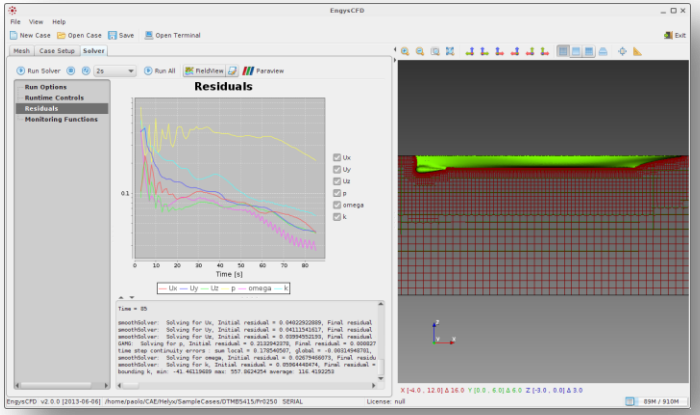
Introducing HELYX, a complete Open Source based CFD solution for Industry

Francisco Campos

OpenCAE Seminar

Japan - 21 June 2013



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Engys' Products

Comprehensive CFD Software Solution

- Native GUI
- Engys' own enhanced Open Source code
- Modular architecture
- Expert user support
- Code maintenance
- Extensive written documentation
- Linux and Windows

Open Source Native GUI for OPENFOAM®

- Designed to work with OpenFOAM® 2.2
- Free to download via SourceForge
- Optional user Support and Documentation for paying customers

Advanced CAE Tool for Vehicle Design

- Developed by Engys and ARC (USA)
- Powered by HELYX®
- Embedded modelling best practices
- Fully validated (+100 wind tunnel tests)
- Full suite → CFD, design & visualisation

These products are not endorsed by OpenCFD (ESI Group)

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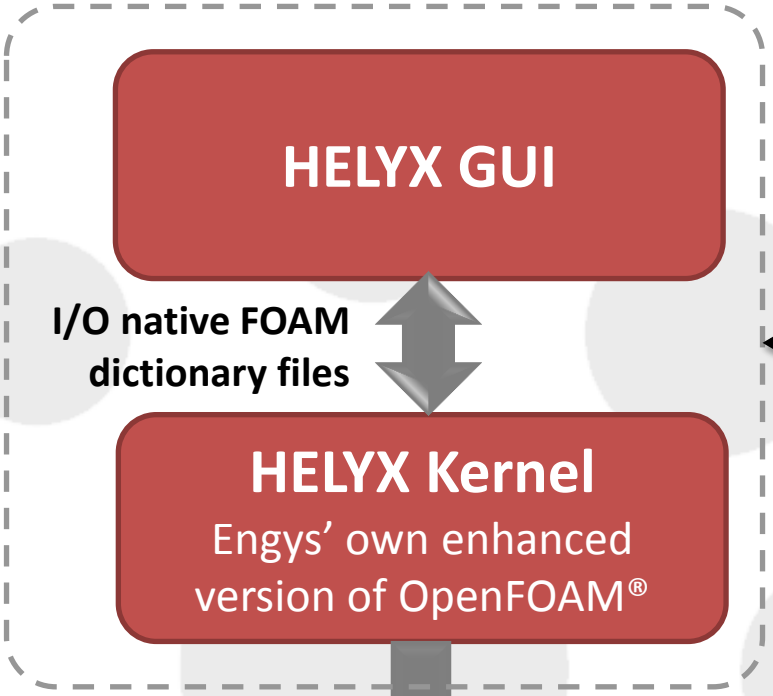
HELYX | Software Overview



3rd party plug-in modules

- Coupled solvers
- ecoMARINE
- Hydro extensions
- Adjoint optimisation solver

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- Any FOAM based development

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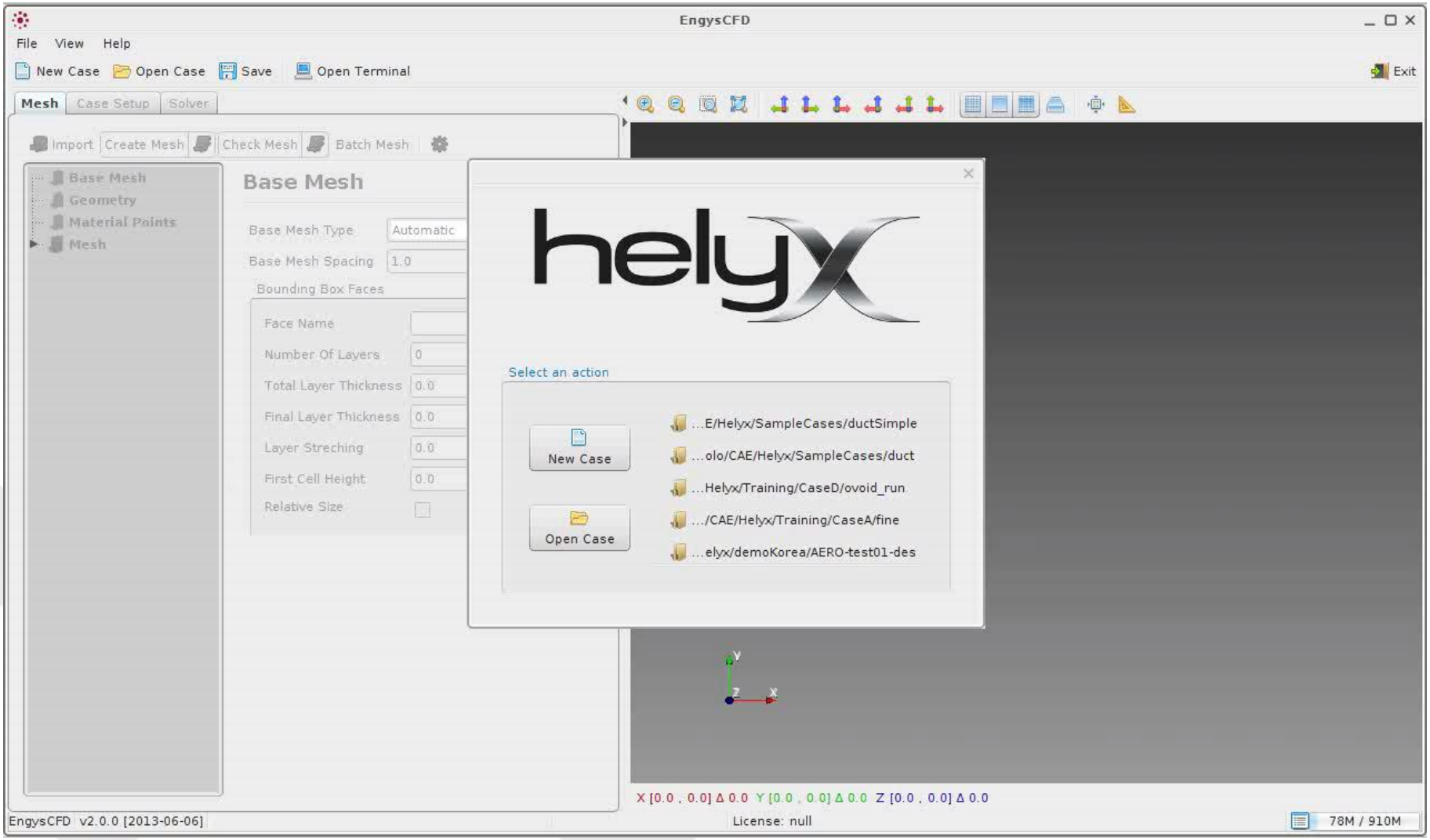
Helyx | Demonstration v2.0.0



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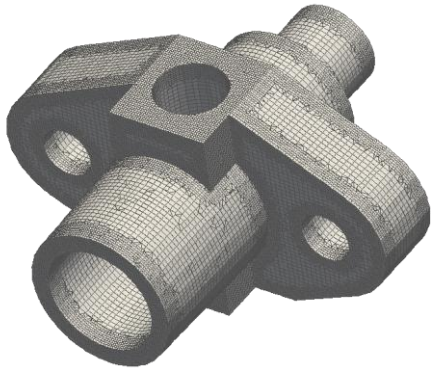
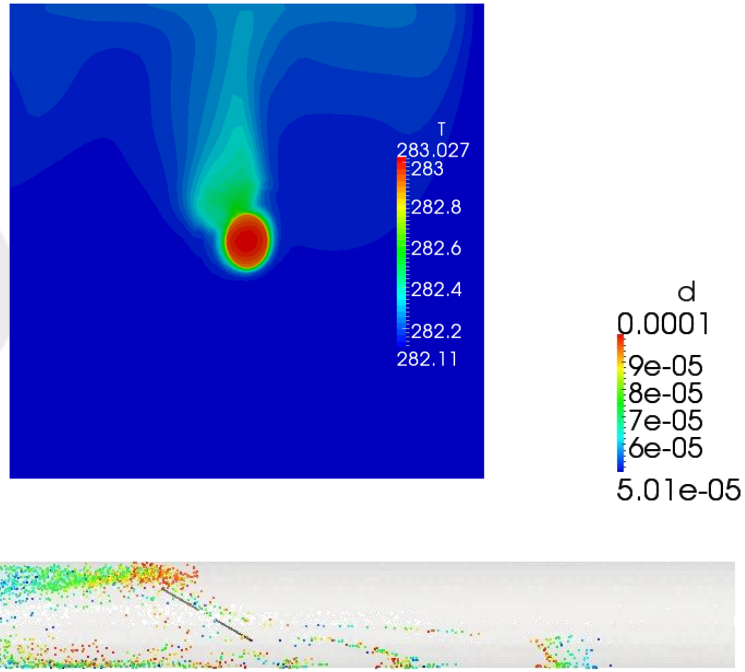
HelyX | GUI v2.x Developments

- Meshing:
  - Improved feature edge handling
  - Distance-based edge refinement
- Modelling:
  - AMI / Dynamic grids
  - Coupled solvers
  - Multiphase flows
  - CHT support





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HelyX | Main Advantages

- First class user support (GUI + OS solvers)
  - Local Japan resellers / support
- Maintained by FOAM/OpenFOAM® experts (developing FOAM since 1999)
- Linux and Windows execution (GUI + OS solvers)
- Fully validated methods
- Provided with extensive written documentation
- Highly scalable (no HPC licenses)
- Open to 3rd party developers (plug-ins)
- Great value for money!

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Questions?

THANK YOU!

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