

Exchange Network Node Help Desk

NOLA Conference Feb 9-10, 2004

Outline

- Node Building Resources Review
 - ECOS Node Help Desk, Docs, FAQs, DNCs
- Amplified Help Desk Support Procedures
 - Getting started on your Node development effort
 - A High Level Review of EN-CDX Security
 - Moving to Test and Production

Resources for Node Builders

- Exchange Network Node Help Desk
- Guidance and Technical Documents
- FAQs
- Node Mentoring Group
- Exchange Network Discussion Board
- Demonstrated Node Configurations (DNCs)
- Testing Tools
 - <https://test.epacdxnode.net/test/>

On-line resources: <http://www.exchangenetwork.net>

Exchange Network Node Help Desk

Mission:

The Exchange Network Node Help Desk is available for *any* Network or Node building question. The focus however is on technical, and account management. Time permitting, some procedural mentoring may be available.

By Telephone:

Call our toll-free line between the hours of 8:00 am and 6:00 pm (Eastern) M-F at 888-890-1995 (Select Option 2).

By E-Mail:

Send support requests to nodehelpdesk@csc.com

Note: The Network Node Help Desk is closed on Federal holidays

Exchange Node Help Desk Structure

- **Help Desk 'Tier 1' Staff are Software Development Engineers**
 - Tarun Verma and Sergey Nikhinson
 - Supplement CDX Node and Web Development Teams
- **Backed By the CDX Node Development and Operations Teams**
- **Closely Coordinated with:**
 - CDX-Web Help Desk
 - Outreach

Guidance and Technical Documents

- Network Node Functional Specification v1.1
- Network Exchange Protocol v1.1
- Node Implementation Guide v1.0
- Flow Configuration Document Template v1.0*
- Node, Flow, and Client Definitions and Implementation Statuses
- Administrator's Guide to Network Security*
- Network Security Policy Document v1.0*
- Network Security Specifications
- Network Security Guidelines
- Network Security White Paper
- Core Reference Model
- XML Schema Design Rules

* Available Mid-Late February 2004

FAQs

- **Most Frequently Asked Questions from Exchange Node Help Desk files**
 - Exchange Network General Questions
 - Security Implementation
 - Dataflow Support
- **Initial Draft in Review 02/06/2004**
 - Publicly available on Network Exchange website very soon
- **View at: <http://test.epacdxnode.net/faq/>**
- **A Living Document**

FAQs

Exchange Network Examples

- **What is the Exchange Network?**
- **What are the benefits of the Exchange Network?**
- **How do I participate in the Exchange Network?**
- **How do I connect my Agency and its data to the Network?**
- **What tools and resources are available to simplify my node development project?**
- **What is the Node Test Tool?**
- **What is a DNC (Demonstrated Node Configuration)?**
- **Where can I find and download a DNC?**
- **What Different Clients are available and how do I get one?**
- **My question is not answered anywhere in the Exchange Network FAQ. Who can help Me?**
- **What is the Exchange Network Mentoring Group? What can they do for me? How do I contact them?**
- **What is the Mentoring Group Message Board?**

FAQs

Security Implementation Examples

- **What is the Network Authentication Authorization Service (NAAS)?**
- **Why should I use NAAS? How does my node benefit from it?**
- **Can I use my security model in conjunction with NAAS?**
- **How does the NAAS Authentication Service work? What are the possible scenarios?**
- **How does Authorization work? What do I need to do to take advantage of Authorization?**
- **How do I get a userId?**
- **How do I get an administrator account?**
- **I need to get a Secure Sockets Layer (SSL) certificate for my Node. Which one should I get? Where can I get one?**

FAQs

DataFlow Support Examples

- What is a dataflow?
- Which dataflows are currently supported by the EPA CDX Node?
- What steps do I take to put a flow into production?
- What is the NFC Group ?
- What is an FCD ?
- What FRS service requests are supported?
- Which FRS exchange scenarios are supported ?
- What are the FRS file naming conventions ?
- Which e-DMR service requests are supported ?
- Which e-DMR exchange scenarios are supported ?
- What are the e-DMR file naming conventions ?

Version 1.1 DNCs

- **Java-based (Integrated Client and Server DNC)**
 - **Apache Axis 1.1** – DNC can be used with any Java-Based middleware, (e.g., WebLogic, WebSphere, XAware, Oracle 9i)
- **Microsoft .NET DNCs**
 - [DNC for server side using Microsoft .NET C#.](#)
 - [DNC for server side using Microsoft .NET VB](#)
 - [Sample client for .NET](#)
 - Also available is a [C# client library](#) (.zip file). This allows you to change the requestor library above. If you don't want to change the API, you should download the .NET Sample Client. Requires the .NET Framework 1.X and 1sp1.
- **All Tools available on the Exchange Network Website “Tool Box” Section**

The Flow Configuration Document

The Flow Configuration Document (FCD) Template identifies the universe of information Network Partners should consider when documenting and implementing a *Flow* or a *Common Data Service*.

- A Flow Configuration Document may include, by reference, information from many other documents (Schema, system code lists, or procedures).

Getting Started

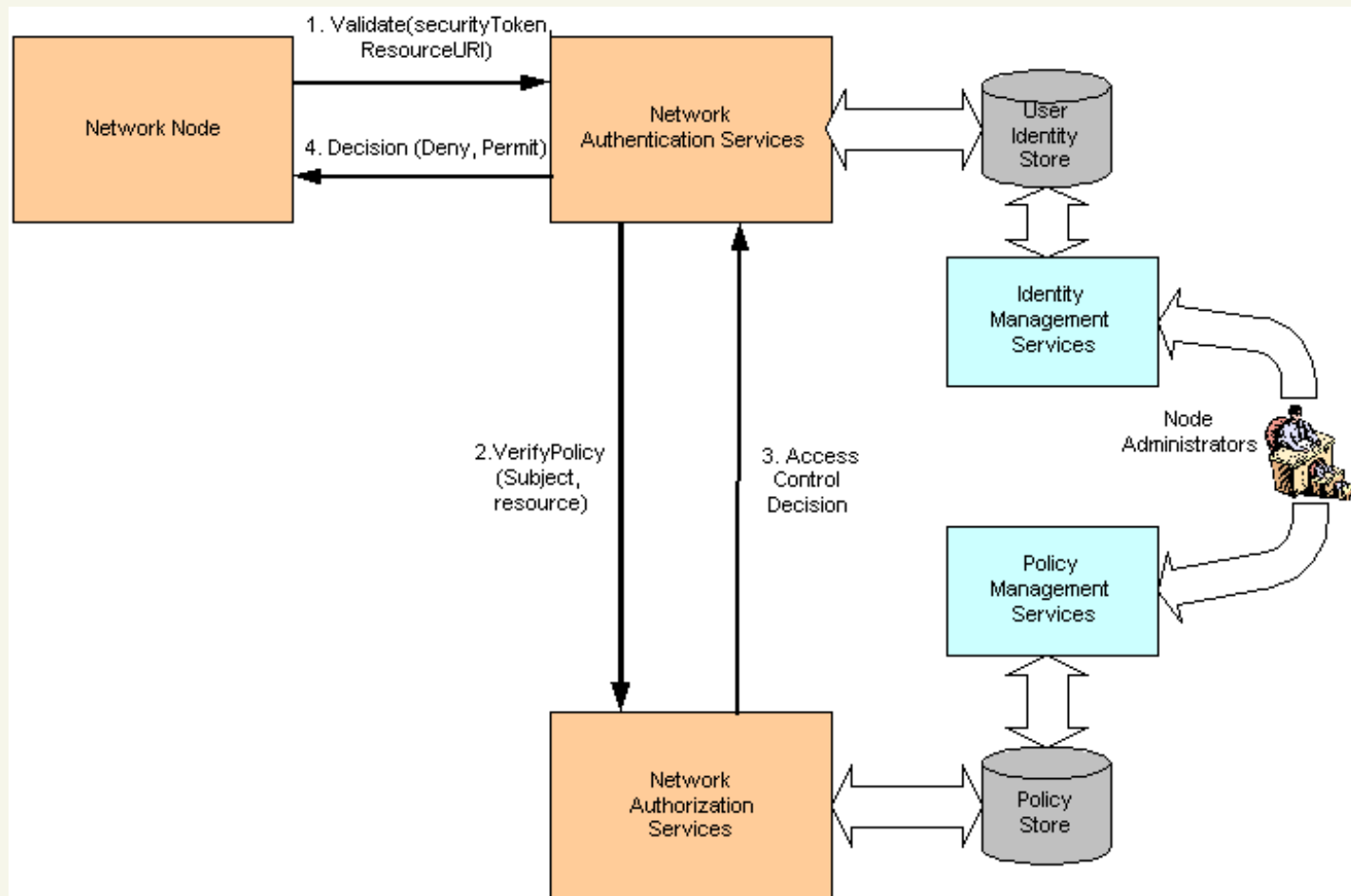
- **Strong support for key Node technologies**
 - Web Services
 - Data Integration using XML
 - When using DNCs (highly recommended), expertise in a supported paradigm (Java, .Net C#, .Net VB)
- **Exchange Network Architecture**
 - Security, EN v1.1 Protocol / Services
- **Leverage Node Mentoring States, Docs, Node Help Desk**
- **Consider Contractor Support**
 - EPA can provide a list of known Node implementers
- **Establish Test accounts and SSL support up front**

Moving From Test to Production

- Testing complete
 - Administrative and User / Operator Test accounts
 - Integration Testing: Node passes all automated tests
 - Client Testing on Test CDX passes
 - Services connectivity verified by Help Desk
 - Data validated by appropriate Program Flow areas
- SSL available
 - 128 bit encryption
- Production NAAS accounts
 - Administrative and User / Operator Production accounts
 - Help Desk authorizes submissions to Production Node

EN Security

Authentication and Authorization For Web Services



Establishing NAAS Accounts

- Types of NAAS Accounts
 - Node Administrator Accounts
 - User and Operator Accounts
 - Test and Production
- Node Administrator accounts established by calling the Network Help Desk
- Network User accounts managed by the appropriate Node Administrator

NAAS Test Accounts

- Test accounts can be established to assist during Node implementation and testing.
- All interactions with the NAAS must use SSL (128-bit encryption)
- Test NAAS and Node are separate and distinct from the Production NAAS and Node
 - Different URLs and Accounts

Node Administrators

- Node administrator account established by calling the Network Help Desk
 - Administrator key information required and verified
 - Administrator accounts are associated with a specific node
 - Each administrator controls Network users entitlements to their specific Node, and no others

Network Node Users and Operators

- Network Node user and operator accounts are managed by the Node administrator
- Authorization permissions are set by the Node administrator
- User – Operator, what's the difference ?
 - User: No permissions on local or remote nodes at creation time
 - Operator: Full permissions on local node at creation time (but still non on remote nodes until remote Node administrator provides entitlements)
- Consider use of 'Firewall' Node Policies for simplification
 - Minimum Node level policies applied to all users and operators

Questions?