



Zowe-App-Framework

File-Transfer-Application

Ayeshmantha Perera

akayeshmantha@gmail.com

2nd Year - Masters Degree In Information Technology

Srilanka, Colombo

Project Name

[Zowe-App-Framework--File-Transfer-Application](#)

Click the link for description.

Zowe Desktop Documentation Viewer

Introduction

Student Name:

Ayeshmantha Perera.

Primary Mentor:

Sean Grady.

Backup Mentor

Leanid

Project Description

The Zowe Virtual Desktop needs to provide a way to easily transfer files and datasets from the mainframe to a user desktop and vice versa, while dealing with encoding and security. Main goal of the project is to work on the file-transfer application and make it ready for the production environment. It should provide the ability to transfer large files and datasets and also should provide mechanisms to download large files from the client browser. And should work on the back end missing endpoints which requires for the file-transfer application to work. Also there will be more work on the interface of the application to make it more intuitive with the provided

mockup files.

Problem Definition:

The current file-transfer application which can be found on this [link](#) is the only file-transfer application in Zowe virtual desktop. Current active release contains an old not much user-friendly interface which contains an ftp connection UI which does not work currently in the right side of the ui. And on the other side there is a file-uploader panel.

As the final output has to provide a more user friendly interface with the capability to connect in to multiple mainframe instances and transfer files also this file transfer app must have the capability to download large files and it should provide capability to users to cancel downloads any time, pause downloads and resume downloads from the provided UI. Also it should be able to track the progress as a percentage and provide time left for the download to complete. There is an existing file-api written from C in mainframe. And there will be missing parts which need to be implemented to make the new file-transfer app to work.

One of the main problems is to find a way to download large files and data sets from the file-transfer app. We have to come up with a solution which can surpass file download functionality from javascript to the browser.

Deliverables:

Finalized file-transfer application

Improved file API written in C

Timeline**Preliminary activities:**

Week	Description of activities	Goal
Week 1	Talk with the team and set up the zowe dev environment.	Get familiar with the Zowe app framework. And the existing applications.

Week	Description of activities	Deliverable
Week 2	Get familiar with the already existing file-transfer app.	Will help to understand the existing solution in zowe.
Week 3	Research for the best solution to download large files from clients.	Find the best file-stream api can be used for the project.
Week 4	Research for the best solution to download large files from clients.	Find the best file-stream api can be used for the project.
Week 5	Finalize the solution and come up with a sample on how it works.	Example of the stream api to be used for the team to get an idea.

Week	Description of activities	Deliverable
Week 6	Start working on the new service which does the download functionality.	Service to handle basic file download functionality.
Week 7	Create the new component to handle the download functionality in angular client.	Angular client which downloads the files.

Week 8	Work on extending the file download service to provide the Cancel option,Retry option, Pause option and Resume options	File download service with the capability to provide the end user Cancel option,Retry option, Pause option and Resume options
Week 9	Finding the best angular UI components framework which suits the use case.	Finalize UI component framework.
Week 10	Work on the mockup to handle multiple zss server connections (FTP/HTTP/SFTP).	UI with the ability to connect to multiple zss servers to transfer files.
Week 11	Come up with the component to display one file transfer transaction.	Angular component to display single transaction details.
Week 12	Extend the angular file download service to get the progress and time left details.	Finalized file download angular service.
Week 13	Extend the angular component to show the progress and time left details.	Finalized download angular component.
Week 14	Create the component to list all the file-transfer transactions for a zss server.	Finalize file-transfer app UI components.

Week 15	Start working file-api. Work on the replace function.	Finalized replace api with unit tests.
Week 16	Start working on the copy file-api.	Finalized copy-file api with unit tests.
Week 17	Finalize both file-api and the file-transfer app components and apis.	Finalized application with unit tests.
Week 18	1st round of testing. Getting feedback on bugs. Start working on the documentation	Get 1st round results. And work on the bugs and feedback.
Week 19	2nd round of testing Continue documentation	Finalized documentation. Work on final evaluations, feedback and bugs reported.
Week 20	Work on the guides and video.	Finalized video and guides of the project.

Detailed Design:

Final Mock Design.

Status: Connected to n2ll.rocketsoftware.com

Host: Username: Password: Port: Quickconnect

Remote site: /u/rospg

File list:

Filename	Filesize	Filetype	Last modified	Permissions	Owner/Group
..					
.xauthen	1,000	XAUTHOR...	6/6/2020 10:58:44 PM	-rwxr-xr-x	TS/PG TSU...
Funet walks around Area 51-viA.kuEQDQg.webm	1,136,632	WEBM File	8/14/2019 4:41:04 PM	-rwxr-xr-x	TS/PG TSU...
.tschrc	2,296	TSCHRC File	8/23/2019 4:34:32 PM	-rwxr-xr-x	TS/PG TSU...
cpu_usage_sample.tar	889,680	TAR File	6/17/2020 4:51:33 PM	-rwxr-xr-x	TS/PG TSU...
ch_history	4,867	SH_HISTORY	6/15/2020 4:30:00 PM	-rwxr-xr-x	TS/PG TSU...
save-8145575-R528-	124	SAVES-843...	6/7/2020 6:50:22 PM	-rwxr-xr-x	TS/PG TSU...
save-6756806-R528-	214	SAVES-675...	5/18/2020 11:05:32 PM	-rwxr-xr-x	TS/PG TSU...
save-6756806-R528-	124	SAVES-675...	6/7/2020 6:50:22 PM	-rwxr-xr-x	TS/PG TSU...
save-67568175-R528-	0	SAVES-675...	6/15/2020 3:30:10 PM	-rwxr-xr-x	TS/PG TSU...
save-6756806-R528-	696	SAVES-675...	5/15/2020 12:45:19 PM	-rwxr-xr-x	TS/PG TSU...
save-50791254-R528-	36	SAVES-507...	6/15/2020 4:33:21 PM	-rwxr-xr-x	TS/PG TSU...
save-50791169-R528-	234	SAVES-507...	6/7/2020 6:50:22 PM	-rwxr-xr-x	TS/PG TSU...
save-459001-R528-	448	SAVES-459...	5/18/2020 1:03:26 PM	-rwxr-xr-x	TS/PG TSU...
save-34014392-R528-	0	SAVES-340...	6/15/2020 6:11:38 PM	-rwxr-xr-x	TS/PG TSU...
profile	871	PROFILE File	1/29/2020 9:29:27 PM	-rwxr-xr-x	TS/PG TSU...
rpmrc	70	MPARC File	4/23/2020 10:25:41 AM	-rwxr-xr-x	TS/PG TSU...
node_repl_history	21,708,059	NODE_REP...	6/17/2020 12:47:11 AM	-rwxr-xr-x	TS/PG TSU...
Funet walks around Area 51-viA.kuEQDQg.mp4	17,330,065	MP4 Video...	8/14/2019 4:42:03 PM	-rwxr-xr-x	TS/PG TSU...
README.md	1,687	MD File	4/23/2020 12:23:55 PM	-rwxr-xr-x	TS/PG TSU...
pkconfig	68	GPCONFIG...	12/3/2019 9:36:10 AM	-rwxr-xr-x	TS/PG TSU...
ch	5	File	5/24/2017 5:29:31 PM	-rwxr-xr-x	TS/PG TSU...
zowe-setup-certificatesenv	1,951	ENV File	5/13/2020 10:23:02 AM	-rwxr-xr-x	TS/PG TSU...
condarc	79	CONDARC...	6/23/2019 3:39:40 PM	-rwxr-xr-x	TS/PG TSU...
bashrc	3,052	BASHRC File	6/15/2020 4:13:25 PM	-rwxr-xr-x	TS/PG TSU...
bash_history	1,966	BASH HIST...	6/17/2020 5:26:35 AM	-rwxr-xr-x	TS/PG TSU...
zowe_certificate_setup_log		File folder	4/23/2020 5:11:41 PM	-rwxr-xr-x	TS/PG TSU...

Selected 8 files. Total size: 39,046,596 bytes

Server/Local file

sftp://rospg@n2ll.rocketsoftware.com

C:\tools\node_repl_history

00:00:00 elapsed 1.2% 262,144 bytes (7 B/s)

C:\tools\Funet walks around Area 51-viA.kuEQDQg.mp4

00:00:00 elapsed 1.7% 294,912 bytes (7 B/s)

C:\tools\README.md

00:00:00 elapsed 1.687

Queue Files (0) Failed transfers Successful transfers (19)