Information Technology Policy
Commonwealth of Pennsylvania
Governor's Office of Administration/Office for Information Technology

ITP Number:	**ITP-INT001**	
ITP Title:	**Message Oriented Middleware**	
Issued by:	**Deputy Secretary for Information Technology**	
Date Issued: September 7, 2006		**Date Revised: October 25, 2010**
Domain:	**Integration**	
Discipline:	**Messaging**	
Technology Area:	**Message Oriented Middleware**	
Revision History Date:	**Description:**	
10/25/2010	**ITP Refresh**	

Abstract:

The purpose of this Information Technology Policy (ITP) is to establish enterprise-wide standards and guidance for message-oriented middleware. Message-oriented middleware operates on the principles of message queuing and/or message passing and is a method for integrating and connecting systems across heterogeneous environments. Middleware enables users and developers to interconnect program logic and data between systems or processes using consistently defined interfaces.

Message-oriented middleware capabilities include:

- Asynchronous messaging for process-to-process and application interoperability
- Distributed transaction processing
- Reliable transfer of information between dissimilar networks and applications running on those network
- Guaranteed delivery of messages
- Uniform and orderly message delivery
- Secure messaging, including access control, payload encryption and privacy
- Automated business functions

This ITP provides guidance in two areas:

1. *STD-INT001A Message-Oriented Middleware Product Standards* provide guidance to agencies as they plan for new application development that require integration or to make significant investments in existing application integration.
2. *STD-INT001B Message-Oriented Middleware Integration Best Practice Guidelines specify* architectural guidance and developmental and operational best practices for applications requiring integration.

The main objectives of this policy are to:

- Provide a more uniform approach to application integration.
- Provide a common method of setting and achieving enterprise priorities.
- Reduce costs for application integration.
- Decrease time in production for application integration.
- Enhance and promote integration standardization.
- Enhance information sharing through connecting applications and systems.
- Improve enterprise IT security.
- Leverage existing IT investments and skills.

The following documents provide guidance to agencies on the current standards and the status of other products currently used or considered for use:

- STD-INT001A, *Message-Oriented Middleware Product Standards*
- BPD-INT001B, *Message-Oriented Middleware Integration Best Practice Guidelines*

The *Technology Life Cycle Classifications* document provides definitions for each of the life cycle classifications associated with the product standards named in the above standards.

General:

This ITP applies to all departments, boards, commissions and councils under the Governor's jurisdiction. Agencies not under the Governor's jurisdiction are encouraged to follow this policy to ensure they develop and implement applications that facilitate enterprise-wide interoperability and standardization.

Policy:

New projects requiring point-to-point messaging, based on the architectural guidance in the Integration Best Practice Guidelines, are required to use one of the current standard message-oriented middleware products defined in STD-INT001A *Message-Oriented Middleware Product Standard*.

Major revisions to existing applications requiring integration and not using the current standards will be reviewed as part of the IT Procurement Review Process to determine if the investment warrants a change in standards at that time. For applications using integration products classified as "Retire," a date for migration from this technology has been established. A definition for the classification of "Retire" can be found in *Technology Life-Cycle Classifications.*

IT projects related to application integration will be subject to review prior to inception for compliance with this standard through a review by Communities of Practice and/or the Procurement Review Processes.

Best Practices Guidelines:

Best practices apply to all current standard products and are to be used for all middleware efforts. BPD-INT001B, *Integration Best Practice Guidelines*

Refresh Schedule:

All standards identified in this ITP are subject to periodic review and possible revision, or upon request by the Enterprise Architecture Standards Committee (EASC).

Exemption from This Policy:

In the event an agency chooses to seek an exemption, for reasons such as the need to comply with requirements for a federally mandated system, a request for waiver may be submitted via the Commonwealth of PA Procurement and Architectural Review (COPPAR) process. Requests are to be entered into the COPPAR Tool located at http://coppar.oa.pa.gov/. Agency CIO approval is required. Contact your agency CoP Planner for further details or assistance.

Questions:

Questions regarding this policy are to be directed to RA-ITCentral@pa.gov.

Policy Supplements:

STD-INT001A - Message-Oriented Middleware Product Standards
BPD-INT001B - Message-Oriented Middleware Best Practices

References:

Technology Life Cycle Classifications