Scilab Cloud
Sanofi Success Story
Scilab – Highlights

• Scilab® is an open-source software for numerical computing

• Scilab has a 1M+ user community worldwide

• Scilab Cloud enables the deployment of scientific applications

• The Scilab Team is part of ESI Group
Scilab – ESI Offering

• **Professional services**
  Development of applications leveraging Scilab, Scilab training, Scilab support

• **Cloud services**
  Scilab Cloud for the deployment of applications (on-premises/private or public cloud)

• **Software solutions**
  Offerings which extend the power of existing ESI software with Scilab & Scilab Cloud
  (Pre/post-processing, coupling with third-party simulation codes, simple apps..)
Scilab functional overview

Application Development & Deployment

Packaged Engineering App
Algorithms
Data
User Interface

0D/1D Modeling & Simulation
Maths-based Model
Visualization
Optimization
Code generation

Scientific Data Analytics
Data-driven Model
Machine Learning
Model Reduction
Post-processing
Statistics
Image processing
Application development

Data

Algorithms/Scripts

User Interface

+ Leverage legacy code with API for Java, C and C++
Application deployment

Scilab

Scilab Cloud App (Web GUI or API)

Simulation Web App (Web Interface & Algorithms)

Simulation Web Service (API & Algorithms)

Scilab Cloud

Private Cloud / Public Cloud
SANOFI using Scilab Cloud ..
… to optimize energy costs through simulation

Problem
• Inefficient control of HVAC (Heating, Ventilation & Air Conditioning) leads to energy waste
• HVAC = 60 % of energy bill (example: 500k€/year/site)

Objectives
• Save 10M€+ /year in energy bills worldwide
• Energy efficiency at 100+ industrial sites
No installation hassle
Easy access to the end user
Extended forms with full personalization

![Image of a software interface with a form for extended forms and personalization]
Dynamic graphics with server side computing
System parameters made available in a black box mode
Workflows providing high level KPIs
Consolidated data across the user base
Find out more

scilab.org/cloud