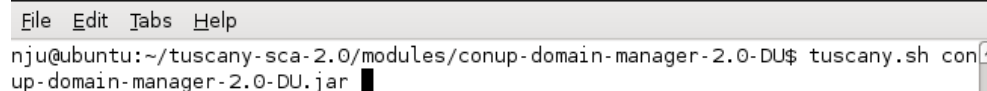


To Run samples in our distribution (tuscany-sca-2.0-DU/samples) in your virtual machine, you need to make sure the following things:

1. Setup your environment path

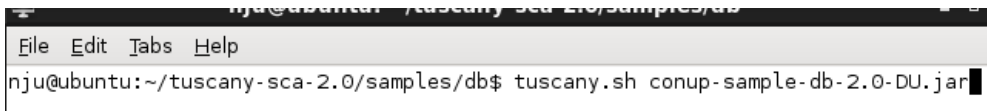
```
set PATH=%PATH%;/home/nju/tuscany-sca-2.0-DU/bin
```

2. use nat network, and make sure your virtual machine's ip address is 10.0.2.15, because our binding uri is this ip.
3. First, start the domain manager in terminal like this:

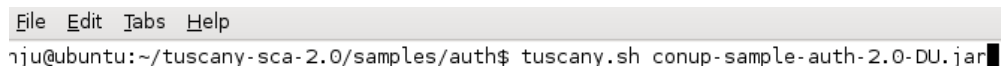


```
nju@ubuntu:~/tuscany-sca-2.0/modules/conup-domain-manager-2.0-DU$ tuscany.sh conup-domain-manager-2.0-DU.jar
```

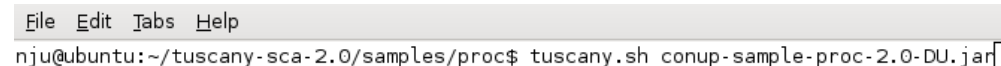
4. Start all other four nodes in your terminals like the following figures.



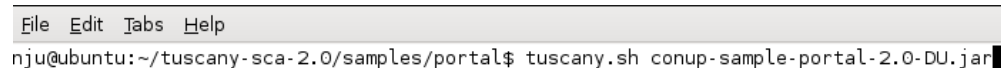
```
nju@ubuntu:~/tuscany-sca-2.0/samples/db$ tuscany.sh conup-sample-db-2.0-DU.jar
```



```
nju@ubuntu:~/tuscany-sca-2.0/samples/auth$ tuscany.sh conup-sample-auth-2.0-DU.jar
```

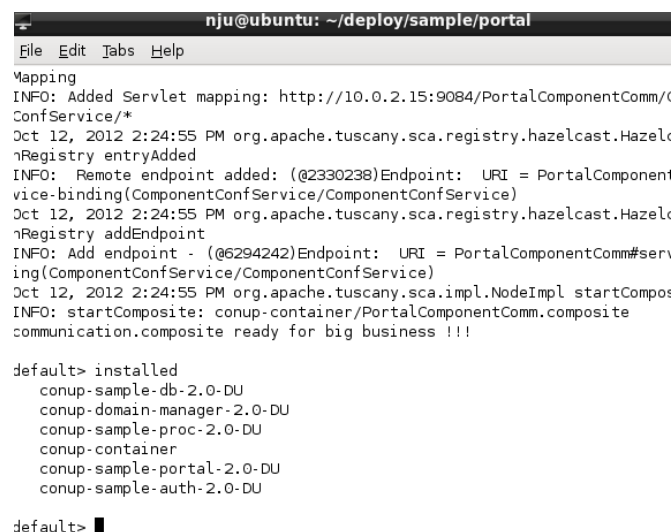


```
nju@ubuntu:~/tuscany-sca-2.0/samples/proc$ tuscany.sh conup-sample-proc-2.0-DU.jar
```



```
nju@ubuntu:~/tuscany-sca-2.0/samples/portal$ tuscany.sh conup-sample-portal-2.0-DU.jar
```

5. After all nodes are started, we can type **installed** in terminal to see which nodes we have started



```
nju@ubuntu: ~/deploy/sample/portal
File Edit Tabs Help
Mapping
INFO: Added Servlet mapping: http://10.0.2.15:9084/PortalComponentComm/ComponentConfService/*
Oct 12, 2012 2:24:55 PM org.apache.tuscany.sca.registry.hazelcast.HazelcastRegistry entryAdded
INFO: Remote endpoint added: (@2330238)Endpoint: URI = PortalComponentConfService-binding(ComponentConfService/ComponentConfService)
Oct 12, 2012 2:24:55 PM org.apache.tuscany.sca.registry.hazelcast.HazelcastRegistry addEndpoint
INFO: Add endpoint - (@6294242)Endpoint: URI = PortalComponentComm#service(ComponentConfService/ComponentConfService)
Oct 12, 2012 2:24:55 PM org.apache.tuscany.sca.impl.NodeImpl startComposite
INFO: startComposite: conup-container/PortalComponentComm.composite
communication.composite ready for big business !!!

default> installed
conup-sample-db-2.0-DU
conup-domain-manager-2.0-DU
conup-sample-proc-2.0-DU
conup-container
conup-sample-portal-2.0-DU
conup-sample-auth-2.0-DU

default>
```

6. Invoke services

- a. Invoke PortalComponent's PortalService

invoke PortalComponent/PortalService execute nju cs

```
default> invoke PortalComponent/PortalService execute nju cs
```

- b. OndemandSetup

if you want to set up these dynamic dependencies, you can invoke ondemandSetup service provided by domain manager like this:

invoke DomainManagerComponent/DomainComponentUpdateService onDemandRequest
AuthComponent ConcurrentVersion

the last two parameter are which component you want to start this onDemandSetup, and which policy you want to achieve freeness. After this invocation, your component status will be changed to valid(normal->valid).

- c. After ondemandSetup, we can check component's status by invoking its
ComponentConfService getCurrentStatus method to get its status(it should be valid)

```
default> invoke AuthComponentComm/ComponentConfService getCurrentStatus  
Valid
```

- d. Update your component, in paper example, we update AuthComponent, we put our new serviceImpl in one folder like following figure:



And we invoke Auth's update service to invoke update.

invoke AuthComponentComm/ComponentUpdateService update /home/nju/deploy/sample/update
cn.edu.nju.moon.conup.sample.auth.services.AuthServiceImpl conup-sample-auth-2.0-DU auth.composite

when you finish updating, you can invoke Portal service to test whether your update is right.

Note:

Because we use tools to analyze our source code and insert some information to help us implement our algorithm in this platform, so you need to use the jars in clean folder to replace the old jar.

