

Environmental Information



# EN2015

## E-Enterprise Architecture

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Supporting the Business of Environmental Protection

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<http://www.exchangenetwork.net/en2015>

# ABSTRACT

- E-Enterprise Architecture Scope
- The Integrated Project Team
- Identity Management Approach
- Portal Architecture
- Shared Services Catalog
- REST Example

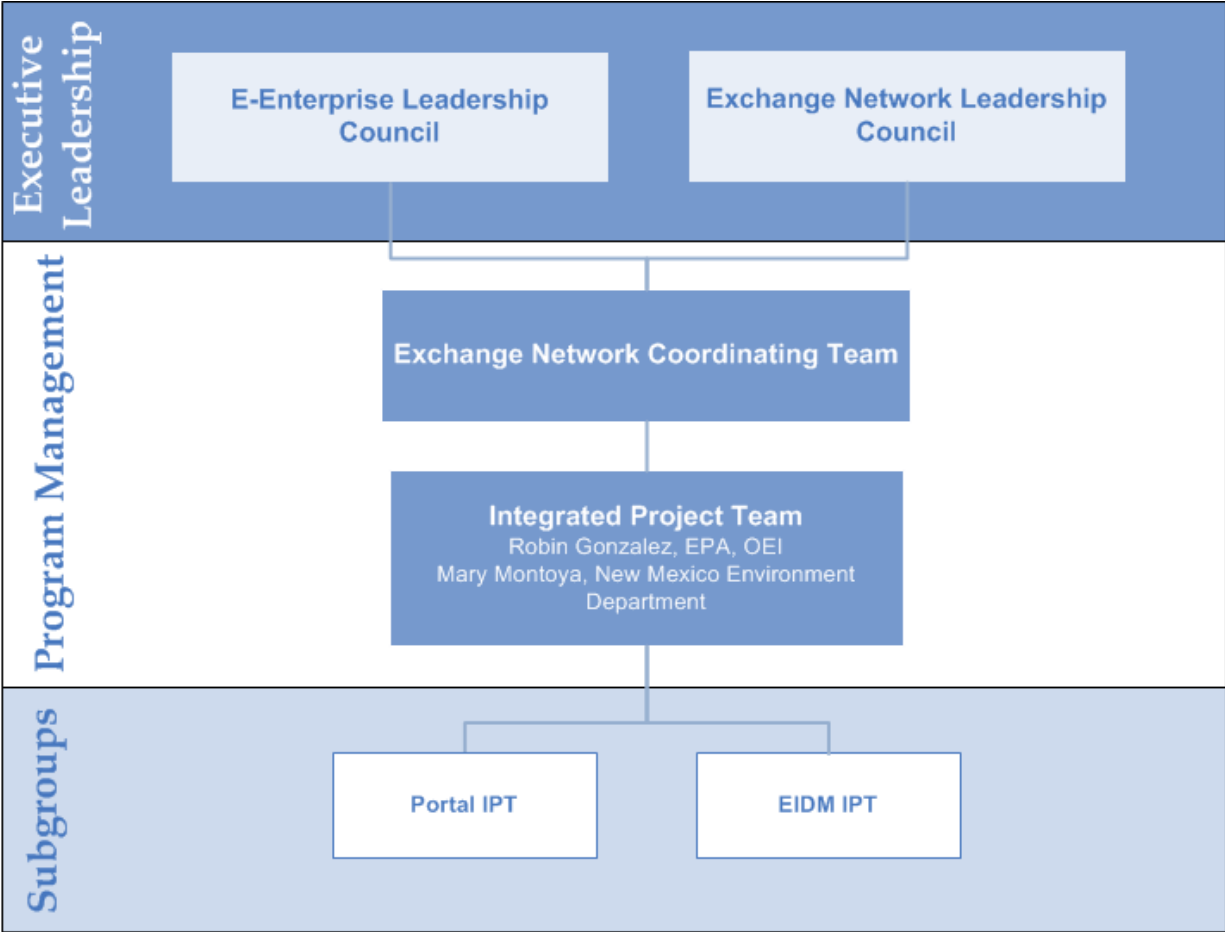
# E-Enterprise Architecture Scope

- Develop conceptual future E-Enterprise architecture to initiate discussions and future planning activities with EPA, EELC, ENLC and others
- Develop common technical architecture shared among EPA and co-regulators
- Value
  - Common architecture across EPA and co-regulators will allow for the interoperability of processes, services, data and systems

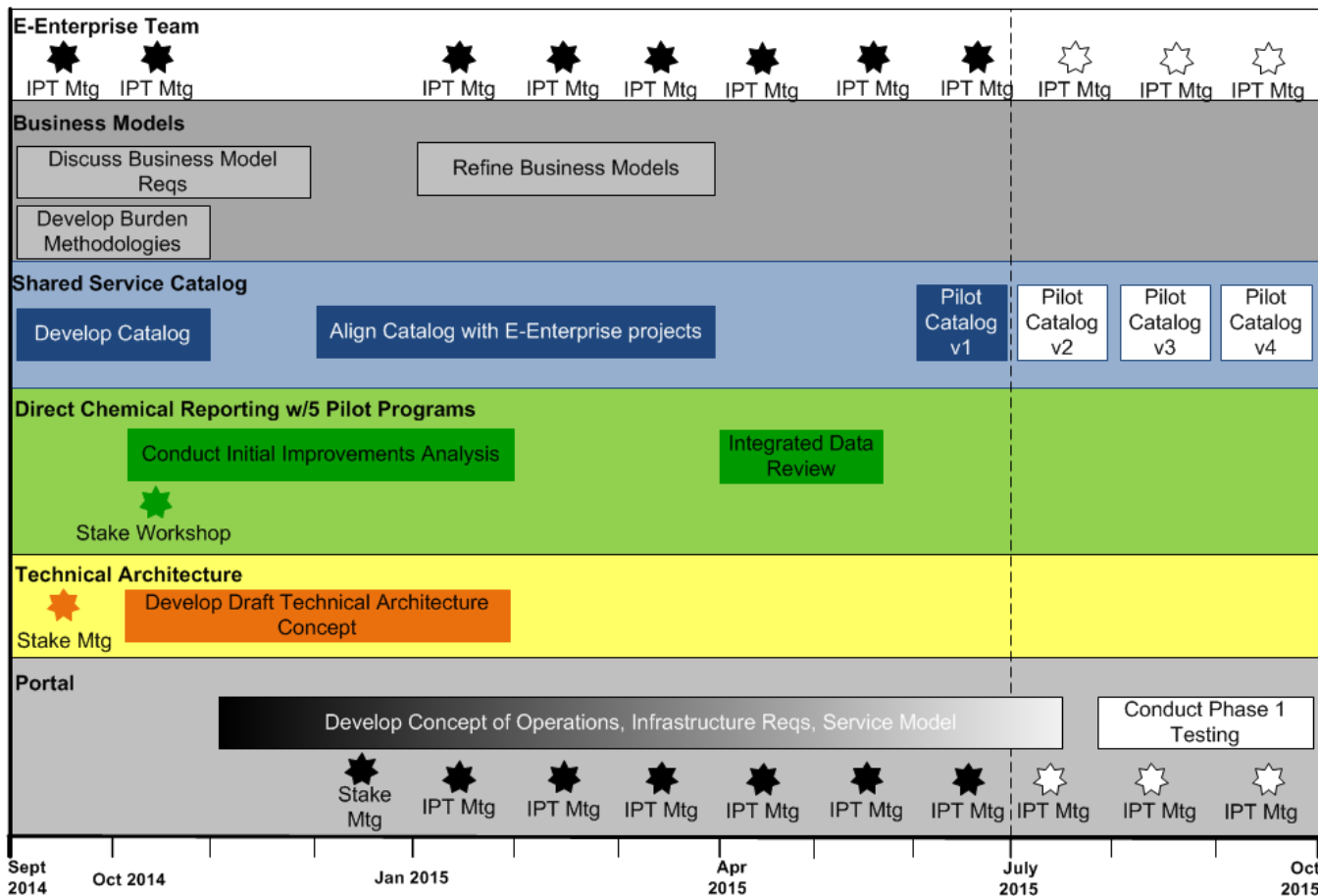
# The Architecture Integrated Project Team

- The Architecture IPT is charged with gathering stakeholder input to enable the development of the foundational technical documents and specifications for E-Enterprise
- Objectives:
  - Document and verify the as-is technical architecture
  - Define business and technical requirements
  - Document and verify the E-Enterprise Solutions Architecture
  - Document and verify remaining shared services documents
- Created Portal and Identity Management subgroups for specific requirements

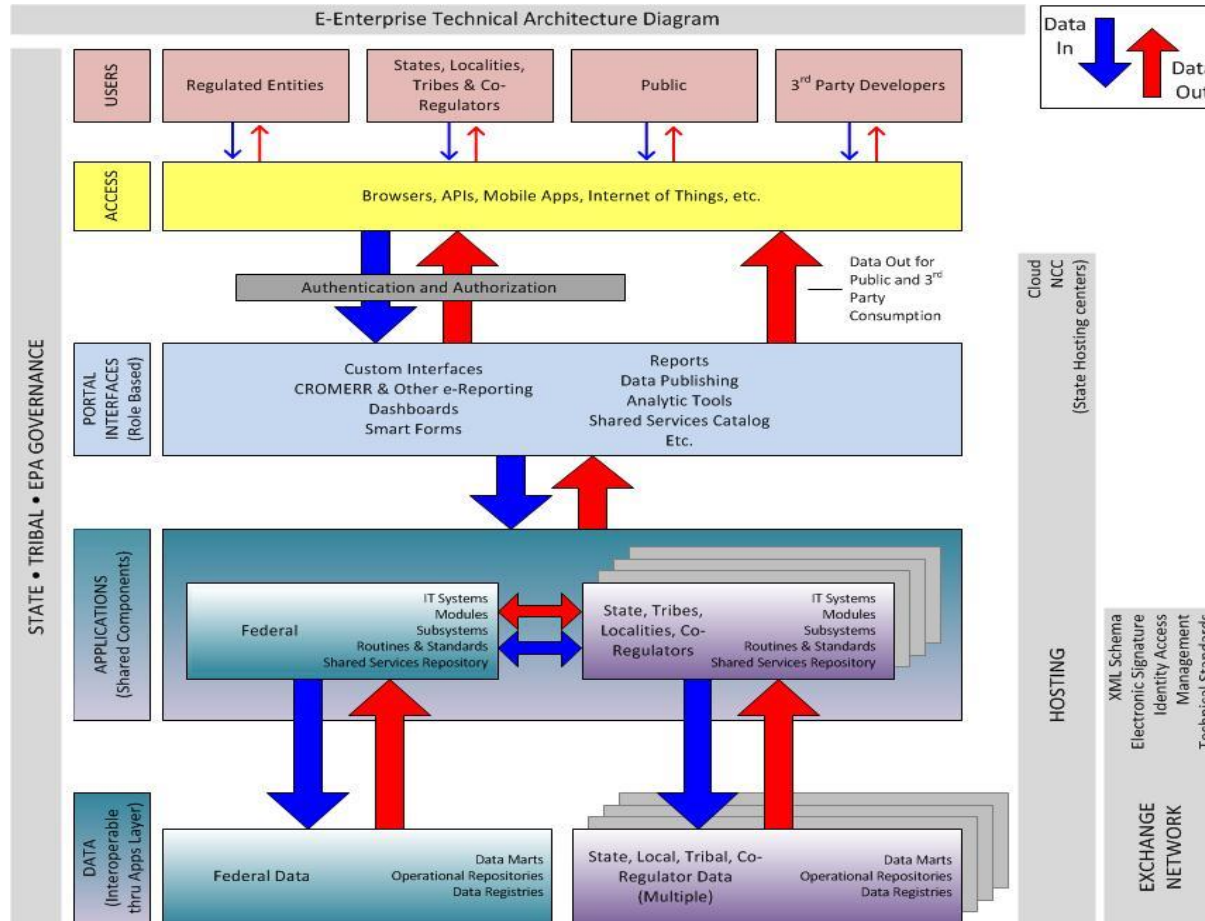
# Architecture IPT Governance



# Extensive IPT Stakeholder Engagement to Date



# E-Enterprise Architecture

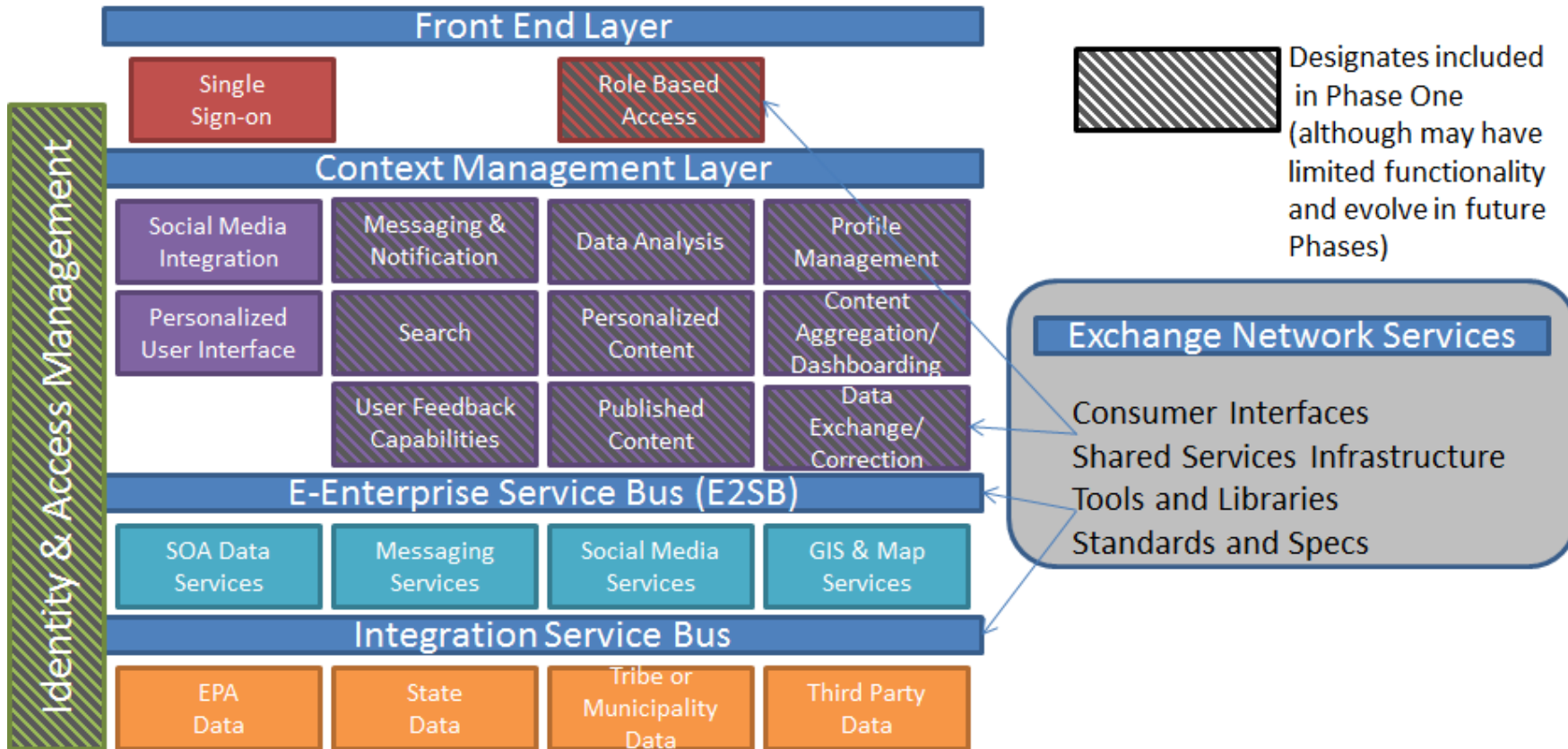


# Portal Architecture/Concept of Operations

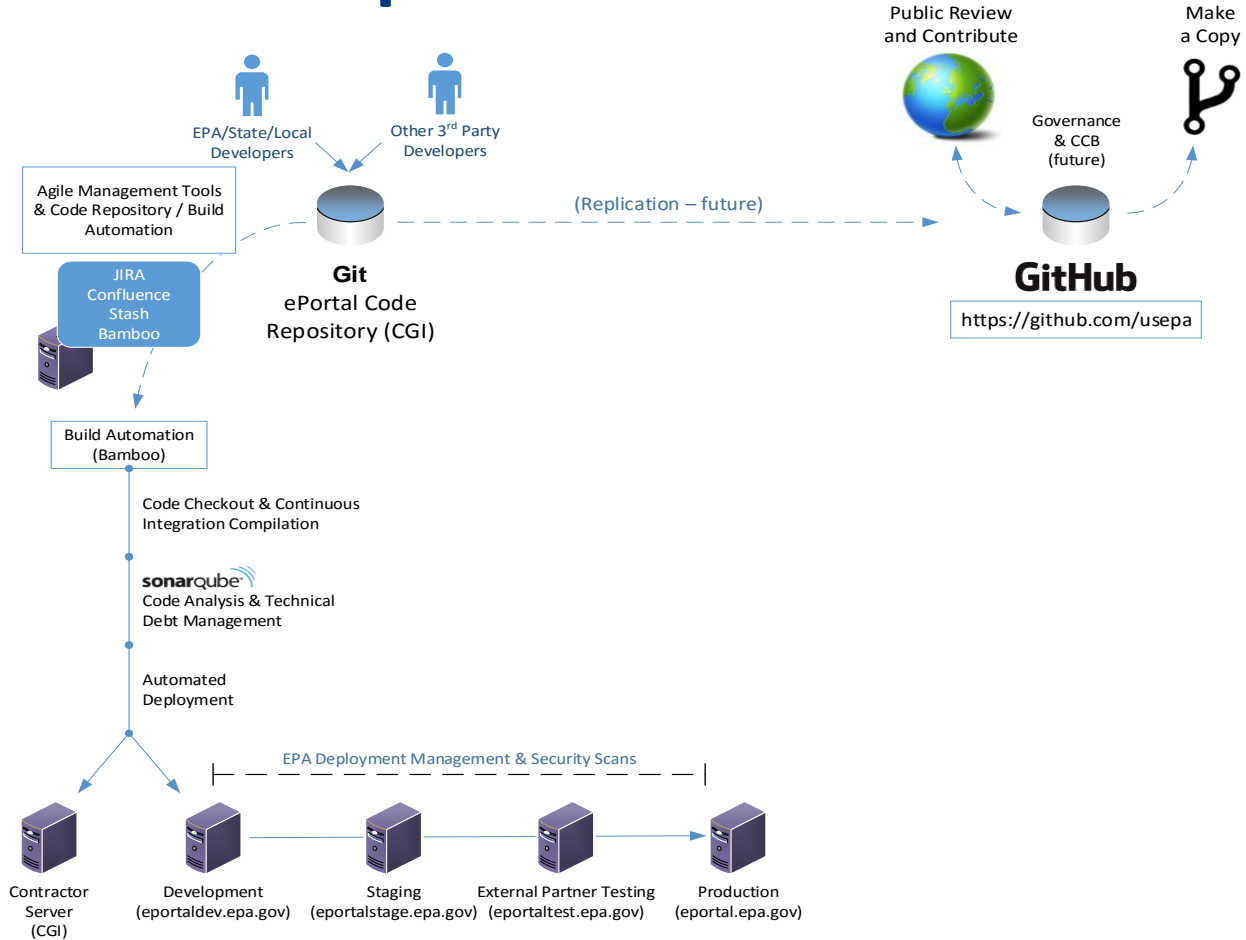
- Worked with OCFO team to develop content, define infrastructure needs and define service support functionality
- Architecture is being implemented as part of Phase 1, and will be expanded in subsequent phases
- Concept of Operations (COO) emphasizes using existing services and open source services where they meet portal and use case requirements
- COO also captures future identified requirements by Portal IPT



# E-Enterprise Portal Conceptual Architecture



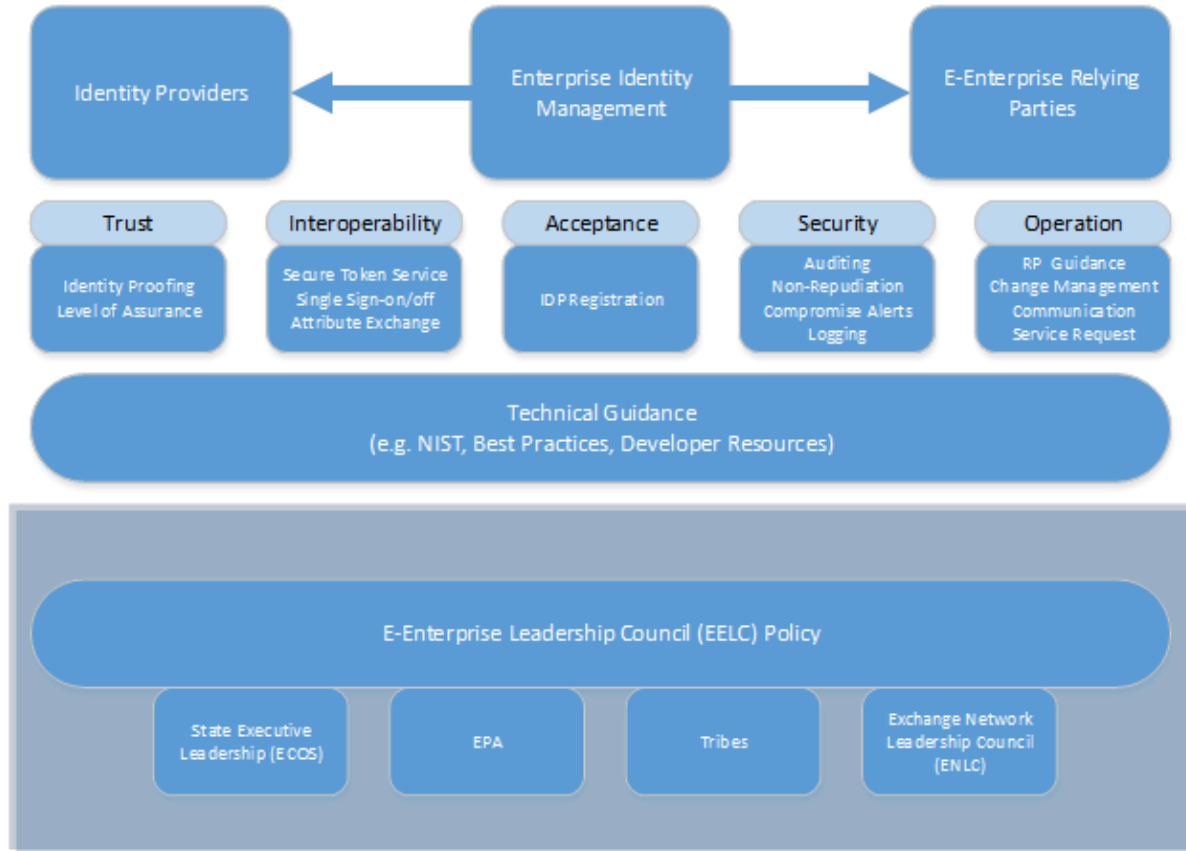
# Development Environment



# Identity Management Approach

- Supported comprehensive identity management approach that will work:
  - For portal access
  - For hybrid cloud access
  - Ultimately, to ensure consistent identity management with our partners across multiple existing platforms
- Builds on the CDX identity management approach but also offers third-party user credentials
- Ongoing steps involve working with States to further expand identity sharing concepts

# E-Enterprise Identity Management Governance Framework



# Portal Workbench

The screenshot displays the Portal Workbench interface with a blue header and navigation tabs. The main content area is divided into several sections:

- To Do:** A task management section with a filter dropdown set to 'All Items' and a 'Refresh' button. It contains a table with one task: 'Notification of Compliance Status, Part 62: National Ambient Air Quality Standards for Hazardous Air Pollutants for Source Categories - Subpart 62.05 - Any Source Before'. The table has columns for Item, Detail, and Do.
- Progress Tracker:** A section for tracking progress with a filter dropdown set to 'Any' and a 'Refresh' button. It contains a table with three items: 'Permit Certificate / 880-1-8334457', 'Permit Certificate / Amendment / M206445', and 'Permit Certificate / Amendment / M206746'. The table has columns for Item, Detail, Status, Date, and Actions.
- My Environment Mapper:** A map view showing a geographical area with various colored markers and a legend on the right side.
- My Facility Manager:** A section for facility management with a 'Refresh' button. It includes a 'Manage Facility' button and a list of facility details: 'ID Location', 'Program', 'Risk Type', 'Hazard Category', 'CSFP', and 'Primary Authorized Official'.
- My Air:** An air quality monitoring section for 'Washington, DC'. It features a line graph showing 'Air Quality Index' over time. The current value is 58, which is highlighted in green. The graph shows a slight upward trend from 55 to 58.
- Trending Air:** A section for trending air quality with a 'Refresh Data' button. It displays 'Air Monitoring Station: Washington, DC' and 'Local Reading: Tue 11:06 AM EDT'. It includes a 'Dialer ID' dropdown and a 'Dialer ID' field. Below this are five data points: 'Temp: 84.2', 'Humidity: 34.6', 'Wind: 1.6 N', 'Cloud: 35', and 'PM2.5: 8'.

# Shared Services Forum Outcomes

- Working to define collectively criteria and priorities for data, application, and infrastructure shared services
- Will develop a catalog of services and playbook to ensure wide use once they are developed
- Also focusing on ways for those with shared services today to contribute them
- Planning Workshop in early December to plan next steps and set an implementation plan

# Shared Services Catalog

- Created and maintained a shared services catalog
  - Working with existing repositories (e.g., RCS, Developer Central, EDG) to provide integrated access and cleaned up data set with functionality to allow single repository with State APIs and data
- Value: Standard method for providing shared services information (APIs, data) and strategy for making sure data are accessible to stakeholders

# Shared Services Catalog Home Page

**EPA** United States Environmental Protection Agency

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## e-Enterprise Shared Services Catalog

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🔍 CATEGORY: API ⚙️

Search

**Filter by Organization:**

- [U.S. Government \(663\)](#)
- [States \(65\)](#)
- [Tribes \(7\)](#)
- [Programs \(4\)](#)
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**Filter by Type:**

- Exchange Network Service (425)
- External Developer Resource (113)
- Exchange Network Node (89)
- Geospatial Dataset (74)
- REST Web Service (26)
- SOAP Web Service (13)

An application programming interface (API) is a set of data structures, protocols, routines and tools for accessing a Web-based software application. For more information on how the government is using APIs, please go to [HowTo.gov](#).

API 30 JUN, 2015

RCRAInfo | REST\_WS | GetCEDDataByHandler

★★★★★

Obtain cm&e data for specific handler

API 30 JUN, 2015

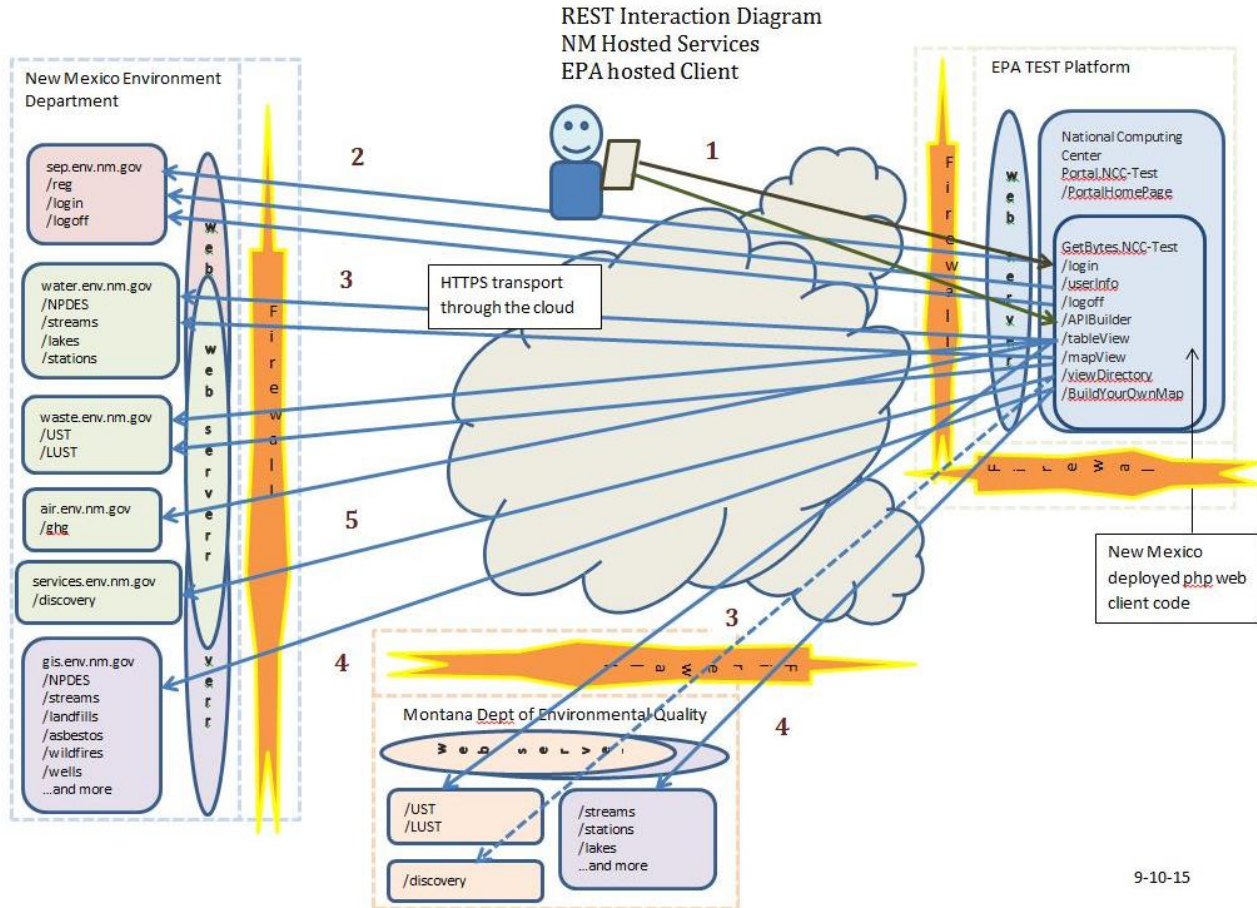
EPA Facility Registry Service (FRS): RADINFO

★★★★★

This web feature service contains location and facility identification information from EPA's Facility Registry Service (FRS) for the subset of facilities that link to...



# REST Example



# Questions/Discussion

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