



Operating Guide

Installation and Administration

CEMS 6.0.0





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This *Operating Guide* is the reference material concerning Convertigo installation and administration.

It contains several chapters:

- *Introducing the Operating Guide* - briefly describes the Operating Guide.
- *Installing Convertigo Studio* - describes the installation procedures of Convertigo Studio in several qualified environments.
- *Installing Convertigo Server* - describes the installation procedures of Convertigo Server in several qualified environments.
- *Using Convertigo Administration Console* - describes how to use the Convertigo Server Administration Console.

After the last chapter, you can find *Appendixes* in relation with operating information.

2 Installing Convertigo Studio

This chapter describes how to install Convertigo Studio in the qualified environment and operating system.

- [General purpose and packages](#)
- [Convertigo Studio installation on Windows](#)

2.1 General purpose and packages

Convertigo Studio can be installed on Windows operating system. Officially supported versions are:

- Windows XPService Pack 2 (32 bits),
- Windows Seven (32 and 64 bits).

In standard, Convertigo Studio installation is packaged as a `.exe` file installing the Eclipse-based Studio and an embedded Convertigo Server including an Apache Tomcat application server.

Convertigo installation file is named as follows:

`convertigo-studio-X.Y.Z-v 12345-win32-install.exe`

2.2 Convertigo Studio installation on Windows

- Prerequisites
- Installation procedure

PREREQUISITES

MACHINE PREREQUISITES

The following table describes minimum machine prerequisites for installing Convertigo Studio:

Table 2 - 1: Machine prerequisites

	Windows
Version	<ul style="list-style-type: none">• Windows XP Service Pack 2 (32 bits)• Windows Seven (32 or 64 bits)
CPU	Dual Core
RAM	2 Gb
Disk space	1 Gb

INSTALLATION REQUIREMENTS

- The C-EMS installer file: `convertigo-studio-X.Y.Z-v12345-win32-install.exe`
- You must have administration privileges to run this installer.

INSTALLATION PROCEDURE

The following procedure explains step by step how to install Convertigo Studio on Windows.

To install Convertigo Studio on Windows

- 1 Double click on the installation file `convertigo-studio-X.Y.Z-v12345-win32-install.exe`

A **User Account Control** popup is displayed (on Windows Seven):

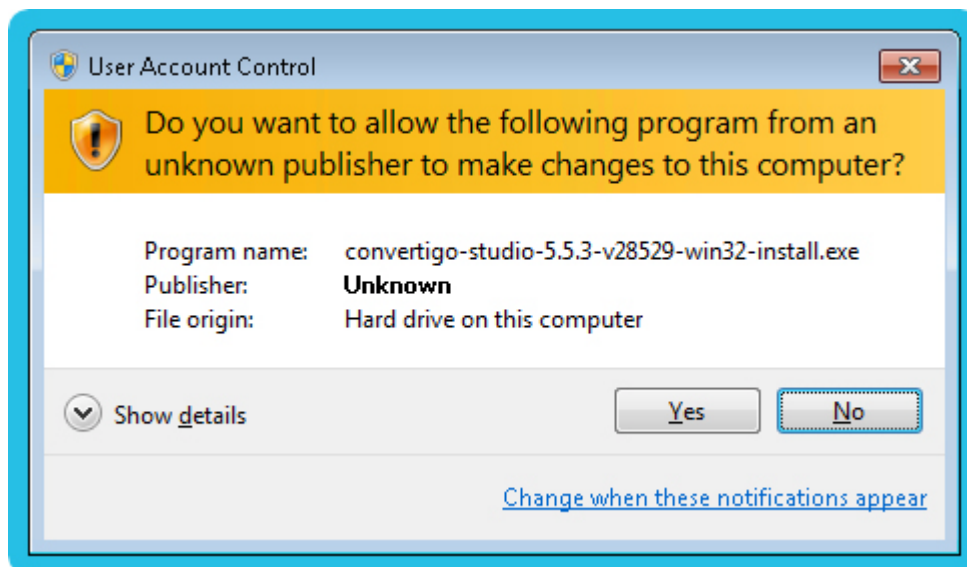


Figure 2 - 1: User Account Control popup after launching the installation file

- 2 Accept the warning by pressing the **Yes** button.

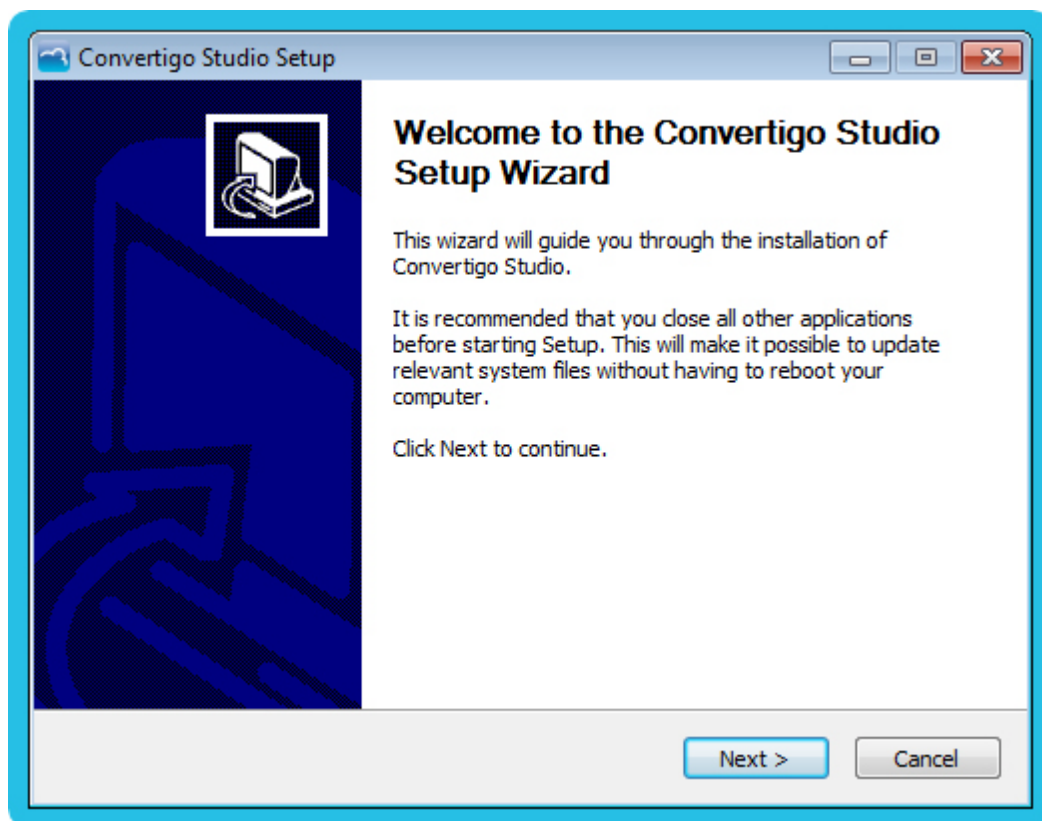


Figure 2 - 2: Installing Convertigo Studio

- 3 Click on **Next**.

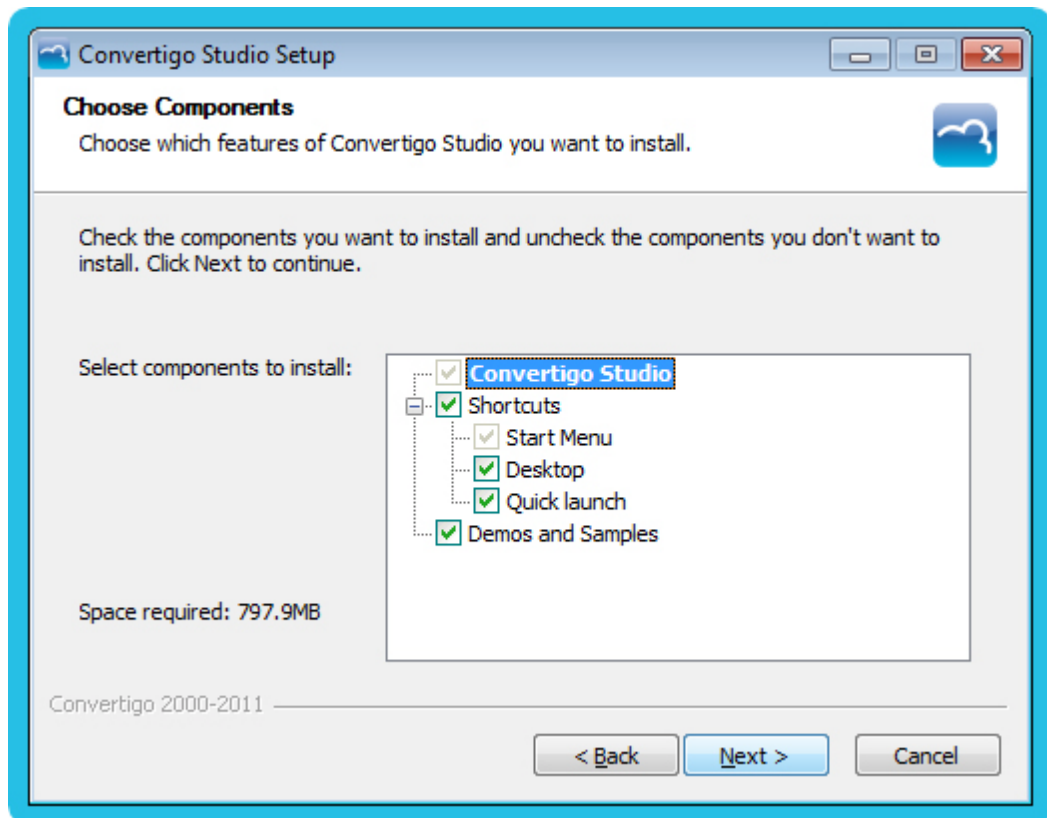


Figure 2 - 3: Selecting components

- 4 On this screen, uncheck the shortcuts you won't use and, depending on your Studio using purpose, uncheck the *Demos and Samples* checkbox. Demo and sample projects are easy to open afterwards directly in the Studio.
- 5 Then, click on **Next**.

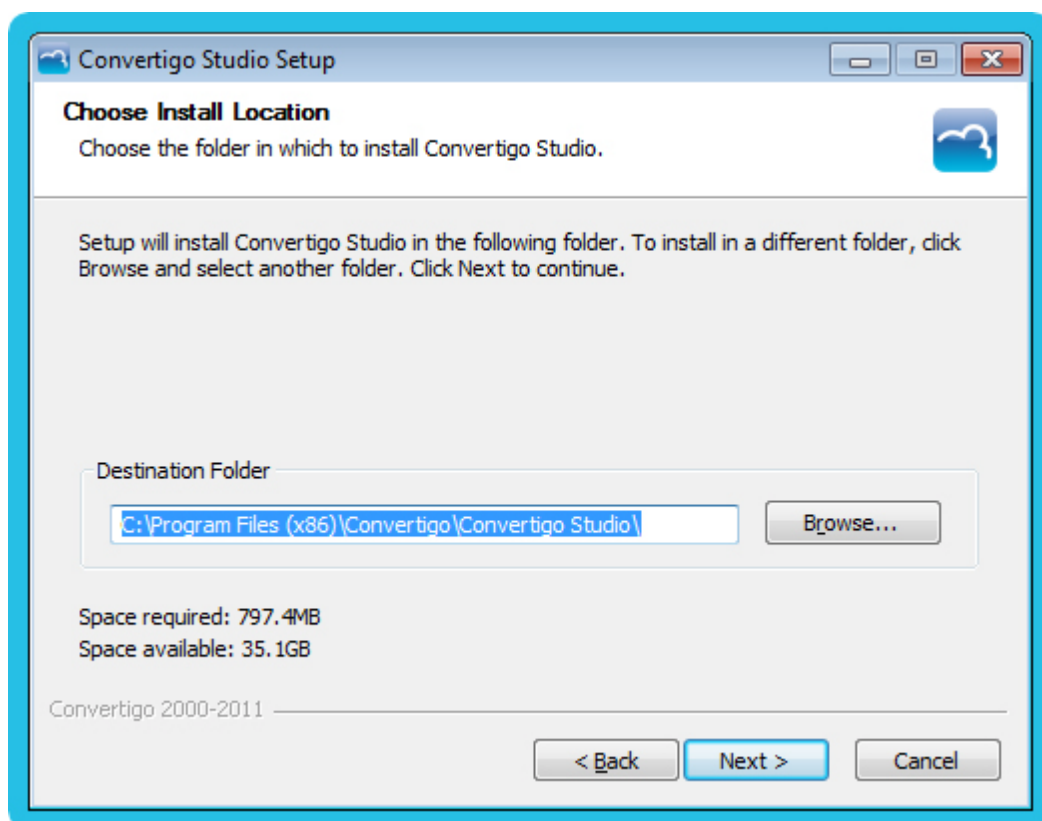


Figure 2 - 4: Setting destination folder

- 6 Change destination folder if the default one is not correct for your installation, and click on **Next**.

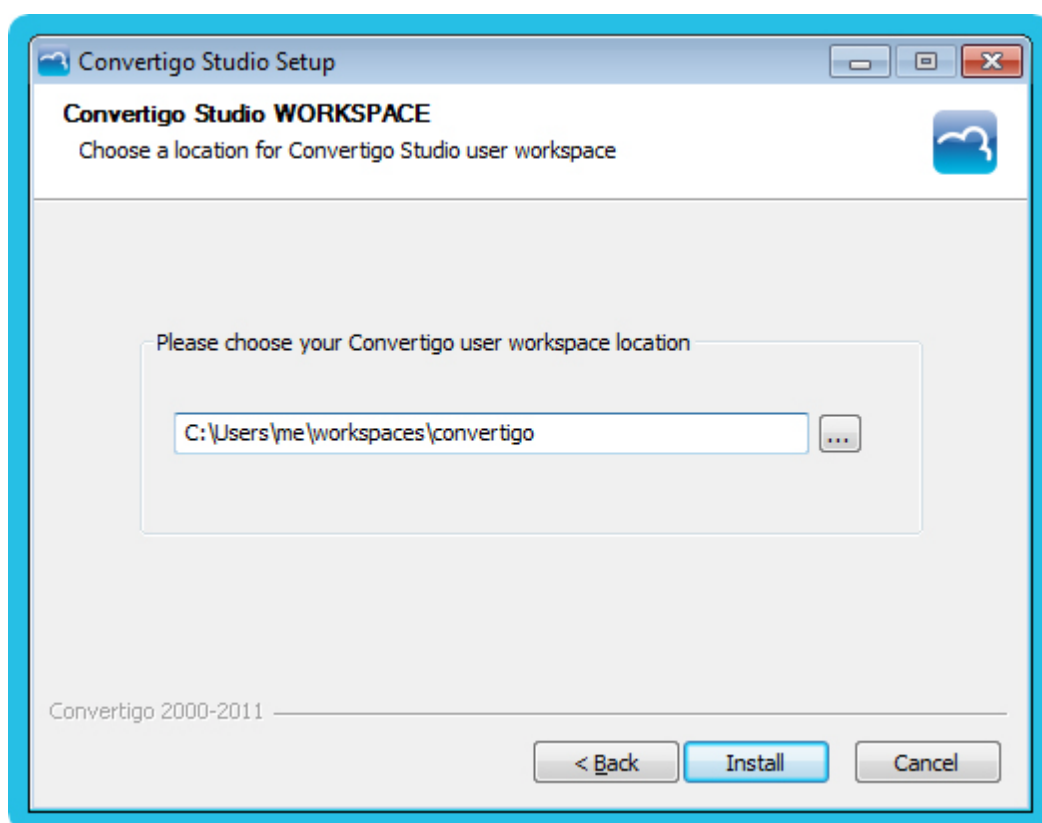


Figure 2 - 5: Convertigo Studio Workspace location

- 7 In this screen, indicate the location of your Convertigo user workspace.



For more information on Convertigo user workspace, see Appendix "Convertigo workspace".

- 8 Then, click on the **Install** button. The installation starts, you should wait for a few minutes:

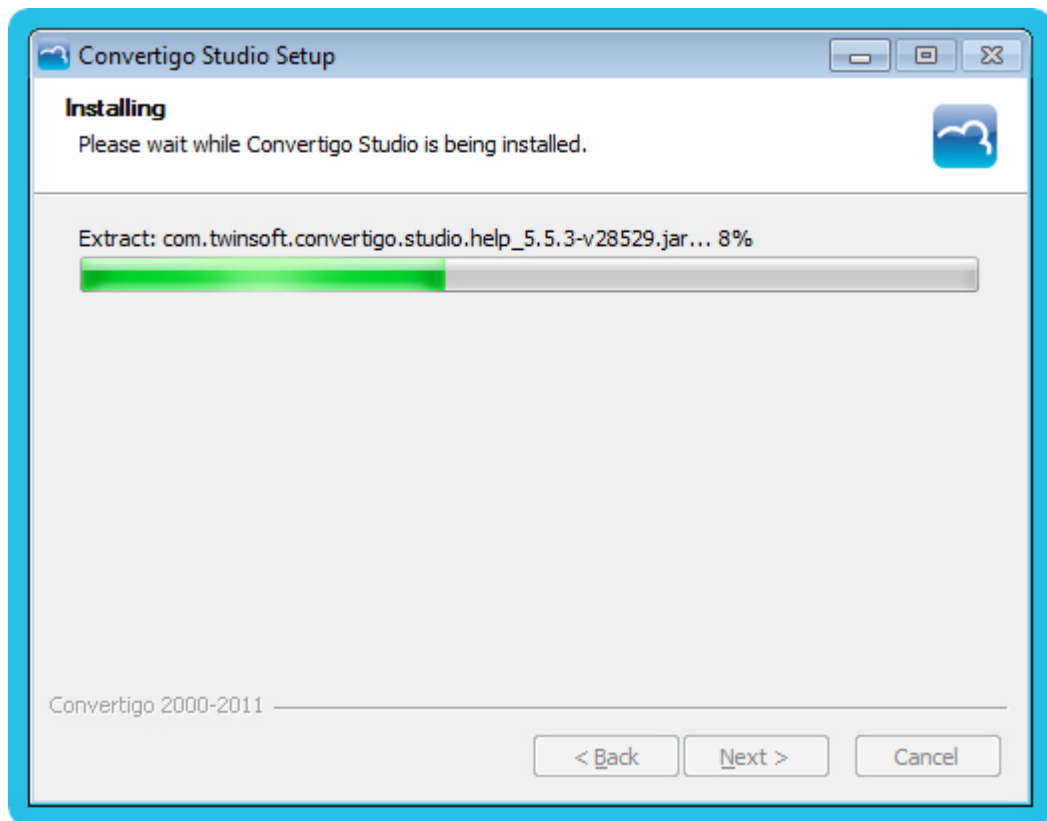


Figure 2 - 6: Convertigo Studio installation process

This screen indicates the end of installation:

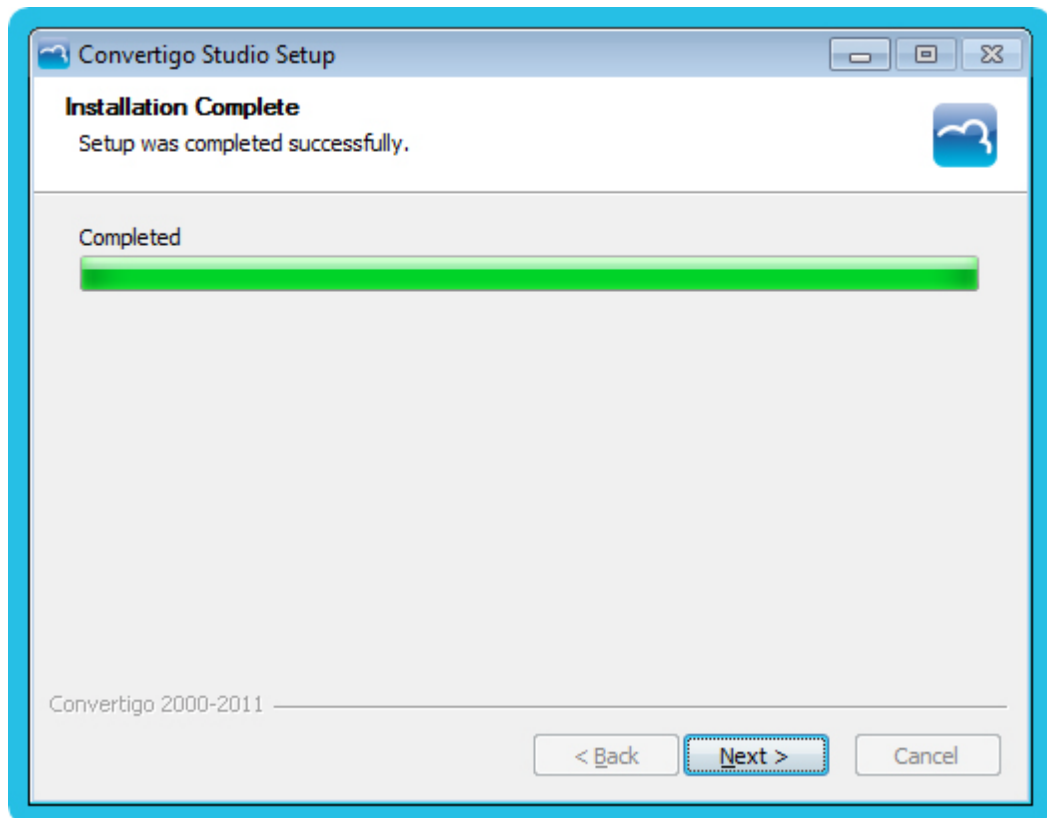


Figure 2 - 7: Installation complete

- 9 Click on **Next**.

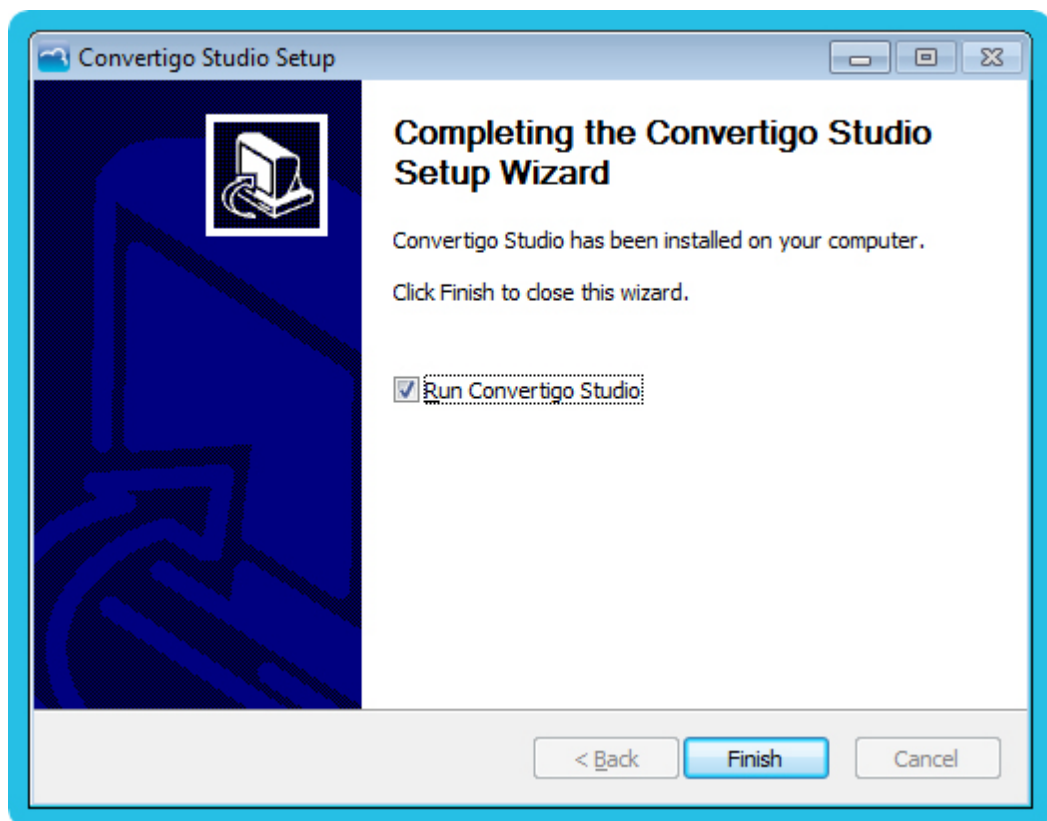


Figure 2 - 8: End of the installation

- 10 If you do not want to run the Convertigo Studio right now, uncheck the **Run Convertigo Studio** checkbox. Here, we leave it checked.
- 11 Then, click on **Finish** to close the wizard.

The Convertigo Studio opens, with the *Trial registration certificate* popup window opened:

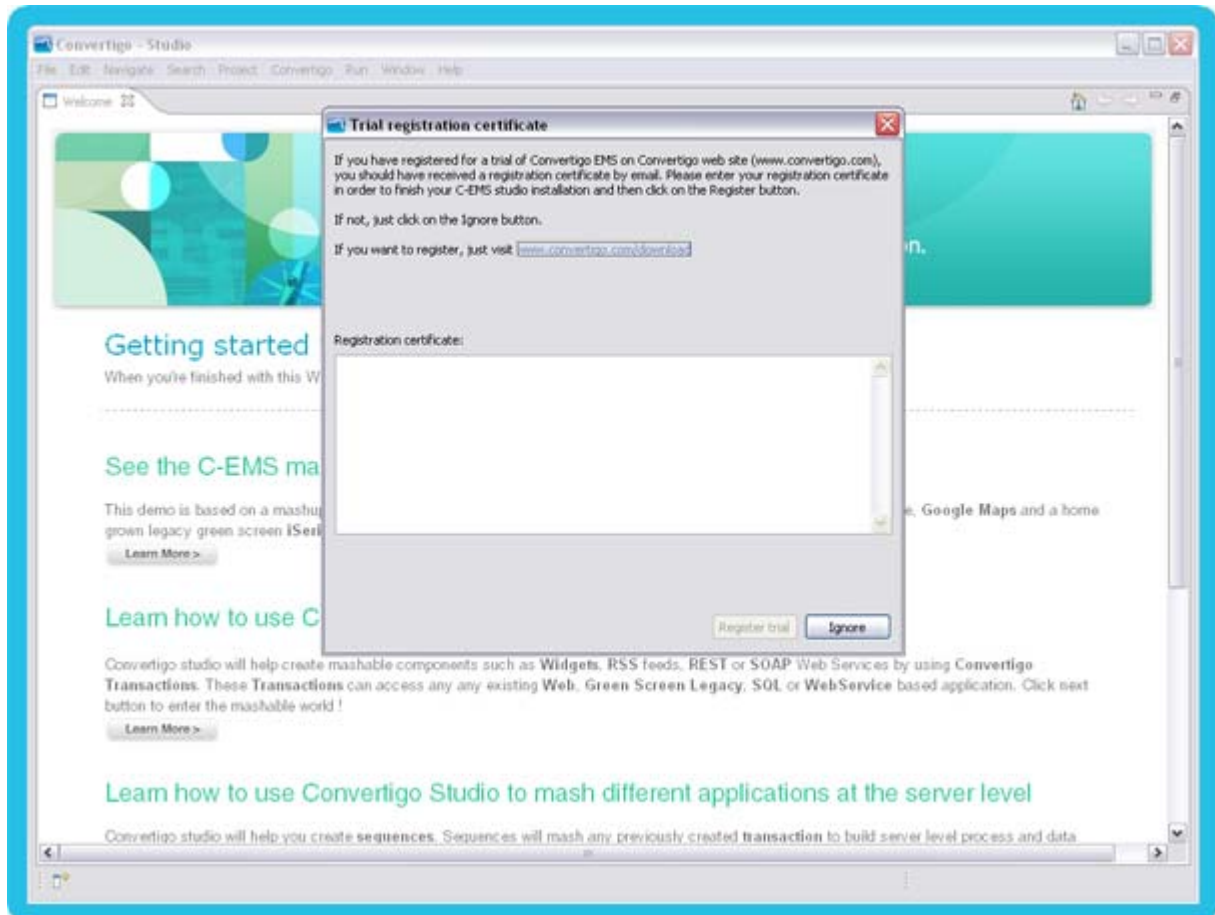


Figure 2 - 9: First Studio start - Trial registration certificate popup

CASE OF A CONVERTIGO STUDIO TESTING USER

While downloading the Convertigo Studio installation file, you registered and, thanks to that, you were granted a free access to trial Convertigo Shared Cloud. You received an email of this form, containing a registration certificate:

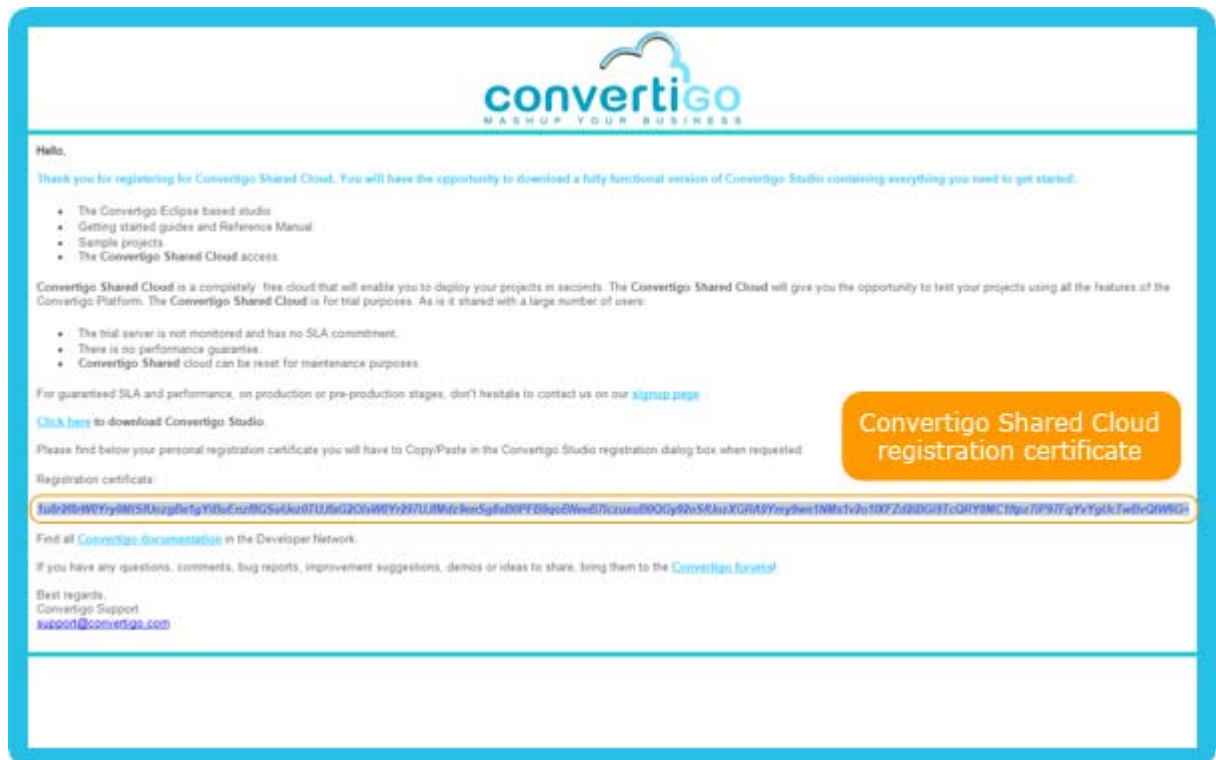


Figure 2 - 10: Email with Convertigo Shared Cloud registration certificate

- 12 In the *Trial registration certificate* popup window, enter the registration certificate you received by email:

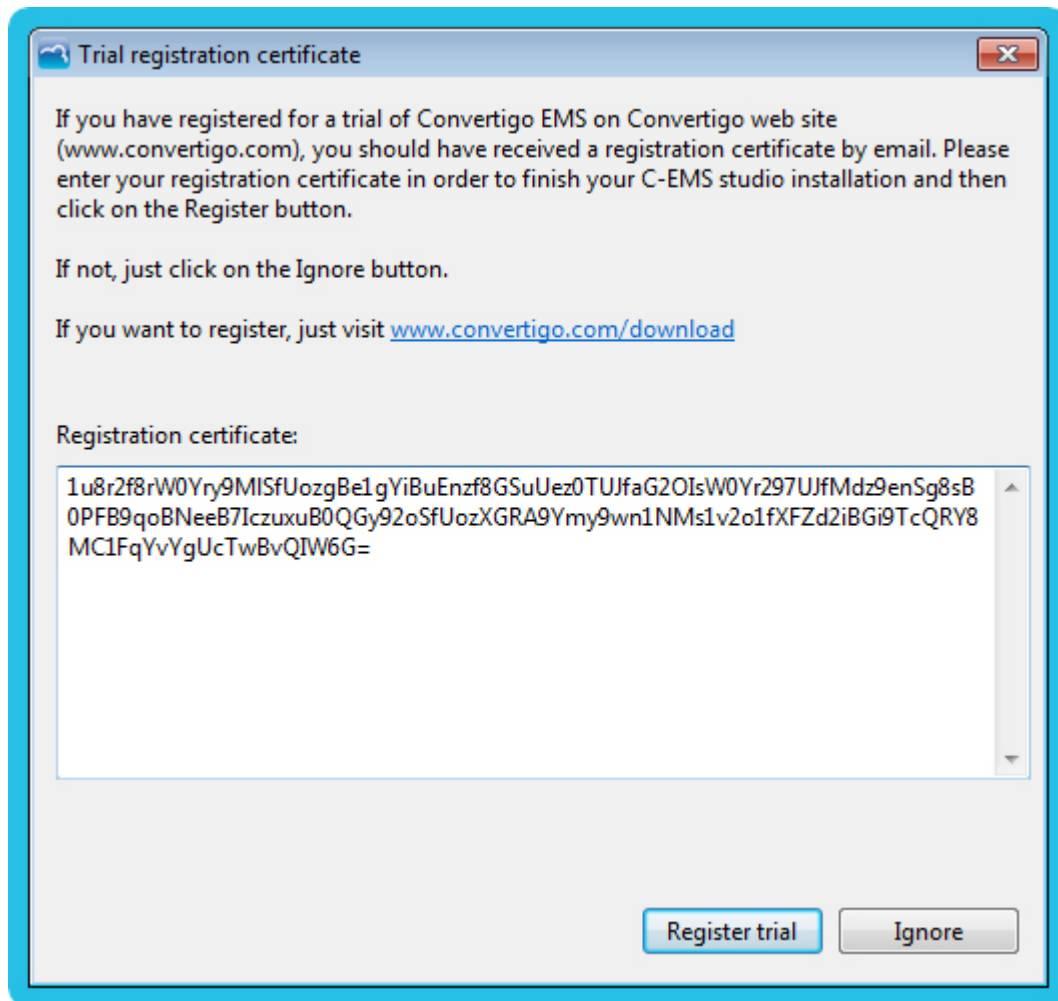


Figure 2 - 11: Registering Convertigo Shared Cloud in Studio

- 13** Then, click on the **Register trial** button.

CASE OF A CONVERTIGO CLOUD CLIENT

If you ordered for a Convertigo Cloud server, you have an email with the URL and username / password of your Cloud server administration.

- 14** For this type of user, click on the **Ignore** button.

A confirmation popup is displayed:

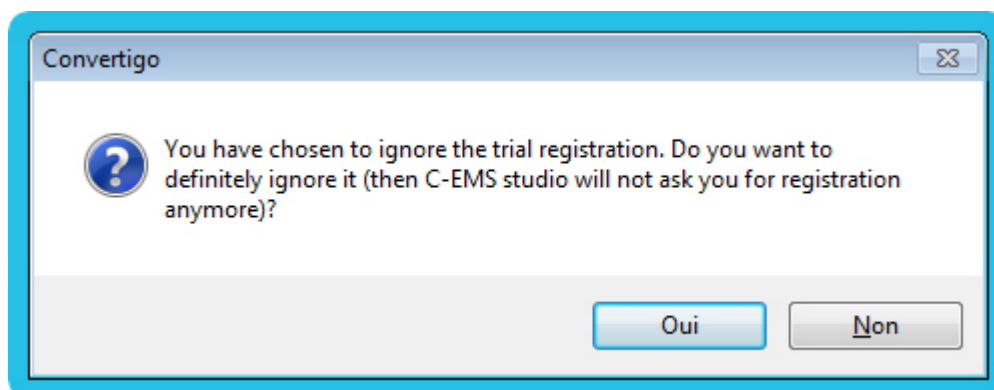


Figure 2 - 12: Ignoring Convertigo Shared Cloud registration

- 15** Click on **Yes**.

Continuing for both user types: a window presenting the last Convertigo news from our blog is displayed:

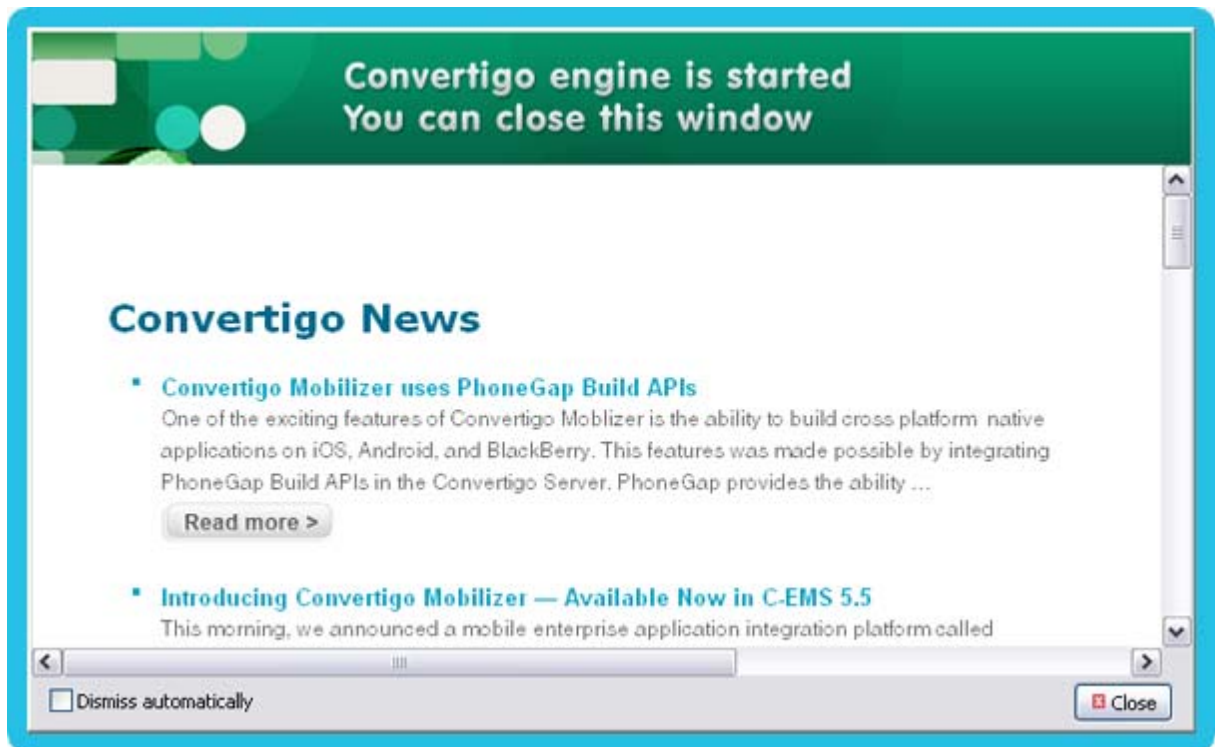


Figure 2 - 13: Convertigo news window

- 16** Check the **Dismiss automatically** checkbox if you don't want to see this window on next application startups.
- 17** Click on the **Close** button.

The Studio is opened, displaying the *Welcome* page:

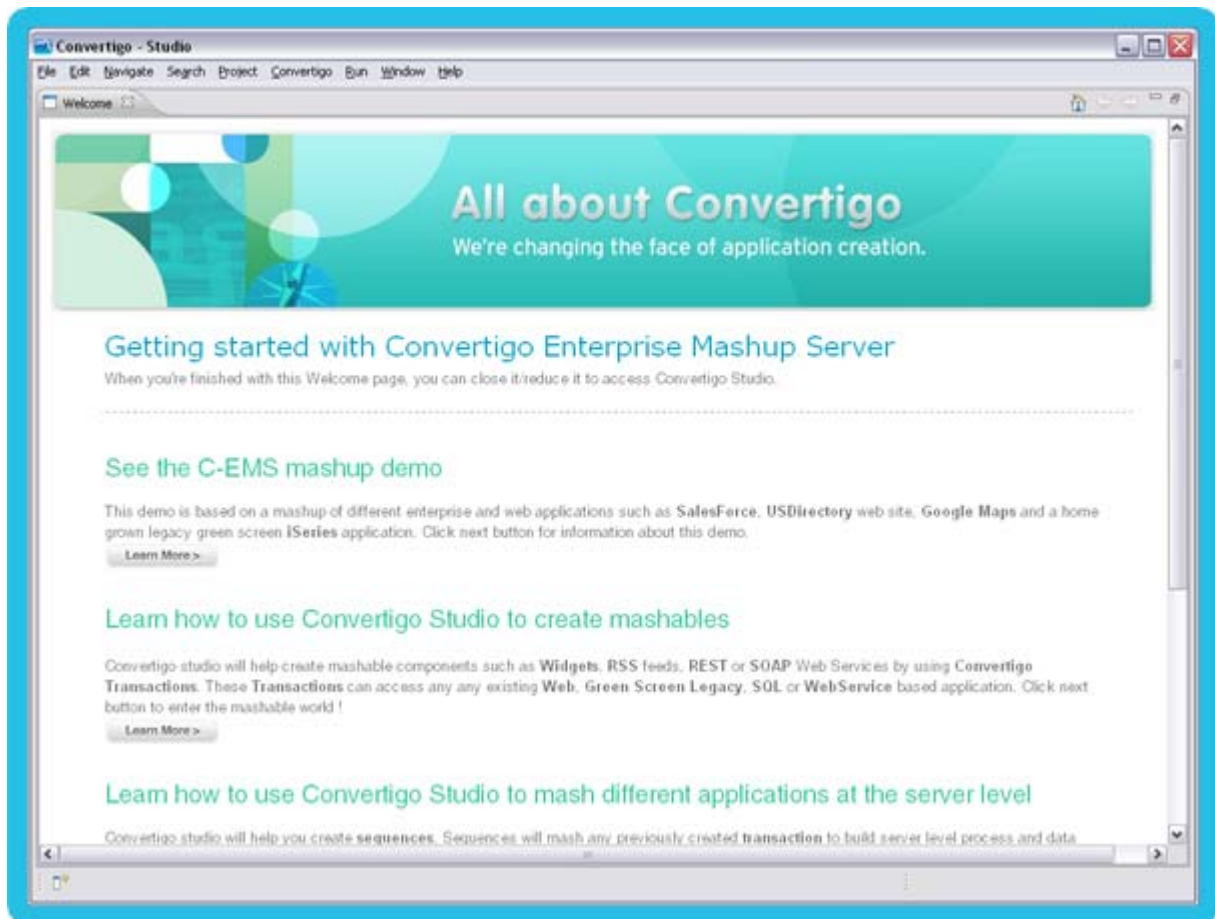


Figure 2 - 14: Convertigo Welcome page

This page contains several pages of demo, Convertigo modules presentation and links to documentations. You can have a look at these pages. PDF files of documentations are accessible in these pages but the documentation chapters are also accessible directly in the Studio Help menu in Eclipse help / HTML format.

- 18 Close this *Welcome* page by clicking on  button.

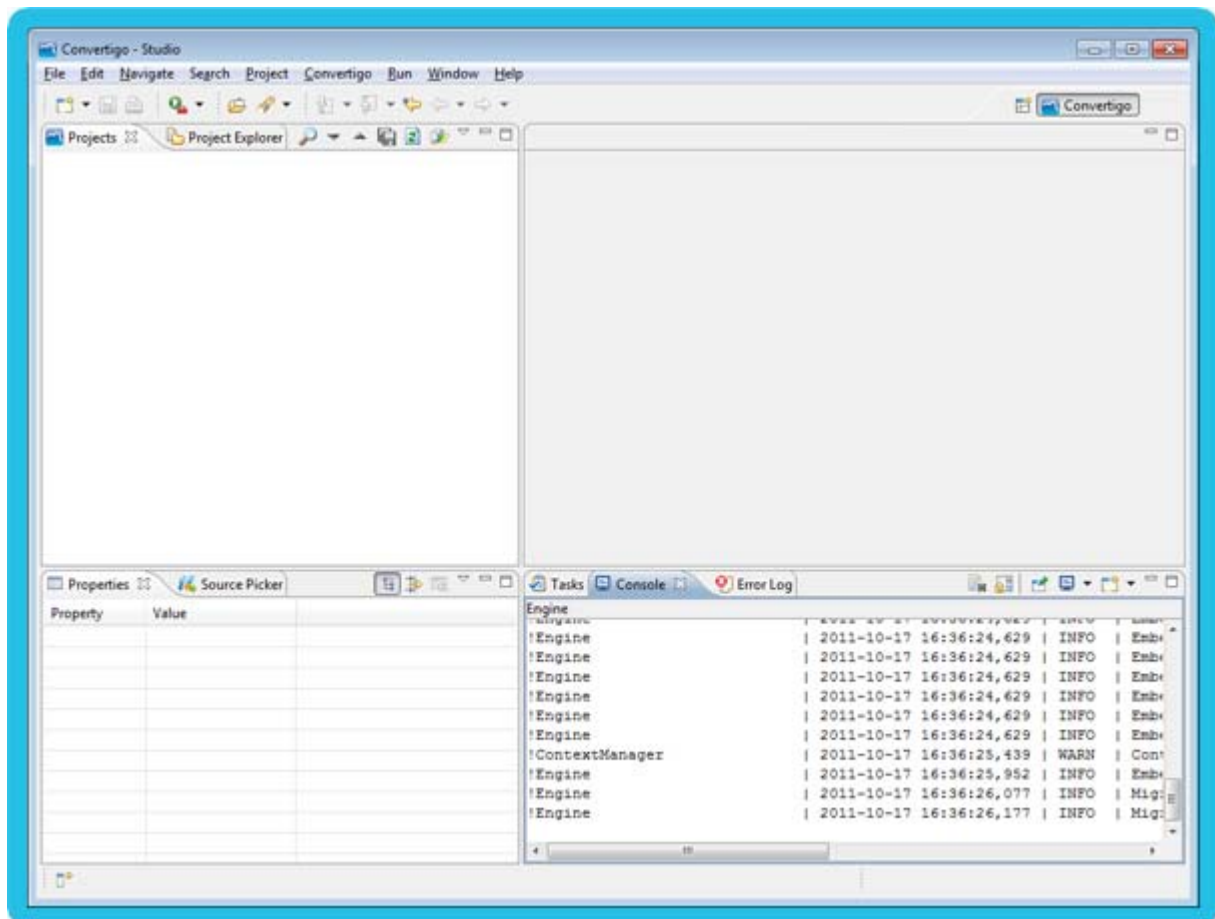


Figure 2 - 15: Convertigo Studio

- 19** The installation can be validated by calling the following URL in a Web browser:

`http(s)://localhost:18080/convertigo/admin`

- `localhost` is the host name of local machine (if you installed your Studio locally).
- `18080` is the default port number of a Convertigo Studio.

The *Administration Console* authentication page of the Server embedded in Convertigo Studio opens:

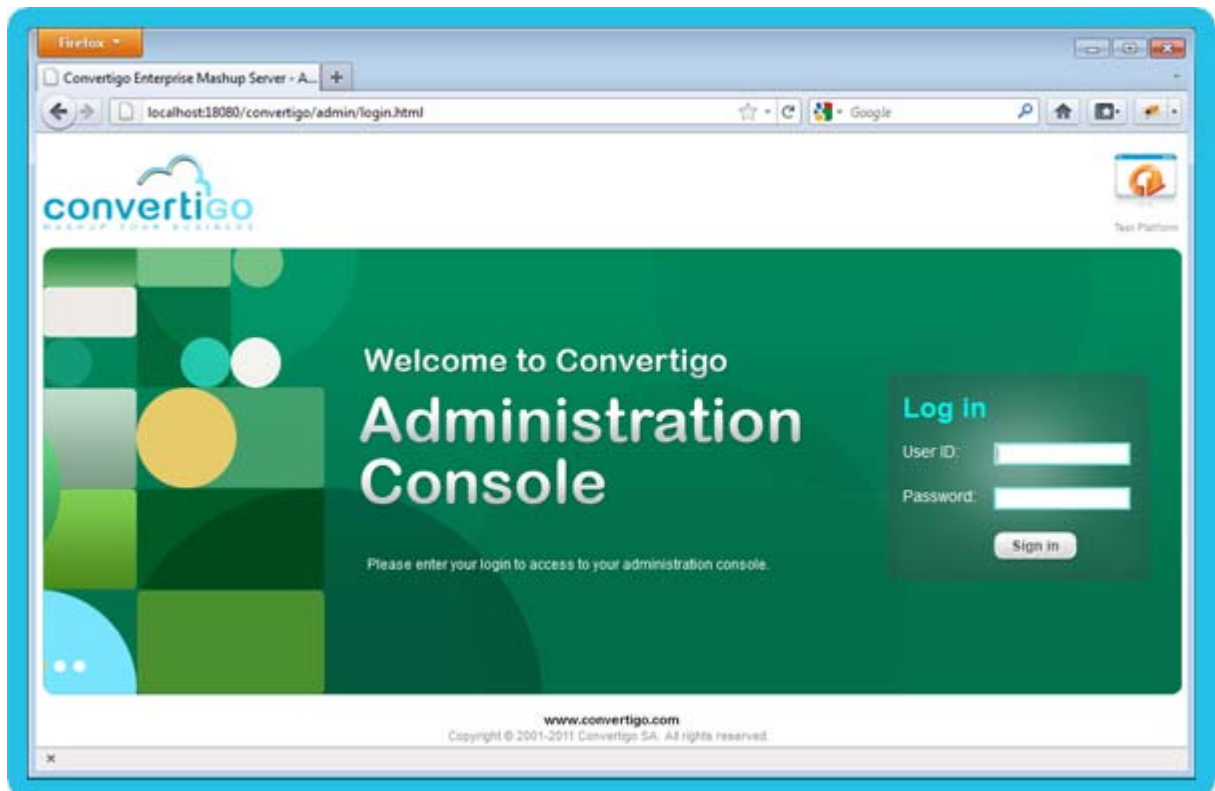


Figure 2 - 16: Convertigo Studio Administration authentication page

The header image features a large white number '3' on a blue background. To the right of the number, the text 'Installing Convertigo Server' is written in white. The background also includes faint, stylized icons of a server, a globe, and a document.

3 Installing Convertigo Server

This chapter describes how to install Convertigo Server in several qualified environments and operating systems.

- General purpose and packages
- C-EMS installation on Windows / Tomcat
- C-EMS installation on Linux / Tomcat
- C-EMS installation on Linux / WebSphere

3.1 General purpose and packages

Convertigo Server can be installed on different operating systems and application servers. The installation can be done on Windows or Linux operating systems.

In standard, Convertigo Server installation is packaged as a `.exe` file including Apache Tomcat application server or is a `.war` file. The installation on application servers, such as IBM WebSphere, is done with the `.war` file of the distribution.

You will see in the following table the packages used for installation:

Table 3 - 1: Packages uses table

	Tomcat	WebSphere	Other application servers
Windows (since version 2003)	convertigo-server-X.Y.Z-v12345-win32-install.exe All embedded package (including Tomcat application server)	convertigo-X.Y.Z-v12345-win32.war	convertigo-X.Y.Z-v12345-win32.war
Linux	convertigo-server-X.Y.Z-v12345-linux32.run.zip All embedded package (including Tomcat application server)	<ul style="list-style-type: none">32 bits: convertigo-X.Y.Z-v12345-linux32.war64 bits: convertigo-X.Y.Z-v12345-linux64.war	convertigo-X.Y.Z-v12345-linux32.war
Other OS (HTML connector not supported)	convertigo-X.Y.Z-v12345-linux32.war	<ul style="list-style-type: none">32 bits: convertigo-X.Y.Z-v12345-linux32.war64 bits: convertigo-X.Y.Z-v12345-linux64.war	convertigo-X.Y.Z-v12345-linux32.war

3.2 C-EMS installation on Windows / Tomcat

This chapter explains how to install C-EMS on Windows with Tomcat application server:

- [Installing C-EMS on Windows / Tomcat](#)

3.2.1 Installing C-EMS on Windows / Tomcat

- [Prerequisites](#)
- [Installation procedure](#)

PREREQUISITES

SERVER PREREQUISITES

The following table describes minimum server prerequisites for installing Convertigo Server:

Table 3 - 2: Server prerequisites

	Windows Server	Other Windows (only for development and demos)
Version	starting from Windows Server version 2003	<ul style="list-style-type: none">• Windows XP Service Pack 2 (32 bits)• Windows Seven (32 or 64 bits)
CPU	Dual Core	Dual Core
RAM	4 Gb	4 Gb
Disk space	10 Gb	10 Gb

INSTALLATION REQUIREMENTS

- The C-EMS installer file: `convertigo-server-X.Y.Z-v12345-win32-install.exe`
- You must have administration privileges to run this installer.

INSTALLATION PROCEDURE

The following procedure explains step by step how to install C-EMS including Tomcat application server on Windows.

To install Convertigo Server on Windows with Tomcat application server

- 1 Double click on the installation file `convertigo-server-X.Y.Z-v12345-win32-install.exe`

A **Security Warning** popup is displayed:

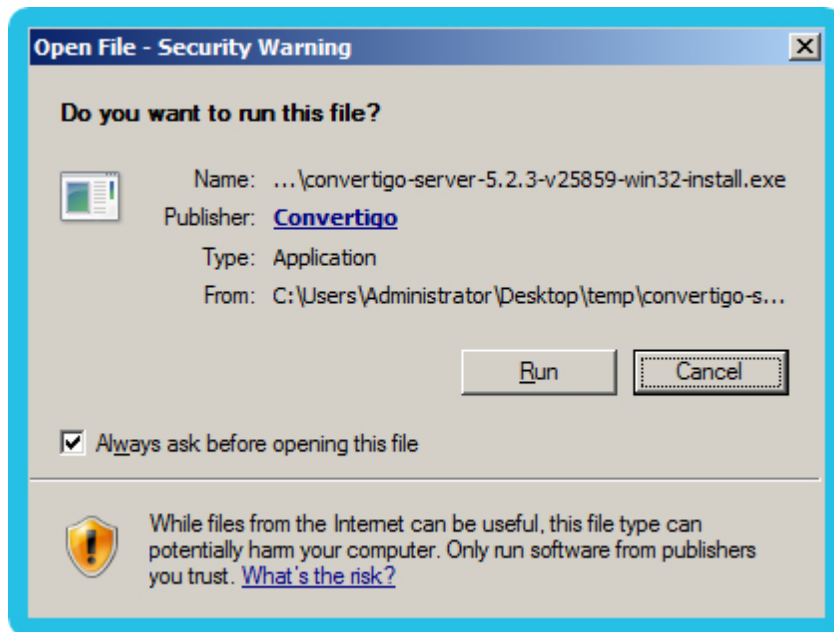


Figure 3 - 1: Security Warning popup after launching the installation file

- 2 Accept the security warning by pressing the **Run** button.



Figure 3 - 2: Installing C-EMS

- 3 Click on **Next** and follow the screens.

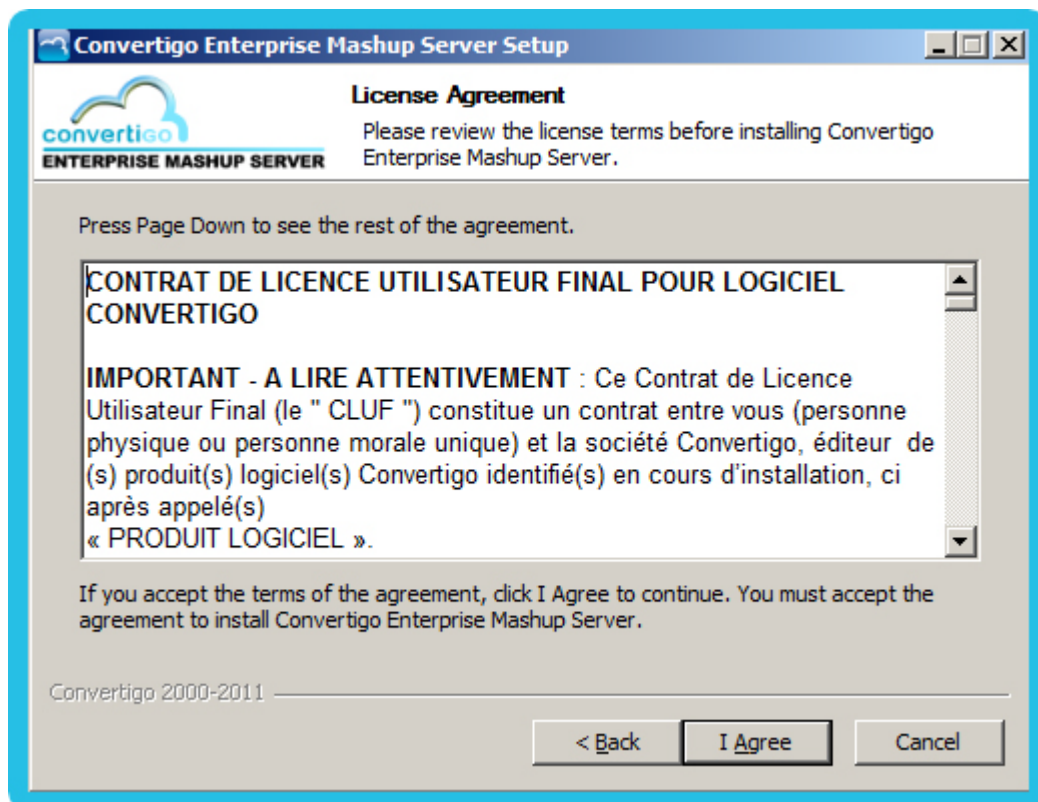


Figure 3 - 3: C-EMS Licence Agreement

- 4 Accept the License Agreement by clicking on the **I Agree** button.

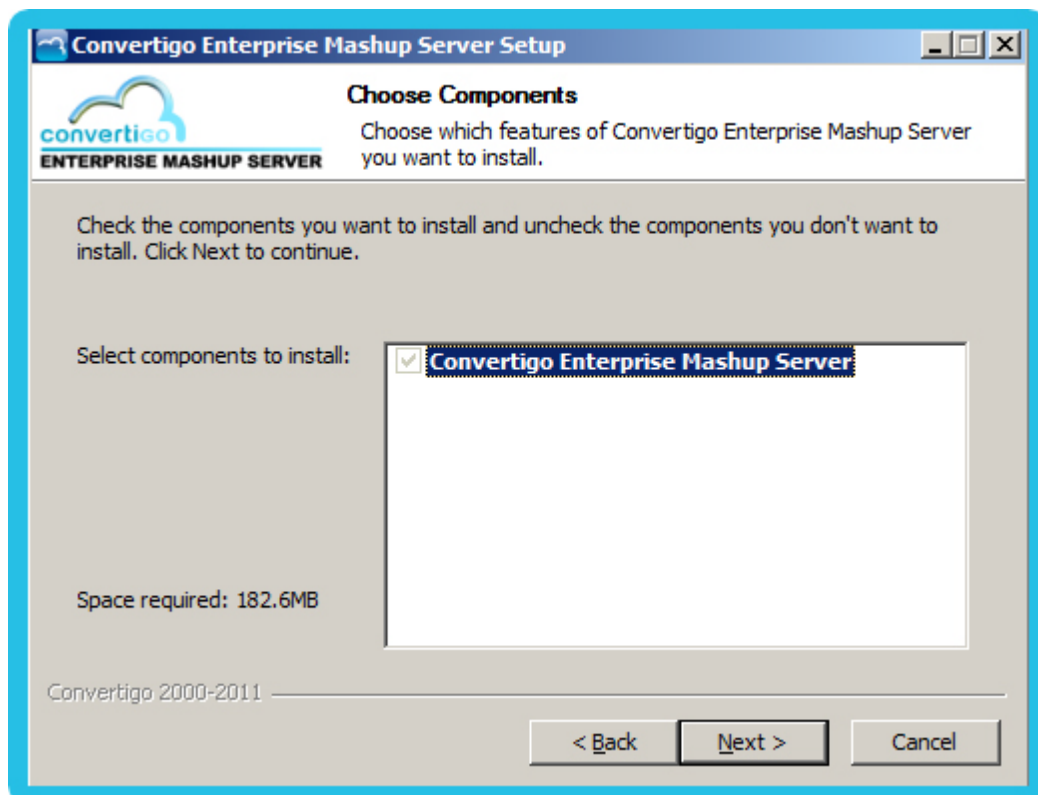


Figure 3 - 4: Choosing components

- 5 The C-EMS component is already selected. Click on **Next**.

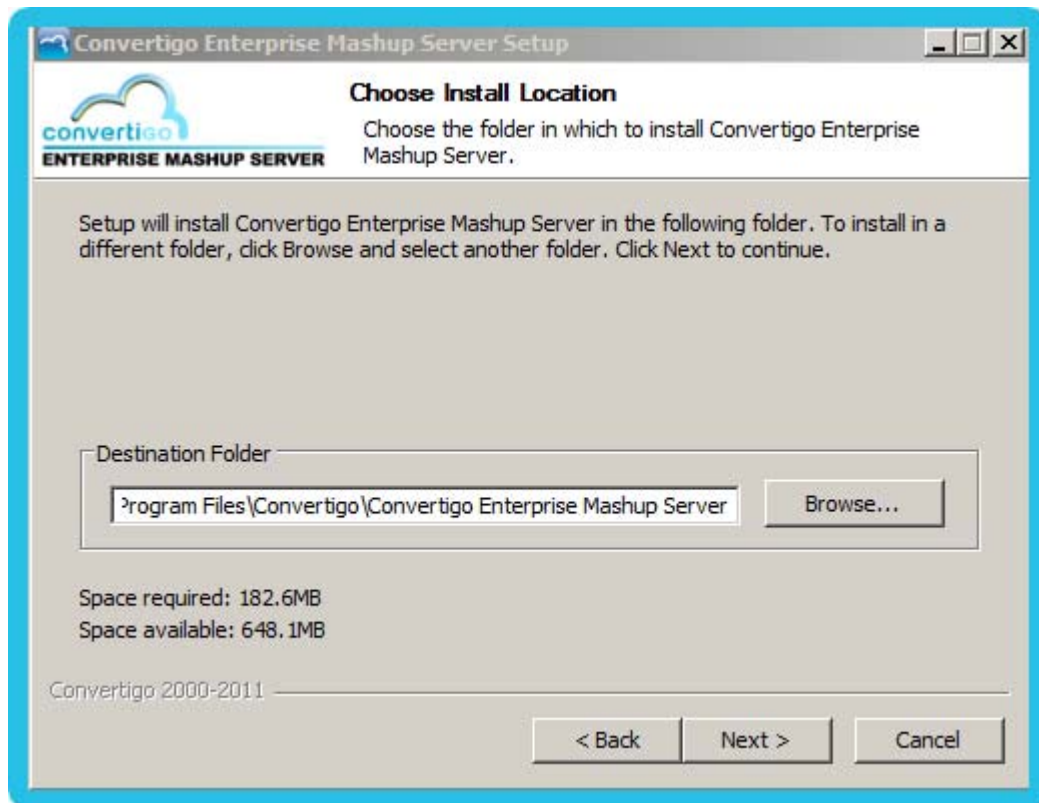


Figure 3 - 5: Setting destination folder

- 6 Change destination folder if the default one is not correct for your installation, and click on **Next**.

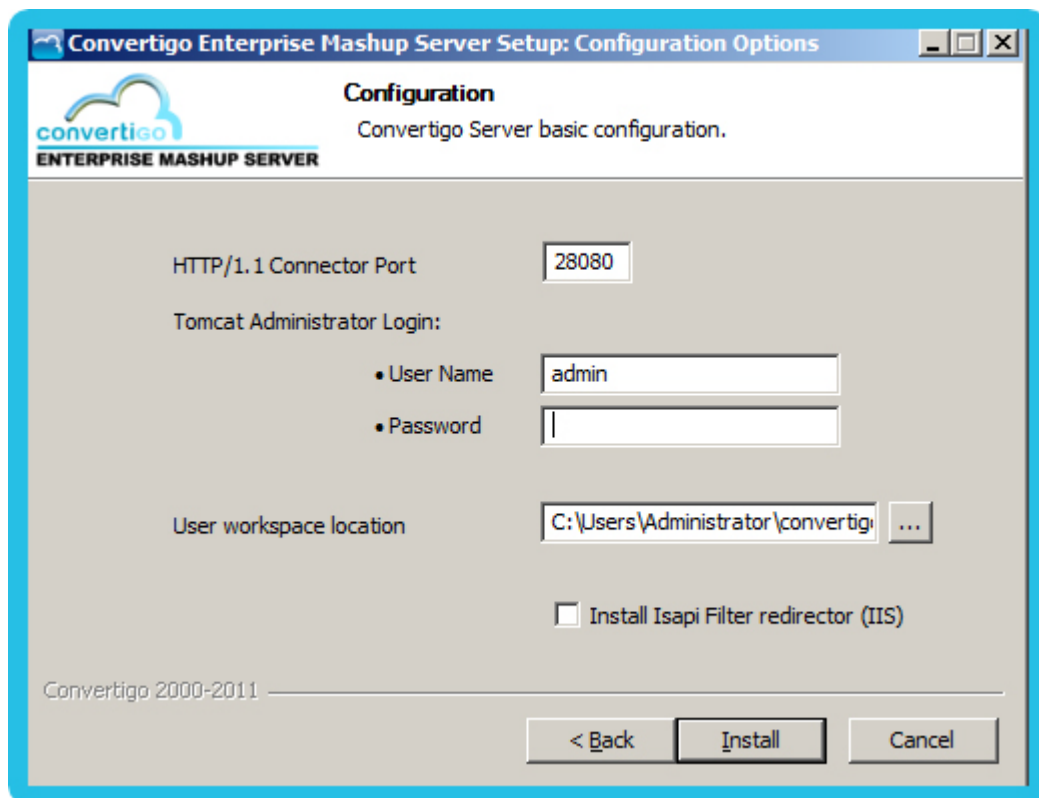


Figure 3 - 6: Server configuration

- 7 In this screen, you have to indicate:
- the Convertigo Server HTTP port (default is 28080),
 - the Tomcat Administrator credentials (user name and password),
 - the location of Convertigo user workspace,
 - whether the connection is made through an IIS (checking or not the box).



For more information on Convertigo user workspace, see Appendix "Convertigo workspace".

- 8 Then, click on the **Install** button. The installation starts, you should wait for a few minutes.

This screen indicates the end of installation:

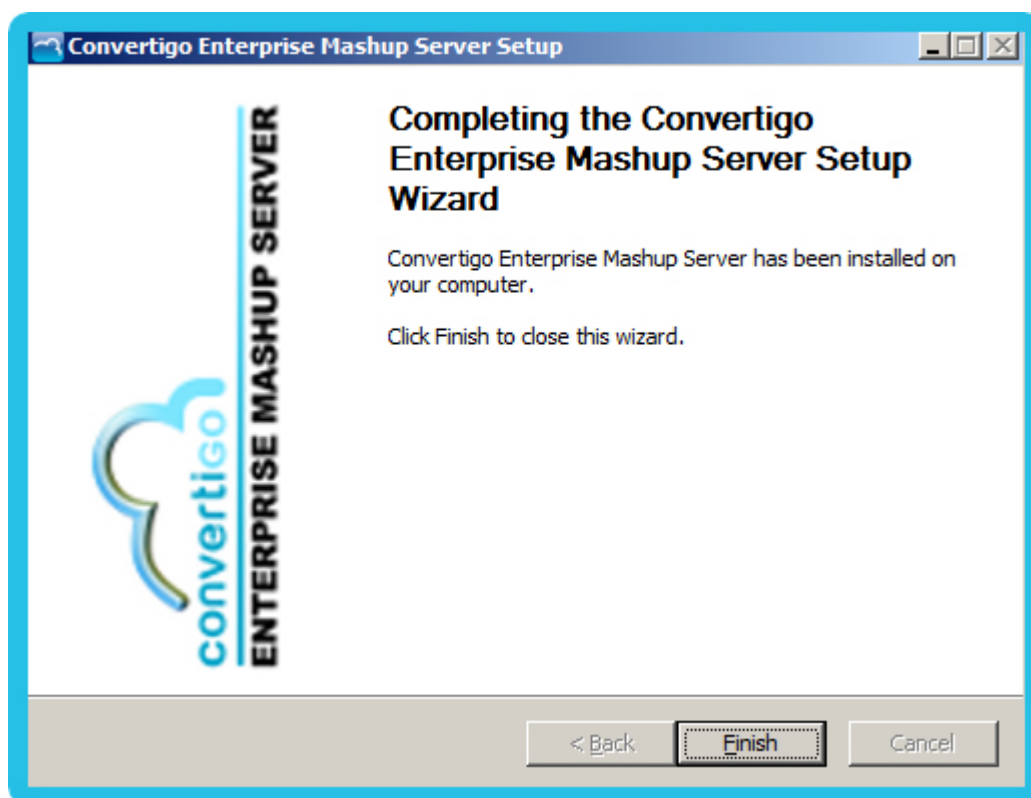


Figure 3 - 7: End of the installation

- 9 Click on **Finish** to close the wizard.
- 10 In Windows **Start** menu, open the **Services** panel by selecting **Configuration panel > Administration tools > Services**.

In the **Services** panel, *Convertigo Server* service must be present, with a *Started* status and *Automatic* startup type:

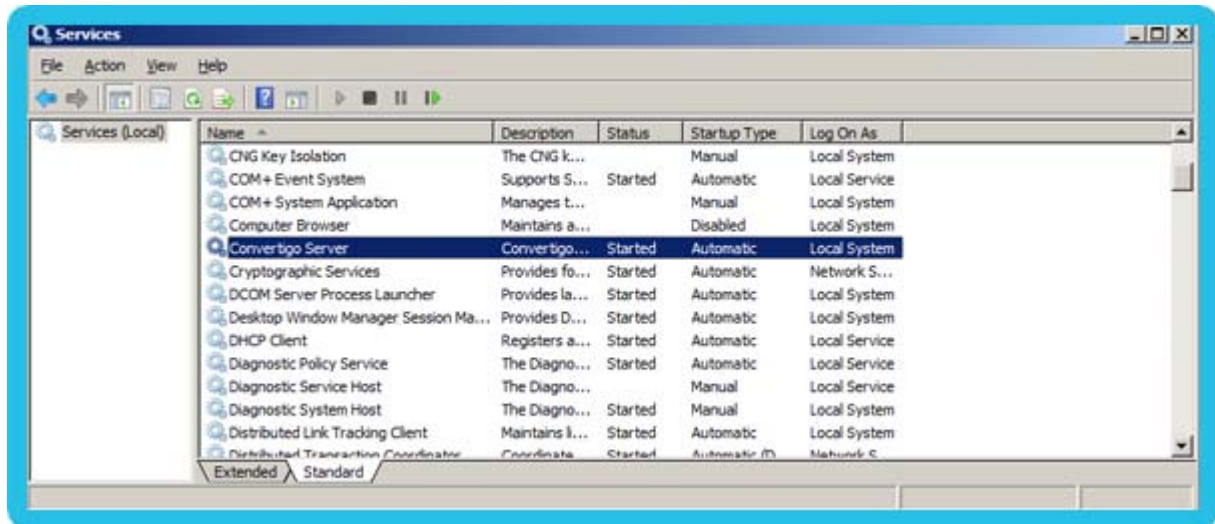


Figure 3 - 8: Services panel after Convertigo Server installation

11 The installation can be validated by calling the following URL in a Web browser:

`http(s)://<ConvertigoServer>:<ConvertigoPort>/convertigo/admin`

- *ConvertigoServer* is the host name or IP address of your server.
- *ConvertigoPort* is the port number of your Convertigo server, configured during installation (28080 by default).

The Convertigo Server Administration Console opens on the authentication page:

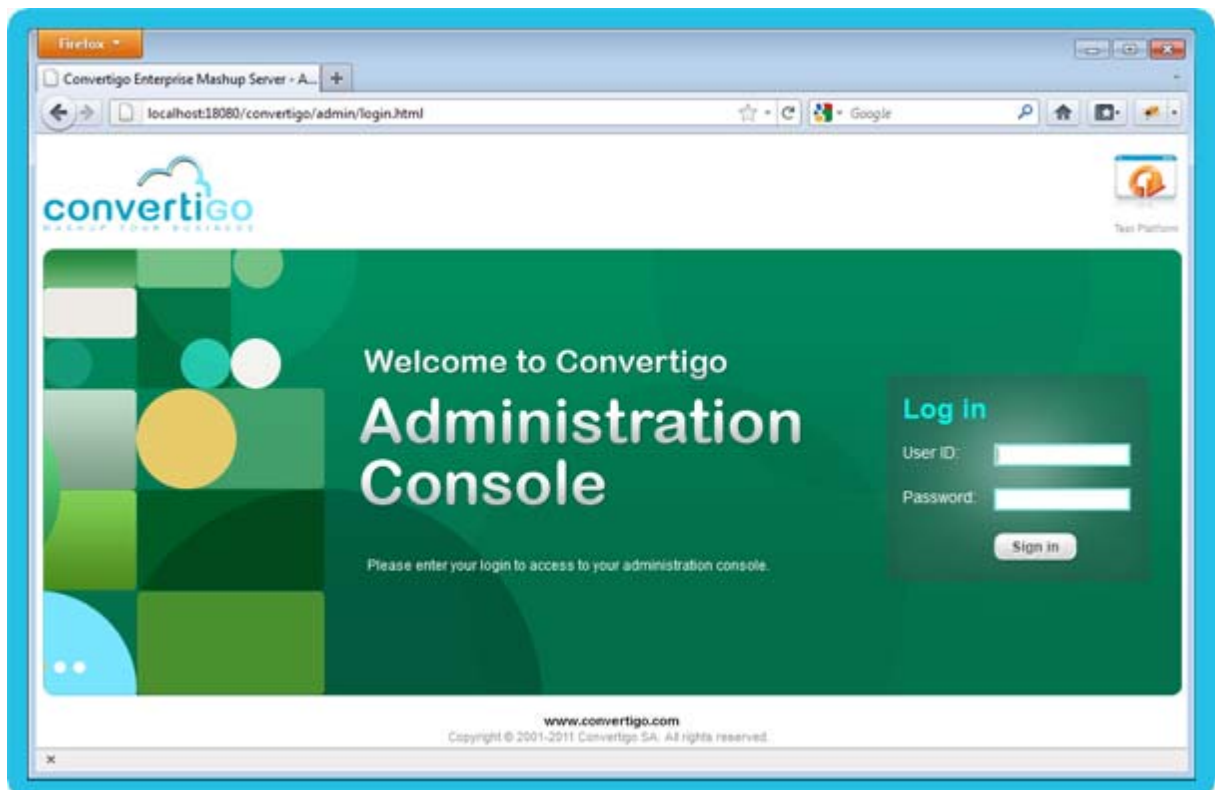


Figure 3 - 9: Convertigo Server Administration authentication page

3.3 C-EMS installation on Linux / Tomcat

This chapter explains how to install C-EMS on Linux with Tomcat application server and then how to start and stop installed Convertigo Server:

- [Installing C-EMS on Linux / Tomcat](#)
- [Start/Stop Convertigo Server on Linux / Tomcat](#)

3.3.1 Installing C-EMS on Linux / Tomcat

- Prerequisites
- Installation procedure

PREREQUISITES

SERVER PREREQUISITES

The following table describes minimum server prerequisites for installing Convertigo Server:

Table 3 - 3: Server prerequisites

	RedHat	Ubuntu	Debian
Version	starting from version 5.2	versions 8.04 and 10.04 (LTS)	version 6.0
CPU	Dual Core	Dual Core	Dual Core
RAM	4 Gb	4 Gb	4 Gb
Disk space	10 Gb	10 Gb	10 Gb
Packages	<ul style="list-style-type: none">• xulrunner-1.9.0.19-1.el5_5 and all dependencies• xorg-x11-fonts-Type1-7.1-2.1.el5• unzip	<ul style="list-style-type: none">• libgtk2.0-0• libxt6• libxtst6• unzip	<ul style="list-style-type: none">• libgtk2.0-0• libxt6• libxtst6• unzip• bzip2



Specified packages are necessary for using web connectors.

INSTALLATION REQUIREMENTS

- The C-EMS installer file: `convertigo-X.Y.Z-v12345-linux32.run.zip`
- You must have root privileges to run this installer script (with `sudo` prefix or logged in with `root` user).

INSTALLATION PROCEDURE

The following procedure explains step by step how to install C-EMS including Tomcat application server on RedHat or Ubuntu.

To install Convertigo Server on Linux with Tomcat application server

- 1 Unzip the installation file `convertigo-X.Y.Z-v12345-linux32.run.zip` in a temporary directory (not with root privileges):

```
# unzip convertigo-server-X.Y.Z-v12345-linux32.run.zip
Archive:  convertigo-server-X.Y.Z-v12345-linux32.run.zip
  inflating: convertigo-server-X.Y.Z-v12345-linux32.run
#
```

- 2** Run `convertigo-server-X.Y.Z-v12345-linux32.run` (use root privileges from here):

```
# ./convertigo-server-X.Y.Z-v12345-linux32.run
Verifying archive integrity... All good.
Uncompressing convertigo-server-X.Y.Z-v12345-linux32 .....
Do you want to create 'convertigo' user ? (yes/no)
```

- 3** You can precise the linux user you want to use:

```
Do you want to create 'convertigo' user ? (yes/no)
yes
CEMS user 'convertigo' home: /home/convertigo
```

The convertigo workspace will be created in the user home directory.



For more information on Convertigo user workspace, see Appendix "Convertigo workspace".

- 4** You can precise the installation path:

```
Where do you want to install CEMS ?
(Default is /opt/convertigo, just hit return to use this path)
```

- 5** Then, the installation continues for a few minutes:

```
Create CEMS directory: /opt/convertigo  
Copying JRE ...  
Copying Tomcat ...  
Unzip Convertigo webapp ...  
Creating Convertigo workspace: /home/convertigo/convertigo  
Installing demo projects ...  
Change owner of /opt/convertigo for convertigo ...  
Change owner of /home/convertigo/convertigo for convertigo ...  
Copy starting script ...
```

6 Depending on the Linux distribution:

- On Ubuntu:

```
Creating auto start links with update-rc.d ...  
Adding system startup for /etc/init.d/convertigo ...  
/etc/rc0.d/K88convertigo -> ../init.d/convertigo  
/etc/rc1.d/K88convertigo -> ../init.d/convertigo  
/etc/rc6.d/K88convertigo -> ../init.d/convertigo  
/etc/rc2.d/S88convertigo -> ../init.d/convertigo  
/etc/rc3.d/S88convertigo -> ../init.d/convertigo  
/etc/rc4.d/S88convertigo -> ../init.d/convertigo  
/etc/rc5.d/S88convertigo -> ../init.d/convertigo
```

- Or on Debian:

```
Creating auto start links with update-rc.d ...  
update-rc.d: using dependency based boot sequencing
```

The procedure is automatically creating startup links. Continue with step 8 of the procedure.

- on RedHat distribution:

```
update-rc.d is not installed, create links to rc.d runlevels  
Create this with 'ln -s'? (yes/no)
```

7 Answer the question.

We recommend to answer 'yes' as it eases accessing Convertigo startup command:

```
Create this with 'ln -s'? (yes/no)

yes

create symbolic link `K88convertigo' to `../init.d/convertigo'
ln: creating symbolic link `K88convertigo' to `../init.d/convertigo': File exists

create symbolic link `K88convertigo' to `../init.d/convertigo'
ln: creating symbolic link `K88convertigo' to `../init.d/convertigo': File exists

create symbolic link `S88convertigo' to `../init.d/convertigo'
ln: creating symbolic link `S88convertigo' to `../init.d/convertigo': File exists

create symbolic link `S88convertigo' to `../init.d/convertigo'
ln: creating symbolic link `S88convertigo' to `../init.d/convertigo': File exists

create symbolic link `S88convertigo' to `../init.d/convertigo'
ln: creating symbolic link `S88convertigo' to `../init.d/convertigo': File exists

create symbolic link `K88convertigo' to `../init.d/convertigo'
ln: creating symbolic link `K88convertigo' to `../init.d/convertigo': File exists
```

- 8** After the links creation, the procedure continues for all Linux distributions:

```
Installation finished, convertigo is ready to listen 28080 and
VNC to 5903.

Use /etc/init.d/convertigo [start|stop|status]
```

The installation is finished. By default, Convertigo Server is configured to be accessed on HTTP port 28080.

```
Do you want to start it now ? (yes/no)
```

- 9** You can start Convertigo Server at the end of the installation by answering 'yes' to this question.


```
Do you want to start it now ? (yes/no)

yes

Starting Convertigo Enterprise Mashup Server: convertigo.

#
```



By default, Convertigo is in auto start mode.

10 The installation can be validated by calling the following URL in a Web browser:

```
http(s)://<ConvertigoServer>:<ConvertigoPort>/convertigo/admin
```

- *ConvertigoServer* is the host name or IP address of your server.
- *ConvertigoPort* is the port number of your Convertigo server, configured during installation (28080 by default).

The Convertigo Server *Administration Console* opens on the authentication page:

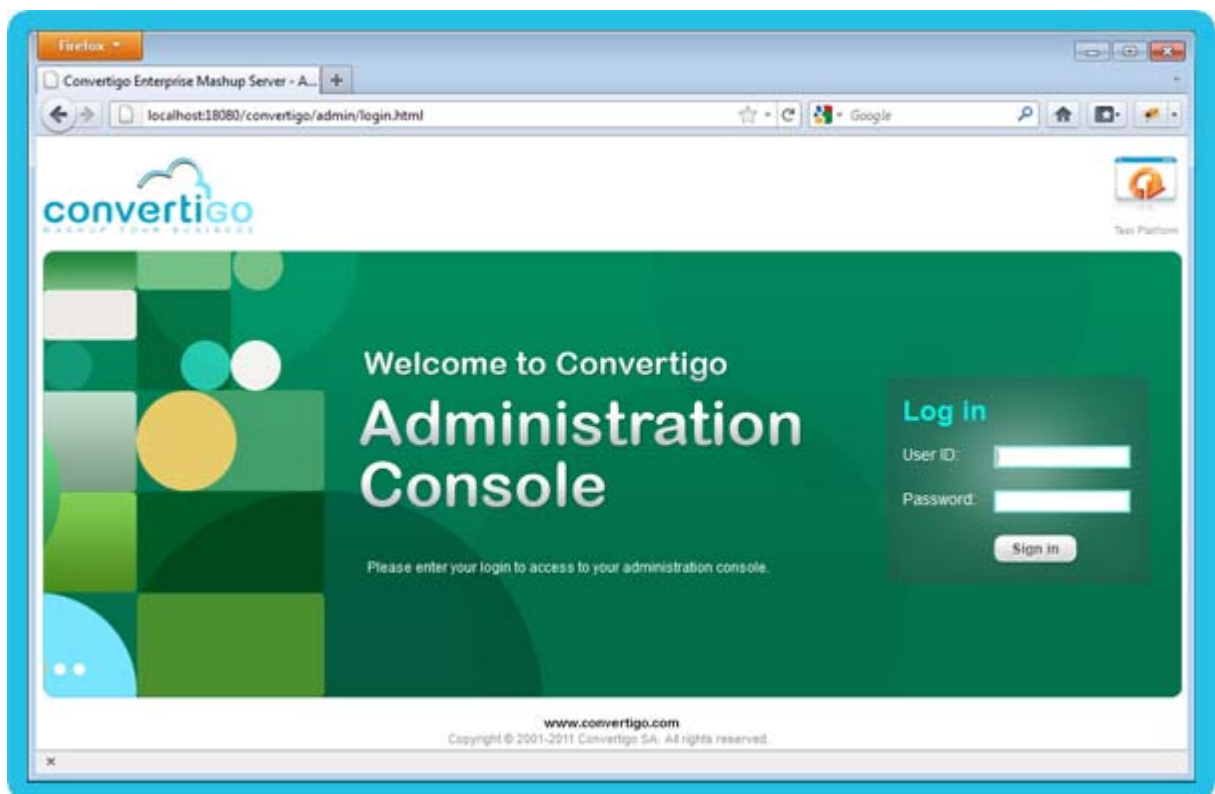


Figure 3 - 10: Convertigo Server Administration authentication page

3.3.2 Start/Stop Convertigo Server on Linux / Tomcat

To start and stop Convertigo Server on Linux / Tomcat, you have to use root privileges. To do that, use the `sudo` prefix or log in with `root` user.

The following table contains the useful commands to start and stop Convertigo Server installed on Linux / Tomcat:

Table 3 - 4: Engine start and stop commands

Action	Command
start	<code>/etc/init.d/convertigo start</code>
stop	<code>/etc/init.d/convertigo stop</code>
restart	<code>/etc/init.d/convertigo restart</code>

3.4 C-EMS installation on Linux / WebSphere

This chapter explains how to install C-EMS on Linux with WebSphere application server and all parametrization that has to be done to correctly run Convertigo Server. This chapter will describes procedures for WebSphere version 6 and for WebSphere version 7:

- [Installing C-EMS on Linux / WebSphere 6](#)
- [Parameterizing C-EMS with WebSphere 6](#)
- [Installing C-EMS on Linux / clustered WebSphere 7](#)
- [Parameterizing C-EMS with WebSphere 7](#)

3.4.1 Installing C-EMS on Linux / WebSphere 6

Installing Convertigo Server is possible on WebSphere version 6. This procedure completes the official IBM documentation to install an application.

- [Prerequisites](#)
- [Installation procedure](#)

PREREQUISITES

SERVER PREREQUISITES

The following table describes minimum server prerequisites for installing Convertigo Server:

Table 3 - 5: Server prerequisites

	RedHat / WebSphere
Version	<ul style="list-style-type: none">• RedHat starting from version 5.2• WebSphere starting from version 6
CPU	Dual Core
RAM	4 Gb
Disk space	10 Gb
Packages	<ul style="list-style-type: none">• Package <code>xulrunner-1.9.0.19-1.el5_5</code> and all dependencies• Package <code>xorg-x11-fonts-Type1-7.1-2.1.el5</code>



Specified packages are necessary for using web connectors.

INSTALLATION REQUIREMENTS

- The C-EMS `.war` file: `convertigo-X.Y.Z-v12345-linux32.war` (for 32 bits version) or `convertigo-X.Y.Z-v12345-linux64.war` (for 64 bits version).
- You must know how to access WebSphere console. For example: `https://websphere_server:9043/ibm/console`
- You must know the user ID and password to connect to the WebSphere console.
- Convertigo workspace will be created in *home* directory. If the account used for installation doesn't have a *home* directory, add an *Environment Entry* named `HOME` with a value pointing on a directory where the Convertigo workspace will be created.

INSTALLATION PROCEDURE

The following procedure explains step by step how to install C-EMS on RedHat / WebSphere 6.

To install Convertigo Server on WebSphere 6

- 1 Connect to the WebSphere 6 console using the appropriate URL:



Figure 3 - 11: Connecting to WebSphere 6 console

- 2 Set administration credentials and validate by clicking the **Log in** button.
- 3 In the left menu, expand **Applications** and click on **Install New Application** submenu.

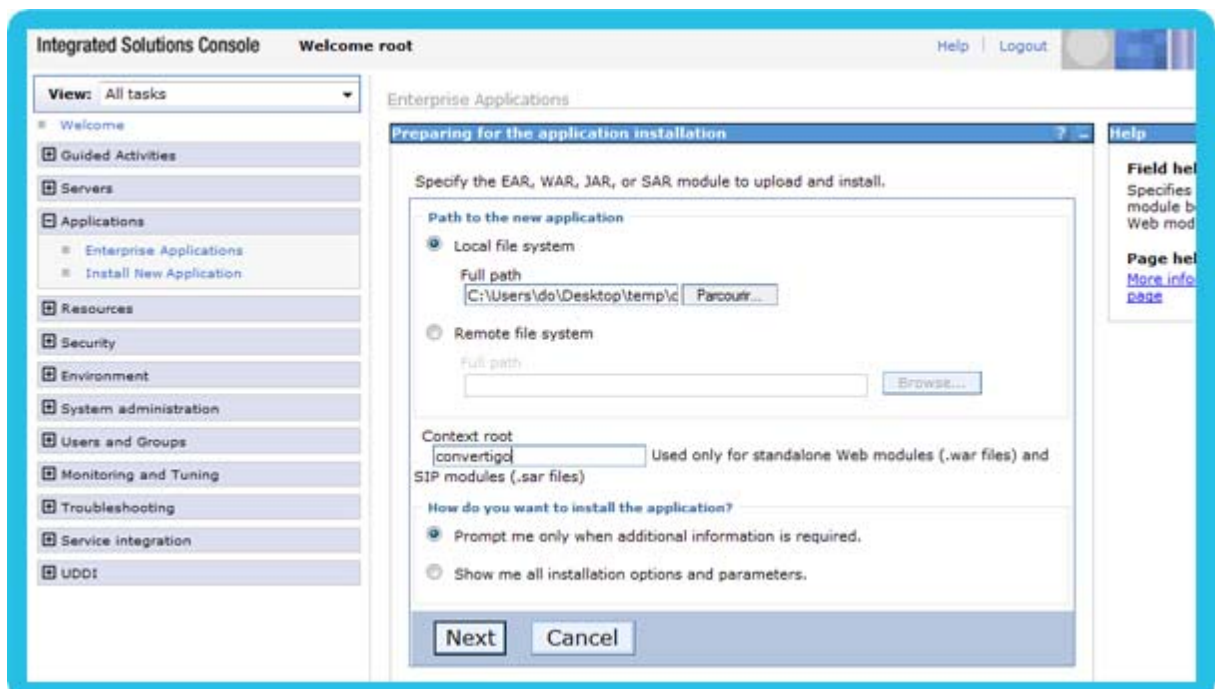


Figure 3 - 12: Installing new application in WebSphere 6

- 4 Set the full path of the .war file (or click on the **Browse** button to access to the file), define a name in the **Context root** input field (for example convertigo) and click on **Next**.

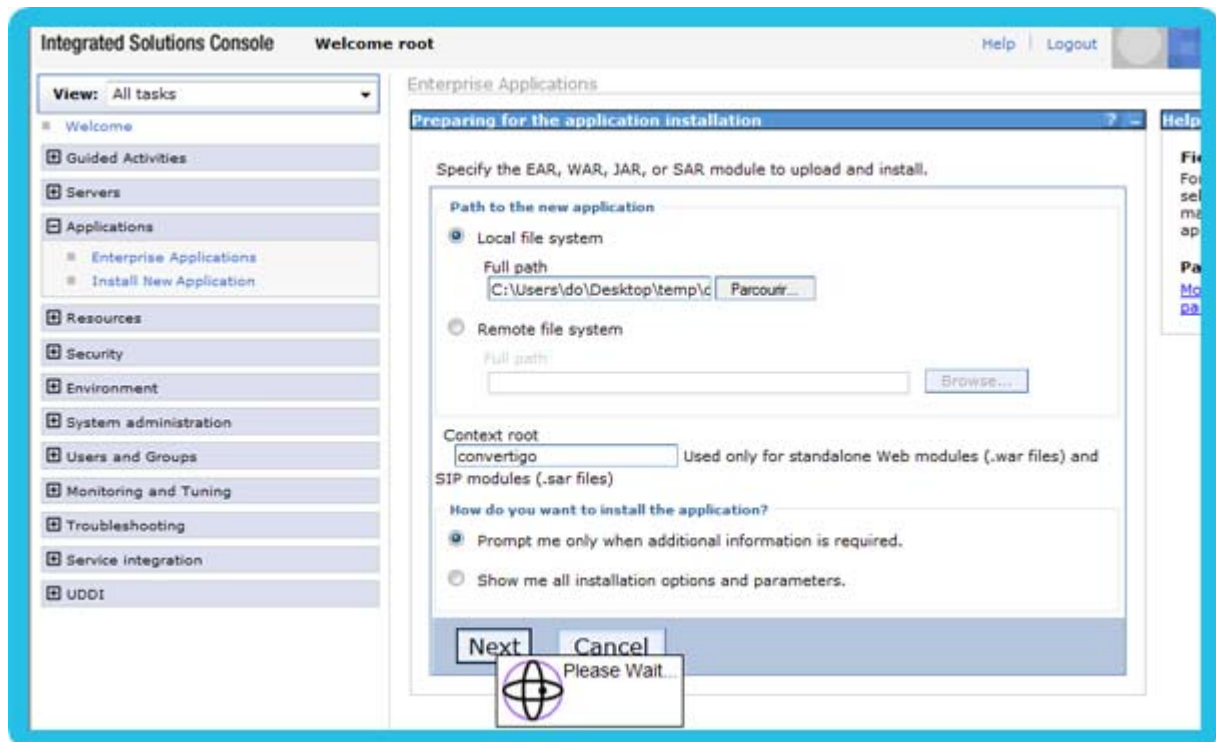


Figure 3 - 13: Convertigo .war file uploading in WebSphere 6

Convertigo .war file upload process may take a while.

- 5 Then, you are redirected to the application's installation page.

Enterprise Applications

Install New Application

Specify options for installing enterprise applications and modules.

→ Step 1: Select installation options

Step 2 Map modules to servers

Step 3 Map resource references to resources

Step 4 Map virtual hosts for Web modules

Step 5 Map context roots for Web modules

Step 6 Summary

Select installation options

Specify the various options that are available to prepare and install your application.

☐ Precompile JavaServer Pages files

Directory to install application
convertigo

☒ Distribute application

☐ Use Binary Configuration

☐ Deploy enterprise beans

Application name
convertigo

☒ Create MBeans for resources

☒ Enable class reloading

Reload interval in seconds
5

☐ Deploy Web services

Validate Input off/warn/fail
warn

☐ Process embedded configuration

File Permission

Allow all files to be read but not written to
Allow executables to execute
Allow HTML and image files to be read by everyone

Set file permissions

.*\,dlm=755#.*\,sow=755#.*\,saw=755#.*\,sl=755

Application Build ID
Unknown

☐ Allow dispatching includes to remote resources

☐ Allow servicing includes from remote resources

Next Cancel

Figure 3 - 14: Convertigo installation options in WebSphere 6

- 6 In the *installation options* page, specify:
 - specify the installation directory in **Directory to install application** input field,
 - specify the application name in **Application name** input field,
 - enable the class reloading by checking the **Enable class reloading** checkbox,
 - and set class reloading interval in **Reload interval in seconds** input field (for example, 5 seconds).
- 7 Then, click on **Next**.

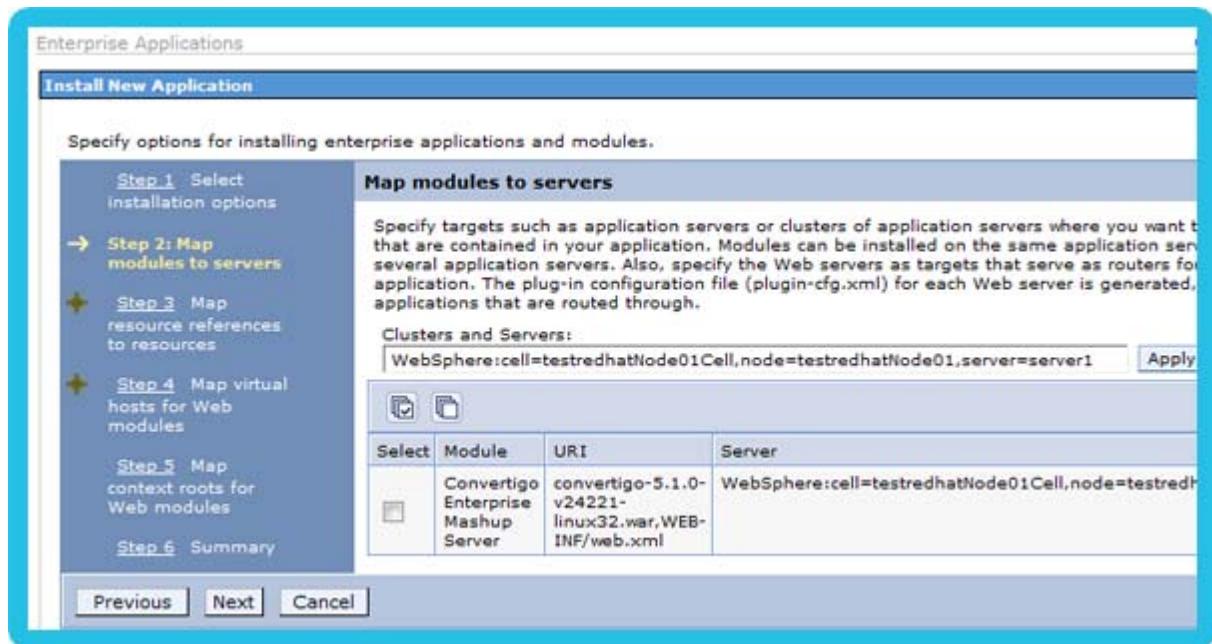


Figure 3 - 15: Convertigo installation Map modules to servers page in WebSphere 6

- 8 Click on **Next** until the *Summary* page.

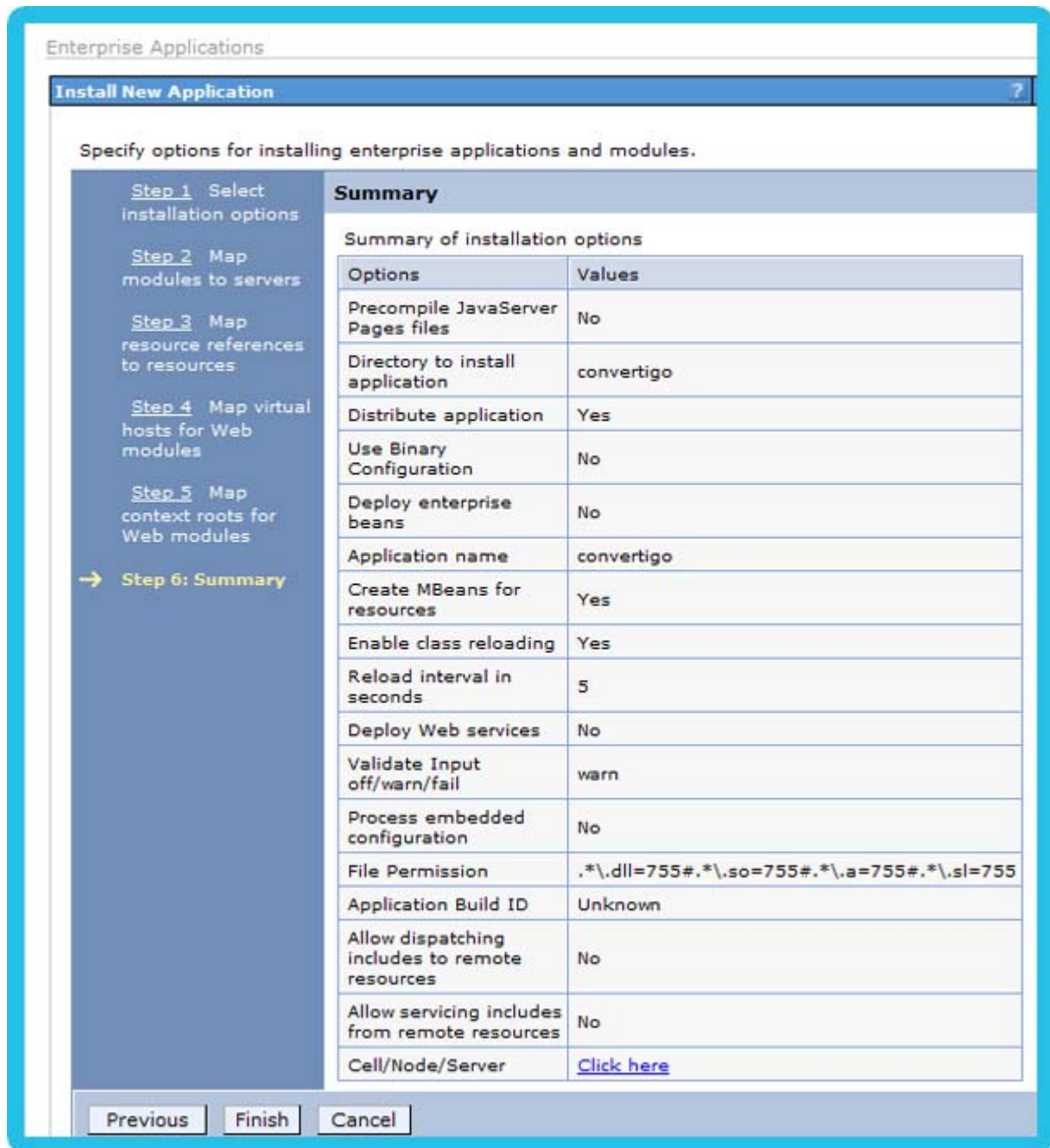


Figure 3 - 16: Convertigo installation Summary page

9 Then, click on **Finish**.

The **Installing...** page is displayed:

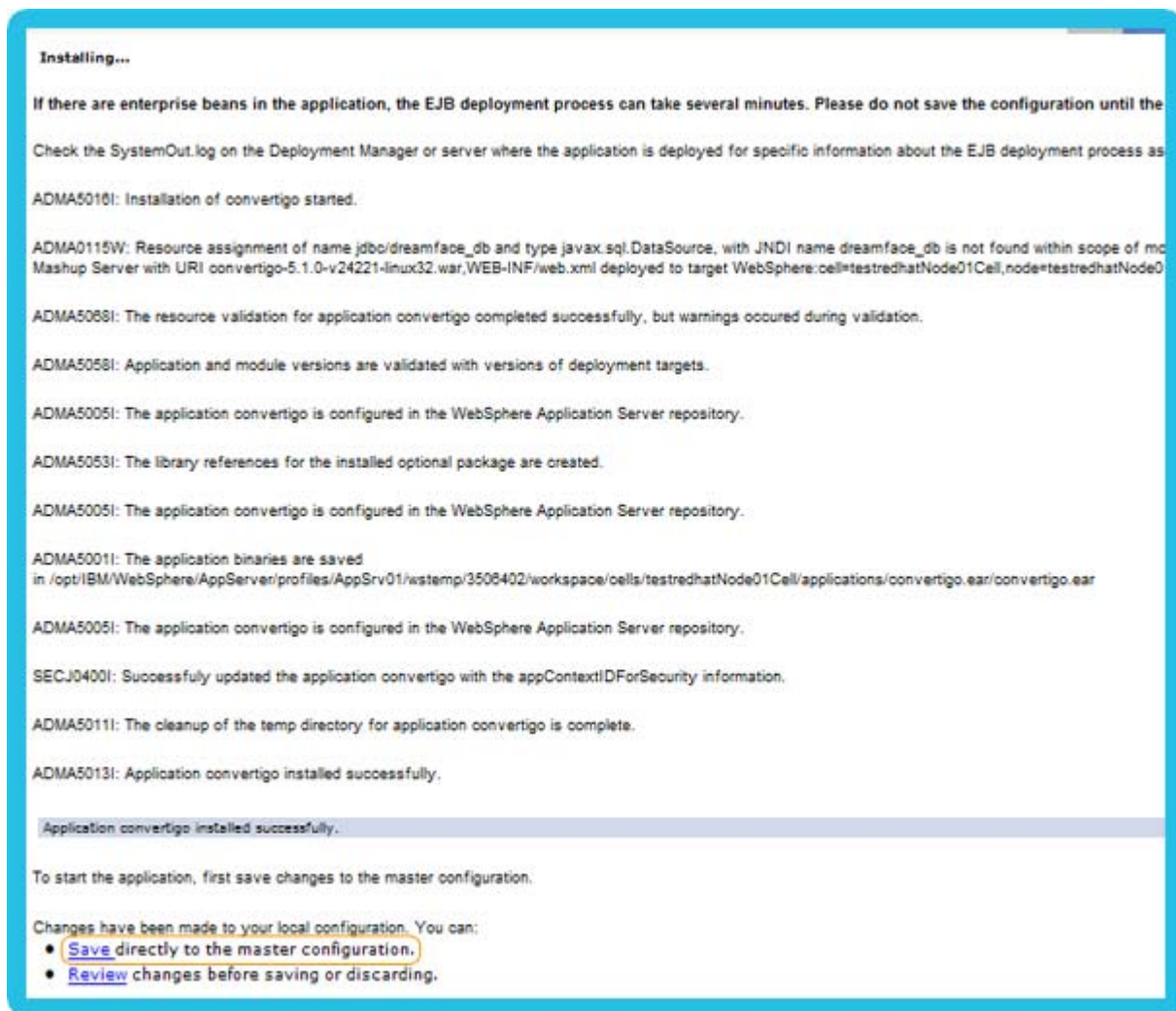


Figure 3 - 17: Convertigo installation Installing... page

10 Then, click on **Save directly to the master configuration.**

The convertigo application should now be visible in the *Enterprise Applications* page:

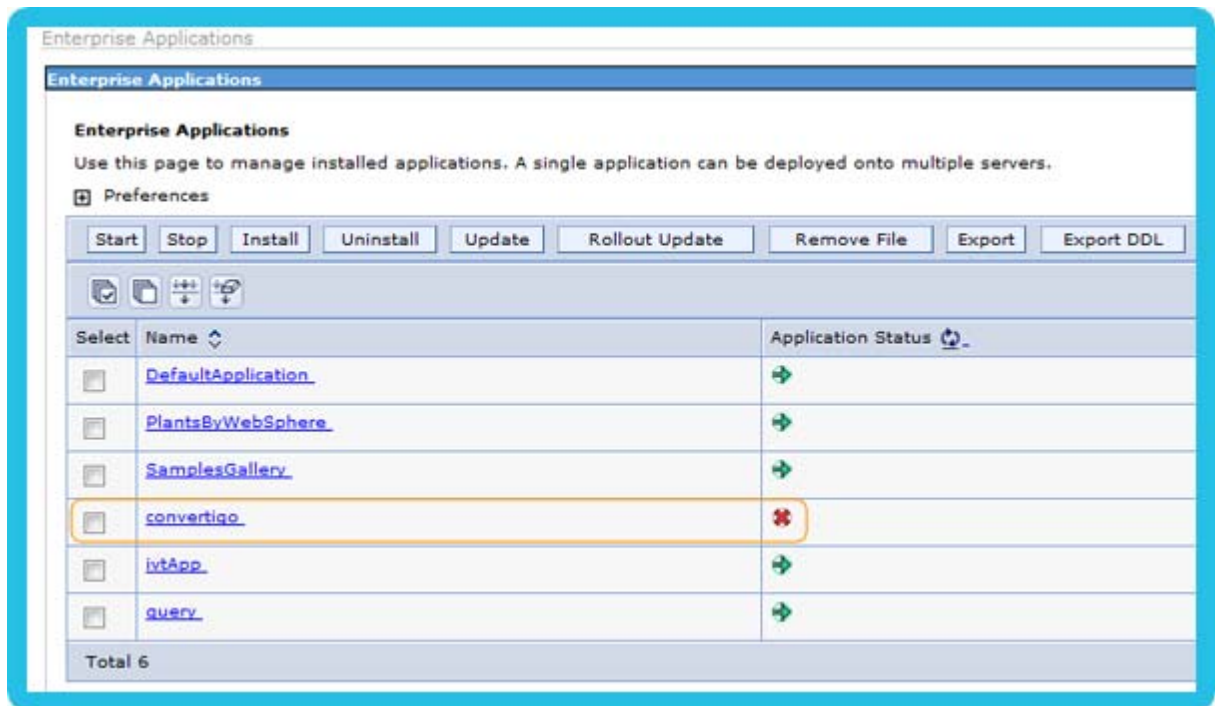


Figure 3 - 18: Convertigo application installed

- 11 Start the convertigo application by checking convertigo application checkbox and clicking on **Start**.

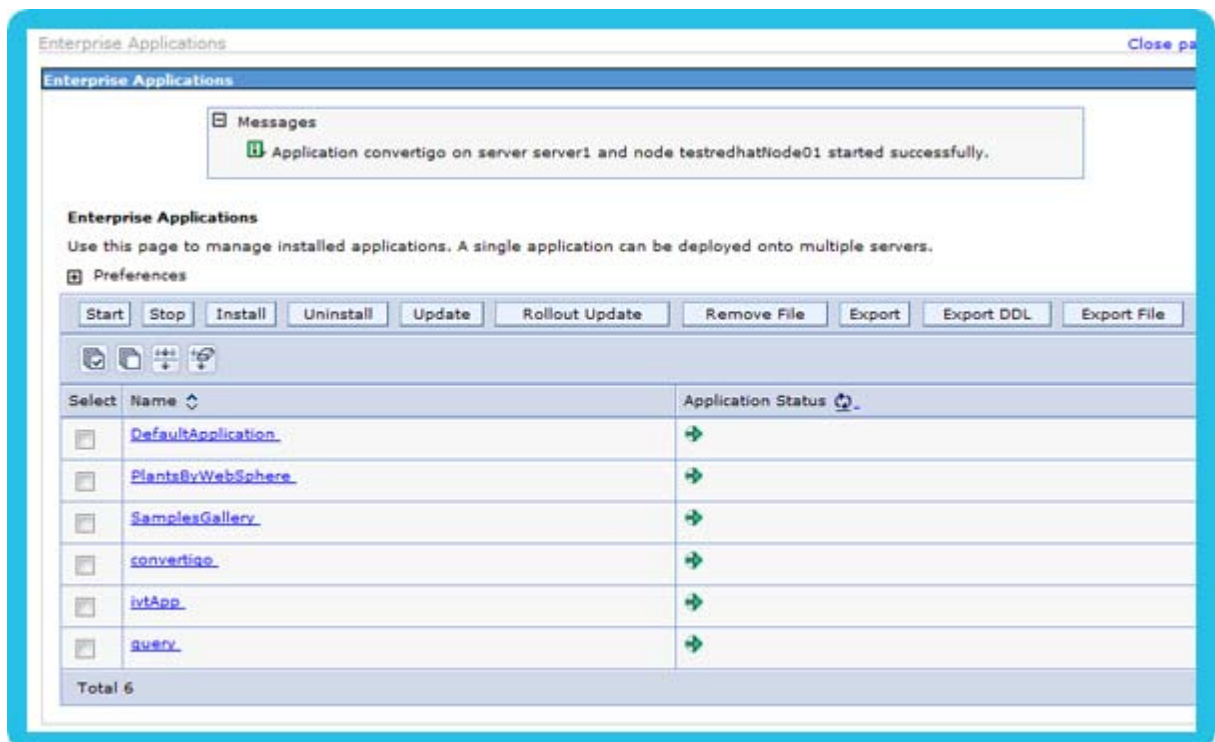


Figure 3 - 19: Convertigo application started

3.4.2 Parameterizing C-EMS with WebSphere 6

Parameterization of C-EMS in WebSphere 6 consists in:

- [Specifying Java parameters and environment entries in WebSphere 6](#)
- [Changing the order of class loaders](#)
- [Modifying the "ibm-web-ext.xml" file](#)
- [Using the Convertigo "compatibility mode"](#)

SPECIFYING JAVA PARAMETERS AND ENVIRONMENT ENTRIES IN WEBSHERE 6

WebSphere 6 server and environment need to be configured to correctly run Convertigo Server application.

To specify Java parameters and environment entries

- 1 In the left menu, expand **Servers** and click on **Application servers** submenu.
- 2 Select **server1** page (server1 is the WebSphere server where C-EMS was installed).

The *server1 Configuration* page opens:

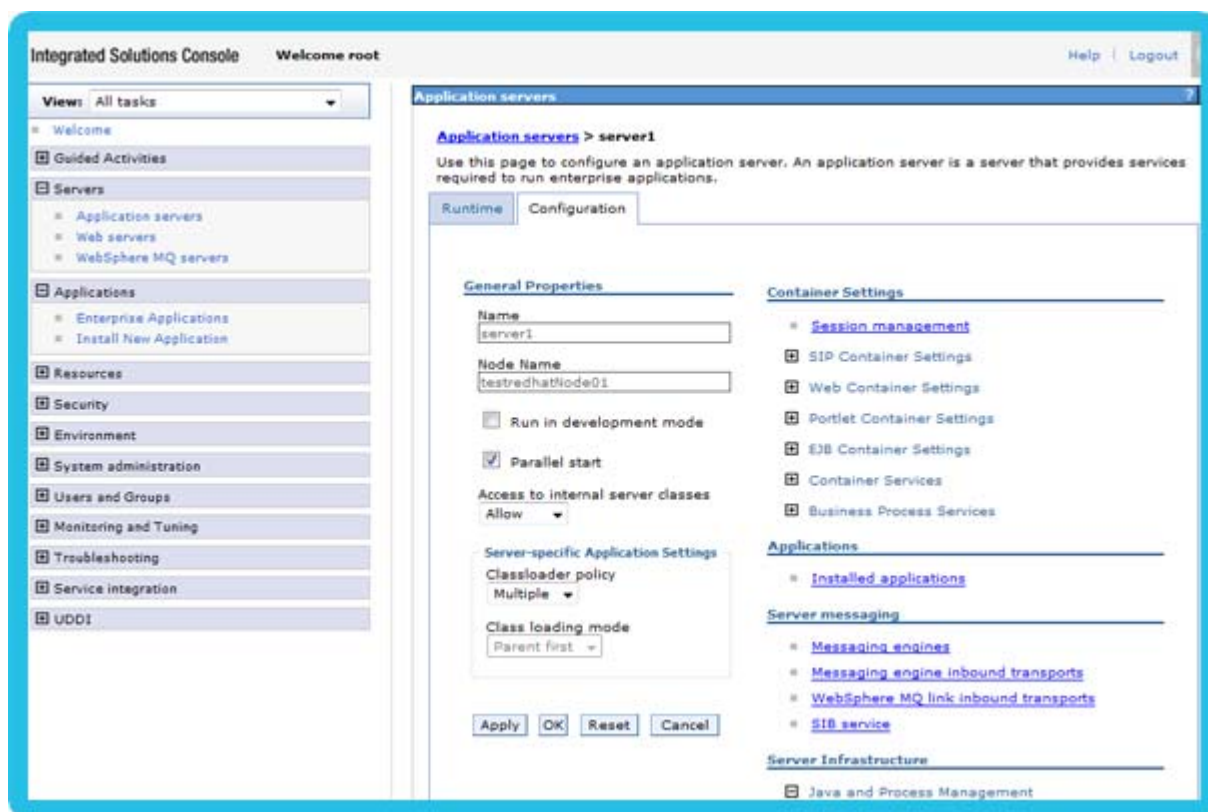


Figure 3 - 20: Server1 Configuration page on WebSphere 6

- 3 In *Server Infrastructure* section of the page, expand **Java and Process Management** and select **Process Definition**:

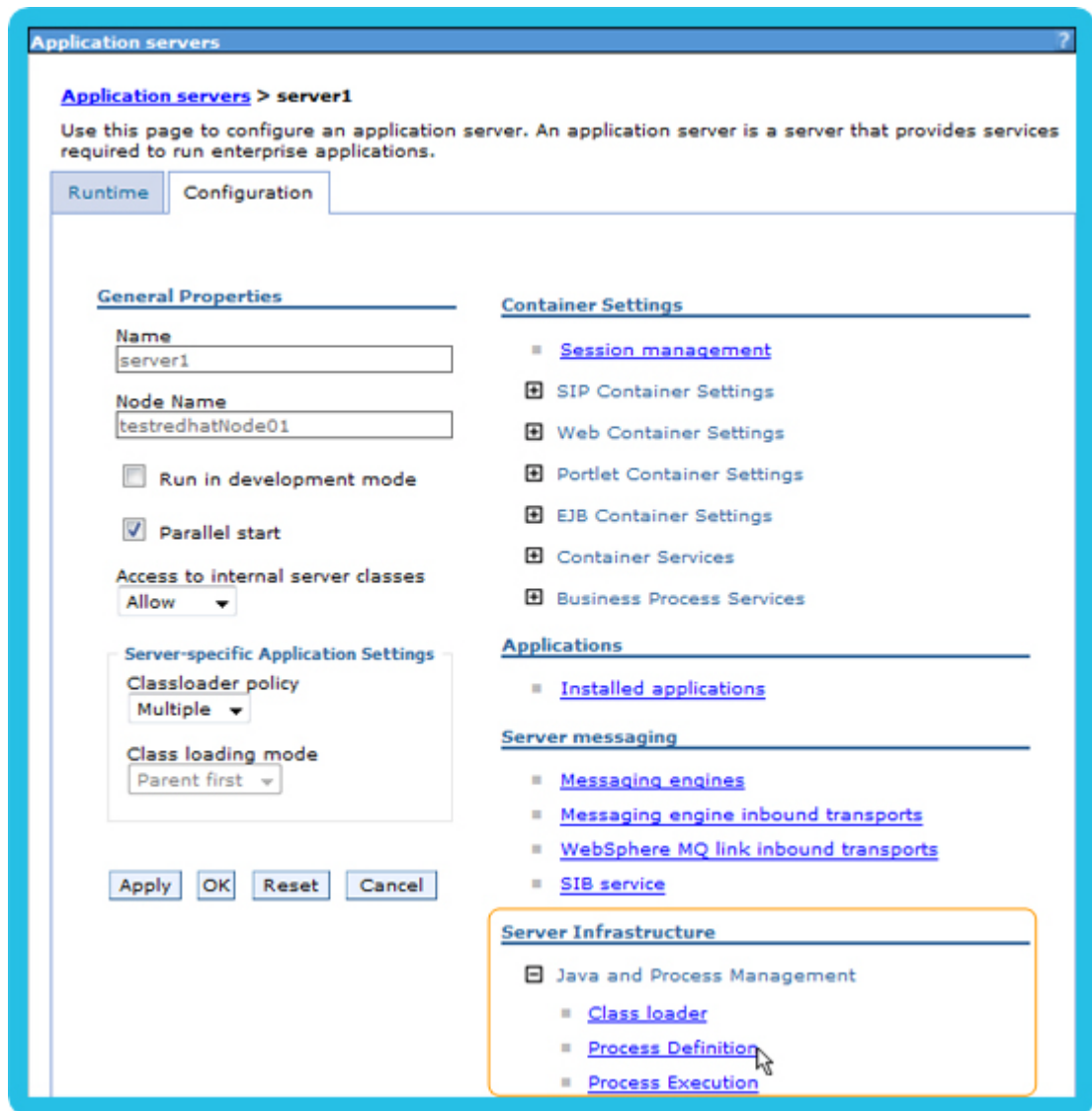


Figure 3 - 21: Accessing Process Definition configuration

The *Process Definition* page opens:

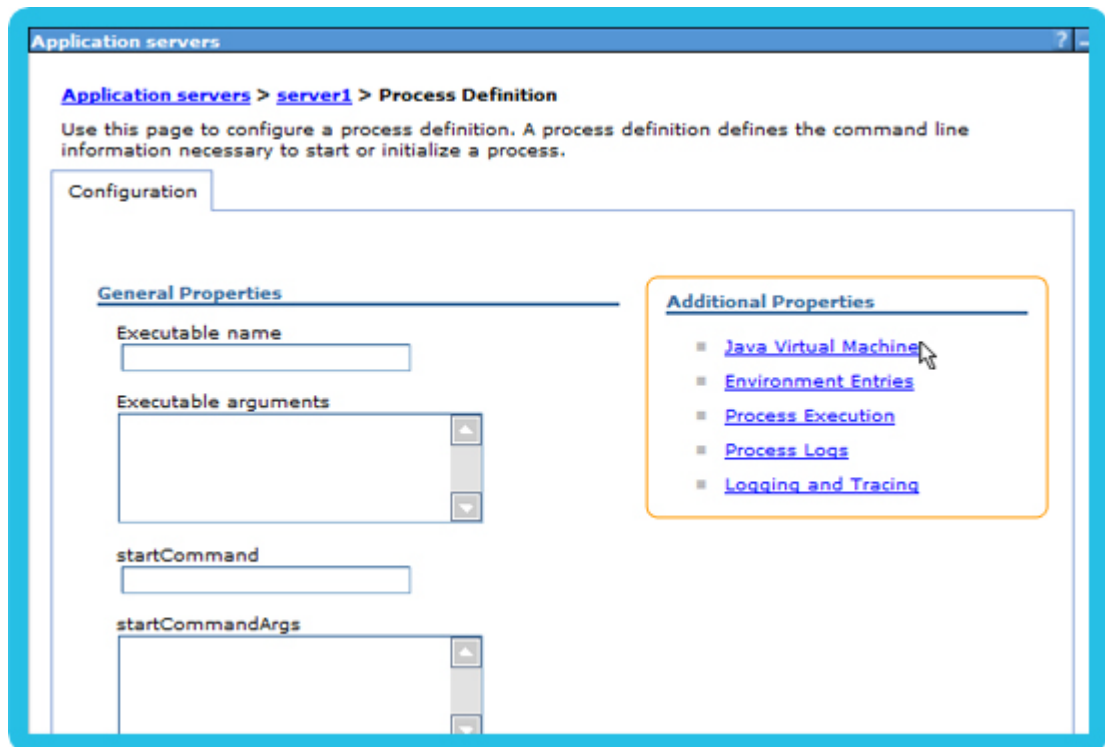


Figure 3 - 22: Server1 Process Definition configuration page on WebSphere 6

- 4 In **Additional Properties** section, click on **Java Virtual Machine**.

The *Java Virtual Machine Configuration* page opens:

Application servers > server1 > Process Definition > Java Virtual Machine

Use this page to configure advanced Java(TM) virtual machine settings.

Configuration Runtime

General Properties

Classpath

Boot Classpath

☐ Verbose class loading

☐ Verbose garbage collection

☐ Verbose JNI

Initial Heap Size

Maximum Heap Size

☐ Run HProf

HProf Arguments

☐ Debug Mode

Debug arguments

-Djava.compiler=NONE -Xdebug

Generic JVM arguments

-Djava.awt.headless=false

Executable JAR file name

Additional Properties

Custom Properties

Figure 3 - 23: Updating Process Definition configuration for server1

- 5 Specify `-Djava.awt.headless=false` in **Generic JVM arguments** input field.
- 6 Then, in *Additional Properties* section on the right of the page, click on **Custom Properties**.

[Application servers](#) > [server1](#) > [Process Definition](#) > [Java Virtual Machine](#) > [Environment Entries](#) > [Custom Properties](#) > [New](#)

Specifies an arbitrary name-value pair. The value is a string that can set internal system configuration properties.

Configuration

General Properties

* Name
DISPLAY

* Value
:3

Description

Apply OK Reset Cancel

Figure 3 - 24: Creating a new entry in Environment Entries

- 7 Create a new *Environment Entry* with name `DISPLAY` and value `:3`.
- 8 Validate by clicking on the **OK** button.

CHANGING THE ORDER OF CLASS LOADERS

In WebSphere 6, order of class loaders has to be changed to correctly run Convertigo Server application.

To change the order of class loaders

- 1 In the left menu, expand **Applications** and click on **Enterprise Applications** submenu.
- 2 Then, click on the **convertigo** application, and **Manage Modules**.

The *convertigo Manage Modules* page opens:

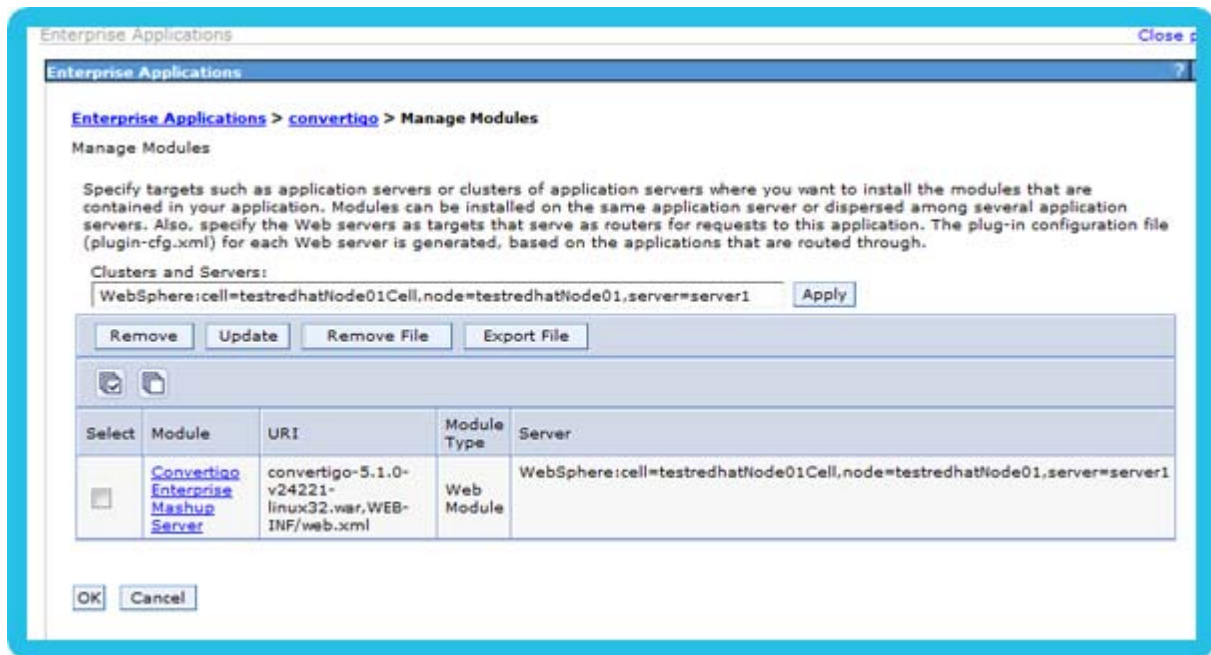


Figure 3 - 25: Convertigo Manage Modules page on WebSphere 6

- 3 Click on the **Convertigo Enterprise Mashup Server** module.

The *Configuration* page of the selected module opens:

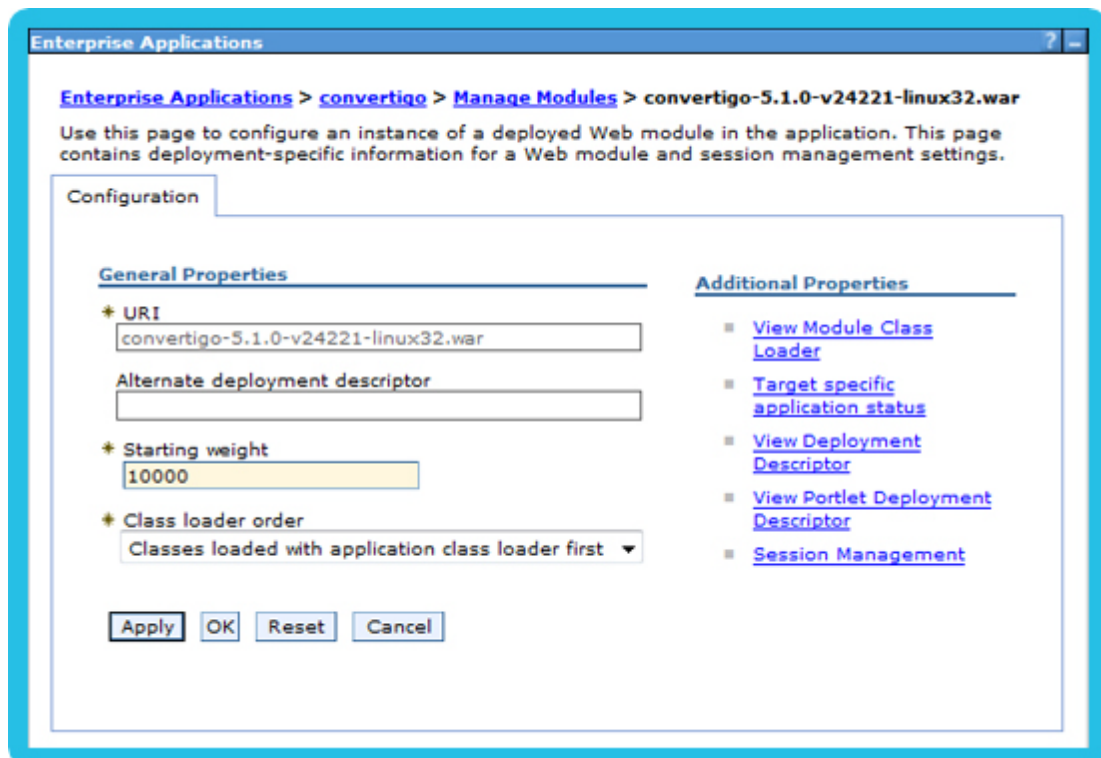


Figure 3 - 26: Updating class loader order for convertigo application

- 4 In the **Class loader order** combo box, select **Classes loaded with application class loader first**.
- 5 Validate by clicking on the **OK** button.

MODIFYING THE "IBM-WEB-EXT.XMI" FILE

In WebSphere 6 installation, the xmi configuration file has to be updated to correctly run Convertigo Server application.

To modify the "ibm-web-ext.xmi" file

- 1 Open the file `/opt/IBM/WebSphere/AppServer/profiles/AppSrv01/convertigoXX/convertigoXX.ear/convertigoXX.war/WEB-INF/ibm-web-ext.xmi` for edition:

```
<?xml version="1.0" encoding="UTF-8"?>

<com.ibm.ejs.models.base.extensions.webappext:WebAppExtension
xmi:version="2.0"          xmlns:xmi="http://www.omg.org/XMI"
xmlns:com.ibm.ejs.models.base.extensions.webappext="webappext
.xmi" xmi:id="WebAppExtension_1283428929512">

    <webApp href="WEB-INF/web.xml#ConvertigoServer"/>

    <jspAttributes      xmi:id="JSPAttribute_1283428929513"
name="reloadEnabled" value="true"/>

    <jspAttributes      xmi:id="JSPAttribute_1283428929514"
name="reloadInterval" value="10"/>

</com.ibm.ejs.models.base.extensions.webappext:WebAppExtension>
```

- 2 Add the following line:

```
<jspAttributes          xmi:id="JSPAttribute_1283428929515"
name="jdkSourceLevel" value="15"/>
```

```
<?xml version="1.0" encoding="UTF-8"?>

<com.ibm.ejs.models.base.extensions.webappext:WebAppExtension
xmi:version="2.0"          xmlns:xmi="http://www.omg.org/XMI"
xmlns:com.ibm.ejs.models.base.extensions.webappext="webappext
.xmi" xmi:id="WebAppExtension_1283428929512">

    <webApp href="WEB-INF/web.xml#ConvertigoServer"/>

    <jspAttributes      xmi:id="JSPAttribute_1283428929513"
name="reloadEnabled" value="true"/>

    <jspAttributes      xmi:id="JSPAttribute_1283428929514"
name="reloadInterval" value="10"/>

    <jspAttributes      xmi:id="JSPAttribute_1283428929515"
name="jdkSourceLevel" value="15"/>

</com.ibm.ejs.models.base.extensions.webappext:WebAppExtension>
```

- 3 Save the updated file.



You might have to also modify the file: `/opt/IBM/WebSphere/AppServer/profiles/AppSrv01/config/cells/localhostNode01Cell/applications/convertigoXX.ear/deployments/convertigoXX/convertigoXX.war/WEB-INF/ibm-web-ext.xml`

USING THE CONVERTIGO "COMPATIBILITY MODE"

The compatibility mode is required by C-EMS when running in WebSphere 6.

To activate the "compatibility mode" in Convertigo Server

- 1 Open the Convertigo Server *Administration Console* by calling the following URL in a Web browser:

`http(s)://<WebSphereIPAddress>:<WebSpherePort>/convertigo/`

- *WebSphereIPAddress* is the host name or IP address of your WebSphere server.
- *WebSpherePort* is the port number of your WebSphere server.

The Convertigo Server Administration Console opens on the authentication page:

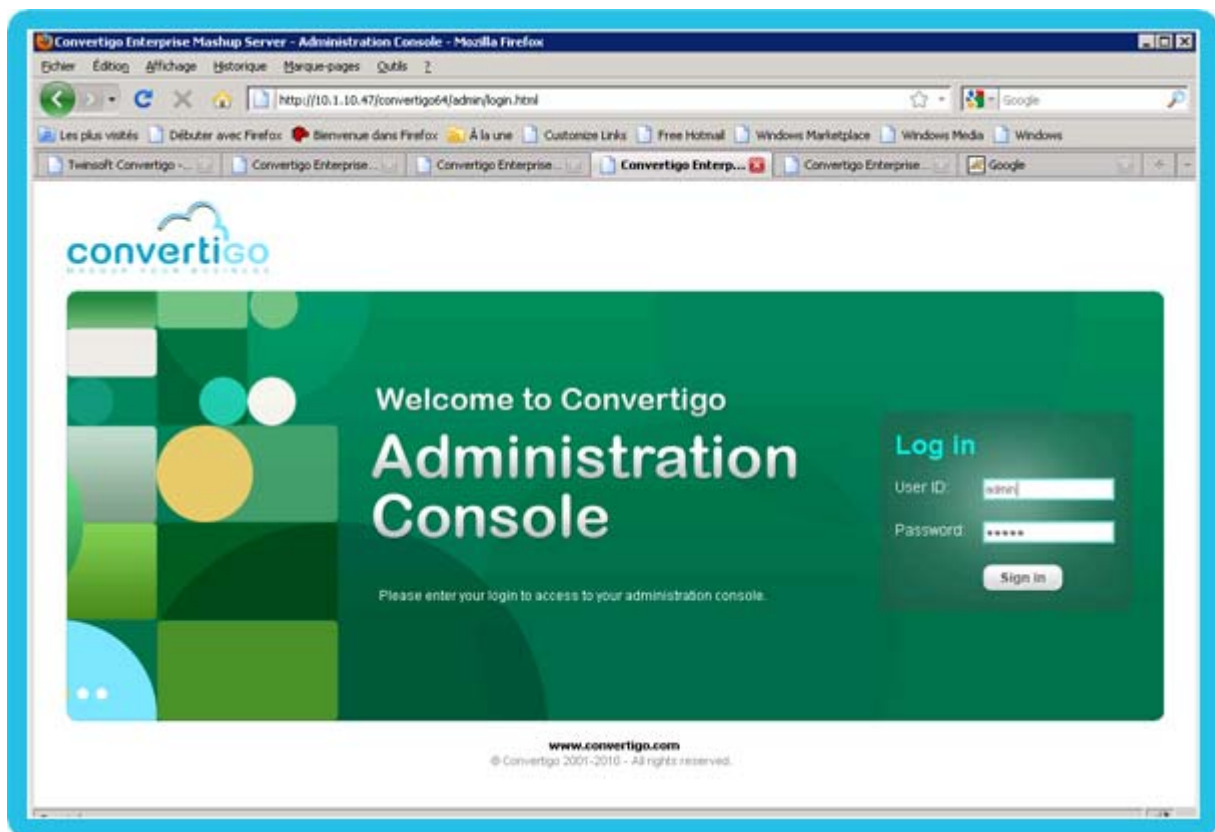


Figure 3 - 27: Convertigo Server Administration authentication page

- 2 Log in with the Convertigo Administration user ID and password (default username / password is: admin / admin) and validate by clicking on the **Sign in** button.

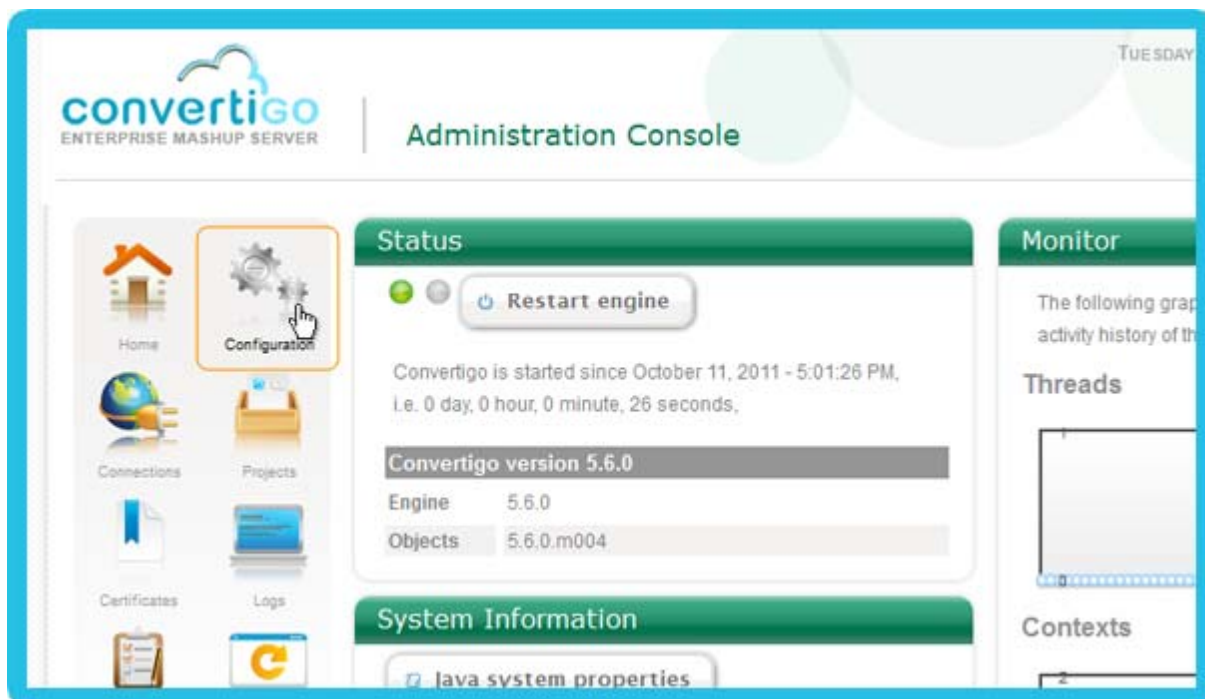


Figure 3 - 28: Clicking Configuration button

- 3 In the Administration Console left menu, click on **Configuration** button.

The *Configuration* page opens:

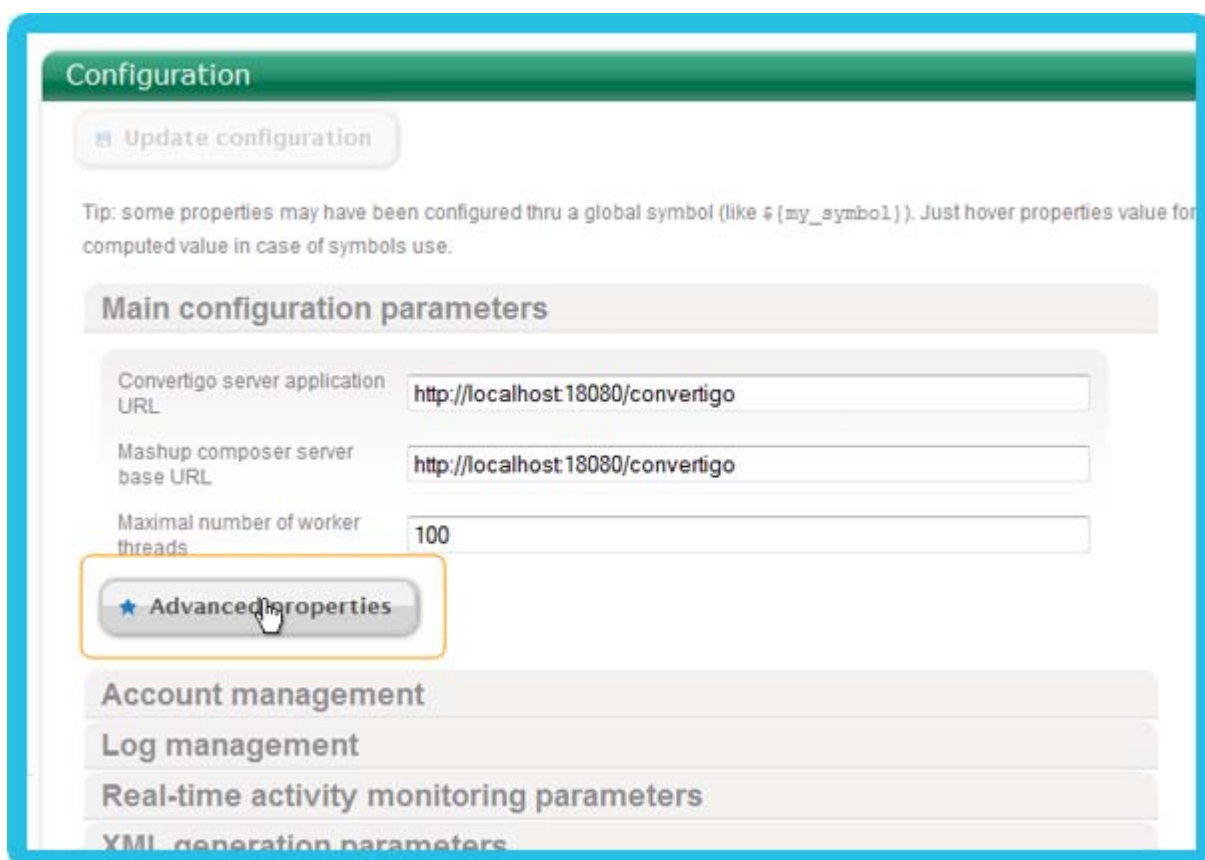


Figure 3 - 29: Configuration page in Convertigo Administration Console

- 4 In *Main configuration parameters* section, click on the **Advanced properties** button.

Advanced properties panel expands:

The screenshot shows the 'Main configuration parameters' section with the following fields:

- Admin password: [masked with dots]
- Admin username: admin
- Convertigo server application URL: http://localhost:28080/convertigo
- Mashup composer server base URL: http://localhost:18080/convertigo
- Maximal number of worker threads: 100

Below this is the '★ Advanced properties' section, which is expanded. It contains the following options:

- ☒ Product version check
- ☐ Use the Java Thread.stop() method in order to finish threads
- ☒ (Linux only) Launch Xvnc server using DISPLAY environment variable at startup
- ☐ Migration 3.0.0
- Time allowed for pool management task in seconds (-1 for disable): -1
- ☒ Enable the compatibility mode for projects data (required for JSP usage); engine restart required

Figure 3 - 30: Advanced properties in Configuration page

- 5 Then, check the **Enable the compatibility mode for projects data** checkbox.
- 6 Scroll down to the bottom of the page and click on the **Update configuration** button:

The screenshot shows a list of configuration categories on the left side of the page:

- Network configuration
- HTML proxy settings
- SSL configuration
- Cache management
- Legacy Carioca portal management
- Billing system
- Notifications
- Mobile builder

At the bottom of the page, there is a button labeled 'Update configuration' with a hand cursor icon pointing to it.

Figure 3 - 31: Validating updates in Configuration page

- 7 After these modifications, restart the Convertigo application in WebSphere.

3.4.3 Installing C-EMS on Linux / clustered WebSphere 7

Installing Convertigo Server is possible on clustered WebSphere version 7. This procedure completes the official IBM documentation to install an application.

- [Prerequisites](#)
- [Installation procedure](#)

PREREQUISITES

SERVER PREREQUISITES

The following table describes minimum server prerequisites for installing Convertigo Server:

Table 3 - 6: Server prerequisites

	RedHat / WebSphere
Version	<ul style="list-style-type: none">• RedHat starting from version 5.2• WebSphere starting from version 7
CPU	Dual Core
RAM	4 Gb
Disk space	10 Gb
Packages	<ul style="list-style-type: none">• Package <code>xulrunner-1.9.0.19-1.el5_5</code> and all dependencies• Package <code>xorg-x11-fonts-Type1-7.1-2.1.el5</code>



Specified packages are necessary for using web connectors.

INSTALLATION REQUIREMENTS

- The C-EMS `.war` file: `convertigo-X.Y.Z-v12345-linux32.war` (for 32 bits version) or `convertigo-X.Y.Z-v12345-linux64.war` (for 64 bits version).
- You must know how to access WebSphere console. For example: `https://websphere_server:9043/ibm/console`
- You must know the user ID and password to connect to the WebSphere console.
- Convertigo workspace will be created in *home* directory. If the account used for installation doesn't have a *home* directory, add an *Environment Entry* named `HOME` with a value pointing on a directory where the Convertigo workspace will be created.

The installation is made on a topology with a `dmgr` (deployment manager) and four nodes. Each node contains ten members. See below a part of the node and members configuration:

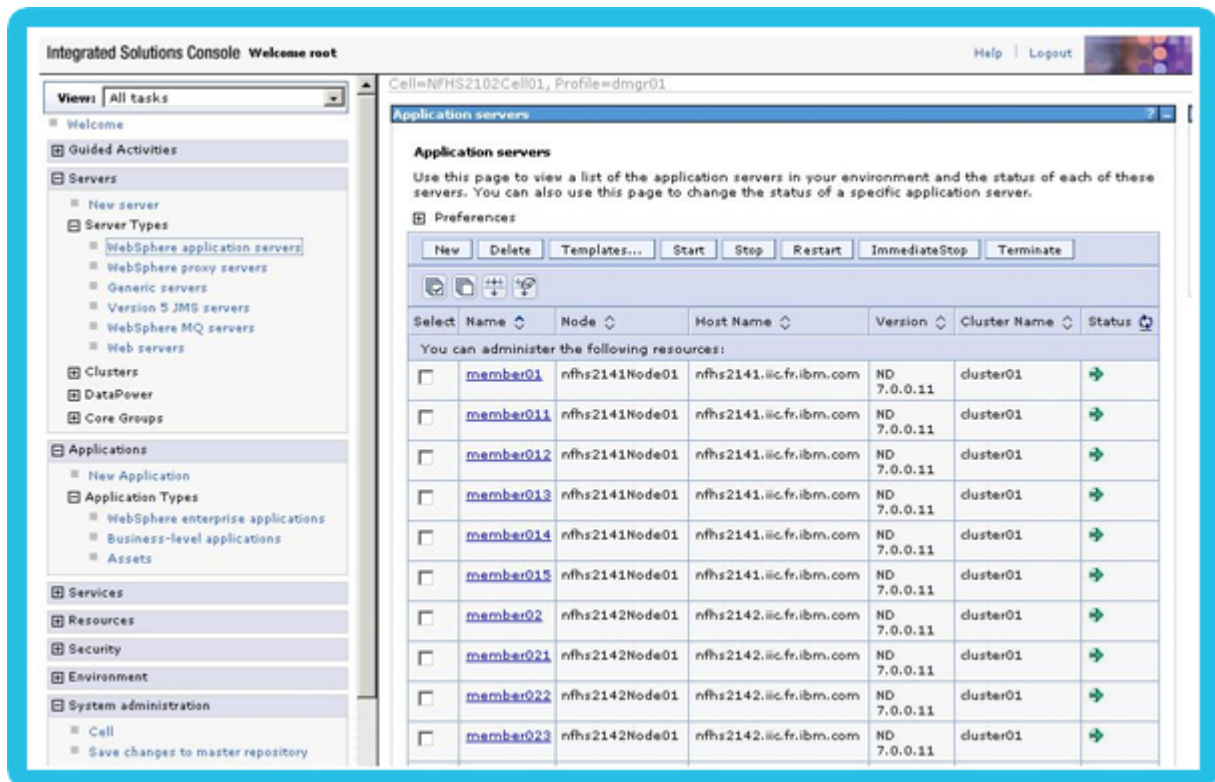


Figure 3 - 32: Node and members configuration in WebSphere 7

INSTALLATION PROCEDURE

The following procedure explains step by step how to install C-EMS on RedHat / WebSphere 7.

To install Convertigo Server on WebSphere 7

- 1 Connect to the WebSphere 7 console using the appropriate URL:

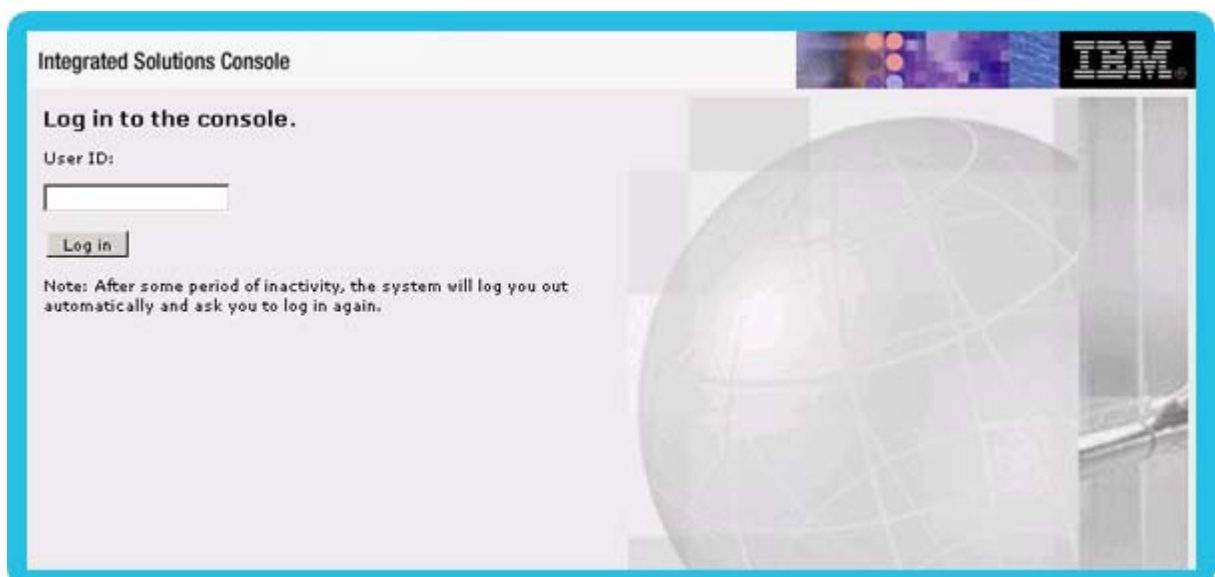


Figure 3 - 33: Connecting to WebSphere 7 console

- 2 Set administration credentials and validate by clicking the **Log in** button.
- 3 In the left menu, expand **Applications** and click on **New Application** submenu.

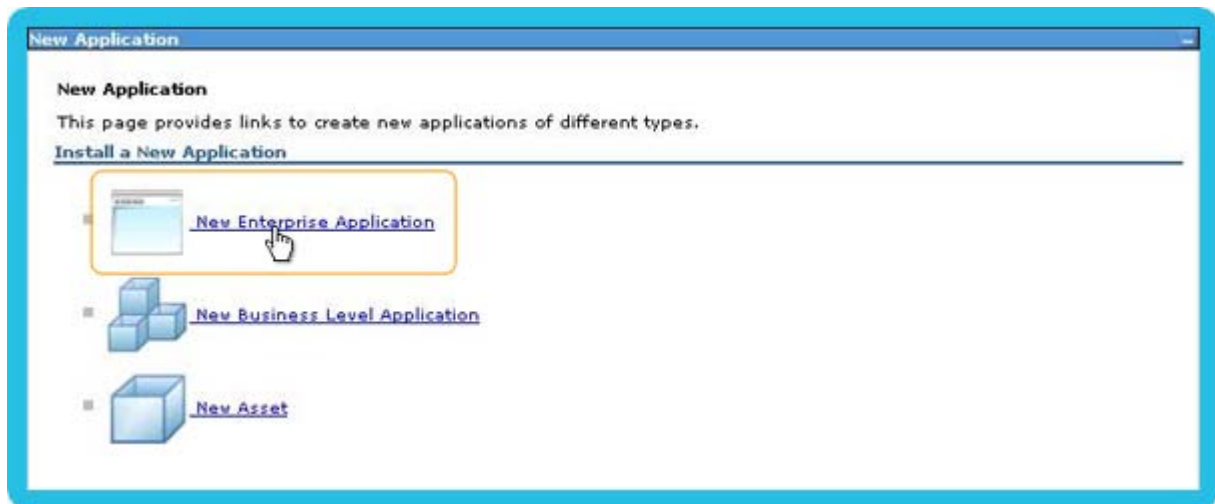


Figure 3 - 34: Installing new application in WebSphere 7

- 4 Click on **New Enterprise Application**.

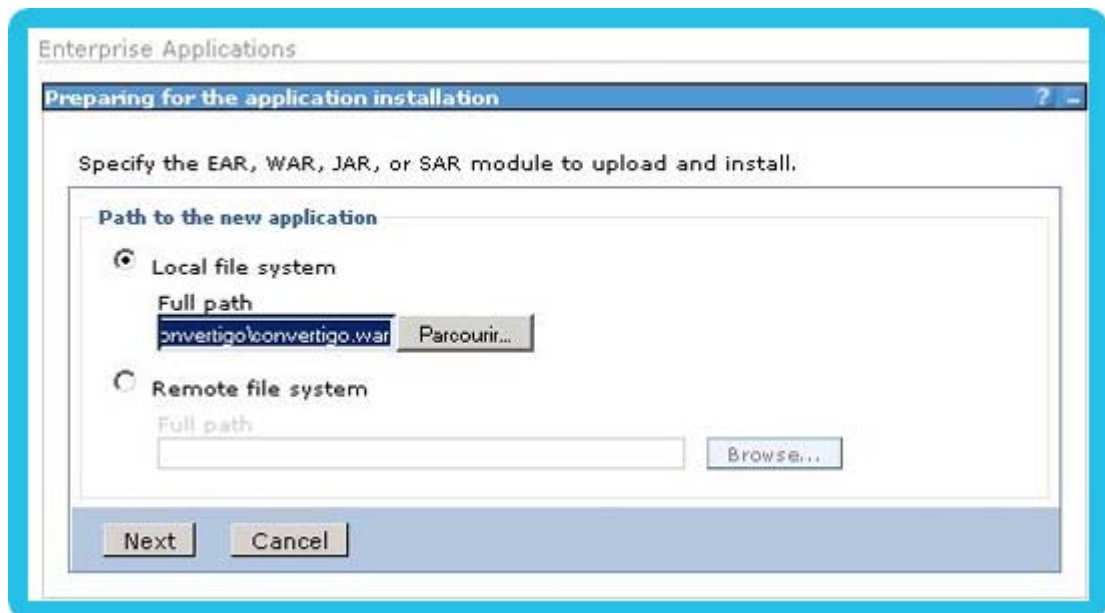


Figure 3 - 35: Installing new application in WebSphere 7

- 5 Set the full path of the `.war` file (or click on the **Browse** button to access to the file) and click on **Next**.

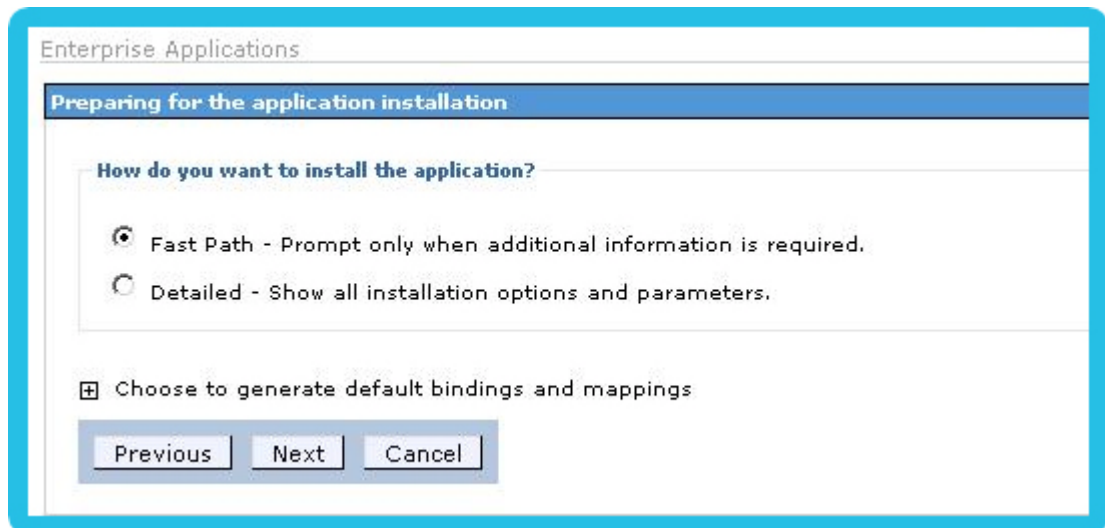


Figure 3 - 36: Configuration of installation in WebSphere 7

6 Click on **Next**.

You are redirected to the application's installation page.

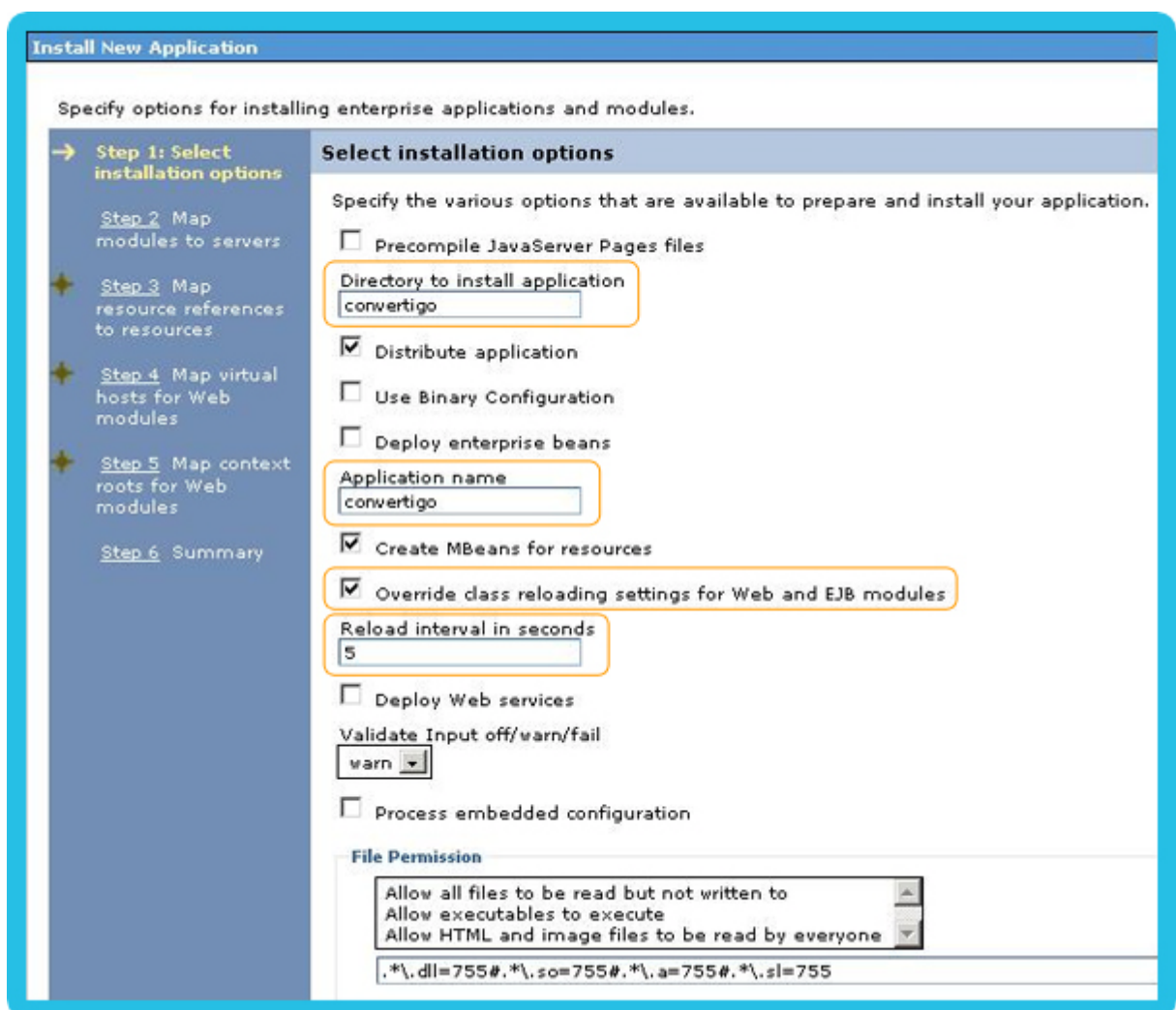


Figure 3 - 37: Convertigo installation options in WebSphere 7

- 7 In the *installation options* page, specify:
 - specify the installation directory in **Directory to install application** input field (for example, convertigo),
 - specify the application name in **Application name** input field (for example, convertigo),
 - check the **Override class reloading settings for Web and EJB modules** checkbox,
 - and set class reloading interval in **Reload interval in seconds** input field (for example, 5 seconds).
- 8 Then, click on **Next**.

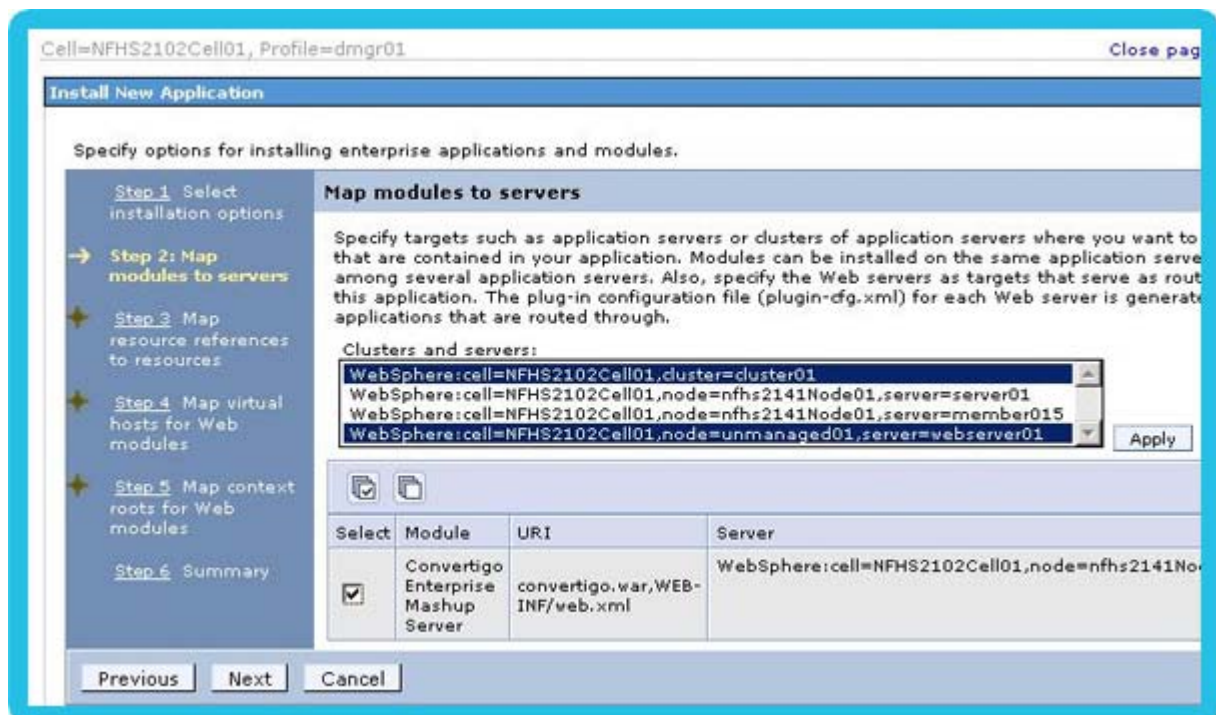


Figure 3 - 38: Convertigo installation Map modules to servers page in WebSphere 7

- 9 In *Map modules to servers* page, select **Convertigo Enterprise Mashup Server** module by checking its checkbox in the table.
- 10 In **Clusters and servers** list, select the cluster AND the load balancer, and click on the **Apply** button.
- 11 Then, click on **Next** until the *Map context roots for Web modules* page.

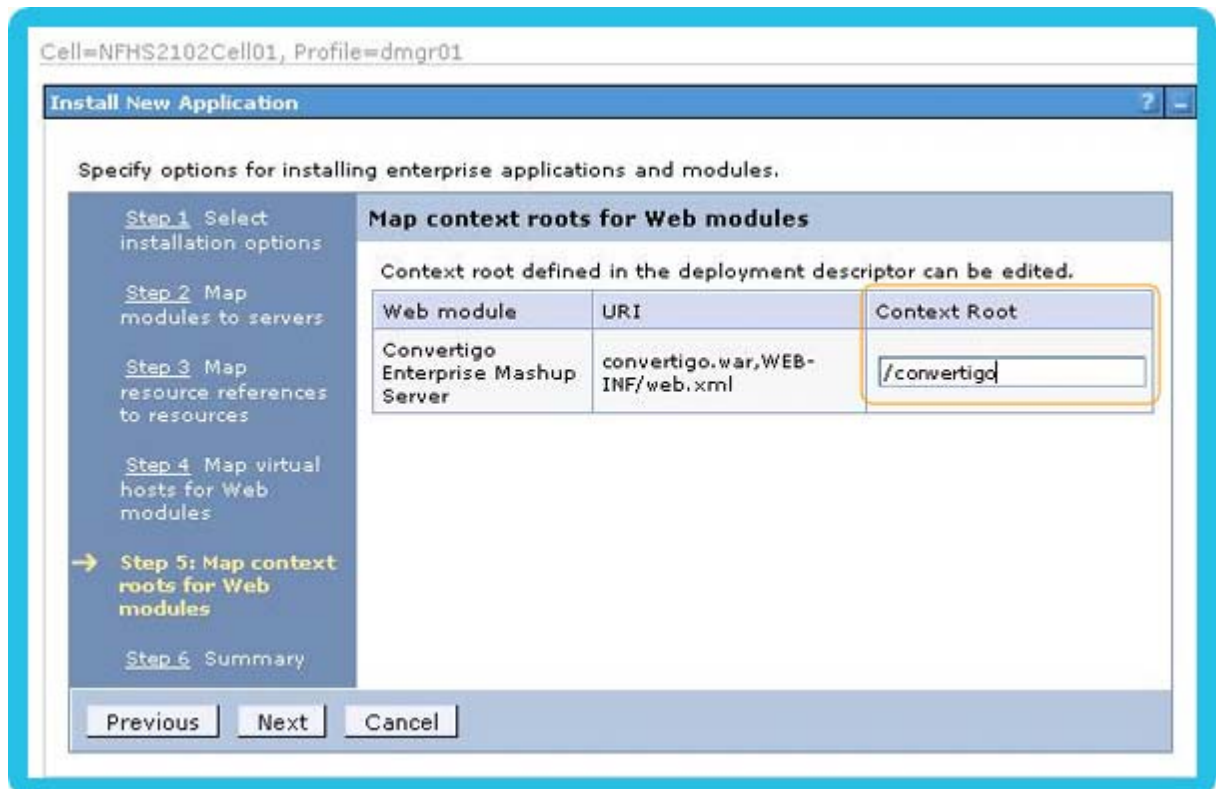


Figure 3 - 39: Convertigo installation Map context roots for Web modules page

- 12** Specify a **Context Root** (for example /convertigo) and click on **Next**.

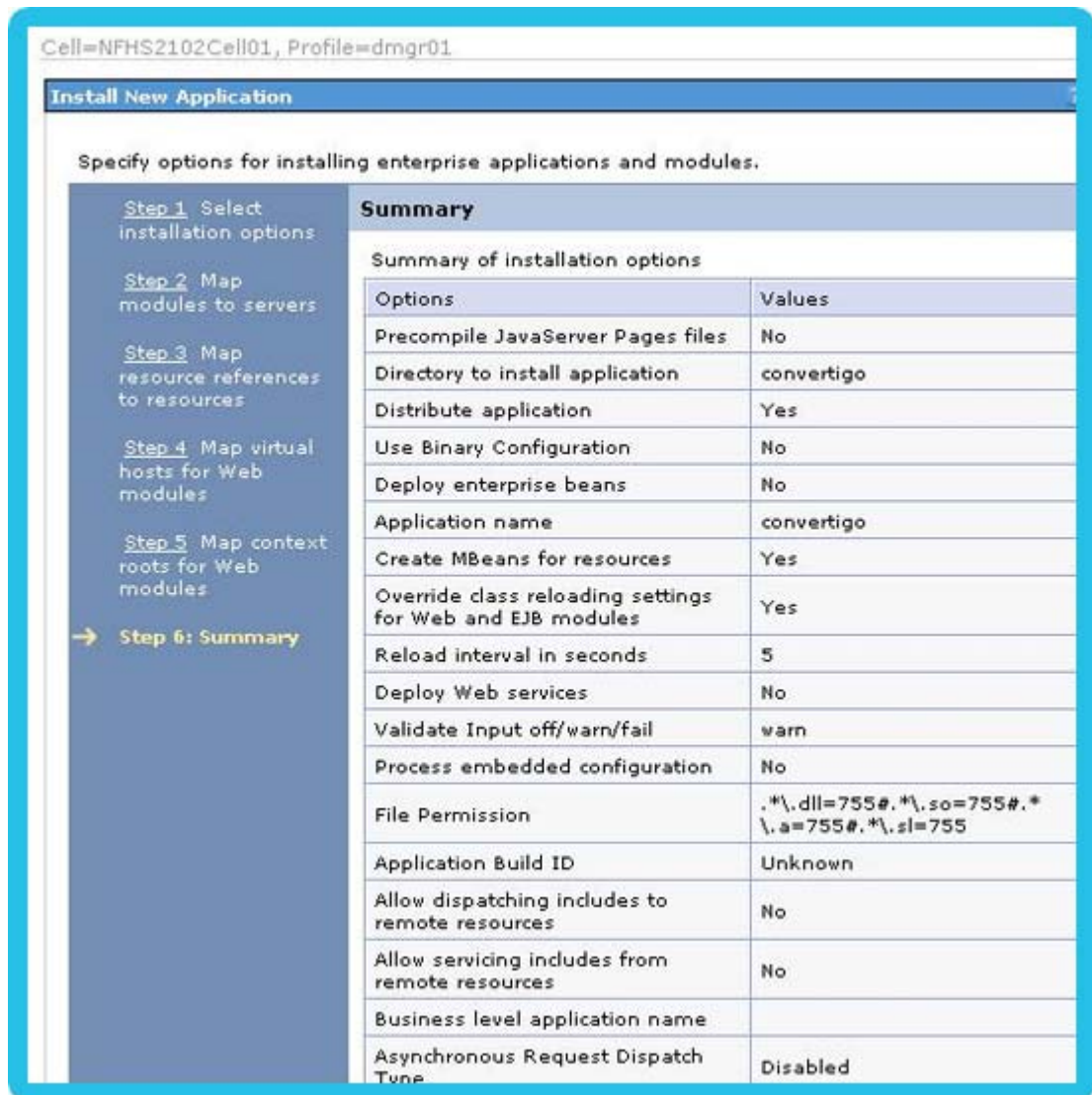


Figure 3 - 40: Convertigo installation Summary page

- 13** In the *Summary* page, click on **Finish**.
- 14** The installation process can take a few minutes:

If there are enterprise beans in the application, the EJB deployment process can take several minutes. Do process completes.

Check the SystemOut.log on the deployment manager or server where the application is deployed for specific information occurs.

ADMA5016I: Installation of convertigo started.

ADMA0115W: Resource assignment of name jdbc/dreamface_db and type javax.sql.DataSource, with JNDI name dreamface_db, module Convertigo Enterprise Mashup Server with URI convertigo.war, WEB-INF/web.xml deployed to target WebSphere:cell=NFHS2102Cell01,node=nfhs2141Node01,server=server01.

ADMA5068I: The resource validation for application convertigo completed successfully, but warnings occurred during validation.

ADMA5058I: Application and module versions are validated with versions of deployment targets.

ADMA5005I: The application convertigo is configured in the WebSphere Application Server repository.

ADMA5053I: The library references for the installed optional package are created.

ADMA5005I: The application convertigo is configured in the WebSphere Application Server repository.

ADMA5001I: The application binaries are saved in /wasProfile/dmgr01/wrtemp/3506402/workspace/cells/NFHS2102Cell01/convertigo.ear

ADMA5005I: The application convertigo is configured in the WebSphere Application Server repository.

SECJ0400I: Successfully updated the application convertigo with the appContextIDForSecurity information.

ADMA5005I: The application convertigo is configured in the WebSphere Application Server repository.

ADMA5113I: Activation plan created successfully.

ADMA5011I: The cleanup of the temp directory for application convertigo is complete.

ADMA5013I: Application convertigo installed successfully.

Application convertigo installed successfully.

To start the application, first save changes to the master configuration.

Changes have been made to your local configuration. You can:

- **Save directly to the master configuration.**

Figure 3 - 41: Convertigo installation page

- 15 Then, click on **Save directly to the master configuration.**

This action triggers the nodes synchronization through the cluster:

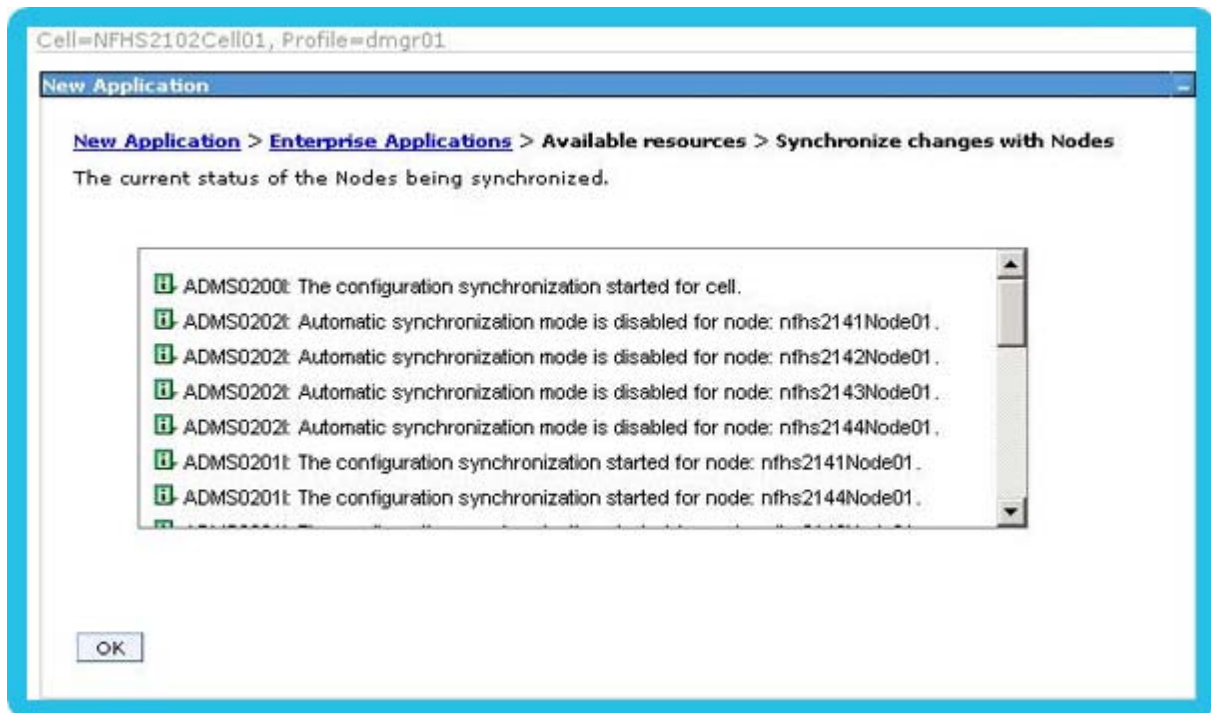


Figure 3 - 42: Nodes synchronization through the cluster

The convertigo application should now be visible in the *Enterprise Applications* page:

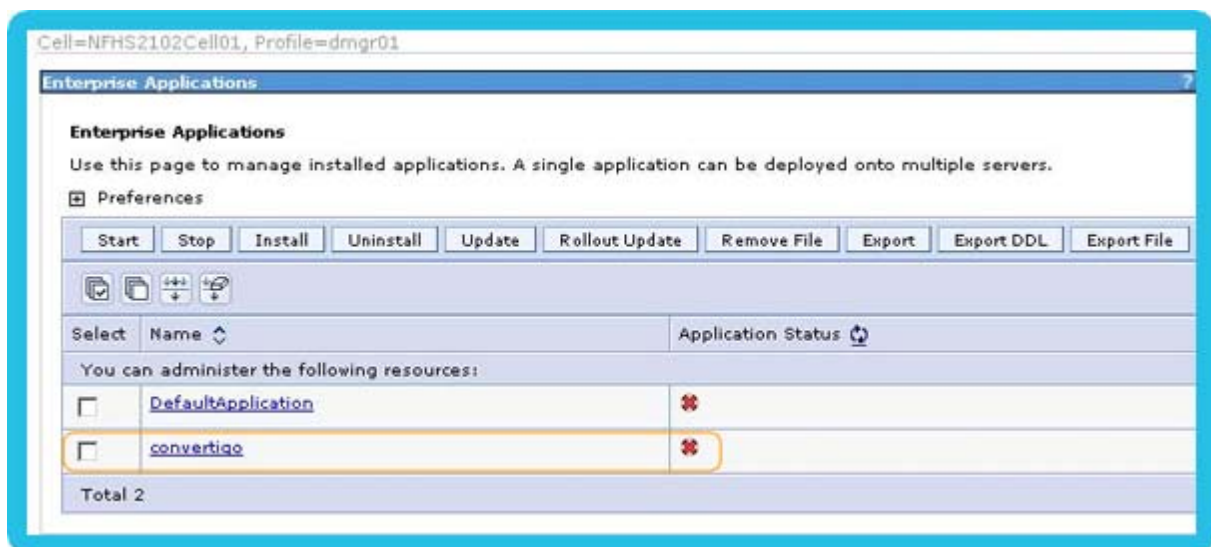


Figure 3 - 43: Convertigo application installed

- 16 In the left menu, expand **Servers > Server Types** and click on **Web servers** submenu.
The *Web servers* page opens.
- 17 In this page, select the web server by checking its checkbox and click on the **Generate Plug-in** button.
- 18 Then, click on the **Propagate Plug-in** button:

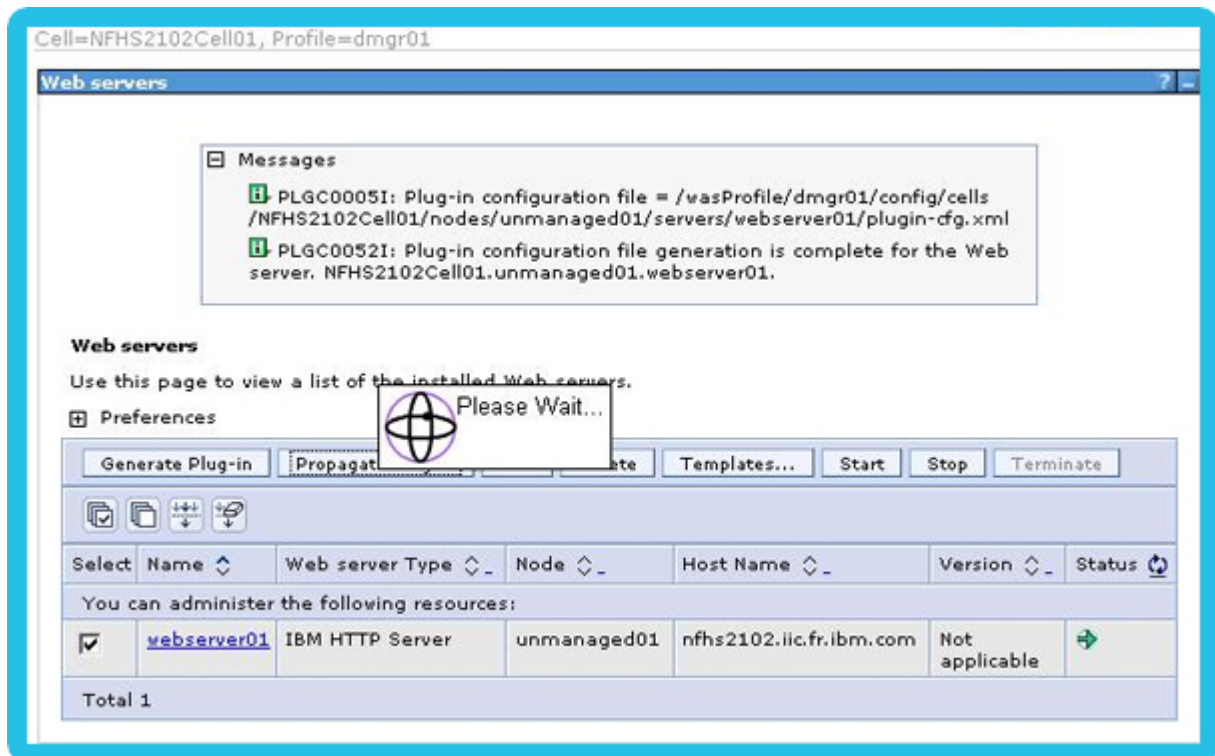


Figure 3 - 44: Propagating Plug-in in Web servers page

- 19 Back to *Enterprise Applications* page, the convertigo application can now be started by selecting the application and clicking on the **Start** button

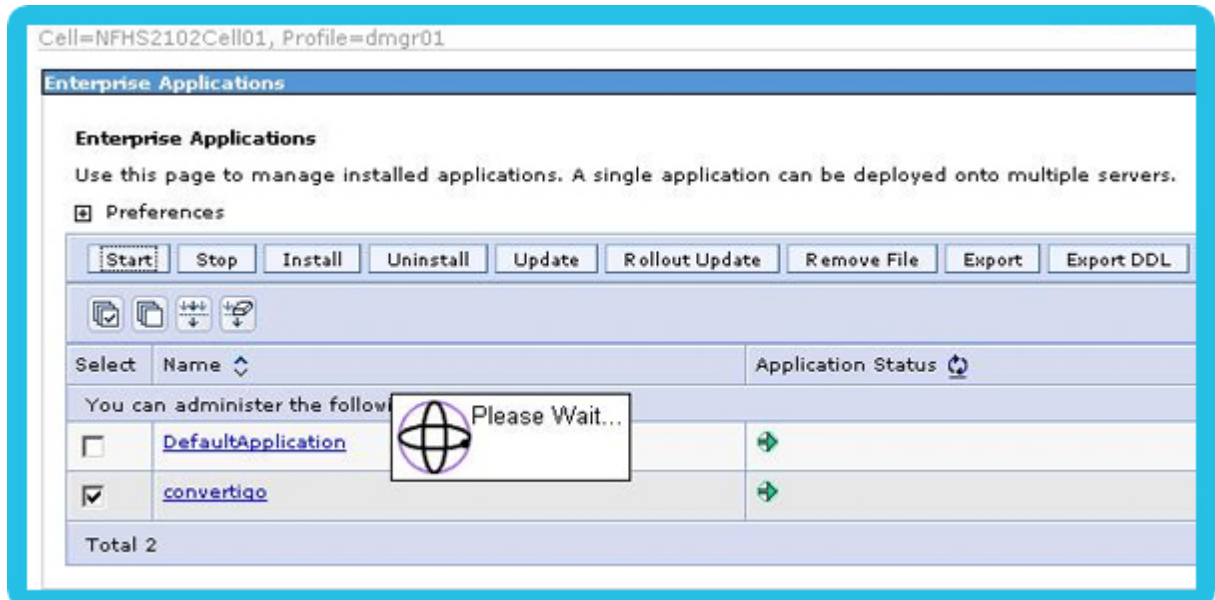


Figure 3 - 45: Starting convertigo application

- 20 You have to check in *Messages* all the members where C-EMS has been deployed.

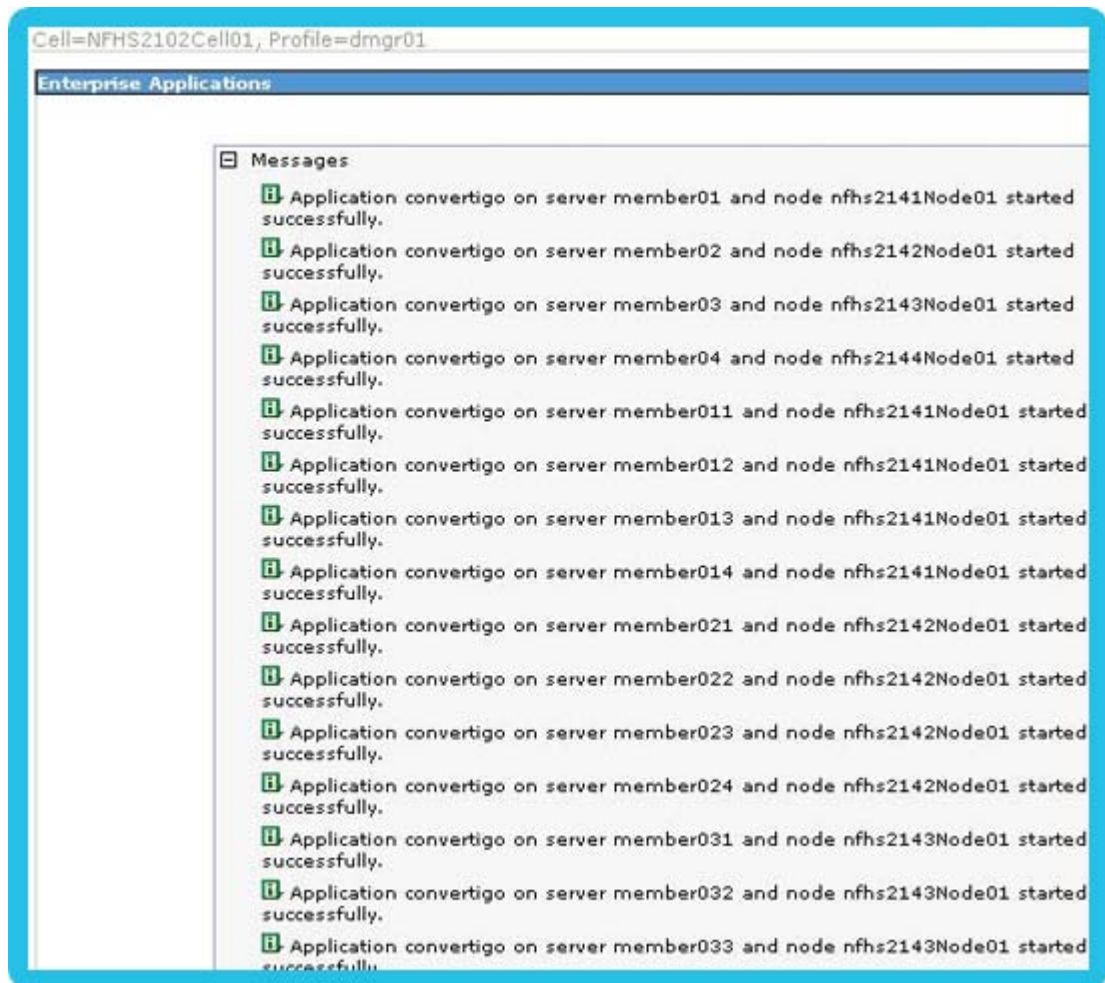


Figure 3 - 46: Starting convertigo application messages to check

3.4.4 Parameterizing C-EMS with WebSphere 7

Parameterization of C-EMS in WebSphere 7 consists in:

- Specifying Java parameters and environment entries in WebSphere 7

SPECIFYING JAVA PARAMETERS AND ENVIRONMENT ENTRIES IN WEBSPHERE 7

WebSphere 7 server and environment need to be configured to correctly run Convertigo Server application.

To specify Java parameters and environment entries in WebSphere 7

- 1 In the left menu, expand **Servers > Server Types** and click on **WebSphere application servers** submenu.

The *Application servers* page opens:

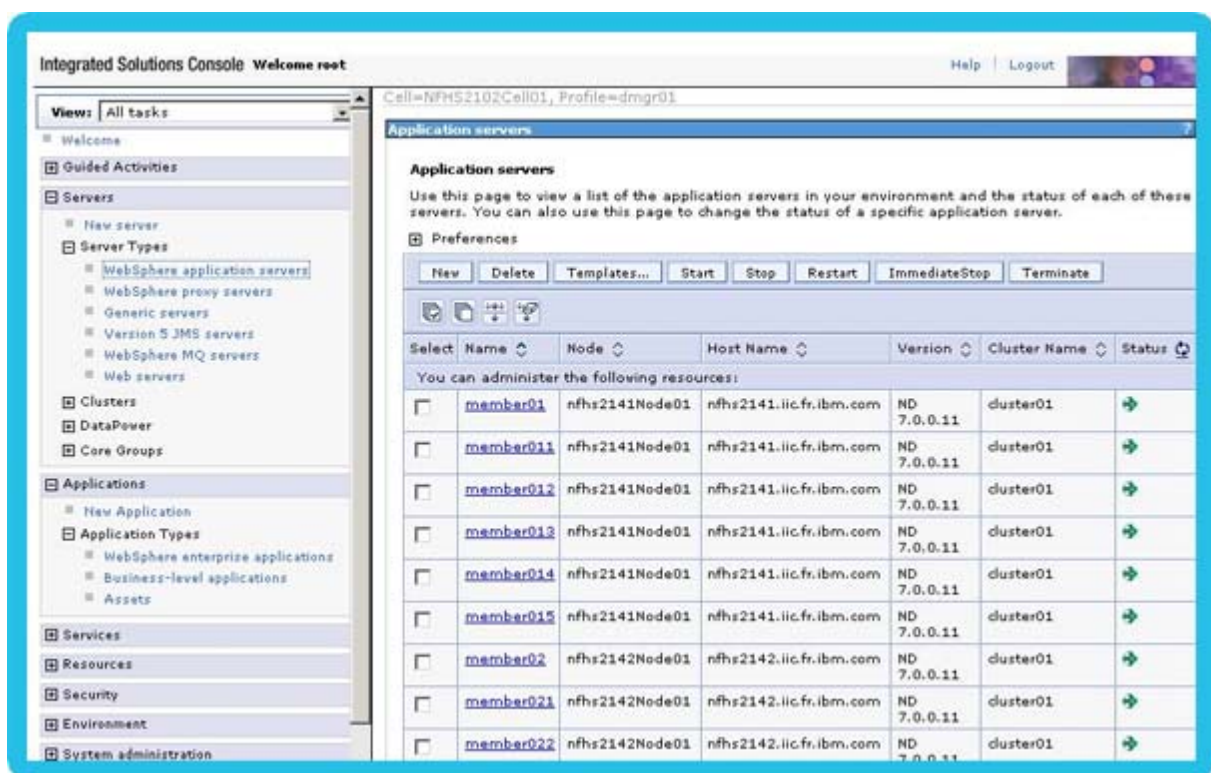


Figure 3 - 47: Application servers page on WebSphere 7

- 2 Click on the member you want to configure.

General Properties

Name
member01

Node name
nfhs2141Node01

☐ Run in development mode

☒ Parallel start

☐ Start components as needed

Access to internal server classes
Allow

Server-specific Application Settings

ClassLoader policy
Multiple

Class loading mode
Classes loaded with parent class loader first

Apply OK Reset Cancel

Container Settings

- [Session management](#)
- ☒ SIP Container Settings
- ☒ Web Container Settings
- ☒ Portlet Container Settings
- ☒ EJB Container Settings
- ☒ Container Services
- ☒ Business Process Services

Applications

- ☒ [Installed applications](#)

Server messaging

- ☒ [Messaging engines](#)
- ☒ [Messaging engine inbound transports](#)
- ☒ [WebSphere MQ link inbound transports](#)
- ☒ [SIB service](#)

Server Infrastructure

- ☒ Java and Process Management
- ☒ Administration

Communications

Figure 3 - 48: Configuration of memberXX on WebSphere 7

- 3 In *Server infrastructure* section of the *memberXX* configuration page, expand **Java and Process management** and click on **Process definition**.

Cell=NFHS2102Cell01, Profile=dmgr01

Application servers

Application servers > member01 > Process definition

Use this page to configure a process definition. A process definition defines the command line information necessary to start or initialize a process.

Configuration

General Properties

Executable name

Executable arguments

Start command

Start command arguments

Additional Properties

- ☒ [Java Virtual Machine](#)
- ☐ [Environment Entries](#)
- ☐ [Process execution](#)
- ☐ [Process Logs](#)
- ☐ [Logging and tracing](#)

Figure 3 - 49: memberXX Process definition on WebSphere 7

- 4 In *Additional properties* section of the page, click on **Java Virtual Machine** link.
- 5 In *Java Virtual Machine* page, update **Generic JVM arguments** input field with:
`-Djava.awt.headless=false`

☐ Verbose garbage collection

☐ Verbose JNI

Initial heap size
512 MB

Maximum heap size
1532 MB

☐ Run HProf

HProf Arguments
|

☐ Debug Mode

Debug arguments
-agentlib:jdwp=transport=dt_socket,server=y,suspend=n,address=7777

Generic JVM arguments
-Djava.awt.headless=false

Executable JAR file name
|

☐ Disable JIT

Operating system name
linux

Apply OK Reset Cancel

Figure 3 - 50: memberXX Java Virtual Machine settings

- 6 To change the Convertigo default workspace directory, you can add:

`-Dconvertigo.cems.user_workspace_path=<path of your workspace>`



For more information on Convertigo user workspace, see Appendix "Convertigo workspace".

- 7 Validate by clicking on the **OK** button.

Cell=NFHS2102Cell01, Profile=dmgr01

Application servers

[Application servers](#) > [member01](#) > **Process definition**

Use this page to configure a process definition. A process definition defines the command line information necessary to start or initialize a process.

Configuration

General Properties

Executable name

Executable arguments

Start command

Start command arguments

Additional Properties

- [Java Virtual Machine](#)
- [Environment Entries](#)
- [Process execution](#)
- [Process Logs](#)
- [Logging and tracing](#)

Figure 3 - 51: memberXX Process definition on WebSphere 7

- 8 In *Additional properties* section of the page, click then on **Environment entries** link.

Cell=NFHS2102Cell01, Profile=dmgr01

Application servers

[Application servers](#) > [member01](#) > [Process definition](#) > **Environment Entries**

Use this page to specify an arbitrary name and value pair. The value that is specified for the name and value pair is a string that can set internal system configuration properties.

Preferences

New Delete

☒ ☐ ☐ ☐

Select	Name	Value	Description
<input type="checkbox"/>	DISPLAY	:3	Set X11 display to Port 3

You can administer the following resources:

Total 1

Figure 3 - 52: Environment entries on WebSphere 7

- 9 Create a new *Environment Entry* with name `DISPLAY` and value `:3`.
- 10 If the account used for installation doesn't have a *home* directory, add an *Environment*

Entry HOME with a value pointing on a directory where the Convertigo workspace will be created.

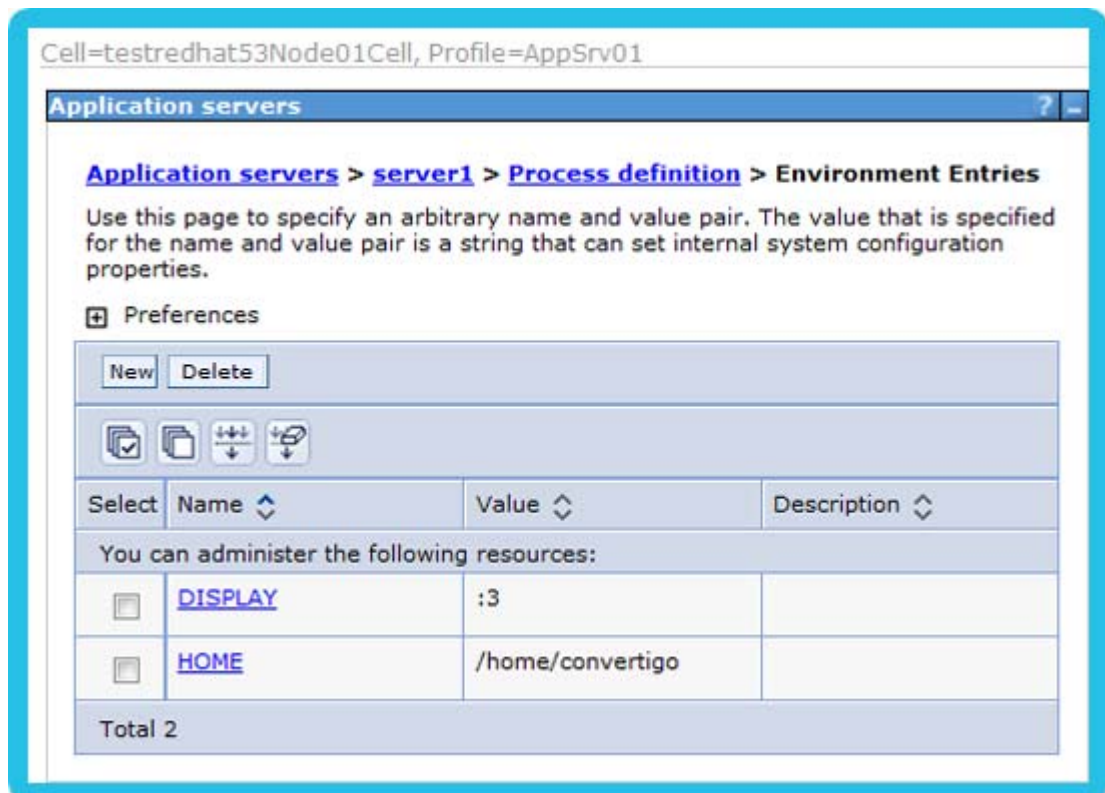


Figure 3 - 53: Environment entries on WebSphere 7



Beware that the `/home/convertigo` directory *MUST* exist before Convertigo Server runs.



For more information on Convertigo user workspace, see Appendix "Convertigo workspace".

- 11 You have to configure all members on which Convertigo Server runs. To do so, repeat steps 2 to 10 of this procedure for each member.



You can also use a template before creating members to deploy these parameters.

- 12 The installation can be validated by calling the following URL in a Web browser:

`http(s)://<WebSphereIPAddress>:<WebSpherePort>/convertigo/`

- *WebSphereIPAddress* is the host name or IP address of your WebSphere server.
- *WebSpherePort* is the port number of your WebSphere server.

The Convertigo Server *Administration Console* opens on the authentication page:

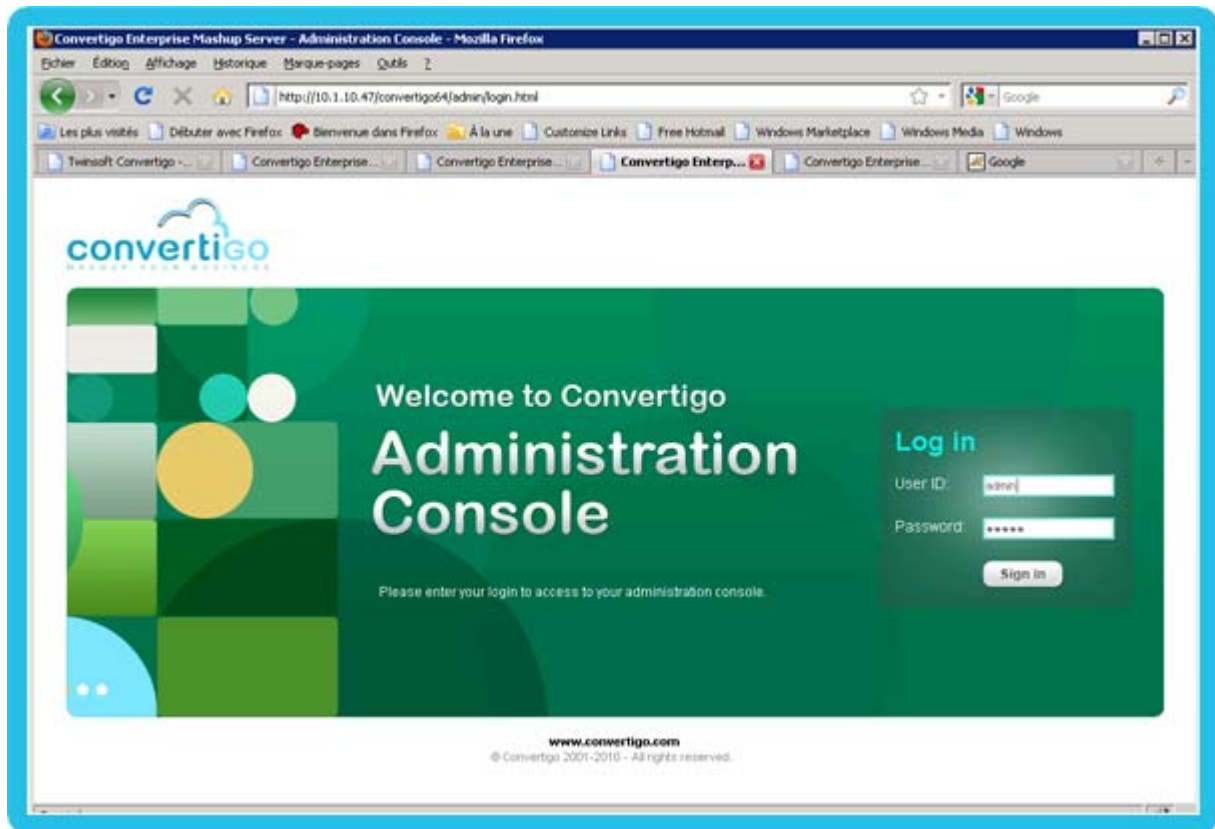


Figure 3 - 54: Convertigo Server Administration authentication page



4 Using Convertigo Administration Console

This chapter describes the several actions, configurations and possibilities of the Convertigo Server Administration Console.

- [General presentation of the Administration Console](#)
- [Configuration](#)

4.1 General presentation of the Administration Console

Convertigo Server Administration Console is the web application that allows you to administrate and configure your Convertigo Server. Convertigo Studio also includes the Administration Console, i.e. the Administration Console of the Convertigo Server embedded in Convertigo Studio.

This section will introduce you to Convertigo Administration Console:

- [Accessing Administration Console](#)
- [Administration Console Home page](#)

4.1.1 Accessing Administration Console

This section explains step by step how to connect to your Convertigo Server Administration Console. Convertigo Server administrator can access Administration Console of the server, Convertigo Studio developers can access Administration Console of the server embedded in the Studio.

To access Convertigo Administration Console

As a Web application, Convertigo Server Administration Console is accessible through a Web browser.

- 1 Launch a standard Web browser (Mozilla Firefox for example).
- 2 In the URL address field, type in the URL in the following format:

`http://<ConvertigoServer>/<ConvertigoAppName>/admin`

For example, to access a local Convertigo Studio or Convertigo Server administration:

- *ConvertigoServer* = localhost:18080 (or localhost:28080 for server local installation configuration)
- *ConvertigoAppName* = convertigo

It gives, in a Mozilla Firefox URL address bar:

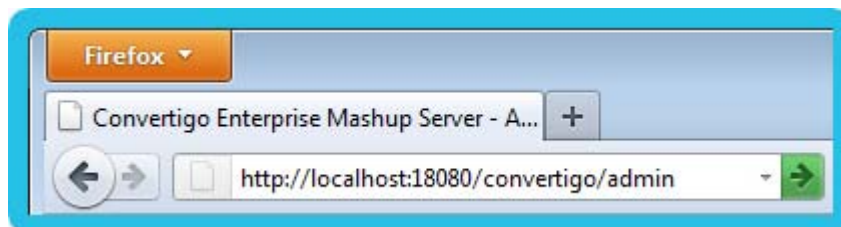


Figure 4 - 1: Convertigo Studio administration URL

For example, to access a Convertigo Cloud administration:

- *ConvertigoServer* = me.convertigo.net
- *ConvertigoAppName* = cems

It gives, in a Mozilla Firefox URL address bar:

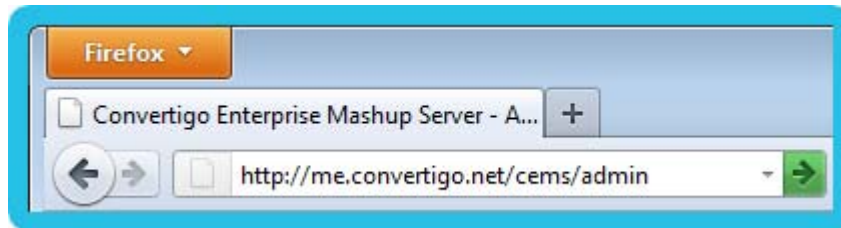


Figure 4 - 2: Convertigo Cloud administration URL

The Administration authentication page opens:

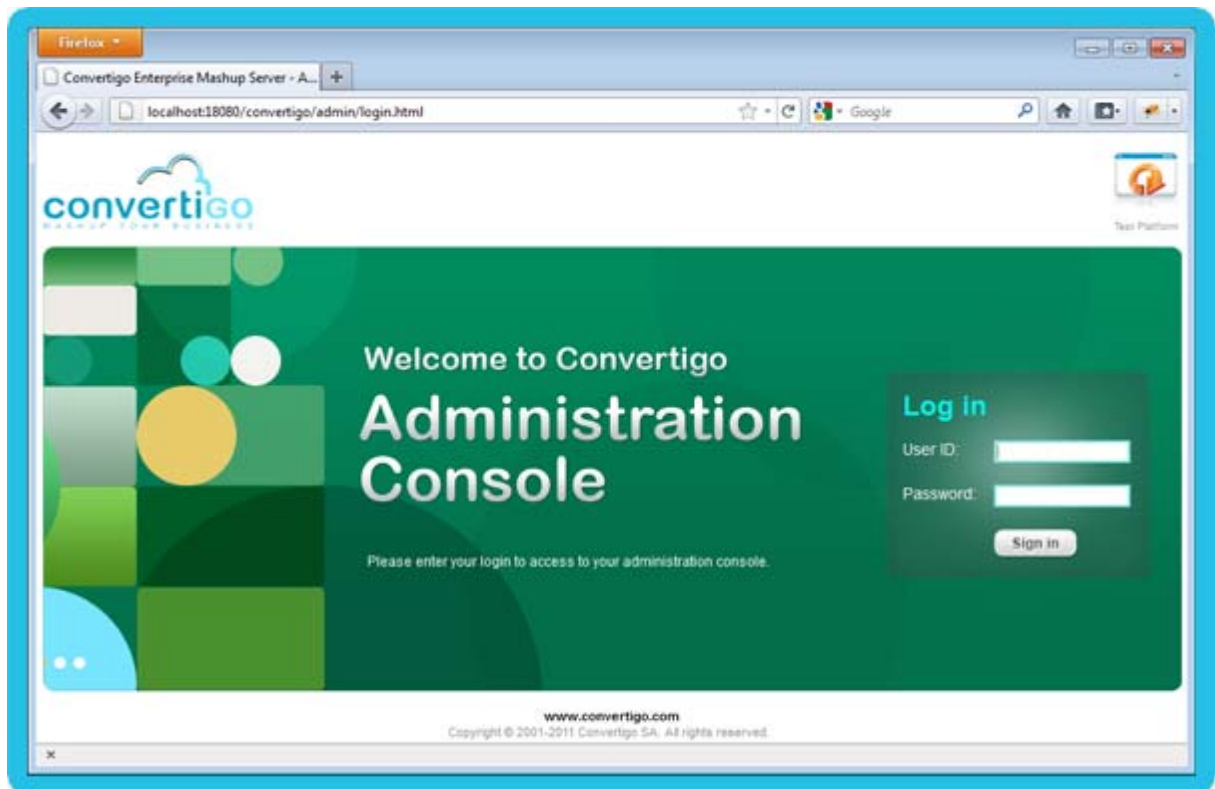


Figure 4 - 3: Administration Console authentication page

- 3 Enter the Convertigo Server login credentials in the **User ID** and **Password** fields. For example, in case of Convertigo Studio, default username / password is admin / admin. In case of a private Convertigo Cloud, credentials were delivered by email.
- 4 Click on the **Sign in** button or validate by pressing **Enter** key.

The Administration Console *Home* page opens:

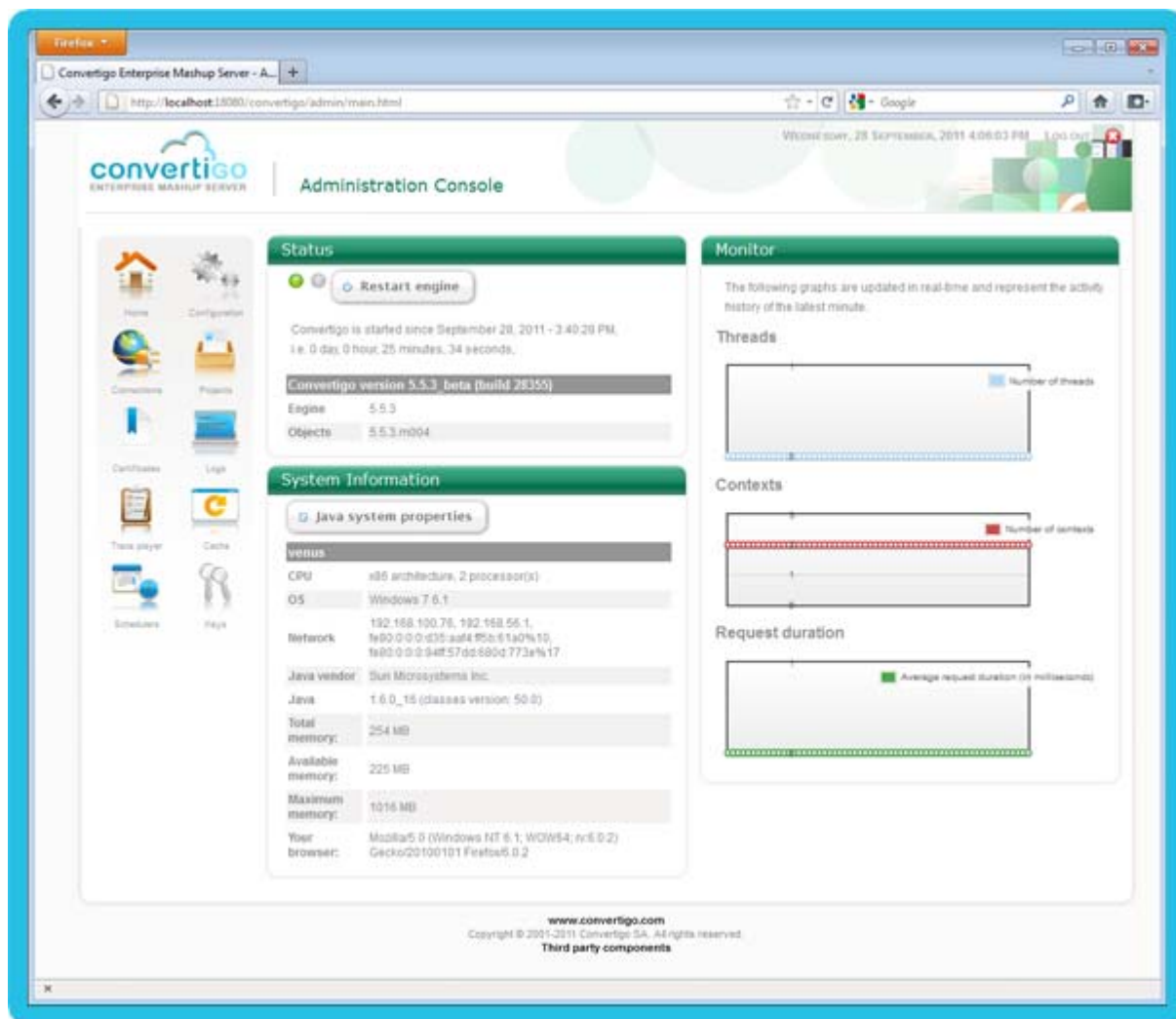


Figure 4 - 4: Administration Console Home page

4.1.2 Administration Console Home page

The Administration Console *Home* page displays:

- a left menu leading to Convertigo Server Administration pages:

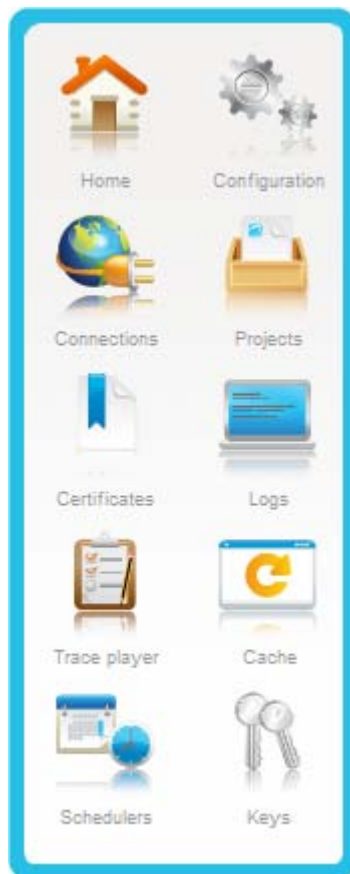


Figure 4 - 5: Administration Console left menu

- a right part containing three widgets:
 - ▶ **Status** widget;



Figure 4 - 6: Status widget in Administration Console

This widget informs you about Convertigo Engine and Objects versions, as well as since when the Convertigo engine is started. It also allows you to restart the Convertigo engine by pressing the **Restart engine** button.

- ▶ **System Information** widget;

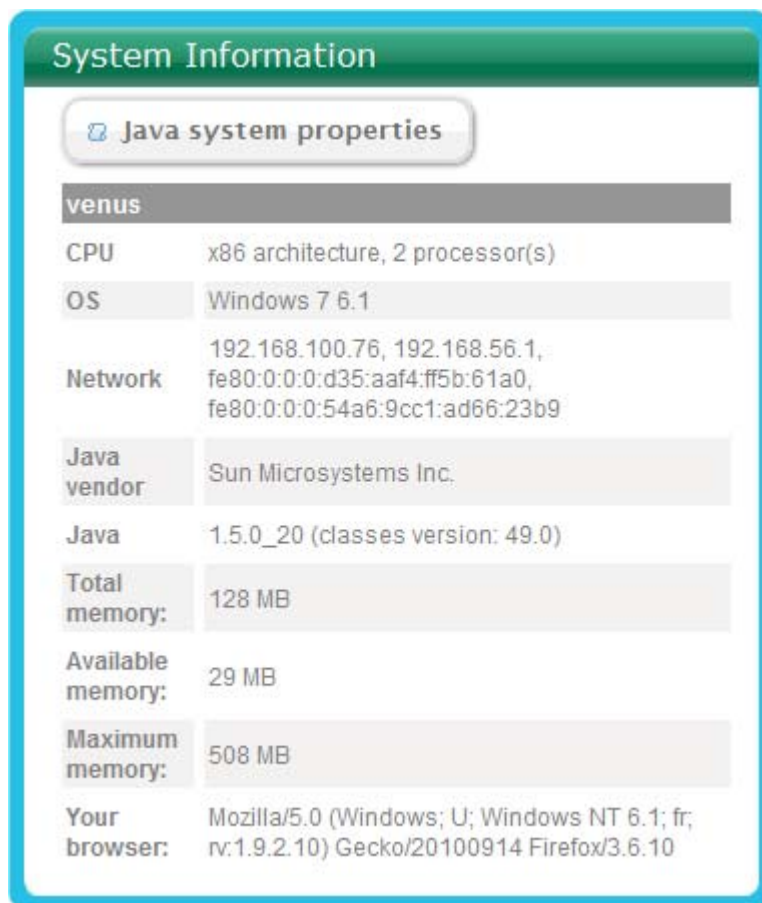


Figure 4 - 7: System Information widget in Administration Console

This widget presents the system properties of the host and the browser you're using. You can also see details about Java properties in a popup by clicking on the **Java system properties** button.

- **Monitor** widget.

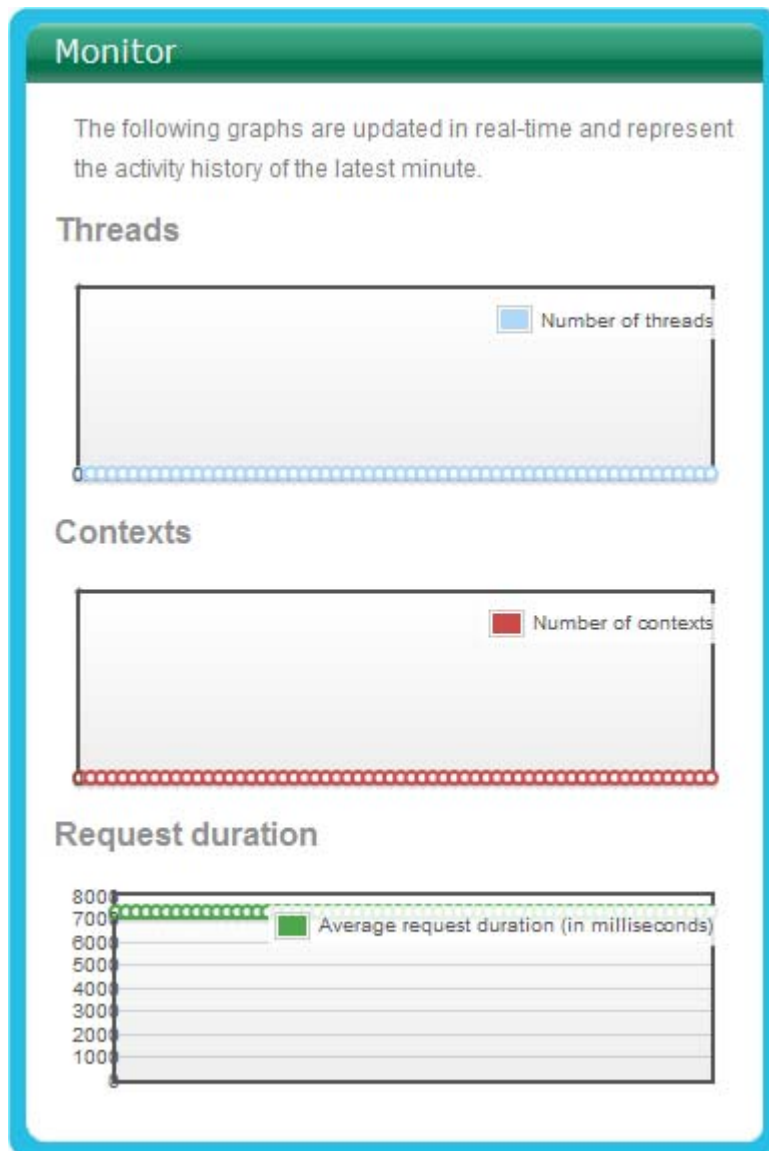


Figure 4 - 8: Monitor widget in Administration Console

This widget shows in real-time the engine activity: number of threads in activity, number of active contexts, average request duration.

WHAT'S NEXT

Each following section will present an Administration page from the left menu. For now, this documentation is not complete. Its content will be enhanced soon.

4.2 Configuration

This section will explain in details every configuration that can be set in Administration Console *Configuration* page:

- [Configuration page](#)
- [Unified proxy configuration](#)

4.2.1 Configuration page

To access Convertigo Administration Configuration page

- 1 Follow procedure *"To access Convertigo Administration Console"* on page 4 - 2 to access Convertigo Administration *Home* page.
- 2 Click on the **Configuration** button in the left menu:

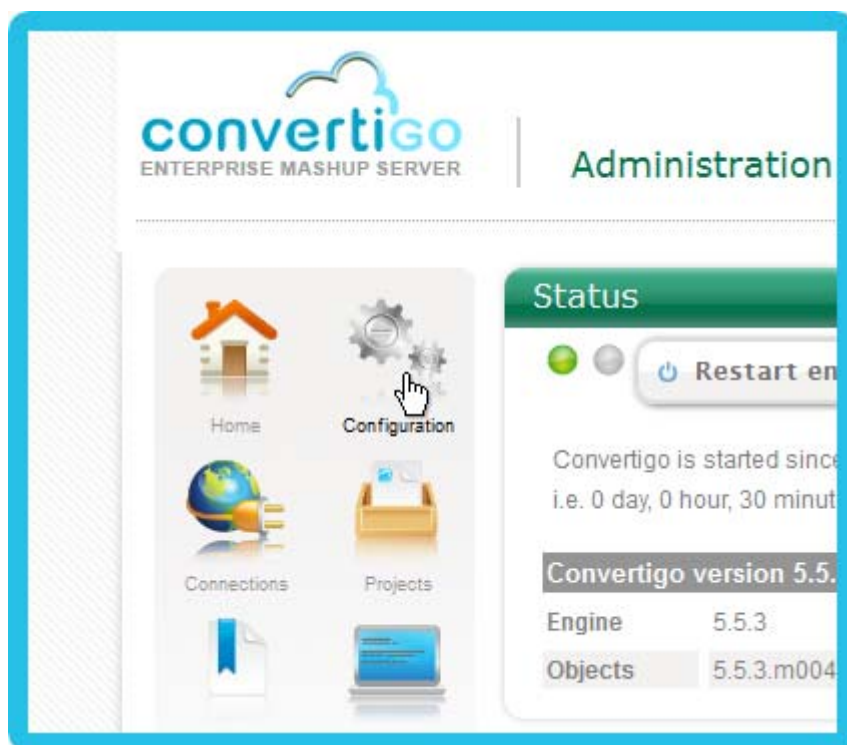


Figure 4 - 9: Accessing Configuration page

The Administration Console *Home* page opens:

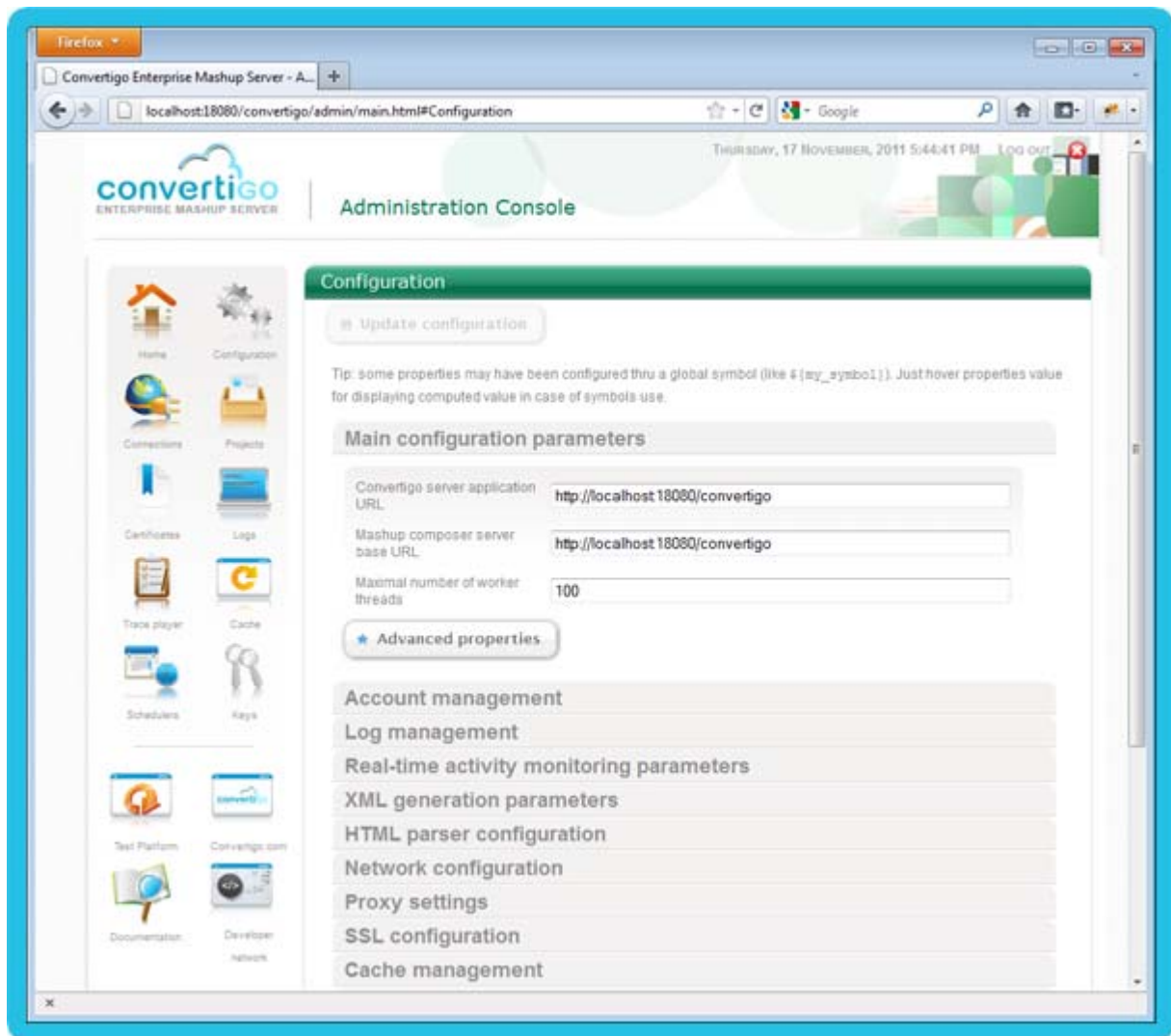


Figure 4 - 10: Administration Console Configuration page

The *Configuration* page contains several tabs that allow you to configure specific parameters of Convertigo engine.

WHAT'S NEXT

Following sections present in details every tab of this page and the specific configurations that can be set on these tabs.

4.2.2 Unified proxy configuration

Convertigo Server now includes a unified HTTP proxy for its following connectors:

- HTML connector,
- HTTP connector,
- Site Clipper connector.

Previously, each connector had its own proxy configuration configured through its properties. Now that the proxy is unified, only one configuration exists for these connectors.

In Administration Console *Configuration* page, a preference tab exists to configure the unified

proxy: **Proxy settings**.

- 1 Expand the **Proxy settings** tab by clicking on it.

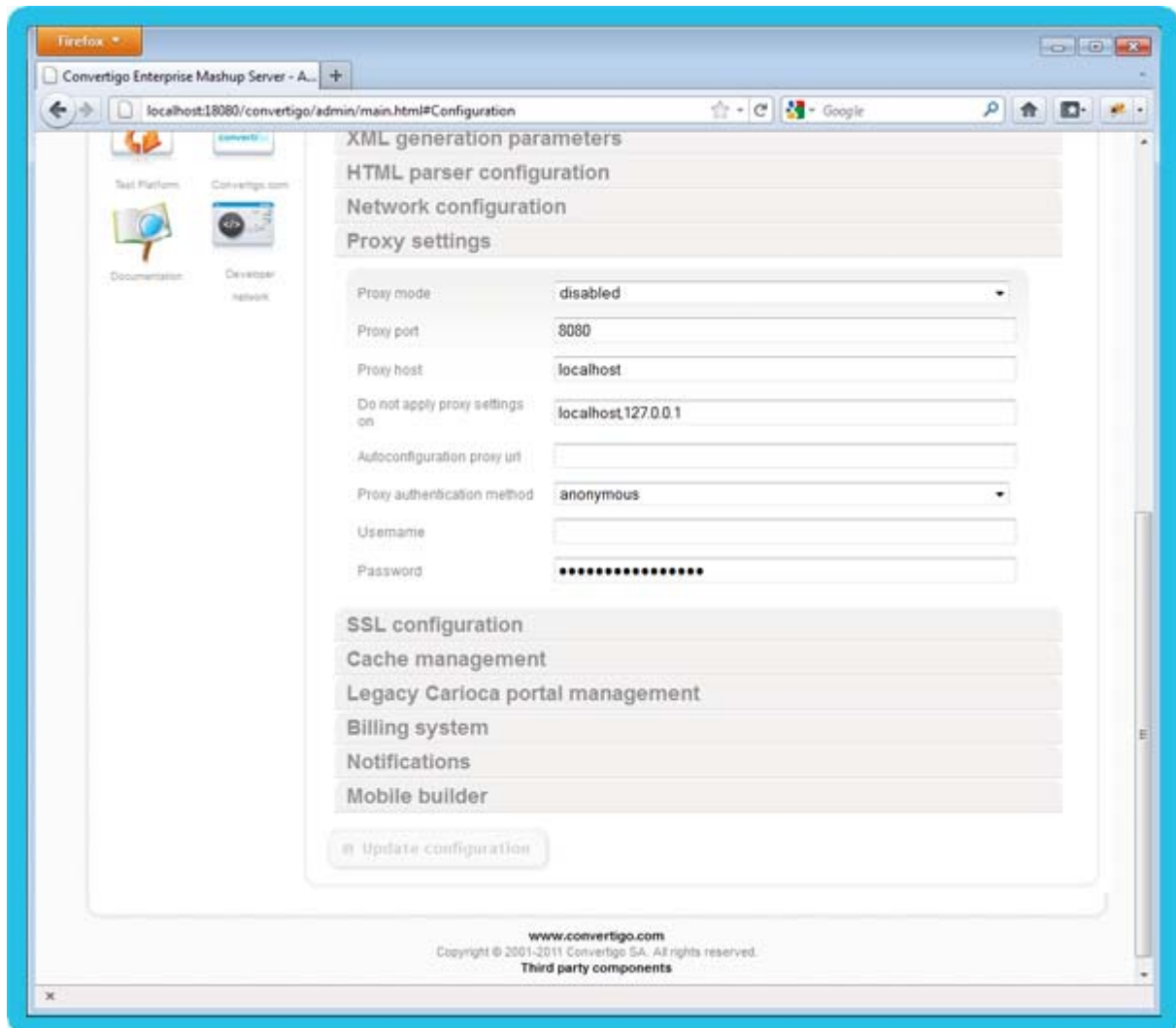


Figure 4 - 11: Proxy settings tab

You can find here all configurable parameters for the Convertigo engine proxy:

- In **Proxy mode** parameter, three different modes are available in order to configure the proxy:
 - ▶ **disabled**: No proxy.
 - ▶ **automatic**: Using this mode, it is possible to automatically configure the proxy through a proxy auto-config (PAC) file. The URL of this file has to be set in **Autoconfiguration proxy url** parameter.
 - ▶ **manual**: The proxy must be configured manually by filling different fields:
 - **Proxy port**: Port which has to be used by the proxy.
 - **Proxy host**: Address of the proxy server.
 - **Do not apply proxy settings on**: Through this field, it is possible to configure on what domains the proxy should not be applied.
- The **Proxy authentication method** parameter allows to choose what authentication

method the proxy should use:

- ▶ anonymous,
 - ▶ basic,
 - ▶ NTLM.
- Finally, the **Username** and **Password** parameters allow to set the credentials to be used by the proxy.

The proxy configuration set thanks to this administration page will be used by all HTTP, HTML and Site Clipper connectors of all Convertigo server projects.

EXAMPLES

Configuring a proxy with basic authentication

- 1 **Proxy mode:** manual
- 2 **Proxy port:** 3128
- 3 **Proxy host:** 192.168.100.9
- 4 **Proxy authentication method:** basic
- 5 **Username:** steph
- 6 **Password:** 123

In case of NTLM authentication, if the proxy is related to LDAP, the username must be preceded by domain name.

Auto-Configuring proxy

- 1 **Proxy mode:** automatic
- 2 **Autoconfiguration proxy url:** http://192.168.100.141:18080/qualif/proxy.pac

The header graphic for the 'Appendixes' section features a teal-to-blue gradient background. On the left side, there is a collage of semi-transparent images including a computer monitor, a smartphone, and various data visualization elements like charts and graphs. The word 'Appendixes' is written in a large, white, sans-serif font, centered horizontally and partially overlapping the collage.

Appendixes

This chapter contains all appendixes related to the *Operating Guide*:

- [Convertigo workspace](#)

A.1 Convertigo workspace

Plugin and war contain static data, that are not subject to be modified by the user. All other files are in a user directory: the user workspace. This workspace contains all user data (projects, configuration files, etc.).

This section presents instructions on:

- [Setting Convertigo user workspace](#)
- [Updating Convertigo user workspace](#)

A.1.1 Setting Convertigo user workspace

It is possible, from Convertigo version 5.1.2, to specify the Convertigo user workspace directory. This is done through:

- [JVM property](#)
- [Installation wizard](#)

JVM PROPERTY

The user workspace path is provided through a JVM property:

```
-Dconvertigo.cems.user_workspace_path=  
<absolute_path_to_the_user_workspace_directory>
```

If this JVM property is not provided, search for a file named `.convertigo` and located at the root of the user home. It contains a property giving the path to the user workspace:

```
cems.user_workspace_path=  
<absolute_path_to_the_user_workspace_directory>
```

INSTALLATION WIZARD

If you are installing Convertigo Studio or Server with installation packages, the Convertigo user workspace is asked in the installation wizard.

If you are installing convertigo with war file, the user workspace can be specified, but it depends on the Operating System and the Application Server. See the appropriate installation documentation depending on the Operating System and the Application Server.

A.1.2 Updating Convertigo user workspace

It is possible to update the Convertigo user workspace directory after installation, depending on the Operating System and the Application Server:

- [Windows + Studio configuration](#)
- [Windows + Tomcat configuration](#)
- [Linux + Tomcat configuration](#)
- [Linux + Websphere configuration](#)

WINDOWS + STUDIO CONFIGURATION

If you are using Windows Operating System and a Convertigo Studio, and if you want to change the user workspace after Convertigo installation, the Convertigo user workspace can be specified by locating `ConvertigoStudio.ini` configuration file (usually in Convertigo Studio installation directory) and editing this `ConvertigoStudio.ini` file.

In line:

```
-Dconvertigo.cems.user_workspace_path=C:/Users/me/workspaces/  
convertigo
```

add or change parameter `-Dconvertigo.cems.user_workspace_path` to specify the location of your workspace.

You have to restart Convertigo Studio to use the new workspace location.

WINDOWS + TOMCAT CONFIGURATION

If you are using Windows Operating System and Tomcat Application Server, and if you want to change the user workspace after Convertigo installation, the Convertigo user workspace can be specified by using the Tomcat Configurator.

Locate in Tomcat installation the file `tomcatXw.exe` and run it.

You can also find a shortcut icon in Windows taskbar, named *Convertigo Server*. Right-click on this icon and select **Configure...** option.

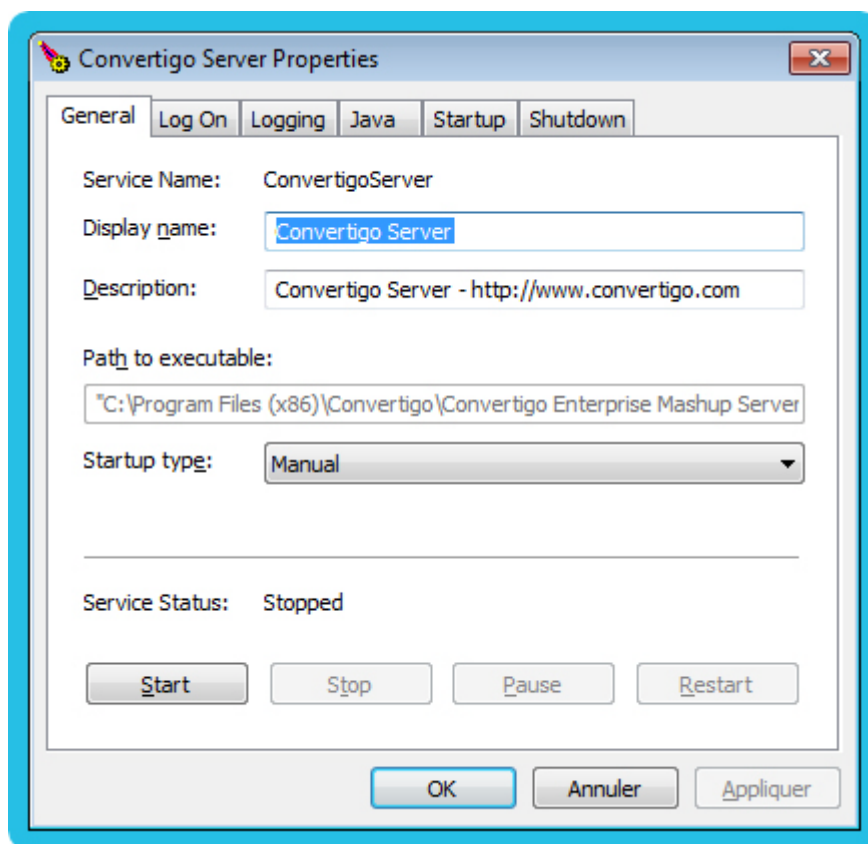


Figure A - 1: Convertigo Server Tomcat Configurator

In *Java* tab, in *Java Options* section, you can add (or update the entry of already existing):

```
-Dconvertigo.cems.user_workspace_path=  
<absolute_path_to_the_user_workspace_directory>
```

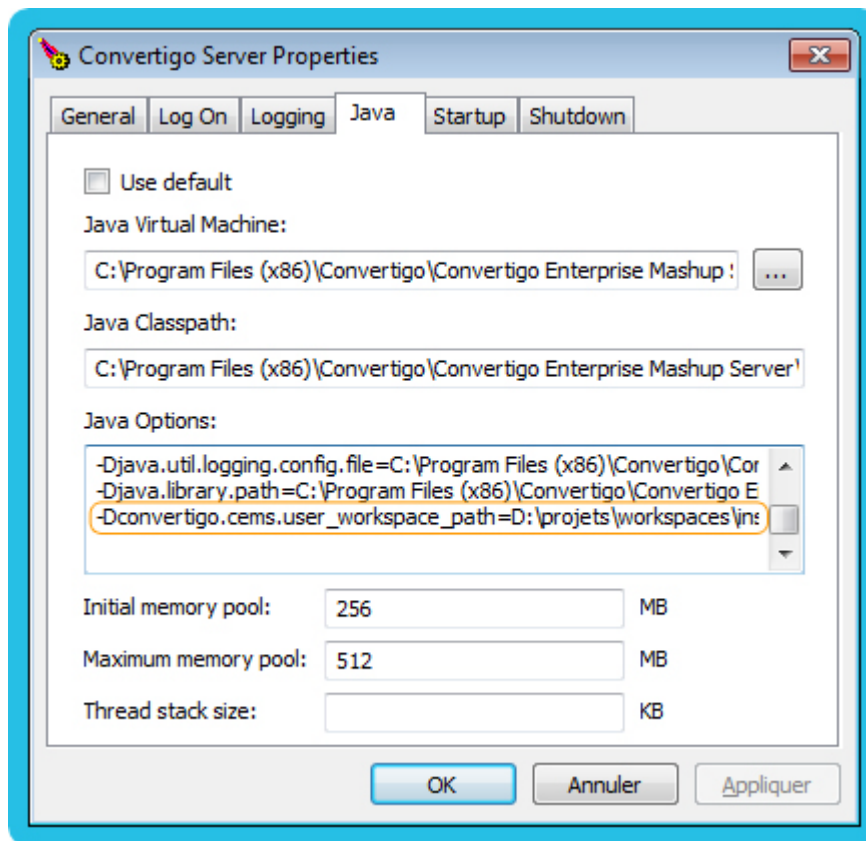


Figure A - 2: Updating Convertigo user workspace in Tomcat Configurator

You have to restart Tomcat for Convertigo to use the new user workspace.

LINUX + TOMCAT CONFIGURATION

If you are using Linux Operating System and Tomcat Application Server, and if you want to change the user workspace after Convertigo installation, the Convertigo user workspace can be specified by locating `convertigo` start file (usually in `/etc/init.d`) and editing this `convertigo` file.

In line:

```
export JAVA_OPTS="$JAVA_OPTS -Dconvertigo.cems.user_workspace_path=/home/convertigoTest/convertigo"
```

add or change parameter `-Dconvertigo.cems.user_workspace_path` to specify the location of your workspace.

You have to restart Convertigo or Tomcat for Convertigo to use the new workspace location.

LINUX + WEBSHERE CONFIGURATION

If you are using WebSphere application server, and if you want to change the user workspace after Convertigo installation, the Convertigo user workspace can be specified in WebSphere console.

In left menu, expand **Java and Process management > Process definition** and select **Java**

Virtual Machine. Then, edit **Generic JVM arguments** to add:

```
-Dconvertigo.cems.user_workspace_path=  
<absolute_path_to_the_user_workspace_directory>
```

You have to restart WebSphere server for Convertigo to use the new workspace location.

