Talk Title: Open MCT: Open Source, Web-based Mission Control

Abstract: NASA’s Open MCT is open source mission operations software that provides a consistent display environment for users across multiple disciplines. Open MCT has been built at the Ames Research Center in collaboration with the Johnson Space Center and the Jet Propulsion Laboratory. In order to design software that meets the user interface needs and software architectural constraints of NASA’s diverse space missions, the Open MCT team has worked closely with flight controllers and engineers responsible for operating the International Space Station, the Mars Science Laboratory, the Resource Prospector lunar rover mission, and a variety of other missions and spacecraft. These efforts have created flexible, customizable software that goes beyond supporting traditional mission control practices by empowering users to improve and evolve their own workflows. Open source licensing creates new opportunities for professionals and space enthusiasts from industry, academia, other agencies, and the general public to contribute to this evolution of mission control.