

## Instructions for Services Matrix

<b>Description</b>	The Services Matrix documents the services that are currently offered within the MIT Enterprise Architecture and MIT IT community.
<b>Version</b>	0.1
<b>Types of Service</b>	
<b>Remote Service</b>	A service is a piece of software functionality that is executing somewhere separate from your program that you can invoke in a defined manner.
<b>Embeddable Service</b>	SDKs & Libraries are reusable components that can be embedded into an application, but there is no central infrastructure for them.
<b>Business/Operational Service</b>	A Business/Operation Service involves interaction with a person or staff member.
<b>End user Service</b>	Services to end users and not applications are those which are used for functionality but have no programmatic access.
<b>Worksheet Definitions</b>	
<b>Systematic Services</b>	The catalog of services that are for use by applications, and are relevant to a services oriented enterprise architecture
<b>Non-Systematic Services</b>	The catalog of services that are for use by people and impact the enterprise architecture only peripherally
<b>Column Definitions</b>	
<b>Service</b>	The short name or description of the service.
<b>Definition</b>	A longer definition of what the service is.
<b>Currently Used By</b>	A representative sample of systems which currently make use of the service.
<b>Current Service Type</b>	Whether the service is currently a Remote Service, an Embeddable Service, a Business/Operational Service or an End User Service
<b>Current Implementation</b>	A description of the current implementation of the service, usually including the systems which implements it.
<b>Future Service Type</b>	Whether, in future, the service should be a Remote Service, an Embeddable Service, a Business/Operational Service or an End User Service
<b>Future Form</b>	A description of how the service should be implemented in the future.
<b>Areas for Investment</b>	Areas in a current service, or anticipated future service that require investment in order to realize.
<b>Contact</b>	The name of the person who should be contacted for more information about the service, for example if you wished to use it from a new application.
<b>Notes</b>	Any further notes about the service or follow up items.

Services Matrix - Systematic Services

Service	Definition	Currently Used by	Current Service Type	Current Implementation	Future Service Type	Future Form	Areas For Investment	Contact	Notes
<b>Infrastructure</b>									
<b>Security</b>									
<b>Authentication</b>									
<b>Authenticate a User</b>	Allow an application to authenticate the user (i.e. assert that they own the identity supplied).	Barton, SAP, COEUS, MITSIS etc.	Remote Service	MIT Kerberos	Remote Service	MIT Kerberos	<ul style="list-style-type: none"> <li>Version 4 needs to be eliminated.</li> <li>Keep up with ITEF Protocol.</li> </ul>	Jeff Schiller	
<b>Authenticate a User</b>	Allow an application to authenticate the user (i.e. assert that they own the identity supplied).	COEUS, Stellar, Dspace, Barton, Ecat etc.	Remote Service	X509 Certificate	Remote Service	X509 Certificate		Jeff Schiller	
<b>Password Reset</b>	Allow a user to reset their password when locked out and attempting to access an application.		Business / Operational Service	User must present ID in person at Accounts Department in N42.	Remote Service	Unknown	Get statistics on man hours/money needed.		
<b>Authorization</b>									
<b>Roles (direct access)</b>	The Roles Database provides a consistent way to store and maintain access rules for other applications. Applications with an interface to the Roles Database interpret the access rules from the Roles Database and enforce them.	SAP, Data warehouse	Remote Service	Roles Database	Remote Service	Roles Database	Need a service interface that is higher level than the current SQL based access.	Jim Repa	<i>To Do: Break this line item up in to the actual services provided by Roles</i>
<b>Identity</b>									
<b>Create MIT IDs</b>	The MIT ID is a 9 digit number used to uniquely identify any member of the MIT community. An MIT ID can be created through the MIT ID Database web client.		MIT ID - Remote service			MIT ID - Remote service	Need to link or consolidate IDs, when someone is a student + alum + employee		
<b>Retrieve MIT IDs</b>	The MIT ID can also be retrieved through the MIT ID Database web client by supplying a person's first and last name.	Medical	MIT ID - Remote Service			MIT ID - Remote service			
<b>Network</b>									
<b>DHCP</b>	The DHCP (Dynamic Host Configuration Protocol) Service lets a user connect his/her computer to MITnet from a variety of sites on campus without reconfiguring his/her computer's network settings each time the computer is moved to a new location.		Remote service						
<b>DNS</b>	The Internet Domain Name Service (DNS) can translate host names into equivalent IP addresses and vice versa, as needed by various Internet programs.		Remote service						
<b>Host ID Management</b>			Remote service						
<b>Messaging &amp; Communication</b>									
<b>SMTP(S) Servers - Email Transmission</b>	Outgoing mail servers are referred to as SMTP servers. The outgoing mail server at MIT is named outgoing.mit.edu.		Remote service						

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<b>IMAP/POP3 Servers</b>	IMAP (Internet Message Access Protocol) is a standard set of rules for storing, accessing and working with e-mail on a post office server. One of the main advantages of IMAP is that it makes your e-mail easily accessible from multiple locations and computers. POP (Post Office Protocol) is a set of rules for storing and accessing your e-mail on a central server. When you access messages, they are downloaded to your local computer (or Athena home directory) and deleted from the server.		Remote service						
<b>List Management (Mailman, Moira)</b>	Mailman, Moira and Listserv are used to manage mailing lists at MIT.		Remote service						
<b>MIT EDI Gateway</b>	EDI is the electronic transfer of information between two trading partners' systems using a set of transactions that have been adopted as a national or international standard for the particular business function.		Remote service						
<b>Data</b>									
<i>List Management</i>									
<b>Moira (direct access)</b>	Moira is Project Athena's Service Management System. It controls the configuration of resources, including user accounts, remote file systems, printers, mailing lists, access control groups, and many other things.		Remote Service	Moira	Remote Service	Moira	List management needs to be integrated with Roles		<i>To Do: Break this line item up in to the actual services provided by Roles</i>
<i>Content Management</i>									
<i>Directory</i>									
<i>Repository Services</i>									
<b>AFS - Remote File Service</b>	AFS, the Andrew File system, is currently used by Athena as the file system for all user home directories and most of the other lockers. AFS is a distributed file system.		Remote service						
<b>Information feeds from the Data Warehouse</b>			Business/Operation service SQL - Remote service				XML Web Service for data retrieved		
<b>Development Tools</b>									
<i>Change management</i>									
<b>Operations</b>									
<i>System Management</i>									
<b>Web Counter</b>	The web counter service allows data gathering of the number of hits made to any web application.		Remote service				Question? Can this be used for sites outside Athena? Where can it be used?		
<b>Admin</b>									
<i>eCommerce</i>									

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<b>Clear Commerce Credit Card Processing</b>	Clear Commerce is an enterprise software that sends transaction information to MIT's bank for verifying and processing payments on customers' credit cards.		Remote service						
<b>Shopping Basket</b>			Embeddable service						
<b>Academic</b>									
<i>Learning management</i>									
<i>Educational Application</i>									
<b>Other</b>									

**Services Matrix - Non-Systematic Services**

Service	Definition	Currently Used by	Current Service Type	Current Implementation	Future Service Type	Future Form	Areas For Investment	Contact
<b>Infrastructure</b>								
<b>Security</b>								
<b>Authentication</b>								
<b>Acquiring a Server Certificate</b>	Allow a system to use a certificate to identify and authenticate itself to a user.		Business / Operational Service	X509 Certificate	Business / Operational Service	X509 Certificate		Jeff Schiller
<b>Password Reset</b>	Allow a user to reset their password when locked out and attempting to access an application.		Business / Operational Service	User must present ID in person at Accounts Department in N42.	Remote Service	Remote service	Get statistics on man hours/money needed.	
<b>End user certificate management</b>		Stellar	End user service					
<b>Authorization</b>								
<b>Encryption</b>								
<b>Identity</b>								
<b>Network</b>								
<b>Messaging &amp; Communication</b>								
<b>Web Casts</b>	Events at MIT can be cast via the Web by using a fee-based service offered by AMPS.		Business/Operation service					
<b>Data</b>								
<b>Reporting Service</b>								
<b>Reporting through the Data Warehouse</b>	Reporting is done in the Data Warehouse through Brio or web reports. In addition, some departments have built their own custom applications to access the Data Warehouse for reporting purposes.		End user service					
<b>Content Management</b>								
<b>Research content archival</b>			Business/Operation service					
<b>Directory</b>								
<b>MIT Online Directory</b>	The MIT Online Directory allows a user to search for and view information about people in the MIT Community.		End user service					
<b>Repository Services</b>								
<b>Information feeds to the Data Warehouse</b>	The Data Warehouse is a storage for any data in the Institute which needs to be accessed by multiple systems. The Data Warehouse is updated daily by systems of records. Other systems can then extract this information from the Data Warehouse as appropriate.		Business/Operation service					
<b>Information feeds from the Data Warehouse</b>			Business/Operation service SQL - Remote service				XML Web Service for data retrieved	

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Service	Definition	Currently Used by	Current Service Type	Current Implementation	Future Service Type	Future Form	Areas For Investment	Contact
<b>GIS</b>	GIS (Geographic Information Systems) are computer tools for managing data about where features are (geographic coordinate data) and what they are like (attribute data), and for providing the ability to query, manipulate, and analyze those data.		End user service			Web Service/Remote Service		
<b>Development Tools</b>								
<i>Change management</i>								
<b>Operations</b>								
<i>System Management</i>								
<b>Co-Location Services</b>	Co-Location Services allow MIT applications and servers to be located in a separate location to allow for backup and recovery in case of any failure.		Business/Operation service					
<b>Server Monitoring</b>	Server Monitoring is a service provided by IS&T to monitor servers for various applications in W91.		Business/Operation service					
<b>Consulting Services</b>	IS&T offers various consulting services to the MIT Community.		Business/Operation service					
<b>Sub Domain Management</b>			Business/Operation service					
<b>Backup and Restore</b>			End user service					
<b>Issue Tracker</b>			End user service					
<b>Admin</b>								
<i>eCommerce</i>								
<b>Academic</b>								
<i>Learning management</i>								
<b>Educational Application</b>								
<b>Matlab</b>	Matlab is a technical computing environment for high-performance numeric computation and visualization, produced by The MathWorks Inc. It includes a number of subject specific toolboxes as well as a dynamic system simulation package, Simulink.		End user service					
<b>Calendaring</b>	A Calendaring service allows a user his/her schedule, or agenda in Calendar parlance, and also coordinate easily with the schedules of other users of the same Calendaring service.		End user service			Remote service		
<b>Events.mit.edu</b>	This web site displays the events at MIT for the current day. It also allows the user to view upcoming events in various categories.		End user service					

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<b>Campus Map</b>	The campus map pinpoints where you are, and where you're going. The campus map uses geographic information systems (GIS) data from the official maps maintained by the Department of Facilities, resulting in a more accurate mapping system. Using XML, the map is also integrated with the lists of departments, labs, and centers on the MIT top-level pages.		End user service					
<b>Other</b>								
<b>Video Production</b>	Video production is a fee-based service offered by AMPS to the MIT Community.		Business/Operation service					
<b>Survey Service</b>			Business/Operation service					