Graphical modeling

THE **SIRIUS** FRAMEWORK

A MODELING LANGUAGE FOR HOME AUTOMATION SYSTEMS

0. Overview

1. Introduction Big picture

IoT

Home automation

Analysing

Generating

1. Introduction Technologies

Sirius[1]

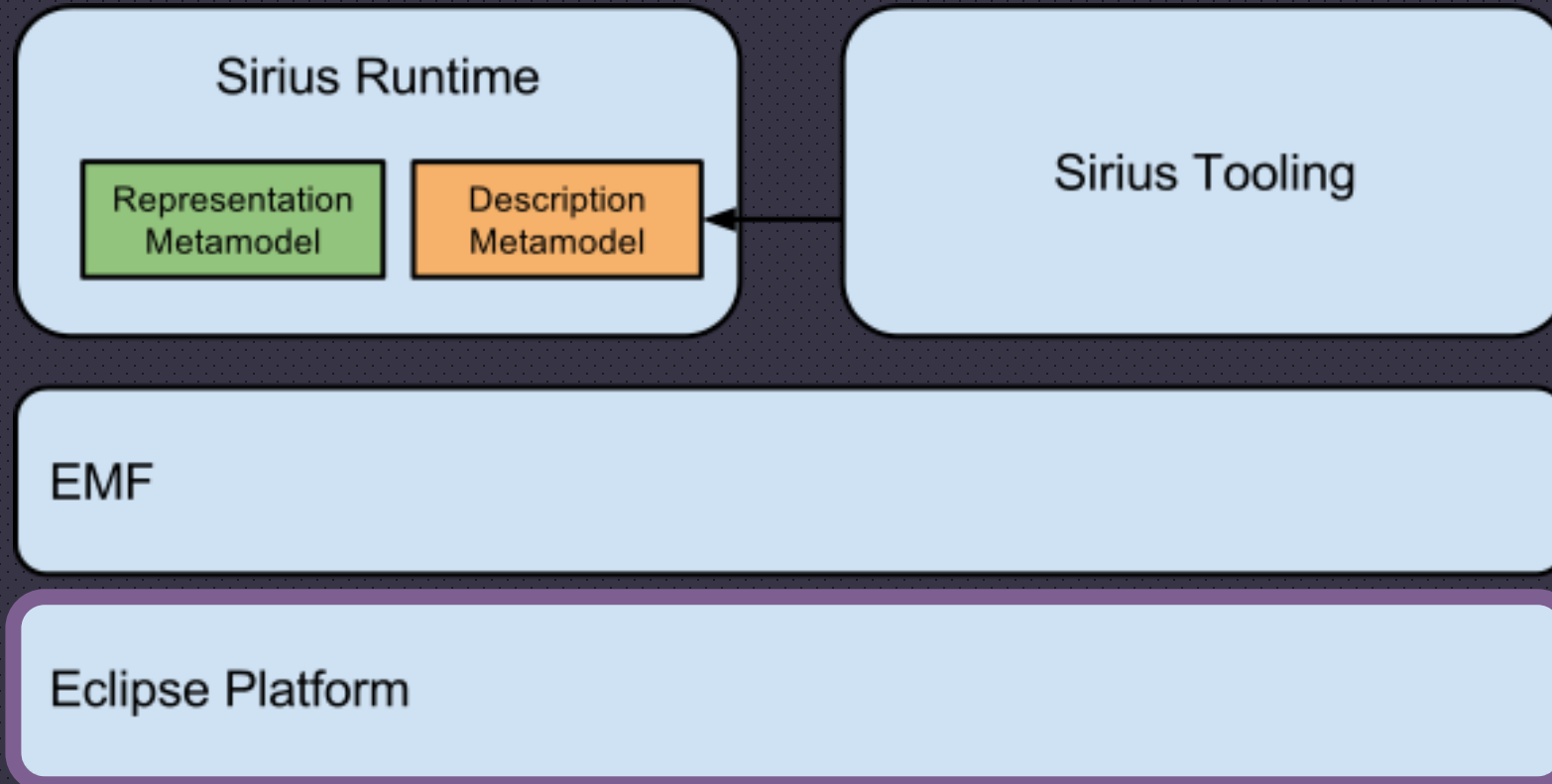OpenHAB[2]

1. http://www.eclipse.org/sirius/
2. https://www.openhab.org/
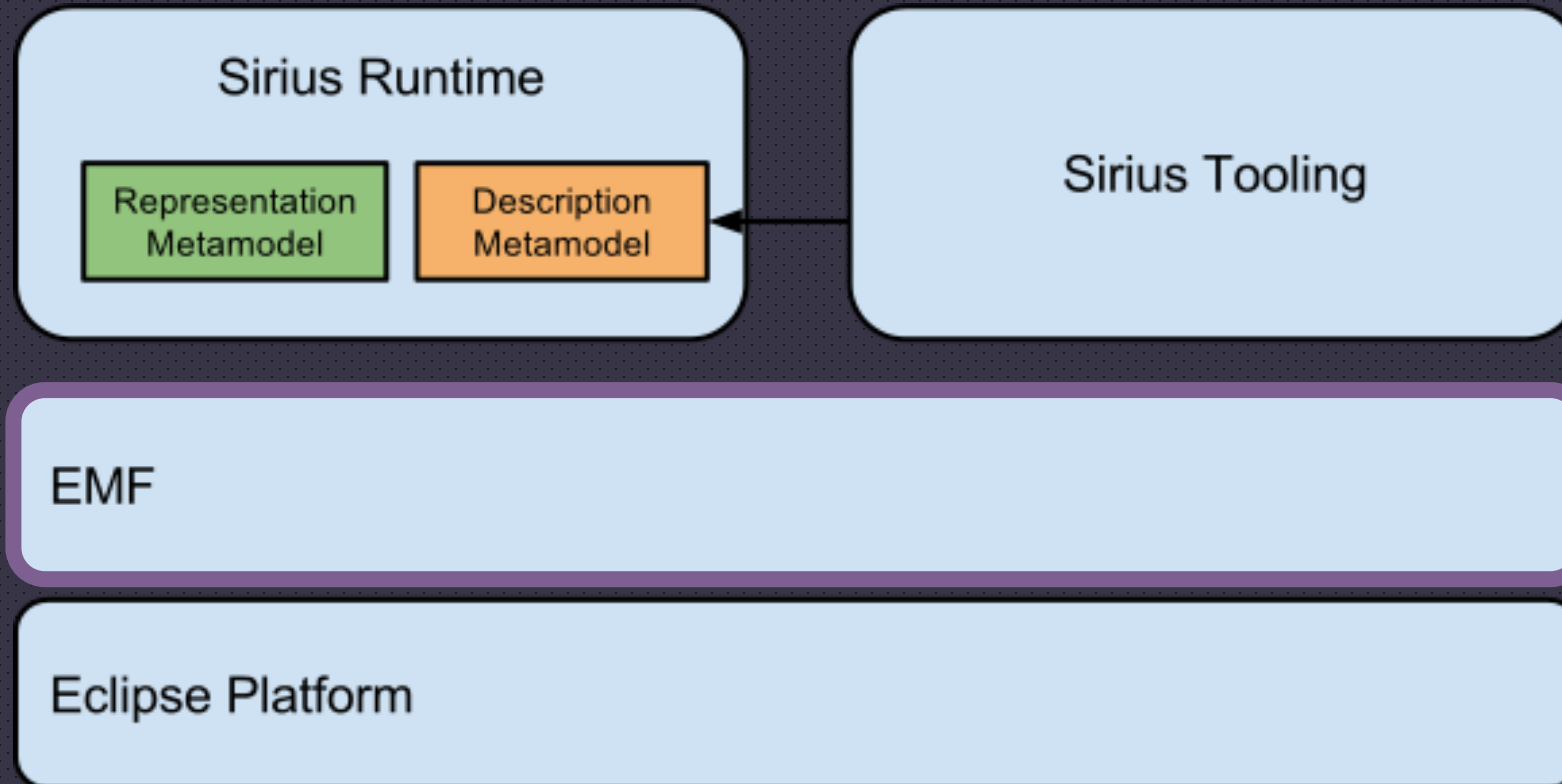
2. Architecture Sirius

3. https://www.eclipse.org/sirius/doc/developer/Architecture_Overview.html
4. https://www.eclipse.org/forums/index.php/t/1070145/

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2. Architecture Sirius

Diagram showing Sirius architecture layers:
- Top layer (highlighted): Sirius Runtime containing Representation Metamodel and Description Metamodel, and Sirius Tooling
- EMF
- Eclipse Platform

3. https://www.eclipse.org/sirius/doc/developer/Architecture_Overview.html
4. https://www.eclipse.org/forums/index.php/t/1070145/
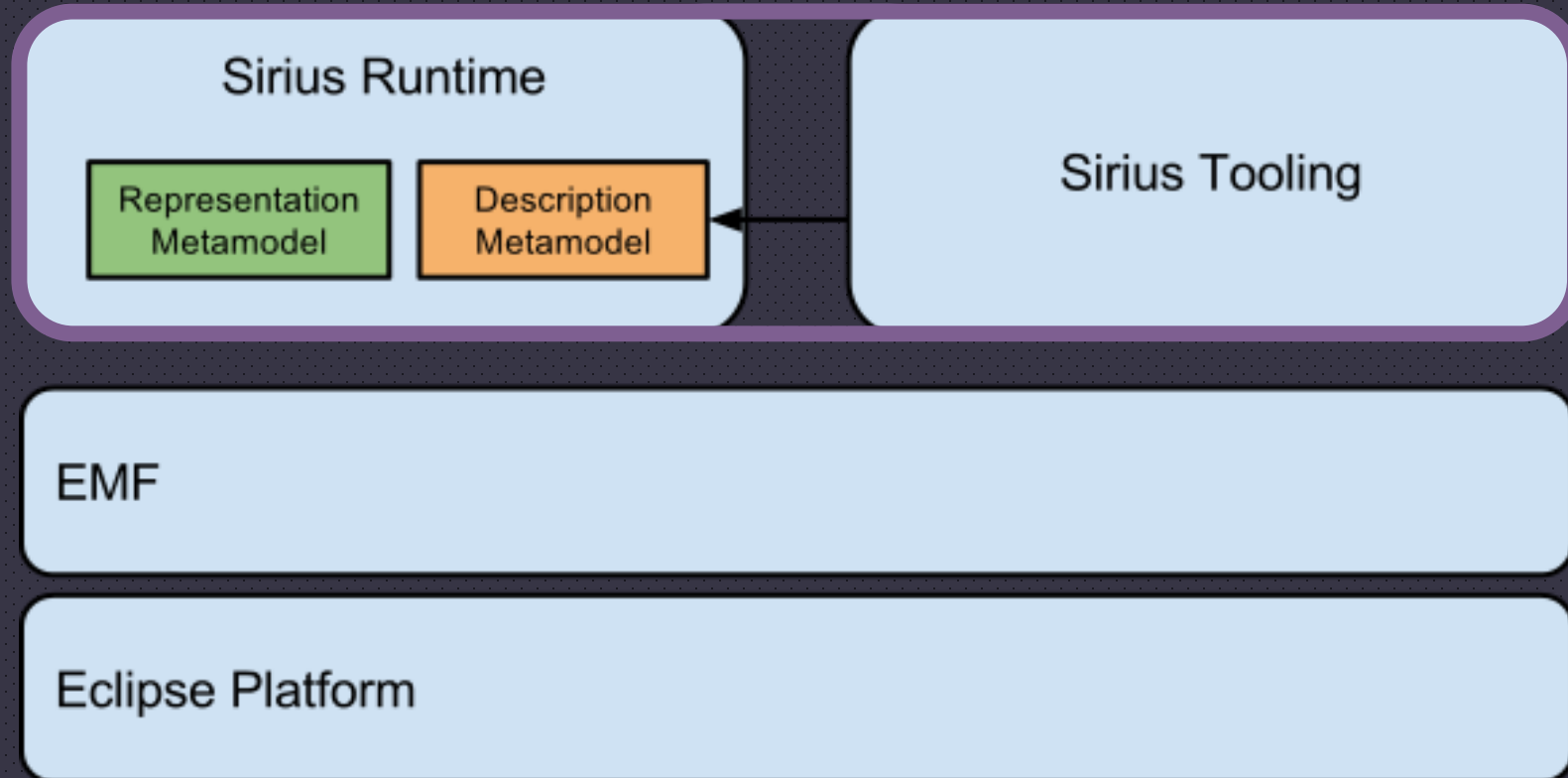
2. Architecture OpenHAB

Rules

Actions

3. Features and capabilities Sirius

Built in representations[5]:

Diagrams

Sequence diagrams

Tables

Trees

Properties view

5. https://www.eclipse.org/sirius/doc/specifier/Sirius%20Specifier%20Manual.html

4. Case study Platforms

OpenHab

IFTTT

Home Control Assistant

4. Case study What?

OpenHAB

Conditions
- ◦ Parse
- ◦ Visualize
- ◦ Generate

Actions
- ◦ Visualize
- ◦ Generate

4. Case study Next?

Model language
- Conditions
- Actions
- Relations

Parse

Transform

5. Summary

How?   Sirius

What?   Home automation
- OpenHAB
  - Generate
  - Parse
  - Visualize
  - Analyze

Why?   Complexity