

TPS Node Initialization

Objective

To initialize a TPS GUS Node to the factory shipped state.

Prerequisites

- Your partition sheet
- Obtain a TPS Initialization APP120 / GUS210 CD-ROM

Introduction

In this lab, you will initialize your TPS GUS Node to the factory shipped state using the TPS Initialization APP120 / GUS210 CD-ROM. This CD-ROM is a customized microsoft Windows NT Workstation installation CD and it is included with the Honeywell Distribution media.

The TPS Initialization APP120 / GUS210 CD-ROM is used for two reasons:

1. If you are upgrading a GUS MR3B or 110 node to GUS 210.

The Windows NT installation procedures used in the factory to load systems prior to GUS120 were not in compliance with the Microsoft LOGO Guidelines. The systems were injected with a full system image and, therefore, inherited a common system security identifier (SID). This causes potential security problems and in future versions of Windows NT, systems which do not have unique system SID will not be allowed to operate on the same network. For this reason, any systems shipped prior to GUS120 will need to be reinstalled.

2. If you are recovering from a TPS GUS Node hard disk failure or if NT is corrupted beyond other recovery methods (ex: Emergency Repair Disk).

Estimated Time to Complete: 50 minutes.

Procedure**Part 1 – Mandatory Backup Procedures****Create the Interactive Boot Diskette**

✓	Step	Action
	1	Obtain the TPS Initialization APP120 / GUS210 CD-ROM.
	2	Obtain a blank diskette to be used as the MS-DOS Boot diskette.
	3	Insert the initialization CD into your GUS.
	4	Insert a blank diskette or a diskette that can be overwritten into the A drive.
	5	Use Windows NT Explorer and double-click on the following file: D:\Dosimage\Makedisk.bat Note: The drive letter D is for the CD. It may be different on your system.
	6	A DOS console window will be displayed as the diskette is created. There are three phases (this will take about 4 minutes): Formatting Creating Verifying
	7	Continue to the next step if the diskette verification completes without error. If verification errors are reported, insert a different blank diskette into the A drive, and then return to step 5.
	8	Remove the Initialization CD from the drive.
	9	Remove the diskette from the drive and label it as follows: Interactive TPS Boot Diskette Note: The diskette can be used to recover any node where the options batch file and the customer database file are not available.
	10	Also, label the diskette with the release information on the Initialization CD.

Backup node specific application and configuration Data

✓	Step	Action
	11	<p>Note: This step will not be done in this lab, but would need to be completed at a plant site.</p> <p>Back up all node specific application data. It is imperative that this be done before the data is needed to recover a node after a hard drive failure.</p> <p>⇒ Note that the hard drive will be reformatted and therefore all files will be lost during the recovery procedure.</p> <p>Following are some application data examples:</p> <ul style="list-style-type: none"> • Emulated Disks • GUS Display Data • Workspace Definitions (If using SafeView) • Any third-party software application data.
	12	<p>Use the following table to record all the node specific configuration data.</p> <p>Note: In Lab, use your partition sheet. There is no need to transfer the information from the partition sheet to the following table.</p>

General Info	Example	Value
PC Model: (Get this from screen at boot)	Dell GXa, GX1, Honeywell Trailblazer	
Operating System Type:	Workstation, Server	
TPS Node Info	Example	Value
Node Type:	APP, GUS	
Station Type:	Deskside, Z-Console	
TPS Domain Name:	TPS Domain	
LCN Address:	14	
LCN Name:	GUS14	
NG Name:	None	
Ethernet Identification	Example	Value
Computer Name:	TPSPDC	
NT Domain Name:	TPSNTDomain	
IP Address:	192.168.1.1	
Subnet Mask	255.255.255.0	
Default Gateway:	None	
DNS (if used) Domain Suffix Search Order:	None	
Node Options Info	Example	Value
Dual Screen:	Yes, No	
Dual Screen Orientation:	N/A, Side-by-Side	
Dual Screen Card:	N/A, Colorgraphics	
SCSI Adapter (only if GX1)	2940U/UW Dual, 2940U2W	
Network Adapter (only if GXPro)	3C590, 3C905	
IKB:	Yes, No	
Touch Screen:	Yes, No	
Tape Drive:	None, 4mm, MINIQIC	

Part 2 – Initializing the System

Gather the required media and licensing information

✓	Step	Action
	13	Obtain the TPS Initialization APP120 / GUS210 CD-ROM
	14	Locate the Microsoft Windows NT License Information (Certificate of Authenticity).
	15	Get the Interactive MS-DOS Boot diskette.
	16	Acquire the sheet containing the node specific data (in lab, the partition sheet).
	17	Have the media containing the backup of user data handy (not necessary in lab).

Remove the system from the Windows NT network

✓	Step	Action
	18	Remove the system from the Windows NT network by unplugging the network cable from the back of the system.
	19	Disconnect the GUS node from the LCN.

Configure a Primary DOS Partition and make it active

✓	Step	Action
	20	Insert the “Interactive TPS Boot Diskette” into the node's diskette drive.
	21	Remove any CD which is present.
	22	<p>Note: The system type is displayed as the computer boots. Watch for it. Here are some examples of what you might see:</p> <p style="margin-left: 40px;">Dell GX1 Dell GXa Honeywell Trailblazer :</p> <p>Press the “reset” button and note the system type.</p> <p>Type _____</p>

✓	Step	Action
	23	<p>Wait until the following screen appears:</p> <pre>***** * The system has been booted into DOS Mode * * Please refer to the System Administration * documentation for information regarding the * steps to be followed to initialize the * hard disk and load the Windows NT and * Honeywell TPS Software onto this system. *****</pre>
	24	<p>Enter the following at the A drive command prompt:</p> <p>FDISK</p> <p>The following menu will appear:</p> <pre>FDISK Options Current fixed disk drive: 1 Choose one of the following: 1. Create DOS partition or Logical DOS Drive 2. Set active partition 3. Delete partition or Logical DOS Drive 4. Display partition information Enter choice : [1] Press Esc to exit FDISK</pre>
	25	Enter 4 to select the “Display partition information” option.
	26	<p>The partitioning information will be displayed. Record the current configuration:</p> <pre>Partition 1 Type: _____ Size: _____ Partition 2 Type: _____ Size: _____ <others> Type: _____ Size: _____</pre>
	27	Press Escape to return to the “FDISK Options” screen.
	28	Enter 3 to select the “Delete partition or Logical DOS Drive” option.
	29	<p>The system will display the “Delete DOS Partition or Logical DOS Drive” screen and prompt for the type of entry to delete.</p> <p>Use the following table to determine what number to enter to delete the partitions recorded above:</p>

Partition Type	Partition Description	Number
PRI_DOS	Primary DOS Partition	1
EXT_DOS	Extended DOS Partition	2
Logical Drives	Logical DOS Drive(s) in the Extended DOS Partition	3
HPFS or other types	Non-DOS Partitions	4

30	Enter the partition number to be deleted.
31	Enter Y to confirm the deletion.
32	The system will delete the partition and confirm that it has been deleted.
33	Press Escape to return to the "FDISK Options" screen.
34	<p>If you have additional partitions to delete, then enter 3 and repeat the above partition deletion steps.</p> <p>⇒ Only the primary partition needs to be deleted.</p> <p>After the desired partitions have been deleted, return to the "FDISK Options" screen, and then continue on to the next step.</p>
35	Enter 1 to select the "Create DOS partition or Logical DOS Drive" option.
36	<p>The following menu will appear:</p> <p style="text-align: center;">Create DOS Partition or Logical DOS Drive</p> <p>Current fixed disk drive: 1 Choose one of the following:</p> <ol style="list-style-type: none"> 1. Create Primary DOS Partition 2. Create Extended DOS Partition 3. Create Logical DOS Drive(s) in the Extended DOS Partition <p>Enter choice : [1]</p>
37	Enter 1 to select the "Create Primary DOS Partition" option.
38	The "Create Primary DOS Partition" screen will be displayed and you will be asked if you want to use the maximum available size and make the partition active.
39	Enter N in order to limit the primary DOS partition size in order to speed up formatting.
40	The available disk space will be displayed and you will be asked to enter the partition size in Mbytes or percent of disk space.
41	Enter 400 .
42	The system will confirm that a primary DOS partition has been created.
43	Press Escape to return to the "FDISK Options" screen.
44	Enter 2 to select the "Set active partition" option.
45	The "Set Active Partition" screen will be displayed and you will be asked to enter the number of the partition to set active.
46	Enter 1 for the active partition.
47	The system will confirm that partition 1 has been set active.
48	Press Escape to return to the "FDISK Options" screen.
49	Press Escape to exit FDISK.

50	<p>The following screen will appear:</p> <p>System will now restart</p> <p>Insert DOS system diskette in drive A:</p> <p>Press any key when ready . . .</p>
51	<p>Press any key to reboot the system.</p> <p>⇒ Do not remove the diskette.</p>
52	<p>Wait until the following screen appears:</p> <pre> ----- - - If you just partitioned the C: drive don't forget to format it. - - Enter "F" and the script will continue. - ----- Invalid Media type reading drive C Abort, Retry, Fail?</pre>
53	<p>Press F for failure.</p>
54	<p>The following screen will appear:</p> <pre> ***** * The system has been booted into DOS Mode* * Please refer to the System Administration * documentation for information regarding the * steps to be followed to initialize the * hard disk and load the Windows NT and * Honeywell TPS Software onto this system. *****</pre>

Format the Partition

✓	Step	Action
	55	<p>Enter the following at the A drive command prompt:</p> <p>FORMAT C:</p> <p>⇒ Note: The file system will be FAT.</p>
	56	<p>The following message will appear:</p> <p>WARNING : ALL DATA ON NON-REMOVABLE DISK DRIVE C WILL BE LOST ! PROCEED WITH FORMAT (Y/N) ?</p>
	57	<p>Enter Y to confirm the format.</p>

✓	Step	Action
	58	The system will begin formatting the C: drive and will display a progress counter which increments from 0 to 100 Percent. When the formatting is complete, it will prompt for a volume label.
	59	Press Enter to bypass entering a label.
	60	Drive C information will be displayed, and the system will return to the A drive command prompt.

Run the Setup Batch File

✓	Step	Action
	61	Insert the TPS Initialization APP120 / GUS210 CD .
	62	Enter the following at the A drive command prompt: setup
	63	<p>The following menu will appear:</p> <p>Prepare for Setup:</p> <p>C: drive must be partitioned, set active, and FAT formatted.</p> <p>Refer to <i>TPS System Administration Guide</i> for detailed instructions.</p> <p>If you have the following hardware platform, reboot the system, look for the indicated boot information on the screen as the system comes back up, and record the information.</p> <p>It will be needed during Setup.</p> <p>Dell GX1 - Record SCSI type</p> <p>Adaptec AHA-2940U/UW Dual SCSI or Adaptec AHA-2940U2W SCSI</p> <p>Dell GXPro - Record USB enhanced or not</p> <p>GXPro 200 or GXPro 200 USB Enhanced</p> <p>Motorola - Record hardware platform type</p> <p>Honeywell Trailblazer or Intel Corporation VS440FX Motherboard</p> <p>1. Continue Setup</p> <p>X EXIT</p> <p>ENTER NUMBER: (1 OR X)</p> <p>Record the information for your platform and then enter 1 to continue.</p>

✓	Step	Action
	64	<p>The following menu will appear:</p> <p>Hardware Platform type:</p> <ol style="list-style-type: none"> 1. Dell GX1 2. Dell GXA 3. Dell GXPro 4. Honeywell Trailblazer --- (MOTOP2) 5. Motorola Intel VS440 FX = "200MHz Venus"-- (MOTOPPRO) <p>X EXIT</p> <p>ENTER NUMBER: (1-5 OR X)</p> <p>Enter the Hardware Platform type you noted when the system was booting.</p>
	65	<p>The following menu will appear <u>ONLY IF</u> the Dell GX1 hardware platform was chosen:</p> <p>Dell GX1 SCSI Adapter cards:</p> <ol style="list-style-type: none"> 1. Adaptec AHA-2940U/UW Dual SCSI -- (DELLGX1) 2. Adaptec AHA-2940U2W SCSI -- (DELLGX1U2) <p>X EXIT</p> <p>ENTER NUMBER: (1-2 OR X)</p> <p>Enter the SCSI Adapter card type for the Dell GX1 hardware platform.</p>
	66	<p>The following menu will appear <u>ONLY IF</u> the Dell GXPro hardware platform was chosen:</p> <p>Dell GXPro 200 Network Adapter cards:</p> <ol style="list-style-type: none"> 1. 3Com 590 - Platform not USB Enhanced -- (DELL590) 2. 3Com 905 - Platform is USB Enhanced -- (DELL905) <p>X EXIT</p> <p>Enter 1 if the GXPro 200 platform is not USB Enhanced, and 2 if it is.</p>
	67	<p>The following menu will appear:</p> <p>Honeywell Node type:</p> <ol style="list-style-type: none"> 1. AM replacement 2. US replacement <p>X EXIT</p> <p>ENTER NUMBER: (1-2 OR X)</p> <p>This menu selection determines which type of LCNP board personality is to be used. Enter 2 for the desired personality type.</p>

✓	Step	Action
	68	<p>The following menu will appear <u>ONLY IF</u> the US replacement personality was chosen:</p> <p>Dual Screen</p> <p>To identify the dual screen interface type look at the back of the PC.</p> <ol style="list-style-type: none"> 1. Not Present <p>Not a dual screen system.</p> 2. STB MVP 3D <p>Uses a cable with 4 monitor connections only 2 of the 4 are used.</p> <p>No markings on the cable.</p> 3. Colorgraphics Pro Lightning (Dell GXPro and Motorola 200Mhz Venus Only!) <p>Has 2 monitor connectors on the interface card.</p> <p>Monitor cables connect directly to interface card.</p> 4. Matrox Productiva G100 MMS <p>Uses a cable with 2 monitor connection.</p> <p>Matrox is marked on large connector.</p> <p>X EXIT</p> <p>ENTER NUMBER: (1-4 OR X):</p> <p>Enter the correct option number.</p>
	69	<p>The following menu will appear <u>ONLY IF</u> the US replacement personality was chosen AND a dual screen option was specified above:</p> <p>Dual Screen Orientation</p> <ol style="list-style-type: none"> 1. One over one 2. Side by side 3. Single screen <p>X EXIT</p> <p>ENTER NUMBER: (1-3 OR X)</p> <p>Enter a dual screen orientation.</p>
	70	<p>The following menu will appear <u>ONLY IF</u> the US replacement personality was chosen:</p> <p>Touch Screen</p> <ol style="list-style-type: none"> 1. Not present 2. Present <p>X EXIT</p> <p>ENTER NUMBER: (1-2 OR X)</p> <p>Enter if a touch screen is present.</p>

✓	Step	Action
	71	<p>The following menu will appear ONLY IF a touch screen is present:</p> <p>Touch Screen Interface</p> <ol style="list-style-type: none"> 1. IKB12 - Console, Z-Console, and EZ-Console 2. IKB12 - Deskside with external touchscreen controller box 3. HBC - Deskside without external touchscreen controller box X EXIT <p>ENTER NUMBER: (1-3 OR X)</p> <p>Enter the correct number for the touch screen interface.</p>
	72	<p>The following menu will appear ONLY IF the US replacement personality was chosen and Z Console was NOT selected as the Station Type:</p> <p>Integrated Keyboard (IKB)</p> <ol style="list-style-type: none"> 1. Not Present 2. Present X EXIT <p>ENTER NUMBER: (1-2 OR X)</p> <p>Enter if an IKB is present.</p>
	73	<p>The following menu will appear:</p> <p>Tape Drive</p> <ol style="list-style-type: none"> 1. Not present 2. 4mm DAT 3. MINIQIC X EXIT <p>ENTER NUMBER: (1-3 OR X)</p> <p>Enter the correct option number if a Tape Drive is present.</p>
	74	<p>Upon completion of selecting the tape drive a Summary menu is displayed. The following is an example:</p> <p>Summary of Options Selected</p> <p>Operating System----- = WKS Hardware Platform----- = MOTOP2 Honeywell Node type---- = USR Dual Screen----- = NONE Screen Orientation----- = NONE Touch Screen----- = NONE Touch Scr interface----- = NONE Integrated Keyboard----- = NONE Tape Drive----- = NONE</p> <p>S Start Option Selection Over R Restore Hard drive with Options Selected X EXIT</p> <p>ENTER: (S, R, OR X)</p>

✓	Step	Action
	75	<p>⇒ Note: The selection will not echo back to the screen and will take a few seconds to respond.</p> <p>Press (R) to restore the node using the options shown. Files will start to be copied to the C drive after a short initialization period. Continue on to the next section.</p>

Restore the Node Using the Chosen Options

✓	Step	Action
	76	<p>After the user has confirmed the options and entered R on the summary menu, the system will display the filenames of temporary installation files being copied from the CD to the hard drive.</p> <p>This step will take approximately 1 to 2 minutes.</p>
	77	<p>After the files have been copied, the screen will turn blue and the Windows NT Setup screen will display a progress bar as additional files are copied to the hard disk.</p> <p>The process of copying the files from the CD to the hard disk will take from 3 to 5 minutes.</p>
	78	The system will reboot.
	79	<p>Wait until the following screen appears:</p> <pre> ***** * The disk based Windows NT Installation is now ready to proceed. * * * Please remove the diskette and CD from their drives and then press * the reset button * ***** </pre>
	80	Remove the diskette and the CD from their drives.
	81	Press the reset button.
	82	After the system reboots, Windows NT Workstation Setup will display a progress bar as files are copied to the C drive.
	83	The system will reboot and then convert the FAT partition to an NTFS partition.
	84	Again, the system will reboot. This time it will enter the first graphical phase of the Windows NT installation process.
	85	Click on the I Agree button to confirm your acceptance of the Microsoft Software License Agreement.
	86	Enter a Name and Organization from your partition sheet and click the Next button.
	87	Enter the User License number found on your official Microsoft Windows NT Certificate of Authenticity in the fields provided and click the Next button.

✓	Step	Action
	88	A message will indicate that setup is ready to guide you through the installation of Windows NT. Begin the installation of networking by clicking on the Next button.
	89	The rest of the installation process is automated and the system must not be disturbed until the following message is displayed: Messenger Service Installation Process Complete - Shutdown and Reboot this computer ⇒ Several reboots will occur and several screens that <u>appear</u> to be prompting for input will be presented. You must wait for the above message to appear before touching the keyboard or the mouse.
	90	Confirm that no error messages are displayed.
	91	Click the Ok button to close the load complete message box.
	92	Select the following: Start > Shut Down > Restart the computer ?
	93	Click the Yes button to verify the restart.

This completes this lab. Honeywell hopes that you found it to be enjoyable.