

## **Data Management Plan**

### **I. Data Workflow and Storage**

#### **A) Server Usage/Backup**

1. All code will be housed on a Rackspace Cloud Server (approximately 50gb of storage) through Hope College.
2. The codebase for the authoring tool will be Drupal (PHP/MySQL/Jquery).
3. The system will be using Drupal's multi-site option for quick and accurate duplication of simulation core functionality. In addition we will be using AEGIR, a Drupal multi-site hosting platform in which new sites can be spun up from a single codebase.
4. All simulations will be a part of a single application and modifications/theming of each simulation will be available on the individual multi-site installation (.edu domain).
5. When authoring data is stored into the database it will be stored in a single database that will be tied directly into the API. Newly entered content will be available through the API instantly.

#### **B) Version Control**

1. All source code will be stored in an SVN repository on a separate server.
2. There will be 3 environments in which to push code – DEV, STAGING and PRODUCTION.
3. Deployments to each environment will be code only deployments.

### **II. Quality Assurance Plan / Requirements Methodology**

#### **A) Quality Assurance**

1. All new functionality will be tested and approved before moving from DEV to STAGE. A full regression test will be administered upon a successful deployment to STAGE.
2. Once we are all satisfied with the staging environment and have tested it with a current production database snapshot we will take the site offline and deploy the new codebase changes.
3. Full sanity check will take place on Production post deployment.

#### **B) Requirements Methodology**

##### **1. Agile Development**

- a) Since the development methodology will be agile and fast in nature, user stories will be created and stored in Pivotal Tracker (Agile Development Tool – web based).
- b) Stories will be slated for development on a weekly basis
- c) Story detailed requirements (wireframes, test scenarios and mockups) will be built in time for each iteration (week).