



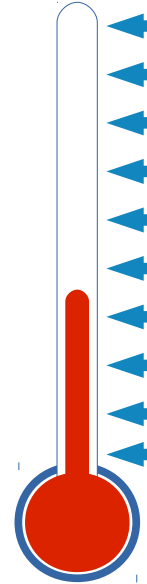
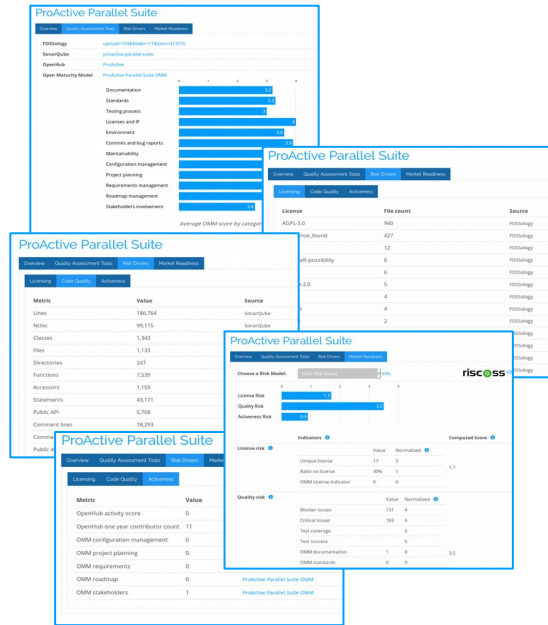
The OW2 Market Readiness Levels Improving Productivity and Market Readiness of OW2 projects

Methodology Summary on the OW2 CROSSMINER Use Case

Cedric Thomas, OW2

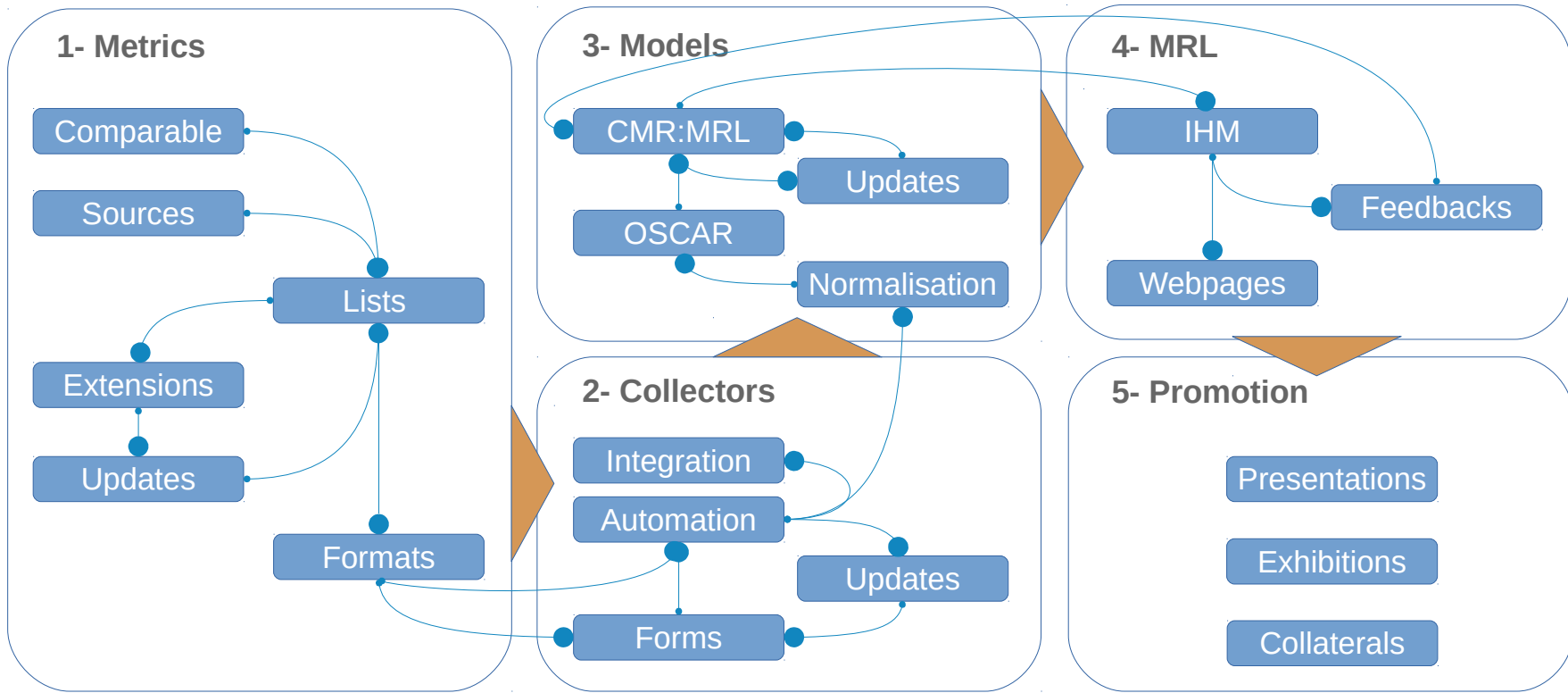


Reminder: From Data to Market Readiness Levels

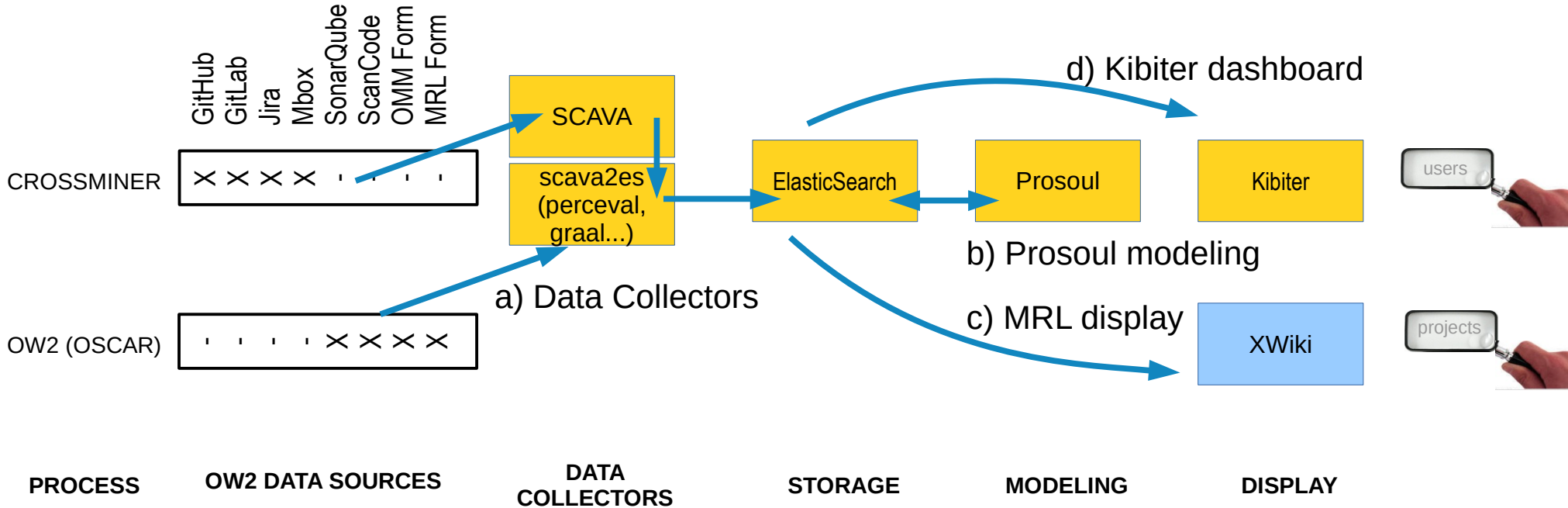


*Fully Supported Product
(useful)*

*Rough Code
(useless)*



CROSSMINER-Based Architecture



Two Scenarios



▶ Project scenario

- ▶ Helps “customers” and project leaders better understand projects
- ▶ Concentrates on project metrics
- ▶ Add CROSSMINER metrics to updated OSCAR metrics
- ▶ Contributes to Market Readiness Levels

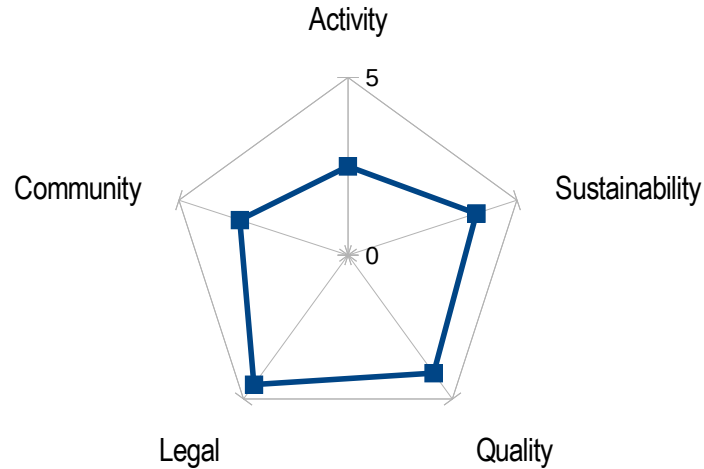


▶ User scenario

- ▶ Helps project leaders monitor and understand contributors behaviors
- ▶ Concentrates on contributor metrics
- ▶ Includes NLP and sentiment analysis
- ▶ Produces Kibiter dashboards

OW2 MRL Three-Stage Assessment

- COM
- CTY
- DOC
- ENV
- MGT
- OPN
- DEV
- TST
- REL
- SEC



- Established Player
- Actively Competitive
- Business build up
- Market Broadening
- Market Opening
- Usefulness
- Demonstrated
- Fledgeling Usefulness
- Development
- Research

Practices

Metrics



Scoring

Stage 1 Best Practices Mapping

Project Communication	Willingness and ability of the project to communicate, to be easy to deal with.
Project Community	Status of the community and mechanisms that support third party contributions.
Project Documentation	Documentation facilitating usage of the project and contribution to it.
Development Environment	Provisioning of development resources and facilitation of bug reports and commits contribution.
Project Organisation and Mgt	Management of requirements and planning and estimates of project activities.
Project Openness	Open source compliance of the project and use and implementation of open standards and open technologies.
Development Process	Development practices that help improve code quality.
Testing Process	Provisioning, implementation quality and maintenance of the testing process.
Release Management	Enablement and maintenance of the integrity of the product and its releases.
Security and Vulnerability Mgt	Attention to security vulnerabilities, mechanisms and resources to deal with them.

Testing Process

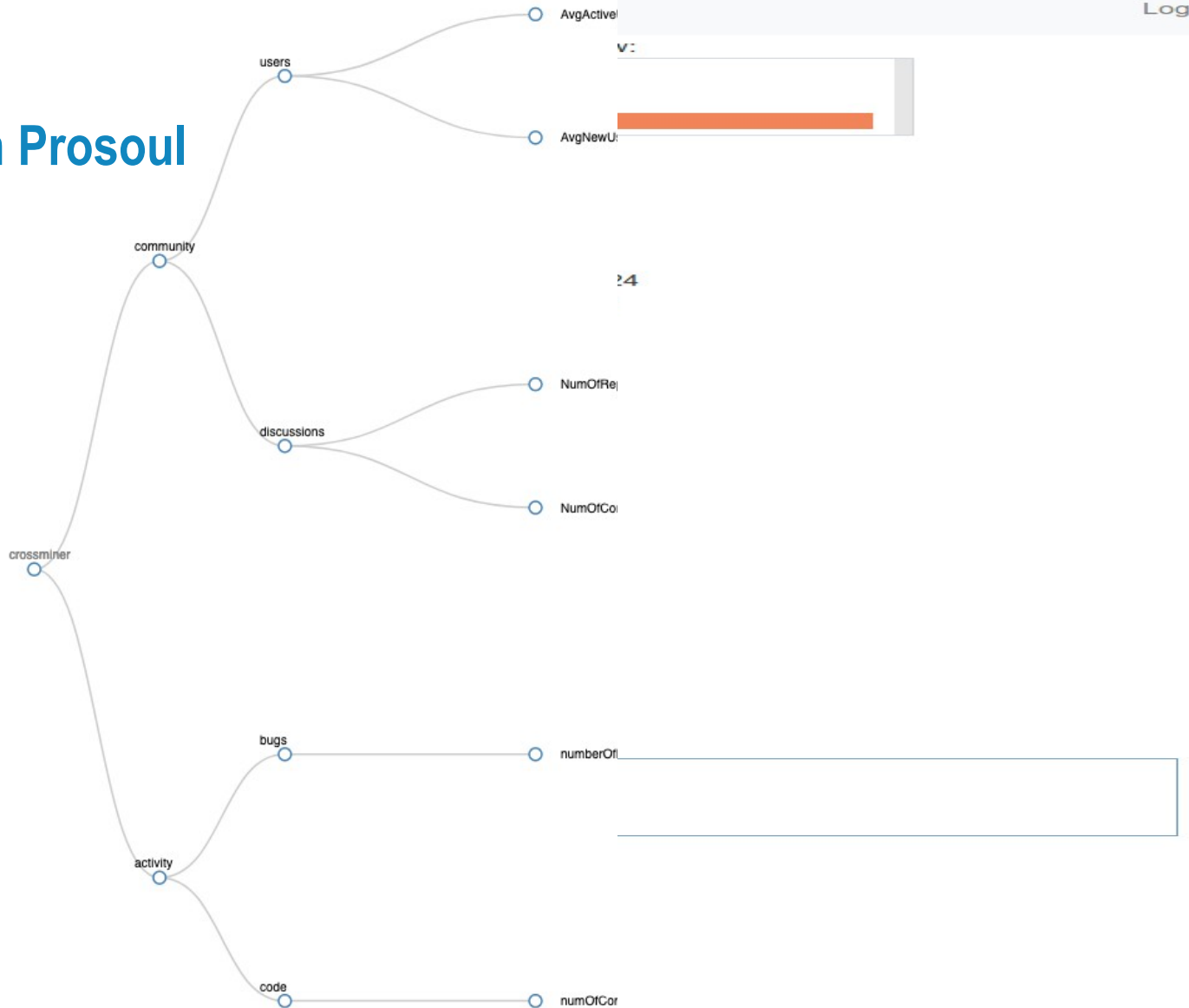
Provisioning, implementation quality and maintenance of the testing process.

TST-1	The project applies at least one static code analysis tool to any proposed major production release of the software before its release, if there is at least one FLOSS tool that implements this criterion in the selected language.		Status: <input type="radio"/> No <input checked="" type="radio"/> Yes
TST-2	The project uses at least one automated test suite that is publicly released as FLOSS.		Status: <input type="radio"/> No <input checked="" type="radio"/> Yes
TST-3	The project can provide evidence that the test results are documented and available.		Status: <input type="radio"/> No <input checked="" type="radio"/> Yes
TST-4	The project can provide evidence that the test plan covers different testing approaches.		Status: <input checked="" type="radio"/> No <input type="radio"/> Yes
TST-5	The project can provide evidence that each release has its own test suite		Status: <input checked="" type="radio"/> No <input type="radio"/> Yes

Optional checkpoints: These additional checkpoints add to the project's market readiness.

TST-6	<i>The project uses STAMP tools to increase confidence in unit testing.</i>		Status: <input checked="" type="radio"/> No <input type="radio"/> Yes
TST-7	<i>The project uses STAMP tools to test different software configurations.</i>		Status: <input checked="" type="radio"/> No <input type="radio"/> Yes

Stage 2 Modeling with Prosoul



Developing the OW2 Model

The screenshot shows the Prosoul Editor web application. The browser address bar displays `scava-dev.ow2.org:8000/prosoul/select_goal`. The application header includes the title "Prosoul" and navigation links: "View", "Edit", "Visualize", "Assess", "Admin (admin/admin for login)", and "Logout".

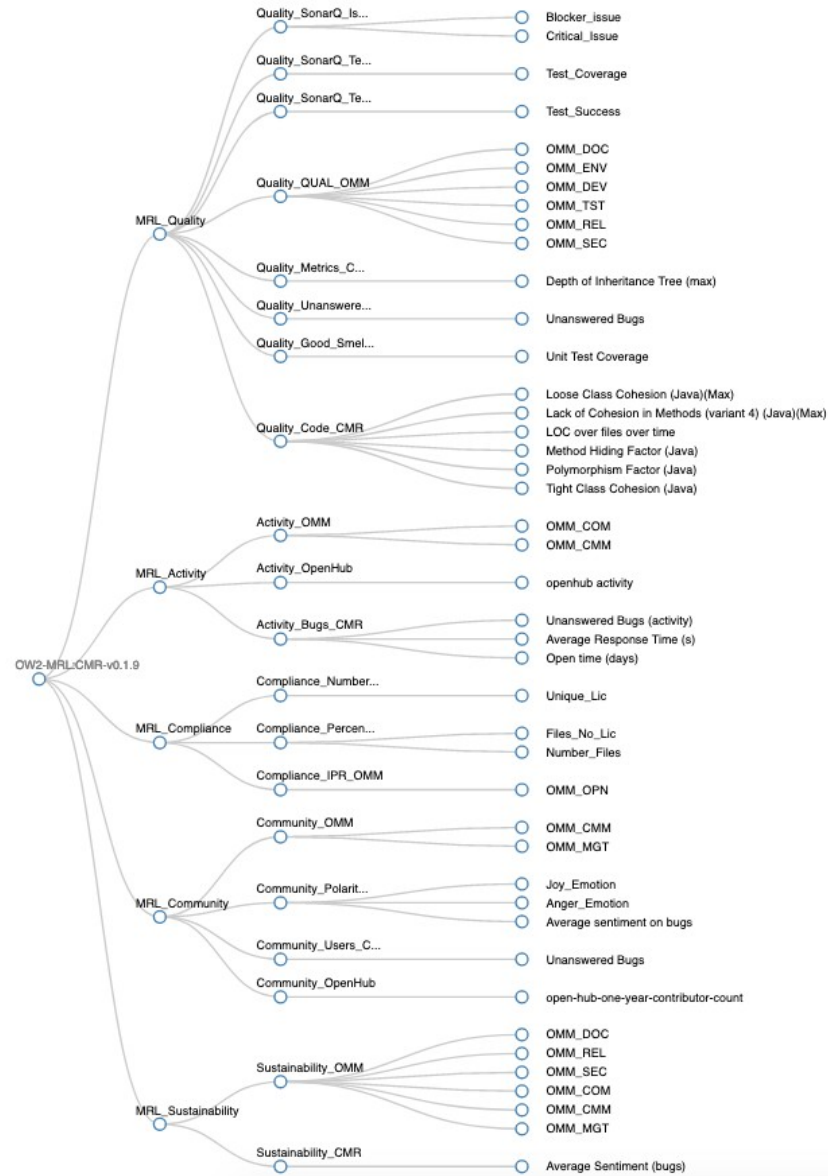
The main content area is titled "QualityModel:" and features a dropdown menu set to "OW2-MRL:CMR-v0.1.9". To the right of the dropdown are buttons for "+ Add" and "Edit". Further right are "Import" and "Export" buttons.

Below the main title, there are three sections: "Goals", "Attributes", and "Metrics". Each section has its own "+ Add" and "Edit" buttons.

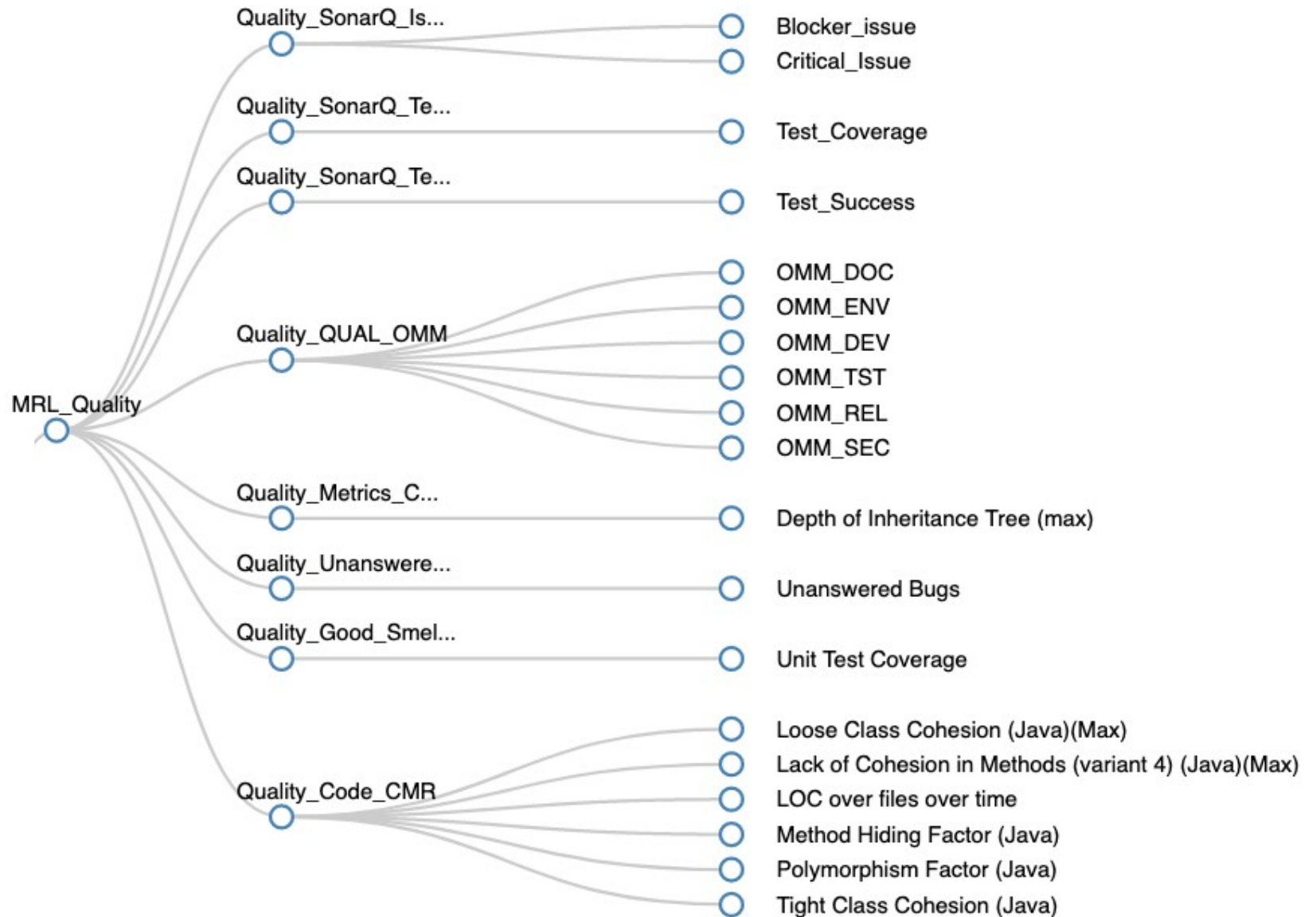
- Goals:** MRL_Activity, MRL_Community, MRL_Compliance, MRL_Quality, MRL_Sustainability
- Attributes:** Activity_Bugs_CMR, Activity_OMM, Activity_OpenHub, Community_OMM, Community_OpenHub, Community_Polarity_CMR, Community_Users_CMR, Compliance_IPR_OMM, Compliance_Number of Uniques Licenc, Compliance_Percent_FilesWithoutLicen, Quality_Code_CMR, Quality_Good_Smells_CMR, Quality_Metrics_CMR, Quality_QUAL_OMM, Quality_SonarQ_Issues, Quality_SonarQ_Test_Coverage, Quality_SonarQ_Test_Success, Quality_Unanswered_Bugs_CMR, Sustainability_CMR, Sustainability_OMM
- Metrics:** Blocker_issue, Critical_Issue, Test_Coverage, Test_Success, OMM_DOC, OMM_ENV, OMM_DEV, OMM_TST, OMM_REL, OMM_SEC, Depth of Inheritance Tree (max), Unanswered Bugs, Unit Test Coverage, Loose Class Cohesion (Java)(Max), Lack of Cohesion in Methods (variant 4), LOC over files over time, Method Hiding Factor (Java), Polymorphism Factor (Java), Tight Class Cohesion (Java), OMM_COM

The OW2 Model (provisional)

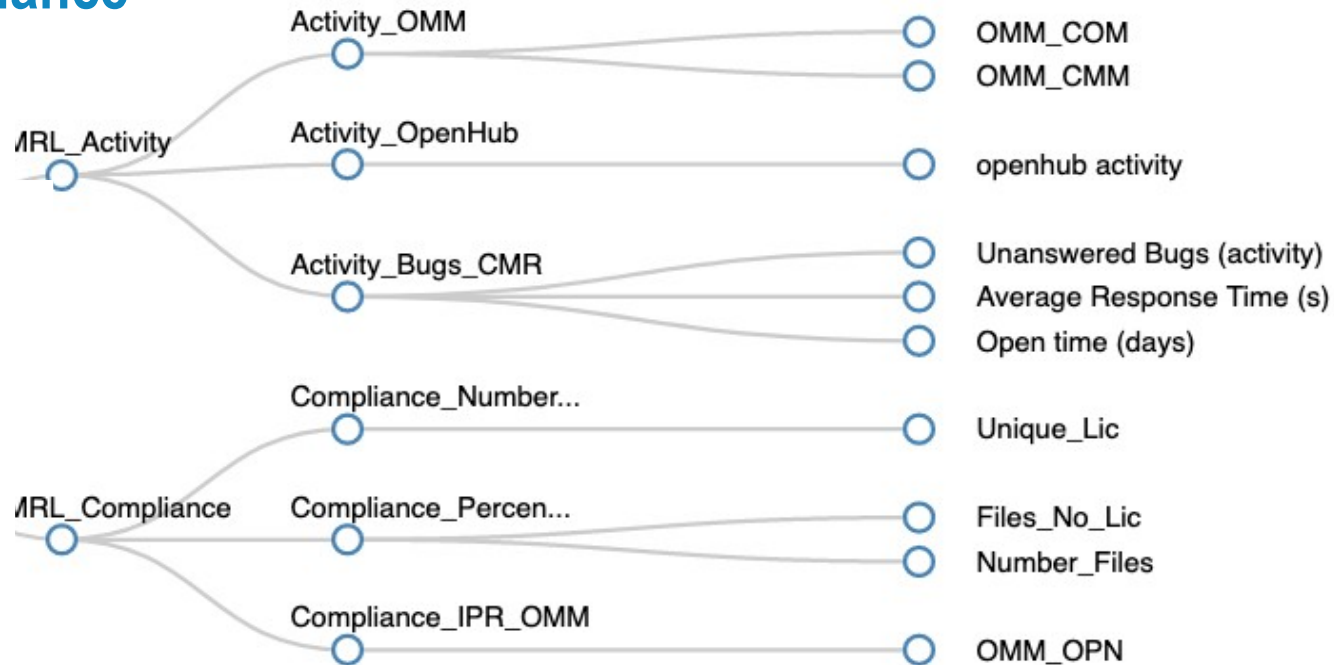
MRL Quality
MRL Activity
MRL Compliance
MRL Community
MRL Sustainability



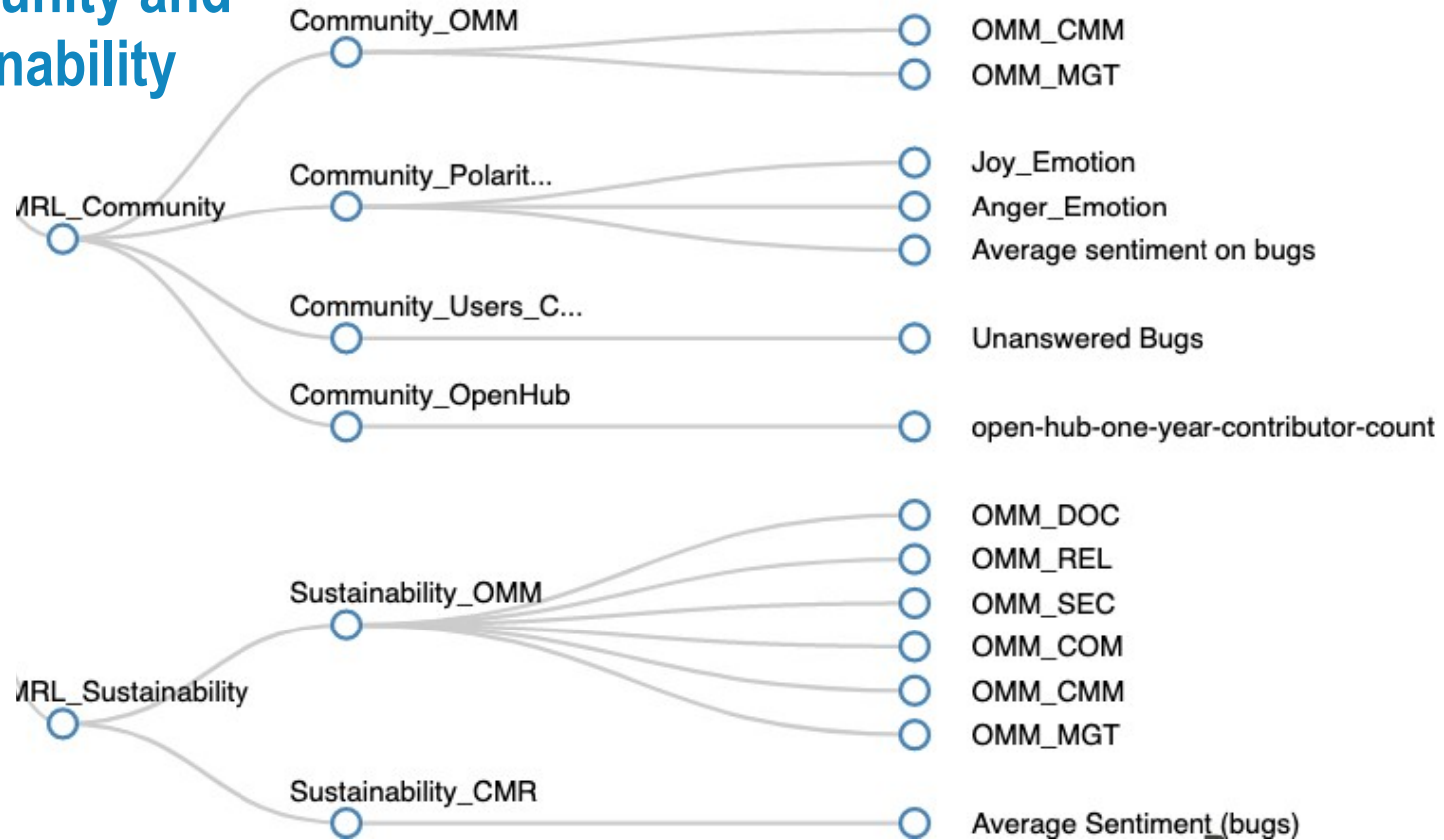
MRL Quality



MRL Activity and MRL Compliance



MRL Community and MRL Sustainability



Stage 3 Market Readiness Scoring

Form ID	Attributes	Variable	0	1	2	3	4	5
MRL-1	Product establishment	mrl-prod	No-user, R&D, POC	Early users	UI and Interoperability	Full Q&A, Doc etc.	Product Range	Platform Sub-Project Generation
MRL-2	Financing	mrl-fin	R&D subsidies	No commercial financing	Fledgeling financing	Fledgeling and some customer	Appropriate financing	Generates own financing
MRL-3	Customer base	mrl-cust	No Customers	Users, no real customers	early customer base	early customer base	growing customer base	established customer base
MRL-4	Repeat sales	mrl-sale	no repeat sales		fledgeling sales		sales from new customers	repeat business from customer base
MRL-5	Market recognition	mrl-reco	No market recognition	Basic communication	Developing marketing	Active marketing	Market recognition	Leadership recognition
MRL-6	Community maturity	mrl-com	Research partners	Open source license	Declared open source project	Active OSS project leader	Third party contributors	Active project community

Market Readiness Levels

“flight proven”

Established player

Established product with properly financed and organized Business support Customer base, Repeat sales and Market recognition

“flight qualified”

Actively competitive

Early customer base, appropriate financing or active community support, recognized software

“prototype in space”

Business build-up

Early customer base and fledgeling financing or active community support

“proven demo”

Broadening market

Proven product recent, market opening, untested governance

“relevant envt validation”

Opening market

Some customers recent, market opening, un-proven governance

“Lab validation”

Usefulness verified

Several users, project leadership well established

“proof of concept”

Fledgling usefulness

One declared user (can be internal) with declared project leader

“application formulation”

Product development

Basic R&D code developed with one demonstrated use case, some documentation

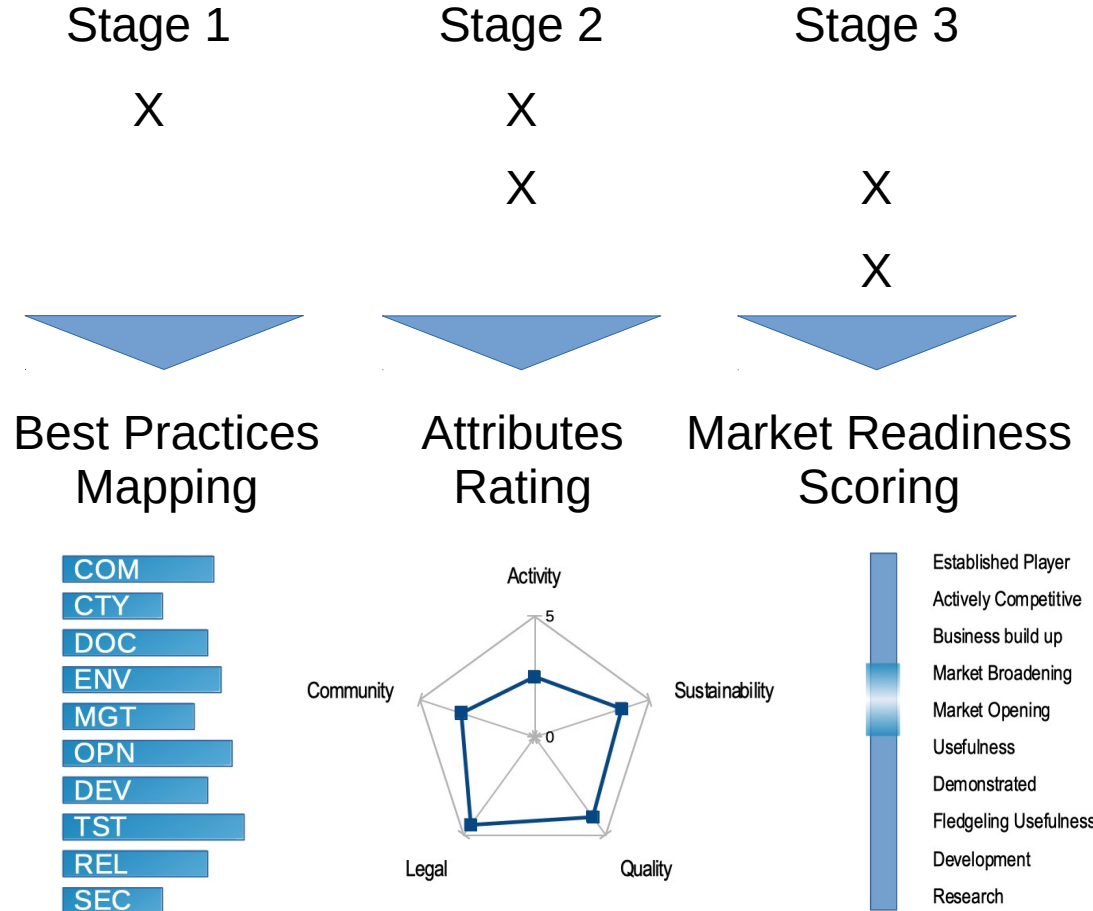
“Basic principles”

Basic early stage

Basic R&D code developed

Computing the Score

- Self declared form
- Metrics from the platform
- Expert evaluation



Summary



- ▶ Composite index to help promote OW2 projects
- ▶ Leverage OW2 platform and tools
- ▶ CROSSMINER technologies added
- ▶ Three-stage evaluation approach
- ▶ Work in progress

A world map with numerous blue stars scattered across the continents, primarily concentrated in North America, Europe, and Asia. A large blue circle is overlaid on the map, framing the central text.

Thank You

And now let's talk
Q&A
Disagreements
Complements
Feedback
etc.

OW2

www.ow2.org