

DIRECTORATE-GENERAL INFORMATICS

# **Quick start guide**

# **eDelivery pilot for BRIS**

Date: 23/04/2015

Version: 1.00

Authors: Adrien Ferial

Revised by:

Approved by:

## **TABLE OF CONTENTS**

1. INTRODUCTION	4
2. PREREQUISITES	5
3. CONFIGURE YOUR ENVIRONMENT	
3.1. JBoss standalone instance	5
3.2. Virtual box	6
3.2.1. Local installation of the Virtual box	6
3.2.2. Installation of the Virtual box on another server	8
3.2.2.1. Firewall settings	10
4. TESTING	12
5. ANNEX	13

# **Document History**

Version	Date	Comment	Modified Pages
1.00	23/04/2015	Document created by Adrien FERIAL, inspired by the Quick start guide initiated by Yoeri SMETS	

#### 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 Virtual box 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 Virtual box appliance can be deploy locally or on another server:

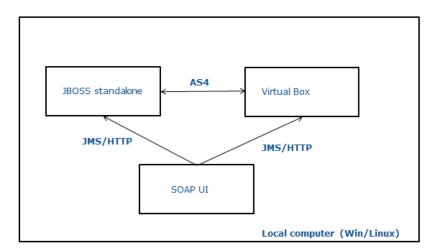


Figure 1 - Installation on the same machine

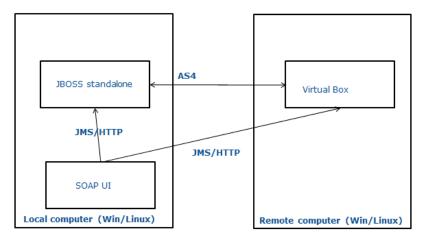


Figure 2 - Installation on 2 different machines

#### 2. Prerequisites

- Java runtime environment version 7 or higher
   (http://www.oracle.com/technetwork/java/javase/downloads/index.html)
- The JCE Unlimited Strength Policy files
  For jre7 (<a href="http://www.oracle.com/technetwork/java/javase/downloads/jce-7-download-432124.html">http://www.oracle.com/technetwork/java/javase/downloads/jce-7-download-432124.html</a>), copy the jar-files from the extracted zip to <JRE\_HOME>\lib\security.
- Oracle Virtual box (<a href="https://www.virtualbox.org/wiki/Downloads">https://www.virtualbox.org/wiki/Downloads</a>)
   Used for running the Virtual box image created for easy testing.
- MySQL database server listening on the default port 3306:
   <a href="http://dev.mysql.com/downloads/windows/installer/5.6.html">http://dev.mysql.com/downloads/windows/installer/5.6.html</a>

Please install the above software on your host machine, for further information and installation details we gently forward you to the websites of the manufacturers.

#### 3. CONFIGURE YOUR ENVIRONMENT

#### 3.1. JBoss standalone instance

- 1. Download the archive from the share drive : <u>U:\COMMON\CIPASHARE\cipa-edelivery-distribution-3.0.0-bris.zip</u>
- 2. Extract the zip file containing the installation package of the CIPA E-Delivery to a location on your physical machine, which we refer to in this document as your "e-Delivery installation path".
- 3. The open a command prompt and navigate to this directory: <e-Delivery installation Path>\sql-scripts
- 4. Execute the following commands on 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

- 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:** 

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

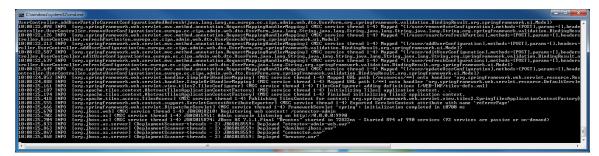


Figure 3 - JBoss standalone instance up and running

Your JBoss standalone instance is now ready for sending messages.

#### 3.2. Virtual box

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

#### 3.2.1. <u>Local installation of the Virtual box</u>

- 1. Start Oracle VM VirtualBox
- 2. Import the Virtual box appliance file by clicking on the menu "File -> Import appliance". Select the eDelivery-3.0.0.ova file from your computer, click on the "open" button and then the "next" button on the following screen.
  - Do not activate the option of reinitializing the mac-address in the screen you see now, but just click on "Import" to start the import process.
- 3. Start the virtual machine from the Oracle VirtualBox Manager, as soon as it is started up, showing the login prompt, the virtual box is ready for receiving/sending documents
- 4. In order to allow the Virtual box to send messages to your local JBoss instance, you now need to configure your local IP address in the Virtual box:
  - Firstly, identify your local IP. We will refer to it as "W.X.Y.Z":
    - Windows: open a command prompt and type "ipconfig"

Linux: type "ifconfig" in a shell:

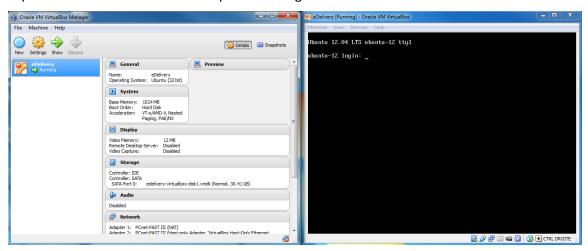


 Click on this <u>link</u> and replace "Undefined address" with "http://W.X.Y.Z/domibus:8080/services/msh" where W.X.Y.Z is your local IP:



Click on the "Save" button

#### Expected result: the Virtual box is up and running

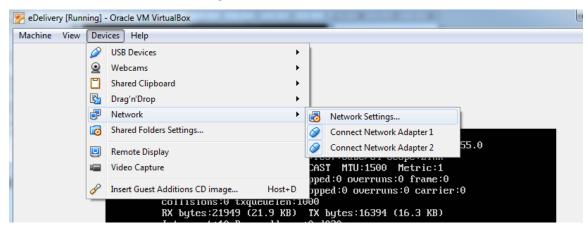


Your Virtual box is now ready to send/receive messages.

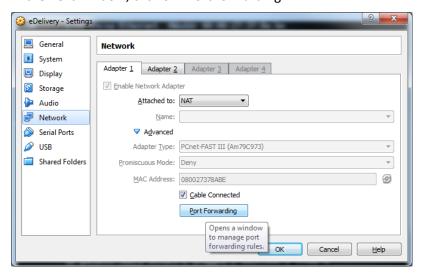
### 3.2.2. <u>Installation of the Virtual box on another server</u>

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

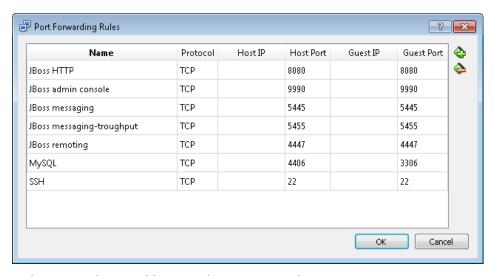
- 1. Install the virtual box on the remote machine:
  - a. On the remote machine, follow the steps of the chapter 3.2.1 Local installation of the Virtual box
  - b. When you replace "Undefined address" with your local IP make sure W.X.Y.Z is your local IP, not the remote machine IP
- 2. Configure the 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. On the remote machine, click on the following link
  - b. Identify the IP of the remote machine (or its host name). We will refer to that IP as "I.J.K.L".
  - c. Scroll in the document and change the host value from 0.0.0.0 to I.J.KL (line 323):

Edit /home/adminuser/cipa-edelivery-distribution/standalone/configuration/standalone.xml

- d. Click on the "Save" button
- 4. Restart the Virtual box by clicking on "Machine > Reset"
- 5. Configure your local JBoss instance
  - a. Make sure your local JBoss instance is started
  - Edit the file "<e-Delivery installation Path>/modules/eu/europa/ec/cipa/configuration/main/domibus/pmodes/part ner.pmodes.xml and replace the value "192.168.56.11" with the remote machine IP "I.J.K.L" (or its host name):

#### 3.2.2.1. Firewall settings

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

To test if a ports 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):

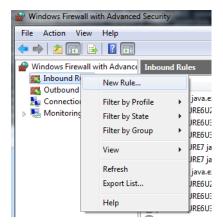
- 8080 (HTTP port)
- 5445 (JMS messaging)
- 5455 (JMS messaging)
- 22 (only needed if you want to connect with SSH to the Virtual box)
- 4406 (MySQL port)
- 4447 (JBoss remoting interface)
- 9990 (JBoss admin console)

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

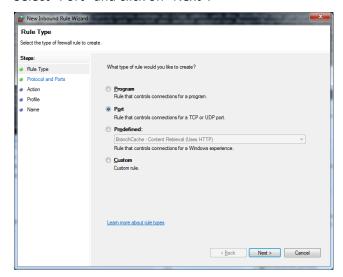
- 8080 (HTTP port)
- 5445 (JMS messaging)
- 5455 (JMS messaging)
- 4447 (JBoss remoting interface)

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

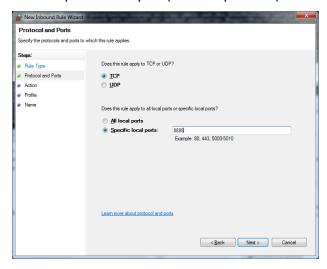
- 1. Open the "Windows Firewall with Advanced Security window": click on Start >Control Panel>System and Security>Windows Firewall and then click on "Advanced Settings".
- 2. Right click on "Inbound Rules > New Rule..."



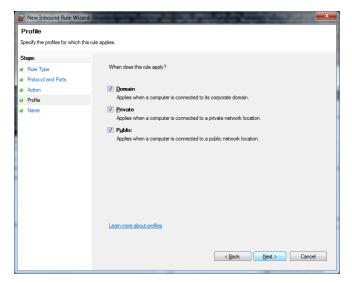
3. Select "Port" and click on "Next":



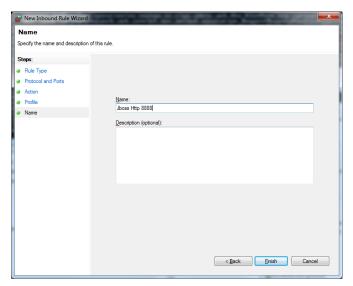
4. Enter a Specific local port (for example 8080) and click on "Next":



5. Click on "Next":



6. Name the rule on 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	http://localhost:8080/connector	http://192.168.56.11:8080/connector	http://I.J.K.L:8080/connector
Admin console base url	http://localhost:8080/connector-admin	http://192.168.56.11:8080/connector-admin	http://I.J.K.L:8080/connector-admin
Domibus base url	http://localhost:8080/domibus	http://192.168.56.11:8080/domibus	http://I.J.K.L:8080/domibus
Browser	http://localhost:8080/browser	http://192.168.56.11:8080/browser	http://I.J.K.L:8080/browser
Databases	Edelivery database jdbc:mysql//localhost:3306/?user=edelive ry&password=edelivery	Edelivery database jdbc:mysql//192.168.56.11:3306/?user=edelivery&passwor d=edelivery	Edelivery database jdbc:mysql//I.J.K.L:4406/?user=edelivery&password =edelivery
	Etrustex database	Etrustex database	Etrustex database
	jdbc:mysql//localhost:3306/?user= trustex_user&password=trustex_passw	jdbc:mysql//192.168.56.11:3306/?user= trustex_user&password=trustex_passw	jdbc:mysql// I.J.K.L:4406/?user= trustex_user&password=trustex_passw
		root password for MySQL : adminuser	root password for MySQL : adminuser
OS login		Username: adminuser Password: adminuser	Username: adminuser Password: adminuser