
MAP ENGINE MAINTENANCE

In order to ensure that PressureMAP will continue to provide years of uninterrupted service, it is important to perform simple, routine maintenance periodically on the MAP Engine computer. Setting up a scheduled MAP Engine maintenance program will help to extend the life of the equipment and keep PressureMAP performing optimally. Please note that this suggestion involves shutting down and/or rebooting the MAP Engine computer. Please refer to the instructions in Section 4 of this manual for performing these functions.

Following are some suggestions for keeping the MAP Engine and components in good working order:

1. Perform an annual cleaning of the MAP Engine. This task would focus on the process of removing dust and lint from the computer housing. When the computer is running, it acts like a vacuum—sucking in dust and other particles. As the material builds up, it can interfere with the operation of the computer, tape backup equipment, CD/DVD-ROM, electrical components, etc. It is recommended that the computer be cleaned out at least once a year in order to remove accumulating dust and lint.

Before shutting down the computer to begin the annual cleaning, make sure that you have a current backup of all office and device data and that you shut down the computer properly. Procedures for backing up the system and shutting down the computer are described below in this section. It is also a good idea to label the cables that you disconnect from the back of the MAP Engine. This will simplify the process of reconnecting everything after the cleaning has been performed.

2. Manually reboot the computer once per month. This simple procedure resets the computer and associated hardware components, and ensures that no files have been left open. The procedure for rebooting the MAP Engine is described at the end of this section.
3. Replace UPS batteries. Once every two years, replace the batteries in your Uninterruptible Power System (UPS), if applicable. If you do not check and/or replace these batteries periodically, the system may fail when it is needed most. Battery replacement procedures should be provided with the product documentation.
4. If you use electronic tape cartridges to back up your system files, it is a good idea to clean the recording heads of the MAP Engine's tape drive monthly. Like any magnetic recording device, the heads must be cleaned periodically to ensure proper operation and accurate recording of data. The tape drive can be cleaned by inserting a head cleaning cartridge into the drive slot. The cleaning material makes contact with the tape backup heads and removes electromagnetic particles.

If you use DVDs as a backup resource, it is recommended that you purchase a commercial CD/DVD drive cleaning kit and use it monthly or bi-monthly to clean the device. Please follow the instructions provided with the kit to apply a proper cleaning technique.

5. Implement a backup strategy to ensure that you have daily, weekly and monthly backups of your system files. This practice is an important safeguard against the potential loss of valuable

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data. For more information on a systematic tape backup process, refer to Release Note #15 on the System Studies website (<http://www.airtalk.com/releasenotes.html>). The principles described there can be applied also to other removable backup media, such as DVD-ROM, RAM disks, backup to remote computer via ftp, etc.

6. Store the removable monthly system backup media in a safe location somewhere off premises. This practice will help to ensure that important office and device data will not be lost in the event of a catastrophe at the MAP Engine location.
7. Systematically replace backup tapes with new ones. Over time, tapes will wear out and could possibly damage the tape drive. When in doubt about the physical condition of a backup tape, replace it. The cost of a new data cartridge is small when compared to the time and expense of replacing lost data.

If you use DVDs to back up your system, it is recommended that you use the DVD+RW disks. The DVD+RW disks can be written to multiple times, whereas the DVD+R disks cannot. Please note also that there have been some reports that data written to DVDs may only be good for a few years, so it is a good idea to use backup tapes for data that you would like to keep for long term storage.

8. Turn off power to the MAP Engine monitor when the system is not being used (directly accessed) at the console. This will extend the life of the monitor and reduce power consumption.

Some or all of the tips presented above may be part of a maintenance procedure that is currently being implemented by your company's IT Department. If they are not, System Studies recommends that you address the maintenance needs of this important PressureMAP system hardware.