

Prepare the Roadmap to Release 0.6.0 (Apache Incubator)

Core Functions

- collect DATASET MD (Schema, Profiles, Usage)
- connect datasets with DOMAIN specific ontologies
- track domain specific activities on a DATASET
- expose MD to visualization tools
- expose MD to query planners (Impala, Hive)
- expose MD via HCatalog/Kite to processing layer

The path ...







MapReduce & "inCluster queries"

"inCluster Workflows"

Cluster Spanning

Data Driven Business &

Research, using linked datasets



Schema REPOSITORY

- track the schema lifecycle of a DATASET and connect it to DOMAIN-Ontologies
- Each dataset has its own URI
 - all triplified facts are available as RDF graphs

EXPOSE metadata

 SPARQL interface and client side integration

EXPOSE metadata

Explore Datasets

This page collects some examples for explorative queries to our knowledge graph.

Contents [hide]

- 1 Where is trouble shooting required?
- 2 Analysis Goals
- 3 Known Dataset
- 4 Known Algorithms
- 5 Applied Algorithms
- 6 Central Nodes
- 7 Time Dependent Multilayer Networks

Where is trouble shooting required?

	Trouble shooting required
Apic2011Data1	
Apic2011Data2	
CIAWorldFactbook	
Hale2014Data	
USCensus	
Working Dataset for Coppock Indicator	extract the raw-time-series and create a Dashboard for each CN page for DJIA data

Analysis Goals

	Goal is •
Apic2011Data1	
Apic2011Data2	
CIAWorldFactbook	
Hale2014Data	
USCensus	
Working Dataset for Coppock Indicator	find out, if there is a correlation between the Coppock Indicator, computed for the financial data and the Wikipedia usage data

Known Dataset

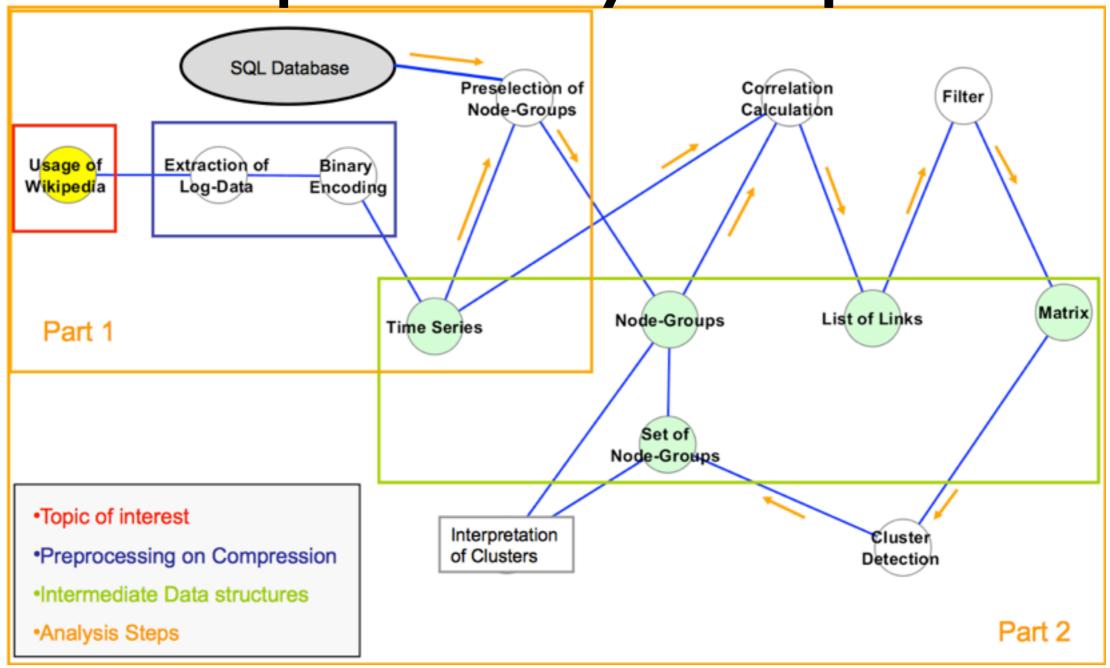
•	Info •
CN 2 en Formula One BIN=24 t7 removed dissertation DEMO 2011 merged TS 20000	
CN 4 en Influenza BIN=24 t7 removed log10 dissertation DEMO 2010 merged SO 4.Advent	
Demo	

EXPOSE metadata

- visualize dependencies and correlations between datasets, projects, processes, resources and objectives
 - >>> Visual and Quantitative

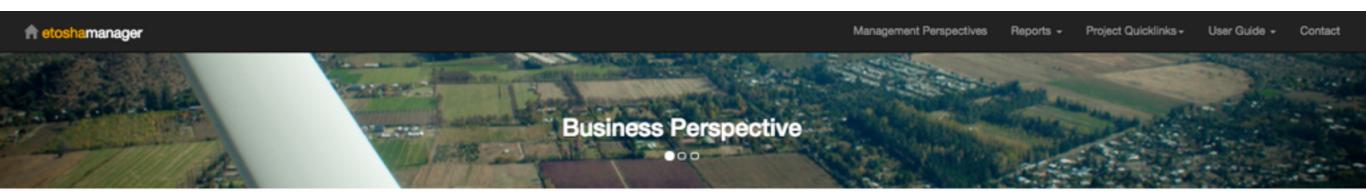
 RISK ANALYSIS is based on
 network metrics from
 complex systems research

Analysis Scenario ... Flow & Dependency Graph



Social Media Analysis - more than a buzzword! - Based on daily access rates to Wikipedia pages (or even groups in a given semantic context) one can study complex systems like financial markets or technology evolution and emerging markets, like the market around the Hadoop Ecosystem.

A fresh Web-UI



Big-Data-Asset Manager

Business Perspectives

Strategic goals and short term operational goals must be in line. But, both can be orthogonal to each other, at least if short time-ranges are considered and temporary views are used for orientation.

Define goals and baselines, explore recent research results and technical white papers to find objectives, and metrics which allow a comparison with your own process metadata.

Open Module

Risk-Assessment

Deviation from the optimal path - if such one exists - and differences between the current state and the target contribute to the overall risk of projects. Define the objectives, analyze the current state and find out the influencing aspects.

Beside technical risks we manage ethical and privacy issues. You have to start with defining privacy roles and ethics statements.

Open Module

Technical Perspectives

Data availability, data quality, cluster operations, and the status of tooldevelopment projects are the operational dimensions, with high impact on you success in a data driven world. But because many different tools are used in different contexts, we have to provide a homogenous view to the management level.

Open Module

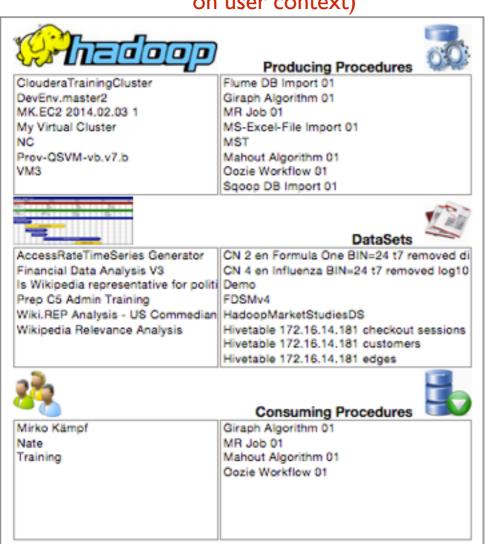
Top Metrics

Management Perspectives

Home / Cluster Dimensions

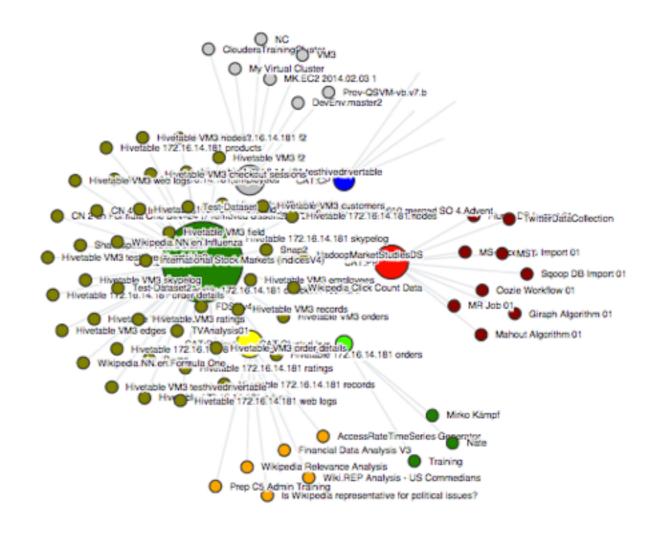
Assets

(depending on user context)



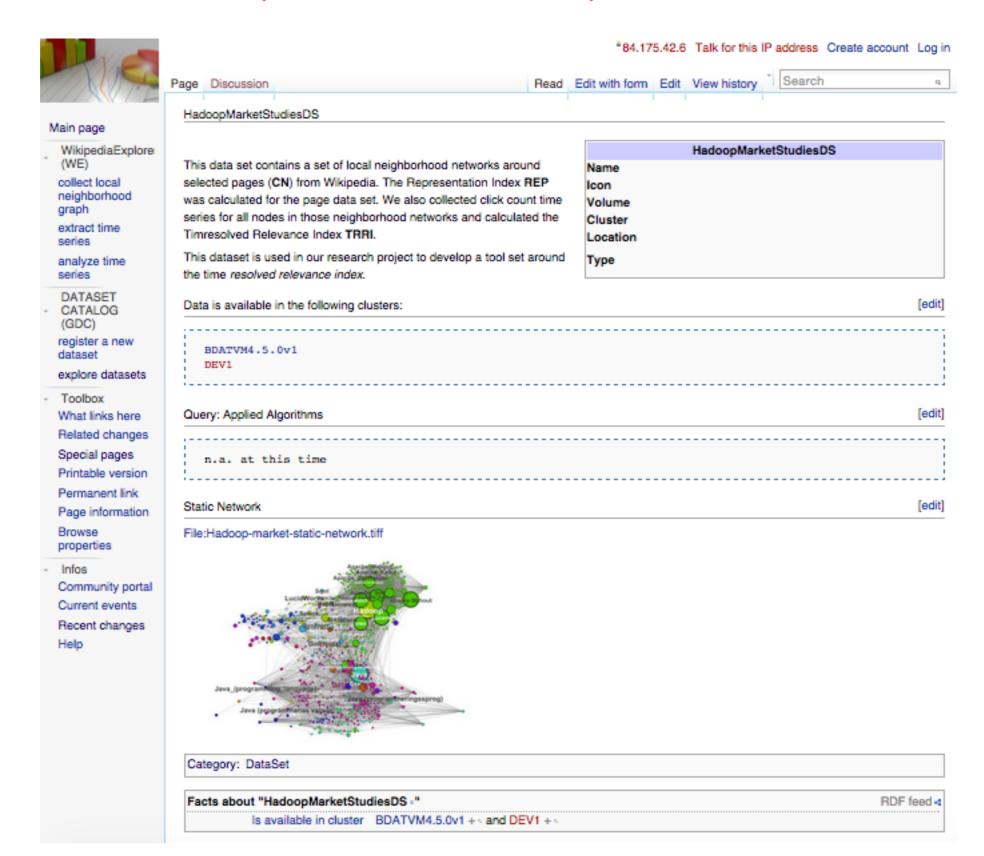
Graph Browser for Relation & Link Analysis

refresh view | reload meta-data | add new test-data click a node to focus, double click to visit page

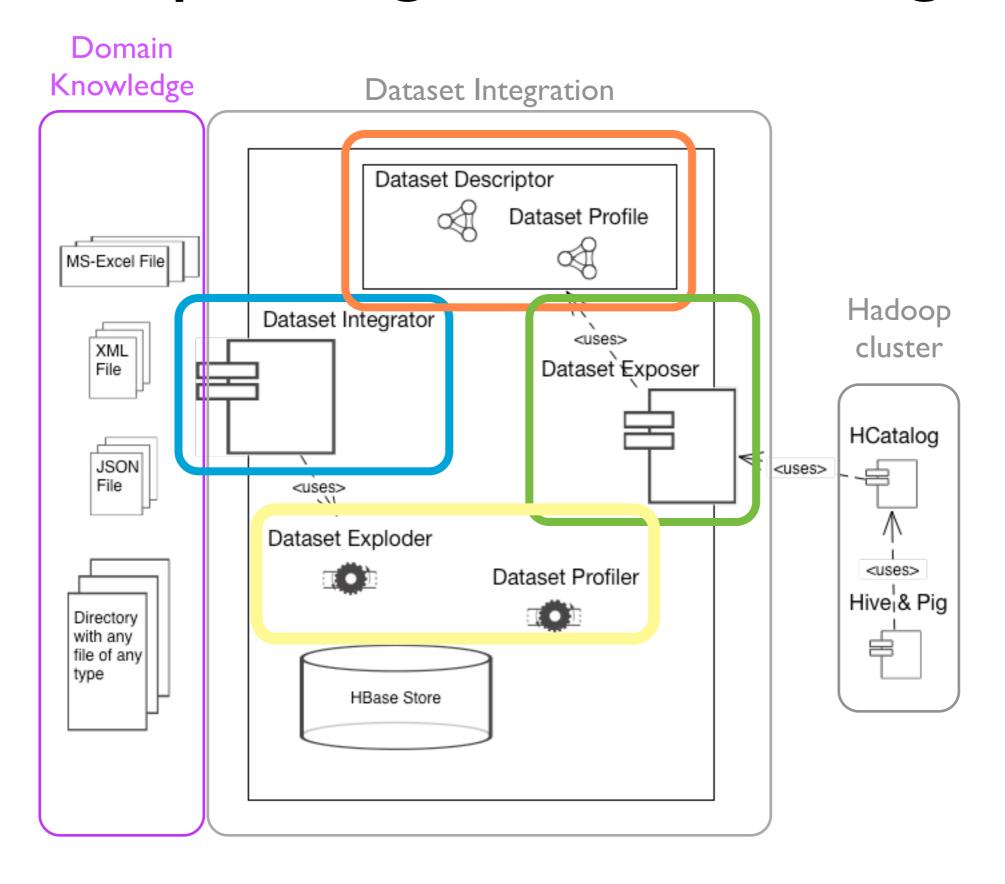


- explore the path, node by node, walk on it ...
- merge multiple layers
- interconnect thing from multiple categories ...

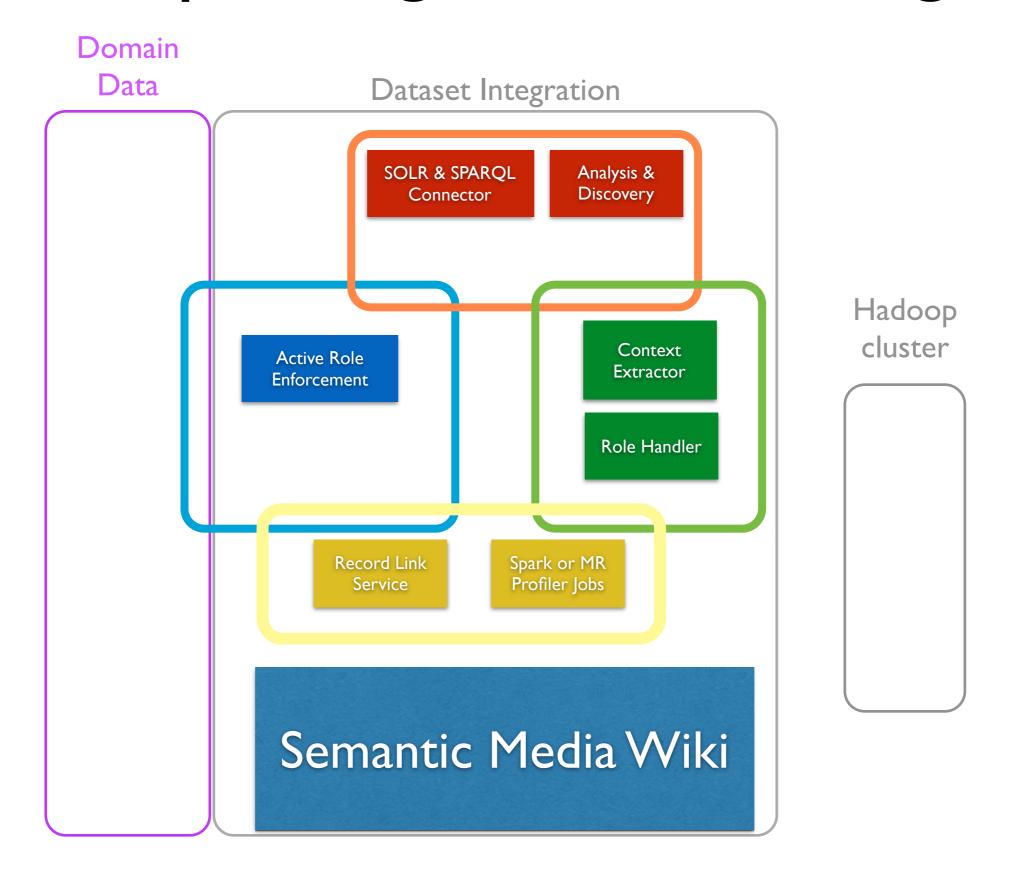
A Dataset Profile (in the backend)



Cluster Spanning Dataset Management



Cluster Spanning Dataset Management



Cluster Spanning Dataset Management

