Scotty - iRODS Admin Interface

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Abstract

RENCI has developed a web-based iRODS Administration dashboard named Scotty. It is available from the E-iRODS website.

Index Keyword Terms— iRODS, E-iRODS, administration, web client, data management

1. Overview

Scotty is a web-based iRODS Administration dashboard that can connect to any running iRODS Zone (grid). Connections are limited to iRODS users with the “rodsadmin” designation.

Scotty is a java application that runs on Tomcat and uses the Jargon API to communicate with iRODS. The iRODS server can be either local or remote. Scotty provides cumulative statistics for users, resources, and files in a single Zone as well as user and password management.

Since Scotty can be installed and run separately from the iRODS server (from any capable networked computer) and provides a dashboard for any iRODS Zone, it stores no connection information and no metric information locally.

2. Statistics

Because Scotty communicates over the iRODS protocol, it can only display information that is available to the iRODS server itself (namely, what is stored in the iCAT database). Figures 1-4 illustrate the type of information that can be accessed directly in this manner.

However, Scotty can also display server-specific statistics collected on its behalf by its accompanying stats gatherer, Guinan. Guinan is a separate application installed alongside E-iRODS which periodically executes small python scripts that each calculate a particular metric. These metrics are stored in the iRODS database and therefore made available to any connecting Scotty instance. These metrics can be displayed within Scotty as time-series data. We expect a community to form around useful metrics that can be shared and installed by grid administrators.

3. Download

Both DEB and RPM packages are available for Scotty and Guinan. They can be found on the E-iRODS downloads page (http://eirods.org/download).

4. Acknowledgements

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**Figure 1.** The Dashboard shows a cumulative snapshot of the number of administrators, users, resources (both in the local Zone and remote), files, and collections. Per user and per resource totals can also be accessed via drop down menus.
**Figure 2.** The Users listing displays the administrators and other users in the iCAT of the connected Zone. This list includes both localZone users and any federated users from other Zones. Also listed are the userID and creation time for each user. The administrator may update or remove users from this page but cannot remove his or her own account.
Figure 3. The User Update page allows the logged in administrator to manipulate the account type (rodsuser or rodsadmin), update the comment and information fields in the iCAT, and reset the password for a particular user.
**Figure 4.** The Resources listing displays the existing resources connected to the Zone. It shows the ID, the name, the type, and the Vault path.