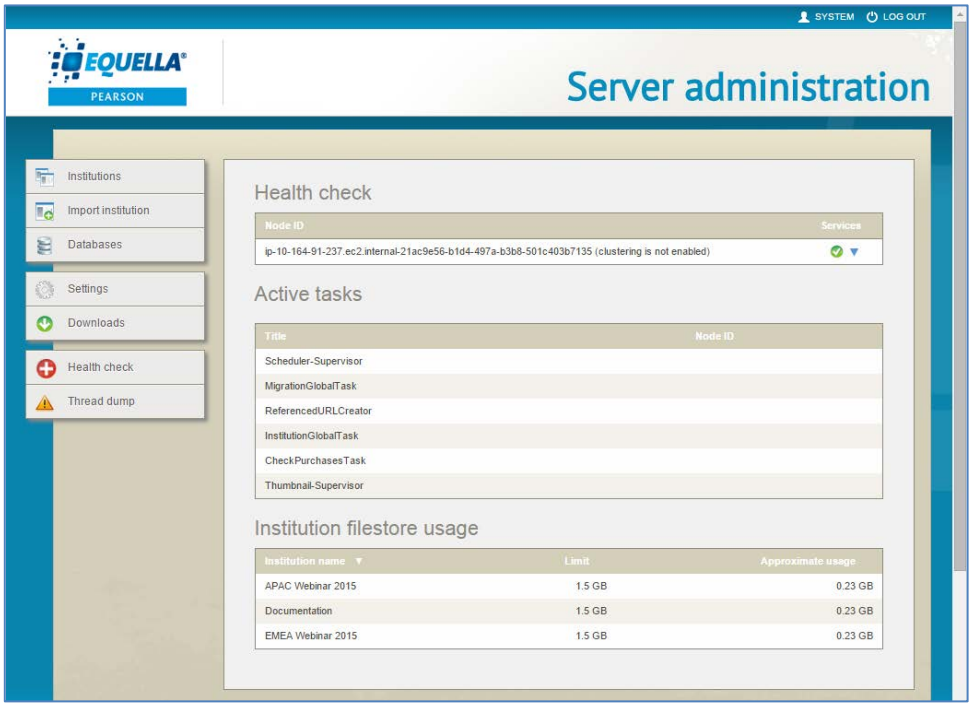


Figure 53 Health check page (no clustering enabled)

2. Click the **Services** drop-down arrow to view the service details. An example (with no clustering configured) is shown in Figure 54.

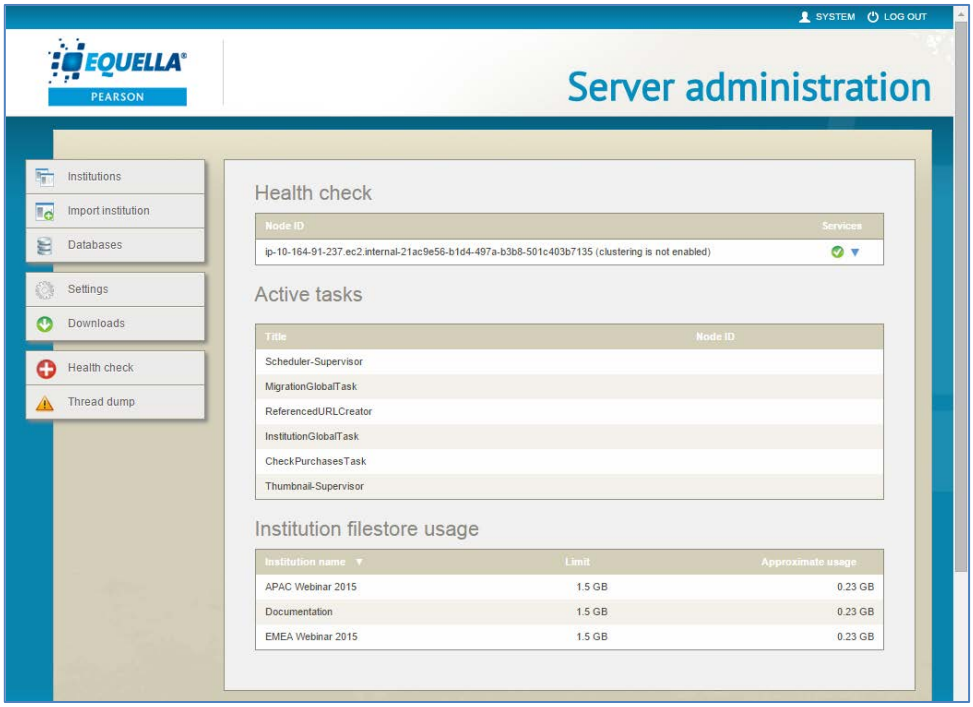


Figure 54 Health check page - Service details, Active tasks and Institution filestore usage

An example for a system with clustered nodes is shown in Figure 55.

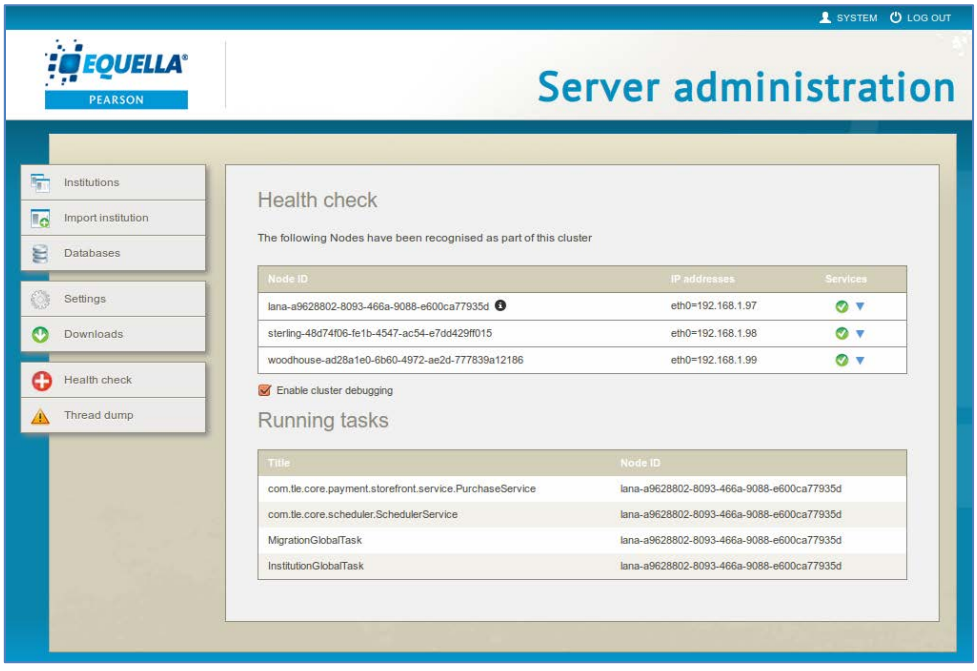


Figure 55 Health check page for system with three cluster nodes

The relevant **Node ID** displays beside each running task in the **Running tasks** section for clustered environments.

If there is a problem with one or more of the services for a node, a red cross icon displays in the **Services** column instead of the green tick icon. An example is shown in Figure 56.

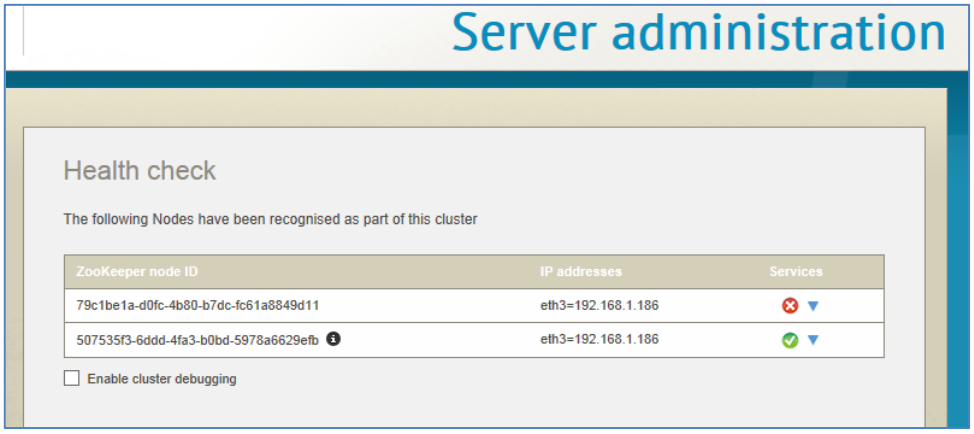


Figure 56 Health check page - node service error

Click the down-arrow to view details of the error. An example is shown in Figure 57.

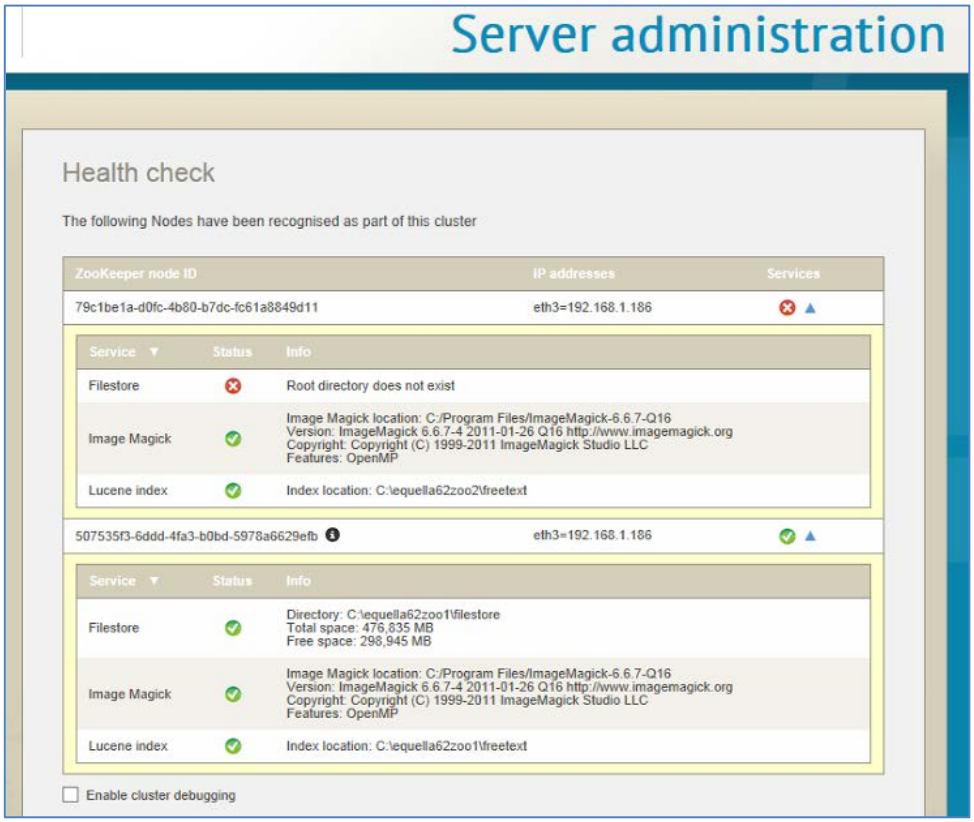


Figure 57 Health check page - cluster error details

Select the **Enable cluster debugging** checkbox to display cluster node information at the bottom of each EQUELLA page. An example is shown in Figure 58.

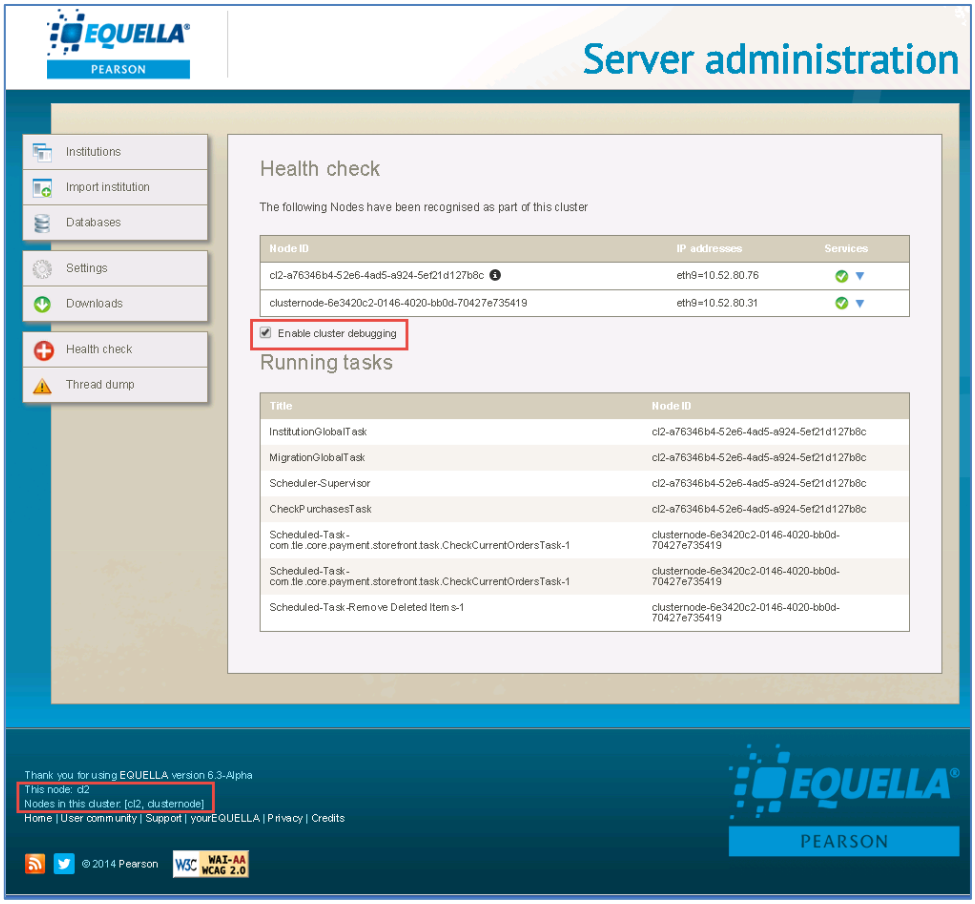


Figure 58 Cluster debugging information selected

Use log files

EQUELLA writes an extensive series of log files for events including the resource centre, EQUELLA services and the EQUELLA conversion service. All log files can be found in directories bearing the date of the log file. Each directory contains one log file containing entries for all events logged on that date. A new log directory is created for every day the logged services are run. Log files may need to be archived from time to time to recover disk space.

When troubleshooting, EQUELLA Client Support will usually request the resource centre logs.

View a log file

Log file Error events are highlighted to simplify discovery as the files can contain many entries. Log files are contained in the **logs** directory of EQUELLA server. An examples is shown in Figure 59.

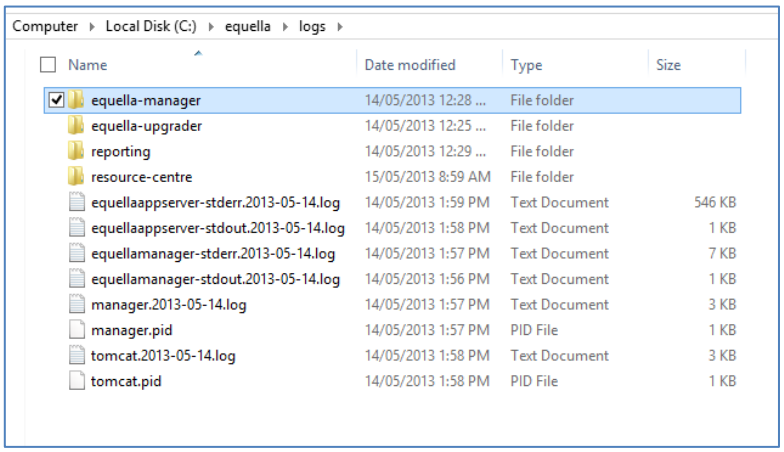


Figure 59 EQUELLA logs directory

To view a resource centre log

1. Navigate to the logs directory, typically <path to equella>**logs\resource-centre**.
2. Select the date directory and open the **application.html** file within. Figure 60 shows a log file error indicating the connection to the database has been lost.

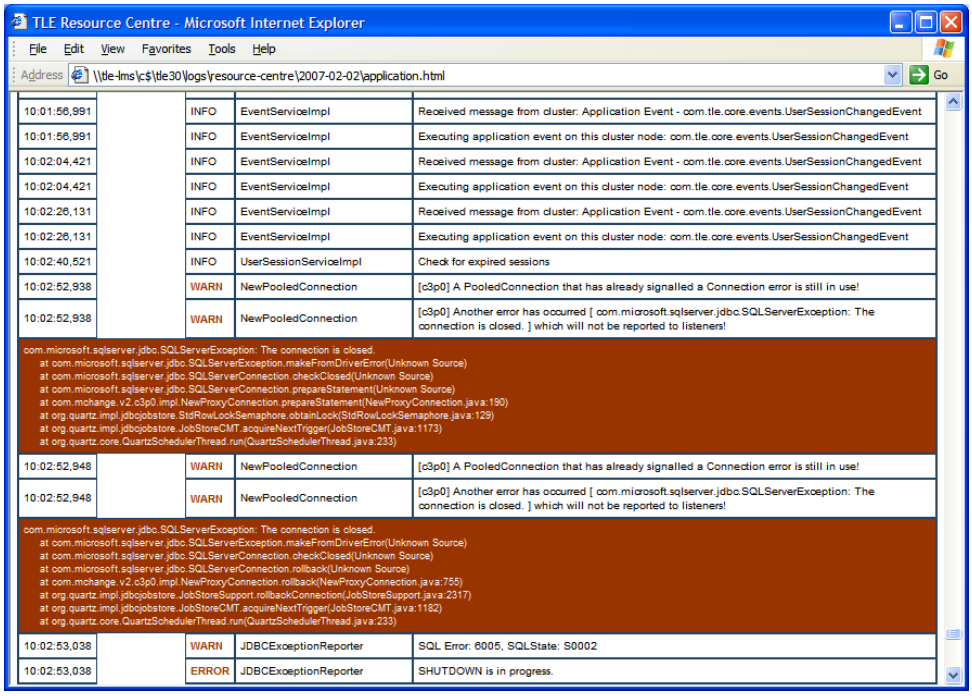


Figure 60 Highlighted log error

Uninstall EQUELLA

This section describes how to uninstall EQUELLA. The reinstallation process is the same as the installation process.

Uninstall EQUELLA

Uninstalling EQUELLA is a three-stage process on Windows and two-stage process on other platforms:

1. Stop the EQUELLA service.
2. **Windows only**: Run the **Unregister service** command to deregister the services manager.
3. Delete the directory that holds the EQUELLA installation.

Stop the EQUELLA server

Using Windows

1. Navigate to the **Start** menu and find **Settings**, then **Control Panel**.
2. Open the Administrative Tools panel and then Services.
3. Find EQUELLA in the list of services (by default the names are *EQUELLA 6.0 App Server* and *EQUELLA 6.0 Manager*) and select the **Stop the service** link on the left.

On other platforms

1. Navigate to the **Manager** folder (the default installation folder is */usr/local/equella*), open a command prompt and enter:

```
./manager stop
./equellaserver stop
```

The services have now stopped.

Deregister the services manager (Windows only)

The Windows service must be removed before deleting the installation.

1. Choose **Run** from the **Start** menu then enter:

```
<path-to-equella>\manager\manager remove
<path-to-equella>\manager\equellaserver remove
```

Now the installation directory can be deleted.

Delete the installation directory

To delete the installation directory:

2. Navigate to and select the installation directory for your installation. (The default installation is *C:\equella.*)
3. Press the **Delete** key.
4. Confirm the deletion. The directory and all its contents are deleted.
5. Ensure the database administrator deletes the EQUELLA database.

Appendix A: Troubleshoot an unsuccessful installation

The installation of EQUELLA is generally uneventful and simple if the installation steps above are followed. However, occasionally an installation can be unsuccessful due to issues involving the local network environment, user network permissions and inaccurate or incomplete information being used in the installation process. If an installation is unsuccessful, these are the points to check first.

Important prerequisites

A successful installation of EQUELLA requires:

- Oracle Java 8 JDK installed on the server prior to the installation being attempted
- ImageMagick installed on the server prior to the installation being attempted
- a graphical user interface (GUI)
- a database configured for use by EQUELLA
- sufficient server resources, memory and disk space
- sufficient permissions to install the various components on the network.

Check that the system has these prerequisites.

Resolve issues

In most instances, the installer will display a message box describing the reason it cannot complete the installation and remove any installed components. In this situation, restarting the installation process after resolving the issue (usually something as simple as entering corrected information) allows the installation to successfully complete.

View the system logs

Search the following logs for clues:

- equella\logs folder \
  - resource-centre folder\20XX- xx-xx
  - equella-manager folder\20XX- xx-xx
  - equella-upgrader folder\20XX-xx-xx
  - manager.log
  - equellaserver.log
- operating system logs (e.g. Event Viewer in Windows).

Contact Client Support

We are always happy to help.

If your organisation has a support agreement with EQUELLA then help is available at http://equella.custhelp.com.