# openCRX Server Installation

Version 2.6.0



www.opencrx.org

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### 1 About this Book

This book describes how to **install an openCRX Server** with the BitRock installer **on Windows or Linux** platforms. Please note that this is a guide to set up a **runtime environment** suitable for evaluation and testing purposes. It is not recommended to use this configuration for a production site.

openCRX is the leading enterprise-class open source CRM suite. openCRX is based on openMDX, an open source MDA framework based on the OMG's model driven architecture (MDA) standards. This guarantees total openness, standards compliance, a state-of-the-art component-based architecture, and virtually unlimited scalability.

#### 1.1 Who this book is for

The intended audience are openCRX administrators and advanced users interested in evaluating openCRX.

## 1.2 What do you need to understand this book

This book describes how to install openCRX with the BitRock installer, which takes care of all the tricky configuration issues for you. The prerequisites are minimal (JDK and Apache Ant) and once they are met you should have openCRX up and running in less than 5 minutes.

## 1.3 Tips, Warnings, etc.

We make use the following pictograms:



Information provided as a "Tip" might be helpful for various reasons: time savings, risk reduction, etc. - it goes without saying that we advise to follow our guides meticulously

**meticulous** \muh-TIK-yuh-luhs\, *adjective*: Extremely or excessively careful about details.



You should carefully read information marked with "Important". Ignoring such information is typically not a good idea.



Warnings should not be ignored (risk of data loss, etc.)

## 2 Prerequisites

#### 2.1 JDK 6.0

**Download and install** the Sun Java JDK 6.0 available from http://java.sun.com/javase/downloads/widget/jdk6.jsp



You really need **Java 6**, i.e. neither Java 4 nor Java 5 will work.



It is not sufficient to have a Java Runtime Environment (JRE) only. The full-blown **JDK** is required to run openCRX.



On Windows, it is a good idea to **avoid paths containing blanks** like the default installation directory ...\Program Files\....



Don't forget to set the **environment variable** JAVA\_HOME. It should point to your JDK installation directory, e.g. to D:\Java\jdk1.6.0 on Windows or opt/jdk1.6.0 on Linux.

#### 2.2 Ant 1.8.0

**Download** Ant 1.8.0 (available from http://ant.apache.org/) for your platform **and install** it by expanding the downloaded file to a directory of your choice.



Don't forget to set the **environment variable** ANT\_HOME as follows: **ANT\_HOME** should point to the installation directory of Ant, e.g. D:\apache-ant-1.8.0 on Windows or /opt/apache-ant-1.8.0 on Linux.

## 2.3 openMDX Tomcat EJB Installer

**Download** the openMDX Tomcat EJB Installer appropriate for your platform from Sourceforge: http://www.openmdx.org/downloads.htm

<u>Installer for Windows:</u>

TomcatOpenEJB-6.0.xx-windows-installer.exe

**Installer for Linux:** 

TomcatOpenEJB-6.0.xx-linux-installer.bin

The Tomcat OpenEJB Installer will install Apache Tomcat v6.0.xx including Apache's OpenEJB on your system.

### 2.4 openCRX Server Installer

**Download** the openCRX Server Installer appropriate for your platform from Sourceforge: http://www.opencrx.org/downloads.htm

Installer for Windows:

opencrxServer-2.6.x-windows-installer.exe

Installer for Linux:

opencrxServer-2.6.x-linux-installer.bin

The openCRX Server installer installs the openCRX EAR, an openCRX database (HSQLDB), openmdx-base.jar and various configuration files on your system.



Please note that HSQLDB is not exactly a high performance DBMS nor is it meant to be used as a productive DBMS for openCRX. However, it gets lots of points for "ease of installation" and that is what counts for getting off the ground fast.

Once you're comfortable with openCRX you can easily migrate to another DBMS without losing any data. More information about choosing a suitable DBMS and migrating from HSQLDB to another DBMS is available here:

- http://www.opencrx.org/faq.htm#db
- http://www.opencrx.org/faq.htm#changedb

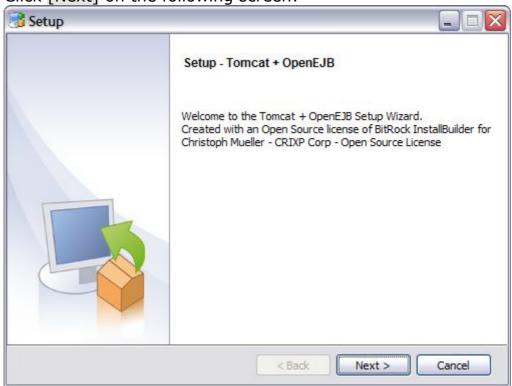
#### 2.5 Hardware

We recommend a decent CPU and at least 1GB RAM. More detailed information about the requirements of openCRX are available from http://www.opencrx.org/fag.htm#hardware

## 3 Installing openCRX Server on Windows

## 3.1 Apache Tomcat / OpenEJB

- 1. Launch the Installer TomcatOpenEJB-6.0.xx-windows-installer.exe
- 2. Click [Next] on the following screen:



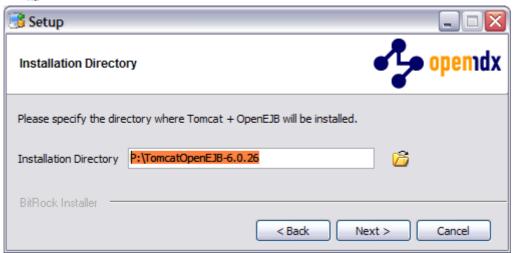
3. Accept the BSD License Agreement and click [Next] again:



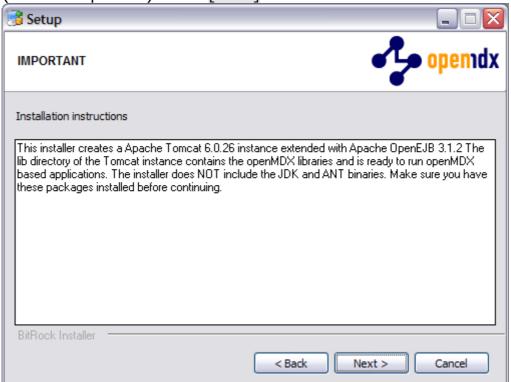
4. Choose an **installation directory** (instead of 6.0.xx you will be seeing the respective Apache Tomcat version number; the directory will be created automatically if it does not exist yet). Then click [Next] to continue:



On Windows it is a good idea to **avoid paths containing blanks** like the default installation directory ...\Program Files\...



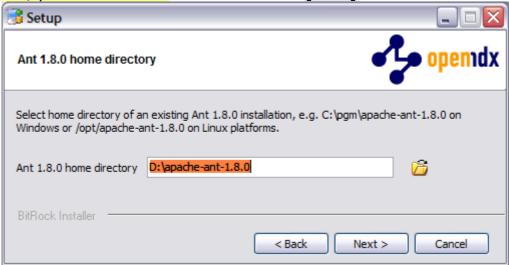
5. Please note the information on the following screen. It is assumed that you have installed JDK 1.6 (also called JDK 6.0) appropriate for your platform (see Prerequisites). Click [Next] to continue:



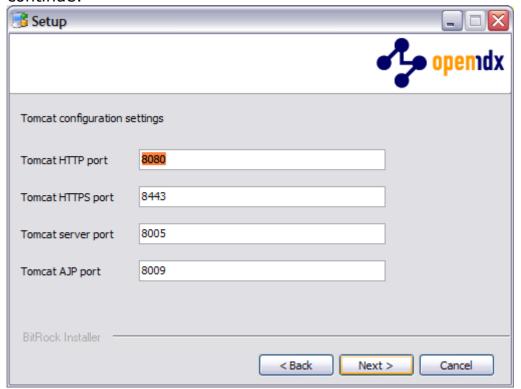
6. Select the home directory of your JDK 1.6 installation - for example **D:\Java\jdk1.6.0** - and then click [Next] to continue:



7. Select the home directory of your Ant installation – for example D:\apache-ant-1.8.0 - and then click [Next] to continue:



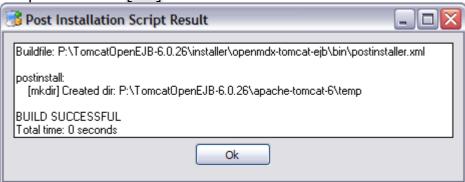
8. Enter the Tomcat ports (defaults are shown below). Please note that Tomcat does not start properly unless it has exclusive use of these ports, i.e. make sure that the chosen ports are indeed available. Click [Next] to continue:



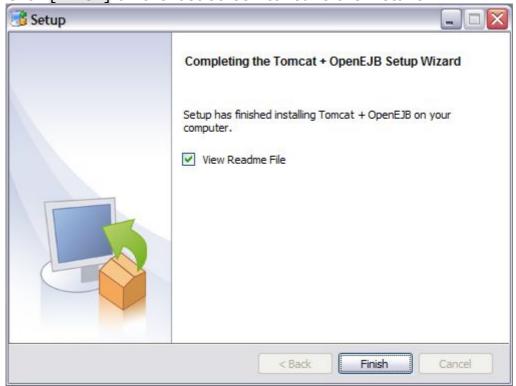
9. Finally, click [Next] to start the installation:



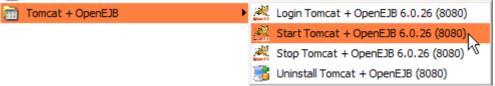
10. Once the installation is complete, verify the result of the post installation script and click [Ok]:



11. Click [Finish] on the last screen to leave the installer:

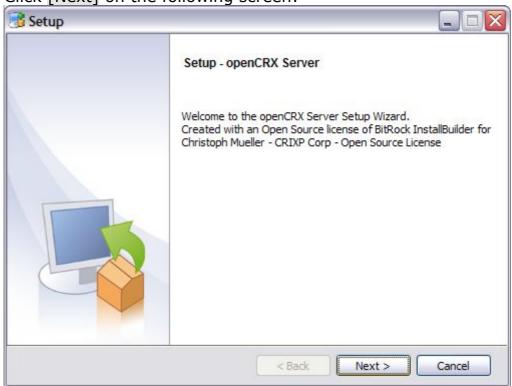


12. The installer creates a few shortcuts in your menu Start > Programs:

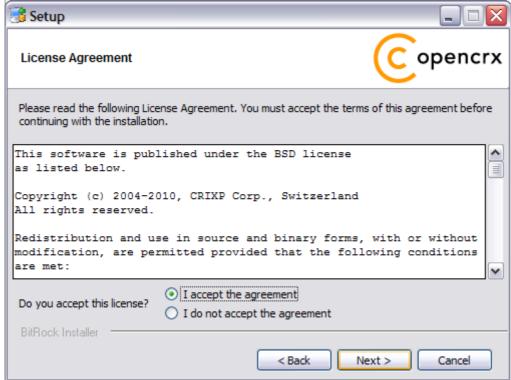


## 3.2 openCRX

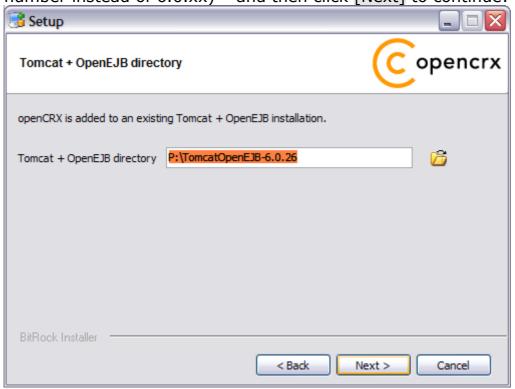
- 1. Launch the Installer opencrxServer-2.6.x-windows-installer.exe
- 2. Click [Next] on the following screen:



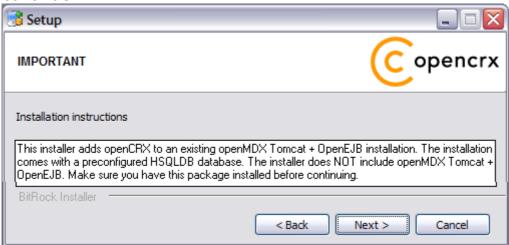
3. Accept the BSD License Agreement and click [Next] again:



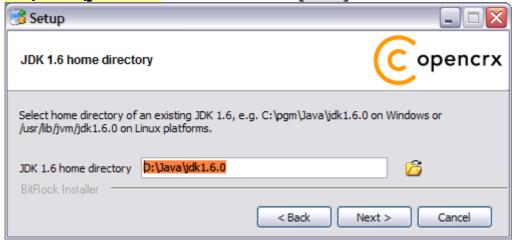
4. On the following screen, navigate to the **Tomcat installation directory** – for example **P:\openmdxOpenEJB-6.0.xx** (use the respective version number instead of 6.0.xx) – and then click [Next] to continue:



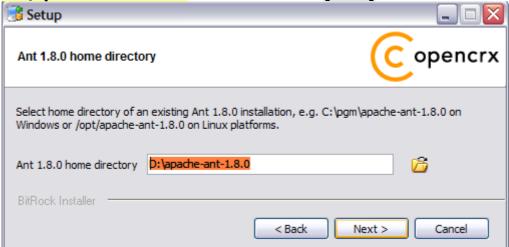
5. Please note the information on the following screen and then click [Next] to continue:



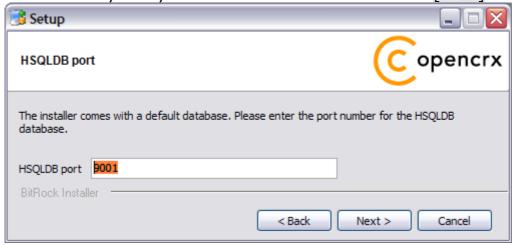
6. Select the home directory of your JDK 1.6 installation - for example D:\Java\jdk1.6.0 - and then click [Next] to continue:



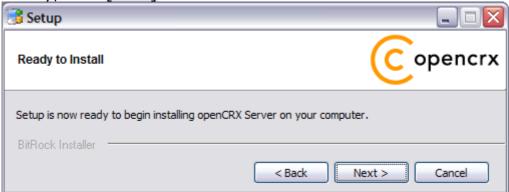
7. Select the home directory of your Ant installation – for example **D:\apache-ant-1.8.0** - and then click [Next] to continue:



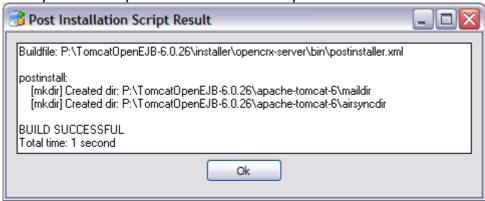
8. Enter the port number of the **HSQLDB service**. You can choose any port available on your system. The default is **9001**. Click [Next] to continue:



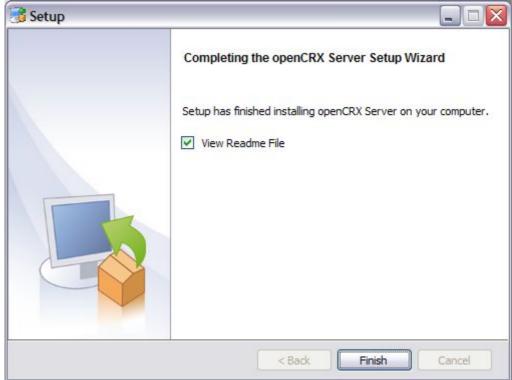
9. Finally, click [Next] to start the installation:



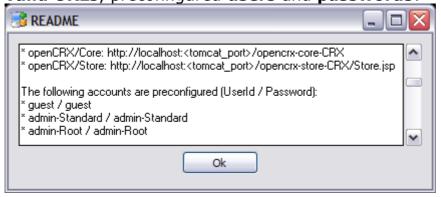
10. Verify that the post installation completed with errors and then click [OK]:



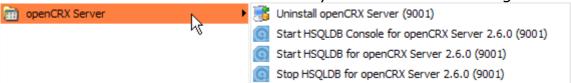
11. Once the installation is complete, click [Finish] on the last screen:



12. Finally, please carefully read the README, in particular information about **valid URLs**, preconfigured **users** and **passwords**:



13. The installer created a few shortcuts in your menu Start > Programs:



That's it for the installation. Move on to chapter 5 (Running openCRX Server).

## 4 Installing openCRX Server on Linux



There is no need to install openCRX as root. We created a user **crx** and the whole installation procedure is done as user **crx**. In case your system is GUI-less, you can launch the installer in text/console mode with the parameter --mode text.

## 4.1 Apache Tomcat / OpenEJB

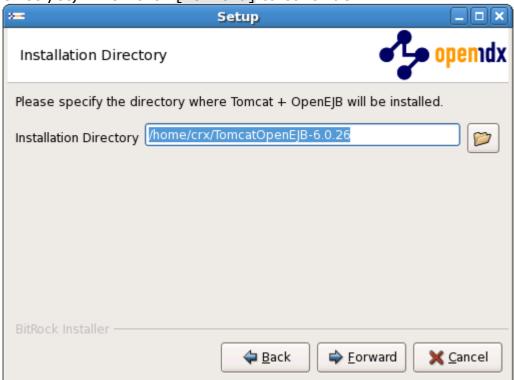
- 1. Launch the Installer TomcatOpenEJB-2.6.0-linux-installer.bin
- 2. Click [Forward] on the following screen:



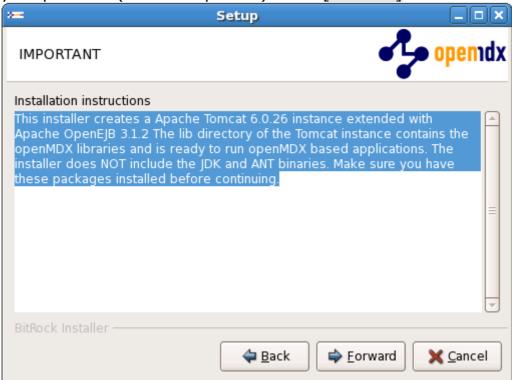
3. Accept the BSD License Agreement and click [Forward] again:



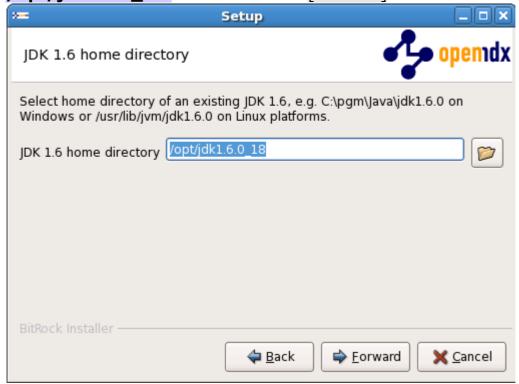
4. Choose an **installation directory** (instead of 6.0.xx you will be seeing the respective version number); it will be created automatically if it does not exist yet). Then click [Forward] to continue:



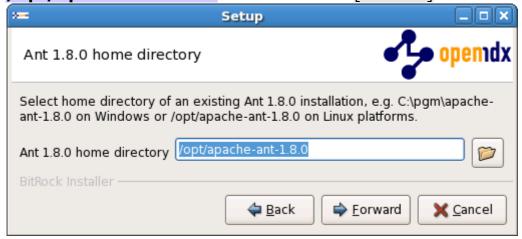
5. Please note the information on the following screen. It is assumed that you have installed JDK 1.6 (also called JDK 6.0) and Ant v1.8.0 appropriate for your platform (see Prerequisites). Click [Forward] to continue:



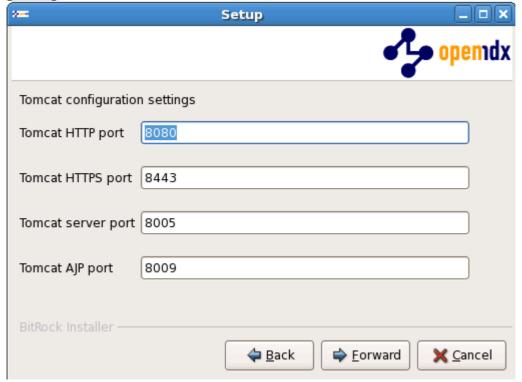
6. Select the home directory of your JDK 1.6 installation - for example /opt/jdk1.6.0\_18 - and then click [Forward] to continue:



7. Select the home directory of your Ant installation - for example **/opt/apache-ant-1.8.0** - and then click [Forward] to continue:



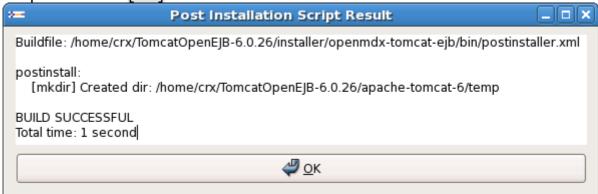
8. Enter the Tomcat ports (defaults are shown below). Please note that Tomcat does not start properly unless it has exclusive use of these ports, i.e. make sure that the ports you choose are not already in use. Click [Next] to continue:



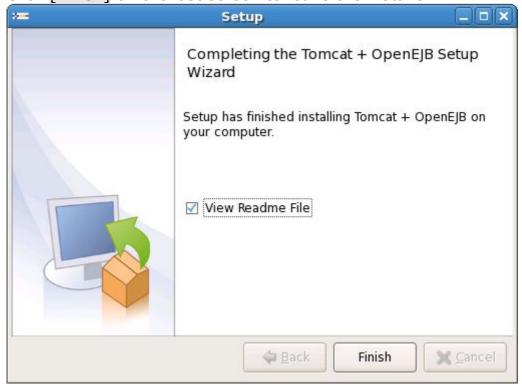
9. Finally, click [Forward] to start the installation:



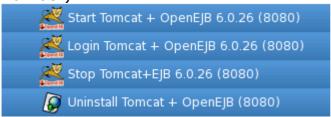
10. Once the installation is complete, verify the result of the post installation script and click [Ok]:



11. Click [Finish] on the last screen to leave the installer:



12. The installer created a few shortcuts/launchers in the installation directory (instead of 6.0.26 you will be seeing the respective Apache Tomcat version number):



## 4.2 openCRX

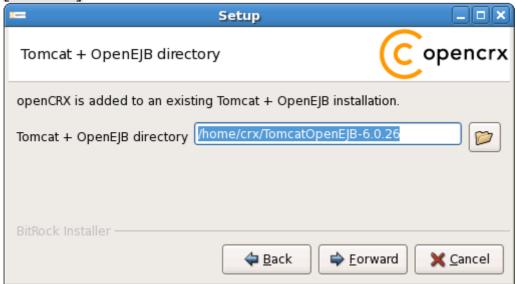
- 1. Launch the Installer opencrxServer-2.6.0-linux-installer.bin
- 2. Click [Forward] on the following screen:



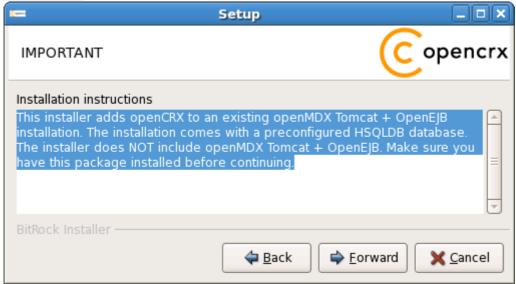
3. Accept the BSD License Agreement and click [Forward] again:



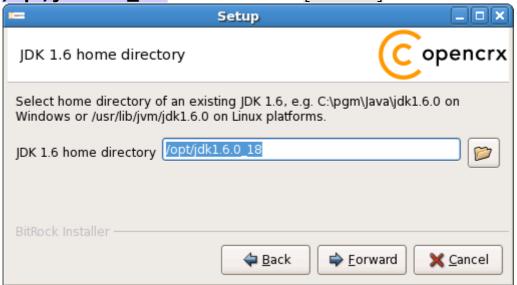
4. On the following screen, navigate to the Tomcat installation directory – for example /home/crx/TomcatOpenEJB-6.0.26 – and then click [Forward] to continue:



5. Please note the information on the following screen and then click [Forward] to continue:



6. Select the home directory of your JDK 1.6 installation - for example /opt/jdk1.6.0\_18 - and then click [Forward] to continue:



7. Select the home directory of your Ant installation – for example /opt/apache-ant-1.8.0 – and then click [Forward] to continue:



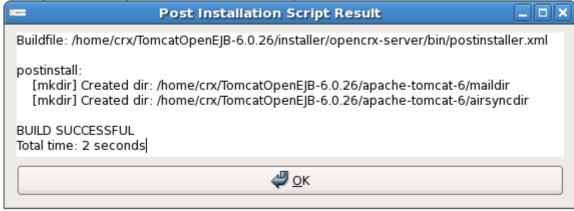
8. Enter the port number of the **HSQLDB service**. You can choose any port available on your system. The default is **9001**. Click [Forward] to continue:



9. Next, click [Forward] to start the installation:



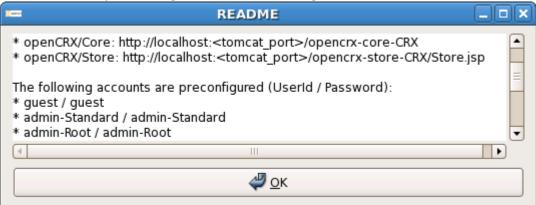
14. Verify that the post installation completed with errors and then click [OK]:



10. Once the installation is complete, click [Finish] on the last screen:



11. Finally, please carefully read the README, in particular information about **valid URLs**, preconfigured **users** and **passwords**:



12. The installer created a few shortcuts/launchers in the installation directory:



13. That's it for the installation. Move on to chapter 5 (Running openCRX Server).

## 5 Running openCRX Server

The installation process created various shortcuts in your Windows Start Menu (shortcuts/launchers in your installation directory on Linux). Your version numbers might be different depending on the Tomcat version included in the installer:

Start Tomcat + OpenEJB 6.0.26 (8080)

Stop Tomcat + OpenEJB 6.0.26 (8080)

Stop Tomcat + OpenEJB and openCRX Server (and HSQLDB)

Login Tomcat + OpenEJB 6.0.26 (8080)

Login Tomcat + OpenEJB 6.0.26 (8080)

Login Tomcat + EJB (launch browser and connect to Tomcat)

Start HSQLDB for openCRX Server 2.6.0 (9001)

Stop HSQLDB

Stop HSQLDB Console for openCRX Server 2.6.0 (9001)

Launch HSQLDB Management Console

### 5.1 Start openCRX Server

**Start openCRX Server** by launching the shortcut [Start Tomcat + OpenEJB].

## 5.2 Connect and Login

Double-click the shortcut **Login Tomcat + OpenEJB**. This will launch your default browser and take you to the Tomcat home page. In your browsers address bar you will see http://localhost:8080/ (the port may be different from 8080 depending on your selection/input during the installation). Append the string "opencrx-core-CRX/" to the above address resulting in the following URL: http://localhost:8080/opencrx-core-CRX/

If you want to define a favorite/shortcut/bookmark in your browser, use the following URL: http://localhost:8080/opencrx-core-CRX/Login.jsp (again, adapt the port 8080 as required).

If you want to load the login page in a specific language, see information at http://www.opencrx.org/faq.htm#login on how to do it.



Initialization takes place during the first login after (re)starting Tomcat, so please be patient. Subsequent logins will be very fast.

## 5.3 Stop openCRX Server

Double-click the shortcut **Stop openCRX Server** (and HSQLDB).

# **6 Next Steps**

Now that you have successfully installed openCRX you might want to have a look at some of the additional documentation published at http://www.opencrx.org/documents.htm.