

# Re: Merge Installation/Configuration Problem on OpenServer 5.0.7

**Source:** <http://unix.derkeiler.com/Newsgroups/comp.unix.sco.misc/2003-08/0329.html>

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Tony:

>*Think you might consider a fresh install?*

Nah, here's an old repost of mine from 1998, which gives the Steps to Go from 5.0.2 to 5.0.4. I don't think you understand real-world implementations very well, but I do like your Web site.

## STEPSTOGO FROM

SCO 5.02 TO 5.04

by

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May 7, 1998

1. For safekeeping and easy restoration, copy special configuration files to a

special files directory on a secondary hard drive, e.g. an Iomega Jaz drive. These files include `hwconfig -h` (piped to a file and printed out; contains interrupts and hardware addresses; annotate the printout with video driver information), `/etc/conf/cf.d/m SCSI` (the list of SCSI devices and ID numbers), `/etc/rc.d/2/mntfs` (the list of file systems to mount after normal booting, including the above secondary drive), `/etc/hosts`, `/etc/ttytype`, `/etc/inittab`, `/etc/passwd`, `/usr/spool/cron/crontabs/root`, `/.profile`, `/usr/lib/uucp/Devices`, `/usr/spool/lp/admins/lp/printers/*`, `/usr/spool/lp/admins/lp/interfaces/*`, `/usr/spool/lp/default`, `/usr/spool/fax/faxconfig` (Arnet fax configuration), `/usr/vsifax3/lib/vsisrv.ini` (VSI-Fax configuration), `/usr/vsifax3/lib/printers.lst`, `/usr/vsifax3/lib/mailers.lst`, `/usr/vsifax3/lib/retrys.lst`, `/etc/vsifax3.sh`, `/etc/default/merge` (various default settings for Merge), `autoexec.bat` and `config.sys` (for DOS under Merge).

To be extra safe, make hard copies of all these files and place in a labeled folder. This folder should also have a list of all UNIX and Gateway for Netware printers and their configurations, a list of all Equinox serial ports and their configuration (obtained by running `ssdiag`), a list of all Boundless multiconsole units and their configurations (obtained by running `srstat -c 0`, `srstat -c 1`, etc.), a list of all data and fax modems and their

configurations, and a list of all mice and their configuration (from mkdev mouse). (Most of these files will not copy over in a non-destructive restore so they must be re-installed separately.) Be sure to have already downloaded the latest drivers from Boundless (3.07, with a Merge 4 fix) and from Equinox (3.32c) and have made the appropriate diskettes (using dd) for later use by custom. Copy the three Boundless replacement files (serialOsa, update, and Xsco) to the special files directory. Also include a list of all Mail aliases.

Note objects on X-Windows desktops of users. Make a second labeled folder to contain all software licenses, certificates, and registration numbers.

2. Make a text list of all other directories and files (including all application programs and users) to be restored to the new system. Call this file "mustsave" and copy it to the special files directory. (These files will copy over in a non-destructive restore.)
3. Make CTAR master backup of 5.02 system and verify that it has no errors whatsoever.
4. Shutdown the system and reboot on the 5.04 installation diskette. Use new license numbers if necessary. From the msci file listing, enter the correct SCSI ID for the CDROM drive.
5. Begin fresh install, since in-place install doesn't work. Set up monitor, video board, keyboard, and mouse as on 5.02 system (refer to data gathered in step 1). Set up the network card using the same TCP/IP and domain information as on 5.02 system. Choose to install Gateway for Netware. Keep existing file layout.
6. The fresh install program should copy all operating system files and relink the kernel without problems. When finished, shutdown and reboot.
7. Install SCO SMP software (using the Software Manager (custom)). License each additional CPU. Install RS504C and OSS469. Relink kernel and reboot.
8. Install OSS474A (license manager for Merge 4). Install Merge 4 and license it. Relink kernel and reboot. Add test user (because Windows 95 will not install for root), log in as test user, and install (from Merge setup) Windows 95 from its CD. Select Merge mouse and monitor. Windows 95 should then appear in its own X-window.
9. Install OSS449F for 5.04 to patch TCP/IP files. Relink kernel and reboot.
10. Check that Gateway for Netware is installed. If not, install it now; relink kernel and reboot.
11. Install any other optional SCO programs (from the 5.04 CD or the Merge CD) at this time; relink kernel and reboot.
12. Install DAT tape drive SCSI driver, using mkdev tape. Use SCSI ID from the msci printout. Device is /dev/rStp0. Relink kernel and reboot.

13. Install CTAR and configure it. Test the tape drive by retensioning the tape (use the CTAR utilities). Create emergency boot and root diskettes.
14. Do master CTAR backup of all that has been done to this step. If problems occur after this step, we can always do a fresh restore of this tape.
15. Run `mkdev hd` to add the drive or drives listed in the `mntfs` file. Be sure not to disturb the contents of these drives (usually accept the default settings offered by the `mkdev hd` program). Relink kernel. Edit the `mntfs` file manually to match the printout in the folder. Reboot. Make sure the secondary drive is recognized by the system on startup. The special files directory on the secondary hard drive should now be accessible.
16. Before copying files from the special files directory, copy the fresh 5.04 versions to other files with a ".o" (for "original") extension in case there are problems later. For example, copy `/etc/inittab` to `/etc/inittab.o`.
17. Restore the `/etc/hosts` file from the special files directory. Test the TCP/IP network; all connected PC's should now function.
18. Install the Equinox 3.32c serial port driver from diskette, using `custom`. Relink the kernel. Restore the `/etc/inittab`, `/etc/ttytype` files from the special files directory. Disable the multiconsole lines in `/etc/inittab` temporarily. Reboot. Run `Equinox ssdiag`; make sure all previous settings (including speed, flow control, transparent printing, and enabled or not enabled) are correct. Test the serial terminals and transparent printing.
19. Copy the Boundless `serialOsa`, `update`, and `Xsco` files from the special file directory to the appropriate directories and `chown`, `chgrp`, and `chmod` them (as stated in the Boundless readme file). Then install the 3.07 driver (using the interrupt and no. of multiscreens found in step 1) with Merge 4 fix using `custom`. Relink kernel. Re-enable (if disabled) multiconsole lines in `/etc/inittab`. Reboot. Run `mkdev mouse` to install the Sunriver mice (channel 0 serial port 1 is `/dev/srs001`, channel 1 serial port 1 is `/dev/srs011`, etc.). Run `mkdev graphics` and add the Sunriver adapter (use 1024x768x256 colors, 70 Hz, 21" or whatever), and choose the appropriate no. of function keys for the number of multiscreens. Relink kernel and reboot. Run `srstat` to check that the configuration is correct. Enable the multiconsole units if not already enabled (enable `tty00a`, `tty00b`, `tty00c`, `tty00d`,...,`tty10a`, `tty10b`, `tty10c`, `tty0d`,..., etc.) Test the multiconsole units.
20. Install the three diskettes of Olympus Tuneup 6.0K using `custom`. Relink kernel. Reboot. Run it and license it.
21. Do a second master CTAR backup of everything that has been done to this step.
22. Copy the `mustsave` file from the special files directory back to the hard drive, say to `/usr/bin/`. With the master backup tape in the tape drive (and write-protected to be safe), use the following CTAR command (from root) to restore all the files listed in the `mustsave` file:

```
ctar -xVNFfbk /usr/bin/mustsave /dev/rStp0 120 4194304
```

This accomplishes a non-destructive restore. (We don't want to do a destructive restore because this may overlay operating system files, causing innumerable problems.)

23. Install Arnet Fax software. Relink kernel. Configure it exactly as on 5.02, using the printout from /usr/spool/fax/faxconfig or copying the file from the special files directory. Reboot. Check that the Arnet fax server has started and that the corresponding fax modem works properly.
24. Install VSI-Gold Fax software. Configure it as before (copy the files from the special files directory). Reboot. Test that the VSI-Fax server has started and that the corresponding modem works properly.
25. Install the parallel port driver (using the interrupt from the hwconfig printout). Restore all printer files from the special files directory. Using Printer Manager, check that all printers are properly displayed and configured. Test console printer (default). Log in to Novell via the Gateway and check that Netware printers can print. Check that the multiconsole printers can print. If there are problems, simply enter the printer information manually from the configuration printouts.
26. Restore the /usr/lib/uucp/Devices file from the special files directory. Check that the data modems are functioning properly.
27. Restore /etc/passwd from the special files directory. Reboot. Check that all users can log in and function as before.
28. Restore /usr/spool/cron/crontabs/root. Reboot. Make sure that cron is running.
29. Check application programs. If some files are missing, restore from master diskettes. Check that X-desktops of users resemble what they were before.
30. Perform Merge installation of Windows 3.1/3.11 for root; it should recognize the Windows directory restored from tape. Check that all previous Windows programs run correctly in an X-Window. Set Merge defaults to be same as before. Check that autoexec.bat and config.sys function as before, e.g., logging into Novell with lccipx and netx and being able to use the CDRom drive as drive K; they may have to be modified to work with Merge 4.
31. Make another CTAR backup of everything that has been done up to this step. Make a new set of emergency boot and root diskettes.
32. Shutdown, reboot, and test every PC, terminal, multiconsole unit, modem, and printer one more time.
33. Run Tuneup to re-tune the system (hopefully it will be able to use information from the 5.02 history).

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34. From SCO's Web-site, obtain all appropriate registration numbers. Enter the information in the license manager.

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...and similarly for a fresh install now.

RWS

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