JCR in 15 minutes

The Ultimate Content Store?

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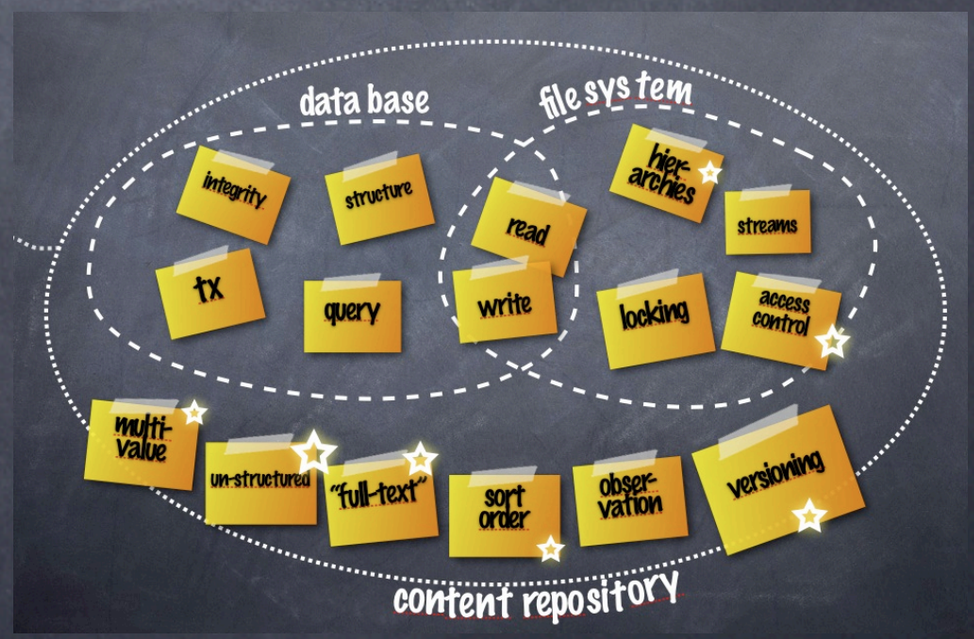
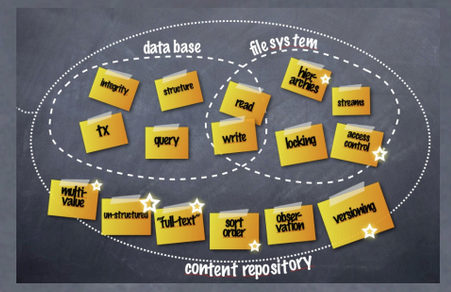


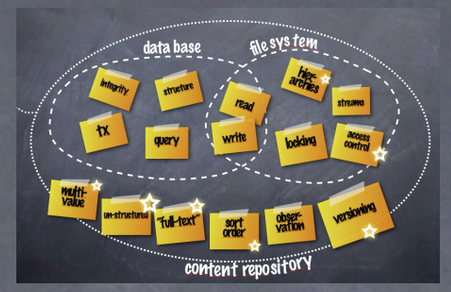


JCR

JCR = Java Content Repository API

JSR-170 / JSR-283

Everything Is Content - and JCR manages it as trees of Nodes and Properties, using rich data types.



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The JCR spec

JSR-170

C ntent Rep sit ry f r
JavaTM techn l gy API

Spec-Lead:
Day S ftware

Status:
Final Release 17-jun-2005

Java Community Process

Expert Gr up:

The JCR spec

JSR-170 | JSR-283

Content Repository for JavaTM technology API v2.0

Spec-Lead:
Day Software

Status:
Final Release 14-sept-2009

Expert Group:

Day

What's JCR?

Day

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"The API should be a standard, implementation independent, way to access content bi-directionally on a granular level to a content repository."

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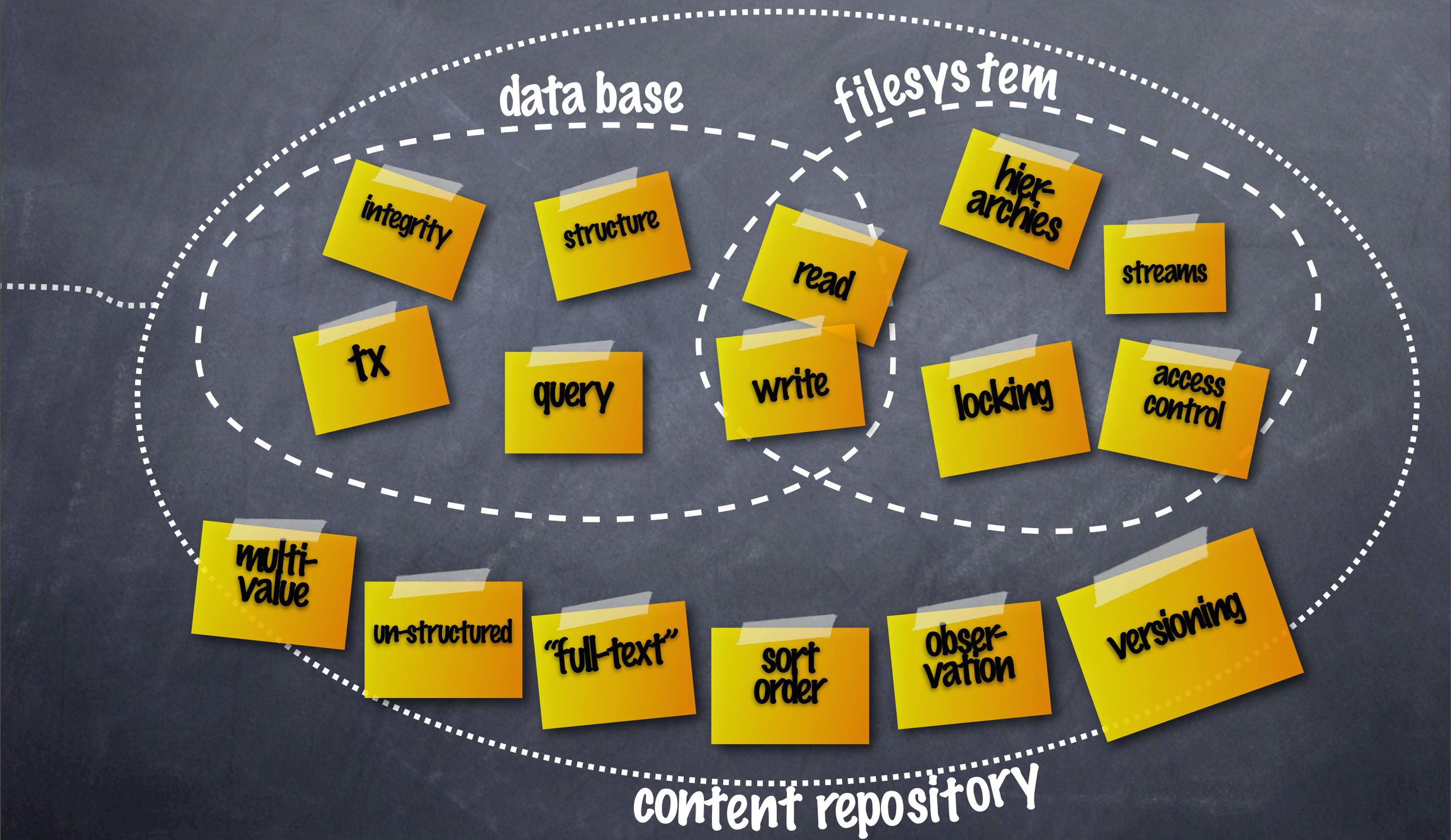
?

Best of both worlds.



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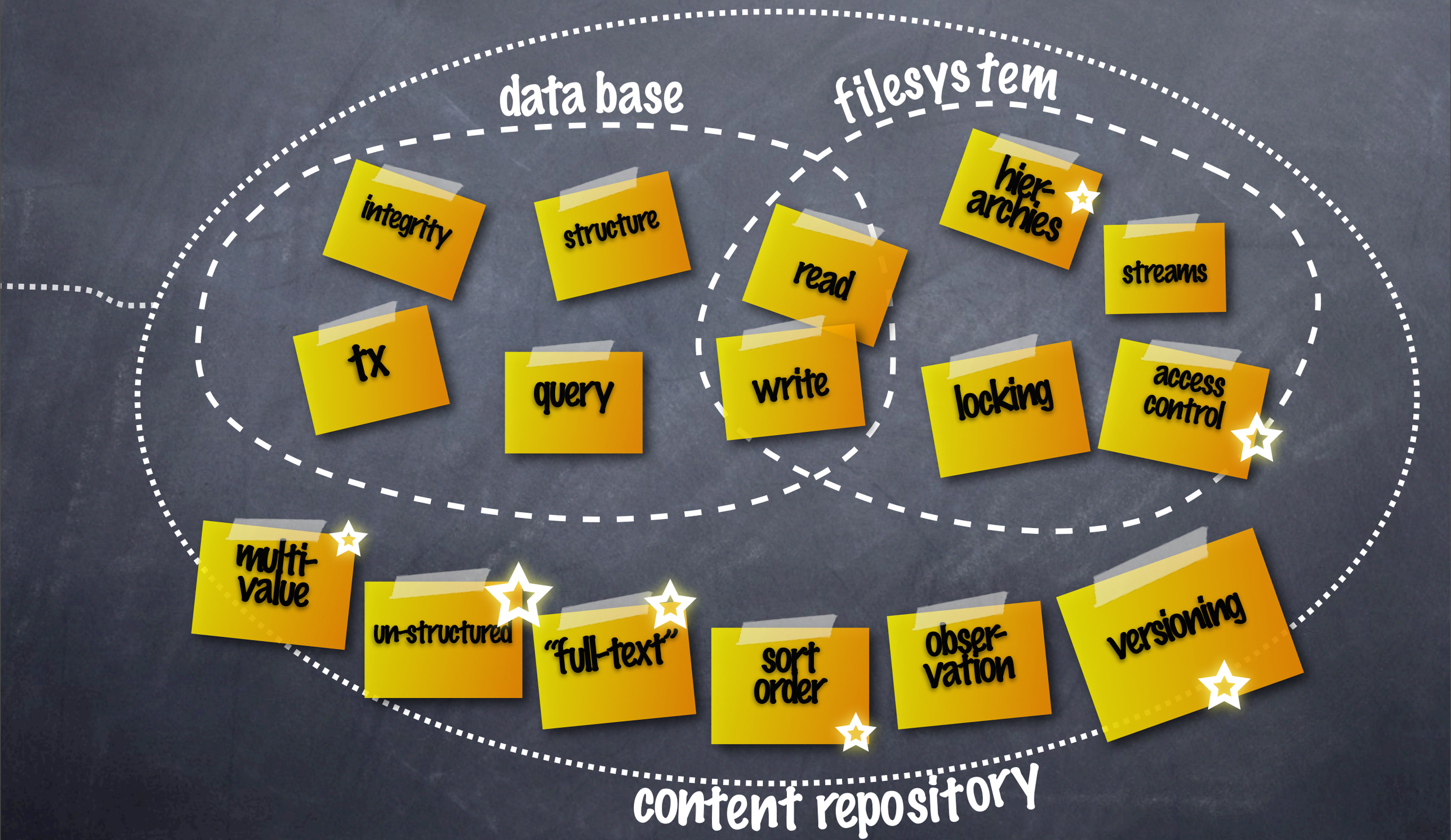
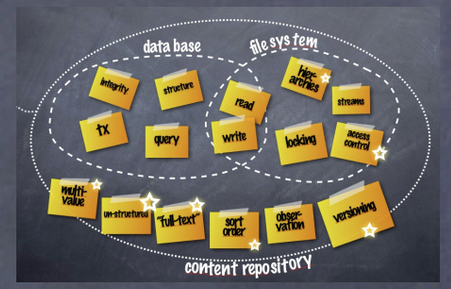
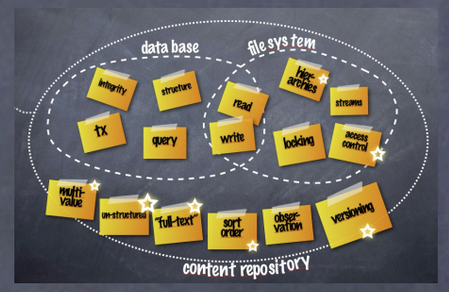


Known compliant Repositories





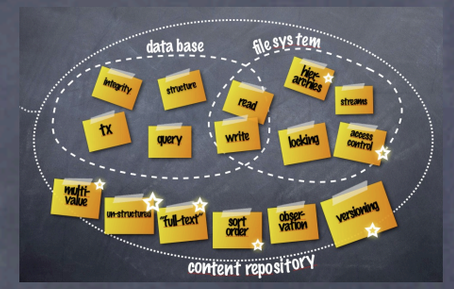
Known compliant Repositories

* using third party connector

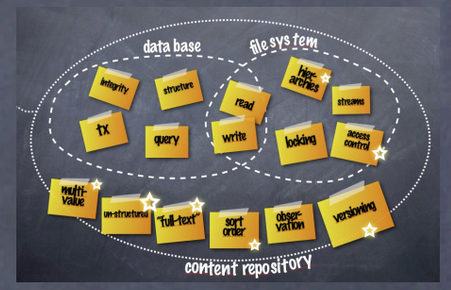
Apache **Jackrabbit**	Oracle **XML DB**	Exo **ECMS Platform**	Microsoft **Sharepoint** *	OpenText **Livelink** *
Day **CRX**	IBM FileNet **P8**	Xythos **Repository**	Alfresco **ECM**	Vignette **V7** *
Interwoven **Repository** *	IBM **CM**	EMC **Documentum** *		

+hundreds of TCKs **registered**

How many RDBMS vendors do you need?



Some known JCR Applications



Some known JCR Applications

BEA **Portal**

Sun **OpenPortal**

JBoss **Portal**

Oracle **Portal**

Fast **Enterprise Search**

magnolia **WCMS**

Apache **Sling**

Day **Communique DAM**

Interface 21 **Spring Framework**

Day **Communique Collab**

Alfresco **ECMS**

Mindquarry **Collaboration**

Apache **Tapestry**

Apache **Cocoon**

QSLabs **Compliance**

Day **Communiqué WCMS**

IBM FileNet **WebSiteManager**

Apache **James**

Artifactory **Maven Proxy**

medic-2-medic **mapofmedicine**

GX **WebManager**

Exo **ECMS Platform**

TYPO3 **v5.0 WCM**

Nuxeo **ECM**

InfoQ **Online Community**

Hippo **CMS**

Liferay **Enterprise Portal**

Percussion **Rhythmix**

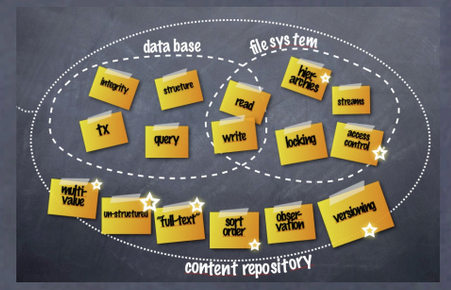
Jahia **Framework**

Sakai **E-learning**

QuickWCM **WCMS**

Lutece **Portal**

Sourcemix **Sourcemix**



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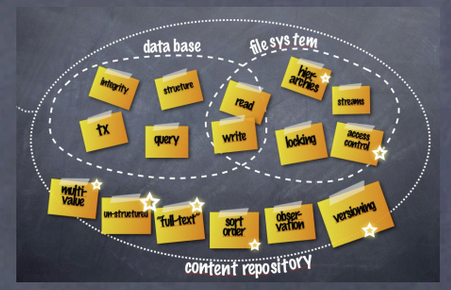


JCR code excerpt

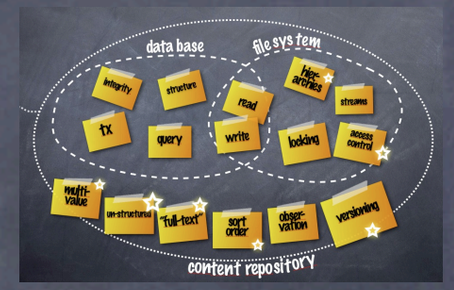
```
Repository repository = new TransientRepository();
Session session = repository.login(...);

// Create content
Node root = session.getRootNode();
Node hello = root.addNode("hello");
Node world = hello.addNode("world");

world.setProperty("message", "Hello, World!");
session.save();

// Retrieve content
Node node = root.getNode("hello/world");
print(node.getPath());
print(node.getProperty("message").getString());
```

Content models

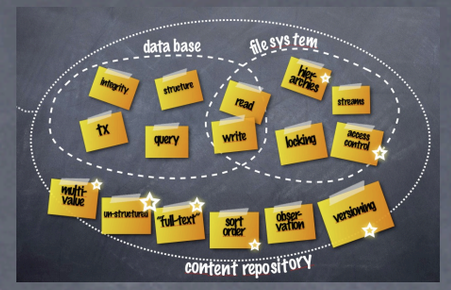


- content
  - campaigns
  - dam
  - geometrixx
    - jcr:content
    - en
      - jcr:content
      - toolbar
        - jcr:content
        - contacts
        - feedback
        - login
        - newsletter
          - jcr:content
            - par
              - title
              - 0000
              - 0001
              - 0002
              - 0003
              - 0004
              - 0020
        - register

Name »	Type	Value
.	nt:unstructured	
jcr:title	String	Registration
sling:resourceType	String	foundation/components/title
type	String	small

Day

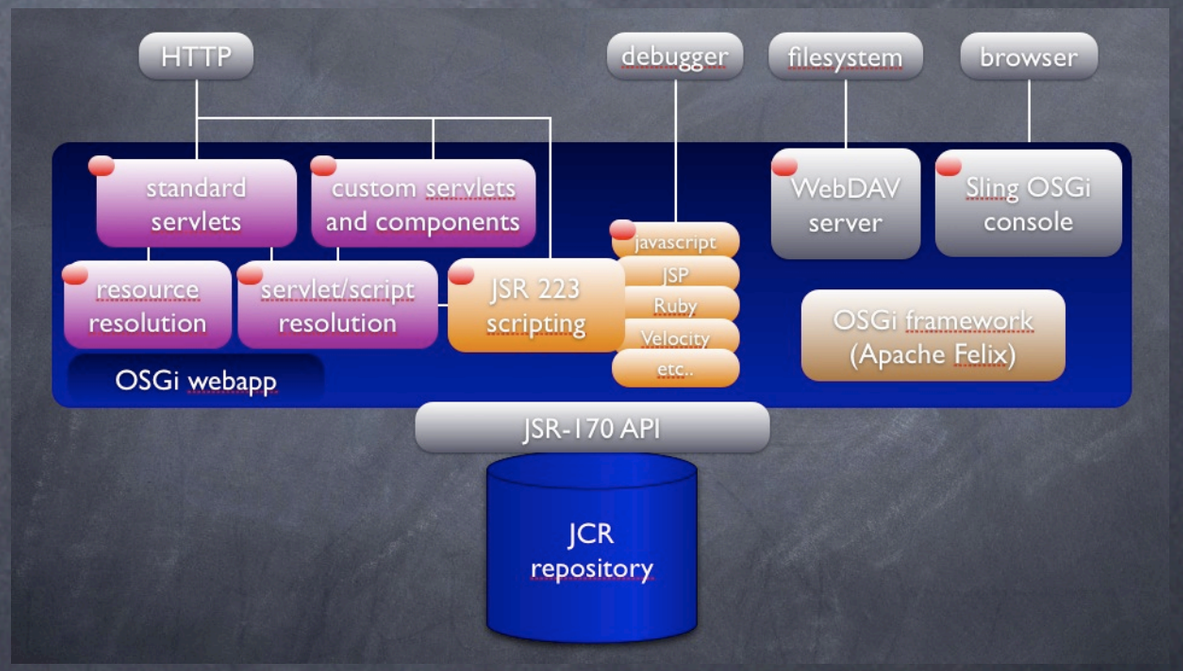
JCR == NoSQL ?



Not as "webscaly" as other NoSQL systems today.
Growing in this direction.

Offers a lot in terms of application infrastructure.

Pragmatic solution for today, and not everybody needs webscale!



Apache Jackrabbit

Sling

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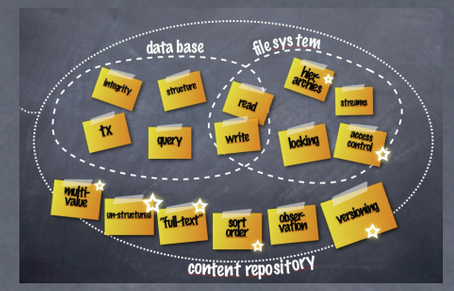

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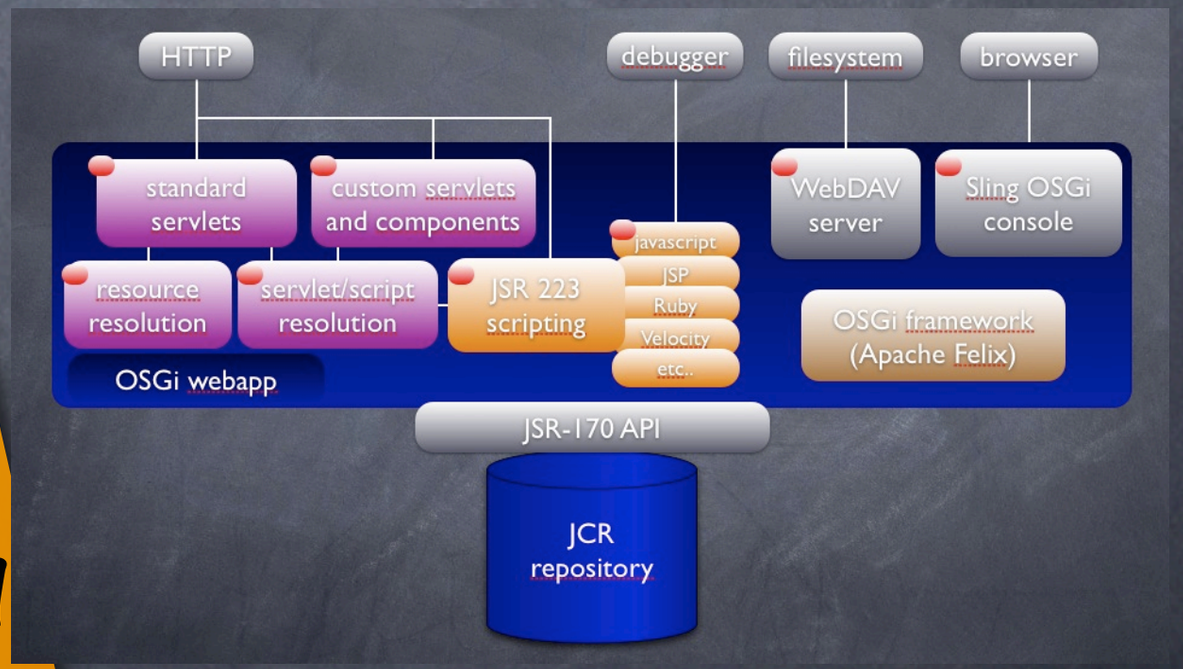

@apache:
Jackrabbit JCR repository
Sling applications layer

Apache Jackrabbit

Sling