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SWIM Service Registry Taxonomy Status

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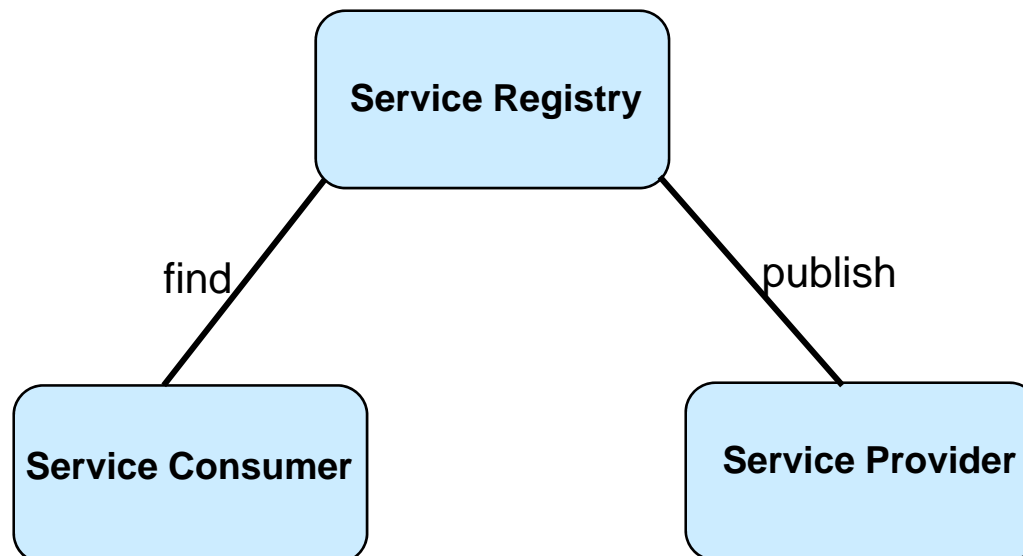
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Overview

- **Background**
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Background

- **The FAA SWIM is being developed to provide a service-oriented architecture (SOA) for the NAS**
 - enables systems integration in order to share information and provide enhanced services
- **SWIM Service Registry is a key among SWIM infrastructure elements**
 - Allows Service providers create, store, and manage service information
 - Provides a common vehicle for discovery of NAS services



Background (cont'd)

- **Taxonomy Definition**
 - A system or controlled list of values by which to categorize or classify objects
 - In service registry context, taxonomies are the classification lists or systems used for the published services
- **Registry Taxonomy categorizes assets in the registry so that a consumer can search for assets**
 - Also provides a means of associating metadata attributes to the asset
- **Main Industry Standards**
 - UDDI (Universal Description, Discovery, and Integration)
 - ebXML (Electronic Business using eXtensible Markup Language)

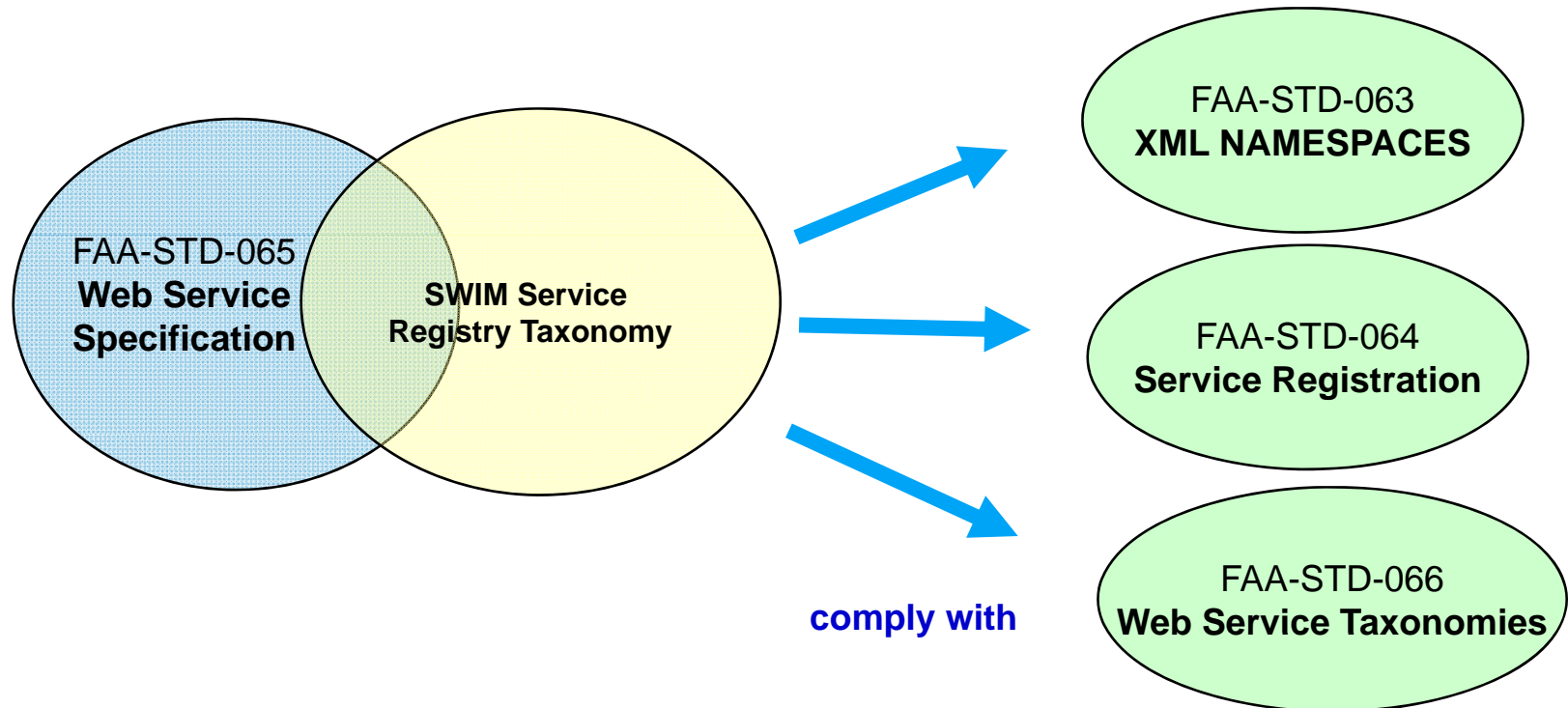
Scope of Work

- The SWIM Service Registry Taxonomy is a work-in-progress document specifically addresses data schemas and categorizations to be specified in the SWIM Service Registry.
- The current version is tailored specifically for SWIM Segment 1 services
- New taxonomies may be added in as SWIM registry implementation progresses

Document History

- **An on-going effort supported by the FAA SWIM Requirements and Governance (Jim Robb)**
- **Initially framed by AgilePath**
- **Currently managed by Boeing SWIM System Engineering team**
 - **In coordination with the SWIM implementation team**
 - FAA Tech Center and Flatiron
 - Implementing the SWIM Service Registry

Related FAA Standards



Current Listings

SWIM Service Registry Taxonomy V1.3.1	
Service Provider	
	Name
	LineofBusiness
	Description
Point of Contact	
	POCType1
	Name1
	Phone1
	Email1
	Address1
	POCType2
	Name2
	Phone2
	Email2
	Address2
Service Information	
General Information	
	ServiceCategory
	ServiceName
	ServiceDescription
	ServiceVersion
	VersionDate
	ReleaseDate
	RetirementDate
	ServiceOperationalStage
	ServiceCriticality
Service Security Profile	
	Visibility
	UserAuthenticationRequired
	MessageAuthenticationRequired
	AuthorizationRequired
	DataAuthorizationRequired
Implementation Reference	
	ServiceDevelopmentLifecyclePhase
Service Interface	
Operations	
	MessageExchangePattern
	ResponseMechanism

SWIM Service Registry Taxonomy V1.3.1	
Service Implementation	
EndPoint	
	BindingProtocolType
	VirtualServiceEndPoint
Service Level Agreement	
	ServiceResponseTime
	AvgServiceResponseTime
	Availability
	Capacity
	Idempotent
	SLARequired
	ServiceLevelAgreement
Support For Governance	
	ServiceDependencyRelation
	FunctionalFocus
	ProjectedReuse
Service Consumer Information	
	ConsumerName
	ConsumerPhone
	ConsumerEmail
Additional Information	
	FaultResponseMechanism
	FaultBehaviorDocumentation
	FaultTaxonomy

An Example

- **Taxonomy: ServiceOperationalStage**

- Mandatory, Single-select Checked String
- *ServiceOperationalStage* indicates where a service or application interface is in its lifecycle. Valid values are:
 - Proposed (1)

A line of business has developed a concept for a new service for investment consideration and system engineering and architecture analysis are underway to determine the need for the proposed service
 - Development (2)

A need for a new service has been validated and funding authorized for support of the software development lifecycle up through integration and/or operational testing or other activities required prior to authorization for operational use
 - Operational(3)

A service is providing measurable benefit to its user community and being supported by the expenditure of O&M funds
 - Deprecated (4)

An operational service that has been identified for retirement on a specific date or milestone
 - Retired (5)

The service is no longer in operation

Taxonomy Characteristics in UDDI Context

- **ServiceOperationalStage Example**

v3 UDDI Key	uddi:swim-faa-gov:taxonomy:ServiceInformation:ServiceOperationalStage
Categorization	Categorization
Compatibility	ServiceInformation
Checked	<input checked="" type="checkbox"/> Yes
Default Values	“Operational”
Multi/Single Select	Single-select
Valid Values	Refer to the taxonomy for a list of valid values
Mandatory	◆ Yes
Search attribute	searchable
Accessibility	All (AG+SA+SP+SC)
Lifecycle Stage	Proposed/Development Stage

What's Next

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- **SIR Distribution Feed Back**
- **SWIM Service Registry Implementation Progress**

Questions?

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