

A paper in the InfoGlue Series

# **InfoGlue - Administrative Manual**

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Version **2.4**

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# InfoGlue – Administrative Manual

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# InfoGlue – Administrative Manual

## Introduction

This document was written to give administrators as well as some developers a useful guide to the underlying setting and mechanism of InfoGlue. Hopefully the information herein will help clarify how to set up some aspects of InfoGlue and function as a reference document to all settings available in the system. Whatever the use, I hope the information is valuable and easy to understand.

The document will not include information about pure user aspects or functional development aspects as there are other documents that specialize in these matters. The aim is to give the administrator the best reference document as possible.

## Feedback

This document is always a work in progress so mail any suggestions to [bogeblad@yahoo.com](mailto:bogeblad@yahoo.com) and I will try to improve it as the platform evolves.

# InfoGlue – Administrative Manual

## General concepts

### What is InfoGlue

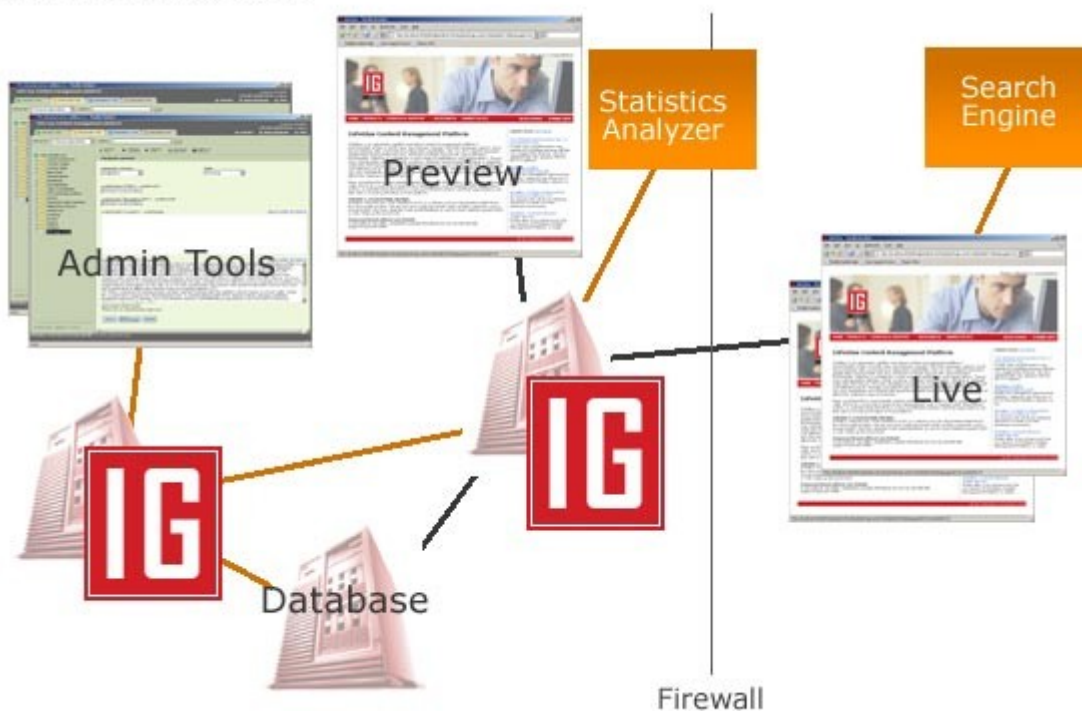
InfoGlue is a Content Management System. Content Management is very much another word for how to manage a company's or organization's information internally and externally. As content management is such a broad term we often say InfoGlue is a Web Content Management System. That is – InfoGlue helps organizations manage their information mainly targeted for the Web both internally, in intranets etc, and externally in public websites and extranets.

### What parts are there in InfoGlue

InfoGlue is a pure Java platform. It is completely database driven which means both the management tool and the public sites are using information from a database. The platform consists of several different applications but from a users perspective the two important ones are the administrative tool and the different delivery engines.

The administrative tools are discussed in detail in the InfoGlue User Manual and are where you manage all aspects of your site. The delivery engines are specialized in presenting sites to users based on the data managed by the tools. By default InfoGlue installs 3 delivery engines. The first is the working version which presents the working version of the site. There is also a version called staging site which shows the site in a preview mode so the publisher can check that the site will look good after publication. The last delivery engine is the one that shows the live site to visitors. This simple sketch shows how a simple setup could look:

Sample Medium Setup



## Installation

The InfoGlue platform is build on top of standard components and are therefore both easy to maintain and easy to upgrade. This reference will take you through the process of installing it for the first time. This reference is written for Windows and Linux-based systems. If you run a different OS the steps should be the same but some minor details may differ.

### Step 1: Installing Java

As the platform is written purely in Java you need the Java SDK installed. InfoGlue currently supports version 1.4.2 or later but Java 5 (1.5.x) is strongly recommended. The software is collected on [www.java.sun.com](http://www.java.sun.com). When you got it just install the software according to Sun's installations instructions. After installation complete it by adding the following environment variables to the system:

```
SET JAVA_HOME={InstallationPath} (for example c:\j2sdk1.4.1_02 )
PATH=%PATH%;{InstallationPath}\bin (for example c:\j2sdk1.4.1_02\bin )
```

On windows, this is done by right-clicking on the My Computer-icon and selecting Properties. Then choose the tab Advanced and then Environment variables. In that dialog these settings are made. If you know how you can also make them at the command-prompt. To verify that the installation worked, start a new command prompt and type "java -version". The result should be something like this:

```
java version "1.5.0_05" Java(TM) Runtime Environment, Standard Edition Java HotSpot(TM)
Client VM (build 1.5.0_05-b06, mixed mode)
```

We also strongly recommend that you set up some environment parameters:

```
SET JAVA_OPTS=-XX:MaxPermSize=256m -Xms128M -Xmx512M
SET CATALINA_OPTS=-XX:MaxPermSize=256m -Xms128M -Xmx512M
```

The same environment-variables should be set up on Linux (export them as usual vars).

### Step 2: Installing Apache Tomcat

The application has to have a servlet 2.3 compatible environment to run in and InfoGlue is known to run on several although the installer only supports Apache Tomcat 4.18 or above. Recommended is Tomcat 5.5 or above. This software is of course free and can be found at <http://jakarta.apache.org>. When you have the right software just install it as instructed. To check that the installation was successful you might want to start tomcat from the start-menu and then browse to <http://localhost:8080>. There you should see a tomcat information screen. After this check please stop tomcat and proceed to step 3.

### Step 3: Installing MySQL

All information in the InfoGlue platform is stored in a database. This database could be almost any JDBC-2 compliant database and the installer default supports MySQL, SQL-Server, DB2 and Oracle. This tutorial will instruct how to install the fast, competent and free MySQL database. You can fetch it from [www.mysql.com](http://www.mysql.com). We support ver. 3.23 or later but strongly suggests version 5.0 or above as a number of limitations has been removed in that version. Install the database as instructed by the MySQL documentation. If you want to use large attachments on your sites like large images or movies you must follow the instructions on [http://www.mysql.com/doc/en/Packet\\_too\\_large.html](http://www.mysql.com/doc/en/Packet_too_large.html). The standard limit is about 1Mb so you will probably want to do that.

## Step 4: Installing InfoGlue

### Normal way

Time has come to install the InfoGlue platform itself. The installer comes in a zip-file which you just unpack with your favorite unzip-program. In the installation directory there is a visual installer you start by running the install.bat(windows) / install.sh (Linux) file. If you prefer a command based installation run installcmd.bat (Windows) / installcmd.sh (Linux) instead. The installer will try to guide you as much as possible and if you move the mouse over the labels in the visual installer more help will be shown as tool tips. If you want to run it from Unix/Linux-systems you have to set the rights on the new directory so it can be executed. This is done by "chmod 777 \* -Rf" in the newly unzipped directory. Below is a small sequence for Linux-users and it assumes you are located in the directory where you downloaded InfoglueInstaller2.x.xFinal.zip:

```
unzip "InfoglueInstaller2.x.xFinal.zip"
chmod 777 "InfoglueInstaller" -R
cd "InfoglueInstaller"
./installcmd.sh
```

### Silent option

If you want to you can specify all setting for the installer in an xml file named installconf.xml and run the installer in silent mode. This is convenient sometimes for a hosted environment or if you wish to automate the installation. Just modify the existing config example file and run InfoGlue with silent option.

```
Example windows: "infogluecmd.bat silent"
Example linux/unix: "./installcms silent"
```

### Upgrading older versions of InfoGlue

The installer can also upgrade existing versions of InfoGlue including updating the database model if needed. Up to now InfoGlue can upgrade versions so far back as 1.0 and we hope to keep it that way in the future. That way upgrades should be pretty easy. When upgrading from 1.3.2 or earlier there may be some problems with access rights, packet structure and other backward compability issues which can be resolved but you should know about. Since 2.0 InfoGlue has settled much more into a more modern setup.

## Detailed descriptions of the fields in the installer / upgrader:

### Database dialog:

**InfoGlue Content Management Platform**

**Database setup**

For the system to work you will have to state which database you wish to use. All fields have a help texts if you click on the question mark next to it.

Database type	MySQL	?
Database name	infoglue	?
Database suffix		?
Database server	localhost	?
Database port	3306	?
Database instance		?
InfoGlue username	INFOGLUE_CMS	?
InfoGlue password	*****	?
Create database	<input type="checkbox"/> Yes	?
Create tables and initial data	<input type="checkbox"/> Yes	?
Create example sites	<input type="checkbox"/> Yes	?
Upgrade to utf-8?	<input type="checkbox"/> Yes	?
DBA name	root	?
DBA password		?

The installer can automatically create a database and set up some basic data to make the basic functionality and examples work. If you would like the installer to do these tasks you mark the options you want below and then supply the installer with an administrative db-account. The account must have rights to create databases and tables on the server stated above.

**InfoGlue 2.4**  
CMS and Portal platform

InfoGlue is released under the GNU General Public License

Please visit us at:  
<http://www.infoglue.org>  
for documentation, upgrades, contribution, support etc.

The core developers behind InfoGlue:  
Mattias Bogeblad, Stefan Sik, Patrik Nyborg,  
Per Jonsson, L.B. Jensen, Frank Febrarro,  
Jed Prentice, Magnus Güvenal, Robert Lerner

Special thanx to these organisations:  
Modul1, Korsnäs Frövi, Tripnet, MSU  
Univ. of Gothenburg, OMX GROUP, WM-Data  
and many, many more

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**Database type:** The database brand you wish to install or upgrade InfoGlue on. Valid are "MySQL", "SQL Server", "DB2" and "Oracle".

**Database name:** The name of the InfoGlue database – either an existing one you wish to upgrade or the one you wish to create.

**Database suffix:** This field gives you the option to add a suffix to the database name so you can have more than one InfoGlue installation in the same database. Used primarily in hosting services.

**Database server:** The hostname of the database server on which the database is located. Can be an IP or a hostname.

**Database port:** The port for the database server if different from default.

**Database instance:** Use this for SQLServer setups where you have several instances running.

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**InfoGlue username:** The username InfoGlue is to use for connecting to the database. This username is not related to user's logins.

**InfoGlue password:** The password InfoGlue is to use for connecting to the database. This password is not related to user's logins.

**Create database:** Do you wish to install a new InfoGlue database? If you already have an InfoGlue installation and wish to keep the data you don't want to. This feature is only available for MySQL and SQLServer. **If you are upgrading an old install don't select this.**

**Create tables and initial data:** Do you wish to InfoGlue to fill the database with the needed tables etc. If you don't want to script the creation of the database yourself you should choose this. **If you are upgrading an old install don't select this.**

**Create example sites:** This installs a couple of example sites for you to look at. **If you are upgrading an old install don't select this.**

**Upgrade to utf-8:** Use this option if you have tried to upgrade and international characters gets messed up. It fixes a problem in the 1.2-version. **DO NOT USE AFTER 1.2.**

**DBA name:** The root (or similar) username to the database. InfoGlue needs it if it's to create the database in a new install.

**DBA password:** The root (or similar) password to the database. InfoGlue needs it to be able to create the database.

## Server dialog:

**InfoGlue Content Management Platform**

**Server setup**

For the system to work we also have to set up the properties below so they corresponds to your configuration. Tip: All fields have a help text if you put your mouse over the label.

Please supply the information needed below.

Application server	Tomcat 5.x	?
Host Name	localhost	?
Port number	8080	?
Application suffix		?
App Server HOME		?
InfoGlue HOME	webapps	?
Enable JSR 168 support	<input checked="" type="checkbox"/> Yes (forces install under tomcat)	?
Applications to install	<input checked="" type="checkbox"/> InfoGlue CMS <input checked="" type="checkbox"/> InfoGlue Deliver Working <input type="checkbox"/> InfoGlue Deliver Preview <input type="checkbox"/> InfoGlue Deliver Live	?
SMTP Host	your.emailserver.com	?
Superuser	root	?
Password	rt3ng1	?

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**Host Name:** The hostname or IP-address of the application server you are installing InfoGlue on. If you want people to access your site from other computers this is important to set correctly.

**Port number:** The port number tomcat operates on.

**Application suffix:** The suffix will be added to the name of the InfoGlue applications. This feature is mostly used in shared environments like hosting services. You can leave it out if this is a one-client installation.

**Tomcat HOME:** Point out the home directory of your tomcat installation. Often something like c:\Program Files\Apache Group\Tomcat 4.1

**Tomcat VERSION:** We now support both tomcat 4.x and 5.x but it is important you state which version it is as they have organized their files a bit different.

**InfoGlue HOME:** Point out the home directory of your InfoGlue directory. As InfoGlue will create a couple of applications/subdirectories you are wise to create a common InfoGlue directory somewhere on the disc which you then supply.

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**Enable JSR 168 support:** This sets InfoGlue up support the JSR-168 portlet specification. Choosing this forces install under tomcat webapps.

**Applications to install:** InfoGlue consists of several applications and two are mandatory. You are also able to select if you wish to install a preview-deliver and a live-deliver. The preview-deliver is used for preview at publication and the live site shows only published data and are aimed to be the deliver used for the public. Both options are recommended.

**SMTP Host:** Your email server used for outgoing mail.

**Super user:** The account name of the super user you want to create.

**Password:** What password the super user should have.

After installation you should start Tomcat again and open the address stated by the installation program. The default login name is **"administrator"** and the password is **"changeit"**. If images does not show and you are running Linux you probably have to chmod the directory digitalAssets and logs under each installer application so the applications are allowed to create files there.

**WARNING:** InfoGlue puts the root account in the cms.properties under the cms webapp. This account is used when security settings have been set up invalid or you must override something without having the rights as an administrator. Be aware to use a good password and username here as it will be a security risk if you don't. To secure the application even more you can remove the username and password altogether.

Now you are ready to go!! Good luck in building you **websites**.

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## Alternative deploy configuration

Instead of using the installer some people and projects prefer to set up a deployment environment which let's them redeploy a configuration easily with just an ant-task. This is a recommended way when working with a development server which you want to be able to update easily and we also use this way for some live installations as the approach let's us get the newest InfoGlue versions automatically. One should however know how CVS works and only fetch the latest stable InfoGlue versions if it's a production environment.

I thought we should be nice and describe a simple setup.

### First we create a Build-folder:

```
cd /root (can be anywhere – this is just an example)
mkdir BuildProject
mkdir software
```

### Download Apache Ant

```
cd software
wget http://www.infoglue.org/downloads/apache-ant-1.6.5-bin.tar (or get it from the official apache)
tar -xvf apache-ant-1.6.5-bin.tar
cd ../BuildProject
```

### Fetch the latest version of InfoGlue:

```
cvs -d :pserver:anonymous@www.infoglue.org:2401/home/cvsroot checkout infoglue
```

### or fetch a tagged version

```
cvs -d :pserver:anonymous@www.infoglue.org:2401/home/cvsroot checkout infoglue241final infoglue
```

### Create redeployAll.sh in BuildProject containing:

```
/etc/init.d/tomcat stop
rm /usr/local/tomcat5.5/logs/* -f
cd infoglue
#Enable this if you wish to have always the latest development version of InfoGlue to be fetched.
#/root/software/apache-ant-1.6.5/bin/ant --noconfig fetchInfoGlue
/root/software/apache-ant-1.6.5/bin/ant --noconfig deploy
/root/software/apache-ant-1.6.5/bin/ant --noconfig deploy-pluto
```

### Chmod it:

```
chmod 755 redeployAll.sh
```

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## Now create and edit infoglue/build.properties

Set all paths and database settings so it suits your needs. Here is a template with the most used parameters:

```
rm infoglue/build.properties
```

```
vi infoglue/build.properties
```

## Infoglue/build.properties

```
##
# $Id: build.properties,v 1.27 2005/11/20 20:59:46 mattias Exp $
#####
project.version=2.4.1
#build.compiler=jikes

##
# deployment directories for each version of the InfoGlue webapp
##

deploy.dir.cms=/usr/local/tomcat5.5/webapps/infoglueCMS
deploy.dir.working=/usr/local/tomcat5.5/webapps/infoglueDeliverWorking
deploy.dir.preview=/usr/local/tomcat5.5/webapps/infoglueDeliverPreview
deploy.dir.live=/usr/local/tomcat5.5/webapps/infoglueDeliverLive

##
# database
##
#Oracle
database.driver.class=oracle.jdbc.driver.OracleDriver
database.driver.engine=oracle
database.url=jdbc:mysql://localhost/infoglue?autoReconnect=true&useUnicode=true&characterEncoding=UTF-8
database.user=infoglue
database.password=xxxxxxx
database.minLimit=5
database.maxLimit=300
database.maxConnections=300
database.mapping=oracle_mapping.xml
database.encoding=UTF-8
database.use.unicode=true

##
# Hibernate
##
hibernate.dialect=net.sf.hibernate.dialect.MySQLDialect
hibernate.show_sql=false

masterServer=
slaveServer=

##
# Which mode does the engine run in... 0=working(first preview), 2=publish(staging preview), 3=published(live)
##
operatingMode.cms=0
operatingMode.working=0
operatingMode.preview=2
operatingMode.live=3

##
# portlet
##
enablePortal=true
actionDispatcher=org.infoglue.deliver.portal.dispatcher.PortalServletDispatcher

portletBase=/usr/local/tomcat5.5/webapps/
portletBase.working=/usr/local/tomcat5.5/webapps/
portletBase.preview=/usr/local/tomcat5.5/webapps/
portletBase.live=/usr/local/tomcat5.5/webapps/
deploy.dir.shared=/usr/local/tomcat5.5/shared/

##
# web-specific settings, user to locate images, etc.
##
```

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```
externalWebServerAddress=
webServerAddress=http://xxx.xxx.xx
liveWebServerAddress= http://xxx.xxx.xx
context.root.cms=infogluеCMS
context.root.working=infogluеDeliverWorking
context.root.preview=infogluеDeliverPreview
context.root.live=infogluеDeliverLive
#digitalAssetPath=/usr/local/tomcat5.5/webapps/digitalAssets
#requestArgumentDelimiter=&
URIEncoding=ISO-8859-1
workflowEncoding=UTF-8
#errorUrl=http://localhost:8080/error.html
errorUrl=/error.jsp
errorBusyUrl=/errorBusy.jsp

enableNiceURI=true
niceURIEncoding=UTF-8
niceURIAttributeName=NiceURIName

#Cache settings
useSelectivePageCacheUpdate=true
cachePath=/tmp
compressPageCache=true
siteNodesToRecacheOnPublishing=100470,102310,102330,100081,100190
pathsToRecacheOnPublishing=/,/omuniversitetet/,/forskning/,/samverkan/
recachePublishingMethod=requestAndMetaInfoCentric
recacheUrl=http://localhost/ViewPage.action

##
# default tree
##
tree=html

#settings for how the content tool should work
showContentVersionFirst=true

#settings for how the structure tool should work
showComponentsFirst=true

#Setting for if content types can be protected
protectContentTypes=false

#Setting for if categories can be protected
protectCategories=false

# Protect workflows
protectWorkflows=false

#Setting for which HTMLEditor to use FCKEditor | HTMLArea
wysiwygEditor=FCKEditor

#SET THIS TO TRUE IF YOU ARE RUNNING ORACLE OR DB2
useShortTableNames=false

# Show all workflows or only the one you owns
showAllWorkflows=false

##
# edition pagination
##
edition.pageSize=10

##
# AutoUpdate Settings
# ( Should point to masterserver, which provide a mirror list later
# For now, point up2dateUrl directly to a xml updates list )
##
up2dateUrl=http://www.infogluе.org/infogluеDeliver/ViewPage.action?siteNodeId=23

##
# security settings - basic
##
#loginUrl=Login.action
loginUrl=https://localhost:8080/infogluеDeliverWorking/Login.action
invalidLoginUrl=Login!invalidLogin.action
```

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```
authenticatorClass=org.infogluue.cms.security.InfoGlueBasicAuthenticationModule
authorizerClass=org.infogluue.cms.security.InfoGlueBasicAuthorizationModule
serverName=localhost:8080
authConstraint=cmsUser
extraParametersFile=InfoGlueAuthorizationParameters.properties
casValidateUrl=
casServiceUrl=

##
# mail
##
mail.smtp.host=smtp.xxx.xx
mail.smtp.auth=false
mail.smtp.user=
mail.smtp.password=
mail.contentType=text/html
systemEmailSender=mattias.bogeblad@modul1.se
warningEmailReceiver=mattias.bogeblad@modul1.se

##
# Sets up a superuser
##
administratorUserName=root
administratorPassword=xxxxxx
administratorEmail=mattias.bogeblad@modul1.se
```

**When save run redeployAll.sh i /root/BuildProject**  
./redeployAll.sh

**The result shall be BUILD SUCCESSFUL.**

## Adding Apache HTTP-Server as a front-end

Many linux/unix-servers have Apache HTTP-server installed by default and it may even be used by several previous projects. If so there are many InfoGlue-installations which utilize the web server as a front-end to Apache Tomcat. Even though this is not an InfoGlue-specific task we have decided to include a small and simple how-to here.

First make sure Apache HTTP-server is installed. If you don't know how you should start on [www.apache.org](http://www.apache.org) before continuing.

We will use the Apache mod\_jk-module for connecting Apache and Tomcat. Download and install from <http://www.apache.org/dist/tomcat/tomcat-connectors/jk/binaries/> or download and compile yourself.

When installed you configure it by adding this or similar last to the httpd.conf (often in /etc/httpd/conf) or in an included file:

```
#
# Mod_jk settings
#

AllowEncodedSlashes On

JkWorkersFile "/usr/local/tomcat5.5/conf/workers.properties"
JkLogFile "/usr/local/tomcat5.5/logs/mod_jk.log"

JkLogLevel error

JkMount /infoglueCMS default
JkMount /infoglueCMS/* default
JkMount /infoglueDeliverWorking default
JkMount /infoglueDeliverWorking/* default
JkMount /infoglueDeliverPreview default
JkMount /infoglueDeliverPreview/* default
JkMount /infoglueDeliverLive default
JkMount /infoglueDeliverLive/* default

# Use SetEnvIf if you want to let apache take care of all digitalAsset calls so Tomcat only
# get app-calls. Improves performance a bit actually.
SetEnvIf Request_URI "/digitalAssets/*" no-jk

# Now /home will goes to /home/dataxxx/
Alias /digitalAssets /usr/local/tomcat5.5/webapps/infoglueDeliverLive/digitalAssets

JkMount /* default
# End of mod_jk settings
```

**Then create workers.properties in the dir pointed out in the conf (in this case /usr/local/tomcat5.5) with the following content:**

```
workers.tomcat_home=/usr/local/tomcat5.5
workers.java_home=/usr/java/jdk1.5.0_04
ps=/
worker.list=default

worker.default.port=8009
worker.default.host=localhost
worker.default.type=ajp13
worker.default.lbfactor=1
```

Then restart Apache HTTP-server and make sure Tomcat is running. Then call the server through apache. Usually that means calling the same address but on port 80 instead of 8080.

## InfoGlue Configuration

In InfoGlue not much is hard coded. Almost all settings affecting the behaviour of the system can be configured either in the tools or in the properties files on disk.

We have tried to let administrators keep as much as possible of their configurations in the database as that very much eases the upgrade process in the future as well as let's the users reconfigure and manage the application settings through the management interfaces.

To allow this InfoGlue is coded so it first checks if an application setting exists in database-driven application properties. If not InfoGlue checks in the properties-files on disk and lastly, if not defined there either, it defaults to preset values. The next sections describe these settings.

## Application settings

This part describes the settings that can be handled through the management tool. If you wish to have different settings for different servers you can add server nodes in this view as well. Just be sure to call the new nodes what the servers are called (InetAddress) as the names are used when looking for server specific properties. This feature is not used by many but now you know it exists.

InfoGlue fetched any property it needs like this:

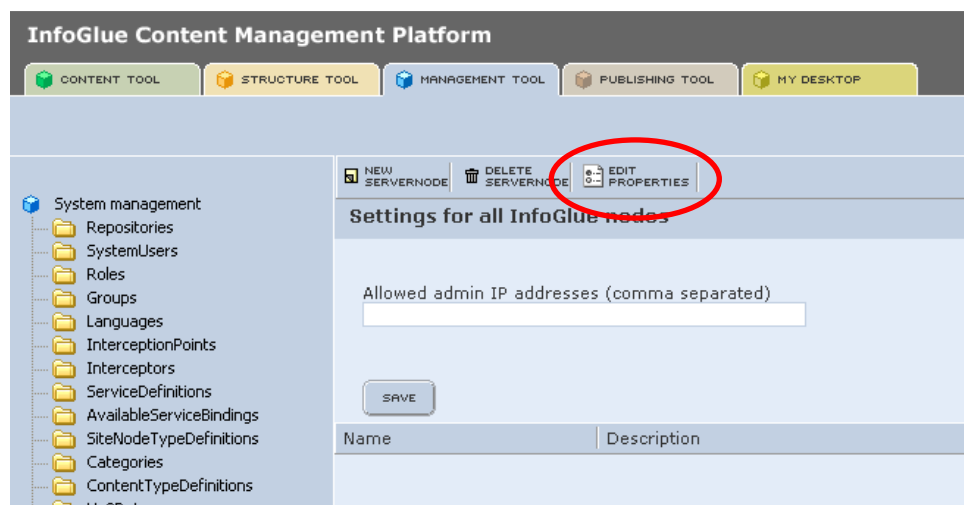
1. Check if there is a server node matching the server running the InfoGlue instance wanting the property/setting. If so InfoGlue gets the application setting in question filled in under that node.
2. If no value or no server node was found InfoGlue looks at the default application settings and fetches the value for that attribute.
3. If no value was specified in either local server node or in general application settings InfoGlue fallbacks to the property files on disk. Mainly deliver.properties and cms.properties. It looks for the value there.
4. If still no property was found a default value is used which is hard coded in the application.

Since InfoGlue 2.3.5 we recommend all app settings to be handled in the management tool with one or two exceptions which should be handled in the property files as they are unique to each deliver-instance.

If you can access the management tool (the blue tab) just press "Application settings". Before we head into the detailed properties we would like to point the only field in this screen:

**Allowed admin IP-addresses:** States the IP-addresses that are allowed to call some admin actions. This is very important as **you must allow the cms-server's IP if you got a distributed environment as the cache update calls are handled like this. If not the cache will not get updated correctly.**

To edit the actual properties press the "Edit Properties"-button.



Below is a thorough walkthrough of the sections and fields under the edit properties button.

# InfoGlue – Administrative Manual

## Cache settings:

These settings all have to do with caching and reaching issues.

Cache settings

Enable Page Cache  
Inherit

Selective page cache update  
Inherit

Expire cache automatically (interval below)  
Inherit

Cache expiration interval  
[input field]

Request timeout (in deliverWorking and preview only). 0 = infinite  
[input field]

Session timeout  
70000

Compress page cache  
Inherit

Compress page response  
Inherit

A commaseperated list of sitenode id's to recache  
2

Recache method  
requestCentric

Recache URL  
http://localhost:8080/infogluDeliverWorking/ViewPage

Use IP-security on application actions  
Inherit

Allowed admin IP addresses (comma separated)  
[input field]

Default page cache key  
[input field]

Default component cache key  
[input field]

Name / description
<b>Enable Page Cache:</b> Enable or disable the page cache possibility globally. You must have a very good reason for setting it to "No" as it has a big performance impact and the cache on pages can be disabled individually instead where needed.
<b>Selective page cache update:</b> Enable or disable if pages should be updated selectively in deliverWorking – do not set to "No" unless you have a special reason.
<b>Expire cache automatically:</b> Enables one to set that the page caches and other caches are thrown away every x millisecond (x defined below). This is not a common setup as it's quite ineffective and there are better options if such behaviour is needed.
<b>Cache expiration interval:</b> How many milliseconds to wait until refreshing the caches. Only used if Expire cache automatically is set to yes.
<b>Request timeout:</b> If set to a positive value the working deliver will kill off request-threads that take longer than the set value. This is to avoid non ready templates etc to block the system. A value between 30000 and 120000 could be suitable if you have problems with blockage/hangs – otherwise keep empty.
<b>Session timeout:</b> How long until a user session are invalidated? Controls when a user is automatically logged out etc. Set in milliseconds.
<b>Compress page cache:</b> States if the page cache should be compressed before stored in memory. Saves quite a lot of RAM.
<b>Compress page response:</b> States if the resulting pages should be gzip:ed before sent to the visitor. Saves bandwidth and speeds delivery a bit.
<b>A commaseperated list of sitenodes to recache:</b> This is to enable one of the recache strategies to know what to recache after a publication.

# InfoGlue – Administrative Manual

**Recache method:** Can be one of these:

- **requestCentric** (recommended) – before flushing all caches the strategy makes a few requests to specified pages so a lot of data get's reached. Minimizes the load after a publication.
- **requestAndMetaInfoCentric** - before flushing all caches the strategy makes a few requests to specified pages and indexes all pages meta info so a lot of data get's reached. Minimizes the load after a publication – a bit slower.
- **contentCentric** - before flushing all caches the strategy indexes some contents. Minimizes the load after a publication – not recommended.

**Recache URL:** Used by the recache strategies which calls pages. Should point out the ViewPage.action with a full url.

**Use IP-security:** States if some application actions like UpdateCache and ViewApplicationState should be protected on which IP-addresses the call come from. If set to Yes you must specify the ip-addresses in the field below.

**Allowed admin IP-addresses:** States the IP-addresses that are allowed to call some admin actions. OBS: This settings are also on the application settings startpage – use them there. **Take care in allowing the cms-server to do this as the cache update calls are handled like this. If not cache will not get updated correctly.**

**Default page cache key:** States what parameters should be taken into account when creating or fetching data from the page cache. The complexity of this affects how large the page cache is in memory and how often the page cache holds what the user wants. The default key is:

*siteNodeId\_languageId\_contentId\_userAgent\_queryString*

which means for example which browser the user has affects the hit rate on the cache. If one knows one will not make components which cares of the browser on the server side the page cache key can be shorter which is good. If one need cookies and session parameters can be used in the key.

**Default component cache key:** States what parameters should be taken into account when creating or fetching data from the component cache (cache containing complete rendered component on a page). The complexity of this affects how large the component cache is in memory and how often the cache holds what the user wants. The default key is:

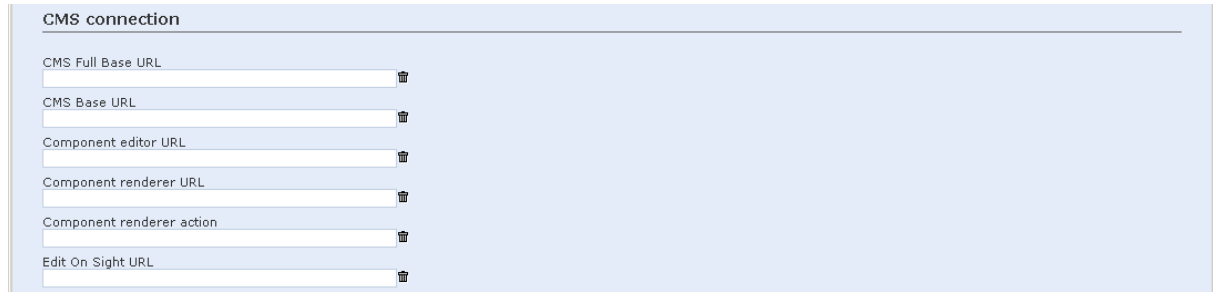
*{pageCacheKey}\_componentId\_componentSlotName\_componentContentId\_isInherited*

which means here as well for example which browser the user has affects the hit rate on the cache. If one knows one will not make components which cares of the browser on the server side the page cache key can be shorter which is good. If one need cookies and session parameters can be used in the key.

# InfoGlue – Administrative Manual

## CMS connection settings:

These settings handles the connection between the deliver-environments and the cms-application. For example so EditOnSight works etc. Most of these settings are set right by the installer in the property-files so we seldom need to modify this. Because of this we have not gone into much details on this.



The screenshot shows a form titled "CMS connection" with the following fields:

- CMS Full Base URL
- CMS Base URL
- Component editor URL
- Component renderer URL
- Component renderer action
- Edit On Sight URL

Name / description
<b>CMS Full Base URL:</b> The full URL to the cms. This is used by the MyDesktop-tool as the return address when invoking workflows from there.
<b>CMS Base URL:</b> The path to the cms. Could be a full url or a relative one to the domain. Used to construct action-urls in structure tool for example to avoid relative urls which might be a problem.
<b>Component editor URL:</b> Points to the action that edits pages (add / remove components etc). Used by the structure tool component editor.
<b>Component renderer action:</b> The component editor action.
<b>Edit On Sight URL:</b> Points out the editor action URL.

# InfoGlue – Administrative Manual

## Template processor settings:

Simple section – just one setting.

### Template Processing

Use Freemarker as default template engine instead of velocity

Inherit

Name / description
--------------------

<b>Use Freemarker as the default template engine instead of velocity:</b> Tells InfoGlue to use freemarker as the default template engine if not JSP was declared in the component/template. The developer docs explains in details how this works.
---

# InfoGlue – Administrative Manual

## Web server settings:

This section let's you define what addresses meet the user or what paths the applications should put files in. Leave empty most of the time.

Webserver settings

---

Webserver address

Application base URL

Digital asset base URL

Images base URL

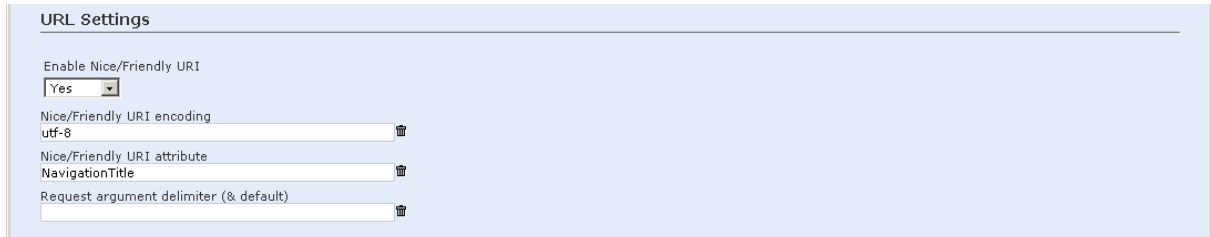
Digital asset directory

Name / description
<b>Web server address:</b> Never use this really except if you know what you are doing. Leaving it blank let's InfoGlue operate with relative URLs only which is more flexible.
<b>Application base URL:</b> The cms base URL.
<b>Digital asset base URL:</b> What URL the assets are found at. Defaults to the dir under the webapp and is relative the context by default.
<b>Images base URL:</b> The URL to the standard InfoGlue image directory. Leave it empty.
<b>Digital asset path:</b> The file system path to where assets should be stored. Defaults to a folder called digitalAssets under the webapp dir – could be set to a SAN or something.

# InfoGlue – Administrative Manual

## URL settings:

This section let's you define how InfoGlue URLs are generated.



Name / description
<b>Enable Nice/Friendly URI:</b> Set to Yes if you want the deliver engine to render <a href="#">url:s</a> like /products/infogluemcms instead for /ViewPage.action?siteNodeId=7 etc.
<b>Nice/Friendly URI encoding:</b> What encoding should be used if encoding takes place due to i18n-characters.
<b>Nice/Friendly URI attribute:</b> What meta info attribute should be used to generate the URI:s. Can be any page meta info attribute or SiteNode.name which uses the non localized name from the structure tree.
<b>Request argument delimiter:</b> Should we use & or &amp; or ; as the argument separator?

# InfoGlue – Administrative Manual

## Error handling / Thumbnail and encoding settings:

These sections let's you define error handling, thumbnails and encoding settings.

**Error handling**

---

Error page URL

Busy page URL

**Thumbnail generation**

---

External thumbnail generator

**Encoding settings**

---

Input character encoding (cms)

Input character encoding (deliver)

URI encoding

Workflow encoding

Property forms encoding

Name / description
<b>Error page URL:</b> If you want a custom error page you can set that here. When an error occurs the user will be shown the information and the url can be relative or full.
<b>Busy page URL:</b> Not used at the moment.
<b>External thumbnail generator:</b> The full path to image magic you have that installed and want to use it rather than the ordinary Java2D-resizing.
<b>Input character encoding (cms):</b> What input character encoding should we expect? Seldom needed to be changed – only if you experience encoding problems when entering data in InfoGlue's standard GUI:s.
<b>Input character encoding (deliver):</b> What input character encoding should we expect when data is entered on pages on the site? Important when we use portlets etc and can depend on what encoding the site is written in, how the web server/tomcat is configured etc.
<b>URI-encoding:</b> What encoding should be used when InfoGlue deals with i18n strings when creating url's inside cms?
<b>Workflow encoding:</b> What input character encoding should be used for the workflow definitions. Defaults to utf-8.
<b>Property forms encoding:</b> Not used at the moment.

# InfoGlue – Administrative Manual

## Database / Log and Portlet settings:

These sections let's you define error handling, thumbnails and encoding settings.

**Database settings**

---

Use short table names (Oracle and DB2 should have yes)

**Log settings**

---

Log database transactions

Enable site statistics

Statistics logpath

One statistics log file per day

Statistics logger mode

**Portlet settings**

---

Enable JSR-168

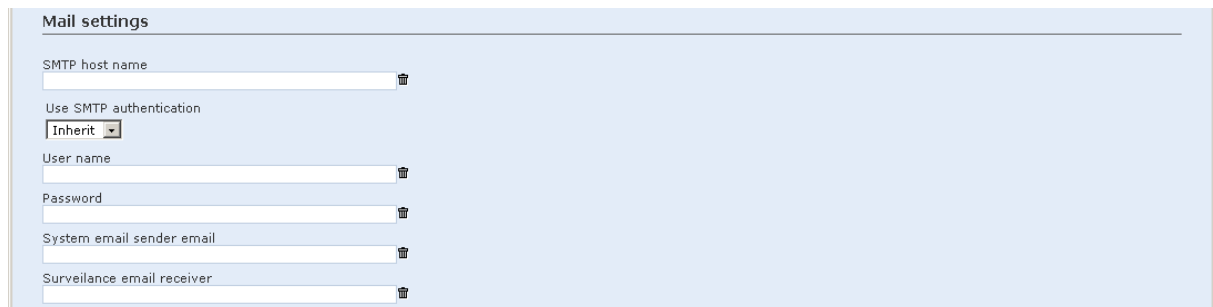
Portlet base (should be tomcat root)

Name / description
<b>Use short table names:</b> The value should be <b>"Yes"</b> if you run InfoGlue against a DB/2 or Oracle database. Set by the installer usually but can be set here as well.
<b>Log database transactions:</b> Not used at the moment.
<b>Enable site statistics:</b> Not used at the moment.
<b>Statistics logs path:</b> Not used at the moment.
<b>One statistics log file per day:</b> Not used at the moment.
<b>Statistics logger mode:</b> Not used at the moment.
<b>Enable JSR-168:</b> Controls if you want the possibility to deploy portlets. Should probably always be set to <b>"Yes"</b> as we don't see any downside to have it enabled even though you don't use portlets at the moment.
<b>Portlet base:</b> Should point to the tomcat home directory at the moment as Apache Pluto demands this.

# InfoGlue – Administrative Manual

## Mail settings:

These sections let's you define the system's mail settings.

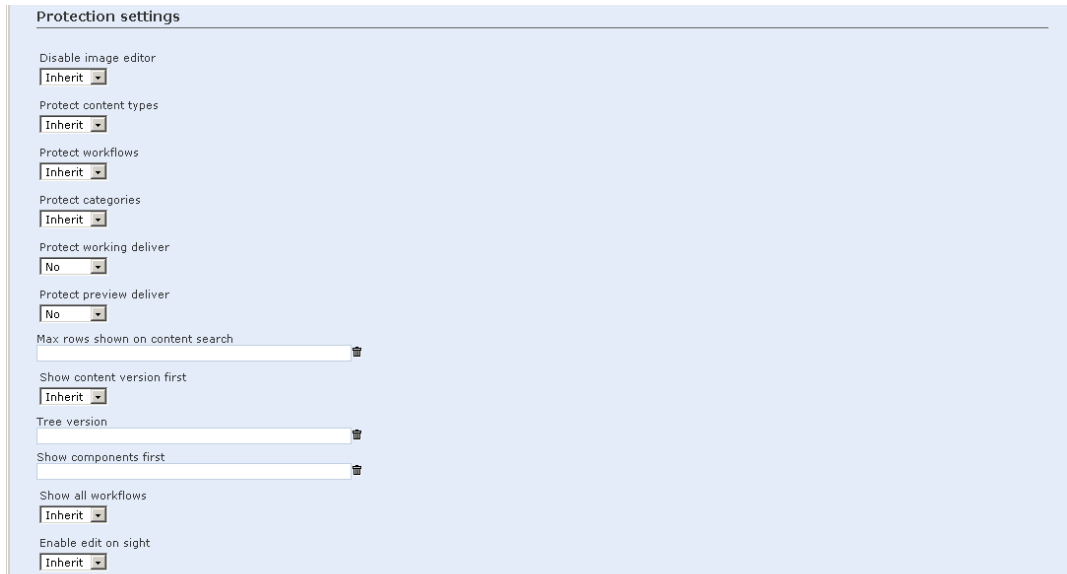


Name / description
<b>SMTP host name:</b> Here you can define the mail server so InfoGlue can send e-mails.
<b>Use SMTP authentication:</b> If the mailservers requires authentication set this to Yes and fill in user name and password below.
<b>User name:</b> The user name for the mail server.
<b>Password:</b> The password for the mail server.
<b>System email sender email:</b> The email address which should be used as sender address.
<b>Surveillance email receiver:</b> The email address to which problems should be reported.

# InfoGlue – Administrative Manual

## Protection settings and misc settings:

These sections let's you define protection and miscellaneous settings.



Protection settings

Disable image editor  
Inherit

Protect content types  
Inherit

Protect workflows  
Inherit

Protect categories  
Inherit

Protect working deliver  
No

Protect preview deliver  
No

Max rows shown on content search

Show content version first  
Inherit

Tree version

Show components first

Show all workflows  
Inherit

Enable edit on sight  
Inherit

Name / description
<b>Disable image editor:</b> Not used at the moment.
<b>Protect content types:</b> Set to yes if you want to access control what content types users should see. Take care as when you switch to Yes you will have to go through all content types and set rights. If enabled none of the content types are usable by anyone by default.
<b>Protect workflows:</b> Set to yes if you want to access control what workflows users should see. Take care as when you switch to Yes you will have to go through all workflows and set rights. If enabled none of the workflows are visible to anyone by default.
<b>Protect categories:</b> Set to yes if you want to access control what categories users should see. Take care as when you switch to Yes you will have to go through all categories and set rights. If enabled none of the categories are visible to anyone by default.
<b>Protect working deliver:</b> Set to yes if you want to force login to the working deliver. Usable to avoid people to authorized to peek at the working site.
<b>Protect preview deliver:</b> Set to yes if you want to force login to the preview deliver. Usable to avoid people to authorized to peek at the preview site.
<b>Max rows shown on content search:</b> How many found items should be shown after a search.
<b>Show content version first:</b> When clicking on a content InfoGlue shows the master language version first instead of the content cover. If you don't want this behavior set this to "No".
<b>Tree version:</b> Allows you to change the tree implementation. Default the value is "html" but it can be "applet" as well.
<b>Show components first:</b> By default InfoGlue shows the working version of a page when you click on a site node in the structure tool. If you rather want the page cover to be shown set this to "Yes"
<b>Show all workflows:</b> Set to Yes if you want the users to see all workflows even if they are not involved.
<b>Enable edit on sight:</b> No good reason to disable it completely but it's possible here.

## Miscellaneous settings continued:

Preview deliver url:

Staging deliver url:

Internal deliver urls (index based)  
 0=http://localhost:8080/infoglueDeliverWorking

Public deliver urls (index based)  
 0=http://localhost:8080/infoglueDeliverWorking

Edition page size:

Content tree sort:

Structure tree sort:

Structure tree hidden property:

Name / description
<b>Preview deliver url:</b> Not used at the moment. Has been replaced by how we define things in repository-dns-name (working= etc).
<b>Staging deliver url:</b> Not used at the moment. Has been replaced by how we define things in repository-dns-name (preview= etc).
<b>Internal deliver urls:</b> Here you register all working and preview delivery-engines. These <a href="#">url:s</a> are used when cache messages are broadcasted. Format (index based):  0=http://xxx.xxx.xx/infoglueDeliverWorking 1=http://xxx.xxx.xx/infoglueDeliverPreview 2=http://yyy.yyy.yy/infoglueDeliverWorking 3=http://yyy.yyy.yy/infoglueDeliverPreview
<b>Public deliver urls:</b> Here you register all live delivery-engines. These <a href="#">url:s</a> are used when publication cache messages are broadcasted. Format (index based):  0=http://xxx.xxx.xx/infoglueDeliverLive 1=http://yyy.yyy.yy/infoglueDeliverLive
<b>Edition page size:</b> Allows you to specify how many publications are shown at a time.
<b>Content tree sort:</b> Here you can state how the tree in content tool should be sorted. Normally sorted by content-name but you can state other attributes like id, publishDateTime or other content properties.
<b>Structure tree sort:</b> Here you can state how the tree in structure tool should be sorted. Normally sorted by site node name but you can state other sort-attributes as well. Like for content tree you can use id, publishDateTime and other SiteNode-properties but you can actually also use the site nodes meta info attributes by adding extra: first. This example sort first on pages meta info attribute sortOrder and if not there by name. " <b>extra:sortOrder,name</b> "
<b>Structure tree hidden property:</b> This is a feature in structure tool which allows you to visualize if some pages are hidden on the site. Just state what meta info attribute points this out. For example <b>isHidden</b> if that is the attribute you used.










## Misc settings continued:

Disable empty urls	<input type="text" value="Inherit"/>
Cache update action	<input type="text"/>
Log path	<input type="text"/>
Log transactions	<input type="text" value="Inherit"/>
Enable extranet cookies	<input type="text" value="Yes"/>
Use alternative language check (not recommended)	<input type="text" value="Inherit"/>
Case sensitive redirects	<input type="text" value="Inherit"/>
Use DNS name in URI	<input type="text" value="Inherit"/>
Extranet cookie timeout	<input type="text" value="35000"/>
Webservice base url	<input type="text"/>
Live publication thread class	<input type="text"/>
Publication thread delay	<input type="text"/>
Paths to recache on publishing	<input type="text" value="/"/>
Disable template debug	<input type="text" value="Inherit"/>
Export format (1 for original or 2 for new optimized)	<input type="text" value="2"/>

Name / description
<b>Disable empty urls:</b> Not used at the moment.
<b>Cache update action:</b> Do not change unless you are a developer and have added your own cache update strategy which is very, very uncommon.
<b>Log path:</b> Not used at the moment.
<b>Log transactions:</b> Not used at the moment.
<b>Enable extranet cookies:</b> Do you want the users to be remembered through a cookie between sessions so they do not have to login again and again.
<b>Use alternative language check:</b> Do not change this.
<b>Case sensitive redirects:</b> By default the redirects are not case sensitive.
<b>Use DNS name in URI:</b> Set this to <b>Yes</b> if you want all <a href="#">url:s</a> to be full – opposed to relative which are default.
<b>Extranet cookie timeout:</b> Set the expiration period of the extranet cookie (if enabled).
<b>Webservice base URL:</b> If you build stuff where users can edit things from the site through the IG-webservices you must point out the services here.
<b>Live publication thread class:</b> Can be org.infoglue.deliver.util.SelectiveLivePublicationThread instead of the default and if set to this the live environments are also updated dynamically and selectively. Improves performance but is still in Beta-mode.
<b>Publication thread delay:</b> How long should the system wait until the publication process starts. This is used only when you have a setup where you replicate the database between the working and live servers and the replication can take a minute or two.
<b>Paths to recache in publishing:</b> Enter paths on the live servers that should be called after a publication. To increase performance and delay after a publication.
<b>Disable template debug:</b> If you don't wish the working deliver to output errors etc in the site you set this to <b>Yes</b> and only look at the logs for debug.
<b>Export format:</b> Since 2.4 InfoGlue's export and Import system is much more advanced and needs a new format. Only use 1 for old systems.

# InfoGlue – Administrative Manual

## Misc settings continued:

DB Release	<input type="text"/>	
DB User	<input type="text"/>	
DB Password	<input type="text"/>	
Master server	<input type="text"/>	
Slave server	<input type="text"/>	
Build name	<input type="text"/>	
Admin tools path	<input type="text"/>	
Db script path	<input type="text"/>	
Upload path	<input type="text"/>	

None of these settings are used at the moment so we will not describe them.

# InfoGlue – Administrative Manual

## Security settings CMS:

These sections let's you define how authentication and authorization are handled in the cms. Most of the field names speaks for themselves but more information can be found under the chapter on Authentication and Authorization.

The screenshot displays the 'Security settings CMS' interface. It features a light blue background with a white border. The title 'Security settings CMS' is at the top left. Below it, there are several input fields, each with a label and a small trash icon to its right. The fields are: 'Login URL', 'Logout URL', 'Invalid login URL', 'Success login base URL', 'Authenticator class', 'Authorizer class', 'Server name', 'Authentication constraint', 'Extra security parameters' (a larger text area), 'CAS validate URL', 'CAS service URL', and 'CAS logout URL'. Each field is currently empty.

# InfoGlue – Administrative Manual

## Security settings Deliver:

These sections let's you define how authentication and authorization are handled in the delivery engine (extranet for example). Most of the field names speaks for themselves but more information can be found under the chapter on Authentication and Authorization.

Security settings Deliver

Login URL

Logout URL

Invalid login URL

Success login base URL

Authenticator class

Authorizer class

Server name

Authentication constraint

Anonymous username (anonymous default)

Anonymous password (anonymous default)

Extra security parameters

CAS validate URL

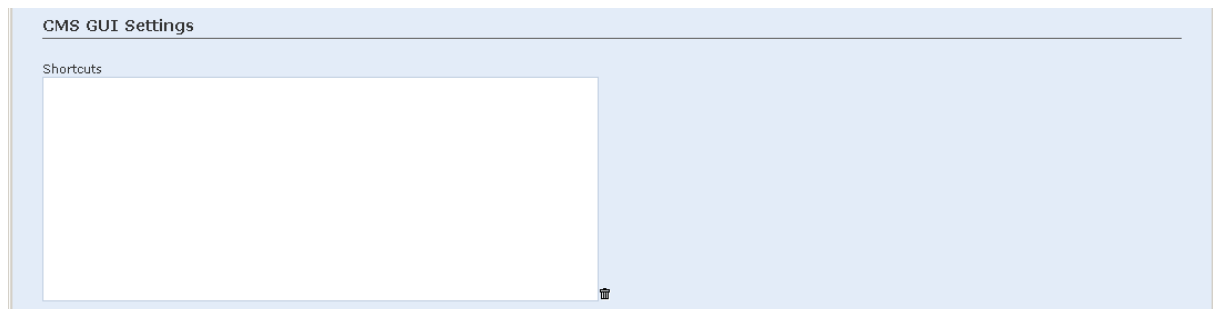
CAS service URL

CAS logout URL

# InfoGlue – Administrative Manual

## CMS GUI settings:

These sections let's you define shortcuts etc.



### Name / description

**Shortcuts:** Here you can define application/task shortcuts which will be shown in the myDesktop tool.

The format is xml-based and here is an example:

```
<?xml version='1.0' encoding='UTF-8'?>
<shortcuts>
  <shortcut>
    <name>InfoGlue Official homepage</name>
    <url>http://www.infoglue.org</url>
    <popup>true</popup>
  </shortcut>
  <shortcut>
    <name>Other tool</name>
    <url>http://www.yourtool.com/toolX</url>
    <popup>true</popup>
  </shortcut>
</shortcuts>
```

# InfoGlue – Administrative Manual

## Configuration files

All the configuration files are located under WEB-INF/classes under respective webapp, both cms and deliver. There is also a web.xml for each application which contains some settings for filters. The most central files are:

cms.properties	Used only by the infoglueCMS-webapp although located in all applications. Contains most of the settings for the CMS-tools. Described in a separate section.
deliver.properties	Used only by the infoglueDeliver-webapp although located in all applications. Contains most of the settings for the Deliver-engines. Described in a separate section.
database.xml	This file contains the database connection settings used by the O/R-mapper Castor which InfoGlue uses for all interaction with the database.
hibernate.cfg.xml	This file contains the database connection settings used by the O/R-mapper Hibernate which InfoGlue uses for all interaction with the database concerning Workflows.
propertyset.xml	This file contains all setting used by the property-framework OS PropertySet which InfoGlue uses for some properties.
oscache.properties	This file contains cache settings for the cache-engine OSCache which InfoGlue uses for page-caching and more further on.
log4j.xml	The log4j settings file for InfoGlue. Controls logging completely.
webwork.properties	This file contains some minor settings for how webwork behaves. Most important the maximum file upload size allowed by WebWork.
quartz.properties	This file contains settings for the scheduler Quartz.
jobs.xml	Contains all jobs defined that are to be scheduled to run at certain times. Contains a cleanup job for example but are meant to be filled with custom jobs in an installation.
JNDIParameters.properties	Settings to use when authenticating with custom authentication and authorization frameworks. More on that later.
InfoGlueAuthorizationParameters.properties	Settings to use when authenticating with custom authentication and authorization frameworks. More on that later.

## InfoGlue – Administrative Manual

### **CMS-application is controlled in the cms.properties**

Below "infoglueCMS{suffix}/WEB-INF/classes" there are a file called "cms.properties". It contains all settings for the CMS-application if not defined in the application settings in management tool and the possible setting are listed below:

Cache settings for the component editor environment		
Field name	Typical values	Comment
isPageCacheOn	true / false	Always use true except for debugging purposes or for a completely dynamic site.
expireCacheAutomatically	true / false	false is default.
cacheExpireInterval	1800000	Only set this value if you set expireCacheAutomatically=true – should not be used in cms really
session.timeout	1800	This sets the timeout for the user session in the tools. Defaults to 30 minutes (1800 seconds)
WEB-SPECIFIC SETTINGS (USED TO LOCATE IMAGES ETC)		
Field name	Typical values	Comment
webServerAddress	http://localhost:8080	Never use this really except if you know what you are doing.
digitalAssetBaseUrl	infoglueCMS/digitalAssets	Defaults to the dir under the webapp.
imagesBaseUrl	infoglueCMS/images	Only set this value if you set expireCacheAutomatically=true – should not be used in cms really
digitalAssetPath	/usr/local/tomcat/webapps/infoglueCMS/digitalAssets	Defaults to the webapp dir – could be set to a SAN or something.
Thumbnail generation		
Field name	Typical values	Comment
externalThumbnailGeneration		Could point to image magic if installed.
Encoding settings		
Field name	Typical values	Comment
URIEncoding	UTF-8	Decides in which way the urls in the tools are generated. If you have internation characters in role/user or group names this will be important.
Logging		
Field name	Typical values	Comment
logTransactions	true / false	This decides if to log activity or now into the table cmTransactionHistory. Default true.
logDatabaseMessages	true / false	Old setting – not used any more.
logToFile	true / false	false is default – old setting we now uses log4j.
logPath	/tmp/logs/tool.log	Old setting
logLevel	INFO, WARNING, ERROR	Old setting
Preview settings		
Field name	Typical values	Comment
previewDeliveryUrl	An url to the working version of InfoGlue.	Used allways except if NiceUri:s are configured with a working-url.
stagingDeliveryUrl	An url to the preview	Used allways except if NiceUri:s are

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	version of InfoGlue.	configured with a working-url.
<b>Replication / Synchronization messaging</b>		
<b>Field name</b>	<b>Typical values</b>	<b>Comment</b>
internalDeliverUrl.0	An url to the deliver context.	The index starts with 0 but can be any number of additional urls.
internalDeliverUrl.x		
<b>Publication settings</b>		
<b>Field name</b>	<b>Typical values</b>	<b>Comment</b>
publicDeliverUrl.0	An url to the public deliver context.	The index starts with 0 but can be any number of additional urls.
publicDeliverUrl.x		
<b>Cache update settings</b>		
<b>Field name</b>	<b>Typical values</b>	<b>Comment</b>
cacheUpdateAction	UpdateCache.action	Allways use this.
<b>Language settings</b>		
<b>Field name</b>	<b>Typical values</b>	<b>Comment</b>
0.toolLanguageCode	sv, en, fr	The index first starts with 0 but can have any number of additional languages.
x.toolLanguageCode		
<b>Tree settings</b>		
<b>Field name</b>	<b>Typical values</b>	<b>Comment</b>
Tree	Applet/html	Sets if the system should use the applet or the html tree.
treemode	Dynamic/static	The default is the new dynamic tree.
content.tree.sort	Id, name etc	The sort order in the tree
structure.tree.sort	Id, name etc	The sort order in the tree
<b>Misc</b>		
<b>Field name</b>	<b>Typical values</b>	<b>Comment</b>
showContentVersionFirst	true / false	Decides if to show the master content version directly upon selection of a content.
showComponentsFirst	true / false	Decides if to show the page component view directly upon selection of a sitenode.
protectContentTypes	true/false	Selects if to protect content types or not from visibility to all users.
protectCategories	true/false	Selects if to protect categories or not from visibility to all users.
wysiwygEditor	FCKEditor / HTMLArea	Selects which html-editor to use.
helpUrl		The url the help-button opens.
<b>Search settings</b>		
<b>Field name</b>	<b>Typical values</b>	<b>Comment</b>
maxRows	100	How many rows should be shown in search.
<b>Publishing settings</b>		
<b>Field name</b>	<b>Typical values</b>	<b>Comment</b>
edition.pageSize	10	How many editions should be visible in the publishing tool.
<b>Database setting</b>		
<b>Field name</b>	<b>Typical values</b>	<b>Comment</b>

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useShortTableNames	false	SET THIS TO TRUE IF YOU ARE RUNNING ORACLE OR DB2.
masterServer	cms.infoglue.org	Set this value only if you are running in a replicated mysql-environment.
slaveServer	www.infoglue.org	Set this value only if you are running in a replicated mysql-environment.
<b>Mail settings</b>		
<b>Field name</b>	<b>Typical values</b>	<b>Comment</b>
mail.smtp.host		The mail server
mail.smtp.auth		If to use authentication
mail.smtp.user		Username if using auth
mail.smtp.password		Password if using auth
systemEmailSender		The system email address, sender.
<b>Update settings</b>		
<b>Field name</b>	<b>Typical values</b>	<b>Comment</b>
up2dateUrl		Do not change
<b>Component editor settings</b>		
<b>Field name</b>	<b>Typical values</b>	<b>Comment</b>
componentRendererUrl		Do not change
componentRendererAction		Do not change
operatingMode		Do not change.
<b>Superuser settings</b>		
<b>Field name</b>	<b>Typical values</b>	<b>Comment</b>
administratorUserName		The root account name
administratorPassword		The root account password
administratorEmail		The root account email.

There are a few other settings in the file but those are not to be changed.

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### **Deliver-application is controlled in the deliver.properties**

Below "infoglueDeliver{Working/Preview/Live}{suffix}/WEB-INF/classes" there are a file called "deliver.properties". It contains all settings for the Deliver-application if not specified in the application settings in management tool and the possible setting are listed below:

Cache settings for the component editor environment		
Field name	Typical values	Comment
isPageCacheOn	true / false	Allways use true except for debugging purposes
useSelectivePageCacheUpdate	true / false	This sets so only affected pages are discarded during updates, can be set to false for debugging purposes.
session.timeout	3600	Sets the timeout on the extranet sessions.
expireCacheAutomatically	true / false	false is default.
cacheExpireInterval	1800000	Only set this value if you set expireCacheAutomatically=true – should not be used in cms really
Operating mode		
Field name	Typical values	Comment
operatingMode	0, 2 or 3	This sets 0 for working, 2 for preview and 3 for live.
Edit On Sight		
Field name	Typical values	Comment
editOnSite	True / false	
editOnSiteUrl		
WEB-SPECIFIC SETTINGS (USED TO LOCATE IMAGES ETC)		
Field name	Typical values	Comment
webServerAddress		
applicationBaseAction		
digitalAssetBaseUrl		
imagesBaseUrl		
digitalAssetPath		
enableNiceURI		
niceURIEncoding		
disableEmptyUrls		
requestArgumentDelimiter		
Encoding settings		
Field name	Typical values	Comment
URIEncoding	UTF-8	Descides in which way the urls in the tools are generated. If you have internation characters in role/user or group names this will be important.
Logging		
Field name	Typical values	Comment
logDatabaseMessages	true / false	Allways use true except for debugging purposes
logToConsole	true / false	false is default.
logToFile	true / false	false is default.
logPath		
logLevel		
statisticsLogPath		

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statisticsLogOneFilePerDay		
statisticsLogger		
Database setting		
Field name	Typical values	Comment
useShortTableNames	false	SET THIS TO TRUE IF YOU ARE RUNNING ORACLE OR DB2.
Portal setting		
Field name	Typical values	Comment
enablePortal	true/false	
portletBase		
Mail settings		
Field name	Typical values	Comment
mail.smtp.host		
mail.smtp.auth		
mail.smtp.user		
mail.smtp.password		
systemEmailSender		
Update settings		
Field name	Typical values	Comment
up2dateUrl		
Component editor settings		
Field name	Typical values	Comment
componentEditorUrl		
componentRenderUrl		
componentRenderAction		

## The InfoGlue applications

InfoGlue follows the ordinary J2EE standard for web applications in it's file system layout. See more in the servlet specification available at <http://java.sun.com/products/servlet/download.html>.

InfoGlue does not have to put files anywhere else unless you want the JSR 168 support (Portlets). Then it needs to insert some components in the shared class loading area of the runner. In tomcat's case the installer copies two files from Apache Pluto into the shared/lib folder.

## Integration between InfoGlue parts

### Cache updates and broadcasts

InfoGlue uses caching heavily. It not only can cache whole pages or parts of pages but also caches most of the model in memory. This gives a superior performance compared to querying the database all the time. The downside is that there needs to be some kind of notifications between the different applications or a common cache. While it is possible to achieve a common cache InfoGlue by default does not support it. Instead we use broadcasts from the CMS-application which is the only app that are to write data to the InfoGlue-tables and the delivery applications. So when a change has been written a simple HTTP-request goes out to all deliver instances and tells them to update what was changed.

Which instances to call are defined in the cms.properties file and if you add a new instance of infoglueDeliverXXX you must also add a reference to it in the appropriate section there. It is described in detail in the cms.properties section.

This is the first place to look if you feel your caches are not updating and reflecting the changes made. If a restart of the appserver results in the right info being shown 99% of the times the reference to the deliver instance in cms.properties are wrong or missing. Remember to test so the address you type actually reached the application. You should try it with a simple wget or similar.

A simple check is to look at the status page on **/infoglueDeliverXXX/ViewApplicationState.action** and see if there is a lot of things cached. If the information comes up on the site after you press clear all caches in that view you probably have a configuration problem.

### InfoGlue Deliver applications calling CMS

In InfoGlue one can of course want to insert content or edit content from forms etc in the live site. For example one perhaps would want to build a simple blogger-tool as a site. That is fine and InfoGlue only requires that the one doing the saves are the cms-tools as they have to be the master at all times so no business rules are broken. This is achieved by using the InfoGlue Web services API:s provided over SOAP by Apache Axis. The deliver application and the site templates/logic calls the internal cms api:s over HTTP and inserts content or whatever that way. The only important thing when using such API:s is that you have an infrastructure that allows the deliver apps to reach the cms-application over HTTP.

## Databases and maintenance

As all databases are a bit different in how they should be maintained we will not try to describe this here. What we will do instead is to discuss different areas which should be discussed or addressed when set up by a DBA.

### Setting up the database

The InfoGlue installer supports creating the database for MySQL and SQLServer while it does not for Oracle and DB2. This is because most DBAs have told us it is not a good idea. If that is so is probably dependent on how the installation of InfoGlue will operate and how much data and transactions will burden the database. So – if you feel that you want some custom setup for the InfoGlue database you should create the schema and tables first and only let the installer insert the needed data.

What DBAs have told me is to take special care when dealing with tables which will grow fast in size as table spaces etc should be dimensioned accordingly. Not being a DBA we only suggest you understand what tables will contain much data and change often and make your own decisions based on that.

### Key tables:

**cmContent** – will probably never reach over 10.000 rows and there will be no especially long data types for your regular site.

**cmContentVersion** – could reach up to 100.000 rows for a regular site and it contains a clob which represents the actual texts written and presented on the site so it could contain a fair amount of data. Perhaps up to a couple of hundred megabytes after a while.

**cmDigitalAsset** – this is the heaviest table as it's only for storing blobs. So all pdf-files, programs, images and other binary content the users wish to publish through InfoGlue will be stored there. If a site will contain a lot of high-res images or movies the size will quickly be very large. We have seen everything from 10Mb in total to over 100Gb and growing.

**cmTransactionHistory** – this table will contain a record of all writes to the database (create/update/delete). The amount of rows will be very big but the size in Kb will not. It is also possible to archive and truncate this once in a while to save space.

### Separation and scalability on the databases.

In a high profile site with a high workload there are often a need to separate the live database and the cms-database. This will relieve the live sites database from any transactions done in the working area of the tools leaving that database instance to only serve visitors to the sites. It will also speed up the internal tools as the live sites traffic will not slow down the administrative tools. It is also excellent from a maintenance point of view as you then can upgrade the cms-tools including database schema without bringing down the live sites as well if you turn off replication during that time.

We will not discuss how to set up such an separated environment with replication here but for people wanting to replicate between two MySQL servers they should look at <http://dev.mysql.com/doc/mysql/en/replication-howto.html>.

Other database vendors have similar possibilities which your DBA can tell you about.

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To achieve this you probably also have separated the servers which delivers the applications and then you only need to install the InfoGlue deliver live on the live server and point it to the replicated database instead of to the master db. You can do it yourself afterwards as well by modifying the following files jdbc-url under infoglueDeliverLive:

database.xml	This file contains the database connection settings used by the O/R-mapper Castor which InfoGlue uses for all interaction with the database.
hibernate.cfg.xml	This file contains the database connection settings used by the O/R-mapper Hibernate which InfoGlue uses for all interaction with the database concerning Workflows.
propertyset.xml	This file contains all setting used by the property-framework OS PropertySet which InfoGlue uses for some properties.

## Scaling the applications only

There are cases when you do not wish to scale on the database side by setting up replication or a clusters but instead want to share database but split the applications on different servers. This can be very effective in the following situations:

- If you for example have a low transaction public site but with extreme load and then a large number of content editors putting a lot of load on the tool server.
- It can also be of interest if you just want to separate the apps out of mainainence reasons. Perhaps you do not want to take down the public site just because you have to upgrade the tools and need to restart tomcat in order to do so.

If this seems attractive to you below are some general guidelines to how to set this up:

1. Install the cms, infoglueDeliverWorking and infoglueDeliverPreview on server1. Let the installer create the database if you don't already have it set up. When it comes to the db just remember to put it on a server which both the internal and external server will be able to reach. After that normal installation make sure the apps are working correctly and that the working and preview engines gets updated by the tools when changes occur.
2. Install the infoglueDeliverLive only on server2 using the same installer. When the database questions come point it to the database set up in step 1 or earlier. Do not tick in so it creates anything in the db.
3. Go into server1 and the cms-applications cms.properties and edit/add the property publicDeliverUrl.x (where x is 0,1,2,3 etc for as many live servers you have). The url should be a network acceptable url to the deliver application **which is reachable from the cms**. An example could look like this:  
publicDeliverUrl.0=http://server2.mycomp.com:8080/infoglueDeliverLive or similar depending on what your setup and servers look like.
4. After a restart of the cms application it will now notify the live server whenever a new publication is made either through the publishing tool or through the direct publishing feature.

If you have nice uri enabled you should also look at that section to find out what more needs to be set up for that to work on the live server. If you have trouble with the live server not getting updated by the cms look in the tips section in this document.

## **Portlet (JSR 168) Support and pitfalls**

InfoGlue supports JSR 168 by including Apache Pluto and integrating it in the InfoGlue core. Apache Pluto is very good but there are a few pitfalls most users end up investigating.

- InfoGlue Deliver and CMS must be located under the tomcat webapps directory directly if portlets are to be deployed. That is a limitation of Pluto today.
- There must never be more than one of pluto-1.0.1.jar and portlet-api-1.0.jar and they must be located in the shared lib directory under tomcat. If one of them are duplicated in one of the webapps Pluto will not work correctly and have trouble finding the portlets.
- If you want to share data between your portlet and InfoGlue you have to have a context for the portlet with the attribute crosscontext="true" as well as for the InfoGlue applications which is default. Otherwise it won't be visible for each other.

How to deploy new portlets and how to use them as components are described in the new InfoGlue User Manual.

## Nice URI

One of the most important features in InfoGlue is Nice-URI or friendly URL's. What it's all about is that instead of referencing a page with a cryptic parameter string like in /ViewPage.action?siteNodeId=22&languageId=11&contentId=-1 your users can find the page by using /Products/Boats or some other understandable URL.

### How does it work

Nice URI can work as InfoGlue tries to match all incoming Uri's to a particular site Node/page. All [URL:s](#) created are also translated to a readable URL in the reverse way. This is not that easy and there are two tricks to this:

The first trick is for InfoGlue to find out which repository the page the user tries to look at is located in (since there may be many repositories). In theory several sites can have the same page structure and therefore InfoGlue would not know where to go to find /contact/about\_us for example if both repository1 and repository2 has the same structure. This is solved by using different dns-names for all repositories. So if you have two repositories, InfoGlue will first match the name of the dns coming in from the users browser request (<http://www.infoglue.org> for example) against the dnsNames registered on each repository and pick the repository which has the first match. So if the repository "InfoGlue" should be picked it has to have [www.infoglue.org](http://www.infoglue.org) in the dnsNames-attribute while you use other names for other repositories.

The second trick is for InfoGlue to find the pages. The /products/boats path given in the browser is matched against the site structure (defined in the structure tool) for that repository. It is possible to set which attribute on each site Node to match against.

## Limitations and pitfalls

### Encoding

As urls are not supporting anything else than ASCII in them any pages with international characters in them needs to be encoded/decoded. This works if you set up InfoGlue NiceURI encoding correctly to fit your platform but the [url:s](#) are far from readable as the Uri's will contain a lot of special characters etc.

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## Setup Instructions

This part assumes that Nice URI is turned on – look at the settings section for info.

For each repository create a dnsName for each webapp. As you understand this will require you to enter quite some dns's but some can be internal only if you have your own dns or even just enter them locally in your hosts-file(windows) if you think it's too expensive. It may seem strange but you'll understand later why we need them.

As an example we would have the following dns-names for [www.infoglue.org](http://www.infoglue.org) pointing to the same machine:

The main site

- [www.infoglue.org](http://www.infoglue.org)
- [preview.infoglue.org](http://preview.infoglue.org)
- [working.infoglue.org](http://working.infoglue.org)

The marketplace site

- [market.infoglue.org](http://market.infoglue.org)
- [preview.market.infoglue.org](http://preview.market.infoglue.org)
- [working.market.infoglue.org](http://working.market.infoglue.org)

Enter the dnsNames for each repository. Completing the example we would add the following string to dnsName for the main [www.infoglue.org](http://www.infoglue.org)-repository:

```
working=working.infoglue.org,preview=preview.infoglue.org,live=www.infoglue.org
```

For the marketplace repository the dnsName-string would be:

```
working=working.market.infoglue.org,preview=preview.market.infoglue.org,live=market.infoglue.org
```

As you see the string is a comma separated list of domain names. The working=, preview= and live= - arguments are just for the tools to know what URL to use when launching the site from different places in the administrative interfaces. For example – the preview button on a site node in the [www.infoglue.org-repository](http://www.infoglue.org-repository) will check out the working=-keyword and launch [working.infoglue.org](http://working.infoglue.org) thereby letting InfoGlue find the right repository in NiceURI-mode. You can also add more entries but without any keyword before. If you for example add [www.infoglue.com](http://www.infoglue.com) last to the [www.infoglue.org](http://www.infoglue.org)-repository people coming in with that domain will come to the right site so you can have many aliases for the same site but only one "working=", "preview=" and "live=" keyword.

In InfoGlue 2.4 we have added a new feature which allows a simple way to map several repositories to a single domain. One can now add for example path=/marketplace in the end of the dnsName.

```
working=working.infoglue.org,preview=preview.infoglue.org,live=www.infoglue.org,path=/marketplace
```

Now the users calling <http://www.infoglue.org/marketplace/Components> will come to the component-page directly under the marketplace repository.

NiceURI are pretty flexible in 2.0. It allows you to influence the algorithm for creating the Uri's pretty much. By default the name used in the Uri's are the NavigationTitle for the sitenodes involved but you can easily set it to use for example the site node name(the non-localized one in structure tree) or a node properties attribute of your choice. You set this up in application settings.

## **Authentication and Authorization**

InfoGlue has a very modular authentication and authorization system. The first thing to understand is the difference between Authentication which is about identifying who a user are during login etc and Authorization which is about deciding what the authenticated user has right to see/do in the system. When it comes to the latter InfoGlue supports setting access rights on user level as always it's recommended using roles and groups for access control to avoid cumbersome maintenance.

InfoGlue supports custom modules for both Authentication and Authorization. By default InfoGlue is installed with the module that uses the infoglue-database for both authentication and authorization. That means that when a user logs on his/her login info is compared to the cmSystemUser table and associated tables by the default Authentication Module and then access rights are controlled by the InfoGlue Authorization Module against cmSystemUser, cmRole and cmGroup tables. This is all fine in some situations but sometimes the organization using InfoGlue would want to reuse the users/roles/groups available in their global user directory. Many organisations also has some kind of Single Sign On system they want to use. This is why you in InfoGlue can set up references to other Authentication/Authorization modules and even write your own if the ones shipped are not enough. These moduls are included:

## **InfoGlue Basic Authentication / Authorization**

InfoGlue itself can act as the source of authentication and authorization. This is the default setup.

## **SSO through CAS**

Apart from the InfoGlue default authentication module InfoGlue ships with a single sign on module written to support CAS(Central Authentication Service). CAS is a open source authentication system developed by the university world. Those of you who have worked with CAS will recognize the validate-service etc under application settings and hopefully know how to configure it. Later a more detailed example will be posted.

## **J2EE Authentication**

If InfoGlue runs inside a J2EE container InfoGlue can be told to operate with J2EE-security and accept the principal coming in from the container.

## **JDBC Authorization**

An module which can be configured against any JDBC-datasource. Queries can be defined in extra security settings.

## **LDAP**

Both Authentication and Authorization can be directed to use the included LDAP-modules. They were written for integration with Active Directory but should work with many more LDAP-servers. These modules let you use users/groups and roles in InfoGlue which are fetched directly from your LDAP-directory thereby reusing that information and avoiding redundant information. The lookups are made online so there is no periodic export into InfoGlue or anything like that. In InfoGlue there is no difference between users/roles/groups coming from InfoGlue's own user-db or from an external resource.

## **Several combinations**

There are also combinations of these modules.

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## List of modules

**Here is a full list of authentication modules available:**

- org.infoglue.cms.security,CASBasicAuthenticationModule
- org.infoglue.cms.security,CombinedJNDIBasicAuthenticationModule
- org.infoglue.cms.security,InfoGlueBasicAuthenticationModule (default)
- org.infoglue.cms.security,InfoGlueExtranetAuthenticationModule
- org.infoglue.cms.security,InfoGlueJ2EEAuthenticationModule
- org.infoglue.cms.security,JNDIBasicAuthenticationModule

**Here is a full list of authorization modules available:**

- org.infoglue.cms.security,CombinedJDBCBasicAuthorizationModule
- org.infoglue.cms.security,CombinedJNDIBasicAuthorizationModule
- org.infoglue.cms.security,InfoGlueBasicAuthorizationModule (default)
- org.infoglue.cms.security,InfoGlueJDBCAuthorizationModule
- org.infoglue.cms.security,JNDIBasicAuthorizationModule

## How to set up LDAP

When deciding to use LDAP as the resource for authorization and/or authentication there are a lot of configuration to be considered. We could have decided upon a directory structure the users have to adjust to but instead we choose to make it configurable instead so InfoGlue can adjust to the users existing setup. So InfoGlue now asks a couple of different questions to the LDAP to get users, roles and groups or when authenticating to log a user on. Below is an example configuration which enables JNDI as both auth and authorization for CMS (the same exists for deliver further down that screen). The red area is where you paste your ldap config. It is described in detail later on in this chapter.

The settings are entered in management tool under application settings:

The screenshot displays the 'InfoGlue Content Management Platform' management interface. On the left is a navigation tree under 'System management' with folders like 'Repositories', 'SystemUsers', 'Roles', 'Groups', 'Languages', 'InterceptionPoints', 'Interceptors', 'ServiceDefinitions', 'AvailableServiceBindings', 'SiteNodeTypeDefinitions', 'Categories', 'ContentTypeDefinitions', 'Up2Date', 'Validation', 'Workflows', 'Portlets', 'Redirects', 'Application settings', 'Message center', and 'Diagnostics and status'. The main area is titled 'ServerNode properties' and 'Security settings CMS'. It contains several configuration fields with trash icons for deletion:

- Login URL: Login.action
- Logout URL: Login!logout.action
- Invalid login URL: Login!invalidLogin.action
- Success login base URL: inherit
- Authenticator class: org.infoglue.cms.security.JNDIBasicAuthorizationModule
- Authorizer class: org.infoglue.cms.security.JNDIBasicAuthorizationModule
- Server name: inherit
- Authentication constraint: cmsUser

An 'Extra security parameters' section is highlighted with a red box, containing a text area with the following content:

```
#####  
# Roles settings section  
#  
# This part is used by InfoGlue JNDI module to get information about roles which  
# are to  
# be used in InfoGlue. The most striking place is to look under roles in management  
# tool.  
#####  
#####  
# Role base - this states which part of the directory structure we want to search for  
# roles  
#####  
roleBase=dc=infoglue,dc=org
```

Below this section are more fields:

- CAS validate URL: https://www.infoglue.org:8433/cas/serviceValidate
- CAS service URL: https://www.infoglue.org/infoglueCMS24/ViewCMSTool.
- CAS logout URL: https://www.infoglue.org:8433/cas/logout

The footer of the interface shows 'InfoGlue CMS (EN) Version build: 2.4 Final (2006-11-13)' and the name 'Klar'.

## Detailed description of JNDI-configs

```
#####
# Properties for the JNDI SETUP
#####

#####
# Authentication method - can be "none" or "simple".
#
# "simple" binds a user
# "none" works only if anonymous bind is allowed.
#####
authenticationMethod=simple

#####
# LDAP-version (2 or 3)
#####
ldapVersion=3

#####
# Enable if you want to run ldaps
#####
#socketFactory=org.infoglue.cms.security.DummySSLSocketFactory

#####
# The ldap url, user name and password to bind with (can be ldaps as well).
#####
connectionURL=ldap://ldap.infoglue.org:389
connectionName=InfoGlue LDAP User
connectionPassword=password

#####
# Roles settings section
#
# This part is used by InfoGlue JNDI module to get information about roles which are to
# be used in InfoGlue. The most striking place is to look under roles in management tool.
#####

#####
# Role base - this states which part of the directory structure we want to search for roles
#####
roleBase=dc=infoglue,dc=org

#####
# Role search attribute - which conditions should we use to find a specific user.
# Can be any ordinary query.
# Default is: roleSearch=(cn=*)
# More advanced example: #roleSearch=(&(objectclass=ldapsubentry)(cn=InfoGlue*))
#####
#roleSearch=(cn=*)

#####
# Roles search - find all roles InfoGlue should be aware of when assigning rights.
#####
rolesFilter=(cn=*)

#####
# How long (in seconds) should the roles be cached to avoid to much queries against the LDAP
#####
roleCacheTimeout=10

#####
# Should the search be recursive in the tree or on the base dn only.
# ONELEVEL_SCOPE, SUBTREE_SCOPE and OBJECT_SCOPE possible
#####
roleSearchScope=SUBTREE_SCOPE

#####
# Filter roles on what search criteria.
#####
roleFilter=*

#####
# What attributes should be returned for each role - commaseperated list
```

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```
#####
rolesAttributesFilter=cn,uniquemember

#####
# Set which attribute should be used to fetch the roleName
#####
roleNameAttribute=cn

#####
# The attribute containing references to the users who has this role
#####
usersAttributesFilter=uniquemember

#####
# Do you want to remove the role base dn from the role name? Easier on the eye but less
# correct.
#####
removeRoleBaseDN=false

#####
# Groups settings section
#
# This part is used by InfoGlue JNDI module to get information about groups which are to
# be used in InfoGlue. The most striking place is to look under groups in management tool.
#####

#####
# Group base - this states which part of the directory structure we want to search for
groups
#####
groupBase=ou=groups,dc=infoglue,dc=com

#####
# Group search attribute - which conditions should we use to find a specific group.
# Can be any ordinary query.
# Default is: groupSearch=(cn=*)
# More advanced example: groupSearch=(&(objectclass=ldapsubentry)(cn=InfoGlue*))
#####
groupSearch=(cn=*)

#####
# Filters what groups are read
#####
groupsFilter=(cn=*)

#####
# How long (in seconds) should the groups be cached to avoid to much queries against the
LDAP
#####
groupCacheTimeout=10

#####
# Should the search be recursive in the tree or on the base dn only.
# ONELEVEL_SCOPE, SUBTREE_SCOPE and OBJECT_SCOPE possible
#####
groupSearchScope=SUBTREE_SCOPE

#####
# Filter roles on what search criteria.
#####
groupFilter=*

#####
# What attributes should be returned for each group - commaseperated list
#####
groupsAttributesFilter=cn,uniquemember

#####
# Set which attribute in LDAP should be used for the groupName
#####
groupNameAttribute=cn

#####
```

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```
# The attribute containing references to the users who has this groups
#####
usersAttributesFilter=uniquemember

#####
# Do you want to remove the group base dn from the group name? Easier on the eye but less
# correct.
#####
removeGroupBasedDN=false

#####
# Users settings section
#
# This part is used by InfoGlue JNDI module to get information about users which are to
# be used in InfoGlue. The most striking place is to look under users in management tool.
#####

#####
# User base - this states which part of the directory structure we want to search for users
#####
userBase=ou=People,dc=infoglue,dc=com

#####
# Anonymous user base - this states which part of the directory structure we want to search
# for the anonymous user which are used when no user is logged on (on a ordinary website).
#####
#anonymousUserBase=cn=IGUsers,cn=specialusers,dc=infoglue,dc=com

#####
# User search attribute - which conditions should we use to find a specific user.
# Can be any ordinary query. The user name will be inserted where 1 is.
# Default is: userSearch=(uid={1})
#####
userSearch=(uid={1})

#####
# How long (in seconds) should the groups be cached to avoid to much queries against the
LDAP
#####
userCacheTimeout=10

#####
# Should the search be recursive in the tree or on the base dn only.
# ONELEVEL_SCOPE, SUBTREE_SCOPE and OBJECT_SCOPE possible
#####
userSearchScope=SUBTREE_SCOPE

#####
# Group search attribute - which conditions should we use to find a specific group.
# Can be any ordinary query.
# Default is: userListSearch=(cn=*)
#####
userListSearch=(cn=*)

#####
# What attributes should be returned for each user - commaseperated list
#####
userAttributesFilter=cn,givenName,sn,mail

#####
# Set which attribute in LDAP should be used for the userName
#####
userNameAttributeFilter=cn

#####
# Set which attribute in LDAP should be used for the users first name
#####
userFirstNameAttributeFilter=givenName

#####
# Set which attribute in LDAP should be used for the users last name
```

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```
#####
userLastNameAttributeFilter=sn

#####
# Set which attribute in LDAP should be used for the users mail
#####
userMailAttributeFilter=mail

#####
# The attribute containing references to the roles this user is part of
#####
memberOfAttributeFilter=memberOf

#####
# The ??????????????????
#####
usersAttributeFilter=cn

#####
# Do you want to remove the user base dn from the user name? Easier on the eye but less
# correct.
#####
removeUserBaseDN=false

#####
# This part is for if you use LDAP as authentication as well. You state here what bind user
# name should be used. infoglue.user is replaced with the user name the user states at
# login.
#####
userNamePattern=CN=infoglue.user,ou=People,dc=infoglue,dc=org

#####
# This part is for if you use LDAP as authentication as well. You state here what bind the
# anonymous user name should be used. infoglue.user is replaced with the user name the user
# states at login.
#####
#anonymousUserNamePattern=CN=infoglue.user,ou=SpecialPeople,dc=infoglue,dc=org
```

## Encoding setting

Encoding of characters are one of the most important aspects of a global content management system. InfoGlue supports Unicode and suggests that UTF-8 is used as the default charset.

It's important to understand how InfoGlue works when receiving data from forms etc both in deliver mode and in the tools. It is also important to understand the issues caused by Apache Tomcat and some other application servers and browsers. The fact is that many appservers and browsers do not behave correctly when sending/receiving data. The browsers sometimes does not send which encoding the data is coming in and Apache Tomcat for example therefore does not decode it correctly. This is a known issue and the solution is to use a servlet filter which sets the encoding in the request object before InfoGlue gets it.

We use this technique both in the cms and deliver applications and the filter (SetCharacterEncoding) is defined in the web.xml. If you're having problems with the wrong encoding coming in you may want to try to set a different encoding in that file than the default UTF-8.

Outgoing encoding is totally managed in the management tool under languages. There you set what charset to use when presenting data to the users browser. We suggest using utf-8 as much as possible.

### **NiceURI effects:**

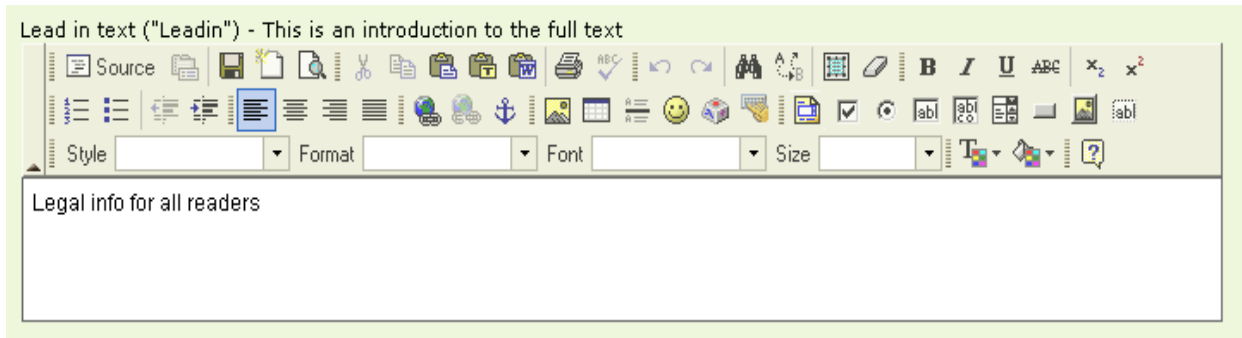
If you have turned on NiceURI – you may want to change the filter SetCharacterEncoding to use a different match in web.xml as there are no longer any action in the url. Set it to “/\*” instead of “.action”. Otherwise get/posts to the deliver engine may not turn up rightly encoded.

```
<filter-mapping>
  <filter-name>Set Character Encoding</filter-name>
  <url-pattern>/*</url-pattern>
</filter-mapping>
```

## Configuring the WYSIWYG editor

This information also resides in the User Manual but since it's a pretty central thing in a CMS we thought we add it here as well.

As stated before InfoGlue comes with FCKEditor as the default WYSIWYG-editor. It is a very nice and customizable editor. Default in InfoGlue it looks like this with all buttons enabled:



The common thing is of course to configure the palette and some behavior to better fit your organization and your users. This is mostly done in a JavaScript-based configuration file. However – in InfoGlue we decided that it is important to be able to set the configuration not only for the system but also give organizations the possibility to give different repositories, users, groups or roles different setups so more advanced users are allowed more than new users etc.

So here is the possible places to put the configurations:

1. Under each repository's properties. As shown in the repository section of the management tool there was two fields available for the WYSIWYG there.
2. For SystemUser, Roles and Group you can create two property-attributes called WYSIWYGConfig and StylesXML and add the configuration there.

If the properties are available on the system user that information is used, otherwise the editor looks in the roles / groups the user is part of and uses the information there if it exists. If not it uses properties put on the repository in question and if not even defined there it uses the default setup.

## Example configuration

### WYSIWYGConfig

```
FCKConfig.CustomConfigurationsPath = '' ;

//Here you can define a CSS you want the editor to use, usually the same URL as the site.
//FCKConfig.EditorAreaCSS = '$request.contextPath/ViewPage.action?siteNodeId=100130' ;
FCKConfig.EditorAreaCSS = '/infoglueDeliverWorking/ViewPage.action?siteNodeId=100130';

FCKConfig.BaseHref = '' ;
FCKConfig.FullPage = false ;
FCKConfig.Debug = false ;
FCKConfig.SkinPath = FCKConfig.BasePath + 'skins/default/' ;
FCKConfig.PluginsPath = FCKConfig.BasePath + 'plugins/' ;
FCKConfig.DefaultLanguage = 'en' ;
FCKConfig.ContentLangDirection = 'ltr' ;
FCKConfig.EnableXHTML = true ;
FCKConfig.EnableSourceXHTML = true ;
FCKConfig.FillEmptyBlocks = true ;
FCKConfig.FormatSource = true ;
FCKConfig.FormatOutput = true ;
FCKConfig.FormatIndentator = ' ' ;
FCKConfig.GeckoUseSPAN = true ;
FCKConfig.StartupFocus = false ;
FCKConfig.ForcePasteAsPlainText = true ;
FCKConfig.ForceSimpleAmpersand = false ;
FCKConfig.TabSpaces = 0 ;
FCKConfig.ShowBorders = true ;
FCKConfig.UseBRonCarriageReturn = false ;
FCKConfig.ToolbarStartExpanded = true ;
FCKConfig.ToolbarCanCollapse = true ;

//This is a InfoGlue addition which let's you turn off styling in the dropboxes
styles/formats
FCKConfig.StyleFontFormats = 'false';
FCKConfig.StyleStyles = 'false';
FCKConfig.AllowImageSizes = 'false';

//This part in for InfoGlue 2.1 - not in 2.0 - let's you define available classes on img-
tag.
FCKConfig.ImageClasses =
'img_left_portrait,img_left_letter,img_right_letter,img_right_portrait,img_scaled';
FCKConfig.ImageClassesNames = 'St&aring;ende v&auml;nster,Liggande v&auml;nster,Liggande
h&ouml;ger,St&aring;ende h&ouml;ger,Fullbredd';

FCKConfig.MaxUndoLevels = 15 ;

//This is where you define the toolbar. Look at the FCKEditor-site for the full list
FCKConfig.ToolbarSets["Default"] = [

['Cut','Copy','Paste','PasteText','Print','Undo','Redo','Find','Replace','RemoveFormat'],
    ['Bold','Italic'],
    ['OrderedList','UnorderedList'],
    ['Link','Unlink','Anchor'],
    ['Image','Table','Rule','SpecialChar','Source'],
    ['Style','FontFormat']
] ;

FCKConfig.ContextMenu =
['Generic','Link','Anchor','Image','Select','Textarea','Checkbox','Radio','TextField','Hidde
nField','ImageButton','Button','BulletedList','NumberedList','TableCell','Table','Form'] ;

FCKConfig.FontFormats = 'h2;h4;h3;h5;p' ;

FCKConfig.StylesXmlPath =
'$request.contextPath/WYSIWYGProperties!viewStylesXML.action?repositoryId=$!request.getParam
eter("repositoryId")&contentId=$!request.getParameter("contentId")&languageId=$!request.getP
arameter("languageId")' ;
```

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```
FCKConfig.SpellChecker = 'ieSpell' ; // 'ieSpell' |
'SpellerPages'
FCKConfig.IeSpellDownloadUrl =
'http://www.iespell.com/rel/ieSpellSetup211325.exe' ;
FCKConfig.LinkBrowser = true ;
FCKConfig.LinkBrowserURL =
'$request.contextPath/ViewLinkDialog!viewLinkDialogForFCKEditor.action?repositoryId=$!request.getParameter("repositoryId")&contentId=$!request.getParameter("contentId")&languageId=$!request.getParameter("languageId")' ;
FCKConfig.LinkBrowserWindowWidth = "770" ;
FCKConfig.LinkBrowserWindowHeight = "660" ;
FCKConfig.ImageBrowser = true ;
FCKConfig.ImageBrowserURL =
'$request.contextPath/ViewContentVersion!viewAssetsDialogForFCKEditor.action?repositoryId=$!request.getParameter("repositoryId")&contentId=$!request.getParameter("contentId")&languageId=$!request.getParameter("languageId")';
FCKConfig.ImageBrowserWindowWidth = "750" ;
FCKConfig.ImageBrowserWindowHeight = "600" ;
```

### StylesXML

```
<?xml version="1.0" encoding="utf-8" ?>
<Styles>
  <Style name="Blockcitat" element="Blockquote"/>
  <Style name="Bild stående vänster" element="img">
    <Attribute name="class" value="img_left_portrait" />
  </Style>
  <Style name="Bild liggande vänster" element="img">
    <Attribute name="class" value="img_left_letter" />
  </Style>
  <Style name="Bild liggande höger" element="img">
    <Attribute name="class" value="img_right_letter" />
  </Style>
  <Style name="Bild stående höger" element="img">
    <Attribute name="class" value="img_right_portrait" />
  </Style>
  <Style name="Fullbredd" element="img">
    <Attribute name="class" value="img_scaled" />
  </Style>
</Styles>
```

As stated these are just examples of configurations we have used. Read more on FCKEditor homepage about configuration options.

## Performance tips

This is a hard area to give advice on but in general there are a couple of ground rules.

- Design your website so that dynamic pages are kept to a minimum. They are of course needed and we don't advise against them but don't get used to always turning page cache off as it severely reduces scalability. If you can get by with creating a separate page with your dynamic logic instead of putting everything in one super dynamic component which sends around a lot of parameters that is often justifiable for a high load site.
- Never use recursive macros in Velocity. Under load macros in Velocity does not seem to be thread safe.
- Make sure what component takes the most time and analyse what in it is expensive. Perhaps it's a badly written component or perhaps we could optimize InfoGlue. Let us know.
- Make sure to use the new component cache available from InfoGlue 2.0 and forward. It lets you cache parts of a page and leave other parts dynamic.
- Check the database so the indexes in InfoGlue are ok. If one index is broken it can affect performance big. Also – below are some new indexes for MySQL we will include in 2.1.

```
CREATE INDEX OWNER ON OS_CURRENTSTEP (OWNER);
CREATE INDEX CALLER ON OS_CURRENTSTEP (CALLER);
CREATE INDEX OWNER ON OS_HISTORystEP (OWNER);
CREATE INDEX CALLER ON OS_HISTORystEP (CALLER);

CREATE INDEX referencingEntityName ON cmRegistry (referencingEntityName);
CREATE INDEX referencingEntityId ON cmRegistry (referencingEntityId);
CREATE INDEX entityName ON cmRegistry (entityName);
CREATE INDEX entityId ON cmRegistry (entityId);
CREATE INDEX referencingEntityComplName ON cmRegistry (referencingEntityComplName);
CREATE INDEX referencingEntityComplId ON cmRegistry (referencingEntityComplId);
CREATE INDEX categoryContVersionId ON cmContentCategory (contentVersionId);
CREATE INDEX contVerDigAssetDigAssId ON
cmContentVersionDigitalAsset (digitalAssetId);
CREATE INDEX contVerDigAssetContVerId ON
cmContentVersionDigitalAsset (contentVersionId);
```

- Set up a load balanced set of live servers or cms-servers. Also make sure you separate the live database and the cms-database.

## Errors and how to find them

InfoGlue has some tricks for looking for errors. Error tracking takes some experience but here is a few basic tips:

- First – if you find the system to behave strange – run the validation service. It's located under Management tool → System tools → Validation tool. Run that and you should not get any errors.
- If you wish to see how the delivery engine is doing check the Diagnostics and status page under Management tool. There you have links to all `ViewApplicationState.action` which is extremely useful and even allows you to turn on debugging during runtime.
- The first thing to know is the root account. In the `cms.properties` file there is a entry described above which let you log in without authenticating against the database or normal repository. This will let you do anything in the tools and if you are looking for errors in user / role handling that is a huge help.
- If you log in and the tools work you can also use the Validation service in the management tool menu. It verifies that database access is ok, that digital assets works and that the file system is configured so InfoGlue can write where it needs to.
- If you still get errors or even get errors before this the log-files are the place to look. InfoGlue uses `log4j` and in `log4j.xml` you can set the debug levels in appropriate ways to get whatever information you want logged. Normally everything is set to `WARN` so only important things end up in the logs.

Normally all errors are found in the tomcat-logs either for Catalina itself or for the particular webapp. That error message found there together with it's stack trace is often the only thing one needs to find the error if one knows how InfoGlue works.

- If you get problems with memory exception in the tomcat logs look at the `ViewApplicationState.action` and the linked subpage in it. It will report which heap is full. You can also get a list of all Threads being executed at the moment. Often shows what code parts are locked or takes long.

## References

1. InfoGlue User Manual and Developer Manual for 2.4 available at [www.infoglue.org](http://www.infoglue.org).
2. MySQL reference website at [www.mysql.com](http://www.mysql.com)
3. Information about FCKEditor – the WYSIWYG-editor used in InfoGlue – can be found at [www.fckeditor.net](http://www.fckeditor.net)

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