

Operating Guide

C-EMS Installation and Administration



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This chapter presents the purpose of the *Operating Guide*, as well as key information about Convertigo softwares.

- Introduction
- Convertigo software elements

1.1 Introduction

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 and proposes general presentation of "Convertigo software elements".
- "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.

1.2 Convertigo software elements

This section briefly presents Convertigo software elements:

- Convertigo Studio
- Convertigo Server
- Administration Console

1.2.1 Convertigo Studio

Convertigo Studio is the application development tool. It allows the developpers to develop



Convertigo projects, including the creation and configuration of objects such as transactions, extraction rules, sequences, etc.

The Studio saves Convertigo projects' specific data into XML files, which will be deployed and used by the Convertigo Server.

For more information on Convertigo Studio installation process and supported platforms, see *"Installing Convertigo Studio"* on page 2-1.

1.2.2 Convertigo Server

Convertigo Server executes projects created in *Convertigo Studio*. The Server can manage simultaneous users connected and requesting data for all different types of connectors (Legacy, HTML, Web service, SQL, etc.).

Convertigo Server is:

- a standalone server program installed as a service for Windows platforms, or
- a standard Web application for all other operating systems.

For more information on Convertigo Server installation process, as well as supported platforms and web application servers, see *"Installing Convertigo Server"* on page 3-1.

Convertigo Server engine can be monitored using the web Administration Console.

1.2.3 Administration Console

Administration Console is the web application that is used to administrate and configure the Convertigo Studio or Convertigo Server engine.

Thanks to a left menu leading to several pages, Convertigo Studio developers or Convertigo Server administrators can monitor engine activity and configure many engine settings.

For more information on the Administration Console, see "Using Convertigo Administration Console" on page 4-1.



This chapter describes how to install Convertigo Studio in the qualified environments and operating systems.

- General purpose and packages
- Convertigo Studio installation



2.1 General purpose and packages

Convertigo Studio can be installed on Windows/Linux/Mac operating systems.

You will see in the following table the officially supported operating systems and versions for Studio installation, as well as the package to use:

	Supported versions	Convertigo package name	
Windows	 Windows XPService Pack 2 (32 bits), Windows Seven (32 and 64 bits), Windows 8. 	convertigo-studio- <i>X.Y.Z</i> -v <i>12345</i> -win32- install.exe	
Linux	 RedHat, starting from version 5.2 (32 bits and 64 bits) Ubuntu, versions 8.04 (LTS), 10.04 (LTS), 12.04 (LTS) and 14.04 (LTS) (32 bitsand 64 bits) Debian version 6.0 (32 bitsand 64 bits) 	convertigo-studio- <i>X.Y.Z-v12345</i> -linux32.tar.gz	
Mac OS	 Mac OS X 10.5 (Leopard) or greater (32 bits and 64 bits) 	convertigo-studio-X.Y.Z-v12345- macosx32.tar.gz	

Table 2 - 1: Operating systems and Convertigo Studio installation packages table

In standard, Convertigo Studio installation is packaged as:

- an .exe file for Windows,
- an .tar.gz archive file for Linux and Mac.

The installer or archive file contains the Eclipse-based Convertigo Studio and the embedded Convertigo Server including an Apache Tomcat application server.

2.2 Convertigo Studio installation

This chapter explains how to install Convertigo Studio on several operating systems and then how to change the default configurations of installed Convertigo Studio:

- Installing Convertigo Studio on Windows
- Installing Convertigo Studio on Linux
- Installing Convertigo Studio on Mac OS
- Finish installing and configuring Convertigo Studio at first start
- Convertigo Studio default configuration



2.2.1 Installing Convertigo Studio on Windows

- Prerequisites
- Installation procedure

PREREQUISITES

MACHINE PREREQUISITES

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

Table 2 - 2: Machine prerequisites

	Windows	
Version	 Windows XP Service Pack 2 (32 bits) Windows Seven (32 or 64 bits) Windows 8 	
CPU Dual Core		
RAM 2 Gb		
Disk space ^{1 Gb}		

INSTALLATION REQUIREMENTS

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

INSTALLATION PROCEDURE

The following procedures explain step by step how to install and to configure Convertigo Studio on Windows.

To install Convertigo Studio on Windows

1 Double click on the installation file convertigo-studio-X.Y.Z-v12345-win32install.exe

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

😵 User Account Control		
Do you want to allow the following program to make changes to this computer?		
Program name: C Verified publisher: C File origin: C	Convertigo Studio C onvertigo Downloaded from the Internet	
Show details	Yes No	
	Change when these notifications appear	

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

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

The Convertigo Splashscreen is quickly shown:



Figure 2 - 2: Convertigo Studio splashscreen

It is replaced by the Convertigo Studio Setup wizard:





Figure 2 - 3: Installing Convertigo Studio

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

The End User Licence Agreement is displayed:

🕋 Convertigo Studio Setup 📃 📼 💌
CONVERTIGO License Agreement Please review the license terms before installing Convertigo Studio.
Press Page Down to see the rest of the agreement.
Convertigo Community Edition Convertigo Community Edition is available under Affero GPL V3 License and can be used for free. Affero GPL V3 License can be accessed at: http://www.qnu.org/licenses/aqpl-3.0.html If you accept the terms of the agreement, click I Agree to continue. You must accept the agreement to install Convertigo Studio
Convertigo Mobility Platform 2000-2014

Figure 2 - 4: Convertigo Studio Licence Agreement

4 Read carefully the EULA, and accept it by clicking on the **I Agree** button.



The next page proposes the Convertigo Studio components to install:





Figure 2 - 5: Choosing components

5 The Convertigo Studio component is already selected and cannot be unchecked. You can uncheck the shortcuts you will not use. Then, click on **Next**.

The next page allows you to choose the installation folder:



Figure 2 - 6: Setting destination folder

6 Default installation folder is located inside current user's home directory. Change destination folder if the default one is not appropriate for your installation.



Convertigo Studio requires to be installed in a folder where the current user has writting and executing rights. Indeed, as Studio is based on Eclipse, it can be updated and/or plugins can be installed/ updated. If Convertigo Studio is not installed in a user's folder, these installation/update functionalities will not work. Moreover, Convertigo Studio will not start at all after trying to install/update some plugins.

7 Then, click on the **Install** button.

The installation starts, you should wait for a few minutes:





Figure 2 - 7: Start of the installation

The installation continues:

🔁 Convertigo Studio Setup		X
convertico	Installing Please wait while Convertigo Studio is being installe	d.
Installing Microsoft Visual C-	++ 2005 SP1 Redistributable Package (x86)	
-		
Convertigo Mobility Platform 20	100-2014	
	< <u>B</u> ack <u>N</u> ext >	Cancel

Figure 2 - 8: Installation in progress

🔁 Convertigo Studio Setup	
convertigo	Completing the Convertigo Studio Setup Wizard Convertigo Studio has been installed on your computer. Click Finish to close this wizard.
	< <u>B</u> ack Einish Cancel

This screen indicates the end of installation:

Figure 2 - 9: End of the installation

8 Click on the **Finish** button to close the wizard.

WHAT'S NEXT

Follow procedure *"To start and configure Convertigo Studio on Windows/Linux/Mac OS"* on page 2-15 to finish installing and configuring Studio.



2.2.2 Installing Convertigo Studio on Linux

- Prerequisites
- Installation procedure

PREREQUISITES

MACHINE PREREQUISITES

The minimum machine prerequisites for installing Convertigo Studio are the following:

- **CPU**: Dual Core,
- **RAM**: 4Gb,
- Disk space: 10Gb.

The following table describes the required packages to install prior to Convertigo Studio installation, depending on the Linux OS and version:

Table 2 - 3: Packages prerequisites

	Version	Packages 32 bits
RedHat 32 bits	starting from version 5.2 32 bits	 xulrunner-1.9.0.19-1.el5_5 and all dependencies libXtst-1.0.1-3.1.i386 and all dependencies xorg-x11-fonts-Type1-7.1-2.1.el5 unzip glibc and all dependencies libXi and all dependencies
RedHat 64 bits	starting from version 5.2 64 bits	 xulrunner-1.9.0.19-1.el5_5 and all dependencies libXtst-1.0.1-3.1.i386 and all dependencies xorg-x11-fonts-Typel-7.1-2.1.el5 unzip glibc.i686 and all dependencies libXi and all dependencies
Ubuntu 32 bits	versions 8.04 (LTS) , 10.04 (LTS) and 12.04 (LTS) 32 bits	 libgtk2.0-0 libxt6 libxtst6 unzip glibc and all dependencies
Ubuntu 64 bits	versions 8.04 (LTS) , 10.04 (LTS) and 12.04 (LTS) 64 bits	 libgtk2.0-0 libxt6 libxtst6 unzip glibc and all dependencies ia32-libs
Ubuntu 32 bits	version 14.04 (LTS) 64 bits	 libgtk2.0-0:i386 libstdc++6:i386 libxft2:i386 libxt6:i386 libxtst6:i386

Table 2 - 3: Packages prerequisites (...)

	Version	Packages 32 bits	
Ubuntu 64 bits	version 14.04 (LTS) 64 bits	 lib32z1 libgtk2.0-0:i386 libstdc++6:i386 libxft2:i386 libxt6:i386 libxtst6:i386 	
Debian 32 bits	version 6.0	 libgtk2.0-0 libxt6 libxtst6 unzip bzip2 glibc and all dependencies 	
Debian 64 bits	version 6.0	 libgtk2.0-0 libxt6 libxtst6 unzip bzip2 glibc and all dependencies ia32-libs 	



Specified packages are necessary for using web connectors or legacy connectors. These lists of packages are not exhaustive. If you have problems with your installation of Convertigo Server on Linux/Tomcat, please contact us.

INSTALLATION REQUIREMENTS

The Convertigo Studio compressed file: convertigo-studio-X.Y.Z-v12345-linux32.tar.gz

INSTALLATION PROCEDURE

The following procedures explain step by step how to install and to configure Convertigo Studio on Linux.

To install Convertigo Studio on Linux

- **1** Expand the archive file convertigo-studio-X.Y.Z-v12345-linux32.tar.gz in a destination directory where you have the rights to.
- 2 Then, follow procedure "To start and configure Convertigo Studio on Windows/Linux/ Mac OS" on page 2-15.



2.2.3 Installing Convertigo Studio on Mac OS

- Prerequisites
- Installation procedure

PREREQUISITES

MACHINE PREREQUISITES

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

Table 2 - 4: Machine prerequisites

	Windows
Version	Mac OS X 10.5 (Leopard) or greater (32 or 64 bits)
CPU	Dual Core, Intel processor
RAM	2 Gb
Disk space	1 Gb

INSTALLATION REQUIREMENTS

The Convertigo Studio compressed file: convertigo-studio-X.Y.Z-v12345-macosx32.tar.gz

INSTALLATION PROCEDURE

The following procedures explain step by step how to install and to configure Convertigo Studio on Mac OS.

To install Convertigo Studio on Mac OS

- Expand the archive file convertigo-studio-X.Y.Z-v12345-macosx32.tar.gz in a destination directory where you have the rights to.
- 2 Then, follow procedure "To start and configure Convertigo Studio on Windows/Linux/ Mac OS" on page 2-15.

2.2.4 Finish installing and configuring Convertigo Studio at first start

After you installed Convertigo Studio on Windows or uncompress the archive file on Linux or Mac OS, the Studio can start but is not completely set up. You have to finish the installation by configuring it at startup. This section presents the procedures to finish installing and configuring Convertigo Studio on all platforms.

- Configure Convertigo Studio at first startup
- Installing SVN kit in Convertigo Studio

CONFIGURE CONVERTIGO STUDIO AT FIRST STARTUP

Common to all platforms (Windows, Linux, Mac OS), the following procedure describes how to finish installing and configuring Convertigo Studio at first start.

To start and configure Convertigo Studio on Windows/Linux/Mac OS

1 On Windows, if you choose to create shortcuts during the installation wizard, simply access the shorcut that is on your desktop and double-click on it to launch Convertigo Studio. Otherwise, use the Start menu to launch Convertigo Studio.

For other platforms, Convertigo Studio was installed in the folder you choose during installation procedure. You can open this folder to access the ConvertigoStudio start file and double-click on it to launch Convertigo Studio.



Convertigo Studio starts:

Figure 2 - 10: Convertigo Studio splashscreen at startup

When Convertigo Studio opens, the Workspace Launcher popup is displayed:



🔁 Workspace	Launcher		×
Select a wor Studio store Choose a wo	kspace s your projects in a folder called a workspace. orkspace folder to use for this session.		
<u>W</u> orkspace:	C:\Users\elodiee\convertigoWorkspace7.1.0-v37057	▼ <u>B</u> rows	ie
Use this a	; the default and do not ask again	0K Can	cel

Figure 2 - 11: Workspace launcher

2 In this screen, indicate the location of your projects workspace, set by default to your user environment.



For more information on Convertigo workspace and projects workspace, see Appendix "Convertigo workspace" on page A-2.



Beware that you must choose a folder where you have writing rights. Otherwise, you will not be able to restart the Studio on this same workspace.

3 Check the **Use this as default and do not ask again** checkbox if you do not want to see the *Workspace Launcher* popup at next startup:

Workspace	Launcher		
elect a wo	rkspace		
Studio store Choose a w	s your projects in a folder called a workspace. orkspace folder to use for this session.		
<u>W</u> orkspace:	C:\Users\elodiee\convertigoWorkspace7.1	•	Browse
✓ Use this a	s the default and do not ask again		
		ОК	Cancel

Figure 2 - 12: Updated values in Workspace Launcher

4 Click on the **OK** button.
e Edit Navigate 1	a 0 🕰	
Welcome 12	Convertigo Workspace This is the first time Convertigo is launched in this workspace	\$ • • • •
	A new Convertigo workspace will be created in: 'C:/Users\elodiee\convertigoWorkspace7.1' This action will be completed when this wizard finishes.	e unique stud
To Ye		er left of the page
G		onvertigo Montery Pattern Version 7.1
j		Constanting of the second seco
	(?) * Back Next > Finish Cancel	www.in 7.1? click.he front-end
·		

The Studio starts and a wizard is opened:

Figure 2 - 13: First Studio start - Starting wizard

This is the **Convertigo Studio Configuration** wizard. You have to go through this wizard before the Studio engine starts.

For Windows environment, continue with step 6 of this procedure.

For Linux and Mac OS environments, the first page of the wizard is the End User Licence Agreement. You need to carefully read the EULA and accept it before the Studio starts:



and the second sec	
You should first read and accept the Convertigo EMS license.	
CONVERTIGO MOBILITY PLATFORM LICENCE AGREEMENT	
This is a legal agreement ("Agreement") between the organization of BY INDICATING YOUR ACCEPTANCE BY CLICKING "YES" BELOW, OR INSTALL	which is represented by a duly authorized representative ("you") and the Con ING OR USING THE SOFTWARE, YOU ARE AGREEING TO BE BOUND BY THE TERMS OF THIS
1. Definitions	
* Authorized User * Any user of the Software that is authorized to access or use a So	ftware that has been licensed to an Organization under the terms of this Agr
Community Edition * Edition of the Software delivered by CONVERTIGO without activation	h keys to activate the Extended Edition components (HTML and MAINFRAME conne
* Organization * The person, partnership, entity, corporation, or government entity	y that is granted a license on the Software and that shall be responsible fo
* Software * The Convertigo Mobility Platform which includes Convertigo proprie	etary software with Software documentation (refers to the Software user manu
Software Studio * One of the Software core components which is for *Convertigo proj The Software Studio installer is installing the Software Studio. The Software Studio includes an Eclipse IDE, Convertigo plugins, i	ect" developments purposes and delivered as one installation file for Window a minimal mono user Software Server, Java runtime documentation and installa
Projects developed with Software Studio are saved into Project.ca	r files to be executed on "Software Server" in production or on the minimal
" Extended Edition " Edition of the Software which allows you to use the Software Exter Activation keys are delivered separately by Convertigo to activat The Software Extended Edition components are delivered and bundled	nded Edition components (HTML and MAINFRAME connectors) beyond the 30 days t e the Software Extended Edition components beyond the 30 days trial period. i with the Software Studio. They are running under the minimal mono user Sof
* Software Server *	
BY INDICATING YOUR ACCEPTANCE BY CLICKING "Accept license" BELOW, OR IN THIS AGREEMENT.	STALLING OR USING THE SOFTWARE, YOU ARE AGREEING TO BE BOUND BY THE TERMS OF
C Accept license	
0	« Back Next » Cancel Finish

Figure 2 - 14: First Studio start - EULA on Linux or Mac

- 5 Select the **Accept license** option, and click on **Next**.
- 6 The next page displays a summary about the workspace (workspace that was chosen in the *Workspace Launcher* window). Depending on the selected path:
 - if the selected folder does not exist or is empty: a new workspace will be created,
 - if the selected folder is a previous Convertigo workspace created with a Convertigo prior to version 6.2.0: the workspace will be migrated,
 - if the selected folder is a previous Convertigo workspace created with a Convertigo from version 6.2.0: the workspace will be used as is. In this case, several pages of the wizard may not be displayed because the workspace is reused.

Convertigo Workspace	
This is the first time Convertigo is launched in this workspace	
A new Convertigo workspace will be created in:	
'C:\Users\elodiee\convertigoWorkspace71'	
This action will be completed when this wizard finishes.	
	ish Cancel

Figure 2 - 15: Studio starting wizard - Convertigo workspace

- 7 If the summary does not fit your needs, click on **Cancel** and restart this procedure from step 1.
- 8 Otherwise, click on **Next**.

The next page allows you to configure a proxy for Convertigo Studio to access the Internet:



ũ		
roxy settings		
This page configures the proxy settings. A proxy confi in order to run demos or to be able to connect to any	guration is needed to let Convertigo Studio access the web site or web service available on the Internet.	Internet
Proxy mode	disabled	•
Proxy host	localhost	
Praxy port	8080	
Do not apply proxy settings on	localhost,127.0.0.1	
Autoconfiguration proxy URL		
Proxy authentication method	anonymous	*
Username		
Password		
	Check connection	

Figure 2 - 16: Studio starting wizard - Proxy settings

9 If you need to use a proxy, configure your proxy settings in this page.



For more information about Convertigo proxy settings, see "Proxy" on page 4-24. This page explains the Convertigo Engine configuration properties about proxy. Settings found in this wizard page are the same.

10 You can test the connection by clicking on the **Check connection** button. A message indicates that the connection test is in progress:

oxy settings			
his page configures the proxy settings. A proxy conf order to run demos or to be able to connect to any	iguration is needed to let Convertigo Studio access the Internet web site or web service available on the Internet.		
Proxy mode	disabled		
Proxy host	localhost		
Proxy port	8080 localhost,127.0.0.1		
Do not apply proxy settings on			
Autoconfiguration proxy URL			
Proxy authentication method	anonymous		
Username			
Password			
Checking connection	Check connection		

Figure 2 - 17: Studio starting wizard - Testing connection

After the test is finished, a message is displayed indicating whether the connection is successful or not:



roxy settings		
This page configures the proxy settings. A proxy configu n order to run demos or to be able to connect to any w	ration is needed to let Convertigo Studio access the eb site or web service available on the Internet.	Internet
Proxy mode	disabled	•
Proxy host	localhost	
Proxy port	8080	
Do not apply proxy settings on	localhost,127.0.0.1	
Autoconfiguration proxy URL		1
Proxy authentication method	anonymous	+
Username		
Password		
The connection test was successful!	Check connection	

Figure 2 - 18: Studio starting wizard - Successful connection test

- 11 If the connection is not successful, configure correctly your proxy settings (start over from step 9 of this procedure).
- 12 Otherwise, click on **Next**.

The next page asks if you already have a Personal Studio Configuration.



A Personal Studio Configuration is an encrypted string that will automatically configure your Convertigo Studio with projects deployment configurations. By registrating on this wizard, you will be granted a free access to

Convertigo Trial Cloud and will get a PSC with a default deployment configuration to this shared Cloud server.

Personal Studio Configuration
Already own a PSC?
A Personal Studio Configuration (PSC) is required to start Convertigo Studio. A PSC automatically configures your Studio for project deployments on Convertigo Cloud and Convertigo Servers.
Note that previous Convertigo "personal registration certificates" are also valid PSCs.
I already have a PSC
I do not have a PSC and I want to register now
Included with Convertigo Community Edition, you get access to a free « Convertigo Cloud » account. This cloud is named Convertigo Trial Cloud and can be accessed at the following URL: <u>http://trial.convertigo.net</u> . You will be able to deploy your projects on this shared cloud for free.
Choose the "I do not have a PSC and I want to register now" option and fill in the creation form in the next page. This form automatically creates for you a Convertigo Trial Cloud account as well as a free Convertigo Support Forum account.
You can access the Convertigo Support Forum by clicking this link: <u>http://www.convertigo.com/en/how-to/developer-forum.html</u> .
As a result of the registration process, you will receive a PSC by email that will configure your Studio for projects deployment on Convertigo Trial Cloud.
Registered users will also get a free 20 minutes "Getting Started" web meeting session with one of our support engineers. The link to choose an available slot will be available in the same email providing you the PSC.
(Back Next > Einish Cancel

Figure 2 - 19: Studio starting wizard - Personal Studio Configuration

On this page, several options are possible:

CASE OF AN ALREADY REGISTERED STUDIO USER

If you were already registered in a former version of Convertigo and you already had a *registration certificate* for deploying your projects on Convertigo Trial Cloud (see Figure 2 - 20), or if you already got a *Personal Studio Configuration* by registrating in Convertigo 6.2.x or 6.3.x (see Figure 2 - 28), you do not need to register again.





Figure 2 - 20: Example of former registration certificate email

Continue with the procedure *"To configure Convertigo Studio with a PSC or a registration key"* on page 2-31.

CASE OF A NEW CONVERTIGO STUDIO TESTING USER, YOU HAVE TO REGISTER NOW

You do not have a registration key nor a PSC, you have to register in the **Studio Configuration** wizard to get one. Thanks to that, you will be granted:

- a free access to Convertigo Trial Cloud,
- an account in the Convertigo Forum to get some tips and tricks,
- and a free 20 minutes "Getting Started" web meeting session.

Continue with the procedure "To register on Convertigo Trial Cloud" on page 2-24

CASE OF A CONVERTIGO CLOUD CLIENT

If you ordered for a Convertigo Cloud server, you should have an email with the URL and username/password of your Convertigo Cloud server administration, as well as a Personel Studio Configuration. You do not need to register again in this wizard. Continue with the procedure *"To configure Convertigo Studio with a PSC or a registration key"* on page 2-31.

To register on Convertigo Trial Cloud

In the Personal Studio Configuration page of the Studio Configuration wizard (see Figure 2 - 19), select the I do not have a PSC and I want to register now option, and click on Next.

The next page proposes a form to create your Convertigo Trial Cloud account as well as a Forum account, and get your PSC:

U		×
Convertigo Trial Cl	oud account creation	
Convertigo provides a f	ree convertigo cloud account for you test and run your projects.	
Filling this form will auto Personal Studio Configu	omatically create for you a Convertigo Trial Cloud account, and send you by email the corresponding tration.	
This process wi <mark>ll</mark> also cre	eate for you a Convertigo Forum account, enabling you to request help, tips and tricks in the forum:	
www.convertigo.com/er	n/how-to/developer-forum.html	
Personal Data		
Firstname *		
Lastname *		-
Email *		
Company		-
ompany headcount	Unknown	+
Country	Select a country	
orum account		
you already have a Co	nvertigo Forum account, just type your username, password will be ignored.	
Username *		
Password		-
Confirm password		-
	* required fire	elds
		-

Figure 2 - 21: Studio starting wizard - Convertigo Trial Cloud account creation

2 Fill the fields with the required personal data and the fields about your Convertigo Forum account.



Beware that if you do not fill the form with correct information, you will not be able to go though the process.

After the form is filled, the **Next** button is enabled:



0			
Convertigo Trial (Cloud account creation		
Convertigo provides a	a free convertigo cloud account for you test and run your projects.		
Filling this form will au Personal Studio Config	utomatically create for you a Convertigo Trial Cloud account, and send you by email the corresponding guration.		
This process will also o	reate for you a Convertigo Forum account, enabling you to request help, tips and tricks in the forum:		
www.convertigo.com/	/en/how-to/developer-forum.html		
Personal Data			
Firstname *	John		
Lastname *	Doe		
Email *	john.doe@gmail.com My company		
Company			
Country	United Kingdom 🗸 🗸		
Forum account			
f you already have a C	onvertigo Forum account, just type your username, password will be ignored.		
Username *	john.doe		
Password			
Confirm password			
	* required fields		
@	Carl Mater Carl		
W	Cancel		

Figure 2 - 22: Studio starting wizard - Filling registration form

3 Click on Next.

The next page sends your registration information and proposes a text area into which you should paste your PSC (see Figure 2 - 29).

In the same time, you should receive a first email that invites you to click on a validation link to continue the Convertigo Trial Cloud registration process:



Figure 2 - 23: Registration process - Validation email

4 Click on the validation link that appears in blue in the email.

A new page opens in your web browser, with the Convertigo Trial Cloud registration process in progress:





Figure 2 - 24: Registration process - In progress

When the process ends, the Convertigo Trial Cloud registration response is displayed. It can be of several forms, depending on the success of the PSC declaration and Forum account creation:



Figure 2 - 25: Registration process - Response after correct registration



Figure 2 - 26: Registration process - Response after existing forum account and correct PSC generation





Figure 2 - 27: Registration process - Response after wrong forum account declaration

- 5 Depending on the case:
 - Click on Ok to close the error popup, and fill again the registration form in the web browser (displayed after clicking on Ok) or in the Studio Configuration wizard (after pressing the Back button); restart this procedure on step 2.
 - Copy your PSC from the response page and paste it into the wizard page; follow procedure *"To configure Convertigo Studio with a PSC or a registration key"* on page 2-31, from step 2.

At the same time, you received an email that summarizes the registration response, so you can keep your PSC for a further Studio installation:



Figure 2 - 28: Registration process - Email with registration response summary

6 Continue with procedure *"To configure Convertigo Studio with a PSC or a registration key"* on page 2-31, from step 2.

To configure Convertigo Studio with a PSC or a registration key

In the Personal Studio Configuration page of the Studio Configuration wizard (see Figure 2 - 19), select the I already have a PSC option, and click on Next.

The next page proposes a text area into which you should paste your PSC or your former registration certificate (received by email):



D				- 0 -
Personal Studio Configuration				
Paste your PSC				
PSC				
Please paste your previous PSC here	and click the 'Next >' button			
				*
				*
			Paste from clipbe	oard Clear
			20 	
0	< Back	Next >	Finish	Cancel
			10 ⁻²	

Figure 2 - 29: Studio starting wizard - Personal Studio Configuration

2 In the **PSC** text area, copy and paste your former registration certificate or your Personal Studio Configuration:

3		×
Personal Studio Configuration		
Paste your PSC		
PSC		
Please paste your previous PSC here a	and click the 'Next >' button	
1001 provide "official and the last of the		
	Paste from clipboard Clear	
0	< Back Next > Finish Cancel	

Figure 2 - 30: Studio starting wizard - Filling in your PSC

If the PSC or the registration certificate is not valid, the wizard indicates an error message:





Figure 2 - 31: Studio starting wizard - Invalid PSC

3 Otherwise, the **Next** button is enabled, click on this button to continue.

A **Setup summary** page is displayed, it shows all steps that are going to be performed at finish:

	- • •
Setup summary Your Convertigo studio is going to be installed with the following parameters.	
Workspace creation in: C:\Users\elodiee\convertigoWorkspace7.1 Proxy configuration:	~
mode: disabled PSC server configuration for: trial.convertigo.net/cems	
	~
? Sack	Next > Finish Cancel

Figure 2 - 32: Studio starting wizard - Setup summary

4 Click on the **Finish** button if all the configurations displayed on this page are correct. Otherwise, click on **Cancel** and restart the procedure *"To start and configure Convertigo Studio on Windows/Linux/Mac OS"* on page 2-15, from step 1.

After the wizard is complete, The Studio engine starts.

Sometimes, on Windows environments, a *Windows Security Alert* popup is displayed:



Windows See	unty Alert Iows Firewa	ll has blocked some features of this program	1
Windows Firewall networks.	has blocked som	e features of ConvertigoStudio.exe on all public and private	
-	Name:	ConvertigoStudio.exe	
	Publisher:	Unknown	
	Path:	C:\program files\convertigo\convertigo studio \convertigostudio.exe	
Allow Convertigo	Studio.exe to con	mmunicate on these networks:	
V Private ne	tw <mark>orks, such as</mark> n	ny home or work network	
Public network because the risk	vorks, such as th nese networks of	ose in airports and coffee shops (not recommended ten have little or no security)	
which are use tisk	s of allowing a pr	ogram billough a tillewaite	
		Allow access Can	cel

Figure 2 - 33: Windows Security Alert popup

5 In this window, you have to select the type of network you are connected to, this will authorize Convertigo to access the network and the several projects' target applications. Check the appropriate checkbox and click on the **Allow access** button.

While the Convertigo engine is starting, a **Convertigo News** popup is displayed. It shows our latest news (a link for you to access our Facebook page and a list of our latest tweets):

	Convertigo engine is started You can close this window			
Conv To follow a See and Li	ertigo News Il news about Convertigo, ke our Convertigo Mobile Enterprise Facebook Page. And follow us	s on Twe	eter:	E
Tweet	s	y Follo	w	
	Convertigo @convertigo Answer is very simple: 100% of b2e and b2b apps should be done hybrid. This gives best value for money.	22 Apr s the	* H	
	for b2cInkd.in/dJv4Tmb			-

Figure 2 - 34: Convertigo news popup

- 6 Check the **Dismiss automatically** checkbox if you want this window to be automatically closed on next application startups.
- 7 Click on the **Close** button.

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





Figure 2 - 35: Convertigo Studio Welcome page

This page contains several tutorial videos organized in three categories:

- Connectivity to back-end data and processes,
- Business logic,
- Mobile front-end.

Do not hesitate to watch these startup videos to understand all capabilities of Convertigo.

On the right top corner of the videos table, you also find a link to the *What's new* page of the Convertigo website.

8 Close this *Welcome* page by clicking on 🔀 button.

The Convertigo Studio is started:

		-0-00
in fine fterdinge gefterte Ballett Conversible Bret Mungon Deb		
Design of the state of the second second		Concertige A
∰ Projecti 22 [™] D Project Collows (2) ▼ → KG 2) Of (7 ™ D)	26 Source Rule 12 and Information III Control	
	O abath : O bloament :	
	and a second	
Dependen II (1) ≥ II cf " " D	* (<u></u>	
Dispersion II II II II II II II II II Angenty Value	s tegentig 22 @ County @ Tons @ Tons to & Statung	14 P 14 (1 ***

Figure 2 - 36: Convertigo Studio

Convertigo Studio user interface includes two perspectives:

- Convertigo API (opened by default): this perspective will be interesting for developing Convertigo server-side projects,
- Resource: this perspective will be interesting to develop Convertigo client-side application projects (mobile or desktop).



You can easily switch between both perspectives thanks to the two buttons available in the top right corner of Convertigo Studio.

9 The correct launch of the Convertigo engine can be validated by calling the following URL in a Web browser:

http://localhost:18080/convertigo

- localhost is the host name of local machine (as Convertigo Studio is installed locally),
- 18080 is the default HTTP port number of a Convertigo Studio.

The Test Platform home page of the Server embedded in Convertigo Studio opens:





Figure 2 - 37: Convertigo Studio Test PlatformHome page

The page must be filled with data in the *Convertigo Versions* panel. The *Projects list* located below should be empty as no projects are present in the Studio just after installation.

INSTALLING SVN KIT IN CONVERTIGO STUDIO

Since Convertigo 7.1.0, SVN kit plugin is not delivered in Studio anymore. Next procedure describes how to install SVN kit plugin for Eclipse in Convertigo Studio.

To install SVN kit in Convertigo Studio

In the started Studio, open a sample project. To open a sample project, refer to the Reference Manual procedure "Opening a sample project from the Studio" on page 1-2. For example, you can choose to open Convertigo Samples and Demos > Mobile samples > CTF gallery sample project thanks to the New Project wizard.



You can also create a new project or open an already existing project (if you are using an previously existing workspace with projects) instead of importing a sample project.

While the project is loaded, an Install Connectors popup is displayed:



Figure 2 - 38: Install SVN kit in Studio - Install Connectors popup

P

The **Install Connectors** popup may not be automatically displayed. It happens because Eclipse considers that you already closed it. It can be the case if you re-use a previously existing workspace or if you closed the popup thinking it would popup later again.

In this case, you can manually re-open this popup by clicking on the **Convertigo** menu, then select the **Open SVN Discovery Connectors** entry.





Figure 2 - 39: Install SVN kit in Studio - Menu to re-open the Install Connectors popup

2 Select the most recent SVN Kit connector (in our example, SVN Kit 1.8.3) by checking the checkbox. The **Finish** button is enabled:



Figure 2 - 40: Install SVN kit in Studio - Selecting SVN Kit connector

3 Click on the **Finish** button.

The wizard loads for computing requirements of the selected option:





Figure 2 - 41: Install SVN kit in Studio - Processing requirements

Then, the **Install** window is displayed, showing the processing result, i.e. the items to install:

Install			-
nstall Check the items that you wish to install.			
Name	Version	Id	
Subversive SVN Connectors	3.0.5.120140122-17	org.polarion.eclipse.team.svn.connector	
SVNKit 1.8.3 Implementation (Optional)	3.0.5.120140122-17	org.polarion.eclipse.team.svn.connector	
Select All Deselect All			
Details			1
(?)	[<back next=""> Finish</back>	Cancel

Figure 2 - 42: Install SVN kit in Studio - Install window

4 Select the items to install by checking/unchecking the checkboxes. We do recommend to keep all items for the SVN Kit to work properly. Then, click on **Next**.

The Install window shows a summary of items that are going to be installed:

a) Install		
Install Details		
Review the items to be installed.		
Name	Version	Id
 Subversive SVN Connectors SVNKit 1.8.3 Implementation (Optional) 	3.0.5.120140122-1700 3.0.5.120140122-1700	org.polarion.eclipse.team.svn.con org.polarion.eclipse.team.svn.con
ize: Unknown		
Details		
(?)	< <u>B</u> ack	Next > Einish Cancel

Figure 2 - 43: Install SVN kit in Studio - Review items to install

5 Then, click on **Next**.



install (ii) X **Review Licenses** Licenses must be reviewed and accepted before the software can be installed. Licenses: License text: Eclipse Foundation Software User Agreement Eclipse Foundation Software User Agreement February 1, 2011 Usage Of Content THE ECLIPSE FOUNDATION MAKES AVAILABLE SOFTWARE, DOCUMENTATION, INFORMATION AND/OR OTHER MATERIALS FOR OPEN SOURCE PROJECTS (COLLECTIVELY CONTENT"). USE OF THE CONTENT IS GOVERNED BY THE TERMS AND CONDITIONS OF THIS AGREEMENT AND/OR THE TERMS AND CONDITIONS OF LICENSE AGREEMENTS OR NOTICES INDICATED OR REFERENCED BELOW. BY USING THE CONTENT, YOU I accept the terms of the license agreement I do not accept the terms of the license agreement ? < Back Next > Einish Cancel

The Licences of items to install are displayed:

Figure 2 - 44: Install SVN kit in Studio - Licence Agreement

6 Read carefully the Licences, and accept them by checking the **I accept the terms of the license agreement** button.



If you do not accept the Licenses, the installation has to be cancelled.

The Finish button is enabled:

et Install	
Review Licenses Licenses must be reviewed and accepted before the software can be	installed.
Licenses:	License text:
Eclipse Foundation Software User Agreement	Eclipse Foundation Software User Agreement February 1, 2011 Usage Of Content THE ECLIPSE FOUNDATION MAKES AVAILABLE SOFTWARE, DOCUMENTATION, INFORMATION AND/OR OTHER MATERIALS FOR OPEN SOURCE PROJECTS (COLLECTIVELY 'CONTENT'). USE OF THE CONTENT IS GOVERNED BY THE TERMS AND CONDITIONS OF THIS AGREEMENT AND/OR THE TERMS AND CONDITIONS OF LICENSE AGREEMENT SOR NOTICES INDICATED OR REFERENCED BELOW. BY USING THE CONTENT, YOU
0	I go not accept the terms of the license agreement I go not accept the terms of the license agreement Seck. Next > Finish Cancel

Figure 2 - 45: Install SVN kit in Studio - Accepting Licenses

7 Click on **Finish**. The installation starts:

Installing Software			
Always run in background			
······································	Run in Background	Cancel	Details >>

Figure 2 - 46: Install SVN kit in Studio - Installation in progress

A Security Warning may pop-up:





Figure 2 - 47: Install SVN kit in Studio - Security Warning popup

8 You can click on **Details** to expand the detailed information about this security warning:

Security Warning
Warning: You are installing software that contains unsigned content. The authenticity or validity of this software cannot be established. Do you want to continue with the installation?
OK Cancel << Details ins\org.polarion.eclipse.team.svn.connector_3.0.2.I20130808-1700.jar
۲

Figure 2 - 48: Install SVN kit in Studio - Security Warning details

9 Click on **OK** to continue installing.

At the end of the installation, a popup proposes to restart the Studio for the changes to be taken into account:



Figure 2 - 49: Install SVN kit in Studio - Restart popup

10 Click on **Yes** to restart the Studio.

The Studio restarts, including the project you added:

de Edit Navigete Search Broject Convertigo Bun Window Help			
9 · 5 · 6 · 6 · 6 · 6 · 6 · 6 · 1 ·		Quick Access	📑 🔁 Resource 🔛 Convertigo AP
🖥 Projects 🗊 🖏 Project Suplice: 🔑 🖛 🖌 😭 🗟 🏈 🦈 💳 🗖	🕰 Source Picker 🖽 📖 References 👘 🖽	👁 sampleMobileCtfGallery (C void) 💠	- 0
arrpieMobileCt/Sallery		3120121#100	
	Tegi		XML Browset
	Type: Name: Convent: Share: Share: Fernave:		Click on the IML generation button to view -
D Properties 12 To 10	O Journet	Last detected sover (lass (unknown)	·
Property Value	(Cardinal)	Output Design	
	S Engine Log II Console @Tasks @Em	or Log 👔 Schema	12 P 4 11 " - 0
	Tome DefaTL. Message 11:40:5 Message 11:40:5 Studio context 11:40:5 1 Studio context 11:40:5 1 Studio context 11:40:5 1 Genvertigo engli 11:40:5 1 Migration start 11:40:5 1 (Schefintrespe 11:40:5 1 (Schefintrespe 11:40:5 1 (Schefintrespe	no pools won't be initialized! ne started ing bed ctor) 243 beans prefetched in 2100 ms	

Figure 2 - 50: Install SVN kit in Studio - Studio after restart

The SVN Kit plugin is fully installed in Convertigo Studio and you can use it the standard way. For more information, you can consult Subversive documentation at *http://www.eclipse.org/ subversive/documentation.php*



2.2.5 Convertigo Studio default configuration

After you installed Convertigo Studio, you may want to use or change the default access URLs to the embedded engine, the default accounts or the default workspace location. This section presents all the needed information about Convertigo Studio default configurations.

- Convertigo Studio default configurations and access URLs
- Changing Convertigo Studio default configurations

CONVERTIGO STUDIO DEFAULT CONFIGURATIONS AND ACCESS URLS

- Convertigo Studio default workspace
- Convertigo Studio default ports
- Convertigo Studio Administration Console URLs
- Convertigo Studio Test Platform URLs
- Convertigo Studio default accounts

CONVERTIGO STUDIO DEFAULT WORKSPACE

Convertigo Studio workspace launcher popup sets by default the projects workspace directory in the user's home directory, as a workspace folder. On Windows, It gives a path of the following form: C:/Users/me/workspace



For more information on Convertigo workspace and projects workspace, see Appendix "Convertigo workspace" on page A-2.

You may have changed this path while installing, see Figure 2 - 11.

CONVERTIGO STUDIO DEFAULT PORTS

Convertigo Studio and its embedded tomcat are intalled by default to listen on the following ports:

- 18080 for HTTP,
- 18081 for HTTPS (Convertigo Studio enables HTTPS by default after installation).

CONVERTIGO STUDIO ADMINISTRATION CONSOLE URLS

Convertigo Studio Administration Console is accessible at the following URL:

in HTTP:

http://localhost:18080/convertigo/admin

- localhost is the host name of local machine (as Convertigo Studio is installed locally),
- 18080 is the default HTTP port number of a Convertigo Studio.
- in HTTPS:



- localhost is the host name of local machine (as Convertigo Studio is installed locally),
- 18081 is the default HTTPS port number of a Convertigo Studio (HTTP port number+1).

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



Figure 2 - 51: Convertigo Studio Administration authentication page



For more information about the Administration Console, see "Using Convertigo Administration Console" on page 4-1.

CONVERTIGO STUDIO TEST PLATFORM URLS

Convertigo Studio Test Platform is accessible at the following URL:

in HTTP:

http://localhost:18080/convertigo

- localhost is the host name of local machine (as Convertigo Studio is installed locally),
- 18080 is the default HTTP port number of a Convertigo Studio.
- in HTTPS:



https://localhost:18081/convertigo

- localhost is the host name of local machine (as Convertigo Studio is installed locally),
- 18081 is the default HTTPS port number of a Convertigo Studio (HTTP port number+1).

The Test Platform home page of the Convertigo Studio opens:

nverti	Un Un	ock your Test Platfo	orm 📫 Userio:	Patro	ord.
		Nelcome		vertigo B	MS
杰	Convertigo version	Engine version	Objects version	Java version	Classes version
	6.3.0_beta	÷	9 8.3.0.m005	14.0_31	50,0 Son Microsystems Inc.
7	Project name	Comment	E () •	lepksymietit date 🔞 Test p	iathern 🏶 Web service definitio
	sample_documentation_CU	Legecy Integration project.	rs/a	0	Den O
consider.	sample_documentation_CHS	Mashup Sequencer project	_ ys/w	0	O well
	sample_documentation_CV/	Web integration project	75/8	0	O well
6	sampleMosile./Query	Woble project based on the XQuer	y mobile framework, rula	0	O wat
-					
Developer retreat					

Figure 2 - 52: Convertigo Studio Test Platform

Here, the *Test Platform* home page contains projects in the list of projects, these projects are those deployed in the Studio.

For more information about the Test Platform, you can consult the Using the Test Platform chapter of the User Guide (coming soon).

CONVERTIGO STUDIO DEFAULT ACCOUNTS

Convertigo Studio declares by default the following accounts:

- administrator account, which user ID/password is admin/admin, used to access the Administration Console and the Test Platform,
- no tester account is defined by default, you access the Test Platform as anonymous user.


For more information about the Test Platform accounts, you can consult the Using the Test Platform chapter of the User Guide (coming soon).

CHANGING CONVERTIGO STUDIO DEFAULT CONFIGURATIONS

- Changing Convertigo Studio default workspace
- Changing Convertigo Studio default ports
- Changing Convertigo Studio default administration account
- Changing Convertigo Studio default tester account

CHANGING CONVERTIGO STUDIO DEFAULT WORKSPACE

The Convertigo Studio projects workspace can be changed using the following procedure.

To change the Convertigo Studio workspace directory

If not running, launch the Convertigo Studio. On Windows, if you choose to create shortcuts during the installation wizard, simply access the shorcut that is on your desktop and double-click on it to launch Convertigo Studio. Otherwise, use the Start menu to launch Convertigo Studio.

For other platforms, Convertigo Studio was installed in the folder you choose during installation wizard. You can open this folder to access the ConvertigoStudio.exe start file. and double-click on it to launch Convertigo Studio.

2 Once started, open the File menu, select Switch Workspace, then Other...



-								
- 🔁 C	Convertigo - Studio	•						
File	Edit Navigate	Search	Project	Convertigo	Run	Windo	w Hel	р
	New			,	Alt+Shift	t+N ►	→ →	
	Open File							
	Close				Ctrl	+W		
	Close All			0	trl±Shift	+ W		
	Close All			C	urtonnu	.+ ¥¥		
	Save				Ct	rl+S		
9	Save As							
R	Save All			(Ctrl+Shif	ft+S		
	Revert							
	Move							
	Rename					F2		
8	Refresh					F5		
	Convert Line Deli	miters To				•		
	Drint				C+	L D		
	PIIIL				Cu	I+F		
	Switch Workspac	e				•	Ot	her
	Restart							~
2	Import							
4	Export							
	Dremention				A 14 . E			
	Properties				AIL+EI	nter		
	1 custom.js [sam	ple_refMa	anual_site	Cli]				
	Exit							🖉 Tasks 🗐 C
	Properties 🛛	🚜 Source	e Picker		৳ ‡			Engine

Figure 2 - 53: Swithcing workspace

This re-opens the *Workspace launcher* popup window:

🕋 Workspace	Launcher	×					
Select a workspace							
Studio store Choose a wo	s your projects in a folder called a workspace. orkspace folder to use for this session.						
<u>W</u> orkspace:	C:\Users\me\workspace	Browse					
▶ <u>C</u> opy Settings							
?	ОК	Cancel					

Figure 2 - 54: Workspace launcher popup window

- 3 Change the **Workspace** path value, possibly using the **Browse...** button, to specify the location of the workspace directory you want to use.
- 4 Then, expend the **Copy Settings** category by click on it:

🔁 Workspace	Launcher		×
Select a w Studio store Choose a w	orkspace s your projects in a folder called a workspace. orkspace folder to use for this session.		
<u>W</u> orkspace:	C:\myWorkspaces\convertigoWorkspace	•	<u>B</u> rowse
Copy Setti Workbeng Working S	ngs h Layout Sets		
0		ОК	Cancel

Figure 2 - 55: Expended Copy Settings category

These checkboxes allow you to configure which settings of your current Eclipse workspace will be transferred to your new workspace:

- Workbench Layout: Opened views, their size, and selected perspectives.
- Working Sets: The user defined working sets.
- 5 Check the appropriate checkboxes for your configuration and click on **OK**.

Convertigo Studio closes and restarts.



At startup, in the case of a workspace path pointing to an empty folder, a not existing folder, or a Convertigo workspace that was created with a Convertigo prior to version 6.2.0, the Convertigo Studio starting wizard is launched.

- 6 In this case, follow the procedure *"To start and configure Convertigo Studio on Windows/Linux/Mac OS"* on page 2-15 from step 6.
- **7** Otherwise, in the case of a workspace path pointing to a Convertigo workspace that was created with a Convertigo from version 6.2.0, the workspace is loaded in Convertigo Studio and reused as is.

CHANGING CONVERTIGO STUDIO DEFAULT PORTS

Convertigo Studio ports can be changed.

- The HTTP port can be changed following the procedure "To change the Convertigo Studio HTTP port" on page 2-56.
- The HTTPS port of the Convertigo Studio will always be the HTTP port+1.

To change the Convertigo Studio HTTP port

- 1 Access the *Configuration* page of the *Administration Console* following the procedure *"To access Configuration page in the Administration Console"* on page 4-9.
- 2 Access to the *Main parameters* category following the procedure *"To access a configuration category in the Configuration page"* on page 4-12. This category is generally the one expanded by default.

The Main parameters category opens:

Convertigo Server application URL	http://localhost:18080/convertigo
Maximal number of worker threads	100
* Advanced properties	

Figure 2 - 56: Main parameters category

In the **Convertigo Server application URL** field, change the HTTP port in the URL. For example, type 8182 as new port number instead of preconfigured 18080:

URL	http://localhost:8182 /convertigo	
Maximal number of worker threads	100	
* Advanced properties		

Figure 2 - 57: Editing Convertigo Server application URL parameter

4 Click on the **Update configuration** button located on the top (or bottom) of the *Configuration* page:

nfiguration	
B Update configuration	
ip: some properties may have been configured thru a g]lobal symbol (like \${my_symbol}). Just hov
Main parameters	Convertigo Server application URL
Assounts	
Accounts	Maximal number of worker
Logs	Maximal number of worker threads

Figure 2 - 58: Updating configuration

A pop-in appears to confirm that the new parameters have been taken into account:

Information	×
The configuration has been successf	ully updated!
	Ok

Figure 2 - 59: Confirmation pop-in

- 5 Click on the **Ok** button to close the pop-in.
- 6 Then, for the configuration to be applied on the Convertigo engine, you need to quit and restart the Studio. Both HTTP and HTTPS ports are updated.
- 7 After the Studio restart, you can access the *Test Platform* or *Administration Console* with the new defined ports. For example, use the following URLs:
 - in HTTP:

http://localhost:8182/convertigo/admin

• in HTTPS:

https://localhost:8183/convertigo/admin





Note that the HTTPS port is always updated along with the HTTP port as the HTTPS port of the Convertigo Studio will always be the HTTP port+1.

CHANGING CONVERTIGO STUDIO DEFAULT ADMINISTRATION ACCOUNT

The Convertigo Studio **administrator** account can be changed using the following procedure.

To change the Convertigo Studio administrator account

- 1 Access the *Configuration* page of the *Administration Console* following the procedure *"To access Configuration page in the Administration Console"* on page 4-9.
- 2 Access to the *Accounts* category following the procedure *"To access a configuration category in the Configuration page"* on page 4-12.

The Accounts category opens:

Main parameters	Accounts 🕢		
Accounts	Admin username	admin	
Logs	Admin password	•••••	
Real-time activity monitoring	Test Platform username		
XML generation	access)		
HTML parser	Test Platform password	•••••	

Figure 2 - 60: Accounts category

- 3 Enter the administrator username and password in the Admin username and Admin password fields.
- 4 Click on the **Update configuration** button located on the top (or bottom) of the *Configuration* page:

ninguration		
Update configuration		
ip, some propenies may nave been configured thru a g	роваї зупівої (нке \$ (my_зуmbol)). Ju:	st nover properties valu
Main parameters	Admin usemame	admin
▶ Accounts	Admin password	••••
Logs	Test Platform username	
Real-time activity monitoring	access)	Jus [
Real-time activity monitoring		

Figure 2 - 61: Setting Admin account parameters and updating configuration

A pop-in appears to confirm that the new parameters have been taken into account:



Figure 2 - 62: Confirmation pop-in

5 Click on the **Ok** button to close the pop-in.

You are still authenticated in the *Administration Console*, even if the **administrator** account has changed. The new account credentials will be needed only when authenticating again in the platform.

CHANGING CONVERTIGO STUDIO DEFAULT TESTER ACCOUNT

As no **tester** account is defined by default after Studio installation, such an account can be declared using the following procedure. This procedure is also valid if you want to change the **tester** account afterwards.

To declare or change the Convertigo Studio tester account

- 1 Access the *Configuration* page of the *Administration Console* following the procedure *"To access Configuration page in the Administration Console"* on page 4-9.
- 2 Access to the Accounts category following the procedure "To access a configuration category in the Configuration page" on page 4-12.

The Accounts category opens (see Figure 2 - 60).

- 3 Enter the tester username and password in the **Test Platform username** and **Test Platform password** fields.
- 4 Click on the **Update configuration** button located on the top of the *Configuration* page:



some properties may have been configured thru a	global symbol (like \$ {my_symbol }). Just ho	ver properties
	no es es kaltanta bi	
Main parameters	Admin username	admin
Accounts	Admin password	•••••
Logs	Test Platform username	
	(leave it blank for anonymous access)	test
Real-time activity monitoring		

Figure 2 - 63: Setting Tester account parameters and updating configuration

A pop-in appears to confirm that the new parameters have been taken into account:

Information ×	
The configuration has been successfully updated!	
Ok	- //)



5 Click on the **Ok** button to close the pop-in.

The *Test Platform* can be accessed authenticating with the **tester** account. The **anonymous** user cannot see any information anymore in the *Test Platform*.



For more information about the Test Platform accounts, you can consult the Using the Test Platform chapter of the User Guide (coming soon).



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:

	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)	 32 bits: convertigo-X. Y.Z-v 12345- linux32.war 64 bits: convertigo-X. Y.Z-v 12345- linux64.war 	convertigo- <i>X. Y.Z</i> -v <i>12345</i> - linux32.war
Other OS (HTML connector not supported)	convertigo- <i>X.Y.Z-v12345-</i> linux32.war	 32 bits: convertigo-X.Y.Z-v12345- linux32.war 64 bits: convertigo-X.Y.Z-v12345- linux64.war 	convertigo-X. Y.Z-v <i>12345</i> - linux32.war

Table 3 - 1: Packages uses table

3.2 C-EMS installation on Windows/Tomcat

This chapter explains how to install C-EMS on Windows with Tomcat application server and what are the default configuration of C-EMS and how to change them:

- Installing C-EMS on Windows/Tomcat
- Convertigo Server default configuration 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	 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-win32install.exe

A Security Warning popup is displayed:

👻 User Account Control 🛛		
Do you want to allow the following program to make changes to this computer?		
~	Program name: Convertigo Enterprise Mobility Server Verified publisher: Convertigo File origin: Downloaded from the Internet	
Show detai	Is Yes No	
	Change when these notifications appear	

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

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



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

The End User Licence Agreement is displayed:





Figure 3 - 3: C-EMS Licence Agreement

4 Read carefully the EULA, and accept it by clicking on the **I Agree** button.



The next page proposes the C-EMS components to install:

🔁 Convertigo Enterprise Mol	ility Server Setup 📃 📼 💌		
convertico	Choose Components Choose which features of Convertigo Enterprise Mobility Server you want to install.		
Check the components you want to install and uncheck the components you don't want to install. Click Next to continue.			
Select components to install:	Convertigo Enterprise Mobility Server		
Space required: 272.9MB			
Convertigo Mobility Platform 200	0-2014		

Figure 3 - 4: Choosing components

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

The next page allows you to choose the installation folder:





Figure 3 - 5: Setting destination folder

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

The next page allows you to configure the basic settings of the Convertigo Server:

🔄 Convertigo Enterprise Mo	🔁 Convertigo Enterprise Mobility Server Setup: Configuration Options 🛛 💼 📧			
convertigo	Configuration Convertigo Server basic configuration.			
User workspace location	C:\Users\me\convertigo_server			
	Install Isapi Filter redirector (IIS)			
Convertigo Mobility Platform 20				
	< <u>B</u> ack Install Cancel			

Figure 3 - 6: Server workspace configuration

7 In this screen, you can indicate:

- the location of the Convertigo workspace (a default folder is proposed in the currently logged user environment),
- whether the connection is made through an IIS (checking or not the box).



For more information on Convertigo workspace and projects workspace, see Appendix "Convertigo workspace" on page A - 2.

8 Then, click on the **Install** buton.

The installation starts, you should wait for a few minutes:





Figure 3 - 7: Start of the installation

The installation continues:

🔁 Convertigo Enterprise M	obility Server Setup	
convertigo	Installing Please wait while Convertigo Er installed.	nterprise Mobility Server is being
Output folder: C:\Program	Files (x86) \Convertigo Mobility Pla	atform\Convertigo Enterprise Mob
Convertigo Mobility Platform 2	000-2014	
	< <u>B</u> ack	Next > Cancel

Figure 3 - 8: Installation in progress

Convertigo Enterprise Mobil	ity Server Setup 🗖 🗖 🖾
convertigo	Completing the Convertigo Enterprise Mobility Server Setup Wizard Convertigo Enterprise Mobility Server has been installed on your computer. Click Finish to close this wizard.
	< Back Finish Cancel

This screen indicates the end of installation:

Figure 3 - 9: End of the installation

- 9 Click on **Finish** to close the wizard.
- 10 In Windows *Start* menu, open the *Control Panel*. Then, open the *Services* window from the *Administrative tools*.

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



	9 🗃 🖬 🗊 🕨 🖬 🕪								
Services (Local)	Services (Local)								
	Convertigo Server	Name	Description	Status	Startup Type	Log On As	1		
	Stop the service Restart the service	 ActiveX Installer (Adaptive Brightness Application Experi 	Provides User Acco Monitors ambient li Processes applicati	Started	Manual Manual Manual	Local System Local Service Local System			
	Description: Convertigo Server - http://www.convertigo.com	Application Identity Application Infor Application Layer	Determines and veri Facilitates the runni Provides support fo	Started	Manual Manual Manual	Local Service Local System Local Service			
		 Application Mana Background Intelli Base Filtering Engi 	Processes installatio Transfers files in the The Base Filtering E	Started Started	Manual Automatic (D Automatic	Local System Local System Local Service			
		😘 BitLocker Drive En 🧠 Block Level Backu 👊 Bluetooth Support	BDESVC hosts the B The WBENGINE ser The Bluetooth servi		Manual Manual Manual	Local System Local System Local Service			
		BranchCache Certificate Propag CNG Key Isolation	This service caches Copies user certific The CNG key isolati		Manual Manual Manual	Network Service Local System			
		COM+ Event Syst COM+ System Ap	Supports System Ev Manages the config	Started	Automatic Manual	Local Service Local System			
		Computer browser	Converting Server	Started	Automatic	Local System			
		Credential Manager	Provides secure stor Provides four mana	Started	Manual Automatic	Local System Network Service	1		

Figure 3 - 10: 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 (localhost for local server installation),
- *ConvertigoPort* is the port number of your Convertigo Server (28080 by default for HTTP port).

The Convertigo Server Administration Console opens on the authentication page:



Figure 3 - 11: Convertigo Server Administration authentication page



3.2.2 Convertigo Server default configuration on Windows/Tomcat

After you installed Convertigo Server on Windows, you may want to use or change the default access URLs to the Convertigo engine, the default accounts or the default workspace location. This section presents all the needed information about Convertigo Server default configurations.

- Convertigo Server default configurations and access URLs
- Changing Convertigo Server default configurations

CONVERTIGO SERVER DEFAULT CONFIGURATIONS AND ACCESS URLS

- Convertigo Server default webapp behavior on Windows/Tomcat
- Convertigo Server default workspace on Windows/Tomcat
- Convertigo Server default ports on Windows/Tomcat
- Convertigo Server Administration Console URLs
- Convertigo Server Test Platform URLs
- Convertigo Server default accounts

CONVERTIGO SERVER DEFAULT WEBAPP BEHAVIOR ON WINDOWS/TOMCAT

Convertigo Server is installed as a Tomcat webapp. It is installed as a war deployed in the Tomcat application server.



Convertigo Server war cannot work unexploded in the application server.

Convertigo Server is installed as a service with Automatic **Startup type**: it will start automatically at Windows startup.

CONVERTIGO SERVER DEFAULT WORKSPACE ON WINDOWS/TOMCAT

Convertigo Server installer on Windows/Tomcat sets by default the workspace directory in the user's home directory, as a convertigo_server folder. It gives a path of the following form: C:/Users/me/convertigo_server



For more information on Convertigo workspace and projects workspace, see Appendix "Convertigo workspace" on page A - 2.

You may have changed this path while installing, see Figure 3 - 6.

CONVERTIGO SERVER DEFAULT PORTS ON WINDOWS/TOMCAT

Convertigo Server and Tomcat application server are intalled by default to listen on the following ports:

- 28080 for HTTP,
- 28443 for HTTPS (Convertigo Server enables HTTPS by default after installation).

CONVERTIGO SERVER ADMINISTRATION CONSOLE URLS

Convertigo Server Administration Console is accessible at the following URL:

• in HTTP:

http://localhost:28080/convertigo/admin

- localhost is the host name of local machine (as Convertigo Server is installed locally),
- 28080 is the default HTTP port number of a Convertigo Server.
- in HTTPS:

https://localhost:28443/convertigo/admin

- localhost is the host name of local machine (as Convertigo Server is installed locally),
- 28443 is the default HTTPS port number of a Convertigo Server.

The Administration Console authentication page of the Convertigo Server opens:



Figure 3 - 12: Convertigo Server Administration authentication page



For more information about the Administration Console, see "Using Convertigo Administration Console" on page 4 - 1.

CONVERTIGO SERVER TEST PLATFORM URLS

Convertigo Server Test Platform is accessible at the following URL:



in HTTP:

http://localhost:28080/convertigo

- localhost is the host name of local machine (as Convertigo Server is installed locally),
- 28080 is the default HTTP port number of a Convertigo Server.
- in HTTPS:

https://localhost:28443/convertigo

- localhost is the host name of local machine (as Convertigo Server is installed locally),
- 28443 is the default HTTPS port number of a Convertigo Server.

The Test Platform home page of the Convertigo Server opens:



Figure 3 - 13: Convertigo Server Test Platform

Here, the *Test Platform* home page contains projects in the list of projects, these projects are those deployed in the Server.



For more information about the Test Platform, you can consult the Using the Test Platform chapter of the User Guide (coming soon).

CONVERTIGO SERVER DEFAULT ACCOUNTS

Convertigo Server declares by default the following accounts:

- administrator account, which user ID/password is admin/admin, used to access the Administration Console and the Test Platform,
- no tester account is defined by default, you access the Test Platform as anonymous user,
- **Tomcat administrator** account, which user ID/password is admin/admin, used to access the *Tomcat Manager* application.



For more information about the Test Platform accounts, you can consult the Using the Test Platform chapter of the User Guide (coming soon).

CHANGING CONVERTIGO SERVER DEFAULT CONFIGURATIONS

- Changing Convertigo Server default workspace
- Changing Convertigo Server default ports
- Changing Convertigo Server default administration account
- Changing Convertigo Server default tester account

CHANGING CONVERTIGO SERVER DEFAULT WORKSPACE

If you are using Windows Operating System and Tomcat Application Server, the Convertigo workspace can be specified after Convertigo installation by using the Tomcat Configurator. The procedure is described below.

To change the Convertigo Server user workspace directory

1 You can find a shortcut icon in Windows taskbar, named *Convertigo Server*.



Figure 3 - 14: Convertigo Server Tomcat Configurator shortcut in taskbar

2 Right-click on this icon and select the **Configure...** option.

If the shortcut is not present in Windows taskbar, you can also locate in Tomcat installation directory the file tomcatXw.exe and run it.

The Convertigo Server Properties window opens:



Convertigo Serv	ver Properties
General Log On	Logging Java Startup Shutdown
Service Name:	ConvertigoServer
Display <u>n</u> ame:	Convertigo Server
Description:	Convertigo Server - http://www.convertigo.com
Pat <u>h</u> to executat	ble:
"C:\Program File	es (x86)\Convertigo Mobility Platform\Convertigo Enterpris
Startup type:	Automatic
Comine Chabury	Shadad
Service Status:	Starteo
<u>S</u> tart	Stop Pause Restart
	OK Appular Appliquer

Figure 3 - 15: Convertigo Server Tomcat Configurator

- 3 Click on the Java tab.
- 4 In *Java Options* section, you can add (or update the entry if already existing):

-Dconvertigo.cems.user_workspace_path= <absolute_path_to_the_user_workspace_directory>

Convertigo Server Prop	erties			— ×
General Log On Logging	Java	Startup	Shutdown	
Use default				
Java Virtual Machine:				
C:\Program Files (x86)\	Java\jre7	\bin\client\	jvm.dll	
Java Classpath:				
C:\Program Files (x86)\	Convertig	o Mobility I	Platform\Co	nvertigo Enterpris
Java Options: -Djava.util.logging.conf	ig.file=C:	Program F	iles (x86)\C	onvertigo Mot
-Djava.iiprary.path=C: Program Files (X86) (Convertigo Mobility Plath -Dconvertigo.cems.user workspace path=D: projets workspaces in:				
Initial memory pool:	256			MB
Maximum memory pool:	512			MB
Thread stack size:				КВ
		ОК	Annuk	er <u>A</u> ppliquer

Figure 3 - 16: Updating Convertigo workspace in Tomcat Configurator

5 Then, you have to restart Tomcat for Convertigo to use the new Convertigo workspace.

CHANGING CONVERTIGO SERVER DEFAULT PORTS

Convertigo Server ports can be changed:

- HTTP port can be modified by following the procedure "To change the Convertigo Server HTTP port" on page 3 - 19,
- HTTPS port can be modified by following the procedure "To change the Convertigo Server HTTPS port" on page 3 - 19,

To change the Convertigo Server HTTP port

Coming soon.

To change the Convertigo Server HTTPS port

Coming soon.

CHANGING CONVERTIGO SERVER SERVICE STARTUP TYPE

If you are using Windows Operating System and Tomcat Application Server, the Convertigo service **Startup type** can be changed after Convertigo installation by using the Tomcat Configurator. The procedure is described below.

To change the Convertigo Server service Startup type

1 You can find a shortcut icon in Windows taskbar, named Convertigo Server.





Figure 3 - 17: Convertigo Server Tomcat Configurator shortcut in taskbar

2 Right-click on this icon and select the **Configure...** option.

If the shortcut is not present in Windows taskbar, you can also locate in Tomcat installation directory the file tomcatXw.exe and run it.

The Convertigo Server Properties window opens:

🍖 Convertigo Server Properties 🛛 💽				
General Log On	Logging Java Startup Shutdown			
Service Name:	ConvertigoServer			
Display <u>n</u> ame:	Convertigo Server			
Description:	Convertigo Server - http://www.convertigo.com			
Pat <u>h</u> to executab	le:			
"C:\Program File	s (x86)\Convertigo Mobility Platform\Convertigo Enterpris			
Startup typ <u>e</u> :	Automatic			
Service Status:	Started			
<u>S</u> tart	<u>Stop</u> <u>P</u> ause <u>R</u> estart			
	OK Annuler Appliquer			

Figure 3 - 18: Convertigo Server Tomcat Configurator

- 3 In *General* section, you can change the Startup type through a combobox containing the following values:
 - Automatic: the service will automatically start,
 - Manual: the service can be manually started,
 - Disabled: the service cannot be started.

🏷 Convertigo Serve	Gonvertigo Server Properties				
General Log On L	.ogging Java	Startup	Shutdown		
Service Name:	Service Name: ConvertigoServer				
Display <u>n</u> ame:	Convertigo S	erver			
Description:	Convertigo S	erver - http	://www.conve	rtigo.com	
Pat <u>h</u> to executable "C:\Program Files	Pat <u>h</u> to executable: "C:\Program Files (x86)\Convertigo\Convertigo Enterprise Mobility Server				
Startup typ <u>e</u> :	Automatic			-	
	Automatic Manual				
	Disabled				
Service Status:	Stopped				
<u>S</u> tart	Stop	P	ause	<u>R</u> estart	
		ОК	Annuler	Appliquer	

Figure 3 - 19: Updating Convertigo service Startup type

- 4 Then, you have to click on the **Apply** button for the update to be taken into account.
- 5 Click on the **OK** button to save the update and close the window;

CHANGING CONVERTIGO SERVER DEFAULT ADMINISTRATION ACCOUNT

The Convertigo Server **administrator** account can be changed using the same procedure as for the Studio, see *"To change the Convertigo Studio administrator account"* on page 2 - 58.

CHANGING CONVERTIGO SERVER DEFAULT TESTER ACCOUNT

As no **tester** account is defined by default after Server installation, such an account can be declared using the same procedure as for the Studio, see *"To declare or change the Convertigo Studio tester account"* on page 2 - 59. This procedure is also valid if you want to change the **tester** account afterwards.



3.3 C-EMS installation on Linux/Tomcat

This chapter explains how to install C-EMS on Linux with Tomcat application server and and what are the default configurations of C-EMS and how to use/change them:

- Installing C-EMS on Linux/Tomcat
- Convertigo Server default configuration on Linux/Tomcat

3.3.1 Installing C-EMS on Linux/Tomcat

- Prerequisites
- Installation procedure

PREREQUISITES

SERVER PREREQUISITES

The minimum server prerequisites for installing Convertigo Server are the following:

- **CPU**: Dual Core,
- **RAM**: 4Gb,
- Disk space: 10Gb.

The following table describes the required packages to install prior to Convertigo Server installation, depending on the Linux OS and version:

Table 3 - 3: Packages prerequisites

	Version	Packages 32 bits
RedHat 32 bits	starting from version 5.2 32 bits	 xulrunner-1.9.0.19-1.el5_5 and all dependencies libXtst-1.0.1-3.1.i386 and all dependencies xorg-x11-fonts-Type1-7.1-2.1.el5 unzip glibc and all dependencies libXi and all dependencies
RedHat 64 bits	starting from version 5.2 64 bits	 xulrunner-1.9.0.19-1.el5_5 and all dependencies libXtst-1.0.1-3.1.i386 and all dependencies xorg-x11-fonts-Type1-7.1-2.1.el5 unzip glibc.i686 and all dependencies libXi and all dependencies
Ubuntu 32 bits	versions 8.04 (LTS) , 10.04 (LTS) and 12.04 (LTS) 32 bits	 libgtk2.0-0 libxt6 libxtst6 unzip glibc and all dependencies
Ubuntu 64 bits	versions 8.04 (LTS) , 10.04 (LTS) and 12.04 (LTS) 64 bits	 libgtk2.0-0 libxt6 libxtst6 unzip glibc and all dependencies ia32-libs



Table 3 - 3: Packages prerequisites (...)

	Version	Packages 32 bits
Ubuntu 64 bits	version 14.04 (LTS) 64 bits	<pre>lib32z1 libgtk2.0-0:i386 libstdc++6:i386 libxft2:i386 libxt6:i386 libxtst6:i386</pre>
Debian 32 bits	version 6.0	 libgtk2.0-0 libxt6 libxtst6 unzip bzip2 glibc and all dependencies
Debian 64 bits	version 6.0	 libgtk2.0-0 libxt6 libxtst6 unzip bzip2 glibc and all dependencies ia32-libs



Specified packages are necessary for using web connectors or legacy connectors. These lists of packages are not exhaustive. If you have problems with your installation of Convertigo Server on Linux/Tomcat, please contact us.

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 Make the unzipped convertigo-server-X.Y.Z-v12345-linux32.run script executable:

chmod +x convertigo-server-X.Y.Z-v12345-linux32.run

3 Run the convertigo-server-X.Y.Z-v12345-linux32.run script:



```
# ./convertigo-server-X.Y.Z-v12345-linux32.run
Verifying archive integrity... All good.
Uncompressing convertigo-server-X.Y.Z-v12345-linux32 ........
```

4 The installer starts by displaying the end-user licence agreement, here is an extract:

```
_____
Convertigo Enterprise Mobility Server installation program
_____
You first have to accept the Convertigo End User License
Agreement (EULA)
Press <return> to start reading the Convertigo EULA...
Convertigo Community Edition
------
Convertigo Community Edition is available under Affero GPL V3
License and can be
used for free.
- Affero GPL V3 License can be accessed at:
 http://www.gnu.org/licenses/agpl-3.0.html
[...]
You should read carefully the agreements covering the Third
Party Software. Each
of these agreements or terms can be accessed via
www.convertigo.com/EEand3rdpartycomponents. By installing and
using this Third
--More--(7%)
```

5 You should read the whole EULA by scrolling down.



6 You must accept the EULA in order to continue the installation.



If you do not accept the EULA, the installation is cancelled.

7 You can precise the linux user you want to use:

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

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



For more information on Convertigo workspace, see Appendix "Convertigo workspace" on page A - 2.

8 You can precise the installation path:

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

9 Then, the installation continues for a few minutes:

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

- 10 Depending on the Linux distribution:
 - On Ubuntu:

```
Creating auto start links with update-rc.d ...
 Adding system startup for /etc/init.d/convertigoMobility
Platform ...
   /etc/rc0.d/K88convertigoMobilityPlatform -> ../init.d/
convertigoMobilityPlatform
   /etc/rc1.d/K88convertigoMobilityPlatform -> ../init.d/
convertigoMobilityPlatform
   /etc/rc6.d/K88convertigoMobilityPlatform -> ../init.d/
convertigoMobilityPlatform
   /etc/rc2.d/S88convertigoMobilityPlatform -> ../init.d/
convertigoMobilityPlatform
   /etc/rc3.d/S88convertigoMobilityPlatform -> ../init.d/
convertigoMobilityPlatform
   /etc/rc4.d/S88convertigoMobilityPlatform -> ../init.d/
convertigoMobilityPlatform
   /etc/rc5.d/S88convertigoMobilityPlatform -> ../init.d/
convertigoMobilityPlatform
```

• 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 12 of the procedure.

• Or on RedHat distribution:

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

11 Answer the question.

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

```
Create this with 'ln -s'? (yes/no)
yes
create symbolic link `K88convertigoMobilityPlatform' to `../
init.d/convertigoMobilityPlatform'
create symbolic link `K88convertigoMobilityPlatform' to `../
init.d/convertigoMobilityPlatform'
create symbolic link `S88convertigoMobilityPlatform' to `../
init.d/convertigoMobilityPlatform'
create symbolic link `K88convertigoMobilityPlatform' to `../
init.d/convertigoMobilityPlatform'
```

12 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/convertigoMobilityPlatform [start|stop|status]

The installation is finished. By default, Convertigo Server is configured to be accessed on HTTP port 28080, and the XVNC displaying the connectors monitors can be accessed on port 5903.


For more information about connectors monitors, see the appendix "Connector monitoring windows" on page A - 5.

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

13 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)
```

```
Starting Convertigo Enterprise Mobility Server: convertigoMobilityPlatform.
```



yes

By default, Convertigo is in auto start mode.

14 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 (28080 by default for HTTP port).

The Convertigo Server Administration Console opens on the authentication page:





Figure 3 - 20: Convertigo Server Administration authentication page

3.3.2 Convertigo Server default configuration on Linux/Tomcat

After you installed Convertigo Server on Linux/Tomcat, you may want to start and stop Convertigo Server, use or change the default access URLs to the Convertigo engine, the default accounts or the default user workspace location. This section presents all the needed information about Convertigo Server default configurations.

- Start/Stop Convertigo Server on Linux/Tomcat
- Convertigo Server default configurations and access URLs on Linux/Tomcat
- Changing Convertigo Server default configurations on Linux/Tomcat

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:

Action Command	
start	/etc/init.d/convertigoMobilityPlatform start
stop	/etc/init.d/convertigoMobilityPlatform stop
restart	/etc/init.d/convertigoMobilityPlatform restart

Table 3 - 4: Engine start and stop commands

CONVERTIGO SERVER DEFAULT CONFIGURATIONS AND ACCESS URLS ON LINUX/ TOMCAT

- Convertigo Server default webapp behavior on Linux/Tomcat
- Convertigo Server default workspace on Linux/Tomcat
- Convertigo Server default ports on Linux/Tomcat
- Convertigo Server Administration Console URLs, Test platform URLs and default accounts

CONVERTIGO SERVER DEFAULT WEBAPP BEHAVIOR ON LINUX/TOMCAT

Convertigo Server is installed as a Tomcat webapp. It is installed as a war deployed in the Tomcat application server.



Convertigo Server war cannot work unexploded in the application server.

Convertigo Server has to be started manually using the commands described in *"Start/Stop Convertigo Server on Linux/Tomcat"* on page 3 - 31.

CONVERTIGO SERVER DEFAULT WORKSPACE ON LINUX/TOMCAT

Convertigo Server installer on Linux/Tomcat sets by default the workspace directory in the



user's home directory, as a convertigo folder. It gives a path of the following form: /home/ convertigoMobilityPlatform/convertigo



For more information on Convertigo workspace and projects workspace, see Appendix "Convertigo workspace" on page A - 2.

CONVERTIGO SERVER DEFAULT PORTS ON LINUX/TOMCAT

Convertigo Server and Tomcat application server are intalled by default to listen on the following ports:

- 28080 for HTTP,
- 28443 for HTTPS (Convertigo Server enables HTTPS by default after installation).

The XVNC displaying the connectors monitors can be accessed on port 5903.



For more information about connectors monitors, see the appendix "Connector monitoring windows" on page A - 5.

CONVERTIGO SERVER ADMINISTRATION CONSOLE URLS, TEST PLATFORM URLS AND DEFAULT ACCOUNTS

Refer to the Convertigo Server installation on Windows for information: "Convertigo Server default configuration on Windows/Tomcat" on page 3 - 14.

CHANGING CONVERTIGO SERVER DEFAULT CONFIGURATIONS ON LINUX/TOMCAT

CHANGING CONVERTIGO SERVER DEFAULT WORKSPACE ON LINUX/TOMCAT

The Convertigo Server workspace can be changed on Linux Operating System and Tomcat Application Server, using the following procedure.

To change the Convertigo Server workspace directory (Linux/Tomcat)

- 1 Locate the convertigoMobilityPlatform start file (usually in /etc/init.d) and open it for edition.
- 2 In the export JAVA_OPTS line, add or change parameter -Dconvertigo.cems.user_workspace_path to specify the location of your Convertigo workspace.

export JAVA_OPTS="\$JAVA_OPTS

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

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

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:

	RedHat/WebSphere	
Version	RedHat starting from version 5.2WebSphere starting from version 6	
CPU	Dual Core	
RAM	4 Gb	
Disk space	10 Gb	
Packages	 Package xulrunner-1.9.0.19- 1.el5_5 and all dependencies Package xorg-xll-fonts-Typel- 7.1-2.1.el5 	

Table 3 - 5: Server prerequisites



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:

Integrated Solutions Console	IBM.
Welcome, enter your information.	
Password:	
	m 5 /
	10021

Figure 3 - 21: Connecting to WebSphere 6 console

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

View: All tasks -	Enterprise Applications	
Welcome	Preparing for the application installation	Help
Guided Activities		Field b
E Servers	Specify the EAR, WAR, JAR, or SAR module to upload and install.	Specifie
Applications	Path to the new application	Web mo
Enterprise Applications	Local file system	Page b
Install New Application	Full path	More in
Resources	C:\Users\do\Desktop\temp\c Parcouir	page
E Security	Remote file system	
E Environment	Full path	
E System administration		
Users and Groups	Context root	
Monitoring and Tuning	convertigo Used only for standalone Web modules (.war files) and SIP modules (.sar files)	
Troubleshooting	Now do you want to install the application?	
E Service integration	Prompt me only when additional information is required.	
E upot	Show me all installation options and parameters.	
	Next Cancel	

Figure 3 - 22: 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**.



	application installation WAR, JAR, or SAR module to upload and install. application
Welcome Guided Activities Servers Applications Enterprise Applications Full path	WAR, JAR, or SAR module to upload and install. application
Builded Activities Specify the EAR, Path to the new Applications Enterprise Applications Full path	WAR, JAR, or SAR module to upload and install. application
Servers Path to the new Applications Enterprise Applications Full path	application
Applications Local file system Enterprise Applications Full path	tem
Enterprise Applications Full path	
and the second se	
Install New Application C:\Users\c	do\Desktop\temp\c Parcourr
E Resources	sustam
E Security	27000
Environment	Browse
System administration	
E Users and Groups convertigo	Used only for standalone Web modules (.war files) and
Monitoring and Tuning SIP modules (.sar	files)
E Troubleshooting	t to install the application?
Service integration	any when auditional information is required.
UDDI Show me all	installation options and parameters.

Figure 3 - 23: 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	2.
Specify options for installing enterp	rise applications and modules.
Step 1: Select installation options	Select installation options
Step 2 Map modules to servers	Specify the various options that are available to prepare and install your application.
Step 3 Map resource	Directory to install application
Step 4 Map virtual	Convertigo Distribute application
Step 5 Map context	Use Binary Configuration
roots for Web modules <u>Step 6</u> Summary	Deploy enterprise beans
	convertigo
	Create MBeans for resources
	Reload interval in seconds
	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
	.*\.dll=755#.*\.so=755#.*\.a=755#.*\.sl=755
	Application Build ID Unknown
	Allow dispatching includes to remote resources
	Allow servicing includes from remote resources
Next Cancel	

Figure 3 - 24: 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**.



			723	15 27.08		
Spe	cify options for installing Step 1 Select	enterprise a	odules to s	nd modules. ervers		
→ +	Step 2: Map modules to servers Step 3 Map resource references to resources Step 4 Map virtual hosts for Web	Specify targets such as application servers or clusters of application servers where you want that are contained in your application. Modules can be installed on the same application server several application servers. Also, specify the Web servers as targets that serve as routers for application. The plug-in configuration file (plugin-cfg.xml) for each Web server is generated applications that are routed through. Clusters and Servers: WebSphere:cell=testredhatNode01Cell,node=testredhatNode01,server=server1 Apple				
	modules	Teles				
	Step 5 Map	Select	Module	UKI	Server	
	context roots for Web modules		Convertigo Enterprise Mashup Server	convertigo-5.1.0- v24221- linux32.war,WEB- INF/web.xml	WebSphere:cell=testredhatNode01Cell,node=t	estred

Figure 3 - 25: Convertigo installation Map modules to servers page in WebSphere 6

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

stall New Application		
Specify options for installi	ng enterprise applications	and modules.
Step 1 Select	Summary	
	Summary of installation	options
Step 2 Map modules to servers	Options	Values
<u>Step 3</u> Map	Precompile JavaServer Pages files	No
to resources	Directory to install application	convertigo
Step 4 Map virtual	Distribute application	Yes
modules	Use Binary Configuration	No
Step 5 Map context roots for Web modules	Deploy enterprise beans	No
web modules	Application name	convertigo
-> Step 6: Summary	Create MBeans for resources	Yes
	Enable class reloading	Yes
	Reload interval in seconds	5
	Deploy Web services	No
	Validate Input off/warn/fail	warn
	Process embedded configuration	No
	File Permission	.*\.dll=755#.*\.so=755#.*\.a=755#.*\.sl=
	Application Build ID	Unknown
	Allow dispatching includes to remote resources	No
	Allow servicing includes from remote resources	No
	Cell/Node/Server	Click here

Figure 3 - 26: Convertigo installation Summary page

9 Then, click on **Finish**.

The Installing... page is displayed:



Installing...

If there are enterprise beans in the application, the EJB deployment process can take several minutes. Please do not save the configuration until the Check the SystemOut.log on the Deployment Manager or server where the application is deployed for specific information about the EJB deployment process as ADMA5016I: Installation of convertigo started. ADMA0115W: Resource assignment of name jdbc/dreamface_db and type javax.sql.DataSource, with JNDI name dreamface_db is not found within scope of mo Mashup Server with URI convertigo-5.1.0-v24221-linux32.war, WEB-INF/web.xml deployed to target WebSphere:cell=testredhatNode01Cell,node=testredhatNode0 ADMA50881: The resource validation for application convertigo completed successfully, but warnings occured during validation. ADMA50581: Application and module versions are validated with versions of deployment targets. ADMA50051: The application convertigo is configured in the WebSphere Application Server repository. ADMA50531: The library references for the installed optional package are created. ADMA50051: The application convertigo is configured in the WebSphere Application Server repository. ADMA50011: The application binaries are saved in /opt/IBM/WebSphere/AppServer/profiles/AppSrv01/wstemp/3508402/workspace/cells/testredhatNode01Cell/applications/convertigo.ear/convertigo.ear ADMA5005I: The application convertigo is configured in the WebSphere Application Server repository. SECJ0400I: Successfuly updated the application convertigo with the appContextIDForSecurity information. ADMA50111: 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. Review changes before saving or discarding.

Figure 3 - 27: 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:

terpris	e Applications			
Enterp Use thi	rise Applications is page to manage installed applications. A single application can b ferences	e deployed onto multiple servers.		
Start	Stop Install Uninstall Update Rollout Update	Remove File Export Export DD		
Salart	D ₩ ₩	Application Status (*)		
	DefaultApplication.			
	PlantsByWebSphere_	\$		
	SamplesGallery_	*		
	convertigo.	*		
	ivtApp.	*		
	alleor	•		

Figure 3 - 28: Convertigo application installed

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

	 Messages Application convertigo on ser 	ver server1 and node	testredhatNode01	started suc	essfully.	
Enterp Use thi Prei	rise Applications is page to manage installed applications. A sing ferences	le application can be	deployed onto mu	Itiple server	5.	
Start	Stop Install Uninstall Update	Rollout Update	Remove File	Export	Export DDL	Export File
D	D # \$					
Select	Name 🗘		Application Status	₫.		
回	DefaultApplication		•			
	Plants8vWebSphere_		*			
2	SamplesGallery		*			
0	convertigo_		+			
2272	ivtApp.		+			
1.1			*			

Figure 3 - 29: 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.xmi" file
- Using the Convertigo "compatibility mode"

SPECIFYING JAVA PARAMETERS AND ENVIRONMENT ENTRIES IN WEBSPHERE 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 - 30: Server1 Configuration page on WebSphere 6

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

Application servers	?
Application servers > server1 Use this page to configure an application servery required to run enterprise applications.	erver. An application server is a server that provides services
General Properties Name Server1 Node Name testredhatNode01 Run in development mode V Parallel start	Container Settings SIP Container Settings Web Container Settings Portlet Container Settings EJB Container Settings Container Settings Container Settings
Access to internal server classes Allow Server-specific Application Settings Classloader policy	Business Process Services Applications Installed applications
Class loading mode Parent first v	Server messaging Messaging engines Messaging engine inbound transports WebSphere MQ link inbound transports SIB service
Appry OK Keset Cancel	Server Infrastructure Java and Process Management Class loader Process Definition Process Execution

Figure 3 - 31: Accessing Process Definition configuration

The Process Definition page opens:



nformation necessary to start or initialize a proc Configuration	ess.
General Properties Executable name Executable arguments	Additional Properties Java Virtual Machine Environment Entries Process Execution Process Logs Logging and Tracing
startCommand	

Figure 3 - 32: 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	- Additional Properties
Classpath	= CustomeProperties
Boot Classpath	
Verbose class loading	
Verbose garbage collection	
E u s ut	
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	

Figure 3 - 33: 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**.



<u>Application servers</u> > <u>server1</u> > <u>Process Definition</u> > <u>Java Virtual Machine</u> > <u>Environment Entries</u> > 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
* Value
:3
Description
Apply OK Reset Cancel

Figure 3 - 34: 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:

nterpris	se Application	ns > <u>convertigo</u> > Mai	nage Mode	ules	
lanage	Modules				
contain servers (plugin Cluste WebS	ed in your ap . Also, specify -cfg.xml) for rs and Server sphere:cell=te	plication. Modules car y the Web servers as each Web server is ge s: estredhatNode01Cell,r	n be instal targets th enerated, node=test	led on the at serve as based on t redhatNode	same application server or dispersed among several application routers for requests to this application. The plug-in configuration fil he applications that are routed through. 01,server=server1 Apply
Ren	nove Upd	ate Remove File	Exp	oort File	
	6				
Select	Module	URI	Module Type	Server	
	Convertigo Enterprise Mashup Server	convertigo-5.1.0- v24221- linux32.war,WEB- INF/web.xml	Web Module	WebSphe	re:cell=testredhatNode01Cell,node=testredhatNode01,server=serve

Figure 3 - 35: Convertigo Manage Modules page on WebSphere 6

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

The Configuration page of the selected module opens:

onfiguration	
General Properties	Additional Properties
* URI convertigo-5.1.0-v24221-linux32.war Alternate deployment descriptor	 View Module Class Loader Target specific
* Starting weight 10000	application status View Deployment Descriptor
+ Class loader order	 View Portlet Deployment <u>Descriptor</u>
Classes loaded with application class loader first 🔻	Session Management
Apply OK Reset Cancel	



- 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-webext.xmi for edition:

</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"/>
                          xmi:id="JSPAttribute 1283428929515"
       <jspAttributes
       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.xmi

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 - 37: 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.



	Administration Console	TUESDAY
× *	Status	Monitor
1 × 1	\varTheta 🔘 🙂 Restart engine	The following grap
Home Configuration	Convertigo is started since October 11, 2011 - 5:01:26 PM, i.e. 0 day, 0 hour, 0 minute, 26 seconds,	Threads
Connections Projects	Convertigo version 5.6.0	1
	Engine 5.6.0	
· ·	Objects 5.6,0.m004	
Certificates Logs	System Information	Contexts
E C	a Java system properties	2

Figure 3 - 38: Clicking Configuration button

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

The Configuration page opens:

Somgaración	
Update configuration	
Tip: some properties may have be computed value in case of symbols	en configured thru a global symbol (like \$ [my_symbol]). Just hover properties val s use:
Main configuration p	arameters
Convertigo server application URL	http://localhost18080/convertigo
Mashup composer server base URL	http://localhost:18080/convertigo
Maximal number of worker threads	100
* AdvancedRoroperties	
Account manageme	nt
Log management	

Figure 3 - 39: Configuration page in Convertigo Administration Console

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

Advanced properties panel expands:

Admin password	•••••
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
* Advanced properties	
Product version check	
Use the Java Thread.stop() n	nethod in order to finish threads
(Linux only) Launch Xvnc se	rver using DISPLAY environment variable at startup
Migration 3.0.0	
Time allowed for pool management task in seconds (-	4

Figure 3 - 40: 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:

SL configuration Iche management gacy Carioca portal management	proxy settings
gacy Carioca portal management	onfiguration
gacy Carioca portal management	e management
lling system	y Carioca portal management
ing system	j system
otifications	cations
bile builder	e builder

Figure 3 - 41: 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:

	RedHat/WebSphere
Version	RedHat starting from version 5.2WebSphere starting from version 7
CPU	Dual Core
RAM	4 Gb
Disk space	10 Gb
Packages	 Package xulrunner-1.9.0.19- 1.el5_5 and all dependencies Package xorg-x11-fonts-Type1- 7.1-2.1.el5

Table 3 - 6: Server prerequisites



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:

	-	Cell=NPH:	\$2102Cell01,	Profile=dmgr01					-
Views All tasks	-	Applicatio	in servers						7
Welcome									
Guided Activities		Applica	ation servers						
E Servers		Use th	is page to vie	w a list of the appl	ication servers	t in your env	ironment and	the status of each	ch of these
New server Server Types		E Pret	ferences	o use ons page to	change the st	cacus or a sp	eone apprica	Don server.	
WebSphere application servers		New	Delete	Templates S	tart Stop	Restart	ImmediateSt	op Terminate	
 WebSphere proxy servers Generic servers 			0#9						
 Version 5 JMS servers WebSphere MQ servers 		Select	Name 🗘	Node 🗘	Host Name	0	Version 🗘	Cluster Name 🗘	Status 👲
Web servers		You c	an administer	the following reso	urces:				
Clusters DataPover			member01	nfhs2141Node01	nfhs2141.iic	.fr.ibm.com	ND 7.0.0.11	duster01	*
E Core Groups			member011	nfhs2141Node01	nfhs2141.iic	.fr.ibm.com	ND 7.0.0.11	duster01	*
Applications			member012	nfhs2141Node01	nfhs2141.iic	.fr.ibm.com	ND	duster01	•
New Application Application Types			member013	nfhs2141Node01	nfhs2141.iic	.fr.ibm.com	ND 7.0.0.11	duster01	*
 Business-level applications Assets 	ins in the second se		member014	nfhs2141Node01	nfhs2141.iic	.fr.ibm.com	ND 7.0.0.11	cluster01	*
I Services			member015	nfhs2141Node01	nfhs2141.iid	.fr.ibm.com	ND 7.0.0.11	duster01	*
Resources			member02	nfhs2142Node01	nfhs2142.iid	fr.ibm.com	ND 7.0.0.11	duster01	*
E Security			member021	nfhs2142Node01	nfhs2142.iic	.fr.ibm.com	ND 7.0.0.11	duster01	*
System administration	_		member022	nfhs2142Node01	nfhs2142.iid	.fr.ibm.com	ND 7.0.0.11	duster01	•
= Cell		Г	member023	nfhs2142Node01	nfhs2142.iic	.fr.ibm.com	ND	duster01	

Figure 3 - 42: 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 - 43: Connecting to WebSphere 7 console

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



	ew Application
	New Application
new applications of different types.	This page provides links to create
Application	Nev Enterprise A
	New Asset

Figure 3 - 44: Installing new application in WebSphere 7

4 Click on **New Enterprise Application**.

Dath to the new anali	-		
• Local file system			
Full path	m		
onvertigoloonvert	tigo.war Parcourir		
C Remote file sys	stem		
Full path		-	
- Uli path		Browse	

Figure 3 - 45: 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**.

How do you wa	int to install the application?	
Fast Path Detailed	n - Prompt only when additional information is required. - Show all installation options and parameters.	
🖸 Choose to g	jenerate default bindings and mappings	

Figure 3 - 46: Configuration of installation in WebSphere 7

6 Click on Next.

You are redirected to the application's installation page.

Step 1: Select installation option	Select installation options
<u>Step 2</u> Map modules to server	Specify the various options that are available to prepare and install your application Precompile JavaServer Pages files
Step 3 Map resource reference to resources	Directory to install application convertigo
Step 4 Map virtua hosts for Web modules	 Distribute application Use Binary Configuration Deploy enterprise beans
 <u>Step 5</u> Map conte roots for Web modules 	ct Application name convertigo
<u>Step 6</u> Summary	Create MBeans for resources
	✓ Override class reloading settings for Web and EJB modules Reload interval in seconds S
	Deploy Web services
	Validate Input off/warn/fail
	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
	.*\.dl=755#.*\.so=755#.*\.a=755#.*\.sl=755

Figure 3 - 47: 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**.

ista	Il New Application					
Sp	ecify options for install	ing enterp	rise applicat	ions and modules.		
	Step 1 Select	Map m	odules to s	ervers		
→ +	Step 2: Map modules to servers	Specify that ar among this ap applica	targets such e contained several app plication. The tions that ar	h as application serve in your application. M plication servers, Also, e plug-in configuratio re routed through.	rs or clusters of application servers where you want t odules can be installed on the same application serv specify the Web servers as targets that serve as roo n file (plugin-cfg.xml) for each Web server is genera	
	resource references	Clusters and servers:				
	to resources	Webs	Sphere:cell=1	NFHS2102Cell01,dust	er=cluster01	
*	Step 4 Map virtual hosts for Web modules	Web9 Web9	Sphere:cell=1 Sphere:cell=1 Sphere:cell=1	NFHS2102Cell01,node NFHS2102Cell01,node NFHS2102Cell01,node	=nfh:2141Node01,server=server01 =nfh:2141Node01,server=member015 =unmanaged01,server=vebserver01	
t	Step 5 Map context	D	6			
	modules	Select	Module	URI	Server	
	<u>Step 6</u> Summary		Convertigo Enterprise Mashup Server	convertigo.war,WEB- INF/web.xml	WebSphere:cell=NFHS2102Cell01,node=nfhs2141N	

Figure 3 - 48: 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.

cify options for install	ing enterprise applicati	ions and modules.	
Step 1 Select	Map context roots	s for Web modules	
	Context root define	d in the deployment de:	scriptor can be edited.
<u>Step 2</u> Map modules to servers	Web module	URI	Context Root
<u>Step 3</u> Map resource references to resources	Convertigo Enterprise Mashup Server	convertigo.war,WEB- INF/web.xml	/convertigo
<u>Step 4</u> Map virtual hosts for Web modules			
Step 5: Map context roots for Web modules			
itep 5: Map context oots for Web nodules			

Figure 3 - 49: Convertigo installation Map context roots for Web modules page

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



	options for installi	ng enterprise appressions and mousie		
Step	1 Select	Summary		
Insta	allation options	Summary of installation options		
<u>Step</u> mod	2 Map lules to servers	Options	Values	
		Precompile JavaServer Pages files	No	
reso	urce references	Directory to install application	convertigo	
to re	isources	Distribute application	Yes	
Step	<u>4</u> Map virtual	Use Binary Configuration	No	
host mod	s for Web Iules	Deploy enterprise beans	No	
-		Application name	convertigo	
roots	s for Web	Create MBeans for resources Yes		
mod	lules	Override class reloading settings for Web and EJB modules	Yes	
- step	o: summary	Reload interval in seconds	5	
		Deploy Web services	No	
		Validate Input off/warn/fail	varn	
		Process embedded configuration	No	
		File Permission	.*\.dll=755#.*\.so=755#.* \.a=755#.*\.sl=755	
		Application Build ID	Unknown	
		Allow dispatching includes to remote resources	No	
		Allow servicing includes from remote resources	No	
		Business level application name		
		Asynchronous Request Dispatch	Disabled	

Figure 3 - 50: 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 dreamfa module Convertigo Enterprise Mashup Server with URI convertigo.war,WEB-INFAveb.xml deployed to target WebSphere:cell=NFHS2102Cell01,node=nfhs2141Node01,server=server01.
ADMA5068I: The resource validation for application convertigo completed successfully, but warnings occurred during val
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/wstemp/3506402/workspace/cells/NFHS2102Cell0 /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 - 51: Convertigo installation page

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

This action triggers the nodes synchronization through the cluster:





Figure 3 - 52: Nodes synchronization through the cluster

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

Entern	Applications	
Use thi ⊕ Pref	s page to manage installed applications. A sin erences	ngle application can be deployed onto multiple servers.
Star	: Stop Install Uninstall Update	Rollout Update Remove File Export Export DDL Export Fil
DI) .	
Select	Name 🗘	Application Status 🟠
You ci	an administer the following resources:	
	DefaultApplication	*
Г	convertigo	*

Figure 3 - 53: 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 **Propatate Plug-in** button:

10-51-58.4						
	Mes Mes /NF	sages PLGC00051: Plug-in co FHS2102Cell01/nodes/ PLGC00521: Plug-in co rver. NFHS2102Cell01.0	nfiguration file = unmanaged01/so nfiguration file g unmanaged01.we	/wasProfile/dmgr01/confi ervers/webserver01/plugin eneration is complete for bserver01.	g/cells -cfg.xml the Web	
Web se Use thi ⊕ Pref Gen	ervers is page to view erences erate Plug-in	v a list of the installed Plea	Web carners. ise Wait	Templates Start	Stop Termi	nate
Webse Use thi B Pref	ervers is page to view ierences erate Plug-in	v a list of the installed Plea	Web carners. ise Wait	Templates Start	Stop Termi	nate
Webse Use thi @ Pref @ (© (Select	ervers is page to view erences erate Plug-in	v a list of the installed Propagat Web server Type O	Web servers, ise Wait	Templates Start	Stop Termi	nate Status (
Web se Use thi ⊕ Pref Gen © Select You c	ervers is page to view ierences erate Plug-in i +++ ++ Name Name an administer	Web server Type O	Node \$_	Templates Start	Stop Termi	nate Status (

Figure 3 - 54: 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

Enterp Use th	vrise Applications is page to manage installed applications. A single ap	oplication can be deployed onto multiple server
Star	rerences rt Stop Install Uninstall Update Rollou	t Update Remove File Export Export DD
	6 # \$	
Select	Name 🗘	Application Status 🟠
You c	an administer the follow Please Wait	
	DefaultApplication	•
		2

Figure 3 - 55: Starting convertigo application

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





Figure 3 - 56: 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.

View: All tasks	Cell=NPH	52102Cell01,	Profile=dmgr01						
= Welcome	Applicati	on servers							
Guided Activities	Applic	ation servers							
B Servers	Use U	his page to vie	v a list of the appl	ication s	ervers in your e	nvironment and	d the status of ea	ch of these	
New server Server Types	E Pre	rs. You can als rferences	o use this page to	change (the status of a	specific applica	tion server.		
WebSphere application servers	Ne	v Delete	Templates St	art St	top Restart	ImmediateSto	p Terminate		
 WebSphere proxy servers Generic servers 	00 ** *								
 Version 5 JMS servers WebSphere MO servers 	Select	Name 🔿	Node 🗘	Host N	ame 🗘	Version C	Cluster Name 🗘	Status C	
= Web servers	You	can administer	the following reso	urcest					
E Clusters	Г	member01	nfhs2141Node01	nfhs21	41.iic.fr.ibm.cor	n ND 7.0.0.11	duster01	*	
E Core Groups		member011	nfhs2141Node01	nfhs21	41.iic.fr.ibm.cor	n ND 7.0.0.11	duster01	*	
Applications		member012	nfhs2141Node01	nfhs21	41.iic.fr.ibm.cor	n ND 7.0.0.11	duster01	*	
Application Types WebSohere enterprise applications		member013	nfhs2141Node01	nfhs21	41.iic.fr.ibm.cor	n ND 7.0,0.11	duster01	•	
Business-level applications Accets		member014	nfhs2141Node01	nfhs21	41.iic.fr.ibm.cor	n ND 7.0.0.11	duster01	*	
Services		member015	nfhs2141Node01	nfhs21	41.iic.fr.ibm.cor	n ND 7.0.0.11	duster01	*	
E Resources		member02	nfhs2142Node01	nfhs21	42.iic.fr.ibm.cor	ND 7.0.0.11	duster01	*	
Security	E	member021	nfhs2142Node01	nfhs21	42.lic.fr.ibm.cor	n ND	duster01	*	
Environment Environment	D	member022	nfhs2142Node01	nfhs21	42.iic.fr.ibm.cor	7.0.0.11	duster01	•	

The Application servers page opens:

Figure 3 - 57: Application servers page on WebSphere 7

2 Click on the member you want to configure.



	Uontainer Settings
mamber01	Session management
memberor	🛨 SIP Container Setting
Node name	
nfhs2141Node01	Settings
🗖 Run in development mode	Portlet Container Settings
Parallel start	∃ EJB Container Setting
-	Container Services
Start components as needed	🛨 Business Process
Access to internal server classes	Services
Allow	Applications
Server-specific Application Settings	Installed applications
Classloader policy	Server messaging
Multiple 💌	Messaging engines
Class loading mode	Messaging engine
Classes loaded with parent class loader first	inbound transports
	WebSphere MQ link inbound transports
Apply OK Reset Cancel	SIB service
	Server Infrastructure
	Management
	由 Administration
	Communications

Figure 3 - 58: Configuration of memberXX on WebSphere 7

3 In Server infrastucture section of the memberXX configuration page, expand Java and Process management and click on Process definition.
necessary to start or initialize a process. Configuration	
General Properties	Additional Properties
Executable name Executable arguments	Java Virtual Mach <u>Environment Entr</u> <u>Process executio</u> <u>Process Logs</u> <u>Logging and trace</u>
Start command	

Figure 3 - 59: 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 J	NI
ana ang ang ang ang ang ang ang ang ang	
Initial heap siz	MB
Maximum hea	p size MB
🗌 Run HProf	
HProf Argumer	nts
n or vagamer	
Debug Mo	de
Debug Mo Debug argume -agentlib:jdwp= Generic JVM ar	de :nts :transport=dt_socket,server=y,suspend=n,address=7777 guments
Debug argume Debug argume -agentlib:jdwp= Generic JVM ar -Djava.awt.hea	de ents etransport=dt_socket,server=y,suspend=n,address=7777 guments dless=false
Debug Mo Debug argume -agentlib:jdwp= Generic JVM ar -Djava.awt.hea Executable JAF	de ents etransport=dt_socket,server=y,suspend=n,address=7777 guments dless=false
Debug argume Debug argume Tagentlib:jdwp= Generic JVM ar Djava.awt.hea Executable JAF	de ents etransport=dt_socket,server=y,suspend=n,address=7777 guments diess=false t file name
Debug Mo Debug argume -agentlib:jdwp= Generic JVM ar Djava.awt.hea Executable JAF	de ents etransport=dt_socket,server=y,suspend=n,address=7777 guments dless=false t file name
Debug Mo Debug argume -agentlib:jdwp= Generic JVM ar -Djava.awt.hea Executable JAF Disable JI Operating syst	de ents etransport=dt_socket,server=y,suspend=n,address=7777 guments dless=false t file name T em name
Debug Mo Debug argume -agentlib:jdwp= Generic JVM ar -Djava.awt.hea Executable JAF Disable JI Operating syst linux	de ents etransport=dt_socket,server=y,suspend=n,address=7777 guments dless=false et file name T em name

Figure 3 - 60: 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 workspace and projects workspace, see Appendix "Convertigo workspace" on page A - 2.

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

Use this page to configure a process definition necessary to start or initialize a process.	n. A process definition defines the command line inf
Configuration	
General Properties Executable name Executable arguments	Additional Properties Java Virtual Mac Environment Ent Process execution Process Logs Logging and trace
Start command	

Figure 3 - 61: memberXX Process definition on WebSphere 7

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

	on servers		
Applic	ation servers > memb	er01 > Process definition > Envir	ronment Entries
Use th	is page to specify an	arbitrary name and value pair. Th	e value that is specified for the name an
value j	pair is a string that ca	n set internal system configuration	n properties.
Prei	ferences		
New	Delete		
	Name ^	Value 🗇	Description 🗇
Select	nume V		
Select You c	an administer the follo	owing resources:	
Select You c	an administer the follo	owing resources: :3	Set X11 display to Port 3

Figure 3 - 62: 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.

	UII SELVEIS		
Applic	ation servers >	server1 > Process definitio	n > Environment Entries
Use thi	s page to specify a	in arbitrary name and value pa	ir. The value that is specified
for the	name and value p ties.	air is a string that can set inter	nal system configuration
D Pre	ferences		
e = = = = =	ici cilues		
New	Delete		
Select	Name 🛟	Value 🗘	Description 🗇
You c	an administer the f	ollowing resources:	
	DISPLAY	:3	
	HOME	/home/convertigo	

Figure 3 - 63: Environment entries on WebSphere 7



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



For more information on Convertigo workspace and projects workspace, see Appendix "Convertigo workspace" on page A - 2.

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 - 64: Convertigo Server Administration authentication page





This chapter describes several of the actions and configurations possible with the Convertigo engine Administration Console.

- General presentation of the Administration Console
- Configuration
- Connections
- Projects
- Certificates
- Logs
- Trace Player
- Cache
- Scheduler
- Keys
- Global symbols



4.1 General presentation of the Administration Console

Configure Convertigo Studio or Convertigo Server engine settings by using Convertigo Administration Console, a web application that is accessible online and through Convertigo Studio.

This section introduces you to Convertigo Administration Console:

- Accessing the Administration Console
- Home page

4.1.1 Accessing the Administration Console

This section explains step by step how to connect to your Convertigo Administration Console. Convertigo Server administrators can access the Administration Console of the Convertigo Server's engine. Developers can access the Administration Console of the engine embedded in their Convertigo Studio.

To access Convertigo Administration Console

As a Web application, Convertigo Server Administration Console is accessible through a Web browser. To access the Administration Console:

- 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 local server installation)
- ConvertigoAppName = convertigo

The result as seen in a Mozilla Firefox URL address bar:





For example, to access a Convertigo Cloud administration:

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

As seen in a Mozilla Firefox URL address bar:



Figure 4 - 2: Convertigo Cloud administration URL

When validating the URL, the *Administration Console*'s *Authentication* page opens. You have to be authenticated to access the *Administration Console*.



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 a Convertigo Studio or a default Convertigo Server installation, default username/password is admin/admin. In case of a private Convertigo Cloud, credentials were delivered to you by email.

4 Click on the **Sign in** button or press Enter on your keyboard.

Once logged in, the Administration Console Home page opens:



convertied	Administration Console	429/2014 18:35/48 AM Los ort
🏠 🖏	Status Monitor The Interest events as use	0
ē	A Restart engine af the latest metule af the latest metule af the latest metule af the latest metule Threads	and a reason of the second
2 .	Uptime: 0 doy(x), 0 hour(x), 2 minute(x), 50 second(x) Convertigo version 7.1.0 beta (build 36119)	Number of threads
	Engine 7.1.0 Objects 7.1.0 mk05	
0	Beald date 2014/04/14 20 22 20, CEST Beald Messame, convertige-studie-71.0, beta-00019-win32-mutual size	
Sat	System Information	Conte d'amais
Salasian Kara	Request duration	
1 typester	CPd x65 arch/schire, 2 processor(a) Q5 Windows 7.6, 1	🗮 Average request duration (in millineament)
	Network 182,108,100 76, 108,254,202,229, Ne00.0.0.0106 1811/109 clas59420	
1 🖂	Java vendor Oracle Corporation development Java 1.7.0_45 (dasses venuer: 51.0) Total memory: 247.ME	anna ann ann ann ann ann ann ann ann an
The Parton Conserve	Asplable 110 ME	
	Maximum 809 MB memory: 809 MB	
Decementation Character National	Your browser: Micstats 0 (Windows NT 6.1, WOWS4) AppleWebK8527.36 (0HTML, like Gacita) Chrome/Ski0:1647.116 Satar/537.38	

Figure 4 - 4: Administration Console Home page

4.1.2 Home page

The Administration Console Home page displays two main parts:

the Left menu contains links to the Convertigo Server Administration pages and some external links are also present leading to the Convertigo website, the documentation, the Test Platform, etc.:

S	
Home	Configuration
Connections	Projects
Certificates	Logs
Trace player	Cache
Scheduler	R
1. J. S. Larden and	Symbols
Ä	converting
Test Platform	Convertigo.com
Documentation	Developer network

Figure 4 - 5: Administration Console left menu



Note that in Convertigo Cloud, some pages are not accessible in the Administration Console, the left menu may look different. For more information, see appendix "Differences between Convertigo Server and Convertigo Cloud in Administration Console" on page A - 14.

- and, a part to the right that contains three widgets:
 - > Status widget



tatus 🚺		
🛛 🔍 🙂 🖉	start engine	
Last Startup: Tu	ue Apr 29 2014 10:30:48 GMT+0200 (Paris, Madrid (heure d'été))	
Uptime: 0 day(s	s), 0 hour(s), 2 minute(s), 50 second(s)	
Uptime: 0 day(s Convertigo ve Engine	e), 0 hour(s), 2 minute(s), 50 second(s) ersion 7.1.0_beta (build 36819) 7.1.0	
Uptime: 0 day(s Convertigo ve Engine Objects	s), 0 hour(s), 2 minute(s), 50 second(s) rsion 7.1.0_beta (build 36819) 7.1.0 7.1.0.m005	
Uptime: 0 day(s Convertigo ve Engine Objects Build date	s), 0 hour(s), 2 minute(s), 50 second(s) ersion 7.1.0_beta (build 36819) 7.1.0 7.1.0.m005 2014/04/14 20:22:35, CEST	

Figure 4 - 6: Status widget in Administration Console Home page

This widget provides you with information about the Convertigo engine, started or not, thanks to the two bullets (green/red) on the top of the widget.

It allows you to restart the Convertigo engine by pressing the **Restart engine** button.



Note that doing so will disconnect all active connections on the Convertigo Server and remove all contexts, active or inactive. You can monitor contexts in the Connections page. For more information about Connections page, see "Connections" on page 4-33.

Below, the widget displays information about the the starting time of the Convertigo engine, as well as versioning information about Convertigo, Convertigo build number, engine and objects. This information can be necessary to understand some situations and may be required in support cases.

> System Information widget

System Information		
VENUS		
CPU	x86 architecture, 2 processor(s)	
OS	Windows 7 6.1	
Network	192.168.100.76, 169.254.202.229, fe80:0:0:0:d1d6:fd1b:f89e:cae5%20	
Java vendor	Oracle Corporation	
Java	1.7.0_45 (classes version: 51.0)	
Total memory:	247 MB	
Available memory:	110 MB	
Maximum memory:	989 MB	
Your browser:	Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/34.0.1847.116 Safari/537.36	

Figure 4 - 7: System Information widget in Administration Console Home page

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 pop-up by clicking on the **Java system properties** button.

Monitor widget



The following	graphs are updated in real-time and represent the activity history of
the latest min	9
ine facest film	MTV.
Threads	
3	Number of threads
2	Co-composition - composition -
-	
1	
Contraction of the second seco	mund-
and the second se	
Contexts	
Contexts	
Contexts	
Contexts	Number of contexts
Contexts	Iration

Figure 4 - 8: Monitor widget in Administration Console Home page

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

WHAT'S NEXT

The following sections present information about the Administration Console pages that can be reached through the links on the *Left menu*.

For now, this documentation is not complete. Its content will be expanded soon.



Note that in Convertigo Cloud, some pages are not accessible in the Administration Console, the left menu and pages content may look different. For more information, see appendix "Differences between Convertigo Server and Convertigo Cloud in Administration Console" on page A - 14.

4.2 Configuration

The *Left menu* contains a link to the *Configuration* page. This page enables configuring several settings of the Convertigo engine.

This section explains step by step how to access to the *Configuration* page, its categories, how to edit a Convertigo engine property, and presents the settings that can be configured on it, in the several tabs that compose the page:

- Configuration page
- Main parameters
- Accounts
- Logs
- Real-time activity monitoring
- XML generation
- HTML parser
- HTTP client
- Network
- Proxy
- Security token
- SSL
- Cache
- Legacy Carioca portal
- Analytics
- Notifications
- Mobile builder

4.2.1 Configuration page

- Accessing the Configuration page
- Presentation of the Configuration page
- Using the Configuration page

ACCESSING THE CONFIGURATION PAGE

The following procedure explains how to access the *Configuration* page of the Convertigo Administration Console.

To access Configuration page in the Administration Console

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





Figure 4 - 9: Accessing Configuration page

The Administration Console Configuration page opens:

convertico	Administration Console			4290294 191800 AU
	Configuration	plate general like s (say, system)) i Austria Main parameters Convertige linear application Upp, Mainsure number of works Mainsure number of contexts • Advanced properties	er (röpsibis value for Ospisying computed value) Into // focultion I IB080 - Convertigic 1000 730	(tare d'antidate unit:
		www.commitgo.com Enzymet is 2001 Conversion GA, Adviger ESLA and Bief party component	t minerent	

Figure 4 - 10: Administration Console Configuration page

PRESENTATION OF THE CONFIGURATION PAGE

The *Configuration* page allows you to configure specific properties of the Convertigo engine, organized in categories. This page displays two main parts:

• the left part contains a list of tabs corresponding to configuration categories:

Main parameters
Accounts
Logs
Real-time activity monitoring
XML generation
HTML parser
HTTP client
Network
Proxy
Security token
SSL
Cache
Legacy Carioca portal
Supervision
Notifications
Mobile builder

Figure 4 - 11: Category tabs on Configuration page



Note that in Convertigo Cloud, some categories of configuration are not accessible in the Administration Console. The tabs in the left may look different. For more information, see appendix "Differences between Convertigo Server and Convertigo Cloud in Administration Console" on page A - 14.

 and the right part contains the properties of the selected category tab (for example here the *Main parameters* tab properties) :



Convertigo Server application	http://localhost:18080/convertigo	
URL		
Maximum number of worker threads	100	
Maximum number of contexts	750	

Figure 4 - 12: Properties of the Main parameters tab on Configuration page



Note that a question mark icon is available at the right of the category title. Clicking on this question mark icon automatically opens the corresponding documentation page in a new tab of your browser.

USING THE CONFIGURATION PAGE

The following procedures explain:

- how to access a configuration category with its editable properties,
- how to access the advanced properties of a category,
- how to edit a Convertigo engine property using the *Configuration* page.

To access a configuration category in the Configuration page

1 In the left part of the *Configuration* page, click on the tab that corresponds to the needed category, for example here click on the *XML generation* category tab:

Configuration	
Update configuration	
Tip: some properties may have been configured thru a	global symbol (like
▶ Main parameters	Mai
Accounts	Con
Logs	Maxi
Real-time activity monitoring	threa
▶ XML generation	Maxi
HTML parser	* A
HTTP client	
Network	
Bassas	

Figure 4 - 13: Selecting a category tab on Configuration page

The corresponding properties are displayed on the right part of the page:

Main parameters	XML generation 🕜
Accounts	Insert statistics in the generated documen
Logs	* Advanced properties
Real-time activity monitoring	
▶ XML generation	
HTML parser	
HTTP client	
Network	
Provv	

Figure 4 - 14: Category properties on the right

The next procedure explains how to access to the advanced properties of a category.

To access the advanced properties of a configuration category

1 Access the appropriate category using the procedure *"To access a configuration category in the Configuration page"* on page 4 - 12.



2 In the right part of the *Configuration* page, click on the **Advanced properties** button at the bottom of the category properties:

Main parameters	XML generation
Accounts	Insert statistics in the generated document
Logs	Advanced, properties
Real-time activity monitoring	Contraction of the second seco
▶ XML generation	
HTML parser	
HTTP client	
Network	
Proxy	

Figure 4 - 15: Accessing advanced properties on Configuration page

The advanced properties of the currently selected tab are displayed in a blue background area below the **Advanced properties** button:

Main parameters	XML generation 🚱	
Accounts	Insert statistics in the generated document	
Logs	Advanced properties	
Real-time activity monitoring		
▶ XML generation	XSLT engine Java Xalan (XSLTC)	
HTML parser	Set namespace aware	
HTTP client		
Notwork		

Figure 4 - 16: Advanced properties for a category

The next procedure explains how to edit a Convertigo engine property in the *Configuration* page.

To edit a Convertigo Engine setting using the Configuration page

Access the category tab that contains the setting you need to change by following one of the procedures "To access a configuration category in the Configuration page" on page 4 - 12 or "To access the advanced properties of a configuration category" on page 4 - 13. For example here let's access the Accounts category:

The tab opens (for example here the Accounts tab):

dain parameters	Accounts 🕢		
Accounts	Admin usemame	admin	
ogs	Admin password		
leal-time activity monitoring	Test Platform username		
(ML generation	access)		
ITML parser	Test Platform password	•••••	

Figure 4 - 17: Accounts tab

- 2 On the right part of the *Configuration* page, change the value of the engine property you want to edit in the corresponding field. (For example here we add a **Test Platform username** and **Test Platform password** in the appropriate fields.)
- 3 Click on the **Update configuration** button located on the top (or bottom) of the *Configuration* page:

Configuration		
Update configuration		
Tip: some properties may have been configured thru a g	global symbol (like \${my_symbol}). Just ho	ver properties value for displaying com
Main parameters	Accounts 🕢	
▶ Accounts	Admin username	admin
Logs	Admin password	•••••
Real-time activity monitoring	Test Platform username	1000
XML generation	(leave it blank for anonymous access)	test

Figure 4 - 18: Setting updated parameters and updating configuration

A pop-in appears to confirm that the new parameters have been taken into account:

Information	×
The configuration has been successf	ully updated!
	Ok



4 Click on the **Ok** button to close the pop-in.

The engine setting is updated. Beware that sometimes, the Convertigo engine needs to



be restarted for the new property to be taken into account. This is specified on such properties documentation.

WHAT'S NEXT

The following sections present in details the tabs present in the *Configuration* page and the specific settings that can be configured on each tab.

4.2.2 Main parameters

Edit your Convertigo Server main parameters in *Main parameters* tab. This tab can be opened by following the procedure *"To access a configuration category in the Configuration page"* on page 4 - 12.

This tab includes an Advanced properties section that can be opened by following the procedure *"To access the advanced properties of a configuration category"* on page 4 - 13. In the Advanced properties section, configure the main advanced Convertigo configuration parameters.

- Properties
- Advanced properties

PROPERTIES

- Convertigo Server application URL: Convertigo Server URL, this URL informs Convertigo Server of its external access URL, including the domain or IP address of the server, and the listening port of the server (configured in the application server).
 - This URL is used by several functionalities of Convertigo Server and it is very important that it is correctly configured, otherwise these functionalities would not work correctly (for example: *Call Sequence* or *Call Transaction* steps not using internal invoke, Scheduler, WSDL generation, etc.). This URL should be configured at the end of the Convertigo Server installation.
 - In case of Convertigo Studio, this URL is used in addition to define the listening port of the embedded server, as well as for the transaction or sequence executions using the "Execute" functionality.
- Maximum number of worker threads: Maximum number of simultaneous worker threads Convertigo will open in the application server. Though there is no theorical limit to this, some application servers seem to be unstable when too many worker threads are in use. Convertigo limits itself to prevent server collapse.

What are worker threads ?



For every request sent to Convertigo, a thread of the application server (Tomcat by default) manages the request and transfer it to Convertigo. Convertigo engine creates a **worker thread** to execute the request. Once the request is performed, the **worker thread** is released and can be used again.

The arbitrary limit set with the **Maximum number of worker threads** property is never exceeded. When this limit is reached, every new request to Convertigo is rejected (the Convertigo engine throws an Exception) until a worker thread has finished performing its request and is available for a new one.

Maximum number of contexts: Maximum number of simultaneous contexts Convertigo will create. This parameter allows the Convertigo server to protect itself from massive context creation policies. Too many contexts created in a server could lead to OutOfMemory errors, resulting in completely blocked server. Convertigo limits its number of contexts to prevent server collapse.

> What is the difference between contexts and worker threads ? For every request sent to Convertigo, a **context** is created (or re-used if the request specifies a context name). Inside this context, a **worker**

thread is created by Convertigo engine to execute the request.

or re-used, it can remain open without requests to execute for a while (without worker thread working). The arbitrary limits set with the **Maximum number of worker threads** and **Maximum number of contexts** properties are not managing the same objects. They are not reached at the same time nor in the same conditions. Depending on the projects and environments, one of these properties or both may be used.

Once the request is performed, the **worker thread** is released and can be used again by Convertigo engine, the **context** is not always released

When one of these limits is reached, every new request to Convertigo is rejected (the Convertigo engine throws an Exception) until a worker thread has finished performing its request or a context is destroyed and/ or is available for a new request.

ADVANCED PROPERTIES

- Product version check: Activated by default, this option enables the verification of Convertigo version number in projects that attempt to be deployed. This helps users not to deploy projects that were created in a greater version of Convertigo in an older version of Convertigo. Indeed, in this case, the projects may not be compatible, due to the add of objects or objects' properties in the software, that an older version of Convertigo cannot handle. In the opposite case, a new version of Convertigo is always compatible with older version, that makes projects to be importable in newer version of Convertigo, possibly including an automatic migration of projects if need be.
- Use the Java Thread.stop() method in order to finish threads: When a transaction or sequence timeout is reached, its thread is gracefully stopped. In some case, the transaction/sequence thread is locked (by reading blocking socket, or whatever) and cannot be gracefully stopped. Enabling this property allows Convertigo to use the deprecated Thread.stop() method in these cases to end the transaction/sequence thread.



- (Linux only) Launch Xvnc server using DISPLAY environment variable at startup: On Linux operating systems, the *HTML Connector* and the *Legacy Connector monitors* need an X server. Convertigo uses the X server corresponding to the DISPLAY environment variable value. If there is no X server on this DISPLAY:
 - > if this property is set to true, an Xvnc server is launched on that DISPLAY,
 - if this property is set to false, the HTML connector is not available and a message is traced in log files.



The Xvnc server is a headless X server that can be viewed by a VncViewer on the port 5900 + DISPLAY value. If DISPLAY=:3, the Xvnc server will listen the port 5903.

• (Linux only) Depth parameter for the Xvnc, default is 16: Set the colour depth of the Xvnc visual to provide, in bits per pixel. Must be a value between 8 and 32.



This property value is used if the Convertigo Server needs to launch an Xvnc server (see previous Launch Xvnc server using DISPLAY environment variable at startup property description).

 (Linux only) Geometry parameter for Xvnc, default is 320x240: Set virtual desktop width and height, in pixels.



This property value is used if the Convertigo Server needs to launch an Xvnc server (see previous Launch Xvnc server using DISPLAY environment variable at startup property description).



Beware that these three last options concerning Linux operating systems have to be used by very advanced users, or on the advice of the Convertigo team. Otherwise, this could lead to a nonfunctioning HTML connector.

Time allowed for pool management task in seconds (-1 for disable): This property defines the time in seconds allowed to the pool manager to start its contexts. If this time is reached, the pool manager does not start a new context and lets the context manager work before continuing its activities. Setting this property to -1 disables time checking: the pool manager starts all needed contexts before it lets the context manager work.



The pool manager is the entity that watches and starts contexts for connectors configured with pools. The pool manager shares the same thread as the context manager. While the pool manager is running, the context manager cannot do its tasks, like removing expired contexts.

Enable the compatibility mode for projects data (required for JSP usage); engine restart required: Activate this option if you need to use an old Convertigo project using JSP pages in a new Convertigo Server. Indeed, some old projects may have used specific code in JSP pages of the project, to deliver content and functionnalities to the client application. Since Convertigo 5.0, the JSP pages usage in Convertigo has been replaced

by a JavaScript framework named Convertigo Weblib.



Beware that if you check this option, you will need to restart Convertigo engine for it to be taken into account.

Use same JSESSIONID for sequences and steps: This option, activated by default, makes the sequence automatically re-use the client session cookie (JSESSIONID) of its context as its own JSESSIONID, used in contexts created by *Call Transaction* and *Call Sequence* steps. This is useful mainly when a context has to be maintained between several transaction calls.



Convertigo Server uses the client session cookie (JSESSIONID) as a parameter to build the **contextId** of requested object (transaction or sequence) executions. In case of a sequence execution, this sequence can call other transactions or sequences thanks to Call Transaction or Call Sequence steps. In this case, the sequence itself is seen as a client to Convertigo. This parameter is used in this case only.

- Add XML encoding charset for SOAP requests: This option, when activated, adds the following XML encoding charset declaration in client SOAP requests: <?xml version="1.0" encoding="UTF-8"?>.
- Throw HTTP 500 in case of unrecoverable servlet error: This option, activated by default, makes Convertigo Server return an HTTP 500 response to the requesting client when an unrecoverable servlet error occurs (no available pool, busy server, unable to connect to target resource, etc.). Unchecking this option makes Convertigo Server answer an HTTP 200 response containing the same content in such cases.
- Hide detailed information in case of unrecoverable servlet error: When activated, this option makes Convertigo Server hide error information (the Java Exception stack trace, the detailed information of the error, etc.) where they can be displayed (engine logs, response XML, etc.) when an unrecoverable servlet error occurs (no available pool, busy server, unable to connect to target resource, etc.). This option is not activated by default.
- Throw HTTP 500 in case of SOAP fault: This option, activated by default, makes Convertigo Server return an HTTP 500 response to the requesting SOAP client when a SOAP fault exception is thrown (by the project managing an error or by the Web service requester of Convertigo). Unchecking this option makes Convertigo Server answer an HTTP 200 response containing the same content in such cases.

4.2.3 Accounts

Edit your Convertigo Server accounts in *Accounts* tab. This tab can be opened by following the procedure *"To access a configuration category in the Configuration page"* on page 4 - 12.

Two types of account are editable:

the Administrator account: Enter the administrator's username and password in the Admin username and Admin password fields. This account is used to access the Administration Console of the Convertigo Server. Default values are admin/admin.



the Test account: Enter the tester username and password in the Test Platform username and Test Platform password fields. This account is used to access the Test Platform of projects running in the Convertigo Server. Leaving the username field blank deactivates the Convertigo tester account for authentication process (anonymous access).

4.2.4 Logs

Control your log settings under the *Logs* tab. This tab can be opened by following the procedure *"To access a configuration category in the Configuration page"* on page 4 - 12.

This tab includes an Advanced properties section that can be opened by following the procedure *"To access the advanced properties of a configuration category"* on page 4 - 13. In the Advanced properties section, configure the advanced log settings.

More information about log management is coming soon.

4.2.5 Real-time activity monitoring

Edit your real-time monitoring settings under the *Real-time activity monitoring* tab. This tab can be opened by following the procedure *"To access a configuration category in the Configuration page"* on page 4 - 12.

Two options are available in this tab:

Display running connectors in monitor of Legacy connectors: When activated, this
option displays a graphical rendering of the legacy connectors currently in use in the active
contexts of the Convertigo Server, in the Legacy connectors monitor.



The Legacy connectors monitor is a window that may be visible or not depending on the Convertigo Server installation. Both Windows and Linux based systems must meet specific requirements for this option to be effective. For more information, see the appendix "Connector monitoring windows" on page A - 5.



Beware that if you check this option, you will need to restart Convertigo engine for it to be taken into account.

Trace in logs the screen dumps of the running Legacy connectors: When activated, this option makes a text screen dump of each mainframe screen Convertigo detects in the legacy connectors currently in use in the active contexts. These screen dumps are output in context logger, it only works when context logger is activated at minimum INFO level.

4.2.6 XML generation

Edit the parameters of XML generation of the transactions and sequences results in *XML* generation tab. This tab can be opened by following the procedure *"To access a configuration category in the Configuration page"* on page 4 - 12.

This tab includes an Advanced properties section that can be opened by following the

procedure *"To access the advanced properties of a configuration category"* on page 4 - 13. In the Advanced properties section, configure the advanced parameters of XML generation of the transactions and sequences results.

- Properties
- Advanced properties

PROPERTIES

- Insert statistics in the generated document: This option, when activated, adds statistics about the time of execution of the transaction or sequence in the output response. These statistics, which data accuracy is not guaranteed, are:
 - inserted as a commentary into the response (the syntax depends on the requester: XML, SOAP, etc. and are not available some times: for JSON requester for example)
 - and are visible only when calling the transaction or sequence from a client (not visible in Studio execution).

Note: This property has nothing to do with the transaction/sequence's **Add statistics to response** property that can be edited for each transaction/sequence and does not have the same behavior in response.

ADVANCED PROPERTIES

 XSLT engine: This option allows you to choose an XSLT engine used by Convertigo Server to perform the XSL transformations of the XML responses of transactions or sequences that are bound to a stylesheet.



We recommend using the default setting for XSLT engine, being Java Xalan (XSLTC).

4.2.7 HTML parser

Edit the parameters of the HTML parser, based on Mozilla XULRunner, in *HTML parser* tab. This tab can be opened by following the procedure *"To access a configuration category in the Configuration page"* on page 4 - 12.

This tab includes an Advanced properties section that can be opened by following the procedure *"To access the advanced properties of a configuration category"* on page 4 - 13. In the Advanced properties section, configure the advanced parameters of the HTML parser, based on Mozilla XULRunner.

- Properties
- Advanced properties

PROPERTIES

Max connections (from 1 to 65535): This preference limits the total number of HTTP connections Convertigo can open using XULRunner. If more connections are needed, they are queued until a connection "slot" is available. This preference takes values between 1 and 65535 inclusive.



- Max connections per server (from 1 to 255): This preference limits the total number of HTTP connections Convertigo can make using XULRunner to a single server. If more connections are needed, they are queued until a connection "slot" is available. This preference takes values between 1 and 255 inclusive.
- Max persistent connections per server (from 1 to 10): This preference limits the total number of HTTP keep-alive connections Convertigo can make using XULRunner to each site, if a proxy server is not configured. If more connections are needed, they are queued until a connection "slot" is available. This preference takes values between 1 and 10 inclusive.



HTTP keep-alive connections can be re-used for multiple requests, as opposed to non-keep-alive connections, which are limited to one request. Using keep-alive connections improves performance.

Override User-Agent: This option defines a user-agent string to replace the standard XulRunner user-agent, which is for example: Mozilla/5.0 (X11; U; Linux i686 (x86_64); en-US; rv:1.9.0.17), with "X11; U; Linux i686 (x86_64)" being a variable part depending on the operating system.

ADVANCED PROPERTIES

- Override Accept-Language header: This option defines an accept-language header value to replace the standard XulRunner accept-language header value, which is for example: en-us, en;q=0.8,fr-fr;q=0.5,fr;q=0.3.
- Allow image: General parameter that enables or disables the Image rendering property of the browser. This value can be overridden using a *Browser property change* statement in HTML transactions.
- Allow plugin: General parameter that enables or disables the Plugin feature property of the browser. This value can be overridden using a *Browser property change* statement in HTML transactions.
- Check cache validity (false could increase latency): This preference defines how often to check for a new version of a cached page. Default value is true, meaning it checks for a new version when the cached page is out of date. If set to false, checking for a new version of a page is done once per session (a session starts when the first application window opens and ends when the last application window closes).



When a page is loaded, it is cached so it doesn't need to be downloaded to be redisplayed. If the page changes after a previous visit, you may want to redownload it anyway to get the updated page. This preference can be used in such cases.

- Enable screen rendering during parse (should be disabled): This preference defines whether the application will interrupt parsing a page to respond to UI events. If true, parsing can be interrupted to process UI events. Default value is false, parsing cannot be interrupted, the application will be unresponsive until parsing is complete.
- XulRunner path: This preference allows you to change the XULRunner used by Convertigo (should never be changed except for very advanced users).

 XulRunner work directory: This preference allows you to change the XULRunner working directory (should never be changed except for very advanced users).



Beware that these two last options have to be used by very advanced users, or on the advice of the Convertigo team. Otherwise, this could lead to a non-functioning XULRunner feature.

4.2.8 HTTP client

Edit the parameters of the HTTP client in *HTTP client* tab. This tab can be opened by following the procedure *"To access a configuration category in the Configuration page"* on page 4 - 12.

- Maximal number of HTTP connections (from 1 to 65535): This preference limits the total number of HTTP connections Convertigo can open using HTTP client. If more connections are needed, they are queued until a connection "slot" is available. This preference takes values between 1 and 65535 inclusive.
- Maximal number of HTTP connections per host (from 1 to 255): This preference limits the total number of HTTP connections Convertigo can make using HTTP client to a single server. If more connections are needed, they are queued until a connection "slot" is available. This preference takes values between 1 and 255 inclusive.



HTTP client is used in Convertigo in: HTTP connector, Site Clipper connector, HTML connector (to make the initial connector connection in stateless mode), HTTP statement.

4.2.9 Network

Edit the network parameters in *Network* tab. This tab can be opened by following the procedure *"To access a configuration category in the Configuration page"* on page 4 - 12.

 Use DNS reverse search for finding host names: If checked, this option makes Convertigo perform reverse DNS checks on client IP adresses. Resolved client names will then be used along with IP in log files and *Connections* page.



Check this option only if you are sure the Convertigo Server is able to reach a DNS server that serves reverse DNS requests, or response times will greatly deteriorate.

- Maximum allowed size of a complete multipart request (in bytes). Value -1 indicates no limit.: This parameter allows to define the maximum allowed size of a multipart request to Convertigo, in bytes. Default value is -1, indicating that the request size is not limited.
- Maximum allowed size of a single uploaded file (in bytes): This parameter allows to define the maximum allowed size of one uploaded file when sending a multipart request to Convertigo, in bytes.





Since version 6.1.10, Convertigo allows to receive multi-part requests. The programmers can then develop forms that will be used to upload files to Convertigo as input variables of transactions/sequences. The transactions/sequences variables can be define as a file upload using the **Is a file upload** property.

4.2.10 Proxy

Configure the Convertigo Server unified proxy in the *Proxy* tab. This tab can be opened by following the procedure *"To access a configuration category in the Configuration page"* on page 4 - 12.

- **Proxy mode**: In this parameter, three different modes are available to configure the proxy:
 - disabled: No proxy.
 - automatic: Using this mode, it is possible to automatically configure the proxy through a proxy auto-configuration (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**: In this field, it is possible to configure the domains to which the proxy should *not* be applied.
- Proxy authentication method: This parameter allows to choose what authentication method the proxy should use. The value is to be chosen amongst the following values:
 - anonymous
 - basic
 - NTLM
- Username and Password: Finally, these parameters allow to set the credentials to be used by the proxy.

Since version 6.0, Convertigo includes a unified HTTP proxy for the following connectors: HTML connector, HTTP connector and 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.

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

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

4.2.11 Security token

Edit the security token parameters for portal authentications in *Security token* tab. This tab can be opened by following the procedure *"To access a configuration category in the Configuration page"* on page 4 - 12.

This tab includes an Advanced properties section that can be opened by following the procedure *"To access the advanced properties of a configuration category"* on page 4 - 13. In the Advanced properties section, configure the advanced parameters of security tokens for portal authentication.

- Properties
- Advanced properties

PROPERTIES

- Security token lifetime (in seconds): This parameter allows to define the lifetime of security tokens generated by the Convertigo server to authenticate an execution context when running a transaction/sequence in a widget of a portal. The security token must be used by the widget to authenticate an execution context within this lifetime. Otherwise, it will not be validated.
- Security token generator passphrase: This parameter allows to define the passphrase used by the Convertigo server to generate the encrypted security token and then to decrypt it when receiving it in a transaction/sequence's execution request.



The default Security token generator passphrase is c8o-password. It is strongly recommended to change it as soon as you use this functionnality of portal widgets authentication.





Since version 6.1.10, Convertigo includes a portal widgets authentication process. It allows any widget to use a security token in order to authenticate the context of execution of the transactions/sequences that it runs for getting data.

The authenticated context requirement for executing a transaction/ sequence in the Convertigo server is defined in each transaction/ sequence itself by the **Authenticated context required** property.

ADVANCED PROPERTIES

- Storage mode: This parameter allows to choose how the Convertigo server stores the valid security tokens during their lifetime. This property can take the following values:
 - memory: The valid security tokens and their parameters (like their lifetime) are stored in the Convertigo server memory. This is the default value, mostly recommended for a single-instance Convertigo Server. Besides, this is a simpler configuration as you have nothing to configure, the following properties are not used.
 - database: The valid security tokens and their parameters are stored in an external database. This is the recommended configuration for multiple instances of Convertigo Server, which would need to share the generated tokens. When using this value, you have to fill the following properties.



When using database mode for storing security tokens, Convertigo uses **Hibernate** (version 4.3) to connect to this database. The following properties, that allow configuring the connection to the security token database, are based on Hibernate configuration. For more information, see the Hibernate documentation at: http:// docs.jboss.org/hibernate/orm/4.3/devguide/en-US/html/ch01.html

 SQL Dialect: This parameter defines the Hibernate SQL Dialect to use to optimize SQL requests to the security tokens database with correct syntaxes.



For more information on the Hibernate Dialects, see the Hibernate documentation at: http://docs.jboss.org/hibernate/orm/4.3/devguide/en-US/html/ch01.html#configuring-dialects

JDBC driver: This parameter defines the JDBC driver to use for connecting to the security tokens database. Any driver already existing in Convertigo for SQL connector can be used, until it corresponds to the defined Dialect. You can refer to appendix "SQL drivers and related jar files" on page A - 18 or to the SQL connector documentation in the Reference Manual for more information about existing drivers.



Other drivers than those existing for SQL connector may be used. They only have to be installed in Convertigo before use. Request for Convertigo support for installing a new SQL driver in Convertigo.

JDBC URL: This parameter defines the JDBC URL to use for connecting to the security tokens database. The URL depends on the specified driver. You can refer to appendix "SQL drivers and related jar files" on page A - 18 for more information about existing drivers and to the *SQL connector* documentation in the *Reference Manual* for more information about existing drivers and related connection URLs.

 JDBC username and JDBC password: These parameters define the username and password to use for connecting to the security tokens database.



For more information on the Hibernate JDBC configuration, see the Hibernate documentation at: http://docs.jboss.org/hibernate/orm/4.3/ devguide/en-US/html/ch01.html#hibernate-jdbc-properties

4.2.12 SSL

Edit the communication security parameters in *SSL* tab. This tab can be opened by following the procedure *"To access a configuration category in the Configuration page"* on page 4 - 12.

• SSL debug output (requires JVM restart): This option, when activated, makes the Java machine write traces about SSL dialogs in Convertigo in stdout console.



SLL dialogs are used in Convertigo in every connector trying to reach the host it is configured to connect to using SSL, i.e. when the connector's SSL mode property is checked.



If you activate this option, you will have to restart the Java machine as it is the one writing traces, it does not take the property into account directly.

 SSL issuers: This parameter allows to enter a list os SSL issuers to be added to the standard issuers list, used to validate client certificates.



The Certificates page of the Administration Console defines certificates positioned on projects requiring them. When Convertigo tries to validate a client certificate, this certificate is validated by a list of issuers. These issuers have to be known for the certificate to be validated completely. The standard list of issuers may be incomplete, this is why this property exists.

4.2.13 Cache

Edit the cache parameters in *Cache* tab. This tab can be opened by following the procedure *"To access a configuration category in the Configuration page"* on page 4 - 12.

 Cache manager class: This parameter allows you to override the cache management Java class by a class of your own in case of file cache type set in the *Cache* page of the Administration Console.



Beware that this option has to be used by very advanced users, or on the advice of the Convertigo team. Otherwise, this could lead to a non-functioning cache feature.

• File cache directory: This parameter defines the folder where cache files have to be



saved, in the case of file cache type set in the *Cache* page of the Administration Console.



Two cache types can be chosen, file or database. For more information on the Cache page of the Administration Console, see "Cache" on page 4-38.

 Cache scan delay (in seconds): This parameter defines the time in seconds to wait between two cache cleaning processes. It is taken into account for both file and database cache types.



Cache cleaning process is the deletion of expired cache entries, found using the expiry date of the cache entry.

• **Disable Cache**: This option, when activated, deactivates cache feature for the whole server. The running projects can then be tested out of any cache environment.

4.2.14 Legacy Carioca portal

Edit the Carioca portal parameters in *Legacy Carioca portal* tab. This tab can be opened by following the procedure *"To access a configuration category in the Configuration page"* on page 4 - 12.

 Default user name and Default user password: These parameters define the default credentials used by Convertigo when no Carioca portal is used for accessing to projects.



This property is used in relation with the **Carioca access URL** property, when set to the local **minime**. See **Carioca access URL** property description for more information.

 Default session key life time (in seconds): This property defines the time of living of a Carioca session key, in seconds.



The session key is sent by Carioca portal to authenticate a request made by an authenticated user, and is validated by Convertigo to define the validity of a received request, in the time of validity of this session key.

 Carioca access URL: This property defines the URL of the Carioca portal used to access to Convertigo. By default, it is set to the local *minime*, which is a local mini-Carioca portal used when no Carioca portal is used for accessing to projects.

4.2.15 Analytics

Enable the analytics feature in *Analytics* tab. This tab can be opened by following the procedure *"To access a configuration category in the Configuration page"* on page 4 - 12.

This tab includes an Advanced properties section that can be opened by following the procedure *"To access the advanced properties of a configuration category"* on page 4 - 13. In the Advanced properties section, configure the advanced parameters of the analytics feature,

i.e. all properties defining the database into which the tickets are stored.

- Properties
- Advanced properties

PROPERTIES

 Enable analytics: This option, when checked, enables the analytics feature in Convertigo Server.



The analytics feature in Convertigo server consists in writing in a database one entry, also known as **ticket**, for each executed transaction or sequence, including its name, relative information, as well as a "**score**" calculated depending on the connector type. For more information on the analytics feature, see the appendix "Analytics in Convertigo Server" on page A - 16. Technically, Convertigo uses **Hibernate** (version 4.3) to connect to this database. The following properties, that allow configuring the connection to the analytics database, are based on Hibernate configuration.

For more information, see the Hibernate documentation at: http:// docs.jboss.org/hibernate/orm/4.3/devguide/en-US/html/ch01.html

ADVANCED PROPERTIES

 SQL Dialect: This parameter defines the Hibernate SQL Dialect to use to optimize SQL requests to the analitycs database with correct syntaxes.



For more information on the Hibernate Dialects, see the Hibernate documentation at: http://docs.jboss.org/hibernate/orm/4.3/devguide/ en-US/html/ch01.html#configuring-dialects

JDBC driver: This parameter defines the JDBC driver to use for connecting to the analytics database. Any driver already existing in Convertigo for SQL connector can be used, until it corresponds to the defined Dialect. You can refer to appendix "SQL drivers and related jar files" on page A - 18 or to the SQL connector documentation in the Reference Manual for more information about existing drivers.



Other drivers than those existing for SQL connector may be used. They only have to be installed in Convertigo before use. Request for Convertigo support for installing a new SQL driver in Convertigo.

- JDBC URL: This parameter defines the JDBC URL to use for connecting to the analytics database. The URL depends on the specified driver. You can refer to appendix "SQL drivers and related jar files" on page A 18 for more information about existing drivers and to the SQL connector documentation in the Reference Manual for more information about existing drivers and related connection URLs.
- JDBC username and JDBC password: These parameters define the username and password to use for connecting to the analytics database.





For more information on the Hibernate JDBC configuration, see the Hibernate documentation at: http://docs.jboss.org/hibernate/orm/4.3/ devguide/en-US/html/ch01.html#hibernate-jdbc-properties

4.2.16 Notifications

Enable the notifications feature in *Notifications* tab. This tab can be opened by following the procedure *"To access a configuration category in the Configuration page"* on page 4 - 12.

This tab includes an Advanced properties section that can be opened by following the procedure *"To access the advanced properties of a configuration category"* on page 4 - 13. In the Advanced properties section, configure the advanced parameters of the notifications feature.

- Properties
- Advanced properties

PROPERTIES

Notify project deployement: This option, when checked, enables the notification by email of information about projects deployement on the Convertigo Server.



Beware that checking this option requires filling the Advanced properties.

ADVANCED PROPERTIES

- **Target email**: this property defines the email address to which notifications will be sent.
- **STMP host**: this property defines the SMTP host of target email.
- **STMP port**: this property defines the SMTP port of target email, default is 465.
- **STMP user**: this property defines the SMTP username of target email.
- **STMP password**: this property defines the SMTP password of target email.

4.2.17 Mobile builder

Edit the mobile builder parameters in *Mobile builder* tab. This tab can be opened by following the procedure *"To access a configuration category in the Configuration page"* on page 4 - 12.

This tab includes an Advanced properties section that can be opened by following the procedure *"To access the advanced properties of a configuration category"* on page 4 - 13. In the Advanced properties section, configure the advanced parameters of the mobile builder feature.

- Properties
- Advanced properties

PROPERTIES

• Mobile builder authentication token: This property defines the authentication token of
the Mobile builder account to use to build the mobile application. The Mobile builder account is nothing more than a PhoneGap build account. It is referenced now by an authentication token. When building a mobile application, a Mobile builder account (PhoneGap build account) is mandatory. Convertigo provides one by default, used by default in Convertigo engine. This **Mobile builder authentication token** property allows you to define your own Mobile builder authentication token. It will be used by default for all mobile applications built by the Convertigo. It can still be overridden by the **Mobile builder authentication** token property in each *Mobile application* object in Convertigo projects.



The Convertigo mobile builder platform performs mobile application build thanks to PhoneGap build platform. Once a PhoneGap build account is configured thanks to the Mobile builder authentication token, do not forget to configure all mobile platforms certificates and keys in accordance. Find below the documentation of properties that need to be filled for mobile platforms certificates and keys.

Android certificate title, Android certificate password and Android keyStore password: These properties define the Android certificate to use for building Android mobile applications. When building a mobile application for Android platform, an Android certificate (including title and password) is mandatory. When using default Convertigo's Mobile builder account, Convertigo's Android certificate is used. When using your own Mobile builder account, default PhoneGap Android certificate is used. These Android certificate title, Android certificate password and Android keyStore password properties allow to override the defaults Android certificate title, password and keystore password. They will be used by default for all Android mobile applications built by the Convertigo. They can still be overridden by the Android certificate title, Android mobile platform object in Convertigo projects.



The Android certificate is linked to the PhoneGap build account. Be aware to configure the **Mobile builder authentication token** and the **Android certificate** accordingly: the **Android certificate** must be one of the "Signing keys" declared in the PhoneGap build account.

BlackBerry key title and BlackBerry key password: These properties define the BlackBerry key to use for building BlackBerry mobile applications. When building a mobile application for BlackBerry platform, a BlackBerry key (including title and password) is mandatory. When using default Convertigo's Mobile builder account, Convertigo's BlackBerry key is used. When using your own Mobile builder account, default PhoneGap BlackBerry key is used. These BlackBerry key title and BlackBerry key password properties allow to override the defaults BlackBerry key title and password. They will be used by default for all BlackBerry mobile applications built by the Convertigo. They can still be overridden by the BlackBerry key title and BlackBerry key password properties in each BlackBerry mobile platform object in Convertigo projects.





The BlackBerry key is linked to the PhoneGap build account. Be aware to configure the **Mobile builder authentication token** and the **BlackBerry key** accordingly: the **BlackBerry key** must be one of the "Signing keys" declared in the PhoneGap build account.

iOS certificate title and iOS certificate password: These properties define the iOS certificate to use for building iOS mobile applications. When building a mobile application for iOS platform, an iOS certificate (including title and password) is mandatory. When using default Convertigo's Mobile builder account, Convertigo's iOS certificate is used. When using your own Mobile builder account, default PhoneGap iOS certificate is used. These iOS certificate title and iOS certificate password properties allow to override the defaults iOS certificate title and password. They will be used by default for all iOS mobile applications built by the Convertigo. They can still be overriden by the iOS certificate title and iOS certificate password properties in each *iOS mobile platform* object in Convertigo projects.



The iOS certificate is linked to the PhoneGap build account. Be aware to configure the **Mobile builder authentication token** and the **iOS** certificate accordingly: the **iOS certificate** must be one of the "Signing keys" declared in the PhoneGap build account.

Window Phone publisher ID title: This property defines the Windows Phone publisher ID to use for building Windows Phone mobile applications. When building a mobile application for Windows Phone platform, a Windows Phone publisher ID (including its title) is mandatory. When using default Convertigo's Mobile builder account, Convertigo's Windows Phone publisher ID is used. When using your own Mobile builder account, default PhoneGap Windows Phone publisher ID is used. This Window Phone publisher ID title property allows to override the defaults Window Phone publisher ID title. It will be used by default for all Window Phone mobile applications built by the Convertigo. They can still be overridden by the Window Phone publisher ID title property in each Window Phone mobile platform object in Convertigo projects.



The Windows Phone publisher ID is linked to the PhoneGap build account. Be aware to configure the **Mobile builder authentication token** and the **Windows Phone publisher ID** accordingly: the **Windows Phone publisher ID** must be one of the "Signing keys" declared in the PhoneGap build account.

ADVANCED PROPERTIES

 Mobile builder platform URL: This property defines the URL of the Convertigo mobile builder platform to use when building the mobile applications. This platform is delivered by Convertigo and should not be modified.



Beware that this option has to be used by very advanced users, or on the advice of the Convertigo team. Otherwise, this could lead to a non-functioning mobile builder feature.

4.3 Connections

The *Left menu* contains a link to the *Connections* page. This page displays all of your running connections on the Convertigo Server in real-time.

More information on *Connections* page is coming soon.



4.4 Projects

The *Left menu* contains a link to the *Projects* page. This page contains information related to the projects currently deployed on the Convertigo Server.

More information on *Projects* page is coming soon.

4.5 Certificates

The *Left menu* contains a link to the *Certificates* page. This page provides information about adding, deleting and reviewing authentication certificates.

More information on *Certificates* page is coming soon.



4.6 Logs

The *Left menu* contains a link to the *Logs* page. This page provides traces of Convertigo engine executions, updated in real-time.

More information on *Logs* page is coming soon.

4.7 Trace Player

The *Left menu* contains a link to the *Trace player* page. This page displays the saved Legacy screens traces and permits you to configure the playing of these traces.

More information on the *Traces player* page is coming soon.



Chapter "Using Convertigo Administration Console" Cache

4.8 Cache

The *Left menu* contains a link to the *Cache* page. This page allows you to configure the cache feature.

More information on the Cache page is coming soon.

4.9 Scheduler

The *Left menu* contains a link to the *Scheduler* page. This page gives you the tools to schedule automatic executions of transactions and/or sequences.

This section introduces the *Scheduler* page and details the different elements of the scheduling functionality:

- Scheduler page
- Jobs table
- Schedules table
- Scheduled Jobs table

4.9.1 Scheduler page

Navigate the *Left menu* using the link to the *Scheduler* page. For an example on how to navigate the *Left menu*, see "To access Configuration page in the Administration Console" on page 4-9.



Figure 4 - 20: Accessing Scheduler page

The Scheduler page contains three individual tables:

- Jobs,
- Schedules,
- Scheduled Jobs.



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	Schedule	er.				
1 Sec.	Jobs 0	2				
Inter Designation	Institut	1 Name	Description	adu.	1.01	Deter
0	0	Cethilophila, 125455788	transaction GativitoleGata with articleno 123455769	URL broadshample_blumentation_CUI int?ionred	-	×
Se 🔛	0	InsertDatemBase_123456709	Bequence insertDatanBase with article_code 123456788	URL: bruedshample_bournerlation_CMSIxn07_seque	-	×
Sector Space	0	SearchGoogle_Convertige	transaction their disciplent million with Nerword Don-Hotog	URL enundersample_botumentation_CNLvmPconvec	-	×
1. mm		pour,2,5ansactions	group of 2 transactions	senat (TransactionConvertige.inth: GetVrlineData_12345678	-	×
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Figure 4 - 21: Administration Console Scheduler page

Scheduling a Convertigo sequence or transaction execution consists in creating a scheduled job, which results in the association of a job, also known as task, and a schedule, also known as a time trigger.

WHAT'S NEXT

The following sections present in details the three tables on the *Scheduler* page which are the tools to create jobs, schedules and scheduled jobs.

4.9.2 Jobs table

The *Jobs* table lists the existing jobs. A job, also known as task, specifies the object to be executed. It can be a Convertigo transaction, a sequence, or a group of other jobs.

Enabled 1	Name	Description	Info	Edit	Delete
0	GetArticleData_123456789	transaction GetArticleData with article_no 1234	URL : /projects/sample_documentation_CLI/.xr	-	×
0	InsertDataInBase_1234567	Sequence InsertDataInBase with article_code '	URL : /projects/sample_documentation_CMS/>	4	×
0	SearchGoogle_Convertigo	transaction SearchGoogleWithLimit with keywo	URL : /projects/sample_documentation_CWI/x	-	×
0	group_2_transactions	group of 2 transactions	serial [TransactionConvertigoJob : GetArticleDa	-	×

Figure 4 - 22: Jobs table

This section is separated in the following paragraphs:

- Description of the Jobs table
- Creating a new job
- Editing a job
- Deleting a job

DESCRIPTION OF THE JOBS TABLE

For each job, the Jobs table includes the following columns:

Enabled: This column displays a green bullet if the job is enabled and a red bullet if the job is disabled. Only enabled jobs can be executed by a scheduled job. Disabled jobs will not be executed, even if used in an enabled scheduled job.



Figure 4 - 23: Jobs table Enabled column



You can change a job's state (enable or disable it) by editing the job. For more information on job edition, see "Editing a job" on page 4-50.

• **Name**: This is the name of the created job, filled by the user at its creation.

	Name 🗢
	GetArticleData_123456789
	group_2_transactions
ľ	InsertDataInBase_123456789
ĺ	SearchGoogle_Convertigo

Figure 4 - 24: Jobs table Name column

Description: This is the description of the created job, filled by the user at its creation.





Figure 4 - 25: Jobs table Description column

- Info: This column displays:
 - the execution URL automatically generated from the configured transaction/sequence, in case of a job executing a transaction/sequence,
 - the type of execution (parrallel/serial) as well as the several jobs that are grouped, including their type (transaction/sequence), in case of a group of jobs.



Figure 4 - 26: Jobs table Info column

- Edit: This column contains a button set that allows you to edit the job. For more information on job edition, see "Editing a job" on page 4-50.
- Delete: This column contains a button X that allows you to delete the job. For more information on job deletion, see "Deleting a job" on page 4-52.

CREATING A NEW JOB

The *Jobs* table allows you to create a new job, first step for creating a scheduled job. It can be a Convertigo transaction or sequence, which can be created in a common way, or a group of other jobs.

Find below two procedures that describe how to create both types of job.

To create a job (transaction or sequence)

- 1 Click one of the following buttons located beneath the *Jobs* table:
 - New Transaction: to schedule a transaction execution,
 - New Sequence: to schedule a sequence execution.



Figure 4 - 27: Transaction/sequence job creation buttons

New Entry	×
Name:	
Description:	
Enabled:	
Context:	
Write output:	
Project:	····
Connector:	
Transaction:	
Parameters:	
	Save Cancel

Once clicked, a window appears in front of the page, depending on the chosen item:

Figure 4 - 28: New job entry - transaction case

New Entry ×
Name:
Description:
Enabled: 🔽
Context:
Write output:
Project:
Sequence:
Parameters:
Save Cancel

Figure 4 - 29: New job entry - sequence case

- 2 Depending on the type of job selected, you have to fill in some information to define the job. Parameters to set are:
 - **Name**: A name for this job, as jobs are used in the *Scheduled Jobs* table, it is recommended to give recognizable names to jobs.



- **Description**: An optional description or notes concerning the job.
- Enabled: Checkbox that allows you to define if the job is enabled (checked checkbox) or disabeld (not checked checkbox). Only enabled jobs can be executed by a scheduled job. Disabled jobs will not be executed, even if used in an enabled scheduled job. This setting is by default set to enabled.
- **Context**: An optional name for the Convertigo context into which the transaction/ sequence will run. This name will replace the 'default' default context name.
- Write output: If checked, the XML output of the transaction/sequence will be saved in a file in the Convertigo logs directory after the task is finished. Otherwise, no execution result will be saved (except traces in logs). This setting is not checked by default.
- Project: This combo box lists all deployed projects in the Convertigo Server. Choose the project to use for the job (into which you want to pick a transaction/ sequence).
- **Connector**: (for transaction jobs only) Once a project is selected, this combo box lists all available connectors. Select the required connector to use for the job (into which you want to pick a transaction).
- **Transaction**: (for transaction jobs only) Once the project and the connector are selected, this combo box lists all available transactions. Select the transaction to use for the job, i.e. the transaction to be executed.
- **Sequence**: (for sequence jobs only) Once a project is selected, this combo box lists all available sequences. Select the required sequence to use for the job, i.e. the sequence to be executed.
- **Parameters**: Once a transaction or a sequence has been selected, its input variables are listed here along with their default values in a table with the following columns:
 - **Name**: Name of the input variable.
 - Value: Default variable value. This value can be changed here and will be used if the **Send** checkbox is checked.
 - **Description**: Variable description.
 - **Send**: Check this checkbox if you want to use the modified variable value for this variable. Otherwise, the variable value will not be sent and the default value will be used.

Depending on the job type, you have for example:

 an enabled transaction job is created to execute the searchGoogleWithLimit transaction from the GoogleConnector connector of the sample_documentation_CWI project, including an updated value for the keyword variable, set to "Convertigo", and writing the XML output in a file thanks to the Write output setting:

New Entry	×
Name:	SearchGoogle_Conve
Description:	transaction searchGo
Enabled:	
Context:	
Write output:	
Project:	sample_documentation_CWI
Connector:	GoogleConnector
Transaction:	searchGoogleWithLimit
	keyword to be searched
Parameters:	maxPages 3 maximum number of pages to accumulate
	Save Cancel

Figure 4 - 30: Configuring and saving a new transaction job

 an enabled sequence job is created to execute the GetXMLData sequence from the sample_documentation_CMS project, including an updated value for the article_code variable, set to "123456789", and writing the XML output in a file thanks to the Write output setting:



New Entry ×
Name: GetXMLData_12345(
Description: Sequence GetXMLDa
Enabled: 🔽
Context:
Write output:
Project: sample_documentation_CMS
Sequence: GetXMLData
Parameters: article_code 123456789 article code 🔽
Save Cancel

Figure 4 - 31: Configuring and saving a new sequence job

3 When you finish specifying the job, click on the **Save** button to create it.

A message window appears to inform that the object was correctly saved:

Information	×
The element was correctly s	aved.
	ж

Figure 4 - 32: New job created

4 Click on the **Ok** button to close the popup window. The new job appears in the *Jobs* table:

Enabled *	Name	Description	Info	Edit	Delete
0	GetArticleData_123456789	transaction GetArticleData with article_no 1234	URL:/projects/sample_documentation_CLI/.xr	-	×
0	InsertDataInBase_1234567	Sequence InsertDataInBase with article_code 1	URL : /projects/sample_documentation_CMS/>	-	×
0	SearchGoogle_Convertigo	transaction SearchGoogleWithLimit with keywo	URL: /projects/sample_documentation_CWI/x	-	×
•	SearchGoogle_Convertigo2	transaction SearchGoogleWithLimit with Kewor	URL : /projects/sample_documentation_CWI/.x	-	×
0	group_2_transactions	group of 2 transactions	serial [TransactionConvertigoJob : GetArticleDa	-	×

Figure 4 - 33: Jobs table with the new transaction job

Enabled 1	Name	Description	Info	Edit	Delete
0	GetArticleData_123456789	transaction GetArticleData with article_no 1234	URL : /projects/sample_documentation_CLI/ xr	-	×
•	GetKMLData_123456789	Sequence GetXMLData with article_code 12345	URL : /projects/sample_documentation_CMS/3	-	×
0	InsertDataInBase_1234567	Sequence insertDataInBase with article_code 1	URL:/projects/sample_documentation_CMS/>	-	×
0	SearchGoogle_Convertigo	transaction SearchGoogleWithLimit with keywo	URL : /projects/sample_documentation_CWI/.x	-	×
0	SearchGoogle_Convertigo2	transaction SearchGoogleWithLimit with Kewor	URL:/projects/sample_documentation_CWI/x	-	×
0	group_2_transactions	group of 2 transactions	serial [TransactionConvertigoJob : GetArticleDa	-	×

Figure 4 - 34: Jobs table with the new sequence job

To create a job group

1 Click the **New Job Group** button located beneath the *Jobs* table, to schedule a group of jobs containing several transactions or sequences.



Figure 4 - 35: Job group creation button

Once clicked, a window appears in front of the Administration Console:



New Entry	×
Name:	
Description:	
Enabled: 🔽	
Group Job: GetArticleData_123456789 InsertDatalnBase_123456789 SearchGoogle_Convertigo SearchGoogle_Convertigo2	
	Save Cancel

Figure 4 - 36: New job entry - job group case

- 2 You have to fill in some information to define the job. Parameters to set are:
 - **Name**: A name for this job, as jobs are used in the *Scheduled Jobs* table, it is recommended to give recognizable names to jobs.
 - **Description**: An optional description or notes concerning the job.
 - Enabled: Checkbox that allows you to define if the job is enabled (checked checkbox) or disabeld (not checked checkbox). Only enabled jobs can be executed by a scheduled job. Disabled jobs will not be executed, even if used in an enabled scheduled job. This setting is by default set to enabled.
 - **Group Job**: This list enumerates all available transaction/sequence jobs from the Jobs table. Select the jobs to group together in this job group.
 - Serial execution: Check this checkbox if you want to execute the chosen transaction/sequence jobs in sequence. Otherwise, they will be executed in parrallel, which is the default value.

For example here, a 2-sequences group job is created to execute the GetXMLData_123456789 sequence job and the InsertDataInBase_123456789 sequence job in parallel as the **Serial execution** checkbox is not checked:

New Entry	×
Name: group_2_sequences	
Description: group of 2 sequence	
Enabled: 🔽	
Group Job: GetArticleData_123456789 GetXMLData_123456789 InsertDataInBase_123456789 SearchGoogle_Convertigo	
	Save Cancel

Figure 4 - 37: Configuring and saving a new group job

3 When you finish specifying the job, click on the **Save** button to create it.

A message window appears to inform that the object was correctly saved:

¢,	Information X
	The element was correctly saved.
	Ok
	UK

Figure 4 - 38: New job created

4 Click on the **Ok** button to close the popup window. The new job appears in the *Jobs* table:



Enabled 1	Name	Description	Info	Edit	Delete
0	GetArticleData_123456789	transaction GetArticleData with article_no 1234	URL : /projects/sample_documentation_CLI/xr	-	×
0	GetXMLData_123456789	Sequence GetXMLData with article_code 12345	URL:/projects/sample_documentation_CMS/a	-	×
0	InsertDataInBase_1234567	Sequence InsertDataInBase with article_code 1	URL : /projects/sample_documentation_CMS/>	-	×
0	SearchGoogle_Convertigo	transaction SearchGoogleWithLimit with keywo	URL:/projects/sample_documentation_CWI/x	-	×
0	SearchGoogle_Convertigo2	transaction SearchGoogleWithLimit with Kewor	URL : /projects/sample_documentation_CWI/x	-	×
0	group_2_sequences	group of 2 sequences	parallel [SequenceConvertigoJob : Geb0MLData	-	×
0	group_2_transactions	group of 2 transactions	serial [TransactionConvertigoJob : GetArticleDa	-	×

Figure 4 - 39: Jobs table with the new job group

EDITING A JOB

In the Jobs table, the Edit column contains a button that allows you to edit an existing job.

To edit an existing job

1 Click on the 🛶 button of the job line:

Enabled *	Name	Description	Info	Edit	Delete
0	GetArticleData_123456789	transaction GetArticleData with article_no 1234567	URL : /projects/sample_documentation_CLI/xml?_	-	×
0	Get/MLData_123456789	Sequence GetXMLData with article_code 12345678	URL : /projects/sample_documentation_CMS/xml7	-	×
0	InsertDstainBase_123456789	Sequence InsertDatainBase with article_code 123-	URL /projects/sample_documentation_CMS/amt7	T	×
0	SearchGoogle_Convertigo	transaction SearchGoogleWithLimit with keyword C	URL : /projects/sample_documentation_CWI/.xml?	Edit	X
0	SearchGoogle_Convertigo2	transaction SearchGoogleWithLimit with Keword C	URL: /projects/sample_documentation_CWI/.xml?		×
•	group_2_sequences	group of 2 sequences	parallel [SequenceConvertigoJob : GetXMLData_12	-	×
0	group_2_transactions	group of 2 transactions	serial [TransactionConvertigoJob : GetArticleData_	-	×

Figure 4 - 40: Editing a job

A popup window opens (here in the case of a sequence job):

Edit Entry		×
Name:	alnBase_123456789	
Description:	Sequence InsertDatal	
Enabled:		
Context:		
Write output:		
Project:	sample_documentation_CMS	•
Sequence:	InsertDataInBase 💌	
Parametere:	Name Value	Description Send
r arameters.	article_code 123456789	article code 🔽
		Save Cancel

Figure 4 - 41: Job edition

2 Change the values of the job settings you want to edit. For example, enable the job by checking the **Enabled** checkbox:

Edit Entry X
Name: InsertDataInBase_12:
Description: Sequence InsertDatal
Enabled: 🔽
Context:
Write output: 🔽
Project: sample_documentation_CMS
Sequence: InsertDataInBase 💌
Name Value Description Send
article_code 123456789 article code 🔽
Save Cancel

Figure 4 - 42: Edited job



- 3 Click on the **Save** button to save the updated values or click on the **Cancel** button if you want to cancel the job update.
- 4 After clicking on the **Save** button, a message window appears to inform that the object was correctly saved:

Information ×
The element was correctly saved.
Ok

Figure 4 - 43: Job updated

5 Click on the **Ok** button to close the popup window. The updated job appears in the *Jobs* table:

Enabled *	Name	Description	Info	Edit	Delete
0	GetArticleData_123456789	transaction GetArticleData with article_no 1234567	URL : /projects/sample_documentation_CLI/xml?_	-	×
0	GetXIMLData_123456789	Sequence GetXMLData with article_code 12345678	URL : /projects/sample_documentation_CMS/xml7	-	×
0	InsertDataInBase_123456789	Sequence InsertDataInBase with article_code 123-	URL : /projects/sample_documentation_CMS/.xmi7	-	×
0	SearchGoogle_Convertigo	transaction SearchGoogleWithLimit with keyword C	URL : /projects/sample_documentation_C/W/xml?	-	×
0	SearchGoogle_Convertigo2	transaction SearchGoogleWithLimit with Keword Co	URL : /projects/sample_documentation_CW//xml7	-	×
0	group_2_sequences	group of 2 sequences	parallel [SequenceConvertigoJob : GetXMLData_12	-	×
0	group_2_transactions	group of 2 transactions	serial [TransactionConvertigoJob : GetArticleData_	-	×

Figure 4 - 44: Jobs table with the edited job

DELETING A JOB

In the Jobs table, the **Delete** column contains a button that allows you to delete an existing job.

To delete an existing job

1 Click on the X button of the job line:

Enabled *	Name	Description	Info	Edit	Delet
0	GetArticleData_123456789	transaction GetArticleData with article_no 1234567	URL : /projects/sample_documentation_CLI/xml?_	-	×
0	GetXMLData_123456789	Sequence GetXMLData with article_code 1234567	EURL : /projects/sample_documentation_CMS/.xml7	-	×
0	InsertDatainBase_123456789	Sequence InsertDataInBase with article_code 123	URL : /projects/sample_documentation_CMS/xml7	-	×
0	SearchGoogle_Convertigo	transaction SearchGoogleWithLimit with keyword	CURL : /projects/sample_documentation_CWI/.xml?	-	×
•	SearchGoogle_Convertige2	transaction SearchGoogleWithLimit with Keword C	URL , projects/sample_documentation_CWV xml?	-	×
0	group_2_sequences	group of 2 sequences	parallel [SequenceConvertigoJob : GetXMLData_12	-	×
0	group_2_transactions	group of 2 transactions	serial [TransactionConvertigoJob : GetArticleData_	-	×

Figure 4 - 45: Deleting a job

A popup window opens, asking for a confirmation before deleting the job:

Information ×
Are you sure you want to delete : SearchGoogle_Convertigo2
Yes No

Figure 4 - 46: Job deletion confirmation

- 2 Click on **Yes** to delete the selected job or click on **No** to abort the job deletion.
- 3 After clicking on the **Yes** button, the job is deleted from the *Jobs* table:

Enabled *	Name	Description	Info	Edit	Delete
0	GetArticleData_123456789	transaction GetArticleData with article_no 1234567	URL : /projects/sample_documentation_CLI/.xml?_	-	×
0	GetXMLData_123456789	Sequence Get/04LData with article_code 1234567	URL : /projects/sample_documentation_CMS/xml?	-	×
0	insertDataInBase_123456789	Sequence InsertDataInBase with article_code 123	URL:/projects/sample_documentation_CN/S/xm/5	-	×
0	SearchGoogle_Convertigo	transaction SearchGoogleWithLimit with keyword C	URL:/projects/sample_documentation_CWI/xml?	-	×
0	group_2_sequences	group of 2 sequences	parallel (SequenceConvertigoJob : Get/MLData_12		×
0	group_2_transactions	group of 2 transactions	serial [TransactionConvertigoJob : GetArticleData_	-	×

Figure 4 - 47: Jobs table without the deleted job

WHAT'S NEXT

Now that the *Jobs* table is fully described, the following section will present the *Schedules* table.

4.9.3 Schedules table

The Schedules table lists the existing schedules. A schedule, also known as time trigger,



defines a date, time and reccurrency of triggering for the object to be executed. It can be a Run Now trigger or a CRON trigger.

Enabled	Name	Description	Info	Edit	Delete
0	Every hour the first of each month	Every hour the first of each month	CRON [0 0 * 1 * 7]	-	×
0	Run now	run now	RunNow	-	×
0	every day of july	every day of july	CRON [0 0 0 * 7 7]		×



This section is separated in the following paragraphs:

- Description of the Schedules table
- Creating a new schedule
- Editing a schedule
- Deleting a schedule

DESCRIPTION OF THE SCHEDULES TABLE

For each schedule, the Schedules table includes the following columns:

Enabled: This column displays a green bullet if the schedule is enabled and a red bullet if the schedule is disabled. Only enabled schedules are triggered and launch scheduled jobs. Disabled schedules will not be triggered, even if used in an enabled scheduled job.



Figure 4 - 49: Schedules table Enabled column



You can change a schedule's state (enable or disable it) by editing the schedule. For more information on schedule edition, see "Editing a schedule" on page 4-61.

• **Name**: This is the name of the created schedule, filled by the user at its creation.

Every hour the first of each month Run now	Name
Run now	Every hour the first of each month
	Run now
every day of july	every day of july

Figure 4 - 50: Schedules table Name column

Description: This is the description of the created schedule, filled by the user at its creation.



Figure 4 - 51: Schedules table Description column

- Info: This column displays:
 - the type of schedule (RunNow or CRON),
 - the CRON syntax, in case of CRON schedule.

CRON [0 0 * 1 * ?]	
RunNow	
CRON [0 0 0 * 7 ?]	

Figure 4 - 52: Schedules Info column

- Edit: This column contains a button shat allows you to edit the schedule. For more information on schedule edition, see "Editing a schedule" on page 4-61.
- Delete: This column contains a button X that allows you to delete the schedule. For more information on schedule deletion, see "Deleting a schedule" on page 4-63.

CREATING A NEW SCHEDULE

The *Schedules* table allows you to create a new schedule, second step for creating a scheduled job. It can be of two types:

- CRON, which permits you to select a date, time and frequency of future job executions,
- Run Now, which permits you to run a scheduled job immediately after creation.

Find below two procedures that describe how to create both types of job.



To create a CRON schedule

1 Click the **New CRON** button located beneath the *Schedules* table, to define a CRON schedule.



Figure 4 - 53: CRON schedule creation button

Once clicked, a window appears in front of the page:

New Entry ×
Name: Description:
Documentation Cron wizard
Save Cancel

Figure 4 - 54: New schedule entry - CRON case

- 2 You have to fill in some information to define the CRON schedule. Parameters to set are:
 - **Name**: A name for this schedule, as schedules are used in the *Scheduled Jobs* table, it is recommended to give recognizable names to schedules.
 - **Description**: An optional description or notes concerning the schedule.
 - Enabled: Checkbox that allows you to define if the schedule is enabled (checked checkbox) or disabled (not checked checkbox). Only enabled schedules are triggered and launch scheduled jobs. Disabled schedules will not be triggered, even if used in an enabled scheduled job. This setting is by default set to enabled.
 - **Cron**: The CRON syntax defining a time trigger based upon the linux CRON syntax. CRON schedules can be used to start a job at specific times and dates, or periodically. The complete CRON syntax documentation can be accessed by clicking on the *Documentation* link. A wizard can help you build the CRON syntax, it can be opened by clicking on the *Cron wizard* link:

New Entry ×
Name:
Description:
Enabled: 🔽
Cron: 0 0 0 * * ?
Documentation Cron wizard
Hours Minutes Days of month Months Days of week
every hourevery minuteallallany0111JanuaryMonday1234FebruaryMonday234AprilTuesday3345MayFriday4456JuneJanuary5567JuneSaturday6*6*7July*
Cancel @ Cancel
Save Cancel

Figure 4 - 55: CRON wizard

In the CRON wizard, you can find several combo list into which you can select entries to build your CRON:

- **Hours**: Select the hour of time when you want the CRON to be triggered or "every hour" for it to be triggered every hour.
- **Minutes**: Select the minutes of time when you want the CRON to be triggered or "every minute" for it to be triggered every minute of the selected hour(s).
- **Days of month**: Select the days of month when you want the CRON to be triggered or "all" for it to be triggered every day of the selected month(s).
- **Months**: Select the months when you want the CRON to be triggered or "all" for it to be triggered during all months.
- **Days of week**: Select the days of the week when you want the CRON to be triggered or "any" for it to be triggered during all days of the week.
- 3 When you finish building the CRON thanks to the wizard, click on the **Generate** button for the CRON syntax to be generated in the **Cron** field, or click on the **Cancel** button to close the wizard.



New Entry	×
Name:]
Description:]
Enabled: 🔽	
Cron: 0 0 0 * * ?	
Documentation Cron wizard	
Hours Minutes	Days of month Months Days of week
every hour	all any any Monday Tuesday Wednsday Thursday February 5 May 5 May 5 June 7 July Tuesday Sunday T
· Gene	rate O Cancel
	Save Cancel

Figure 4 - 56: Using CRON wizard

For example here, the generated CRON will be triggered every day of the year, on the working days of weeks, at 5 AM.

4 When you finish specifying the schedule, click on the **Save** button to create it:

New Entry	×
Name: Every working day at	
Description: ery working day at 5	
Enabled: 🔽	
Cron: 0 0 5 ? * 2-6	
Documentation Cron wizard	
	Save Cancel

Figure 4 - 57: Saving a new CRON schedule

5 After clicking on the **Save** button, a message window appears to inform that the object was correctly saved:



Figure 4 - 58: New schedule created

6 Click on the **Ok** button to close the popup window. The new schedule appears in the *Schedules* table:

Enabled	Name	Description	Info	Edit	Delete
0	Every hour the first of each month	Every hour the first of each month	CRON [0 0 * 1 * 7]	-	×
Θ	Every working day at 5	Every working day at 5	CRON [0 0 5 ? * 2-6]	-	×
0	Run now	run now	RunNow	-	×
0	every day of july	every day of july	CRON [0 0 0 * 7 ?]	-	×

Figure 4 - 59: Schedules table with the new schedule

To create a Run Now schedule

1 Click the **New Run Now** button located beneath the *Schedules* table, to define a Run Now schedule.



Figure 4 - 60: Run Now schedule creation button

Once clicked, a window appears in front of the Administration Console:



New Entry	×
Name: Description:	
Enabled: 🔽	
	Save Cancel

Figure 4 - 61: New schedule entry - CRON case

- 2 You have to fill in some information to define the Run Now schedule. Parameters to set are:
 - **Name**: A name for this schedule, as schedules are used in the *Scheduled Jobs* table, it is recommended to give recognizable names to schedules.
 - **Description**: An optional description or notes concerning the schedule.
 - Enabled: Checkbox that allows you to define if the schedule is enabled (checked checkbox) or disabled (not checked checkbox). Only enabled schedules are triggered and launch scheduled jobs. Disabled schedules will not be triggered, even if used in an enabled scheduled job. This setting is by default set to enabled.



Scheduled jobs that use an enabled Run Now schedule start immediately after creation (or when enabled). Once triggered, such a scheduled job auto-disables itself.

3 When you finish specifying the schedule, click on the **Save** button to create it:

New Entry	×
Name: Execute now	
Description: Execute now	
Enabled: 🔽	
	Save Cancel
	<u> </u>

Figure 4 - 62: Saving a new Run Now schedule

4 After clicking on the **Save** button, a message window appears to inform that the object was correctly saved:



Figure 4 - 63: New schedule created

5 Click on the **Ok** button to close the popup window. The new schedule appears in the *Schedules* table:

Enabled	Name	Description	Info	Edit	Delete
0	Every hour the first of each month	Every hour the first of each month	CRON [0 0 * 1 * 7]	-	×
0	Every working day at 5	Every working day at 5	CRON [0 0 5 ? * 2-6]	-	×
0	Execute now	Execute now	RunNow	-	×
0	Run now	run now	RunNow	-	×
0	every day of july	every day of july	CRON [0 0 0 * 7 ?]	-	×

Figure 4 - 64: Schedules table with the new schedule

EDITING A SCHEDULE

In the *Schedules* table, the **Edit** column contains a button that allows you to edit an existing schedule.

To edit an existing schedule

1 Click on the **Edit** button of the schedule line.

A popup window opens (here in the case of a CRON schedule):



Edit Entry	k
Name: every day of july Description: every day of july	
Enabled: 🔲	
Cron: 0 0 0 * 7 ? Documentation Cron wizard	
	Save Cancel

Figure 4 - 65: Schedule edition

2 Change the values of the schedule settings you want to edit. For example, enable the schedule by checking the **Enabled** checkbox:

Edit Entry	×
Name: every day of july Description: every day of july Enabled: 🔽	
Cron: 0 0 0 * 7 ? Documentation Cron wizard	
	Save Cancel

Figure 4 - 66: Edited schedule

- 3 Click on the **Save** button to save the updated values or click on the **Cancel** button if you want to cancel the schedule update.
- 4 After clicking on the **Save** button, a message window appears to inform that the object was correctly saved:



Figure 4 - 67: Schedule updated

5 Click on the **Ok** button to close the popup window. The updated schedule appears in the *Schedules* table:

Enabled	Name	Description	Info	Edit	Delete
0	Every hour the first of each month	Every hour the first of each month	CRON [0 0 * 1 * ?]	-	×
0	Every working day at 5	Every working day at 5	CRON [0 0 5 ? * 2-6]	5	×
0	Execute now	Execute now	RunNow	-	×
0	Run now	run now	RunNow	-	×
Θ	every day of july	every day of july	CRON [0 0 0 * 7 ?]	-	×

Figure 4 - 68: Schedules table with the edited schedule

DELETING A SCHEDULE

In the *Schedules* table, the **Delete** column contains a button that allows you to delete an existing schedule.

To delete an existing schedule

1 Click on the 💥 button of the schedule line.

A popup window opens, asking for a confirmation before deleting the schedule:

Information	×
Are you sure you wa	ant to delete : Run Now
	Yes No



2 Click on Yes to delete the selected schedule or click on No to abort the schedule



deletion.

3 After clicking on the **Yes** button, the schedule is deleted from the *Schedules* table:

Enabled	Name	Description	Info	Edit	Delete
0	Every hour the first of each month	Every hour the first of each month	CRON [0 0 * 1 * ?]	-	×
0	Every working day at 5	Every working day at 5	CRON [0 0 5 ? * 2-6]	-	×
0	Execute now	Execute now	RunNow		×
0	every day of july	every day of july	CRON [0 0 0 * 7 ?]	-	×

Figure 4 - 70: Schedules table without the deleted schedule

WHAT'S NEXT

Now that the *Schedules* table is fully described, the following section will present the *Scheduled Jobs* table, in which you can combine a job and a schedule previously created.

4.9.4 Scheduled Jobs table

The *Scheduled Jobs* table lists the scheduled jobs. A scheduled job is the association of a job and a schedule. Once combined, the job will run at the date and time specified in the schedule. Both the job and the schedule must be enabled, along with the scheduled job, for the scheduled job to be executed.

Enabled	Name	Description	Info	Edit	Delete
0	GetArticleData_123456789@Execute now		[not ready to run]	-	×
0	InsertDataInBase_123456789@Every hour the fir		[ready to run]	-	×
0	group_2_transactions@every day of july		[ready to run]	-	×

Figure 4 - 71: Scheduled jobs table

This section is separated in the following paragraphs:

- Description of the Scheduled Jobs table
- Creating a new scheduled job
- Editing a scheduled job
- Deleting a scheduled job

DESCRIPTION OF THE SCHEDULED JOBS TABLE

For each scheduled job, the Scheduled Jobs table includes the following columns:

• **Enabled**: This column displays a green bullet if the scheduled job is enabled and a red bullet if the scheduled job is disabled. Only enabled scheduled jobs are executed.

Disabled scheduled jobs will not be executed, even if they combine an enabled schedule and an enabled job.



Figure 4 - 72: Scheduled Jobs table Enabled column



You can change a scheduled job's state (enable or disable it) by editing the scheduled job. For more information on scheduled job edition, see "Editing a scheduled job" on page 4-68.

• **Name**: This is the name of the created scheduled job, automatically generated by the *Scheduler* depending on the combined job and shedule.

	Name
GetAi	rticleData_123456789@Execute now
Inser	tDataInBase_123456789@Every hour the fir
group	p_2_transactions@every day of july

Figure 4 - 73: Scheduled jobs table Name column

- Description: This is the description of the created scheduled job, filled by the user at its creation.
- Info: This column displays information about the scheduled job's ability to be executed:
 - first, if the scheduled job is ready or not ready to run,
 - and, if applicable, the reason why the job is not ready to run (if it is the job or the schedule that is disabled). Nothing is written in this second part if it is the scheduled job itself that is disabled.

Info
[not ready to run]
[ready to run]
[ready to run]

Figure 4 - 74: Scheduled jobs Info column

Edit: This column contains a button state that allows you to edit the scheduled job. For more information on scheduled job edition, see "Editing a scheduled job" on page 4-68.



 Delete: This column contains a button X that allows you to delete the scheduled job.
 For more information on scheduled job deletion, see "Deleting a scheduled job" on page 4-70.

CREATING A NEW SCHEDULED JOB

The *Scheduled Jobs* table allows you to create a new scheduled job. Find below the procedure that describes how to create a scheduled job.

To create a scheduled job

1 Click the **New Scheduled Job** button located beneath the *Scheduled Jobs* table, to define a new scheduled job.



Figure 4 - 75: Scheduled job creation button

Once clicked, a window appears in front of the page:

Description:			
	Job		Schedule
Association:	GetArticleData_123456789 GetXMLData_123456789 InsertDataInBase_123456789 SearchGoogle_Convertigo group_2_sequences group_2_transactions	*	Every hour of the first of each month Every working day at 5 Execute now every day of july
		*	



- 2 You have to fill in some information to define the scheduled job. Parameters to set are:
 - **Name**: A name will automatically be generated for this scheduled job by the *Scheduler*, depending on the combined job and schedule.
 - **Description**: An optional description or notes concerning the scheduled job.
 - Enabled: Checkbox that allows you to define if the scheduled job is enabled (checked checkbox) or disabled (not checked checkbox). Only enabled
scheduled jobs are executed. Disabled scheduled jobs will not be executed, even if they combine an enabled schedule and an enabled job. This setting is by default set to enabled.

- Association: This is the main configuration of the scheduled job, through which you can associate the job and the schedule. It presents two lists: Job and Schedule, each enumerating all existing jobs/schedules. You have to configure the Scheduled Job by associating a job and a schedule, simply by selecting the job and the schedule in each of the two lists.
- 3 When you finish specifying the scheduled job, click on the **Save** button to create it:

Description:	execute the group of		
Enabled:	V		
	Job		Schedule
Association:	GetArticleData_123456789 GetXMLData_123456789 InsertDataInBase_123456789 SearchGoogle_Convertigo	*	Every hour of the first of each month Every working day at 5 Execute now every day of july
	group_2_sequences group_2_transactions	+	

Figure 4 - 77: Saving a new scheduled job

4 After clicking on the **Save** button, a message window appears to inform that the object was correctly saved:

×
ectly saved.
Ok

Figure 4 - 78: New scheduled job created

5 Click on the **Ok** button to close the popup window. The new scheduled job appears in the *Scheduled Jobs* table:



Enabled	Name	Description	Info	Edit	Delete
0	GetArticleData_123456789@Execute now		[not ready to run]	-	×
0	InsertDataInBase_123456789@Every hour the fir		[ready to run]	-	×
0	group_2_sequences@Every working day at 5	execute the group of 2 sequences every ([ready to run]	-	×
0	group_2_transactions@every day of july		[ready to run]	-	×



Scheduled jobs that use an enabled *Run Now* schedule start immediately after creation (or when enabled). Once triggered, such a scheduled job auto-disables itself.

EDITING A SCHEDULED JOB

In the *Scheduled jobs* table, the **Edit** column contains a button that allows you to edit an existing scheduled job.

To edit an existing scheduled job

1 Click on the **Edit** button of the scheduled job line.

A popup window opens:

Description: Enabled:		
	Job	Schedule
Association:	GetArticleData_123456789 GetXMLData_123456789 InsertDataInBase_123456789 SearchGoogle_Convertigo group_2_sequences group_2_transactions	Every hour of the first of each month Every working day at 5 Execute now every day of july
		•

Figure 4 - 80: Scheduled job edition

2 Change the values of the scheduled job settings you want to edit. For example, enable the scheduled job by checking the **Enabled** checkbox:

Name:	GetArticleData_1234	
Description:		
Enabled:	V	
	Job	Schedule
Association:	GetArticleData_123456789 GetXMLData_123456789 InsertDataInBase_123456789 SearchGoogle_Convertigo group_2_sequences	Every hour of the first of each month Every working day at 5 Execute now every day of july
	group_2_transactions	Ψ.

Figure 4 - 81: Edited scheduled job

- 3 Click on the **Save** button to save the updated values or click on the **Cancel** button if you want to cancel the schedule update.
- 4 After clicking on the **Save** button, a message window appears to inform that the object was correctly saved:

Information	×
The element was cor	rectly saved.
	Ok

Figure 4 - 82: Scheduled job updated

5 Click on the **Ok** button to close the popup window. The updated scheduled job appears in the *Scheduled Jobs* table:



Enabled	Name	Description	Info	Edit	Delete
0	GetArticleData_123456789@Execute now		[currently running] [not ready to run]	-	×
0	InsertDataInBase_123456789@Every hour the fir		[ready to run]	-	×
0	group_2_sequences@Every working day at 5	execute the group of 2 se	[ready to run]	-	×
0	group_2_transactions@every day of july		[ready to run]	-	×





Scheduled jobs that use an enabled Run Now schedule start immediately when enabled. Here, the updated scheduled job is currently running, it is displayed in the **Info** column. Once triggered, such a scheduled job autodisables itself, this is why the bullet of the **Enabled** column remains red.

DELETING A SCHEDULED JOB

In the *Scheduled Jobs* table, the **Delete** column contains a button that allows you to delete an existing scheduled job.

To delete an existing scheduled job

1 Click on the 💥 button of the scheduled job line.

A popup window opens, asking for a confirmation before deleting the scheduled job:

nformation	
Are you sure you want to delete : InsertDataInBase_	_123456789@Every hour of the first of each mon
	Yes No

Figure 4 - 84: Scheduled job deletion confirmation

- 2 Click on **Yes** to delete the selected scheduled job or click on **No** to abort the scheduled job deletion.
- 3 After clicking on the **Yes** button, the scheduled job is deleted from the *Scheduled jobs* table:

Enabled	Name	Description	Info	Edit	Delete
0	GetArticleData_123456789@Execute now		[not ready to run]		×
0	group_2_sequences@Every working day at 5	execute the group of 2 se	[ready to run]	-	×
0	group_2_transactions@every day of july		[ready to run]		×

Figure 4 - 85: Scheduled Jobs table without the deleted scheduled job



4.10 Keys

The Left menu contains a link to the *Keys* page. The *Keys* page permits you to add keys and review active keys.

More information on the Keys page is coming soon.

4.11 Global symbols

The Left menu contains a link to the *Global symbols* page. The *Global symbols* page permits you to manage *Global symbols*.

More information on the *Global symbols* page is coming soon.





This chapter contains all appendixes related to the Operating Guide:

- Convertigo workspace
- Connector monitoring windows
- Differences between Convertigo Server and Convertigo Cloud in Administration Console
- Analytics in Convertigo Server
- SQL drivers and related jar files



A.1 Convertigo workspace

Convertigo 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 Convertigo workspace.

This section presents the Convertigo workspace, as well as information about setting this directory or updating it:

- Presentation of Convertigo Workspace
- Setting Convertigo workspace
- Updating Convertigo workspace

A.1.1 Presentation of Convertigo Workspace

The Convertigo workspace is a directory external to the installation directory into which the user has write permissions. This workspace contains all Convertigo user data: the projects, the configuration files, the logs, etc.



In case of a Convertigo Studio, the user is the Convertigo developper running and using the Studio. In case of a Convertigo Server, the user is the logged account running the Server.

The default location of the Convertigo workspace depends on the Convertigo type (Studio/ Server), the Operating System and the Application Server (for Servers). See the appropriate installation documentation for each case.

The Convertigo workspace contains the following folders and data:

- **cache**: this folder contains the file cache repository, including the cached responses,
- certificates: this folder contains the Convertigo installed certificates (client or server),
- **configuration**: this folder contains the configuration files for the Convertigo engine,
- databases: this folder contains HSQLDB databases files,
- logs: this folder contains the Convertigo engine log files,
- minime: this folder contains the default legacy emulator configurations as well as Convertigo licenced keys,
- projects: this folder contains the Convertigo projects,



In case of a Convertigo Studio, the configurable workspace folder is the Eclipse workspace, where the projects are located. That means that the projects folder is empty in the Studio's Convertigo workspace. The Studio's Convertigo workspace, containing all the described folders, is located inside the Eclipse workspace, in the .metadata\.plugins\com.twinsoft.convertigo.studio folder.

- studio: this folder contains some Studio specific configurations,
- xulrunner-work: this folder contains the work directory of embedded xulrunner for HTML

connector.



The Convertigo workspace should be different for each installed/ running Convertigo: two Convertigo, for example a Studio and a Server, or two Servers, should never share a workspace directory.

A.1.2 Setting Convertigo workspace

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

- JVM property
- Installation wizard

JVM PROPERTY

The Convertigo workspace path is provided through a JVM property:

-Dconvertigo.cems.user_workspace_path= <absolute_path_to_the_convertigo_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 Convertigo workspace:

cems.user_workspace_path=
<absolute_path_to_the_convertigo_workspace_directory>

INSTALLATION WIZARD

If you are installing Convertigo Studio with installation package (on Windows), the Eclipse workspace path is configurable after installation at the Studio's first start.

If you are installing Convertigo Server with installation packages (on Windows or on Linux/ Tomcat), the Convertigo workspace path is configurable through the installation wizard.

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

A.1.3 Updating Convertigo workspace

It is possible to update the Convertigo workspace directory after installation, depending on the Operating System and the Application Server. See the appropriate installation documentation depending on the Operating System and the Application Server, or find below other cases.

LINUX + WEBSPHERE CONFIGURATION

If you are using WebSphere application server, and if you want to change the workspace directory after Convertigo installation, the Convertigo 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_workspace_directory>

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

A.2 Connector monitoring windows

Two windows are connector monitors: the *Legacy connector monitor* and the *HTML connector monitor*.

This section presents both windows as well as the requirements needed for displaying these windows on several server environments:

- Presentation of the connector monitoring windows
- Activate the connector monitors on a Windows-based system
- Activate the connector monitors on a Linux-based system

A.2.1 Presentation of the connector monitoring windows

Convertigo Server includes two connector monitoring windows:

- Legacy connector monitor
- HTML connector monitor

LEGACY CONNECTOR MONITOR

The *Legacy connector monitor* is a window that is used for monitoring the screens that are reached by the legacy connectors. It displays a graphical rendering of the legacy connectors currently in use in the active contexts of the Convertigo Server.

It is not instantiated by default after a Convertigo Server installation and has to be activated.

HTML CONNECTOR MONITOR

The *HTML connector monitor* is a window that is used for monitoring the pages that are reached by the HTML connectors. It displays a graphical rendering of the HTML connectors currently in use in the active contexts of the Convertigo Server.

It is a necessary tool for the HTML connector to work in Convertigo Server. It is not always visible but it always exists after a Convertigo Server installation (using the Windows installer of the Linux installation file).



Find more information about the activation and display of both connector monitoring windows in "Activate the connector monitors on a Windowsbased system" on page A - 5 and "Activate the connector monitors on a Linux-based system" on page A - 13.

A.2.2 Activate the connector monitors on a Windows-based system

This section presents the common configuration to perform on Windows intalled Convertigo Server before activating each of the monitors:

- Interaction with desktop
- HTML connector monitor display
- Legacy connector monitor display



INTERACTION WITH DESKTOP

After installing a Convertigo Server on a Windows operating system, the Convertigo Server is installed as a service. To be able to display the connector monitors, the service has to be authorized to interact with the desktop.

Activate service's interaction with desktop on Windows

1 Open the properties window of the Convertigo Server service:

Convertigo Server P	roperties (Local Computer)
General Log On	Recovery Dependencies
Service name:	ConvertigoServer
Display name:	Convertigo Server
Description:	Convertigo Server - http://www.convertigo.com
Path to executable ''C:\Program Files	e: (x86)\Convertigo\Convertigo Enterprise Mashup Server\tc
Startup type:	Automatic
Help me configure	service startup options.
Service status:	Started
Start	Stop Pause Resume
You can specify the from here.	e start parameters that apply when you start the service
Start para <u>m</u> eters:	
	OK Cancel Apply

Figure A - 1: Convertigo Server service properties

2 You can also find a shortcut icon in Windows taskbar, named *Convertigo Server*. Rightclick on this icon and select **Configure...** option:

🍗 Convertigo Serv	ver Properties			
General Log On	Logging Java Startup Shutdown			
Service Name:	ConvertigoServer			
Display <u>n</u> ame:	Convertigo Server			
Description:	Convertigo Server - http://www.convertigo.com			
Path to executal	ole:			
"C:\Program File	"C: \Program Files (x86) \Convertigo Mobility Platform \Convertigo Enterpris			
Startup typ <u>e</u> :	Startup type: Automatic			
Service Status:	Started			
<u>S</u> tart	Stop Pause Restart			
	OK Annuler Appliquer			

Figure A - 2: Convertigo Server Tomcat Configurator

3 Switch to the **Log On** tab:



Convertigo Server Properties (Local Computer)			
General Log On Recovery Dependencies			
Log on as:			
Local System account Allow service to interact with desktop			
Password:			
Confirm password:			
Help me configure user account log on options.			
OK Cancel Apply			

Figure A - 3: Log On tab of Convertigo service properties

4 Check the Allow service to interact with desktop option:

Convertigo Server Properties (Local Computer)							
General Log On Recovery Dependencies							
Log on as:							
 Local System account Allow service to interact with desktop 							
Password:							
Confirm password:							
Help me configure user account log on options.							
OK Cancel Apply							

Figure A - 4: Activation of the desktop interaction on the Log On tab of Convertigo service properties

5 Click on the **OK** button to validate the option and close the window.

You may have to restart the service for the property to be completely taken into account.

HTML CONNECTOR MONITOR DISPLAY

Now that the service is authorized to interact with the desktop, any transaction execution using an HTML connector displays the *HTML connector monitor*.

Depending on Windows version, the monitor can appear directly on the desktop or popup indicates that the program wants to display a message. While accessing this message, the *HTML connectos monitor* appears:



vinsoft	46EA78EA023EE178E1219E0E6EEB	4495 default			
TOER/GEAUE3FT1/OE1619EUE0FT09H395_00F3UE		HT	Twinsoft Convertigo 4 ML Connector Monitor		

Figure A - 5: HTML connector monitor

Every context that will use an HTML connector will the be displayed in the same monitor, added in a new a tab:

Twinsoft 46EA78EA023FF178E	E1219E0E6FFB4A95_default 46EA78EA023FF178E1219E0E6FF	FB4A95_default
Ges S	Global Company Search Website Ionu	Account settings
	Welcome 'convertigo', y Customer	ou are now logged in. Search
	Business	Search
	copyright@2012. GlobalCompanySearchWebsite. P	overed by Convertigo
4	123	(6)

Figure A - 6: Several contexts in HTML connector monitor



This window must never be closed as it would cause Convertigo Server to be killed.

LEGACY CONNECTOR MONITOR DISPLAY

To display this monitor, an option has to be configured in the Administration Console *Configuration* page, see "*Real-time activity monitoring*" on page 4-20.

After restarting the server, the *Legacy connector monitor* will appear next to the *HTML connector monitor*.



🖆 Twinsoft Convertigo connectors monitor	_ 🗆 🖂
Session ID: 16420F775FF44B262D29C82794721CBE_default	
INTEXALU	
Nous sommes le 27/08/06	
. Vous êtes sur l'écran OPADEV000N Entres votre nom et votre mot de passe	
L:15 C:27 CNX	

Figure A - 7: Legacy connector monitor

Every context that will use a legacy connector will the be displayed in the same monitor, next to others:

Session ID: 1642	017751144826202908279	ATZTCBE_GOTAUN	Session ID: D4	29081900141016209651385	C63105A_default
HARDS1/E	Gestion Artisies	21/02/09 10:20:44	HMR0017E	destion Articles	01700/D0 10:20:44
MONER V 10.5APA		SAPA OPEDEV200H	MOVEX V 10.94PM		SAPA OPADEVDOD
HOVER I BAPA BUILDING BY	STEM FRANCE (IMPIG)205004	891034	HOVER 7, SAPA BUILDING	STATEN FRANCE (INPAC) 888204	89100-
Coop artiste POID1930	84		Code artisle PD1D10	1004	
New			Aum		
Designation			Designation		
fumero de plan			Numes de plan.		
11 a fut 20	Pap atticks.	TTW SOF	Restort	Res anti-the.	TTM BOF
Type artiste	Code fab. raine	1 D	Troe arbiele	Code fab. (set)	et 0 -
Groupe erticle.	- Groupe approvi	_ w	Groupe atticite.	Groupe approx	1 B.P
Groupe produit.	Groupe blane (R) per ett of	4 +>>>	Groupe produit.	Groupe blens (6) per ett is	pt P777
Betteur setiett	4 BLMO		Besteur estivit	A BLANC	
Nr 19912500	GRIN NY CHT.	<u>0</u>	No revision	Geré en OUT	<u> </u>
Gern en stock 1	ent pretionili	1 D	Off an stock 1	Het anstien/ h	ot 🖪
ent conste att. 1	wet runerot. In	1 D	set compts ath. 1	Net inumeration	et 0
WW de tales	Unite (mp.ut)	1	WW dv base	Unite remi.ut	i i 0 →
rs-Fin F4+1	ncia: Po-Refficher	-	PD-Fin F4	-invite #G-Rhafflicher	
12-Retout		F24-Autime touches	F19-Retour		F24-Autres touthe

Figure A - 8: Several contexts in Legacy connector monitor



This window must never be closed as it would cause Convertigo Server to be killed.

A.2.3 Activate the connector monitors on a Linux-based system

After installing a Convertigo Server on a Linux operating system, the *HTML connector monitor* is automatically instantiated in an XVNC.

To display the HTML connector monitor, you can directly launch a VNC player on port 5903.

To display the *Legacy connector monitor*, an option has to be configured in the Administration Console *Configuration* page, see "*Real-time activity monitoring*" on page 4-20.

After restarting the server, the *Legacy connector monitor* will appear next to the *HTML connector monitor*.



These windows must never be closed as it would cause Convertigo Server to be killed.



A.3 Differences between Convertigo Server and Convertigo Cloud in Administration Console

In Convertigo Cloud, a number of functionalities (pages or configurations) of the Administration Console are not accessible. This appendix lists these differences.

- Pages
- Configuration categories and settings

A.3.1 Pages

The following list shows the pages of the Administration Console that are not available at all in Convertigo Cloud:

Keys page.

A.3.2 Configuration categories and settings

Configuration page of the Administration Console includes categories, in which is proposed the edition of settings.

This first list shows the categories of *Configuration* page that are not available at all in Convertigo Cloud's Administration Console:

- Legacy Carioca portal management category,
- Billing system category.

This second list shows the settings that are not available in Convertigo Cloud's Administration Console, from visible categories of *Configuration* page:

- in Main configuration parameters category:
 - Convertigo Server application URL,
 - (Linux only) Launch Xvnc server using DISPLAY environment variable at startup,
 - Linux only) Depth parameter for the Xvnc, default is 16,
 - (Linux only) Geometry parameter for Xvnc, default is 320x240,
 - Enable the compatibility mode for projects data (required for JSP usage); engine restart required,
- in **Log management** category:
 - Log4J default appender,
 - Log4J default appender file,
 - Log4J default appender layout,
 - Log4J audit appender file,
 - Log4J audit appender layout,
- in **HTML parser configuration** category:
 - > XulRunner path,

- > XulRunner work directory,
- in **Cache management** category:
 - Cache manager class,
 - File cache directory.



For more information about the pages or settings described in this appendix, see "Using Convertigo Administration Console" on page 4-1.



A.4 Analytics in Convertigo Server

In Convertigo Server, an analytics feature is available.

This section presents the analytics feature, as well as more detailed information:

- Analytics feature
- Ticket content

A.4.1 Analytics feature

The analytics feature is available in Convertigo Server, as well as for the Convertigo engine embedded in the Studio, but not in Convertigo Cloud. It can be activated in the *Configuration* page of the Administration Console, in *Analytics* tab.

The analytics feature consists in writing in a database one entry, also known as **ticket**, for each executed transaction or sequence. This is useful to monitor the Convertigo Server's activity. The analytics feature produces the raw data, but the management and treatment of these data has to be manually performed and personnalised by each Convertigo administrator.

A.4.2 Ticket content

For each execution of a transaction or sequence, a ticket is inserted in the database. The Ticket table contains the following columns:

Column name	Туре	Description	
id	bigint(20) PK	The primary key of the record, it is an auto-incremented integer.	
clientlp	varchar(255)	The IP address of the client that called the transaction or sequence. In the case of a transaction or sequence called by a <i>Call Transaction</i> or <i>Call Sequence</i> step, the IP address is 127.0.0.1.	
connectorName	varchar(255)	The name of the connector containing the executed transaction, in case of a transaction. Empty in the case of a sequence.	
connectorType	varchar(255)	The type (the name of the Java class) of the connector containing the executed transaction, in case of a transaction. For example: HtmlConnector, JavelinConnector, SqlConnector, HttpConnector, etc. Empty in the case of a sequence.	
creationDate	bigint(20)	The ticket creation date and time (as a timestamp).	
customerName	varchar(255)	Contains a predefined value: • CONVERTIGO Studio in case of an execution in a Studio, or • CONVERTIGO Server in case of an execution in a Server.	
projectName	varchar(255)	The name of the project containing the executed transaction or sequence.	
requestableName	varchar(255)	The name of the executed transaction or sequence.	
requestableType	varchar(255)	The type (the name of the Java class) of the executed transaction or sequence. For example: GenericSequence, HtmlTransaction, JavelinTransaction, SqlTransaction, XmlHttpTransaction, HttpTransaction, etc.	
responseTime	bigint(20)	The response return date and time (as a timestamp).	

Table A - 1: Ticket table columns

Column name	Туре	Description	
score	bigint(20)	 The score calculated for this execution. Depending on the executed object, the score is different and calculated with the following method: the number of detected screen classes for a transaction executed in one of the connectors with screen classes (Legacy, HTML), 1 for another transaction execution (SQL, HTTP,), 0 for a sequence execution. 	
userName	varchar(255)	 The username defined for the execution, which is: the value of the username property set in the context of execution of the transaction or sequence: set using the expression context.set("username", "value") retrieved using the expression context.get("username"), the Carioca portal username, of if no Carioca portal is used, the default Carioca portal username: set in the Administration Console Configuration page, in Legacy Carioca portal tab, using property Default user name, user if no previous value is set. 	

Table A - 1: Ticket table columns



A.5 SQL drivers and related jar files

The SQL connector allows to connect to several types of databases. You can refer to the SQL connector documentation in the *Reference Manual* for more information about SQL connector and its configuration properties.

The type of database accessed by the *SQL connector* can be configured through the **Driver** property. Depending on the selected driver, Convertigo can or cannot deliver the needed jar file for execution.

When possible, Convertigo directly delivers the jar file needed to run code for connecting to the database. But sometimes, it is impossible to do so, because this jar file is not free.

In this case, Convertigo provides a fake jar instead, already declared in the software. When trying to execute, a log is displayed in the engine logs to warn you about this.

To run your SQL connector correctly, you only need to:

- get the correct jar file by your own,
- rename it to match the Convertigo jar file name,
- replace the fake jar in Convertigo by the real one:
 - in Convertigo Studio, jar files are located in <Convertigo Studio installation folder>\plugins\com.twinsoft.convertigo.studio_x.y.z.v12345\lib
 - in Convertigo Server, jar files are located in <Convertigo Server installation folder>\tomcat\webapps\convertigo\WEB-INF\lib
- and re-start Convertigo (Studio or Server).

The following table shows the matches between SQL Driver, jar file, and their presence or not in Convertigo for running:

Driver	Database	jar file name	Delivered
sun.jdbc.odbc.JdbcOdbcD river	JDBC-ODBC bridge for accessing ODBC databases	rt.jar (delivered in Java)	true
com.ibm.as400.access.AS 400JDBCDriver	IBM AS400 database	jt400.jar	true
com.mysql.jdbc.Driver	MySQL database	mysql-connector.jar	false (fake jar)
net.sourceforge.jtds.jdbc. Driver	Microsoft SQL Server database	jtds-1.2.2.jar	true
org.hsqldb.jdbcDriver	HSQLDB database	hsqldb.jar	true
com.ibm.db2.jcc.DB2Drive r	IBM DB2 Server database	db2jcc.jar + db2jcc-licence.jar	false (fake jars)
oracle.jdbc.driver.OracleD river	ORACLE database	ojdbc5.jar	true
org.mariadb.jdbc.Driver	MariaDB database, community-developed fork of MySQL	mariadb-java-client-1.1.3.jar	true

Table A - 2: SQL Drivers and jar files in Convertigo