



Zowe Desktop Application State Persistence Mechanism & REST APIs for Files and Datasets

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Project:

Zowe Desktop Application State Persistence Mechanism & REST APIs for Files and Datasets

Project Description:

Web plugins running within the application framework do not have access to a secure state persistence mechanism that would allow a user to restore one or more plugins to an early state when restarting a session. The App Framework needs to provide this capability.

The mainframe has some additional features for files than a standard unix/linux system such as encoding, tagging, additional permissions and a whole other type of "file" called dataset and there currently is no perfect server that has all the command APIs required. The APIs for Zosmf and ZSS can be similar but the name of the variables and the shape of the json returned is different for both these servers. New APIs need to be created to accommodate the remaining commands and existing APIs need to be improved to transform the data in the right shape for the program that requested it.

Deliverables:

- 1) State Persistence for Zowe Desktop Applications
- 2) REST APIs for Files and Datasets (Adding new ones and enhancements to <https://github.com/zowe/zlux/wiki/URI-Broker> to do the zss & zosmf data-shaping)



Coding Plan

Week	Description of activities	Deliverable
Week 1	<ul style="list-style-type: none">• Community Bonding	<ul style="list-style-type: none">• Get familiar with the Community• Complete the prerequisite tasks
Week 2	<ul style="list-style-type: none">• Environment Setup	<ul style="list-style-type: none">• Zowe Framework and Test Plugins installation
Week 3	<ul style="list-style-type: none">• POC for State Persistence Mechanism	<ul style="list-style-type: none">• POC Development
Week 4	<ul style="list-style-type: none">• POC Implementation• Feedback and Improve	<ul style="list-style-type: none">• Working POC for State Persistence Mechanism
Week 5	<ul style="list-style-type: none">• Coding Phase - I	<ul style="list-style-type: none">• Pull Requests
Week 6	<ul style="list-style-type: none">• Coding Phase - II• Feedback and Improve	<ul style="list-style-type: none">• Pull Requests• State Persistence for Sample Plugins
Week 7	<ul style="list-style-type: none">• Work on feedback received• Commit remaining	<ul style="list-style-type: none">• Code to Remote



	<div>Changes</div> <ul style="list-style-type: none">● Create Pull Requests	
Week 8	<ul style="list-style-type: none">● Testing and Fixing Bugs● Documentation Phase	<ul style="list-style-type: none">● Documentation for State Persistence
Week 9	<ul style="list-style-type: none">● Research<ul style="list-style-type: none">○ Mainframe structures○ User needs○ Data formats	<ul style="list-style-type: none">● Read Documentation
Week 10	<ul style="list-style-type: none">● API Arguments and Data format	<ul style="list-style-type: none">● API list for files
Week 11	<ul style="list-style-type: none">● Coding Phase - I● Writing APIs	<ul style="list-style-type: none">● REST APIs for files
Week 12	<ul style="list-style-type: none">● Coding Phase - II● Writing APIs● Feedback and Improve	<ul style="list-style-type: none">● REST APIs
Week 13	<ul style="list-style-type: none">● Assembly Code required to connect the APIs	<ul style="list-style-type: none">● REST API connections
Week 14	<ul style="list-style-type: none">● Code Integration Phase● Feedback and Improve	<ul style="list-style-type: none">● Working APIs for file commands



Week 15	<ul style="list-style-type: none">• Testing and fixing bugs• Documentation	<ul style="list-style-type: none">• Documentation for File REST API
Week 16	<ul style="list-style-type: none">• Research on zss & zosmf data-shaping	<ul style="list-style-type: none">• Read Documentation
Week 17	<ul style="list-style-type: none">• Improve existing APIs of ZSS and Zosmf for data transformation	<ul style="list-style-type: none">• API enhancements
Week 18	<ul style="list-style-type: none">• Testing and fixing bugs• Documentation• Feedback and improve	<ul style="list-style-type: none">• Documentation for Data Shaper API code
Week 19	<ul style="list-style-type: none">• Buffer Week	<ul style="list-style-type: none">• Finish remaining tasks
Week 20	<ul style="list-style-type: none">• Guide and Demo Video	<ul style="list-style-type: none">• Video Presentation