



EUROPEAN COMMISSION

DIRECTORATE-GENERAL INFORMATICS

# Quick start guide

## eDelivery Pilot for BRIS

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## 1. INTRODUCTION

The CIPA e-Delivery is a generic solution for public administrations to exchange documents in a secure and reliable way.

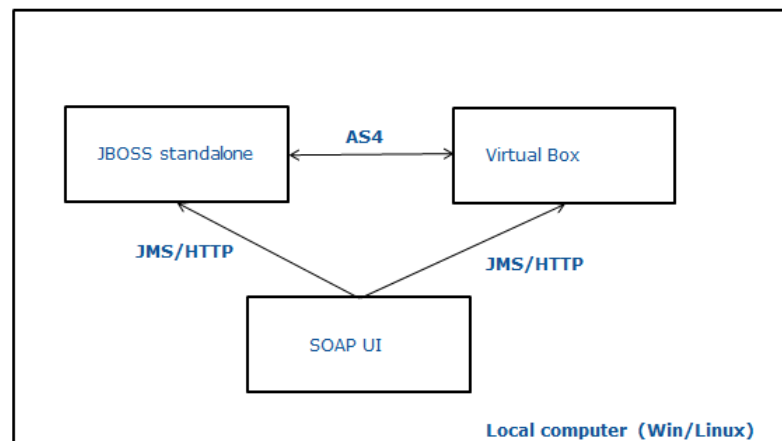
For easy internal testing in the context of the BRIS project, we have developed a set of 2 instances consisting of a preconfigured JBoss standalone instance and a preconfigured VirtualBox appliance.

Each instance contains the following components:

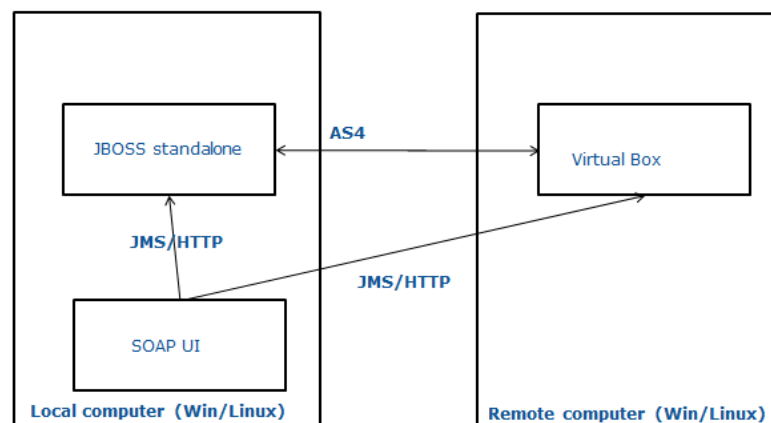
- CIPA e-Delivery connector
- CIPA Administration console
- Domibus (AS4 gateway)

As AS2 message exchanging and dynamic discovery capabilities are not required in the BRIS context, these components are not part of this pilot.

The JBoss standalone instance must be deployed locally. The VirtualBox appliance can be deployed either locally or on another server:



**Figure 1 - Installation on the same machine**



**Figure 2 - Installation on 2 different machines**

## 2. PREREQUISITES

- Java runtime environment (JRE), version 7 or higher:  
<http://www.oracle.com/technetwork/java/javase/downloads/index.html>
- JCE Unlimited Strength Policy files, for JRE7:  
<http://www.oracle.com/technetwork/java/javase/downloads/jce-7-download-432124.html>  
Copy the jar files from the extracted zip to <JRE\_HOME>\lib\security.
- Oracle VirtualBox:  
<https://www.virtualbox.org/wiki/Downloads>  
Used for running the VirtualBox image created for easy testing.
- MySQL database server listening on the default port 3306:  
<http://dev.mysql.com/downloads/windows/installer/5.6.html>
- WinSCP, or any other SFTP client:  
<http://winscp.net>

Please install the above software on your host machine. For further information and installation details, we kindly advise you to refer to the manufacturers' websites.

## 3. CONFIGURE YOUR ENVIRONMENT

### 3.1. JBoss standalone instance

1. Download the CIPA eDelivery Distribution archive from the share drive :  
[U:\COMMON\CIPASHARE\e-Delivery\BRIS Pilot](#)
2. Extract the zip file containing the installation package of the CIPA eDelivery to a location on your physical machine, which we will refer to in this document as your "< eDelivery installation path >".
3. Open a command prompt and navigate to this directory:  
< eDelivery installation path >\sql-scripts.
4. Execute the following commands in the command prompt:

```
mysql -h localhost -u root --password=root -e "drop schema if exists edelivery;create schema edelivery; create user edelivery identified by 'edelivery';grant all on edelivery.* to edelivery;"
```

```
mysql -h localhost -u root --password=root edelivery < create-mysql.sql
```

**Note:** if you are using Windows, make sure to have *mysql.exe* added to your PATH variable.

5. You can now start the JBoss standalone instance on your computer. Execute:
  - a. bin/standalone.sh (for Linux)
  - b. bin/standalone.bat (for windows)

Expected result:

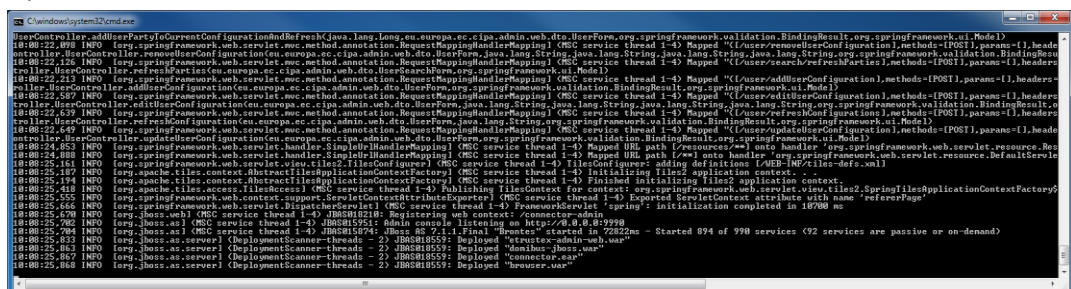


Figure 3 - JBoss standalone instance up and running

Your JBoss standalone instance is now ready for sending messages.

## 3.2. VirtualBox

If you intend to install the VirtualBox on a different server, skip the next chapter and go directly to 3.2.2 Installation of the VirtualBox on another server

### 3.2.1. Local installation of the VirtualBox

1. Start Oracle VM VirtualBox.
2. Import the VirtualBox appliance file by clicking on the menu "File -> Import appliance". Select the *edelivery-virtualbox-2.4.0.ova* file from your computer, click on the "open" button and then the "next" button on the following screen.  
**Note:** Do NOT activate mac-address reinitializing. Just click on "Import" to start the import process.
3. Start the virtual machine from the Oracle VirtualBox Manager. The login prompt appears, and the VirtualBox is ready for receiving/sending documents.
4. In order to allow the VirtualBox to send messages to your local JBoss instance, you now need to configure your local IP address in the VirtualBox:
  - First, identify your local IP. We will refer to it as "W.X.Y.Z":

- **Windows:** open a command prompt and type "ipconfig":

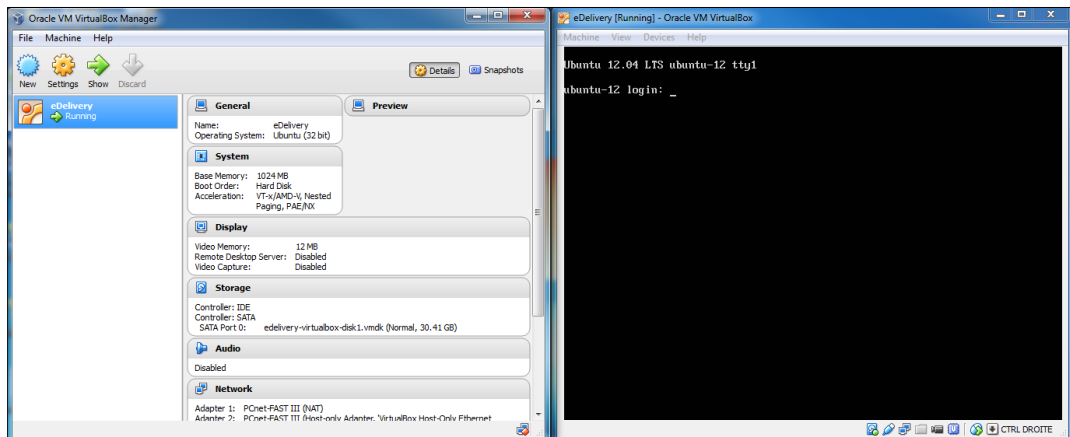
```
Ethernet adapter Local Area Connection:
Connection-specific DNS Suffix . : net1.csc.eu.int
IPv4 Address. . . . . : 158.166.205.133
Subnet Mask . . . . . : 255.255.255.0
Default Gateway . . . . . : 158.166.205.1
```

- **Linux:** type "ifconfig" in a shell:

```
eth1      Link encap:Ethernet  HWaddr 08:00:27:5f:f3:43
          inet addr:192.168.56.11  Bcast:192.168.56.255  Mask:255.255.255.0
          inet6 addr: fe80::a00:27ff:fe5f:f343/64  Scope:Link
          UP BROADCAST RUNNING MULTICAST  MTU:1500  Metric:1
          RX packets:649 errors:0 dropped:0 overruns:0 frame:0
          TX packets:354 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:1000
          RX bytes:98909 (98.9 KB)  TX bytes:49983 (49.9 KB)
          Interrupt:9 Base address:0xd060
```

- ```
<MEP name="One-Way/Push">
  <Leg number="1" userService="urn:www.cenbii.eu:profile:bii04:ver1.0_urn:oasis:
    <Producer name="senderCN_GW">
      <PartyId type="urn:oasis:names:tc:ebcore:partyid-type:iso3166-1">
        <Role>GW</Role>
      </Producer>
      <Endpoint address="http://192.168.56.11:8080/domibus/services/msh" soapVersion="1.2"/>
      <As4Receipt method="response" nonRepudiation="true">
        <As4Reliability maxRetries="3" interval="5" shutdown="10" duplicate="false">
          </As4Receipt>
        </Leg>
      </MEP>
    </Binding>
    <Binding name="receiverCN_senderCN_urn:www.cenbii.eu:profile:bii04:ver1.0_urn:oasis:
      <MEP name="One-Way/Push">
        <Leg number="1" userService="urn:www.cenbii.eu:profile:bii04:ver1.0_urn:oasis:
          <Producer name="receiverCN_GW">
            <PartyId type="urn:oasis:names:tc:ebcore:partyid-type:iso3166-1">
              <Role>GW</Role>
            </Producer>
            <Endpoint address="Undefined address" soapVersion="1.2"/>
            <As4Receipt method="response" nonRepudiation="true">
              <As4Reliability maxRetries="3" interval="5" shutdown="10" duplicate="false">
                </As4Receipt>
              </Leg>
            </MEP>
          </Binding>
          <PMode name="senderCN_receiverCN_urn:www.cenbii.eu:profile:bii04:ver1.0_urn:oasis:
            <PMode name="receiverCN_senderCN_urn:www.cenbii.eu:profile:bii04:ver1.0_urn:oasis:
          </PModes>
        </Binding>
      </PModes>
    </PModes>
  </PModes>
</PModes>
```

- Expected result:

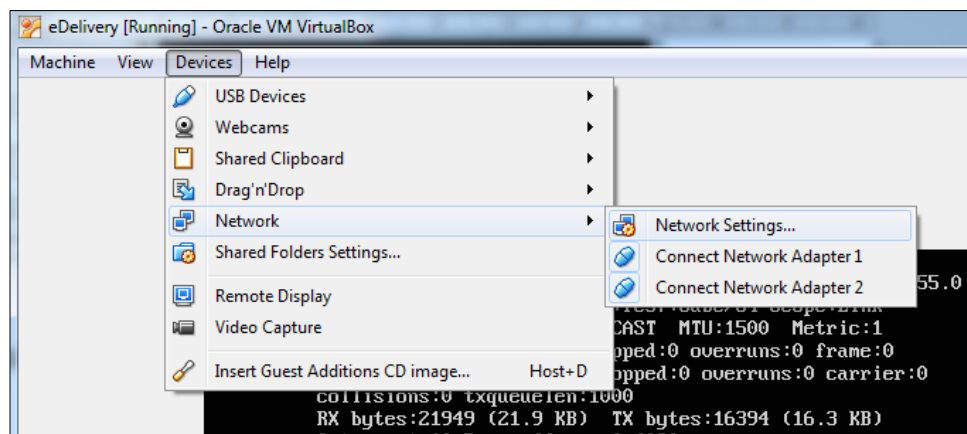


Your VirtualBox is now ready to send/receive messages.

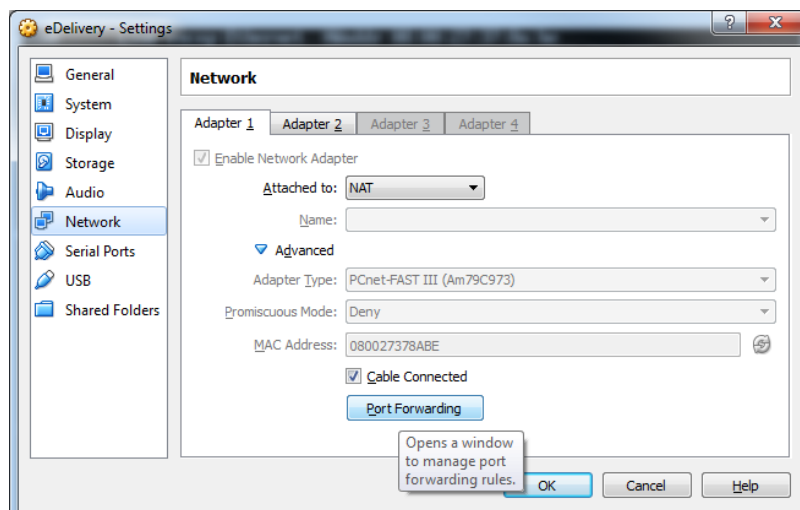
### 3.2.2. Installation of the VirtualBox on another server

To install the VirtualBox on a remote machine, you will need to follow these different steps:

1. Install the VirtualBox on the remote machine:
  - a. On the remote machine, follow the steps of the chapter 0 If you intend to install the VirtualBox on a different server, skip the next chapter and go directly to 3.2.2 Installation of the VirtualBox on another server
  - b. Local installation of the VirtualBox.
  - c. When you replace "Undefined address" with your local IP make sure W.X.Y.Z is your local IP, not the remote machine IP.
2. Configure the port forwarding on the remote machine:
  - a. On the remote machine, in Oracle VM VirtualBox, click on "Devices>Network>Network Settings...":

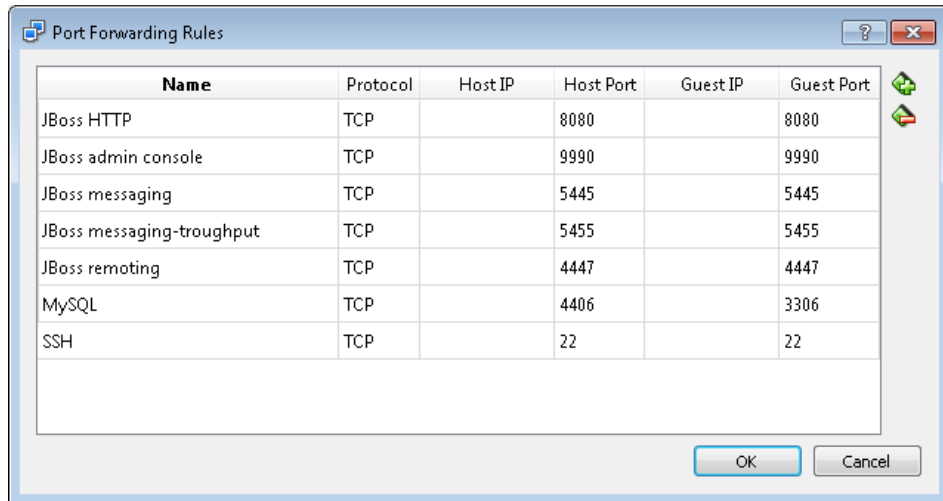


- b. In the next window, click on "Port Forwarding":



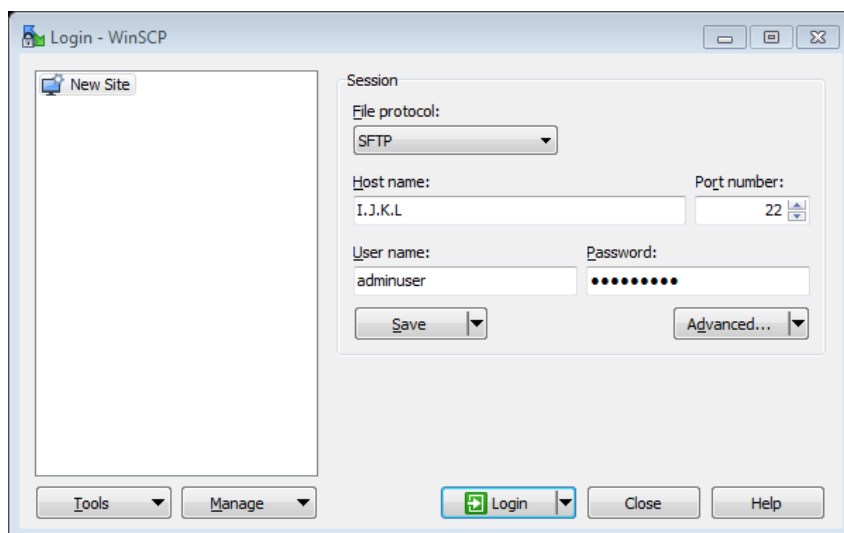


- c. Add the following forwarding rules:

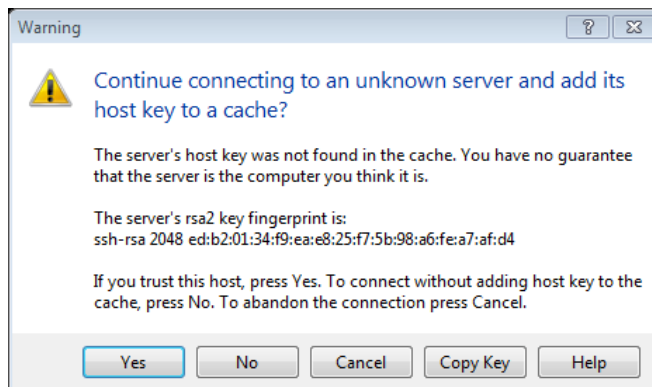


3. Configure the JMS endpoint address on the remote machine.

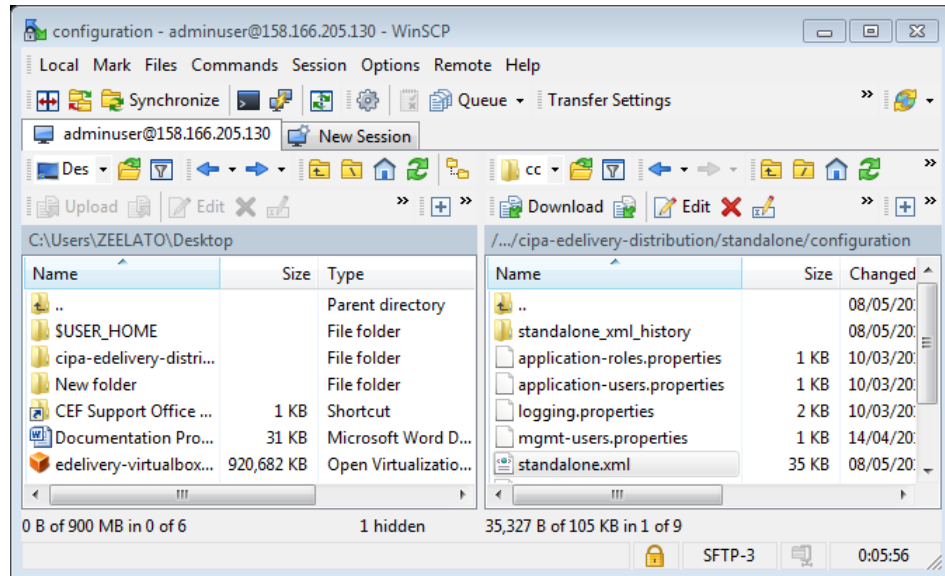
- a. Connect to the remote machine with WinSCP, using SFTP. Identify the IP of the remote machine (or its host name). We will refer to that IP as "I.J.K.L":



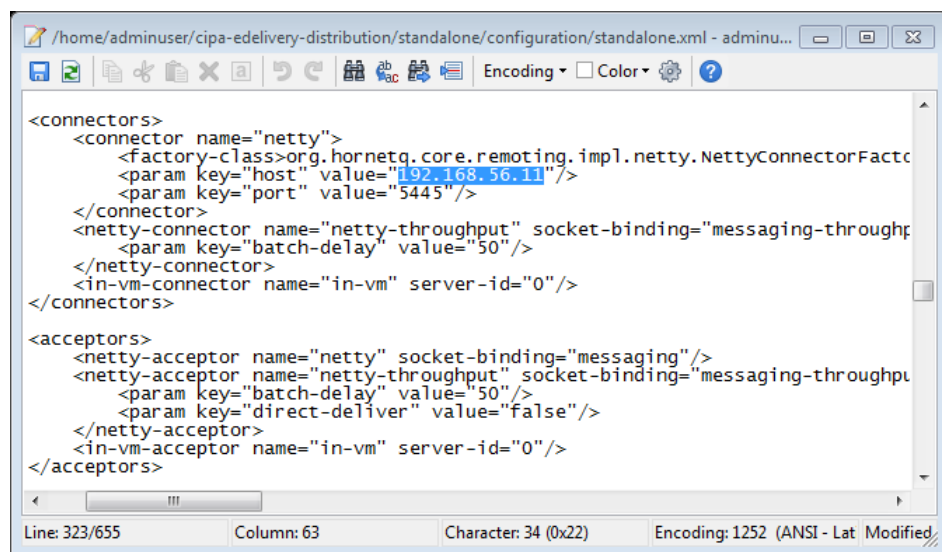
- b. Click "Yes" to connect to the remote machine:



- c. In the remote panel (right panel), navigate to:  
*cipa-edelivery-distribution/standalone/configuration/*:



- d. Right-click on file *standalone.xml* and click on "Edit".
- e. Scroll in the document and change the host value from "192.168.56.11" to "I.J.KL":



- f. Save and close the file
- g. Shutdown the VirtualBox and reboot it.

#### 4. Configure your local JBoss instance.

- a. Make sure your local JBoss instance is started.
- b. Edit the file < eDelivery installation path >/modules/eu/europa/ec/cipa/configuration/main/domibus/pmodes/partner.pmodes.xml and replace the value "192.168.56.11" with the remote machine IP "I.J.K.L" (or its host name):

```
<Binding name="senderCN_receiverCN_urn:www.cenbii.eu:profile:bii04:ver1.0_urn:"
  <MEP name="One-Way/Push">
    <Leg number="1" userService="urn:www.cenbii.eu:profile:bii04:ver1.0_urn:"
      <Producer name="senderCN_GW">
        <PartyId type="urn:oasis:names:tc:ebcore:partyid-type:iso3166-
          <Role>GW</Role>
        </Producer>
        <Endpoint address="http://192.168.56.11:8080/domibus/services/msh"
          <As4Receipt method="response" nonRepudiation="true">
            <As4Reliability maxRetries="3" interval="5" shutdown="10" dupl
          </As4Receipt>
        </Leg>
      </MEP>
    </Binding>
```

#### 3.2.3. Firewall settings

Depending on your organization, the firewall settings might prevent you from exchanging messages from your local JBoss instance and the remotely deployed VirtualBox.

To test if a port is blocked or open, you can use the tool "telnet" and run the command "telnet <server\_ip> <port>". If the port is blocked then you need to open it.

The following ports must be open the **remote** machine (TCP protocol):

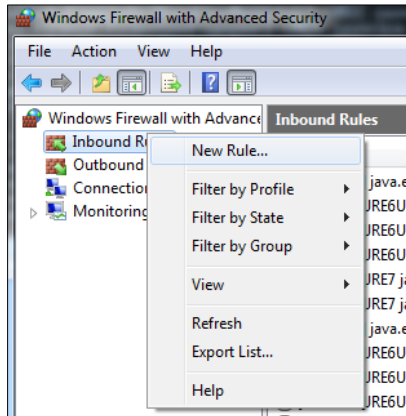
- 8080 (HTTP port)
- 5445 (JMS messaging)
- 5455 (JMS messaging)
- 22 (only needed if you want to connect with SSH to the VirtualBox)
- 4406 (MySQL port)
- 4447 (JBoss remoting interface)
- 9990 (JBoss admin console)

The following ports must be open on the **local** machine (TCP protocol):

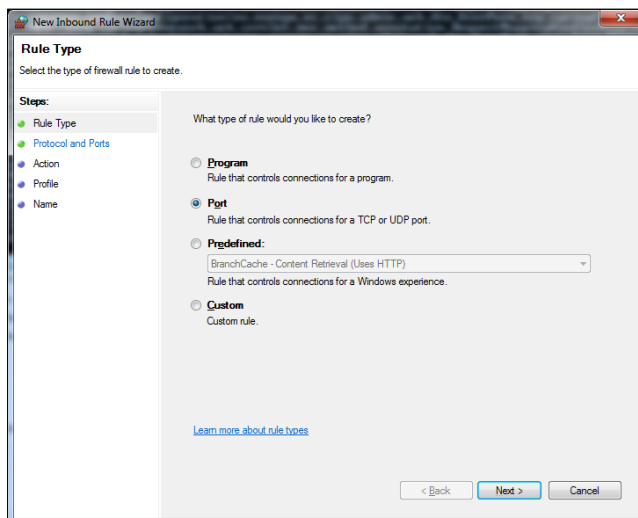
- 8080 (HTTP port)
- 5445 (JMS messaging)
- 5455 (JMS messaging)
- 4447 (JBoss remoting interface)

If your computer is protected by the Windows firewall, this is how you can open a port:

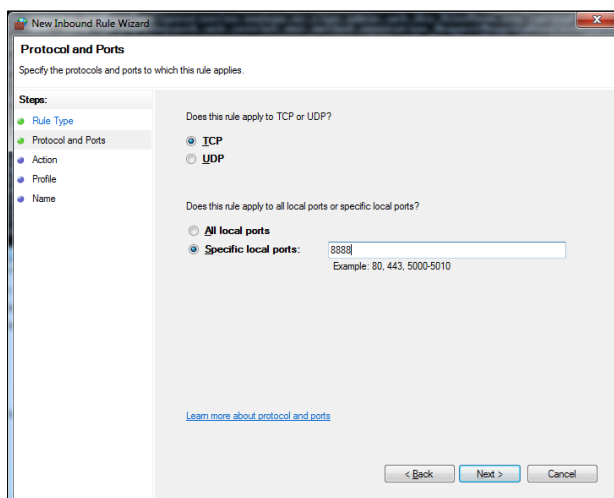
1. Open the "Windows Firewall with Advanced Security window": click on Start > Control Panel > System and Security > Windows Firewall and then click on "Advanced Settings".
2. Right click on "Inbound Rules > New Rule...":



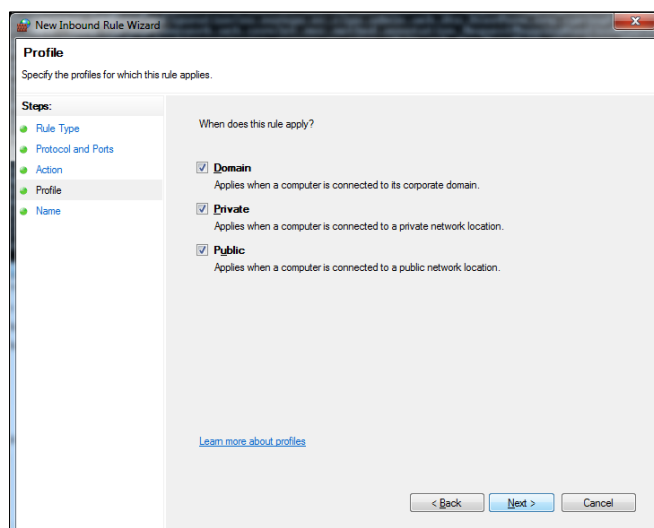
3. Select "Port" and click on "Next":



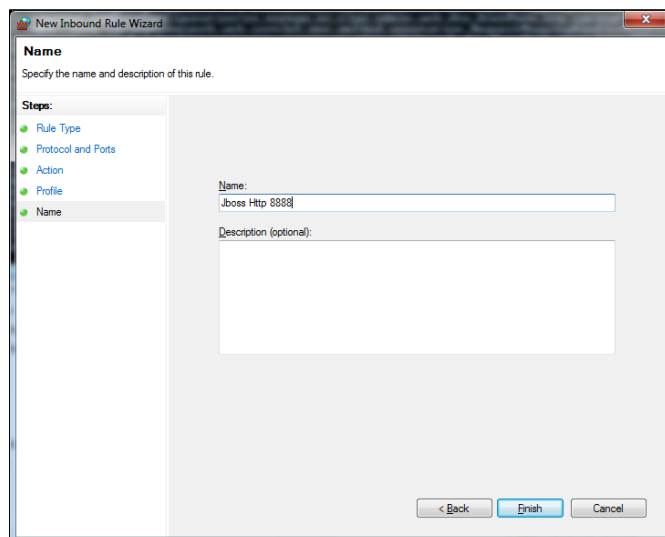
4. Enter a specific local port (for example 8080) and click on "Next":



5. Click on "Next":



6. Name the rule and click on "Finish":



## **4. TESTING**

To send messages, you can follow the instructions of the "Testing guide".

## 5. ANNEX

Parameter	JBoss local instance	VirtualBox deployed locally	VirtualBox deployed remotely on a machine with IP "I.J.K.L"
IP	localhost	192.168.56.11	I.J.K.L
Connector base url	<a href="http://localhost:8080/connector">http://localhost:8080/connector</a>	<a href="http://192.168.56.11:8080/connector">http://192.168.56.11:8080/connector</a>	<a href="http://I.J.K.L:8080/connector">http://I.J.K.L:8080/connector</a>
Admin console base url	<a href="http://localhost:8080/connector-admin">http://localhost:8080/connector-admin</a> Username: testadm Password: testadm	<a href="http://192.168.56.11:8080/connector-admin">http://192.168.56.11:8080/connector-admin</a> Username: testadm Password: testadm	<a href="http://I.J.K.L:8080/connector-admin">http://I.J.K.L:8080/connector-admin</a> Username: testadm Password: testadm
JBoss Admin console url	<a href="http://localhost:9990/console/index.html">http://localhost:9990/console/index.html</a> Username: manager Password: manage	<a href="http://192.168.56.11:9990/console/index.html">http://192.168.56.11:9990/console/index.html</a> Username: manager Password: manage	<a href="http://I.J.K.L:9990/console/index.html">http://I.J.K.L:9990/console/index.html</a> Username: manager Password: manage
Domibus base url	<a href="http://localhost:8080/domibus">http://localhost:8080/domibus</a>	<a href="http://192.168.56.11:8080/domibus">http://192.168.56.11:8080/domibus</a>	<a href="http://I.J.K.L:8080/domibus">http://I.J.K.L:8080/domibus</a>
Browser	<a href="http://localhost:8080/browser">http://localhost:8080/browser</a>	<a href="http://192.168.56.11:8080/browser">http://192.168.56.11:8080/browser</a>	<a href="http://I.J.K.L:8080/browser">http://I.J.K.L:8080/browser</a>
Databases	Edelivery database jdbc:mysql//localhost:3306/?user=edelivery&password=edelivery  Etrustex database jdbc:mysql//localhost:3306/?user=trustex_user&password=trustex_passw	Edelivery database jdbc:mysql//192.168.56.11:3306/?user=edelivery&password=edelivery  Etrustex database jdbc:mysql//192.168.56.11:3306/?user=trustex_user&password=trustex_passw  root password for MySQL: adminuser	Edelivery database jdbc:mysql//I.J.K.L:4406/?user=edelivery&password=edelivery  Etrustex database jdbc:mysql// I.J.K.L:4406/?user=trustex_user&password=trustex_passw  root password for MySQL: adminuser
OS login		Username: adminuser Password: adminuser	Username: adminuser Password: adminuser
WSDL	<a href="http://localhost:8080/connector/wsd/DocumentWrapper-2.0.wsdl">http://localhost:8080/connector/wsd/DocumentWrapper-2.0.wsdl</a>  <a href="http://localhost:8080/connector/wsd/BRISDocument-2.0.wsdl">http://localhost:8080/connector/wsd/BRISDocument-2.0.wsdl</a>	<a href="http://192.168.56.11:8080/connector/wsd/InboxRequest-2.0.wsdl">http://192.168.56.11:8080/connector/wsd/InboxRequest-2.0.wsdl</a>  <a href="http://192.168.56.11:8080/connector/wsd/RetrieveRequest-2.1.wsdl">http://192.168.56.11:8080/connector/wsd/RetrieveRequest-2.1.wsdl</a>	<a href="http://I.J.K.L:8080/connector/wsd/InboxRequest-2.0.wsdl">http://I.J.K.L:8080/connector/wsd/InboxRequest-2.0.wsdl</a>  <a href="http://I.J.K.L:8080/connector/wsd/RetrieveRequest-2.1.wsdl">http://I.J.K.L:8080/connector/wsd/RetrieveRequest-2.1.wsdl</a>