

# BI-SSB - Lab Manual 4

## Install Cisco ISE in GNS3

### 1. Introduction

The Cisco ISE (Identity Services Engine) is a central point of management for managing switches, routers and other devices as well as insuring policy compliance of users. Long story short: it is the next generation AAA, a continuation of ACS.

### 2. Necessary Elements

For this lab you need the Windows XP virtual machine, VMWare Workstation (please download the trial version suited for your operating system), the ISE virtual machine (from your teacher) and the GNS3 lab (which you will build yourselves).

### 3. Installation

The installation is similar to Cisco ACS in Lab Manual 3.

### 4. Accessing the ISE

ISE has the IP address: 192.168.0.252

Ping this IP from the Windows XP. If it does not work, start the CLI of ISE and verify the settings of the network card of ISE. If you need to configure it (because the IP address is missing, for example), type:

```
ISE# configure terminal
ISE-conf# interface Gigabit 0
ISE-conf-if# ip address 192.168.0.252 255.255.255.0
ISE-conf-if# no shutdown
```

**WARNING: The ISE server (which also has the GUI may take a VERY long time to start (20 minutes at first start).**

```
ISE# show application status ise //to see if it is running
```

```

CiscoISE1
Identity Mapping Service                disabled

CiscoISE/admin# sh application status ise

% Warning : ISE RUNNING IN SAFE MODE. IP ACCESS RESTRICTIONS ARE RELAXED
%          AND CERTIFICATE BASED AUTHENTICATION IS BYPASSED.

ISE PROCESS NAME                        STATE                PROCESS ID
-----
Database Listener                       running             18306
Database Server                         running             40 PROCESSES
Application Server                       running             21058
Profiler Database                       running             19522
AD Connector                            running             21412
M&T Session Database                   running             19436
M&T Log Collector                       running             21327
M&T Log Processor                       running             21284
Certificate Authority Service           running             21237
pxGrid Infrastructure Service            disabled
pxGrid Publisher Subscriber Service     disabled
pxGrid Connection Manager               disabled
pxGrid Controller                       disabled
Identity Mapping Service                disabled

CiscoISE/admin#

```

The default gateway of ISE is the XP machine. If you need to change it:

```
ISE-conf# ip route 0.0.0.0 0.0.0.0 gateway A.B.C.D
```

If the webserver does not run type:

```
ISE# application start ise [safe]
```

CLI: username: admin, pass: 1CiscoStudent

GUI: <https://192.168.0.252>

The username and password for GUI are the same but they are the same as value because in fact in the database there will be two usernames, one for GUI and one for CLI.

Be careful that the GUI is Adobe Flash oriented. You need to download Adobe Flash 11 and install it in the Virtual Machine. Download the NPAPI version for Firefox. Download Flash on your computer and then through the Shared folders transfer it to the machine.

You now have an ISE lab ready. Do not forget that ISE is Cisco IOS like, thus to save the configuration you need to issue at the CLI ACS# *write memory*

**BEFORE SHUTDOWN of GNS3 because ISE is a complicated system I recommend to give in the CLI the command *halt* to stop the ISE machine.**

