tracsnap

Trac Social Network Analysis Plugin

Fostering Team Awareness in Earth System Modelling Communities

Ainsley Lawson & Sarah Strong. Supervision by Professor Steve Easterbrook.

Department of Computer Science, University of Toronto.

NSERC CRESING

Introduction

Earth System modellers often need to find expert colleagues to help them understand unfamiliar parts of the code base.

In large collaborative teams, this can be a difficult task.

tracSNAP addresses this difficulty by helping modellers to understand and improve their social networks.

Our Approach

tracSNAP is written as a plugin for the Trac project management system available at trac.edgewall.org.

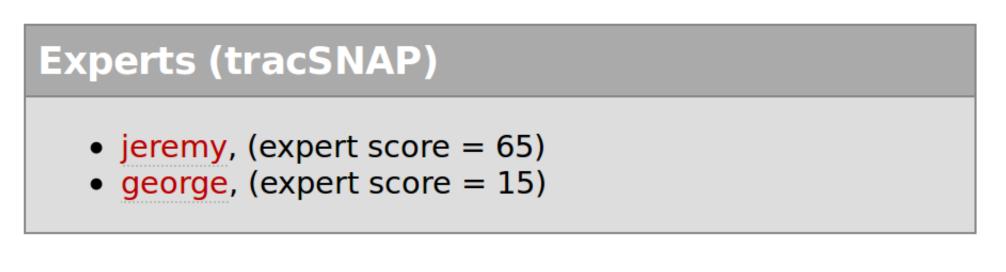
tracSNAP determines file relatedness from subversion repository data and adds social data from ticket comments to map the existing social network, and make suggestions on how to improve it.

Contact us at: ainsley.lawson@utoronto.ca http://code.google.com/p/tracsnap/

Get Help Understanding Code

Which of my colleagues can help me to understand this section of code?

See at a glance who has edited a file the most, and see related files based on how often your colleagues edited them at the same time.



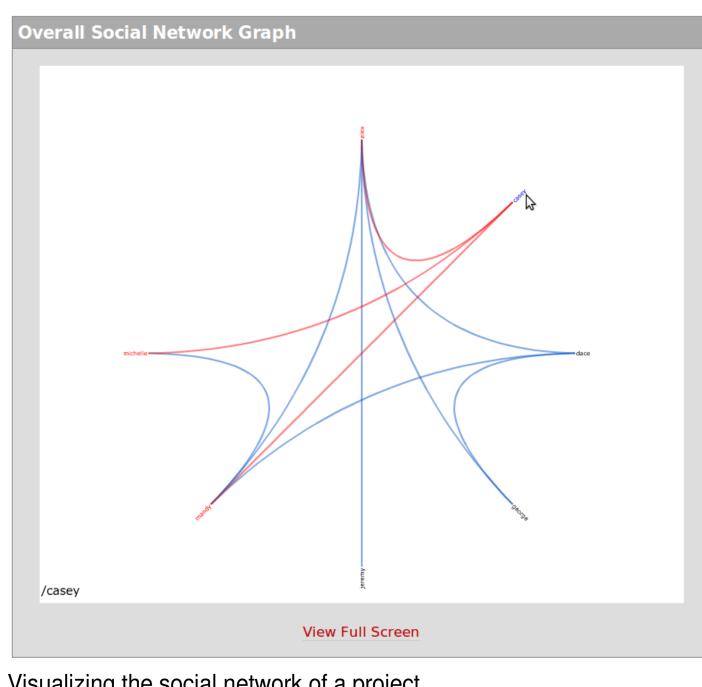
When browsing source code, tracSNAP gives suggested experts and links to related modules

Related Modules (tracSNAP) • air/vapour • air/convection

Organize Project Communication

We're developing a new science module. Who should be on the team?

Visualize your social network, the communication patterns of all contributors to your project, or the mutual acquaintances bridging you and a distant colleague.



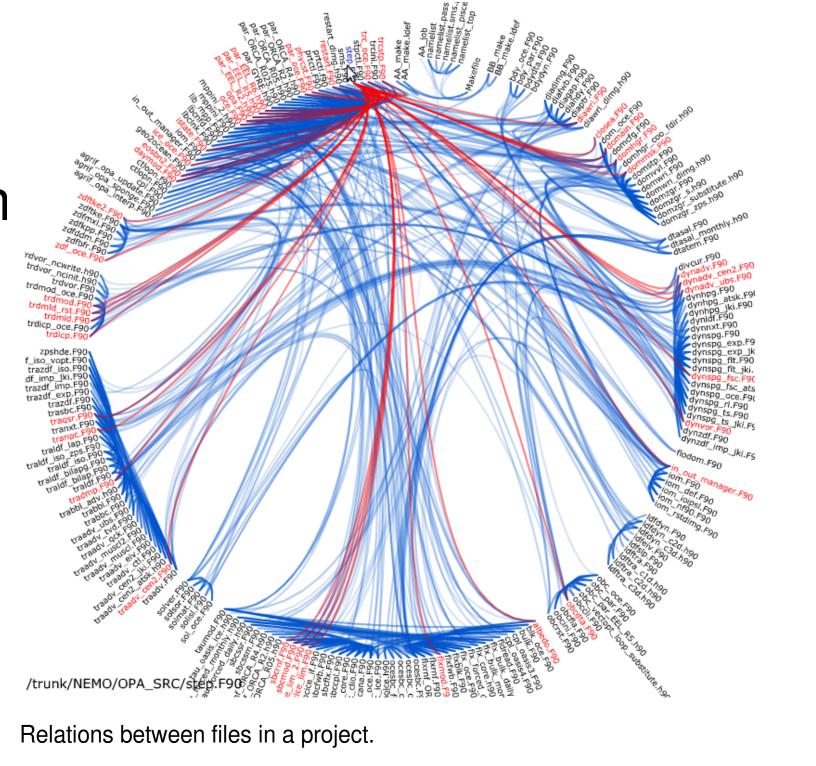
Using tracSNAP

Visualizing the social network of a project.

Find Unexpected Code Dependencies

Why did my change over here cause a problem over there?

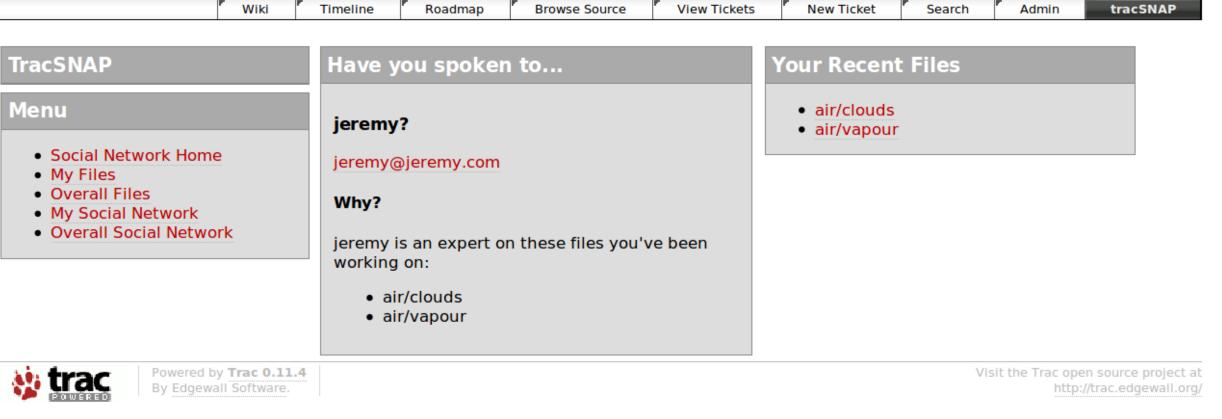
Visualize the whole codebase or just the section you're interested in, and see the relationships between files. based on how they're really used.



Build New Working Relationships

I'm a new contributor, who should I talk to first?

Quickly get recommendations of people with similar edits, and of colleagues you don't interact with much but who might have valuable insight into your work.



tracSNAP makes suggestions on how to improve your social network, and explains why you should talk to the suggested people.