Sirius by Example

Build your own diagram, tables and tree editors in 20 minutes

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http://www.eclipse.org/sirius

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Obeo
Model Driven Company

What is Sirius?

Sirius in a nutshell

- A system to quickly define custom multi-view worbenches
  - Based on graphical editors/modelers
- Based on Eclipse Modeling Technologies
  - No need to be an expert for most uses
- New Eclipse Project
  - But already proven technology

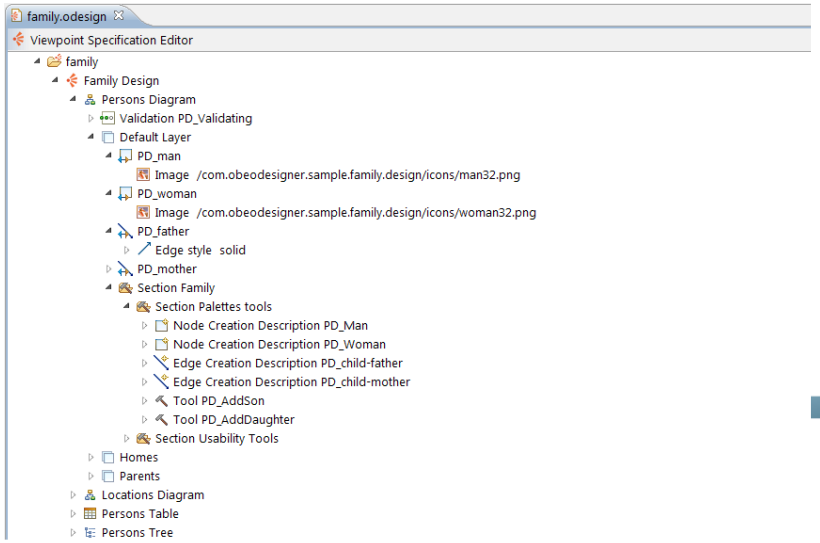
What benefits?

- For developers: reduce cost & complexity
  - No need to be a GMF expert
  - Dynamic & iterative (live) development
- For end-users
  - Tools adapted to their needs and workflows
  - Improved experience (compared to raw GMF)

Two parts for two kinds of users

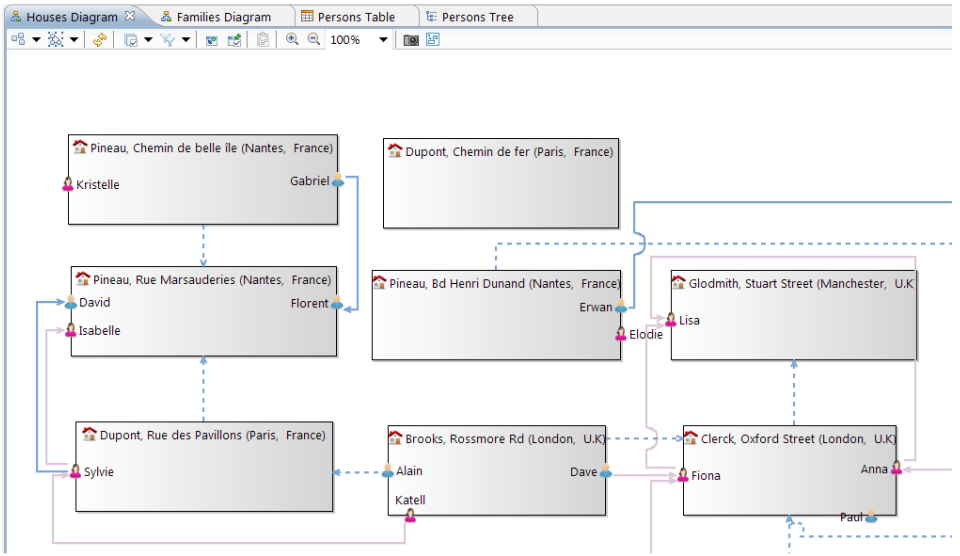
Specification Environment

(Specifier/Developer)



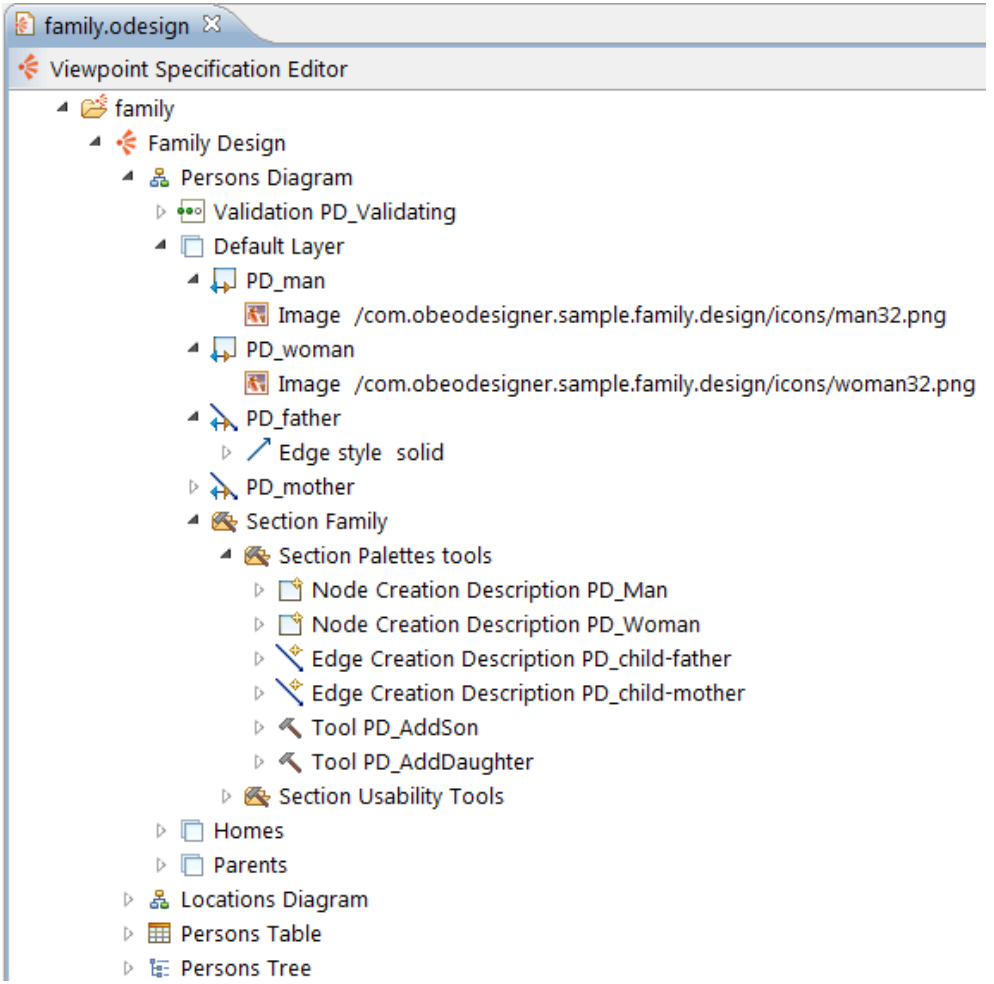
Runtime Environment

(End-user)



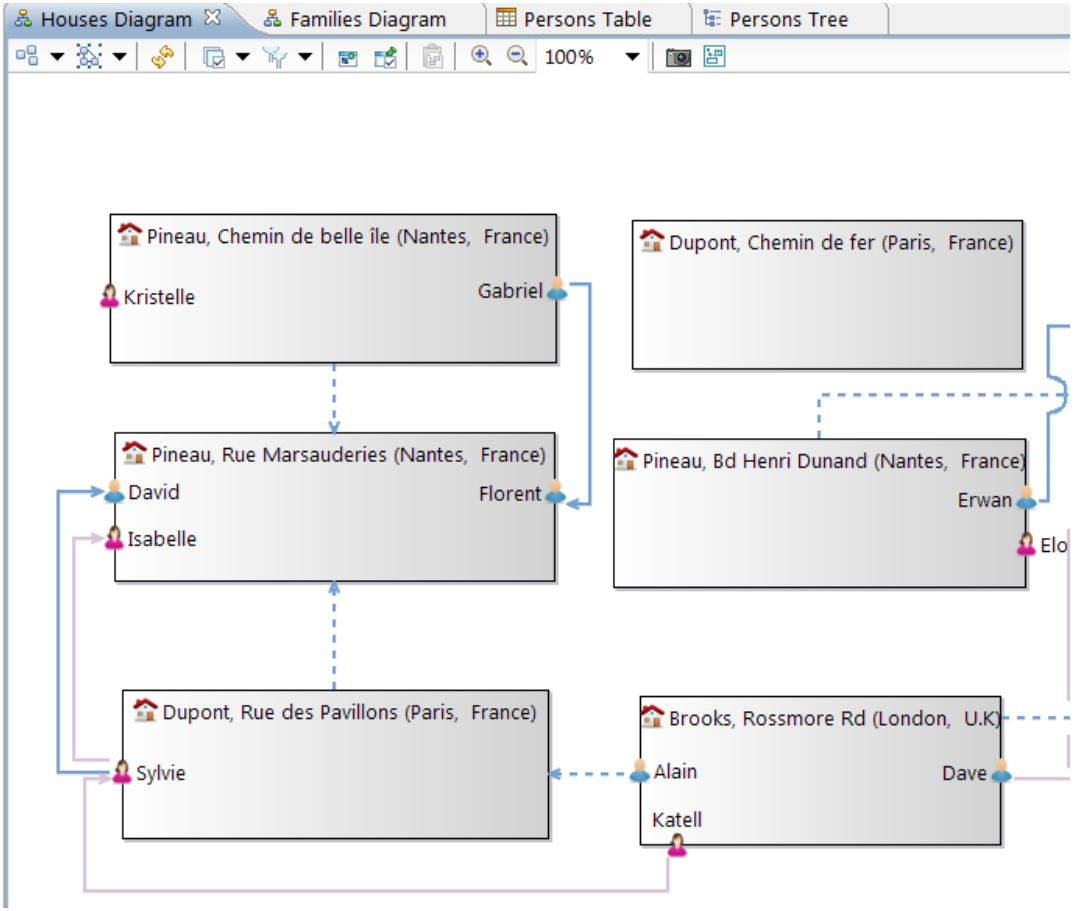
The Specification Environment

- Define custom multi-view worbenches
  - Diagrams, Trees, Tables
- With little technical knowledge
- Get a working modeler fast
  - instant feedback
- Highly customizable
  - native tooling
  - Java or extension points



The Runtime

- Executes the specification
  - No code generation
- Users manipulate models
  - Not just a drawing tool
- Environment adapted to user needs
  - Viewpoint-based
- Simplified workflow
  - Modeling Project

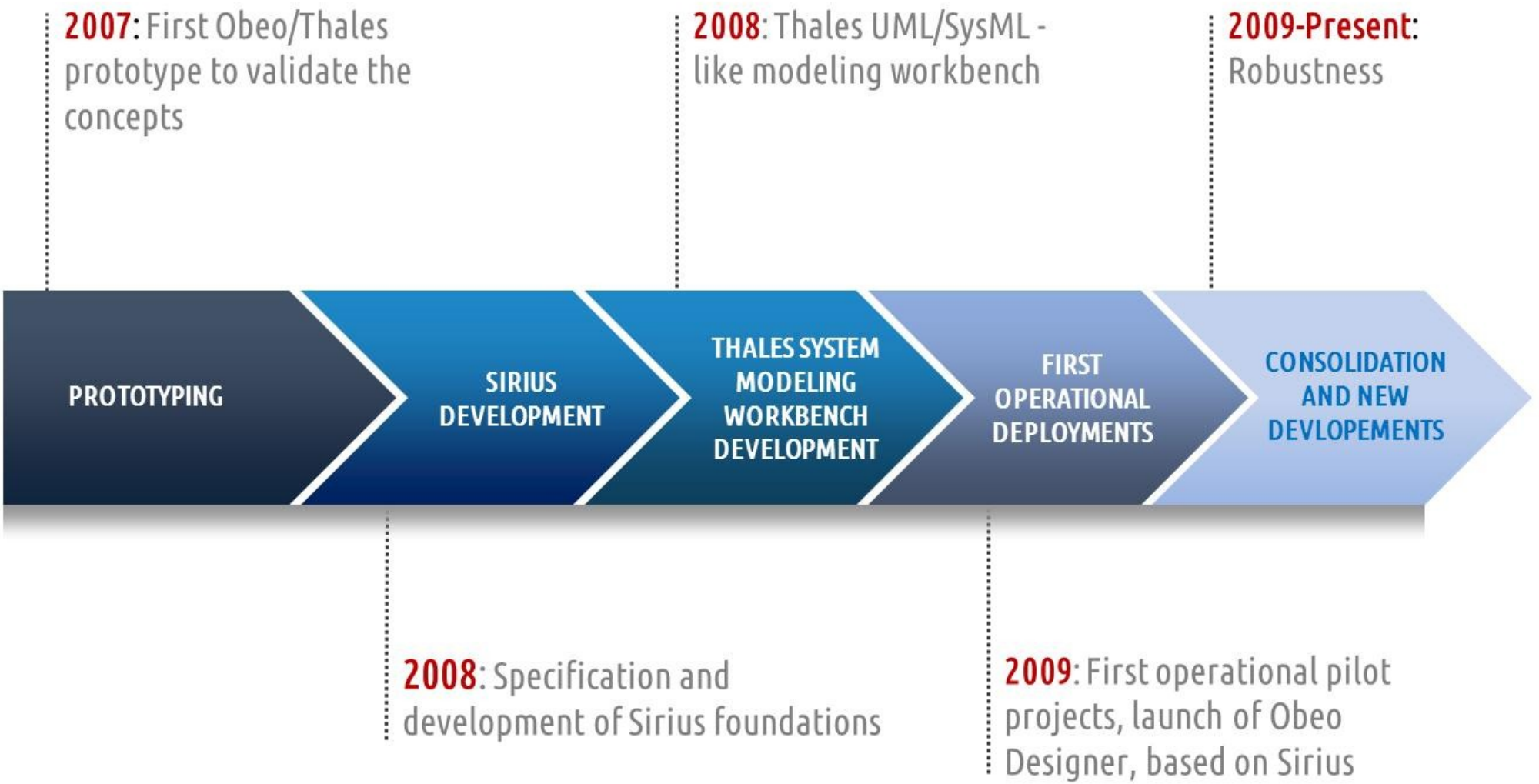


A bit of history (1/2)

Thales original needs

Thales previous experiences with UML profiling	• Poor adoption by system engineers • Metamodels constrained byUML concepts • Representations constrained by existing UML diagram 
Need for DSLs	• More freedom in representations • Heavier and more technical (GMF) developments • Originally 2 or 3 foreseen modeling tools
Workbench/Business concerns separation	• Generic infrastructure for model management and representation • Focus on business added-value • Capitalization 

A bit of history (2/2)



Who already uses Sirius?

Thales Operational Deployment Figures

Avionic Systems for Airbus, Boeing, Dassault

France

Security

France

Space

France, Italy

Transportation

Canada, Germany

Ground and Air Radars

France, The Nederlands

Air Traffic Control

Australia, France

XXX Modeling Tools	XXX Everyday Users
XX Operational or Pilot Projects	XXX Diagrams in Some Models
XXX Engineers Trained per day	XXXX Graphical Elements in Biggest Diagrams

Who already uses Sirius?

- Embedded in the Obeo Designer and Obeo SmartEA (proprietary) products for 4 years
  - many use cases & customers
- Open Source modelers on Github and the MarketPlace
  - Many fields (UML, Risk Analysis, SysML, TOGAF, Entity...)
  - 1300+ installs in September 2013
- And now... **you!**
  - Integation builds for v0.9 available now
  - Version v1.0 planned for Eclipse 4.4 (Luna)

Sirius in Action

Live Demo

- Eclipse 4.3 (Kepler)
- Sirius 0.9 (integration build)
- All materials available on GitHub
  - https://github.com/pcdavid/eclipsecon-europe-2013

Alex will play the **Customer**

Expresses the needs

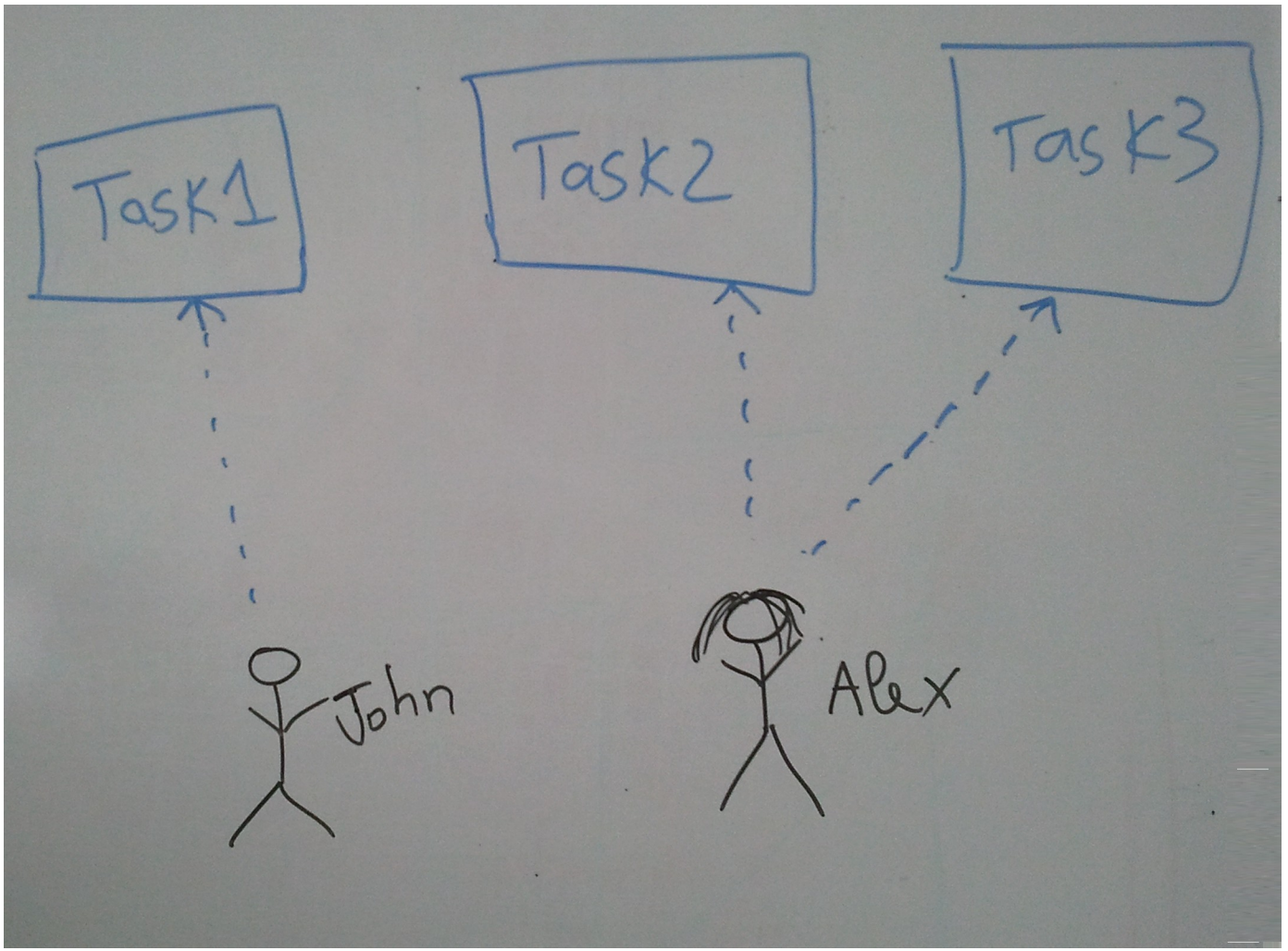
No technical knowledge

Pierre-Charles will play the **Specifier**

Implements the modelers

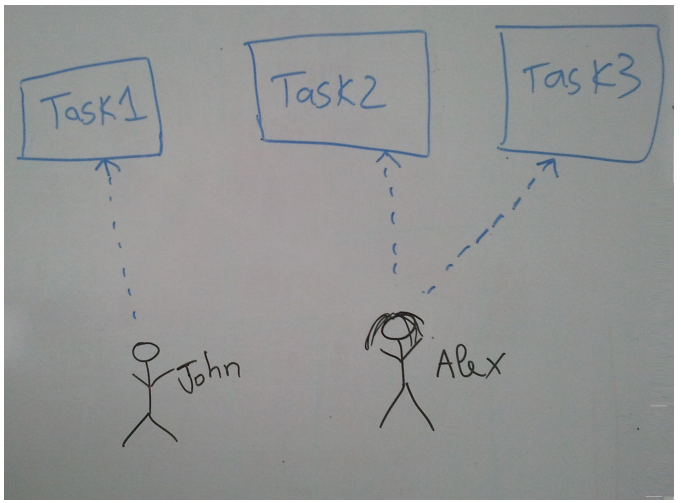
Sirius in Action

What the customer wants:

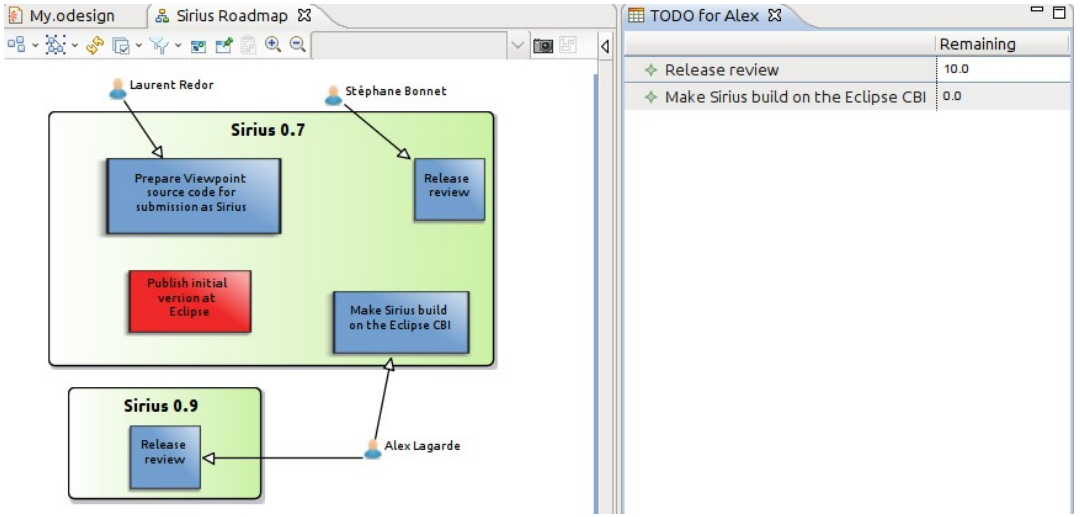


Sirius in Action

What the customer asked for:

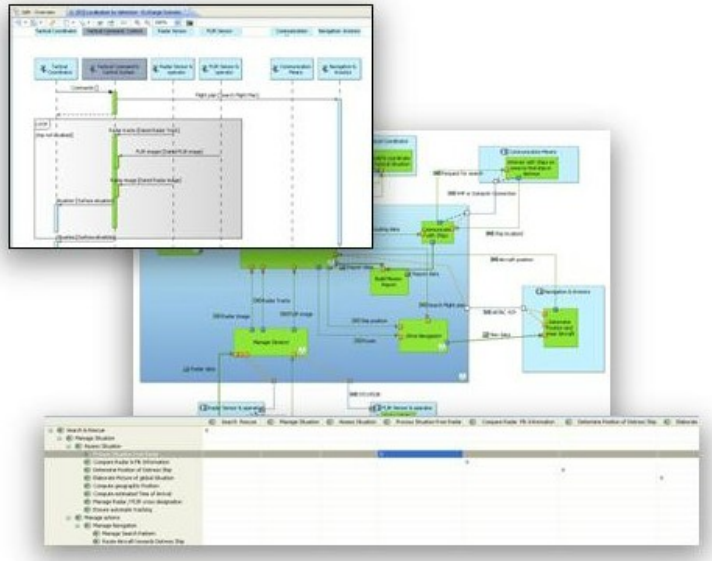


What he actually needed and got:



What the customer can get in more than 20 minutes

Sirius in the Thales Flagship Engineering Modeling Workbench



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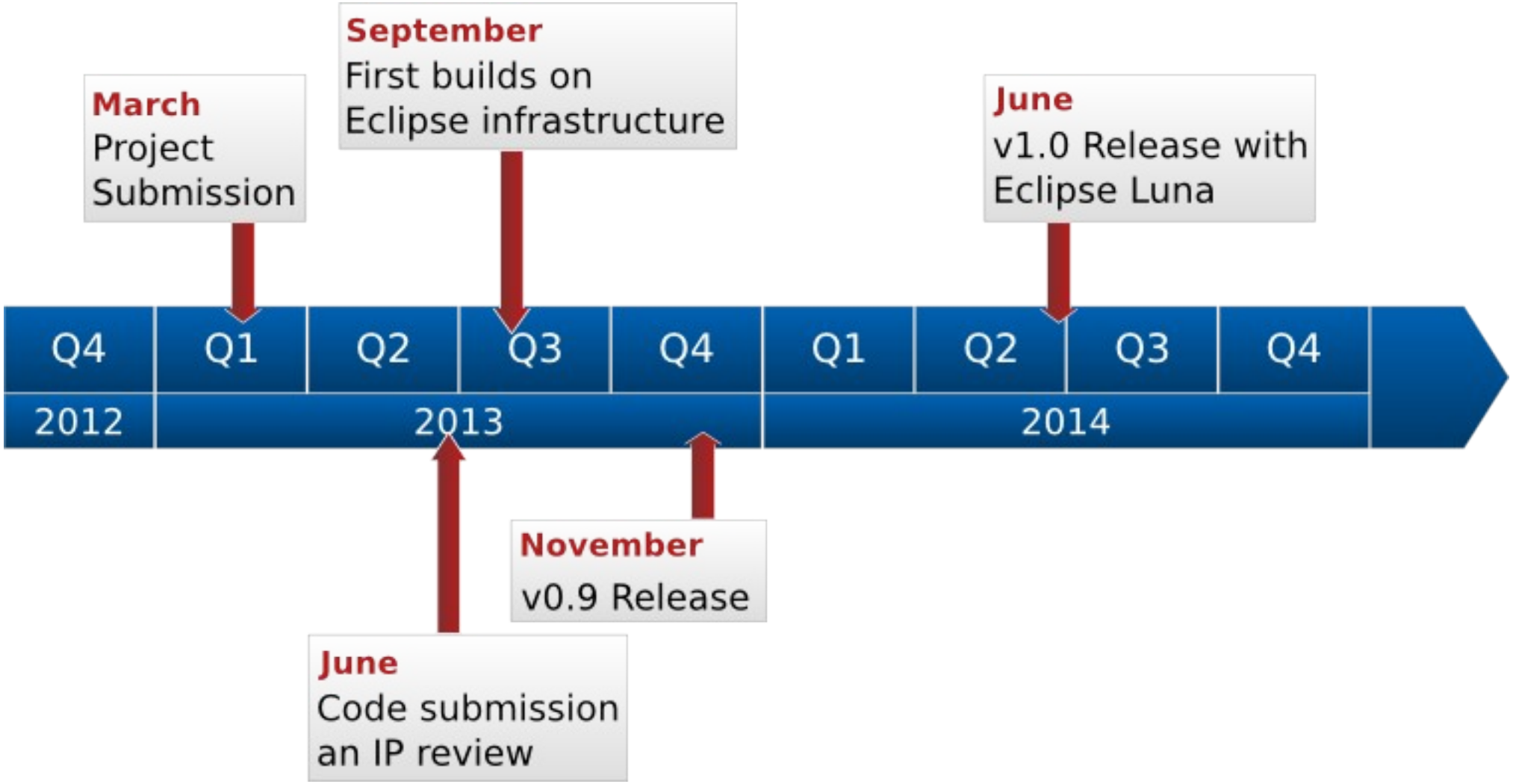
Conclusion

Three things to remember about Sirius

1. A full-featured environment to create custom modelers
   - Easy to use
   - Fast, iterative (live) development
2. Mature, many deployements
   - Inside Thales and elsewhere via Obeo Designer
3. Official Eclipse project
   - around 8 full-time commiters
   - v0.9 release soon, v1.0 will be in Luna

Roadmap


March
Project
Submission
September
First builds on
Eclipse infrastructure
June
v1.0 Release with
Eclipse Luna
Q4
Q1
Q2
Q3
Q4
Q1
Q2
Q3
Q4
2012
2013
2014
June
Code submission
an IP review
November
v0.9 Release

Thank You!

- Project Web Site
  - http://www.eclipse.org/sirius
- How to get started
  - http://wiki.eclipse.org/Sirius/Getting_Started
- Forum
  - http://www.eclipse.org/forums/eclipse.sirius
- Don't forget to give feedback

See you at the BOF tonight!