Quick Start Installation Guide

This quick start guide is intended as a reference for the steps necessary to install an eagle-i node (institutional server). For detailed instructions, please refer to the linked guides.

Prerequisites

For details, see Repository Installation, Upgrade and Administration Guide > Platform Requirements
See also System Requirements.

1. Install and configure the Tomcat web application server to `${CATALINA_HOME}`
    a. Configure Tomcat to use SSL
    b. Purchase and install an SSL server certificate (for testing purposes it is possible to use a self-signed certificate; a property to this effect can be set in the file `eagle-i-apps.properties`)
        i. Make sure your certificate is properly installed by using an SSL checker, e.g. http://www.geocerts.com/ssl_checker
    c. Set up the networking configuration such that Tomcat responds on standard ports 80 and 443
2. Move aside the default `ROOT.war` or `ROOT` directory if it is present in Tomcat's webapps directory
3. Secure access to an outgoing mail server (SMPT). This can be co-located and accessed via localhost (e.g. postfix), or can be a remote server accessed over https.

1. Install the eagle-i repository

For details, see Repository Installation, Upgrade and Administration Guide > Install and Configure Repository
For downloads, see: Get Software

1. Download the eagle-i repository distribution package, `eagle-i-repository-dist-[version].zip`
2. Establish a repository home directory, such as `/opt/eaglei/repo` and set an environment variable `${REPO_HOME}`. Unzip the distribution package to this location
3. Copy `${REPO_HOME}/webapps/ROOT.war` to Tomcat's webapps directory
4. Configure Tomcat's JAVA_OPTS (in tomcat6.conf or similar):
   `JAVA_OPTS="-XX:PermSize=64M -XX:MaxPermSize=256M -Xmx1024m"`
5. Add two system properties to `catalina.properties`:
   `org.eaglei.repository.home=/opt/eaglei/repo`
   `derby.system.home=/opt/eaglei/repo`
6. Run the script `${REPO_HOME}/etc/prepare-install.sh`
7. Create and edit the repository configuration file in `${REPO_HOME}/configuration.properties`
8. Start Tomcat
9. Run the script `${REPO_HOME}/etc/finish-install.sh`
10. Run the script `${REPO_HOME}/etc/upgrade.sh`

Did it work?
The repository admin console should be available at https://your.host.edu/repository/admin. Log in with your newly created admin user. Verify that the version information reflects your installation.

2. Install SWEET and Online Help

For details, see: SWEET and Institutional Search Installation and Upgrade Guide and Configuration Property Guide
For software downloads, see: Get Software
For configuration sample files, see: examples in our code repository

1. In the repository admin console, create an "anonymous-ext" repository user with **no** roles (to be used by the sweet backend services), and a few test users with different roles.
2. Stop Tomcat
3. Establish an eagle-i application home directory and a subdirectory for common application configuration files, e.g. `/opt/eaglei` and `/opt/eaglei/conf`. Edit `catalina.properties` to reflect these:
   `org.eaglei.home=/opt/eaglei`
   `common.loader=/opt/eaglei/conf,.....`
4. Download example configuration files `eagle-i-apps.properties`, `eagle-i-apps-credentials.properties`, `whoami.xml`, place them in the common configuration directory and modify them to reflect your installation
5. Download `eagle-i-webapp-sweet-[version].war` into Tomcat's webapps directory and rename to `sweet.war`
6. Download `eagle-i-webapp-help-[version].war` into Tomcat's webapps directory and rename `help.war`
7. Start Tomcat

Did it work?
The SWEET should be available at https://your.host.edu/sweet. Create a "Level 4" test user via the repository admin console and log in to the SWEET. Verify that the footer information reflects your installation. Verify that the header links work.

3. (Optional) Configure search engine access and Google analytics

For details, see: [Guide under construction] and Configuration Property Guide
For sample files, see: examples in our code repository

1. Create the file `robots.txt` in `${CATALINA_HOME}/webapps/ROOT` and edit it to allow search engine crawler access (see examples directory)
2. Create the file sitemap.xml in `${CATALINA_HOME}/webapps/ROOT` by using the sitemap web service provided by SWEET:
   `wget -O ${CATALINA_HOME}/webapps/ROOT/sitemap.xml http://foo.bar.edu/sweet/sitemap`
   (It is a good idea to set up a cron job to update the site map periodically.)
3. Submit this sitemap to the search engines of your choice (for Google, you will need to set up a Google Webmaster account)
4. Google analytics: obtain an analytics account and configure your tracker ID in the file `eagle-i-apps.properties`

4. (Optional) Install Sparqler

For details, see: Public SPARQL Endpoint Installation Guide and Configuration Property Guide
For software downloads, see: Get Software
For configuration sample files, see: examples in our code repository

1. Stop Tomcat
2. Copy `${REPO_HOME}/webapps/sparqler.war` to Tomcat's webapps directory
3. Establish a Sparqler home directory, such as `/opt/eaglei/sparqler` and set an environment variable `${SPARQLER_HOME}`.
4. Add the following system property to `catalina.properties`:
   `org.eaglei.sparqler.home=/opt/eaglei/sparqler`
5. Run the script `${REPO_HOME}/etc/prepare-install.sh` with an additional argument: `sparqler-users.derby`
6. Edit the repository configuration file in `${SPARQLER_HOME}/configuration.properties`. It should be identical to the repository's except for two lines:
   `eaglei.repository.sesame.dir=${sys:org.eaglei.sparqler.home}/sesame`
   `eaglei.repository.log.dir=${sys:org.eaglei.sparqler.home}/logs`
7. Start Tomcat
8. Run the script `${REPO_HOME}/etc/finish-install.sh` targeting the newly created /sparqler endpoint

Did it work?
The Sparqler query workbench should be available at http://your.host.edu/sparqler and should have no access restrictions. Execute the following SPARQL query: `select * where {?s ?p ?o}` with Default Graph = NG_Published. You should see the public triples of your main repository.

5. (Optional) Install Institutional Search

For details, see: SWEET and Institutional Search Installation and Upgrade Guide and Configuration Property Guide
For software downloads, see: Get Software
For configuration sample files, see: examples in our code repository

1. Stop Tomcat
2. Modify files `eagle-i-apps.properties`, `eagle-i-apps-credentials.properties` and `whoami.xml` to reflect your installation
3. (optional) install a MySQL database for search usage logging and configure its name and credentials in the two property files above (the tables will be created upon first access by the application)
4. Download `eagle-i-webapp-institution-[version].war` into Tomcat's webapps directory and rename to `institution.war`
5. Start Tomcat

Did it work?
Institutional Search should be available at https://your.host.edu/institution. Verify that the footer information reflects your installation. Verify that the header links work.