

GNU Octave in NCLab

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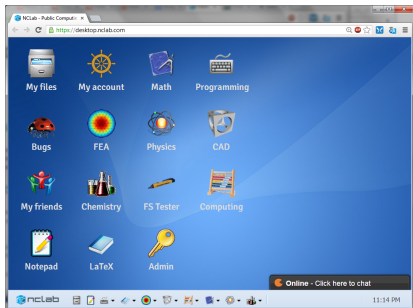


Overview

- 1 What is NCLab?
- 2 What can you do in NCLab?
- 3 Who is NCLab for?
- 4 How does it work?
- 5 Future, what keeps us busy



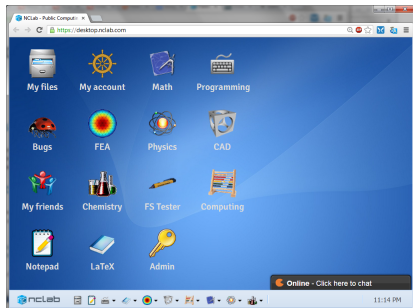
What is NCLab?



1 Online desktop – workspace



What is NCLab?



- 1 Online desktop – workspace
- 2 Brings “free-software” online
 - GUI
 - No installation required
 - Platform-independent
 - Accessible in your browser
 - Keeps the functionality
- 3 Makes use of advanced tools in education easier



What can you do in NCLab?

Teach / Learn

- Programming
 - Karel, Python, JavaScript, GPU (CUDA)



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 - Algebra, Calculus, Numerical Methods, ... (Octave, Scipy, Python)



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- CAD 3D (PLaSM)
- Physics, Engineering
 - Differential Equations, ...
 - FEM (Hermes, GE/ME)
- Chemistry (Molecule Sketcher, Avogadro - in preparation)



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Publishing

- LaTeX



Who is NCLab for?

- Grammar and high schools, Universities
 - Lectures
 - Assignments
 - Tests (in preparation)

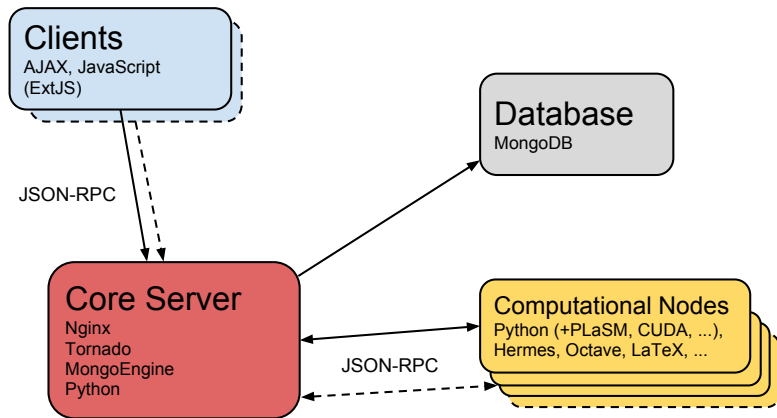


Who is NCLab for?

- Grammar and high schools, Universities
 - Lectures
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 - Tests (in preparation)
- Scientists and Engineers
 - Alternative to expensive non-free software
- Individuals
 - Home/self education
 - Test/learn not commonly accessible technology (CUDA)

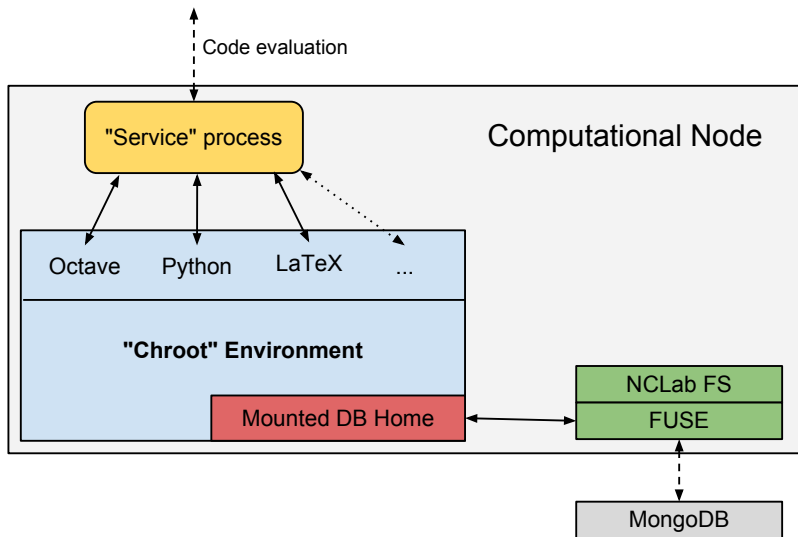
How does it work?

NCLab general infrastructure



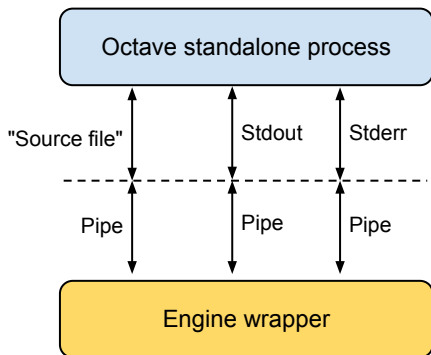
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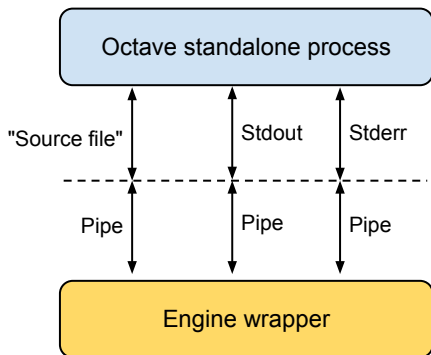
How does it work?

NCLab Octave engine scheme



How does it work?

NCLab Octave engine scheme



Also included

- Show plots
- Interactivity
- Octave-Forge packages



Future, what keeps us busy

Features

- Sharing
- Real-time collaboration
- Dropbox, GDrive incorporation
- "Installation" of modules
- Classroom support
- Automatic grading
- ... and a lot more



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Free-software developers support

- Contact us for getting a paid version for free

Future of NCLab

- "To be or not to be free"?

Thank You!



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