The Exchange Network Virtual Exchange Services (Virtual Node)
1/21/2015

Environmental Information
eXchange Network

CDX
CENTRAL DATA EXCHANGE

What are the Virtual Exchange Services(VES)

- A cloud platform that hosts any number of partner services: State, Tribe, Region, Agency, etc.

- Each partner configures services on the cloud platform by filling out forms in a web application (eliminating partner node HW/SW)

- Partners can create any type of Network service only it is easier and cheaper to set up and maintain

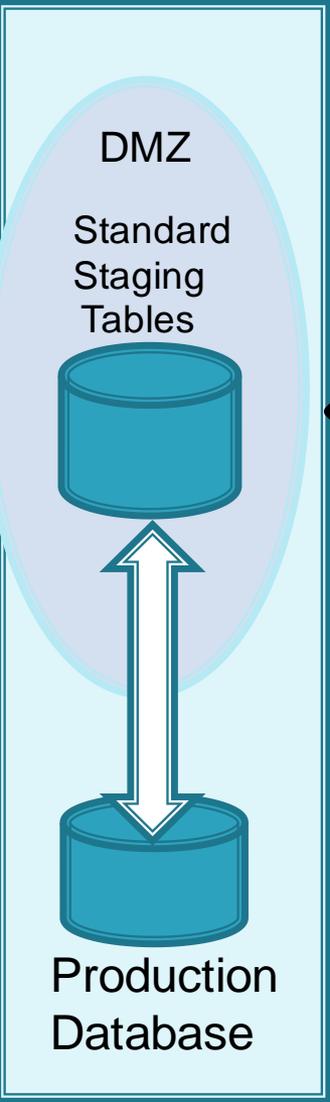- New data exchanges are imported from a set of shared templates with no coding in minutes

Why Virtual Exchange Serices

▸ Nodes are Simply Configured not Installed

▸ Provides a Low Cost Node Alternative for Partners

▸ Eliminates Node Maintenance, upgrades, patching, etc.

▸ Simplifies Development and Maintenance

Advantages

- Can supplement existing nodes

- Common Architecture: New features will be shared by all nodes

- Can inherit services (e.g., ICIS-AIR)

- Only one trusted connection to your DMZ

- Services can be cataloged in ENDS automatically
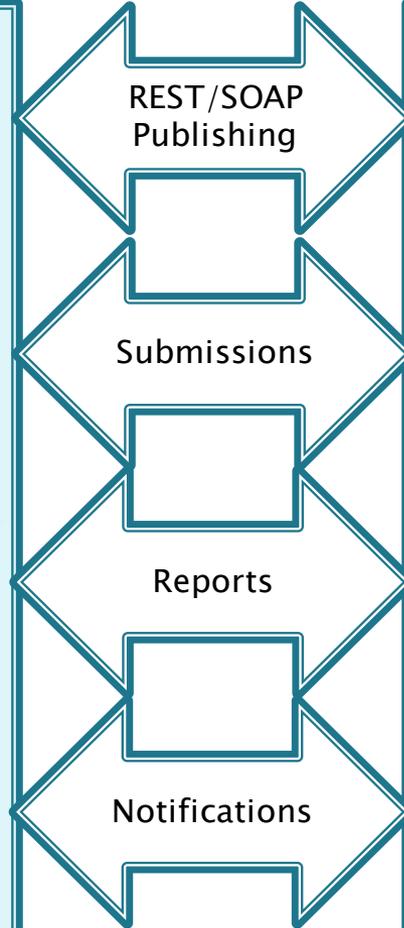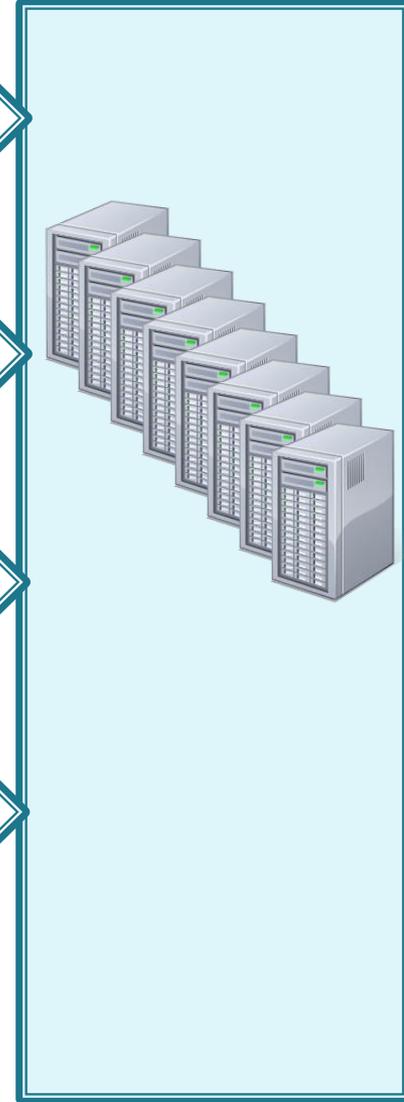
- Cloud capacity is easily expanded to keep up with demand

Partner Environment

Cloud

Exchange Network Partners / CDX

DMZ

Standard Staging Tables

Production Database

Internet Service Bus Or VPN

Virtual Exchange Services

REST/SOAP Publishing

Submissions

Reports

Notifications

Virtual Exchange Services

What you do

- Establish Connection(ISB/VPN)
- Map Data to Staging Database
- Import Data Exchange (services..)

Virtual Exchange Services

- Creates SOAP and REST Services
- Schedules data exchange
- Authenticates
- Pulls Data from staging
- Formats data to XML
- Sends submission to CDX
- Logs activities
- Checks Status
- Collects processing reports
- Sends Notifications to you

Configuring a Service in the Admin Tool

Admin. Console

Service Details

ChrisICISAirNode (Operational | 2.1 | Test)

Node ID / Description:
ChrisICISAirNode -
My demonstration node
for ICIS

Dataflow:
ICIS-Air

Admin. Actions

Services

Nodes

Dataflows

Data Sources

Document Headers

Tasks

Workflows

Node Requests

Utilities

Search Transactions

Provision Node

Export/Import Node

Service Settings

Service Name: GetAirFacility

Service Description* Get Air Facility

Method Type* Query

Visibility* public

Service Status* Enabled

Workflow GenericQuery

Data Source* ICISData

Style Sheet GetAirFacility.xslt

Template

SQL Statement*
```
SELECT  AirFacility.AirFacilityID,
FacilitySiteName, LocationAddressText,
SupplementalLocationText, GNISCityCode,
LocationStateCode, LocationZipCode,
LCONCode,TribalLandCode, FacilityDescription,
FacilityTypeOfOwnershipCode,
RegistrationNumber, SmallBusinessIndicator,
```

VES "Plug-ins" Supported

- AQS 3.0
- ICIS–AIR
- FACID v3.0 (FRS)
- eBeaches
- EIS V2.0
- EMTS v3.0
- ENDS v2.0
- ICIS–NPDES (DMR only)

- SPCC v1.1 (Region one)
- TRI (OUT)
- UIC
- WQX v2.0
- CROMERR (workflow for submission only)
- OWIR_ATT
- RCRA

Partner Status on VES

- Hualapai Tribe: Implemented WQX dataflow in production
- South Dakota: Implemented TRI OUT dataflow in production
- San Joachim Air District (CA): Production submission of Air Facility, Compliance Monitoring and Annual Certification data for ICIS AIR.
- Alabama: Successfully tested submissions of Air Facility and Air Programming data to ICIS-AIR , actively developing more data families for ICIS-AIR
- Georgia: Implemented ICIS-AIR dataflow in production
- Maine, Oklahoma, Mohawk Tribe: following our progress

Documentation

- Lab Guide
- Developer Guide
- Admin Guide
- ICIS Air Setup Guide
- Connectivity Guide
- Connector Setup Guide
- Staging Databases

Questions