Template Project Deployment

[TemplateProjectDeployment.htm - uqlpayne 26 Jul 2013]

The following procedure requires that:

- The *GlassFish Server Open Source Edition 4.0* is installed and running.
- The *UQ-iLab-BatchLabServer-Java* GitHub repository has been downloaded as a ZIP file from:

  `https://github.com/uqlpayne/UQ-iLab-BatchLabServer-Java`
- The *Template LabServer Database* has been created and configured (see TemplateLabServerDatabase.pdf).
- The *Dummy ServiceBroker Database* has been created and configured (see DummyServiceBrokerDatabase.pdf).
- The folder *D:\iLabs\Template* has been created for the Template project application files.
- The folder *D:\iLabs\Dummy* has been created for the Dummy ServiceBroker application files.

GlassFish Server Admininistration Console

- Run the *GlassFish Server Admininistration Console* by entering the following URL in a web browser.

  `http://localhost:4848/`

  If prompted, log in to the Administration Console.
- There are four web applications that need to be deployed to the GlassFish Server.

  Template LabEquipment
  - Packaged File: *UQ-iLab-BatchLabServer-Java/Builds/Template_LabEquipment.war*
  - Local Folder: *D:\iLabs\Template\LabEquipment*
  - Context Path: */TemplateLabEquipment*

  Template LabServer
  - Packaged File: *UQ-iLab-BatchLabServer-Java/Builds/Template_LabServer.war*
  - Local Folder: *D:\iLabs\Template\LabServer*
  - Context Path: */TemplateLabServer*

  Template LabClient
  - Packaged File: *UQ-iLab-BatchLabServer-Java/Builds/Template_LabClient.war*
  - Local Folder: *D:\iLabs\Template\LabClient*

Context Path: */TemplateLabClient*

Dummy ServiceBroker

Packaged File: *UQ-iLab-BatchLabServer-Java/Builds/Dummy_ServiceBroker.war*

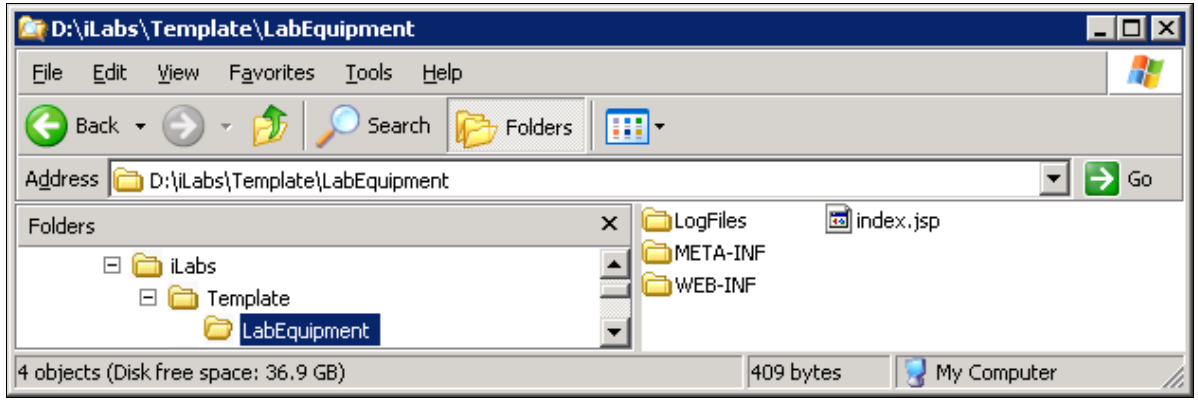
Local Folder: *D:\iLabs\Dummy\ServiceBroker*

Context Path: */DummyServiceBroker*

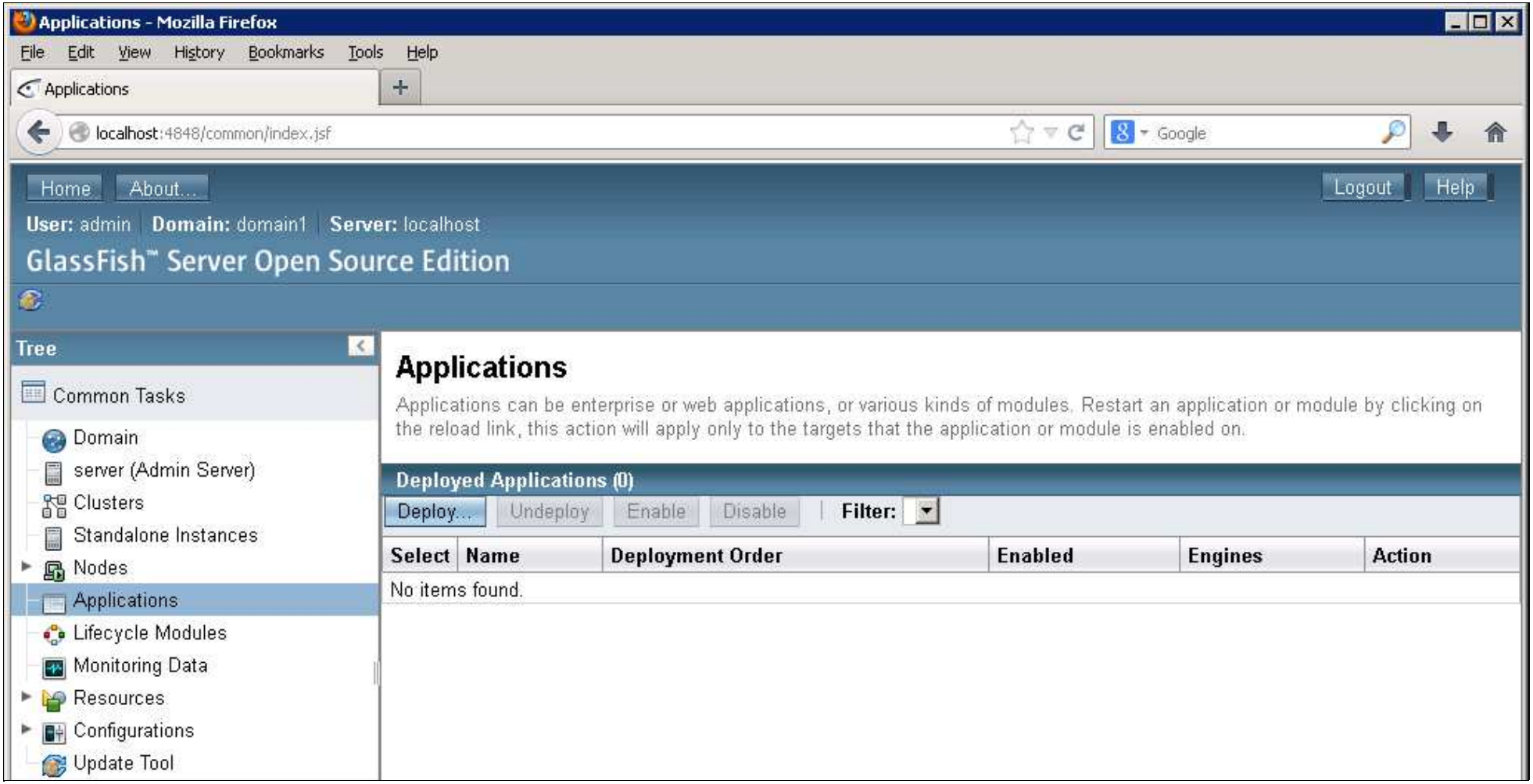
Deploy Template LabEquipment

- Create the folder *LabEquipment* in the folder *D:\iLabs\Template* so that the folder *D:\iLabs\Template\LabEquipment* exists.

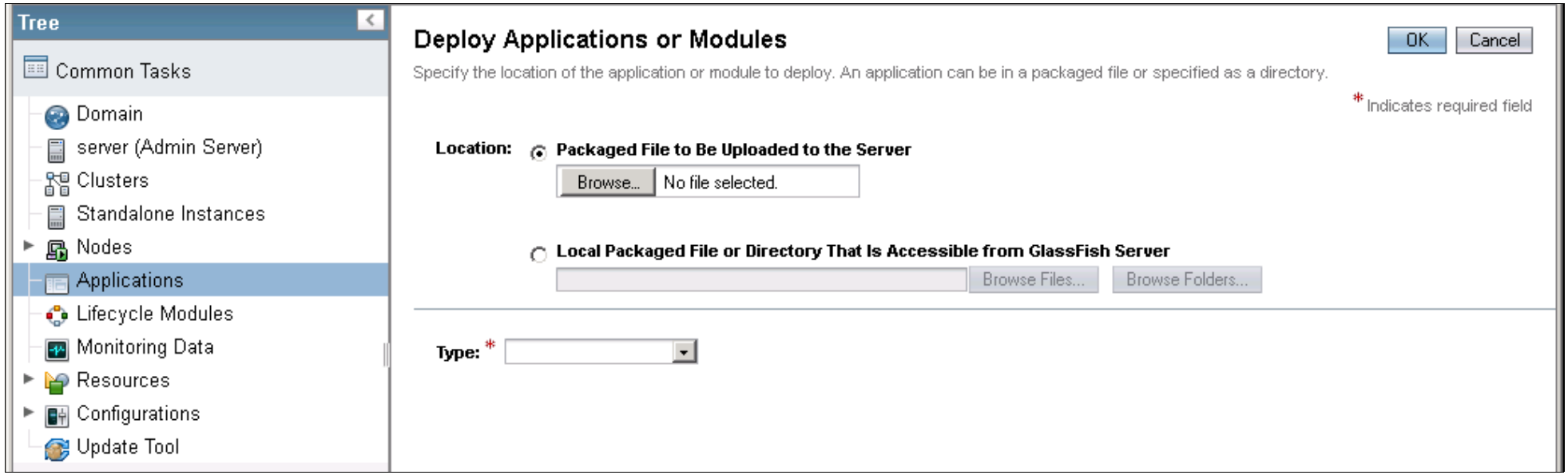
  Extract the web archive file *Builds/Template_LabEquipment.war* to the folder *D:\iLabs\Template\LabEquipment*.



- Go to the *GlassFish Server Admininistration Console*. In the *Common Tasks* panel, click on *Applications*.



In the *Applications* panel, click the *Deploy...* button.



In the *Deploy Applications or Modules* panel, select *Local Packaged File or Directory That Is Accessible from GlassFish Server* and enter `D:\iLabs\Template\LabEquipment` in the field.

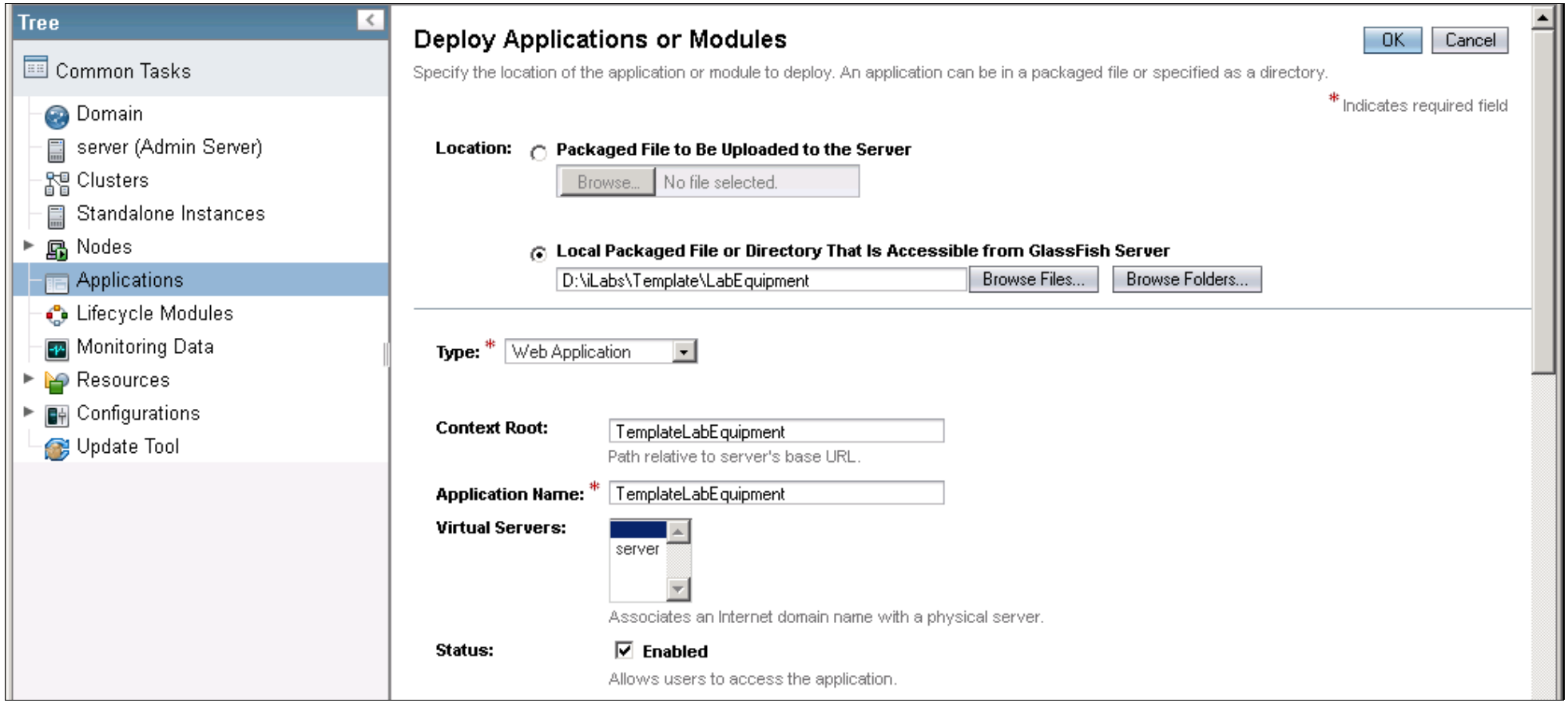
Alternatively, click the *Browse Folders...* button to select the folder.

For *Type:* select *Web Application* from the dropdown list. More fields are then displayed.

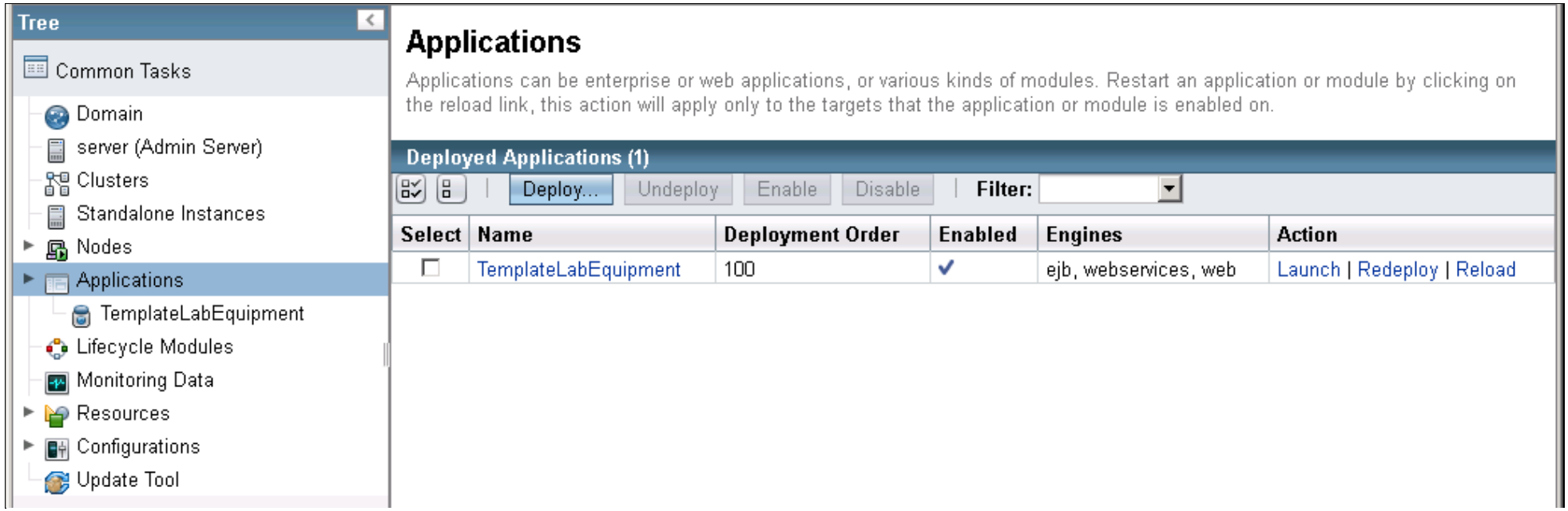
For *Context Root:* enter `TemplateLabEquipment` in the field.

Also for *Application Name:* enter `TemplateLabEquipment` in the field.

Leave the other fields with their default values.



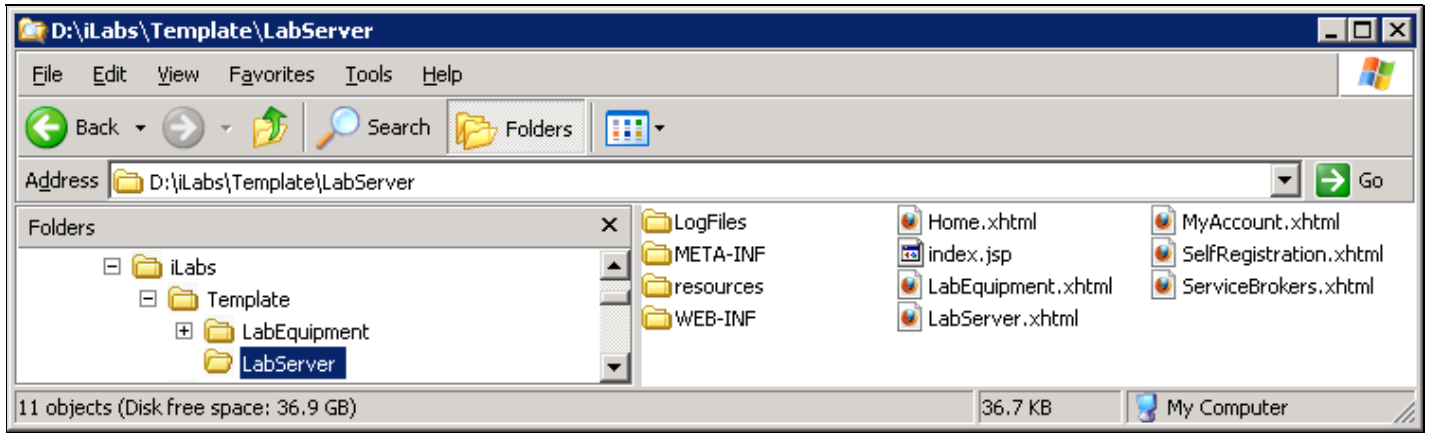
Click the *OK* button to deploy the application.



Deploy Template LabServer

- Create the folder *LabServer* in the folder *D:\iLabs\Template* so that the folder *D:\iLabs\Template\LabServer* exists.

  Extract the web archive file *Builds/Template_LabServer.war* to the folder *D:\iLabs\Template\LabServer*.



- Go to the *GlassFish Server Admininistration Console*. In the *Applications* panel, click the *Deploy...* button.

In the *Deploy Applications or Modules* panel, select *Local Packaged File or Directory That Is Accessible from GlassFish Server* and enter `D:\iLabs\Template\LabServer` in the field.

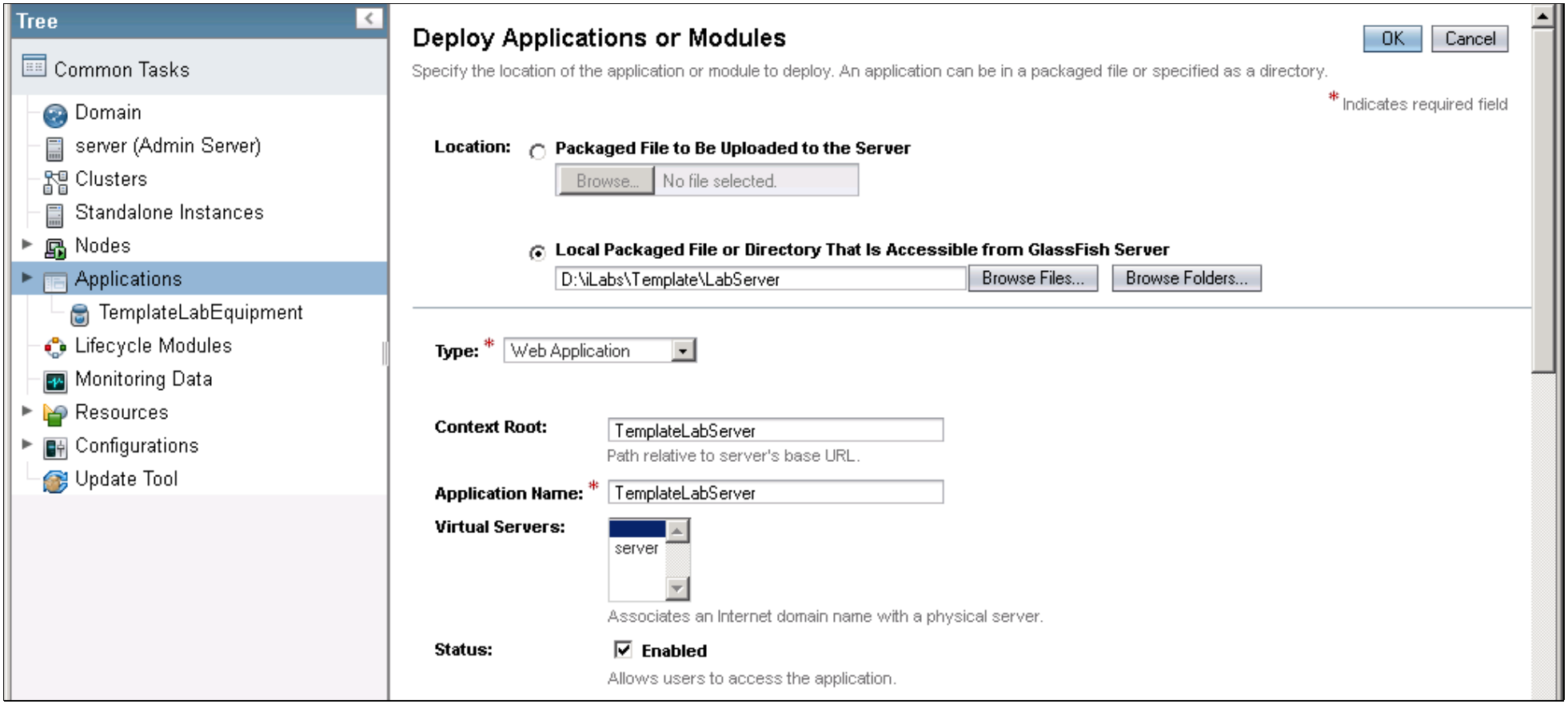
Alternatively, click the *Browse Folders...* button to select the folder.

For *Type:* select *Web Application* from the dropdown list. More fields are then displayed.

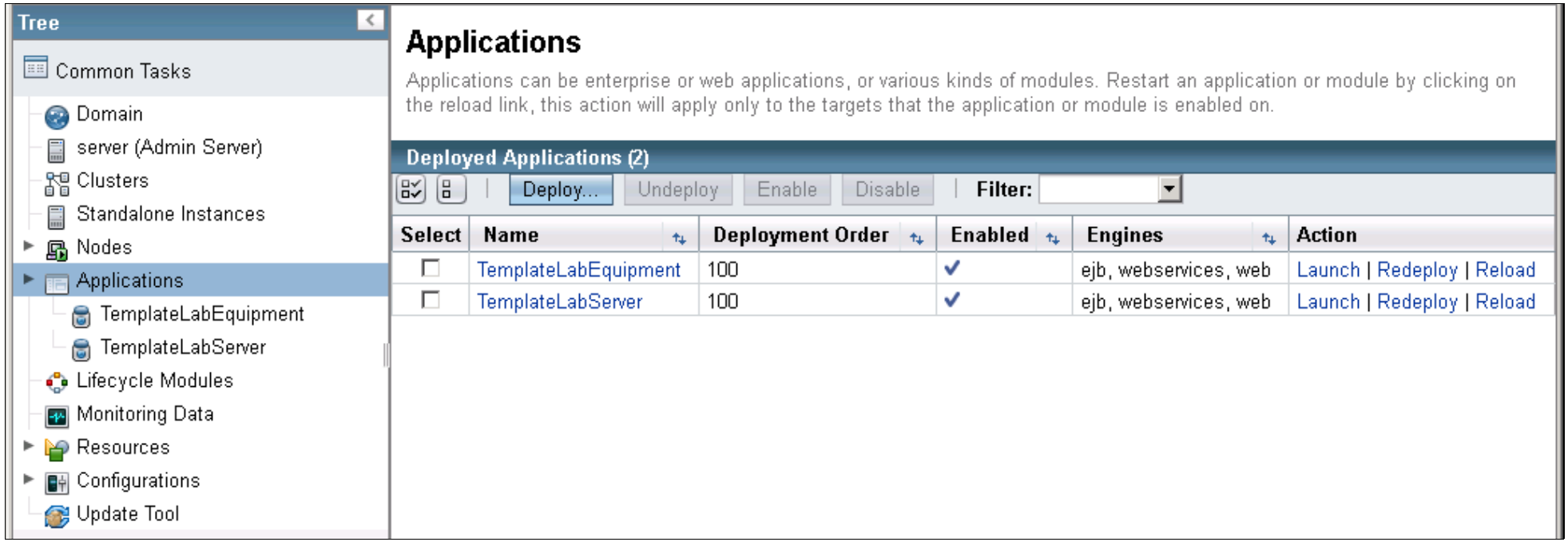
For *Context Root:* enter `TemplateLabServer` in the field.

Also for *Application Name:* enter `TemplateLabServer` in the field.

Leave the other fields with their default values.



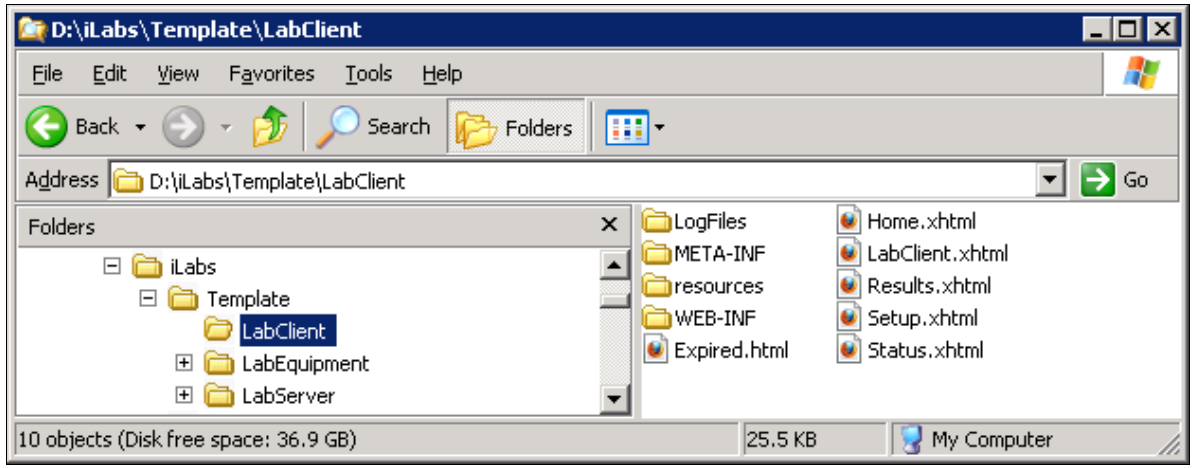
Click the *OK* button to deploy the application.



Deploy Template LabClient

- Create the folder *LabClient* in the folder *D:\iLabs\Template* so that the folder *D:\iLabs\Template\LabClient* exists.

  Extract the web archive file *Builds/Template_LabClient.war* to the folder *D:\iLabs\Template\LabClient*.



- Go to the *GlassFish Server Admininistration Console*. In the *Applications* panel, click the *Deploy...* button.

  In the *Deploy Applications or Modules* panel, select *Local Packaged File or Directory That Is Accessible from GlassFish Server* and enter `D:\iLabs\Template\LabClient` in the field.

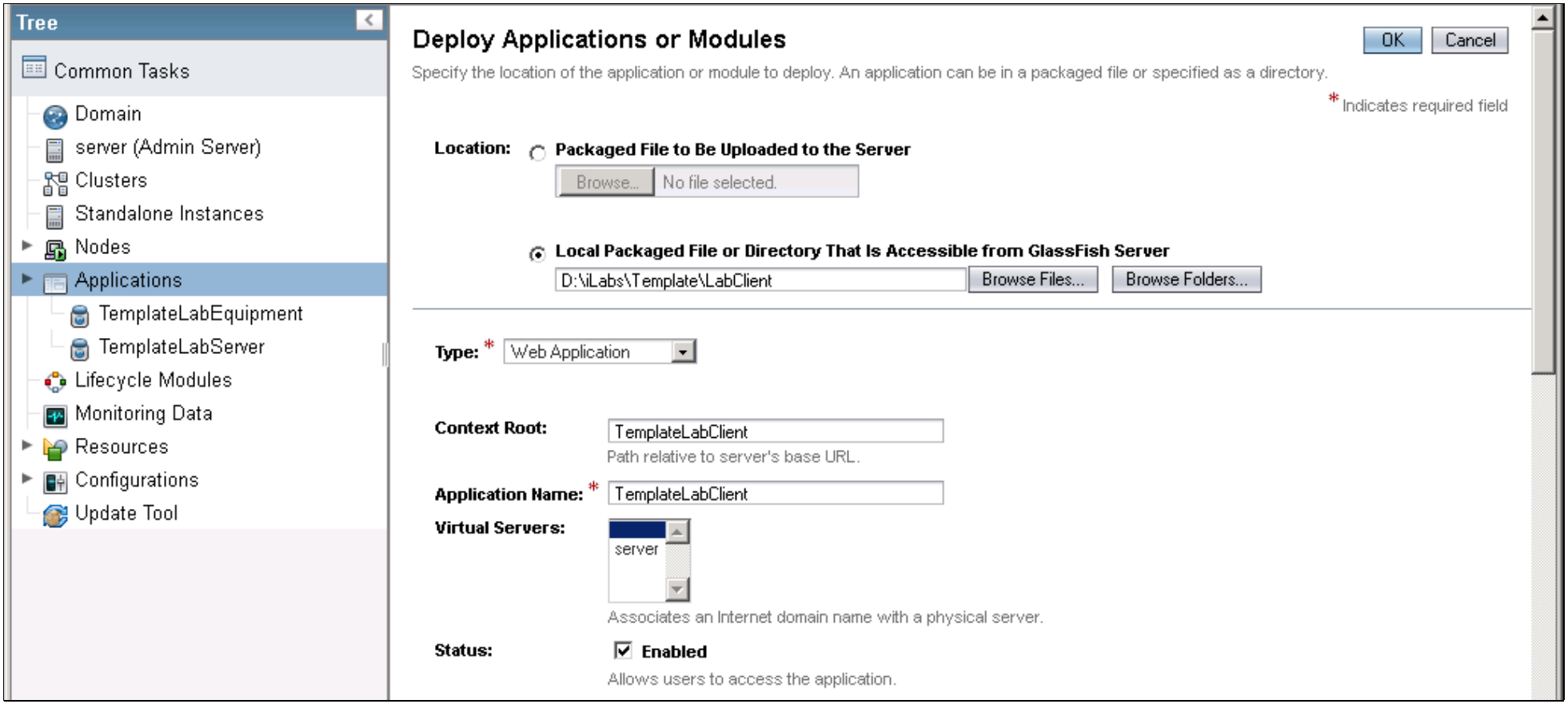
  Alternatively, click the *Browse Folders...* button to select the folder.

  For *Type:* select *Web Application* from the dropdown list. More fields are then displayed.

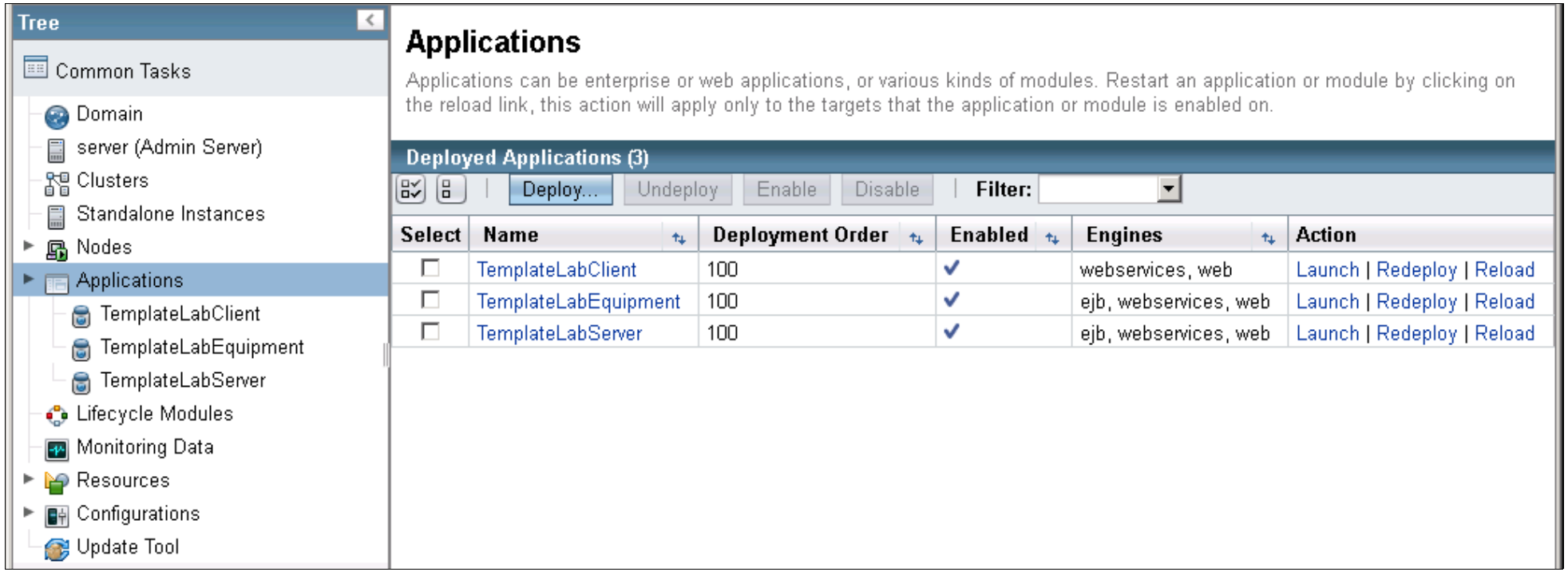
  For *Context Root:* enter `TemplateLabClient` in the field.

  Also for *Application Name:* enter `TemplateLabClient` in the field.

  Leave the other fields with their default values.



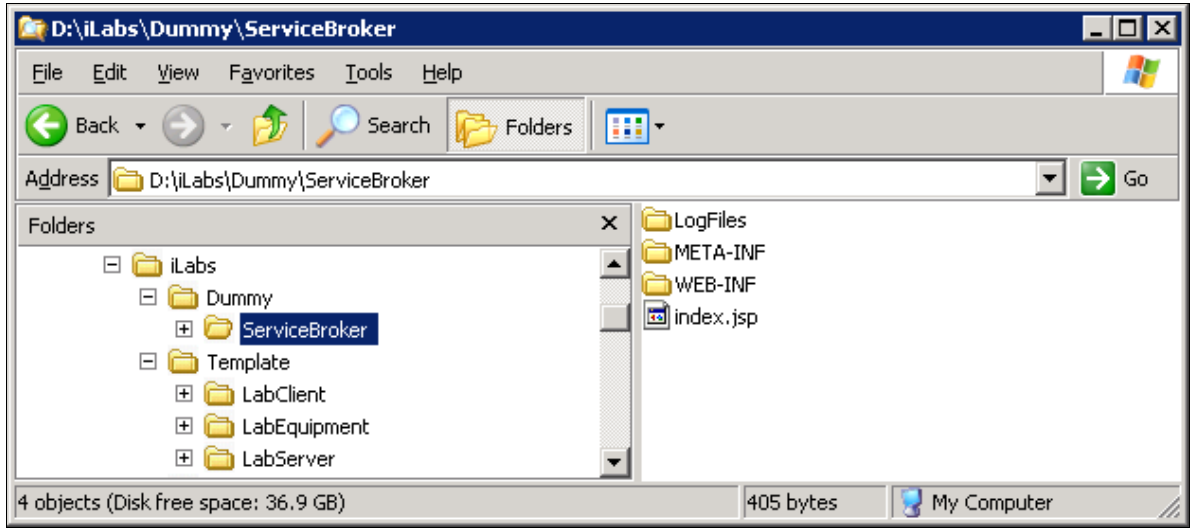
  Click the *OK* button to deploy the application.



Deploy Dummy ServiceBroker

- Create the folder *ServiceBroker* in the folder *D:\iLabs\Dummy* so that the folder *D:\iLabs\Dummy\ServiceBroker* exists.

  Extract the web archive file *Builds/Dummy_ServiceBroker.war* to the folder *D:\iLabs\Dummy\ServiceBroker*.



- Go to the *GlassFish Server Admininistration Console*. In the *Applications* panel, click the *Deploy...* button.

  In the *Deploy Applications or Modules* panel, select *Local Packaged File or Directory That Is Accessible from GlassFish Server* and enter `D:\iLabs\Dummy\ServiceBroker` in the field.

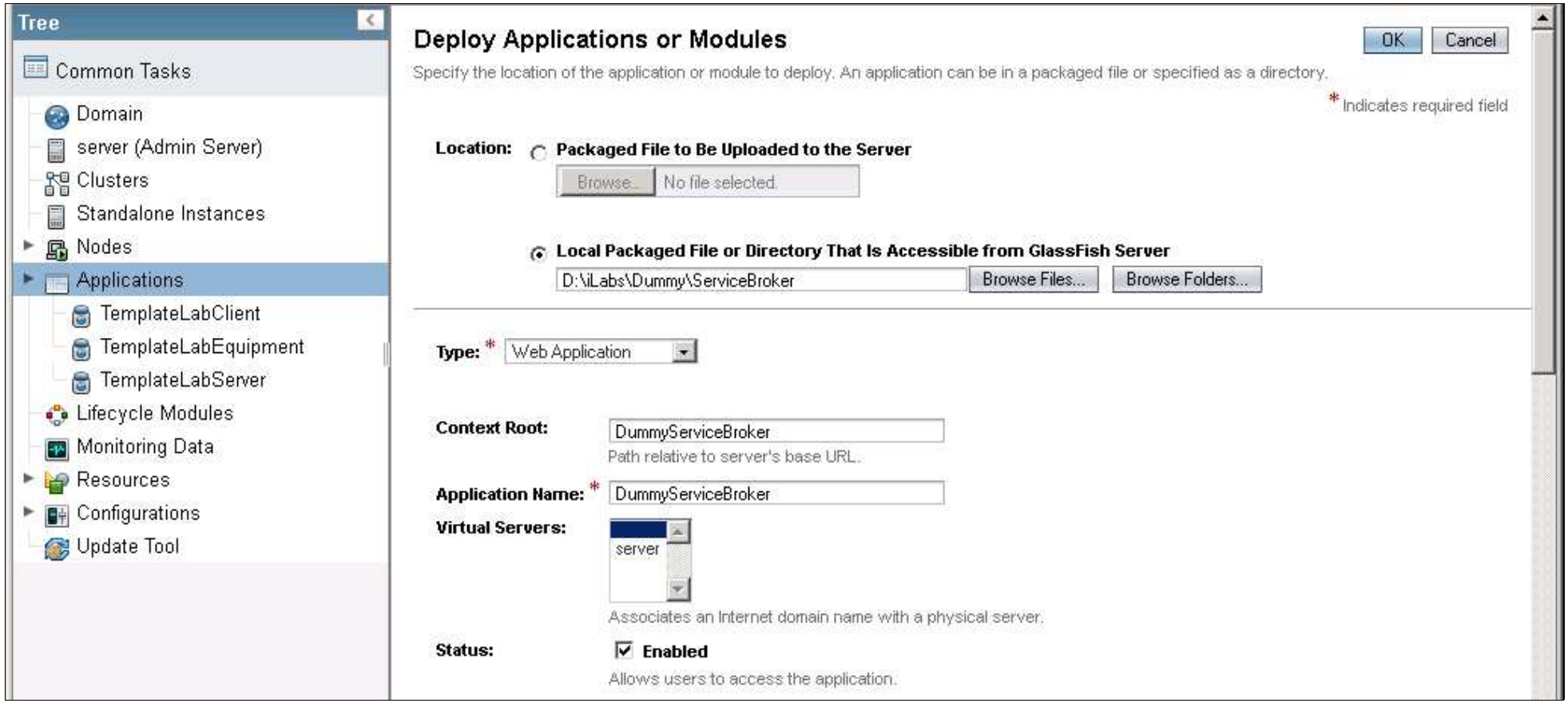
  Alternatively, click the *Browse Folders...* button to select the folder.

  For *Type:* select *Web Application* from the dropdown list. More fields are then displayed.

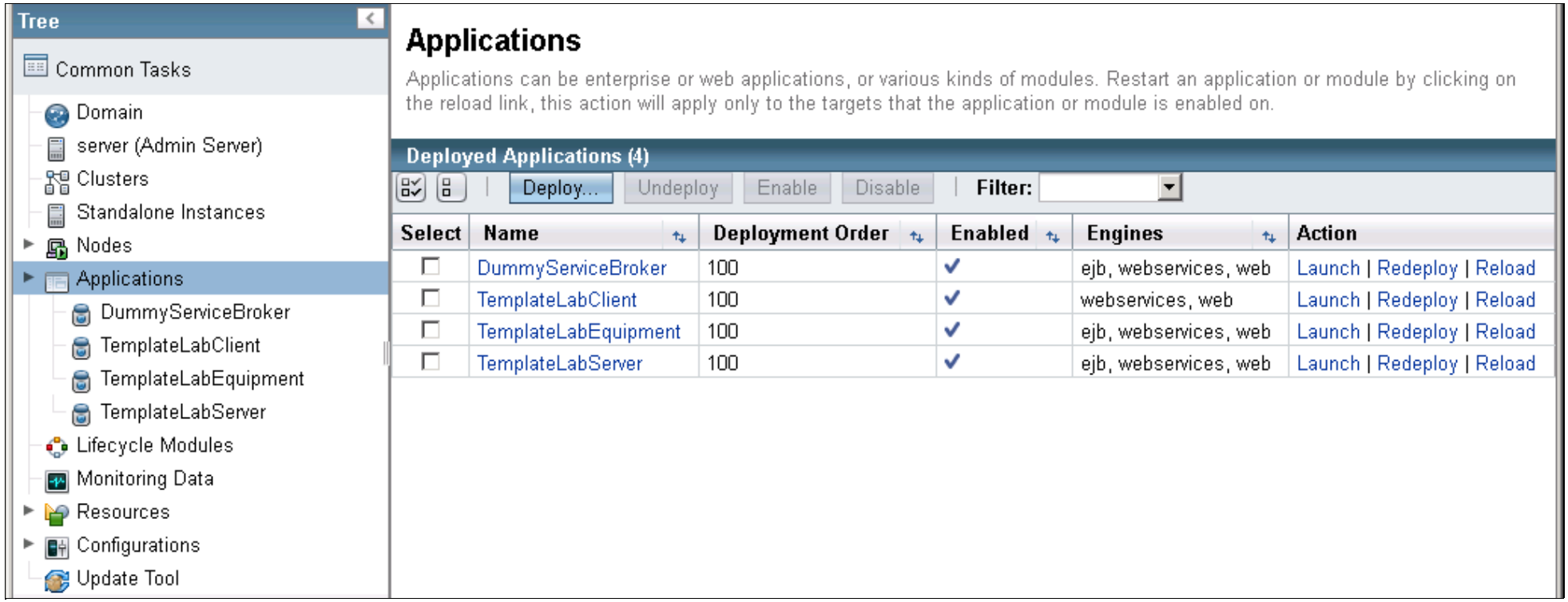
  For *Context Root:* enter `DummyServiceBroker` in the field.

  Also for *Application Name:* enter `DummyServiceBroker` in the field.

  Leave the other fields with their default values.



Click the *OK* button to deploy the application.



Launch Template LabEquipment

- Launch the Template LabEquipment client by entering the following URL in a web browser:

  `http://localhost:8080/TemplateLabEquipment/`

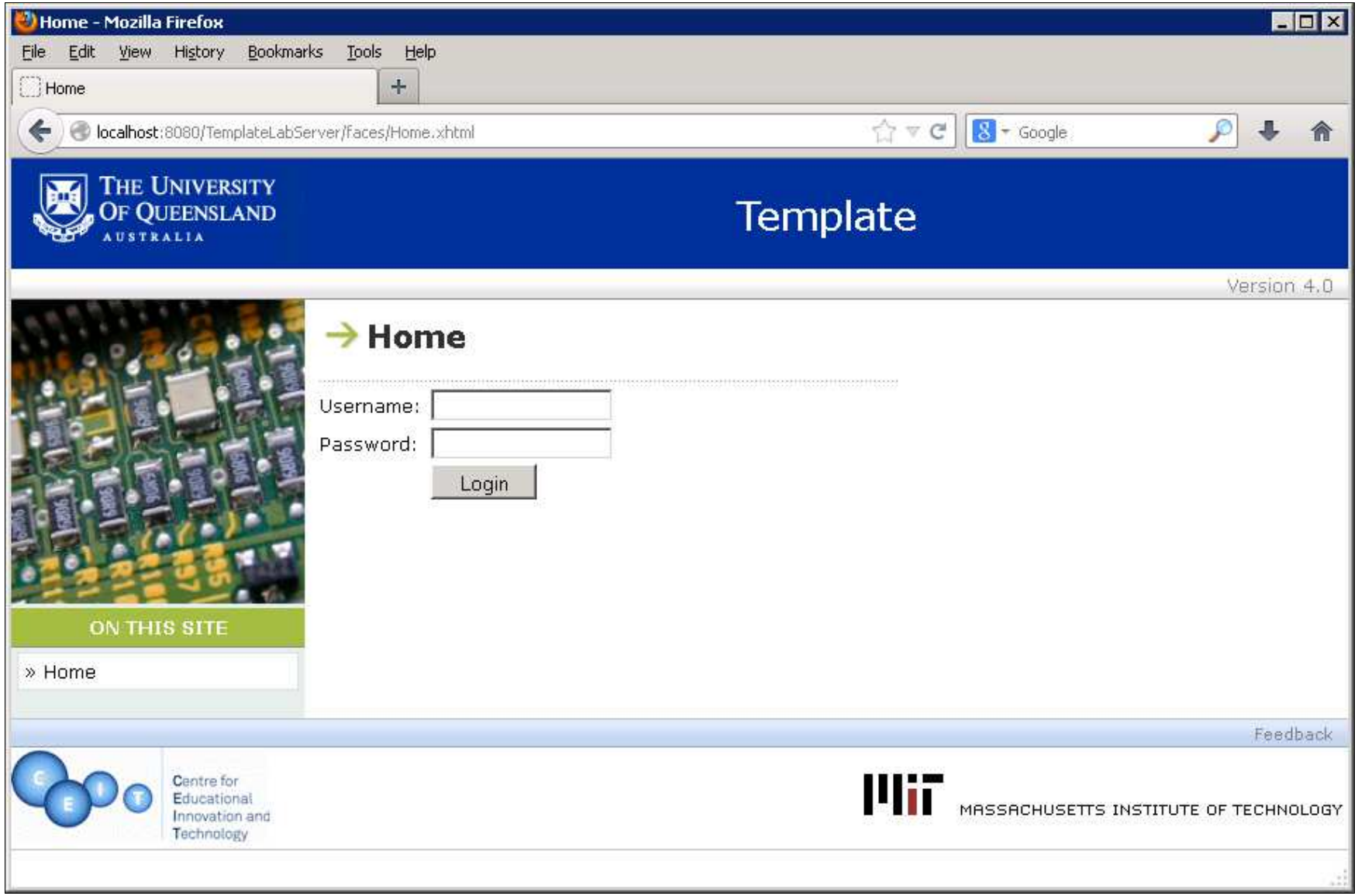
  The web page simply displays *Template LabEquipment*. This is sufficent to show that the Template LabEquipment application has been deployed correctly. At this point in time, the Template LabEquipment service has not been invoked.

Launch Template LabServer

- Launch the Template LabServer client by entering the following URL in a web browser:

  `http://localhost:8080/TemplateLabServer/`

  The web page displays the *Template LabServer* login. This is sufficent to show that the Template LabServer application has been deployed correctly. At this point in time, the Template LabServer service has not been invoked.

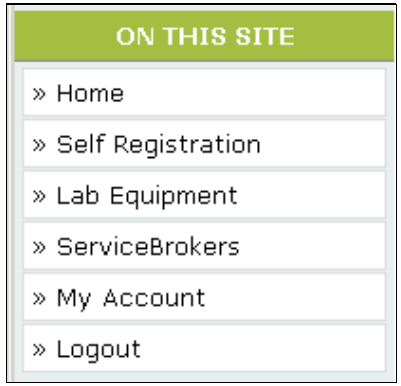


- Log in to the Template LabServer with the following username and password:

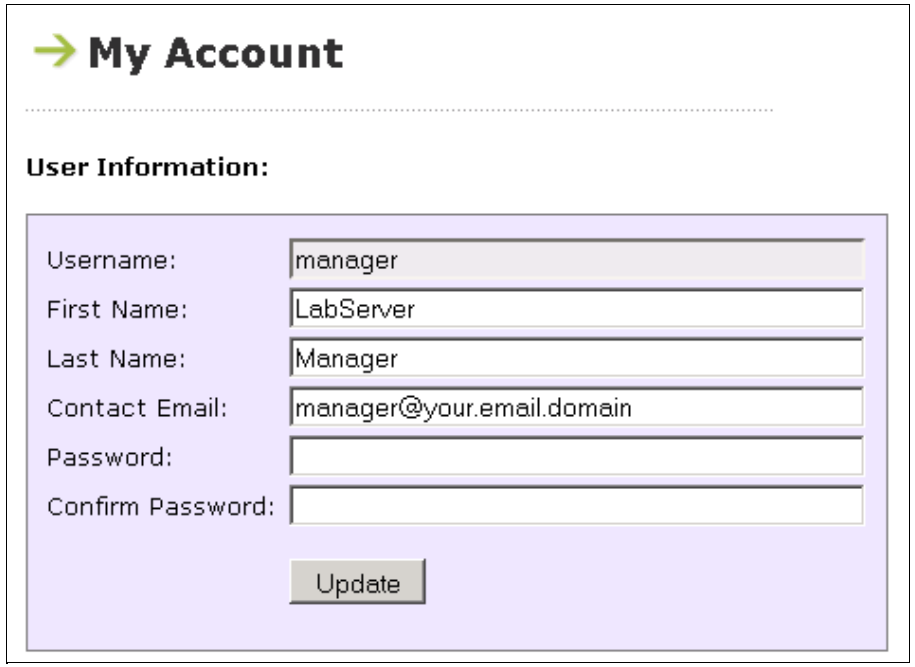
  Username: **`manager`**
  Password: **`ilab`**

  The menu provides a number of items to configure the LabServer.

- Self Registration - Configure the LabServer by specifying the name, guid, service URL and email address.
- Lab Equipment - Configure one or more LabEquipment services by specifying the service URL and passkey.
- ServiceBrokers - Specify the details of one or more ServiceBrokers that are permitted to access the LabServer.
- My Account - Specify the LabServer manager's account information.
- Logout - Log out of the LabServer.



- Select the *My Account* menu item.

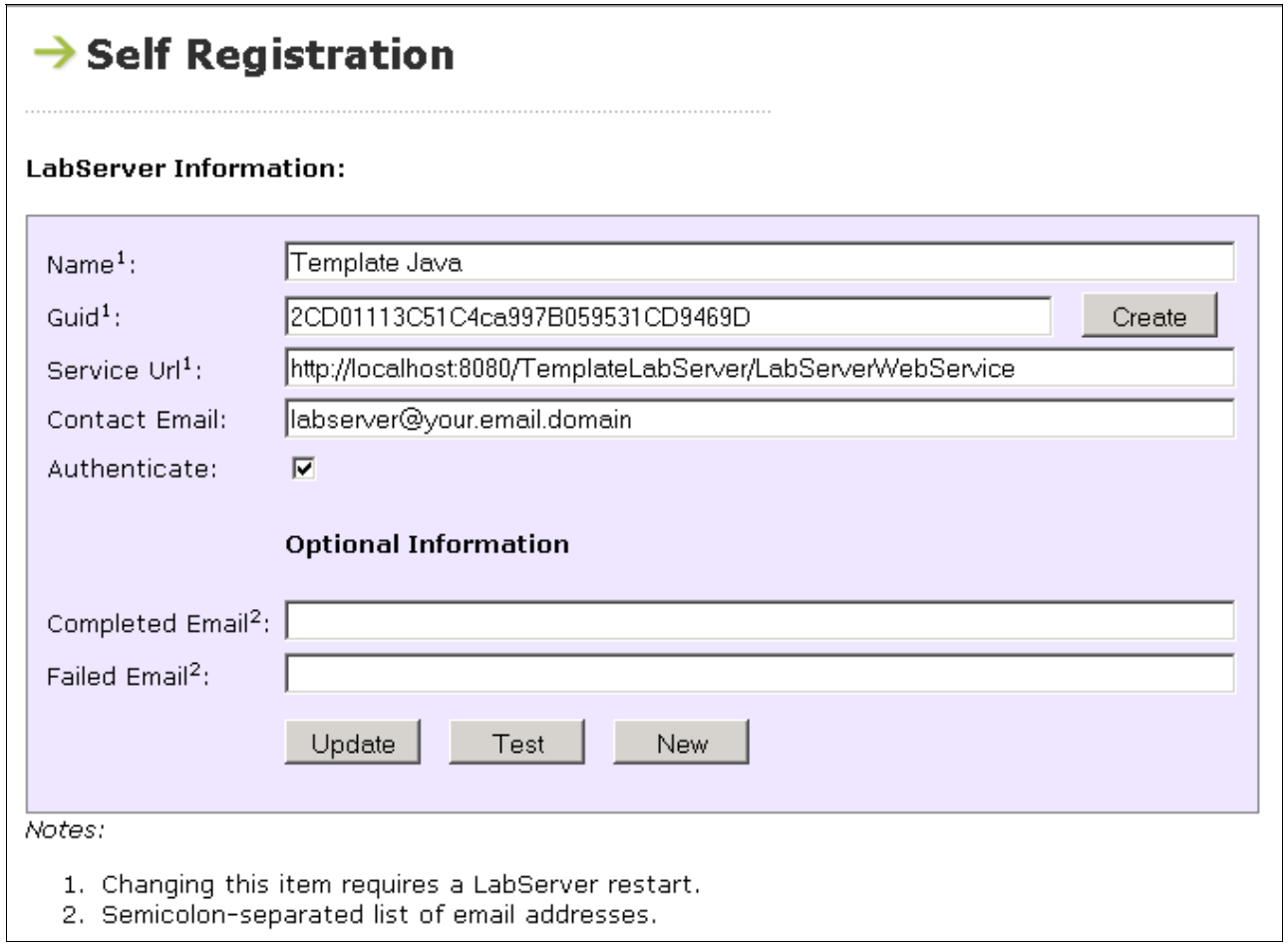


Change the *Contact Email* to your email address or some other appropriate email address.

Change the *Password* to something else especially if the LabServer is deployed on a networked server.

Click the *Update* button to save the changes.

- Select the *Self Registration* menu item.



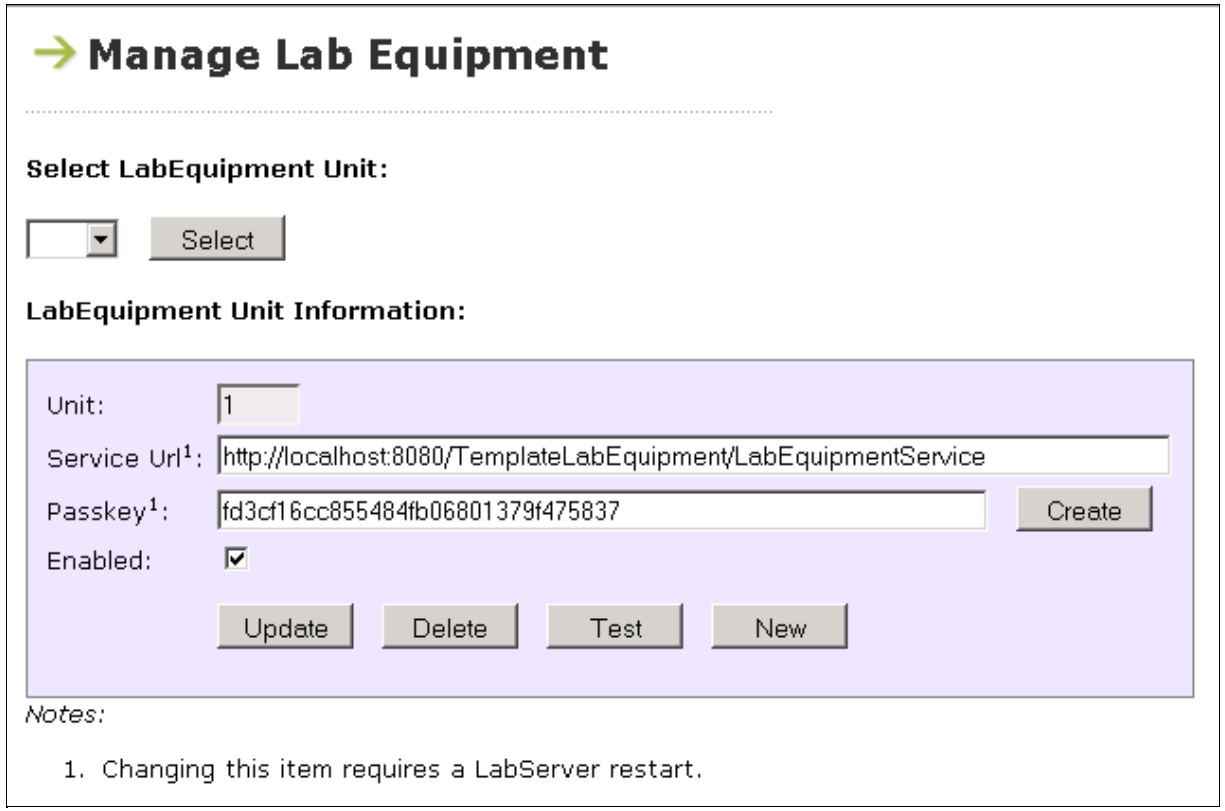
Change the *Contact Email* to your email address or some other appropriate email address. This is the LabServer's email address and not the LabServer Manager's email address although they could be the same.

If you require the LabServer to send an email when an experiment completes, enter an email address in the *Completed Email* field.

If you require the LabServer to send an email when an experiment fails, enter an email address in the *Failed Email* field.

Leave the *Name*, *Guid* and *Service Url* fields with their default values.

- Select the *Lab Equipment* menu item. Select LabEquipment Unit *1* from the dropdown list and click the *Select* button.



Leave the fields with their default values.

Click the *Test* button. This makes a web service call to the LabEquipment to retrieve the LabEquipment status. A message is displayed showing the status of the LabEquipment.

If the message indicates that the LabEquipment is *Offline*, wait a few seconds for the LabEquipment web service to initialise and start and then click the *Test* button again.

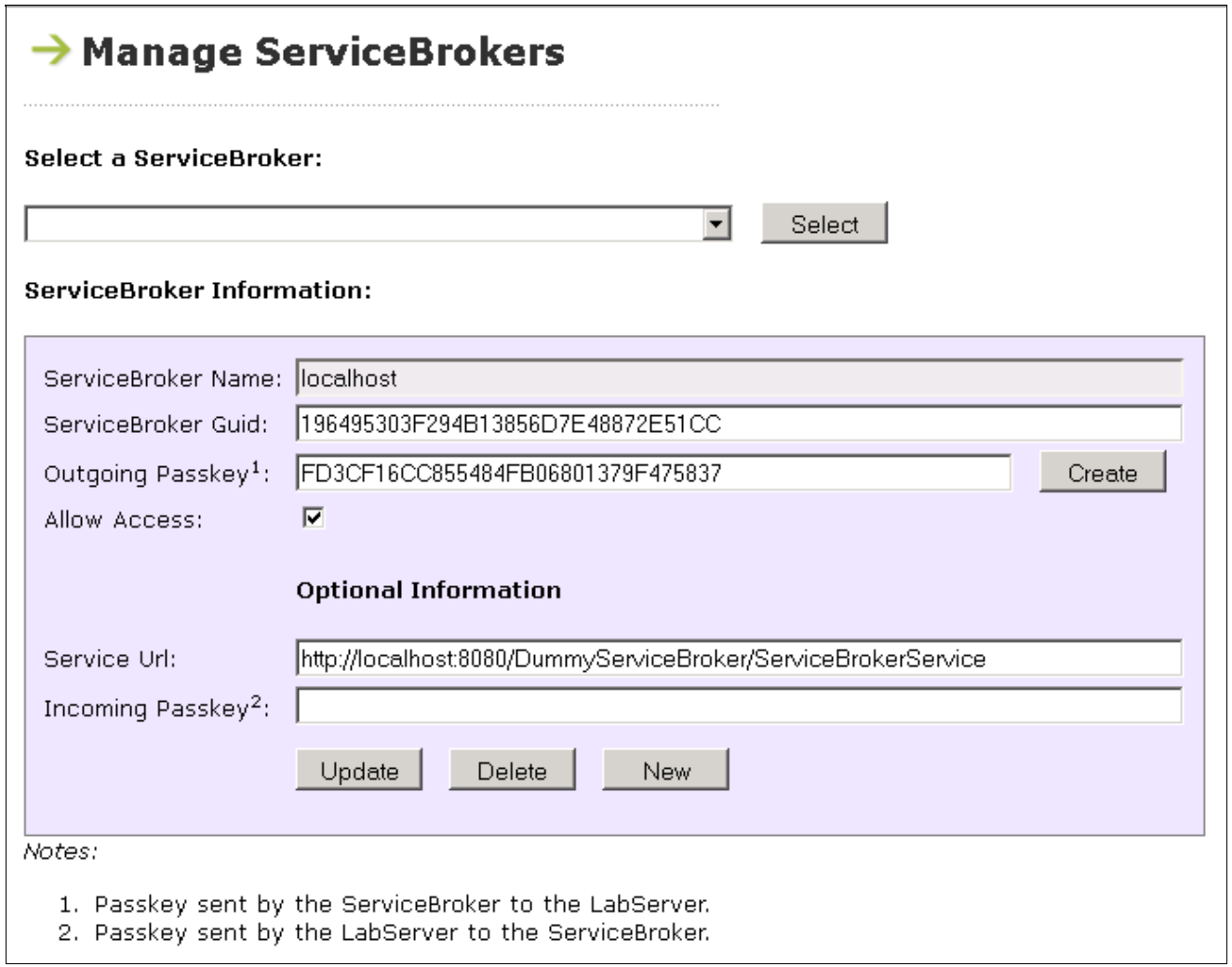
Open the logfile for the LabEquipment located at *D:\iLabs\Template\LabEquipment\LogFiles\LabEquipment.log* to view the activity of the LabEquipment service.

- Select the *Self Registration* menu item again.

  Click the *Test* button. This makes a web service call to the LabServer to retrieve the LabServer status as well as the status of the LabEquipment services that are enabled. It may take a few seconds for the LabServer web service to initialise and start.

  Open the logfile for the LabServer located at *D:\iLabs\Template\LabServer\LogFiles\LabServer.log* to view the activity of the LabServer service.

- Select the *ServiceBrokers* menu item. Select the ServiceBroker *localhost* from the dropdown list and click the *Select* button.



  Leave the fields with their default values.

  If a *Service Url* is specified then the LabServer will notify the ServiceBroker that an experiment has completed successfully or failed.

- Log out of the Template LabServer.

Launch Dummy ServiceBroker

- Launch the Dummy ServiceBroker client by entering the following URL in a web browser:

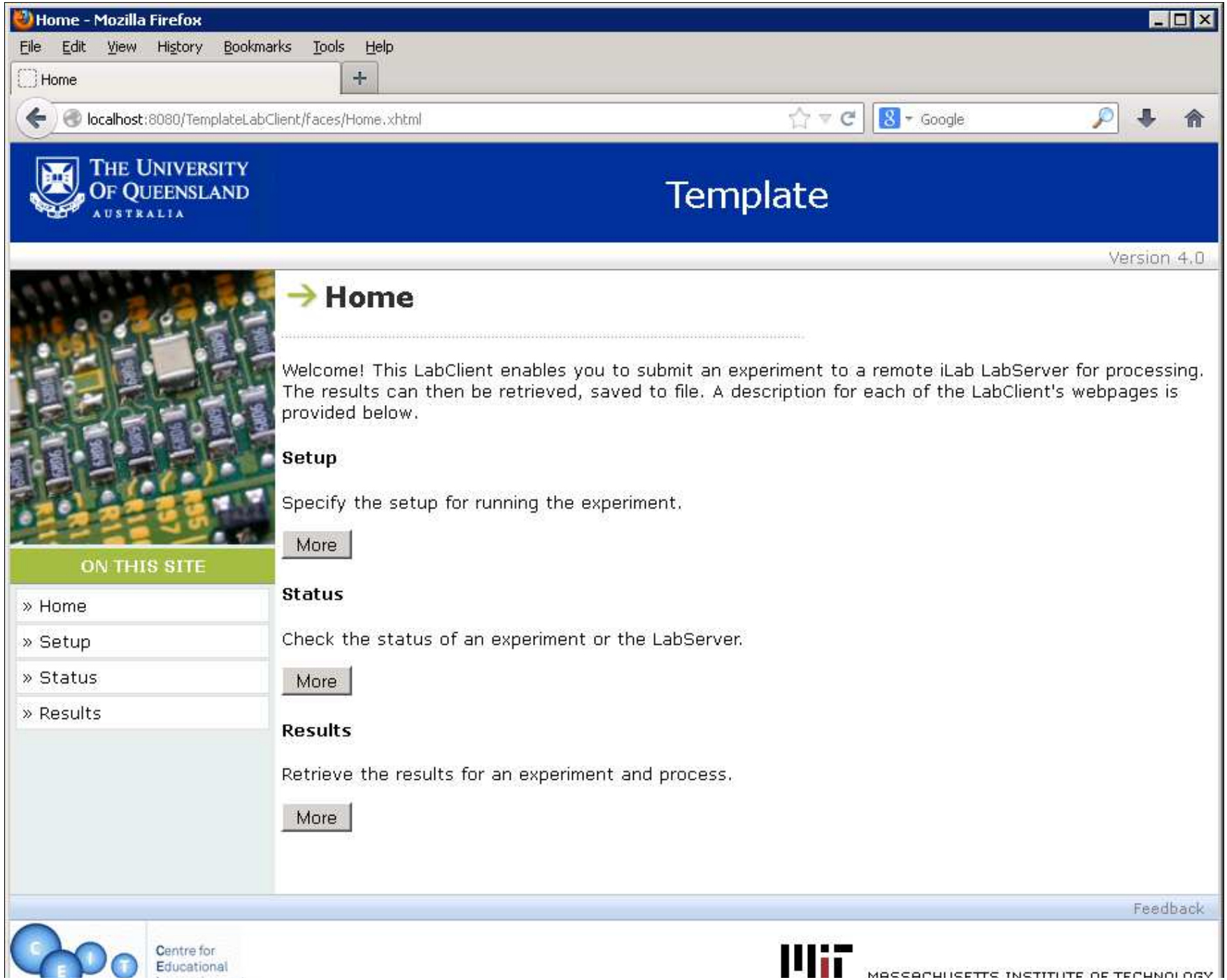
  `http://localhost:8080/DummyServiceBroker/`

  The web page simply displays *Dummy ServiceBroker*. This is sufficent to show that the Dummy ServiceBroker application has been deployed correctly. At this point in time, the Dummy ServiceBroker service has not been invoked.

Launch Template LabClient

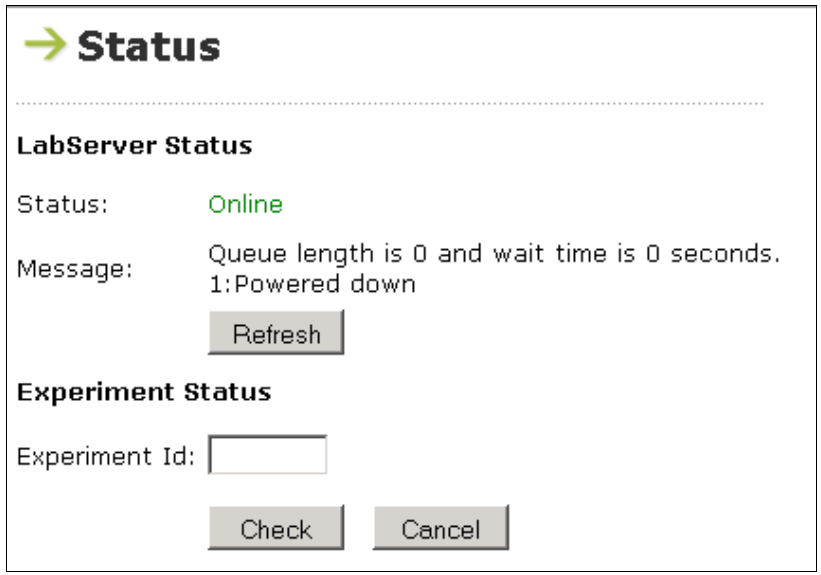
- Launch the Template LabClient by entering the following URL in a web browser:

  `http://localhost:8080/TemplateLabClient/LabClient.do?CouponId=12345&Passkey=qwerty`


Home - Mozilla Firefox
File Edit View History Bookmarks Tools Help
Home
localhost:8080/TemplateLabClient/faces/Home.xhtml
Google
THE UNIVERSITY OF QUEENSLAND AUSTRALIA
Template
Version 4.0
ON THIS SITE
» Home
» Setup
» Status
» Results
Home
Welcome! This LabClient enables you to submit an experiment to a remote iLab LabServer for processing. The results can then be retrieved, saved to file. A description for each of the LabClient's webpages is provided below.
Setup
Specify the setup for running the experiment.
More
Status
Check the status of an experiment or the LabServer.
More
Results
Retrieve the results for an experiment and process.
More
Feedback
Centre for Educational

The title *Template* should be displayed at the top of the web page and a version number near the top-right of the page.

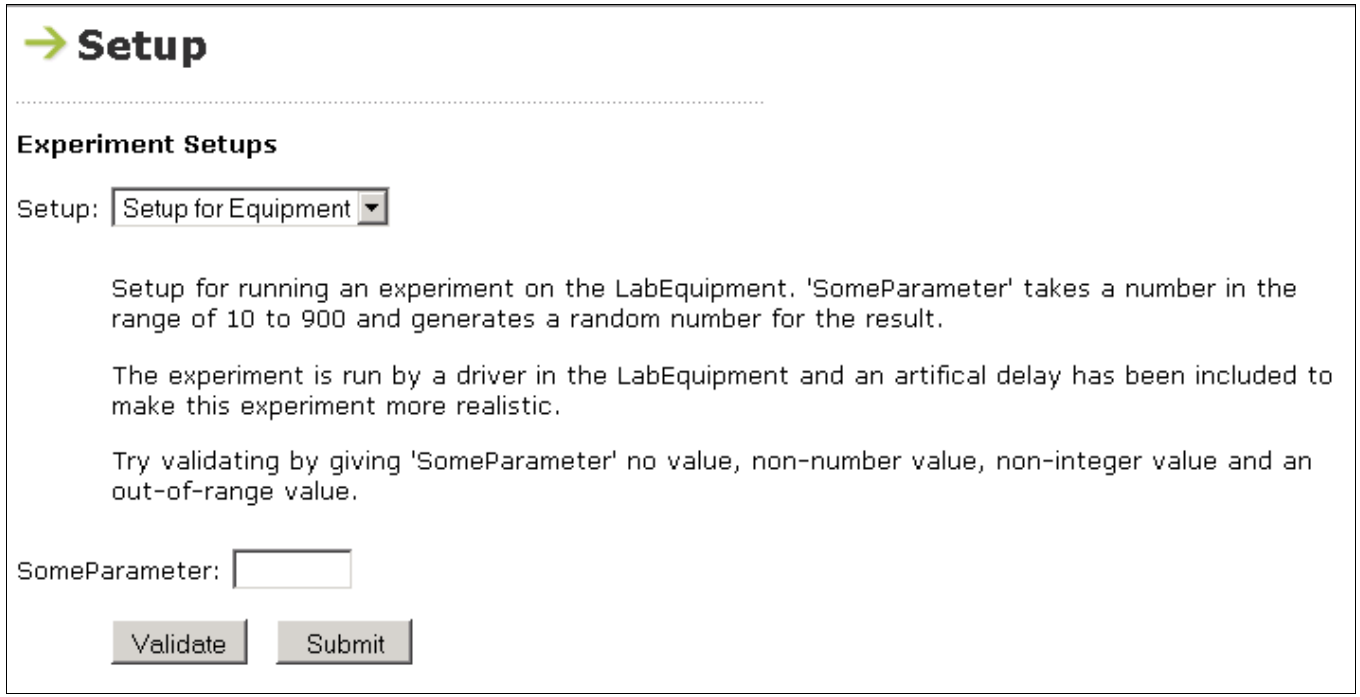
- Select the *Status* menu item.



The LabServer status should be *Online*

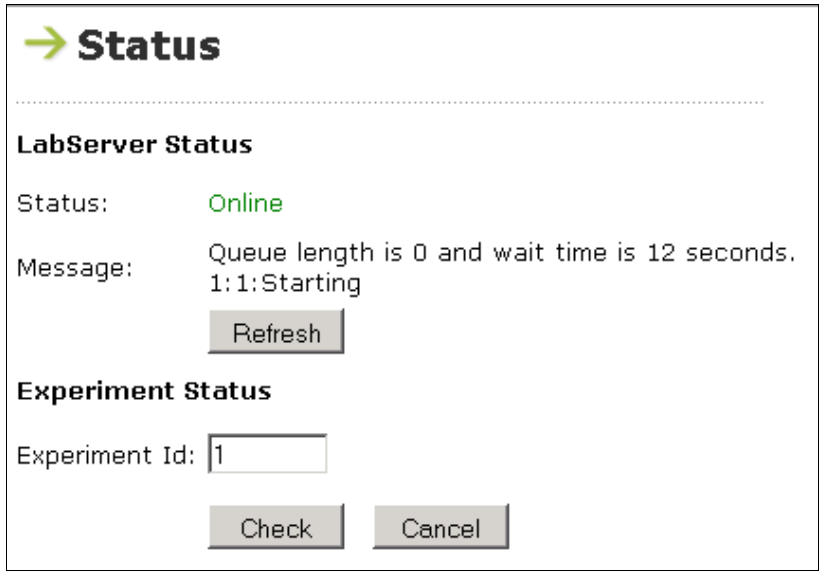
Open the logfile for the LabClient located at *D:\iLabs\Template\LabClient\LogFiles\LabClient.log* to view the activity of the LabClient application.

- Select the *Setup* menu item.

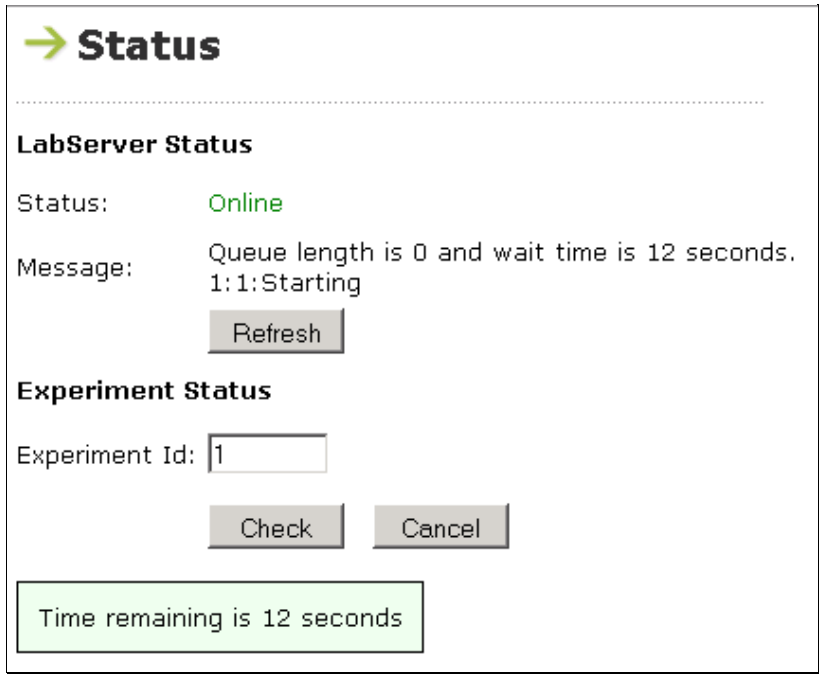


To run an experiment, select the *Setup for Equipment* experiment setup from the *Setup* dropdown list. Enter a value for *SomeParameter* and then click the *Submit* button. The experiment setup should be successfully submitted and an experiment number presented.

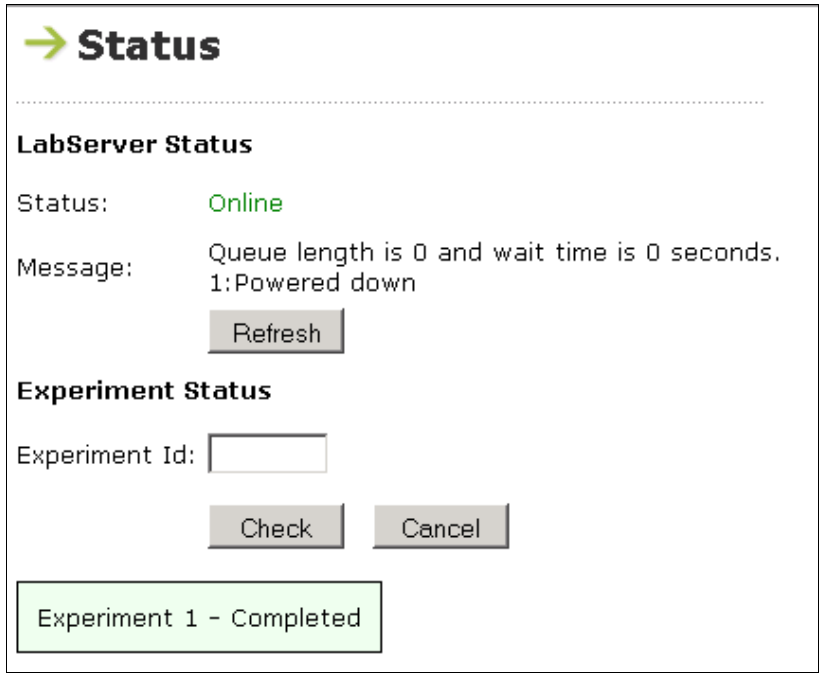
Select the *Status* menu item.



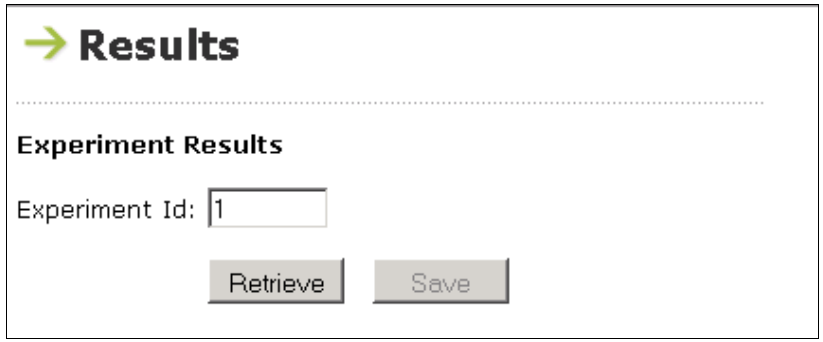
The experiment number should automatically appear in the *Experiment Id* field. Click the *Check* button to check the status of the experiment.



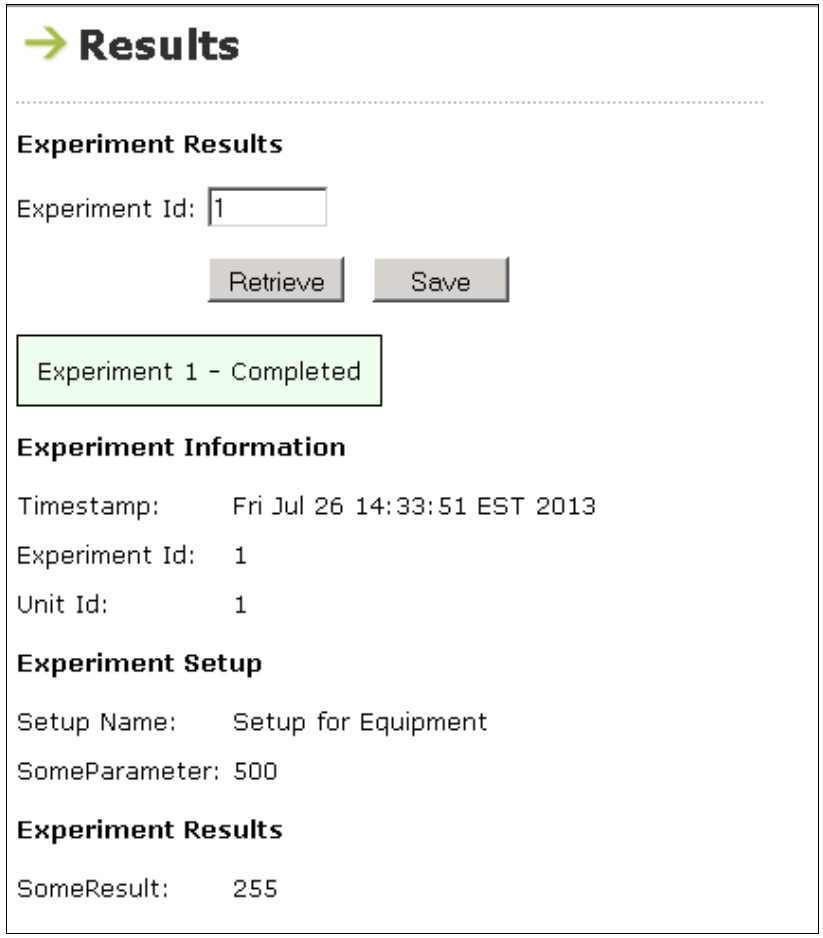
Click the *Check* button to check the status of the experiment repeatedly until the experiment completes.



- Select the *Results* menu item.



When the experiment completes, the experiment number should automatically appear in the *Experiment Id* field. Click the *Retrieve* button to retrieve the experiment results.



Save the results to a comma-separated-value (CSV) file by clicking the *Save button*.

- Select the *Setup* menu item again.

  Run another experiment but this time, select the *Setup for Simulation* experiment setup from the *Setup* dropdown list. Enter a value for *SomeParameter* and then click the *Submit* button. The experiment setup should be successfully submitted and an experiment number presented.

  Check the status of the experiment repeatedly until the experiment completes.

  Retrieve the experiment results.

That's it.