



Zowe Community Roadmap

23PI2





23PI2 Community Roadmap

Planned

Under Consideration

23PI1

23PI2

23PI3

23PI4

24PI1

CLI
Squad

Complex z/OS Jobs and Files

V3 Pre-release

Miscellaneous Backlog Items

Golden CII Badge

Keytar Replacement

Keytar Replacement

Zowe CLI on Unix System Services (USS)

SDK Conformance and LTS Status

Zowe Client Mentorship Opportunity: Enhancing the Python SDK

Golden CII Badge

Priority Backlog & Technical Debt

V3 Pre-release Early Availability

Improve Error Handling

Add More Functionality to Jobs Tree View

Explorer
Squad

JCL Highlight MVP

Zowe zDevOps Jenkins Plugin v0.2.0

Zowe Explorer IntelliJ v1.1.0

API Mediation Layer Usage

Code Coverage Increase to 50% +

Ongoing GitHub Issues

Becoming a GA Squad

CICS Plugin MVP

Jenkins IntelliJ UI Plugin MVP

COBOL Plugin MVP

IntelliJ
Squad



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23PI1

23PI2

23PI3

23PI4

24PI1

Chat
Squad

API
Squad

Event-Driven Notifications

Containerized Distribution

Extensibiity

Golden CII Badge Conformance

Build a Demo Environment

API Mediation Layer Integration

Web Desktop Integration

Identity Federation

z/OS 3.1 Toleration on TSS and ACF2

Observability via Open Telemetry

API Layer Backlog Management

Catalog UI Enhancements & Templating

Improved Logging for the API ML

Multi-Tenancy API ML Deployments

SMF Records Creation

Spring Cloud Gateway Proxy

Observability for the API ML

Improved Fault Tolerance Testing

Improved Onboarding of Internal APIs



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23PI1

23PI2

23PI3

23PI4

24PI1

Switch tn3270-ng2 to use ts-term

Desktop Shortcut and Folder Support

App Server Uses defaults.yaml

Document Desktop Error Codes in V2

Up & Running Documentation

Release, Pipeline & Website Issues

Simplify AT-TLS Setup

Standardize HTTPS Configuration

Improve Installation/Startup Logging

Get CII Best Practices Gold Badge

Create Automated Upgrade via ZWE

Migrate to Webpack 5

Web Browser App Enhancements

Angular File Tree Version Upgrade

File Transfer App

App2app Communication Toolkit

DB Browser App Release

App-in-App Embedding

Infrastructure

Onboarding

Release and CI/CD

ZEN Contribution


Install / Config Improvements

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						
		22Q4	23Q1	23Q2	23Q3	23Q4	24Q1	24Q2
<div>Complex z/OS Jobs and z/OS Files commands</div> <div>Customers are looking for CLI commands that perform more complex (jobs & files) tasks to reduce scripting and make interactive CLI commands more efficient</div>	Introduce several new CLI commands capable of performing multiple tasks in a single command.	22Q4	23Q1	23Q2	23Q3	23Q4	24Q1	24Q2
<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.	22Q4	23Q1	23Q2	23Q3	23Q4	24Q1	24Q2
<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.	22Q4	23Q1	23Q2	23Q3	23Q4	24Q1	24Q2
<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.	22Q4	23Q1	23Q2	23Q3	23Q4	24Q1	24Q2
<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.	22Q4	23Q1	23Q2	23Q3	23Q4	24Q1	24Q2
<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.	22Q4	23Q1	23Q2	23Q3	23Q4	24Q1	24Q2
<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)	22Q4	23Q1	23Q2	23Q3	23Q4	24Q1	24Q2
<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	22Q4	23Q1	23Q2	23Q3	23Q4	24Q1	24Q2
		22Q4	23Q1	23Q2	23Q3	23Q4	24Q1	24Q2
		22Q4	23Q1	23Q2	23Q3	23Q4	24Q1	25Q1



(What exactly are we solving?)

(How are we solving the problem?)

22Q4	23Q1	23Q2	23Q3	23Q4	24Q1	24Q2
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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.

22Q4	23Q1	23Q2	23Q3	23Q4	24Q1	24Q1
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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.

22Q4	23Q1	23Q2	23Q3	23Q4	24Q1	24Q1
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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.

22Q4	23Q1	23Q2	23Q3	23Q4	24Q1	24Q1
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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.

22Q4	23Q1	23Q2	23Q3	23Q4	24Q1	24Q1
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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.

22Q4	23Q1	23Q2	23Q3	23Q4	24Q1	24Q1
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<div></div> <div>Problem</div> <div>(What exactly are we solving?)</div>	Solution	IntelliJ Squad						
		22Q4	23Q1	23Q2	23Q3	23Q4	24Q1	24Q2
<div>JCL Highlight MVP</div> <div>There is no JCL Highlight in IntelliJ yet. This will introduce the new plugin.</div>	Implement an MVP of the plugin	22Q4	23Q1	23Q2	23Q3	23Q4	24Q1	24Q2
<div>Zowe zDevOps Jenkins Plugin v0.2.0</div> <div>There are some new features like classic freestyle jobs, new declarative steps, etc. ready to be implemented and released in the next version of the Zowe zDevOps plugin.</div>	Implement and release v0.2.0 for the Zowe zDevOps plugin.	22Q4	23Q1	23Q2	23Q3	23Q4	24Q1	24Q1
<div>Zowe Explorer IntelliJ v1.1.0</div> <div>There are some features to introduce in the next version of the plugin. To introduce them this quarter, it is planned to release the new minor version of the plugin.</div>	Implement and release v1.1.0 for the Zowe Explorer IntelliJ plugin.	22Q4	23Q1	23Q2	23Q3	23Q4	24Q1	24Q1
<div>APL Mediation Layer Usage</div> <div>The explorer for IntelliJ currently doesn’t take advantage of the API ML for benefits like token support, single sign on, MFA etc.</div>	Set up the environment to work with API ML, implement a connection through the API ML, implement a tree view of datasets, USS files and JES jobs.	22Q4	23Q1	23Q2	23Q3	23Q4	24Q1	24Q1
<div>Code Coverage Increase to 50% or Greater</div> <div>As a newer component, we need to establish a high quality standard in order to establish a high confidence level for consumers.</div>	Establish automated testing that achieves greater than 50% code coverage for the existing code base.	22Q4	23Q1	23Q2	23Q3	23Q4	24Q1	24Q1
<div>Ongoing Github Issues</div> <div>Ensuring that Zowe consumers continue to receive new value and increased stability with each release.</div>	Squad will deliver select prioritized features, bug fixes as technical debt items as allowed by capacity for the releases within the quarter.	22Q4	23Q1	23Q2	23Q3	23Q4	24Q1	24Q1
<div>Becoming a GA Squad</div> <div>Achieving a GA status enables the squad to reach a broader audience and deliver more value to more users.</div>	Onboard a contributor from a different company and prepare the evidence of readiness for the GA state.	22Q4	23Q1	23Q2	23Q3	23Q4	24Q1	24Q1
<div>CICS Plugin MVP</div> <div>There is no UI for CICS resources and interactions with them using IntelliJ platform.</div>	Implement an MVP of the CICS plugin	22Q4	23Q1	23Q2	23Q3	23Q4	24Q1	24Q1
<div>Jenkins IntelliJ UI Plugin MVP</div> <div>There is no proper UI to work with Jenkins through the IntelliJ with mainframe-specific functions.</div>	Implement an MVP of the Jenkins IntelliJ UI plugin	22Q4	23Q1	23Q2	23Q3	23Q4	24Q1	24Q1
<div>COBOL Plugin MVP</div> <div>There is no COBOL Highlight in IntelliJ yet. This will introduce a new plugin.</div>	Implement an MVP of the COBOL plugin	22Q4	23Q1	23Q2	23Q3	23Q4	24Q1	24Q1

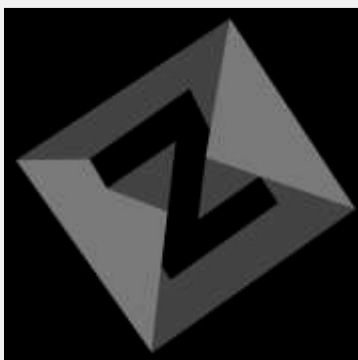
<div></div> <div>Problem</div> <div>(What exactly are we solving?)</div>	Solution	Chat Squad						
		22Q4	23Q1	23Q2	23Q3	23Q4	24Q1	24Q2
Event-driven Notifications Chat use case will need to be event-driven and therefore triggered by event notification.	Building server-side capability for receiving push events and a common model for describing them.	22Q4	23Q1	23Q2	23Q3	23Q4	24Q1	24Q2
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.	22Q4	23Q1	23Q2	23Q3	23Q4	24Q1	24Q1
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	22Q4	23Q1	23Q2	23Q3	23Q4	24Q1	24Q1
Golden CII Badge Conformance Certifying release quality for Zowe Chat by adhering to best practices.	Investigating and implementing Golden CII badge requirements	22Q4	23Q1	23Q2	23Q3	23Q4	24Q1	24Q1
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.	22Q4	23Q1	23Q2	23Q3	23Q4	24Q1	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.	22Q4	23Q1	23Q2	23Q3	23Q4	24Q1	24Q1
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.	22Q4	23Q1	23Q2	23Q3	23Q4	24Q1	24Q1
		22Q4	23Q1	23Q2	23Q3	23Q4	24Q1	24Q1
		22Q4	23Q1	23Q2	23Q3	23Q4	24Q1	24Q1
		22Q4	23Q1	23Q2	23Q3	23Q4	24Q1	24Q1

<div></div> <div>Problem</div> <div>(What exactly are we solving?)</div>	Solution	API ML Squad						
		22Q4	23Q1	23Q2	23Q3	23Q4	24Q1	24Q2
<div>Identity Federation</div> <div>Customers need to integrate the mainframe with their existing SSO</div>	Providing support for the OIDC protocol	22Q4	23Q1	23Q2	23Q3	23Q4	24Q1	24Q2
<div>z/OS 3.1 Toleration on TSS and ACF2</div> <div>Technical currency is needed for the API ML running on Top Secret or ACF2 on z/OS 3.1.</div>	Regression Test the API ML on the forthcoming z/OS V3R1 operating system to verify it continues to function properly.	22Q4	23Q1	23Q2	23Q3	23Q4	24Q1	24Q1
<div>Observability via Open Telemetry</div> <div>We want to explore the option of introducing the Open Telemetry into the Zowe API Mediation Layer. As a part of the overall Observability approach we are also considering to deprecate and then archive the metrics service.</div>	This is a research spike to determine what might be possible.	22Q4	23Q1	23Q2	23Q3	23Q4	24Q1	24Q1
<div>API Layer Backlog Management</div> <div>Ensuring that Zowe consumers continue to receive new value and increased stability with each release.</div>	Certificate management documentation depends on V1 tooling unavailable in V2 Confusing documentation for security configuration of OIDC and x509 ZSS may not accept JWT Network error from API Catalog on system with Java 11	22Q4	23Q1	23Q2	23Q3	23Q4	24Q1	24Q1
<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	22Q4	23Q1	23Q2	23Q3	23Q4	24Q1	24Q1
<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	22Q4	23Q1	23Q2	23Q3	23Q4	24Q1	24Q1
<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	22Q4	23Q1	23Q2	23Q3	23Q4	24Q1	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,...)	22Q4	23Q1	23Q2	23Q3	23Q4	24Q1	24Q1
<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	22Q4	23Q1	23Q2	23Q3	23Q4	24Q1	24Q1
<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	22Q4	23Q1	23Q2	23Q3	23Q4	24Q1	24Q1



<div></div> <div>Problem</div> <div>(What exactly are we solving?)</div>	<div>Solution</div> <div>(How are we solving the problem?)</div>	Web UI Squad						
		22Q4	23Q1	23Q2	23Q3	23Q4	24Q1	24Q2
<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”	22Q4	23Q1	23Q2	23Q3	23Q4	24Q1	24Q2
<div>Shortcut and folder support for Desktop</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	22Q4	23Q1	23Q2	23Q3	23Q4	24Q1	24Q1
<div>App Server Config in default.yaml via Config Manager</div> <div>The existing app server configuration is overly complex.</div>	Migrate the app server configuration to the less complex, Zowe standardized yaml configuration which leverages the Zowe configmgr	22Q4	23Q1	23Q2	23Q3	23Q4	24Q1	24Q1
<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	22Q4	23Q1	23Q2	23Q3	23Q4	24Q1	24Q1
<div>Up & Running Documentation</div> <div>Need to improve the overall customer experience for standing up the Web UI</div>	Continue to prioritize and address pain points in the Up & Running experience where documentation improvements can be impactful.	22Q4	23Q1	23Q2	23Q3	23Q4	24Q1	24Q1
<div>Release, Pipeline & Website Issues</div> <div>Need to research opportunities for improving the doc build</div>	Continuing research on reduction of memory consumption like updating/refactoring Docasaurus, or changing to a different platform,etc. Includes engineering capacity to resolve issues where a quick resolution is indicated.	22Q4	23Q1	23Q2	23Q3	23Q4	24Q1	24Q1
<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	22Q4	23Q1	23Q2	23Q3	23Q4	24Q1	24Q1
<div>Standardize HTTPS Configuration</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.	22Q4	23Q1	23Q2	23Q3	23Q4	24Q1	24Q1
<div>Improve Installation/Startup Logging</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.	22Q4	23Q1	23Q2	23Q3	23Q4	24Q1	24Q1
<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.	22Q4	23Q1	23Q2	23Q3	23Q4	24Q1	1H1Q1

<div></div> <div>Problem</div> <div>(What exactly are we solving?)</div>	<div>Solution</div> <div>(How are we solving the problem?)</div>	Web UI Squad						
		22Q4	23Q1	23Q2	23Q3	23Q4	24Q1	24Q2
<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.	22Q4	23Q1	23Q2	23Q3	23Q4	24Q1	24Q2
<div>Migration 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.	22Q4	23Q1	23Q2	23Q3	23Q4	24Q1	24Q1
<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	22Q4	23Q1	23Q2	23Q3	23Q4	24Q1	24Q1
<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	22Q4	23Q1	23Q2	23Q3	23Q4	24Q1	24Q1
<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.	22Q4	23Q1	23Q2	23Q3	23Q4	24Q1	24Q1
<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”.	22Q4	23Q1	23Q2	23Q3	23Q4	24Q1	24Q1
<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	22Q4	23Q1	23Q2	23Q3	23Q4	24Q1	24Q1
<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.	22Q4	23Q1	23Q2	23Q3	23Q4	24Q1	24Q1
		22Q4	23Q1	23Q2	23Q3	23Q4	24Q1	24Q1
		22Q4	23Q1	23Q2	23Q3	23Q4	24Q1	12Q1

<div></div> <div>Problem (What exactly are we solving?)</div>	Solution (How are we solving the problem?)	System Squad						
		22Q4	23Q1	23Q2	23Q3	23Q4	24Q1	24Q2
Infrastructure Current activities related to managing the Zowe infrastructure.	Verify Marist Z15 transfer, z/OS 2.5 and 3.1.	22Q4	23Q1	23Q2	23Q3	23Q4	24Q1	24Q2
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-distribution relationships (PAX, SMP/E, PSWI), containerization, secret and account management	22Q4	23Q1	23Q2	23Q3	23Q4	24Q1	24Q1
Release and CI/CD Current activities related tote Zowe release process.	Review release process, Java 11 test cases, GitHib actions set-output deprication, Artifactory API Key deprication, add PR labels to manage z/OS builds	22Q4	23Q1	23Q2	23Q3	23Q4	24Q1	24Q1
ZEN Contribution Zowe needs a way to simplify the installation and configuration experience.	Broadcom will contribute their ZEN wizard for Zowe installation and configuration to the Zowe community. (Create technical preview)	22Q4	23Q1	23Q2	23Q3	23Q4	24Q1	24Q1
Install and Config Improvements Current activities related to improving the installation and configuration experience for Zowe consumers.	Modify zwe install/config process to remove Node.JS dependency	22Q4	23Q1	23Q2	23Q3	23Q4	24Q1	24Q1
Expand Build and Test Infrastructure Configure additional MF infrastructure to support demos, labs, and test requirements.	Working with OMP to define and validate systems.	22Q4	23Q1	23Q2	23Q3	23Q4	24Q1	24Q1
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	22Q4	23Q1	23Q2	23Q3	23Q4	24Q1	24Q1
		22Q4	23Q1	23Q2	23Q3	23Q4	24Q1	24Q1
		22Q4	23Q1	23Q2	23Q3	23Q4	24Q1	24Q1
		22Q4	23Q1	23Q2	23Q3	23Q4	24Q1	24Q1