

Semantic Days 2011 – Tutorials

Practical Use of ISO 15926



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What is iRING?

- “iRING” is just a label for something else.
- A set of protocols and reference data, that are fully compliant with ISO 15926.
- Easier to say.
- Sets a clear expectation of the level of ISO 15926 compliance.

What is iRINGTools?

- Web Applications and Services to help use ISO 15926
- Open Source Project (BSD3)
- iRING User Group is the owner
 - <http://www.iringug.org>
- SVN hosted on Google Code
 - <http://code.google.com/p/iring-tools>
- Mix of .NET and Java
- Issue tracking in public JIRA
 - <http://jira.iringug.org>



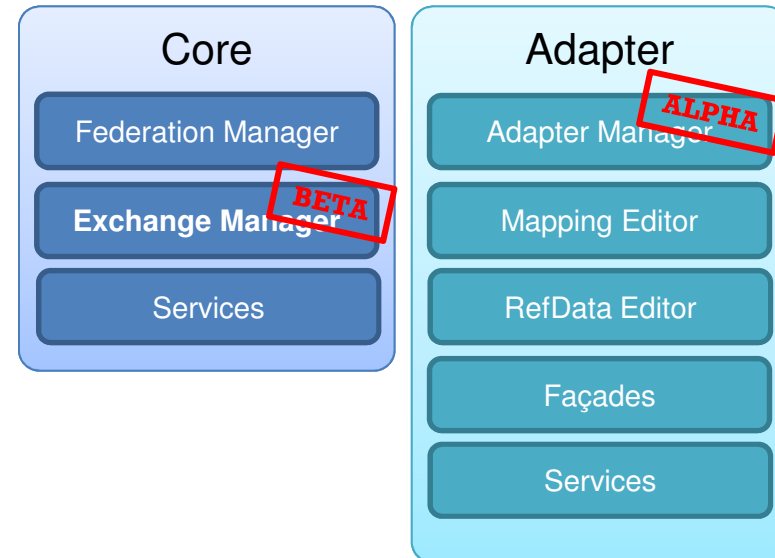
What does it do?

- **Applications**

- Search Reference Data
- Edit Reference Data
- Map between Data and Reference Data
- Query Façade

- **Services**

- Federate Reference Data
- Transform Data in terms of Reference Data
- Expose Multiple Protocols and Data Formats
- Populate Façade



Federation Manager

Demo

<http://dev.iringsandbox.org/apps/adaptermanager>

Adapter Framework

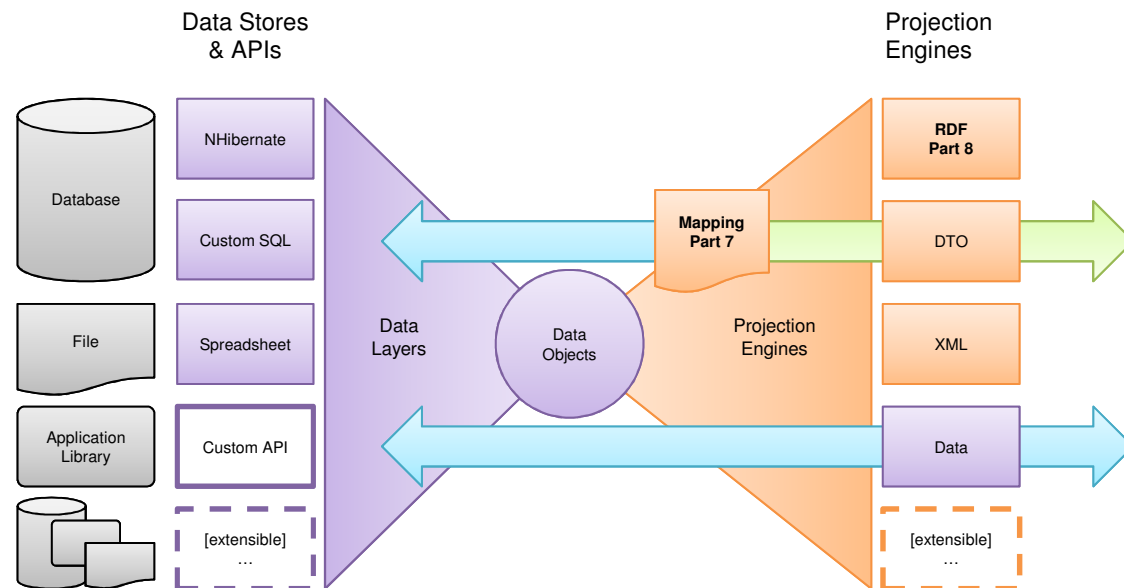
- **Extensible DataLayers**

- Databases
- Excel
- Custom APIs

- **Extensible Projection**

- Flexibility
- Harmonization

- **Raw Data is Possible**



Adapter Manager

Demo

<http://dev.iringsandbox.org/apps/adaptmanager>

<http://dev.iringsandbox.org/services/data/help>

Façade Exchange

The screenshot shows a Windows-style application window titled "iRINGTools Façade Exchange Utility". The window contains the following elements:

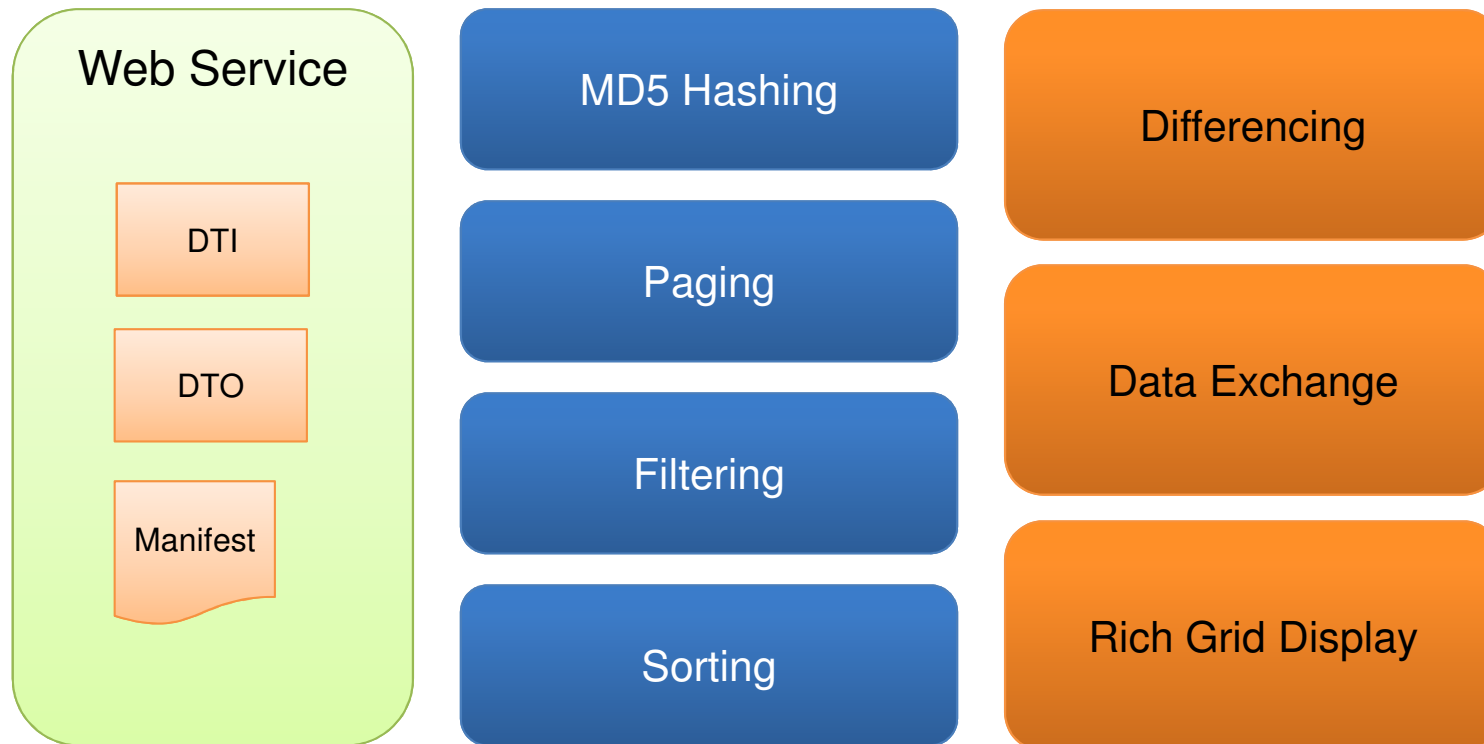
- Header:** The iRINGTools logo and the text "Façade Exchange Utility".
- Ask Credentials For:** Two checkboxes, "Adapter Service" and "Façade Service", both of which are currently unchecked.
- Adapter URL:** A text input field containing "http://localhost:54321/adapter" and a "Connect" button to its right.
- Project Name:** A dropdown menu.
- Application Name:** A dropdown menu.
- Graph Name:** A text input field and a "Publish" button to its right.
- Pull From Façade:** A section header for a sub-section containing:
 - Façade URL:** A text input field containing "http://localhost:54321/facade/query" and a "Connect" button to its right.
 - Graph URI:** A dropdown menu and a "Pull" button to its right.
- Results:** A large empty rectangular area for displaying data.
- Exit:** A button located at the bottom right of the window.

Façade Exchange

Demo

<http://dev.iringsandbox.org/services/facade/sparql/query>

Data Transfer Protocol



Exchange Manager

The screenshot shows the iRING Tools Exchange Manager interface. The main window displays a directory tree on the left, a central data grid, and a details pane at the bottom left. The grid is titled 'PipingNetworkSystem' and contains a list of entries with columns for Transfer Type, IdentificationByTag.valIdentifier, NominaDiameter.hasScale, and NominalDiameter.valValue. A context menu is open over the grid, showing options for sorting and filtering. The interface includes a 'Directory' pane on the left, a 'Details' pane at the bottom left, and a 'Paging' control at the bottom right. The title bar shows 'Exchange Manager' and 'Help About'.

Tabbed Organization

Filtering & Sorting

Rich Grid

Collapsible Sections

Paging

Transfer Type	IdentificationByTag.valIdentifier	NominaDiameter.hasScale	NominalDiameter.valValue
ADD	66015-O	MILLIMETRE	0
ADD	90002-RV	MILLIMETRE	40
ADD	90002-SW	MILLIMETRE	40
ADD		MILLIMETRE	150
ADD		MILLIMETRE	40
ADD		MILLIMETRE	40
ADD	90004-SL	MILLIMETRE	100
ADD	90005-RV	MILLIMETRE	80
ADD	90006-O	MILLIMETRE	250
ADD	90006-SL	MILLIMETRE	50
ADD	90007-SL	MILLIMETRE	40
ADD	90008-RV	MILLIMETRE	150
ADD	90009-O	MILLIMETRE	150
ADD	90010-O	MILLIMETRE	80
CHANGE	90011-O	INCH -> MILLIMETRE	90 -> 80
CHANGE	90012-O	MILLIMETRE	100
ADD	90013-O	MILLIMETRE	100
ADD	90014-RV	MILLIMETRE	80
ADD	90020-O	MILLIMETRE	50
ADD	90024-RV	MILLIMETRE	25

Exchange Manager

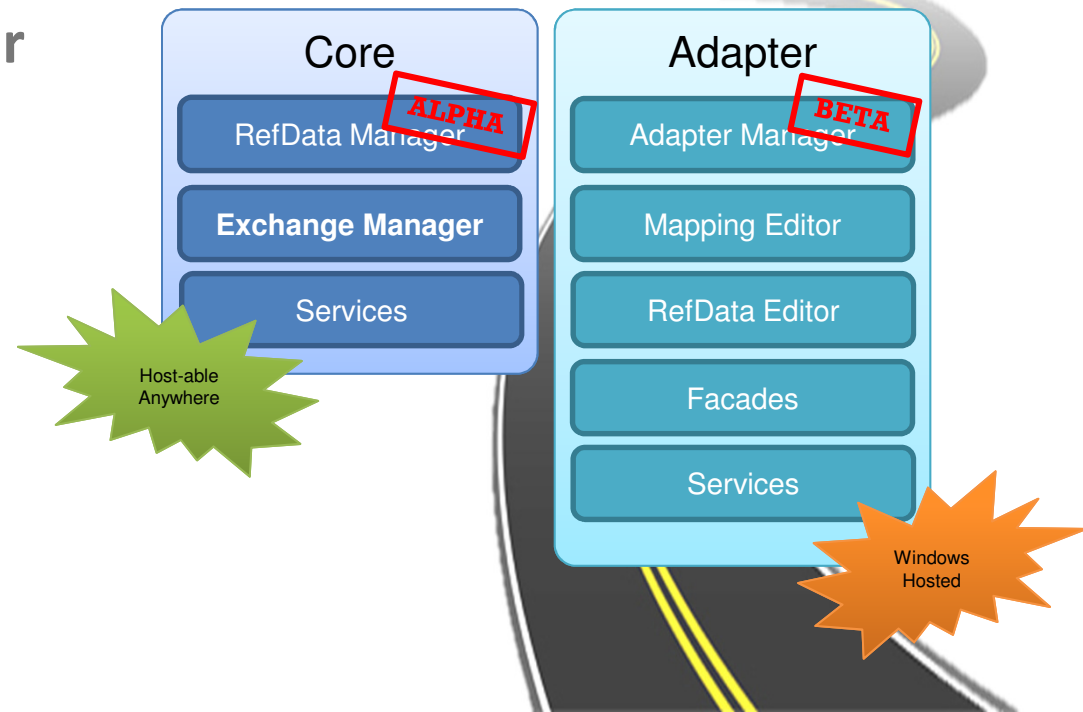
Demo

<http://tomcat.dev.iringsandbox.org/services/dxfr/help>

<http://tomcat.dev.iringsandbox.org/apps/xchmgr>

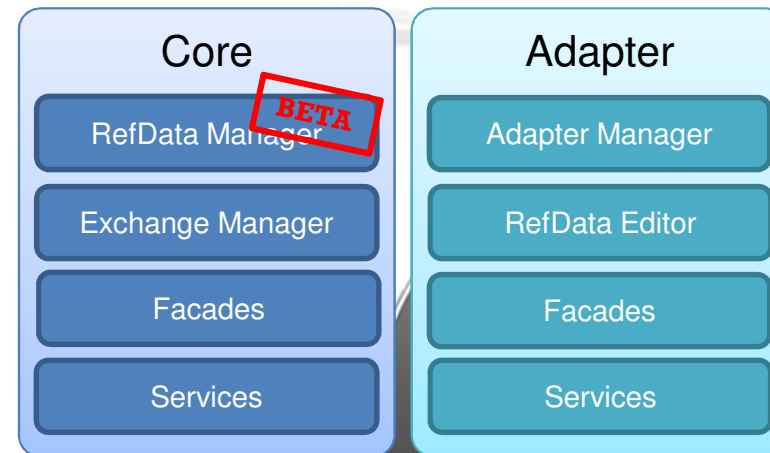
Roadmap

- 2.1 – June 2011 (Pending)
 - Part 8 Reference Data
 - Exchange Manager



Roadmap

- **2.2 – September 2011**
 - Basic Security
 - Adapter Manager
 - Exchange Enhancements
- **2.3 – Late 2011**
 - RefData Manager
 - ID Generator
 - Exchange Configuration



Wrap-up

- Federated Reference Data
- Adapter Framework
- Multiple Protocols and Format (Extensible)
- Part 8 RDF
- Façade Exchange
- Exchange Manager

