

# System Administration

This top level node intends to hold all system administration aspects of DSpace including but not limited to:

- Installation
- Upgrading
- Troubleshooting system errors
- Managing Dependencies

In this context System administration is defined as all technical tasks required to get DSpace in a state in which it operates properly so its behaviour is predictable and can be used according to all the guidelines under "Using DSpace".


## Introduction to DSpace System Administration

DSpace operates on several levels: as a Java servlet (in a servlet container like Tomcat), cron jobs, and on-demand operations. This section explains many of the on-demand operations. Some of the command operations may be also set up as cron jobs. Many of these operations are performed at the Command Line Interface (CLI) also known as the Unix prompt (\$). Future references will use the term CLI when a command needs to be run at the command line.

Below is the "Command Help Table". This table explains what data is contained in the individual command/help tables in the sections that follow.

Command used:	<i>The directory and where the command is to be found.</i>
Java class:	<i>The actual java program doing the work.</i>
Arguments:	<i>The required/mandatory or optional arguments available to the user.</i>

DSpace Command Launcher

 With DSpace Release 1.6, the many commands and scripts have been replaced with a simple `[dspace]/bin/dspace <command>` command. See the Application Layer chapter for the details of the [DSpace Command Launcher](#).

- [AIP Backup and Restore](#)
  - [DSpace AIP Format](#)
- [Ant targets and options](#)
- [Command Line Operations](#)
  - [Executing streams of commands](#)
  - [Database Utilities](#)
- [Mediafilters for Transforming DSpace Content](#)
  - [ImageMagick Media Filters](#)
- [Performance Tuning DSpace](#)
- [Scheduled Tasks via Cron](#)
- [Search Engine Optimization](#)
  - [Google Scholar Metadata Mappings](#)
- [Troubleshooting Information](#)
- [Validating CheckSums of Bitstreams](#)