

# Knowledge Base: KB1022 - Understanding & Using HP3s Local DNC

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## Overview

Local DNC is a feature that allows users to store job files in flash memory of the HP3 controller. This allows users the ability to keep jobs in the controller between power cycles. Since the job files are stored in flash memory no batteries are required to maintain the files in the controller when power is off.

Local DNC functions similar to original DNC or Remote DNC, but a number of requirements must be met to use Local DNC. This document will describe the operation and requirements to run Local DNC.

## Requirements

1. Current HP3 Controller with a K520 CPU board. (Ethernet port on the back of the controller.)
2. APEX Product Software Release 01.03.06.
3. Job Server version 3.9.39.0 or higher. (Installed with APEX Product Software 01.03.06)
4. HP3 Firmware k3c444g.bin or higher. (Installed with APEX Product Software 01.03.06)
5. INIT file version 3.33 or higher. (Installed with APEX Product Software 01.03.06)

Note: It will be mandatory to check the versions of firmware and INIT files in the HP3 controller to determine if flashing is necessary. Contact Newing-Hall support for details.

## Limitations

1. 3MB flash space for user files.
2. No file size checking exists before storing a job in flash memory. The side effect can be lost memory space if a file is larger than available memory space. If flash memory space is lost, it can be reclaimed by formatting files.

## Operation

### Enabling Local DNC

1. Turn on the HP3 controller.
2. Enter the menu on the HP3 controller by selecting ENTER -> CONFIGURATION -> DNC\_MODE.
3. Select Local and press ENTER.
4. Exit out of the menu by pressing CANCEL.

### **Saving a job into Flash Memory**

1. Make sure Job Server is running on a PC connected via a serial cable or Ethernet cable.
2. Press DNC on the controller. This will open local DNC mode. The top line will display:

< Load Job from PC >

3. Place the cursor using the arrows keys on line one and press ENTER. The controller briefly displays the number of bytes available in the controller flash memory.
4. The next menu shows the jobs via Remote DNC. These jobs are located on the computer running Job Server. Select the job and press START. This will save the job into flash memory. Pressing ENTER will display the job file size and date, press CANCEL to exit.
5. Once all the job(s) are saved to the controller press CANCEL. The menu will display the Local DNC menu. To exit from Local DNC press CANCEL to exit the menu system.

Note: For example, if the file that needs to be saved to flash memory is 2.8MB. The time it takes to save the file to flash memory depends if serial or Ethernet communications is used. Ethernet is much faster compared to serial communication. Looking at the table below a 2.8 MB file will take 10 minutes to load at 57600 bps!

	Ethernet	Serial
2.8MB File	2:40	10:00

### **Running a job from Local DNC**

1. Press DNC on the controller.
2. Select the job using the arrow keys and press START on the controller. If you would like to see the number of bytes the job is using in the flash memory, press ENTER on the controller. To exit press CANCEL.

### **Deleting a job from Local DNC**

1. Press DNC on the controller.
2. Select the job using the arrow keys and press the DECIMAL key. The DECIMAL key is also +VST key.
3. A confirmation will appear. To delete the file press ENTER, to cancel press CANCEL.

Note: Deleting a file from flash memory can take up to a minute.