Communication Layer Documentation

*Initial Set-Up*

1. Install the following packages:
   1. git 4.6.0+
   2. apache2 2.4.18+
   3. php 7.0.22+
   4. php-amqp
   5. php-mysql
   6. rabbitmq-server 3.5.7+
   7. mysql-server 5.7.20
2. enable the rabbitmq management plugin with the following command

*rabbitmq-plugins enable rabbitmq\_management*

1. Login to rabbitmq management console using the following URL

[http://127.0.0.1:15672](http://127.0.0.1:15672/)

1. Create a new rabbitmq user with the following credentials

username: test

password: test

tags: Admin

1. Create a new Virtual Host with the name “testHost”
2. give the user we just created “test’’ permission to access the Virtual Host “testHost”
3. Create 3 exchanges with the following names “deckExchange”, “authExchage” and “APIExchange” with the following attributes

Virtual host: testHost

type: Headers

Durability: Durable

Auto Delete: No

Internal: No

Arguments:

1. Create 3 queues with the followingnames “deckQueue”, “authQueue” and “APIQueue”. Assign the following attributes

Virtual host: testHost

Durability: Durable

Auto Delete: No

Arguments:

1. Make sure you bind all three queues with their appropriate exchanges in the rabbitmw console. Ie. authQueue → authExchange
2. Clone the communication layer repository from the URL below make sure you use the “Final” branch

[*https://github.com/agar23/IT490.gi*](https://github.com/agar23/IT490.git)*t*

1. the tree structure should be like the one below:

IT490/

├── clients

│ └── deployClient.php

├── DNS.conf

├── Ini

│ ├── conf.ini

│ ├── deploy.ini

│ ├── get\_host\_info.inc

│ ├── host.ini

│ ├── logRabbitMQ.ini

│ ├── path.inc

│ └── rabbitMQLib.inc

├── logs

│ └── logfile.log

├── logscript.php

├── README.md

└── servers

4 directories, 12 files

1. For file specific documentation please see documentation inside each file.

*Current set-up*

* *The existing communication layer server lives at the address below*

prdComm – 192.168.43.?

* *The root directory for this project is*

*/home/aga23/Documents/IT-490/Dev/IT490*

* *there are no servers/ “lisitners” that live on this server.*