

openCRX Server Installation

Version 2.5.1



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 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 the Sun Java JDK 5.0 available from http://java.sun.com/javase/downloads/index_jdk5.jsp



Warning

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



Important

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



Tip

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



Tip

Don't forget to set the **environment variable** `JAVA_HOME`. It should point to your JDK installation directory, e.g. to `D:\Java\jdk1.5.0`.

2.2 Ant 1.7.0

Download Ant 1.7.0 (available from <http://ant.apache.org/>) for your platform and install it by expanding the downloaded file to a directory of your choice.



Tip

Ant v1.7.1 might work as well. However, we recommend Ant v1.7.0 (there are some combinations of JDK versions and Ant v1.7.1 that "don't like each other"...))



Important

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-1.7.0` on Windows or `/opt/apache-ant-1.7.0` 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>

Installer for Windows:

openmdxTomcatEjb-2.5.1-windows-installer.exe

Installer for Linux:

openmdxTomcatEjb-2.5.1-linux-installer.bin

The openMDX Tomcat EJB Installer will install Apache Tomcat v6.0.18 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-2.5.1-windows-installer.exe

Installer for Linux:

opencrxServer-2.5.1-linux-installer.bin

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



Please note that HSQLDB is neither 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>

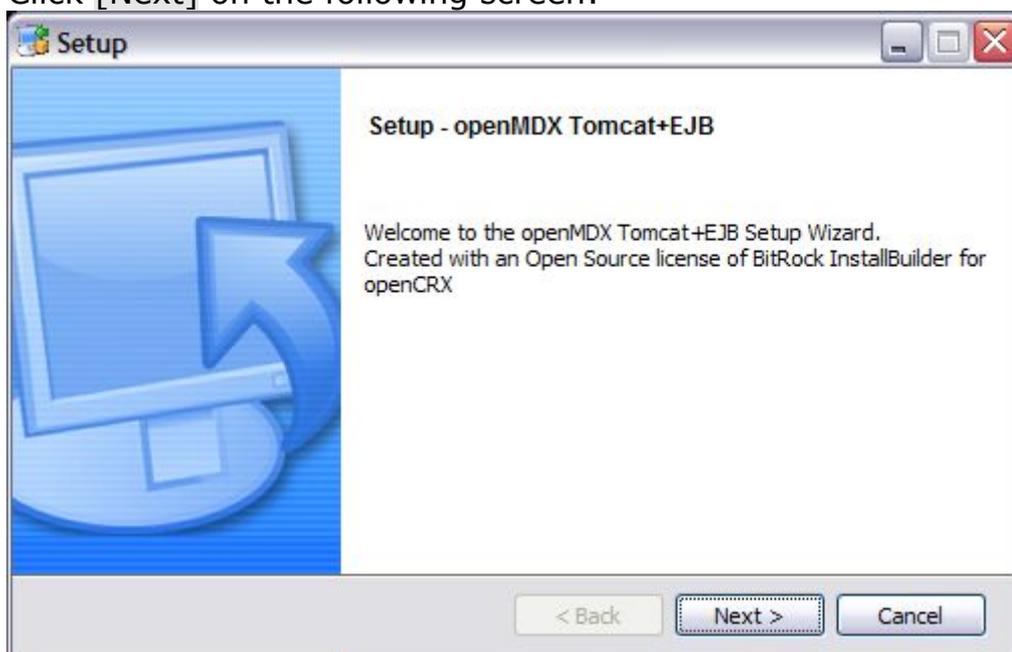
2.5 Hardware

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/faq.htm#hardware>

3 Installing openCRX Server on Windows

3.1 Apache Tomcat / OpenEJB

1. Launch the Installer `openmdxTomcatEjb-2.5.1-windows-installer.exe`
2. Click [Next] on the following screen:



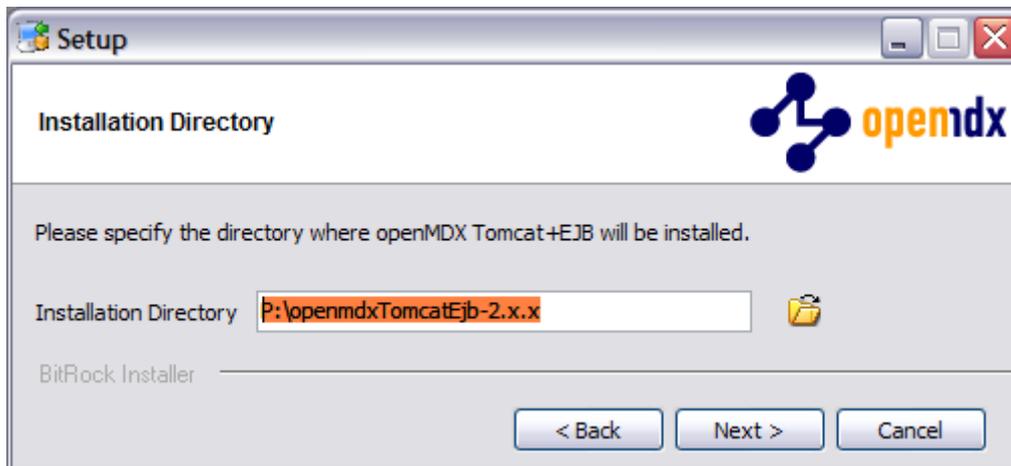
3. Accept the BSD License Agreement and click [Next] again:



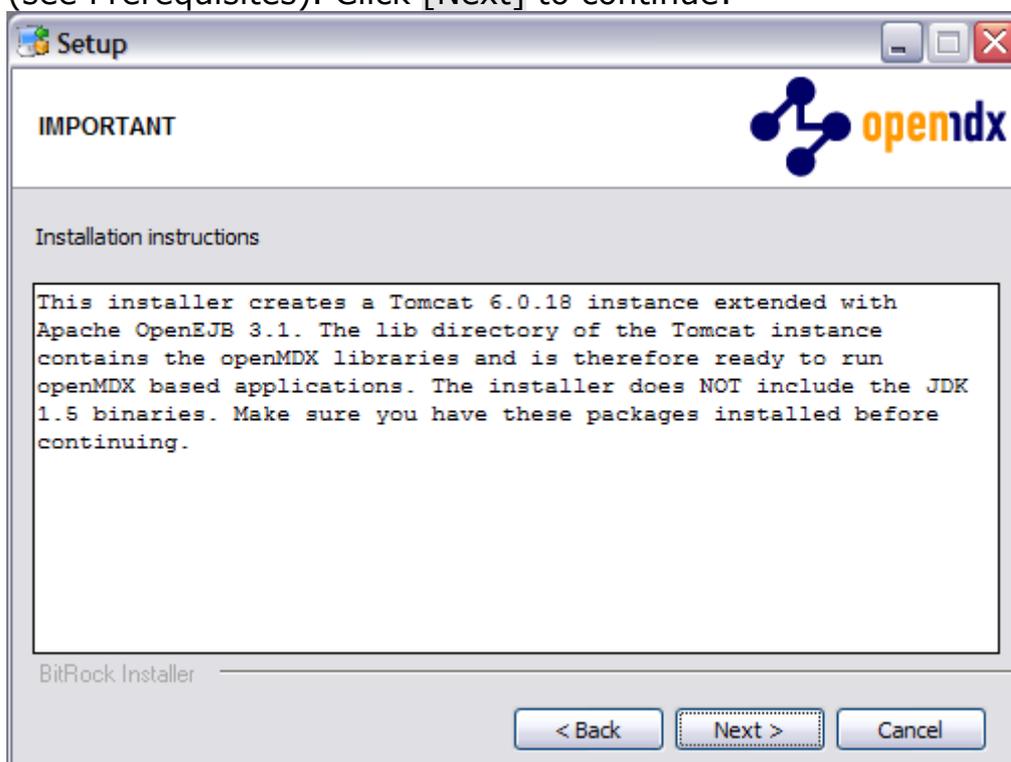
4. Choose an **installation directory** (instead of 2.x.x you will be seeing the respective version number; the directory will be created automatically if it does not exist yet). Then click [Next] to continue:



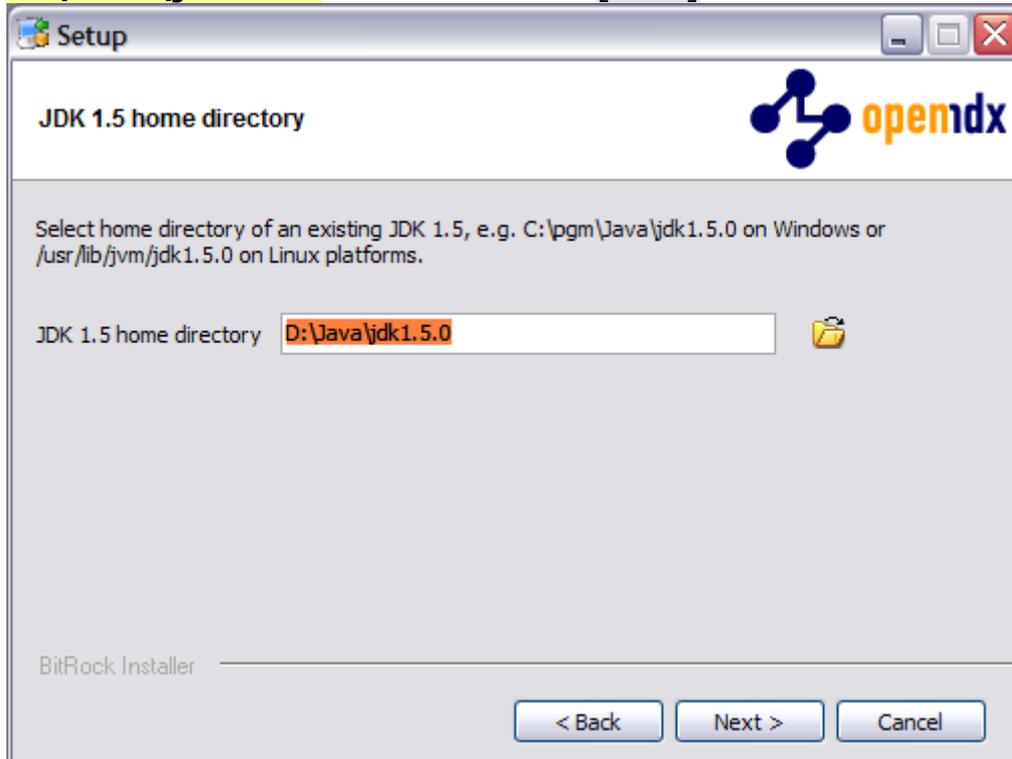
It is a good idea to **avoid paths containing blanks** like the default installation directory ...\\Program Files\\... on Windows



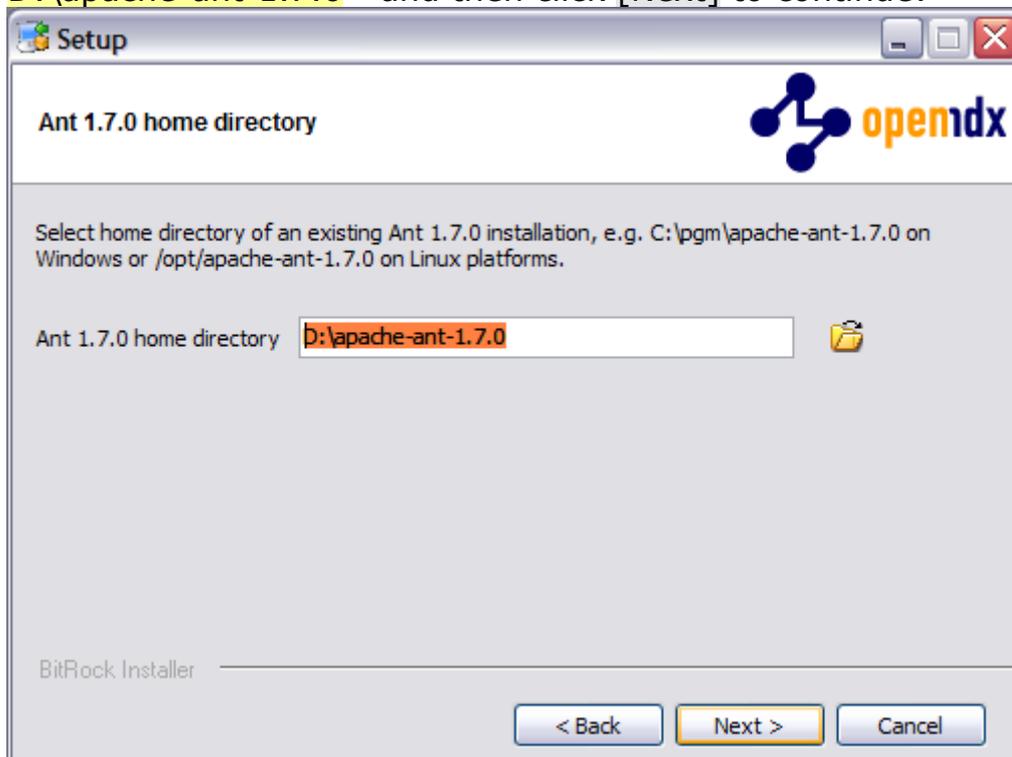
5. Please note the information on the following screen. It is assumed that you have installed JDK 1.5 (also called JDK 5.0) appropriate for your platform (see Prerequisites). Click [Next] to continue:



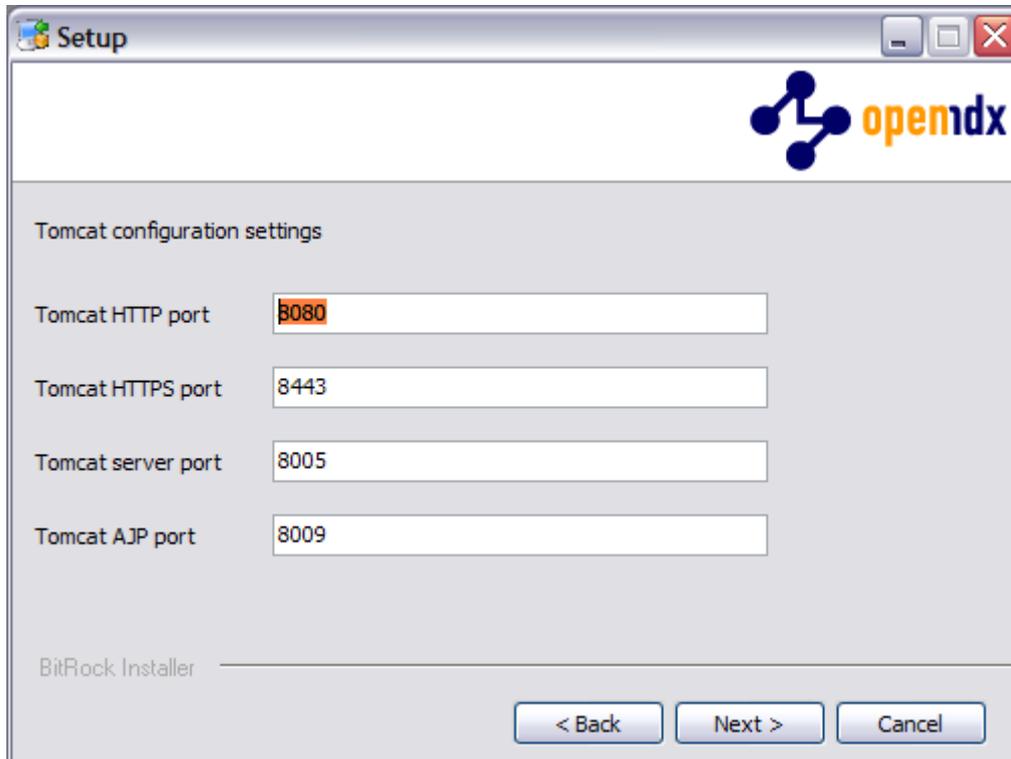
6. Select the home directory of your JDK 1.5 installation - for example **D:\Java\jdk1.5.0** - and then click [Next] to continue:



7. Select the home directory of your Ant installation - for example **D:\apache-ant-1.7.0** - 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:

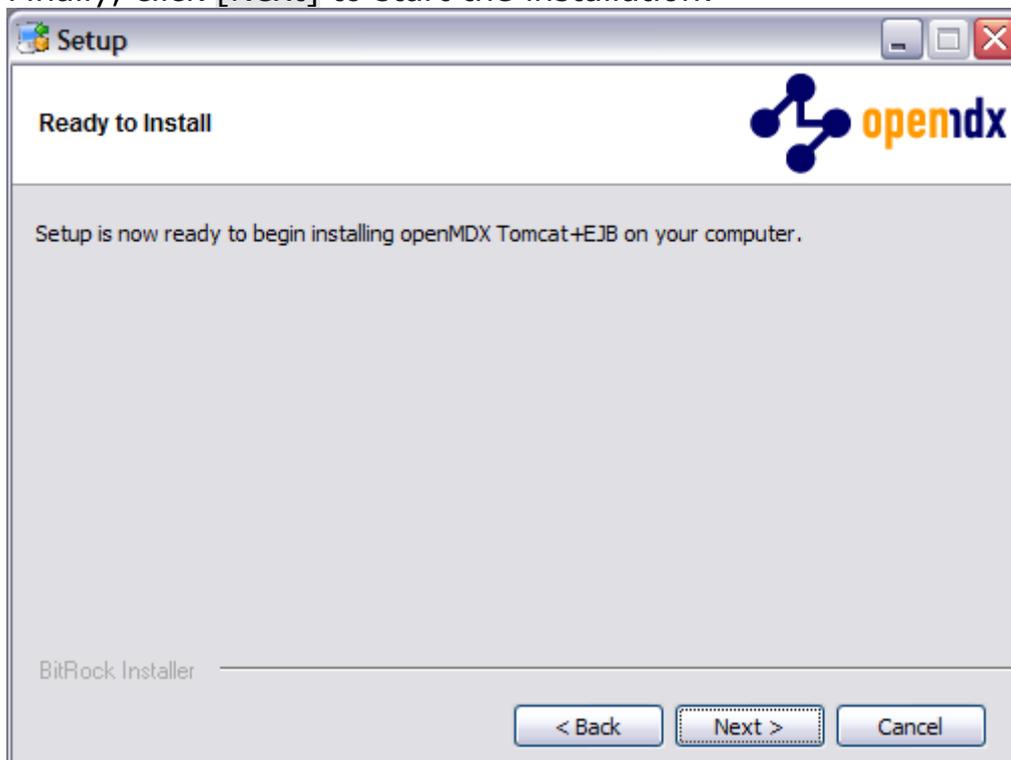


The screenshot shows a Windows-style window titled "Setup" with the openMDX logo in the top right corner. The main content area is titled "Tomcat configuration settings" and contains four input fields:

| Configuration Setting | Value |
|-----------------------|-------|
| Tomcat HTTP port | 8080 |
| Tomcat HTTPS port | 8443 |
| Tomcat server port | 8005 |
| Tomcat AJP port | 8009 |

At the bottom of the window, there are three buttons: "< Back", "Next >", and "Cancel". The "Next >" button is highlighted with a dashed border, indicating it is the active option.

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

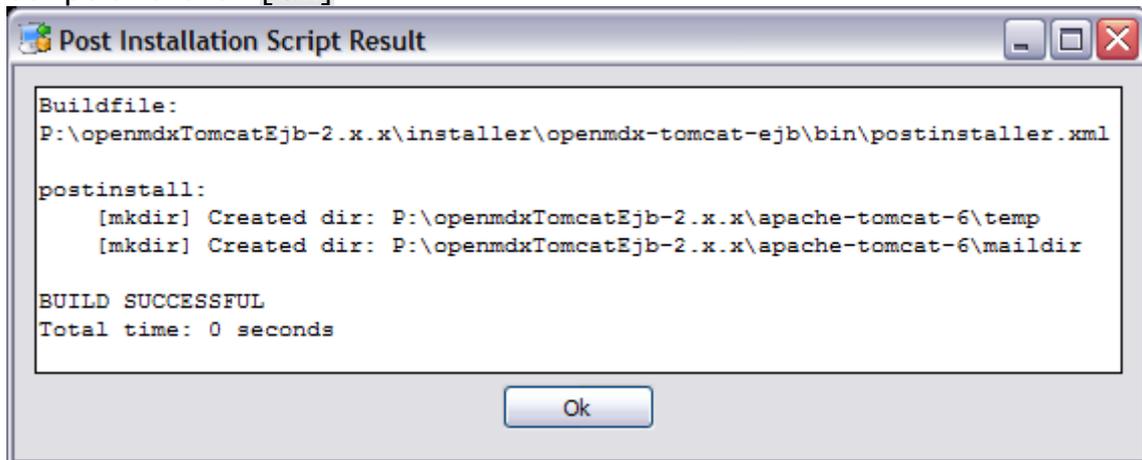


The screenshot shows a Windows-style window titled "Setup" with the openMDX logo in the top right corner. The main content area is titled "Ready to Install" and contains the following text:

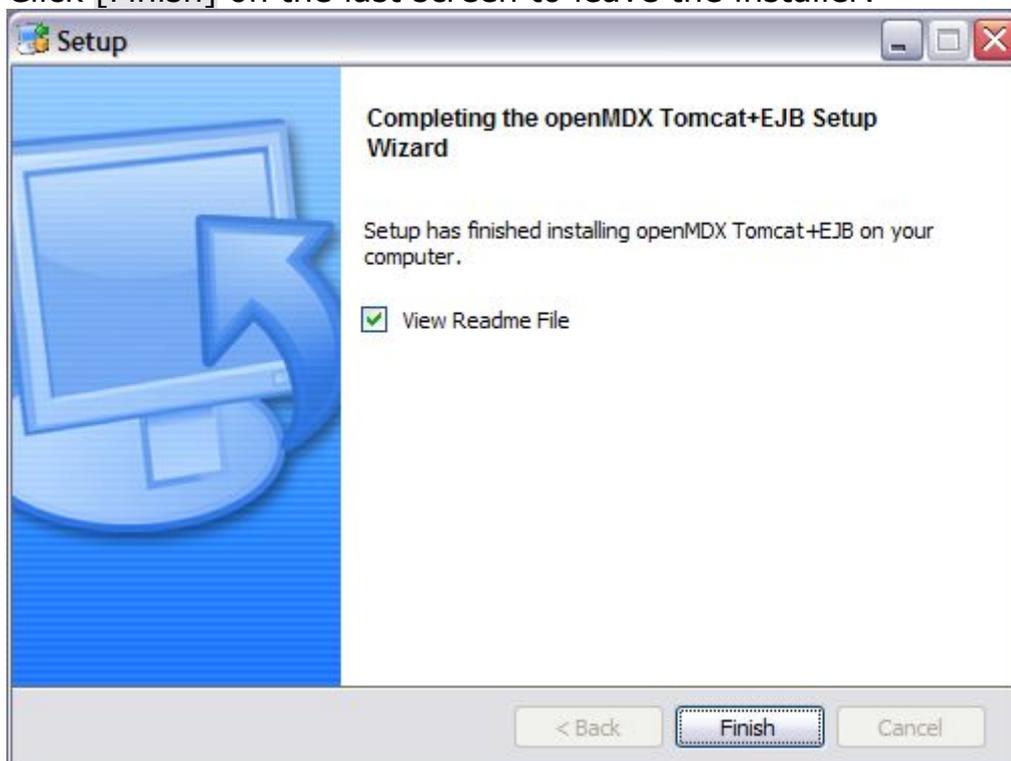
Setup is now ready to begin installing openMDX Tomcat+EJB on your computer.

At the bottom of the window, there are three buttons: "< Back", "Next >", and "Cancel". The "Next >" button is highlighted with a dashed border, indicating it is the active option.

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:

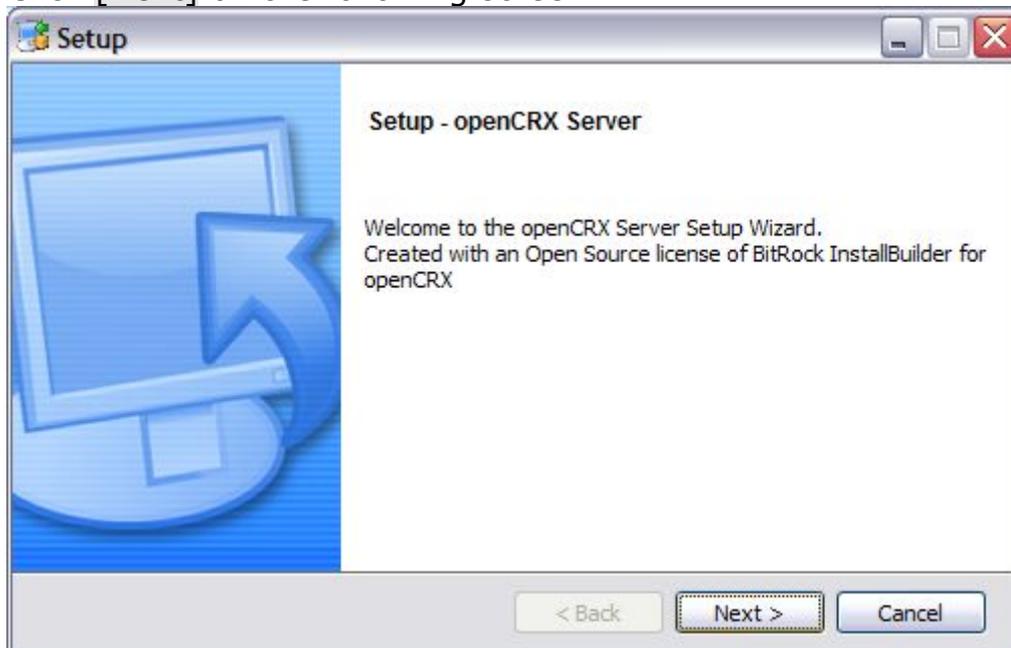


12. On your desktop, you should see the following new shortcuts created by the installer (instead of 2.x.x you will be seeing the respective version number):



3.2 openCRX

1. Launch the Installer `opencrxServer-2.5.1-windows-installer.exe`
2. Click [Next] on the following screen:



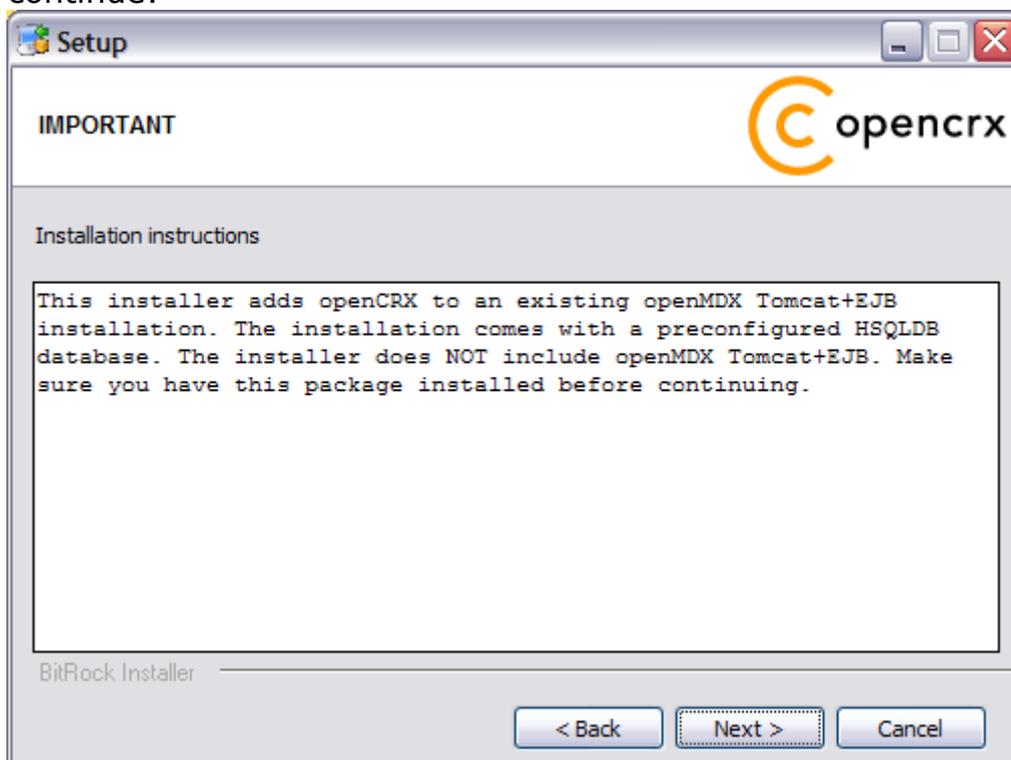
3. Accept the BSD License Agreement and click [Next] again:



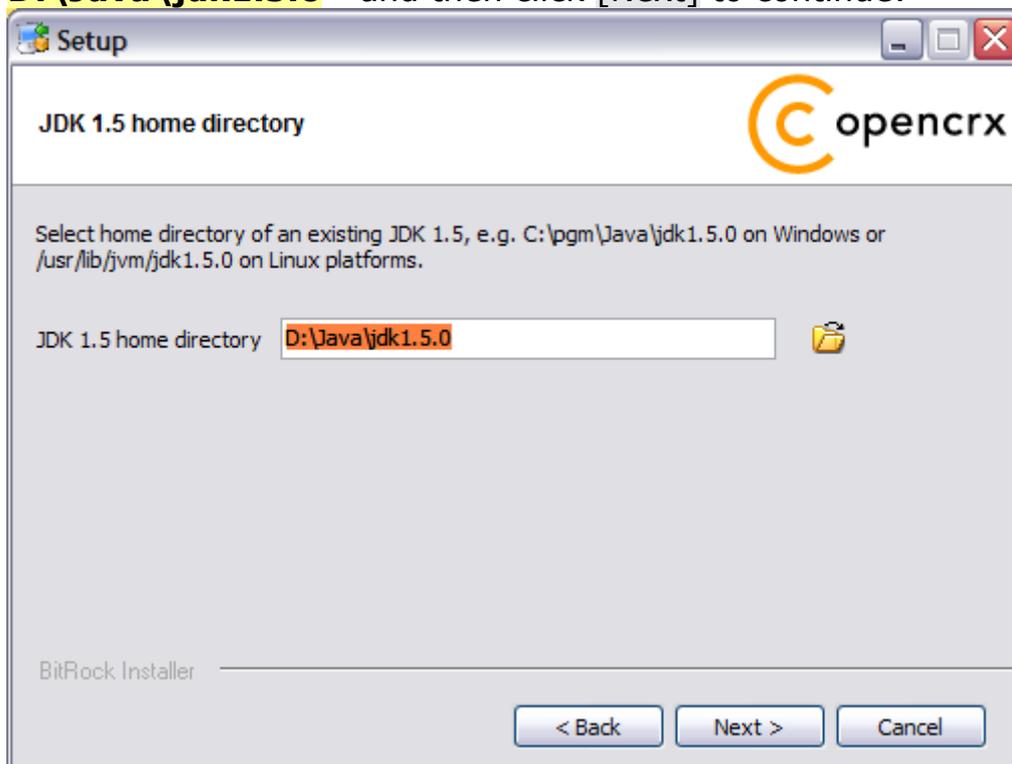
- On the following screen, navigate to the **Tomcat installation directory** – for example **P:\openmdxTomcatEjb-2.x.x** (use the respective version number instead of 2.x.x) – and then click [Next] to continue:



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



6. Select the home directory of your JDK 1.5 installation - for example **D:\Java\jdk1.5.0** - and then click [Next] to continue:



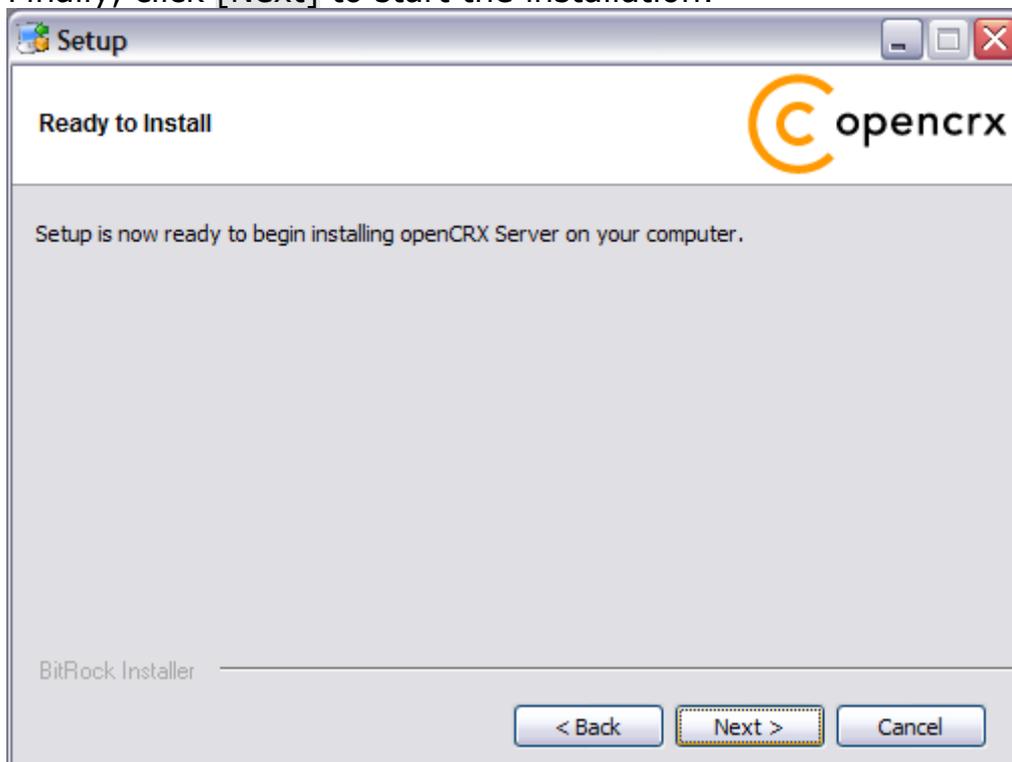
7. Select the home directory of your Ant installation - for example **D:\apache-ant-1.7.0** - and then click [Next] to continue:



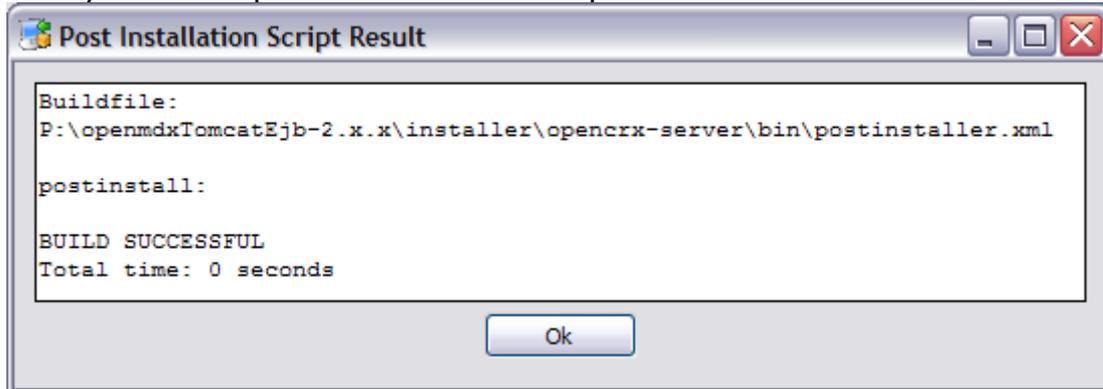
8. Enter the port number of the **HSQLDB service**. You can choose any port available on your system. The default is **9001**. Click [Next] to continue:



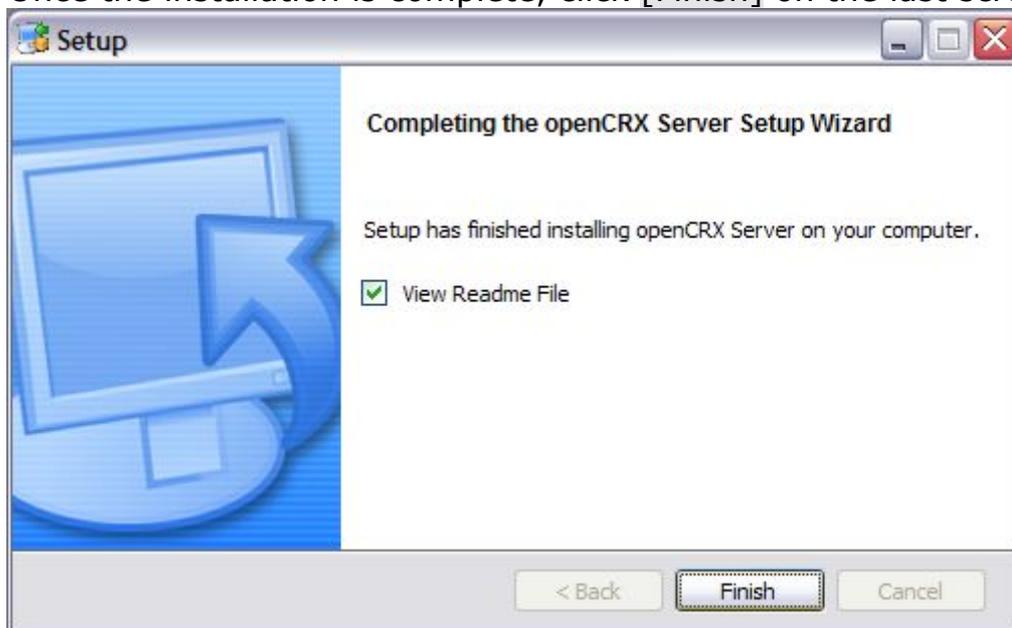
9. Finally, click [Next] to start the installation:



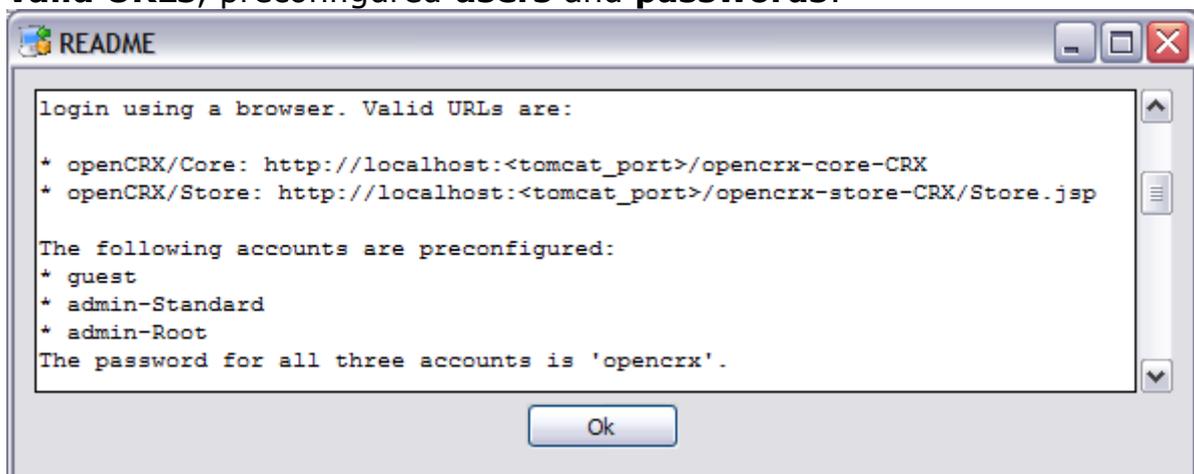
10. Verify that the post installation completed with errors and then click [OK]:



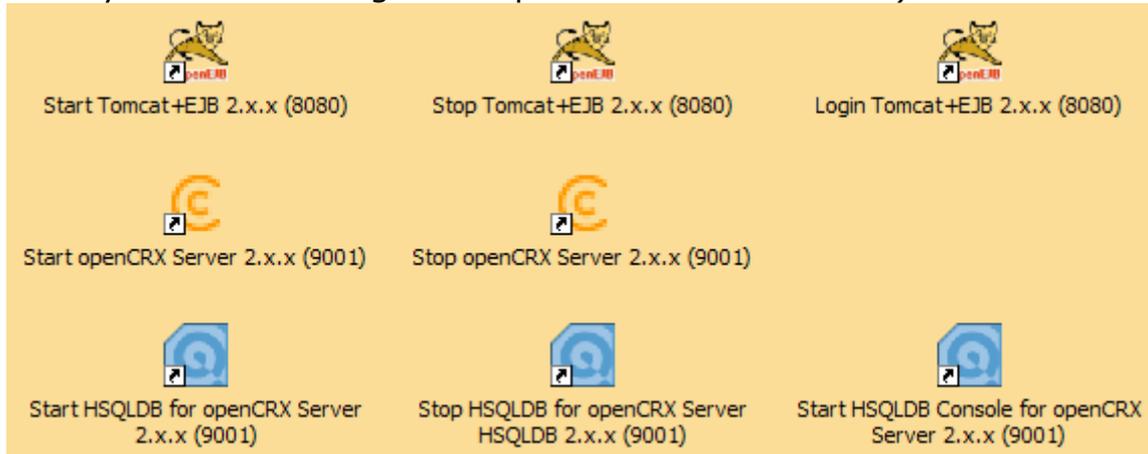
11. Once the installation is complete, click [Finish] on the last screen:



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



13. On your desktop, you should now see the following shortcuts (instead of 2.x.x you will be seeing the respective version number):



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

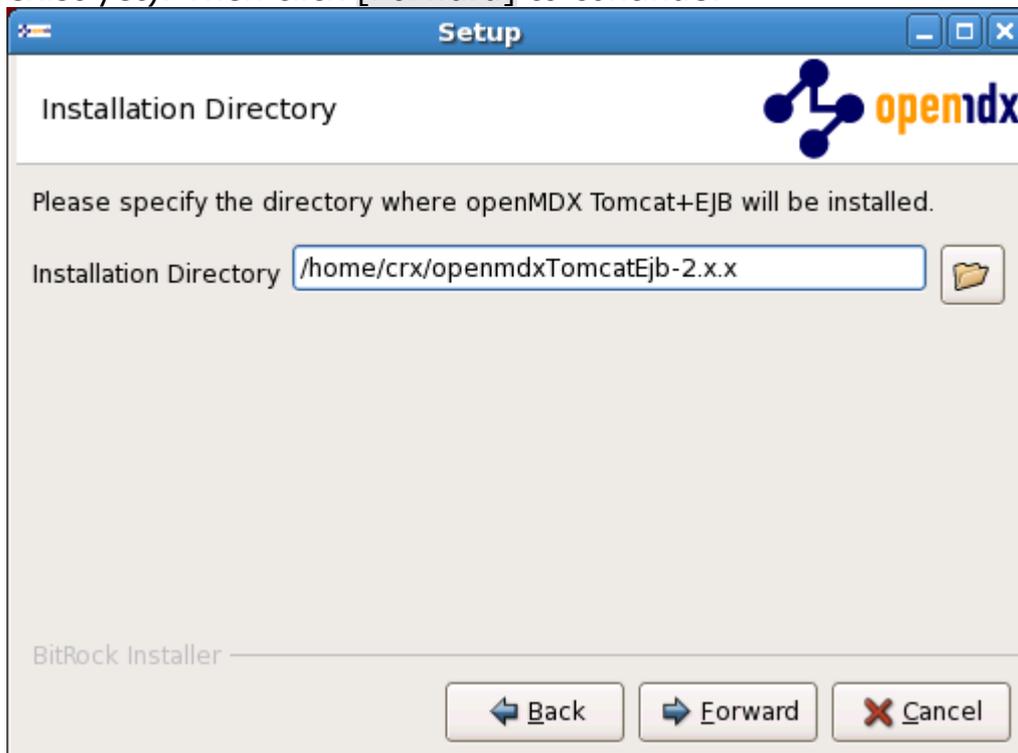
1. Launch the Installer `openmdxTomcatEjb-2.5.1-linux-installer.bin`
2. Click [Forward] on the following screen:



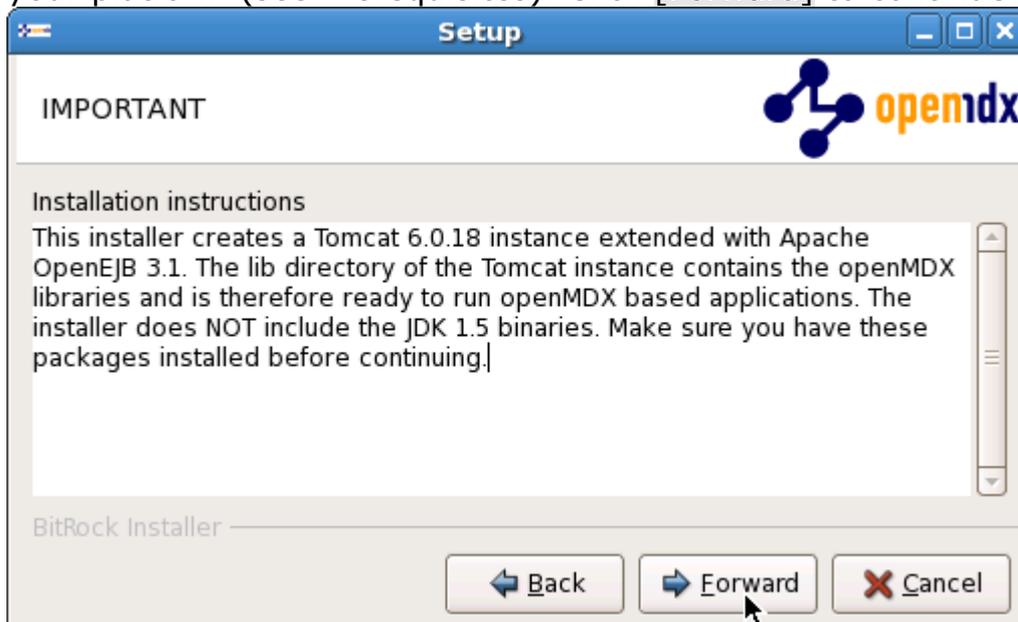
3. Accept the BSD License Agreement and click [Forward] again:



4. Choose an **installation directory** (instead of 2.x.x you will be seeing the respective version number); it will be created automatically if it does not exist yet). Then click [Forward] to continue:



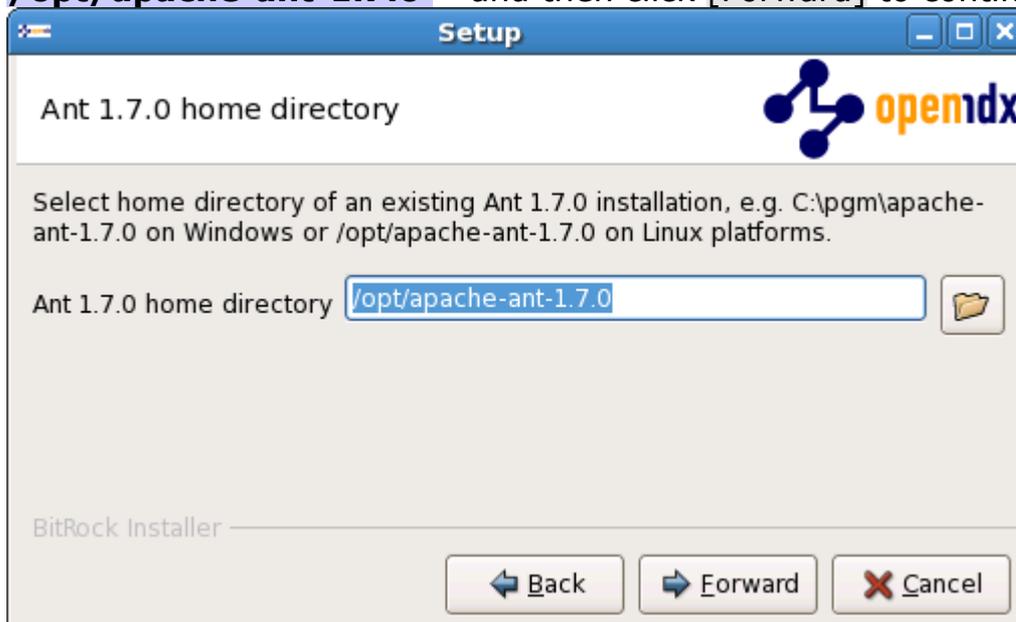
5. Please note the information on the following screen. It is assumed that you have installed JDK 1.5 (also called JDK 5.0) and Ant v1.7.0 appropriate for your platform (see Prerequisites). Click [Forward] to continue:



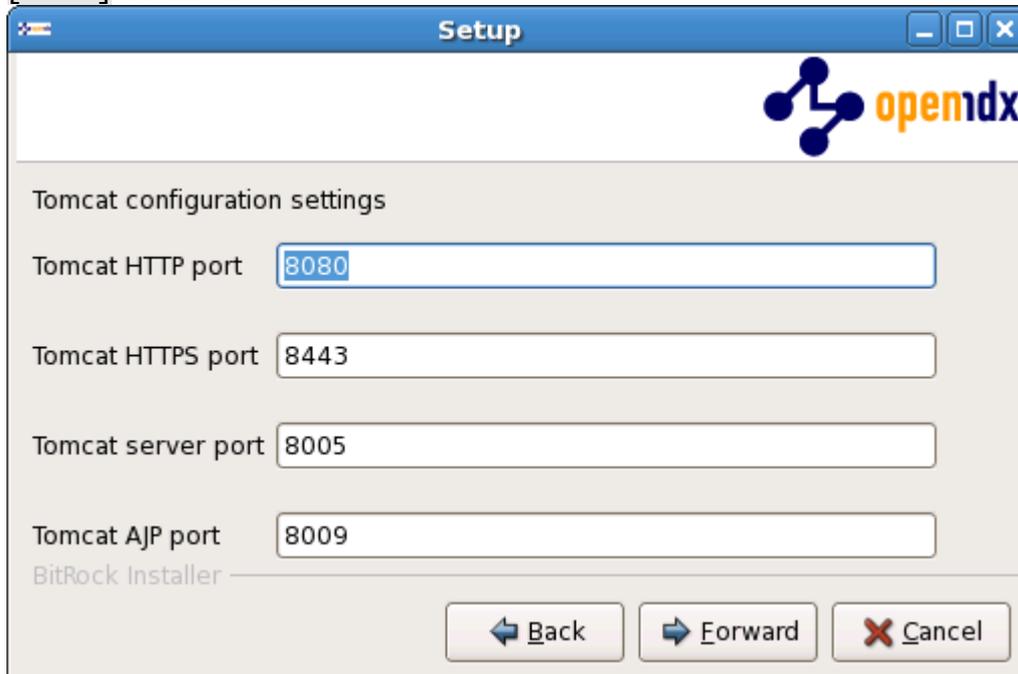
6. Select the home directory of your JDK 1.5 installation - for example **/opt/jdk1.5.0_17** - and then click [Forward] to continue:



7. Select the home directory of your Ant installation - for example **/opt/apache-ant-1.7.0** - and then click [Forward] to continue:

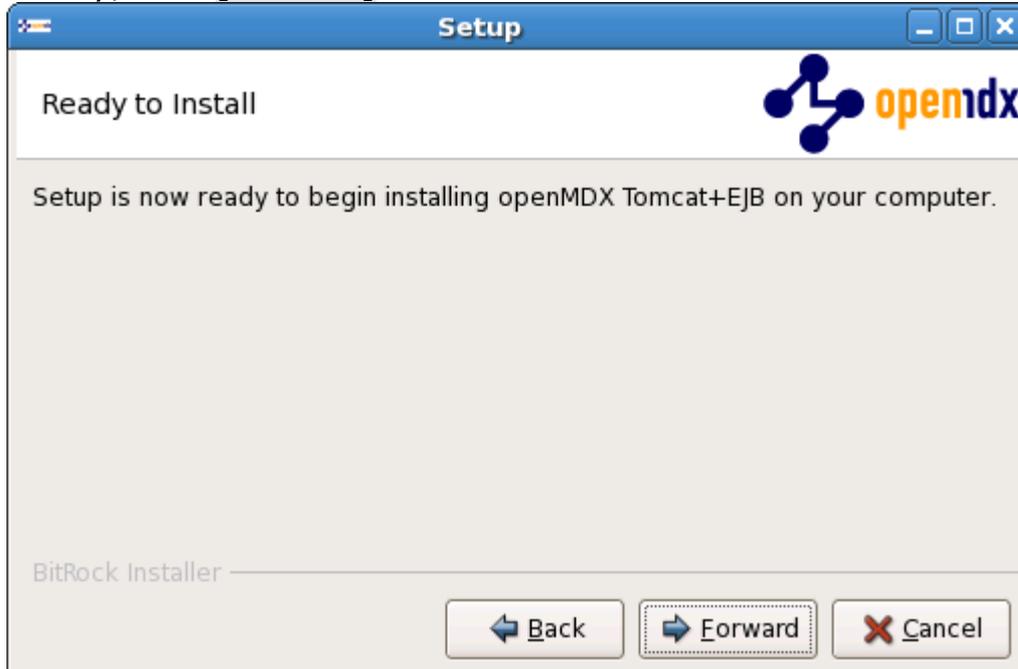


8. Enter the Tomcat ports (defaults are shown below). Please note that Tomcat does not start properly unless it has exclusive use of these ports, i.e. make sure that the ports you choose are not already in use. Click [Next] to continue:



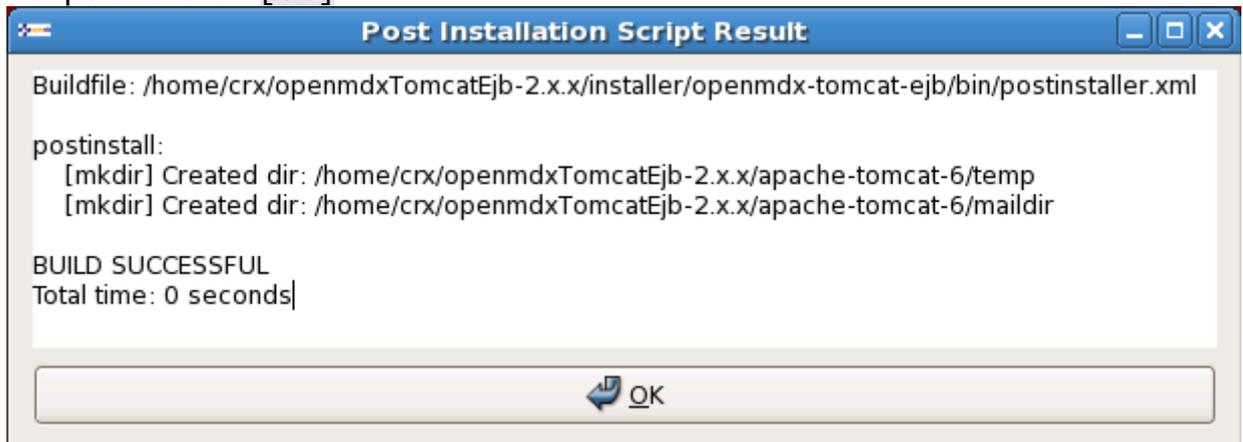
The screenshot shows a window titled "Setup" with the openMDX logo in the top right corner. Below the logo, the text "Tomcat configuration settings" is displayed. There are four input fields for port numbers: "Tomcat HTTP port" with the value "8080", "Tomcat HTTPS port" with "8443", "Tomcat server port" with "8005", and "Tomcat AJP port" with "8009". At the bottom left, the text "BitRock Installer" is visible. At the bottom right, there are three buttons: "Back", "Forward", and "Cancel".

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

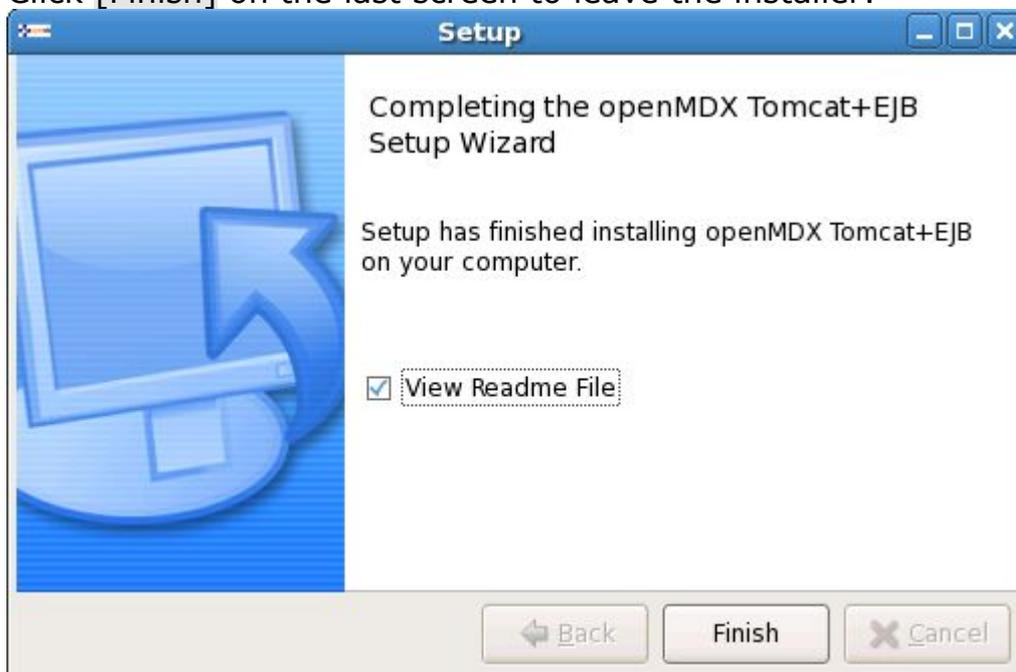


The screenshot shows a window titled "Setup" with the openMDX logo in the top right corner. Below the logo, the text "Ready to Install" is displayed. Below that, the text "Setup is now ready to begin installing openMDX Tomcat+EJB on your computer." is shown. At the bottom left, the text "BitRock Installer" is visible. At the bottom right, there are three buttons: "Back", "Forward", and "Cancel". The "Forward" button is highlighted with a dashed border, indicating it is the next step.

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. On your desktop, you should see the following new shortcuts created by the installer (instead of 2.x.x you will be seeing the respective version number):



4.2 openCRX

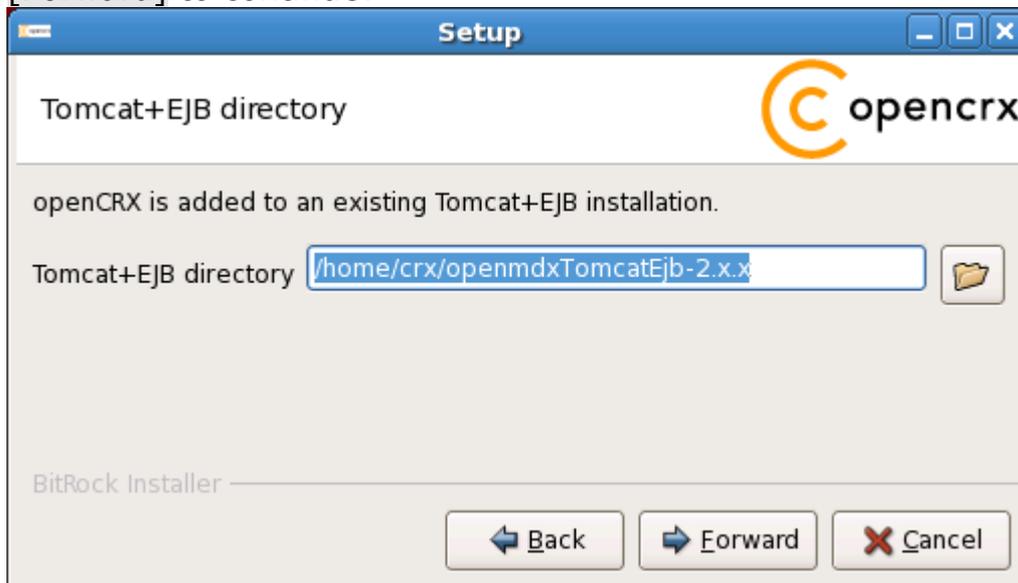
1. Launch the Installer `opencrxServer-2.5.1-linux-installer.bin`
2. Click [Forward] on the following screen:



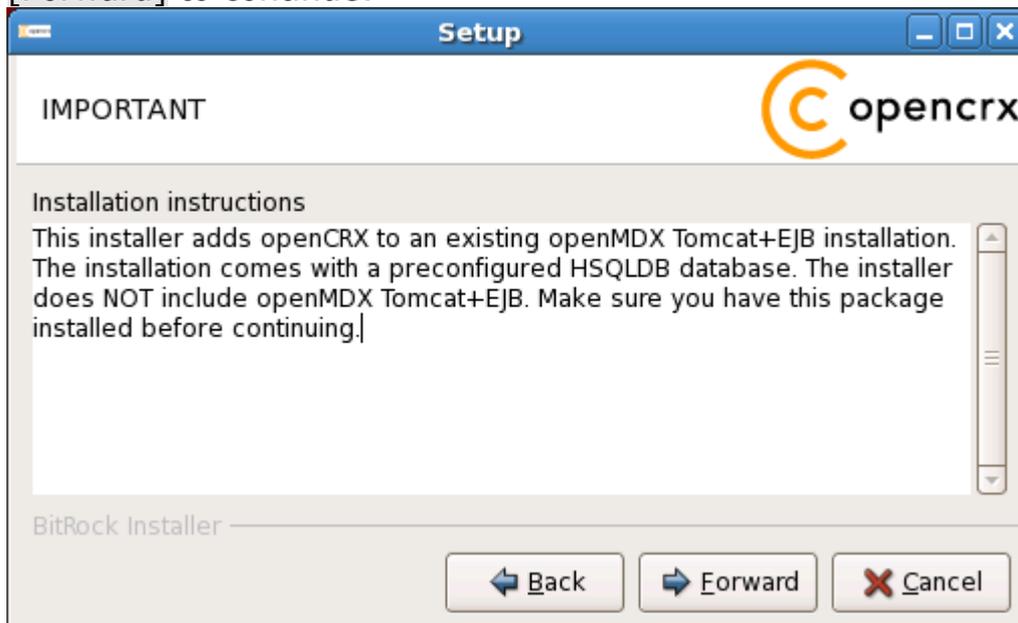
3. Accept the BSD License Agreement and click [Forward] again:



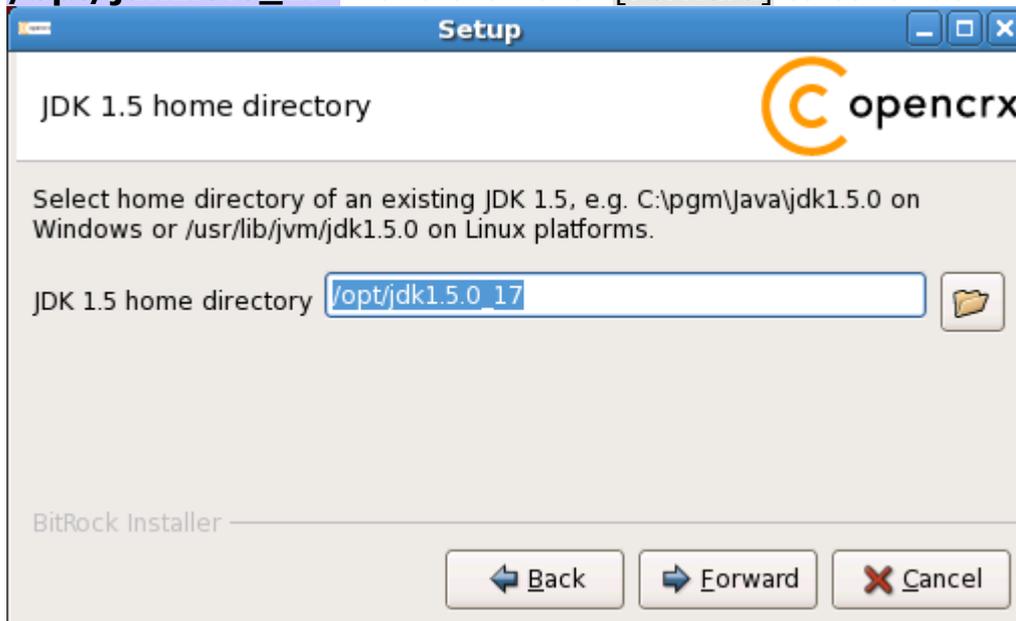
- On the following screen, navigate to the **Tomcat installation directory** – for example **/home/crx/openmdxTomcatEjb-2.5.1** – and then click [Forward] to continue:



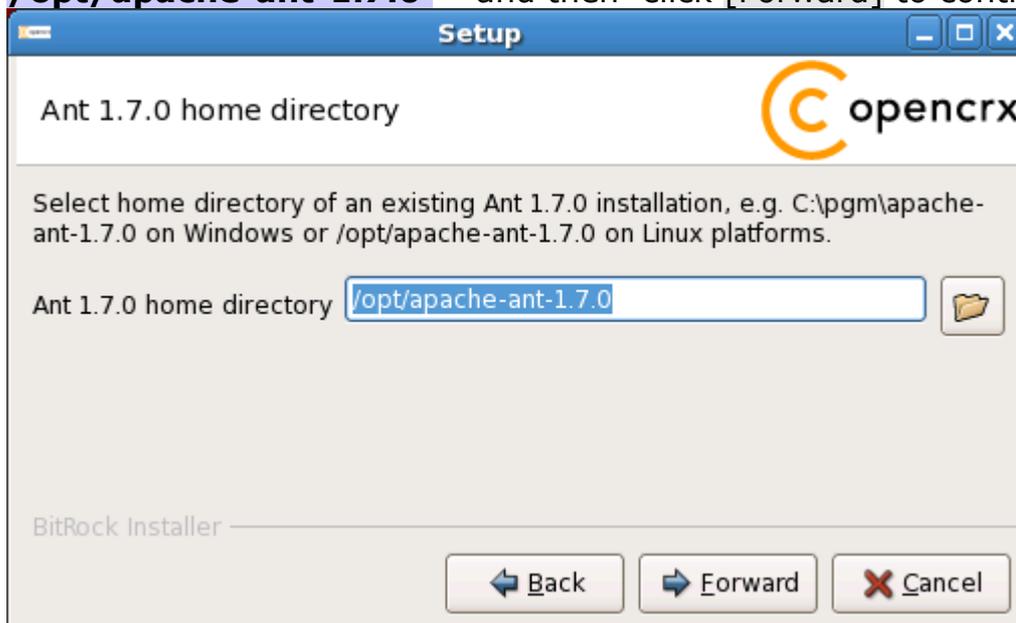
- Please note the information on the following screen and then click [Forward] to continue:



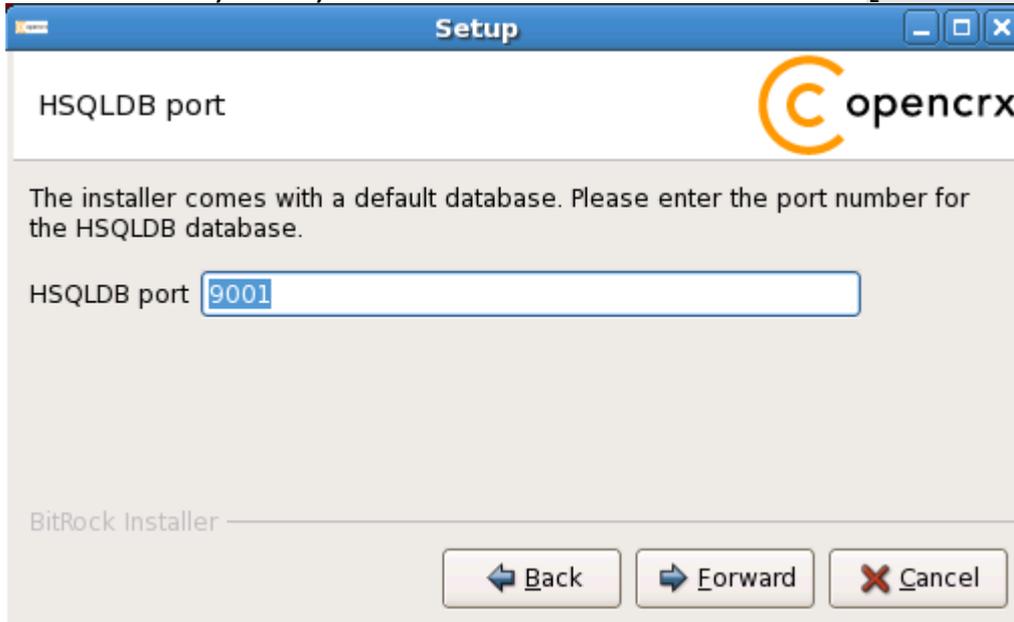
6. Select the home directory of your JDK 1.5 installation - for example **/opt/jdk1.5.0_17** - and then click [Forward] to continue:



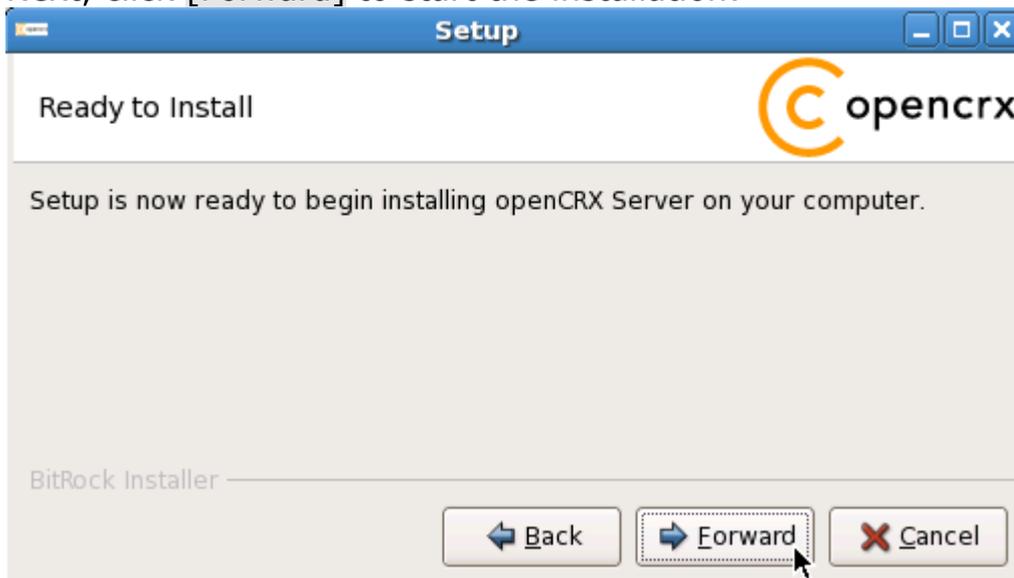
7. Select the home directory of your Ant installation - for example **/opt/apache-ant-1.7.0** - and then click [Forward] to continue:



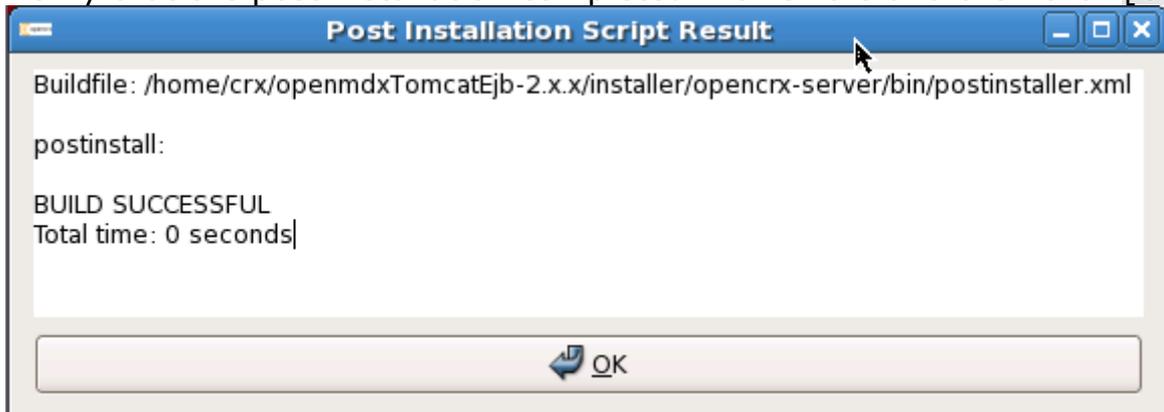
8. Enter the port number of the **HSQLDB service**. You can choose any port available on your system. The default is **9001**. Click [Forward] to continue:



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



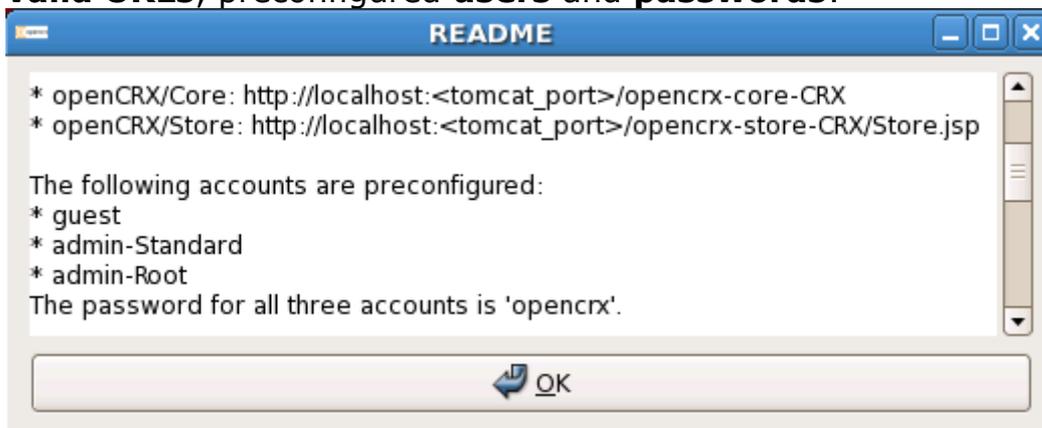
14. Verify that the post installation completed with errors and then click [OK]:



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. On your desktop, you should now see the following shortcuts (instead of 2.x.x you will be seeing the respective version numbers):



5 Running openCRX Server

The installation process created 8 shortcuts on your desktop (instead of 2.x.x you will be seeing the respective version numbers):



Start Tomcat+EJB



Stop Tomcat+EJB



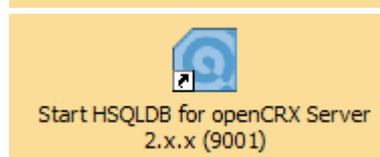
Login Tomcat+EJB
(launch browser and connect to Tomcat)



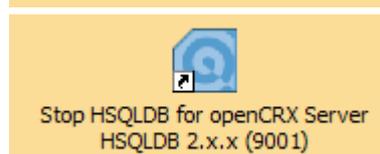
Start openCRX Server
(start HSQLDB, start Tomcat and deploy openCRX)



Stop openCRX Server
(stop Tomcat, stop HSQLDB)



Start HSQLDB



Stop HSQLDB



Launch Management Console of HSQLDB

5.1 Start openCRX Server

Double-click the shortcut **Start openCRX Server**.

5.2 Connect and Login

Double-click the shortcut **Login Tomcat+EJB**. This will launch your default browser and take you to the Tomcat home page. In the lower left corner you will see a box labeled 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 Stop openCRX Server

Double-click the shortcut **Stop openCRX Server**.

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>.