

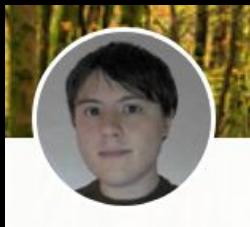
# Zowe File Transfer Application



Ayeshmantha  
Perera

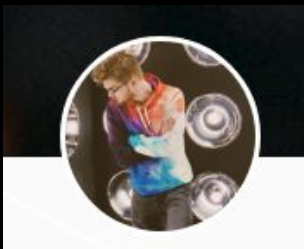


# Mentors



Primary Mentor  
Sean Grady

Senior Software Architect  
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Mentor  
Irek Fakhrutdinov

Senior Software Engineer  
Rocket Software

# ZOWE



## What is ZOWE ?

**Zowe** is an open source project created to host technologies that benefit the Z platform from all members of the Z community (Integrated Software Vendors, System Integrators and z/OS consumers).

**Zowe** offers modern interfaces to interact with z/OS and allows you to work with z/OS in a way that is similar to what you experience on cloud platforms today. You can use these interfaces as delivered or through plug-ins and extensions that are created by clients or third-party vendors.

## The MISSION

Zowe has a mission focused on providing a simple, open, and familiar tooling platform for z/OS system programmers and developers.

# ZOWE



## Zowe The Big Picture

**Zowe** Application Framework: A web user interface (UI) that provides a virtual desktop containing a number of apps allowing access to z/OS function.

**Zowe** API Mediation Layer: Provides a gateway that acts as a reverse proxy for z/OS services, together with a catalog of REST APIs and a dynamic discovery capability. The API Mediation Layer also provides a framework for Single Sign On (SSO).

**Zowe** CLI: Provides a command-line interface that lets you interact with the mainframe remotely and use common tools such as Integrated Development Environments (IDEs), shell commands, bash scripts, and build tools for mainframe development.



# ZOWE



## Zowe Virtual Desktop

The Virtual Desktop, a part of the framework, is Zowe's web UI that serves as a host to an assortment of applications, developed in various languages, as an alternative to traditional interfaces and stacks of the Z platform.

### What is it used for?

The desktop, together with the app server and ZSS (Zowe Secure Services) server, provides the interface and set of APIs to host modern Z web applications as well as low-level microservices. Applications can be developed to use, modify, and delete mainframe data (i.e. just as one would do through an ISPF panel or z/OSMF).

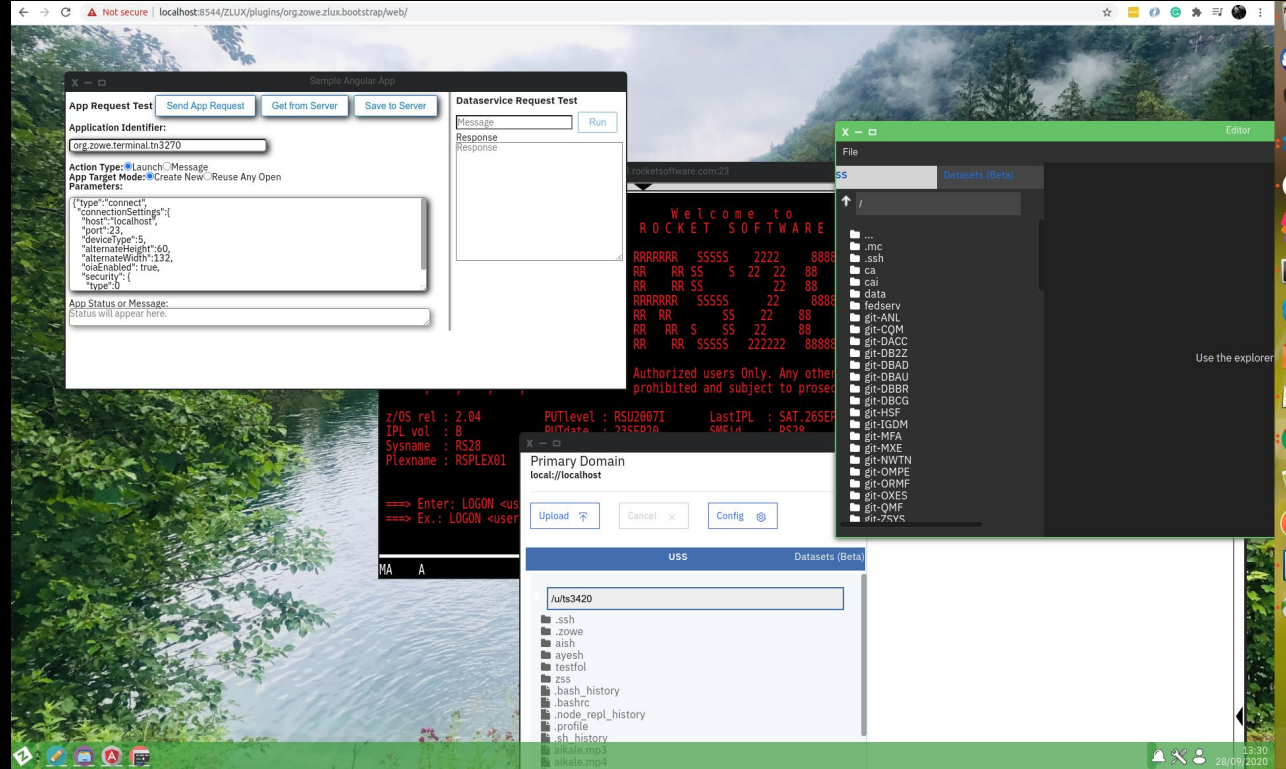
### What frameworks are supported?

Currently, it support Angular, React, and Iframe applications on the desktop. Architecturally, the desktop is bootstrapped to support more in the future.



# ZOWE

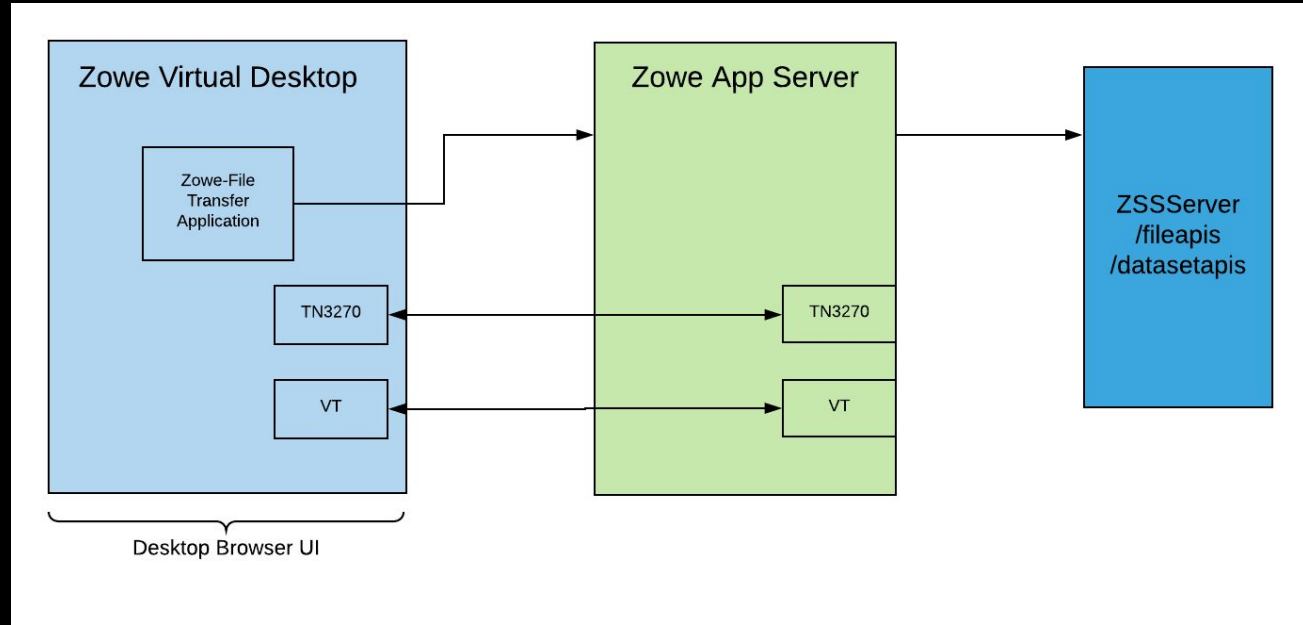
## Zowe Virtual Desktop Overview with few Apps



# File-Transfer Application

## What is Zowe File-Transfer Application

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.



File Transfer App installed in Zowe Virtual Desktop

## OMP'20 Developing Zowe-File-Transfer-Application

### Main Objective



**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. Goal of the project is to **Zowe**-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.

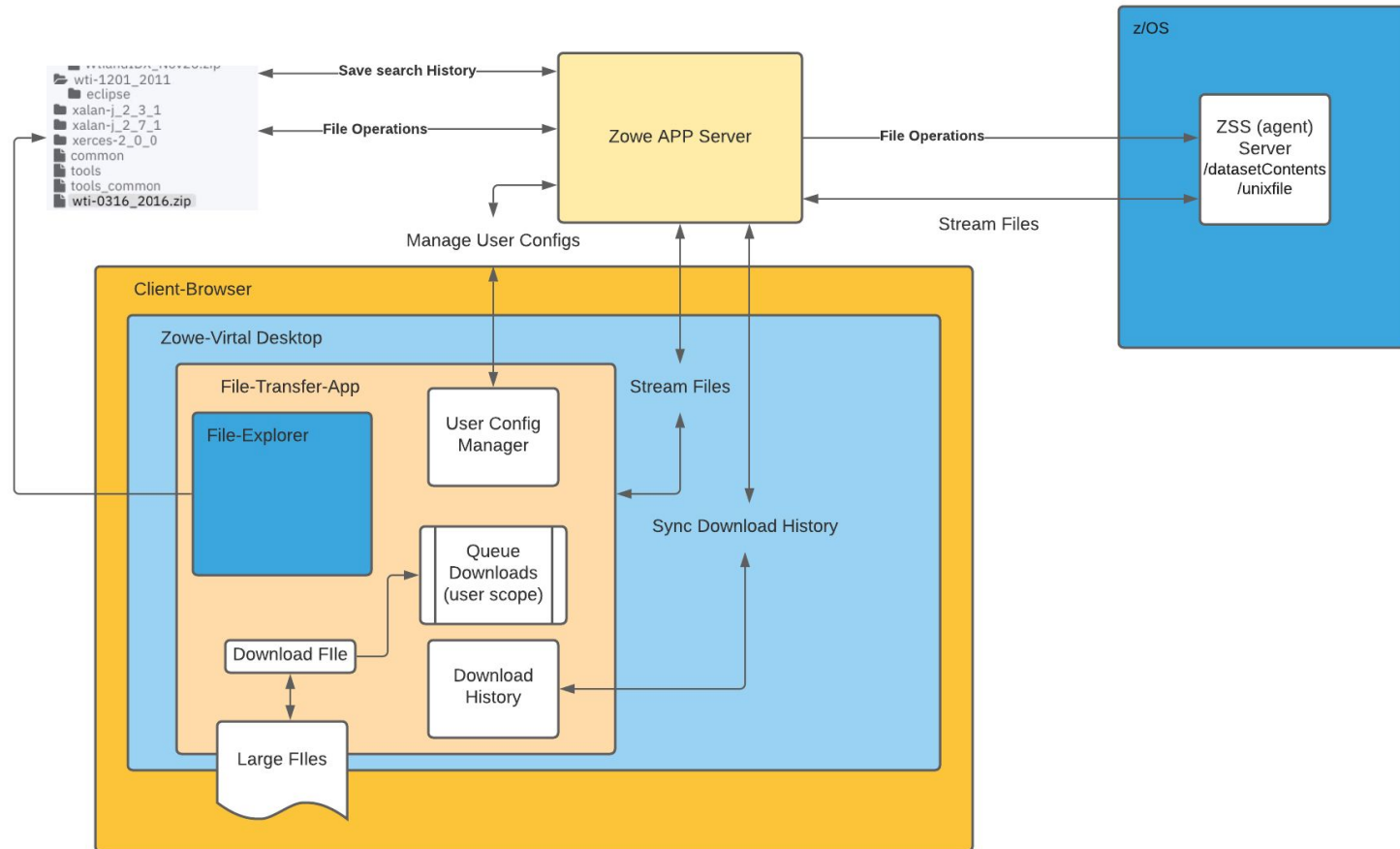
There are few components which are involved in this process apart from the FTA.

1. ZSS :- Provides the file/dataset api's.
2. **Zowe** App Server :- Hosts the virtual desktop and FTA and handles authenticating with ZSS to enable API usage.
3. File-Explorer :- which visualizes the USS & MVS file system on the mainframe via a file and folder hierarchy.





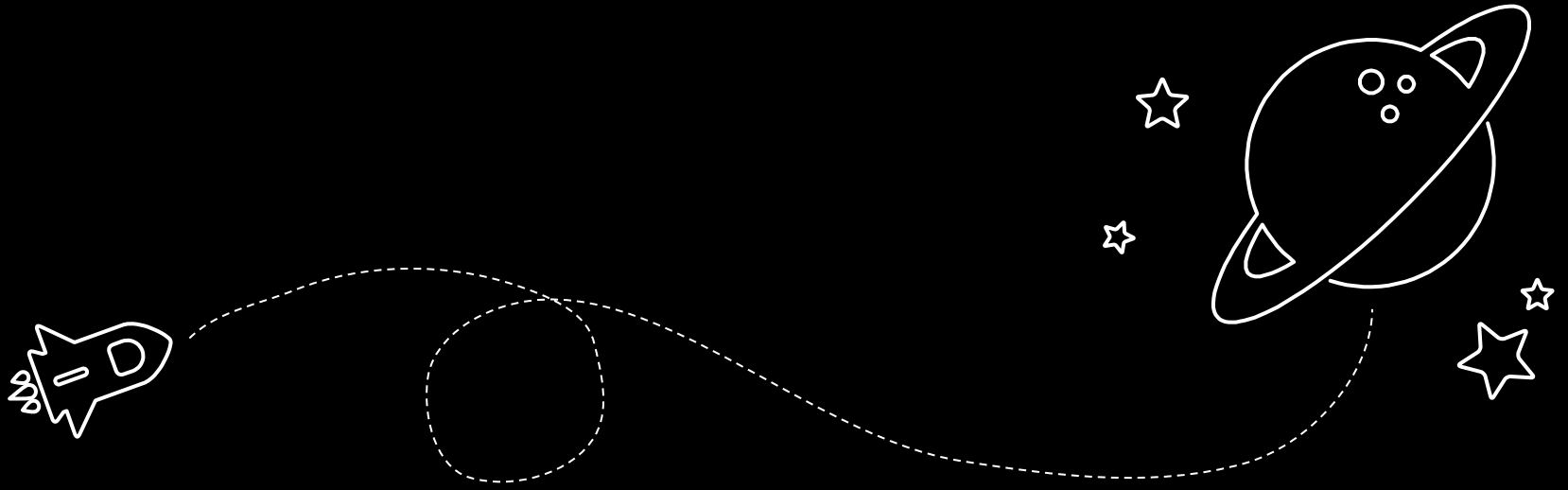
# Zowe File Transfer Application The Architecture.



# Special Thanks

```
While (true) {  
  for( i in primary_task_arr){  
    sysout("Sean always helps")  
    sysout("Lenny always helps")  
    sysout("Irek always helps")  
    alert("thank you all")  
  }  
}
```





# Demo