

Maritime Administration Information Technology Standards

Fiscal Year 2004 is going to be an exciting and busy year for the Maritime Administration (MARAD) Office of the Chief Information Officer (OCIO). Over the recent years we have focused on providing infrastructure networking and desktop services. This year our focus will shift to enterprise-wide areas. Two main areas are: 1) the consolidation of information technology (IT) infrastructure services to a fee-for-service by the Department of Transportation (DOT) OCIO, and 2) an integrated application and data environment to enable faster, better decision-making for MARAD's executive leaders and senior managers. To enable the consolidation and provide you the most effective operating environment, we must begin to implement standards for our IT systems. The first step in implementing these IT standards is for the MARAD OCIO to publish the current and target standards. Our current MARAD standards are provided in Attachment 1. The target standards for the DOT consolidated environment are provided in Attachment 2. As the year progresses, we will work with existing application owners to understand their unique requirements. For those of you who are currently developing systems, the MARAD OCIO is available to you and your application developer to answer questions and help you plan for the upcoming transition. Of course, we will need to make informed business decisions on whether to transition an application to the existing or target environment based on many factors, including your schedule and overall cost.

These standards and the MARAD OCIO relationship with application developers is similar to building codes and the relationship between a local government and a homebuilder. For instance, the MARAD OCIO does not need to "own" every application just like the government doesn't own every house. Business owners should be able to develop applications just like homebuilders should be able to build houses. The MARAD OCIO will provide certain restrictions for applications to enable the applications to work well together just like the government provides building code restrictions that enable neighbors to live together harmoniously. Similarly, the MARAD OCIO doesn't question your business need just like the government doesn't dictate a homeowner's need for a house, but if you work with the government, you may avoid buying gas appliances when your house is all electric. If you work with the MARAD OCIO, we will avoid situations where your application won't integrate with the enterprise architecture. Our applications and our data are corporate assets and need to be managed responsibly. The MARAD OCIO is here to advise MARAD leadership and application owners and provide the framework for managing and improving the many useful MARAD business applications.

During the next couple of months as the date is set for MARAD's transition to the new DOT consolidated environment, you will undoubtedly have many questions. Indeed the MARAD OCIO has many questions, some that can be answered at this time and some that cannot. We have compiled a list of questions with answers from DOT OCIO. These questions and answers can be found on the MARAD OCIO web site at <http://intramarad.dot.gov/cio/index.asp> under the **IT Focus** section. The MARAD OCIO will update these standards quarterly and will publish additional information regarding the DOT consolidation when it becomes available. You can obtain the latest information on the MARAD OCIO web site.

Should you have additional questions, please contact Louis Effa, MARAD Associate CIO for Information Resources Management, at x69727, or Donna Seymour, MARAD CIO, at x61941.

DOT Information Technology Services Information Sheet (current as of December 2003)

General Practices

- Secured, on-site hosting services for all server applications utilizing IP communications
- 24x7 Operations Support through the Enterprise Network Operations Center
- Service and problem tracking through Enterprise class tracking system
- Complete configuration control and change management process for all areas
- System administration/application support services for Microsoft Office XP operating environment
- Help Desk Operations

Facilities

- Secure card access system
- Raised floor for easy access to power connections and superior air flow
- Fully redundant air conditioning
- Uninterrupted power supply (UPS) providing fully conditioned electric power and capable of providing thirty minutes of battery power in the event of a power failure
- Smoke/particle detection system
- Monitored environmental sensors and controls

Desktop Services

Desktop Services provides a wide range of personal computer support, from a “seat management” environment to customized solutions, as well as an array of web site hosting and applications development alternatives. Current aspects of these services are:

- Central point of contact for software and hardware support
- Helpdesk support from 7am – 7pm. Option available for extended hours.
- Unlimited Access to PC Helps Knowledgebase
- Windows Active Directory domain
- Roaming Profiles
- 600 MB Home Directory
- 300 MB Group Drive
- Hardware refresh cycle provided every 2 – 3 years.
- Current refresh cycle includes a Mid-level PC with standard Microsoft Office Applications
- Current minimum hardware configuration:
 - PC with PIII 500 megahertz or higher
 - 128 megabytes (MB) of RAM or higher recommended
 - 20 gigabytes (GB) of hard disk space
 - CD-ROM
 - Floppy Drive

- PCI Sound card and speakers or headphones
- Current DOT/ITS standard software:
 - Windows XP Professional, SP1
 - Windows XP Office professional (Word, Outlook, Excel, Access, PowerPoint and FrontPage), SP1&2
 - Internet Explorer 6.0
 - WinZip 8.1
 - Adobe Acrobat 6.0
 - E-Trust 7.0
 - Macromedia Shockwave
 - QuickTime 6.0
 - Media Player 9.0
 - Surfer 1.1
 - Rumba / SNA
 - Direct X 9.0a
 - Media Player 9.0
 - MS Java Runtime
 - Real One Player
 - Cisco IPTV
 - Windows Messenger
- Support options include support for customer provided equipment & hardware
- Network Printers (7-10 member work group)
- Workstations “locked” for security and centralized management considerations

E-mail Services

- Microsoft Exchange
- E-mail storage – 100MB per user
- Web access to mail
- Wireless Access (Blackberry) Available
- Enterprise class Directory Service
- Mail virus protection inbound and outbound

Network Engineering

- High speed, redundant, secure routed connections to the IDN
- Remote VPN Access Support Available
- Remote Dial Support Available
- Certificate Service (VPN Users) Available
- Network Operations and Maintenance
 - Includes upkeep of all customer network documentation, including the connections, from the center of the network, to the end user connection point.
 - IP Addressing
- Add/Change network port
- Domain Name Service support

- Enterprise class network design and implementation
- Interconnections to modal administrations DR/COOP facilities

Server Support

- Automated server monitoring, including IDN connectivity, CPU, memory, disk space thresholds and web server availability
- Monitoring of all backup and recovery operations
- Network monitoring
- Database monitoring
- Problem determination and resolution
- Trouble ticket generation
- Notification of problems via E-mail
- Problem escalation to technical support staff
- Performance monitoring of computer resources
- Performance and utilization reporting
- Disaster recovery planning, testing and preparedness
- File and Print (clustered)
- SQL Server (clustered)
- Exchange Mail Servers
- Data backup and restore (90 day retention on servers)
 - Off-site backup retention available
- Authority to create and manage user accounts and directory permissions can be delegated to an authorized group of administrators at each agency
- Web servers
- Storage Area Network (SAN)

Telecommunications

- POTS (Plain Old Telephone Service)
- Operator Services
- Voice Over IP Service
- Federal Telephone Service (FTS)
- Dedicated Telecommunication Service (External High Speed Data Links)
- Private Branch Exchange (PBX) Hardware and Services
- Customized Voicemail Services
- Phone Directory Services, Conferencing, Teleconferencing
- Toll-free and Wide Area Telephone Services
- Wireless (cell phone and pager)
- Facsimile Services

Security

- Transportation Cyber Incident Response Center
- Vulnerability Scanning
- Monitoring of critical servers for disruption

- Intrusion Detection
- Security notification and correlation
- Certification and Accreditation of systems and networks
- Auto-updating Anti-virus software is mandatory on all servers and workstations
- Any server or workstation connected to the DOT network is subject for periodic security scans and monitoring.

Other Services

- UNIX/Windows Systems Administration Available
- DBA Support Available
- Optional application assistance on a 24x7 per call basis
- Disaster Recovery and COOP facilities as needed

MARAD Information Technology Services Information Sheet (current as of December 2003)

General Practices

- Secured, on-site hosting services for all server applications utilizing IP communications
- System administration/application support services for Microsoft Office operating environment
- Help Desk Operations

Facilities

- Secure lock access system
- Fully redundant air conditioning
- Uninterrupted power supply (UPS) providing fully conditioned electric power and capable of providing thirty minutes of battery power in the event of a power failure
- Monitored environmental sensors and controls

Desktop Services

Desktop Services provides a wide range of personal computer support including web site hosting and applications development alternatives. Current aspects of these services are:

- Central point of contact for software and hardware support.
- Helpdesk support from 7am – 5pm.
- Unlimited Access to PC Helps Knowledgebase
- 600 MB Home Directory
- 300 MB Group Drive
- Hardware refresh cycle provided every 3 – 4 years.
- Current refresh cycle includes a Mid-level PC with standard Microsoft Office Applications
- Current minimum hardware configuration:
 - Dell Optiplex PC with P4 1.8GHZ or higher
 - 17” Monitor
 - 128 megabytes (MB) of RAM or higher recommended
 - 40 gigabytes (GB) of hard disk space
 - CD-ROM / CDR-W / DVD
 - Floppy Drive
 - PCI Sound card and speakers or headphones
- Current MARAD/ITS standard software:
 - Windows NT 4.0
 - Windows 97 Office professional (Word, Outlook, Excel, Access, PowerPoint and FrontPage)
 - Internet Explorer 6.0
 - WinZip 8.1

- Adobe Acrobat 6.0
- FormFlow
- McAfee Virus Scan
- Macromedia Shockwave
- Surfer 1.1
- Direct X 9.0a
- Media Player 9.0
- MS Java Runtime
- Network Printers (3-5 member work group)
- Workstations “locked” for security and centralized management considerations

E-mail Services

- Microsoft Exchange
- E-mail storage – 25MB per user
- Web access to mail (coming soon)
- Wireless Access (Blackberry) Available
- Enterprise class Directory Service
- Mail virus protection inbound and outbound

Network Engineering

- High speed, secure routed connections to the IDN
- Remote VPN Access Support Available
- Remote Dial Support Available
- Certificate Service (VPN Users) Available
- Network Operations and Maintenance
 - Includes upkeep of all customer network documentation, including the connections, from the center of the network, to the end user connection point.
 - IP Addressing
- Add/Change network port
- Domain Name Service support thru OST
- Enterprise class network design and implementation
- Interconnections to modal administrations DR/COOP facilities (under development)

Server Support

- Automated server monitoring, including IDN connectivity, CPU, memory, disk space thresholds and web server availability
- Monitoring of all backup and recovery operations
- Network monitoring
- Database monitoring
- Problem determination and resolution
- Trouble ticket generation
- Problem escalation to technical support staff
- Performance monitoring of computer resources
- Performance and utilization reporting

- File and Print
- SQL Server
- Exchange Mail Servers
- Data backup and restore (90 day retention on servers)
 - Off-site backup retention available
- Authority to create and manage user accounts and directory permissions can be delegated to an authorized group of administrators at each agency
- Web servers

Telecommunications (All telecommunication services are provided thru OST)

- POTS (Plain Old Telephone Service)
- Operator Services
- Voice Over IP Service
- Federal Telephone Service (FTS)
- Dedicated Telecommunication Service (External High Speed Data Links)
- Private Branch Exchange (PBX) Hardware and Services
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Other Services

- DBA Support Available
- Disaster Recovery and COOP facilities as needed