



eLustro 3.6 Release 2 Installation and Configuration Guide

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About these notes

Welcome to the InfoSTEP's eLustro 3.6 Release 2 Installation and Configuration Guide. This guide provides you with information and procedures for Installing and Configuring eLustro™ 3.6. This guide is intended for the system administrator or IT professional who is responsible for the installation, deployment, and maintenance of eLustro™. Familiarity with your overall network environment, port usage, database environment, and web application server software is beneficial.

In addition, this guide contains recommended application settings, best practices on this version.

Please read the entire document before installing eLustro™ 3.6. After installation if you receive any error or if you have any product related questions please use the support link available at:

<http://www.infostep.com/infostep/php/support.php4>

Please refer to the eLustro™ 3.6 Release Notes for additional information.

Overview

eLustro™ is a holistic suite of tools to manage customer and employee feedback throughout their lifecycle. It includes both operational and analytic tools for capture, analysis and integration. eLustro™ can be used for a variety of feedback applications. Sample list of applications are given below:

- Customer satisfaction surveys
- Employee satisfaction surveys
- eLearning
- Concept testing
- Brand effectiveness
- Pricing effectiveness

For more detailed product information, refer to the product page on our website at:

http://www.infostep.com/infostep/php/products_feedback_mgmt.php4

Installation media

The installation pack contains the following:

Content	Description
eLustro 3.6 Installation and Configuration Guide.pdf	Installation guide
elustro36-Installation-sql.zip	SQL scripts for installing & upgrade eLustro database
elustro36.war	The application instance in *.war format
eLustro 3.6 Product Release Notes.pdf	Release Notes for eLustro 3.6

Installing eLustro 3.6 Application

This section describes everything you need to know about installing the eLustro 3.6 application. It includes the basic steps for installing the instance, what to do before the installation, pre-requisites, steps of performing a fresh installation, upgrading the installation and what to do after the installation.

About the application installation

The application requires a number of other software servers that provides different services. These servers can be installed on same or separate machines. The location of these servers can be changed in eLustro properties after installation. The following table describes the required server types.

Server type	Description
Application server	This server type is required to host the application instance. Check the release notes for list of supported application servers
Database server	This is a pre-requisite that needs to be installed prior to installing the eLustro application. Minimum of 500MB table space is required by eLustro.
LDAP server	This server type is optional and is required if certain advanced features of authentication are used in the application. This may be configured after the installation.

Pre-requisites

The following section describes the software you need to install before installing eLustro. Check the release notes for the latest list of supported platforms and pre-requisites and minimum version required.

- Operating System
- Relational Database
- Application Server
- LDAP Server (if required)

Scalability Guidelines

When considering the architecture of eLustro application installation, you should consider how many users need to be supported, whether it should be highly available, whether you should use low or high end servers, and which servers host which parts of the system.

The Release Notes specifies a minimum hardware requirement for deploying eLustro application. A proper sizing needs to be done for supporting the number of users for eLustro. Please check with eLustro support team for recommendations on hardware sizing and architecture.

Typical scalable architecture with high availability requirement recommends deploying eLustro on multiple application servers (distributed deployment) and database server deployed on a separate machine. You must use a load balancing software or hardware to handle requests to these multiple application servers. Note that these are only guidelines, and should be tailored to meet your specific business needs.

Before starting the eLustro application installation

You must perform the following tasks before starting your new eLustro deployment. The following steps are common to new install and upgrade of eLustro.

- Install all the required pre-requisite software's.
- Ensure the application server meets all the criteria's of supported platform e.g. JDK.
- Update the "elustroInit.properties". See [Configuring eLustro 3.6](#) on page 10 for the details of each property. This file is packaged in "elustro36.war" under "/WEB-INF/classes".
 - Extract the war file using the command "jar -xvf elustro36.war". Note you would need to have java installed on the system for using the JAR command.
 - Navigate to elustroInit.properties file under the extracted folder.
 - Edit the file using standard text editor.
 - Create the war file using the updated properties file using the command "jar -cvf elustro36.war *".

Installing new eLustro 3.6

Preparing for install

It is expected that you will follow your usual administrative practices before installing the eLustro 3.6. However, you should also consider the following common tasks and guidelines:

- Ensure you have conformed to the supported software and pre-requisites for this version.
- Ensure you have all the privileges to perform the deployment on the application server.

Setting up database for eLustro

This process will create the necessary system tables for eLustro 3.6 and a default eLustro administrative user named 'admin' with a password 'admin'.

1. Extract elustro36-Installation-sql.zip to a directory.
2. Login to database using the eLustro account your DBA has provided for eLustro and execute the SQL scripts in the following order.
 - install-elustro.sql
 - upgrade-2.5_to_3.0.sql
 - upgrade-3.0_to_3.3.sql
 - upgrade-3.3_to_3.4.sql
 - upgrade-3.4_to_3.5.sql
 - upgrade-3.5_to_3.6.sql
 - upgrade_3.6_release2.sql

Deploy the eLustro application

The deployment steps are generic and not specific to any application server. Please refer to deployment procedure for your application server. The steps assume that the application server meets all the criteria and is a supported version.

1. Follow the deployment procedure of your application server to deploy eLustro 3.6. The steps need to be followed for each application server to be used in the architecture.
2. As part of the deployment you would need to provide the elustro36.war file to the application server.
3. You would need to set the context path for using the application e.g. <http://servername:port/<context>>. You can choose a context of 'elustro36' or as per your need.
4. Restart the application server and test the deployment by using the URL: <http://servername:port/context/index.html> . If deployment is successful then you should see the login page of eLustro 3.6.

Upgrading to eLustro 3.6

This section describes how to upgrade to eLustro 3.6 from the following version(s):

- eLustro 3.3

The upgrade requires an existing eLustro version. If you are performing a fresh install, see [installing new eLustro 3.6](#) on page 7.

The upgrade process involves several steps:

- Upgrading the existing database to the new system database of 3.6
- Upgrading the application instance currently deployed on application server

Preparing for upgrade

It is expected that you will follow your usual administrative practices before upgrading the eLustro 3.6. However, you should also consider the following common tasks and guidelines:

- Ensure you have conformed to the supported software and pre-requisites for this version.
- Disable the access to the existing eLustro installation on application server. Check with your application server administrator for the same.
- Ensure that you have details about the database server and accounts that are used for the existing system database and that will be used by the new system database.
- Back up your existing system database. Check with you DBA for the performing the backup.
- Back up your existing eLustro application instance. Check with the application server administrator for the steps of backup. The most important file for backup is the "elustroInit.properties" file available under <install_dir>/WEB-INF/classes.
- Ensure you have all the privileges to perform the deployment on the application server.

Setting up database for eLustro

This process will create the necessary system tables for eLustro 3.6. The base tables used by eLustro should already be present.

1. Extract elustro36-Installation-sql.zip to a directory.
2. Login to database using the eLustro account your DBA has provided for eLustro and execute the SQL scripts in the following order. Ensure there are existing tables for eLustro.

- upgrade-3.3_to_3.4.sql
- upgrade-3.4_to_3.5.sql
- upgrade-3.5_to_3.6.sql
- upgrade_3.6_release2.sql

Deploy the eLustro application

The deployment steps are generic and not specific to any application server. Please refer to deployment procedure for your application server. The steps assume that the application server meets all the criteria and is a supported version.

1. Follow the deployment procedure of your application server to deploy eLustro 3.6. The steps need to be followed for each application server to be used in the architecture.
2. As part of the deployment you would need to provide the elustro36.war file to the application server.
3. You would need to set the context path for using the application e.g. <http://servername:port/<context>> . You can choose a context of 'elustro36' or as per your need.
4. Restart the application server and test the deployment by using the URL: <http://servername:port/context/index.html> . If deployment is successful then you should see the login page of eLustro 3.6.

Configuring eLustro 3.6

The configuration may be required as per the needs. The key fields that need to be changed for your installation are:

- Database parameters
- SMTP server parameters
- Document root and base directories
- LDAP configuration (if required)
- Necessary permission to temporary directory defined in the configuration file.

Contact your System Administrator & DBA to provide you the above parameter values. Once these values are known, edit the "elustroInit.properties" file with the above values. If you are unsure of some values it is recommended not to go ahead with the application install as it might be difficult to change the values later. If you are upgrading from earlier version, refer to the elustroInit.Properties file for the older values.

For configuring some key fields in the installation:

- Setting up database connection pooling
 1. Login to the admin console of application server and setup the datasource details.
 2. Edit and save the elustroInit.properties by setting the **useServerPool** equal to "yes" and set **dataSourceName** equal to "Elustro Oracle Data source" that is created in previous step.
- Configuring LDAP for authentication (check with LDAP administrator for details)
 1. Update the "LDAP.url", "LDAP.dn" in the elustroInit.properties file and save.

The following table describes the settings/properties for the elustroInit.properties file that needs to be updated. Sample values (for UNIX machine) are also provided for each of the property.

Note: While defining server names, the names should be either the hostname, IP Address or fully qualified domain names (FQDN).

Category	Property	Description	Sample Value
Web server context	servletRoot	Requires the root of for the servlets used in the application. Format is: /<context root>/servlet	/elustro36/servlet
	docRoot	Describes the root of the document paths	/elustro36
	docRootJsp	Describes the root path for the JSP folder in the application instance.	/elustro36/jsp
	absDocRoot	Describes the root of elustro installation	/apps/jakarta-tomcat-4.1.29/webapps/elustro36

	absDocRootJsp	Absolute path of the JSP folders	/apps/jakarta-tomcat-4.1.29/webapps/elustro36/jsp
Web server directories	imageFilePath		/ensurvey/images
	previewFile		/ensurvey/tmp/_preview.htm
	javaScriptFile		/ensurvey/javascript/survey.js
	helpRoot		/help
	accessProp		/WEB-INF/classes
Database and pool	dbUser		elustro36
	dbPassword		elustro36
	jdbcUrl		jdbc:oracle:thin:@stage:1521:stage
Database Pool	useServerPool	Possible values are yes/no. If yes, then the "dataSourceName" property should be available in web.xml and JDBC datasource lookup needs to be setup in the application server. Refer to JDBC datasource setup procedure of your application server.	yes
	dataSourceName		elustro36Pool
Database driver	dbDriver		oracle.jdbc.driver.OracleDriver
	databaseVersion		2.0
Database pool	maxConns	max database connections to open	20
	minConns	min database connections to open	5
	connectionTimeout		10
	userTimeout		10
Capture/ Elustro Server Name	captureServer		192.168.168.1
	capturePort		80
	elustroServer		192.168.168.1
	elustroPort		80
Broadcast Link message	broadcastURLMessage		To access the survey please click <%here%>
Debug level {<ERROR> DEBUG}	debugLevel		ERROR
LDAP server	ldapServer		stage
	ldapPort		1390
	ldapBase		ou=People,dc=example,dc=com
SMTP server	smtpServer		mail.localhost.com
	smtpUser		guest
	smtpPassword		guest
Elustro	superuser		Admin

super user	superuserEmail		admin@localhost.com
Offline e-mail	mailto		admin@localhost.com
	popServer		pop.localhost.com
	fromAddress		admin@localhost.com
	popEmail		admin@localhost.com
	popPassword		Guest
	popSleep		3000
Multi Language support values (AUTOMATIC RESOURCE_BUNDLE)	translationMode		AUTOMATIC
Multi Language support values (YES NO)	multiLangSupport		YES
Miscellaneous	tmpDir		/apps/jakarta-tomcat-4.1.29/webapps/elustro36/ensurvey/tmp
	tmpDirSPSS		/ensurvey/tmp
	relTmpDir		/ensurvey/tmp
	elustroLogFile		/apps/jakarta-tomcat-4.1.29/webapps/elustro36/elustro36.log
	ximpPropPath		ximp.properties
	delimiter		;
	authenticate		Yes
	normalMode		True
	tickerFile		
	method		Post
	sectionEditorPresent		True
	sectionBuilder		True
	Language		English
excelInFile {true false} writing excel file to db or file system. true than write to file system	excelInFile		False
Panels {true false}	enablePanels		True
	productLabel	Current version of eLustro installed. Recommend not to modify this property.	eLustro 3.6 Release 2

	Build	Do not modify this property.	eLustro3.6.2.8
Scheduler time {<30> number_in_minutes}	schedInterval		3
Saving report/upload into database {<no> yes}	saveInDB		No
	saveImageInDB		No
enable contextTmpDir {<no> yes}, if set then use servletContext temporary directory	enableContextTmpDir		No
Protocol Scheme {<http> https}	Scheme		http
JSP version	JSPVER		1.2
Optimizer	dbOptimizer		Rule
	enableJavascript		true
	harmonyACL		0
	multiLang		False
No. Of Search Results per page	pageSize		10,20,30,40,50,100
XML File Path	xmlFilePath		/apps/jakarta-tomcat-4.1.29/webapps/elustro36/XML_FILES/
DTD Path	DTDPath		http://192.168.168.1/elustro36/dtd
DBLink - for survey Migration	dbLink		False
Database Compatibility Parameters	dbCompareTables		survey,users,user_survey_owner,category,question,q_radio,q_check_box,q_metrics,q_fillin,survey_audit,answer,answer_text,a_radio,a_text,a_check_box
	compareSequence		elustro33_schema.properties,elustro30_schema.properties
LDAP	LDAP.url		ldap://192.168.168.18:1309/

Authentication	LDAP.dn		ou=People,dc=example,dc=com
	authentication.type		elustro ldap
Survey Archival	archivePackagePath		/WEB-INF/classes/sql
	responseTresholdFlag		True
	responseTreshold		5
	Archival_Migration_Limit	maximum limit of surveys for migration and archival	300
	Archival_Migration_TotalResponseCount	Total Response Count for Migration or Archival	5000
	exceedMessage	Message when Total Response Count exceeds Archival_Migration_TotalResponseCount exceedMessage	Total Response Count for selected Surveys exceed treshold, Please update your selection !!!
	responseTresholdMessage	Message When Unsuccessful responses exceeds responseTreshold	Survey Archival is Unsuccessful, as Number of Failed responses Exceeded Threshold
Poll WebService URL	WS_SUBMIT_POLL_URL		http://192.168.168.1/elustro36/services/PollSurveySubmit
	WS_REQ_POLL_URL		http://192.168.168.1/elustro36/services/PollSurvey
	WS_POLL_URL_XSL		http://192.168.168.1/elustro36/poll/xsl.xsl
	WSDL_URL		http://192.168.168.1/elustro36/services/Poll?wsdl
	WS_PIE_GRAPH_CSS		http://192.168.168.1/elustro36/pie/diagram.css
	WS_PIE_GRAPH_JS		http://192.168.168.1/elustro36/pie/diagram.js

Appendix A: Recommended settings

To ensure that the elustro application functions properly and reliably, this section provides guidelines on important sets of settings: JVM configuration, Database processes. By following these recommendations, the software should perform reliably without significant cost to concurrency and performance response times.

Java Virtual Machine (JVM) heap size configuration:

It is recommended to use a minimum size of 256MB and maximum JVM size of 1024MB. To make the changes you would need to update the following properties:

-Xms256m -Xmx1024m

Refer to the JVM heap size configuration procedure applicable to your application server.

Database processes configuration:

It is recommended to use a max number processes and max number cursors to be more than 200 threads. Check with your DBA for best practices and supported values.

Appendix B: Security considerations

Typically, your client/server configuration as it relates to security is unique and specific to your needs. We recommend that you set up Secure Socket Layer (SSL) encryption on the application server hosting eLustro. The document however does not cover any SSL configuration needs that you may have.