5

DIGITAL UNIX System Upgrade Information

This chapter provides background information on DIGITAL UNIX system upgrades in the presence of operating system patches. Releases of DIGITAL UNIX are structured and distributed as full or sparse inventory kits.

5.1 Full Inventory DIGITAL UNIX Kit

This type of kit contains a full inventory of operating system objects (headers, libraries, kernel modules, and the like). It can be used to perform full and update installations:

- A full (also called new) installation creates new file systems and loads a full copy of DIGITAL UNIX from the kit onto a system. Any other version of DIGITAL UNIX, any layered products, and any patches that previously existed on the system are overwritten. A full installation does not preserve system customizations (for example, user or data files) because the root (/), /usr, and /var file systems are re-created during the process.

- An update installation from a full inventory kit loads a full copy of DIGITAL UNIX from the kit, replacing every operating system object that existed on the system prior to the installation.

  An update installation does not update layered products. This may cause a regression in operation of a layered product if a layered product version of a DIGITAL UNIX object is replaced with a new version of that object.

The end result of either a full or an update installation is an operating system consisting of a known set of operating system objects that provides predictable system behavior.

Following an update installation it is necessary to install all layered products and all DIGITAL UNIX patches (official as well as test) that were built for the new release.

5.2 Sparse Inventory DIGITAL UNIX Installation

The DIGITAL UNIX Version 3.2C family sparse inventory operating system kits do not contain a full inventory of operating system objects. Also, it does not use either the full or the update installation processes described above; it uses setld directly.

Because a sparse inventory kit contains only a partial inventory of DIGITAL UNIX objects, installing from this type of kit does not load an entire copy of DIGITAL UNIX onto a system. Existing objects are overwritten only if replacement objects exist on the software kit.

Sparse inventory kits are produced assuming that any system to be upgraded is running the baseline DIGITAL UNIX operating system objects from a previous release. In the presence of patches, a layered product that modifies base operating system files and other files causes the system to deviate from one of the supported baselines and has the potential to cause object inconsistency following an installation from a sparse inventory kit. Therefore, you must exercise special care when upgrading DIGITAL UNIX from a sparse inventory kit.

Following a sparse inventory installation, you must install all appropriate versions of layered products and all DIGITAL UNIX patches (official as well as test) that were built for the new release. Failure to do so will probably cause a regression in the behavior of layered products, DIGITAL UNIX, or both.

The following tables provide upgrade information for the V3.2, V3.2C, and V4.0 families of releases.

Table 5–1: Upgrade Migration for DIGITAL UNIX Version 3.2 Family

DIGITAL UNIX Version	Kit Type	Upgrade Migration Supported
V3.2	Full	From V3.0, V3.0A, V3.0B via an update installation.
V3.2A	—	This release consisted of layered products only.
V3.2B	Sparse	This release provided V3.2 functionality for new hardware.
V3.2C	Full	From V3.2, V3.2A, V3.2B via an update installation.
V3.2D-1	Sparse	From V3.2C via `setld`.
V3.2E-1	Sparse	From V3.2D-1 via `setld`. This release contains DIGITAL UNIX fixes necessary for TruCluster V1.0 to function.
V3.2D-2	Full	No migration path. Full installation only for AlphaServer 2100A.
V3.2E-2	Sparse	From V3.2D-2 via `setld` This release contains DIGITAL UNIX fixes necessary for TruCluster V1.0 to function.
V3.2F	Sparse Full	From V3.2C, V3.2D-1 via `setld`. No migration path. Full installation only for AlphaServer 4100.
V3.2G	Sparse	From V3.2C, V3.2D-1, V3.2D-2, V3.2E-1, V3.2E-2, V3.2F via `setld`.

Table 5–2: Upgrade Migration for DIGITAL UNIX Version 4.0 Family

DIGITAL UNIX Version	Kit Type	Upgrade Migration Supported
V4.0	Full	From V3.2C, V3.2D-1, V3.2D-2 via update installation
V4.0A	Full	From V3.2G or V4.0
V4.0B	Full	From V4.0A
V4.0C	Full	Installs only on DIGITAL Personal Workstation 433AU and DIGITAL Personal Workstation 500AU
V4.0D	Full	From V4.0A, V4.0B, V4.0C