

Keowee Product Suite

for the IBM
iSeries and AS/400

Installation Guide

Version 4.11



Keowee Systems, Inc.

418 East Waterside Drive
Seneca, SC 29672
(864) 885-0094
sales@keoform.com
www.keoform.com

Copyright Notice:

Copyright 2008, Keowee Systems, Inc., All rights reserved. No part of this publication may be reproduced, transmitted, transcribed, stored in a retrieval system, or translated into any language in any form, by any means, without the express written permission of Keowee Systems, Inc.

Trademark Acknowledgments:

FORMagic, FontMagic, ProSign, and ShopCom are trademarks of Keowee Systems, Inc.
IBM is a registered trademark of International Business Machines, Inc.
MS-DOS and Windows are trademarks of Microsoft Corporation.
TrueType is a registered trademark of Apple Computer, Inc.

Fair Usage Policy Overview:

The Keowee Product Suite is a copyrighted product, distributed without charge for evaluation purposes. In order to prevent copyright infringement, the Suite cannot be copied or distributed except as specifically described in the Fair Usage Policy provided in the next section. For an overview of this policy, please see "Copying and Distributing the Suite" in section 1.4.

Major Changes in Version 4:

A completely new client system, optimized for use with all 32-bit versions of Windows (9x, NT, 2000, XP), provides major new functions and ease of use:

- The Keowee Product Suite integrates the PC client and host installation and upload processes for **all** of our AS/400 host-based products. A single client and host installation provides evaluation versions for a number of our products and quick upgrades of prior versions.
- Full co-existence among all V1-V4 client versions allows host upgrades to be performed when convenient. FORMagic/400 forms created with V3 clients can be migrated to the V4 client or remain separately managed. With minor exceptions for FORMagic/400, there is complete compatibility between all host versions of all of our host-based products and the V4 client. Therefore, there is no requirement to upgrade the host immediately when the client is upgraded. FORMagic/400 V1 and older versions of V2 are **not** compatible with forms created by the V4 client; these host versions **will** require prompt upgrading if new or existing forms are created or changed.
- The new Automated FTP installation process provides quick, fully automated installation of the Keowee Product Suite host component, for AS/400 hosts adequately configured to support FTP clients.
- The new Automated FTP upload process provides quick, fully automated upload of FORMagic/400 forms and FontMagic/400 fonts, for AS/400 hosts adequately configured to support FTP clients. This support is also compatible with V3 host versions.
- The Keowee Product Suite provides full OS/400 V6 support for all of our AS/400 host-based products. Several rarely used features were removed from FORMagic/400 and FontMagic/400 in V3. They are no longer supported by Keowee Systems, but OS/400 V6 support is provided for continued usage under V4. These features include the internal download/remove APIs FMPSDNL and FFPSDNL.

Keowee Product Suite - Fair Usage Policy

Keowee Systems, Incorporated ("KSI") provides the Keowee Product Suite ("the Suite") and its component products ("the Programs") for your fair usage. You assume full responsibility for selection of the Suite and its Programs for your purposes, for their installation and usage, and for any and all results obtained from their usage.

You own this copy of the Suite. Like a book, it is Copyrighted and protected by the Copyright laws of the United States and various foreign countries. To comply with our Copyright, the Suite and its Programs must be installed and used only in strict accordance with the Fair Usage Policies provided below.

1. EVALUATION VERSION: The Keowee Product Suite is distributed without charge as a single installable file KPSV4.EXE. This file contains the **Evaluation Version** of many of our products. This file may be **freely** copied and distributed provided that all copies are **exact duplicates** of the original. You can install and use the **Evaluation Version** freely on any number of AS/400 **host** and Windows-based **client** systems. This version provides for the temporary evaluation and initial production usage of all Programs in the Suite for a limited time. All features of the Suite and its Programs are fully functional, though some functions include minor usage limitations. No Activation Keys are required for evaluation. Copying or distributing **any** Evaluation Version installed on client or host systems is restricted as provided below.

2. PERMANENT VERSION: Permanent Activation Keys ("PAKs") for client and/or host systems must be obtained from KSI to enable permanent usage of the Suite and its Programs and optional features and to remove or the reduce the usage limitations in effect during the evaluation. You can install each PAK on a **single** client or host system. If you wish to use the Suite or any of its Programs permanently on additional host and/or client systems, you must obtain additional PAKs. Once a PAK is installed, the Suite and its Programs become the **Permanent Version**. Copying or distributing **any** Permanent Version installed on client or host systems is restricted as provided below.

3. RETURNS: KSI provides the Evaluation Version of the Suite without charge to facilitate evaluation and initial usage. PAKs are provided **only** after the user has evaluated the Suite, determined that one or more of its Programs meet all user requirements, and paid any fees for acquiring appropriate PAKs. Therefore, no returns or refunds will be allowed.

4. TECHNICAL SUPPORT: Reasonable amounts of free telephone support and corrective updates, if available, will be provided for up to ninety (90) days from the date of initial installation. KSI reserves the right to alter or discontinue this policy at any time without notice. Beyond this initial period, additional support, corrective updates, and functional upgrades will be provided on a chargeable basis, to the extent they are available.

5. COPYING AND DISTRIBUTION: You may freely copy and distribute the file KPSV4.EXE, provided that all copies are **exact duplicates** of the original. You can freely make copies of all installed client folders and host libraries for normal backup and archival purposes **only**.

PC folders containing the installed client, whether for evaluation or activated for permanent usage, **cannot** be copied or distributed for any other purpose except complete transfer to another computer. AS/400 libraries containing installed host components, whether for evaluation or activated for permanent usage, **can always be freely copied and distributed**. AS/400 activation keys are sensitive to system data: the serial number and processor group. If the system data changes for any reason, the host components will revert to time-limited evaluation mode and new PAKs must be obtained to restore full and permanent operation. There may a charge for providing new PAKs.

(continued)

You may **not** distribute, lend, or install copies of client PAKs beyond the number of copies documented with the PAK. You may **not** modify, translate, or reverse engineer the Suite or any of its Programs or related documentation without the prior written consent of KSI. You must use your best efforts and take all reasonable steps to protect the materials from unauthorized reproduction, publication, disclosure, and distribution.

In order to prevent Copyright infringement, no other copying or distribution is permitted.

6. TRANSFER TO ANOTHER COMPUTER: You may transfer the Suite and its Programs and PAKs from one host or client system to another as long as it is completely removed from the original system and usage on the new system fully complies with all terms of this Fair Usage Policy. A fee may be charged by KSI for providing new PAKs.

7. COPYRIGHT: Copyright 2008, Keowee Systems, Inc., All rights reserved. The Suite and its Programs are protected by the U. S. Copyright Act and by the laws of most other countries. Unauthorized copying of the Suite or its Programs is an infringement of KSI's Copyright and subjects the violator to civil lawsuit. Criminal infringement under the U.S. Copyright Act carries a fine of up to \$25,000.00 and imprisonment of up to one year (17 USC 506).

8. LIMITED WARRANTY AND LIMITATION OF REMEDIES: THE SUITE AND PROGRAMS CONTAINED IN THIS PACKAGE ARE PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE SUITE AND ITS PROGRAMS IS ASSUMED BY THE ORIGINAL PURCHASOR. IN THE EVENT THERE IS ANY DEFECT, YOU ASSUME THE ENTIRE COST OF ALL NECESSARY SERVICING, REPAIR, OR CORRECTION. SOME STATES DO NOT ALLOW THE EXCLUSION OF IMPLIED WARRANTIES, SO THE ABOVE EXCLUSION MAY NOT APPLY TO YOU. THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE.

KSI does not warrant that the functions contained in the Suite and its Programs will meet your requirements, that operation will be uninterrupted or error-free, or that any defects will be corrected. KSI will assume no responsibility for problems caused by changes in the operating characteristics of the computer hardware or software operating environment after the initial support period has expired. KSI will not be responsible for problems in the interaction of the Suite and its Programs with software and/or hardware supplied by others.

The documentation supplied with the Suite and its Programs contains important cautionary messages. Used improperly, the Suite and its Programs may cause operational difficulties with the user's computer. KSI assumes no responsibility for any difficulties, whether due to customer error, defects in the Suite or its Programs, or environmental factors in the customer's installation.

IN NO EVENT WILL KSI BE LIABLE FOR ANY DAMAGES (INCLUDING ANY LOST PROFITS OR SAVINGS, OR OTHER INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING FROM THE USE OF OR INABILITY TO USE THE SUITE OR ITS PROGRAMS EVEN IF KSI HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES) OR FOR ANY CLAIM BY ANY OTHER PARTY. SOME STATES DO NOT ALLOW THE LIMITATION OR EXCLUSION OF LIABILITY FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

KSI makes no other expressed or implied warranty with respect to the Suite or its Programs.

Table of Contents

1.0 – Introduction and Installation

1.1 Welcome	6
1.2 About This Manual	6
1.3 System Requirements	7
1.4 Copying and Distributing the Suite	8
1.5 Installing the Suite	8
1.6 Starting the Administrator	9
1.7 Technical Support	9
1.8 Overview of Products	10

2.0 – Host Installation and User Object Uploads

2.1 Overview	11
2.2 Installing the Host Component	12
2.3 Uploading User Objects	15
2.4 Setting the Host Upload Transfer Option	17
2.5 Using a File Transfer Utility for Object Uploads	18
2.6 Libraries, Folders, and User Objects	19
2.7 Troubleshooting	19

3.0 - Using the Windows Client

3.1 Overview	20
3.2 Migration Facility	20
3.3 Preferences	21
3.4 Register Facility	22
3.5 Logging Facilities	22

4.0 - Using the Host Installation and Upgrade Menu

1.0 – Introduction and Installation

1.1 Welcome

Thank you for choosing our products! To simplify their installation and usage, we have integrated most of our Windows products and all of our AS/400 products into the **Keowee Product Suite**. The single download file KPSV4.EXE provides quick installation and **everything** you need for all included products: the PC client, host components, PDF-based product information and user guides, and additional technical information for both new installations and upgrades!

Initially, all products and all optional features are fully active for evaluation after installation on the PC. After a single "mini-installation" from the PC to the host, any combination of our AS/400 products can then be installed for evaluation. Each installed, and all optional features, will be fully active for a 30-60 day evaluation. The only limitations will be in the number of "user objects" (FORMagic/400 forms, FontMagic/400 fonts, ProSign/400 message images, and ShopCom/400 communication lines) you can create and use during the evaluation. No activation keys are required for evaluation!

The following products are available in the Suite:

- FORMagic/400 Forms Overlay Manager
- FORMagic/400 PDF File Creator and Forms Manager
- FORMagic/Windows Forms Overlay Manager
- FORMagic/Windows Host Developer Kit
- FlashMagic Non-volatile Memory Manager
- FontMagic/400 Font Manager
- ProSign/400 SignOn Display Manager
- ShopCom/400 ASCII Communications Manager

The client menu system provides product summary information covering functions and features for each of these products. A very brief summary of each is also provided in section 1.8 below.

You don't risk anything except your time when you try our products. We can't guarantee success for every situation, but, if you encounter any difficulties with our products, we **can** guarantee to make every reasonable attempt to resolve them.

If you decide to purchase any combination of the products and features in this Suite, just call us with instructions for billing via invoice or credit card. If needed, we will quickly provide temporary activation keys that provide additional activation time and increase product usage limits while payment is processed. Once payment is received, we will provide permanent activation keys that enable your selection of products and features for permanent usage. Installation of keys is very simple; and you do **not** have to re-install the software.

1.2 About This Manual

This Installation Guide introduces you to the Keowee Product Suite. It covers only non-product-related client functions, host installation, and product functions for user object uploads (because they are so similar to the installation function). All other product functions are detailed in the user guide for each individual product.

Information is provided in these general categories:

- General introduction, installation, and startup - Chapter 1
- Host installation and user object uploads - Chapter 2
- Non-product client functions - Chapter 3
- Host Installation and Upgrade Menu – Chapter 4

You should begin with Chapter 1 to familiarize yourself with the Suite, to install it, and to launch the Administrator. If you will be using AS/400 host-based products, use Chapter 2 to install the host component of the Suite and Chapter 4 to install and upgrade our AS/400 products on the host. Chapter 3 describes the non-product-related functions provided by the client on the Tools menu. The Register function will always be needed to install permanent activation keys. The Preferences function will be important to all users of any FORMagic product, as well as users of our Windows-only products. The Migration function will be important to all FORMagic users upgrading from V3 to V4. The log functions will be of use to all users of any AS/400 host-based product.

Please note that important information is provided in the ReadMe First! document available from the Installation menu. This document is particularly important for AS/400 users performing any product upgrade.

1.3 System Requirements

The Keowee Product Suite client will operate under any 32-bit version of Windows. However, we recommend using Windows XP. The AS/400 host components of the products in this Suite support all AS/400, iSeries, System i, and i processors operating under OS/400 V3R7 or above. There may be minor limitations with some products when using V4R1 and below. Please call if you need support for V2R3 through V3R6, AS/436, or System/36 SSP.

You must also meet the following additional requirements:

- When AS/400 products are used, installation, update, and user object uploads require one of the PC-to-AS/400 communication methods described in Chapter 2 below.
- FORMagic/400, FORMagic/Windows, FORMagic/Windows Host Developer Kit, and FontMagic/400 require HP laser printers, or compatible, providing full hardware-based firmware support for PCL 5e, 5c, or above. FontMagic/400 also requires printer-based support for TrueType scalable fonts. See Chapter 6 in the FORMagic400 User's Guide for more details.
- FORMagic/400 and FontMagic/400 require print emulators providing 3812 SCS or equivalent functionality. Twinax, terminals with printer ports, LAN ASCII, TCP/IP, network, and print server attachments generally comply. Our products are compatible with almost all hardware- and software-based printer emulators, though setup will vary and is a user responsibility. See Chapter 6 in the FORMagic400 User's Guide for more details.
- FORMagic/400 and FontMagic/400 are compatible with SCS printer device descriptions. They are **not** compatible with devices configured for IPDS or AFP capability. Note that, in many cases, you can re-configure existing emulators for SCS operation, or create additional SCS device descriptions and direct spoolfiles created for **both** AFP and SCS applications to the same physical printer.
- FlashMagic supports the HP laser printers described above, provided they also support flash memory programmed through HP PJI download commands.
- ShopCom/400 requires one or more AS/400 EIA RS-232 ASCII communication lines.
- No other special hardware or software is required for using any of our products. However, storing FORMagic/400 forms in non-volatile flash memory or hard drives may increase operational efficiency for some environments. If you need this capability, FlashMagic provides the necessary support.

1.4 Copying and Distributing the Suite

The Keowee Product Suite is a copyrighted product distributed without charge as a single installable file, KPSV4.EXE. This file contains evaluation versions of most of our Windows products and all of our AS/400 products. It may be freely copied, distributed, and installed onto multiple machines, provided that all copies are **complete and exact duplicates** of the original file.

After installation:

You can always make copies of all installed folders and libraries for backup and archival purposes **only**.

PC folders containing the installed client, whether for evaluation or activated for permanent usage, **cannot** be copied or distributed for any other purpose except complete transfer to another computer. AS/400 libraries containing installed host components, whether for evaluation or activated for permanent usage, **can always be freely copied and distributed** via SAVLIB/RSTLIB.

When a product or feature is purchased, PC and host activation keys enabling permanent usage of the purchased item(s) will be provided to you. PC activation keys can be installed on individual PCs **only** up to the quantity indicated with the key provided by Keowee Systems.

AS/400 activation keys are sensitive to system data: the serial number and processor group. If the system data changes for any reason, the host components of our products will revert to time-limited evaluation mode. System data changes for reasons such as total system replacement, system upgrade, SAVLIB/RSTLIB transfers to another system, and SAVLIB/RSTLIB to an additional system. **Note:** Future versions of our products will also include the partition where installed in the system data.

When any of the system data changes, new activation keys are required to restore full and permanent operation. There is a charge for providing new activation keys unless the installation is covered by an active support plan. All user objects (defined in section 1.1) copied from the prior system **will remain usable** on the new system while in evaluation mode prior to the installation of new activation keys. However, if the number of user objects equals or exceeds the evaluation limit automatically granted for the new system, user objects cannot be added or changed until (a) an enhanced activation key is obtained from Keowee Systems and installed, or (b) sufficient user objects are deleted to make the actual count less than the evaluation limit.

In order to prevent copyright infringement, no other copying or distribution is permitted except as specifically described in the Fair Usage Policy.

1.5 Installing the Suite

To install the Suite on a Windows PC, simply click on the distribution file KPSV4.EXE and follow all prompts carefully. **Be sure to select New Installation or Upgrade an Existing V4 Installation appropriately.** The complete client system will be installed or upgraded; and shortcuts for the client Administrator, this [Installation Guide](#), and all product user guides will be installed in a group on the Start-Programs menu.

You can install the client system on a network drive. However, you must purchase a separate client copy for each machine that any permanent activation keys are installed on. Note that multi-user support is **not** provided; only **one** user can access the system at a time.

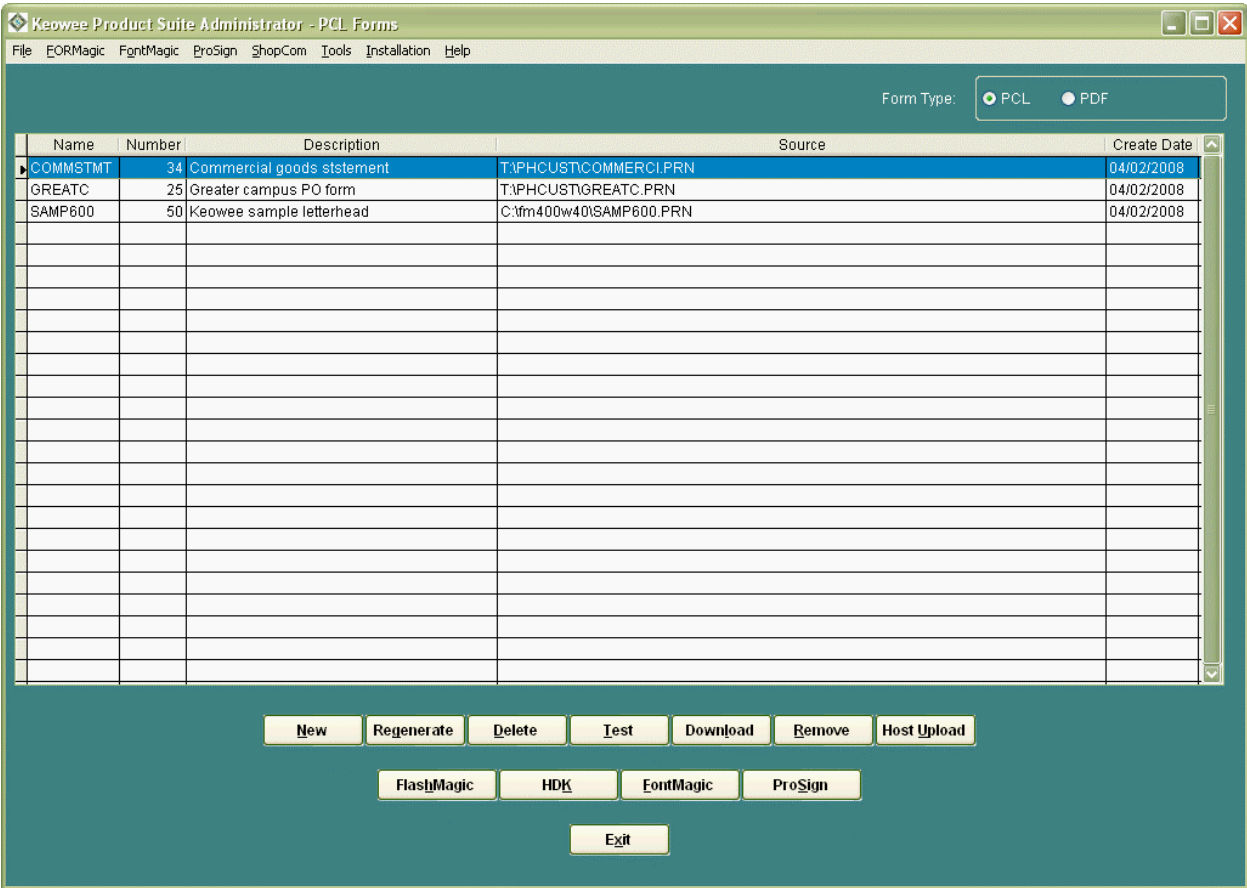
Please see the next section to start the Administrator, verify client operation, print and review documentation, and install the host component (if necessary). Be sure to save the KPSV4.EXE file in a safe location. It is your permanent media, and it will be needed if the Suite must ever be re-installed.

1.6 Starting the Administrator

Simply click the KPS Administrator in the Start-Programs menu to launch the initial Administration window. This window is used directly by all FORMagic products, but it also provides direct access to all other products, all documentation, plus tools and the host installation facility. Please consult the individual product user guides when using the Administrator to perform all product-related functions, except uploads. User object uploads are very similar to installation, and they are covered in Chapter 2.

This [Installation Guide](#) covers only the non-product-related client functions, host installation, and product functions for user object uploads. Note there is a dedicated product menu for each of our product families. Each product menu provides summary product information, the complete user guide, and other technical information for the product.

If you will be using AS/400-based products, you must install the Keowee Product Suite host component. Please see Chapter 2 for details.



1.7 Technical Support

We provide reasonable amounts of free technical support for installing the Keowee Product Suite, using the products within the Suite, and implementing applications with those products. Free technical support is available for 90 days beginning with the date of the original installation. This support is intended to help clear up questions about the Suite and our products, how to use the client and host components and their features, how to implement applications with our products, and other questions of a general support nature.

Our support is **not** intended to provide "over-the-phone-training" or to be a substitute for using this [Installation Guide](#) or the [User's Guide and Reference Manual](#) for each individual product. After the 90 day free support period expires, extended technical and maintenance support is available on a fee basis with our Annual Support service.

All calls for technical support should be made to our published number. Support requests can also be emailed to support@keoform.com. However, we have found that, due to the nature of our products, we can generally provide faster and more effective service to those who make their support requests by phone instead of email.

1.8 Overview of Products

The Suite contains evaluation versions for each of the products summarized below. A more complete product summary is available for each product from the client menu for its product family.

FORMagic/400 Forms Overlay Manager: Quickly add electronic forms to *any* AS/400 application using *any* printer connection type, *any* SCS printer emulator, *any* HP compatible laser printer, and *any* PC package to design forms. Only minor programming changes are required for adding forms to most applications. The optional, command-driven **AutoMerge** feature **completely** eliminates the need to modify HLL programs when adding forms to most applications. FORMagic/400 can also be used with some S/3x applications. If you need assistance with forms design, our services can help fill the gap.

FORMagic/400 PDF File Creator and Forms Manager: Create PDF files, with or without forms, from pre-existing SCS spoolfiles. Use forms already designed for use with FORMagic/400; no new forms design is required. Fully command driven, no programming changes are required! **Coming soon:** Use FontMagic/400 fonts in PDF files, with or without FORMagic/400 forms. For AS/400 only.

FORMagic/Windows Forms Overlay Manager: Same as above for applications using any 32-bit version of Windows. You must be able to add PCL escape commands to your applications. Therefore, your applications must **bypass** the Windows printer driver, utilize the command transparency facility within the driver, or provide a specific means for sending PCL escape commands to the printer.

FORMagic/Windows Host Developer Kit: Includes FORMagic/Windows and allows the forms it creates to be uploaded to, stored on, and used from almost any host including IBM mainframes, Linux, Unix, AIX, Sun, HP, DEC, and virtually all ASCII-based systems.

FlashMagic Non-volatile Memory Manager: Stores FORMagic forms in flash memory to improve operational convenience for some environments. For HP laser printers supporting flash memory or hard drive accessories and the PJI method for programming non-volatile devices. FlashMagic is available **now** for the PC client, coming soon for the AS/400 host.

FontMagic/400 Font Manager: Quickly add popular 1-D barcodes, postal codes, MICR banking, and OCR machine-readable fonts to host reports using **variable print data** in host spool files. Our scalable TrueType fonts are easy to use in bar coding, archive indexing, check, bulk mailing, label, turnaround document, and many special applications! We can even convert TrueType fonts *you* supply for use with your AS/400 applications. Ideal for standalone usage or with FORMagic/400 forms.

ProSign/400 SignOn Display Manager: Create highly customized and *dynamically changeable* signon display screens with colors, logos, dynamic messages, special attributes (underlining, blinking, etc), and more. Change messages interactively or via program API at any time, *while subsystems are active!* Ideal for getting important notices and announcements out quickly and being certain they will be seen.

ShopCom/400 ASCII Connection Manager: Connect asynchronous ASCII devices, such as scales, time clocks, sensors, laboratory instruments, and many others to the AS/400 without any knowledge of communications protocols.

2.0 - Host Installation and User Object Uploads

2.1 Overview

Installing or upgrading the host component of the Suite and all uploads of user objects, such as FORMagic/400 forms and FontMagic/400 fonts, require that files be transferred from the client to the host. Because of widely varying procedures, security concerns, and configurations among AS/400 systems, the Suite provides broad flexibility for making these transfers.

Many factors are outside our control when communication occurs between systems. To reduce the associated risk for both upgrades and uploads, we employ a multi-phase process. Phase one transfers the necessary file(s) from the PC into the AS/400. Phase two then updates production files. In every case, **the initial phase one transfer into the AS/400 is completely risk free because it does not touch production files in any manner.**

To facilitate this flexibility, we install the host component of the Suite into a dedicated library, PCI400W. (**Note:** In older versions of our products, PCI400W was a transient library used only during installation and deleted at completion. Beginning with V4, it is now retained as a permanent library; but it contains **no** production data.) Once the host component is installed, the Host Installation and Upgrade menu (see Chapter 4) is used to install new products for evaluation and/or to upgrade older production versions. Because it contains no production data, the host component can be upgraded at any time with no risk to production operations.

Three distinct phase one transfer methods are provided for installation/upgrades and user object uploads. With the exception of installation/upgrades performed using the Automated FTP method, you must perform additional steps to complete the phase two processes:

- **Automated FTP**, using an FTP client built into the Suite. We recommend using this method wherever possible, for all transfers. **Installation/upgrades:** The PC client performs both installation and upgrades **directly** into library PCI400W. This is a **fully** automated process; there is actually no second phase. PCI400W will be created if it does not exist. **Uploads:** The PC client uploads the necessary files into a holding file in the product library. This method requires that you change the default Host Upload Transfer setting. Once the transfer finishes, you must complete the upload with the appropriate host upload completion function.
- **Mapped Network Drive**, using the NetServer support built into OS/400. The PC client transfers the necessary files into the proper folder in QDLS. **Installation/upgrades:** Once the transfer finishes, you must perform additional steps to install or upgrade the PCI400W library. **Uploads:** This method uses the default setting for the Host Upload Transfer option. Once the transfer finishes, you must complete the upload with the appropriate host upload completion function.
- **Other**, using any qualifying method you wish to employ. Initially, the PC client places the necessary files in any folder on any drive you designate. You can then use any method to manually copy them into the proper folder in QDLS (a mapped network drive will likely be involved) or use any qualifying utility to transfer them manually into the proper library. The transfer utility must support the transfer of ASCII text files, binary database files, and binary save files. **Installation/upgrades:** Once the transfer finishes, you must perform additional steps to install or upgrade the PCI400W library. **Uploads:** If you manually copied the upload files into database members, this method requires that you change the Host Upload Transfer setting. Once the transfer finishes, you must complete the upload with the appropriate host upload completion function.

Sections 2.2 and 2.3 provide details for the installation/upgrade and user object upload processes. The required folders, libraries, and files are summarized by product component in section 2.6. Changing the Host Upload Transfer setting is covered in section 2.4.

2.2 Installing the Host Component

You should begin with a review of the ReadMe First! document available from the Installation menu. This is particularly important if you will be upgrading existing products. Then, determine the transfer method you will be using for installation; and select it from the Installation menu. You must meet all pre-requisites for the selected method. In particular, note that *ALLOBJ authority is required for **all** installation methods. Depending on your choice, one of the windows below will be opened. Carefully observe all prompts on all windows that are presented to you. Because none of the installation methods will affect any production files, you can safely repeat any and all methods as many times as needed to achieve a successful installation.

Automated FTP: The AS/400 FTP server must be active. You must have adequate authority for using it to create the PCI400W library, if needed, and to transfer files. This method performs a **complete**, fully automated installation. When it completes, you can use the host component to install or upgrade our host products. See Chapter 4 for details. If a problem occurs while the Automated FTP process is being used, the log functions available on the Tools menu will provide detailed information that can help you diagnose and resolve it.

Automated FTP Install to AS/400

Installation will use the Automated FTP process. Please review the following requirements before continuing.

- Your AS/400 FTP server must be active.
- You must have sufficient authority for the installation process. At least *ALLOBJ authority is required.

The Keowee Product Suite will be installed or updated into a permanent AS/400 library named PCI400W.

Site Name for your AS/400: keowee

User ID: cjhorne

Password: *****

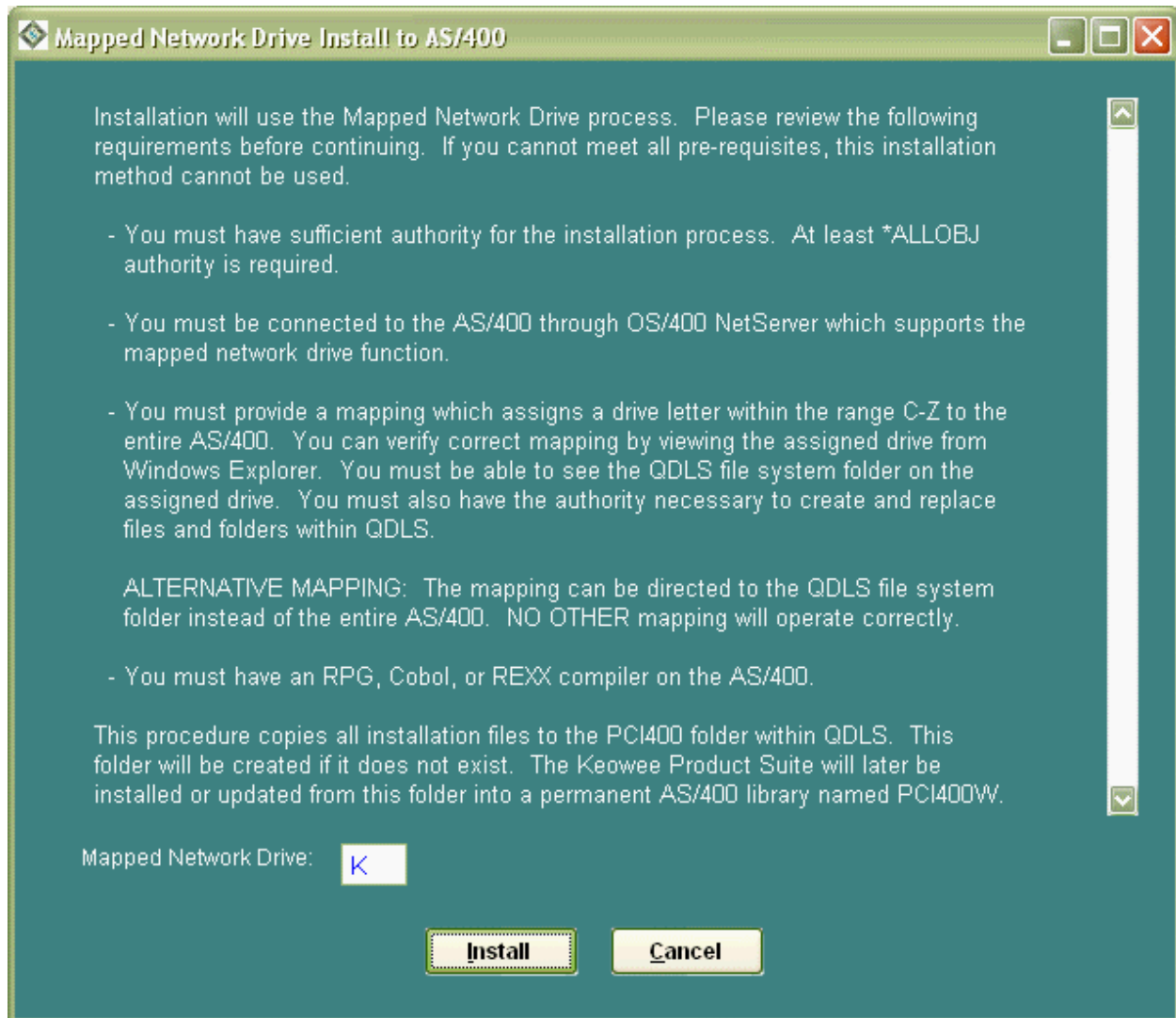
Print Install Cancel

Mapped Network Drive: OS/400 NetServer supports the mapped network drive function and must be active. All transferred files will be placed in the PCI400 folder within QDLS. If it does not exist, it will be created automatically. It is strongly recommended that you use WRKFLR, option 14, to set Public Authority to *ALL for this folder. You must have configured a NetServer share which provides read/write access to the entire AS/400 or to the QDLS folder itself, and have mapped a drive letter C-Z to it. **No other mapping will operate correctly.** If you have multiple hosts, be sure the mapping is to the correct host.

You can verify correct setup, mapping, and authorities from Windows Explorer. When viewing folders on the assigned drive, you must be able to see the root level of the Integrated File System (folders QDLS, QSYS.LIB, QOpenSys, etc) **-or-** you must be able to see the contents of QDLS (folders QDIADOCs,

QIWSADM, etc). The User ID creating the network drive connection must have sufficient authority to create a folder in QDLS, and add and delete files in it. You should use Windows Explorer to verify that you can actually perform each of these functions. If not, please call IBM or your support provider and ask for assistance in establishing a configuration which allows you to do so.

If this is your first installation of the host component, you must have an RPG, Cobol, or REXX compiler installed on the AS/400.

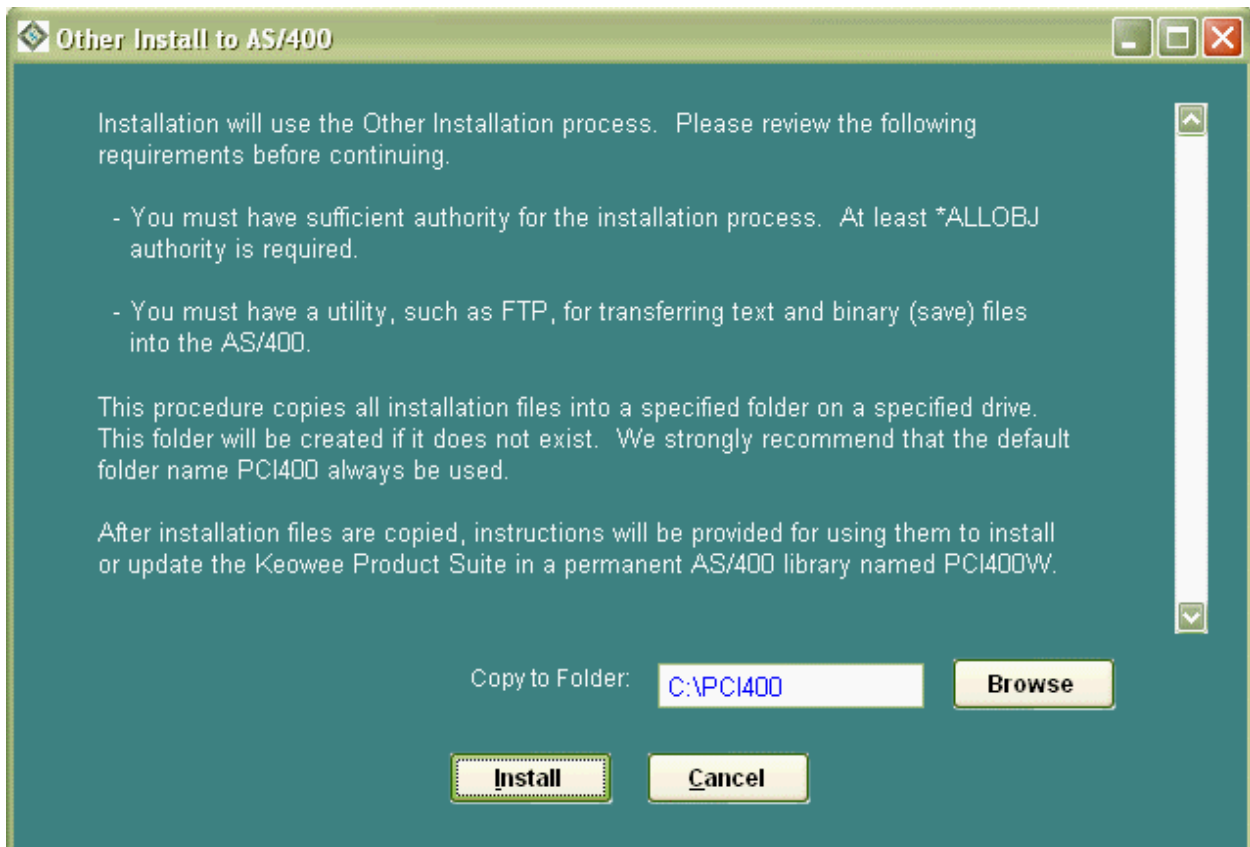


When the Mapped Network Drive procedure completes, you must execute the AS/400 commands shown below to finish the host installation. You must be signed on with a user profile having *ALLOBJ authority. Note the similarities in the commands. **Please type them exactly as shown!** When the last command completes, you can use the host component to install or upgrade our host products. See Chapter 4 for details.

- **CRTLIB PCI400W** (if it does not exist)
- **CRTSRCPF PCI400W/QSRC** (if it does not exist)
- **CPYFRMPCD PCI400 PCI400W/QSRC KIPLDPC KIPLDPC**
- **CRTCLPGM PCI400W/KIPLDPC PCI400W/QSRC**
- **CALL PCI400W/KIPLDPC (*MND')**

Other Installation: Two variations are available for this installation method. After this method copies the installation files to the designated folder, select either variation:

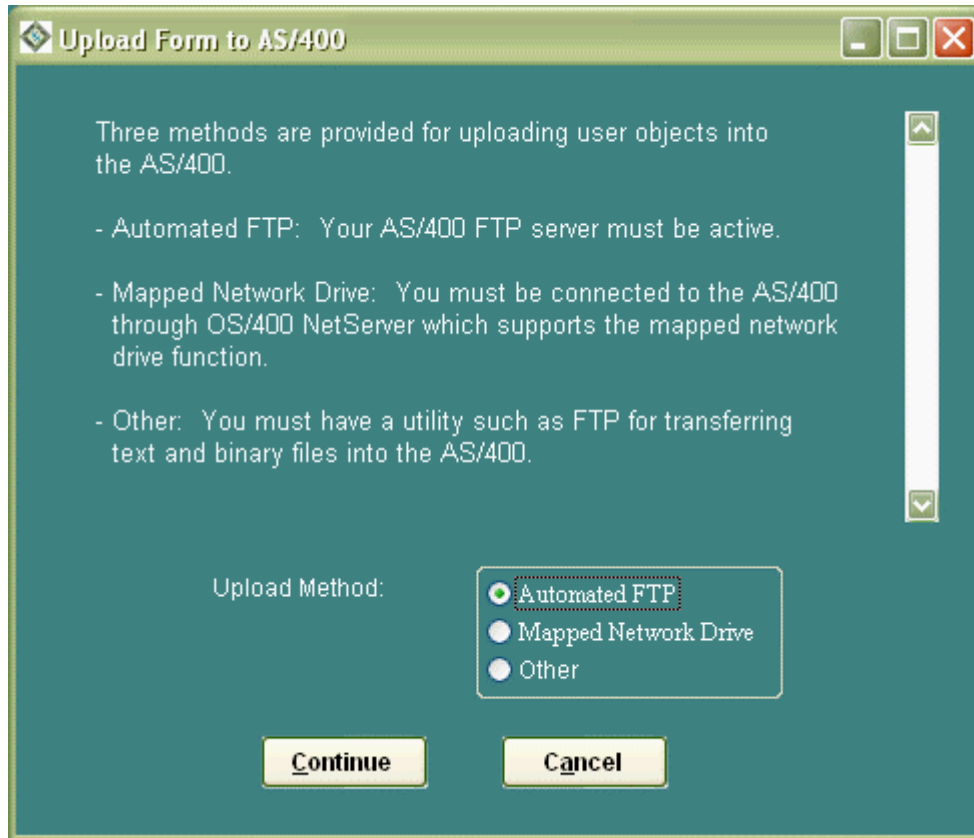
- (a) **Use a Mapped Network Drive to transfer the files into QDLS:** All requirements stated above for a mapped network drive installation apply. Manually create the PCI400 folder in QDLS, if it does not exist. It is strongly recommended that you use WRKFLR, option 14, to set Public Authority to *ALL for this folder. Use Windows Explorer to copy and paste **all** files created in the folder you designated into the PCI400 folder in QDLS. Then, execute the final installation commands shown above for Mapped Network Drive. When the last command completes, you can use the host component to install or upgrade our host products. See Chapter 4 for details.
- (b) **Use Windows FTP, or your own utility, to transfer a save file into the host:** Manually create the PCI400W library, if it does not exist. Create save file PCI400W/KIGP37, if it does not exist. Use FTP to transfer the KIGP37 file, as a binary save file, into PCI400W/KIGP37. If you are using FTP and are not familiar with the required FTP commands, the file KIFTP.TXT in the client installation folder provides generic instructions. After the save file is transferred, execute these commands to complete installation of the host component. When the last command completes, you can use the host component to install or upgrade our host products. See Chapter 4 for details.
 - **ADDLIBLE PCI400W**
 - **RSTOBJ OBJ(KIPLDPC) SAVLIB(ZWRK) DEV(*SAVF) OBJTYPE(*PGM) + SAVF(PCI400W/KIGP37) MBROPT(*ALL) ALWOBJDIF(*ALL) + RSTLIB(PCI400W**
 - **CALL KIPLDPC (*FTP')**



2.3 Uploading User Objects

User object uploads ultimately move user-created forms and user-selected fonts into AS/400 database files in production libraries. The process is almost identical to that used for host installation of the Keowee Product Suite. The primary difference is simply that different files are transferred. The process begins when you select the Host Upload function for a FORMagic/400 form or the Upload Fonts function for a FontMagic/400 font.

You must first choose the upload method. Generally, you should use the same method chosen for installing the host component. As with installation, we also recommend using Automated FTP wherever possible.



Depending on the selected upload method, additional windows will be opened. They are almost identical to those shown in section 2.2 for installation. Carefully observe all prompts. Because none of the upload methods will affect any production files, you can safely repeat any and all methods as many times as needed to achieve a successful phase one upload transfer. When the transfer finishes (including any applicable manual steps), you must complete the upload using the appropriate host function for the user object type being uploaded. The final upload window will provide specific instructions.

Automated FTP: The AS/400 FTP server must be active. You must have adequate authority for using it to create and delete members in a database file and to transfer files. This method requires a Host Upload Transfer setting of 'FT'. Once the phase one transfer finishes, you must complete the upload on the host (see **Completing the upload on the host** below). If a problem occurs while the Automated FTP process is being used, the log functions available on the Tools menu will provide detailed information that can help you diagnose and resolve it.

Mapped Network Drive: OS/400 NetServer supports the mapped network drive function and must be active. All transferred files will be placed in the product upload folder within QDLS, as shown in section 2.6. The upload folder will be created automatically if it does not exist. It is strongly recommended that you use WRKFLR, option 14, to set Public Authority to *ALL for this folder. You must have configured a NetServer share which provides read/write access to the entire AS/400 or to the QDLS folder itself, and have mapped a drive letter C-Z to it. **No other mapping will operate correctly.** If you have multiple hosts, be sure the mapping is to the correct host.

You can verify correct setup, mapping, and authorities from Windows Explorer. When viewing folders on the assigned drive, you must be able to see the root level of the Integrated File System (folders QDLS, QSYS.LIB, QOpenSys, etc) **-or-** you must be able to see the contents of QDLS (folders QDIADOCs, QIWSADM, etc). The User ID creating the network drive connection must have sufficient authority to create a folder in QDLS, and add and delete files in it. You should use Windows Explorer to verify that you can actually perform each of these functions. If not, please call IBM or your support provider and ask for assistance in establishing a configuration which allows you to do so.

This method requires a Host Upload Transfer setting of blanks. Once the phase one transfer finishes, you must complete the upload on the host (see **Completing the upload on the host** below).

Other Upload: Two variations are available for this upload method. After this method copies the upload files to the designated folder, select either variation:

- (a) Use a Mapped Network Drive to transfer the files into QDLS:** All requirements stated above for a mapped network drive upload apply. Manually create the product upload folder in QDLS, if it does not exist; see section 2.6 for the proper name. It is strongly recommended that you use WRKFLR, option 14, to set Public Authority to *ALL for this folder. Use Windows Explorer to copy and paste **all** files created in the folder you designate into the product upload folder. This method requires a Host Upload Transfer setting of blanks. Once the phase one transfer finishes, you must complete the upload on the host (see **Completing the upload on the host** below). **Note:** This method is actually the same as the Mapped Network Drive method described above. It simply splits the initial portion of the upload process into two parts. This method is very useful when the client system that creates the user objects being uploaded is not on the same PC as that providing the mapped network drive connection. This method also completely isolates our client from the host copying process; this isolation can be useful if problems, such as authority issues, arise when files are copied into the host.
- (b) Use Windows FTP, or your own utility, to transfer files into the host:** Use your transfer utility to copy the files placed in the designated folder to the host; see section 2.5 for **specific** requirements for making these transfers. If you are using FTP and are not familiar with the required FTP commands, the file KIFTP.TXT in the client installation folder provides generic instructions. This method requires a Host Upload Transfer setting of 'FT'. Once the phase one transfer finishes, you must complete the upload on the host (see **Completing the upload on the host** below).

Completing the upload on the host: Regardless of the upload method used, when the phase one transfer finishes (including any applicable manual steps), you must complete the upload using Work with Overlays or Work With Fonts, option F6 or 1. See the User's Guide for FORMagic/400 or FontMagic/400 if you are not familiar with these functions. **Reminder:** Prior to using the host function, you must insure the Host Upload Transfer setting is set to the proper value (blanks when using a QDLS folder, 'FT' when using database files).

The Work With Overlays/Fonts functions use the Host Upload Transfer setting to locate the proper upload files. The completion process **verifies checksum information**. If a file transfer is not handled correctly or if anything changes the contents of the upload files, a checksum error will be diagnosed. The uploaded files (members in database files or files in QDLS folders) are **not** deleted when the upload is completed. You can remove them manually or simply allow them to be overlaid automatically if the form or font is uploaded again. When this step is completed, you can begin using the newly uploaded user object in your applications.

2.4 Setting the Host Upload Transfer Option

You must set the Host Upload Transfer option, separately for FORMagic/400 and FontMagic/400, to 'FT' whenever FTP or another file transfer utility is used instead of a mapped network drive to transfer files. This choice can be changed from time to time, but it applies to all uploads until changed again. The default setting is blanks (value ' '), which must be used whenever uploads are made through QDLS folders instead of database files. Note the commands are slightly different for FORMagic/400 and FontMagic/400:

FORMagic/400: **CHGDTAARA DTAARA(FMAGIC/FMAMTXT (101 2)) VALUE('FT')**

FontMagic/400: **CHGDTAARA DTAARA(FONTMAGIC/FFAMTXT (100 2)) VALUE('FT')**

2.5 Using a File Transfer Utility for User Object Uploads

This section applies only when you are using the **Other Upload** method and FTP or another file transfer utility to upload user objects. Your file transfer utility must be able to transfer text and binary files into the AS/400 database. If you are using FTP and are not familiar with the required FTP commands, the file KIFTP.TXT in the client installation folder provides generic instructions.

The transfer utility **must** upload files from the PC into host files in accordance with the following:

- **FORMagic/400:** The Other Upload function places three files in the specified folder for each form being uploaded. These files are named xxxxxxxx.HPI, xxxxxxxx.HPO, and xxxxxxxx.HPS where xxxxxxxx is the name of the form being uploaded. The transfer utility must copy these files into FMAGIC/FORMSUPLD, with members named as follows, and using the method indicated:

PC Filename		Member	Method
xxxxxxx.HPI	➔	Ixxxxxxx	(1)
xxxxxxx.HPO	➔	Rxxxxxxx	(2)
xxxxxxx.HPS	➔	Fxxxxxxx	(2)

- **FontMagic/400:** The Other Upload function places two files in the specified folder for each font being uploaded. These files are named xxxxxxxx.HPI and xxxxxxxx.HPF where xxxxxxxx is the name of the font being uploaded. The transfer utility must copy these files into FONTMAGIC/FONTSUPLD file, with members named as follows, and using the method indicated:

PC Filename		Member	Method
xxxxxxx.HPI	➔	Ixxxxxxx	(1)
xxxxxxx.HPF	➔	Rxxxxxxx	(2)

You **must** use appropriate utility settings and commands to accomplish the following:

Method (1) Specify transfer options for a carriage return/line feed delimited text file with Ascii-Ebdcid translation. Note the PC record contains approximately 80 characters. The host record length will be 132; the record must be padded with spaces. If you view the file on the PC with a text viewer and on the host with DSPPFM, you should see one record, identical in both locations, and the data should be readable; everything is character data and spaces except the host file will contain a hex byte, for the PC's end-of-file character, which should be ignored.

Method (2) Specify transfer options for a stream file with **no** translation and a record length of 132. If you view the file on the PC with a binary viewer and on the host with DSPPFM set to hex mode (use F10, then F11), you should see identical hex data in the same relative positions throughout the file. The only difference is that, on the host which uses fixed length records, the last record will be padded with hex zeroes at the end. **This hex zero padding must be provided!**

For example, if the xxxxxxx.HPO file is 300 bytes long on the PC as shown by a DIR command, the Rxxxxxxx member will contain three records. On a **hex** basis, record one **must match** bytes 1-132 in the .HPO file, and record two **must match** bytes 133-264. Bytes 1-36 of record three **must match** positions 265-300, and positions 37-132 of record three **must be** filled with binary zeros.

2.6 Libraries, Folders, and User Objects

The chart below summarizes the various libraries, folders, and user object upload files used by the Keowee Product Suite client and AS/400 host components. This information will be necessary for use with some user object upload methods. It will often be helpful as general information.

If you need to remove a host product, for any reason, simply delete the applicable libraries and folders shown in the chart below. If you need to delete the client, use the Uninstall option in the Keowee Product Suite group on the Start-Programs menu.

Product	AS/400 Library	User Object Type and QDLS Upload Folder	User Object Upload File
Keowee Product Suite - Host Component FORMagic/400 Forms Overlay Manager FontMagic/400 Font Manager ProSign/400 SignOn Display Manager ShopCom/400 ASCII Comm Manager	PCI400W FMAGIC FONTMAGIC PROSIGN PHCMN	Install files: PCI400 Forms: FMAGIC Fonts: FONMAGIC Not used Not used	Not used FORMSUPLD FONTSUPLD Not used Not used
<p>The libraries and folders indicated above only apply to our AS/400 products.</p> <p>Default client installation folder: c:\fm400w40 (Only folder used by the client)</p>			

2.7 Troubleshooting

The installation and upload processes are highly reliable when performed according to the detailed instructions we have provided. Virtually all issues that do arise occur during the copy process. Only standard file copy functions are being used by our processes, and they cannot report the specific cause in many cases when errors do occur. Most issues arise from not having:

- An actual working connection to the AS/400 for the mapped drive.
- Sufficient configuration of FTP, network shares, or mapped drives.
- Sufficient authority to perform the necessary operations. **This is, by far, the most common issue that arises, and we have no control over it.**

These factors account for virtually all of our support calls. We are happy to help when we can, but we have little or no control over most of these factors. We will often have to refer you to IBM SupportLine or your support provider for assistance to resolve these issues if we are unable to diagnose and resolve them with you.

3.0 - Using the Windows Client

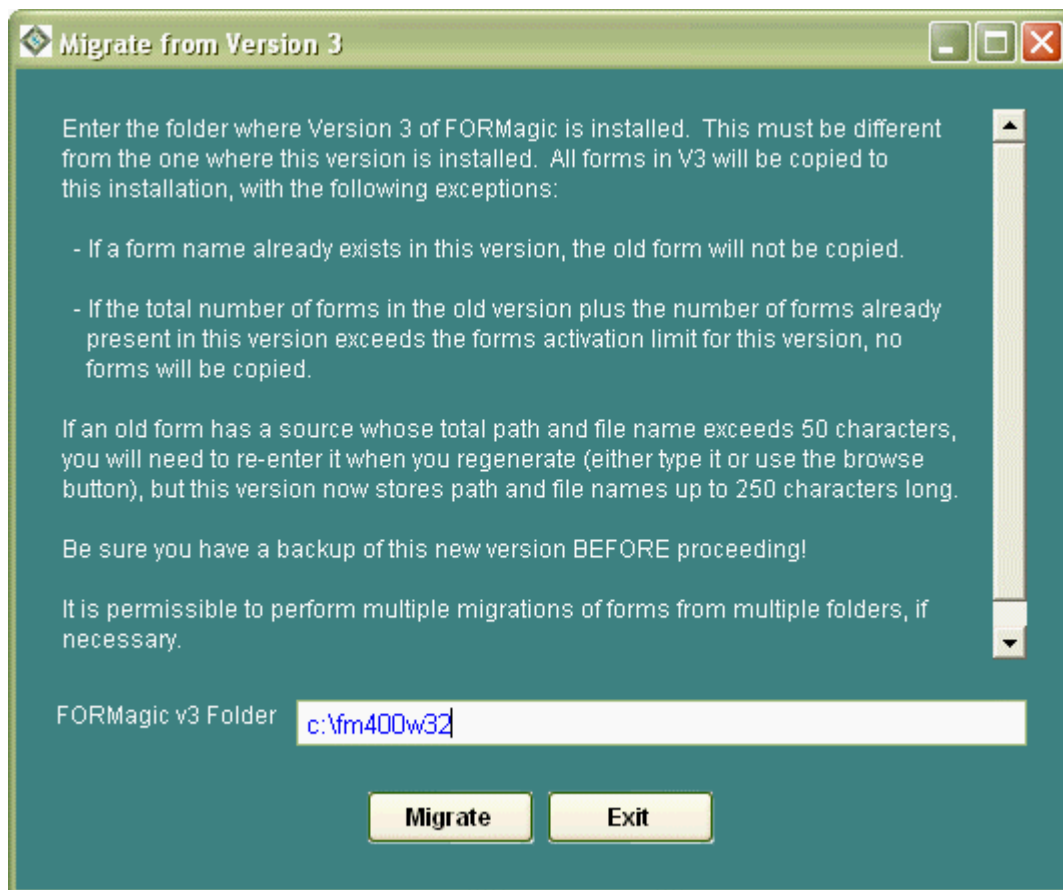
3.1 Overview

Usage of the Keowee Product Suite client will normally be devoted to managing user objects related to specific products. These functions are invoked from the initial screen, or from the individual product menus; and they are covered in the user guides for the individual products. The Installation menu provides multiple functions related to installation activities. These functions, and the very similar user object upload functions, are covered in Chapter 2. This chapter details occasionally-used functions provided on the Tools menu.

3.2 Migration Facility

The Migration facility applies only to FORMagic/400 forms. When upgrading from V3 to V4, this facility enables you to copy all forms, with their related information, from a folder containing V3 into a folder containing V4. At that point, you can delete the older installation, if desired, or retain it for any reason.

If you have FORMagic/400 forms in multiple V3 folders, you can migrate all of them. There are certain situations where forms will not be migrated: (a) if a form with the same name already exists, or (b) if the V4 form limit would be exceeded. Note that, in some cases, path information for V3 PRN files may not be available for transfer.



3.3 Preferences

The Preferences window allows you to specify your own defaults for certain functions. All items for which preference settings are available will not be relevant for all users.

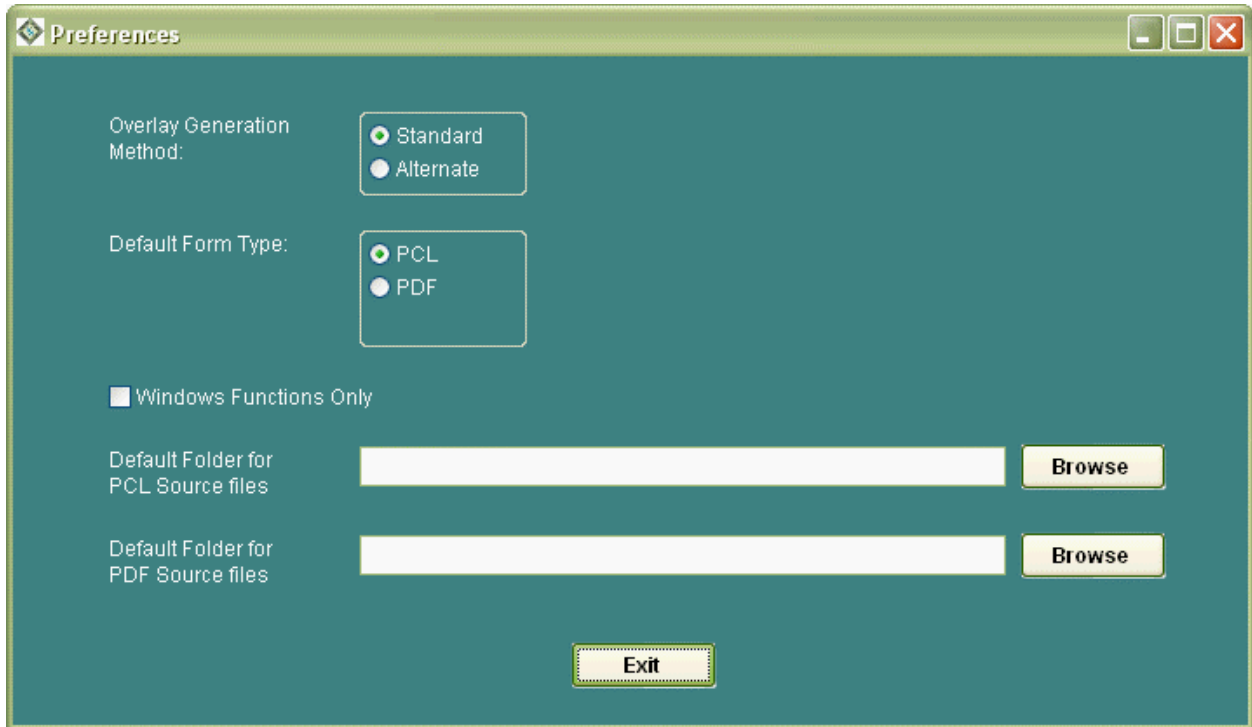
Default Form Type: Users of any FORMagic PCL or PDF product can specify the most commonly used form type for automatic selection on the Administrator screen. PCL is otherwise the default.

Overlay Generation Method: Applicable to all FORMagic PCL products. Our overlay generator is highly reliable, but it does fail on rare occasions. Such failures are indicated by **minor** corruption of a **small** number of elements on the form, **not** the entire form. To resolve the corruption, use another approach for the failing elements; or try the Alternate generator. Select the Alternate method, generate your form, and re-test it. Then, **be sure to reset the method back to Standard**. There are not many situations where the generator will mishandle elements. However, overlay generation is a highly complex process that is very time-consuming to revise. For this reason, we have provided two, **completely different**, generators. Please report **all** problems, with either generator, so we can address them in at least one of the generators in a future release.

Default PCL Folder: Users of any FORMagic PCL product can use this setting to specify a default location for PRN files used to create PCL overlays. If you keep PRN files in multiple locations, specify the most commonly used location.

Default PDL Folder: Users of FORMagic/400 PDF can use this setting to specify a default location for PDF files used to create PDF overlays. If you keep PDF files in multiple locations, specify the most commonly used location.

Windows Functions Only: If you are **not** using AS/400 host-based products, selecting this setting will remove as many of the AS/400 functions as possible from various client menus and windows.



3.4 Register Facility

The Register facility allows you to install activation keys which control operation of the client system. They are necessary to provide permanent activation for any products and features that are purchased, initially or as subsequent upgrades. Keys can also be provided, upon request, to re-activate expired evaluation systems or to increase user object limits during the evaluation period.

The screenshot shows a dialog box titled "Register/Upgrade" with a teal background. It contains the following fields and text:

- Name: John Rogers
- Company: Calhoun Distributors
- # Overlays: 99 (dropdown menu)
- Exp. Date: 99/99/9999
- Features: 0480 ---
- Serial Number: 26074-14957
- Activation Key: 246-BK45-1357

Text on the right side of the dialog:

All fields are required and must be entered exactly as shown on your registration form.

To register or upgrade, call:
Keowee Systems, Inc.
(864) 885-0094

Buttons: Register Now, Cancel

If you wish to purchase a new product or feature or increase applicable activation limits, please call Keowee Systems. We will ask for the normal contact, billing, and host system (if applicable) information and provide permanent activation keys by email after payment is received.

When you receive a new key, it is critical that all information be entered **exactly as provided**; otherwise, the key entry will **not** be accepted. If, for example, your company name is shown incorrectly, you must nonetheless enter it exactly as provided in order for the key to be accepted. (But please let us know, so we can correct our records!)

Note that you are limited to installing the activation keys on the number of PCs indicated in the key file. If you need to install the keys on additional PCs, additional keys must be purchased.

Please retain the file containing the activation keys in a permanent location. It will be needed if the client system is transferred to another computer. There may be a charge for replacing misplaced activation keys.

3.5 Logging Facilities

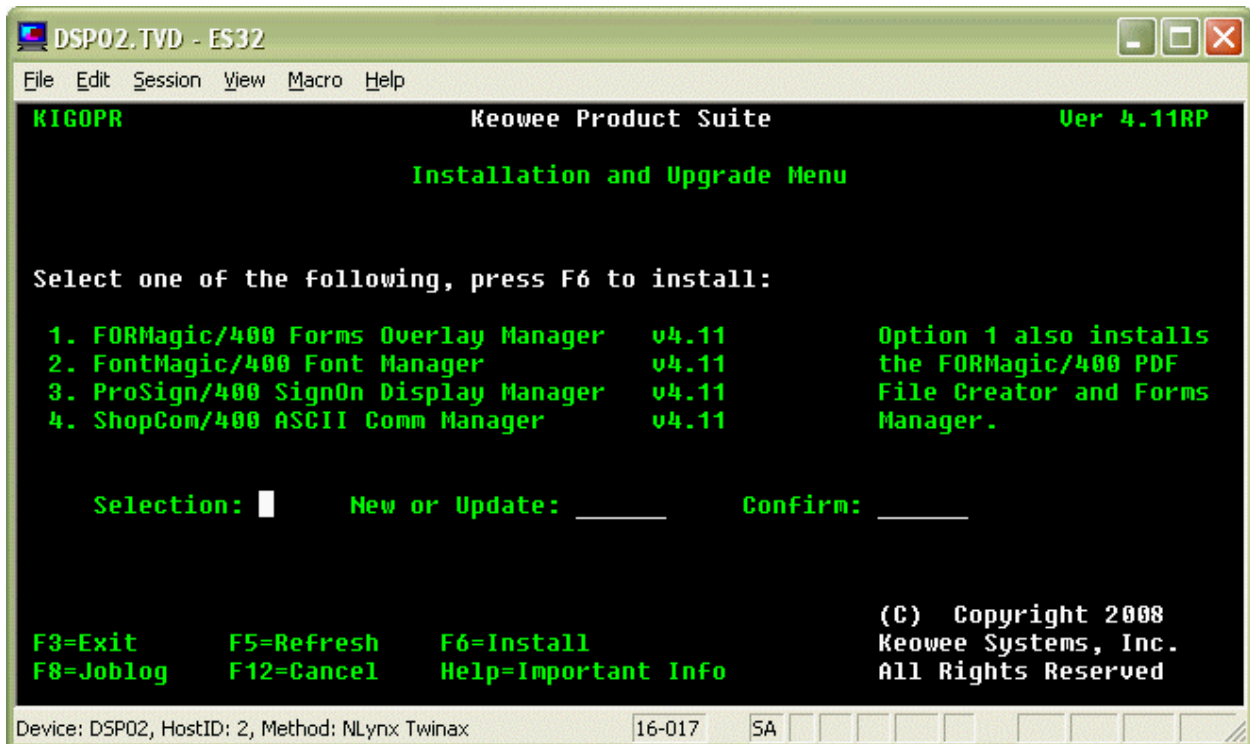
The logging functions provide access to detailed logs that are created when AS/400 host installations and uploads are performed. These logs will generally be very useful in diagnosing the cause of any issues that arise from those activities (which are covered elsewhere in this Guide).

4.0 - Using the Host Installation and Upgrade Menu

The host Installation and Upgrade menu allows you to install or upgrade any combination of our AS/400 products. If you will be upgrading production systems, be **certain** you have a **complete backup** of the appropriate AS/400 libraries (FMAGIC, FONTMAGIC, PROSIGN, or PHCMN) **before** beginning the upgrade.

You must be signed on with *ALLOBJ authority to install or upgrade products. To launch the menu:

- Add the PCI400W library to your library list with command: **ADDLIBLE PCI400W**
- Start the menu with command: **KIGOPR**



The menu provides all the functions needed to install a new product for evaluation or to upgrade an existing product. You may want to check our website at www.keoform.com to insure you have the latest version of the Suite before continuing. If not, download the latest version and upgrade the Suite on both the PC and the AS/400 first. Note that, when performing upgrades, all of your user objects (defined in section 1.1) and activation keys will be preserved if you carefully perform both installations as **Upgrades**.

Note: There are no user objects in the PCI400W library. You can always safely upgrade the Keowee Product Suite host component without first creating a backup. Each upgrade completely replaces the previous installation. No activation keys are used by the host component of the Suite. To prevent possible loss due to naming conflicts, you should never place any of your own objects in this library.

For each AS/400 product to be installed or upgraded, just type the number of the product, plus the word 'New' or the word 'Update' in the 'New or Update' field **and** in the 'Confirm' field. **There will be no request for confirmation, so be careful!** Then, press F6 to perform the installation. Each product will only take a minute or so. If you encounter any problems, press F8 to review the joblog for the cause. If installation completes successfully, you are ready to begin using the newly-installed product; just consult the appropriate user guide for complete information.