WMO Information System (WIS)

Search (with SRU)

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Why is search important?

Search lets

- users find what they are looking for
- but also find you

- by implementing the search interface you become compatible with WIS
- "hierarchical" search (GISC-> .. -> local search)

Search in WIS / What is SRU?

SRU is the designated search standard for WIS

- Search/Retrieval via URL
- ISO 23950 profile, builds on Information Retrieval
- Takes the concept of ISO 23950 to the web
- New query syntax (CQL[1]) and transport (HTTP)
- But well-known "concept" remains the same

[1] Contextual query language

Search in WIS / What is SRU ? Example (SRU vs. classic 23950)

We are looking for all WMO publications about WIS

classic ISO 23950
- we use e.G yaz-client
- open TCP connection
- query: @and @attr 1=4 WIS @attr 1=1003 WMO

- XML or other response

ISO 23950 / SRU
- we use our browser
- search service via CGI interface
- http://example.com/sru?query = title=WIS and publisher=WMO

- XML response

Search in WIS

This presentation is about:

How to interface your system with SRU
(making it WIS compatible in the process)

Search in WIS

Three use cases

1. No metadata management yet
2. Working classic ISO 23950 interface but no SRU
3. complex metadata management present, but customized SRU integration desired

Search in WIS
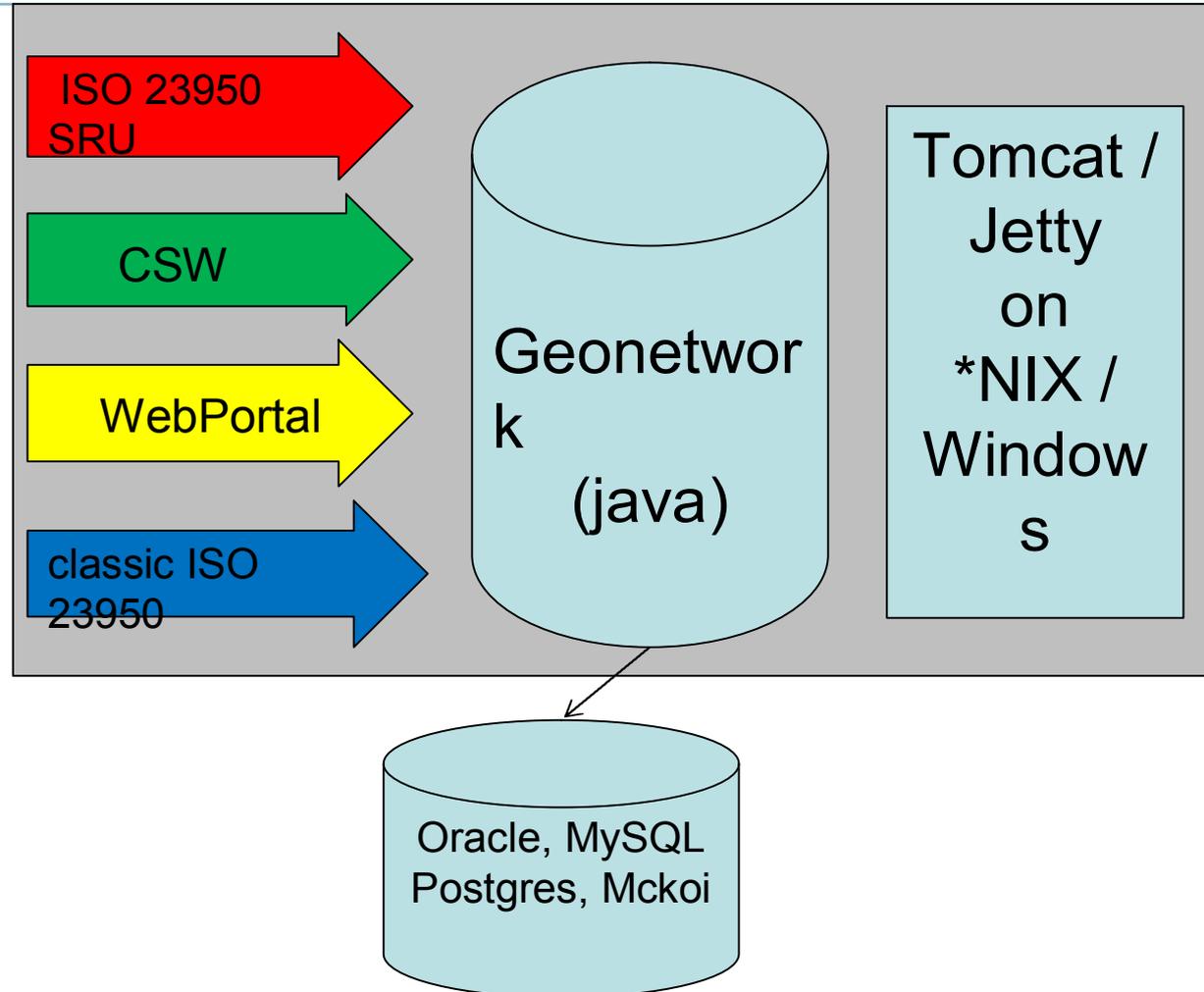## case I: No metadata management

- Use geonetwork for managing metadata
- We have added a SRU interface
- Also has CSW and classical ISO 23950 interfaces
- Can be installed on desktop and server (tomcat, SQL Database)

Search in WIS
case I: No metadata management

User searches
via

ISO 23950
SRU

CSW

WebPortal

classic ISO
23950

Geonetwork

(java)

Tomcat /
Jetty
on
*NIX /
Windows

Oracle, MySQL
Postgres, Mckoi

Search in WIS
case II: Working classic ISO 23950 interface

- Translate classic ISO 23950 into ISO 23950 SRU

- Use yazproxy

- Yazproxy is opensource C/C++ (windows/*NIX)

- dedicated server-process

Search in WIS
case II: Working classic ISO 23950 interface

User searches via

WebPortal

classic ISO 23950

ISO 23950 SRU

Existing Software

Yazproxy process on *NIX/Windows (needs compilation)
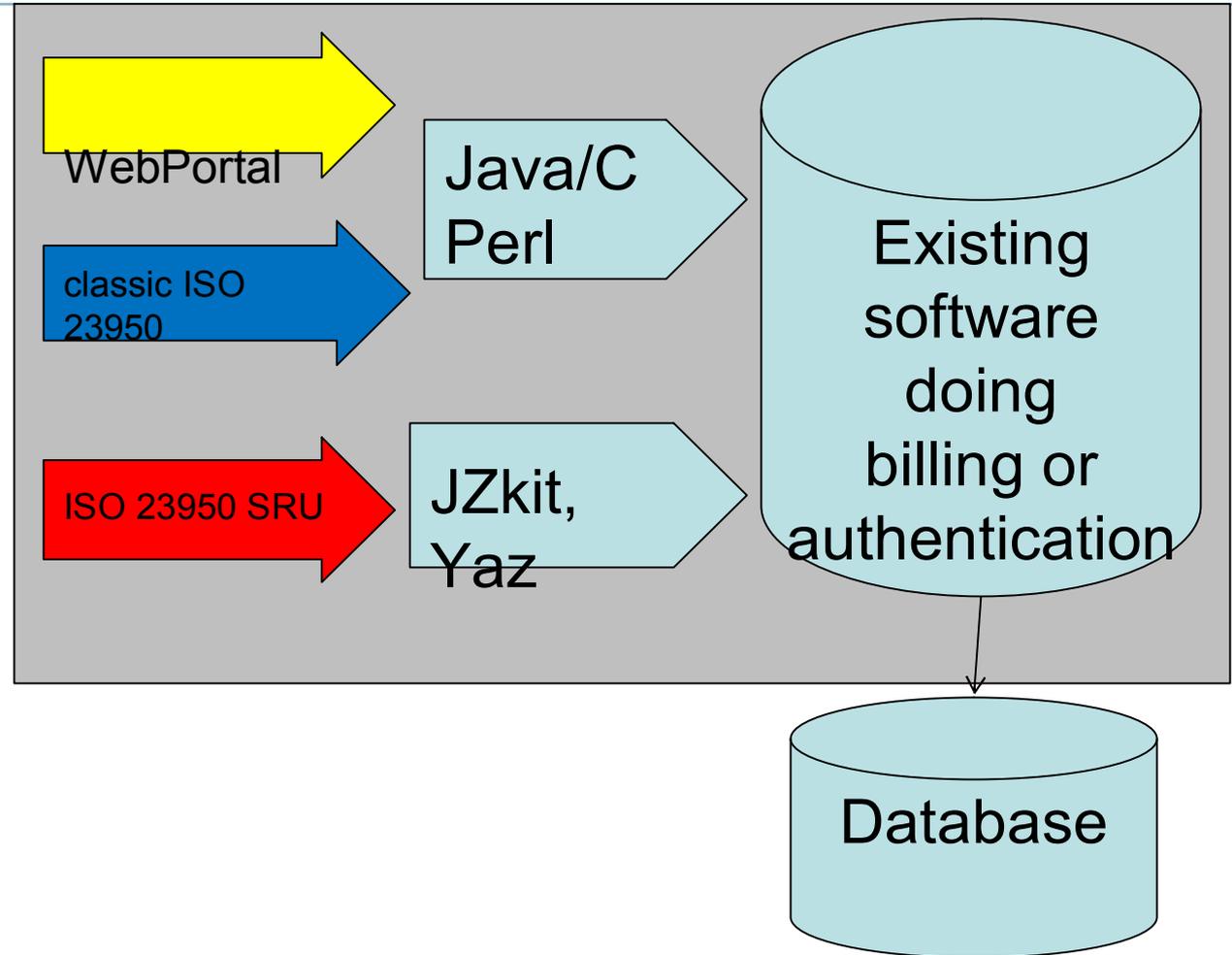
Search in WIS
case III: system integration

- Libraries can be used to add SRU interface to existing software

- Requires change of sourcecode but allows for good integration into existing workflow

- Use Jzkit, OCLC SRW/SRU, Yaz, ..

- Suport for Java,C/C++ and perl

Search in WIS
case III: system integration

User searches via

WebPortal

classic ISO 23950

ISO 23950 SRU

Java/C Perl

JZkit, Yaz

Existing software doing billing or authentication

Database

Thank you!

Questions?