



Zowe Community Roadmap

23PI3





23PI3 Community Roadmap

Planned

Under Consideration

23PI2

23PI3

23PI4

24PI1

24PI2

CLI
Squad

V3 Pre-release

Miscellaneous Backlog Items

Keytar Replacement

Gold Open SSF Best Practices Badge

Zowe CLI on Unix System Services (USS)

SDK Conformance and LTS Status

Zowe Client Mentorship Opportunity: Enhancing the Python SDK

Golden CII Badge

V3 Pre-release Early Availability

Priority Backlog & Technical Debt

Improve Error Handling

Add More Functionality to Jobs Tree View

Improve Experience for Using API ML Sessions in Zowe Explorer

Event-Driven Notifications

Containerized Distribution

Extensibiity

Golden CII Badge Conformance

Build a Demo Environment

API Mediation Layer Integration

Web Desktop Integration

Explorer
Squad

Chat
Squad



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23PI2

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23PI4

24PI1

24PI2

IntelliJ
Squad

Zowe Explorer for IntelliJ IDEA – Become a Zowe Core Component

Zowe Explorer for IntelliJ IDEA v1.1.0 Release

Zowe zDevOps plugin for Jenkins v0.2.0 Release

Zowe Explorer for IntelliJ Code Coverage Increase to 50% +

Zowe Explorer for IntelliJ Usage of API Mediation Layer

CICS Plugin MVP – Basic Interactions and Tree

COBOL Plugin MVP

JCL Plugin for IntelliJ IDEA v0.2.0

IntelliJ Plugin for Jenkins UI v0.1.0 Release

Migration to JetBrains LSP for JCL plugin starting with IntelliJ IDEA v2023.2

UI Enhancements and Templating

Multi-Tenancy API ML Deployments

Spring Cloud Gateway Proxy

Improved Logging for API ML

V3 Support Java 17

V3 Support Spring Boot 3.1

Improve Fault Tolerance Testing

SMF Records Creation

Observability for API ML

Improve Onboarding of Internal APIs

API
Squad



23PI2 Community Roadmap

Planned

Under Consideration

23PI2

23PI3

23PI4

24PI1

24PI2

Switch tn3270-ng2 to use ts-term

Get CII Best Practices Gold Badge

Standardize HTTPS configuration for all Zowe servers

Simplify AT-TLS setup

ZEN First PI Goals

WebUI Version 3

Migrate to webpack 5

Angular File Tree version upgrade

Automated upgrade via ZWE

Improve the logging experience

Web browser app enhancements

app2app communication toolkit

DB Browser app release

Desktop shortcut and folder support

Document desktop error codes in v2

App-in-app embedding

File Transfer App

Infrastructure

Onboarding

Release and CI/CD

ZEN

Install / Config


Supply Chain Security V3


Expand Build and Test Infrastructure

Use Sigstore to Sign Artifacts


Web UI
Squad


System
Squad


<div></div> <div>Problem</div> <div>(What exactly are we solving?)</div>	<div>Solution</div> <div>(How are we solving the problem?)</div>	CLI Squad						
		23Q1	23Q2	23Q3	23Q4	24Q1	24Q2	24Q3
<div>V3 Pre-Release</div> <div>Zowe V3 is right around the corner, planned for early in CY24. In order to ensure a smooth delivery without delays, each squad needs to prepare with some pre-release activities.</div>	Squad will create the vNext branch in the Zowe CLI repository, migrate the Imperative package to the monorepo and remove the deprecated V1 profile functionality.		23Q2	23Q3				
<div>Miscellaneous Backlog Items</div> <div>Ensuring that Zowe consumers continue to receive new value and increased stability with each release.</div>	Squad will deliver select prioritized features and bug fixes as well as up-voted community requests, as allowed by capacity for the releases within the quarter.	23Q1	23Q2	23Q3	23Q4	24Q1	24Q2	24Q3
<div>Keytar Replacement</div> <div>Mainframe customers demand trustworthy storage of secure values in Zowe CLI. With the sunset of the Atom organization who supplied the Keytar package, we would require an alternative for secure credential storage.</div>	Release a suitable replacement to the Keytar package with minimal impact to our end users.	23Q1		23Q3				
<div>Golden CII Badge</div> <div>The Zowe Project has not earned the Golden CII Badge / a requirement from LF/OMP that ensures the Open Source project satisfies FLOSS Best Practices criteria</div>	Review requirements and take necessary actions to satisfy them for the gold badge level.	23Q1	23Q2	23Q3	23Q4	24Q1	24Q2	24Q3
<div>Zowe CLI on Unix System Services (USS)</div> <div>Mainframe customers like to experiment with Zowe w/o requiring desktop software (i.e. SYSPROGS want to run CLI commands on z/OS) as part of their experimentation or enterprise use with Zowe CLI</div>	Certify and document how to use of Zowe CLI on z/OS (USS). Requires Daemon testing (USS executable) / zLinux daemon works. Would require in-memory (or other?) credential management.	23Q1	23Q2	23Q3	23Q4			
<div>SDK Conformance and LTS Status</div> <div>Mainframe developers are interested in extending the existing SDKs in order to create applications for their services.</div>	New Services (like CICS SDK) New Programming languages (like Ruby SDK)	23Q1	23Q2	23Q3	23Q4	24Q1	24Q2	24Q3
<div>Zowe Client Mentorship Opportunity: Enhancing the Python SDK</div> <div>Consumers of the Python SDK are requesting enhancements, including support for Zowe V2 team configuration files</div>	Leverage the mentorship program to deliver select enhancements to the existing SDK		23Q2	23Q3	23Q4			
		23Q1	23Q2	23Q3	23Q4	24Q1	24Q2	24Q3
		23Q1	23Q2	23Q3	23Q4	24Q1	24Q2	24Q3


<div>  <div> Problem (What exactly are we solving?) </div> </div>	<div> Solution (How are we solving the problem?) </div>	Explorer Squad						
		23Q1	23Q2	23Q3	23Q4	24Q1	24Q2	24Q3
Golden CII Badge The Zowe Project has not earned the Golden CII Badge / a requirement from LF/OMP that ensures the Open Source project satisfies FLOSS (Free/Libre & Open Source Software) Best Practices criteria	Review requirements and take necessary actions to satisfy them for the gold badge level.	23Q1	23Q2	23Q3				
V3 Pre-Release Early Availability Extenders will need to be aware of breaking changes in the upcoming major release of 3.0.0.	Publish a pre-release of v3 with documentation of breaking changes so Extenders will be able to begin their adoption early.	23Q1	23Q2	23Q3	23Q4	24Q1	24Q2	24Q3
Priority Backlog and Technical Debt Ensuring that Zowe consumers continue to receive new value and increased stability with each release.	Squad will deliver select prioritized features, bug fixes as technical debt items as allowed by capacity for the releases within the quarter.			23Q3				
Improve Error Handling Users would like error messages returned to be relevant to the error encountered and describe the issue clearly.	Make sure all errors are being handled appropriately and make sure the error message returned is helpful and understandable to the user.	23Q1	23Q2	23Q3	23Q4	24Q1	24Q2	24Q3
Add More Functionality to Jobs Tree View Users would like a comparable experience working with JES files, Zowe Explorer doesn't have a lot of functionality in that tree compared to others.	Add more functionality to jobs in the tree, ie. local sorting, filtering, and more.	23Q1	23Q2	23Q3	23Q4			
Improve Experience for Using API ML Sessions in Zowe Explorer Many users of Zowe Explorer aren't familiar with or are unaware of authentication methods supported by Zowe Explorer, like token authentication, SSO, & MFA.	For users of the API ML with SSO and MFA, deliver the enhancements needed to create a first-class experience.	23Q1	23Q2	23Q3	23Q4	24Q1	24Q2	24Q3
		23Q1	23Q2	23Q3	23Q4	24Q1	24Q2	24Q3
		23Q1	23Q2	23Q3	23Q4	24Q1	24Q2	24Q3

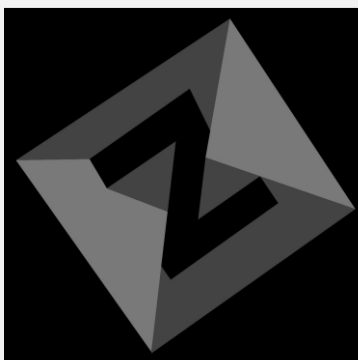
<div></div> <div>Problem (What exactly are we solving?)</div>	Solution (How are we solving the problem?)	Chat Squad						
		23Q1	23Q2	23Q3	23Q4	24Q1	24Q2	24Q3
Event-driven Notifications Chat use case will need to be event-driven and therefore triggered by event notification.	Building server-side capability for receiving push events and a common model for describing them.		23Q2	23Q3	23Q4			
Containerized Distribution (x86, x390x) Zowe Chat may not need to run on bare metal MF once APIML authorization is complete. Containers can make install easier and more flexible in this case.	Building a containerized deployment, following Zowe's existing model w/ Kustomize.	23Q1	23Q2	23Q3	23Q4	24Q1	24Q2	24Q3
Extensibility Chat use cases will require extensibility to enable the use of customer commands and services.	Create a Zowe Chat Extension Guide, Sample Extension, and a Conformance Program		23Q2	23Q3	23Q4			
Golden CII Badge Conformance Certifying release quality for Zowe Chat by adhering to best practices.	Investigating and implementing Golden CII badge requirements	23Q1	23Q2	23Q3	23Q4	24Q1	24Q2	24Q3
Build a Demo Environment We would like to target the OMP's existing Slack user base for feedback on Zowe Chat.	Create a "production-like" deployment of Zowe Chat which runs in OMP Slack, and is backed by open infrastructure. Preferably OMP.			23Q3	23Q4	24Q1		
Zowe APIML Integration Chat cannot leverage any of the benefits of Zowe API ML.	Building an APIML Authn / Authz option and making Zowe chat a conformant APIML Web Service.	23Q1	23Q2	23Q3	23Q4	24Q1	24Q2	24Q3
Zowe Web Desktop Integration Zowe Desktop users want the flexibility to use Zowe Chat from the desktop.	Make Zowe Chat a conformant App Framework plugin, or build a thin conformant plugin for Chat.				23Q4	24Q1	24Q2	
		23Q1	23Q2	23Q3	23Q4	24Q1	24Q2	24Q3
		23Q1	23Q2	23Q3	23Q4	24Q1	24Q2	24Q3

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		23Q1	23Q2	23Q3	23Q4	24Q1	24Q2	24Q3
Zowe Explorer for IntelliJ IDEA – Become a Core Component Enable the IntelliJ Explorer to become recognized as a core component and supported by Zowe support providers.	Define and meet the requirements for the plug-in to become a core component	23Q1	23Q2	23Q3				
Zowe Explorer for IntelliJ IDEA v1.1.0 Release A new minor release will provide access to many new feature enhancements.	Prepare, test and release the new version of the plug-in.	23Q1	23Q2	23Q3	23Q4	24Q1	24Q2	24Q3
Zowe zDevOps plug-in for Jenkins release v0.2.0 New features including classic freestyle jobs, new declarative steps, etc. to be implemented and released as a new release of the Jenkins plugin	Implement the remaining features and release v0.2.0 of the Zowe zDevOps plug-in for Jenkins	23Q1	23Q2	23Q3				
Zowe Explorer for IntelliJ Code Coverage Increase to 50% + Better code coverage for automated testing will help deliver higher quality with fewer defects.	Create new automated testing to create at least 50% code coverage.	23Q1	23Q2	23Q3	23Q4	24Q1	24Q2	24Q3
Zowe Explorer for IntelliJ Usage of API Mediation Layer Supporting the API ML enables a better user experience, a stronger security posture, and a more integrated Zowe component overall	Investigate, how to introduce possibility to work with a mainframe using API ML	23Q1	23Q2	23Q3	23Q4			
CICS Plugin MVP – Basic Interactions and Tree IntelliJ users need to have easy access to CICS resources through their IDEs.	Set up the environment to work with CICS, implement the new plugin as an extension to the Zowe Explorer plug-in for IntelliJ IDEA, implement a connection to the CICS through CMCI API, implement tree view of the CICS resources	23Q1	23Q2	23Q3	23Q4	24Q1	24Q2	24Q3
COBOL Plugin MVP There is currently no COBOL language support plug-in for IntelliJ.	Design and implement an MVP of the plugin	23Q1	23Q2	23Q3	23Q4			
JCL Plugin for IntelliJ IDEA v0.2.0 The JCL plugin is lacking some key features that warrant development and a new release for delivery.	Prepare, test and release the new minor version of the plug-in to introduce live templates, JES statements and auto-completion	23Q1	23Q2	23Q3	23Q4	24Q1	24Q2	24Q3
IntelliJ Plugin for Jenkins UI v0.1.0 Release IntelliJ users need a user interface inside their IDEs to work with Jenkins while supporting mainframe-specific activities	Implement the basic design of the user interface to interact with Jenkins, implement interaction with pipelines	23Q1	23Q2	23Q3	23Q4	24Q1		
Migration to JetBrains LSP for JCL plugin starting with IntelliJ IDEA v2023.2 JetBrains team announced that starting with v2023.2, IntelliJ IDEA will include LSP support. This technical currency feature will leverage the LSP in place of our own ANTLR/PSI implementation for highlighting.	Investigate and implement a new version of the Zowe JCL plug-in for IntelliJ IDEA with LSP support	23Q1	23Q2	23Q3	23Q4	24Q1	24Q2	24Q3

<div></div> <div>Problem</div> <div>(What exactly are we solving?)</div>	<div>Solution</div> <div>(How are we solving the problem?)</div>	API ML Squad						
		23Q1	23Q2	23Q3	23Q4	24Q1	24Q2	24Q3
<div>API Catalog UI Enhancements and Templating</div> <div>Adopters want to have easy access to the available APIs and easily find what they need. This includes their own internal APIs.</div>	Update API Catalog, simplify deployment and support wider amount of ways to show the information about APIs	23Q1	23Q2	23Q3				
<div>Multi-Tenancy API ML Deployments</div> <div>Authenticating Zowe users across Sysplex and security domains</div>	Route users to the relevant sysplex based on the type of request and retrieve data on existing and available Sysplexes	23Q1	23Q2	23Q3	23Q4	24Q1	24Q2	24Q3
<div>Spring Cloud Gateway Proxy</div> <div>Current Netflix ZUUL gateway is no longer actively developed</div>	Deliver a new gateway built upon the Spring Cloud Gateway	23Q1	23Q2	23Q3	23Q4			
<div>Improved Logging for the API ML</div> <div>Currently it's difficult for Users to self-analyze and fix the configuration of Zowe</div>	Provide good quality logs with meaningful and actionable information	23Q1	23Q2	23Q3	23Q4	24Q1	24Q2	24Q3
<div>V3 Support for Java 17</div> <div>API ML depends heavily on the spring framework. Spring 6 drops support for java versions prior to 17.</div>	The objective for the API ML is to use java 17 in the toolchain and produce artifacts that run on this runtime.			23Q3	23Q4			
<div>V3 Support for Sprint Boot 3.1</div> <div>Zowe V3 must be on a Spring Boot baseline of 3.1 to be in support.</div>	The objective is to upgrade SpringBoot to at least 3.1.x version for Zowe V3.	23Q1	23Q2	23Q3	23Q4	24Q1	24Q2	24Q3
<div>Improve Fault Tolerance Testing</div> <div>The problems related to fault tolerance are found in the user's systems.</div>	Improve the test suite to contain more tests on how Zowe behaves in different fault scenarios and then fixing the issues.				23Q4	24Q1		
<div>SMF Record Creation</div> <div>Missing SMF records for some types of authentication events</div>	Create SMF records for each authentication with API ML JWT or PAT with details such as timestamp, mainframe identity, and form of the provided authentication(JWT, PAT,...)	23Q1	23Q2	23Q3	23Q4	24Q1	24Q2	24Q3
<div>Observability for the API ML</div> <div>The customers need to integrate the mainframe APIs into their wider observability effort</div>	Implementing the integration of the API ML traffic data with popular solutions such as Splunk or ELK stack			23Q3	23Q4	24Q1	24Q2	
<div>Improve Onboarding of Internal APIs</div> <div>API ML users need to be able to easily onboard their own custom internal infrastructure APIs</div>	Update wizard in the API Catalog, Add more functionality for the administrator about onboarded services.	23Q1	23Q2	23Q3	23Q4	24Q1	24Q2	24Q3

<div></div> <div>Problem</div> <div>(What exactly are we solving?)</div>	Solution	Web UI Squad						
		23Q1	23Q2	23Q3	23Q4	24Q1	24Q2	24Q3
<div>Switch tn3270-ng2 to use ts-term</div> <div>The current process for maintaining the Zowe Desktop Terminal is complex for the Zowe WEB UI Squad</div>	Modify the existing libraries / dependencies (i.e. switch tn3270-ng2 to use ts-term”	23Q1	23Q2	23Q3				
<div>Get CII Best Practices Gold Badge</div> <div>Certifying release quality for Zowe Web UI by adhering to best practices.</div>	Complete the backlog of requirements for Golden CII badge.	23Q1	23Q2	23Q3	23Q4	24Q1	24Q2	24Q3
<div>Standardize HTTPS Configuration for all Zowe servers</div> <div>The builtin TLS capabilities of each Zowe server varies considerably; it can vary by capability, but also by ways in which the capabilities are configured.</div>	Standardize the HTTPS configuration settings including the overrides for various Zowe components in the yaml.		23Q2	23Q3				
<div>Simplify AT-TLS Setup</div> <div>Zowe's AT-TLS setup is too complex.</div>	Have all servers be able to turn AT-TLS on/off with a single, standardized configuration section within zowe.yaml	23Q1	23Q2	23Q3	23Q4	24Q1	24Q2	24Q3
<div>ZEN First PI Goals</div> <div>ZEN will simplify Zowe installation and configuration for mainframe admins. This feature represents planned incremental improvements for 23PI3.</div>	Finish ZEN for single admin, basic certificate setup, prompting for YAML (HTML forms and editor), distribution for Windows/Mac/Linux, support offline PAX upload, license agreement for direct download from jfrog, documentation			23Q3				
<div>WebUI Version 3</div> <div>Zowe V3 is planned for 24Q1 and the Web UI squad has certain preparation milestones that must be achieved in each PI.</div>	Create in a Community repository new page for the squads to share upcoming and planned changes for vNext	23Q1	23Q2	23Q3	23Q4	24Q1	24Q2	24Q3
<div>Migrate to webpack 5</div> <div>Audits reveal that some packages we use are limited in upgrade capacity by webpack 4. Migrating to webpack 5 will help us with both security and maintenance.</div>	Completed migration to webpack 5.			23Q3				
<div>Angular File Tree major version upgrade</div> <div>Dependent Software limitations associated with back-leveled version</div>	Upgrade “Angular File Tree” to the next major version	23Q1	23Q2	23Q3	23Q4	24Q1	24Q2	24Q3
<div>Create Automated Upgrade via ZWE</div> <div>Upgrading Zowe can be confusing and frustrating.</div>	Create an easier way for customers to understand what actions are needed when upgrading from one Zowe release to another.				23Q4			
<div>Improve Installation/Startup Logging Experience</div> <div>Customers need a consistent, appropriate, actionalble and manageable logging experience for customers.</div>	Create the appropriate log volume and content for informational messages, warning and errors to make it easier for users to locate the messages they need and take appropriate actions.	23Q1	23Q2	23Q3	23Q4	24Q1	24Q2	24Q3

<div>  <div> Problem (What exactly are we solving?) </div> </div>	<div> Solution (How are we solving the problem?) </div>	Web UI Squad						
		23Q1	23Q2	23Q3	23Q4	24Q1	24Q2	24Q3
<div>Web browser app enhancements</div> <div>Desktop users who access non-native websites must rekey the URLs each time.</div>	Introduce a capability to save websites as if they were Zowe Apps				23Q4			
<div>App-2-App Communication Toolkit</div> <div>Zowe desktop app users don't have an easy way to see and understand the individual "app2app" capabilities that are available to them.</div>	Specific solution is still "to be determined".	23Q1	23Q2	23Q3	23Q4	24Q1	24Q2	24Q3
<div>DB Browser app release</div> <div>Zowe consumers are interested in database tooling for the Zowe desktop and the planned DB Browser App is not ready for validation</div>	Deliver capabilities in support of MVP and introduce a technical preview for the DB Browser App				23Q4			
<div>Desktop shortcut and folder support</div> <div>The current location of Desktop plugins that include app-to-app communication is not as effective and efficient as it can be, resulting in less-powerful performance</div>	Modify (if appropriate), package and deliver the hackathon code that creates folders and groups together applicable Desktop plugins and shortcuts	23Q1	23Q2	23Q3	23Q4	24Q1	24Q2	24Q3
<div>Document desktop error codes in v2</div> <div>Customers have difficulty understanding messages & codes associated with the Zowe Desktop</div>	Documenting the Zowe Desktop INFO, WARN and ERROR codes in the Zowe V2 documentation				23Q4			
<div>App-in-App Embedding</div> <div>Currently no way to embed one app within another in the same view.</div>	One app can be positioned inside of a portion of another app's viewport, without including an extra window in the process.	23Q1	23Q2	23Q3	23Q4	24Q1	24Q2	24Q3
<div>File Transfer App</div> <div>Need to Support secure file and dataset transfer between z/OS and your computer without requiring FTP.</div>	Deliver an application that supports secure file transfer between z/OS and your PC.				23Q4	24Q1		
		23Q1	23Q2	23Q3	23Q4	24Q1	24Q2	24Q3
		23Q1	23Q2	23Q3	23Q4	24Q1	24Q2	24Q3

<div></div> <div>Problem (What exactly are we solving?)</div>	Solution (How are we solving the problem?)	System Squad						
		23Q1	23Q2	23Q3	23Q4	24Q1	24Q2	24Q3
Infrastructure Current activities related to managing the Zowe infrastructure.	Marist Mainframe - Verify z/OS 2.5 and 3.1 Timeline is expected to be within this PI, exact dates are not set.			23Q3				
Onboarding Current activities related to the creation of onboarding materials.	zwe command overview, zwe shell scripts design, zowe-install-packaging-tools, shared pipeline libraries, zowe-actions, build, packaging, and distribution relationships - PAX/SMP/PSWI, zowe containerization, secret and account management	23Q1	23Q2	23Q3	23Q4	24Q1	24Q2	24Q3
Release and CI/CD Current activities related tote Zowe release process.	Artifactory API Key Deprecation Review Test Cases (Follow-up from TSC discussion)			23Q3				
ZEN Zowe installation and configuration needs to be easier.	1.0 Milestones Support certificate configuration, Full YAML Editing Mode, Validate security definitions	23Q1	23Q2	23Q3	23Q4	24Q1	24Q2	24Q3
Install and Config Improvements Current activities related to improving the installation and configuration experience for Zowe consumers.	Remove Node.JS dependency and focus on improving configmgr mode, Focus: configmgr mode			23Q3				
Supply Chain Security V3	Begin research on improvements we can make to supply-chain security	23Q1	23Q2	23Q3	23Q4	24Q1	24Q2	24Q3
Expand Build and Test Infrastructure Configure additional MF infrastructure to support demos, labs, and test requirements.	Working with OMP to define and validate systems.	23Q1	23Q2	23Q3	23Q4			
Use Sigstore to Sign Artifacts Customers need the ability to validate the artifacts delivered with Zowe builds, adhering to the latest industry standards using digital signing	Evaluate how to shift our digitally signed artifacts from opengpg to sigstore, and implementing the change		23Q2	23Q3	23Q4	24Q1	24Q2	24Q3
		23Q1	23Q2	23Q3	23Q4	24Q1	24Q2	24Q3