# SENG4400 – Assignment 2

## Diagram Description

### Physical\_Machine

This represents the physical machine that the 2 application servers are deployed on.

### Server\_1

#### Description

This represents the glassfish instance, running on the *Physical\_Machine* with *OnlineShop* and *AdminConsole* applications running within it.

#### Connections

Exposes port 8080 for *User* and *Admin* interaction with both the above stated applications. Also exposes port 3700 for the jms queue for the two applications to communicate in a publish/subscribe manner. Along with a few other ports for other activates (4848 for glassfish admin, 8181 for ssl connections etc)

### Server\_2

#### Description

This is the second instance of glassfish running on the *Physical\_Machine* with the *Payment* application deployed on it.

#### Connections

Exposes port 8081 for other applications to make remote procedure calls to the *Payment* application.

### jms/seng4400ass2PS

#### Description

The publish/subscribe java message system, hosted on *Server\_1* for communication between *OnlineShop* and *AdminConsole*.

#### Connections

Messages come from the *OnlineShop* and get read by the *AdminConsole*.

### OnlineShop

#### Description

Online web application for Newyzon’s online shop. Hosted on *Server\_1* when a *User* makes a login attempt through the web ui, the online shop authenticates and redirects the *User* to a store web UI for them to input a credit card/paypal id for payment.

#### Connections

Messages between the *OnlineShop* and *AdminConsole* is done through the publish/subscribe topic *jms/seng4400ass2PS*  where the *OnlineShop* publishes to the topic. When a purchase is made the *OnlineShop*  uses the *Skeleton* code to communicate with the *Payment* application through the *Stub* code.

### AdminConsole

#### Description

The *AdminConsole* is used by the *Admin* to audit login events.

#### Connections

The *AdminConsole* receives audit events by subscribing to the *jms/seng4400ass2PS* topic. *Admin* users can see the audit events through a web ui.

### Payment

#### Description

The *Payment* application exposes a SOAP web service to record payment details.

#### Connections

The *OnlineShop* communicates with the *Payment* application through the generated *Stub* and *Skeleton.* This information can then be output to the bank for integration.

### User

#### Description

Typical user who can log into the *OnlineShop* to make purchases

#### Connections

Communicates with the *OnlineShop* through a web ui.

### Admin

#### Description

Any of Newyzons system administrators.

#### Connections

Can view the audit events on a web page provided by *AdmineConsole*.

### Bank

#### Description

Represents the bank who can receive payments.

#### Connections

At this stage the bank can view the payment id and type provided by the *Payment* application.

## Setup Instructions

* *OnlineShop*.war and *AdminConsole*.war should go on the same instance of glassfish listening for http requets on any unused port as long as its not 8081.
* *Payment*.war needs to be on a different instance of glassfish configured to listen for http request on port number 8081 as the *OnlineShop*’*s* *ServiceLocator* is looking for [***http://localhost:8081/Payment/processPaymentServiceService***](http://localhost:8081/Payment/processPaymentServiceService)
* One of the glassfish instances should host a jms topic on port 3700 with the details given in the assignment specs.
* Once both instances are up and running visit:
  + Online Shop
    - <http://localhost:8080/OnlineShop/>
    - Login credentials
      * Username: Admin || User
      * Password: Admin || User
  + Admin Console
    - <http://localhost:8080/AdminConsole/>
    - needs to be refreshed to get updated list of events.