

# Semantic SDK 2.0

Published 2014-04-24 | Editor Tutorial. (Compatible with SDK 5.1 and 2014 models)

Semantic Service SDK helps a software developer to make a TV app more easily with Samsung SDK library APIs and 3rd party web service APIs. So far, it takes much time for a developer to find an appropriate API over the internet, then, to find out how to use it and how to make a program with it. A user is generally considered as a TV app developer here.

Contents

## Overview

### Prerequisites - Importing a Semantic Server on Virtual Box

## Overview

On Semantic Service SDK for easy use of services,

A user can search appropriate services (APIs) which he wants to use with a simple keyword,

A user can evaluate service compatibility and interoperability among services with user-specified criteria,

A user can validate a service, i.e. is the service available now? what is the return value with this parameters?, and

A user can get sample code snippet of a service by drag-and-drop the service into the editor.

A user is generally considered as a TV app developer here.

Semantic Service SDK provides the following functions.

### Semantic Mashup Perspective

It describes the window, views, and menus in Semantic Mashup perspective .

### Semantic Service Discovery

The keyword given by a user will be semantically analyzed, and related services will be searched.

### Semantic Service Matching

The compatible/interoperable matching between the source service selected by the user and the target service will be evaluated, and the matching results and related information is provided.

### Semantic Graphic Service Mashup Editor

A user can mashup services graphically on the mashup editor.

### Semantic Service Registry Statistics

Statistical information about services will be provided graphically. The following section shows how to show the registry information.

### Semantic Sample Source Code Search

A user can search sample source codes including a given keyword.

### Semantic Tracing Resource Changes

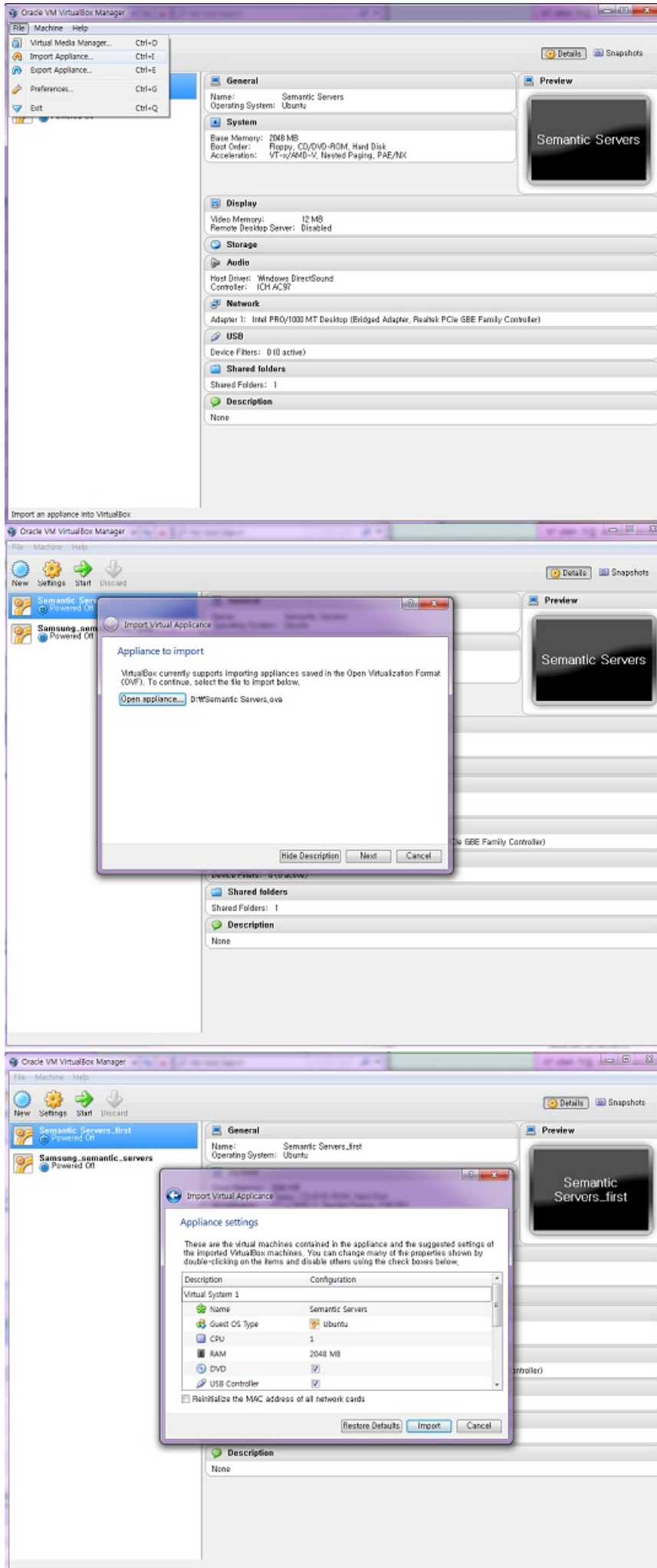
A user can develop a TV App using the (including Samsung SDK Library APIs or 3rd party web services). The user can trace changes of resources that he/she used in an application. The user can identify the changed resource quickly and decide whether or not it will be applied to the TV App, by tracking the resource that has evolved and changed continuously during the TV App development or after its deployment.

## Prerequisites - Importing a Semantic Server on Virtual Box

Before the use of Samsung semantic SDK, a VirtualBox for semantic servers are running as follows :

1. Download 'VirtualBox for Semantic Servers(**Semantic\_Servers.ova**)' from the SDK download site.
2. Run your 'VirtualBox'.

### 3. Import Semantic\_Servers.ova on your VirtualBox.

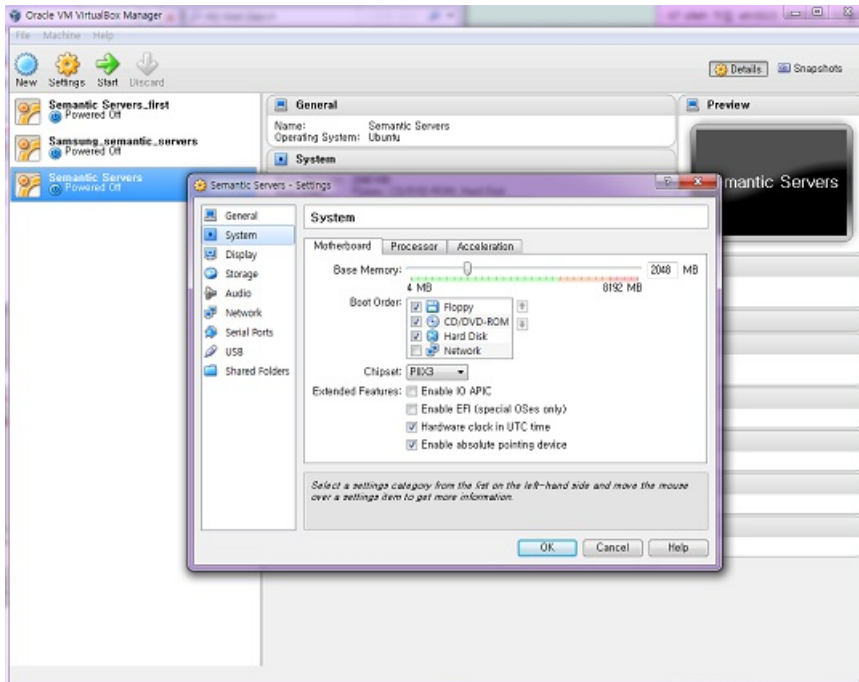


## 4. Confirm the System Settings

### 4.1 Settings

#### System

Base Memory >= 2048 MB

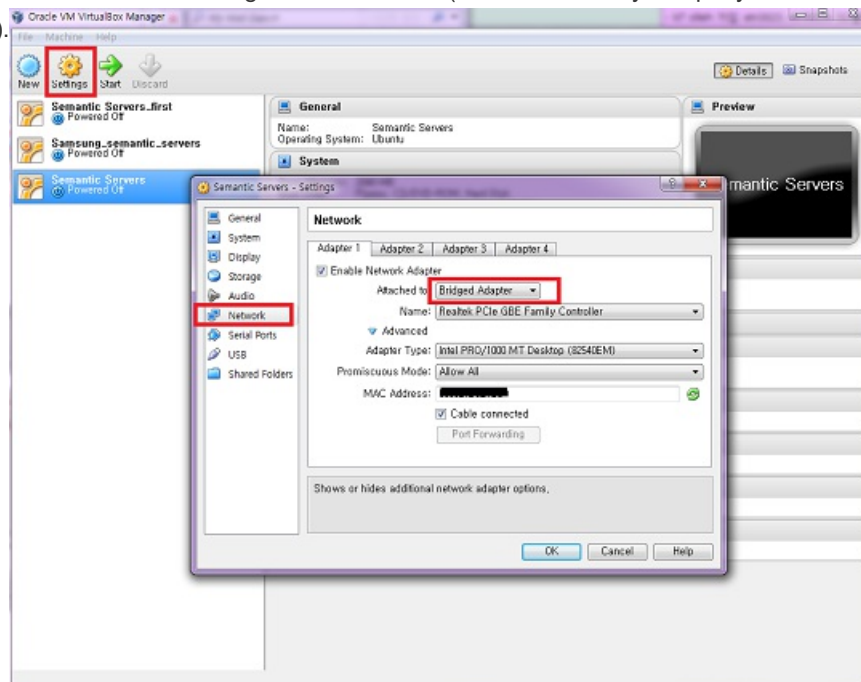


### 4.2 Settings

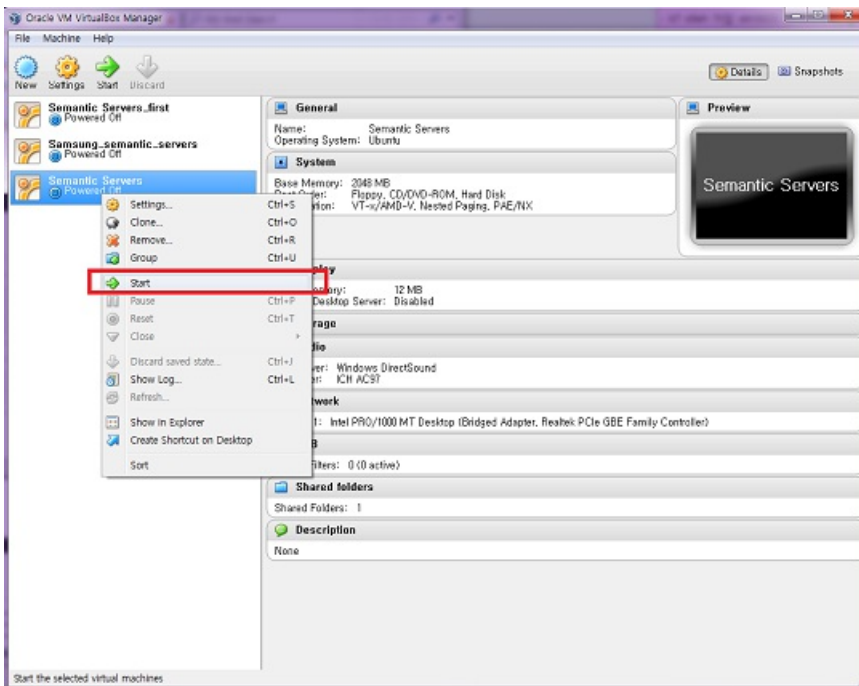
#### Network

Support **Bridged Adapter** method (NAT method not supported).

MAC address should be set if it's binding with IP address. (It is automatically setup if you choose the network card on your computer).

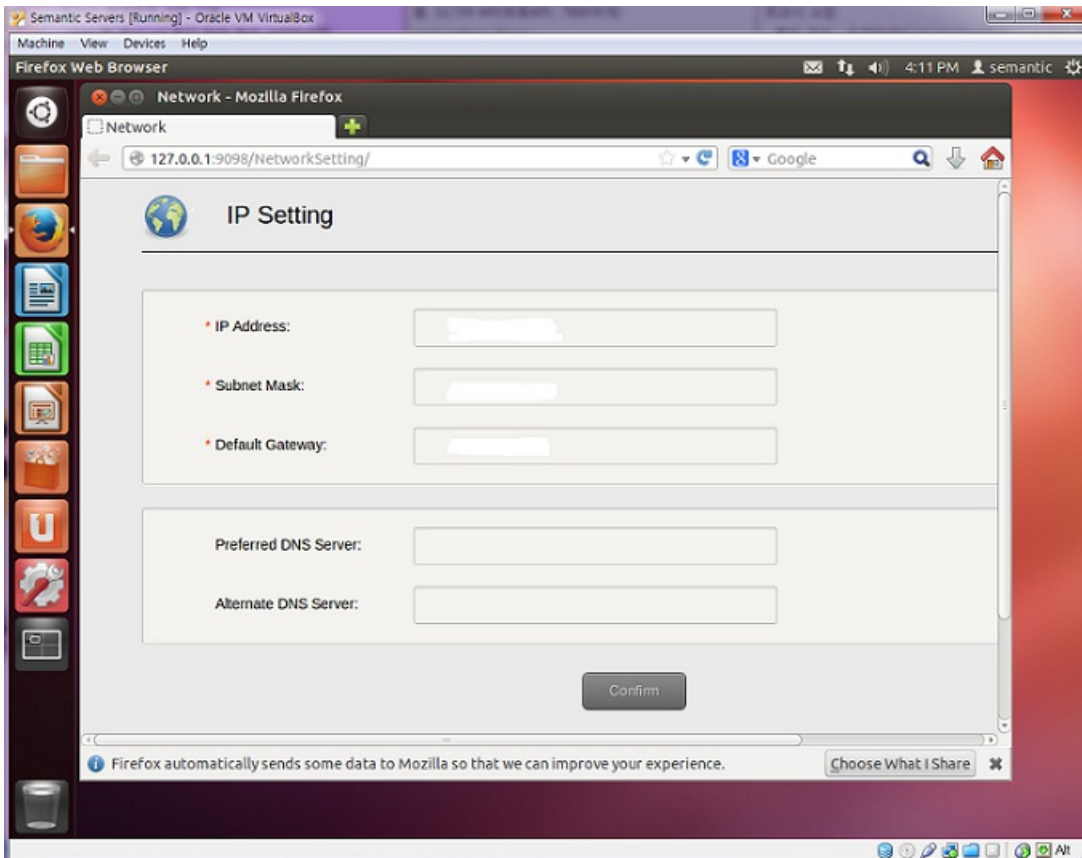


## 5. After importing Semantic\_servers.ova and start 'Semantic Servers'.

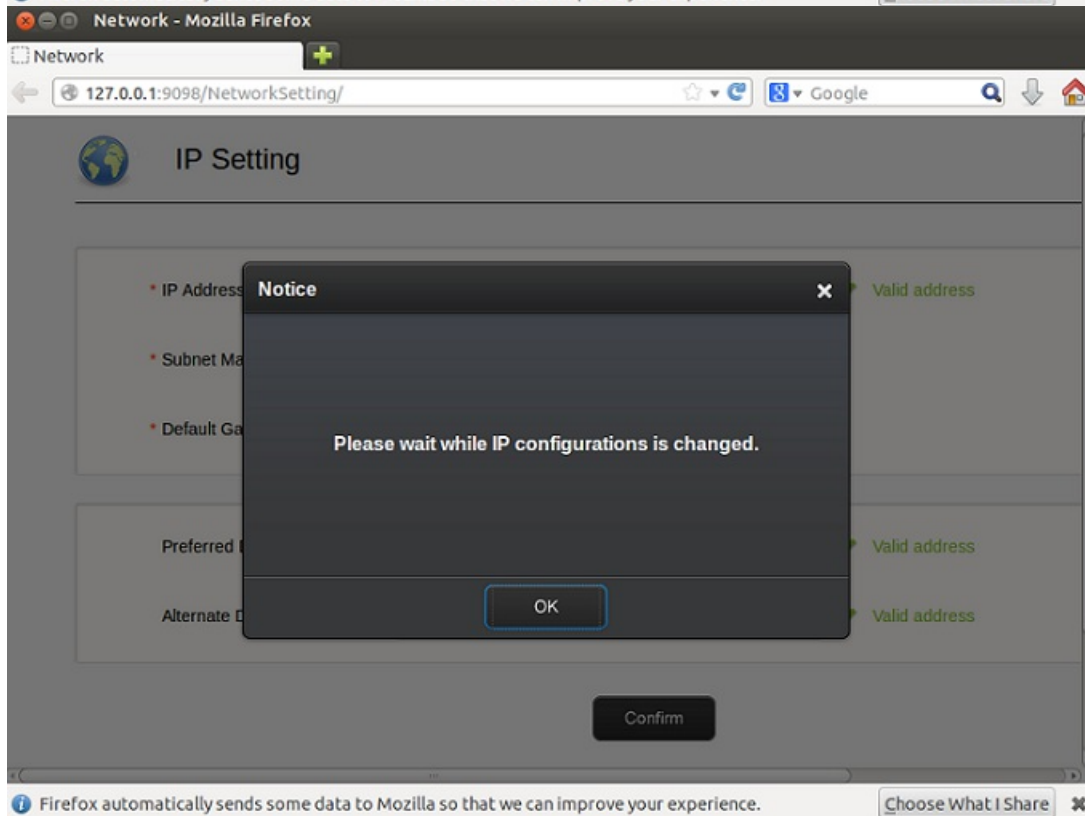
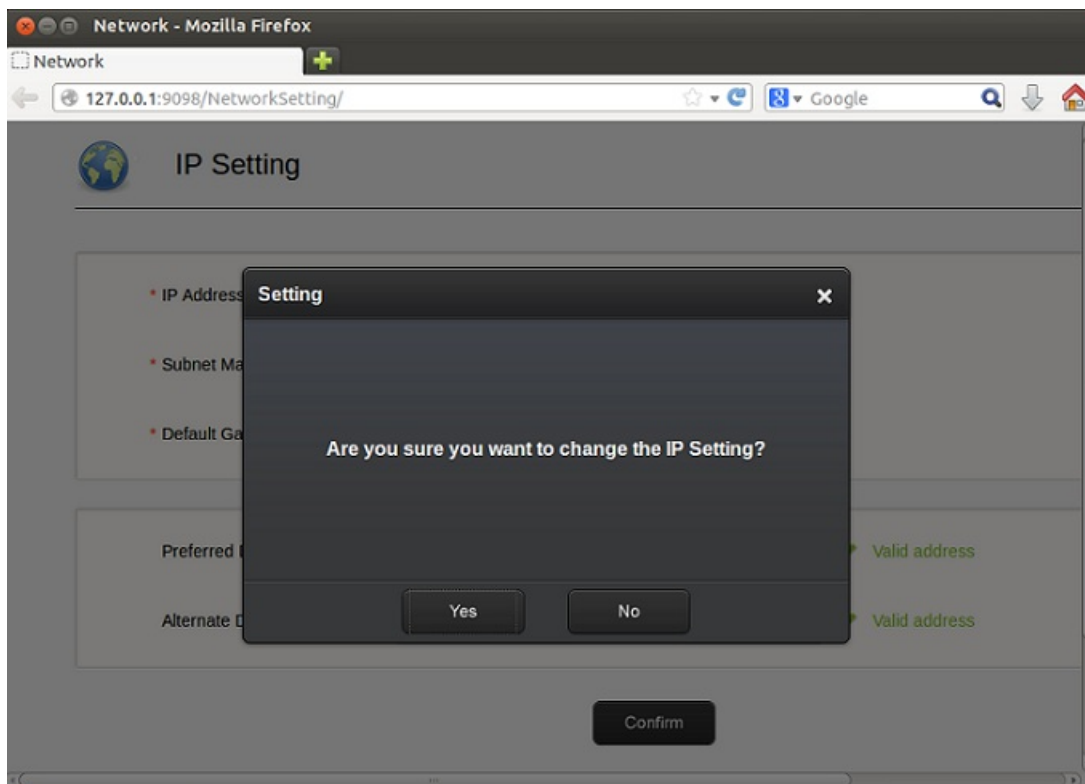


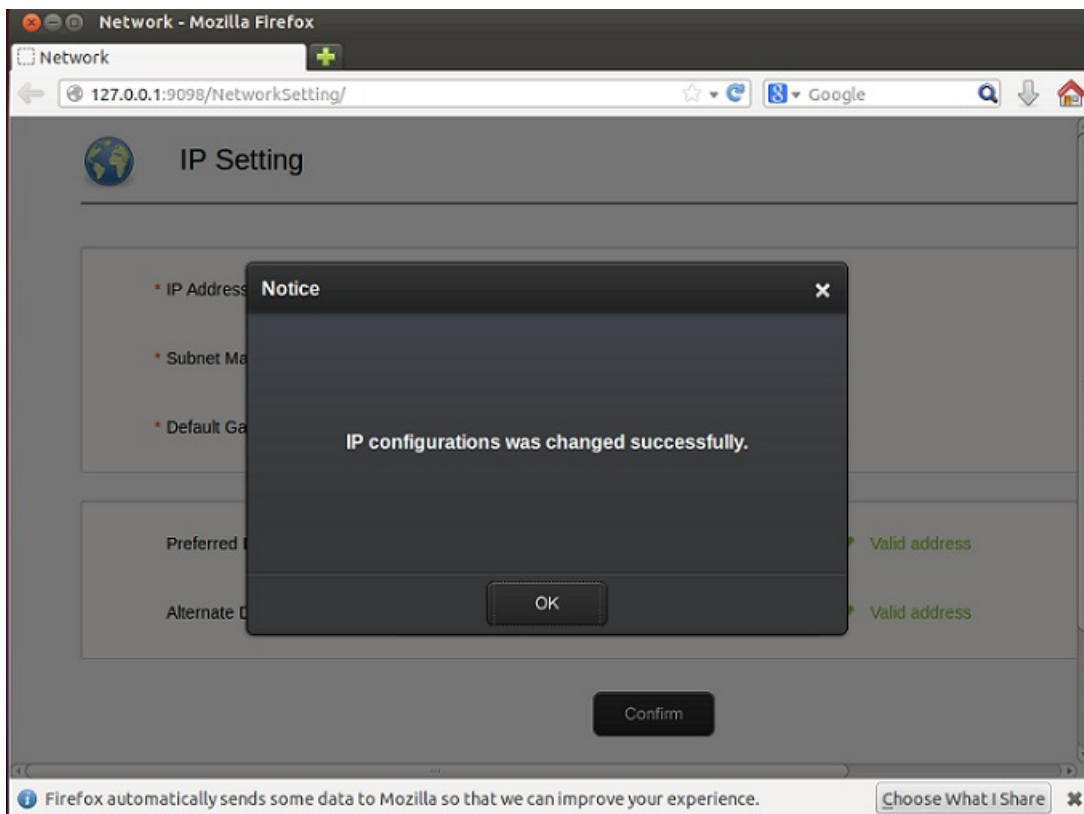
6. After starting up the server (it will takes a few minutes), system will show IP setting page of the servers.

6.1 Input your IP Address and DNS Server and click 'confirm' button.

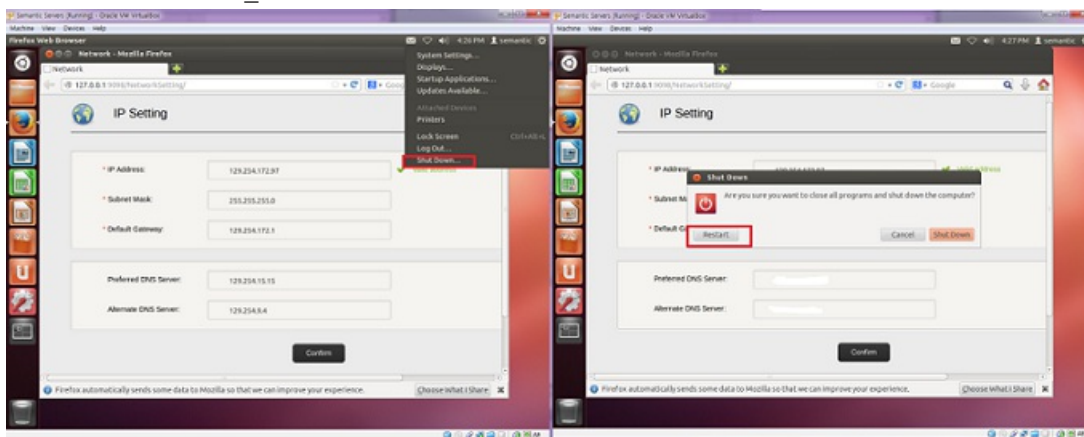


Then, you will meet the following popup messages.





7. Restart the 'Semantic\_servers' as follows :



Now, you are ready for use of semantic servers. Once the servers are installed successfully (Step 1~4), a user can just 'start Semantic Servers' on your Virtual Box whenever you want to use them.

#### Initial settings

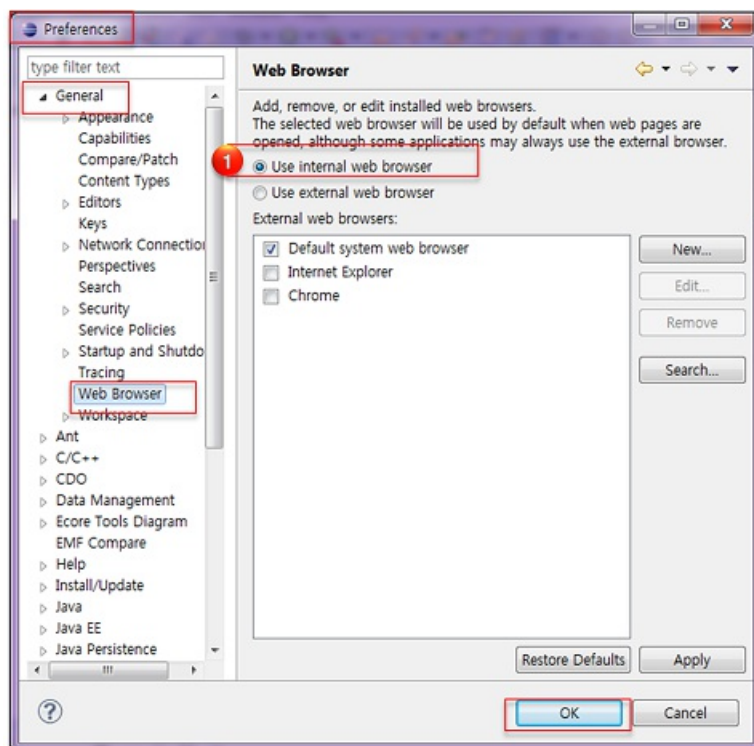
The followings are required to use semantic SDK for the first time.

1. Set the internal web browser in the SDK. Once the internal web browser is set, do not change it.

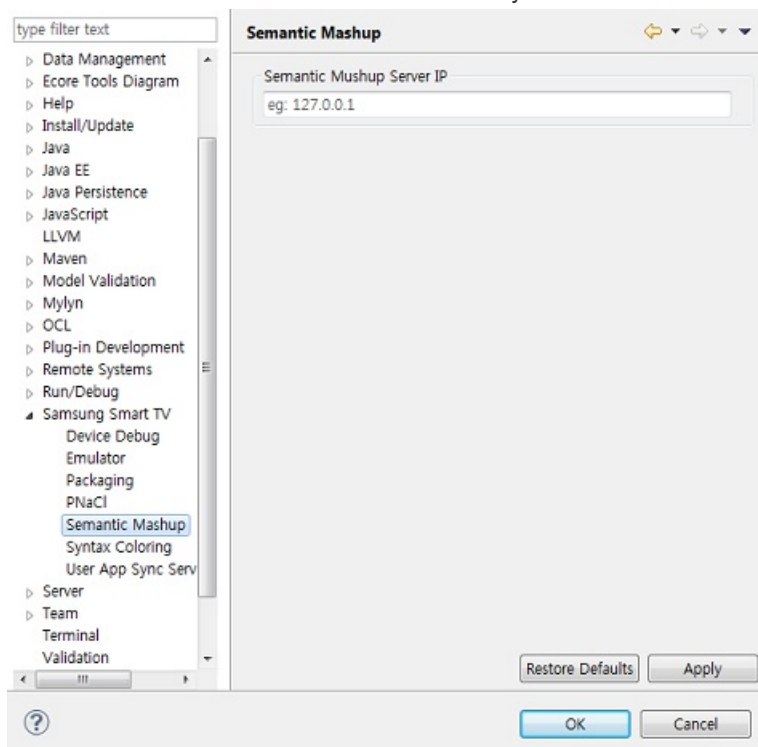
#### Note

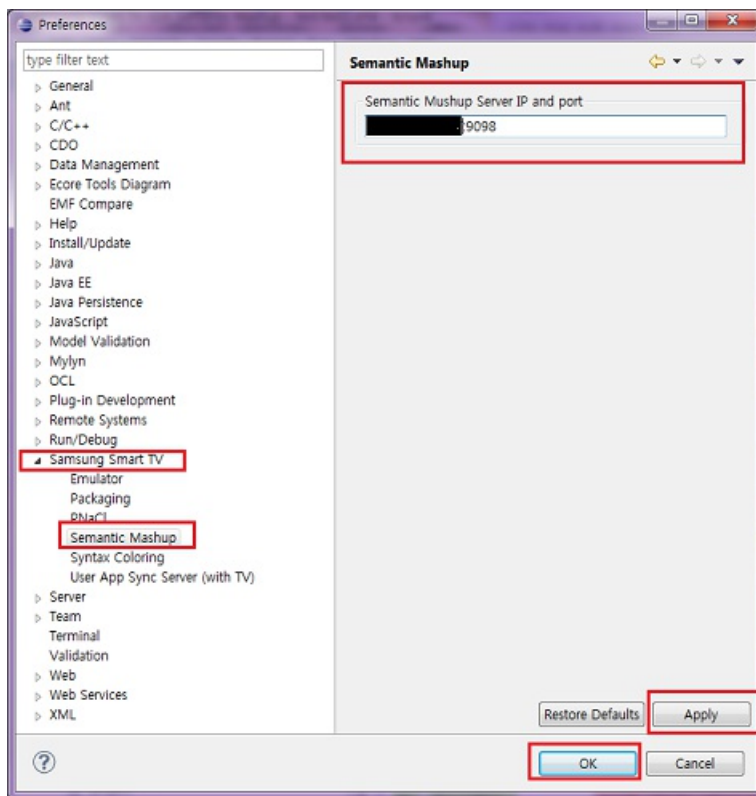
Goto Window > Preferences > General > Web Browser and check Use internal web browser.





2. Set the IP address of Semantic Servers on your VirtualBox. Click 'Apply' and 'OK'.





#### Note

Goto Window > Preferences > Samsung Smart TV > Semantic Mashup and set {IP address}.

The IP address should be an address of Semantic Server installing on VirtualBox. If the semantic server IP is changed, this configuration should be also modified.