

# WS-Data Access and Integration The XML Realization (WS-DAIX)

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GGF11 – 7 June 2004

# Outline

- Changes from GGF10
- Status of related specifications
- Issues

# Changes from GGF10

- New **XMLSequenceAccess** interface
  - Represents XML results
  - Provides access to a sequence of items
    - Nodes or Atomic Types
    - Defined in XPath 2.0 and XQuery 1.0 data model
- Moved XMLCollectionManagement operations back into XMLCollectionAccess
- Consistency with other specifications

# Changes from GGF10 - Operations

## GGF10

- **XMLCollectionAccess**
  - addDocuments
  - removeDocuments
- **XMLCollectionManagement**
  - createSubcollection
  - removeSubcollection
  - addSchemas
  - removeSchemas
  - bulkLoad
- **XMLCollectionFactory**
  - createService

## GGF11

- **XMLCollectionAccess**
  - AddDocuments
  - RemoveDocuments
  - CreateSubCollection
  - RemoveSubCollection
  - AddSchemas
  - RemoveSchemas
  - BulkLoad
- **XMLCollectionFactory**
  - SelectCollectionFactory
  - SelectDocumentFactory

# Changes from GGF10 - Operations

## GGF10

- **XQueryAccess**
  - XQueryExecute
- **XQueryFactory**
  - createService
- **XPathAccess**
  - xPathQuery
- **XPathFactory**
  - createService
- **XUpdateAccess**
  - xUpdate

## GGF11

- **XQuery**
  - XQueryExecute
  - XQueryExecuteFactory
- **XPath**
  - XPathQuery
  - XPathQueryFactory
- **XUpdate**
  - XUpdate

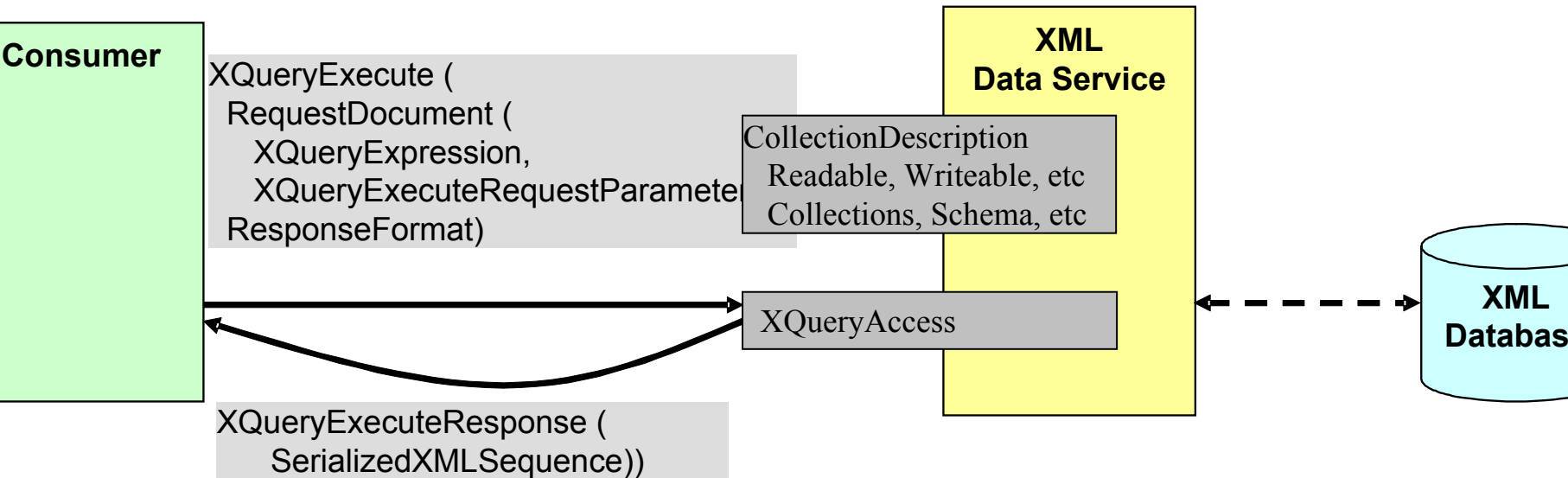
# XMLSequenceAccess

- Operations:
  - GetItems(StartPosition, Count)
- Properties:
  - ResolveLinks
    - Resolve Links within the document
  - CursorDirection
    - ForwardOnly, ForwardAndReverse, ...
  - XMLSerializationMethod
    - XML, HTML, Text, implementation defined
  - XMLSerializationProperties

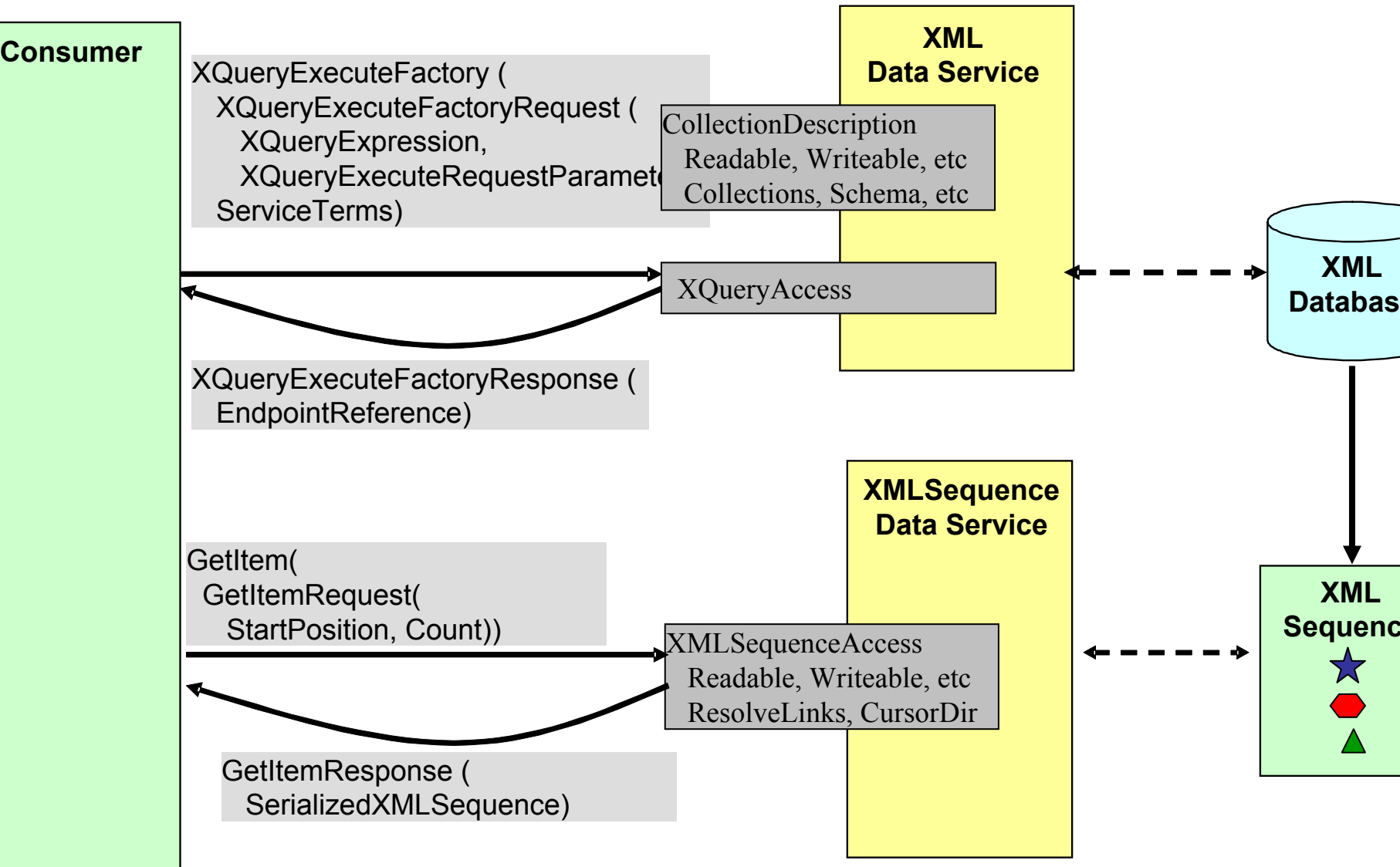
# Properties

- XMLCollection
  - Collections
  - Documents
  - NumberOfDocuments
  - Schemas
- XMLDocument
  - Schema
  - DocumentName
  - Size
- XPathAccess
  - XPathVersion
  - RequestSchema
- XQueryAccess
  - XQueryVersion
  - RequestSchema
  - XMLSerializationMethod
  - XMLSerializationProperties
- XMLSequenceAccess
  - ResolveLinks
  - CursorDirection
  - XMLSerializationMethod
  - XMLSerializationProperties

Additional properties are defined in WS-DAI







# Standards

- XQuery 1.0, XPath 2.0, XML Serialization, XQueryX and related specs
  - Last release 12 November 2003
  - W3C
- XQJ (XQuery API for Java)
  - Released on 25 May 2004
  - JCP

Last Call

First Draft

# Issues

- What if an XML document satisfies a DTD and not schemas?
- Should there only be one schema that can be associated with a collection?
- Does the “Schema” property give a URI pointing to where the schema may be dereferenced? The actual content of the Schemas themselves? The name of the schema file?
- XMLCollectionAccess::removeDocuments: Besides being able to remove documents by name, one should be able to remove document by XPath.
- XQJ vs XML:DB
- Management of collections, schemas and documents