

Exchange Network Forum

Partnerships with EPA, States, Tribes & Territories

Thursday, May 14, 2026

Format

- **This Forum is an open meeting.** We want to encourage open dialogue. Please be respectful.
- **You will hear from Tribes, States, and EPA.** EN Forum calls are divided into thirds, with time for each group to push updates and request feedback.
- **We will send polls, surveys to gauge interests.** This is a call run by Exchange Network partners for Exchange Network partners.



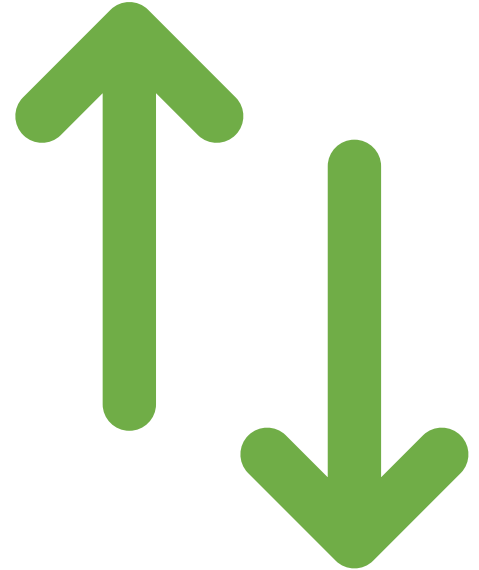
Teams Best Practices

- **Introduce yourself!** If or when you speak, please tell us your name and the organization you represent.
- **Submit questions in the Microsoft Teams chat.** You are also welcome to message the meeting host directly.



Meeting Ground Rules

- **Choose to be present and participate**
- **Engage actively, raise your hand to speak**
- **Maintain a respectful, open space to share and discuss ideas**
- **Assume positive intent**
- **Be curious and open to new ideas**
- **Listen and question with a desire to understand**
- **Stay on topic**
- **Turn on your camera when speaking**
- **Meetings will be recorded**



Agenda

- **CDX Update on HTTPS Encryption**
- **Exchange Network Reinvigoration:
Intro to the Team**
- **Future of Data Exchanges Workshop:
Report Out**
- **Next Steps**
- **Open Forum, Questions**



HTTPS Encryption

- **Change Coming to HTTPS Encryption for EN and CDX Services.** U.S. EPA's Central Data Exchange (CDX) is making a change to several Exchange Network services after hours on **May 22**.
- **After May 22, 2026, encryption ciphers will be limited to the following:**
 - TLS_AES_256_GCM_SHA384
 - TLS_AES_128_GCM_SHA256
 - TLS_ECDHE_RSA_WITH_AES_128_GCM_SHA256
 - TLS_ECDHE_RSA_WITH_AES_128_CBC_SHA256



HTTPS Encryption

- **This change will be implemented for the following hostnames:**
 - cdx.epa.gov
 - cdxnodenaas.epa.gov
 - cdxnodengn.epa.gov
 - cdxtools.epa.gov
 - encromerr.epa.gov
 - ves.epa.gov
 - cdxapi.epa.gov
 - cdxnode2.epa.gov
 - ends2.epa.gov
 - enservices.epa.gov



HTTPS Encryption

- **More information:** [Access EN Alert](#)
- **Please contact us** if your users or administrators observe encryption-related errors after this date or require more information. The **Exchange Network Help Desk** can be reached at **1-(888)-890-1995** or **nodehelpdesk@epa.gov**.



EN Fusion Team

- **Dwane Young**
- **Gem Cortez**
- **John Blakey**
- **Alex O'Neill**



Future of Data Exchanges Workshop: Background

- **2024 E2i Meeting:** Broad engagement from states and tribes. During the last session we discussed “What’s next” for the data exchange and data interoperability between EPA, states, and tribes.
- **Existing EN Technology is over 25 years old** - a lot has changed since 2001.
- **Several data flows have also already embraced other API approaches (e.g. RCRAInfo, DW-SFTIES, and WQX).**
- **This presents an opportunity for us, as a community, to rethink how we enable data interoperability between EPA, states, and tribes.**



Future of Data Exchanges Workshop: Overview

- **April 21 - 22, Washington DC**
- **~40 participants (EPA, states, tribes)**
- **Day 1: Program Implementation and Needs**
 - Exchange Network (EN) experiences, lessons learned, and a shared vision for success
 - Landscape assessments of major EPA programs and state/tribal perspectives on modernization, APIs, and capacity
- **Day 2: Opportunities to Continue Working Together**
 - Concrete opportunities, priorities, and next steps for EN



EN Vision Concepts (Strawman Version)

- The Current EN Vision **focuses on data exchange and data accessibility** (the right people have the right data at the right time).
- We'd build on that vision and **expand it to include the full data lifecycle in support of our collective mission to protect human health and the environment, as well as support Pillar 1 (Clean Air, Land and Water for Every American) and Pillar 3 (Permitting Reform, Cooperative Federalism, and Cross-Agency Partnership).**
- **We accomplish this by:**
 - Building foundational data management capabilities within organizations.
 - Enabling data discovery within and across programs and organizations.
 - Turning data into information by leveraging analytics and visualization.



Charge: Take the Exchange Network to the Next Phase (Technology)

- **Current State: Nodes, SOAP, Standard Protocols, XML-Based, Batch**
 - APIs are standardized around a 'node.'
- **Future State: API-Driven, Rest, Standard web protocols, Json-based, transactions match the business need**
 - APIs are built around the programs/systems they support, leveraging enterprise services as appropriate.
 - APIs support the full data lifecycle, including analytics and discovery.



Future of Data Exchanges Workshop: Next Steps

- **EPA to produce a straw vision for EN that synthesizes input from the workshop.**
- **Technical teams will undertake 3 activities focused on the following areas:**
 - Security - authentication and authorization approaches
 - API Standards - API management and unlocked opportunities
 - API Documentation - enable usage by partners
- **Technical teams will identify transition pathways and candidates.**
 - Interactive - engage with our partners
- **EPA will identify opportunities to improve communications and transparency around grant timelines.**



Activity 1: API Security

- **The workgroup will develop a recommendation for a shared security framework.**
- **The framework will align with federal Zero Trust while remaining flexible for state and tribal environments.**
- **The technical team will produce guidance for API key management, authentication flows, and role-based access control.**
- **Multiple architectural models will be evaluated to balance security and partner capacity using a risk-based controls approach.**



Activity 2: API Standards

- **The workgroup will produce baseline design standards to ensure predictable, reusable, modern REST services.**
- **The standards will focus on the following but not limited to ensure flexibility with EPA, states, and tribes:**
 - Versioning
 - Error handling
 - Consistency
- **The standards are meant to allow for adaptability to meet the specific programmatic business needs while also enabling consistency across programs.**



Activity 3: API Documentation

- **The workgroup felt that OpenAPI/Swagger is the baseline documentation standard to ensure clarity, discoverability, and consistency.**
- **The technical teams will establish a central, public, and accessible API documentation catalog to reduce duplication and improve onboarding.**
- **Flow configuration documents will be streamlined and templated for readability and uniformity across programs.**
- **Technical teams will document field constraints, business context, error handling and patterns that partners can rely on.**



Continuing the Discussion

- **During the workshop, we also covered several other important topics that are critical to the future of the EN:**
 - **Data Standardization:**
 - This consists of both agreed-upon data models and taxonomy.
 - This is identified as a future topic for collaboration.
 - **Governance:**
 - We'll leverage EPA, state, tribal workgroups to deliver on the three target activities over the next 6 months.
 - We'd use this open forum to report out on progress.
 - **Transition:**
 - We recognize that this is a change and will require a transition plan for individual program flows.

Open Forum

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Thank you!

Questions?