# openCRX Server Installation

Version 2.1.0



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 once they are met you should have openCRX up and running in less than 5 minutes.

## 1.3   Tips, Warnings, etc.

We make use of 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 5.0

Install either the Sun Java JDK 5.0 or the BEA JRockit JDK 5.0 appropriate for your platform. The JDKs are available from the following sites:

Sun JDK 5.0:
http://java.sun.com/javase/downloads/index_jdk5.jsp

Oracle/BEA JRockit JDK 5.0:
http://www.oracle.com/technology/software/products/jrockit/index.html

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

Unless you are a Sun Java VM expert **we recommend Oracle/BEA JRockit for production use**. The reason is the following one:

If you deploy openCRX on Sun's JVM you might run into a problem that is mind-boggling (but specific to the Sun JVM). It's the dreaded

### PermGen OutOfMemoryError

Lots of people have been struggling with this error (which is by the way not related to openCRX – any application could trigger it) and as of today we have not come across a solution other than to avoid Sun's JVM (JVMs by Oracle/BEA and IBM are – by construction – not prone to this error). Do a Google search if you want to convince yourself or drop us a line if you have a solution. But be aware that increasing the  memory allocated for the permanent generation is no solution – it will only postpone the problem:

- http://my.opera.com/karmazilla/blog/2007/03/13/good-riddance-permgen-outofmemoryerror

- http://my.opera.com/karmazilla/blog/2007/03/15/permgen-strikes-back

- http://crashingdaily.wordpress.com/2007/02/04/crashing-tomcat/

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

Don't forget to set the **environment variable** JAVA_HOME

## 2.2   openMDX Tomcat LWC Installer

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

Installer for Windows:
**openmdxTomcatLwc-2.1.0-windows-installer.exe**

Installer for Linux:
**openmdxTomcatLwc-2.1.0-linux-installer.bin**

The openMDX Tomcat LWC Installer will install Apache Tomcat v6.0.14 including the openMDX Lightweight Container (LWC) on your system.

## 2.3   openCRX Server Installer

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

Installer for Windows:
**opencrxServer-2.1.0-windows-installer.exe**

Installer for Linux:
**opencrxServer-2.1.0-linux-installer.bin**

The openCRX Server Installer will install the openCRX EARs, an openCRX database (HSDQLDB), and various configuration files on your system.

## 2.4   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/faq.htm#hardware

# 3   Installing openCRX Server on Windows

## 3.1   Apache Tomcat / LWC

1. Launch the Installer openmdxTomcatLwc-2.1.0-windows-installer.exe

2. Click [Next] on the following screen:
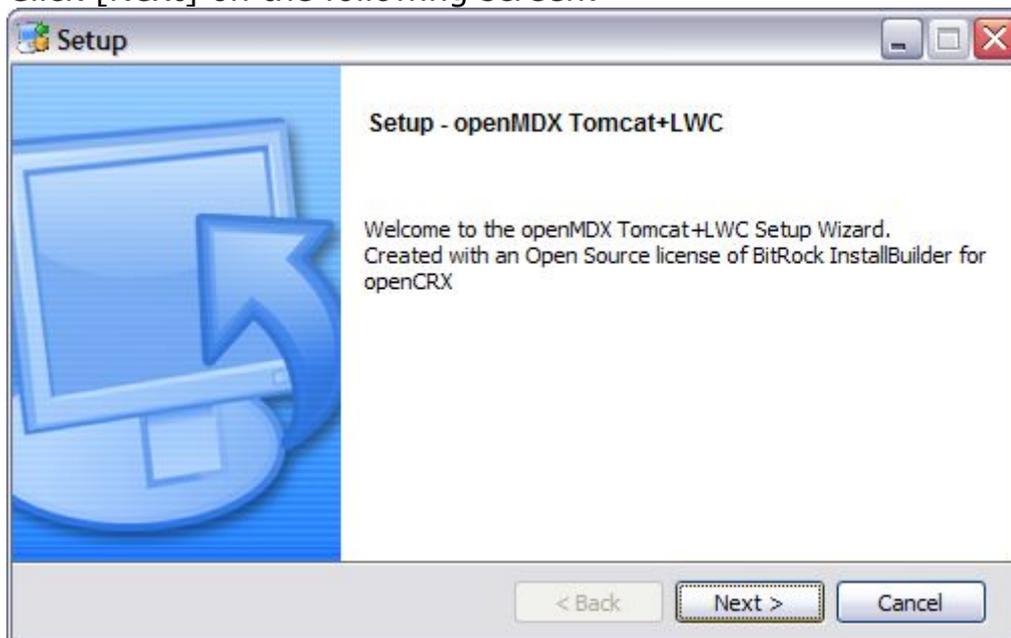
3. Accept the BSD License Agreement and click [Next] again:

4. Choose an **installation directory** (it will be created automatically if it does not exist yet). Then click [Next] to continue:
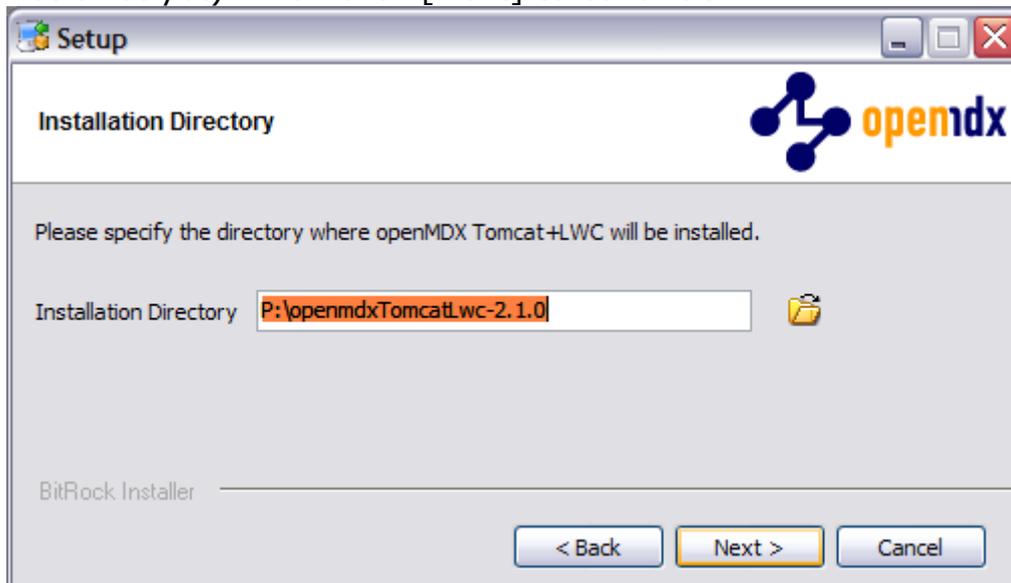


5. Please note the information on the following screen. It is assumed that you have installed JDK 1.5 (also called JDK 5.0) appropriate for your platform (see Prerequisites). Click [Next] to continue:
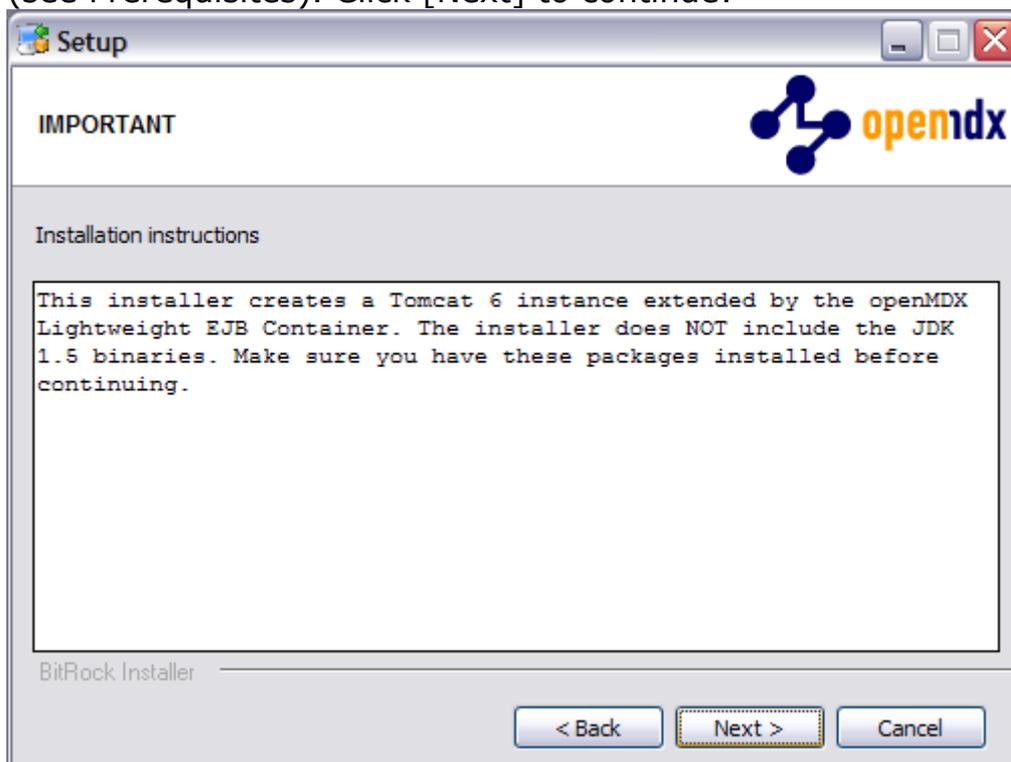
6. Select the home directory of your JDK 1.5 installation  - for example
   **D:\Java\jrockit1.5.0** - and then click [Next] to continue:



7. Enter the port number of the **Tomcat HTTP connector**. You can choose
   any port available on your system. The default is **8080**. Click [Next] to
   continue:
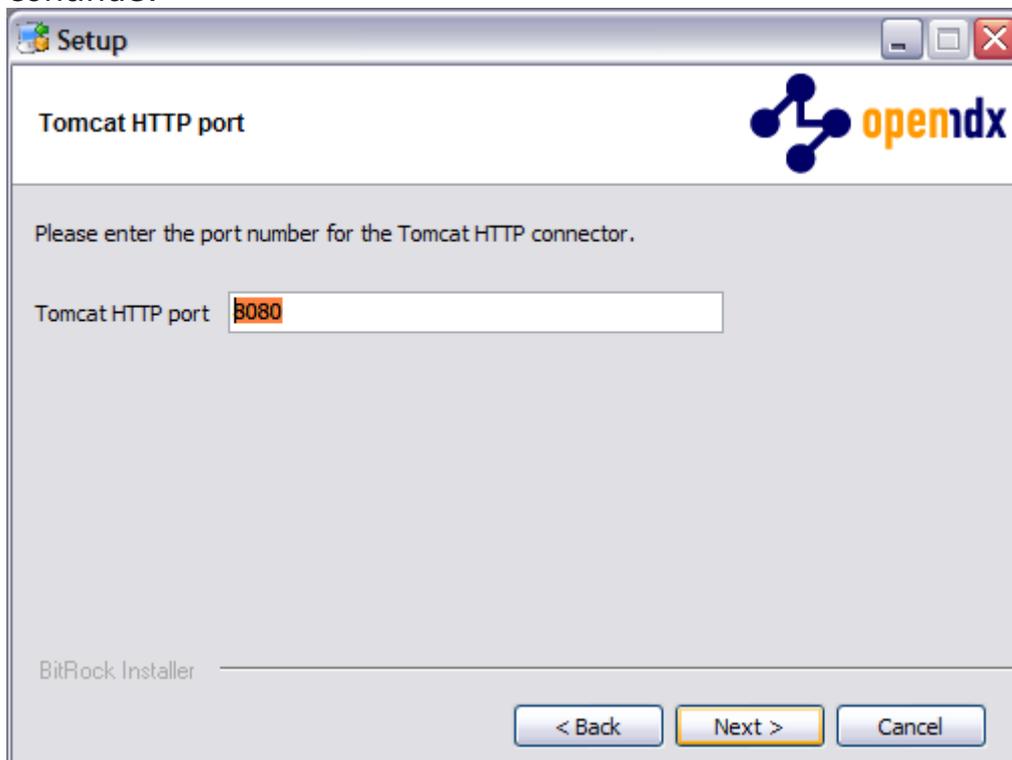
8. Similarly, enter the port number of the **Tomat HTTPS Connector**. The default is **8443**. Click [Next] to continue:
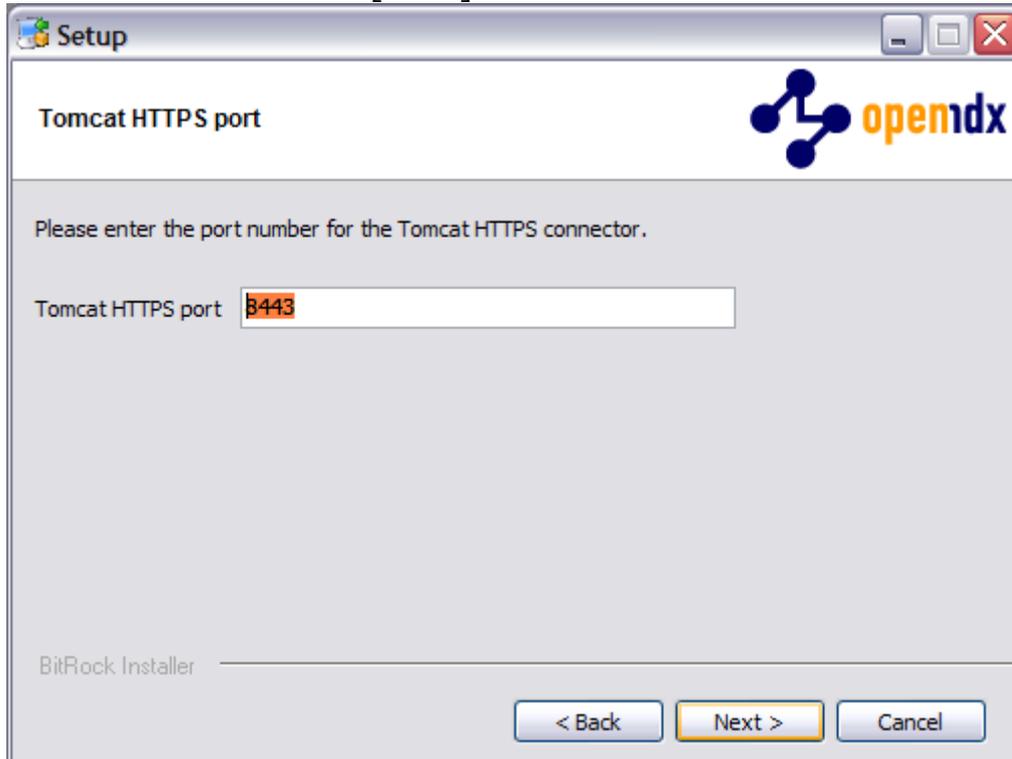


9. Next, enter the **Tomcat command port** number. The default is **8005**. Click [Next] to continue:
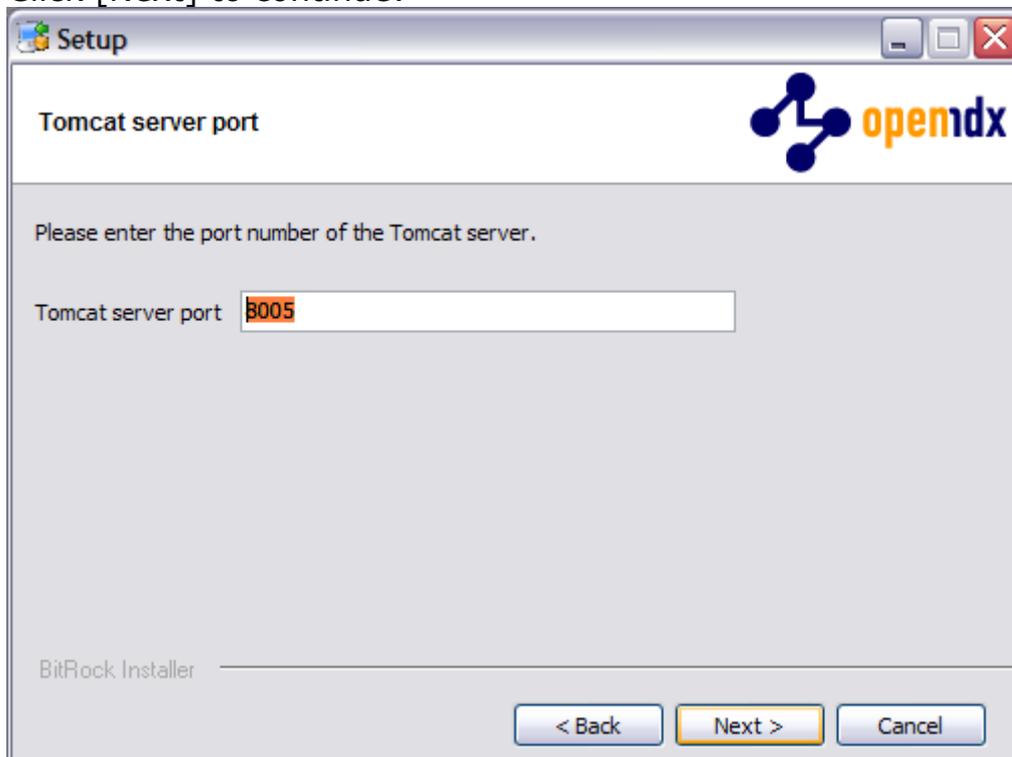
10. Enter the port number of the **Tomcat AJP connector**. The default is **8009**. Click [Next] to continue:
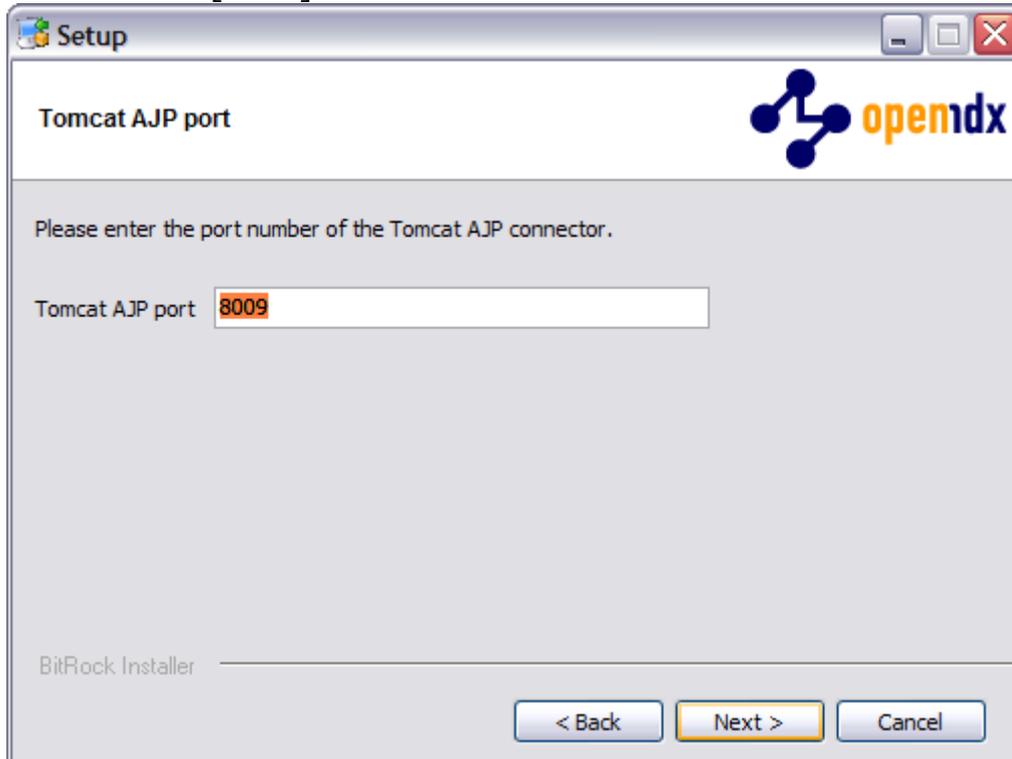


11. Finally, click [Next] to start the installation:
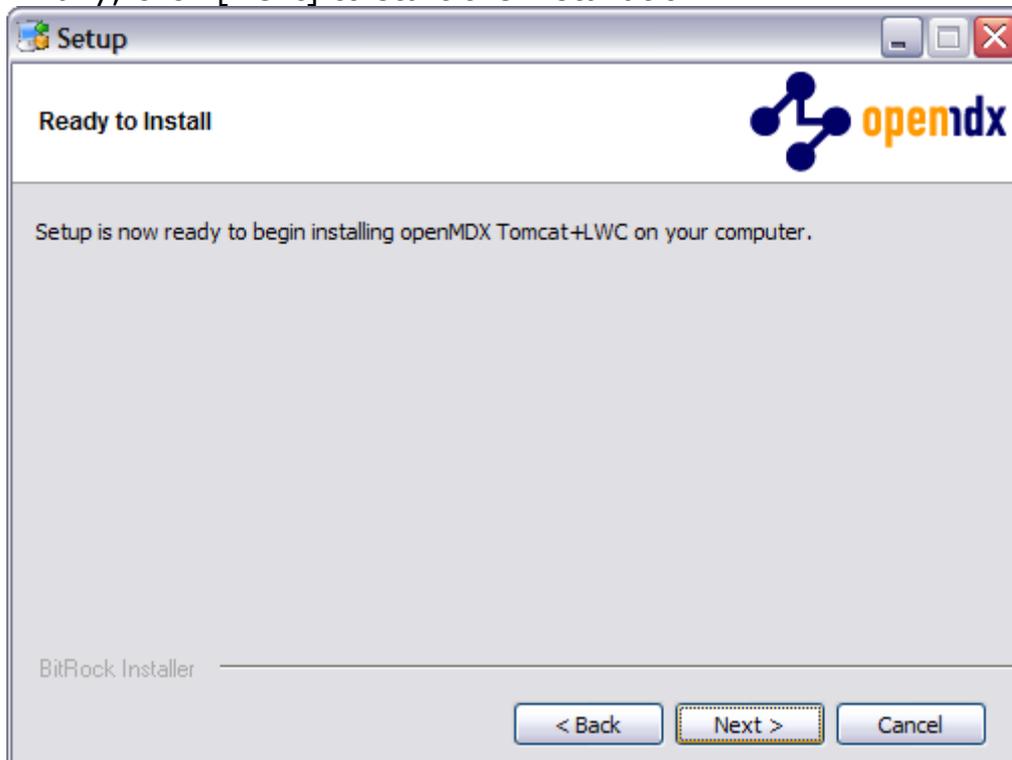
12. Once the installation is complete, verify the result of the post installation script and click [Ok]:
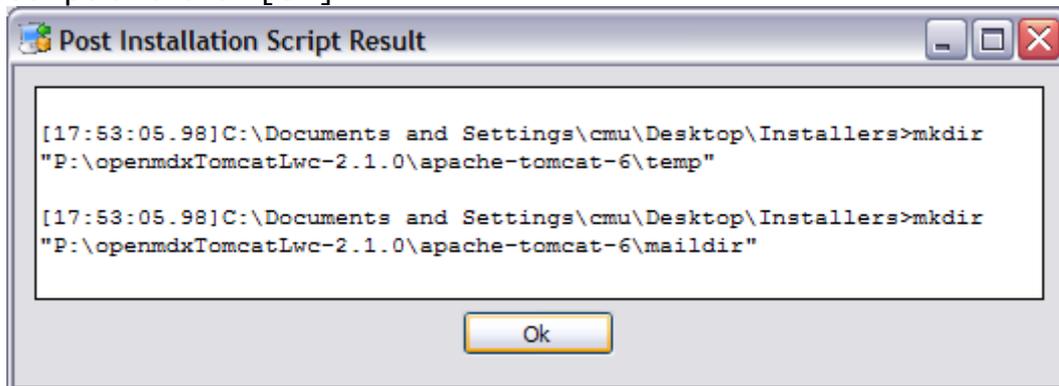


13. Click [Finish] on the last screen to leave the installer:
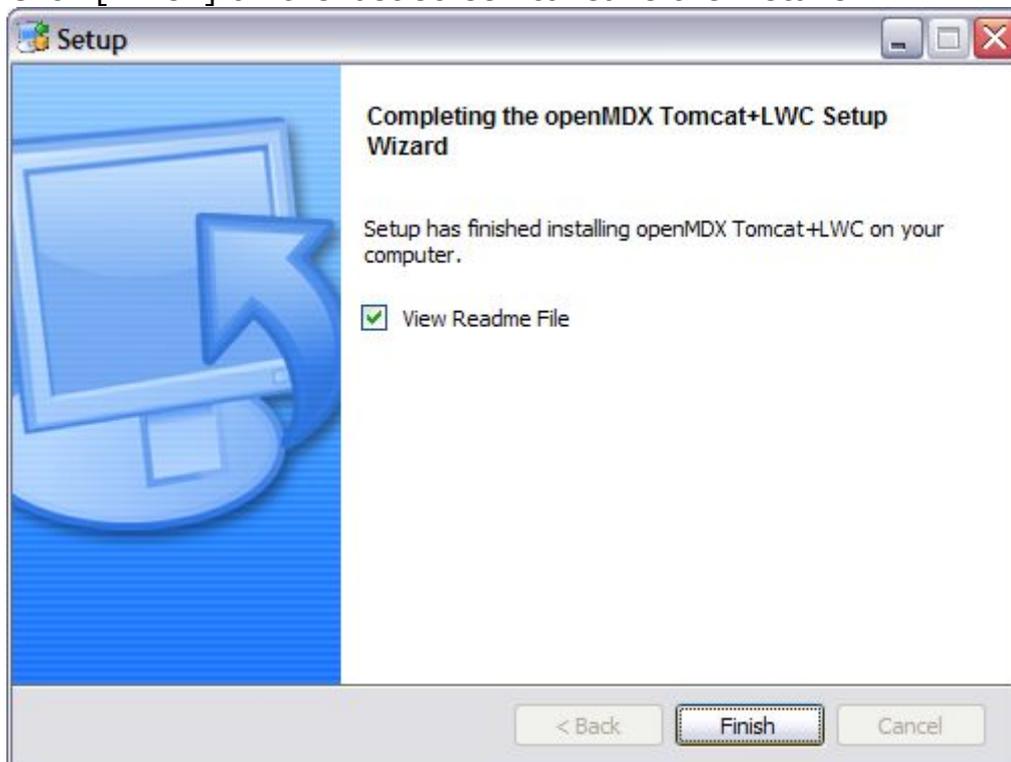


14. On your desktop, you should see the following new shortcuts created by the installer:
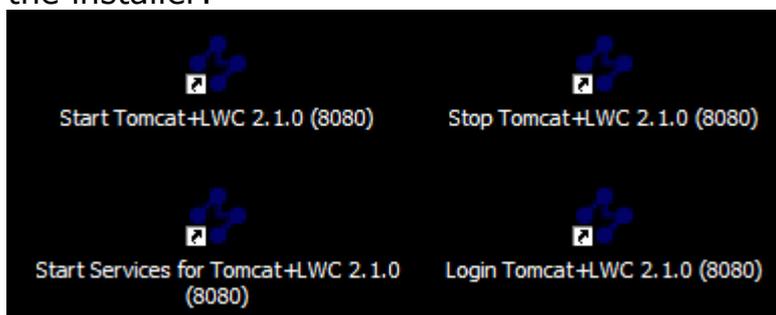
## 3.2   openCRX

1. Launch the Installer opencrxServer-2.1.0-windows-installer.exe

2. Click [Next] on the following screen:
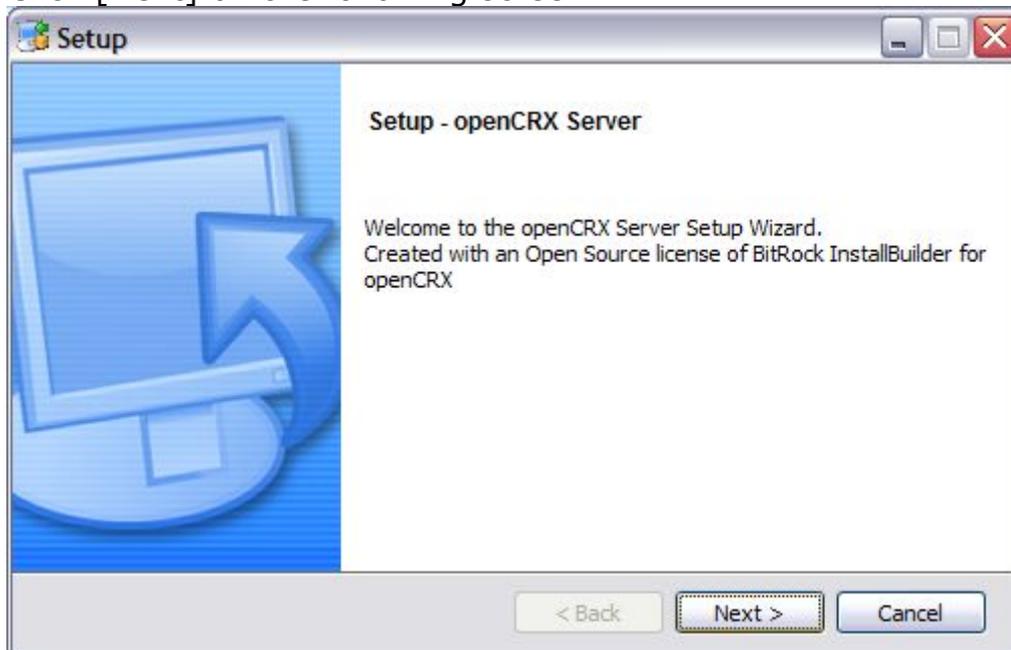
3. Accept the BSD License Agreement and click [Next] again:

4. On the following screen, navigate to the **Tomcat installation directory** – for example **P:\openmdxTomcatLwc-2.1.0** – and then click [Next] to continue:
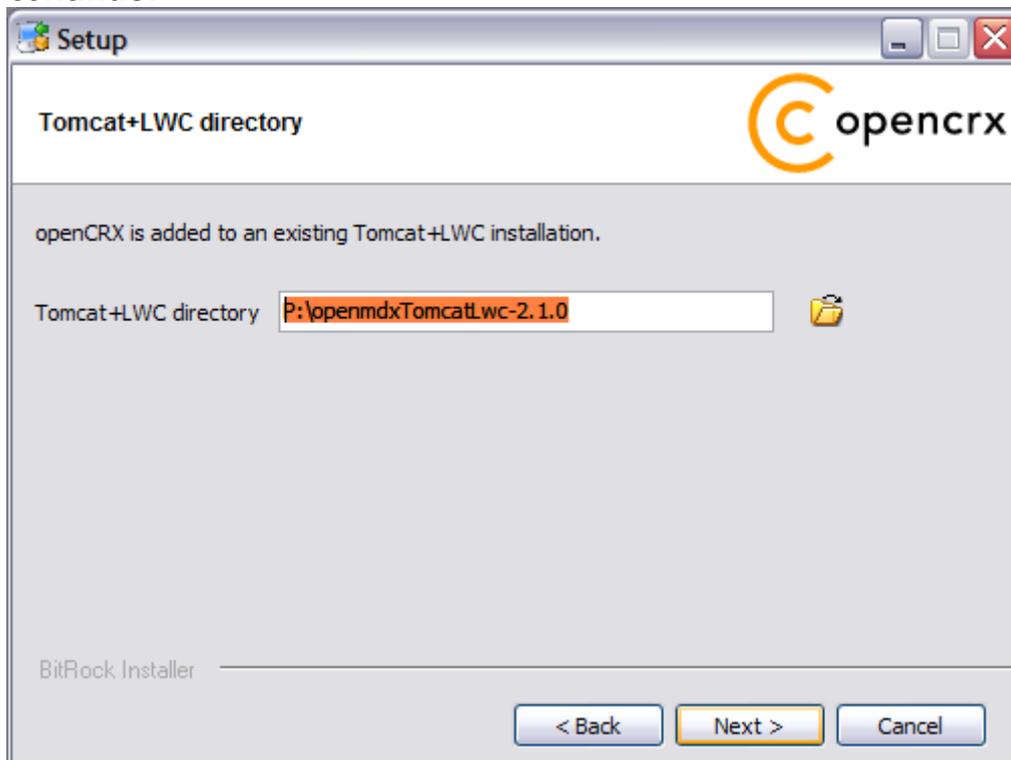


5. Please note the information on the following screen and then click [Next] to continue:
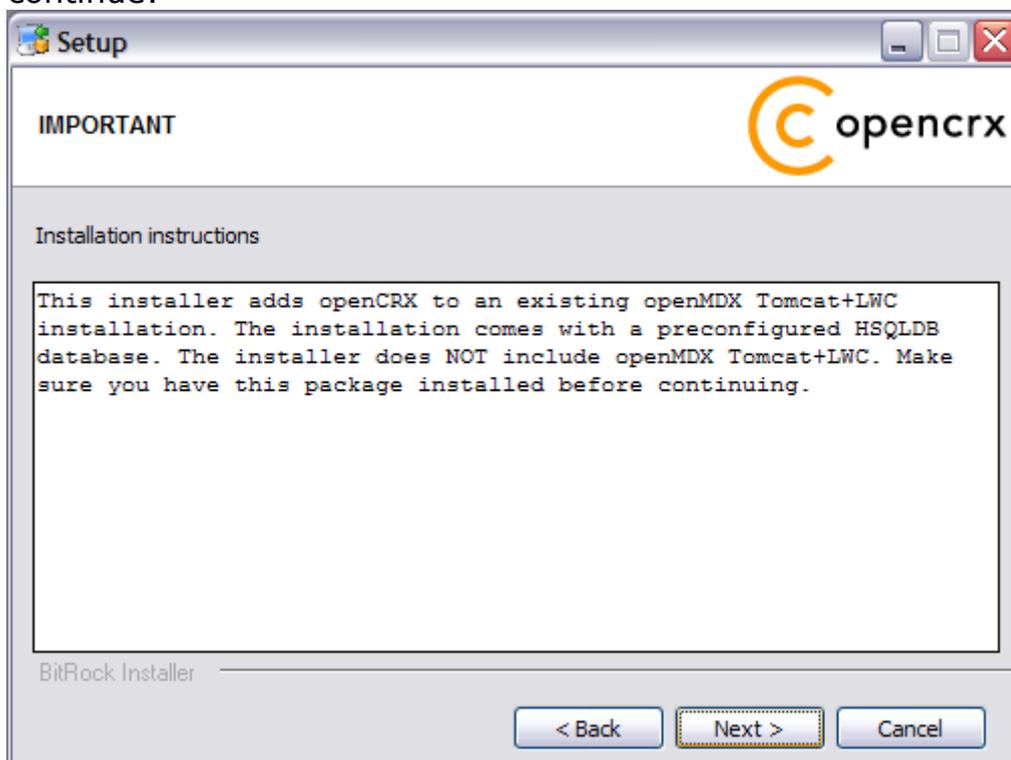
6. Enter the port number of the **HSQLDB service**. You can choose any port available on your system. The default is **9001**. Click [Next] to continue:
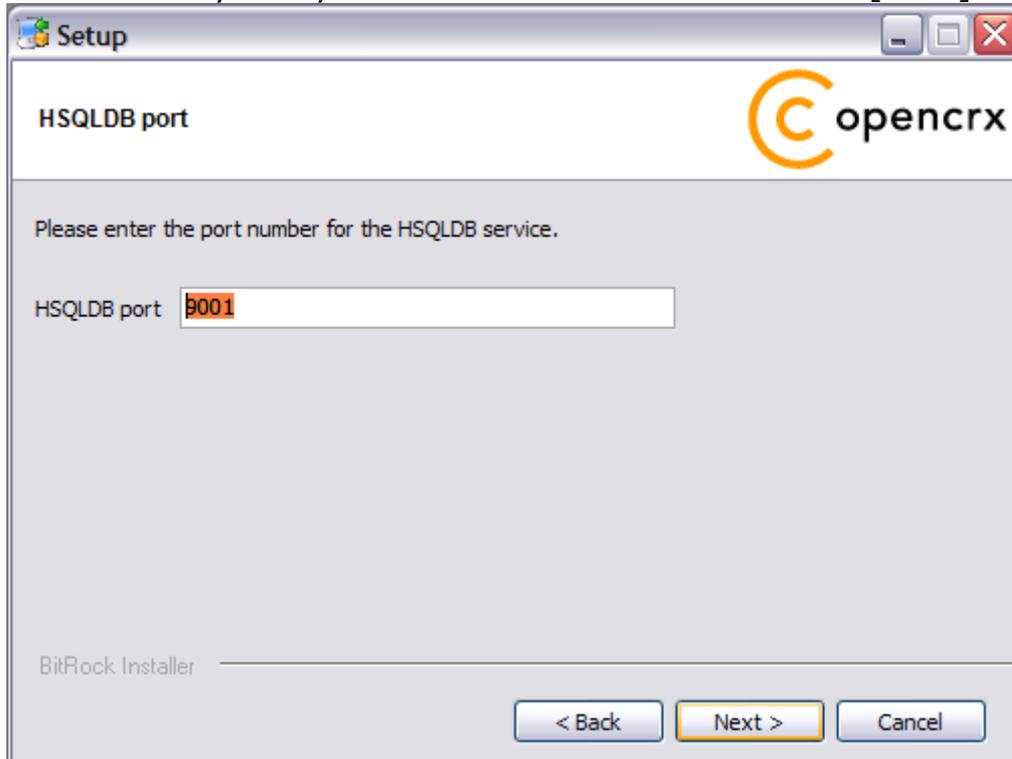


7. Finally, click [Next] to start the installation:

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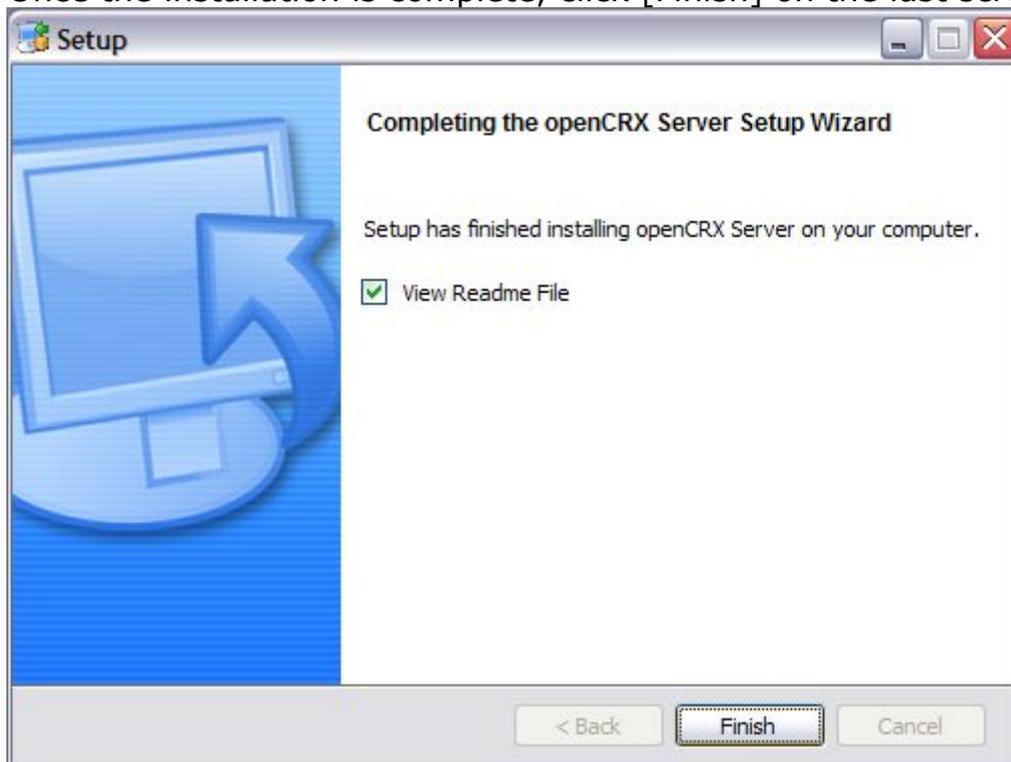


9. Finally, please carefully read the README, in particular information about **valid URLs**, preconfigured **users** and **passwords**:
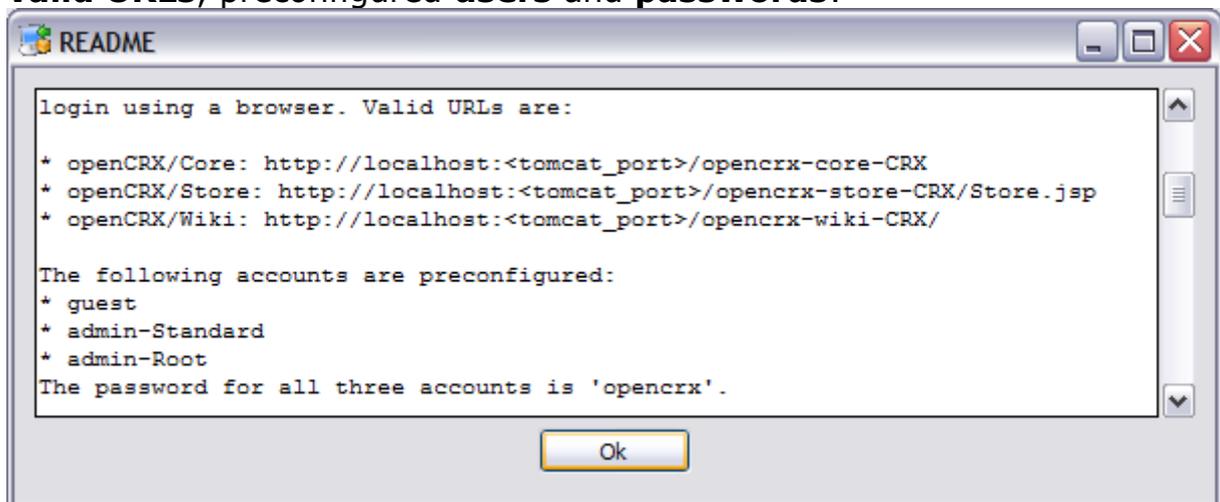


10. On your desktop, you should see the following new shortcut created by the installer:
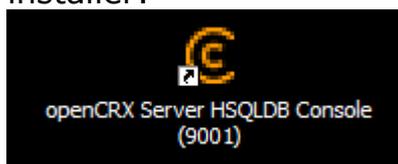
# 4   Installing openCRX Server on Linux

There is no need to install openCRX as root. We created a user **crx** and the whole installation procedure is done as user **crx**.

## 4.1   Apache Tomcat / LWC

1. Launch the Installer openmdxTomcatLwc-2.1.0-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** (it will be created automatically if it does not exist yet). Then click [Forward] to continue:
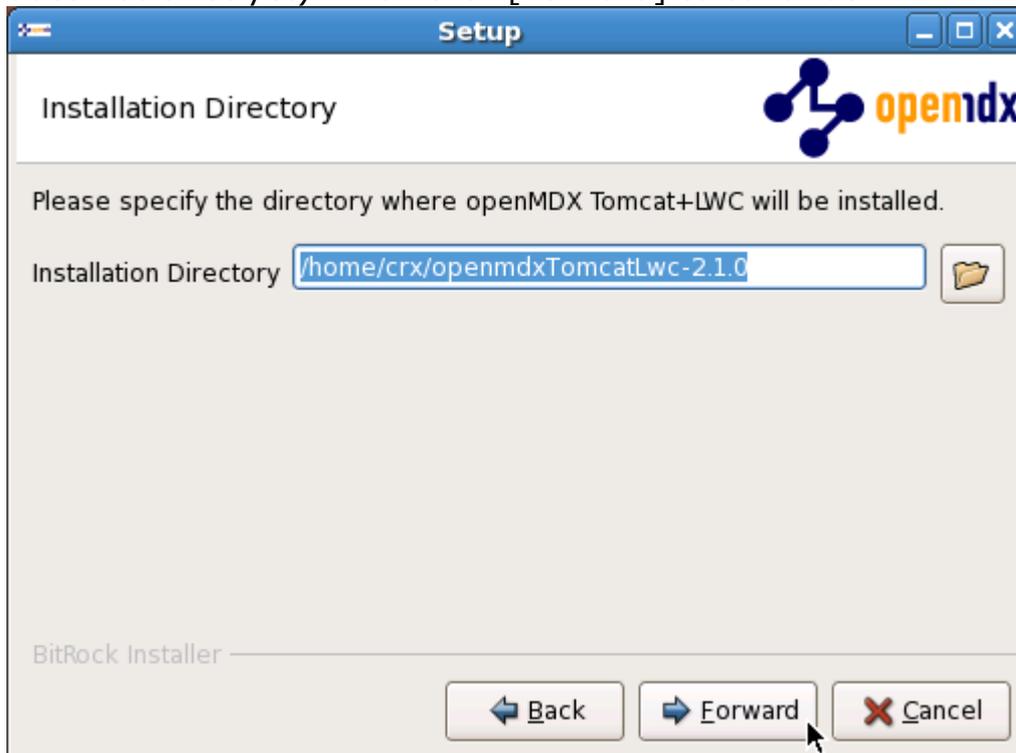


5.  Please note the information on the following screen. It is assumed that you have installed JDK 1.5 (also called JDK 5.0) appropriate for your platform (see Prerequisites). Click [Forward] to continue:
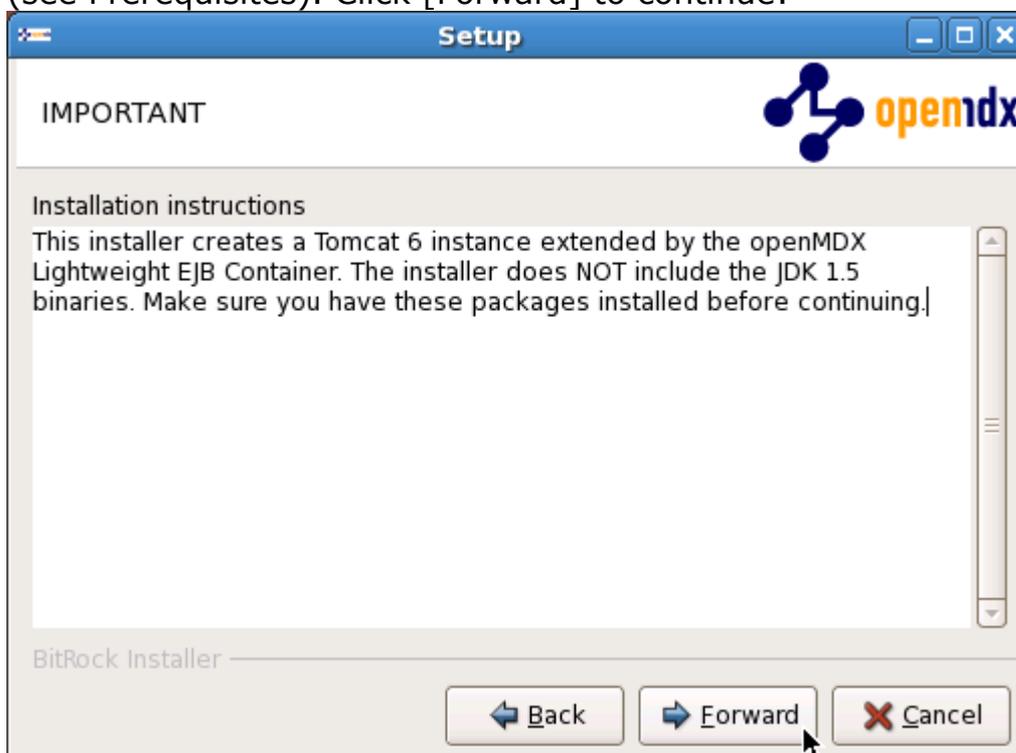
6. Select the home directory of your JDK 1.5 installation - for example **/opt/jrockit-1.5.0_12** - and then click [Forward] to continue:



7. Enter the port number of the **Tomcat HTTP connector**. You can choose any port available on your system. The default is **8080**. Click [Forward] to continue:
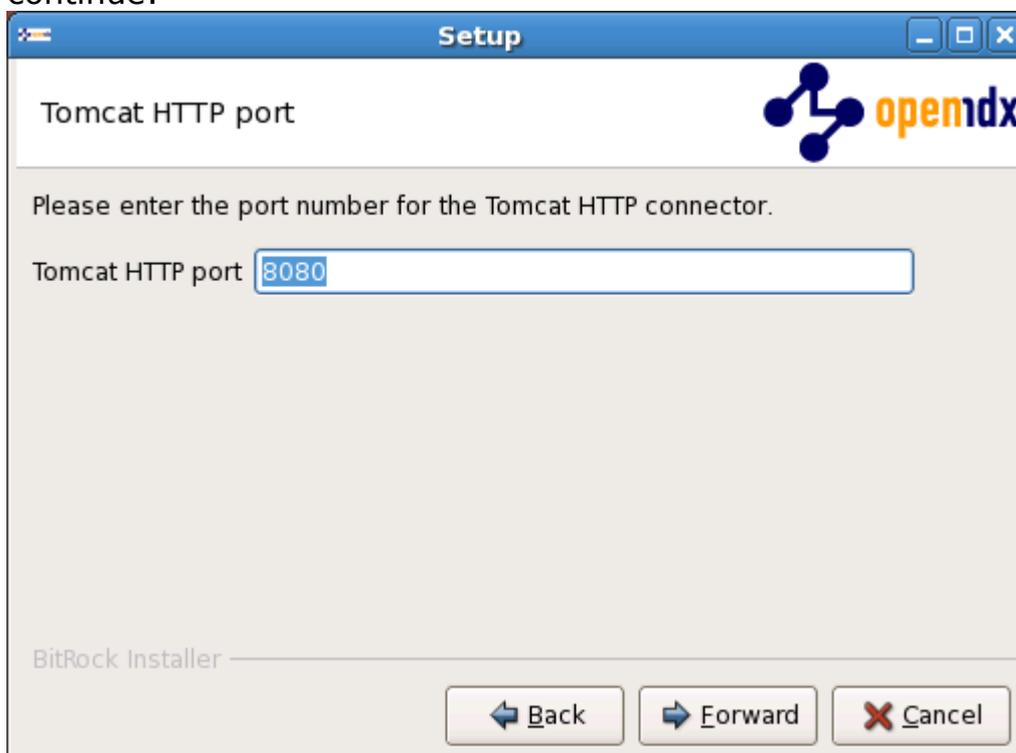
8. Similarly, enter the port number of the **Tomat HTTPS Connector**. The default is **8443**. Click [Forward] to continue:



9. Next, enter the **Tomcat command port** number. The default is **8005**. Click [Forward] to continue:

10. Enter the port number of the **Tomcat AJP connector**. The default is **8009**. Click [Forward] to continue:
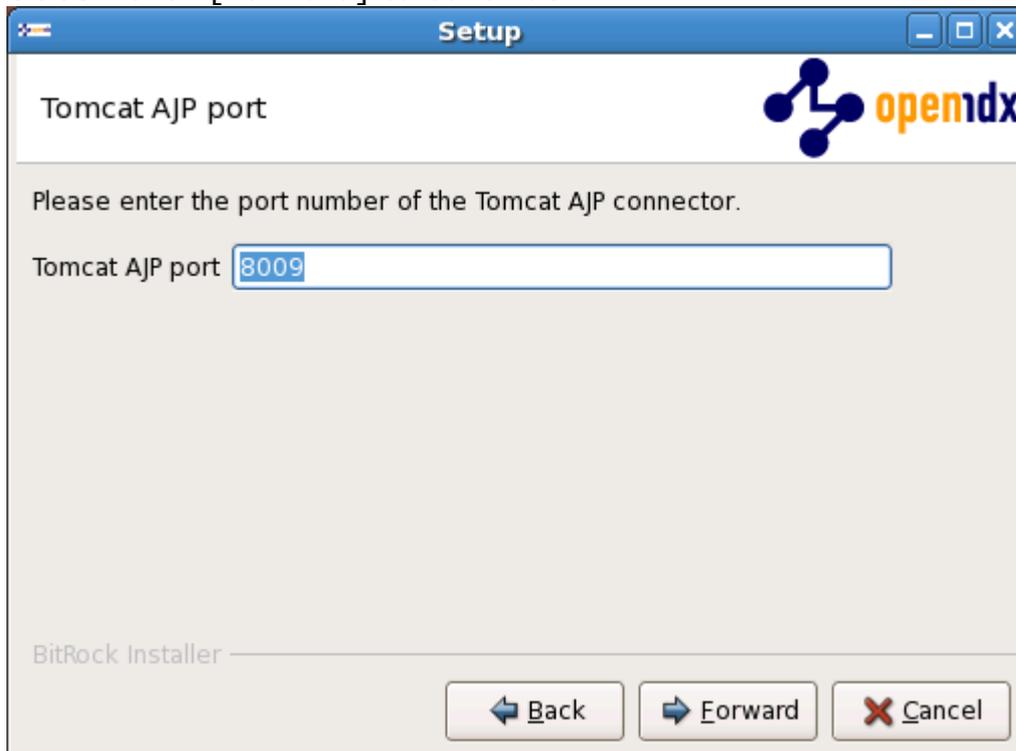


11. Finally, click [Forward] to start the installation:
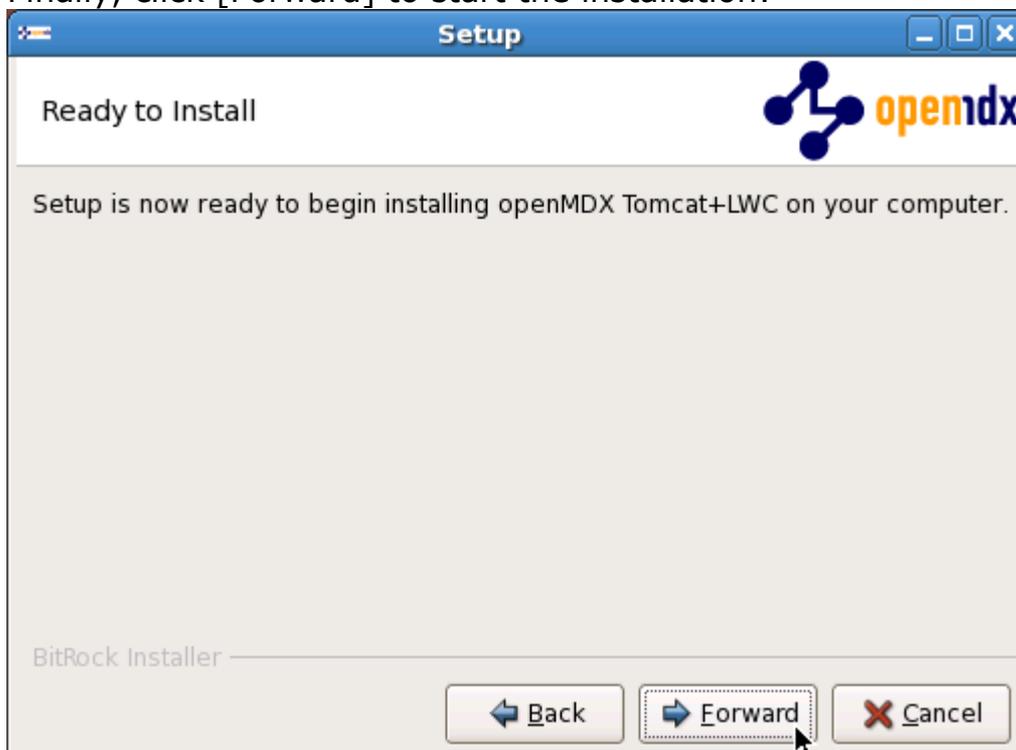


12. Once the installation is complete, you might see a window containing the result of the post installation script. Click [Ok] to close the window

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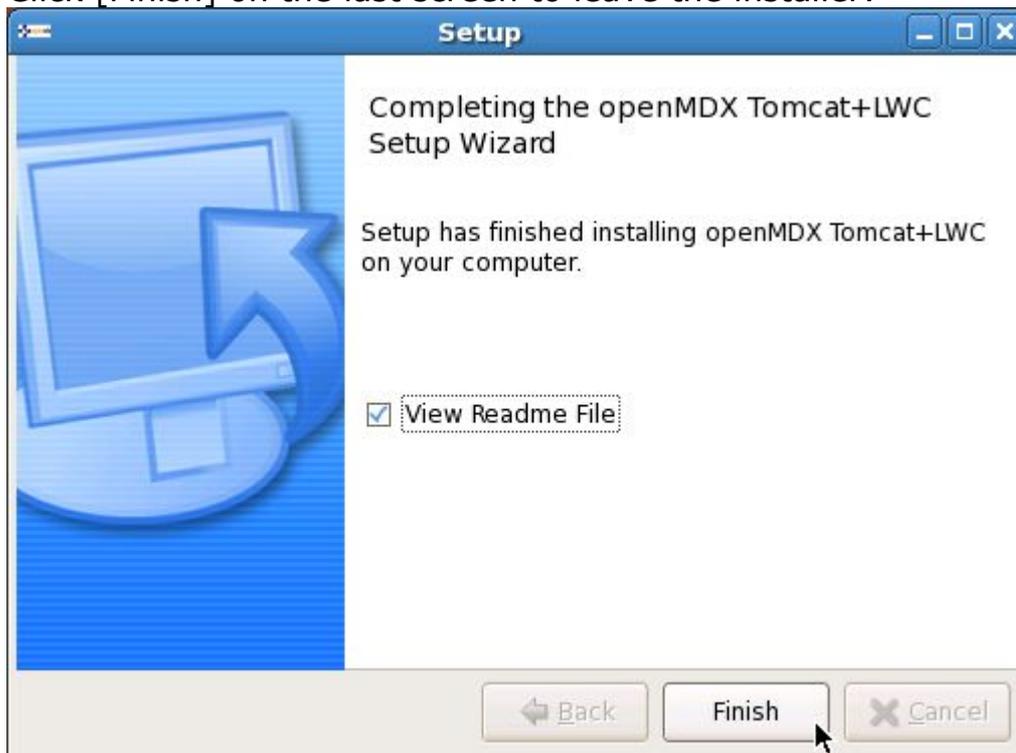


14. On your desktop, you should see the following new shortcuts created by the installer:

## 4.2  openCRX

1.  Launch the Installer opencrxServer-2.1.0-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/openmdxTomcatLwc-2.1.0** – and then click
    [Forward] to continue:



5.  Please note the information on the following screen and then click
    [Forward] to continue:
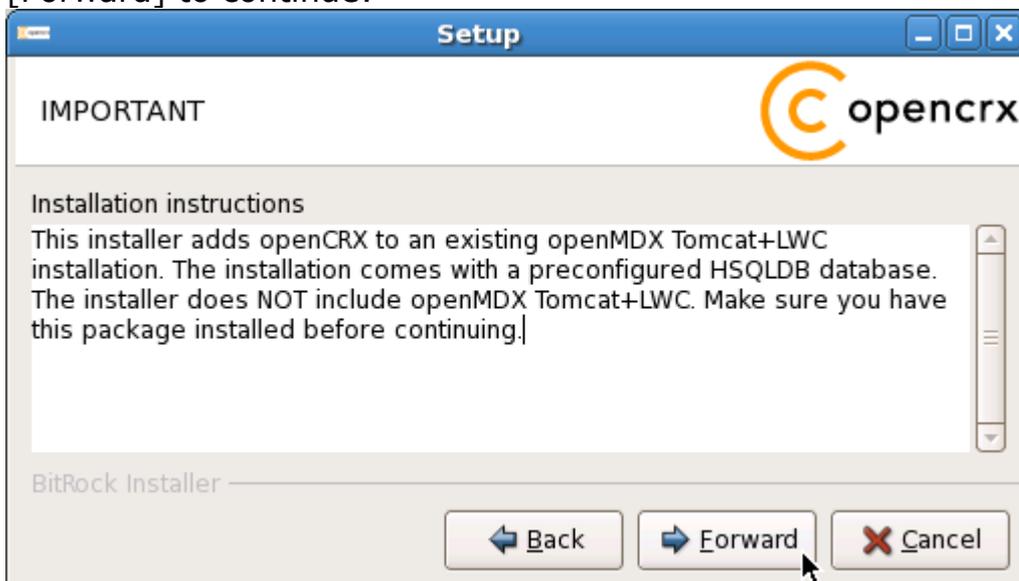
6. Enter the port number of the **HSQLDB service**. You can choose any port available on your system. The default is **9001**. Click [Forward] to continue:

> **Setup**
>
> **HSQLDB port**
>
> **opencrx**
>
> Please enter the port number for the HSQLDB service.
>
> HSQLDB port  `9001`
>
> BitRock Installer
>
> [← Back]  [→ Forward]  [✗ Cancel]

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

> **Setup**
>
> **Ready to Install**
>
> **opencrx**
>
> Setup is now ready to begin installing openCRX Server on your computer.
>
> BitRock Installer
>
> [← Back]  [→ Forward]  [✗ Cancel]

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

**Setup**

Completing the openCRX Server Setup
Wizard

Setup has finished installing openCRX Server on
your computer.

☑ View Readme File

◀ Back          Finish          ✗ Cancel

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

**README**

login using a browser. Valid URLs are:

* openCRX/Core: http://localhost:<tomcat_port>/opencrx-core-CRX
* openCRX/Store: http://localhost:<tomcat_port>/opencrx-store-CRX/Store
* openCRX/Wiki: http://localhost:<tomcat_port>/opencrx-wiki-CRX/

The following accounts are preconfigured:
* guest
* admin-Standard
* admin-Root
The password for all three accounts is 'opencrx'.

◀ OK

10. On your desktop, you should see the following new shortcut created by the
    installer:

openCRX Server
HSQLDB Console
(9001)

# 5 Running openCRX Server

The installation process created 5 shortcuts on your desktop:

 **Start Tomcat** to start the openCRX Server

 **Launch Browser** and connect to Tomcat

 **Stop Tomcat** to stop the openCRX Server

 Most likely you won't need this shortcut
Nevertheless, with this shortcut you could launch scripts named 001S.bat/sh, 002S.bat/sh, ... located in the Tomcat directory ./bin without actually starting Tomcat – currently, only HSDLDB installs a start script.

 **Launch Management Console** of HSDQLDB

## 5.1 Starting openCRX Server

Double-click the shortcut **Start Tomcat+LWC**.

## 5.2 Connect and Login

Double-click the shortcut **Login Tomcat+LWC**. This will launch your default browser and take you to the Tomcat home page. In the lower left corner you will see a box labelled openCRX CRM:

 Click on **openCRX Core** to load the openCRX login page. Enter a valid username (e.g. guest) and the corresponding password (e.g. opencrx) and then click [Login]. Initialization takes place during the first login after (re)starting Tomcat, so please be patient. Subsequent logins will be very fast.

## 5.3 Stopping openCRX Server

Double-click the shortcut **Stop Tomcat+LWC**.

# 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.