Procedures to update the DCS software.

The DCS is running Linux, and uses binary files called 'rpms' to install and update its software. There are two classes of rpms, the first are rpms that are created by Logical Solutions and are only useful to control a DCS. The second class of rpms are created by a third-party and can be used on any PC-based Linux system. Examples of these types of files are rpms for the ssh agent, the networking support rpms, the logging rpms, etc. This document is concerned with the updating of the LSI rpms, although the third-party rpm procedures are similar.

By default, the DCS is configured to search for updates (LSI & third-party) from the Internet. This search mechanism is disabled and must be enabled before a search can take place.

Internet Access.

If the DCS has access to the Internet, then you may run the command:
/root/setup/enable.yum.repos to enable the searching for updates. We use a program called 'yum' to do the search. More information on yum is available in its man page (man yum). Instructions for using yum are at the end of this document.

Download Files.

If the DCS does not have access to the Internet, then the rpms must be copied onto a medium that the DCS can access. LSI offers the updates on a USB thumb drive, a CD, or you may download the updates yourself from our FTP site. If you download the files, we suggest you copy the single rpm located at *DCS/updates/repo-rpm-1.0-X.noarch.rpm*
(X is a release number and will change).

Copy this file to the DCS /tmp/ directory. (suggested methods are using Putty PSCP on a Windows machine and SCP on a Linux machine – Putty & Putty SCP install files are included on the CD)
After the file is copied, run the command:
yum localupdate /tmp/repo-rpm-1.*.noarch.rpm

(replace 'localupdate' with 'localinstall' if this is the first time installing the repo-rpm. yum will print an error message if you try to update a file that is not installed)

This will expand several rpm files and create an rpm repository on the DCS.
Now skip to the section about using yum.

USB thumb drive.

Insert the USB thumb drive into a free USB port on the DCS. The drive should be recognized and mounted automatically. If it is not recognized, then run these commands:

mkdir /media/DCSREPO
mount /dev/sda1 /media/DCSREPO

How do you know if the drive was mounted? Run the command:

ls /media/DCSREPO

Files will be listed if the drive is mounted.

Using yum (without the USB drive).

List available updates command:

yum list updates

Install all updates command

yum upgrade

Using yum (with the USB drive).

You use the same commands as above, but after the word 'yum', insert the phrase: '--enablerepo=lsi-dcs-media'

For example: yum --enablerepo=lsi-dcs-media list updates

yum will look for all the rpms it needs to satisfy module dependencies. After listing the rpms it will process, you are given a Yes/No prompt to continue. A 'No' response will end the upgrade with no changes having been made.

FTP server installation

The README.first file contains instructions on installing ftp server software onto the DCS. When this server is installed and running, Windows users have another method of copying files to the DCS.

Quick install using the CD

- Copy the repo-rpm-1.*.noarch.rpm from the CD to the /tmp/ directory on the DCS.
- On the DCS, run the commands:
  - yum localupdate /tmp/repo-rpm*rpm
  - yum upgrade dcs-utility

Notes: use 'yum localinstall' in place of 'yum localupdate' if yum returns an error with the localupdate option. (localinstall can ONLY be used once, when first installing software, after that, localupdate must be used)