# Infrastructure Design

## Components and versions

|  |  |
| --- | --- |
| **Product** | **Version** |
| Red Hat Jboss Fuse | V6.2.1 on Karaf |
| Nexus | V3 OSS |
| Jenkins | V2 |
| Jboss Developer Studio | V9.1 with Integration Pack |
| MySQL | V5.9 |

## Jboss Developer Studio

## Fuse/Fabric

As part of this project a JBoss Fuse environment is configured on a private hosted environment.

The chosen topology is a production-like topology that provides high availability, scalability, load balancing and centralized management capabilities. It consists of three virtual hosts over which 3 instance of a Fabric Ensemble cluster are deployed.

Each virtual host will run:

- one registry

- one Fabric HTTP Gateway

- X applications

## Containers

The development environment will use child Karaf while the production one will use SSH containers.

## Database

The database will be hosted on one of the production host. The database will be a single instance without HA.

## Brokers

Master/Slave activeMQ brokers are configured with the network-based replicated levelDB persistence.

## Load balancers

F5 load balancers are used to balance the load over the application instances.

## Continuous Integration

The build & deploy process is the Fuse CI reference implementation based on Git, Jenkins, and Nexus.

* The Git environment is accessible from a Developer workstation for the purposes of source code management.
* The Nexus host has access to the public internet in order to download the relevant library dependencies from the public maven repository.
* The Jenkins environment can access the Git, Nexus, and Fuse environments for the purposes of building and deploying the relevant applications.

## Continuous delivery

### Quality criteria

### Testing framework

## Environments configuration

|  |  |  |
| --- | --- | --- |
| **Component** | **IP / hostname / port** | **Details (credentials...)** |
| Nexus |  |  |
| Fuse dev |  |  |
| Fuse prod1 |  |  |

## Infrastructure Design Diagram

Illustration 1: Infrastructure Overview