

Secure Display of Space-Exploration Images

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Java EDR Display Interface (JEDI) is software for either local display or secure Internet distribution, to authorized clients, of image data acquired from cameras aboard spacecraft engaged in exploration of remote planets. ("EDR" signifies "experimental data record," which, in effect, signifies image data.) Processed at NASA's Multimission Image Processing Laboratory (MIPL), the data can be from either near-real-time processing streams or stored files. JEDI uses the Java Advanced Imaging application program interface, plus input/output packages that are parts of

the Video Image Communication and Retrieval software of the MIPL, to display images. JEDI can be run as either a standalone application program or within a Web browser as a servlet with an applet front end. In either operating mode, JEDI communicates using the HTTP(s) protocol(s). In the Web-browser case, the user must provide a password to gain access. For each user and/or image data type, there is a configuration file, called a "personality file," containing parameters that control the layout of the displays and the information to be included in them. Once

JEDI has accepted the user's password, it processes the requested EDR (provided that user is authorized to receive the specific EDR) to create a display according to the user's personality file.

This program was written by Cecilia Cheng, Gillian Thornhill, and Michael McAuley of Caltech for NASA's Jet Propulsion Laboratory. Further information is contained in a TSP (see page 1).

This software is available for commercial licensing. Please contact Karina Edmonds of the California Institute of Technology at (626) 395-2322. Refer to NPO-41246.