



SCO UnixWare 7™ Definitive 2018 Maintenance Pack 1 and Update Pack 1 Release Notes

About this Document

XinuOS continues to provide new and updated packages to enhance your UnixWare 7 Definitive 2018 operating system. Collectively, these packages provide new features, security updates, and bug fixes. This document describes the new UnixWare 7 Definitive 2018 Maintenance Pack 1 (MP1) and the new UnixWare 7 Definitive 2018 Update Pack 1 (UP1), the first in our planned series. Also explained are the UP1 licensing requirement and a new easy installation process.

This document supplements the SCO UnixWare Definitive 2018 documentation:

- [SCO UnixWare 7 Definitive 2018 GETTING STARTED GUIDE](#)
- [SCO UnixWare 7 Definitive 2018 RELEASE NOTES](#)
- [SCO UnixWare 7 Definitive 2018 RELEASE NOTES SUPPLEMENT](#)

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Typographical Conventions

This document follows these conventions

Convention	Usage	Examples
NOTE:	Important additional information or further explanation of a topic.	Note: A weekly backup is recommended.
WARNING!	The task or operation might have serious consequences if conducted incorrectly or without appropriate safeguards.	WARNING! Do not change configuration parameters.
Bold	A command or system input that you type, or text or a button you select on a screen.	Click HELP for details on disaster recovery.
<i>Italic</i>	Italic font indicates any of the following: <i>A term with a specific meaning</i> in the context of this document. <i>Emphasis</i> on specific information. <i>Reference</i> to another document. <i>Variables</i> in a syntax statement for which values are substituted.	Detailed information on <i>disaster recovery</i> methods is available in the <i>Administrator Guide</i> . tar [zxvf] file.tgz
Courier	System output, file names or path names.	> Recovery in progress
Bold Courier	Bold Courier for commands typed by user.	tar cvf tarfile *.cc
Angle <> Brackets	A required entry or parameter	installer-<version#>.run
Square [] Brackets	An optional entry or parameter.	tar x[zv]f file.tgz
Curly { } Brackets	A list of choices separated by a vertical bar from which one must be selected.	Click { OK Cancel }.

Overview

The UnixWare 7 Definitive 2018 Maintenance Pack 1 (MP1) and Update Pack 1 (UP1) offerings enhance UnixWare 7 Definitive 2018 with security and bug fixes as well as new features. **patchck** is improved and streamlined to facilitate easy installation of these offerings on top of your already installed and licensed UnixWare 7 Definitive 2018 system. See the [Installation Instructions](#) section below to use **patchck** to install the required MP1 and, optionally, the separately licensed UP1.

MP1 and UP1 consist of:

1. The new UnixWare 7 Definitive 2018 Maintenance Pack 1 (**MP1**), which features Python 3.10.12 and numerous additional open source packages.

These are operating system **core** packages and they are **required** for UnixWare 7 Definitive 2018 support, maintaining a secure open source environment, and enablers for newer features, such as those in Update Pack 1. See [Appendix A: Maintenance Pack 1 Packages](#) for a complete listing of the MP1 packages. Maintenance Pack 1 is cumulative and will be updated over time with newer versions and perhaps additional packages.

2. Update Pack 1 (**UP1**), the first update pack for UnixWare 7 Definitive 2018, provides new packages including Perl version 5.34.0, Sendmail version 8.17.2, and Samba version 4.10.16. See [Appendix B: Update Pack 1 Packages](#) for a complete listing of the UP1 packages.

Prerequisites

The base UnixWare 7 Definitive 2018 operating system has updated packages and patches to enable installation of open source packages in MP1 and UP1. These items must be installed before installing Maintenance Pack 1. Installing Maintenance Pack 1 is required before installing Update Pack 1.

MP1 Prerequisites

These patches and updated packages are **required** for both MP1 and UP1:

- **Xinuoscurl**, version 7.58.0 or later.
- **xz**, version 5.2.5 or later.
- **libc**, version **j** or a later version. For a list of features and fixes in the recent versions of **libc**, please see [Technical Article #128105: What is libc version 8.0.2j, the UnixWare7 Definitive Runtime C Library?](#).
- **libthread**, version **d** or a later version. For a list of features and fixes in the recent versions of **libthread**, please see [Technical Article #128106: What is libthread version 8.0.2d, the UnixWare7 Definitive Thread Library?](#).)
- **PTF 9151** version **a** or later version.

For a list of features and fixes in PTF 9151, please see:

- [Technical Article #128107: What is Support Level Supplement \(SLS\) ptf9151a, the UnixWare 7 Definitive 2018 Supplement 2?](#) and
- [Technical Article #128065: What is Support Level Supplement \(SLS\) ptf9150i, the UnixWare 7 Definitive 2018 Supplement?](#) PTF 9151 includes all the fixes that were part of the earlier PTF 9150, plus many additional enhancements.

Installing **ptf9151** through the **patchck** menus will determine and install all of these prerequisites. **libc**, **libthread**, and **ptf9151** provide numerous bug fixes and operating system enablers for newer open source ports. These packages are cumulative, with each version including all the fixes of prior versions of the package. A list of all bug fixes is provided in the technical articles for the latest version of these packages. **Xinuoscurl** is used to download the packs and **xz** is used to unwind package archives for installation.

NOTE: This document uses the phrase **or later** to indicate that these packages will likely be updated in the future to provide new features, enablers for other software, and/or bug fixes. **patchck** will be updated to always install the latest version. Periodically running **patchck** allows you to stay up-to-date with Xinuos software updates.

UP1 Prerequisite

UP1 requires that MP1 be installed.

Licensing

All UnixWare 7 Definitive 2018 Maintenance Pack 1 packages, and their prerequisites, are available for installation on your registered UnixWare 7 Definitive 2018 system with no additional fee.

The UnixWare 7 Definitive 2018 Update Pack 1 requires a separate update pack license. **You must install and register your UnixWare 7 Definitive 2018 Update Pack 1 license before patchck will offer you the option to install Update Pack 1.**

Maintenance Pack 1 and Update Pack 1 are Non-Removable

WARNING! Installing MP1 and UP1 are each one-way upgrades. MP1 provides core packages that are **required** to have a **supported system**. UP1 provides new features, including the **sendmail** package. If you remove this package, basic mail will not work even if you reinstall the new **sendmail** package. You would then need to restore your system from backup.

Features

Appendix A and Appendix B list the open source packages provided in Maintenance Pack 1 and Update Pack 1, respectively. See the documentation provided with each package for more information.

There are also various third-party books and web pages about many of the open source packages provided in the MP1 and UP1. Here are a few references:

- For information about Python 3 (MP1 provides Python 3):
 - <https://docs.python.org/3.10/>
 - <https://www.python.org/about/gettingstarted/>
 - <https://docs.python-guide.org/intro/learning/>
- For information about Perl (UP1 provides Perl):
 - <https://www.perltutorial.org/>
 - <https://www.perl.org/books/library.html>
 - After installing UP1, some **Python 3** documentation is available on your installed system at:
 - `/opt/xinuos/share/doc/packages/python3/html`
 - `/opt/xinuos/share/doc/packages/python3/pdf`
 - `/opt/xinuos/share/doc/packages/python3/text`and at: **`https://<your-host>/Xinuos-packages/python3/`**
- For information about Samba (UP1 provides Samba):
 - Configuration notes are also provided below in the [Samba Set-up Notes](#) section of this document and in this technical article: [Technical Article #128085: How to configure samba4 with windows domain integration on UW7D2018.](#)
 - https://wiki.samba.org/index.php/Main_Page
 - https://wiki.samba.org/index.php/Setting_up_Samba_as_a_Domain_Member
- For information about Sendmail (UP1 provides Sendmail):
 - Configuration notes are provided below in the [Sendmail Notes](#) section of this document and in this technical article: [TA #128086: How to get started with Sendmail, SPF, libspf, and spfmlter on UW7D2018?](#)
 - <https://www.proofpoint.com/us/sendmail/faq>
 - <https://linuxconfig.org/configuring-gmail-as-sendmail-email-relay> This link is for reference as many of the steps have been incorporated into the UP1 **sendmail** package.
 - After installing UP1, this **sendmail** documentation is available on your system:
 - `/opt/xinuos/share/doc/packages/sendmail/op.pdf`
 - `/opt/xinuos/share/doc/packages/sendmail/op.ps`
 - `/opt/xinuos/share/doc/packages/sendmail/op.txt`

Installation Instructions

The installation steps are summarized next, followed by a more detailed enumeration.

Summary

The basic installation steps are:

1. Since the upgrades to Maintenance Pack 1 and Update Pack 1 are each one way (see [Maintenance Pack 1 and Update Pack 1 are Non-Removable](#)), create a full system backup or snapshot your virtual machine before proceeding to install these updates and their prerequisites.
2. Run **patchck** to install the MP1 prerequisite packages **Xinuoscurl**, **xz**, **libc**, **libthread**, and **ptf9151**.
3. Reboot your system.
4. If you want to access UP1 functionality, install your UnixWare 7 Definitive 2018 Update Pack 1 license and **register** the license.
5. Run **patchck** again. With **ptf9151** installed, **patchck** will display options to install the entire MP1 and, if you have an installed and registered Update Pack 1 license, UP1. Answer the prompts to install these items.
6. Run the appropriate open source configuration scripts. You can also install additional packages by running **patchck -dev** (for development tools) or **patchck -o** to see optional packages. If you run **patchck** at a later date, the latest updates to the MP1 packages and security updates to the UP packages will be offered.

Details

Given the many packages that comprise the MP1 and UP1, **patchck** has been updated to simplify the process. Follow these steps to install the latest UnixWare 7 Definitive 2018 packages:

1. Create a system backup of your UnixWare 7 Definitive 2018 system, or snapshot your virtual machine. Installing MP1's prerequisites and MP1 is a major system update, as is installing UP1. Once MP1 and/or UP1 are installed, neither can be removed, as described in [Maintenance Pack 1 and Update Pack 1 are Non-Removable](#).
2. Log into your UnixWare 7 Definitive 2018 system as **root**.
3. If you have not previously installed **Xinuoscurl**, run **patchck** and select **Xinuoscurl**. Select to allow **patchck** to install **Xinuoscurl** and, if displayed, its two prerequisites. When prompted after the packages are installed, select to clean-up the downloaded images. Not doing so can cause errors with later **patchck** runs.

The first time you run **patchck** after installing a new UnixWare 7 Definitive 2018 system, you may see the following messages which can be ignored:

```
UX:sh (patchck): ERROR: curl: Not found
UX:sh (patchck): ERROR: curl: Not found
UX:sum: ERROR: Cannot open patchck.tar.Z: No such file or directory
Updating patchck to version ...
```


4. Run **patchck** and, from the displayed menu, select the **ptf9151** package. Selecting **ptf9151** will select all its prerequisites (**Xinuoscurl**, **xz**, **libc**, and **libthread**), if the latest versions were not already installed.
5. Reboot your system.
6. Install and register your update pack license at <https://www.xinuos.com/licensing-registration>.
7. If you are using your system as an LDAP server running **Xinuosopenldap** version 2.4.x, and if you have configured it to use default Berkeley database format (**bdb**), then you need to export your OpenLDAP data before installing MP1, and import your OpenLDAP data after installing MP1. See the [OpenLDAP Configuration Notes](#) section below for details.
8. If your system is going to be used for developing software, edit **/usr/lib/patchck.d/patchck.conf** and set **INSTALLDEV=Y**, if it is not already set to **Y**. The next step will then install development-specific packages, in addition to MP1 and/or UP1. If the system is not going to be used for software development, you can skip this step and the default **INSTALLDEV=N** value will be used.
9. Run **patchck** to install MP1 and, if licensed, UP1. Follow the installation prompts. **patchck** will download all MP1 and UP1 packages; use the downloads to check whether your system already has that version installed; and install/update those packages which are missing or for which the MP/UP has a newer version. Development-specific packages will also be installed if **INSTALLDEV=Y** is set.
10. When **patchck** completes the installation of MP1 and UP1, reboot your system. Periodically run **patchck** to get later updates and bug fixes for your UnixWare 7 Definitive 2018 system. **patchck** also provides:
 - Platform-specific packages, including updated device drivers, that are of value to some users and hardware configuration but may not be of general interest.
 - Additional optional packages, which are displayed if you run **patchck -o** (or setting **INSTALLOPT=Y** in the **/usr/lib/patchck.d/patchck.conf** file).
 - The previously released UnixWare 7/OpenServer 6 Definitive extended development system can also be installed by **patchck**. This development system provides new GNU C and GNU C++ compilers; linker; debugger; and **binutils**. It is only needed to develop applications. Applications developed with this development system do not need the compiler, linker, or debugger to run. For more information, see the [Technical Article #128108](#). To view these packages, run **patchck -dev** or set **INSTALLDEV** to **Y** in the in the **/usr/lib/patchck.d/patchck.conf** file.
11. To use the new UnixWare 7 Definitive 2018 **MP1** and **UP1** open source ports, your PATH may need to be updated to include **/opt/xinuos/bin** and perhaps **/opt/xinuos/sbin**.

Run these two commands to see how these variables are currently set for regular users and **root**, respectively:

```
/sbin/defadm login PATH
/sbin/defadm login SUPATH
```

To add **/opt/xinuos/bin** and/or **/opt/xinuos/sbin** to the path, run:

```
/sbin/defadm login SUPATH=<new_path>
/sbin/defadm login PATH=<new_path>
```

System administrators must set these paths based on what is best for their system.

The updated UnixWare 7 Definitive 2018 media kit sets paths to include these directories, as shown here:

```
/sbin/defadm login \  
SUPATH=/sbin:/usr/sbin:/opt/xinuos/sbin:/opt/sbin:/usr/bin:/opt/xinuos/bin:/opt/bin:/etc  
/sbin/defadm login PATH=/usr/bin:/opt/xinuos/bin:/opt/bin
```

If you installed with the earlier media kit, and have not modified these paths before, you can run the above two commands to get the new XinuOS defaults. **NOTE:** Each **defadm** commands must be on a single line.

Additionally, **/opt/xinuos/man** should be added to MANPATH in the **/etc/default/man** file if it is not already there.

12. If using your own SSL certificates, please set them up before configuring new Maintenance Pack and Update Pack 1 open source packages.

For the packages that use certificates, XinuOS provides **/etc/ssl/certs/xinuos-ca-bundle.crt** which is copied to **/etc/ssl/certs/ca-bundle.crt** if it does not exist. **/etc/ssl/certs/ca-bundle.crt** is the file the packages will use. From time to time an updated package may provide a newer **xinuos-ca-bundle.crt** but it is the system administrator's responsibility to keep **ca-bundle.crt** up to date.

For the packages that use certificates, the **/opt/xinuos/sbin/setup-<package_name>.sh** programs have hooks in them to use a real certificate and key if you have one.

If it finds files (or symbolic links) named **/etc/ssl/certs/hostcert.pem** and **/etc/ssl/private/hostkey.pem**, it will configure the package to use those, otherwise it will generate a self-signed cert.

13. Run the appropriate set-up scripts for your system. For example, **/opt/xinuos/sbin/setup-sendmail.sh** and **/opt/xinuos/sbin/setup-samba.sh**. Which set-up scripts to run depends on the features you will use, and the needs of your environment. In particular, you need to run the **setup-sendmail.sh** script if you intend to use the new **sendmail** features, or if you **receive mail on this server**. See the [Configuration Notes](#) section below for more information.
14. The following precautions should be taken in case your system later encounters a hardware problem or software/user data lost:
 - o Make a copy of the installed kernel. After the system reboots for the first time, run:

```
cd /stand  
cp unix unix.good  
cp resmgr resmgr.good
```

- o This kernel can be used in the event that successive kernel relinks produce kernels that do not boot.
- o After installing, licensing, and configuring your system, create a complete system backup. Also, implementing a regular backup schedule is recommended.
- o Use the emergency disk utility to create an emergency recovery DVD that can be used if your system later develops a problem that prevents it from booting.

15. If you are installing a new, similarly configured virtual machines, use the **guest_conf** utility. The instructions for cloning a UnixWare 7 Definitive 2018 virtual machine are the same as is documented in the Cloning a SCO UnixWare 7 Definitive 2018 System section of the UnixWare 7 Definitive 2018 Getting Started Guide: <https://www.xinuos.com/wp-content/uploads/UnixWare7D2M1-GettingStartedGuide-201712.pdf>

Configuration Notes

Xinuos provides technical articles about UnixWare products and packages here: [SCO Knowledge Center \(xinuos.com\)](https://www.xinuos.com) To query this database, enter search keywords and select **UnixWare Release 7**.

Many open source packages have README files on the Xinuos download site. For both MP1 and UP1, these READMEs are in subdirectories under [Index of /unixware7D/D2M1MP \(xinuos.com\)](https://www.xinuos.com). Some package versions, which are now in MP1, were posted prior to MP1 and have their READMEs here: [Index of /unixware7D/D2M1 \(xinuos.com\)](https://www.xinuos.com).

As described next, the **openssl** (MP1), **httpd** (MP1), **Samba** (UP1), and **Sendmail** (UP1) utilities should be configured after installing MP1 and UP1, respectively, to use those features.

OpenSSL Configuration Notes

If an **/etc/ssl/certs/ca-bundle.crt** exists on your system, then a new **xinuos-ca-bundle.crt** bundle is available. To replace the old root certificates, use:

```
cp /etc/ssl/certs/ca-bundle.crt /etc/ssl/certs/ca-bundle.crt.orig
cp /etc/ssl/certs/xinuos-ca-bundle.crt /etc/ssl/certs/ca-bundle.crt
```

OpenLDAP Configuration Notes

If your system was not configured to use OpenLDAP before upgrading to MP1, then run **/opt/xinuos/sbin/setup-openldap.sh [-client]** to finish the OpenLDAP setup.

However, if you were using OpenLDAP before upgrading to MP1, you should export your OpenLDAP data and then import it after installing MP1. See the [OpenLDAP Upgrade Notes](#) subsection below.

Note: For those installing UP1, the **Xinuosnss-pam-ldapd** package will replace the obsolete **pam_ldap** and **nss_ldap** modules (**/usr/lib/security/pam_ldap.so** and **/usr/lib/nss/ldap.so**, respectively) first introduced in UnixWare 7.1.4 Maintenance Pack 3.

OpenLDAP Upgrade Notes

WARNING: MP1's **Xinuosopenldap** version 2.5.16 does not support the 2.4.x default Berkeley database (**bdb**). Prior to installing MP1, if you are running **Xinuosopenldap** version 2.4.x; using your system as an LDAP server; and you are using the default Berkeley database format (**bdb**), the database should be exported before installing MP1 and then imported after installing MP1. Otherwise any existing OpenLDAP database data will no longer be accessible.

Before Installing MP1

The following procedure can be used to export an existing OpenLDAP database and prepare for the new version:

1. Log in as **root**.
2. Stop the **slapd** daemon, if running, to ensure a consistent export:

```
/etc/init.d/openldap-xinuos stop
```

3. Create an ***.ldif export** file; for example, named **2.4.ldif**:

```
/opt/xinuos/sbin/slapcat -l /var/opt/xinuos/openldap/openldap-data/2.4.ldif
```

4. Backup the old configuration and data files:

```
sh /var/sadm/pkg/Xinuosopenldap/install/preremove
```

5. Unconfigure OpenLDAP:

```
/opt/xinuos/sbin/setup-openldap.sh -u  
rm -fr /etc/opt/xinuos/openldap/slapd.d/cn=*
```

During the MP1 installation, OpenLDAP will be upgraded by the **Xinuosopenldap** package.

After Installing MP1

After installing MP1, the OpenLDAP database backup can be restored using the following procedure:

1. Log in as **root**.
2. Configure OpenLDAP:

```
/opt/xinuos/sbin/setup-openldap.sh
```

3. Restore the old configuration files in a temporary area such as **/tmp**:

```
cd /tmp
tar xvf /var/opt/xinuos/saved-configs/Xinuosopenldap-2.5.16-config.tar
```

4. Compare the old files in **/tmp/openldap** with the files in **/etc/opt/xinuos/openldap** and integrate any appropriate changes made to your old configuration files. Like the **rootpw** line in the **slapd.conf** file.

NOTE: Many of the OpenLDAP schema files have been updated in the 2.5 series.

5. Once all configuration file changes are in place, make sure **openldap** will start:

```
/etc/init.d/openldap-xinuos start
ps -ef | grep slap
```

You should see a line like this.

```
ldap 1637    1  TS   2  0   Jan 20 ?           4:43 /opt/xinuos/libexec/slapd -u ldap -f
/etc/opt/xinuos/openldap/slapd-tls.conf -h
```

6. Import the **ldif export** file:

```
/etc/init.d/openldap-xinuos stop
/opt/xinuos/sbin/slapadd -l /var/opt/xinuos/openldap/openldap-data/2.4.ldif
/etc/init.d/openldap-xinuos start
```

HTTPD Configuration Notes

This **Xinuoshttpd** release is a bare bones base Apache without any add-on modules. It can be configured as:

1. A reverse proxy with TLS 1.2 to older Apache systems and/or
2. An up-to-date web server for basic HTML web pages (no PHP, no DB connectivity, and so on).

Run **/opt/xinuos/sbin/setup-httpd.sh** to get a basic HTTPD setup. The configuration files will be in **/etc/opt/xinuos/httpd**. If you use **vhosts**, your **vhosts** configuration files should be placed in **/etc/opt/xinuos/httpd/vhosts**.

The default configurations expect your web pages to go in **/var/opt/xinuos/httpd/htdocs**.

By default, the latest version of Apache is disabled in **/etc/opt/xinuos/httpd/httpd.options** (ONBOOT="no"). However if you change this setting to **yes** and the ISL release of Apache is already enabled, the new **httpd** will not start. Even with a reboot, the ISL release always starts before this **httpd** release. To use the new **httpd** in this scenario, disable the ISL release with **/etc/init.d/apache disable** and, if needed, move your web pages from **/usr/lib/apache** to **/opt/xinuos**.

Once you have completed configuring **httpd**, run **/etc/init.d/httpd start** to start **httpd**.

Samba Set-up Notes

Note: The Xinuossamba package will replace /usr/lib/security/pam winbind.so from the obsolete Samba 3.0.24-01 package introduced in UnixWare 7.1.3 Maintenance Pack 4.

If this system is going to be used for an Active Directory member:

1. Samba Active Directory (AD) authentication requires that time be synchronized on all domain members. Thus it is recommended to set up an NTP client. For further details, see Technical Article #111921, [How to configure NTP to synchronize correctly?](#).
2. In the background, AD uses DNS to locate other Domain Controllers (DCs) and services, such as Kerberos. So AD domain members and servers must be able to resolve the AD DNS zones. Set the DNS server IP and AD DNS domain in your **/etc/resolv.conf** configuration file. For example:

```
nameserver 10.99.0.1
search s4addom16.test.xinuos.com
```

Make sure the Samba server's IP address is added into DNS, both forward and reverse:

```
#host <server name>
#host <samba server IP>
```

Both should return the correct IP address and server name.

3. Run the UnixWare 7 Definitive 2018 Update Pack 1 Samba configuration script and answer the prompts to configure Samba for this system:

/opt/xinuos/sbin/setup-samba.sh

Here is an example of the prompts and possible responses:

```
uw7d2m1b:/ # /opt/xinuos/sbin/setup-samba.sh
Installing smb.conf

    a) Stand Alone Server
    d) Active Directory Domain Member

Which one? d
Enter Machine name: [uw7d2m1b]
Machine name set to "uw7d2m1b".

Installing krb5.conf
Installing user.map
Enable starting Samba daemons at boot time? (recommended) [Yes]

Start Samba daemons now? (recommended) [Yes] No
uw7d2m1b:/ #
```

4. The resulting configuration files are in **/etc/opt/xinuos/samba**. These files are well commented in case you want to further tweak your configuration. Make sure **/etc/opt/xinuos/samba/smb.conf** is configured like you want it.

5. Reboot your system or run: **/etc/init.d/samba-xinuos start**

6. After running the Samba configuration script **setup-samba.sh** above, then please note the following:

- o To join an AD domain, run:

```
net ads join -U <AD Admin Username>
```

<AD Admin Username> should be a AD user having administrator rights. The command asks for the AD user password to complete the AD join.

- o Restart Samba:

```
#!/etc/init.d/samba-xinuos restart
Stopping samba: UX:kill (samba-xinuos): ERROR: No such process
UX:kill (samba-xinuos): ERROR: No such process
```

Or reboot your system.

- o After the above, Samba can be tested using the **smbclient** tool:

```
# smbclient //<samba_server_IP>/tmp -U <AD_Username>
Enter S4ADDOM16\<AD_User>'s password:*****
Try "help" to get a list of possible commands.
smb: \>
```

- o If you need to reconfigure the Samba environment, you can execute the **setup-samba.sh -u** command. This will remove all created configuration files, so you can start configuring Samba all over again.

7. For additional information, please see this technical article: [Technical Article #128085: How to configure samba4 with windows domain integration on UW7D2018.](#)

Sendmail Notes

To use the Update Pack 1 **sendmail**:

1. Note the certificates discussion in the earlier installation [Details](#) section.
2. **IMPORTANT**: This is required if you want to use **sendmail**'s new features, or if you are receiving mail from other machines on this systems. Otherwise this step is optional.

Run this script and please pay attention to what it tells you at the end:

/opt/xinuos/sbin/setup-sendmail.sh

This script will configure **sendmail** and place the configuration files in **/etc/mail**. There may be multiple configuration files; for example, in case you have multiple networking cards The **sendmail** configuration files are well commented.

3. If you decide to modify any of the source configuration files, run **./make all** to process them.
4. Note that this system also includes **spfmliter**. Uncomment the **ONBOOT=yes** line in **/etc/mail/spfmliter.options** to have it start on boot.
5. For additional information, please see [TA #128086: How to get started with Sendmail, SPF, libspf, and spfmliter on UW7D2018?](#)

Limitations and Known Problems.

Keep -dev Packages Synchronized with Runtime Versions

Developers need to keep their **-dev** packages (for example, **Xinuosbind-dev** and **zlib-dev**) synchronized with the latest runtime packages. To check that this is the case, run **patchck** with the **-dev** option, or set **INSTALLDEV** to **Y** in the **/usr/lib/patchck.d/patchck.conf** file. Select and install/upgrade any displayed **-dev** sibling package if the sibling is already installed, or if this is a package you also want to add to your system.

patchck pkgname is Broken

To install packages and patches with **patchck**, enter **patchck** and choose the package(s) of interest. **patchck** will automatically identify any needed prerequisites and install them. Do not use **patchck pkgname** as that functionality does not currently work.

Python 2 is Deprecated

Modern applications use Python 3 and it is highly recommended. If your system had Python 2 installed before installing Maintenance Pack 1, then Maintenance Pack 1 updated Python 2 to a version that is compatible with the new Maintenance Pack libraries. This is in addition to installing Python 3. Although Python 3 is more modern, Python 2 may be needed for maintaining old Python 2 applications that have not been ported to Python 3.

If you did not install Python 2 before installing Maintenance Pack 1, you can separately download and install Python 2 (the **Xinuospython** package) from: <https://download.xinuos.com/unixware7D/D2M1MP>

WARNING! Python 2 is deprecated and is no longer supported. Xinuos will not provide additional updates to the **Xinuospython** (Python 2) package. Specifically, Xinuos will not provide additional/future security updates.

Appendix A: Maintenance Pack 1 Packages

The Maintenance Pack 1 package versions listed below are included in the initial Maintenance Pack 1 release. These packages are available with your UnixWare 7 Definitive 2018 license and do not require a separate Update Pack license.

You can install the latest current XinuOS versions of these packages using **patchck**. Additional packages will be added to Maintenance Pack 1 later and will also be available by running **patchck**. We recommend that you periodically run **patchck** to identify new updates as they become available.

The packages in Maintenance Pack 1 are:

- **XinuOSapr**: Apache Portable Runtime Library (APR) 1.6.5 for Definitive (version 1.6.5b)
- **XinuOSapr-util**: Apache Portable Utility Library (APR) 1.6.1 for Definitive (version 1.6.1a)
- **XinuOSatf**: The Automated Testing Framework (ATF) 0.22pre for Definitive (version 0.22pre)
- **XinuOSbind**: BIND (Berkeley Internet Name Domain) 9.10.5-P3 for UnixWare714D (version 9.10.5-P3a)
- **XinuOSbison**: GNU Bison 3.8.2 for Definitive (version 3.8.2)
- **XinuOSc-ares**: c-ares 1.17.2 for Definitive (version 1.17.2)
- **XinuOScurl**: Curl 7.58.0 for Definitive (version 7.58.0)
- **XinuOSdb53**: Berkeley DB 5.3.28 for Definitive (version 5.3.28c)
- **XinuOSdejagnu**: DejaGnu 1.6.3 for Definitive (version 1.6.3)
- **XinuOSdiffutils**: GNU Diffutils 3.7 for Definitive (version 3.7)
- **XinuOSexpat**: Expat 2.5.0 for Definitive (version 2.5.0)
- **XinuOSexpect**: Expect 5.45.4 for Definitive (version 5.45.4a)
- **XinuOSflex**: flex 2.6.4 for Definitive (version 2.6.4)
- **XinuOSgawk**: GNU Awk 3.1.8 for Definitive (version 3.1.8)
- **XinuOSgcc-rtlibs**: GNU Compiler Collection (XinuOS GCC) 7.3.0 Runtime Libraries for Definitive (version 7.3.0e)
- **XinuOSgdb**: GDB 8.1 for Definitive (version 8.1a)
- **XinuOSgdbm**: GNU dbm 1.19 for Definitive (version 1.19)
- **XinuOSgettext**: GNU Gettext Package 0.21 for Definitive (version 0.21)
- **XinuOSgmake**: GNU Make 4.2.1 for Definitive (version 4.2.1a)
- **XinuOSgmp**: GNU MP Library 6.2.1 for Definitive (version 6.2.1a)
- **XinuOSgnum4**: GNU m4 1.4.19 for Definitive (version 1.4.19)
- **XinuOSgpgme**: GPGME - GnuPG Made Easy 1.16.0 for Definitive (version 1.16.0)
- **XinuOSgrep**: GNU grep 3.6 for Definitive (version 3.6)
- **XinuOSgtar**: GNU tar 1.30 for Definitive (version 1.30)
- **XinuOShttpd**: Apache HTTP Server 2.4.58 for Definitive (version 2.4.58)
- **XinuOSlibassuan**: Libassuan 2.5.5 for Definitive (version 2.5.5)
- **XinuOSlibffi**: libffi (Foreign Function Interface) 3.0.13 for Definitive (version 3.0.13)
- **XinuOSlibgpg-error**: Libgpg-error 1.43 for Definitive (version 1.43)
- **XinuOSlibiconv**: GNU LIBICONV - character set conversion library 1.16 for Definitive (version 1.16)
- **XinuOSlibksba**: LIBKSBA 1.6.0 for Definitive (version 1.6.0a)
- **XinuOSlibsasl**: Cyrus SASL API implementation 2.1.28 for UnixWare7D (version 2.1.28)
- **XinuOSlibssh2**: libssh2 - SSH2 library 1.8.0 for Definitive (version 1.8.0b)
- **XinuOSlibxml2**: libxml2 2.9.4 for Definitive (version 2.9.4b)
- **XinuOSlibksba**: LIBKSBA 1.6.0 for Definitive (version 1.6.0a)
- **XinuOSlua**: Lua 5.4.3 for Definitive (version 5.4.3)

- **Xinuosllynx:** Lynx 2.8.9rel.1 for Definitive (version 2.8.9rel.1a)
- **Xinuoslz4:** LZ4 - Extremely fast compression 1.9.3 for Definitive (version 1.9.3a)
- **Xinuoslzip:** Lzip 1.23 for Definitive (version 1.23)
- **Xinuoslzo2:** LZO -- a real-time data compression library 2.10 for Definitive (version 2.10a)
- **Xinuosmpfr:** GNU MPFR Library 4.0.2 for Definitive (version 4.0.2a)
- **Xinuosopenldap:** OpenLDAP 2.5.16 for Definitive (version 2.5.16)
- **Xinuospcre:** PCRE (Perl-compatible regular expression library) 8.45 for Definitive (version 8.45)
- **Xinuospcre2:** PCRE2 (Perl-compatible regular expression library) 10.37 for Definitive (version 10.37)
- **Xinuospkg-config:** pkg-config 0.29.2 for Definitive (version 0.29.2)
- **Xinuospython3:** Python 3.10.12 for UnixWare7D (version 3.10.12)
- **Xinuospython3-modules:** python3 modules 1.1 for Definitive (version 1.1)
- **Xinuosreadline:** Gnu Readline library, version 8.1 for Definitive (version 8.1p2)
- **Xinuossed:** GNU sed 4.8 for Definitive (version 4.8)
- **Xinuossqlite:** SQLite 3.20.1 for Definitive (version 3.20.1)
- **Xinuossudo:** Sudo 1.9.12p2 for UnixWare7D (version 1.9.12p2a)
- **Xinuostcl:** Tcl 8.6 for Definitive (version 8.6.12)
- **Xinuostexi2html:** texi2html 1.82 for Definitive (version 1.82)
- **Xinuostexinfo:** Texinfo 4.13 for Definitive (version 4.13)
- **Xinuostk:** Tk 8.6 for Definitive (version 8.6.12)
- **Xinuostre:** TRE 0.8.0 for Definitive (version 0.8.0)
- **Xinuosuuid:** OSSP uuid - Universally Unique Identifier 1.6.2 (04-Jul-2008) for Definitive (version 1.6.2b)
- **Xinuoswget:** GNU Wget 1.20 for Definitive (version 1.20)
- **bzip2:** bzip2 1.0.8 for UnixWare7D (version 1.0.8)
- **less:** Less 530 for UnixWare7D (version 530)
- **openssh:** OpenSSH Portable for UnixWare (version 7.3p1f)
- **openssl:** OpenSSL 3.0.12 for UnixWare7D (version 3.0.12)
- **uw7d2m1mp1:** UnixWare 7 Definitive 2018 Maintenance Pack 1 (version 1.0)
- **uw7vconf:** UnixWare 7 Definitive 2018 Configuration (version 2.0.4)
- **xz:** XZ Utils 5.2.5 for Definitive (version 5.2.5)
- **zlib:** ZLIB DATA COMPRESSION LIBRARY 1.2.13 for UnixWare7D (version 1.2.13)

Appendix B: Update Pack 1 Packages

The Update Pack 1 package versions listed below are included in the initial Update Pack 1 release. They require a UnixWare 7 Definitive 2018 Update Pack 1 license.

patchck allows you to always install the latest current security updates of these packages. We recommend that you periodically run **patchck** to identify new updates as they become available. Future first and/or second digit updates may be provided in subsequent update packs, with a separate license.

The packages in Update Pack 1 are:

- **Xinuosalpine:** Alpine/Pico/Pilot/Web Alpine/Imapd Distribution 2.26 for UnixWare7D (version 2.26)
- **Xinuosgnutls:** GnuTLS 3.6.16 for Definitive (version 3.6.16)
- **Xinuosheimdal:** Heimdal 7.8.0 for Definitive (version 7.8.0)
- **Xinuoshelp2man:** GNU help2man 1.48.5 for Definitive (version 1.48.5)
- **Xinuosjansson:** Jansson 2.14 for Definitive (version 2.14)
- **Xinuoslibarchive:** libarchive 3.5.2 for Definitive (version 3.5.2a)
- **Xinuoslibcrypt:** Libgcrypt - The GNU Crypto Library 1.8.8 for Definitive (version 1.8.8)
- **Xinuoslibidn2:** Libidn2 2.3.2 for Definitive (version 2.3.2a)
- **Xinuoslibspf:** libspf 1.0.0-p6 for Definitive (version 1.0.0-p6)
- **Xinuoslibtasn1:** GNU Libtasn1 4.18.0 for Definitive (version 4.18.0a)
- **Xinuoslibunistring:** GNU LIBUNISTRING - Unicode string library 0.9.10 for Definitive (version 0.9.10a)
- **Xinuosnettle:** Nettle 3.7.3 for Definitive (version 3.7.3a)
- **Xinuosnss-pam-ldapd:** nss-pam-ldapd 0.9.12 for UnixWare7D (version 0.9.12)
- **Xinuosperl:** Perl 5.34.0 for Definitive (version 5.34.0)
- **Xinuosperlmod:** Perl Modules 5.34.0 for Definitive (version 5.34.0-20230616)
- **Xinuossamba:** Samba 4.10.16 for UnixWare7D (version 4.10.16j)
- **Xinuosspfmlilter:** spfmlilter 2.001 for Definitive (version 2.001)
- **sendmail:** Sendmail 8.17.2 for UnixWare7D (version 8.17.2a)

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