



# *release notes*

## **iBASE iDIS™ Software XNXIBASEK R2.0**

### **Warranty and Registration Information**

This product is fully supported and carries a 90-day warranty on the media. Enclosed with this product is a Software Registration Form (121918-001). **Please return this form to Intel** to ensure proper registration of the software with our service department. This will ensure your receipt of any enhancements to the product during your warranty period, or during the period that a Maintenance Contract is in force.

If you have any installation or usage questions, you may obtain additional technical information concerning this product through the Intel Technical Information Phone Service (TIPS) at 602-869-INFO. If you have any other product-related questions, please feel free to contact your local Intel distributor or Intel representative.

Should you desire, Intel's Customer Support Operations can arrange for installation of this product for you. Customer Support services, which include installation, extended service contracts, and consulting services, are available for a reasonable fee through your Intel field service office or local sales office.

### **Trademark Acknowledgements**

- The iDB facility is a version of EMPRESS, a trademark of Rhodnius, Inc.
- The iDB Report Writer is a version of M-Writer, a trademark of Rhodnius, Inc.
- The iMENU facility is a version of /menus, a trademark of Schmidt Associates.
- The iPLAN facility is a version of Multiplan, a registered trademark of Microsoft Corporation.
- The iWORD facility is a version of LatiCorp Wordprocessing, a trademark of LatiCorp, Inc.

- The iDESK facility is a version of SYNC: The Executive Desk from LatiCorp, a trademark of LatiCorp, Inc.
- The operating system is a version of XENIX, a trademark of Microsoft Corporation.
- UNIX is a trademark of AT&T Bell Laboratories.

## Introduction

iBASE is an easy-to-use software platform which serves as a menu-driven environment for system administration, network administration and application software access. In addition, iBASE provides electronic mail, electronic personal calendar and on-line help facilities as well as data conversion tools for facilitating communication with both mainframe hosts and PCs.

## Taking Inventory

The iBASE Software Release 2.0 package (Product Code XNXIBASEK R2.0, Part No 138486) consists of the following:

Part Number	Description
<b>138486-001</b>	<b>XNXIBASEK R2.0</b>
138273-001	iBASE Object Diskette, 1 of 11
138274-001	iBASE Object Diskette, 2 of 11
138275-001	iBASE Object Diskette, 3 of 11
138276-001	iBASE Object Diskette, 4 of 11
138277-001	iBASE Object Diskette, 5 of 11
138278-001	iBASE Object Diskette, 6 of 11
138279-001	iBASE Object Diskette, 7 of 11
138280-001	iBASE Object Diskette, 8 of 11
138281-001	iBASE Object Diskette, 9 of 11
138282-001	iBASE Object Diskette, 10 of 11
138283-001	iBASE Object Diskette, 11 of 11
138284-001	iBASE R2.0 Update 0, 1 of 1
138644-001	iBASE Release Notes
136972-002	<i>Getting Started with iDIS</i>
137724-001	<i>iBASE User's Reference</i>
138267-001	<i>Key Operator Tutorial</i>
138268-001	<i>Key Operator User's Reference</i>
138563-001	<i>Using iDIS Documentation</i>
138269-001	<i>iDIS System Administration Reference</i>
138270-001	<i>iDIS Installation &amp; Configuration Guide</i>
138820-001	iDIS Menu Selection Maps (2)
138349-001	Binder/Slipcase
138350-001	Binder/Slipcase

9800035-06  
121918-001

Problem Reports (2)  
Software Registration Form  
(Please Return Immediately)

## Pre-Installation Requirements

- XENIX 3.4, update 1 (or greater), and for networked systems, XENIX-NET R2.0, must be installed on your system before iBASE R2.0 can be installed.
- Installation procedures for iBASE are in the *iDIS Installation and Configuration Guide*.
- For networked systems, it is important to plan your network design and sequence of installation before attempting the installation. Refer to the following manuals for additional information:

*OpenNET Planning and Design Guide* (P/N 138444)  
*iDIS Installation and Configuration Guide* (P/N 138270)  
*System Administrator's Installation Guide* (135823)

## New Features and Enhancements

- For the purpose of clarity, the term "domain" has been replaced throughout the system with the term "workarea." In addition to individual and public workareas, iDIS now supports private group workareas.
- The process of managing users, resources, workareas and nodes across the network has been simplified, and largely automated.
- Users are given varying capabilities according to their classification as Administrator, Key Operator, Developer or user. These capabilities (including a user's "default" editor) can be managed by the administrator from within the menu system.
- Group workareas provide file sharing among groups of users without requiring public access.
- Features can be installed or deleted across a subnetwork.
- On-screen menu aids help the user navigate through the menus. Information added to the screen informs the user of his/her location within the file system and the network.
- The capability has been added to allow a user to quickly access frequently-used menu selections anywhere in the menu system with a single keystroke.
- The on-line HELP capability has been expanded to provide more tutorial assistance for menus, functions, forms, and dynamic lists.
- Enhanced file management includes group workareas, non-INTEL application (asw) directories, multiple line printers and mailing text files.
-

iBASE is no longer required to be physically on each node.

- TTY Passthrough works over the network.
- User backup/restore works across the network and supports hard disks, floppy disks, and 9-track tape.
- Resources across the network (such as printers, disks, floppy disks, tapes, modems, etc.) can now be controlled from within the menu system by the administrator with the Distributed Resource Manager.
- Lower case "idis" login ID has been added to simplify login.
- Consistency of all menus and dynamic lists has been improved.
- System Administration has been added to provide the following capabilities:
  - Display system status and statistics.
  - Change user login passwords.
  - Add or delete users.
  - Printer Administration provides the capabilities of selecting a printer, managing the printer queue, aligning printer forms, starting and stopping the printer, and viewing the printcap file.
  - Group Administration provides capabilities for controlling which users are "grouped" together, and maintenance of a group mailing list.
  - Save/Restore operations provide the capabilities of selecting a backup device, saving and/or restoring entire workareas or individual files, listing backup files, and preparing diskettes or tape for use.
- Subnetwork Administration has been added to provide the capabilities of viewing network status and statistics, adding network nodes (execution, user, subnetwork master, and public), deleting network nodes (execution and user), adding or deleting network users, and administering the network from a single node.

## Release 2.0 Considerations

### Password Protection

- As the iDIS system is delivered, the following login IDs are not password protected:
  - idis
  - iDIS
  - ilna
  - shutdown
  - netoff
  - neton
  - iuser
  - ikey

idev  
ademo

To prevent system misuse, the administrator should use the facility provided on the iDIS "Admin" menu to provide passwords for these login IDs. It is important **NOT** to do this from XENIX shell as root, especially for ilna, since this impacts an **entire network**, mail service is degraded, and logical network updates can fail.

## Network Administration

- With this release, significant improvements have been made in network administration. The tasks of configuring and managing large numbers of computers and work-stations have been simplified and standardized in the iDIS system. Logical network administration affects the entire network and is performed at the logical network master node. Subnetwork administration affects only the nodes in a subnetwork and is done at the subnetwork master node.

Most critical aspects of network administration have been incorporated into this release of iDIS. A few capabilities, such as deleting logical network master, subnetwork master and public server nodes from the logical network, have yet to be automated.

- Public server nodes have been incorporated into the logical network design to allow shared access to printer and host communications resources. In this release, other types of resources (i.e. winchester disks, floppy disks, tapes, etc.) cannot be utilized through the public server facility.
- In a network environment, iDIS R2.0 requires the default network delimiter of "//".

## Key Operator Functions

- To disconnect a node from the XENIX Networking Software (OpenNET), the key operator or administrator may login as "netoff" and respond with the number of minutes until the node is to be disconnected, and whether or not a warning message is to be broadcast to all users on the subnetwork.

Disconnecting a node from the network may result in severe consequences (such as loss of data, interruption of processing, loss of execution paths, etc.) for any subnetwork users who happen to be using work areas or iDIS software located on the disconnected node. It is the responsibility of the administrator to provide these users with sufficient time and warning to complete their work and/or log off before the node is disconnected.

While a node is waiting to be disconnected, new users will be prevented from accessing the node. Subnetwork users already accessing the node will be allowed to continue until the specified waiting period has elapsed, at which time the node will be disconnected from the network without regard to who is using the node or how they are using the node.

- Ordinarily, a node will be automatically connected into the XENIX Networking Software when it is booted, but if it is disconnected using the netoff login, the key operator or administrator is required to login as "neton" to reconnect the node.
- If a key operator's group workarea does not reside on the same node for which he has key operator privileges, he cannot save that workarea by selecting the "group" option. He must move into his own group workarea and save it with the "current" option.

## Distributed Resource Management

- Some resource names created by the iDIS system cannot be typed into the field on the resource management forms because they contain hyphens or other special characters. These resource names may be entered by typing the characters up to the hyphen and then using the space bar to select the name as a legal value.
- The assignments for a resource must be deleted before the resource itself is deleted. If the resource is deleted before its assignments, the assignments cannot be displayed nor can they be deleted.

## Printer Administration

- The iDIS system provides its own lpr command which is an enhanced version of the standard XENIX lpr command. For the non-iDIS user, this iDIS lpr command functions exactly as the standard XENIX lpr command, following the usual lpr rules for determining the printer to which output will be sent.

For the iDIS user working in the shell, unless the "-P *printername*" option is used, the iDIS lpr command will direct the output to the user's "current" printer, as selected on the iDIS printer administration menu. If no "current" printer has been specified, the iDIS lpr command will direct its output to the default system printer.

- On the printer administration menu, the "form" selection says:

*Print forms alignment on: current printer*

but it does not print the forms alignment pattern on that printer. Instead, it allows the selection of the printer from a dynamic list.

## User Backup and Restore

- To prevent two users from accidentally writing to or reading from each other's disk or tape, iDIS puts a "lock" on the resource. This lock allows iDIS to warn a user that the device he wants to use is in use by someone else. However, if the "View/restore unit" operation is abnormally terminated, or if the user prematurely exits that dialogue with the < DEL >

key, this lock is not removed. When another user attempts to use the resource, he may be falsely told that someone else is already using it.

Whenever this message appears in the backup and restore process, the user should check to see if anyone else is actually using the resource. If it is not currently in use, the user may ignore the warning by responding to the message with a "y" and allowing the process to proceed.

## System Backup and Restore

- System-wide backup and restore is not included as part of this release of iBASE.
- **Do not backup and subsequently restore** the /usr/iDIS/synch or the /usr/ilna/netsynch directories **while the node is processing its transactions**. It is not necessary to backup these directories, and system damage could result if they are "restored" while transactions are pending or in progress.

The results of restoring a partially completed batch of transactions range from the loss or corruption of user or critical system data, to the mailing of duplicate, erroneous, or confusing status messages. What damage actually occurs depends on what has been done in between the time that the backup is made and the time it is restored, and at what point in the transaction processing the backup was made.

The user is advised to either not backup the /usr/iDIS/synch and /usr/ilna/netsynch directories, or to back them up only when absolutely sure that no network synchronization transactions are in the process of being completed.

## User Administration

- Before initializing the first user, the system administrator should log in as "iuser", "ikey" and "idev" to ascertain whether or not the default configurations are acceptable for his/her installation. If the default configurations are not correct, it will be necessary to change the User Template definitions.

For example, the default editor that iDIS is initially configured for is "vi". If most of the users in your network use and prefer another editor, such as iWORD, this can be accommodated by changing the default editor entry on the User Template Definition screen.

- The ability to modify a user's information is not in this release. The administrator may modify the template that is used to build users, but once the user is built, it cannot be changed by iDIS.
- Before an "iDISdeveloper" user is initialized, the iMENU feature should be installed on the node from which the user will obtain his/her execution copy of iDIS.
-

If vi is used as the default editor during menu development, it may be necessary to use ":w!" to update already existing files.

- When deleting a user, the corresponding entry in the personnel directory is not removed. The administrator can remove the entry by performing the personnel modification selection from the (Auser) menu.

## Transaction Processing

- If a node is "down," and/or several batches are waiting to be completed, the administrator should avoid submitting more batches of transactions until the situation is resolved, and the number of unfinished batches is reduced. Because it starts new processes with each batch of transactions, and there is a system limit on how many processes may be running at the same time, the transaction processor is somewhat limited in how many outstanding transaction batches it can safely process at one time.
- Once a batch of transactions has been scheduled for later execution, it cannot be rescheduled for a different time or deleted.

## Menu System Configuration

- During initialization, the menu system needs to acquire terminal capability information. Before the TERMCAP file is read, the directory named by the environment variable SAEEXEC is searched for a file named *termtype*.trm, where *termtype* is the type of terminal being used (e.g. "intelpc"). Such a file is assumed to contain a "compiled" termcap entry, and if found will be used to drive the terminal. These "trmfiles" provide a faster iDIS initialization, and are supplied in /usr/iDISbin for each supported terminal type. If the /usr/iDIS/menus/termcap entry for a given terminal type is changed, the corresponding trmfile must be deleted or rebuilt for the change to take effect. To rebuild a trmfile for, say, "intelpc", login as idis, enter the Xenix shell, and execute the commands:

```
cd /usr/iDISbin
TERMCAP=/usr/iDIS/menus/termcap
export TERMCAP
gettcd intelpc >intelpc.trm
```

Note that in a network, any change to the termcap file will need to be replicated on all master and execution nodes, as will the rebuilding of the trmfile.

## Dynamic Lists

- Dynamic lists are used throughout the system to solicit user selections. Because of memory limitations, the number of items that can appear on a dynamic list is truncated at 128. These items truncated from the end of the dynamic list cannot be accessed directly by the iDIS system.



For example, in File Management many actions involve building a dynamic list of filenames. In order to guarantee File Management access to all your files, you must limit the number of files in any single cabinet (or drawer) to 128.

At present, no workaround exists for this problem.

## TTY Passthrough

- TTY Passthrough will derive its remote capabilities information from user defined resources if a "vt-remote" resource has been defined, otherwise it will expect to find that information in a file named /etc/remote.
- The remote capabilities file (as defined by the "vt-remote" resource or /etc/remote) provides the information necessary for TTY Passthrough to connect to a remote host processor, whether it's through a dial-up modem or a virtual terminal connection. Host processors that are defined in the remote capabilities file must conform to the same syntax as required for entries in the /etc/termcap file, e.g. there must be a space or a tab after the host name and before the comment (as illustrated below), and succeeding lines must be preceded by a space or a tab:

```
host1|-   This is a sample /etc/remote entry:
          :dv>//nodename/dev/ttycx:b4#1200:
          :pn=939-8563:du:at=hayes:
```

- When defining "vt-lan" or "vt-phone" resources, the "nodename" field in the "SPECIFY THE RESOURCES" form is not used. The name specified for the resource must be identical to the corresponding host-name used in the remote capabilities file. For example, for the "host1" entry shown above, the corresponding resource should also have the name "host1" placed in the resource field.
- When using SCP to configure a port for use with TTY Passthrough, it is important that the port be set up as a terminal and not as a modem.

The procedure for verifying that the port is set up as a terminal and not a modem is to look at the device listing in /dev. If the minor device number (which is immediately before the date) is greater than 64, the port is set up as a modem:

```
crwx-wx-wx 1 root 1, 68 Sep 11 1:39 /dev/ttyd4
```

On the other hand, the same device set up as a terminal would read:

```
crwx-wx-wx 1 root 1, 4 Sep 11 1:39 /dev/ttyd4
```

If a mistake is made in configuring the modem port, the method of correcting this minor device number would be to use the mknod command to "subtract" 64 from the minor device number (using the above as an example):

```
(log in as root)
rm /dev/ttyd4
mknod /dev/ttyd4 c 1 4
```

- As a general rule, most modems that are configured for no parity expect a character size of 7 bits. These are attributes that are declared in the /etc/remote file.
- Any port to be used as a dial-out port for TTY Passthrough must be disabled. Any port being used as a dial-in port must be enabled.
- The device path in the remote capabilities file must always include the node name whereon the device resides, if it is to be used across the network.