

24<sup>TH</sup> ANNUAL GLOBAL  
NAUTICAL SYSTEMS

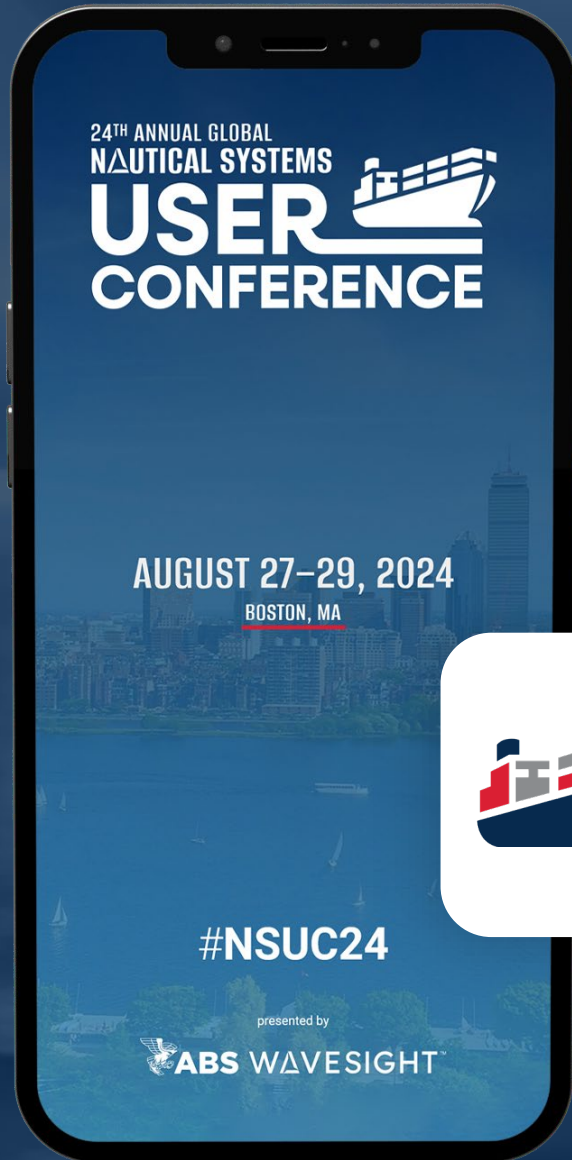
**USER**   
**CONFERENCE**

# Technical Session: Recently Released & Roadmap

9/12/2024

Presented by





# GET ON THE LEADERBOARD!

REMINDER: You can earn points during this session! Submit your questions, answer polls and leave feedback on this presentation through the NSUC24 mobile app.

The more you use the app, the more points you earn. Winners will be announced daily.



# Glen Vickers

Head of Technology and Cybersecurity

Been in IT for 25 years in cyber security and operations. 10 years in cyber security.

Family of 6 with one left in High School.  
Martial Artist and Scholar.





# Bibhas Sarkar

Director, Technology Applications

Been pivotal in designing and leading technical teams to achieve business goals for over 28 years.



# Technical Items Recently Delivered

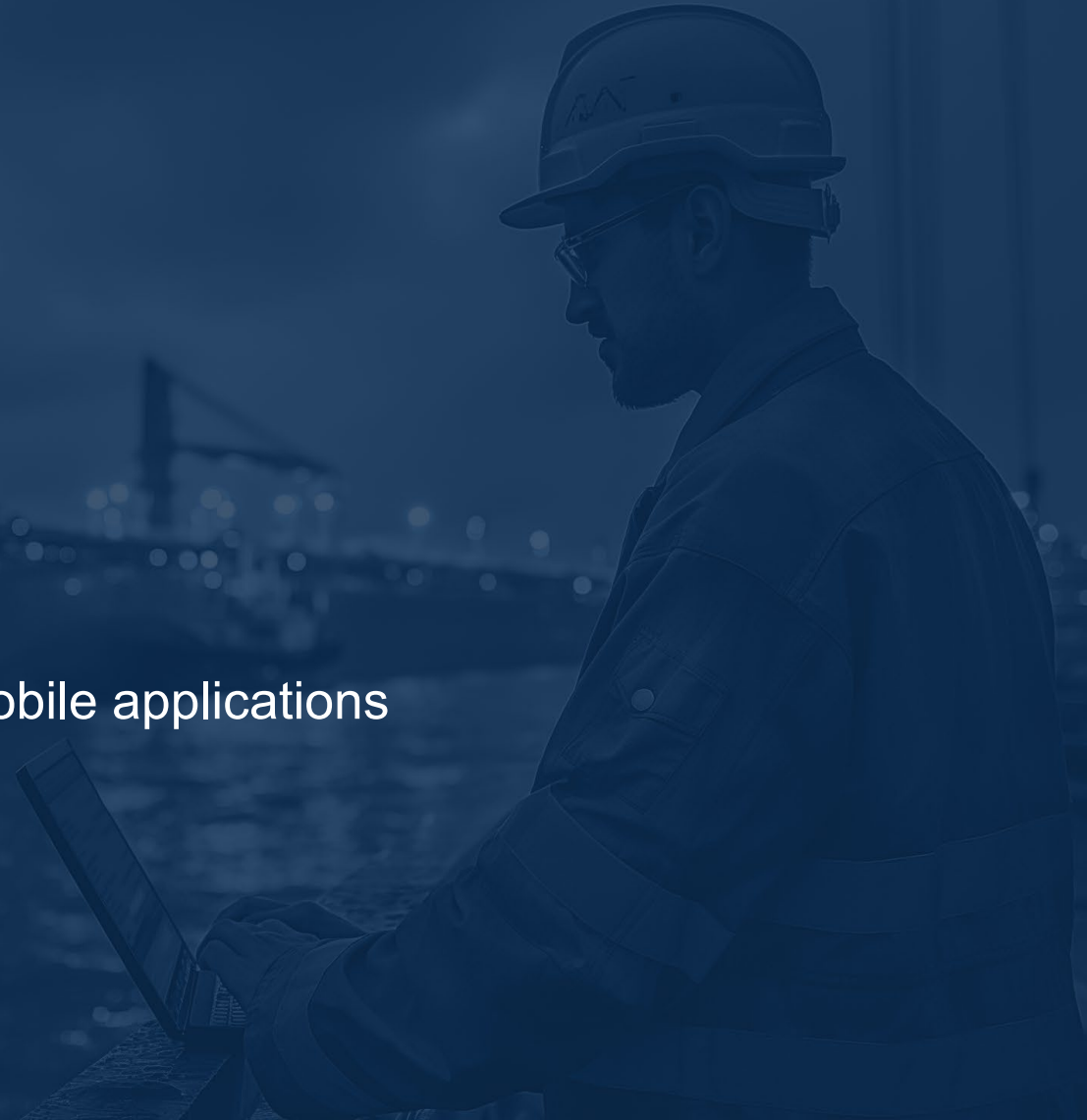
---



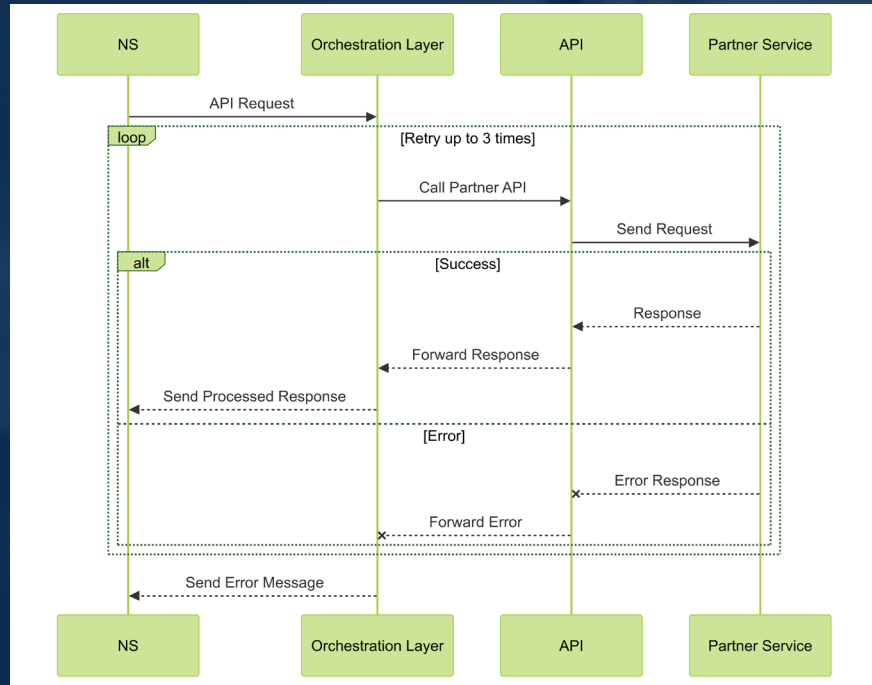
**ABS WAVESIGHT™**

# Tech Stack Upgrade

- MySQL 8.0.36
- MariaDB 11.4.2
- CouchDB – 3.3.3
- Tomcat 9.0.86
- Log4J – 2.20.0
- Cordova to Capacitor – transition for mobile applications



# API & Integration

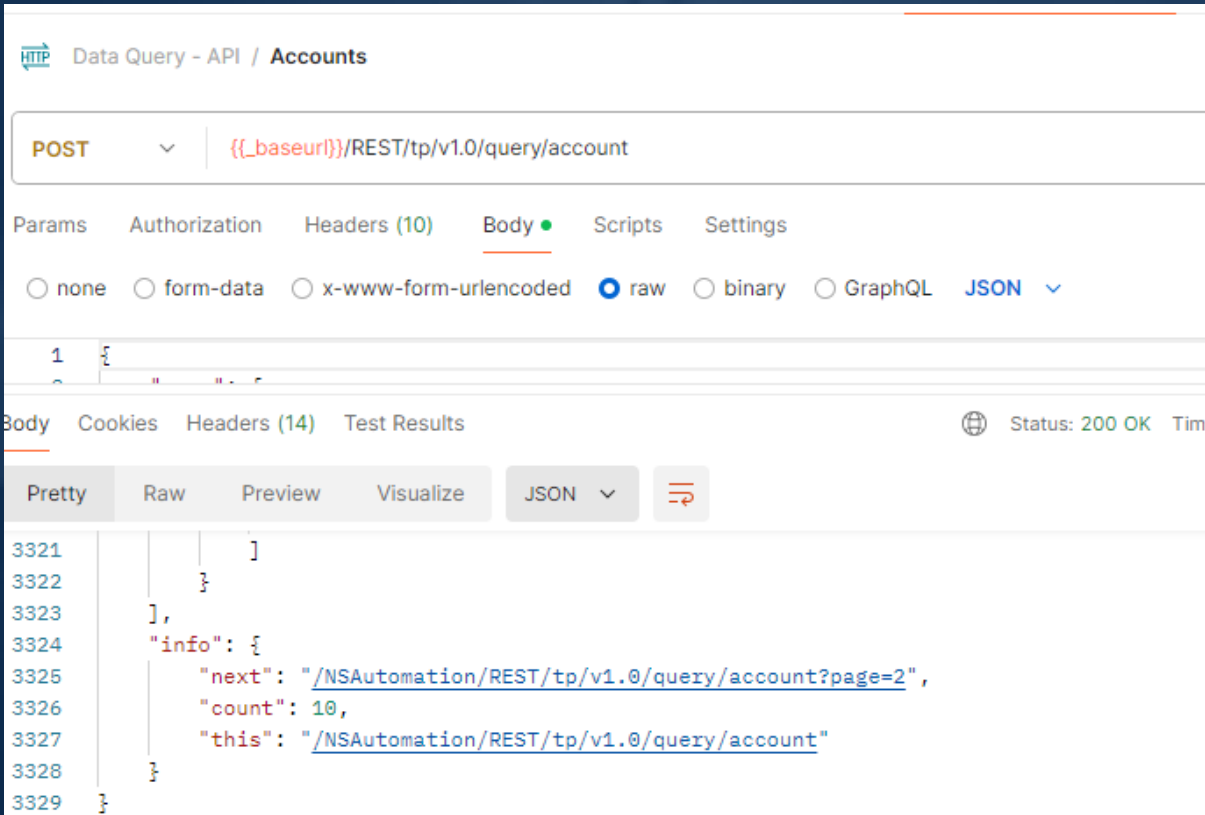


- Support for REST API for integration
- OData style rest end points for retrieving large data set - support easy to deploy custom API end points



# OData Style API

- The response provide reference to the next page
- It contains the number of elements returned



```
HTTP Data Query - API / Accounts
POST {{_baseurl}}/REST/tp/v1.0/query/account
Body
[
  {
    "info": {
      "next": "/NSAutomation/REST/tp/v1.0/query/account?page=2",
      "count": 10,
      "this": "/NSAutomation/REST/tp/v1.0/query/account"
    }
  }
]
```



# Integration API

## INDEX

### 1. CREW AND PAYROLL

- 1.1 POST /REST/tp/v1.0/run/i/Embarkation
- 1.2 POST /REST/tp/v1.0/run/e/Embarkation
- 1.3 POST /REST/tp/v1.0/run/i/Seaman
- 1.4 POST /REST/tp/v1.0/run/e/Voucher
- 1.5 POST /REST/tp/v1.0/run/e/Allotment
- 1.6 POST /REST/tp/v1.0/run/e/TravelRec
- 1.7 POST /REST/tp/v1.0/run/i/TicketOp1
- 1.8 POST /REST/tp/v1.0/run/e/TicketOp1

### 2. GENERAL

- 2.1 POST /REST/tp/v1.0/attachment/upd
- 2.2 POST /REST/tp/v1.0/ack/{concept}
- 2.3 POST /REST/tp/v1.0/error/{concept}

4

4

6

9

## API

### 1. CREW AND PAYROLL

API related to the Crew and Payroll Module

#### 1.1 POST /REST/tp/v1.0/run/i/Embarkation

Embarkation - Import

#### REQUEST

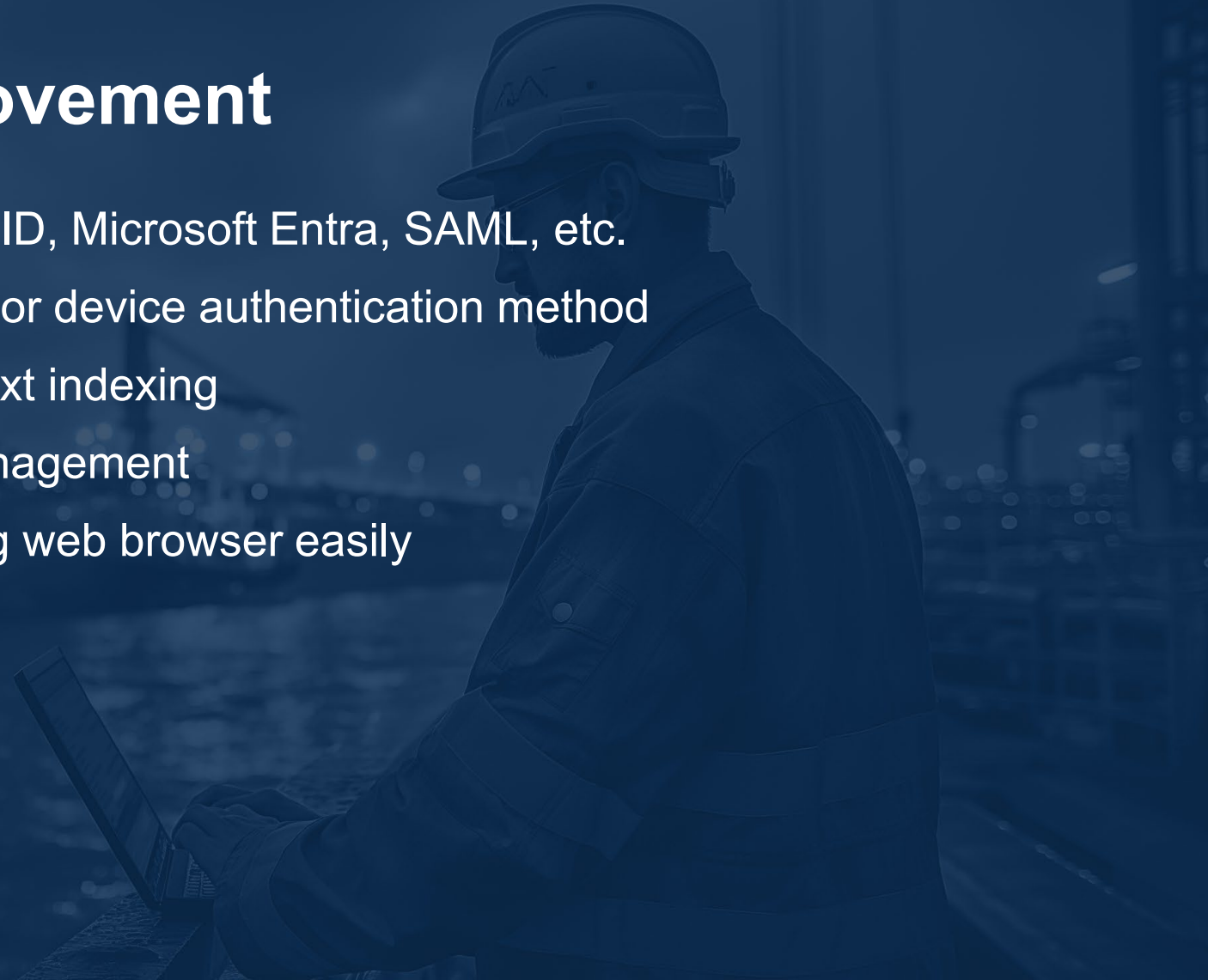
REQUEST BODY - application/json

```
{  
  embarkation* [{  
    Array of object:  
  }  
}
```

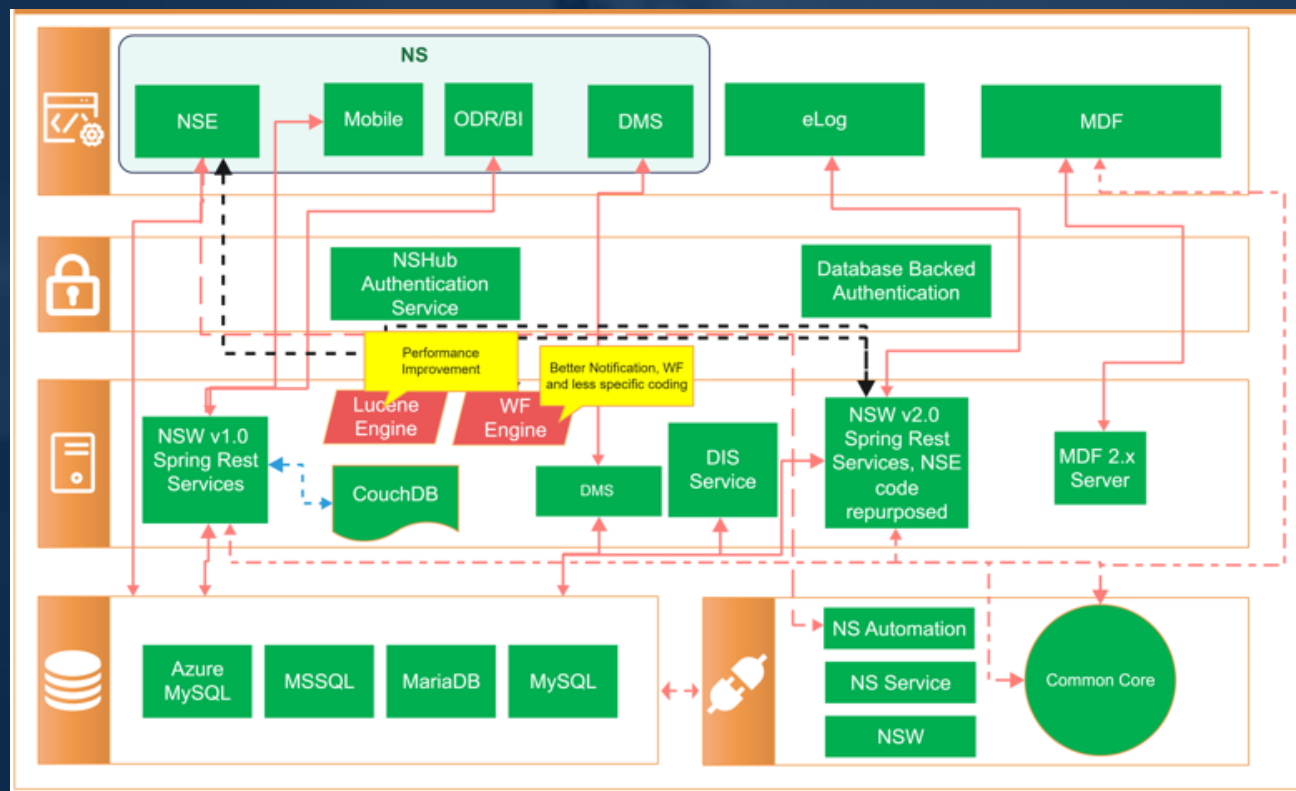
- API documentation updated and being released for newer API's

# Planned Technical Improvement

- OAuth2 authentication to support OpenID, Microsoft Entra, SAML, etc.
- Mobile application to support biometric or device authentication method
- Performance Improvement – Add full text indexing
- Improved notification and workflow management
- Implement interface to query data using web browser easily
- Add integration with 3<sup>rd</sup> party IoT data



# Planned Arch. Improvements



- Addition of WF and Search Engine
- Common-core for IoT data integration

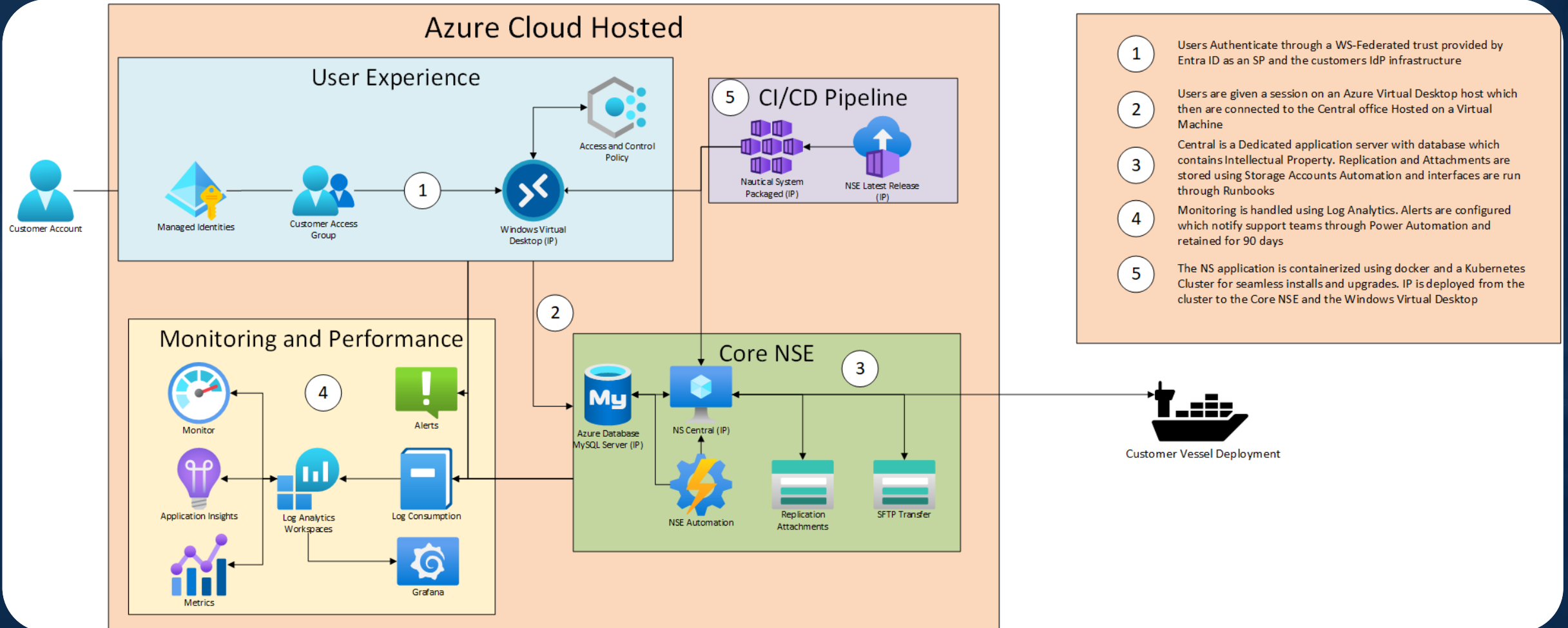
# Cloud Infrastructure

---





## Azure Cloud Hosted



# Wavesight Infrastructure Updates

## Hosted Services

- Aligning to Azure platform upgrades
- All servers set for upgrade to 8.0 MySQL
- Expanding and adopting our capabilities
- Monitoring and Alerts to Actionable tickets
- Aligned systems patch management to Industry best practices
- Vulnerability management and QA alignment
- Enhancing our threat monitoring platform through Azure Services

# Wavesight DevSecOps Model

## CI/CD Pipeline Maturity

- All code is scanned for Vulnerabilities and Quality
- Penetration testing is done annually and at each major release
- SAST/DAST scanning is a part of the Quality release pipeline
- Each push/pull request goes through the CI/CD pipeline so no code is skipped
- Security continues into the environment
- Multiple security monitoring tools have been deployed to prevent incidents
- CrowdStrike Example



## Wavesight Cyber Security

ISO, SOC, and CMMC

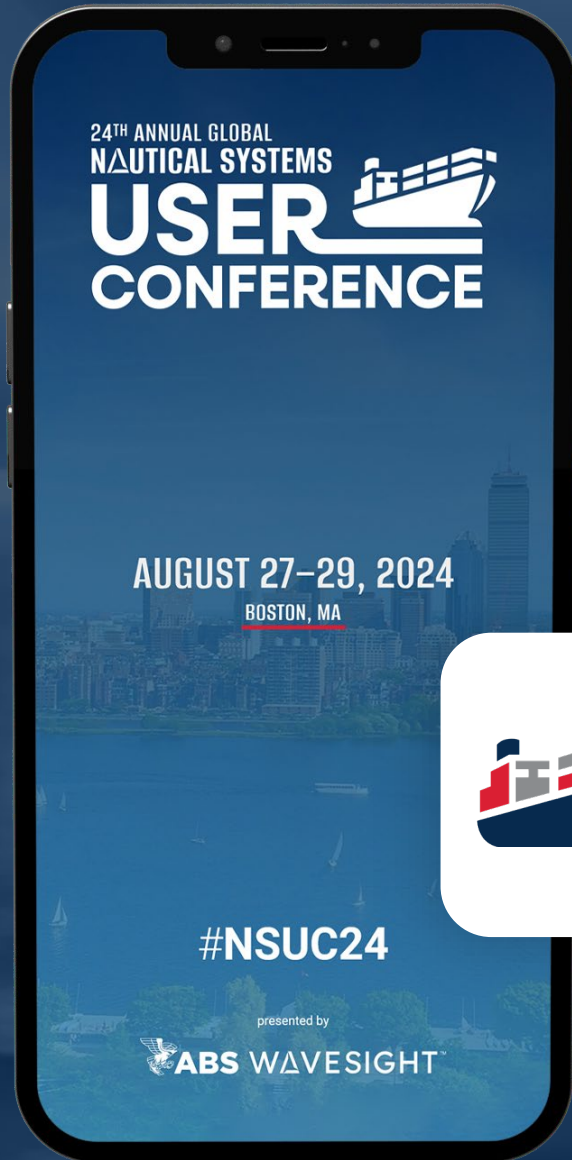
- The 2024 Audit results are available on request along with the ISO 2024 Certification
- CMMC Prep is underway and on track for 2025
- FIPS compliance for GOV deployments (US based only)
- On track for ISO 2022 upgrade (first audit in 2025)
- Several new utilities deployed for threat detection, endpoint monitoring, and automated reactive prevention



# Wavesight Cyber Security Guidelines

## Requirements and Controls

- Prior to any release:
  - Pen Testing
  - SAST/DAST
  - Code Scanning
  - Vulnerability code scanning
  - Vulnerability dependency scanning
- After release and Production monitoring:
  - Active Threat monitoring
  - Vulnerability management and Patching
  - Endpoint protection through the Azure backplane
  - Removal of known exploited systems (RDP)
  - Geo-redundancy where applicable and allowed
  - Zone redundant data and systems



## How many points did you get?

Use the NSUC app leaderboard to check your score and keep participating throughout the conference for a chance to win prizes (and bragging rights)!

## #NSUC24



# THANK YOU

## #NSUC24

---



**ABS WAVESIGHT™**





24<sup>TH</sup> ANNUAL GLOBAL  
NAUTICAL SYSTEMS

# USER CONFERENCE

