



INCQUERY

Powerful queries at your fingertips

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SPONSORS



Customizing Tools for Building **Smart & Safe Systems**



IncQuery Labs



Engineering tools

Eclipse, IntelliJ
web-based tools

UML, SysML,
AUTOSAR, DSLs

Papyrus, Capella,
Artop, MagicDraw

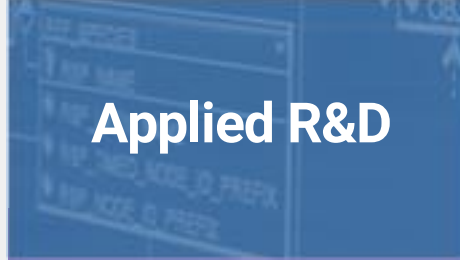


Smart embedded systems

Internet-of-Things
& Automotive

Hardware-in-the-
Loop testbeds

Matlab & LabVIEW
toolchains



Applied R&D

Graph databases

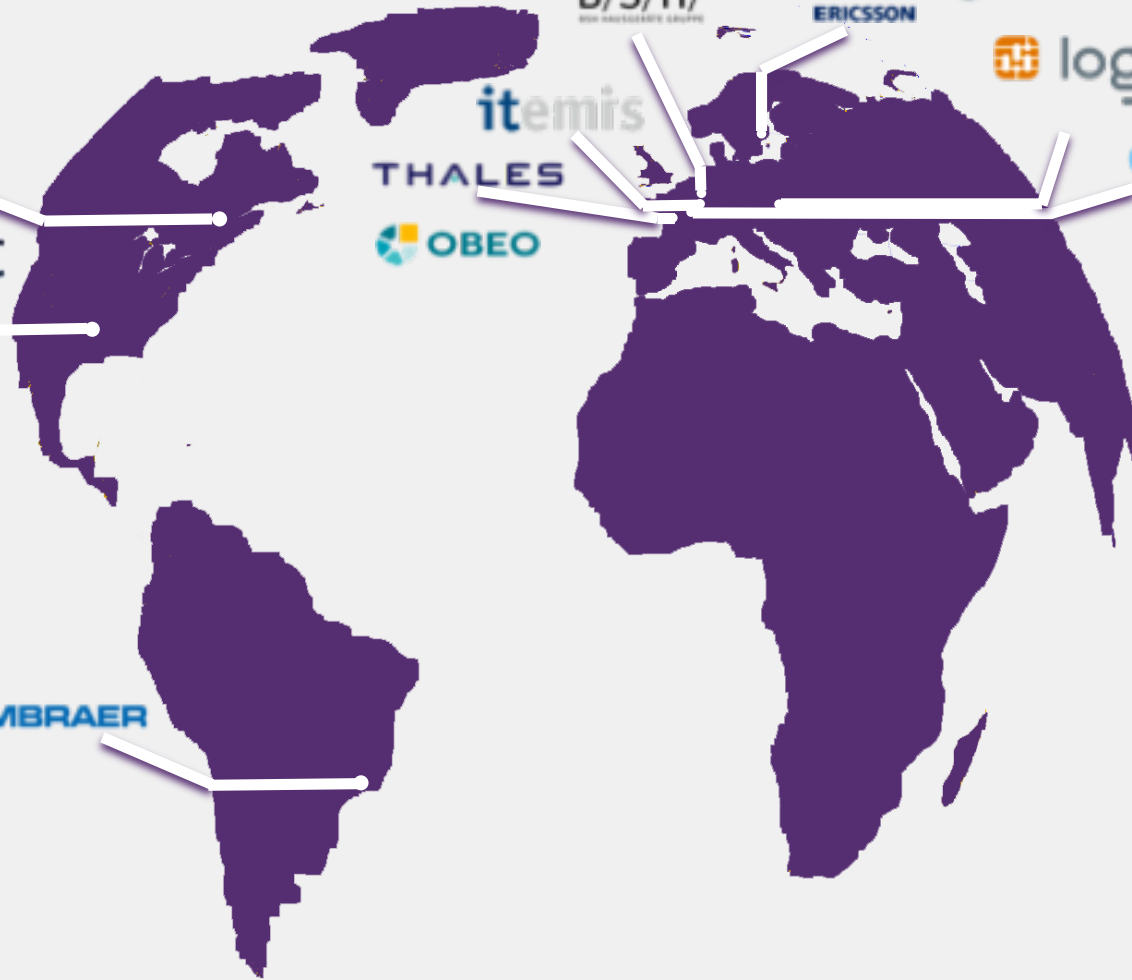
AI & computer
vision

Distributed and
real-time systems

Our Partners



No Magic



B/S/H/
BOSCH MAGNETICS EUROPE



Development partner





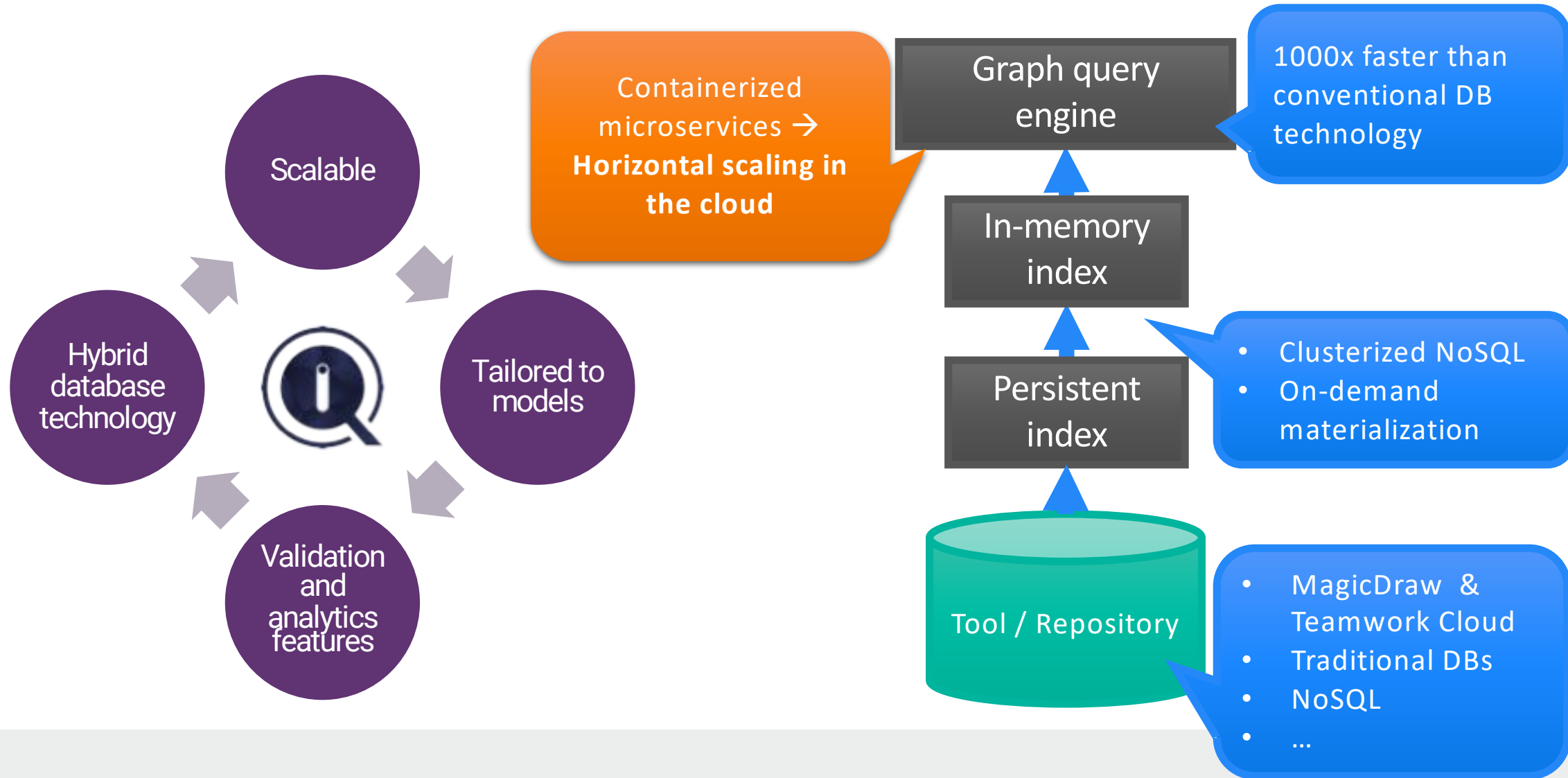
IncQuery

for MagicDraw™

and Teamwork Cloud™

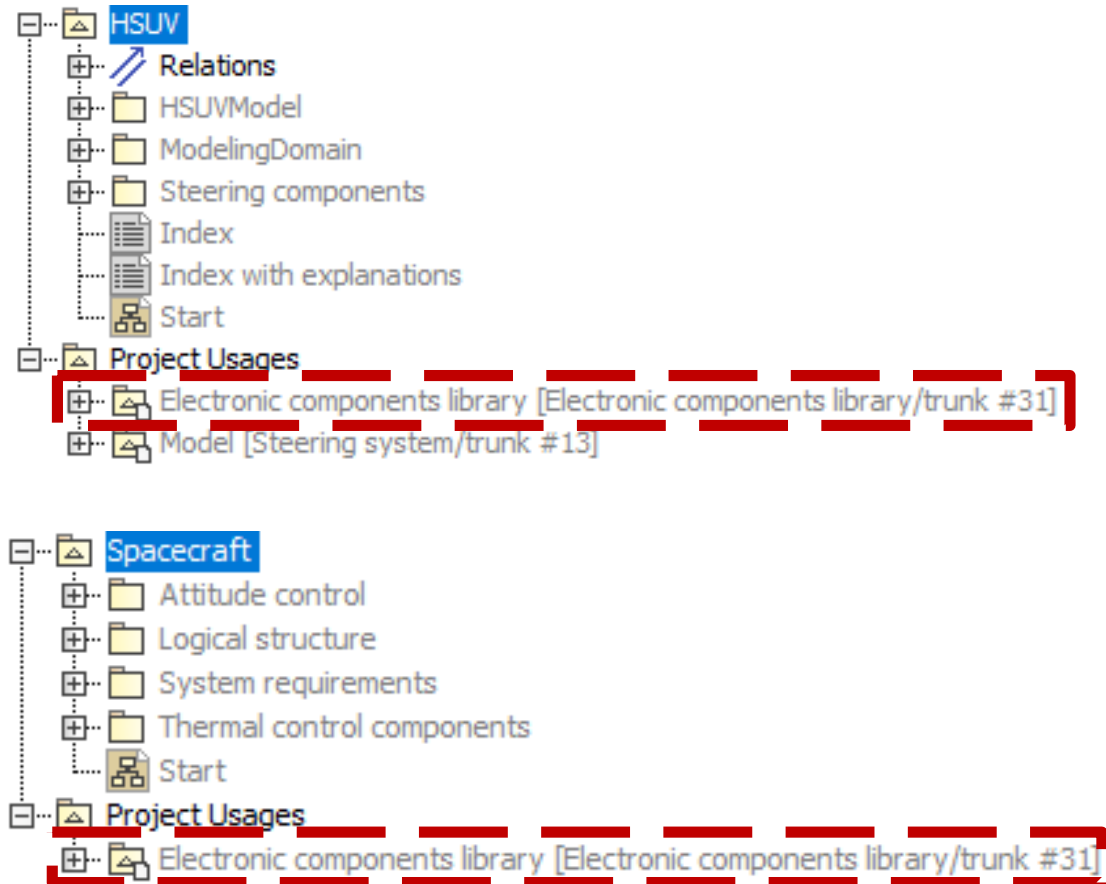
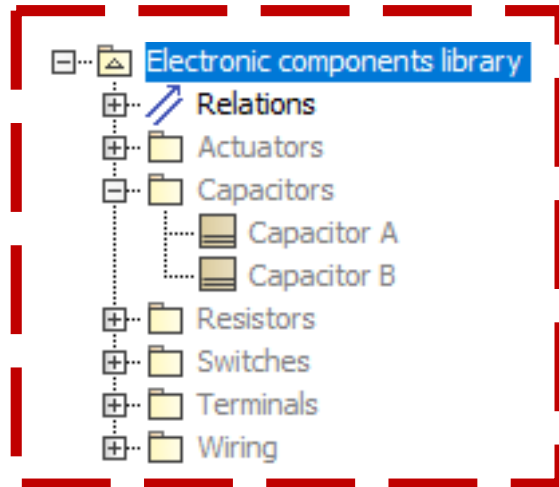


Powerful queries at your fingertips





Change impact analysis





Change impact analysis

The screenshot displays a project tree for 'HSUV'. The tree structure includes:

- HSUV
 - Relations
 - HSUVModel
 - ModelingDomain
 - Steering components
 - Electronic Power Steering
 - Relations
 - Dependency[Pump -> Actuator A] (marked with a red 'X')
 - Pump
 - Tie Rod End
 - Index
 - Index with explanations
 - Start
- Project Usages
 - Electronic components library [Electronic components library/trunk #32] (highlighted with a red dashed box)
 - Relations
 - Actuators
 - Actuator A (marked with a red 'X')
 - Actuator B
 - Capacitors

A warning dialog box titled "Recovered Elements Detected" is shown in the bottom right corner. The message reads: "The project contains recovered elements in the used project Hybrid Sport Utility Vehicle. Learn how to manage them in [the resolution instructions.](#)"



Change impact analysis with model queries

The screenshot shows the IncQuery Server for Teamwork Cloud REST API interface. The browser address bar indicates the URL: `nmecc-demo-1.iqs.beta.incquerylabs.com/static/iqs4twc/ul/index.html#/QueryResultContainer`. The page title is "IncQuery Server for Teamwork Cloud".

Below the title, there is a list of queryable properties:

- Property - (e8ef82a1-b0d4-4b14-aa1e-c278afcbe034)
- DiagramContentsDescriptor - (9f9a1339-46f6-4633-9d76-211010565f79)
- Property lastName - (80bf11bc-6e89-4a15-804b-8987771a8126)
- Property - (c79ac541-27de-4ca6-8451-bebec8456ec8)
- Property - (81fd0c6b-821b-4884-aa3d-6cc979d99ce2)
- Property ID - (739a0a19-0806-498b-bdd8-27018af70249)
- Property email - (59707427-46ab-4ba1-9804-8ff57a915020)
- Property - (649d88ca-bcda-46e0-a38f-14a41f3c250d)
- Property firstName - (d86afad9-32ef-4410-b615-30c24b96de2d)

Below the list, the results are displayed for a query executed on 05/06/2018 at 15:45:29 with a response time of 487ms. The results are shown in a table with filters for Workspace, Resource, Branch, and Revision.

Workspace	Resource	Branch	Revision
<input type="text" value="Enter Regex for Workspace..."/>	<input type="text" value="Enter Regex for Resource..."/>	<input type="text" value="Enter Regex for Branch..."/>	<input type="text" value="Enter Regex for Revision..."/>
model-reuse	library-model.MASTER	trunk	1
model-reuse	user-model-2.MASTER	trunk	1

Showing rows 1 to 2 of 2

IncQuery Server for Teamwork Cloud REST API - 0.5.0

IncQuery is built on open source



<http://eclipse.org/viatra>

<http://github.com/viatra/v4md>

Model query and transformation framework

- Declarative
- Scalable
- Reactive

Easy integration

- Java & other JVM languages
- Enabling libraries for open & commercial tools



Major industrial users & partners:





Try it yourself

- **Get the MagicDraw plug-in at <https://incquerylabs.com/incquery>**
 - Complete with tutorial and examples
 - Powerful model queries
 - Comprehensive active validation support
 - Build your own on-the-fly validation rules
 - Use your own opaque behaviors for quick fixes
 - Fully integrated with MagicDraw 18.4/5 and 19.0
- **<https://github.com/IncQueryLabs/TMT-SysML-Model>**
 - Examples of actual validation rules inspired by NASA JPL



Thank you!



<http://iq4md.incquerylabs.com>



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