Enterprise Applications: Electronic Messaging

**Definition(s):**
A robust electronic messaging system is comprised of intelligent e-mail (both "person to person" and "application to application") and task management, integrated with calendaring and group scheduling; contact management; web accessibility; flexible replication options for working off-line; and seamless integration with standard office software and a variety of wireless devices.

**Rationale:**
Electronic messaging is one of the most mission critical components of enterprise communication. It should be robust, secure, and capable of growing as the enterprise grows. To simplify and enhance communication and collaboration, and encourage the sharing of information, a strategic asset of the state, a single electronic messaging system shall be used throughout the state enterprise. To capitalize on economies of scale, server hardware, software, and tier-one technical support shall be centralized.

Essential functions and features to support these requirements include:
- single, central e-mail directory for all state employees; integration to Active Directory
- e-mail communication person-to-person and application-to-application
- single user and group calendaring and scheduling
- ability to share public folders
- ability to view a wide variety of foreign document attachments
- accessibility by various clients and browsers
- ability to replicate and work off-line
- horizontal and vertical scalability
- bi-directional connectivity to back-end systems
- ability to integrate PKI with digital signatures and per-message encryption
- clustering
- ability to support collaboration, unified messaging, instant messaging, and data conferencing.
- supports single sign-on with trusted domains
- ability to filter high risk attachments
- perimeter anti-virus and anti-SPAM protection
- interdepartmental anti-virus protection
- provides options for wireless access

**Approved Standards:**
- routing externally using SMTP (Simple Message Transfer Protocol)
- MAPI-enabled applications
- use of and integration with LDAP (Lightweight Directory Access Protocol)
- IMAP4 (Internet Message Access Protocol version) storage/retrieval of messages
- MIME (Multipurpose Internet Mail Extension) encoding of attachments
- HTTPS (HyperText Transport Protocol over SSL) support to allow secure, web-based access
to e-mail

- XML (eXtensible Markup Language) support

**Approved Products:**
Microsoft Exchange

**Guidelines/Technical Considerations:**
For a successful deployment/migration to an enterprise-wide messaging system, careful planning of the infrastructure must be performed.

Multiple items within the messaging infrastructure need to be reviewed to ensure consistency and integrity across the enterprise:

- Naming conventions and standards for: domains, certifiers (organization, organization units, etc), servers, network and port names, user names, group names, cluster names
- Directory structure
- ID file placement and access
- Mail quotas
- Backup / recovery procedures and retention
- Security, access control
- Mail routing
- Impact on custom applications that are tightly integrated with e-mail systems
- Mailbox cleanup policies
- Virus and SPAM protection

**Review Cycle:**
Every three years

**Timeline:**
Issued: February, 2002; Revised March, 2005.

**Transition:**
The transition period for each agency will be dictated by budget for and distribution of client software, the number and complexity of mailboxes to be converted, and the ability to provide end-user and technical training. When planning desktop software license acquisitions for operating system and office suite, agencies should take into consideration their transition timeline for e-mail. Once begun, transition within an agency should occur as quickly as possible in order to minimize the number of problems that may be created by the coexistence of competing products, on-going licensing fees, technical support costs, etc.
**Procurement:**
All Executive Branch agencies may purchase Microsoft software products via the State's Enterprise Agreement (EA) or Select Agreement. These agreements assure the most competitive pricing and provide purchasing statistics that the State can use to negotiate optimal software discounts in the future.

Numerous vendors are certified by Microsoft to provide EA and Select pricing, but only vendors who have also enrolled with the State can do so. When making a software purchase, OIT recommends that agencies contact these vendors to obtain price quotes, and compare prices before ordering.

For the latest information about enrolled vendors and the State’s Microsoft contracts, refer to the Office of State Purchasing web page under the heading “Volume Pricing Agreements”.

Date: ____________________

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