Registry User Interface v.1.0.0

for the Planetary Data System

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1.1 Overview

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About Registry User Interface

The Registry User Interface software serves as the web-based interface for the Registry Service.

Please send comments, change requests and bug reports to the PDS Operator at pds_operator@jpl.nasa.gov.

1.2 **Installation**

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Installation

This section describes how to install the Registry User Interface software contained in the *registry-ui* package. The following topics can be found in this section:

- System Requirements
- Unpacking the Package
- Deploying the Application
- Configuring the Application

System Requirements

This section details the system requirements for installing and operating the Registry Service.

Java Runtime Environment

The Registry User Interface was developed using Java and and Google Web Toolkit and will run on any platform with a supported Java Runtime Environment (JRE). The software was specifically developed under Java version 1.6 and has only been tested with this version. The following commands test the local Java installation in a UNIX-based environment:

```
% which java
/usr/bin/java

% java -version
java version "1.6.0_26"
Java(TM) SE Runtime Environment (build 1.6.0_26-b03-384-10M3425)
Java HotSpot(TM) 64-Bit Server VM (build 20.1-b02-384, mixed mode)
```

The first command above checks whether the *java* executable is in the environment's path and the second command reports the version. If Java is not installed or the version is not at least 1.6, Java will need to be downloaded and installed in the current environment. Consult the local system administrator for installation of this software. For the do-it-yourself crowd, the Java software can be downloaded from the Oracle Java Download page. The software package of choice is the Java Standard Edition (SE) 6, either the JDK or the

JRE package. The JDK package is not necessary to run the software but could be useful if development and compilation of Java software will also occur in the current environment.

Java Application Server

The Registry User Interface requires a Java application server for hosting the web application. The suggested application server for this release is Apache Tomcat with a minimal version of 6.0.20 through version 7.0.X. Consult the local system administrator for installation of this software. For the do-it-yourself crowd, the Apache Tomcat software can be downloaded from the Apache Tomcat page. Choose the version to download (6.0 or 7.0) from the menu on the left.

Unpacking the Package

Download the *registry-ui* package from the PDS FTP site. The binary distribution is available in identical zip or tar/gzip packages. Unpack the selected binary distribution file with one of the following commands:

```
% unzip registry-ui-1.0.0-bin.zip
or
% tar -xzvf registry-ui-1.0.0-bin.tar.gz
```

Note: Depending on the platform, the native version of *tar* may produce an error when attempting to unpack the distribution file because many of the file paths are greater than 100 characters. If available, the GNU version of tar will resolve this problem. If that is not available or cannot be installed, the zipped package will work just fine in a UNIX environment.

The commands above result in the creation of the *registry-ui-1.0.0* directory with the following directory structure:

- **README.txt**

  A README file directing the user to the available documentation for the project.

- **LICENSE.txt**

  The copyright notice from the California Institute of Technology detailing the restrictions regarding the use and distribution of this software. Although the license is strictly worded, the software has been classified as Technology and Software Publicly Available (TSPA) and is available for *anyone* to download and use.

- **registry-ui-1.0.0.war**

  This is the Web ARchive (WAR) file containing the Registry User Interface software including all dependent JAR files.

- **doc/**

This document directory contains a local web site with the Registry User Interface Guide, javadoc, unit test results and other configuration management related information. Just point the desired web browser to the *index.html* file in this directory.

Deploying the Application

The Registry User Interface web application is packaged as a WAR file and is intended for installation under a standard Java Application Server. Prior to installation the WAR file should be renamed from *registry-ui-1.0.0.war* to *registry-ui.war*. For a Tomcat server deployment, the WAR file is normally copied directly to the *webapps* directory or installed via the Manager interface. Once this step is complete, the application is ready for operation.

Configuring the Application

By default, the Registry User Interface comes configured to access the Registry Service at the specific endpoint *http://localhost:8080/registry*. This should be modified to represent the endpoint of the Registry Service target installation. To modify the configuration, edit the *application.properties* file located in the *$TOMCAT_HOME/webapps/registry-ui/WEB-INF/classes* directory. Modify the following line with the new endpoint:

```
service.endpoint=http\://localhost\:8080/registry/

  should be changed to (if hosted at node.nasa.gov on port 80):

service.endpoint=http\://node.nasa.gov/registry/
```

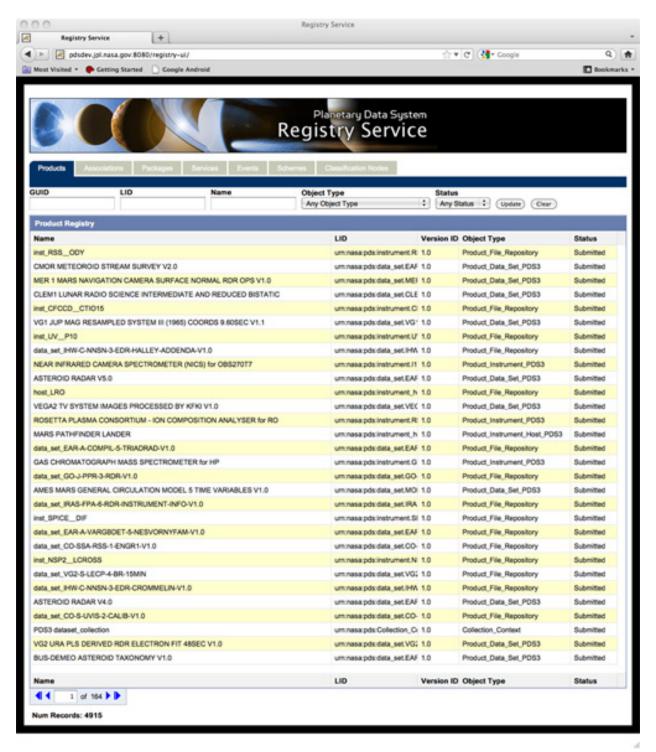The Apache Tomcat server must be restarted for this change to take effect.

1.3 **Operation**

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Operation

The Registry User Interface software is a web application for interfacing with the Registry Service. The main screen of the application is as follows:

Click on the image for a larger version.