HP Designjet T920, T1500 ePrinter, T2500 eMFP Series Certificate of Volatility

Introduction

The following is a statement regarding the volatility of customer data stored in memory devices and hard disk drives of the HP Designjet T920 and T1500 ePrinter Series and the HP Designjet T2500 eMFP Series.

The printer uses volatile memory to store customer data during the printing process. When the printer is turned off, this volatile memory is erased. The printer uses non-volatile memory to store device configuration information. This non-volatile information is used to initialize the volatile memory when the printer is turned on and at the beginning of a print job. The printer also contains a hard disk drive that retains data after the printer is powered off.

Volatile memory

Volatile memory in HP Designjet T920, T1500 ePrinter and T2500 eMFP Series include:

- Main RAM memory. 1536 MBytes by default. Used as system memory. All information is erased when the printer is powered off.
- I/O Card: 128MB used to manage printer communications. All informacion is erased when printer is powered off
- Other volatile memory used as the main memory for some ASICs or as microprocessor cache.

Non volatile memory

Non volatile memory components in HP Designjet T920, T1500 ePrinter and T2500 eMFP Series include:

- NVRAM – BIOS. 2 MBytes. It does not contain user data. Its purpose is to act as the bootloader for the BIOS.
- CMOS Memory. 256 Bytes. It does not contain user data. Its purpose is to contain BIOS parameters.

- NVM in ink supplies. 1Kbyte per ink cartridge. It contains usage information and control parameters for the ink supply.
- NVM in printheads. 256 bits per printhead. It contains usage information and control parameters for the printhead.
- NVM at line sensor. 2KB. It contains calibration tables for the sensor.
- NVM at analog encoder PCA. 256 KB. It contains printer settings and calibrations; it also contains usage counters. It can be reset to factory defaults by a service engineer.
- NVM. 64 Kbit. Mounted on the RFID Tag, contains a copy of the printer identification values. It's not possible to clear the memory.
- NVM 18 Kbyte. Mounted on a chip contains a copy of the printer identification values.
- NVM in service station 1Kbyte. Mounted on a board that controls the printhead cleaning station to manage the cleaning station.
- NVM in printhead carriage. 640 bytes to that contains information and control parameters for the printhead.
- NVM in I/O Card. 18 Kbytes. It contains information with the control parameters for the Gigabit Ethernet card.

Hard Disk drives

The printer contains a 320GBytes hard disk drive which has different purposes. It is not possible to operate the printer without the hard disk drive.

User information can be stored in 5 different partitions of the hard disk drive and can include:

- Calibration data and printer settings
- User plots (in rasterizer format, i.e. already processed)
- User plots in native format (plots submitted to the Job Storage of the printer)
- Accounting information
- Usage information

For the T2500eMFP, an additional partition will hold user information:

- Scan temporal files

There are different options to erase part of the user information in the hard drive:

- User plots in native format stored in the Job Storage folder of the printer can be erased manually by users with administrative access to the printer's Embedded Web Server
- User plots in rasterized format (in the printer's queue) can be erased from the queue by users with administrative access to the printer's Embedded Web Server or with access to the printers front panel
- Scan temporal files can be erased from the queue by accessing the printers front panel

- Calibration data, printer settings, usage information and accounting information can be erased by service engineers

Designjet T920, T1500 and T2500 support Secure Disk Erase and Secure File Erase according to the U.S. Department of Defense 5220-22.M specification.

Secure Disk Erase and Secure File Erase allow erasing the information from the Hard Disk drive in a secure mode which makes it impossible to have this information recovered. It's also possible to trigger a Secure Disk Wipe which will use the U.S. Department of Defense 5220-22.M specification to erase all data from hard disk partitions that contain user data.

For more information about this feature, please check the "Secure Disk Erase for HP Designjet printers" whitepaper.