Integrated Baseline System (IBS) Version 2.0

System Management Guide

March 1994

Prepared for the
U.S. Army Nuclear and Chemical Agency
under a Related Services Agreement
with the U.S. Department of Energy
Contract DE-AC06-76RLO 1830

Pacific Northwest Laboratory
Operated for the U.S. Department of Energy
by Battelle Memorial Institute

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INTEGRATED BASELINE SYSTEM (IBS)
Version 2.0

SYSTEM MANAGEMENT GUIDE

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March 1994

Prepared for the
U.S. Army Nuclear and Chemical Agency
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Richland, Washington 99352

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Kennewick, Washington

NOTICE

The Integrated Baseline System (IBS) is an emergency planning and training tool intended to supplement existing resources for emergency planning, training, and management. IBS results should NOT be used as the sole basis for a decision regarding public safety. Although IBS is operational, not all IBS software/models have been verified. The assumptions of the IBS software should be reviewed to ensure its appropriateness for an intended use.

Preface

The Integrated Baseline System (IBS) is an emergency management planning and analysis tool being developed under the direction of the U.S. Army Nuclear and Chemical Agency. The following documents were developed to support system users. The audience for each is identified.

This *IBS User Guide* explains how to start and use the *IBS program*, which is designed to help civilian emergency management personnel to plan for and support their responses to a chemical-releasing *event* at a military chemical stockpile.^(a) **Audience:** all users of the IBS, especially emergency management planners and analysts.

The *IBS Utilities Guide* explains how you can use IBS utility programs to manage and manipulate various kinds of IBS data. These programs include utilities for creating, editing, and displaying maps and other data that are referenced to geographic location. **Audience:** chiefly data managers but also system managers and some emergency management planners and analysts.

The *IBS Models Guide* summarizes the IBS use of several computer models for predicting the results of emergency situations. These include models for predicting dispersion/doses of airborne contaminants, traffic evacuation, explosion effects, heat radiation from a fire, and siren sound transmission. The guide references additional technical documentation on the models when such documentation is available from other sources. **Audience:** chiefly emergency management planners and analysts, but also data managers and system managers.

The *IBS Data Management Guide* provides the information needed to manage the data files and database used to support the administrative, user-environment, database management, and operational capabilities of the IBS. **Audience:** chiefly database administrators and system managers, but also emergency management planners and analysts who want to know details of the emergency management data.

The *IBS System Management Guide* defines IBS hardware and software requirements and gives instructions for installing, upgrading, or transferring the IBS software package. **Audience:** system managers.

(a) The IBS program was developed as part of the U.S. Army's Chemical Stockpile Emergency Preparedness Program (CSEPP).

About This Guide

Purpose

This *IBS System Management Guide* explains how to install or upgrade the Integrated Baseline System (IBS) software package. The IBS is an emergency management planning and analysis tool that is being developed under the direction of the U.S. Army Nuclear and Chemical Agency (USANCA).^(a)

Scope

This guide includes detailed instructions for installing the IBS software package on a Digital Equipment Corporation (DEC) VAX computer from the IBS distribution tapes. The installation instructions include procedures for both first-time installations and upgrades to existing IBS installations.

To ensure that the system manager has the background necessary for successful installation of the IBS package, this guide also includes information on IBS computer requirements and software organization.

When special utility programs are used during IBS installation and setups, this guide refers you to the *IBS Utilities Guide* for specific instructions. This guide also refers you to the *IBS Data Management Guide* for detailed descriptions of some IBS data files and structures.

Any special requirements for installation are not documented here but should be included in a set of *installation notes* that come with the distribution tapes.

Audience

This guide is addressed to the local system manager or administrator who is responsible for IBS system management—a person who has computer system management skills and authority, and who is familiar with both the DEC VMS operating system and the local VAX configuration on which the IBS is to be installed or upgraded.

(a) The IBS is being developed by the Pacific Northwest Laboratory (PNL). PNL is operated for the U.S. Department of Energy by Battelle Memorial Institute under Contract DE-AC06-76RLO 1830.

Organization

This guide consists of the following five sections and one appendix:

Section 1. Introduction

A description of the basic IBS software package and a list of contacts for getting help.

Section 2. IBS Computer Requirements

A list of the hardware and software resources necessary and optional for operation of the IBS.

Section 3. Installation Overview

A summary of IBS installation terms, software, data, and conventions.

Section 4. Installation Procedures

Preparations and procedures for installing IBS for the first time or as an upgrade to an existing IBS installation. The procedures include preparing for installation or upgrades, loading the IBS from the distribution tapes, modifying system files and parameters, initializing the system for IBS, fixing or updating various files, setting directory and file protections, managing user accounts, and starting IBS batch jobs.

Section 5. Software Organization

A summary of software organization: directory structures and start-up command files.

Appendix. Logical Names and Symbols

Lists of the logical names and symbols defined by IBS command files.

How to Use This Guide

This guide should be used in conjunction with whatever installation notes accompany the IBS distribution tapes.

For the First-Time Installer of IBS

If you are a first-time IBS installer, we recommend that you scan this document to get an idea of the scope of installation concerns. Then focus on *IBS Computer Requirements* (page 3) to verify that the system has adequate resources to install the software. Once adequate resources have been determined, proceed with *Installation Procedures* (page 7). Reference information about the IBS software setup is supplied in *Software Organization* (page 23).

For Experienced IBS System Managers

Experienced IBS installers and system managers should scan the document for areas of interest and then turn to *Installation Procedures* (if installation is of primary interest).

Visual Conventions

The following conventions are used in this guide.

Type Style	Meaning
bold	Text that you must type at the keyboard. Example: \$ NEWUSER
<i>italic</i>	Place holders for information that you must provide. Example: \$ DEL <i>filename</i> Here you would type the actual name of a file instead of the word shown in italics.
ALL CAPITALS	Directory names, file names, program names, and acronyms. Example: "Refer to the LOGIN.COM file in the [PNLDEV] directory."

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Section 1

Introduction

The Integrated Baseline System (IBS) is being developed by the Pacific Northwest Laboratory (PNL) under the direction of the U.S. Army Nuclear and Chemical Agency (USANCA). The intent of this document is to supply the information necessary for you to install and configure the IBS V2.0x software package on a Digital Equipment Corporation (DEC) VAX/VMS computer.

1.1 The IBS Software Package

IBS consists of many software and database components. The IBS 2.0x software package includes software developed by PNL and a geographic database specific to each installation. This software package contains the basic functions that are expected to be part of most IBS installations throughout the emergency management community:

<u>IBS Component</u>	<u>Function</u>
MESORAD	dispersion, deposition, decay, and dose model for radiological materials
D2	chemical downwind hazard model
CHEMS	chemical explosion-fire-dispersion models
IDYNEV	dynamic traffic evacuation model
OSPM	outdoor (siren) sound propagation model
REA	regional evacuation analysis
IBS	offpost emergency preparedness near a chemical stockpile
IBS	map display and editing of a geographic database
IBS	display of modeling results overlaid on maps

1.2 Getting Help

General questions regarding IBS should be directed to the IBS Project Manager for the U.S. Army Nuclear and Chemical Agency (USANCA):

COL Lawrence Skelly
Chief, Chemical Division
U.S. Army Nuclear and Chemical Agency
7150 Heller Loop, Suite 101
Springfield, VA 22150-3198

Software use questions and problems should be addressed to the IBS Help Desk operated by Innovative Emergency Management (IEM):

(504) 767-1138
Innovative Emergency Management, Inc.
Suite E
Baton Rouge, LA 70808-4362

All references to IBS should be made through USANCA. If an emergency contact is necessary, and USANCA cannot be reached, a second source of information is the software developer, Pacific Northwest Laboratory:

Pacific Northwest Laboratory
Attn: Blanche M. Wood, K7-22
POB 999, MS K7-22
Richland, WA 99352-0999
Phone (509) 375-2615

Section 2

IBS Computer Requirements

The IBS has specific computer hardware and software requirements. This section lists the basic hardware requirements as well as the requirements for vendor-supplied software.

2.1 Hardware Requirements

The IBS software requires as a minimum the following computer hardware:

- Digital Equipment Corporation (DEC) VAX computer system that is capable of running VMS (examples include the VAX 4000 and MicroVAX II)
- 32 megabytes (MB) of random access memory (RAM) plus 1 MB per user
- 1.5 to 4.5 gigabytes (GB) of mass storage
- Tektronix 4107 terminals, Tektronix 4107 PC terminal emulators, or an equivalent
- asynchronous interface (ports for Tektronix terminals)
- magnetic tape storage unit (TK50 or TK70 tape drives)
- high-density backup device (4-mm or 8-mm)
- a modem capable of operating at 9600 baud or faster.

This minimum hardware configuration provides adequate resources for a single user to operate IBS on test data sets and small local area databases and allows the user to view the results on a computer display. Higher performance VAX computers may be desired for multiple-user environments. Generally, each concurrent user of IBS should have 1 MB of memory, one asynchronous port (unless part of a network), and 1 million instructions per second (MIPS) of central processing unit (CPU) computing power.

Desirable capabilities beyond the basic hardware requirements include the following:

- more on-line mass storage (several GB may be necessary)

2 IBS Computer Requirements

- a hard copy device (such as a line printer) or a color hard copy device (for the Tektronix terminal).

These listed hardware requirements represent a simplification of the actual requirements for IBS. They are intended to be sufficient information for discussing IBS requirements with a VAX system manager or a computer vendor.

2.2 Software Requirements

The PNL-developed software and basic geographic database are included in the IBS software package. As a minimum, the basic operation of IBS also requires the following vendor-supplied software:

- VAX/VMS Operating System V5.5-2 from DEC.

For other installations requiring IBS capabilities beyond the basic IBS functions, the following vendor-supplied resources may also be required.

- DECnet V5.5-2 from DEC
- TCP/IP for VMS, such as Wollongong's Pathway or Software Process Corporation's TCPware. PNL has tested Pathway and found it to work for this application.

Section 3

Installation Overview

3.1 Save Sets: Software and Data

IBS is distributed in VMS Backup format on TK50, TK70, 4-mm, 8-mm, or 9-track tapes, depending on the installation site's capabilities. Each set of installation tapes should be accompanied by installation notes or instructions that supplement the instructions in this *System Management Guide*. Several backup save sets may be included on the distribution tapes:

- **ISYSFILES.BCK** contains system data files.
- **PNLDEV.BCK** contains all executable files and static data.
- **OFFSITE.BCK** contains IBS system-wide files. It should be mostly empty, containing at the very least the site subdirectories corresponding to the ones in **INFOMANAGER** together with the Emergency Functions file.
- **ONSITE.BCK** contains files for the communication interface between IBS and the onpost system. It should be empty, except for a placeholder file.
- **INFOMANAGER.BCK** contains the operational site databases and other site files set up as they would be for an IBS user.
- **TEST.BCK** contains a small map database (for Utah) to use for verifying that IBS was installed correctly.
- **map.BCK** contains a regional geographic (map) database. (For example, **UT.BCK** contains a map database for Utah. The map database provided may vary, depending on the installation. Refer to any special installation instructions that come with the distribution tapes.)

Each of the backup save sets, **ISYSFILES.BCK**, **PNLDEV.BCK**, **OFFSITE.BCK**, **ONSITE.BCK**, **INFOMANAGER.BCK**, **TEST.BCK**, and **map.BCK**, correspond to the principal IBS directories: **[ISYSFILES]**, **[PNLDEV]**, **[OFFSITE]**, **[ONSITE]**, **[INFOMANAGER]**, **[TEST]**, and **[map]**. The IBS installation procedures will use (or create) these directories.

All save sets are required for the initial installation of IBS on a specific computer. For an upgrade of the IBS software on an existing IBS installation, only the **PNLDEV.BCK** save set may be required: check the installation instructions received with the tape.

3.2 Conventions

In the following instructions, the italicized device names are place holders that represent the logical names that you may have already assigned to one or more physical disk drives or tape drives on your system. In procedures, substitute the correct logical names of your devices for the italicized place-holder names. Note that the four logical disk drives in the following list could all be the same physical drive if one drive has the capacity to hold all the information.

- *DiskA* represents a logical name assigned to the disk drive where the source code and system data files will reside. (The [PNLDEV] and [ISYSFILES] directories must reside on this disk.) *DiskA* will be PNLDEVDB on systems with existing IBS installations.
- *DiskB* represents a logical name assigned to the disk drive where the INFOMANAGER user account and the modifiable parts of the IBS operational site databases will be found. The other files related to IBS (from the OFFSITE and ONSITE save sets) also will be found there. *DiskB* will be EVNDB on systems with existing IBS installations.
- *DiskC* represents a logical name assigned to the disk drive where the TEST map database will be found. *DiskC* will be TESTDB on systems with existing IBS installations.
- *DiskD* represents a logical name assigned to the disk drive where the map database will be found. *DiskD* will be *mapDB* on systems with existing IBS installations.
- *TapeA* represents a logical name assigned to the TK50, TK70, 4-mm, 8-mm, or 9-track tape drive.

In the following sections, substitute the correct physical names for the italicized place holders where appropriate. For example, instead of using *TapeA*, you might use MKA500.

Section 4

Installation Procedures

Generic procedures for installing the IBS software package are documented in this section. Specific instructions will accompany the tapes. This discussion includes:

1. Pre-Installation Procedures
2. Pre-Upgrade Procedures
3. Load IBS from the Distribution Tapes
4. Modify System Files and Parameters
5. Initialize the System for IBS
6. Post-Upgrade Procedures
7. Fix Miscellaneous Files
8. Convert the Master Mail List
9. Establish New IBS User Accounts
10. Modify Existing User Accounts for IBS Use
11. Change User Privileges
12. Update the Master Mail List
13. Set Directory and File Protections
14. Start the Batch Jobs
15. Verify Installation by Using the Test Plan.

Note: This discussion assumes that the DEC VMS operating system is installed and operating on the computer. If VMS is not installed, have it installed according to the instructions provided by the vendor.

4.1 Pre-Installation Procedures

Every installation: To prepare for installing IBS, please heed the following instructions and review the description of the IBS distribution tapes (page 5).

The following preparatory steps are strongly recommended:

- 4.1.1 Before installing IBS, please review IBS Computer Requirements (pages 3, 4) to verify that your computer has adequate resources for the intended implementation.

Evaluation of available computer resources is especially important when installing IBS on computers that are running other software and have multiple uses. When the available computer resources are inadequate or "just" adequate for the intended IBS implementation, action can be taken to alleviate any deficiencies before the installation. An example of a potential deficiency is inadequate disk space for the software and data.

- 4.1.2 If you are not also the computer system manager (person responsible for the computer system) at your local VAX installation, then plan and coordinate IBS installation with that system manager.
- 4.1.3 To protect against the inadvertent permanent loss of old information contained on the computer, perform a complete system backup before installing the IBS software or upgrade.
- 4.1.4 Always refer to any installation notes that may accompany the distribution tapes.

4.2 Pre-Upgrade Procedures

Upgrade: The following software upgrade instructions are provided for systems that are upgrading the IBS software but retaining the existing databases on the system. If you are not familiar with the IBS logical name assignments, see the Appendix (page A.1) before following these instructions.

- 4.2.1 Make sure no one is using the IBS software:
\$ SHOW DEVICES/FILES/NOSYSTEM PNLDEVDB:
If the EVENT and MAIL_C batch jobs are running, stop them:
\$ SHOW QUEUE/ALL SYSS\$BATCH (assuming you use SYSS\$BATCH)
\$ DEL/ENTRY=*n* (where *n* is the entry # for EVENT)
\$ DEL/ENTRY=*m* (where *m* is the entry # for MAIL_C)
- 4.2.2 Give yourself the necessary VMS privileges:
\$ SET PROCESS/PRIVILEGE=(SYSPRV,BYPASS)

- 4.2.3 Move to the appropriate disk:
\$ SET DEFAULT PNLDEVDB:[000000]
- 4.2.4 If the upgrade includes the ISYSFILES.BCK save set, then save the current directory by renaming it:
\$ RENAME ISYSFILES.DIR ISYSFILES_OLD.DIR
- 4.2.5 If the upgrade includes the TEST site in OFFSITE.BCK and INFOMANAGER.BCK, then delete the old TEST site databases:
\$ @IEMIS\$EXE:DELTREE EVNDB:[OFFSITE.TEST]
\$ @IEMIS\$EXE:DELTREE EVNDB:[INFOMANAGER.SITES.TEST]
- 4.2.6 If the upgrade includes the TEST.BCK save set, then delete the old TEST map database:
\$ @IEMIS\$EXE:DELTREE TESTDB:[TEST]
- 4.2.7 If you have made any changes to the NEWUSER utility on your system, save the file to your home directory. Any changes would probably have been regarding automatic password generation (/FLAGS=GENPWD), minimum password length (/PWDMINIMUM=), or password pre-expiration (/PWDEXPIRED).
\$ COPY IEMIS\$EXE:NEWUSER.COM SYS\$LOGIN:
- 4.2.8 De-install the shared image files:
- If upgrading from V1.03, then use the following:
\$ @PNLDEVDB:[PNLDEV.RELEASE]INSTALL-OFF
 - If upgrading from V2.x, then use the following:
\$ @PNLDEVDB:[PNLDEV.EXE]INSTALLOFF
- If you do not do this, you will NOT be able to delete the directory in the next step.
- 4.2.9 Delete the current IBS software:
\$ DELETE [PNLDEV...]*.*;*
Repeat this command until all files and subdirectories have been deleted.
This process can take a considerable amount of time (more than 30 minutes is not unreasonable).

4.3 Load IBS from the Distribution Tapes

Every installation: Notice that the command procedures are the same for each set of data or software: only the disk device is different. The generic command is the following:

\$ BACKUP/NEW/LOG TapeA:*. Diskn:[*...]

- 4.3.1 Give yourself the necessary VMS privilege:
\$ SET PROC/PRIV=SYSPRV
- 4.3.2 Restore ISYSFILES.BCK and PNLDEV.BCK:
\$ MOUNT/FOREIGN *TapeA*:
\$ BACKUP/NEW/LOG *TapeA*:*. * *DiskA*:[*...]
\$ DISMOUNT *TapeA*
- 4.3.3 Restore OFFSITE.BCK, ONSITE.BCK, and INFOMANAGER.BCK:
\$ MOUNT/FOREIGN *TapeA*:
\$ BACKUP/NEW/LOG *TapeA*:*. * *DiskB*:[*...]
\$ DISMOUNT *TapeA*
- 4.3.4 Restore TEST.BCK:
\$ MOUNT/FOREIGN *TapeA*:
\$ BACKUP/NEW/LOG *TapeA*:*. * *DiskC*:[*...]
\$ DISMOUNT *TapeA*
- 4.3.5 Restore *Map*.BCK:
\$ MOUNT/FOREIGN *TapeA*:
\$ BACKUP/NEW/LOG *TapeA*:*. * *DiskD*:[*...]
\$ DISMOUNT *TapeA*

The IBS software and supplied data have now been transferred to the computer. The next step is to modify the VMS and IBS system files to set up IBS for use.

4.4 Modify System Files and Parameters

New installation: Installation of IBS on a new computer requires changes to some of the VMS system files so that the IBS setup command files are invoked. Then some of the IBS startup files must be modified so that they reference devices on that system. Next, some system parameters will probably need to be changed, among them the size of the detached process logical name table and the virtual page count limit. It has been reported that other system parameters may need to be changed also. These include GBLSECTIONS (450), GBLPAGFIL (1024), and GBLPAGES (62500). While IBS itself does not require these changes, when used in conjunction with other software on the system, IBS or the other software may not run without making the modifications. Finally, you must create or assign system batch and print queues before initializing the system for IBS.

Overview of steps:

1. Modify VMS System Files
2. Modify IBS System Files
3. Modify System SYSGEN Parameters: Job Table Quotas

4. Modify System SYSGEN Parameters: Page File
5. Create Batch Queue
6. Create Print Queue

4.4.1 Modify VMS System Files

1. SYSS\$MANAGER:SYSTARTUP_V5.COM

Add the following lines at the bottom of the command file:

```
$ ASSIGN/SYSTEM DiskA: PNLDEVDB  
$ @PNLDEVDB:[ISYSFILES]PNLLOGDEF  
$ @PNLDEVDB:[ISYSFILES]PNLEXECUT
```

Substitute the correct logical device name for the italicized name shown here.
(*DiskA* is the drive that contains the IBS software.)

2. SYSS\$MANAGER:SYLOGIN.COM

Add the following line at the bottom of the file:

```
$ @PNLDEVDB:[ISYSFILES]PNLSYMDEF
```

4.4.2 Modify IBS System Files

DiskA: [ISYSFILES]ASS_DISK_LOG.COM

- Modify the logical device names:
\$ ASSIGN/NOLOG/SYSTEM *DiskB*: EVNDB/EXEC
\$ ASSIGN/NOLOG/SYSTEM *DiskC*: TESTDB
\$ ASSIGN/NOLOG/SYSTEM *DiskD*: MapDB

Substitute the correct logical device names for the italicized names shown here.
(Again, *DiskB* contains the IBS event database; *DiskC* contains test map database;
DiskD contains the map database.)

4.4.3 Modify System SYSGEN Parameters: Job Table Quotas

The size of the system's detached process logical name table MUST be adjusted to match the size of the job logical name table authorized for an IBS user. This involves setting the PQL_MJTQUOTA and PQL_DJTQUOTA parameters to 0, which causes the user's JTQUOTA value (set by the NEWUSER utility to 8192) in the User Authorization File (UAF) to be used for each detached process. To modify these parameters, run SYSGEN as shown in the following sequence:

```
$ SET DEF SYSS$SYSTEM:  
$ MCR SYSGEN  
(continued)
```

4 Installation Procedures

4.4 Modify System Files and Parameters

```
SYSGEN> USE CURRENT
SYSGEN> SET PQL_MJTQUOTA 0
SYSGEN> SET PQL_DJTQUOTA 0
SYSGEN> WRITE ACTIVE
SYSGEN> WRITE CURRENT
SYSGEN> EXIT
```

4.4.4 Modify System SYSGEN Parameters: Page File

If the system virtual page count limit (VIRTUALPAGECNT) is less than about 200,000, you will need to change this parameter also. To show and then modify the current limit, run SYSGEN as shown in the following sequence of commands.

```
$ SET DEF SYS$SYSTEM:
$ MCR SYSGEN
SYSGEN> USE CURRENT
SYSGEN> SHOW VIRTUALPAGECNT
SYSGEN> SET VIRTUALPAGECNT 200000
SYSGEN> WRITE ACTIVE
SYSGEN> WRITE CURRENT
```

If the system disk is large enough, extend the current pagefile:
SYSGEN> CREATE SYS\$SYSTEM:PAGEFILE/SIZE=200000

If there is not enough room on the system disk, then you must create a pagefile on some other disk:
SYSGEN> CREATE *disk:[dir]*PAGEFILE.SYS/SIZE=200000/CONTIG

Later, you must add the command to install the pagefile on bootup to SYS\$MANAGER:SYSPAGSWPFILES.COM:
\$ INSTALL *disk:[dir]*PAGEFILE.SYS/PAGEFILE

Then install the new or extended pagefile:
SYSGEN> INSTALL SYS\$SYSTEM:PAGEFILE.SYS/PAGEFILE
or
SYSGEN> INSTALL *disk:[dir]*PAGEFILE.SYS/PAGEFILE

Then exit SYSGEN:
SYSGEN> EXIT

Finally, edit SYS\$SYSTEM:MODPARAMS.DAT and change the value for VIRTUALPAGECNT to 200000.

Note: MODPARAMS.DAT may not exist on all systems. If it does not exist, create it and include the following line:
VIRTUALPAGECNT=200000

4.4.5 Create Batch Queue

If your system does not have the SYSS\$BATCH batch queue, you will need to set it up. Make sure the batch queue can run at least four jobs at once (/JOB=4).

To create the queue, refer to VMS documentation under "Initialize/Queue."

Generically, the following may work:

```
$ INIT/QUEUE/START/BATCH/JOB=4/BASE_PRIORITY=3 SYSS$BATCH
```

On the other hand, if you have an existing batch queue and wish to use it, then make the SYSS\$BATCH logical name point to it:

```
$ ASSIGN/SYSTEM batchqueuename SYSS$BATCH
```

Then make sure everyone can use the queue:

```
$ SET QUEUE/PROT=WORLD:RW SYSS$BATCH
```

Once you get the queue set up, you may want to add the necessary commands to a system initialization file, usually SYSS\$MANAGER:SYSTARTUP_V5.COM.

4.4.6 Create Print Queue

If your system does not have the SYSS\$PRINT print queue, you will need to set it up.

To create the queue, refer to VMS documentation under "Initialize/Queue."

Generically, the following may work:

```
$ SET DEVICE/SPOOLED=SYSS$PRINT LPA0
```

```
$ SET PRINTER LPA0
```

```
$ INIT/QUEUE/START LPA0
```

or

```
$ SET PROT=W:RWED/DEVICE TXA1: (some port)
```

```
$ SET TERM/PERM/NOBROADCAST/SPEED=9600/FORM/NOTYPE TXA1:
```

```
$ SET DEVICE/SPOOLED=(SYSS$PRINT,SYSS$SYSDEVICE:) TXA1:
```

```
$ INIT/QUEUE/DEVICE=TERM/START/ON=TXA1: SYSS$PRINT
```

On the other hand, if you have an existing print queue and wish to use it, then make the SYSS\$PRINT logical name point to it:

```
$ ASSIGN/SYSTEM printqueue SYSS$PRINT
```

Then make sure everyone can use the queue:

```
$ SET QUEUE/PROT=WORLD:RW SYSS$PRINT
```

Once you set up the print queue, you may want to add the necessary commands to a system initialization file, usually SYSS\$MANAGER:SYSTARTUP_V5.COM.

4.5 Initialize the System for IBS

Every installation: After modifying system parameters (as explained in the previous section), carry out the following steps for initializing the system for IBS.

- Reboot the system, OR enter the following commands:
\$ ASSIGN/SYSTEM Disk4: PNLDEVDB
\$ @PNLDEVDB:[ISYSFILES]PNLLOGDEF
\$ @PNLDEVDB:[ISYSFILES]PNLSYMDEF
\$ @PNLDEVDB:[ISYSFILES]PNLINSTALL

Note: You must reboot the system if you changed the VIRTUALPAGECNT (because it is not a dynamic parameter).

Note: If you reboot and this is a new installation of IBS, the batch jobs will fail. Ignore this problem—you will fix it later when you start the batch jobs (page 20).

4.6 Post-Upgrade Procedures

4.6.1 Any upgrade: If the upgrade includes the ISYSFILES.BCK save set, then restore selected files from the [ISYSFILES_OLD] directory. Refer to the installation notes for the exact list. At the very least, consider saving—

- ALLSITE.DAT (if it includes users on other nodes)
- OFF_TO_ON.DAT (or use FIXOFFON to recreate it)
- OTHER_SYSTEMS.DAT (if route onpost data to other nodes)
- MAIL_SYSTEMS.DAT (if route mail list updates to other nodes)
- POST_SYSTEM.DAT (if respond to onpost)
- PERMITL.DAT (very important)
- USERNAME.DAT (converted later - see page 18)
- *.*TEMPLATE (probably dangerous to keep)

The commands to restore the files will be something like:
\$ COPY [ISYSFILES_OLD]x.x [ISYSFILES]*.*

When done restoring the old files, delete the old directory:
\$ @IEMIS\$EXE:DELTREE [ISYSFILES_OLD]

4.6.2 Upgrade V1.03 to V2.0x: Fix the IBS privileges file.
\$ FIXPD

4.6.3 Upgrade V1.03 to V2.0x: Fix the offsite database by adding the new directories.
\$ FIXOFFSITE

4.6.4 Any upgrade: If the upgrade includes the TEST site in OFFSITE.BCK and INFOMANAGER.BCK, then make sure that Infomanager's SITE.DAT includes the TEST site. If not, add the record from [INFOMANAGER.SITES.TEST]SITE.DAT.

4.6.5 Upgrade V1.03 to V2.0x: Fix user SETUP.COM files for the entire system.
\$ FIXSETUP, then answer Y -- (Do the entire system.)

4.6.6 Upgrade V1.03 to V2.0x: Fix D2 Master Directory files for the entire system. Execute the following commands from the Infomanager account:
\$ @IEMIS\$EXE:FIXD2MSTR
\$ SUBMIT/NOPRINT/NOTIFY SYS\$LOGIN:FIXD2MSTR.BIS

4.6.7 Upgrade V1.03 to V2.0x: Convert all IPs for the entire system.
\$ @IEMIS\$EXE:FIXIPS
\$ SUBMIT/NOPRINT/NOTIFY SYS\$LOGIN:FIXIPS.BIS

4.6.8 Any upgrade: Update the attribute dictionary.
Run the utility to combine the old and new attribute dictionaries and point out duplicates (same major and minor codes, but different description).
\$ SET DEF SYS\$LOGIN:
\$ mapDATABASE (where map is your state code)
\$ FIXATTS
MAP\$ATTRIB:ATTRIBDIC.BIN
PNLDEVDB:[ISYSFILES.ATT]ATTRIBDIC.BIN
NEW.BIX
Convert it back to binary:
\$ ASCXATT
NEW.BIX <RETURN>
NEW.BIN <RETURN>

If no duplicates exist, then copy the new file to the attribute directory:
\$ COPY NEW.BI% MAP\$ATTRIB:ATTRIBDIC.*

If any duplicates exist, keep the ones you want by editing the ASCII file (NEW.BIX), converting it to binary with ASCXATT, and copying the new files to MAP\$ATTRIB.

Then copy the new dictionary files to the TEST map database:
\$ COPY MAP\$ATTRIB:ATTRIBDIC.* TESTDB:[TEST.ATT]

4.6.9 Any upgrade: Update the icon control file and icon files.
\$ mapDATABASE (where map is your state code)
\$ SET DEF PNLDEVDB:[ISYSFILES.ICON]
\$ COPY MAP\$ICON\$CTL: SYS\$LOGIN:ICON.CTL OLDER
\$ DIFF ICON.CTL-Vxxx SYS\$LOGIN:ICON.CTL_OLDER (where xxx is the old IBS version number, such as 200)

If no differences exist, then simply replace the icons:

```
$ DEL MAP$ICONS:*. *;*
$ BACKUP/LOG *. %%%; MAP$ICONS:
```

If there are differences, then you may have a lot of work ahead of you. In general, you must determine what you want to do with the icons you changed. When done, run the CHKICONS utility to see if all is right with the world.

- 4.6.10** Any upgrade: If the icon control file has changed (that is, if ICON.CTL is different from ICON.CTL_OLD), then fix all the Resource Management files for the entire system.

```
$ SET DEF SYS$LOGIN:
$ @IEMIS$EXE:FIXRM
ICON.CTL_OLD
$ SUBMIT/NOPRINT/NOTIFY SYS$LOGIN:FIXRM.BIS
```

- 4.6.11** Upgrade V1.03 to V2.0x: Delete the WHO and CHAT verbs:

```
$ SET COMMAND/DELETE=(WHO,CHAT)
$ SET COMMAND/DELETE=(WHO,CHAT) -
/ TABLE=SYS$SHARE:DCLTABLES.EXE -
/ OUTPUT=SYS$SHARE:DCLTABLES.EXE
$ SET PROCESS/PRIVILEGE=CMKRNL
$ INSTALL REPLACE SYS$SHARE:DCLTABLES.EXE
$ SET PROCESS/PRIVILEGE=NOCMKRNL
```

- 4.6.12** Upgrade V1.03 to V2.0x: If you have changed the NEWUSER utility for your system (page 9), then add those changes to the new program.

```
$ EDIT IEMIS$EXE:NEWUSER.COM
```

4.7 Fix Miscellaneous Files

- 4.7.1** New installation: Fix MESORAD RSP control files for every site on the system:

```
$ @IEMIS$EXE:FIXRSP_BIS
$ SUBMIT/NOPRINT/NOTIFY SYS$LOGIN:FIXRSP.BIS
```

- 4.7.2** New installation: Add the MYTAPE verb to the DCLTABLES:

```
$ SET DEF IEMIS$EXE:
$ @FIXVERB
```

- 4.7.3** Every installation: Fix the Master Directory file:

```
$ RUN IEMIS$EXE:FIXMSTRDIR
```

4.7.4 New installation: Modify IBS template files

You may want to edit the following files and configure them for your system. Refer to the *IBS Data Management Guide* for the structure and content of each file. All these files are located in PNLDEVDB:[ISYSFILES]:

- LOGIN.COM_TEMPLATE
- JOB_ENV.DAT_TEMPLATE
- SITE_EF.DAT_TEMPLATE

4.7.5 New installation: Modify IBS System Files

1. PNLDEVDB:[ISYSFILES]OTHER_SYSTEMS.DAT

Edit this file and include the names of only those offpost systems to which the EVENT program should route onpost information. For more information, refer to OTHER_SYSTEMS.DAT in the *IBS Data Management Guide*, Appendix A. An example follows:

```
KIRK"INFOMANAGER INFOMGR":EVNDB:[ONSITE]  
PICARD"INFOMANAGER FLEZPUTR":EVNDB:[ONSITE]
```

2. PNLDEVDB:[ISYSFILES]MAIL_SYSTEMS.DAT

Edit this file and include the names of only those offpost systems to which the EVENT program should route mail list update information. For more information, refer to MAIL_SYSTEMS.DAT in the *IBS Data Management Guide*, Appendix A. An example follows:

```
KIRK"INFOMANAGER INFOMGR":EVNDB:[ONSITE]  
STONE"INFOMANAGER INFOMGR":EVNDB:[ONSITE]
```

3. PNLDEVDB:[ISYSFILES]POST_SYSTEM.DAT

Edit this file and include the node name, along with the username and password, of the onpost system to which the EVENT program should send information. For more information, refer to POST_SYSTEM.DAT in the *IBS Data Management Guide*, Appendix A. An example follows:

```
EMIS02      INFOMANAGER  INFOMGR
```

4.7.6 Every installation: If the installation tapes include the ISYSFILES.BCK save set, then copy the template and onpost simulator files from the state subdirectory for your site:

```
$ SET DEF PNLDEVDB:[ISYSFILES]  
$ COPY [..xx]*.* [] (where xx is your state abbreviation)  
$ COPY [.SIM.xx]*.* [.SIM]
```

4.7.7 Every installation: Add IBS help to the system help:
\$ SET DEF IEMIS\$HELP:
\$ @BUILDHLP

4.7.8 New installation: Select FTP template file.
If your system communicates with the onpost system (that is, POST_SYSTEM.DAT is not empty), then you must select an FTP template file based on the type of TCP/IP network you use.
\$ SET DEF PNLDEVDB:[ISYSFILES]
For Pathway, do this: \$ COPY FTP.COM_WINTCP.COM_TEMPLATE
For TCPware, do this: \$ COPY FTP.COM_TCPWARE.COM_TEMPLATE
For other TCP/IP networks, you must create your own FTP template file, possibly based on one of the existing files. The CHECKFTP utility can be used to solve the problem.

4.8 Convert the Master Mail List

Upgrade V1.03 to V2.0x: The Mail List Manager utility automatically converts an old format mail list file to the new format if it cannot find the new format file. Because the new format file is not part of the release, MLMGR does just what it should—it converts the old file. Simply run it and exit. Refer to the *IBS Utilities Guide* for information about using MLMGR.

\$ MLMGR

4.9 Establish New IBS User Accounts

Usually new installation: Use the NEWUSER utility to create IBS user accounts. You must have SYSPRV privilege to run this utility. After you supply the user name, full user name, disk, account, group and member information, and user type, NEWUSER creates a command file (NEWUSER.username) in your login directory, which it then executes to create the user account in the UAF.

The group and member are octal numbers used for the User Information Code (UIC). The group numbers should be the same for all IBS users, while the member numbers **MUST** be unique. The system manager should look at the UAF to find an unused group and put all IBS users in it. Refer to VAX/VMS documentation for more information about the UAF file.

After NEWUSER creates the new account, it then does the following:

- creates the necessary directories for the user
- copies various template files from IEMIS\$SYSF: to the user's home directory

- sets file and directory ownership and protections
- adds a record to the master mail list of IBS users who can receive electronic mail through IBS
- adds a permission record (with privileges based on the user type) to the IBS authorization file
- adds a record to the Master Directory file for use in Copy Case Site help.

Refer to the *IBS Utilities Guide* for specific information about using NEWUSER.

4.10 Modify Existing User Accounts for IBS Use

Usually every installation: Existing user accounts may not have the correct directories, the correct privileges, or the correct process quotas to use IBS. The NEWUSER utility should also be used to update existing user accounts, giving them the directories, privileges, and quotas they require. Specifying 0: for the disk and 0 for both the group and member numbers tells NEWUSER to keep a user's current disk and UIC settings.

Note: User accounts created with previous versions of the NEWUSER utility do not need to be updated: doing so may overwrite some information that should be kept, especially UAF modifications.

4.11 Change User Privileges

Usually every installation: If a user needs to have different IBS privileges than those granted by the NEWUSER utility, use the PDMGR utility (Permit.Dat Manager) to change privileges. Refer to the *IBS Utilities Guide* for information about using PDMGR.

4.12 Update the Master Mail List

Usually every installation: Although the NEWUSER utility adds the user to the IBS master mail list, you must use the MLMGR (Mail List Manager) utility to complete the new user's mail record by adding agency / position information. Refer to the *IBS Utilities Guide* for information about using MLMGR.

4.13 Set Directory and File Protections

Every installation: To set the owner and protections on the files and directories within IBS, use the FIXPROT utility. It will take several minutes to complete (10-60 minutes depending on the size of the map database), so you may want to turn verification on. (See the notes following these commands.)

```
$ mapDATABASE
$ COPY IEMIS$EXE:FIXPROT.COM SYS$LOGIN:
$ SET VERIFY
$ @SYS$LOGIN:FIXPROT
$ SET NOVERIFY
```

Note: If you are logged in as Infomanager, copy and run FIXPROT.COM from SYS\$MANAGER: instead of SYS\$LOGIN:.

Note: If FIXPROT.COM refers to directories that do not exist on your system, errors will occur. You may need to edit the copy of FIXPROT.COM to remove commands that refer to such directories. For example, if you do not have a [TEST] directory, then you need to remove the commands that include the [TEST] directory.

4.14 Start the Batch Jobs

Every installation: The EVENT batch job processes data from the onpost and mail list data from onpost or other offpost systems. The MAIL_C (Mail Checker) batch job is used to notify users of new or late mail. To start them, type the following:

```
$ @IEMIS$SYSE:PNLBATCH
```

If things have not been correctly set up, the PNLBATCH command file can fail to start the EVENT and Mail Checker batch processes for IBS. If that happens, you should see error messages while PNLBATCH is executing. To check whether the EVENT and Mail Checker processes started, use the SHOW SYSTEM commands and see if "EVENT - BATCH" and "Mail Checker" are executing. If EVENT is not executing, examine the EVENT.LOG file in the INFOMANAGER directory to determine the problem. One possible cause of problems is that the INFOMANAGER account has not been created by using NEWUSER.

4.15 Verify Installation by Using the Test Plan

Every installation: The IBS Installation Test Plan is a short document containing a few tasks you must perform using IBS in order to confirm that it is installed correctly. The test plan tasks should take less than an hour to complete.

Section 5

Software Organization

This section presents a summary of the software organization. This summary includes: A) high-level directory structures; and B) start-up command files.

5.1 High-Level Directory Structures

For in-depth information, refer to the *IBS Data Management Guide*.

- **PNLDEVDB:[PNLDEV]** -- This is the top-level directory for the IBS software package and contains all documentation, executables and command files, and static data files necessary to use IBS.
- **PNLDEVDB:[ISYSFILES]** -- This is the top-level directory for template files, onpost simulator input files, and site-dependent control files, all maintained by the database administrator.
- **EVNDB:[ONSITE]** -- This directory contains onpost/offpost interface files.
- **EVNDB:[OFFSITE]** -- This is the top-level directory for shared IBS site files.
- **EVNDB:[INFOMANAGER]** -- This is the home directory for the Information Manager user AND the top-level directory for the operational site databases.
- **TESTDB:[TEST]** -- This is the top-level directory for the small map database used after installation to verify IBS was installed properly and that everything works.
- **MapDB:[Map]** -- This is the top-level directory of the map database. For example, the top-level directory of the Utah map database is **UTDB:[UT]**.

5.2 Start-Up Command Files

The following three command files simplify installation, start-up, and use of IBS, and are required in order to use the IBS system. They are merely the top-level drivers, however, and call the command files which do the real work. Refer to the Appendix for more in-depth information.

5 Software Organization

- [ISYSFILES]PNLLOGDEF.COM is called from SYSS\$MANAGER:SYSTARTUP_V5.COM and defines system-wide logical names required to use IBS.
- [ISYSFILES]PNLEXECUT.COM is called from SYSS\$MANAGER:SYSTARTUP_V5.COM and installs IBS images and executes monitoring tasks for handling new mail and data from the onpost. It calls 1) PNLINSTALL.COM, which installs IBS images, and 2) PNLBATCH.COM, which starts the monitoring tasks which run all the time in the background.
- [ISYSFILES]PNLSYMDEF.COM is called from SYSS\$MANAGER:SYLOGIN.COM and defines global symbols needed for the execution of the IBS software.

Appendix A

Logical Names and Symbols

The system logical names and symbol definitions required by IBS users are defined in command files located in the PNLDEVDB:[ISYSFILES] directory.

- PNLLOGDEF.COM executes several other command files that assign system-level logical names. This occurs at boot time only: it is called from SYSS\$MANAGER:SYSTARTUP_V5.COM.

ASS_DISK_LOG.COM -- Disk logical names for IBS. This file will need to be modified for each new installation and saved before re-installing a new release of the software.

ASS_IBS_LOG.COM -- Various logical names required for all parts of IBS.

ASS_MAP_LOG.COM -- Logical names that point to the map data.

ASS_SITE_LOG.COM -- Logical names that point to site-specific data.

- PNLSYMDEF.COM executes several other command files that define symbol names. This occurs at login time for each user: it is called from SYSS\$MANAGER:SYLOGIN.COM.

ASS_IBS_SYM.COM -- Symbol definitions for IBS in general.

ASS_MAP_SYM.COM -- Symbol definitions for switching between map databases.

One other IBS logical name needs to be defined: PNLDEVDB, which points to the disk device where the IBS software ([PNLDEV] and [ISYSFILES]) resides. It must be in SYSS\$MANAGER:SYSTARTUP_V5.COM immediately before executing PNLDEVDB:[ISYSFILES]PNLLOGDEF.COM.

The IBS system-level logical names and symbols in this appendix are organized in the following lists:

- A.1 Disk Logical Names
- A.2 IBS Logical Names
- A.3 Map Logical Names
- A.4 Site Logical Names
- A.5 IBS Symbols
- A.6 Map Symbols

A.1 Disk Logical Names

Disk logicals (Change at installation time)

DUA1:	EVNDB
DUA1:	TESTDB
DUA1:	mapDB

A.2 IBS Logical Names

Directory logicals for IBS

PNLDEVDB:[PNLDEV.EXE]	IEMIS\$EXE
PNLDEVDB:[PNLDEV.EXE.QA]	IEMIS\$QA
PNLDEVDB:[PNLDEV.SYSD.DOC]	IEMIS\$DOC
PNLDEVDB:[PNLDEV.SYSD.HELP]	IEMIS\$HELP
PNLDEVDB:[PNLDEV.SYSD.MSG]	IEMIS\$MSG
PNLDEVDB:[PNLDEV.SYSD.TBL]	IEMIS\$TBL
PNLDEVDB:[ISYSFILES]	IEMIS\$SYSF
PNLDEVDB:[ISYSFILES.SIM]	IEMIS\$SIMF

File logicals for IBS

IEMIS\$HELP:MAPHELP.BIN	MAP\$HELP
IEMIS\$SYSF:BLANKICON.DMS	BLANKICON
IEMIS\$SYSF:COLORTBL.DAT	MAP\$COLOR\$TABLE
IEMIS\$SYSF:PROBLEM.REPORT	PROBLEM

Reassign system logical to include IBS help

IEMIS\$HELP:SYSS\$SYSROOT:[SYSHLP]	SYSS\$HELP
------------------------------------	------------

Logicals for IBS, etc

IEMIS\$EXE:IBS_SM.EXE	IBS_SM
-----------------------	--------

Logicals for the Models

PNLDEVDB:[PNLDEV.SYSD.CHEMS]	IEMIS\$CHEMS
PNLDEVDB:[PNLDEV.SYSD.IDYNEV]	IEMIS\$IDYNEV
PNLDEVDB:[PNLDEV.SYSD.MESORAD]	IEMIS\$MESORAD

A.3 Map Logical Names

Default map database (Change at installation time)

mapDB:[map]	MAP\$DATA\$MAIN
mapDB:[map.]	MAP\$TOPDIR

Directories and Control Files

MAP\$TOPDIR:[ATT]
 MAP\$TOPDIR:[ICON]
 MAP\$TOPDIR:[LOG]
 MAP\$ICONS:ICON.CTL
 MAP\$DATA\$MAIN:TOPOCTL.FIL
 MAP\$DATA\$MAIN:TOPODESC.FIL
 MAP\$ATTRIB:ATTRIBDIC.BIN

MAP\$ATTRIB
 MAP\$ICONS
 MAP\$MEMLOG
 MAP\$ICON\$CTL
 MAP\$CONTROL
 MAP\$TOPOGRAPHY
 MAP\$ATTRIBUTE\$DICTIONARY

Topographies

MAP\$TOPDIR:[tx]
 MAP\$DATA\$tx

MAP\$DATA\$tx
 T\$tx

A.4 Site Logical Names

Default Operational Site Database

EVNDB:
 INFOMANAGER
 site
 post
 mode

EVNT\$DISK
 EVNT\$USER
 EVNT\$SITE
 EVNT\$POST
 EVNT\$MODE

Offpost directories

EVNDB:[OFFSITE]
 EVNDB:[OFFSITE.site]
 EVNDB:[OFFSITE.site.]
 OFF\$MAPDIR:[FROM]
 OFF\$MAPDIR:[SEND]

OFFSITE\$DIR
 OFF\$DIR
 OFF\$MAPDIR
 OFF\$FROMDIR
 OFF\$SENDIR

Onpost directory

EVNDB:[ONSITE]

ONSITE\$DIR

InfoManager's home directory

EVNDB:[INFOMANAGER]

INFO\$DIR

Set site directory logicals

EVNDB:[INFOMANAGER.SITES.site]
 EVNDB:[INFOMANAGER.SITES.site.]
 EVNDB:[INFOMANAGER.SITES.site.INPUT.MAPS.]

SITE\$DIR
 SITE\$TOPDIR
 SITE\$MAPDIR

Miscellaneous

SITE\$TOPDIR:[BCK]
 SITE\$TOPDIR:[INPUT.IP]
 SITE\$TOPDIR:[INPUT.OFF]
 SITE\$TOPDIR:[INPUT.POP]

SITE\$BCK
 SITE\$IP
 SITE\$OFF
 SITE\$POP

Models

SITE\$TOPDIR:[INPUT.CHEMS]	SITE\$ISCHEMS
SITE\$TOPDIR:[INPUT.D2]	SITE\$SD2
SITE\$TOPDIR:[INPUT.DYNEV]	SITE\$SDYNEV
SITE\$TOPDIR:[INPUT.IDYNEV]	SITE\$SIDYNEV
SITE\$TOPDIR:[INPUT.MESORAD]	SITE\$SMESORAD
SITE\$TOPDIR:[INPUT.OSPM]	SITE\$SOSPM
SITE\$TOPDIR:[OUTPUT.CHEMS]	SITE\$OSCHEMS
SITE\$TOPDIR:[OUTPUT.D2]	SITE\$OSD2
SITE\$TOPDIR:[OUTPUT.DYNEV]	SITE\$OSDYNEV
SITE\$TOPDIR:[OUTPUT.IDYNEV]	SITE\$OSIDYNEV
SITE\$TOPDIR:[OUTPUT.MESORAD]	SITE\$SMESORAD
SITE\$TOPDIR:[OUTPUT.OSPM]	SITE\$SOSPM

Volatile topographies

SITE\$MAPDIR:[D2]	MAP\$DATA\$D2
SITE\$MAPDIR:[EX]	MAP\$DATA\$EX
SITE\$MAPDIR:[FI]	MAP\$DATA\$FI
SITE\$MAPDIR:[VA]	MAP\$DATA\$VA
OFF\$MAPDIR:[DA]	MAP\$DATA\$DA
OFF\$MAPDIR:[EI]	MAP\$DATA\$EI
OFF\$MAPDIR:[RM]	MAP\$DATA\$RM
OFF\$MAPDIR:[RP]	MAP\$DATA\$RP
OFF\$MAPDIR:[SR]	MAP\$DATA\$SR
OFF\$MAPDIR:[WD]	MAP\$DATA\$WD
OFF\$MAPDIR:[WI]	MAP\$DATA\$WI
MAP\$DATA\$D2	TSD2
MAP\$DATA\$EI	TSEI
MAP\$DATA\$WD	TSWD
MAP\$DATA\$WI	TSWI

A.5 IBS Symbols

Configurable Command files

FTPSTART	::= @IEMIS\$SYSF:FTPSTART.COM
FTPSTOP	::= @IEMIS\$SYSF:FTPSTOP.COM
SELECTDB	::= @IEMIS\$SYSF:SELECTDB.COM

Batch command files

EVENT	::= @IEMIS\$EXE:EVENT.COM
MAIL_C*HECKER	::= @IEMIS\$EXE:MAIL_C.COM

Interactive command files

ALLSITE	== @IEMIS\$EXE:ALLSITE.COM
DEASSIGNLOG	== @IEMIS\$EXE:DEASSIGNLOG.COM
DELTREE	== @IEMIS\$EXE:DELTREE.COM
DELUSER	== @IEMIS\$EXE:DELUSER.COM
DOLIMITXX	== @IEMIS\$EXE:DOLIMITXX.COM
DOSEELIMITXX	== @IEMIS\$EXE:DOSEELIMITXX.COM
DUPOFFSITE	== @IEMIS\$EXE:DUPOFFSITE.COM
DUPSITE	== @IEMIS\$EXE:DUPSITE.COM
FDISP	== @IEMIS\$EXE:FDISP.COM
IBSSH	== @IEMIS\$EXE:IBSSH.COM
INSTALLOFF	== @IEMIS\$EXE:INSTALLOFF.COM
INSTALLON	== @IEMIS\$EXE:INSTALLON.COM
LIMITXX	== @IEMIS\$EXE:LIMITXX.COM
LIMITXX2	== @IEMIS\$EXE:LIMITXX2.COM
LIMITXX3	== @IEMIS\$EXE:LIMITXX3.COM
LISTCNX	== @IEMIS\$EXE:LISTCNX.COM
NEWUSER	== @IEMIS\$EXE:NEWUSER.COM
SHOWCNX	== @IEMIS\$EXE:SHOWCNX.COM
STOPEVENT	== @IEMIS\$EXE:STOPEVENT.COM
STOPMAIL_C	== @IEMIS\$EXE:STOPMAIL_C.COM
SWAPSITE	== @IEMIS\$EXE:SWAPSITE.COM

Installation command files

FIXATTS	== @IEMIS\$EXE:FIXATTS.COM
FIXCNX	== @IEMIS\$EXE:FIXCNX.COM
FIXCNX_BIS	== @IEMIS\$EXE:FIXCNX_BIS.COM
FIXMAPDB	== @IEMIS\$EXE:FIXMAPDB.COM
FIXOFFSITE	== @IEMIS\$EXE:FIXOFFSITE.COM
FIXPROT	== @IEMIS\$EXE:FIXPROT.COM
FIXRSP	== @IEMIS\$EXE:FIXRSP.COM
FIXRSP_BIS	== @IEMIS\$EXE:FIXRSP_BIS.COM
FIXSETUP	== @IEMIS\$EXE:FIXSETUP.COM
FIXSITEDB	== @IEMIS\$EXE:FIXSITEDB.COM
FIXVERB	== @IEMIS\$EXE:FIXVERB.COM

Installation Foreign commands

FIXD2MSTR	== \$ IEMIS\$EXE:FIXD2MSTR
FIXIPS	== \$ IEMIS\$EXE:FIXIPS
FIXRM	== \$ IEMIS\$EXE:FIXRM

Foreign commands

D2PC	== \$ IEMIS\$EXE:D2PC
D2RUN	== \$ IEMIS\$EXE:D2RUN
KERMIT	== \$ IEMIS\$EXE:KERMIT
MD_ADD	== \$ IEMIS\$EXE:MD_ADD
MD_DELETE	== \$ IEMIS\$EXE:MD_DELETE
PD_ADD	== \$ IEMIS\$EXE:PD_ADD
PD_DELETE	== \$ IEMIS\$EXE:PD_DELETE
SEETXTNM	== \$ IEMIS\$EXE:SEETXTNM

Appendix: Logical Names and Symbols

SEELIMITXX	== \$ IEMIS\$EXE:SEELIMITXX
SHOWENV	== \$ IEMIS\$EXE:SHOWENV
TTXTTDTAT	== \$ IEMIS\$EXE:TTXTTDTAT
XMAIL	== \$ IEMIS\$EXE:XMAIL

IBS Programs and Utilities

CHECKFTP	== RUN/NODEB IEMIS\$EXE:CHECKFTP
DELPTDB	== RUN/NODEB IEMIS\$EXE:DELPTDB
DELSITE	== RUN/NODEB IEMIS\$EXE:DELSITE
FIXLOG	== RUN/NODEB IEMIS\$EXE:FIXLOG
IBS	== RUN/NODEB IEMIS\$EXE:IBS
IBS NOGR	== RUN/NODEB IEMIS\$EXE:IBS NOGR
IBSCOPY	== RUN/NODEB IEMIS\$EXE:IBSCOPY
IMPORT	== RUN/NODEB IEMIS\$EXE:IMPORT
LOCATE	== RUN/NODEB IEMIS\$EXE:LOCATE
MAIL LIST	== RUN/NODEB IEMIS\$EXE:MAIL LIST
MLMGR	== RUN/NODEB IEMIS\$EXE:MLMGR
MLROUTE	== RUN/NODEB IEMIS\$EXE:MLROUTE
NEWLOG	== RUN/NODEB IEMIS\$EXE:NEWLOG
NEWSITE	== RUN/NODEB IEMIS\$EXE:NEWSITE
ONPOSTSIM	== RUN/NODEB IEMIS\$EXE:ONPOSTSIM
PDMGR	== RUN/NODEB IEMIS\$EXE:PDMGR
RMCHK	== RUN/NODEB IEMIS\$EXE:RMCHK
RMMGR	== RUN/NODEB IEMIS\$EXE:RMMGR
RMMGR NOGR	== RUN/NODEB IEMIS\$EXE:RMMGR NOGR
SITEBKP	== RUN/NODEB IEMIS\$EXE:SITEBKP

Database utilities

ADDATTDMS	== RUN/NODEB IEMIS\$EXE:ADDATTDMS
APPENDDMS	== RUN/NODEB IEMIS\$EXE:APPENDDMS
ASCIIXDMS	== RUN/NODEB IEMIS\$EXE:ASCIIXDMS
ASCXATT	== RUN/NODEB IEMIS\$EXE:ASCXATT
ATTREQ	== RUN/NODEB IEMIS\$EXE:ATTREQ
ATTSORT	== RUN/NODEB IEMIS\$EXE:ATTSORT
ATTXASC	== RUN/NODEB IEMIS\$EXE:ATTXASC
CHKICONS	== RUN/NODEB IEMIS\$EXE:CHKICONS
CLIPDMS	== RUN/NODEB IEMIS\$EXE:CLIPDMS
COLORDMS	== RUN/NODEB IEMIS\$EXE:COLORDMS
CONTOUR	== RUN/NODEB IEMIS\$EXE:CONTOUR
CREATELIMITS	== RUN/NODEB IEMIS\$EXE:CREATELIMITS
DECLUTTER	== RUN/NODEB IEMIS\$EXE:DECLUTTER
DELATTDMS	== RUN/NODEB IEMIS\$EXE:DELATTDMS
DEMXTAC	== RUN/NODEB IEMIS\$EXE:DEMXTAC
DLGXDMS	== RUN/NODEB IEMIS\$EXE:DLGXDMS
DMSXASCI	== RUN/NODEB IEMIS\$EXE:DMSXASCI
DMSXDLG	== RUN/NODEB IEMIS\$EXE:DMSXDLG
DMSXDTX	== RUN/NODEB IEMIS\$EXE:DMSXDTX
EXTRACT	== RUN/NODEB IEMIS\$EXE:EXTRACT
FIXLIMITS	== RUN/NODEB IEMIS\$EXE:FIXLIMITS
GEDIT	== RUN/NODEB IEMIS\$EXE:GEDIT
LINEAR_JOIN	== RUN/NODEB IEMIS\$EXE:LINEAR_JOIN

LJ_TIGER	== RUN/NODEB IEMIS\$EXE:LJ_TIGER
LOOKTXT	== RUN/NODEB IEMIS\$EXE:LOOKTXT
MAKEDMS	== RUN/NODEB IEMIS\$EXE:MAKEDMS
MAKETAC	== RUN/NODEB IEMIS\$EXE:MAKETAC
MAPDBGEN	== RUN/NODEB IEMIS\$EXE:MAPDBGEN
MAPDBUPDT	== RUN/NODEB IEMIS\$EXE:MAPDBUPDT
MODATTDMS	== RUN/NODEB IEMIS\$EXE:MODATTDMS
MODTEXTNM	== RUN/NODEB IEMIS\$EXE:MODTEXTNM
MPDISPLAY	== RUN/NODEB IEMIS\$EXE:MPDISPLAY
PLOTDMS	== RUN/NODEB IEMIS\$EXE:PLOTDMS
PLOTICON	== RUN/NODEB IEMIS\$EXE:PLOTICON
POPXOMS	== RUN/NODEB IEMIS\$EXE:POPXOMS
SCALEDMS	== RUN/NODEB IEMIS\$EXE:SCALEDMS
SEELIMITS	== RUN/NODEB IEMIS\$EXE:SEELIMITS
SHOWATT	== RUN/NODEB IEMIS\$EXE:SHOWATT
SHOWCOVER	== RUN/NODEB IEMIS\$EXE:SHOWCOVER
SMOOTHER	== RUN/NODEB IEMIS\$EXE:SMOOTHER
SPLITDMS	== RUN/NODEB IEMIS\$EXE:SPLITDMS
STATDMS	== RUN/NODEB IEMIS\$EXE:STATDMS
TACFIXTAA	== RUN/NODEB IEMIS\$EXE:TACFIXTAA
TACLLXUTM	== RUN/NODEB IEMIS\$EXE:TACLLXUTM
TACXASCII	== RUN/NODEB IEMIS\$EXE:TACXASCII
TBXDMS	== RUN/NODEB IEMIS\$EXE:TBXDMS
THINNER	== RUN/NODEB IEMIS\$EXE:THINNER
TIGERCVT	== RUN/NODEB IEMIS\$EXE:TIGERCVT
TIGERXDMS	== RUN/NODEB IEMIS\$EXE:TIGERXDMS
UPDATEATT	== RUN/NODEB IEMIS\$EXE:UPDATEATT
USGS100KXDMS	== RUN/NODEB IEMIS\$EXE:USGS100KXDMS
USGSXDMS	== RUN/NODEB IEMIS\$EXE:USGSXDMS
UTMXLL	== RUN/NODEB IEMIS\$EXE:UTMXLL

Miscellaneous utilities

SETUPTEK	== RUN/NODEB IEMIS\$EXE:SETUPTEK
SHOWCOL	== RUN/NODEB IEMIS\$EXE:SHOWCOL
SHOWTEK	== RUN/NODEB IEMIS\$EXE:SHOWTEK
SM_DUMP	== RUN/NODEB IEMIS\$EXE:SM_DUMP
TEKSETUP	== RUN/NODEB IEMIS\$EXE:TEKSETUP

Model drivers

CHEMS_GR	== RUN/NODEB IEMIS\$EXE:CHEMS_GR
CHEMS_NOGR	== RUN/NODEB IEMIS\$EXE:CHEMS_NOGR
D2_GR	== RUN/NODEB IEMIS\$EXE:D2_GR
D2_NOGR	== RUN/NODEB IEMIS\$EXE:D2_NOGR
EESF_GR	== RUN/NODEB IEMIS\$EXE:EESF_GR
EESF_NOGR	== RUN/NODEB IEMIS\$EXE:EESF_NOGR
IDYNEV_GR	== RUN/NODEB IEMIS\$EXE:IDYNEV_GR
IDYNEV_NOGR	== RUN/NODEB IEMIS\$EXE:IDYNEV_NOGR
MES_GR	== RUN/NODEB IEMIS\$EXE:MES_GR
MES_NOGR	== RUN/NODEB IEMIS\$EXE:MES_NOGR
OSPM_GR	== RUN/NODEB IEMIS\$EXE:OSPM_GR
OSPM_NOGR	== RUN/NODEB IEMIS\$EXE:OSPM_NOGR

Appendix: Logical Names and Symbols

PREDYN_GR	== RUN/NODEB IEMIS\$EXE:PREDYN_GR
PREDYN_NOGR	== RUN/NODEB IEMIS\$EXE:PREDYN_NOGR
REA_GR	== RUN/NODEB IEMIS\$EXE:REA_GR
REA_NOGR	== RUN/NODEB IEMIS\$EXE:REA_NOGR

Other model utilities

BUILDNET	== RUN/NODEB IEMIS\$EXE:BUILDNET
IDYNEV_MERGE	== RUN/NODEB IEMIS\$EXE:IDYNEV_MERGE
IDYNEV_POP	== RUN/NODEB IEMIS\$EXE:IDYNEV_POP
IDYNEV_PP	== RUN/NODEB IEMIS\$EXE:IDYNEV_PP

Installation utilities

FIXKPL	== RUN/NODEB IEMIS\$EXE:FIXKPL
FIXMSTRDIK	== RUN/NODEB IEMIS\$EXE:FIXMSTRDIR
FIXOFFON	== RUN/NODEB IEMIS\$EXE:FIXOFFON
FIXPD	== RUN/NODEB IEMIS\$EXE:FIXPD

Miscellaneous commands

IBSEDT	== EDIT/EDT/NOCOMMAND
IBSHELP	== HELP/LIBRARY=IEMIS\$HELP:IBSHELP
SAY	== WRITE SYSS\$OUTPUT
TEK	== ASSIGN/NOLOG/JOB TEKTRONIX TRPLOT\$DEVICE

Commands maintained for compatibility

IP_CONVERT	== \$ IEMIS\$EXE:FIXIPS
MR_CHK	== \$ IEMIS\$EXE:XMAIL CHECK
CREATLIMITS	== RUN/NODEB IEMIS\$EXE:CREATLIMITS
CREATETAC	== RUN/NODEB IEMIS\$EXE:MAKETAC
CSEPP	== RUN/NODEB IEMIS\$EXE:IBS
CSEPP_NOGR	== RUN/NODEB IEMIS\$EXE:IBS_NOGR
LATLONXUTM	== RUN/NODEB IEMIS\$EXE:TACLLXUTM
NET_BMD	== RUN/NODEB IEMIS\$EXE:FIXMSTRDIR
READDMS	== RUN/NODEB IEMIS\$EXE:DMSXASCII
READTAC3	== RUN/NODEB IEMIS\$EXE:TACXASCII
SITE_WIPE	== RUN/NODEB IEMIS\$EXE:DELSITE
TAC3XCONTXDMS	== RUN/NODEB IEMIS\$EXE:CONTOUR
TESTICON*S	== RUN/NODEB IEMIS\$EXE:CHKICONS
UPDATE_MAIL_LIST	== RUN/NODEB IEMIS\$EXE:MLMGR
USGSXTAC3	== RUN/NODEB IEMIS\$EXE:DEMXTAC
WATCHSIM	== RUN/NODEB IEMIS\$EXE:ONPOSTSIM

A.6 Map Symbols

Symbols to switch between map databases for individual users

TESTDATA*BASE ::= @TESTDB:[TEST]SETUPDB JOB
*map*DATA*BASE ::= @*map*DB:[*map*]SETUPDB JOB

Symbols to switch between map databases for all users

SYSTESTDATA*BASE ::= @TESTDB:[TEST]SETUPDB SYSTEM
SYS*map*DATA*BASE ::= @*map*DB:[*map*]SETUPDB SYSTEM

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