



Model Discovery (MoDisco)

An extensible MDE framework dedicated to
software modernization



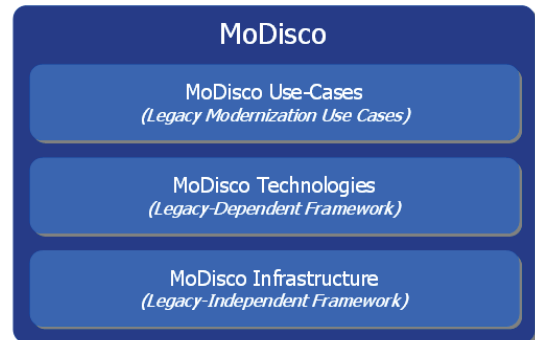
- Website: <http://www.eclipse.org/gmt/modisco>
 ► Newsgroup: <news://news.eclipse.org/eclipse.modisco>

- Providers:  AtlanMod Team (INRIA & EMN)
 MIA-Software (SODIFRANCE)

Software Modernization

Changing markets; Merging, acquiring and/or diversifying existing legacy systems; Getting a faster time to market; Shrinking budgets; Increasing compliance and compatibility; Integrating new technologies. With all these **challenges**, how can you stay focused on **growth, productivity and innovation** in order to create added value within your organization? As such **modernization projects** face with both technologies combination and various modernization scenarios, **model-driven approaches and tools** offer the required abstraction level in order to design and build-up **mature, flexible and efficient solutions**.

An Extensible Framework For Model-Driven Reverse Engineering



► What Is MoDisco?

MoDisco provides an extensible **model-driven reverse engineering framework** to support various **software modernization** use-cases:

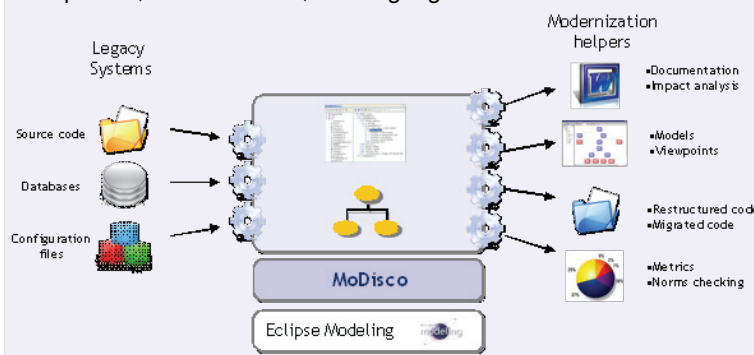
- **Quality Assurance**: verifying the system according to provided requirements (detection of anti-patterns, computation of metrics, etc)
- **Documentation**: extraction of information from it to understand a given aspect (structure, behavior, persistence, data-flow, etc)
- **Improvement**: transformation of an existing system to integrate better coding norms or use more efficient design patterns.
- **Migration**: transformation of an existing system to change a component, the framework, the language or its architecture

► The 3 Modernization Phases

- **Describing** the information extracted out of the artifacts of this system
- **Understanding** the extracted information in order to take the better modernization decisions
- **Transforming** this information into new artifacts facilitating the modernization (metrics, document, generated code...)

► MoDisco Components

- **Metamodels** to describe existing systems (KDM, SMM, Java™, C#, etc)
- Associated **discoverers** to automatically create models of these systems
- **Generic tools** to understand and transform these complex models (model browser, discovery manager & workflow, converters, etc)
- **Use-cases** to illustrate how **MoDisco** can concretely support modernization processes (e.g. combining Java & UML2)



► Contact Us

Websites (please, use the project's newsgroup in priority):

- AtlanMod Team <http://www.emn.fr/x-info/atlanmod>
- MIA-Software <http://www.mia-software.com/>

► Related Projects

Eclipse-M2M ATL: <http://www.eclipse.org/m2m/atl/>

Eclipse-GMT AMW: <http://www.eclipse.org/gmt/amw/>

Eclipse-GMT AM3: <http://www.eclipse.org/gmt/am3/>