



SUSTAINMENT MANAGEMENT SYSTEM (SMS) SUMMIT 2024

ESMS WebAPI Developer Workshop



U.S. ARMY



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SUMMARY



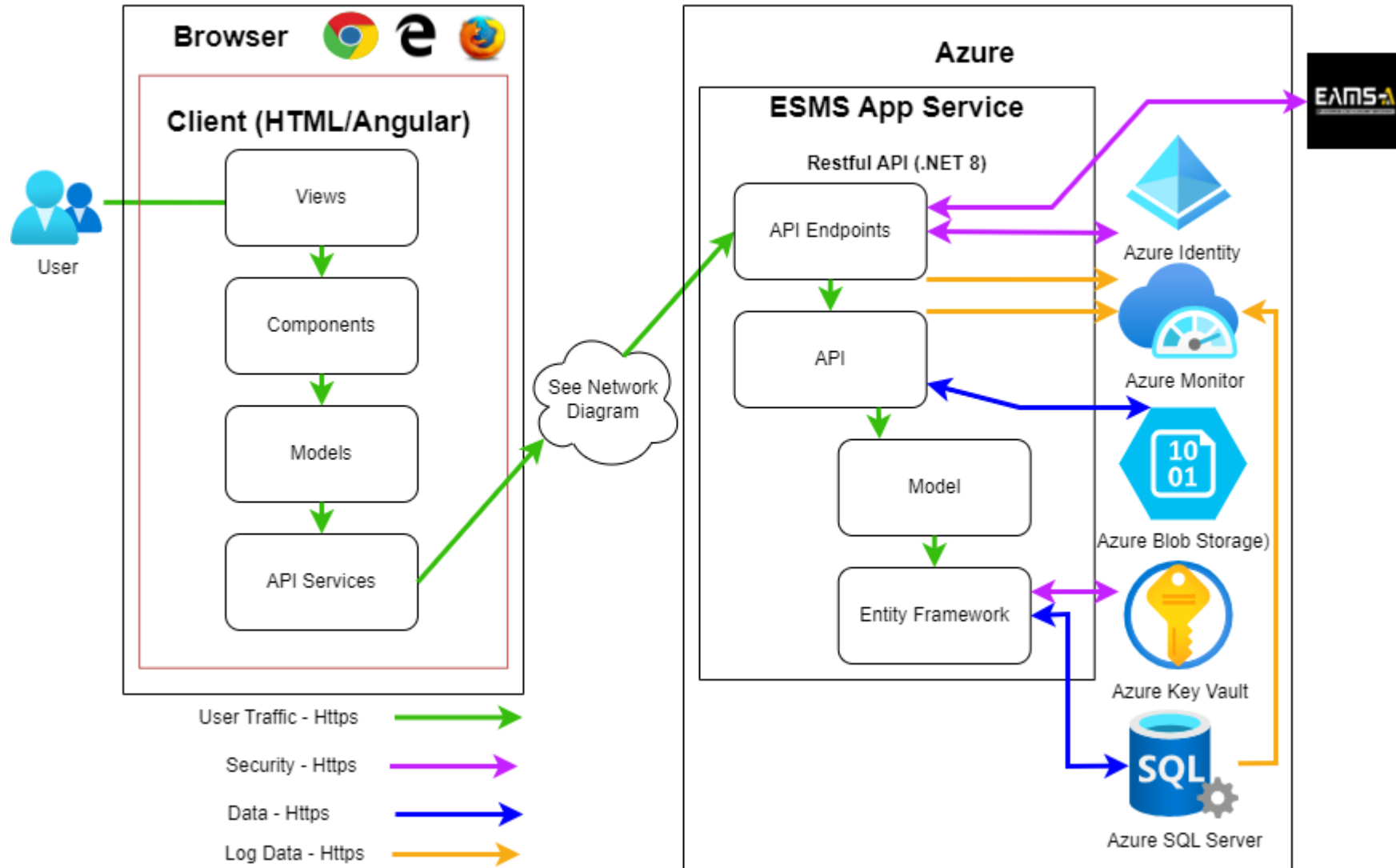
The ESMS WebAPI is developed with .NET and hosted within the cARMY Azure Gov Cloud environment. The SMS team has designed the WebAPI to enable great flexibility for third parties to develop their own tools for interfacing with the ESMS Application. We hope to help make it easy for customers to manage their data either directly through the ESMS Web App or through their own in-house developed tools.

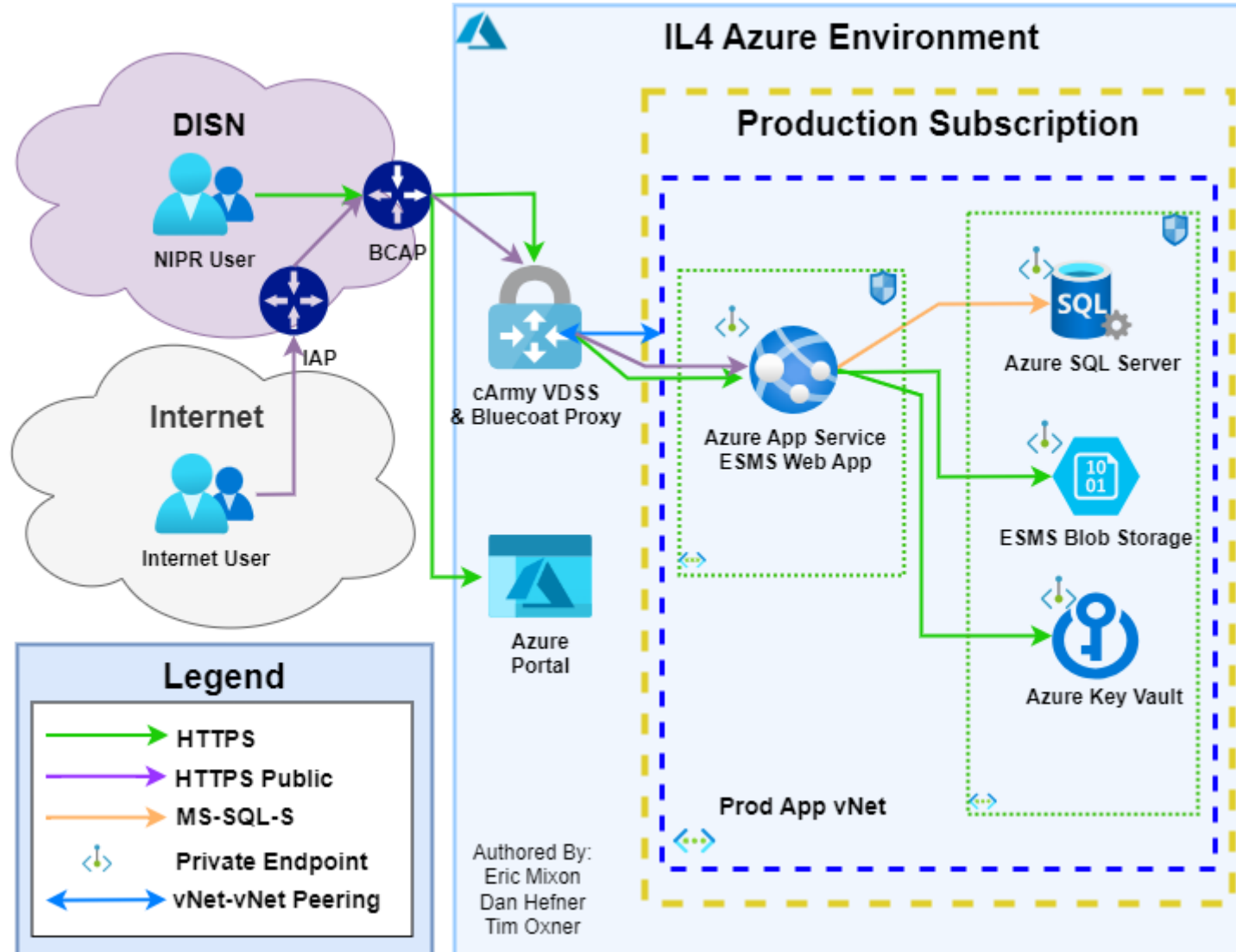
This developer workshop is intended to provide an overview of:

- ESMS architecture and available environments
- ESMS WebAPI documentation
- Requesting sandbox environments to use for testing
- Authenticating your tools to the ESMS WebAPI
- Common protocols and open standards used by ESMS
- How to request changes for future ESMS WebAPI iterations



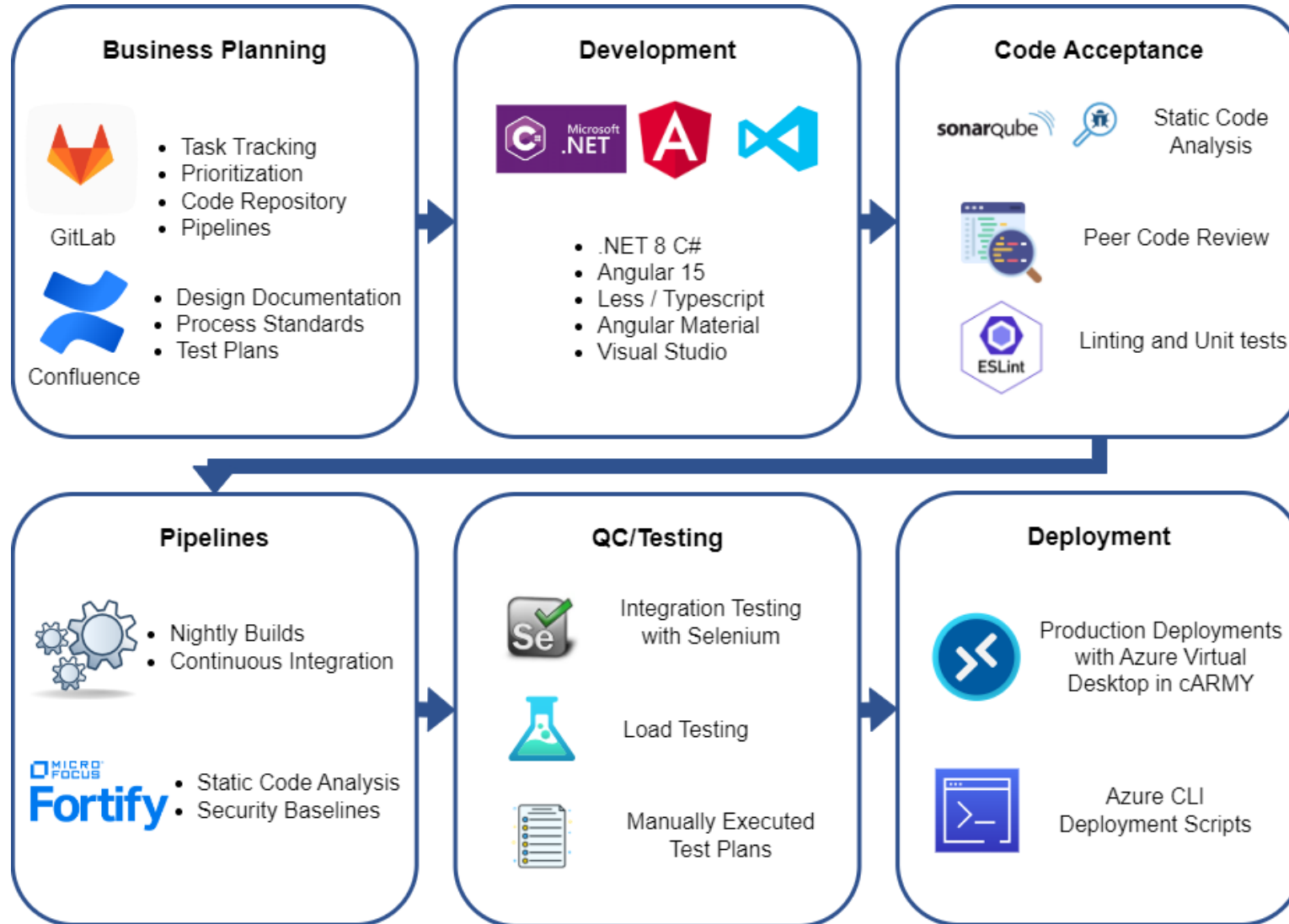
ESMS ARCHITECTURE







CHANGE MANAGEMENT





ESMS ENVIRONMENTS



- Azure App Services make it easy for us to stand up additional ESMS development/test instances.
- Leveraging the cloud, we now have the capability to provide individual sandbox environments for onboarding customers and developers looking for a testing environment.

Request a Sandbox Environment

- Used for Training, Testing, and Development against an isolated instance of the ESMS API
- Appropriate for Non-CUI Demo Data
- Request through the ESMS Helpdesk at:
smssupport@erdc.dren.mil



AUTHENTICATION

EAMS-A

- Available for all DOD CAC Holders
- ESMS Supports OpenID Protocol
- No current plans for SAML support

Service Accounts

- Awaiting ATO



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AUTHORIZATION



ESMS Permissions Management Walkthrough

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WEBAPI DOCUMENTATION



ESMS uses generated API Documentation

- Documentation available to developers by request through the ESMS helpdesk.
- REST API endpoints with /odata/ use the standard “Open Data Protocol” for data queries.

Select a definition Enterprise ESMS 1.10.355.0

ESMS API 1.10.355.0 OAS3

ESMS Developer API

AccessImportSource

- POST /api/core/accessimportsources
- POST /api/core/accessimportsources/schema

ActivityService

- GET /api/core/activity
- GET /api/core/activity/core
- GET /api/core/activity/{id}/activitiesforpolicy
- POST /api/core/activity/{id}/activitiesforpolicy

ApplianceTypes

- GET /api/raais/odata/ApplianceTypes
- GET /api/raais/odata/ApplianceTypes/\$count
- GET /api/raais/odata/ApplianceTypes({key})
- GET /api/raais/odata/ApplianceTypes/{key}

ApplicationRuleService

ManagedAsset

POST /api/core/managedassets Create new core managed asset

Authorization: user must have Create permissions at the parent Site

Parameters: Try it out

No parameters

Request body: application/json;odata.metadata=minimal;odata.streaming=true

New asset properties. See ESMS Core Models.AssetAddModel

Example Value | Schema

```
{
  "name": "string",
  "description": "string",
  "siteId": "3fa85f64-5717-4562-b3fc-2c963f66afad",
  "assetNumber": "string",
  "dateBuild": "2024-07-18T14:27:12.050Z",
  "dateBuildId": "2024-07-18T14:27:12.050Z",
  "type": 0,
  "quantity": 0,
  "rpuId": "string",
  "cat": 0,
  "rl": 0,
  "pl": 0,
  "acl": 0,
  "mcl": 0,
  "comments": "string",
  "domainId": 0,
  "measurementUnitId": "3fa85f64-5717-4562-b3fc-2c963f66afad",
  "catCodeId": "3fa85f64-5717-4562-b3fc-2c963f66afad",
  "status": 0,
  "type": 0,
  "pocId": "3fa85f64-5717-4562-b3fc-2c963f66afad",
  "locationId": 0,
  "userDefined": true
}
```

Responses

Code	Description	Links
200	ID of the newly-created asset	No links
400	Bad request.	No links
403	Unauthorized request.	No links
500	Internal server error.	No links



CODE EXAMPLES



Sample ESMS Console App



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QUESTIONS



ESMS Helpdesk
smssupport@erdc.dren.mil

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