

HP Designjet T7100 Printer 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 T7100 Printer..

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 T7100 Printer include:

- Main RAM memory. 1Gbyte by default; upgradeable up to 1.5GBytes. Used as system memory. All information is erased when the 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 T7100 Printer include:

- NVRAM – BIOS. 1 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 printheads and ink supplies. 128 Bytes per printhead / ink cartridge. It contains usage information and control parameters for the printhead or ink supply
- NVM at line sensor. 2KB. It contains calibration tables for the sensor
- NVM at Printmech PCA. 32 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 KBits. Mounted on the RFID Tag, contains a copy of the printer identification values. It's not possible to clear the memory.

Hard Disk drives

The printer contains a 160GBytes 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 4 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

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

Designjet T7100 supports Secure Disk Erase and Secure Sanitized Erase according to the U.S. Department of Defense 5220-22.M specification.

Secure Disk Erase and Secure Sanitized 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.