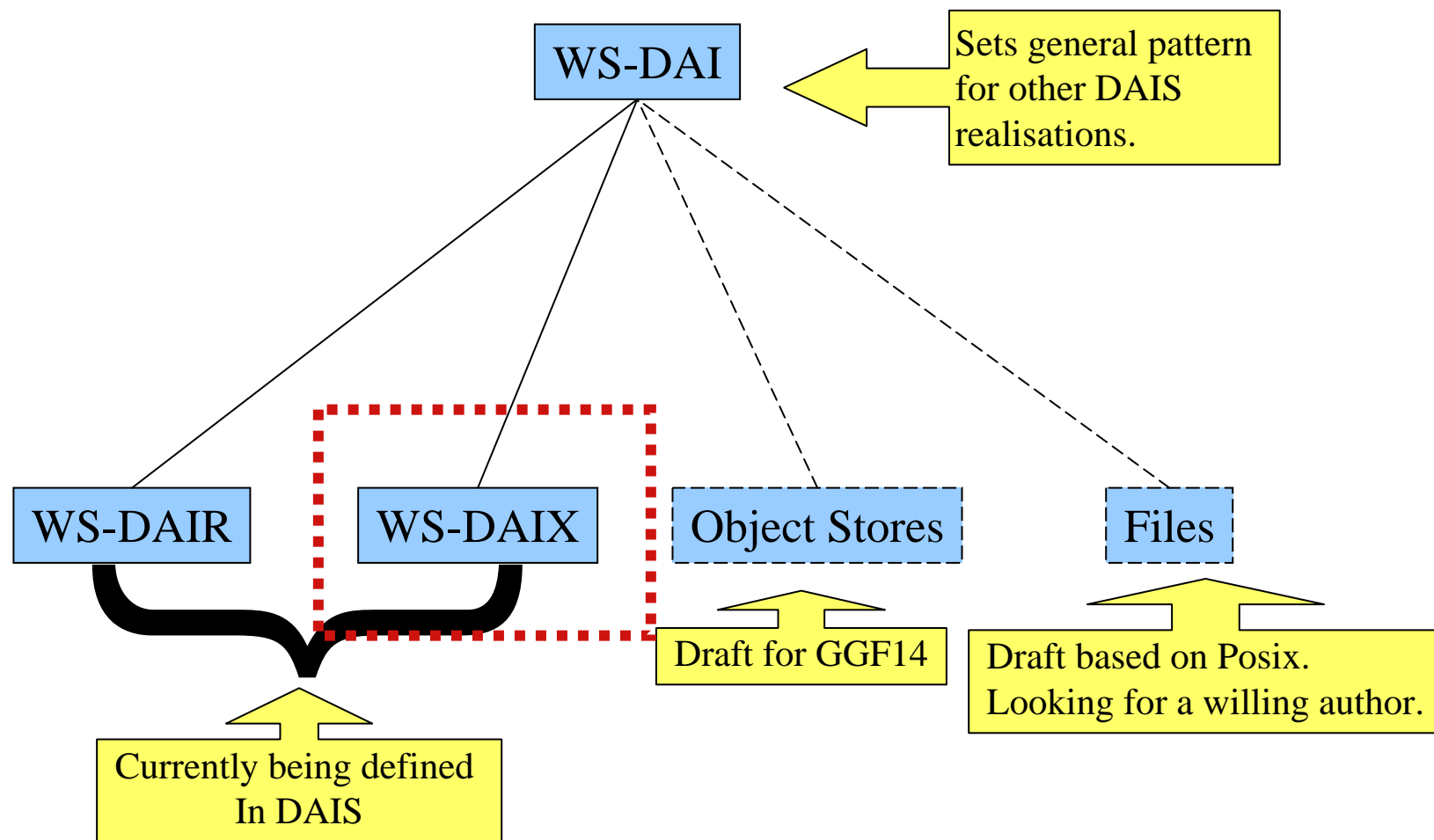# WS-DAIX
XML Realization

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- Background

- Related Standard

- Changes from GGF12

- Outstanding Issues

- Future Plans

WS-DAI Specifications

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WS-DAI

Sets general pattern for other DAIS realisations.

WS-DAIR

WS-DAIX

Object Stores

Files

Currently being defined In DAIS

Draft for GGF14

Draft based on Posix. Looking for a willing author.

WS-DAI XML Operations
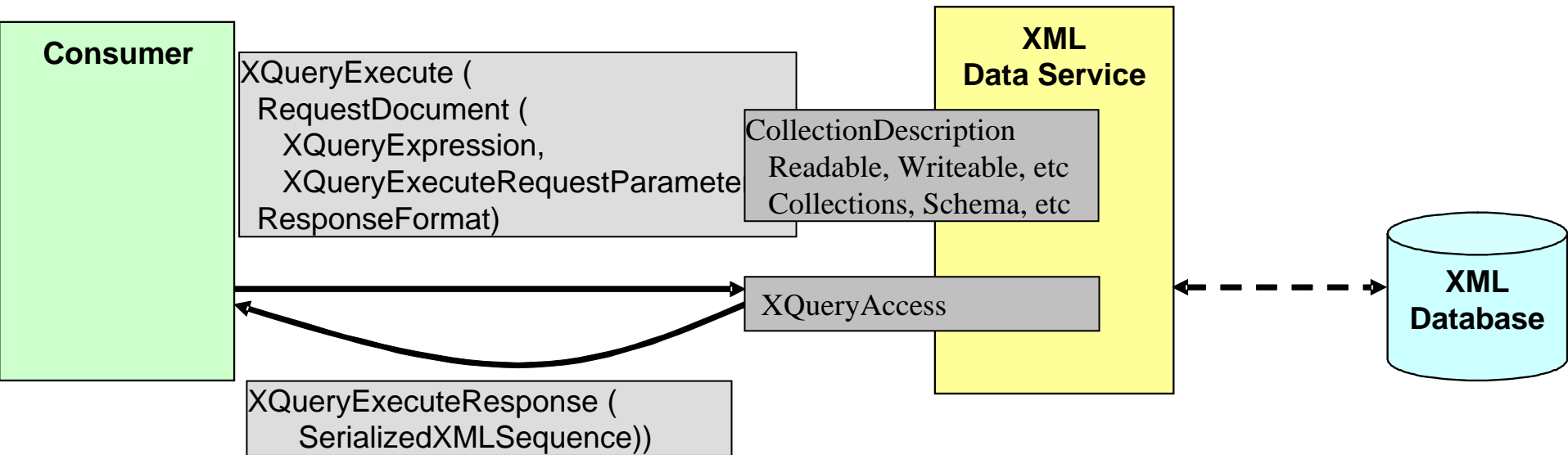
- **XMLCollection**
    - AddDocuments
    - RemoveDocuments
    - CreateSubCollection
    - RemoveSubCollection
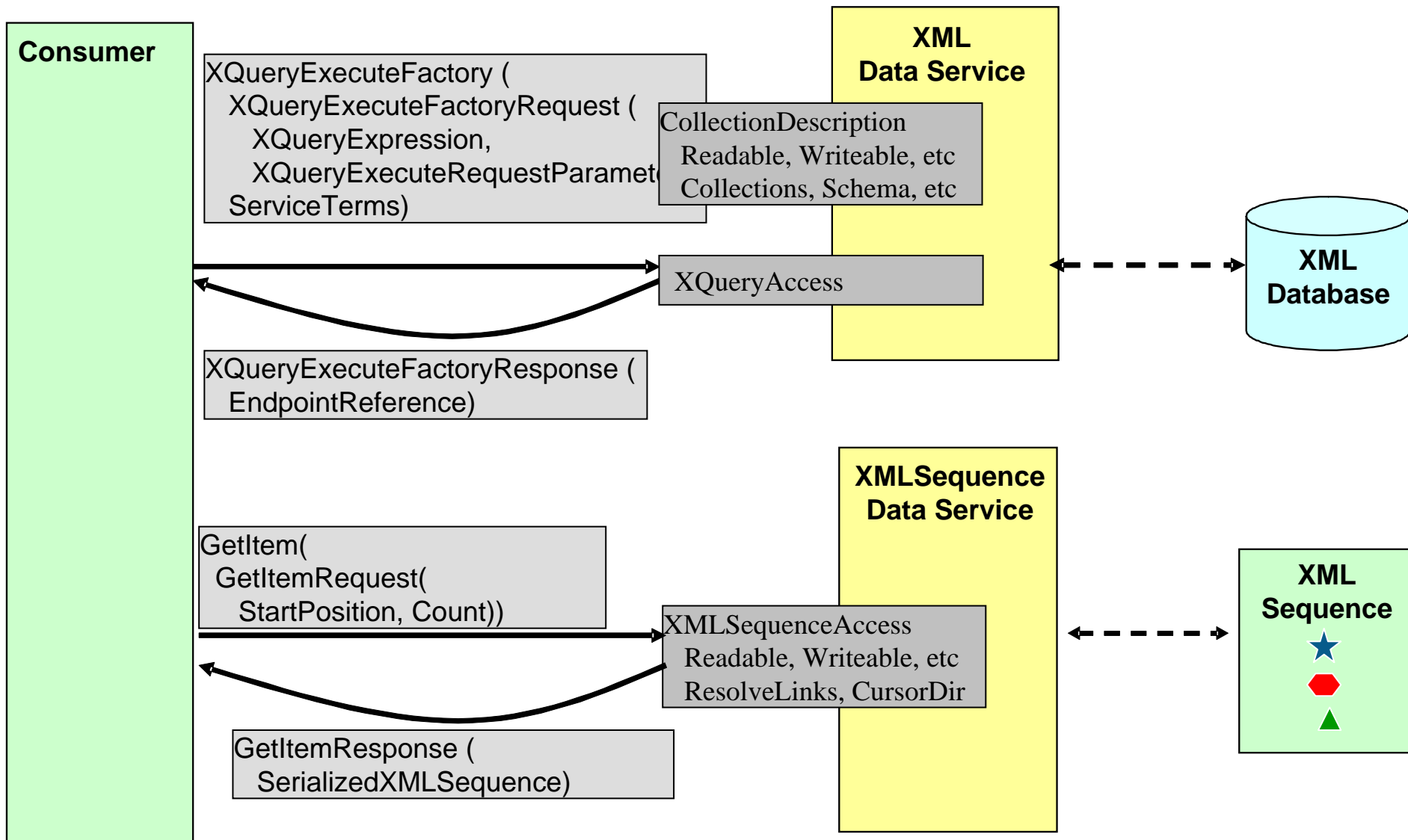   - BulkLoad
    - *AddSchema*
    - *RemoveSchema*

    - XMLCollectionSelectionFactory
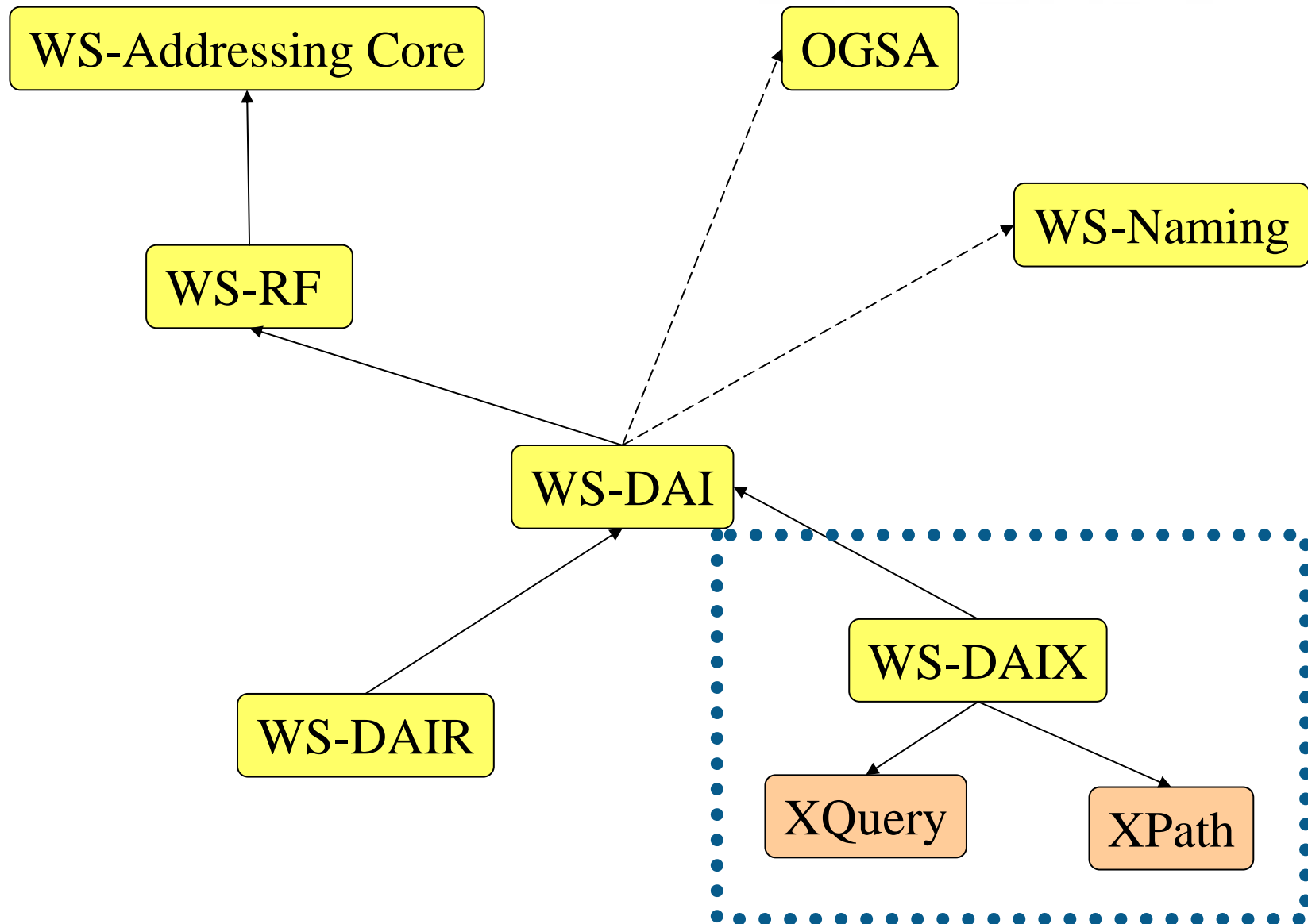   - XMLDocumentSelectionFactory

WS-DAI XML Operations (cont)

- **XQuery**
  - XQueryExecute
  - XQueryExecuteFactory

- **XPath**
  - XPathQuery
  - XPathQueryFactory

- **XMLSequence**
  - XMLSequenceAccess

- *XUpdate*
  - *XUpdate*

Properties

- ## XMLCollection
  - Collections
  - Documents
  - NumberOfDocuments
  - Schemas

- ## XMLDocument
  - Schema
  - DocumentName
  - Size

- ## XPathAccess
  - XPathVersion
  - RequestSchema

- ## XQueryAccess
  - XQueryVersion
  - RequestSchema
  - XMLSerializationMethod
  - XMLSerializationProperties

- ## XMLSequenceAccess
  - ResolveLinks
  - NumberOfItems
  - XMLSerializationMethod
  - XMLSerializationProperties

Additional properties are defined in WS-DAI

Consumer

XQueryExecute (
  RequestDocument (
    XQueryExpression,
    XQueryExecuteRequestParameter
  ResponseFormat)

**XML
Data Service**

CollectionDescription
  Readable, Writeable, etc
  Collections, Schema, etc

XQueryAccess

**XML
Database**

XQueryExecuteResponse (
  SerializedXMLSequence))

Consumer

XML Data Service

XQueryExecuteFactory (
  XQueryExecuteFactoryRequest (
    XQueryExpression,
    XQueryExecuteRequestParamet...
ServiceTerms)

CollectionDescription
Readable, Writeable, etc
Collections, Schema, etc

XQueryAccess

XML Database

XQueryExecuteFactoryResponse (
  EndpointReference)

XMLSequence Data Service

GetItem(
  GetItemRequest(
    StartPosition, Count))

XMLSequenceAccess
  Readable, Writeable, etc
  ResolveLinks, CursorDir

XML Sequence
★
⬡
▲

GetItemResponse (
  SerializedXMLSequence)

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WS-Addressing Core

OGSA

WS-Naming

WS-RF

WS-DAI

WS-DAIR

WS-DAIX

XQuery

XPath

Related Specifications

- ## XQuery 1.0
  - Working drafts from 11 February 2005
  - <u>XQuery Update Facility Requirements</u>: First draft released on 11 February 2005

- ## XPath 2.0
  - Working draft released on 11 February 2005

- ## XQJ (JSR 225): XQuery API for Java
  - Early draft being reviewed by JCP (deadline: 9 July 2004)

Changes from GGF12

- Refactoring of document structure

- Fixed typos and tightened up the language

- More diagrams!

- Clarifications

Outstanding Issues

- Create WSDL

- XMLCollectionAccess::AddSchema
  - Storing schemas with a collection of documents

What's Next

- Prepare the specification for the final draft stage for GGF14
  - Process the grid forge issues
  - Adopt a solution that helps with WSRF and WSI compatibility
  - Create WSDL
  - Modify the specifications
  - Review the specifications
- Please do join in the DAIS activity
  - DAIS mailing list
  - DAIS phone calls
- Implementations