PUMP URS User Import

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1 Overview
This document proposes a change to ECHO Provider User Management Program (PUMP) that allows a PUMP provider to find and add to a provider group any user within the EOSDIS User Registration System (URS) without requiring that the user had previously logged into ECHO or Reverb.

2 Background
ECHO stores users in its local database to allow for ACL management. When a user creates an account or logs into ECHO using a URS account that user’s account is copied over to the local ECHO storage and is added to the ECHO member group within URS.

Some providers leverage the PUMP interface not only to manage metadata at both the collection and granule level but also to enforce group membership for external applications and access such as the ASTER DAR tool, MODIS Re-projection Tool and MERIS data access via LAADS and OBPG.

Currently, if a user needs access to one of the groups managed by ECHO via PUMP’s group interface, that user is required to not only create URS account, but also log in to the account via Reverb or some other ECHO based authentication. If a user has not been copied locally to ECHO, the user will not be retrievable via PUMP and therefore cannot be added to an ECHO-based group.

More specifically, this operations concept seeks to fix NCR 11013521: “OPS:Apparent disconnect between URS and ECHO PUMP“ which states:

“Once users have successfully created an URS account their user names are not visible in the ECHO PUMP interface until they sign in to Reverb. This issue seems to occur whether or not users have gone directly to the URS interface or through a redirect from Reverb. This is causing confusion for customers as well as user support.

This impacts users who would like to apply for access to ASTER data and are unable to do so, in addition to customers who would like to download LP DAAC Tools and cannot all because the ECHO/PUMP does not have a record of the user name they have already generated in URS and in many cases validated via clicking on the link in the system generated email they received.”
3 Proposed Changes

It is recommended that if tools such as the MODIS Re-projection Tool are to continue to use ECHO for group management, several changes are made the user query and import mechanism currently employed by ECHO. When a user is queried or added to a group using ECHO’s PUMP interface, that interface will first look locally for that user and, if not found will query URS for that user. If the user is found in URS, regardless of the user’s state, that user’s information should be copied to ECHO’s local store. That user should also be added to the ECHO group. The diagram below illustrates the proposed change.

4 Alternative Solution

Ultimately, it might be worth considering adding rudimentary group management interface to URS and allowing providers to leverage that centralized system to track group membership.

For example, if a provider wanted to provide access to a service or tool, say “MyCoolTool”, they would simply request a member group be created within URS and that they be given group administrative privileges on said group.

The provider would have a URS user account that would be marked as the group admin for the “MyCoolTool” group and would be able to add and remove URS users from this group.
While the user would not have the ability to track different levels authorization within the tool, it would be easy to check to see if a user was in the group during normal URS authentication. It would also be easier to track access to “MyCoolTool” at a URS level.

This would require changes to both the providers currently using ECHO for this type of activity, and would require a new user interface for URS, but could be a more simplistic and less circuitous group management tool in the long term. Group management would be streamlined and consolidated in one place and could be less confusing.

5 Assumptions
This solution assumes the following technical capabilities exist or can be easily modified either within ECHO or URS:

1. ECHO can retrieve and store a user using its application authority and doesn’t require an explicit authentication by that user to retrieve his data.

2. The user being imported into ECHO does not need to be added to the ECHO URS member group.

3. This change applies to both system level groups within PUMP as well as provider level groups.

4. Any user logging into PUMP to perform this activity already is able to act on behalf of the provider or the system being used to manage the group.

6 Data Partner Impacts
This change should allow providers more flexibility in group/user management. This would require no software change for data partners and would solve a reported problem.

7 Client Impacts
These proposed changes should not directly impact any existing or future ECHO clients.