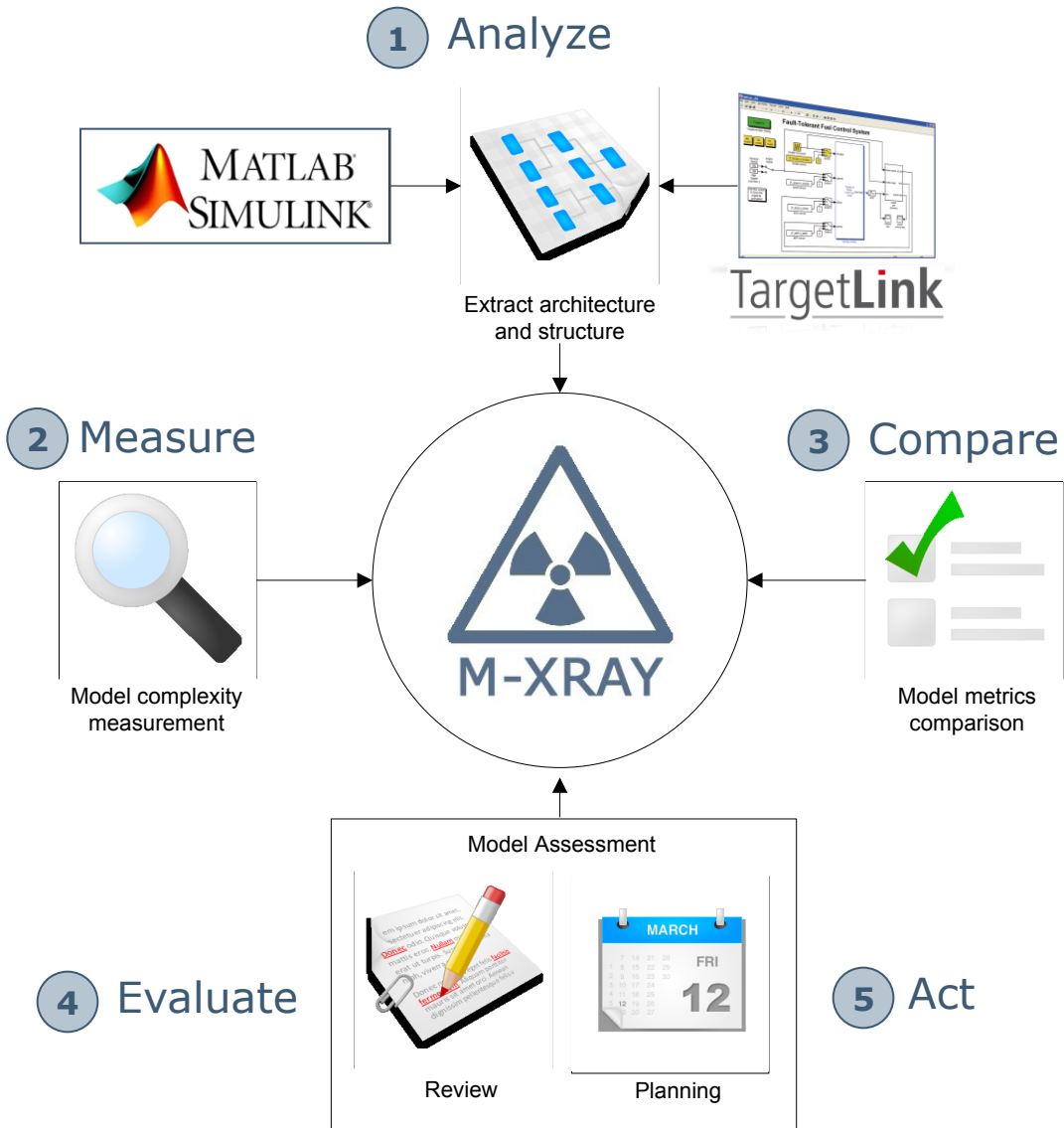




M-XRAY: Ensuring Software Models are Production-Ready

Analyze and evaluate architecture and complexity of Simulink® and TargetLink® models



Ensuring models comply with accepted standards

□ ISO 26262, IEC 61508, DO-178B

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M-XRAY: Mastering Larger Models

Key benefits

- Practice-oriented approach to determining model complexity
- Quick overview of model architecture and structure
- Model metrics used to evaluate model quality
- Measures and evaluates model complexity in compliance with accepted standards (ISO 26262, IEC 61508, DO-178B)
- Prepares and supports the model review process
- Detects subsystems with above-average complexity
- Displays all libraries and model references used

Key features

- Measurement of model complexity, including Halstead, cyclomatic complexity, block number, depth of hierarchy, interface width, state complexity, local and global complexity
- Visualization of model architecture and structure
- Accentuation of complex model structures
- Comparison of model complexity between multiple models
- Automatic generation of review templates
- Different license options: single developer, group, site, company
- Free evaluation version (available for 1-month free trial)

Metric Overview

Model: C:\Programme\MATLAB\R2006b\toolbox\stateflow\sdemos\fuelsys.mdl

Name	Metric name	Overview	Detail		
Absolute Local Complexity	Local Complexity		good [0 - 300]: 58	acceptable [300 - 750]: 1	too complex [750+]: 0
Subsystem Level	Level		good [0 - 3]: 31	detailed [3 - 6]: 28	too detailed [6+]: 0

Most complex subsystems [\[contents\]](#)

Path	Name	Level	Info	Local Complexity	Global Complexity
fuelsys/fuel rate controller	Airflow calculation	2	1	344	344
fuelsys/fuel rate controller/Fuel Calculation	Switchable Compensation	3	2	200	238
fuelsys/engine gas dynamics/Throttle & Manifold	Throttle	3	3	151	151
fuelsys/fuel rate controller	Sensor correction and Fault Redundancy	2	4	134	332
-	fuelsys	0	5	96	2588
fuelsys/fuel rate controller/control logic	Sens_Failure_Counter	3	6	85	195

M-XRAY product information:

<http://www.model-engineers.com/en/our-products/m-xray.html>

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