



Developing a REST API Strategy for the Network

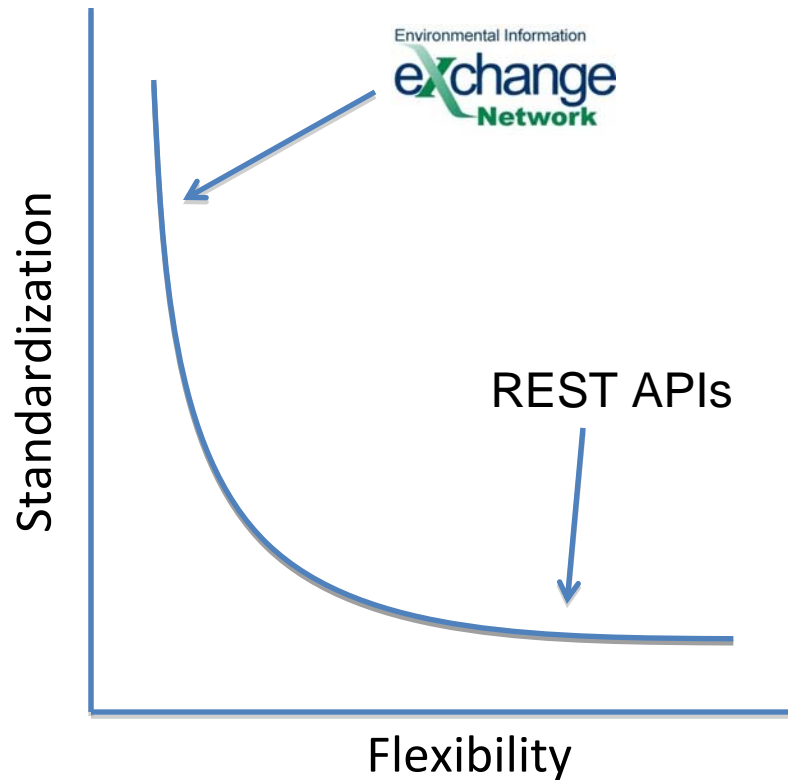
EN2014

February 25, 2014

Why a REST API Strategy?

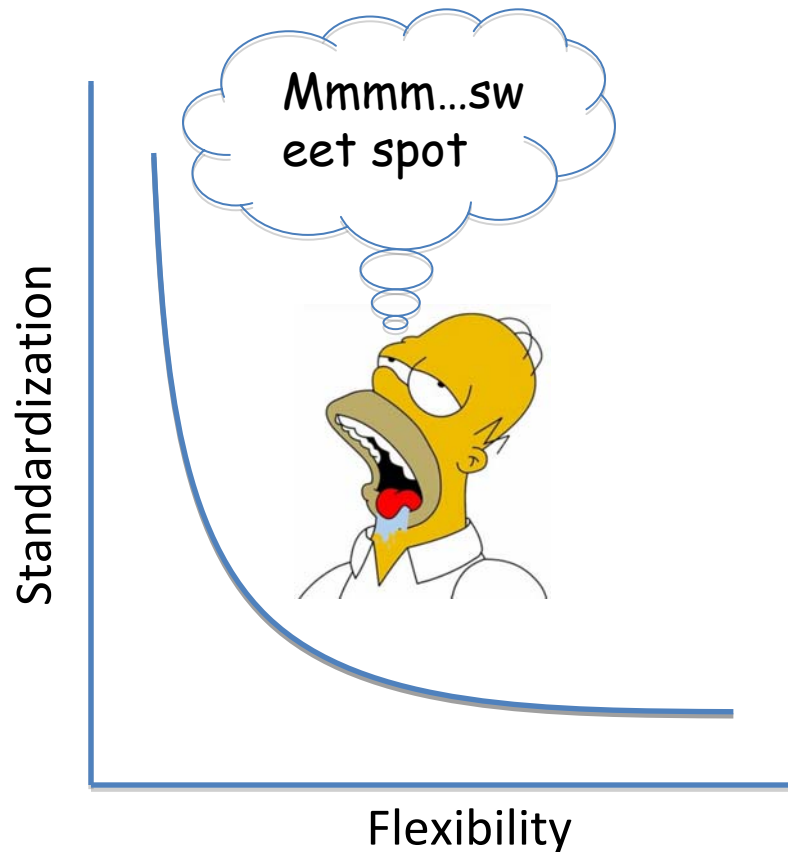
- Phase 2 goals call for a Network that:
 - Makes data easier to find, access, and use
 - Encourages the participation of new partners
 - Responds to the technology needs of providers and consumers of data
- REST is a logical addition to our toolkit
 - Relatively simple, flexible, and open
 - Widespread adoption by developers
 - Highly complimentary of existing SOAP services
- Our challenge is to figure out the best way to bring REST into the EN fold

Standards vs Flexibility



- EN has very specific standards for:
 - Nodes and Clients
 - Data element names
 - Web service definitions
 - Developing schemas
- Consistency comes with some barriers to entry
- REST is a design approach rather than a standard
- Highly flexible but a little messy

Where's the Sweet Spot?



- Depends on the business need
- NTB is working on an API Strategy to figure out how the Network can make REST services more valuable and easier to use
- Practical application of standards and shared services could help build an ecosystem for environmental APIs across Network partners

Elements of an API Strategy

- Forge connections with Open Data community
 - Understand scope of existing efforts
 - Get feedback on how EN standards, tools, and services can be useful
- Refine and promote REST API Standards and Guidance
 - Specific standards for offering Node Query services via REST
 - More flexible guidelines for developing APIs independent of a Node
- Allow Node Admins to make authentication optional

Elements of an API Strategy

- Gather input on requirements for API documentation, registration, and discovery
 - Consistently documented and readily discoverable APIs could be a boon for data consumers
 - Should the EN adopt standards and tools to support an ecosystem for environmental APIs?
 - If so, what existing standards and tools might we be able to reuse?
- Maintain XML-based EN schemas and develop guidance for optionally offering other formats
 - Evaluate simplifying schema design rules

We're gonna need some help here

- We're just getting started
- The NTB foresees lots of opportunities for participation and input
 - IPTs
 - Open Calls
 - Comments on draft documents
 - Feedback and ideas in Session 4 today