9. SOA technologies

- 9.1 Are you using an integrated commercial SOA suite?
- 9.2 Indicate whether this is a) exploration b) a pilot or, c) an enterprise implementation
- 9.3 Are you using one or more of the following service bus applications?
- 9.4 Indicate whether this is a) exploration b) a pilot or, c) an enterprise implementation
- 9.5 Which enterprise services are connected via a bus?
- 9.6, 9.7 Which of the following technology standards do you use?
- 9.6 How would you describe the logical topology of your SOA?
- 9.9 Has the introduction of SOA related technologies altered your enterprise technology road-map?

9.1 Are you using an integrated commercial SOA suite?

	Oracle SOA suite	IBM websphere	Microsoft Biztalk	JBoss Enterprise SOA Suite	SAP Netweaver	TIBCO ActiveMatrix	Other
UBC							
Michigan							
Cornell	✅						
Georgetown							
Ohio State							
UMUC							
UofT		✅					
MIT					✅		
Washington			✅				
UW-Madison							
UC-Irvine	✅			✅			
Colorado	✅						
Indiana							

9.2 Indicate whether this is a) exploration b) a pilot or, c) an enterprise implementation

UofT
Using part of the Websphere suite: Message Broker. Implementing a small (100-150msg/sec) enterprise implementation. We'll scale it up as business demands increase.

MIT

We might be using a bit of SAP in places but we're not using any suite for everything or as a strategy

Washington

Only local implementations (not enterprise)

UC-Irvine
JBoss SOA suite: Production
Oracle SOA suite:Development

Colorado
Pilot is implemented, primarily focusing on the Oracle Service Bus component. Goal for the next year is to have an Enterprise class implementation

9.3 Are you using one or more of the following service bus applications?

	Mulesoft	WSO2 ESB	Fuse (built on ServiceMix)	Apache ServiceMix	JBoss ESB	KSB (Kuali Service Bus)	Other Messaging
UBC							JBoss HornetQ
Michigan		ℹ️ *					
Cornell						✅	
Georgetown						✅ (1)	
Ohio State		ℹ️ *					
UMUC		✅ (ESB)					
UofT						✅	WMB (formally MQ Integrator and MQ Series)
MIT							
Washington						✅	

UW-Madison		✓ ESB	✓					Cape Clear
UC-Irvine			✓		✓	✓	✓	
Colorado								
Indiana							✓	

* Investigating: lead contender

(1) but KSB is not part of the roadmap*

9.4 Indicate whether this is a) exploration b) a pilot or, c) an enterprise implementation

Ohio State
Exploring Enterprise Service Buses, Service Registries, etc. (WSO2, Mule, Fuse, JBoss)

We have KSB but it is not our target.

UMUC
Implementing for production

UofT
Implementing a small (100-150msg/sec) enterprise implementation. We'll scale it up as business demands increase.

Washington
KSB usage is local
Exploring Oracle Service Bus

UM-W
Cape Clear is in retirement
Oracle, Fuse and WSO2 will soon be set up as part of our integration testbed

UC-Irvine

1. Apache: production
2. JBoss: production
3. Fuse: proof of concept
4. KSB: In development

   Indiana
   We have an enterprise implementation of Kuali Rice + KSB.

9.5 Which enterprise services are connected via a bus?

- UBC: SIS & Learning Tools provisioning engine, ePayment
- Cornell:Kuali Rice, Kuali Financials, standalone custom Rice-based applications
- Ohio State: none at present
- UMUC: We are exposing and aggregating delivered services in PeopleSoft Campus Solutions for Student Accounts to our CRM platform. We are also working to connect real time IMS LIS to the bus.
- UofT: Student Contact Information is about to go into production.
- Washington: KSB: Kuali CDM and myPlan and KIM
- UW-Madison Certain Person Services, Curricular data services
- UC-Irvine: Apache SOA without the service bus has been in production for two years handling Timesheet and Facilities Work Order management processes.
  We are bringing up the service bus now primarily for data warehousing.
- Colorado:Basic student profile information, user provisioning and update flows
- Indiana: Workflow, Identity Management, Calendar, Portal, Notification, Student Services, Research Administration, Enterprise Calendar, HR system, Leave Management, Travel System, Purchasing, etc.

9.6, 9.7 Which of the following technology standards do you use?

	JAX-WS, JAX-B	WS-Transaction	BPEL	SAML	WS-Security	WS-Trust	WS-Policy	Other
UBC	JAX-WS, JAX-B			SAML				
Michigan					WS-Security			
Cornell	JAX-WS, JAX-B							
Georgetown				SAML				
Ohio State	JAX-WS, JAX-B	WS-Transaction		SAML	WS-Security			
UMUC				SAML	WS-Security			
UofT	JAX-WS, JAX-B			SAML	WS-Security			
MIT	JAX-WS,JAX-B			SAML				
Washington	JAX-WS, JAX-B			SAML				
UW-Madison	JAX-WS, JAX-B		BPEL	SAML	WS-Security			
UC-Irvine	JAX-WS, JAX-B		BPEL	SAML	WS-Security		WS_Policy	

Colorado	JAX-WS, JAX-B							
Indiana	JAX-WS, JAX-B, JAX-RS			SAML	WS-SECURITY			oath

9.6 How would you describe the logical topology of your SOA?

	Bus	Hub-and-spoke	Point-to-point	Federated	Other
UBC	Y		Y		
Michigan			Y		
Cornell			Y		
Georgetown			Y		
UMUC	Y	Y	Y	Y	
UofT		Y			
MIT			Y		
Washington	Y				
UW-Madison	Y				
UC-Irvine					A mixture of topologies
Colorado					A mixture of topologies
Indiana					A mixture of topologies

9.9 Has the introduction of SOA related technologies altered your enterprise technology road-map?

UMUC Yes - the ability to integrate via SOA/web services is a key determinant we evaluate new products on.

UofT
Yes. SOA is being talked about as a "game-changer". The business people quickly recognize the benefits of SOA, while the IT people seem to warm to it much more slowly, possibly because they see more implementation challenges than do the business folk.

MIT
Yes, but project priorities have delayed any progress in this direction

Washington
We don't have a clearly articulated technology roadmap
Pub-sub may have a greater impact than web services

UW-Madison
Not much yet. I imagine we'll see a lot or planning in the coming eighteen months.

UC-Irvine
SOA has changed the roadmap, primarily because people started thinking about real time.