DON XML - Achieving Enterprise Interoperability

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Why Are We Here Today?

- The Extensible Markup Language is a syntax for creating user defined data markup languages
- Each markup language acts as unique metadata
- Multiple markup languages create interoperability issues
  - No functional area is an island
  - Each functional area interoperates with many others
  - Transformations are expensive, time-consuming, and not guaranteed
- The DON must ensure an enterprise perspective if initiatives such as TF Web are to succeed with XML
- The DONXML WG stands ready to help you support the DON XML Vision and Policy
The DON XML Vision
Vision

The Department of the Navy will fully exploit Extensible Markup Language as an enabling technology to achieve interoperability in support of maritime information superiority.

—Signed by Mr. Porter, DON CIO
15 March 2002
Interoperability and systems integration are crucial to achieving maritime information superiority.
XML is a proven technology that will play a pivotal role in making enterprise-wide interoperability a reality.
Vision—XML Enabled Services & Applications

- **XML enabled applications**
  - Are based on XML technical specifications
  - Will employ XML business standards
  - Play key role in all aspects of systems development, integration, and interoperability
  - Integral to achieving knowledge superiority
  - Must be capable of supporting interoperability with legacy systems

- **DON Involvement**
  - Identifying DON requirements through standards efforts
  - Identifying DON requirements through Alpha and Beta testing

**DON must be proactive about providing inputs to XML solution providers.**
Vision—
Moving Forward with DON IM/IT Initiatives

- The DON must establish XML based protocols as enterprise-wide standards
  - Identify, adopt, deploy single set of platform-independent information exchange protocols
  - Extend this model to the entire DON enterprise
  - Interoperability WILL BE enhanced
  - Develop distributed registry solution

The DON CIO is tasked with developing the required governance for establishment of DON-wide XML based protocols.
Achieving the Vision - DON XML Policy
DON XML Policy Issued

- Provides direction for development of interoperable XML business practices and applications across the DON
- Ensures integration of DON XML implementation with enterprise architecture initiatives

Policy includes:
- Direction on use of technical specifications, XML standard components, and participation on XML-related standards bodies
- Prohibition on proprietary extensions
- Creation of XML Functional Namespace Coordinators to support FAMs
- Key action steps for DON CIO, FAMs,

Next Steps
- Work with FAMS and FDMs for standup of FNCs
- Finalize governance structure
- Finalize XML registry requirements, Concept of Operations, and implementation strategy
- Enhance specific guidance for developers to support enterprise approach
Key Policy Components

- Technical Specifications
  - W3C, OASIS, ISO, IETF, Other
- Proprietary Extensions
- Standards Participation
- XML Standard Components
- Developers Guide
- XML Enterprise Management
- DoD Registration Policy
Achieving the Vision - Work Group and Governance Structure
Creating consensus across the DON

Creating consensus across the DON

DONXML Work Group

Steering Committee

Action Team 2
Standard Implementation

Action Team 3
Enterprise Implementation

Action Team 5
Integration with Existing DON Processes
Achieving the Vision - Evolving the Work Group Structure

- FNC roles established
- Work group legitimacy established and formally recognized by DON Policy and press releases
- Work group interactions maturing, seeking better collaboration tools
Ultimate Goal - XML Governance Structure

DON CIO

XML Governance Council

DON XML POC

Report
Chairs

FAMs

Business Processes

FDMs

FNCs

XML Business Standards

Technical Standards

Policy & Procedures

Training & Education

Authoritative Data Sources, Functional Data Architectures

Technical Assistance

Provide assistance upon request

Ultimate Goal – XML Governance Structure

Provide Recommendations

Manage

Use

Manage

Use

Use

Provide Recommendations

Memberships

Ultimate Goal – XML Governance Structure

Provide assistance upon request

Manage

Use

Use

Provide Recommendations

Memberships
Achieving the Vision - FAMs and FNCs
FAM XML Policy Responsibilities and Actions

- **FAM Responsibilities**
  - Work with the appropriate Resource Sponsors to identify funding requirements in support of the XML Functional Namespace Coordinator (FNC), for their functional area
  - Provide oversight and management of the XML FNC’s efforts, for the appropriate functional area

- **FAM Action**
  - “...shall designate an appropriate organization to act as the DON XML FNC, for their functional area of responsibility. This designation shall take place within 60 days from the date of this memorandum” (11 Feb, 03)
FNC Responsibilities

- Report to the appropriate FAM and work in conjunction with the FDMs to ensure the development of an integrated data architecture
- Adhere to the requirements contained in
  - SECNAVINST 5000.36
  - FAM designation memo
  - Appropriate Federal, DoD and DON XML regulations, policies and standards
- Actively participate in the XML governance structure
- Implement DON XML strategy and processes
FNC Responsibilities

- Advocate standard XML
- Select and use XML standard components in the following order of precedence (highest to lowest)
- Manage standards use
- Participate in developing and managing the DON Enterprise XML Namespace & functional area namespace
- Manage XML components
Good News!
XML and the DON XML Enterprise Perspective is gaining wide acceptance

- XML is being used in
  - TFWeb
  - TFExcel
  - IT21
  - NMCI
  - Virtually every other enterprise initiative

- XML is being used by
  - Systems Commands
  - Central Design Activities
  - Fleet and Type Commanders
  - Within virtually every organizational and functional boundary

- DONXML WG participation continues to grow

- Developers Guide gaining wide acceptance both within and external to DON

- Visibility of efforts is occurring on many fronts and is helping drive buy-in
Press Coverage

- eWeek, *In the Navy, XML is the Standard*, Darryl K. Taft, December 19, 2002

Also in the Cover Pages (http://xml.coverpages.org) -


- "XML - an Enabling Technology to Achieve Interoperability."
  By Dan Porter (The Department of the Navy, Chief Information Officer). In *CHIPS Magazine* (Fall 2002).

- "Promise and Potential: The Navy Works to Leverage XML's Power."
  By Jack Gribben (Research Fellow, Logistics Management Institute - LMI). In *CHIPS Magazine* (Fall 2002).
Summary

- XML is a key technology that will impact every aspect of the developing DON IM/IT Architecture.
- DON XML Policy has direct impact on everyone using XML.
- DONXML WG is actively engaged in supporting and enabling enterprise XML.
- FAMs and FNCs will play key role in ensuring enterprise approach to XML implementation.
- DONXML WG and DON CIO stand ready to assist in achieving the DON XML Vision.
Resources & Point of Contact

- **DON XML Quickplace**
  https://quickplace.hq.navy.mil/navyxml

- **DON IM/IT Website**
  http://www.don-imit.navy.mil
  “Interest Areas”, “Data Management”

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Questions?