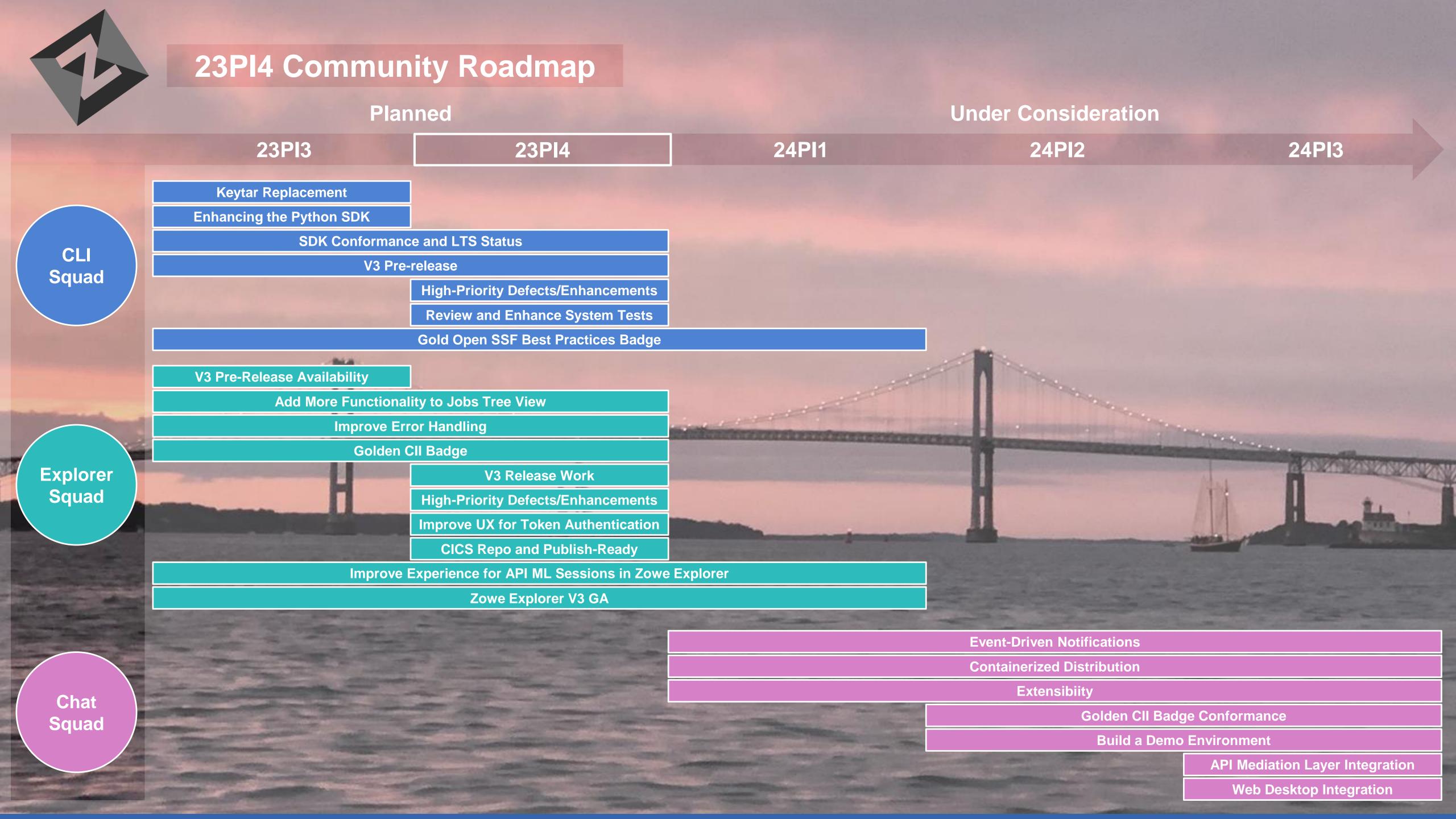


# Zowe Community Roadmap

23PI4







IntelliJ

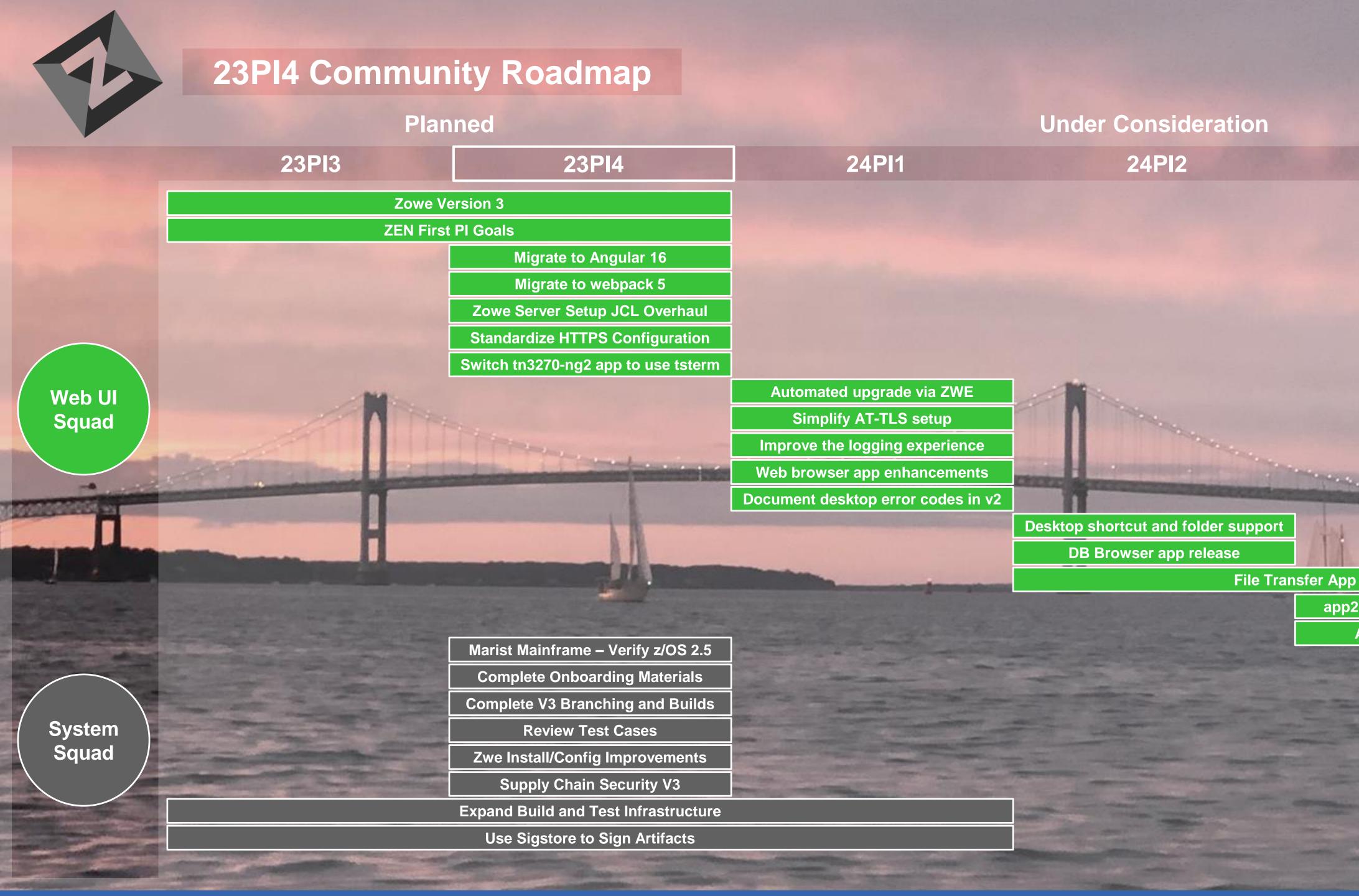
Squad

Squad

#### 23PI4 Community Roadmap

**Planned Under Consideration** 24PI1 23PI4 24PI2 24PI3 23PI3 **Zowe Explorer for IntelliJ Code Coverage Increase to 50% + Zowe Explorer for IntelliJ Usage of API Mediation Layer Zowe zDevOps plugin for Jenkins v0.2.0 Release Zowe DevOps PlugIn for Jenkins Code Coverage Increase to 50% +** JCL Plugin for IntelliJ IDEA v0.2.0 **Zowe Explorer for IntelliJ IDEA v1.1.1, v1.1.2, v1.1.3** Zowe Clients Kotlin SDK v0.5.0 – Propose as GA Solution Zowe Explorer for IntelliJ IDEA – Become a Zowe Core Component CICS Plugin for IntelliJ IDEA MVP – Basic Interactions and Tree LSP support for JCL plugin starting with IntelliJ IDEA v2023.2 **COBOL Plugin MVP IntelliJ Plugin for Jenkins UI v0.1.0 Release UI Enhancements and Templating Multi-Tenancy API ML Deployments V3 Support Spring Boot 3.1** Improved Logging for API ML V3 Support Java 17 **Spring Cloud Gateway Proxy Improve Fault Tolerance Testing SMF** Records Creation **Observability for API ML** 

**Improve Onboarding of Internal APIs** 

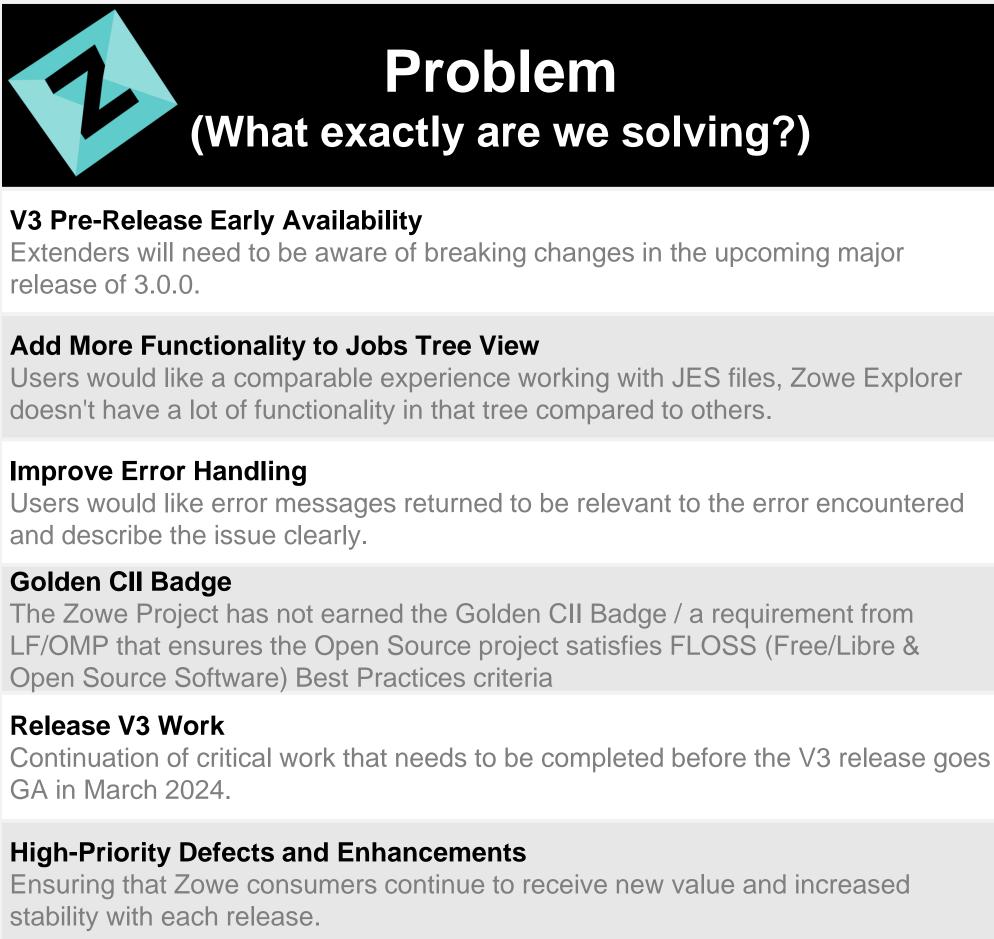


24PI3

app2app communication toolkit

**App-in-app embedding** 

Problem (What exactly are we solving?)	Solution (How are we solving the problem?)	CLI Squad								
		23Q2	23Q3	23Q4	24Q1	24Q2	24Q3	24Q4		
Keytar Replacement 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.	Release a suitable replacement to the Keytar package with minimal impact to our end users.	23Q2	23Q3	23Q4	24Q1	24Q2	24Q3	24Q4		
Enhancing the Python SDK (Zowe Client Mentorship Opportunity) Consumers of the Python SDK are requesting enhancements, including support for Zowe V2 team configuration files	Leverage the mentorship program to deliver select enhancements to the existing SDK	23Q2	23Q3	23Q4				24Q4		
SDK Conformance and LTS Status  Mainframe developers are interested in extending the existing SDKs in order to create applications for their services.	New Services (like CICS SDK) New Programming languages (like Ruby SDK)	23Q2	23Q3	23Q4				24Q4		
V3 Pre-Release 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.	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	23Q4				24Q4		
High-Priority Defects and Enhancements Ensuring that Zowe consumers continue to receive new value and increased stability with each release.	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.			23Q4				24Q4		
Review and Enhance System Tests As the Zowe CLI becomes more and more widely adopted for critical work, consumers expect and demand the highest level of quality possible.	The squad will inventory the existing system tests, identify any functional gaps and add new tests to eliminate those gaps. If possible will try to identify or create opportunities for contributions from the broader community.			23Q4				24Q4		
Golden OpenSSF Best Practices Badge 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	Review requirements and take necessary actions to satisfy them for the gold badge level.	23Q2	23Q3	23Q4	24Q1	24Q2		24Q4		
								24Q4		
								24Q4		



# **Problem** (What exactly are we solving?) Extenders will need to be aware of breaking changes in the upcoming major **Add More Functionality to Jobs Tree View** Users would like a comparable experience working with JES files, Zowe Explorer

Design improvements, functional and usability enhancements, bug fixes to improve

Many users of Zowe Explorer aren't familiar with or are unaware of authentication

methods supported by Zowe Explorer, like token authentication, SSO, & MFA.

# Solution (How are we solving the problem?)

message returned is helpful and understandable to the user.

allowed by capacity for the releases within the quarter.

tactics, and other items needed for our v3 GA release.

will be able to begin their adoption early.

level.

APIML profile

publish-ready

create a first-class experience.

Publish a pre-release of v3 with documentation of breaking changes so Extenders

Add more functionality to jobs in the tree, ie. local sorting, filtering, and more.

Make sure all errors are being handled appropriately and make sure the error

Committed: Add UI for managing local storage history data for USS/DS/Jobs,

Minimize the activate() function to have less chance of failure, Stretch: Group

common method into Singleton classes, Use VSCode.FileSystemProvider for

content downloaded from mainframe, Forward all extra properties to the SDK calls

Squad will deliver select prioritized features, bug fixes as technical debt items as

Stretch: Support logging in to multiple APIML instances per config file, Prevent

users from storing wrong credential type for session, Search operation does not

prompt for login for APIML profile, Expand session does not prompt for login for

For users of the API ML with SSO and MFA, deliver the enhancements needed to

Prepare a plan for dependency & engine updates, enhancements, migration

Complete move to cics-for-zowe-client-repository with CLI plugin and be

Review requirements and take necessary actions to satisfy them for the gold badge

23Q2 | 23Q3 | 23Q4 | 24Q1 | 24Q2 | 24Q3 | 24Q4

23Q2 | 23Q3

23Q2 | 23Q3 | 23Q4

23Q2 | 23Q3 | 23Q4

23Q2 23Q3 23Q4

23Q4

23Q4

23Q3 23Q4 24Q1

23Q2 23Q3 23Q4 24Q1

**Explorer Squad** 

**23Q4** 24Q1 24Q2 24Q3 24Q4

**23Q4** 24Q1 24Q2 24Q3

**V3 Pre-Release Early Availability** 

**Improve UX for Token Authentication** 

**CICS** Repo and Publish-Ready

**Zowe Explorer V3 GA** 

the overall user experience for authentication from Explorer

Zowe V3 is planned for GA release in March, 2024

Improve Experience for Using API ML Sessions in Zowe Explorer

release of 3.0.0.





supported by Zowe support providers.

**CICS Plugin MVP – Basic Interactions and Tree** 

ANTLR/PSI implementation for highlighting.

IntelliJ users need to have easy access to CICS resources through their IDEs.

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

LSP Support for JCL plugin starting with IntelliJ IDEA v2023.2

## **Problem** (What exactly are we solving?) **Zowe Explorer for IntelliJ Code Coverage Increase to 50% +** Better code coverage for automated testing will help deliver higher quality with Supporting the API ML enables a better user experience, a stronger security posture, and a more integrated Zowe component overall

## Solution (How are we solving the problem?) Create new automated testing to create at least 50% code coverage.

Investigate, how to introduce possibility to work with a mainframe using API ML

Prepare, test and release the new minor version of the plug-in to introduce live

Define and meet the requirements for the plug-in to become a core component

extension to the Zowe Explorer plug-in for IntelliJ IDEA, implement a connection to

Investigate and implement a new version of the Zowe JCL plug-in for IntelliJ IDEA

Set up the environment to work with CICS, implement the new plugin as an

the CICS through CMCI API, implement tree view of the CICS resources

templates, JES statements and auto-completion

Prepare, test and release the new version of the plug-in.

Implement the remaining features and release v0.2.0 of the Zowe zDevOps plug-in

23Q2 | 23Q3 | 23Q4 | 24Q1 | 24Q2 | 24Q3 | 24Q4 23Q2 23Q3 23Q4 24Q1 24Q2 24Q3 24Q4

23Q2 | 23Q3 | 23Q4

23Q2 | 23Q3 | 23Q4

23Q2 | 23Q3 |

23Q2 23Q3

IntelliJ Squad

23Q2 23Q3 23Q4 24Q1 24Q2 24Q3 24Q4

23Q2 23Q3 23Q4 24Q1 24Q2 24Q3

23Q4

23Q2 | 23Q3 | 23Q4 | 24Q1

23Q2 23Q3 23Q4 24Q1

23Q2 | 23Q3 | 23Q4 | 24Q1

fewer defects. **Zowe Explorer for IntelliJ Usage of API Mediation Layer** 

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 Zowe zDevOps plug-in for Jenkins Code Coverage Increase to 50% + Better code coverage for automated testing will help deliver higher quality with

for Jenkins Create new automated testing to create at least 50% code coverage.

with LSP support

Problem (What exactly are we solving?)	Solution (How are we solving the problem?)	IntelliJ Squad								
		23Q2	23Q3	23Q4	24Q1	24Q2	24Q3	24Q4		
COBOL Plugin MVP There is currently no COBOL language support plug-in for IntelliJ.	Design and implement an MVP of the plugin	23Q2	23Q3	23Q4	24Q1	24Q2	24Q3	24Q4		
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	23Q2	23Q3	23Q4	24Q1	24Q2	24Q3	24Q4		
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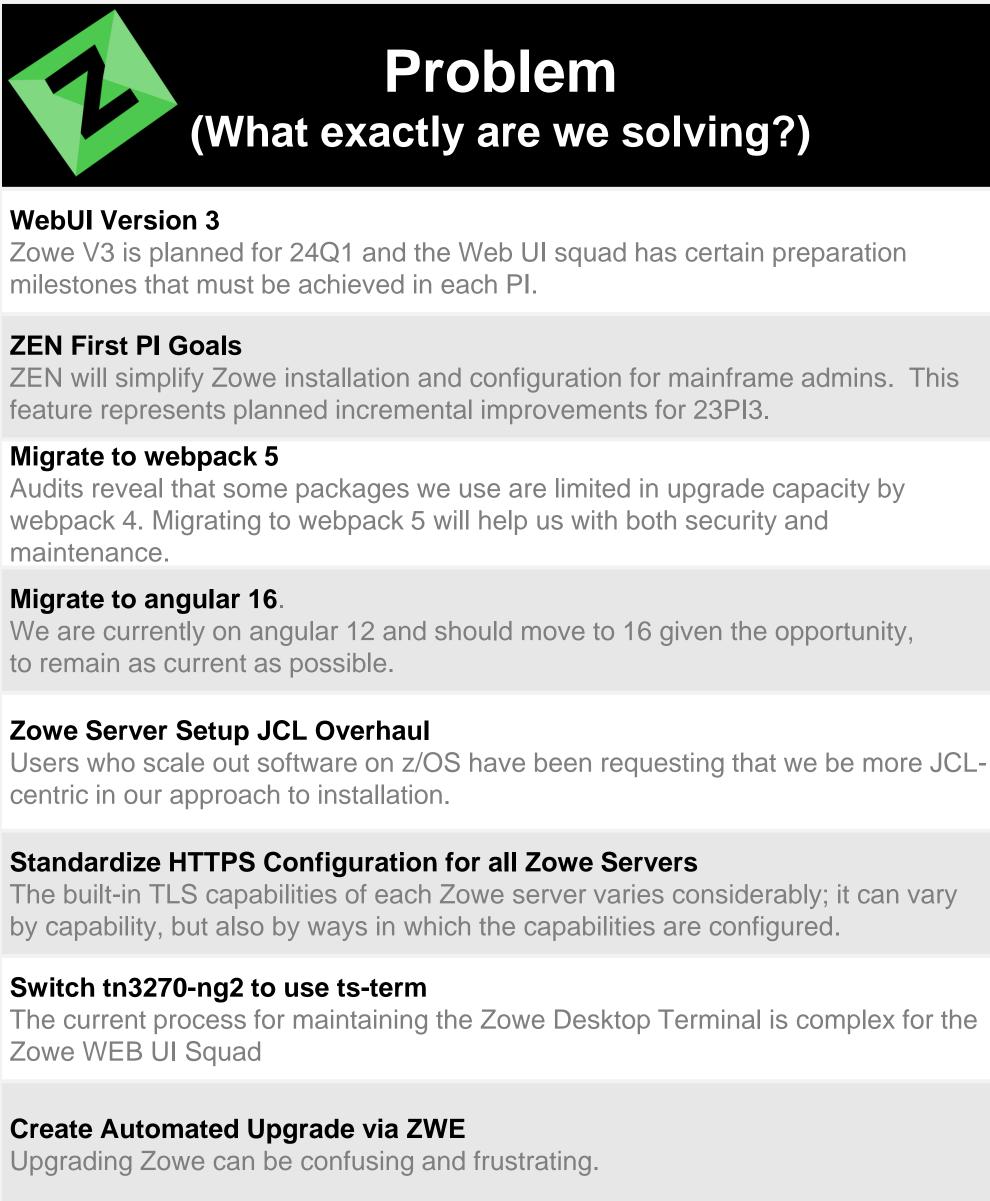
Problem (What exactly are we solving?)	Solution (How are we solving the problem?)	API ML Squad								
		23Q2	23Q3	23Q4	24Q1	24Q2	24Q3	24Q4		
API Catalog UI Enhancements and Templating Adopters want to have easy access to the available APIs and easily find what they need. This includes their own internal APIs.	Update API Catalog, simplify deployment and support wider amount of ways to show the information about APIs	23Q2	23Q3	23Q4	24Q1	24Q2	24Q3	24Q4		
Multi-Tenancy API ML Deployments Authenticating Zowe users across Sysplex and security domains	Route users to the relevant sysplex based on the type of request and retrieve data on existing and available Sysplexes	23Q2	23Q3	23Q4	24Q1					
V3 Support for Sprint Boot 3.1 Zowe V3 must be on a Spring Boot baseline of 3.1 to be in support.	The objective is to upgrade SpringBoot to at least 3.1.x version for Zowe V3.	23Q2	23Q3	23Q4	24Q1					
Improved Logging for the API ML Currently it's difficult for Users to self-analyze and fix the configuration of Zowe	Provide good quality logs with meaningful and actionable information	23Q2	23Q3	23Q4	24Q1	24Q2				
V3 Support for Java 17 API ML depends heavily on the spring framework. Spring 6 drops support for java versions prior to 17.	The objective for the API ML is to use java 17 in the toolchain and produce artifacts that run on this runtime.			23Q4	24Q1	24Q2				
Spring Cloud Gateway Proxy Current Netflix ZUUL gateway is no longer actively developed	Deliver a new gateway built upon the Spring Cloud Gateway	23Q2	23Q3	23Q4	<b>24Q</b> 1	24Q2	24Q3			
Improve Fault Tolerance Testing The problems related to fault tolerance are found in the user's systems.	Improve the test suite to contain more tests on how Zowe behaves in different fault scenarios and then fixing the issues.				<b>24Q</b> 1	24Q2	24Q3			
SMF Record Creation Missing SMF records for some types of authentication events	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,)		23Q3	23Q4	24Q1	24Q2	24Q3	24Q4		
Observability for the API ML The customers need to integrate the mainframe APIs into their wider observability effort	Implementing the integration of the API ML traffic data with popular solutions such as Splunk or ELK stack		23Q3	23Q4	24Q1	24Q2	<b>24Q</b> 3	24Q4		
Improve Onboarding of Internal APIs  API ML users need to be able to easily onboard their own custom internal	Update wizard in the API Catalog, Add more functionality for the administrator		23Q3	23Q4	24Q1	24Q2	24Q3	24Q4		

about onboarded services.

23Q3 | 23Q4 | 24Q1 | 24Q2 | 24Q3 | 24Q4

API ML users need to be able to easily onboard their own custom internal

infrastructure APIs



**Simplify AT-TLS Setup** 

experience for customers.

Zowe's AT-TLS setup is too complex.

Improve Installation/Startup Logging Experience

Customers need a consistent, appropriate, actionalble and manageable logging

#### **WebUI Version 3** Zowe V3 is planned for 24Q1 and the Web UI squad has certain preparation milestones that must be achieved in each PI. **ZEN First PI Goals** ZEN will simplify Zowe installation and configuration for mainframe admins. This feature represents planned incremental improvements for 23PI3. Migrate to webpack 5 Audits reveal that some packages we use are limited in upgrade capacity by

# **Problem** (What exactly are we solving?)

#### Solution (How are we solving the problem?)

license agreement for direct download from jfrog, documentation

overhauled to utilize rexx-configmgr for input validation.

planned changes for vNext

Completed migration to webpack 5.

Completed migration to angular 16

uses these configuration values.

upgrading from one Zowe release to another.

configuration section within zowe.yaml

and take appropriate actions.

Create in a Community repository new page for the squads to share upcoming and

Finish ZEN for single admin, basic certificate setup, prompting for YAML (HTML

forms and editor), distribution for Windows/Mac/Linux, support offline PAX upload,

Zowe Server configuration JCL is made visible at rest, visible as output of zwe, and

Zowe.yaml is updated to support default HTTPS configuration and component-

level overrides, schema is updated to reflect these updates, and each of the server

Modify the existing libraries / dependencies (i.e. switch tn3270-ng2 to use ts-term"

Create an easier way for customers to understand what actions are needed when

Have all servers be able to turn AT-TLS on/off with a single, standardized

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

23Q2 | 23Q3 | 23Q4 | 24Q1 | 24Q2 | 24Q3 | 24Q4

23Q3 23Q4

23Q3 | 23Q4

23Q4

23Q4

23Q4

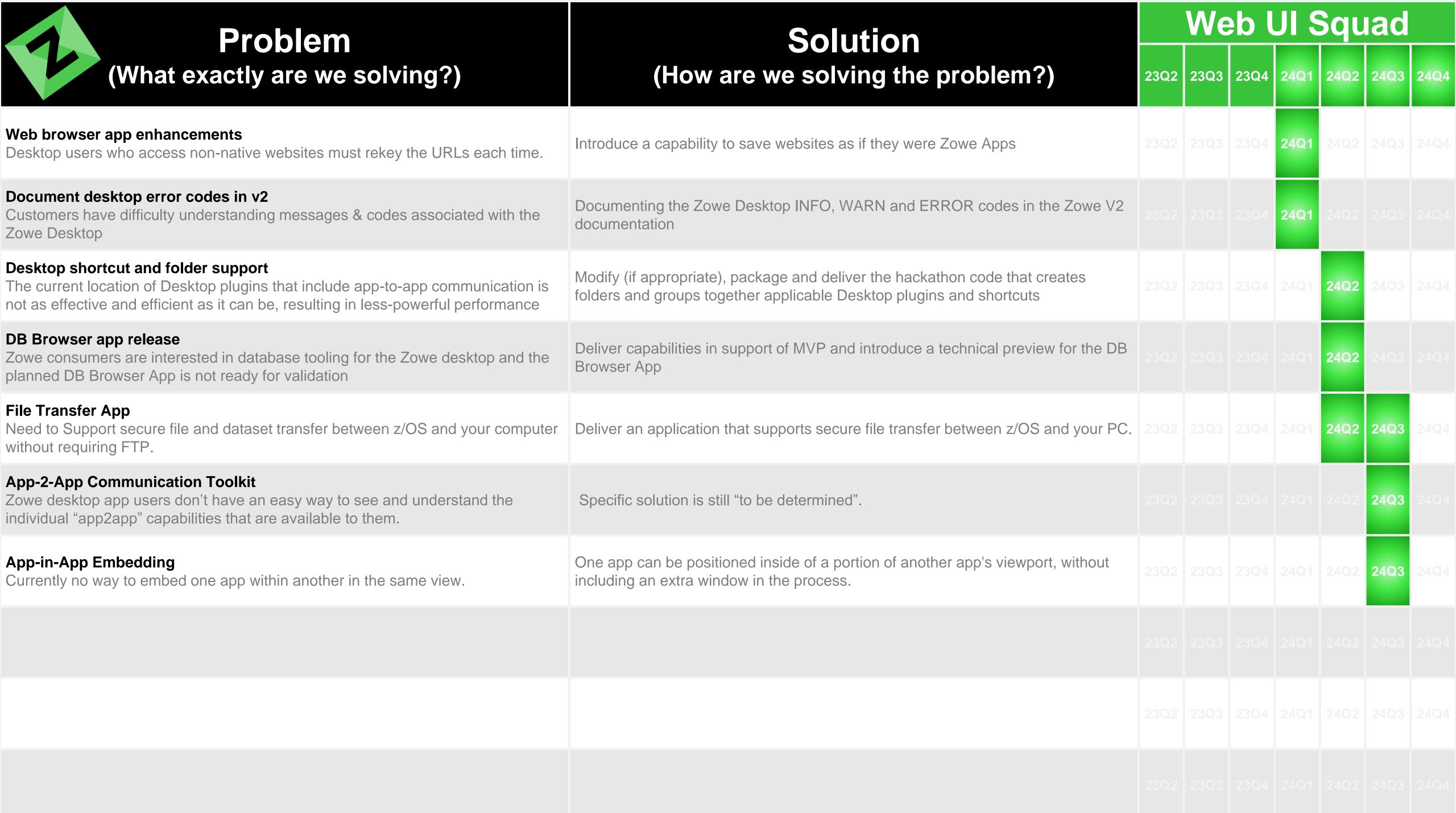
23Q4

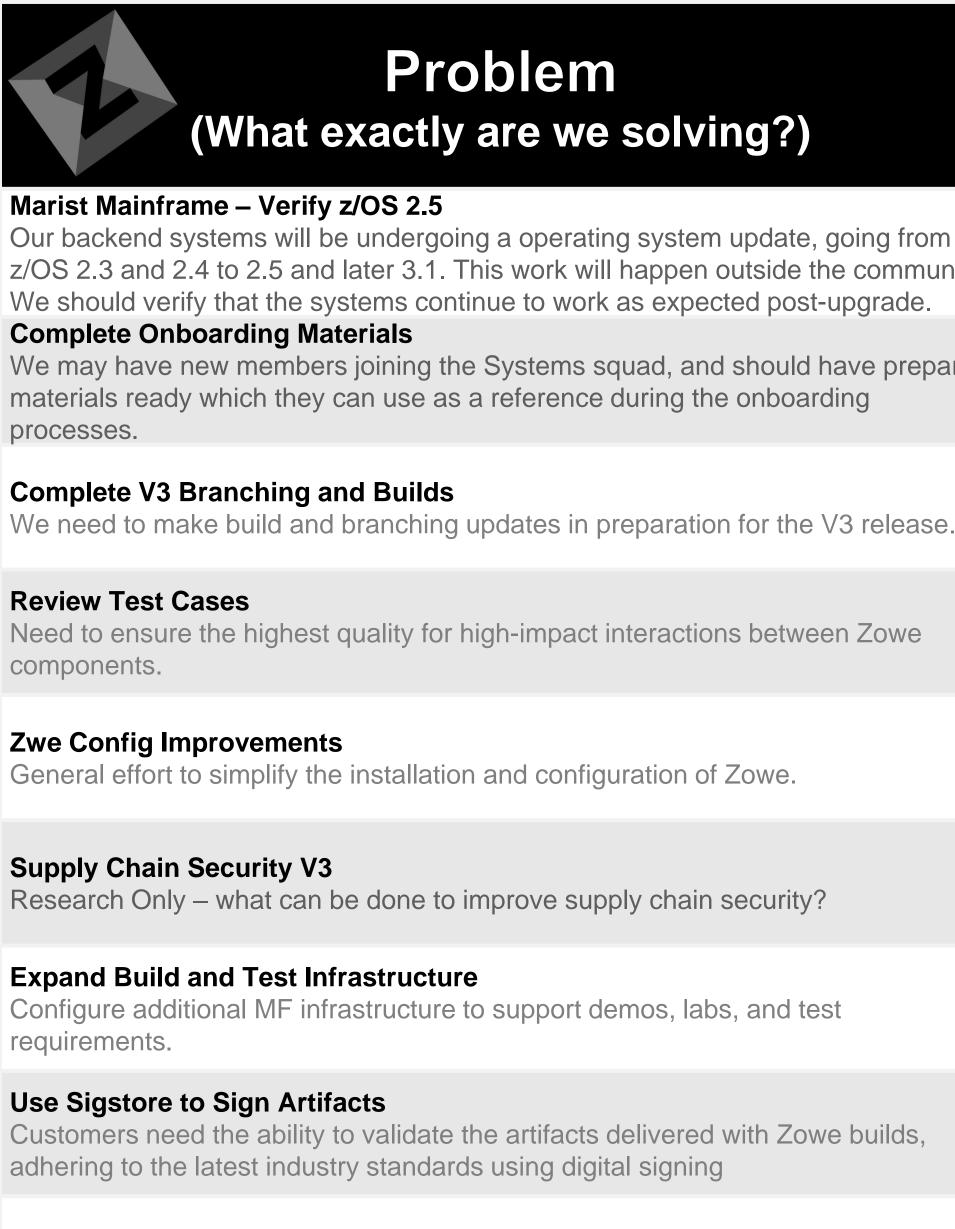
23Q2 | 23Q3 | 23Q4 |

23Q2 | 23Q3 | 23Q4 | **24Q1** 

24Q1

Web UI Squad





# Problem (What exactly are we solving?) Marist Mainframe – Verify z/OS 2.5

#### Solution (How are we solving the problem?)

Checklist of items for V3 preparation has been completed including V3 FMIDs,

Existing system tests have been reviewed, areas for improvement have been

Zwe improvements including elimination of the existing Node.js dependency and

Begin research and document potential improvements that can be made to supply-

Evaluate how to shift our digitally signed artifacts from opengpg to sigstore, and

identified, and new system tests have been developed. As needed.

conversion of remaining zowe-install-packaging tools (fconv, curl, jq)

Onboarding materials are available for new members.

Working with OMP to define and validate systems.

install packaging and more.

chain security

implementing the change

23Q2 | 23Q3

23Q4

23Q4

23Q4

23Q4

23Q4

23Q4

23Q3 | 23Q4 | 24Q1

23Q3 23Q4 24Q1

System Squad

23Q4 24Q1 24Q2 24Q3 24Q4

Our backend systems will be undergoing a operating system update, going from Validation that our Marist systems continue to run properly as expected after the z/OS 2.3 and 2.4 to 2.5 and later 3.1. This work will happen outside the community. upgrade to 2.5. We should verify that the systems continue to work as expected post-upgrade. **Complete Onboarding Materials** 

We may have new members joining the Systems squad, and should have prepared materials ready which they can use as a reference during the onboarding