

# Table of Contents

<b>Preface .....</b>	<b>vii</b>
<b>1. Installation .....</b>	<b>1-1</b>
1.1 Before You Start .....	1-1
1.2 Mount the CD .....	1-2
1.3 New Software Installation .....	1-3
1.3.1 Preparing for a New Software Installation .....	1-3
1.3.2 Performing a New Software Installation .....	1-4
1.3.3 Copy SIGMET environment files into /home/operator .....	1-6
1.3.4 Run setup utility .....	1-6
1.3.5 Get your SIGMET license (IRIS or TS Archive systems ONLY) ...	1-7
1.3.6 Run sigmet_env .....	1-7
1.4 Initial Configuration .....	1-8
1.4.1 Setting up for rcp and other “r” commands .....	1-8
1.4.2 Setting up for scp and other ssh commands .....	1-8
1.4.3 Serial Line Setup .....	1-9
1.4.4 Create mount point for MO disks .....	1-9
1.4.5 Installation Security Issues .....	1-9
1.4.6 Startup profile File .....	1-10
1.4.6.1 How to Create and Modify the profile File .....	1-10
1.4.6.2 Operator list Defined in the Startup File .....	1-11
1.4.7 Do platform dependent configuration .....	1-11
1.5 Configuring Linux for the first time .....	1-12
1.5.1 Automatic startup of X and Default SIGMET Environment .....	1-12
1.5.2 Configuring NTP .....	1-12
1.5.3 Configuring xinetd .....	1-13
1.5.4 Configuring the root prompt .....	1-14
1.6 Configuring HP-UX .....	1-15
1.6.1 Create the SCSI Pass-Through Driver for the RVP .....	1-15
1.6.2 Configuring for Automatic Startup .....	1-16
1.6.3 Create link for libXmu.sl .....	1-16
1.6.4 Check patches .....	1-17
1.6.5 Check kernel parameters .....	1-17
1.6.6 Enable windows on the local host .....	1-17
1.6.7 Disabling the Distributed Printer Services .....	1-17
1.7 Upgrade Installation .....	1-18
1.7.1 Preparing for an Upgrade Installation .....	1-18
1.7.2 When should I upgrade? .....	1-18

1.7.3	What should I do before I upgrade? .....	1-18
1.7.4	Where to get software upgrades? .....	1-19
1.7.5	How should I upgrade .....	1-19
1.7.6	Getting the network upgrade files .....	1-20
1.7.7	Performing an Upgrade Installation .....	1-22
1.8	Install Utility Window Options .....	1-24
1.8.1	“Read From” Option .....	1-25
1.8.2	Install To Option (Including Network Installs) .....	1-25
1.8.3	Manuals Option .....	1-26
1.8.4	EMACS Text Editor Option .....	1-26
1.8.5	Headers, Source, and Objects .....	1-27
1.8.6	Product Example file option .....	1-27
1.8.7	Verbose Option .....	1-28
1.8.8	Keep Old Files Option .....	1-28
1.9	Troubleshooting .....	1-29
1.9.1	File Ownership and Protection .....	1-29
1.9.2	Authorizing remote X-Windows on Your Node .....	1-29
1.10	Basics of Login, Logout and Shutdown .....	1-30
1.10.1	Power up procedure .....	1-30
1.10.2	Local and remote login .....	1-30
1.10.3	Default operator and root login passwords .....	1-30
1.10.4	Login procedure .....	1-30
1.10.5	Logout procedure .....	1-32
1.10.6	Poweroff shutdown procedure .....	1-32
1.11	RVP8 & RCP8 (RDA) Software Installation .....	1-33
1.11.1	Install the upgraded kernal module .....	1-33
1.11.2	Installation steps to “flash” FPGA’s in SIGMET devices .....	1-33
1.11.3	Reboot power-up check and RDA diagnostics .....	1-34
1.12	RDA Software Configuration .....	1-35
1.12.1	RCP8 Setup Configuration Summary .....	1-36
1.12.2	RVP8 Setup Configuration Summary .....	1-37
1.12.3	Configuring the softplane.conf file .....	1-39
1.13	Testing, Backup, and Calibration .....	1-50
1.13.1	Ascope Test (RVP8 Installations ONLY) .....	1-50
1.13.2	Antenna Test (RCP Installations ONLY) .....	1-50
1.13.3	IRIS Test (IRIS systems ONLY) .....	1-50
1.13.4	Print Special Files .....	1-50
1.13.5	Make a Full Backup .....	1-50
1.13.6	DSP Calibration (RVP Installations ONLY) .....	1-50

<b>2. UNIX Survival Skills .....</b>	<b>2-1</b>
2.1 Setting up the Login Environment .....	2-1
2.2 Running IRIS Utilities from a Remote Node .....	2-2
2.3 Managing an IRIS System .....	2-3
2.3.1 Checking the IRIS Environment .....	2-3
2.3.2 Reporting the Free Blocks on a Disk .....	2-4
2.3.3 File Ownership and Protection .....	2-4
2.4 Command Summary .....	2-5
2.5 CDE Front Panel Configuration .....	2-6
2.5.1 Installing the IRIS Utilities Icon .....	2-6
2.5.2 Installing the Utilities List .....	2-6
2.5.3 Getting the icons to display .....	2-7
2.6 Automatic Windows Startup .....	2-9
2.7 HP-UX Issues .....	2-9
2.7.1 Backup Procedure .....	2-9
2.7.1.1 Backing up .....	2-9
2.7.1.2 Restoring .....	2-9
2.7.2 Controlling banner page printing .....	2-10
2.7.3 Configure routing to another network .....	2-10
2.7.4 Booting in single user mode .....	2-10
2.7.5 Extending a logical volume .....	2-10
2.7.6 Using the floppy to read DOS disks .....	2-11
2.7.7 Fix ClearLine warning message .....	2-11
2.8 Linux Issues .....	2-12
2.8.1 Backup Procedure .....	2-12
2.8.2 Time & Date .....	2-12
2.8.3 LINUX for experienced users of other OS's .....	2-12
2.8.3.1 Unix to Linux .....	2-12
2.8.3.2 DOS to Linux .....	2-13
2.8.3.3 VAX/VMS to Linux .....	2-13
2.8.4 Red Hat Configuration Utilities .....	2-13
<b>3. IRIS Diagnostic Utilities .....</b>	<b>3-1</b>
3.1 sigmet_env Command .....	3-1
3.2 ps_iris Command .....	3-2
3.3 restart_iris Command .....	3-3
3.4 show_iris Command .....	3-4
3.5 structmap Command .....	3-6

<b>A. Installing Red Hat Linux: RHEL ES Version 4</b>	<b>A-1</b>
A.1 Installation Overview	A-2
A.1.1 Using this Manual	A-2
A.1.2 Types of installation media	A-2
A.1.3 Installation Preparation	A-3
A.2 Automatic Installation (Not yet available)	A-4
A.2.1 SIGCONFIG	A-4
A.3 Automatic Installation Post-Install Steps	A-6
A.3.1 Configuring X Windows	A-6
A.3.2 Configuring your time zone	A-6
A.4 Manual Installation	A-7
A.4.1 Disk Partitioning	A-7
A.4.2 Install Redhat Linux RHEL ES Version 4	A-8
A.5 Manual Installation Post-Install Steps	A-14
nA.5.1 Disable Graphical Login	A-14
A.5.2 Set the Root Prompt Symbol	A-14
nA.5.3 Make a cd Mount Point	A-14
nA.5.4 User Account Configuration	A-14
A.5.5 Basic Network Configuration	A-15
A.5.6 Service Configuration	A-17
A.5.7 Ftp for Red Hat Enterprise Linux (vsftpd)	A-18
A.5.8 rcp	A-19
A.5.9 Routing	A-20
A.5.10 Configuring NTP	A-20
A.5.11 Configuring xinetd	A-21
A.6 Region Specific Settings	A-21
A.7 X-Windows Troubleshooting: Framebuffer Method	A-22
A.8 Installing Linux on Windows System (Dual Booting)	A-24
A.8.1 Dual Boot Partition Example	A-26
A.9 Special notes for notebook installations	A-26
<b>B. UNIX System File Listings</b>	<b>B-1</b>
B.1 /usr/sigmet/config_template/profile	B-1
<b>C. Printer Configuration</b>	<b>C-1</b>
C.1 Configuring Printer Queues for IRIS use	C-1
C.2 Displaying Print Queues	C-3
C.3 Configuring Printer Options	C-4
3.5.1 Printer Setup Menu	C-4
<b>D. sigbru Utility</b>	<b>D-1</b>
D.1 System Configuration for sigbru	D-3
D.1.1 Authorization to login as root on a remote system	D-3

D.1.2	Authorization to use a remote tape drive or remote disk drive .....	D-3
D.1.3	Archive device and media configuration for sigbru .....	D-4
D.2	Starting sigbru .....	D-6
D.3	The sigbru Menu .....	D-9
D.4	Making System Backups for Linux Computers .....	D-14
D.5	Documenting Your Linux Disk Partitions .....	D-18
D.5.1	Running df .....	D-18
D.5.2	Running fdisk .....	D-19
D.6	Documenting Your Basic Network Configuration .....	D-20
D.7	Selected File Restore Functions .....	D-21
D.8	Linux Disk Restore Functions .....	D-23
D.8.1	Disk Restore Overview .....	D-23
D.8.2	Step 1: Basic Linux Installation into a Mini-Root Partition .....	D-24
D.8.3	Step 2: Restore the sigbru backup to main partition .....	D-26
D.8.4	Step 3: Configuring to boot from the main or mini partitions .....	D-31
D.9	Test IRIS and Backup Your Restored System .....	D-36
D.10	Disk Crash After Mini-Root is Installed .....	D-36
D.11	sigbru -auto: Auto Archive Features .....	D-37
<b>E.</b>	<b>Upgrading RedHat Linux .....</b>	<b>E-1</b>
E.1	Check your disk first .....	E-1
E.2	Backing up important files .....	E-1
E.3	Do the OS install .....	E-1
E.4	Do the IRIS or RDA install .....	E-1
E.5	Restoring from backup .....	E-1
E.6	Upgrade release notes .....	E-2
E.7	Done .....	E-2
<b>F.</b>	<b>Installing IRIS/Web Server .....</b>	<b>F-1</b>
F.1	Installing IRIS/Web code .....	F-1
F.2	Installing the tomcat rpms .....	F-1
F.3	Re-install the IRIS/Web code .....	F-1
F.4	Configuring Java .....	F-2
F.5	Configuring Apache .....	F-2
F.6	Testing Apache .....	F-2
F.7	Configuring Tomcat4 .....	F-2
F.8	Testing Tomcat .....	F-3
F.9	Configuring the default page .....	F-3
F.10	Testing .....	F-4
F.11	Comments about browsers .....	F-4
<b>Index</b>	<b>.....</b>	<b>Index-1</b>

## Figures

Figure 1–1:	Sample /etc/hosts.equiv File .....	1–8
Figure 2–1:	Sample .profile File .....	2–1
Figure A–1:	RedHat Greeting .....	A–4
Figure A–2:	chkdsk .....	A–24
Figure A–3:	Convert NTFS partition (c:) to FAT32 .....	A–24
Figure A–4:	Resize Partition .....	A–25

## Tables

Table 2–1:	UNIX Commands .....	2–5
------------	---------------------	-----