



PDS-to-JPEG Converter v.6.0.0

for the Planetary Data System

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1.1 Overview

About PDS-to-JPEG Converter

The pds2jpeg application is a simple tool that converts an 8-bit PDS image into a JPEG image for ease of viewing. Although the application can be executed from the command-line, it is most commonly used by Product Servers in the PDS Data Distribution (PDS-D) system for converting images on the fly.

Please send comments, change requests and bug reports to the [PDS Operator](mailto:pds_operator@jpl.nasa.gov) at pds_operator@jpl.nasa.gov.

1.2 Release Notes

Release Notes

The purpose of this section is to provide a description of a PDS-to-JPEG Converter release including any impact that the new or modified capabilities will have on the Discipline Nodes or the PDS user community.

Release 6.0.0

This release of the PDS-to-JPEG Converter application is from November 2003. Although the source code has not been updated since that time, the binary executables have been compiled on modern platforms. See the [Installation](#) section for supported platforms.

1.3 Installation

Installation

This section describes how to install the PDS-to-JPEG Converter application contained in the *pds2jpeg* package. The following topics can be found in this section:

- [System Requirements](#)
- [Unpacking the pds2jpeg Package](#)

System Requirements

The following table shows a list of platforms that pds2jpeg currently supports:

Platform	Version
Linux (32-bit)	Built on Red Hat 7.3. Tested on Red Hat Enterprise 3.
Linux (64-bit)	Built and tested on Red Hat Enterprise 4.
Mac OS X	Built on 10.4.11. Tested on 10.5.
Solaris	Built and tested on 2.7.
Windows	Built on XP with Service Pack 3. Requires at least Service Pack 2.

Unpacking the pds2jpeg Package

Download the *pds2jpeg* package from the [PDS-to-JPEG Converter](#) web page. The binary distribution is available in identical zip or tar/gzip packages based on the platform. Unpack the selected binary distribution file with one of the following commands:

```
% unzip pds2jpeg-6.0.0-bin-<platform>.zip
or
% tar -xzf pds2jpeg-6.0.0-bin-<platform>.tar.gz
```

Note: Depending on the platform, the native version of *tar* may produce an error when attempting to unpack the distribution file because many of the file paths are greater than 100 characters. If available, the GNU

version of tar will resolve this problem. If that is not available or cannot be installed, the zipped package will work just fine in a UNIX environment.

The commands above result in the creation of the *pds2jpeg-6.0.0* directory with the following directory structure:

- **README.txt**

A README file directing the user to the available documentation for the project.

- **LICENSE.txt**

The copyright notice from the [California Institute of Technology](#) detailing the restrictions regarding the use and distribution of this software. Although the license is strictly worded, the software has been classified as Technology and Software Publicly Available (TSPA) and is available for *anyone* to download and use.

- **bin/**

This directory contains batch and shell scripts for executing the tool.

- **doc/**

This document directory contains a local web site with the PDS-to-JPEG Converter Guide and other configuration management related information. Just point your favorite browser to the *index.html* file in this directory.

- **examples/**

This directory contains an example PDS image file and the corresponding JPEG image file.

1.4 Operation

Operation

The following topics can be found in this section:

- [Tool Setup](#)
- [Tool Execution](#)

Tool Setup

In order to execute pds2jpeg, the user's environment must first be configured appropriately. This section describes how to setup the user environment on UNIX-based and Windows machines.

UNIX-Based Setup

This section details the environment setup for UNIX-based machines. Setting the *PATH* environment variable to the location of the tool, enables it to be executed from any location on the user's machine.

The following command demonstrates how to set the *PATH* environment variable, by appending to its current setting:

```
% setenv PATH ${PATH}:%HOME/pds2jpeg-6.0.0/bin
```

The tool can now be executed as demonstrated in the following example:

```
% pds2jpeg <command-line arguments>
```

Windows Setup

This section details the environment setup for Windows machines. Setting the *PATH* environment variable to the location of the tool, enables it to be executed from any location on the user's machine.

The following command demonstrates how to set the *PATH* environment variable, by appending to its current setting:

```
C:\> set PATH = %PATH%;C:\pds2jpeg-6.0.0\bin
```

The tool can now be executed as demonstrated in the following example:

```
C:\> pds2jpeg <command-line arguments>
```

Tool Execution

This tool provides a simple command-line interface for converting PDS images. The resulting JPEG image is directed to standard out and can be captured in file form by using a UNIX redirection.

Command-Line Options

This section details the command-line option flags available for the tool:

Flag	Description
-if <PDS-image-file>	Specify the 8-bit PDS image file to convert into a JPEG image.
-m	Specifies that the target image file is a compressed MOC image.

Running pds2jpeg

This section demonstrates how to run the tool using the command-line option flags. There is really only one way to run the tool and that is with the *-if* flag and redirecting the output to the target JPEG file as follows:

```
% pds2jpeg -if c1634202.img > c1634202.jpg
```

If you are converting a MOC image, add the *-m* flag before the *-if* flag.