SCO OpenServer® 6 Definitive 2018

RELEASE NOTES

About this Release

SCO OpenServer® 6 Definitive 2018 is a new release of the OpenServer 6 operating system from Xinuos, which includes OpenServer 6, its maintenance packs and all OpenServer 6.0.0V features as well as additional functionality and maintenance.

SCO OpenServer 6 Definitive 2018, denoted as Definitive 2 Maintenance 1 (**D2M1**), is a successor release to OpenServer 6 as well as a successor release to OpenServer 6.0.0V. These *Release Notes* accompany the

SCO OpenServer 6 Definitive 2018 GETTING STARTED GUIDE (December 2017)
which is also available for free download at the Xinuos web site portal.

Revisions

Revision	Date	Description
00	12/2015	Initial document release – OpenServer6D2M0.
01	12/2017	Update document release – OpenServer6D2M1.

Contents of these Release Notes

Media

SCO OpenServer 6 Definitive 2018 consists of one DVD image, which can be used to:

▶ install a new OpenServer 6 Definitive 2018 system on a physical system or in a virtual machine.

▶ upgrade an existing installation of OpenServer 6 to SCO OpenServer 6 Definitive 2018.

Supported Platforms

SCO OpenServer 6 Definitive 2018 supports these platforms:

▶ Physical hardware.

▶ VMware™.

▶ OpenServer 10 with VirtualBox™.

SCO OpenServer 6 Definitive 2018 upgrades these installations:

▶ OpenServer 6 Maintenance Pack 4.

▶ OpenServer 6 V.

▶ OpenServer 6 Definitive (OpenServer6D2M0).

SCO OpenServer 6 Definitive 2018 will not provide a VMware appliance as was provided with OSR6V. To install a new virtual machine running SCO OpenServer 6 Definitive 2018 on VMware, a user can create a virtual machine and install from the Install DVD in much the same way as they would on a physical system. If a user has previously deployed the OpenServer 6.0.0V appliance, the user can upgrade the resulting VM from OpenServer 6.0.0V to SCO OpenServer 6 Definitive 2018 through use of the SCO OpenServer 6 Definitive 2018 update shell script.

What's New in this Release

Highlights

SCO OpenServer 6 Definitive 2018 introduces the ability to run on VirtualBox™, a type-2 hypervisor for OpenServer 10. Support to run on Bhyve, FreeBSD's own lean type-2 hypervisor, has also been added and will be made available soon.

SCO OpenServer 6 Definitive 2018 provides additional new features, including:

► Added support to install on all supported platforms including Virtual Machines.

► A simplified installation process integrating maintenance and updates into ISL.

► Added support for message signaled interrupts (automatically enabled for VirtualBox™ and Bhyve).

► Integration of device drivers updated since OpenServer 6 Maintenance Pack 4. These drivers include:

- An updated ahci driver to add support for latest ahci controllers as found with Intel 100/200 series chipsets (i.e. C236, Z170, Z270).

- An updated bcme driver that supports the Broadcom BCM5718, BCM5719, and BCM5720 NICs.

- An updated e1008g driver that supports the Intel i350 NIC.

- An updated ide driver to add QEMU compatibility.

- An updated megasas driver (added support for LSI 9341, 9361 and 9381 HBAs also known as DELL H330, H730 and H830).

- An updated mpt2 HBA driver (added support for SAS 3008 chipset).

► The OpenServer 6 development system is installed and licensed by default (FOC).

► License changes:

- Support for 500 users.

- Support for unlimited CPUs.

- Support for 32GB general purpose memory (64GB memory enabled)

► Additional maintenance (see list under **Fixes and Enhancements** on page 6).

Licensing and Registering SCO OpenServer 6 Definitive 2018

SCO OpenServer 6 Definitive 2018 requires a new specific subscription license:

► Upgrades from SCO OpenServer 6, including OpenServer 6.0.0V, and earlier SCO OpenServer 6 Definitive (OpenServer6D2M0) require a new SCO OpenServer 6 Definitive 2018 Enterprise System license.

► During ISL you can provide this license or you can select a thirty-day free evaluation license. You will then need to purchase and register a SCO OpenServer 6 Definitive 2018 Enterprise System license before your evaluation period ends.

► Once your system is installed, log in to your Xinuos account to register your license. If this is your first time registering a license, you can create the account at https://www.xinuos.com.

► If you purchased a one-year or three-year subscription license, you can later extend the license by purchasing a renewal license. Before applying a renewal license, the original Enterprise license must first be registered.

► Multiple renewal licenses can be applied. The previously applied renewal license must be registered before installing the new renewal license.

> *WARNING:* *When applying a renewal license, do not remove the initial OpenServer 6 Definitive 2018 license or any previously applied renewal license. The earlier licenses are required for the renewal license to extend the subscription to the end date you purchased.*

► If you choose to provide a license instead of accepting the evaluation license, be sure to provide the new SCO OpenServer 6 Definitive 2018 Enterprise System license and not a renewal license. A license is a Definitive 2018 renewal license if its license data field contains the string **h203.**

Upgrade Prerequisites

SCO OpenServer 6 Definitive 2018 requires a specific subscription license; do not attempt the upgrade without this new license.

Before upgrading your OSR6 Enterprise or 6.0.0V system to SCO OpenServer 6 Definitive 2018, make sure you have good backups. The upgrade process is not reversible. For more

information on the installation media images and the installation process, please check the "**Getting Started Guide for SCO OpenServer 6 Definitive 2018**".

WARNING: *Users are encouraged to check the free space before an upgrade, especially if the iso file coped to the rootfs. A minimum of 3GB should be available for the upgrade.*

Use `patchck` to verify systems are up to date.

Fixes and Enhancements

ID	Description
fz534041#1	LicenseMgr truncates Registration Lock: used for license registration. Changed the registration lock display from a VxAlignedForm to a VtFrame to simplify it and to put the Registration Lock on a line by itself.
fz535596#2	init 0 doesn't power the system down; leaves it in "can be powered-off" state.
fz535909#2	Custom verify problems with /etc/named.
fz536108#15	Implement virtioload boot loader.
fz536108#16	Add message signaled interrupts.
fz536108#17	Add X2APIC support.
fz536108#18	Add virtio support.
fz536108#19	Add vtblk driver.
fz536108#21	Add vtnet driver.
fz536108#23	Update serial console support.
fz536108#24	Miscellaneous changes to ISL scripts.
fz536108#27	Add support for VirtualBox platforms
fz536117#1	Update xorg binary.
fz536120#1	Prompt displays with symbols instead of words while installing Development System.
fz536168#2	Corrected misleading ISL Licensing Screen.
fz536175#2	Update MP5 package and sub-packages name and version.
fz536177#1	Add patchck to the OpenServer 6 Definitive ISL.
OSR6-23	Abort the install causes the screen to hang
OSR6-29	Include updated packages for OpenServer 6

ID	Description
OSR6-30	The default setting for Mouse on an install should be set to Deferred to avoid bhyve issue
OSR6-31	Run 2 separate bhyve installs at the same time on a same machine cause both sessions to hang and the directories got deleted
OSR6-32	During hypervisor install and hit the "delete" or "del" keys will go back to the previous screen
OSR6-33	When an install is finished and during the first boot up, product names need to be updated
OSR6-34	At the very end of an install, it displays "No OS license is present. Warning: System services are restricted"
OSR6-35	IO APIC in VirtualBox (Clock issue)
OSR6-36	Networking problem with virtio-net adapter on VirtualBox
OSR6-49	/tcb/bin/integrity reports many permission issues after ISL
OSR6-50	slapd man pages not working
OSR6-57	Update.sh problem
OSR6-63	Fixed problem "undefined symbol" during kernel link when RecoverEDGE media is created
OSR6-67	Missing devsys license after ISL
OSR6-78	ISL MMDF hangs
OSR6-84	Patch to start-up file fixes /etc/tcp looking for wrong sshd process ID file
OSR6-85	sendmail fix for makemap failure
OSR6-88	Fix and new bind version created for error with tcp start/stop restarting named
OSR6-96	Packaging issue (libm)
OSR6-97	Verification of Vmware Fix for ESXi6.0 & E1000 vNIC
OSR6-102	New AHCI driver to support latest chipsets like Intel C236
OSR6-105	Missing parts of OSS711 installation
OSR6-106	ahci panic in ahci_timeout_remove+4 OSR6 Def on OSR10.3 Stack
OSR6-107	Panic during installation
OSR6-111	ISL problems from /etc/smpd
OSR6-114	VMtools shutdown does not power off
OSR6-123	ndc & named errors

ID	Description
OSR6-130	PANIC: ran out of km_szlist entries
OSR6-138	Bring in /usr/ucblib/doctools from UnixWare so nroff works.
UW7-79	Fix typo in source file for /etc/conf/bin/idmknodd
UW7-94	Make package tools work as documented in prototype(4)
UW7-115	Updates to support Definitive 2018 licenses

The following supplements and updates are also automatically installed through ISL:

▶ OSS716K, the SCO OpenServer 6 Definitive Supplement

▶ OSS717B, the Berkeley-DB Database Library update for SCO OpenServer 6 Definitive

▶ OSS719B, the Cyrus SASL API update for SCO OpenServer 6 Definitive

▶ OSS720B, the OpenLDAP update for SCO OpenServer 6 Definitive

▶ OSS723C, the OpenSSL update for SCO OpenServer 6 Definitive

▶ OSS724C, the OpenSSH update for SCO OpenServer 6 Definitive

▶ OSS725F, the Bind update for SCO OpenServer 6 Definitive

Please see Addendum on page 10 for more information on these supplements and updates.

Known Issues in this Release

▶ On booting the installation media, there might be a delay before input from a USB keyboard is accepted. This is caused by the USB stack initialization and will only be noticed during ISL boot.

▶ Using a Dell PowerVault RD1000 backup device or a Tandberg RDX1000 might cause a panic on boot if a cartridge is inserted. A fix is currently in test and will be released as soon as possible.

▶ A trap 0x0e panic is reported if a DELL RD1000 is used on a DELL T330. This issue is currently under investigation.

▶ On upgrade, during the MP5 install, you will see:

```
Error: license generation failed (-31)
```

```
Press <Enter> to continue:
```

This can be ignored.

► If /usr/lib/acct/holidays has been modified, you'll get verification errors when loading MP5 and OSS716K.

These errors can be ignored.

Addendum

OSS716K, the SCO OpenServer 6 Definitive Supplement

Problems fixed:

1. Bring in psm_apm kernel driver and updated /sbin/uadmin so the system will power off after a shutdown if the BIOS supports it.
2. Updated /usr/lib/drf/mini_kernel for the psm_apm driver.
3. Add the fix in OSS711 for usr/include/nl_types.h.
4. OSR6-49: added an entry to /etc/auth/system/files to keep custom and integrity from arguing with each other about /etc/default/inet. Tightened up security on /usr/bin and /etc/rc.d entries. New versions of:
   /usr/lib/libprot.so.1   /osr5/usr/lib/libprot.so.1   /tcb/bin/authck   /tcb/bin/cps
   /tcb/bin/integrity   /usr/bin/auths   /usr/bin/prwarn   /tcb/lib/initcond
   /tcb/files/no_luid/sdd
   with the matching compiled in contents of /etc/auth/system/files.
5. OSR6-49: Modify /usr/adm/install/contents base package entries to match owner/group/perms in: /etc/auth/system/files.
6. osr6-104: Corrected the following development system files so libtool will generate the correct linker options:
   /usr/lib/libcairo.la   /usr/lib/libexif.la   /usr/lib/libgdk.la   /usr/lib/libgdk_imlib.la
   /usr/lib/libglib-2.0.la   /usr/lib/libgmodule-2.0.la   /usr/lib/libgobject-2.0.la
   /usr/lib/libgpg-error.la   /usr/lib/libgthread-2.0.la   /usr/lib/libgtk.la
   /usr/lib/libpopt.la   ./usr/lib/libttf.la
7. This supplement includes a patch to /etc/rc2 and /etc/rc3 that adds the _AUTOBOOT environment variable that exists in UnixWare but not OpenServer 6. The _AUTOBOOT variable is used by some daemon startup scripts to know if they are run by a sysadmin or from the boot process.
8. The OpenServer 6 MP4 version of sendmail was linked against openssl 0.9.7 and the other libraries sendmail uses were linked against 0.9.8. Now all parts of sendmail use 0.9.8.
9. OSR6-85: Due to a packaging error, makemap produces the following error:
   # makemap
   dynamic linker : makemap : could not open libdb-4.4.so.0
   Killed
   #
   Fixed.
10. During normal configuration of sendmail, config files can end up being owned by root and have 644 permissions which custom complains about. The custom entries have been modified for the following files to match real usage:
   /etc/mail/access   /etc/mail/access.db   /etc/mail/aliases   /etc/mail/domaintable
   /etc/mail/domaintable.db   /etc/mail/local-host-names   /etc/mail/mailertable
   /etc/mail/mailertable.db   /etc/mail/sendmail.cf   /etc/mail/userdb
   /etc/mail/userdb.db   /etc/mail/virtusertable   /etc/mail/virtusertable.db
   Custom now expects them to be root:sys and 644.

11. Update system header files to match build environment:
    /usr/include/sys/ca.h
    /usr/include/sys/clock_p.h
    /usr/include/sys/cm_i386at.h
    /usr/include/sys/debug.h
    /usr/include/sys/emap.h
    /usr/include/sys/fs/vx_gemini.h
    /usr/include/sys/mman.h
    /usr/include/sys/privilege.h
    /usr/include/sys/socket.h
    /usr/include/sys/sockio.h
    /usr/include/sys/strsubr_f.h
    /usr/include/sys/sysconfig.h
    /usr/include/sys/termios.h
    /usr/include/stdlib.h
    /usr/include/tzfile.h
    /usr/include/netinet/tcp_timer.h
    /usr/include/netinet/tcp_var.h
12. pkginfo would not handle package set names longer than 9 characters even though package names
    could be up to 32 characters. Fixed "off by one"- bug in pkgtrans library function.
    /usr/bin/pkginfo
    /usr/bin/pkgtrans
    /usr/bin/pkgadd
    /usr/bin/pkgchk
13. OSR6-130 "`PANIC: ran out of km_szlist entries`". Increased km_szlist to 64K in acpi
    driver.
    /etc/conf/pack.d/apci/Driver.o
14. A packaging error in MP2 changed the group of /usr/bin/netstat from mem to bin. Changed group
    back to mem so a regular user can use the -g and -L options.
15. Xinuos License agreement /etc/agreement/license
16. Update copyright years and address in /stand/bootmsgs:
    /usr/lib/locale/C/LC_MESSAGES/bootmsgs
    /etc/copyrights/DSrelease6.0
    /etc/copyrights/release6.0
17. UW7-79: Fix typo in source file for /etc/conf/bin/idmknodd
18. update copyrights in /usr/lib/drf/conframdfs
19. UW7-94: make package tools work as documented in prototype(4).
    /usr/adm/install/bin/pkginstall
20. UW7-115: Updates to support Definitive 2018 licenses.
    Sync license messages with UnixWare version
    /usr/lib/libiaf.{a,so}
21. OSR6-138: Bring in /usr/ucblib/doctools from UnixWare so that nroff works.

NOTE: *OSS716A through OSS716J were never released.*

OSS717B, the Berkeley-DB Database Library update for SCO OpenServer 6 Definitive

This supplement includes an update to the latest version of the Berkeley-DB 4.6.21p4 series needed for our OpenLDAP build.

OSS719B, the Cyrus SASL API update for SCO OpenServer 6 Definitive

This supplement includes an update to version 2.1.23 of the Cyrus SASL API needed for our OpenLDAP build. This supplement includes the saslauthd authentication daemon useful for sendmail SMTP authentication. Two utilities (sasl-checkpass sasl-mechlist) sysadmins may find useful were added. Example programs and html docs have been included in /usr/share/doc/packages/sasl. See the Security section of DocView.

OSS720B, the OpenLDAP update for SCO OpenServer 6 Definitive

With the version of OpenLDAP included on MP4, slapd would crash as soon as you queried it. This supplement includes an update of OpenLDAP to version 2.4.36 that works. It also includes a startup script for slapd and /usr/sbin/openldap-setup.sh for doing initial setup on config files using information specific to the local machine.

Note: slapacl, slapadd, slapauth, slapcat, slapdn, slapindex, slappasswd, slapschema, and slaptest have been moved from /usr/bin to /usr/sbin to better match UnixWare and the rest of the computing world.

▶ OSR6-50: A packaging problem in the release of Definitive has been corrected so the OpenLDAP man pages work.

OSS723C, the OpenSSL update for SCO OpenServer 6 Definitive

OSS723C contains the latest OpenSSL long term support version openssl-1.0.2m, an open source toolkit for SSL/TLS. For details of changes and known issues with openssl-1.0.2m, see the release notes at:

https://www.openssl.org/news/openssl-1.0.2-notes.html

OSS724C, the OpenSSH update for SCO OpenServer 6 Definitive

The OpenSSH 7.3p1 package is an updated OpenSSH for OpenServer 6 Definitive 2018 that addresses the following problems or new features.

Problems fixed:

1. OpenSSH on OpenServer 6 MP4 and 6V was outdated.
2. OSR6-84: OSR6d /etc/tcp looking for wrong sshd process ID file.
3. OpenSSH changed to the UnixWare style ptys in a previous version of OpenServer 6. The version shipped with SCO OpenServer 6 Definitive (OpenServer6D2M0) also uses the new ptys, causing some customers problems with their applications.
4. Modified /etc/init.d/opensshd to not kill the remote administrator's session if they restart sshd.
5. Fix to keep terminal sessions from locking when large amounts of text are pasted.

OSS725F, the Bind update for SCO OpenServer 6 Definitive

Problems fixed:

1. Update named to bind-9.10.5-P3.
2. OSR6-88: fixed error with tcp start / stop restarting named.
3. Add start / stop script /etc/init.d/named.
4. Add support for runtime options in /etc/default/named.
5. Add user bind to allow running named as a non-root user.
6. Provide up to date root.cache.
7. Removed the following obsolete files:
   /etc/named-xfer   /etc/named.d/named-bootconf.pl
   /etc/named.d/named-bootconf.sh   /usr/lib/nslookup.help
   /usr/man/html.ADMN/dig.ADMN.html   /usr/man/html.ADMN/host.ADMN.html
   /usr/man/html.ADMN/named-bootconf.ADMN.html
   /usr/man/html.ADMN/named-xfer.ADMN.html
   /usr/man/html.ADMN/named.ADMN.html /usr/man/html.ADMN/nsupdate.ADMN.html
   /usr/man/html.SFF/named.boot.SFF.html   /usr/man/html.SFF/named.conf.SFF.html
   /usr/man/html.TC/nslookup.TC.html
8. Added Administrators Reference Manual in /usr/share/doc/packages/bind/html/arm.
9. include files and development libs included.
10. Modified etc/ndc, usr/sbin/rndc-keyadm, and sa/dns/dnsOsa.fvsn.1.1.1.1 (OSR6-123) for bind 9.10.
11. OSR6-123: fixed ndc & named errors.

THE XINUOS DOCUMENTS, INCLUDING THESE RELEASE NOTES, ARE PROVIDED "AS IS" AND MAY INCLUDE TECHNICAL INACCURACIES OR TYPOGRAPHICAL ERRORS. XINUOS RESERVES THE XINUOS DOCUMENTS, INCLUDING THESE RELEASE NOTES, ARE PROVIDED "AS IS" AND MAY INCLUDE TECHNICAL INACCURACIES OR TYPOGRAPHICAL ERRORS. XINUOS RESERVES THE RIGHT TO ADD, DELETE, CHANGE OR MODIFY THE XINUOS DOCUMENTS AT ANY TIME WITHOUT NOTICE. THE DOCUMENTS ARE FOR INFORMATION ONLY. XINUOS MAKES NO EXPRESS OR IMPLIED REPRESENTATIONS OR WARRANTIES OF ANY KIND.

XINUOS, SCO and SCO OpenServer are trademarks or registered trademarks of Xinuos, Inc. in the United States and other countries. Linux is a registered trademark of Linus Torvalds. All other brand and product names are trademarks or registered marks of their respective companies. UNIX and UnixWare are registered trademarks of The Open Group in the United States and other countries.

info@xinuos.com