**Oracle® Communications
Tekelec Platform**

Initial Product Manufacture

Release 5.5

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ORACLE®

Oracle Communications Tekelec Platform Initial Product Manufacture, Release 5.5

**CAUTION: Use only the guide downloaded from the Oracle Technology Network (OTN) (http://www.oracle.com/technetwork/indexes/documentation/oracle-comms-tekelec-2136003.html).
Before upgrading your system, access the My Oracle Support web portal (https://support.oracle.com) and review any Knowledge Alerts that may be related to the System Health Check or the Upgrade.**

Before beginning this procedure, contact My Oracle Support and inform them of your upgrade plans.

Refer to Appendix D for instructions on accessing My Oracle Support.

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1. INTRODUCTION

1.1 Purpose and Scope

This document details the procedure for installing the Operating System on a Tekelec E5-APP-B Application Server.

The intended audiences for this document are the Tekelec manufacturing engineers who will work with manufacturing technicians to build the systems. It will also be useful to test and development engineers who need to rebuild systems in the lab. Customer Service staff may also benefit from the information contained within this document. The Initial Product Manufacture (IPM) will be used for all E5-APP-B series systems at Tekelec manufacturing and Lab facilities.

This document applies to TPD 5.5 only. Some of the figures in this document were captured on a server running a TPD version older than 5.5, so they should be used as a sample and not as exact text. TPD releases older than 5.0 should continue using [2]. Other TPD release 5.0 and later should continue using [3].

The following items are considered out of the scope of this document:

- Application Server unpacking

- Application Server assembly

- Application Server diagnostics and acceptance testing

- Application Server application install/upgrade

- Application Server platform upgrade

- Specific part/configuration information for the terminal device (or equivalent) and null modem serial cable used to initiate and monitor the IPM process

1.2 References

The following are references internal to Tekelec. They are provided here to capture the source material used to create this document. Internal references are only available to Tekelec personnel.

[1] *Core Tekelec Platform Distribution*, TR005889, Documentum version 1.17

[2] *TPD Initial Product Manufacture for Releases >= 3.1 and 4.x*, 909-1378-001, Rev F, July 2011

[3] *TPD Initial Product Manufacture for Releases 5.0+*, 909-2130-001, Rev B, February 2012

1.3 Acronyms

Table 1: Acronyms

Acronym	Meaning
BIOS	Basic Input Output System
E5-APP-B	E5 APPlication server B
GRUB	Grand Unified Bootloader
IPM	Initial Product Manufacture – the process of installing TPD on a hardware platform
KVM	Kernel-based Virtual Machine
MBR	Master Boot Record
OS	Operating System (e.g. TPD)
TPD	Tekelec Platform Distribution
USB	Universal Serial Bus
VSP	Virtual Serial Port

1.4 Terminology

The IPM media kit for the E5-APP-B is distributed as USB only.

2. PRE-INSTALLATION SETUP

2.1   Installation Prerequisites

The following items are required in order to IPM a server:

- A properly assembled server.
- Appropriate IPM Media Kit
- A terminal device (or equivalent) and null modem serial cable to initiate and monitor the IPM process:
    - E5-APP-B requires a serial cable to RJ45 console port.

    In general, ANSI standard terminal emulations are supported. As of this writing, the following terminal emulations are known to work: ANSI BBS, VT-52, VT-100, VT-102, VT-220, and VT-320

    Console serial port settings are specified in reference [1] . As of this writing, the settings are as follows:

Table 2: Console serial port settings

System	Baud Rate	Data Bits	Parity	Stop Bits	Flow Control
E5-APP-B	115200	8	None	1	None

- User passwords are specified in reference [1] The default password for the syscheck user is as follows:

Table 3: syscheck password

User	Password
Syscheck	syscheck

NOTES:
    (1) Default password(s) will be changed by the manufacturing process –or– will be disclosed to customer with recommendation to change. Standard UNIX commands are used to change user passwords.
    (2) To login as root, contact **Customer Support**.

2.2 System Configuration

Assemble and configure the system as appropriate and documented in the applicable application installation setup guides.

2.3   Network Connections

None

2.4   Serial Connections

A serial connection to the console port is required to initiate and monitor the progress of the IPM installation. The location and type of the connection varies by system:

Table 4: Console port connections

System	Port type	Port location

System	Port type	Port location
E5-APP-B	RJ45 – Serial	Back of unit

2.5   Verify System Health

1. Verify a null modem serial interface cable connects the terminal device to the server console port. Refer to Table 2 for console port settings and to Table 4 for the type and location of the console port.

2. Power on the terminal device (if necessary) and establish a connection to the server console port.

3. Power on the server using the following instructions:

Table 5: Power-on instructions

System	Instructions
E5-APP-B	Insert the blade server into a configured and powered EAGLE shelf. Ensure that both hard disk latches and the eject latch are in the locked position (the word LOCKED is shown on the latch).

2.6   Time Estimates

Table 6: Time Estimates for IPM in Minutes

	Phase	Setup	OS USB	Initial Reboot	Syscheck
	Activity	Cable and Power up	IPM Install of OS	OS Boot	System health check
TPD	This Step	5	15	10	1
	Cumulative	5	20	30	31
TPD scrub 2 300 GB Disks	This Step	5	40	10	1
	Cumulative	5	45	55	56

3. SOFTWARE INSTALLATION AND VALIDATION PROCEDURES

The date and time in the server's CMOS clock must be set accurately before running the IPM procedure. Additionally, in order to boot from the USB drive, the disk drive boot order must be set.

The CMOS clock can be set by alternate methods (see 3.4Appendix B), but the boot order can only be done from the BIOS setup screen.

3.1 Setting the CMOS clock and disk boot order from the BIOS setup screen

Setting the clock and other BIOS parameters from the BIOS setup screen does not require TPD to be installed. **Note that setting the boot order requires the USB key to be installed.**

1. A few seconds after the server is powered on, as soon as you see the first bit of output on the screen, press the BIOS Setup Entry key three (3) times to access the BIOS setup screen. On E5-APP-B, this is the **F4** key

```
Main    Advanced    Boot    Security    Exit
*******************************************************************
* System Overview                          * Use [ENTER], [TAB]  *
* ***************************************** * or [SHIFT-TAB] to   *
* AMIBIOS                                  * select a field.     *
* Version    :TP752HRA.86H.0002.P          *                     *
* Build Date:02/13/06                      * Use [+] or [-] to   *
* ID         :TP752HRA                     * configure system Time. *
*                                          *                     *
* Processor                                *                     *
* Type      :Intel(R) Xeon(TM) CPU 2.80GHz *                     *
* Speed     :2800MHz                        *                     *
* Count     :2                              *                     *
*                                          *                     *
* System Memory                            * *    Select Screen  *
* * USB Configu96MB                        * **   Select Item    *
*                                          * +-   Change Field   *
* FPGA                                     * Tab  Select Field   *
* Version   :B.005                         * F1   General Help   *
*                                          * F10  Save and Exit  *
* System Time              [06:46:20]      * ESC  Exit           *
* System Date              [Mon 08/15/2005]*                     *
*******************************************************************
        v02.58 (C)Copyright 1985-2004, American Megatrends, Inc.
```

Figure 1: Example Main BIOS Screen

2. Set the server date and time to GMT (Greenwich Mean Time).

3. Set the boot order as follows

   a. Enter the Boot screen using the right arrow key.

   b. From the Boot screen, select Hard Disk Drives menu, and select 1st Drive .
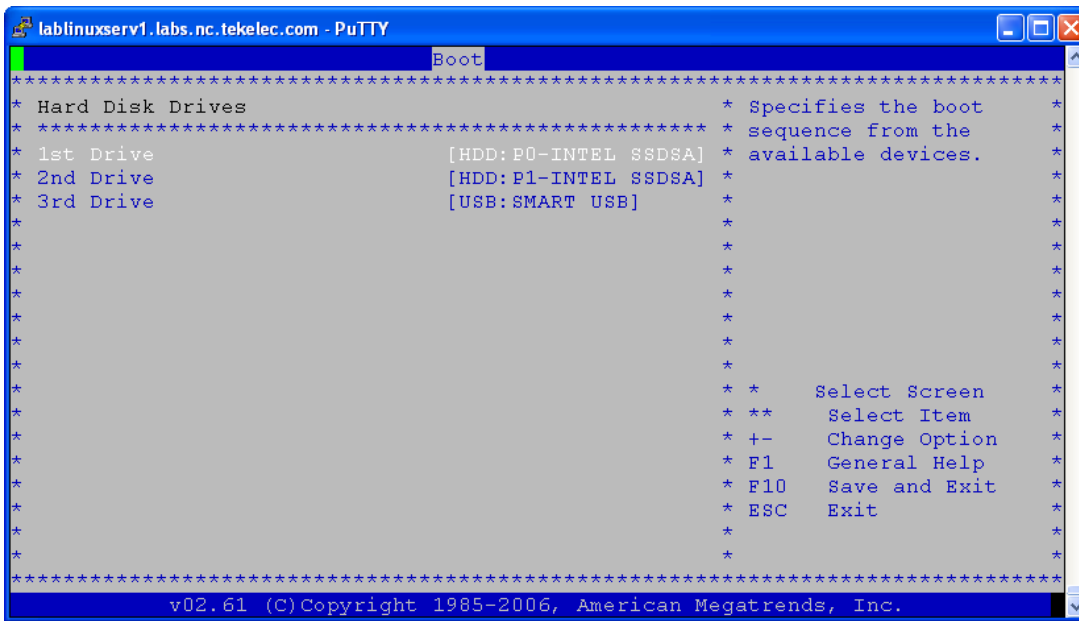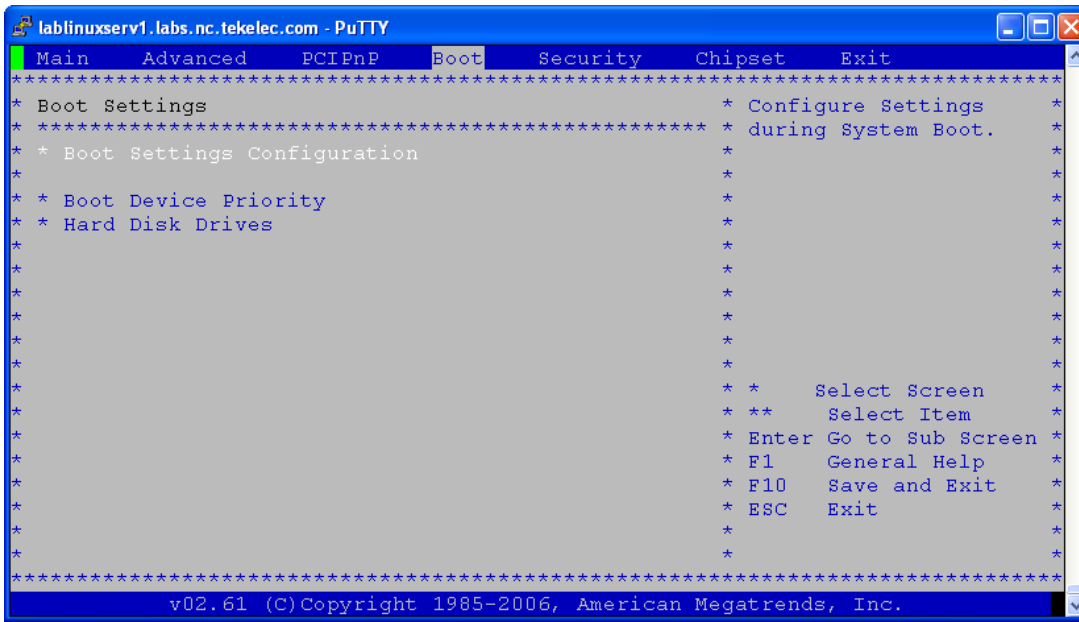
     c.   Select the USB drive from the popup menu using the down arrow key.

NOTE: USB device must be installed in the USB port or it will not be shown as an option. If no USB device present, insert the device, exit BIOS, reboot, and go back to step 1.
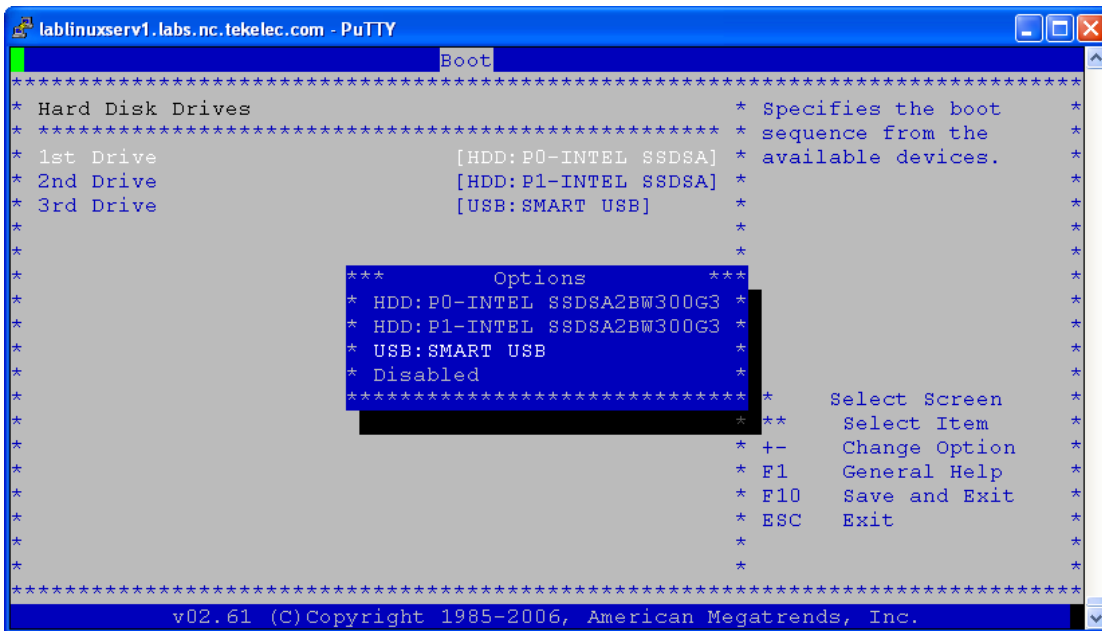
4. Exit from the BIOS screen, saving changes.
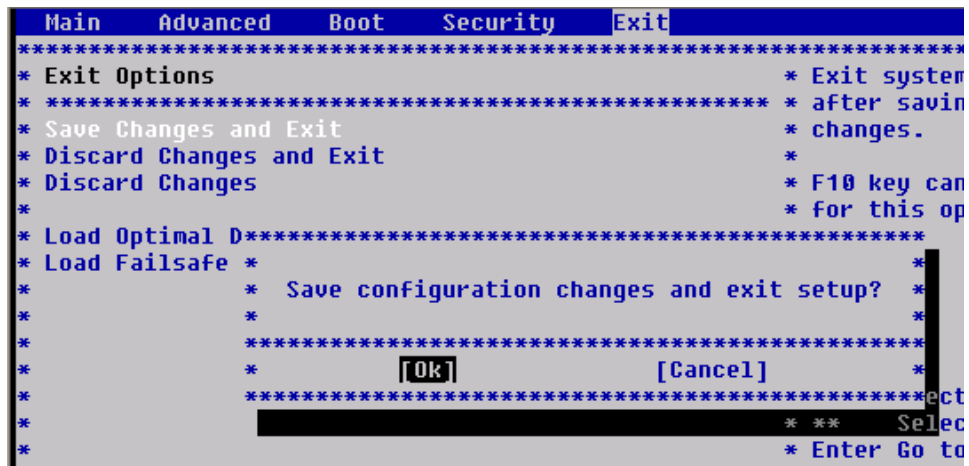
Figure 2: Example Exit BIOS Screen

3.2 OS IPM Install

Installation will then begin upon reboot.

3.3 IPM Command line procedures

1. Figure 3 is a sample output screen indicating the initial boot from the install media was successful. The information in this screen output representative of TPD 5.5.

Figure 3: Example boot from media screen, TPD 5.5.0

2. The command to start the installation is dependent upon several factors, including the type of system, knowledge of whether an application has previously been installed or a prior IPM install failed, and what application will be installed.

   NOTE: that text case is important, and must be typed exactly.

   If installing on a server that has never had an application installed (a "fresh install"), start the IPM process by entering the **TPD** command at the boot prompt. Note that there are other boot targets and options available. The following is a description of the alternative boot targets:

   - TPD – To install with software RAID. The number of software RAID enabled partitions will vary depending on the TPD release. This target is appropriate for E5-APP-B.
   - TPDnoraid – To install on first device found. Creates a /boot partition and five logical volumes. This target is not intended for production use.
   - TPDcompact – To install using the minimum disk space. Create a boot partition and a / (root) partition. This target is not intended for production use.

- TPDblade – To install to one disk with blade partition config. Create a /boot partition and five logical volumes. This target is similar to TPDnoraid but some platform partitions are smaller, and is not intended for production use.
- rescue – To enable rescue mode.
- HDD – This option allows you to boot to the default hard drive after booting from IPM media. This is used when the server has been rebooted while IPM media was left in the USB drive.

If the server has had an application installed (and is not a "fresh install"), if its state is not known, or if recovering from a failed installation, start the IPM process by typing the **TPD scrub** command. Warning: Make sure you understand the behavior of the "scrub" option (as described in section 3.4C.3) before using it.

Some applications require disk space to be set aside for use other than being part of the vgroot LVM volume group. See the installation documentation for the application to determine if this is needed and if so, how much space needs to be reserved. The **reserved** option provides this ability to set aside one or more partitions. For more information on the option, see section C.1.

When installing to a server with more than one drive, it may be desired to limit the TPD installation to a subset of the drives. For example, it may be desired to perform a **TPDnoraid** installation to a drive other than the first. If this special handling is desired, use the **drives** option to specify the device names to which TPD should be installed.

Refer to **Appendix C IPM command options** for all TPD IPM command options.

How long the IPM process will take will be determined by the size and speed of the disk drives installed in the server. See Table 6 for time estimates. No status is printed to the screen for several hours as the scrub option is run. If one or more disk drives in the server has any hardware errors, the time required to run a scrub will rise dramatically.

After entering the command to start the installation, the Linux kernel will load, as in the following screenshot:

```
please refer to the Initial Platform Manufacture document for this release.
In addition to linux & rescue TPD provides the following kickstart profiles:

    [ TPD ¦ TPDnoraid ¦ TPDblade ¦ TPDbladeraid ¦ TPDnocons ¦ T1200sol ¦ HDD ]

Commonly used options are:

    [ console=<console_option>[,<console_option>] ]
    [ rdate=<server_ip> ]
    [ scrub ]
    [ reserved=<size1>[,<sizeN>] ]
    [ diskconfig=HPG6[,force] ]
    [ drives=<device>[,device] ]

To install using a monitor and a local keyboard, add console=tty0




boot: TPD
Loading vmlinuz.............................
Loading initrd.img......................................................................
...........................................................................................
........................
Ready.
```

Figure 4: Example kernel loading output

3. After a few seconds, additional messages will begin scrolling by on the screen as the Linux kernel boots, and then the drive formatting and file system creation steps will begin:
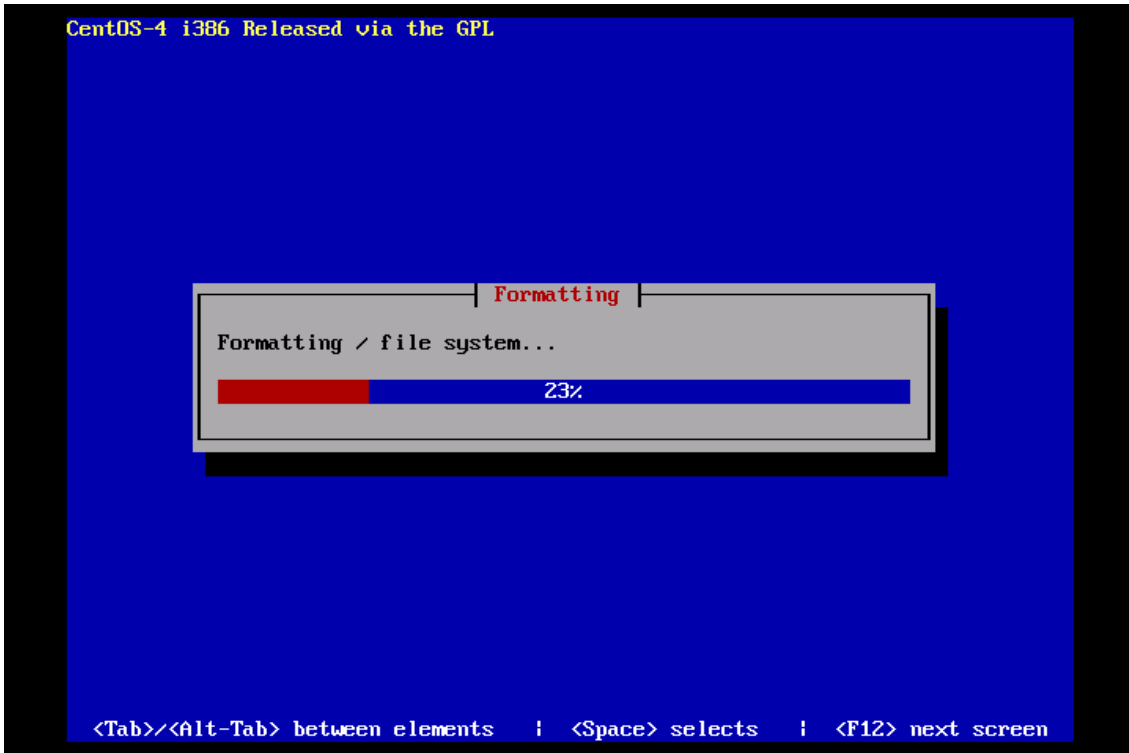
Figure 5: Example file system creation screen

4. Once the drive formatting and file system creation steps are complete, the following screen will appear indicating that the package installation step is about to begin.
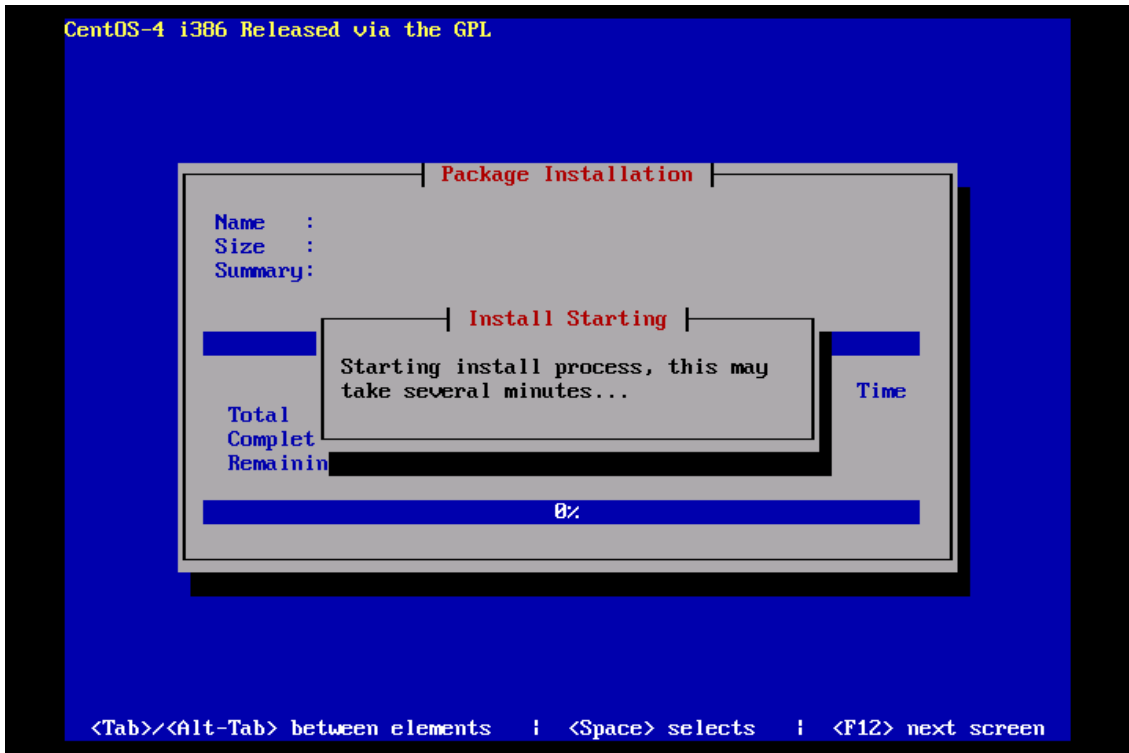
Figure 6: Example package installation screen

5. Once the screen shown in Figure 6 appears, it may take several minutes before anything change. However, after a few minutes, you will see a screen similar to that below, showing the status of the package installation step. For each package, there will be a status bar at the top indicating how much of the package has been installed, with a cumulative status bar at the bottom indicating how many packages remain. In the middle, you will see text statistics indicating the total number of packages, the number of packages installed, the number remaining, and current and projected time estimates:
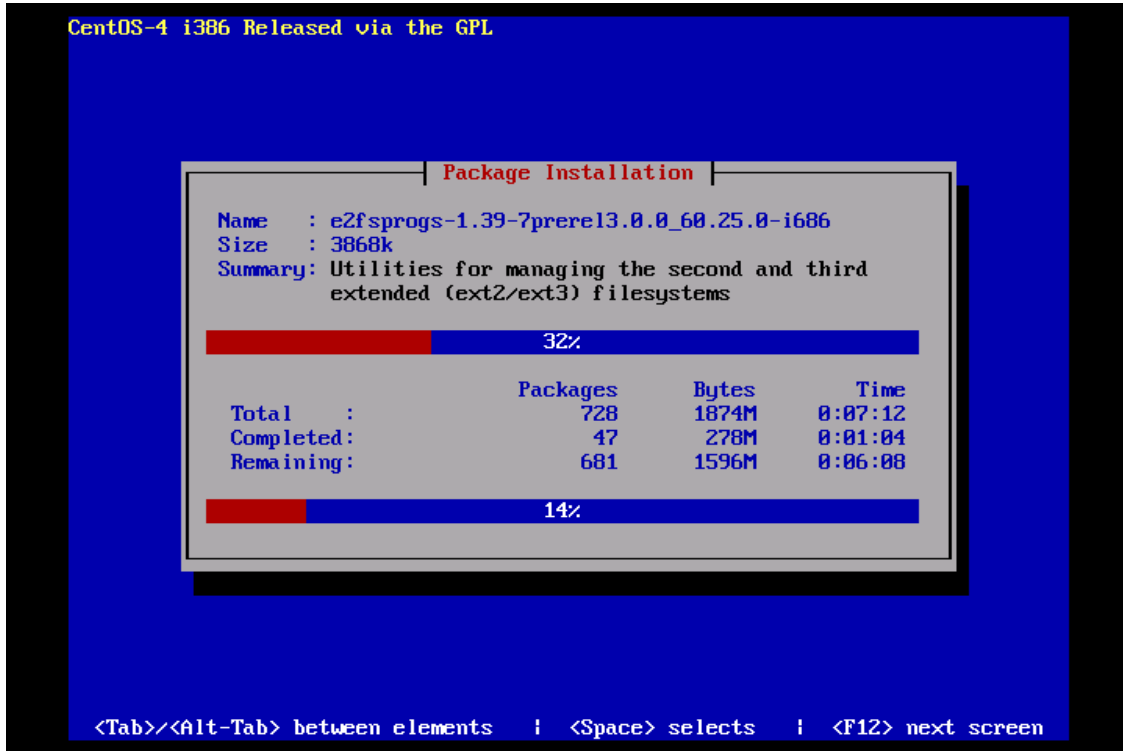
Figure 7: Example installation statistics screen

6. Once all the packages have been successfully installed, the following screen will appear, letting you know the installation process is complete. Remove the installation USB device and then press <ENTER> to reboot the system.

Figure 8: Example installation complete screen

7. After a few minutes, the BIOS screen will appear again, followed by several messages about each of the Ethernet ports in the system, and finally followed by the following message printed by the boot loader, indicating that it is booting the new IPM load.

   NOTE: there is no need to reset the BIOS settings to boot from the Hard Disk as long as the USB was removed as directed in the previous step.

Figure 9: Example boot loader output

8. NOTE: it is possible that the system will reboot several times during the IPM process. No user input is required if this occurs.

9. A successful IPM platform installation process will result in a user login prompt.

3.4 Post-Install Processing

Login as user syscheck, and the system health check will run automatically. This will check the health of the server, and print out an "OK" if the tests passed, or a descriptive error of the problem if anything failed. The screenshot below shows a successful run of syscheck, where all tests pass, indicating the server is healthy.

```
CentOS release 4.4 (Final)
Kernel 2.6.18-1.2849prerel3.0.0_60.52.0 on an i686

tokyo login: syscheck
Password:
Last login: Mon Jul 17 11:27:41 from 10.25.61.126
Running modules in class hardware...
                                OK

Running modules in class proc...
                                OK

Running modules in class disk...
                                OK

Running modules in class system...
                                OK

LOG LOCATION: /var/TKLC/log/syscheck/fail_log

CentOS release 4.4 (Final)
Kernel 2.6.18-1.2849prerel3.0.0_60.52.0 on an i686

login:
```

Figure 10: Example successful syscheck output

Since an NTP server will not normally be configured at this point, syscheck may fail due to the NTP test as shown in Figure 11: Example syscheck output with NTP error. The syscheck NTP test will not give this failure during the first 20 minutes after the server is booted up. The error shown in Figure 11 is acceptable and can be ignored.

```
ilopc9101511.ipde.nc.tekelec.com - PuTTY
hostname1307389642 login: syscheck
Password:
Last login: Mon Jun  6 15:49:26 from localhost
Running modules in class system...
                              OK

Running modules in class hardware...
                              OK

Running modules in class proc...
*        ntp: FAILURE:: MINOR::5000000000000200 -- Server NTP Daemon Not Synchr
onized
*        ntp: FAILURE:: ntp is not synchronized.
One or more module in class "proc" FAILED

Running modules in class disk...
                              OK

LOG LOCATION: /var/TKLC/log/syscheck/fail_log

CentOS release 5.5 (Final)
Kernel 2.6.18-194.32.1.el5prerel5.0.0_72.11.0 on an x86_64

hostname1307389642 login:
```

Figure 11: Example syscheck output with NTP error

The screenshot Figure 12 indicates a disk failure in one of the syscheck tests. If the server is using software disk mirroring (RAID1), the syscheck disk test will fail until the disks have synchronized. The amount of time required to synchronize the disks will vary with disk speed and capacity. Continue executing system check every 5 minutes (by logging in as syscheck to run syscheck again) until the health check executes successfully as shown above. If the disk failure persists for more than two (2) hours, or if system check returns any other error message besides a disk failure or the NTP error shown in Figure 11, do not continue, contact Manufacturing Support and report the error condition.

```
CentOS release 4.4 (Final)
Kernel 2.6.18-1.2849prerel3.0.0_60.52.0 on an i686

tokyo login: syscheck
Password:
Last login: Mon Jul 17 11:28:48 on ttyS0
Running modules in class hardware...
                              OK

Running modules in class proc...
                              OK

Running modules in class disk...
One or more module in class "disk" FAILED

Running modules in class system...
                              OK

LOG LOCATION: /var/TKLC/log/syscheck/fail_log

CentOS release 4.4 (Final)
Kernel 2.6.18-1.2849prerel3.0.0_60.52.0 on an i686

login:
```
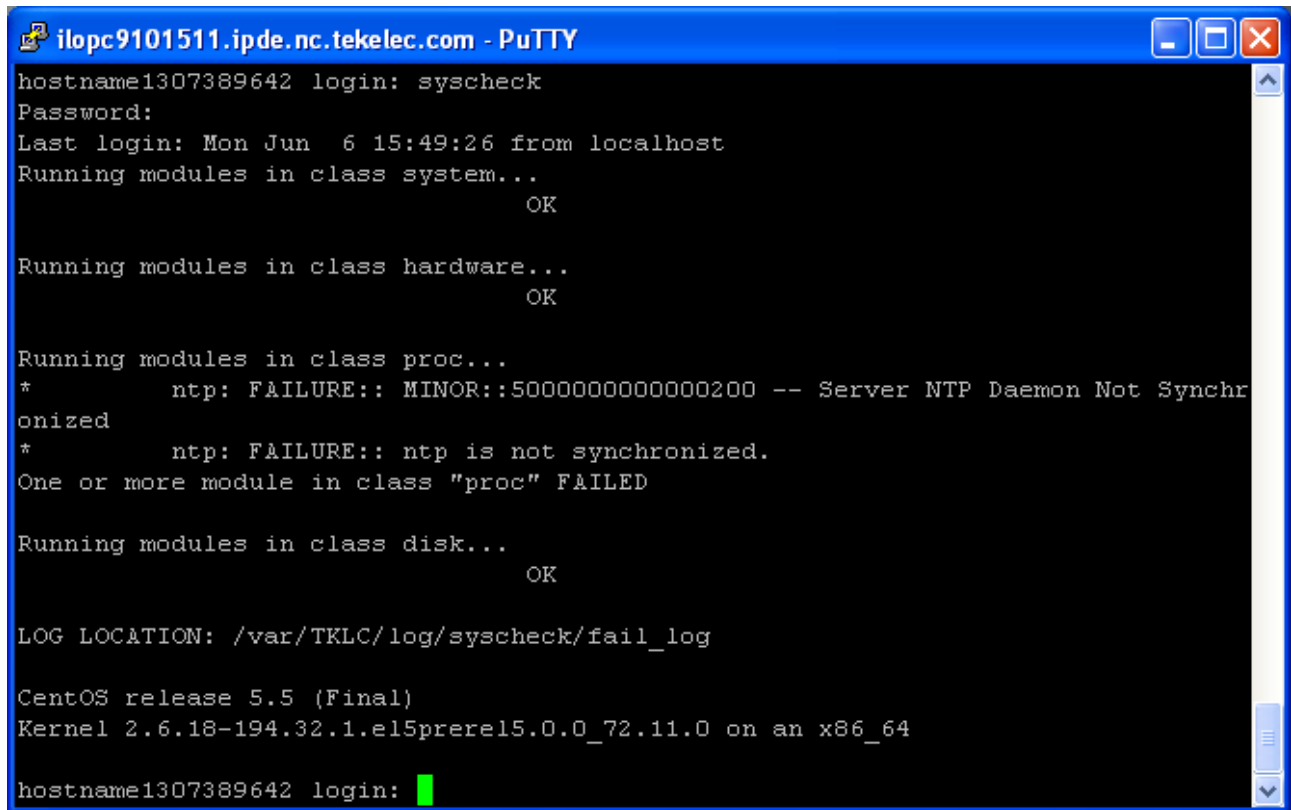
Figure 12: Example syscheck disk failure output

1. Verify that the IPM competed successfully by logging in as root and running verifyIPM. Contact Customer Service if any output is printed by the verifyIPM command.

```
root@server:~                                                           _ □ ✕
[root@server ~]# verifyIPM
[root@server ~]#
```

Figure 13: Example verifyIPM output

> **Congratulations!**
> **Application Server IPM Process is complete and Post-install checks have passed...**
> **You have successfully completed this procedure.**
> **Refer to sales order to load appropriate application.**

Appendix A.   **Possible Errors During IPM Installation Processing**

A.1   **IPM Errors**

1. During the IPM installation, if failures occur, or if the IPM process stops and requests user input, the installation process is suspended and manual intervention is required.

A.2   Post Installation syscheck errors

If the syscheck command continues to fail in the post-installation step, execute the following steps to isolate the problem

1. Log in as root
2. Run: syscheck -v -k meta
3. If the output looks like the screenshot below, then execute all the steps in section 3.3 again, but at step 3, append the "scrub" option to the installation start command. Warning: Make sure you understand the behavior of the "scrub" option (as described in Section C.3) before using it. Refer to the text for step 3 to determine the proper installation start command for your hardware.

```
Kernel 2.6.18-1.2849prerel3.0.0_60.52.0 on an i686

tokyo login: root
Password:
Last login: Mon Jul 17 11:31:10 on ttyS0
[root ~]# syscheck -v -k meta
Running modules in class disk...
        meta: Checking md status on system.
        meta: md Status OK, with 11 active volumes.
        meta: Checking md configuration on system.
        meta: md12 is configured, but is not currently active.
        meta: ::MAJOR:: 3000000000000002 - Server Internal Disk Error
        meta: md configuration failed
        meta: Active md config doesn't match /etc/raidtab
Return string: "Configuration check of md subsystem failed"
One or more module in class "disk" FAILED

Running modules in class system...
                                OK

LOG LOCATION: /var/TKLC/log/syscheck/fail_log
[root ~] █
```

Figure 14: Example syscheck failure output

Appendix B.   **Alternative Methods of Setting CMOS clock**

There are multiple ways to set the Server's CMOS clock. The following methods are offered as alternatives to the method described in section 3.1. Please note that the CMOS clock must be accurate before the IPM is initiated.

B.1   Setting CMOS clock when running TPD.

If the server has TPD installed and you know the root password, you can use the following procedure to set the system clock.

1. Boot the server up.

2. Log in as root.

3. Verify the current date, using the `date` command:

```
# date
Fri Jul 13 13:14:15 EDT 2007
```

4. If the date, time and time zone are correct, continue to section 3.2, OS IPM Install.

5. If the time zone or date is not correct, use the *platcfg* utility to enter the correct time zone and date (see reference [1])

6. Halt the server using the *platcfg* utility (see section 1.2.2 in reference [1])

B.2   **Setting CMOS clock from an NTP server while running TPD.**

If the server has TPD installed and you know the root password, you can use the following procedure to set the system
    clock if the network is configured and an NTP server is available to the server running TPD:

1. Boot up the server

2. Log in as root

3. Verify the current date, using the `date` command:

```
# date
Fri Jul 13 13:14:15 EDT 2007
```

4. If the date, time and time zone is correct, continue to section 3.2, OS IPM Install.

5. Disable ntp:

```
# service ntpd stop
Shutting down ntpd:              [ OK ]
```

6. Use ntphost to change the local time:

```
# ntpdate <NTP server IP address>
13 Jul 13:15:01 ntpdate[27747]: step time server 198.89.40.60 offset 46.01234 sec
```

7. Shut down the kernel and reboot the server:

```
# shutdown -r now
```

8. Check the date and time by logging in as root and verifying the current date, using the `date` command:

```
# date
Fri Jul 13 13:18:03 EDT 2007
```

Appendix C.   **IPM command options**

There are multiple options that can be specified on the boot line that affect how the system is manufactured. Multiple options can be specified on a single command.

C.1   **reserved**

The **reserved** option provides the capability to create one or more extra partitions that are not made part of the vgroot LVM volume group.

The sizes of the partition(s) are indicated after "**reserved=**" and are separated by commas without any whitespace if there are more than one. The sizes use a suffix to indicate whether the value is in units of megabytes ('**M**') or gigabytes ('**G**'). In this context, a megabyte is 1024^2 and a gigabyte is 1024^3.

In the case of a software RAID-1 configuration, such as **TPD** (but not **TPDnoraid**), a single value will actually cause the creation of a partition on 2 drives and a metadevice (md) that incorporates the two partitions.

Examples:
1. **TPD reserved=2G** – On a T1200, this will create a reserved partitions on sda and sdb of 2 GB, and a RAID-1 metadevice using those reserved partitions.
2. **TPDnoraid reserved=512M** – On a HP server, this will create a reserved partition on sda of 0.5 GB.
3. **TPDnoraid reserved=4G,128M** – On a HP server, this will create two reserved partitions on cciss/c0d0 of 4 GB and of 128 MB.

The partition(s) or metadevice(s) can be used by storageMgr to create a DRBD device or LVM physical volume. However, to do so, one will need to know the partition number or metadevice number.

Numbering of partitions is performed by anaconda and is controlled by anaconda. Therefore, to get the partition number, a developer would need to examine the partition table after an IPM to determine the number. Also, this number may change due to changes in anaconda in future releases of TPD.

C.2   **drives**

The **drives** option provides the capability to limit the installation of TPD to certain drives by specifying the device names separately by commas after "**drives=**".

Examples:
1. **TPD drives=sda,sdb** – May be useful on a system with more than 2 drives where the additional drives are not intended to be used for the root (TPD) install.**TPDnoraid drives=cciss/c1d0** – May be useful on HP G5 rack mount servers where the logical drive for the internal RAID is not the first device in the system.

Note: If the drives specified do not include the first device in the system, care must be made to set the BIOS to treat one of the drives specified as the first boot disk/controller **before** starting the IPM. For example #2 to work, the internal RAID controller should be configured as the boot controller.

The order in which the drives are specified in the **drives** parameter determines the boot drive order sent to anaconda for use. The order in which the drives are specified must correspond to the order in which the drives are specified in the BIOS.

C.3   scrub

This option is typically used as part of the IPM process on machines that have had TPD loaded in the past. The usage of the "scrub" option is used to ensure that the disk and logical volume partitioning that occurs during the early phase of IPM operates correctly.

It is extremely important to understand that the "scrub" option will remove all data from ALL attached disk devices to the machine being IPM'ed. Note that this includes disk drives that are not mentioned in the "drives", but for E5-APP-B will NOT include the USB device. Therefore, whenever the "scrub" option is used, any such disk drives attached to the machine being IPM'ed, including those not mentioned in the "drives" parameter, will lose all of their data. Technically, this is accomplished by writing zeroes to the entire disk of each attached disk drive.

C.4   clear

This option is used to erase the Master Boot Record (MBR) of all the attached disk drives. Note that this option will operate against all attached disk drives of the machine being IPM'ed. Clearing the MBR also removes each disk drive's partition table, effectively causing the loss of all data on the disk. Note that this option should not be used during hardware USB media based IPM since doing so will erase the TPD installation media.

It is extremely important to understand that the "clear" option will remove all MBR's from all the attached devices to the machine being IPM'ed. Note that this includes disk drives that are not mentioned in the "drives" parameter as well as USB install media. Therefore, whenever the "clear" option is used, any and all disk drives attached to the machine being IPM'ed, including those not mentioned in the "drives" parameter, will lose all of their data. Technically, this is accomplished by writing zeroes to the 512 KBytes of each attached disk drive.

C.5   diskconfig

This option is intended to direct the IPM process to configure the disks in different ways. At this time diskconfig supports the following options:

- force – specify that if the current disk configuration does not match the desired configuration, that the desired configuration should be forcibly installed.   Loss of data on any disk on the same RAID disk controller may result.

C.6   lab

Note: Intended for development use only

This is a debug mode which will provide an interactive shell on failure rather than exiting the IPM process. If this mode is selected and the kickstart file is coming from an http server, the kickstart file will attempt to download the files normally included in the initrd from the http server where the kickstart file is located.

C.7   test

Note: Intended for development use only

This is a debug mode which will cause the IPM process to stop at multiple locations and prompt the user. This mode is useful to check status of scripts used during the IPM process.

C.8   ForceFail

This value provides a way to force IPM failures for testing purposes.   Three options are available:

- ipmfailed – send "ipmfailed" inform at end of IPM rather than normal "tpdinstalled" trap.
- installfailed – send "install failed" as part of the tpdstate inform on first reboot after IPM.
- ipmabort – Do not put the expected final entry in the kickstart log file. This will cause an "install failed" as part of the tpdstate inform on first reboot after IPM.

If the ForceFail argument is provided with any of the supported options, it will cause the verifyIPM command to fail.

C.9   rdate

This optional argument should be set to the IP address of a server on the local network segment that is running the "time" service. The "time" service is not the same as NTP. If this value is set, the clock on the server will be set using rdate to the provided IP address before the installation of packages begins. If this option is provided, no other setting of the server clock will be required. If the rdate argument is provided, the IP address will be configured as an NTP server when the IPM is completed unless the ntphost option is provided, in which case the IP address provided with the ntphost argument will be used.

C.10   ntphost

This optional argument can be set to the IP address of an NTP server. If this value is provided, TPD will be configured to use this NTP server when the IPM is completed. This option does NOT set the clock of the server before the packages are installed, so it is important the server CMOS clock is set either manually (see 3.1 or Appendix B) or using the "rdate" option (see C.9).

C.11   primaryConsole

The argument provided to this option will be set as the primary console device for TPD. This means that all init and kernel messages will be sent to this device while the server is running and during startup and shutdown. Additionally, a login prompt will display itself on this console after the system startup. The argument must be a valid console device such as "tty0", "ttyS1,115200", or "ttyS0,9600n8r".

C.12   diskpart

This optional argument is used to override the disk partition template used for TVOE installation.   By default, the "TVOE" disk partition template will be used when TVOE is installed.   The "TVOE" partition scheme assumes hardware RAID is used and the first disk should have TVOE installed on it.   However, it is possible to install TVOE using the default TPD disk partition by passing "diskpart=TPD" on the TPD command line. This might be useful when installing TVOE on platforms that do not have hardware disk mirroring, such as T1200.

C.13   console

The default console is serial console but sometimes it is useful to be able to use another device like a VGA monitor. An example for using a VGA monitor would be to use `console=tty0.`

C.14   guestArchive

This optional argument is used to start the system in guest archive creation state. This state is used to IPM a guest system that can be used as a base to create a TVOE guest archive.

Appendix D.   **Accessing My Oracle Support (MOS)**

MOS (https://support.oracle.com) is your initial point of contact for all product support and training needs. A representative at Customer Access Support (CAS) can assist you with MOS registration.

Call the CAS main number at 1-800-223-1711 (toll-free in the US), or call the Oracle Support hotline for your local country from the list at http://www.oracle.com/us/support/contact/index.html. When calling, make the selections in the sequence shown below on the Support telephone menu:

1. Select 2 for New Service Request

2. Select 3 for Hardware, Networking and Solaris Operating System Support

3. Select 2 for Non-technical issue

You will be connected to a live agent who can assist you with MOS registration and provide Support Identifiers. Simply mention you are a Tekelec Customer new to MOS.

MOS is available 24 hours a day, 7 days a week, 365 days a year.

Appendix E.   **Locate Product Documentation on the Oracle Technology Network Site**

Oracle customer documentation is available on the web at the Oracle Technology Network (OTN) site, http://docs.oracle.com. You do not have to register to access these documents. Viewing these files requires Adobe Acrobat Reader, which can be downloaded at www.adobe.com.

1. Log into the Oracle Technology Network site at http://docs.oracle.com.

2. Under Applications, click the link for Communications.

   The Oracle Communications Documentation window opens with Tekelec shown near the top.

3. Click Oracle Communications Documentation for Tekelec Products.

4. Navigate to your Product and then the Release Number, and click the View link (the Download link will retrieve the entire documentation set).

5. To download a file to your location, right-click the PDF link and select Save Target As.