

# State of Octave

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- More activity by more people than ever
- The state of Octave is good!
- Challenges for the future

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# Challenges

- MATLAB (constantly moving target, not the best language, etc.)
- User expectations
- Maintainer burnout

# Why Use Octave?

- **No license manager.** Octave is free software!
- **No black boxes.** The complete source code is available. You are encouraged to look at the internals.
- **Octave is portable** to POSIX systems with a standard C++ compiler. Octave can also be ported to other unusual systems (**you** have the source!).
- **Large support community.** Octave has an active support community with more than 1000 messages per month posted to the mailing lists.

# How Many Users?

Because Octave may be freely redistributed, it's impossible to know precisely how many people are using Octave. My guess is in the hundreds of thousands.

- We don't get good download info from the GNU project.



- Mailing list activity seems stable.
- IRC activity seems on the rise, but slowly. People talk a lot when Jordi is around, not as much otherwise.

In the last year and a half:

- about 90 different contributors made 2917 commits
- 57 of them made only 1 or 2 changes
- the top 10 contributors made 2639 commits
- the top 5 contributors made 2377 commits

# Missing Features

- Classdef classes (handle and value)
- Packages (+dir names in the load path)
- containers.Map class (handle class)
- InputParser class (handle class)
- MException objects (handle class)
- cdflib interface (package)
- netcdf interface (package)
- hdf (4 and 5) functions (packages)

# Missing Features

- Camera viewpoint functions
- Volume visualization
- Foreign function interface
- Java interface
- COM and Active X
- .NET
- Serial port device functions

Newsgroups: gnu.gcc.help

Subject: Re: WorkShop won't work with non-SGI compilers?

From: rms@gnu.ai.mit.edu (Richard Stallman)

Date: 14 Nov 1993 02:00:43 -0500

[...]

If you want to share software with us, you're welcome to--but cooperation is a two-way street. If you want it to be one-way (we give and you take), you have come to the wrong place.

We are getting better at communicating this idea to Octave users.

# The Octave Developer Community

- We have a diverse developer community
- Currently growing but still rather small (we'd love to have more participation)
- Most contributors make a few small changes and move on
- We must work to include more people in the community

# Needs of the Developer Community

- Bug tracking
- Release management
- Web site hackers
- Mailing list maintenance
- Support via the `help@octave.org` mailing list
- Core language interpreter development
- Domain specialists: signal processing, image processing, control systems design, graphics, GUI development, etc.
- ...

- We have hundreds of thousands of users but very little direct funding. Is that what should be happening?
- Free software is not a charity project.
- Having a large user community expecting to get something for free from a small developer community is not sustainable.



- Independently wealthy developer
- Research project/government grant
- A few large donations from a small number of benefactors
- Many small donations from users
- Selling support contracts
- Selling binary distributions (maybe pay what you want)