Sirius by Example

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

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http://www.eclipse.org/sirius

What is Sirius?

Sirius in a nutshell

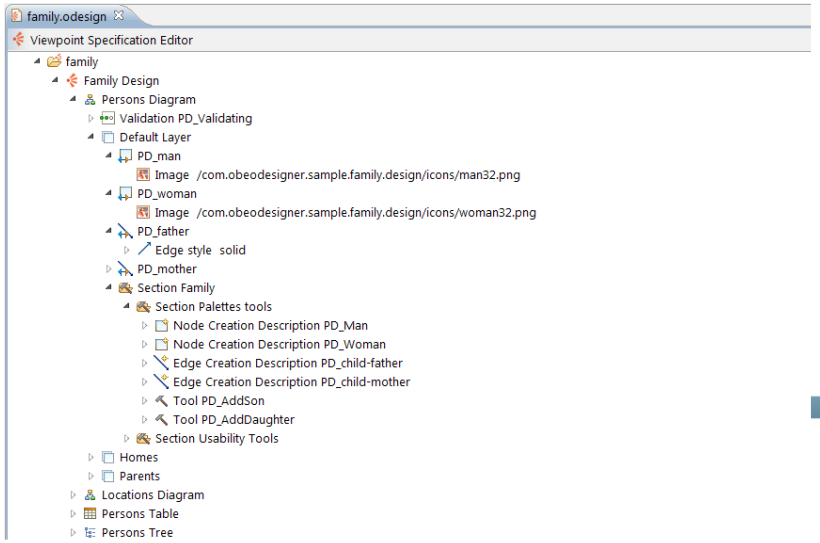
- A system to *quickly* define custom *multi-view* worbenches
  - Based on graphical editors/modelers
- Based on Eclipse *Modeling* Technologies
  - No need to be an expert for most uses
- *New* Eclipse Project
  - But already *proven* technology

What benefits?

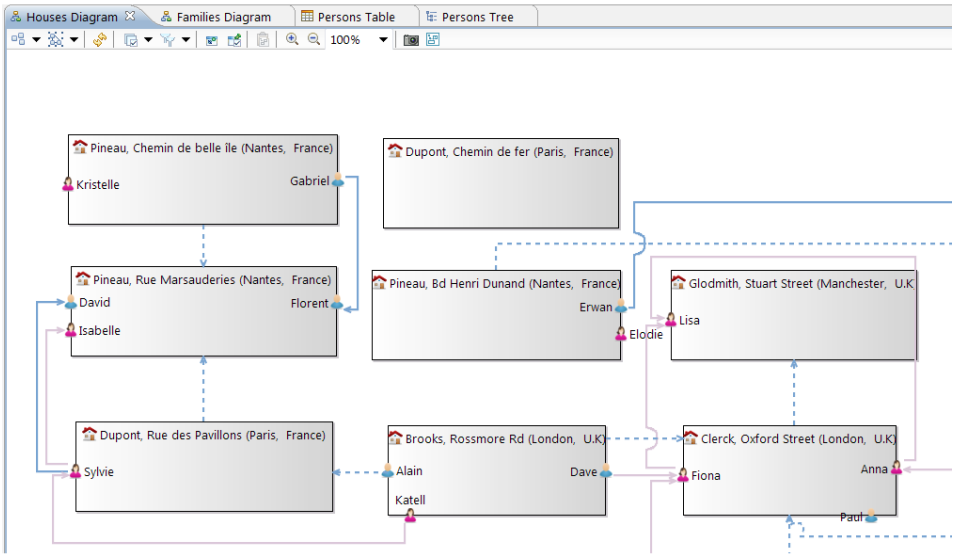
- For developers: reduce *cost & complexity*
  - No need to be a GMF expert
  - Dynamic & iterative (live) development
- For end-users:
  - Tools *adapted* to their needs and workflows
  - Improved experience (compared to raw GMF)

Two parts for two kinds of users

Specification Environment (Specifier/Developer)

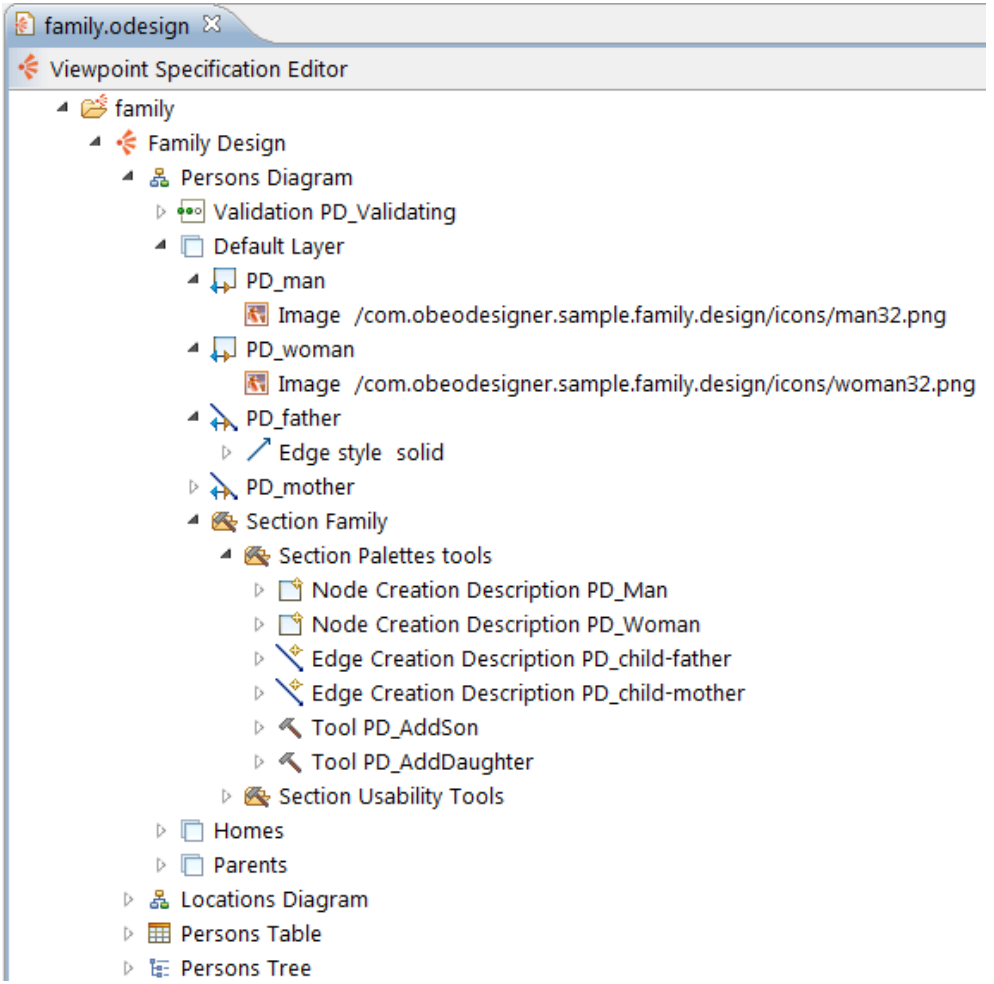


Runtime Environment (End-user)



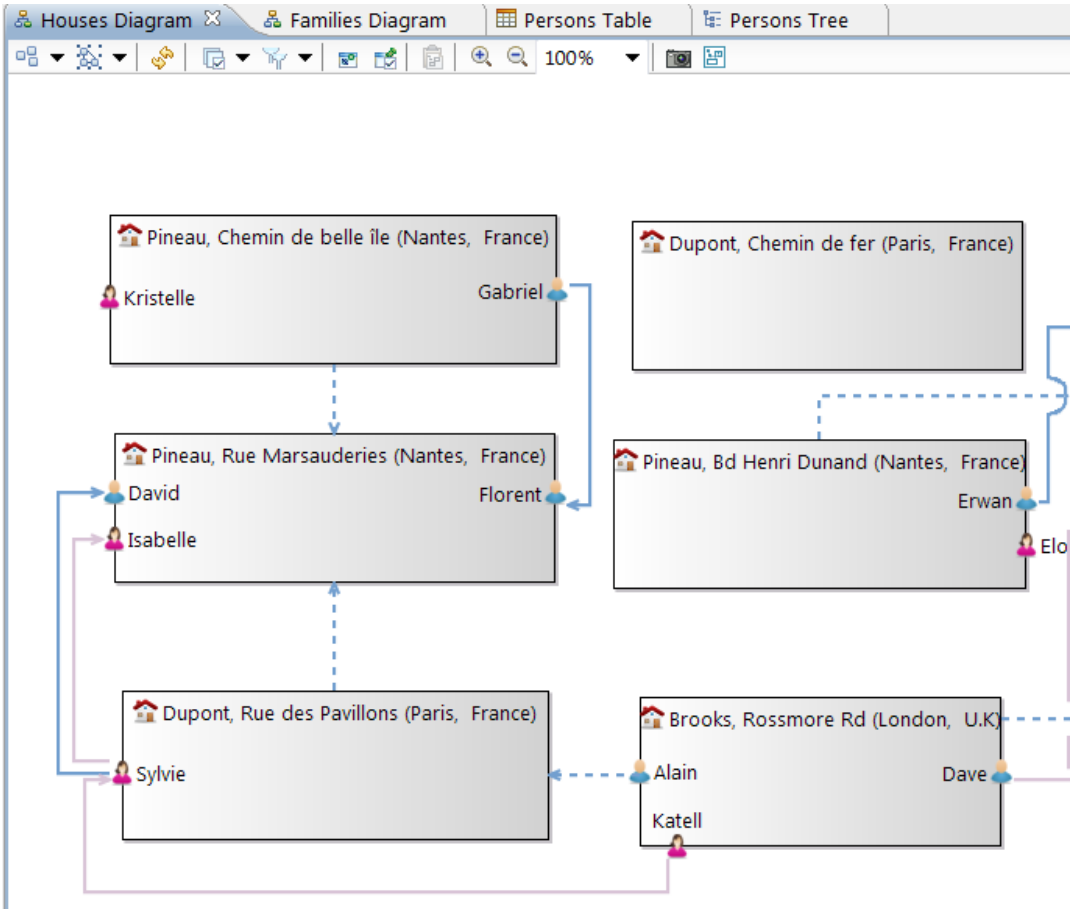
The Specification Environment

- 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 work with models
  - Not just a drawing tool
- Environment adapted to user needs
  - Viewpoint-based
- Simplified workflow
  - Modeling Project

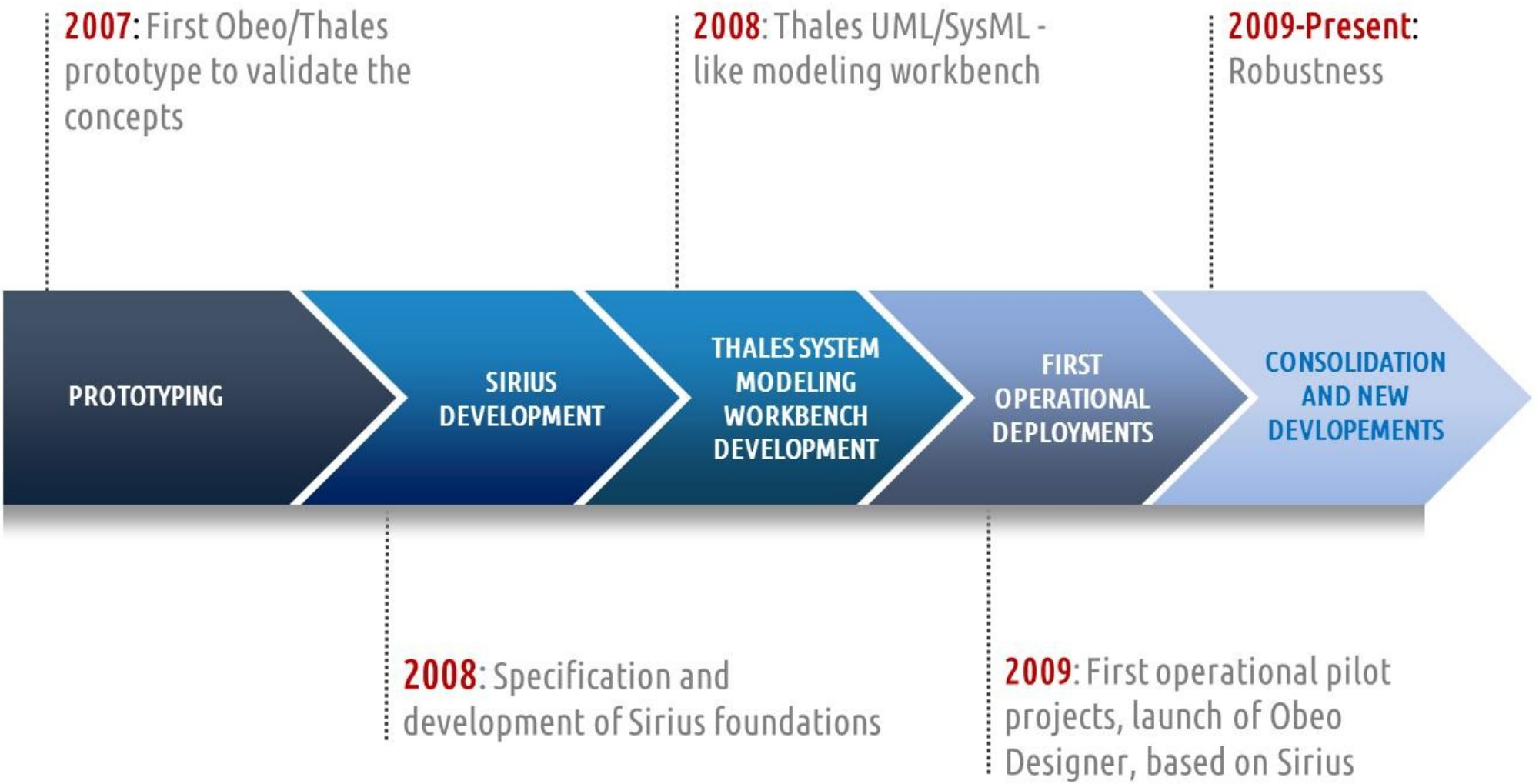


A bit of history (1/2)

Thales original needs

Thales previous experiences with UML profiling	• Poor adoption by system engineers • Metamodels constrained by UML 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
  - Available from the Eclipse 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)
  - Available in Obeo Designer with more features and commercial support

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

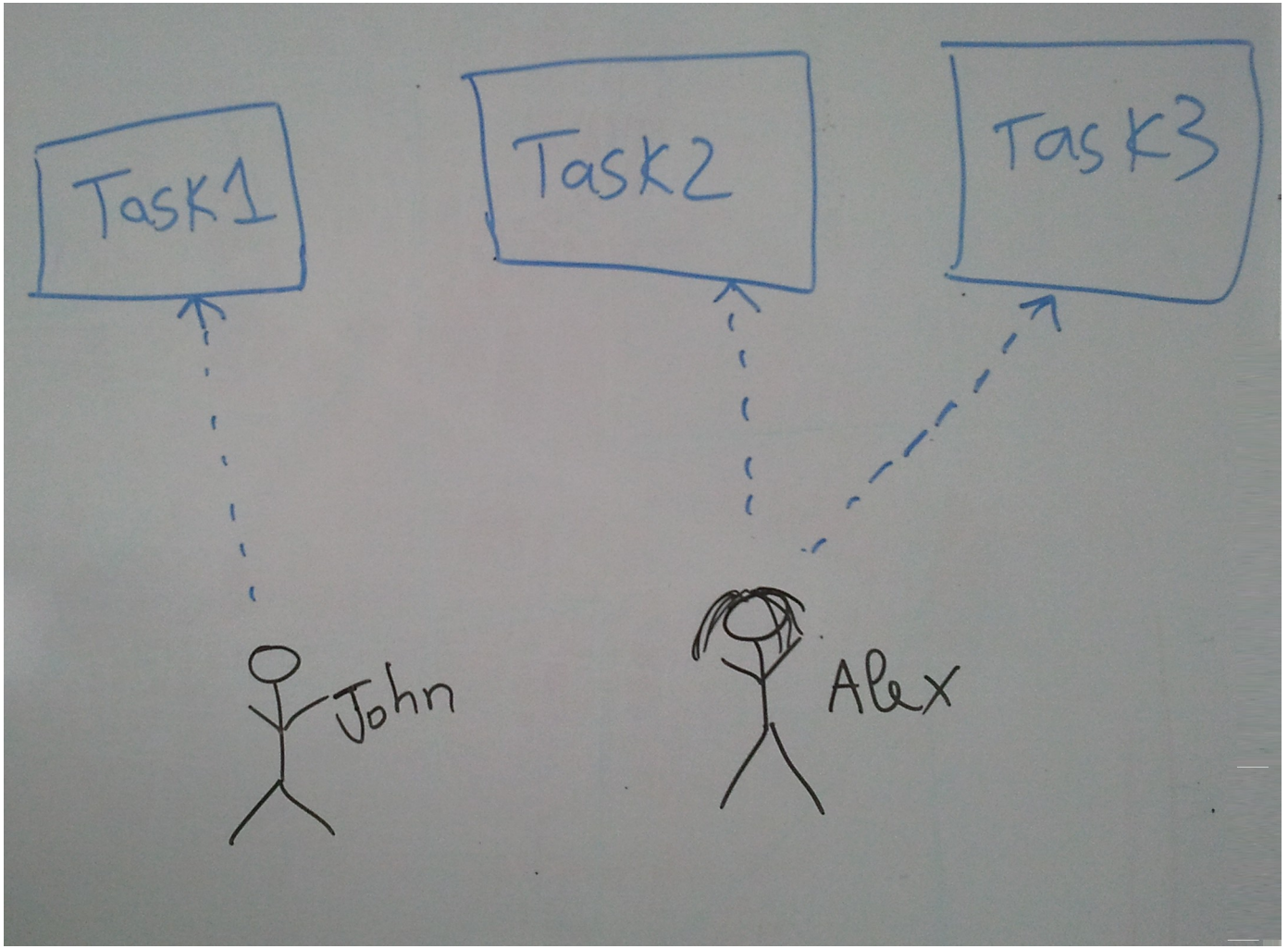
No technical knowledge

Pierre-Charles will play the **Specifier**

Implements the modelers

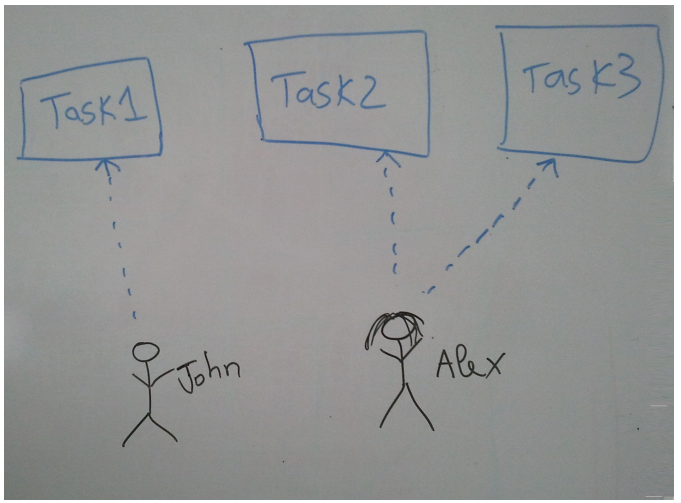
Sirius in Action

What the customer wants:

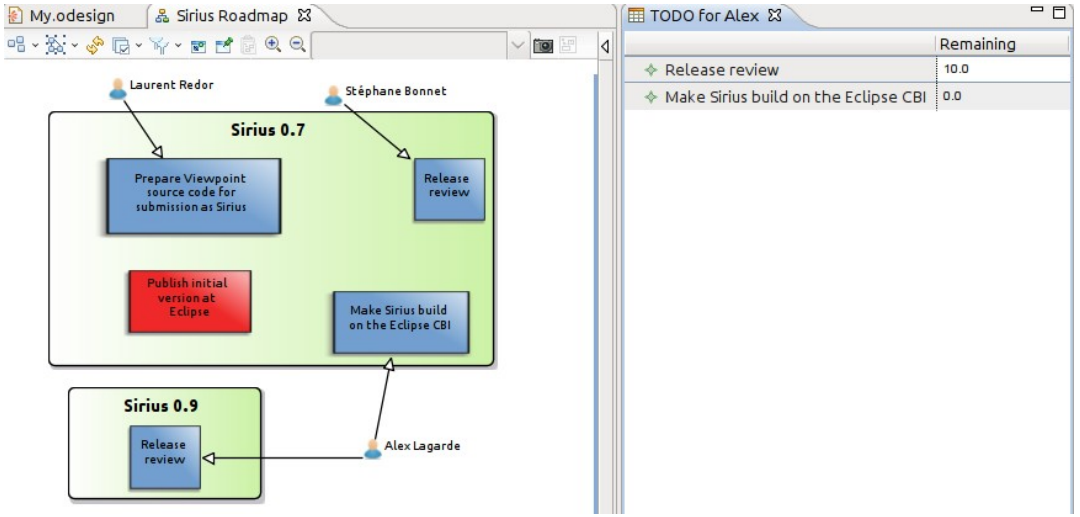


Sirius in Action

What the customer asked for

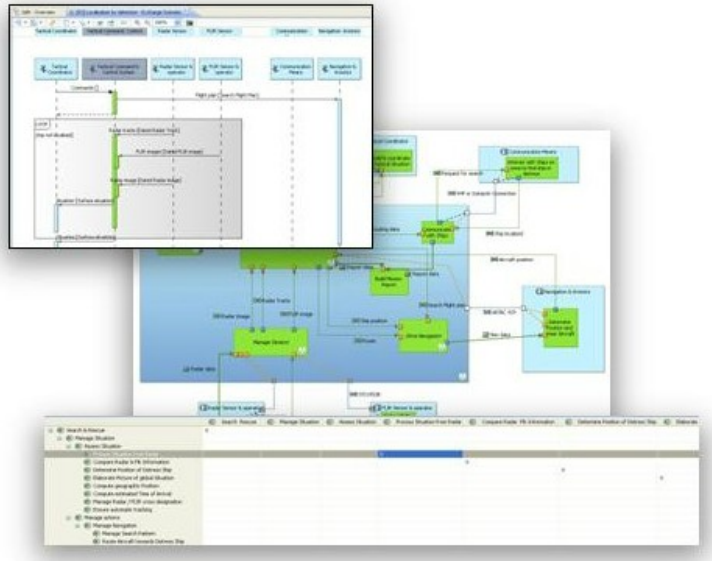


What he actually needed, and got



What the customer can get in more than 20 minutes

Sirius in the Thales Flagship
Engineering Modeling Workbench



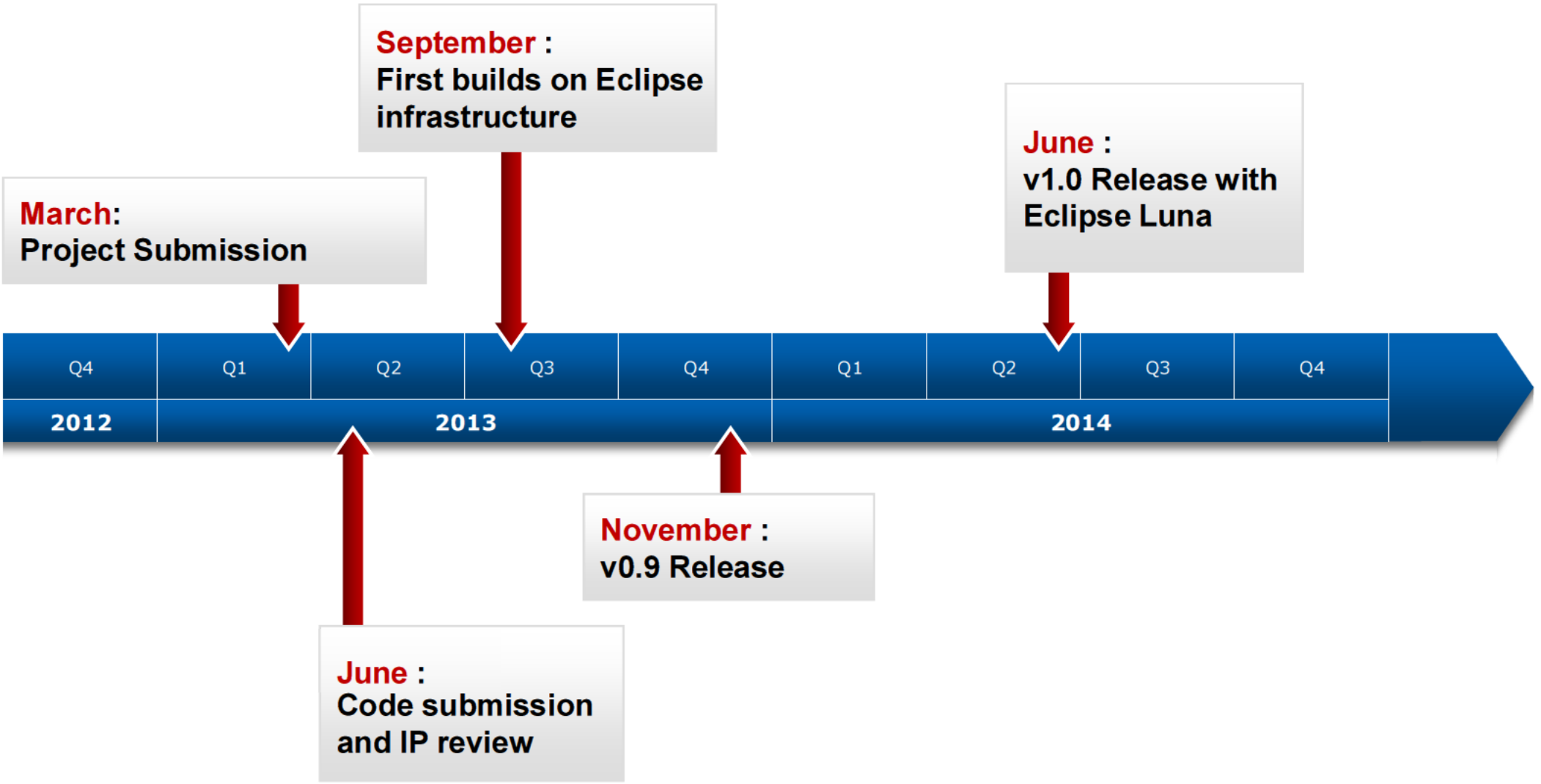
THALES

Conclusion

Three things to remember about Sirius

1. A *full-featured* environment to create custom modelers
2. *Mature*, many deployements
3. Official Eclipse project
   - around 10 full-time commiters
   - integration builds available, 0.9 release soon
   - version 1.0 will be in Luna

Roadmap


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

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!