Virtual Node
Integrated Project Team (IPT) Charter

This Charter defines the objectives, leadership, and membership of an Integrated Project Team (IPT) that will guide the requirements definition for a cloud-based Node installation.

Background on Integrated Project Teams

Integrated Project Teams (IPTs) are used to achieve successful solutions to complex problems that involve multiple organizations. An IPT is a multi-disciplinary, cross-functional team brought together to implement the processes necessary to deliver a defined product or set of products. IPTs are multi-disciplinary in order to bring together all the business and technology skills required to construct a successful product. IPTs are cross-functional in the sense that they include representation from the various organizations that have different functional roles with respect to the product.

Virtual Node Background

For many Exchange Network partners, maintaining a presence on the Exchange Network (EN) means implementing and maintaining an Exchange Network Node. To date, the Exchange Network has used a federated approach to Node implementation with each partner maintaining a local instance of Node software that complies with a core set of functionality as defined in the EN Protocol and Specification. This model alone may no longer be sufficient for meeting the needs of Network partners. Budget shortfalls, staff turnover, and changes in technology and program requirements can pose challenges to some organizations that wish to operate a Node on the Network. The maturity of cloud-based technologies may offer a path to cheaper and more efficient ways of managing infrastructure. A shared environment may also offer opportunities to help partners more easily meet their goals around data publishing.

Objectives and Anticipated Work of the IPT

The objective of the Virtual Node IPT is to define the requirements and policy implications for a cloud-based, centrally-managed, Exchange Network Node installation.

In developing the requirements and policy implications, the IPT will:

- Identify the key needs and barriers;
- Identify target audience for Virtual Node;
- Identify a set of requirements for a Virtual Node;
- Document the key set of decisions embedded in the requirements;
- Identify potential migration paths and issues; and
- Provide recommendations to the NOB on relevancy, timing, governance, and implementation of Virtual Node.

Deliverables

The Virtual Node IPT will produce the following set of deliverables that will be made available to the Exchange Network community.

- Project Plan: The Virtual Node IPT Plan will define the set of key activities that will be undertaken by the team in order to explore the policy implications and provide definition for a cloud-based, centrally-managed, Exchange Network Node installation.
- Meeting Summaries: Meeting summaries will be produced by the Virtual Node IPT following each team meeting. These meetings will include periodic status meetings in addition to detailed technical/business discussions focused on specific topics.
- Virtual Node IPT Feedback / Response Summary: In order to direct activities of the team to the appropriate priority areas, the Virtual Node IPT will create, respond to and document responses to a set of questions that will be designed to provide feedback that will guide the team's analysis. The group will produce a summary of the feedback after it has been analyzed.
- Virtual Node Guidance and Recommendation Document: Through a series of focused sessions, the Virtual Node IPT will explore a number of technical, functional and business related areas. These discussions will be used to define and document policy and governance implications, provide definition for a cloud-based, centrally-managed, Exchange Network Node installation and discover requirements for agreed to approaches. Some of the topic areas that may be covered in this document include:
    - Target Audience and Use Cases: Define target audience and types of use cases where this platform may be the most effective;
    - Governance: Types of governance models that would be needed in order to effectively manage and optimize a centrally managed Exchange Network Node platform;
    - Impacts to Existing Flows: Explore migration of existing data flows to this platform;
    - Resource Management Requirements: Identification of resources required to migrate to and/or support a virtual node installation;
    - User Interface Requirements: Define User Interface requirements and concepts to manage administrative tasks, node configuration, data flow configuration and data mapping capabilities;
    - Data Management: What type of model, if any, would potentially be needed to stage data in order to be accessed by the node platform;
    - Data Security and Connection to Data Systems: Define data security specifications and methods for secure connections to source databases; and
    - Data Publishing: Define how this platform can further the objectives of Phase 2 of the network, focusing on data publishing requirements (e.g. REST, ENDS Integration, etc.).
- Proof of Concept Definition: Virtual Node IPT members will discuss the applicability and relevance for establishing one or more Proof of Concept implementations that could make use of this platform.

Constraints

The primary constraint is the timing of the release of the Exchange Network Grant Program Solicitation Notice and the due date for Exchange Network Grants. The draft Solicitation Notice identifies migrating to the Virtual Node as a Type I activity and the due date for grant applicants is in November. While the Virtual Node Guidance and Recommendation Document (to be finalized in January of 2013) will ultimately detail the specifics about the Virtual Node, the EPA has asked that this IPT make its incremental progress known and available to the EN community in support of grant applicants and the application deadline. The form and type of necessary documentation and dissemination will be determined by the Virtual Node IPT co-chairs by the end of October 2012.

Schedule and Structure of the IPT

The kick-off conference call will be on August 28th from 12:00 – 2:00 PM Eastern Daylight Time (EDT). Thereafter, the IPT will meet every two weeks on Tuesdays starting September 18th from 12:00-1:30 EDT or as needed. The call schedule, anticipated topics, and interim milestones are listed below, but are subject to change:

Date and Time (Eastern Time)	Call Topic	Milestone
August 28th, 12-2p	Charter Review, data collection process	Charter Adopted
September 18th, 12-130p	Review of data collection results, and topic drill down (TBD)	Participants complete data collection in advance of call
October 2nd, 12-130p	Topic drill down (TBD)	
October 16th, 12-130p	Topic drill down (TBD)	
October 30th, 12-130p	Topic drill down (TBD)	Communication to EN community in support of EN grant applicants
November 13th. 12-130p	Topic drill down (TBD)	
November 27th, 12-130p	Rough Draft Review	Draft #1 Scope Document
December 11th, 12-130p	Rough Draft Feedback	
January 8th, 2013, 12-130p	Final Draft Review	Final Draft Scope Document
January 22nd, 2013, 12-130p	Final Scope Document	Final Scope Document

Roles, Responsibilities, and Time Commitments

All members are expected to attend every call or ensure participation by an alternate if unavailable. The amount of work between calls will vary, however, the biggest time commitments will likely be during the requirements gathering process (early September), document review (November and January), and conference call participation (90 minutes, bi-weekly). The total amount of work will average 5-10 hours a month for workgroup members and 10-12 hours a month for co-chairs. Individuals interested in piloting or participating in a proof of concept will likely have additional time considerations.

State and Tribal representatives are expected to broker input from other representatives within their organizations for topics outside their expertise. The IPT will identify the topics for each call with as much lead time as possible if States or Tribes are interested in having other representatives join the call.

EPA representatives are expected to provide technical resources and expertise as necessary. EPA has also indicated a willingness to prototype the Virtual Node if the IPT decides that would be valuable.

EPA is providing **CGI and Ross Strategic** as contractor support to produce the deliverables and to manage the IPT. CGI will be responsible for leading technical discussions and be the primary lead on the Guidance and Recommendation Document. Ross Strategic will manage the day-to-day operations of the IPT including meeting agenda, call scheduling, meeting summaries, and other support roles.

Membership

The IPT will be comprised of the members of the Network Operations Board (NOB) and other volunteers from the community at large. As co-chairs of the NOB, Connie Dwyer (U.S. EPA) and Roy Walker (Oklahoma DEQ) will serve as co-chairs of the IPT.

Connie Dwyer	EPA/Co-Chair
Roy Walker	OK/Co-Chair
Eric Cleckler	AL
Bryanna Vaughan	Bishop Paiute Tribe
Dennis Murphy	DE
Greg McNelly	ECOS
Chris Clark	EPA
Charles Freeman	EPA
Kurt Rakouskas	Exchange Network
Steve Allison	GA
Brian Gregory	GA
Angela Westin	GA
Dave Wilcox	Gold Systems
Mike Beaulac	MI
Harry Boswell	MS
Frank Harjo	Muscogee Nation
Chris Simmers	NH
Daniel Burleigh	NH
Bruce Jones	NWIFC
Mary Beth Parisi	OH
Mike VanMatre	OH
Rene Roy	OK
Glen Carr	OR

Amy Miguel	Salt River Pima-Maricopa Indian Community
Phani Eturu	VA
Guy Outred	Windsor Solutions
Ted Morris	Windsor Solutions
Support Contractors	CGI, Ross Strategic • William Labar (CGI) • Jason Payne (CGI) • Kristen Durance (Ross) • Rob Willis (Ross)