MarkMagic8 and JMagic8 Installation Instructions

Version 8 Release 1 & Version 8 Release 6

Modification Level: 131005



Support : 914-963-6600 Option 4 • Fax: 716-712-0666 • help@cybra.com



| A. | INSTALLATION / UPGRADE ROADMAP 3 - |
|----|--|
| 1. | INSTALLATION / UPGRADE ROADMAP 4 - |
| В. | INTRODUCTION TO MARKMAGIC 8 |
| 1. | INSTALLATION TERMS |
| 2. | WHAT'S NEW IN MARKMAGIC 8 6 - |
| 3. | WHAT'S NEW IN JMAGIC 8 |
| 4. | ENHANCEMENTS AND FIXES IN MOD LVL 131005 |
| 5. | MARKMAGIC ADD-ON OPTIONS 9 - |
| 6. | VERSION HISTORY 11 - |
| 7. | LICENSE INFORMATION 11 - |
| 8. | MIRRORING INFORMATION OVERVIEW 12 - |
| C. | CD INSTRUCTIONS - NEW INSTALLATION 13 - |
| 1. | INSTALLATION 13 - |
| 2. | TROUBLESHOOTING 15 - |
| D. | TROUBLESHOOTING |
| 1. | BEFORE YOU BEGIN 17 - |
| 2. | INSTALLATION 20 - |
| З. | TROUBLESHOOTING 22 - |
| Е. | CD INSTRUCTIONS - UPGRADE 23 - |
| 1. | BEFORE YOU BEGIN 23 - |
| 2. | INSTALLATION 24 - |
| З. | TROUBLESHOOTING 27 - |
| F. | DOWNLOAD INSTRUCTIONS - UPGRADE 29 - |
| 1. | BEFORE YOU BEGIN 29 - |
| 2. | INSTALLATION 34 - |
| З. | TROUBLESHOOTING 37 - |
| G. | JMAGIC INSTALLATION 39 - |
| 1. | BEFORE YOU BEGIN 39 - |
| 2. | INSTALLATION 39 - |
| З. | 5250 Web Help installation 40 - |

IMPORTANT INFORMATION FOR 4.1, 5.1 AND OLDER 6.1 USERS (PLEASE READ BEFORE UPGRADING TO MARKMAGIC 8)

Users upgrading from version 4.1 or 5.1 **must** upgrade to version 6.1 or 6.5 Mod Level 081219 before upgrading to Version 8. MarkMagic 8 does not co-exist with version 4.1 or version 5.1. Please see MarkMagic 6 install guide for details.

Users upgrading from version 6.1/6.5 mod level 080620 or earlier, to version 8 must upgrade to version 6.1/6.5 mod level 081219 first. Users upgrading from version 6.0 to version 8 must upgrade to version 6.1 mod level 081219 first.

<u>Note</u>: The MarkMagic 8 upgrade procedure will automatically cancel if the user attempts to upgrade from 4.1, 5.1 or 6.0. Please see MarkMagic 6 install guide for more details.

A. INSTALLATION / UPGRADE ROADMAP

To find your System i OS version enter the following command: **DSPPTF** To determine your current MarkMagic version and mod level (if MarkMagic is currently installed), start MarkMagic (STRMRKMAG), press F9 for a command line, and type the following command: **SETMMPRM**

IBM's operating systems "V6R1MO" and above require MarkMagic to be split into two versions compiled to different OS versions. MarkMagic 8.1 and MarkMagic 8.6 contain identical fixes and updates.

- MarkMagic 8.6 mod level 131005 is compatible with IBM's System i OS V6R1MO and above. If you are running an older MarkMagic version and plan to upgrade to OS V6R1MO or above, an upgrade to MarkMagic 8.6 is required. MarkMagic 8.6 will not run on an OS release prior to V6R1MO.
- 2. MarkMagic 8.1 mod level 131005 is compatible with System i OS releases V5R3M0 and V5R4M0. MarkMagic version 8.1 is not compatible with System i OS release V6R1M0 and above.
- 3. Both MarkMagic versions (8.1 and 8.6) are shipped on the MarkMagic Product CD. The install/upgrade program detects your OS version and automatically installs the compatible MarkMagic version. If you are downloading MarkMagic from the web, be sure to download the correct version for your OS version and mod level.
- JMagic version 8 mod level 131005 is compatible with both MarkMagic 8.1 mod level 131005 and MarkMagic 8.6 mod level 131005.

NOTE: If multiple versions of MarkMagic are installed on your system, please see *Upgrade Notes* in section E or F for important details.

NOTE: A MarkMagic installation cannot be performed if an independent auxiliary storage pools (ASP) is accessible. Tip: Remove all independent ASPs from your job by issuing the SETASPGRP (Set ASP Group) command and specify *NONE for the ASP Group parameter.



1. INSTALLATION / UPGRADE ROADMAP

B. INTRODUCTION TO MARKMAGIC 8

Enclosed is the latest modification level of CYBRA's MarkMagic 8 Bar Code Labels, RFID Tags, and Electronic Forms Software for the IBM System i featuring our JMagic 8 Client – the world's only WYSIWYG label and forms designer written in Java.

MarkMagic installation comes in a variety of flavors. The traditional CD based installation is still available. In addition, you have the alternative of downloading MarkMagic from the CYBRA website.

1. INSTALLATION TERMS

<u>Install</u> – An Install is a new installation of MarkMagic. We offer two methods of installing MarkMagic 8, via CD or via download.

<u>Upgrade</u> – An Upgrade is a move from version to version; for example, if you are an existing customer on MarkMagic Version 5.1 or 6.1 and you wish to install MarkMagic 8. We offer two methods of upgrading, via CD or via download.

<u>Update</u> – An Update is a move from one mod level to a later modification level of MarkMagic (Example: updating/replacing 7.1 Mod Level 090916 with 8.1 Mod Level 131005). We offer three methods of updating modification levels: full update via CD, full update via download, or quick update via download.

<u>Fixes</u> – Fixes are single updates to individual program objects and are not applicable to all customers. All fixes distributed since a Mod Lvl release will be incorporated into the next Mod Lvl release. Visit <u>http://www.cybra.com/resources-support</u> to see if any applicable fixes have been released for your modification level and printer device types.

You must be at OS/400 V5R2M0 or later to download and install MarkMagic 8 from the web. If using OS/400 V5R1 or earlier, please contact <u>help@cybra.com</u>. To download MarkMagic 8, visit <u>http://www.cybra.com/members-login</u>

If installing from CD, the CD contains installation programs for both MarkMagic 8 (the System i product), and JMagic 8 (the WYSIWYG client for the PC). Both, 8.1 and 8.6 are shipped on the MarkMagic Product CD.

2. WHAT'S NEW IN MARKMAGIC 8

Award-winning MarkMagic[™] 8 is the easiest and fastest way to design and print the bar code labels, electronic forms, ad hoc reports, and RFID tags you need to communicate with your customers and suppliers. The culmination of years of innovative software engineering, new MarkMagic 8 is a total document development solution with features and capabilities not found in any other product on the market.

What's Great in MarkMagic 8

New MarkMagic[™] 8 is more than a collection of updates. New MarkMagic 8 features breakthrough capabilities that give you more forms and report writing power, more flexibility to automate your document processing, more performance enhancements to reduce processing time, and more interface refinements to make designing bar code labels, RFID tags, forms and reports easier than ever before. Even more so than in previous versions, no technical skills are required to produce even more types of sophisticated documents with new MarkMagic 8.

Enhancements in MarkMagic 8

- (New) <u>Floating Footers</u> (also known as "Clamped Footers") are groups of lines and fields that print after the last detail line. The Floating Footer can appear anywhere on a page of a document or report. The Floating Footer's fields can be derived from any source field with constant and/or variable data. Any field "type" can be part of the Footer Group.
- (New) <u>Calculation Groups</u> let you total spool file data or other retrieved data. Now you can define the 'total' field using calculation groups per page, group, report, or even running totals. More functionality, no programming.
- (New) <u>Collect Pages</u> is a new Bursting parameter that searches a multiple page spool file and collects and extracts individual pages based on a value such as Customer ID. This is great for wave based printing of invoices even if orders are placed at different times of the day and therefore intermixed in the spool file.
- (New) <u>Last Page</u> is a new PrintTransformer parameter that adds an extra page to the end of a print run (or Burst). It's a great way to add legal terms or Instructions to the end of print job or PDF..
- (New) Smartphone and Social Media QR Bar Code Support: MarkMagic 8 lets you add QR bar codes to any label or form and integrate marketing and promotion programs with logistics documents.

- (New) <u>GreenShip</u> Go green with new MarkMagic support for the Sato GY412T 2-Sided Printer. Save money and save the planet by printing pick lists or return labels on the reverse side of a shipping label.
- Admin Enhancements:
 - (New) Print Log which, if turned on, tracks which formats (device, name, user lib, user name) are being printed/converted to PDF/faxed over the last X number of days.
 - (New) <u>PrintTransformer report</u> added to Print Analysis reports. Rules (in a given user library) and Conditions for a particular format are documented.
 - (New) <u>Comment field</u> added to format definitions.
 - 0

3. WHAT'S NEW IN JMAGIC 8

Enhancements in JMagic 8

- (New) <u>Dynamically create *LINK Text fields</u> by dragging DATA fields from List View Panel to the Design Canvas. Drag/Drop and the new Text field will be created as a *LINK with the data field as the source field.
- (New) Format Canvas Toggle to show fields that are Conditioned or Ruled or both.
- (New) <u>Canvas field crosshairs</u> now magically appear when selecting or moving a field.
- (New) Holding down the "Alt" Key performs a Horizontal or Vertical Lock when moving Fields via the Mouse on the JMagic Canvas.
- (New) <u>Offset Option</u> Under alignment for quick multiple field spacing. This is ideal for detail line vertical offsets.
- (New) <u>New JMagic Display Objects</u> enhance Print Preview performance by drastically improving the speed of screen refreshes. Now you can test Rules and Conditions in real time and watch the screen change dynamically.

4. ENHANCEMENTS AND FIXES IN MOD LVL 131005

MarkMagic and Options 8.1 / 8.6 131005

- Support for Printronix PXSL4M and PSCL5000R series added
- New option to run CPYGRAF under an always on JVM server job
- New OVRMMJOB features for batch processing
- Work with TextBlocks added to Main Menu
- Rules and Conditions added to Print Analysis report
- New PrintTransformer Feature: Ability to dynamically test a field's variable length
- AFP (AFPDSFX) barcode updates:
 - Datamatrix: supports lengths over 70, proper translation of pipe character, extra spaces removed
 - Maxicode: support for a blank State code
- PrintTransformer updates:
 - Graphic Conditions processing corrected
 - "Contains" rule corrected
 - "&" Rules bursting issue resolved
 - Rotated format field position with Column/Row Conditions resolved
 - Resolved RuleSet format swapping issue when using Spooled files as data source
- FormComposer fix for packed data fields & for obtaining *MASTER format field usages
- PCL variable graphic positioning
- Missing CPYGRAF parameter added
- RFID data conversion resolved when passing via the PRTLBLF DATA parameter

JMagic and Options Mod 131005

- Fixed editing and adding label file records using the Work with Label Files interface.
- VICS BOL check digit (#23) now shows as a valid check digit option in JMagic
- Graphic WYSIWYG size on Datamax formats has been resolved.
- Resolved issues with graphics that have no source images. JMagic no longer hangs when opening a format that has a graphic with no source image.
- Rulers on the left and bottom of the format are now visible at all times.
- Fixed rare case when there was an extra "save" request when closing a format.

- Export MarkMagic Fix option has been removed from the menus. This procedure should be done using MarkMagic on the server side.
- Emails did not contain a Sent Date. Corrected this problem.
- JMagic no longer sets an invalid alignment option when adding barcodes to SATO formats
- Special characters in Zebra 2D Barcodes (GS, RS, FS, EOT) will now properly encode when printing to a PDF
- UPC Human Readable text will now show properly when printing Zebra UPC labels to PDF
- Support for the HPPCL5EDG "Edge" driver is added to the PDF driver. Print offsets using the HPPCL5EDG are now visible when printing to PDF.

5. MARKMAGIC ADD-ON OPTIONS

Quick Comply RFID Add-On Option

MarkMagic supports encoding "smart" labels containing RFID tags for these seven popular thermal printer types: Monarch, Zebra, Printronix, Intermec, Sato, Datamax, and Avery Dennison. Included is support for both Class 1 and Class O+ EPC standards as well as the more prominent Class 1, Generation 2, EPC protocol from tag manufactures. MarkMagic RFID Option also supports the complex logic regarding decimal to binary to hex data conversion, so you don't have to. Just pass your System i decimal data and the RFID option will do the rest. Tag password lock/unlock and user defined data can also be defined. Quick Comply RFID lets you quickly and easily meet EPC compliance mandates with built-in item level (SGTIN) serialization. While previous versions of MarkMagic fully supported RFID tag compliance, new MarkMagic accomplishes this in a matter of minutes, rather than hours.

PrintTransformer Add-On Option (formerly called PrintManager)

MarkMagic PrintTransformer lets you print fields based on user defined conditions such as printing negative values in red, or hiding a box field if a carrier class of service does not require a box field to print. Print Transformer makes it easy to define rules at the field level. Text, Bar Code, Line, Box, Graphic, Text Block and RFID field attributes can be defined to conditionally print based on variable data or job attributes. The rule-based option gives you the ability to redirect and modify in-process print jobs without programming. Spool files that meet user-defined criteria are manipulated and printed according to user determined rules. This eliminates programming for virtually all complex forms printing applications. Using intelligent print routing, spool files can be separated and sent to different printers and e-mail addresses based on the data in the spool file. In addition, label file records can cause several labels to be printed on different printers based on the information in the label file. The JMagic PrintTransformer GUI makes defining even the most complex rule easy. <u>Note:</u> This option requires V5R3MO or higher of OS/400, PASE & JAVA v1.5

On Demand Add-On Option

MarkMagic On Demand creates a web based portal that allows your customers to securely sign on (using a userid and password) and search for and display, print or e-mail their invoices, statements, purchase orders, or other MarkMagic Forms.

Print Monitor Add-On Option

Print Monitor eliminates programming for automatic MarkMagic printing. New spooled files added to a queue or a record added to a database file will trigger a MarkMagic Job to print labels or forms.

PDF Email and Fax Add-On Option

Can produce Adobe Acrobat PDF files containing searchable text and readable bar codes. PDF documents can be sent as e-mail attachments. <u>Note: This option requires V5R3M0 or higher of</u> OS/400, PASE & JAVA v1.5

<u>FAX</u>: Any format designed using the MarkMagic HPPCL5, HPLJ4P, or AFPDS printer device types can now be faxed directly from the System i. This option requires IBM Facsimile Support for System i (licensed program: 5798FAX) to be installed and functional with a fax profile that has enhanced services enabled. To use the Fax capability, either the SNDMMFAX or PRTLBLF command can be used. (Note: in order to take advantage of MarkMagic's automatic PCL graphic conversion to AFPDS the user must be enrolled in the system directory (WRKDIRE), the source image must in the MarkMagic graphics gallery, and licensed program: 5722AF1, IBM AFP Utilities must be enabled.

Laser Printer 2D Bar Code Add-On Option

Select this option if you need to print UPS Maxicode, PDF417 or DataMatrix 2D bar codes on HP PCL Laser or IBM AFP or IPDS laser printers.

FormWeaver Add-On Option

The FormWeaver option enables printing of documents that merge up to 100 formats. An example of merged formats would be a pick ticket or invoice form with a shipping label in the lower left hand corner. FormWeaver Documents can also consist of two or more different formats, each on a separate page, for each input record. An example of multiple formats per input record would be a printed bill of lading that contains a duplexed back page with special instructions.

6. VERSION HISTORY

A complete list of MarkMagic & JMagic enhancements and updates can be found at: <u>http://www.cybra.com/documentations/markmagic-</u> version-history

7. LICENSE INFORMATION

The MarkMagic 8 licensing scheme requires that we know your processor group, in addition to the CPU model and serial number. Also we need to know whether MarkMagic will be run in more than one logical partition (LPAR).

<u>Note:</u> A new MarkMagic 8.1 or 8.6 license code is required for all MarkMagic version 6.1, 6.5, 7.0, 7.1, 7.5 and 7.6 upgrades.

The following command will display your Processor Group: **WRKLICINF** (Work with License Information) Please include the following information in your MarkMagic 8 product key requests:

You will not be able to access your LPAR number if you do not have a previous version of MarkMagic on your system. If this is the case, please let your sales representative know. We will issue you a temporary code with a default LPAR#. After you install MarkMagic you can access your LPAR# with the following command: MRKMAG80/SETMMPRM

8. MIRRORING INFORMATION OVERVIEW

Any System i deemed as a Disaster Recovery or Back Up system must have MarkMagic8 "installed" on the system and a valid authorization code. Saving objects from Prod system to DR system is not sufficient. Please install from CD or Download before mirroring formats, jobs, graphics, rules, monitors, and conditions from your Prod system.

Note: The objects listed below are meant as an overview of areas where you need to be careful. This is not intended to be a comprehensive list. Please contact help@cybra.com with any questions.

 MarkMagic licensing data is saved in LICPRD libraries which correlate to the MM version number (see below examples). Customers should not mirror these libraries.

MM81LICPRD MM86LICPRD

 MarkMagic DATA Areas, DATAQs, and User Spaces in MRKMAGDTA, MRKMAGXX, and MRKMAGUSRP should not be mirrored.

Examples:

- Data Area MMPRODKEYS in library MRKMAGXX should not be mirrored.
- Data Queues in MRKMAGDTA Library used to transfer bar code image data should not be mirrored.

| Object | Туре | Text |
|------------|-------|------------------------------|
| GRARCVDTAQ | *DTAQ | Graphics received data queue |
| GRARQSDTAQ | *DTAQ | Graphics request data queue |

 Library MRKMAGUSRP contains several User Spaces and should not be mirrored.

3) MarkMagic Objects in Library QGPL should not be mirrored.

C. CD INSTRUCTIONS - NEW INSTALLATION

1. INSTALLATION

Sign on to a new session as **QSECOFR** and confirm both QTEMP and QGPL are on your library list.

Insert the CD into the drive, and enter the following on an AS/400 command line: LODRUN *dddddd* (where *ddddddd* is the optical device name).

Once the LODRUN command is executed, the install procedure automatically confirms your OS release, copies the compatible 8.1 or 8.6 libraries from the CD to QTEMP and the MarkMagic install program will start running. The first screen that is displayed is a message that you are installing MarkMagic 8, mod 131005. Enter G to continue or C to cancel.

MarkMagic will load automatically and prompt you at various points for information such as your product keys and device types. When the install is complete, you will be prompted to sign off and then sign back on. The entire installation of MarkMagic should take less than 30 minutes.

Set MarkMagic Parameters Date: 12/23/13 CPU model type: 520 Version: 8.6 Time: 16:31:24 CPU serial num: 10B0728 Mod lvl: 131005 Processor group: P10 Logical partitn: 001 Type choices, press Enter. F4 for list Printer device types . . . <u>*ALL</u> More... F3=Exit F5=Refresh F8=Product Keys F10=Prod Key Detail F12=Cancel Add any additional device types or ***ALL** to test with all available device types. Press F8 to Set MarkMagic Product Keys (Call your Account Manager or CYBRA

Towards the end of the installation process, you will see the Set MarkMagic Parameters Screen:

Sales at 914-963-6600 Option 3 for a MarkMagic 8 rental key).

| | Set M | arkmagic product | ĸeys | | |
|---|-------|--|--|--|--|
| Date: 12/23/13 Time: 16:35:57 | 21 | | | rsion: 8.6 d lvl: 131005 | |
| Type choices, press Ent | er. | | | | |
| Product keys 1. 88CD2 ED86B C66C0 | BB101 | Expiration (mm/dd/yy) 04 / 15 / 14 00 / 00 / 00 00 / 00 / 00 00 / 00 / 00 | LPAR 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | Maximum Users <u>999999</u> 0 0 0 0 0 0 0 0 0 | Maximum Printers <u>999999</u> 0 0 0 0 0 0 0 0 0 0 |
| F3=Exit F5=Refresh | F8=W | ork with license | informa | tion F1 | 2=Cancel |

Default 45 day Labels Runtime (Print Only) product key is enabled if no product key is entered.

The rental key you will be given will enable ALL MarkMagic features. Customers who receive permanent keys will require multiple product keys to activate the following MarkMagic 8 optional features:

- Print Monitor Option
- PDF Fax & Email Option
- Laser Printer 2D Option
- RFID Printing Option (Quick Comply)
- FormWeaver Option
- PrintTransformer Option
- On Demand Option

Once the installation is complete, **please sign off your** QSECOFR session to close and deallocate any open files. Sign back on and begin using MarkMagic.

2. TROUBLESHOOTING

Two MarkMagic Installation Logs are created upon completion of installation. The summary log contains MarkMagic installation comments, while the detail log also includes the full job log. The log's details are:

Spooled Filename: MARKMAGIC User data: INSTALLLOG

In addition, the detail log is written to the following database file:

Library: QGPL File: MMINSLOG

If you have trouble installing MarkMagic 8 we request that you e-mail us the summary log immediately following your installation. If the installation is unsuccessful, there will most likely not be a printed install log. Please send the log file in QGPL to <u>help@cybra.com</u>

D. DOWNLOAD INSTRUCTIONS - NEW INSTALLATION

1. BEFORE YOU BEGIN

- Depending on your system's OS release, click on the appropriate MarkMagic 8 link (MarkMagic 8.1 for OS releases V5R3 through V5R4 or MarkMagic 8.6 for OS release V6R1M0 and above) to download. If you are prompted to open or save the .zip file, save it to a temporary directory on your PC.
- Once the download is complete, find the downloaded file and extract the zip file contents. The enclosed file will have an .EXE extension. Double click on the icon to begin the MarkMagic 8 InstallAnywhere installation process.

| InstallAnyw | InstallAnywhere | | | | | | |
|----------------|---|--|--|--|--|--|--|
| * | InstallAnywhere is preparing to install | | | | | | |
| | 94% | | | | | | |
| | Cancel | | | | | | |
| (C) 2012 Flexe | ara Software LLC. | | | | | | |

- Make sure any firewalls that you may have installed do not block the install, and also confirm that FTP is configured and running on your System i.
- NOTE: Windows XP SP2 users will have to temporarily disable the Windows Firewall by clicking START > CONTROL PANEL > WINDOWS FIREWALL and clicking the radio button for "Off". Once the Firewall is disabled, the MarkMagic 8 install process will complete without any errors.



Follow the MarkMagic 8 installation prompts by clicking "Next"



• You will reach the "MarkMagic 8 iSeries Installer" panel. There you enter the name or IP address of the CPU on which you would like to install MarkMagic 8. Also enter your iSeries user id and password (we recommend your ID have QSECOFR authority). Then click "Next".



• You will be presented with the "Pre-Installation Summary". Click Install.



Chapter D. DOWNLOAD INSTRUCTIONS -- NEW INSTALLATION Page - 19 -

• When the MarkMagic 8 process is completed, you will have a library named MM80TEMP on the System i. At this point you can restart your Windows XP SP2 Firewall, if applicable.



2. INSTALLATION

Sign on to a new session as **QSECOFR**, confirm both QTEMP and QGPL are on your library list and then enter the following command:

MM80TEMP/INSTALL.

The first screen that is displayed is a message that you are installing MarkMagic 8, mod 131005. Enter G to continue or C to cancel.

MarkMagic will load automatically and prompt you at various points for information such as your product keys and device types. When the install is complete, you will be prompted to sign off and then sign back on. The entire installation of MarkMagic should take less than 30 minutes.

Towards the end of the installation process, you will see the Set MarkMagic Parameters screen:

| | | Set MarkM | lagic Para | ameters | | | |
|------------|----------------------|----------------------|--|----------------|----------|--------------------|----------------|
| | 12/23/13 16:31:24 | CPU seri Processo | el type: al num: or group: partitn: | 10B0728 P10 | | Version Mod lvl | |
| Type choic | ces, press Enter | | | | | | |
| Printer | device types . | <u>*All</u> | | | F4 | 4 for list | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| F3=Exit | F5=Refresh I | F8=Product | Keys I | F10=Prod | Key Deta | | More Cancel |

Add any additional device types or ***ALL** to test with all available device types.

Press F8 to Set MarkMagic product keys (Call your account manager or CYBRA Sales at 914-963-6600 Option 3 for a MarkMagic 8 rental key).

| | set | MarkMagic Product | кеуз | | |
|---|--------------|--|--|--|--|
| Date: 12/23/13 Time: 16:35:57 | 21 | | | | |
| Type choices, press Ent | er. | | | | |
| Product keys 1. 88CD2 ED86B C66C0 | <u>BB101</u> | Expiration (mm/dd/yy) 04 / 15 / 14 00 / 00 / 00 00 / 00 / 00 00 / 00 / 00 | LPAR 1 0 0 0 0 0 0 0 0 0 0 0 0 0 | Maximum Users <u>999999</u> 0 0 0 0 0 0 0 0 0 0 0 | Maximum Printers <u>999999</u> 0 0 0 0 0 0 0 0 0 0 0 0 |
| F3=Exit F5=Refresh | F8=1 | Work with license | informa | tion F1 | 2=Cancel |

The Default 45 day Labels Runtime (Print Only) product key is enabled if no product key is entered.

The rental key you will be given will enable ALL MarkMagic features. Customers who receive permanent keys will require multiple product keys to activate the following MarkMagic 8 optional features:

- Print Monitor Option
- PDF Fax & Email Option
- Laser Printer 2D Option
- RFID Printing Option (Quick Comply)
- FormWeaver Option
- PrintTransformer Option
- On Demand Option

Once the installation is complete, **please sign off** your QSECOFR session to close and deallocate any open files. Sign back on and begin using MarkMagic.

3. TROUBLESHOOTING

Two MarkMagic Installation Logs are created upon completion of installation. The summary log contains MarkMagic installation comments, while the detail log also includes the full job log. The log's details are:

Spooled Filename: MARKMAGIC User data: INSTALLLOG

In addition, the detail log is written to the following database file:

Library: QGPL File: MMINSLOG

If you have trouble installing MarkMagic 8 we request that you e-mail us the summary log immediately following your installation. If the installation is unsuccessful, there will most likely not be a printed install log. Please send the log file in QGPL to <u>help@cybra.com</u>

E. CD INSTRUCTIONS - UPGRADE

1. BEFORE YOU BEGIN

UPGRADE NOTES:

- If you upgraded from MarkMagic V6.1 or V6.5 or V7.2 or V7.7 <u>to</u> V8.1 or 8.6, your formats will be available in both versions, in each of your user libraries. Any changes to formats or new formats created after the installation will have to be exported out of one version and imported into the other version.
- Although this situation is unlikely, it important to understand MarkMagic 8 will upgrade from the most recent MarkMagic version on your system, even if an older version is set as your system default. Example: If both 6.1 (MRKMAG60) and 7.2 (MRKMAG70) are installed and 6.1 is your *SYSTEM default running your everyday production, MarkMagic will "see" 7.2 and upgrade any formats, jobs, graphics, and monitors found in 7.2. Note: renaming or deleting MRKMAG70 in this scenario will not force the upgrade of your 6.1 objects. In other words, the upgrade program does not allow a user to "skip over" a version. Please use the MRKMAG60/WRKMMVSN or MRKMAG70/WRKMMVSN command to help determine if multiple MarkMagic versions are installed and which is the most recent (more WRKMMVSN details can be found later in this section).

Do <u>**not**</u> remove or rename the MarkMagic product library MRKMAG60, MRKMAG70, or any MarkMagic User Libraries (MRKMAGDTA, etc.). The installation process will convert your existing formats to the new version.

Before installing your new version, make sure that:

- No one has the MarkMagic library (MRKMAG60 or MRKMAG70) or the MarkMagic User library (MRKMAGDTA) in his or her library list, and also make sure that no one is working with MarkMagic or JMagic. For example, to see if someone is using MarkMagic sign on with SECOFR authority and enter WRKOBJLCK OBJ(MRKMAGxx) OBJTYPE(*LIB). Also, enter the Work with Active Jobs (WRKACTJOB) command on an OS/400 command line. Look at the column "Function" for CMD-STRMRKMAG.
- The MarkMagic library (MRKMAGDTA) is not locked. To see if the MarkMagic User library files are "locked," enter the Work with Object Locks (WRKOBJLCK OBJ(DEVPFxx) OBJTYPE(*FILE)) command on the AS/400 command line, and press F4. Type DEVPFxx for the object name, MRKMAGDTA for the library, and *FILE for the object type, and press ENTER. Look at the column "Users" to see who is working with MarkMagic. Ask them to sign off the system in order to release the MarkMagic libraries and files.
- If you are upgrading from MarkMagic 6, 7 or 8 and using the MarkMagic Monitor Option, please make sure to end your monitor before upgrading. Type: CALL PGM(MRKMAG60/ENDMONPGM) PARM(' '), and press Enter to

end the MarkMagic 6 print monitor (use MRKMAG70 to end MarkMagic 7 and MRKMAG80 to end MarkMagic 8)

- Note: Start the MM System Version of the Monitor after an upgrade.
- We recommend that you save your MarkMagic libraries (MRKMAG60, or MRKMAG70, and MRKMAGDTA) and User libraries prior to installation.

After following the above steps, **sign off the system** and sign on to a new session as **QSECOFR** and confirm both QTEMP and QGPL are on your library list

2. INSTALLATION

Insert the CD into the drive, and enter the following on an AS/400 command line: LODRUN *dddddd* (where *ddddddd* is the optical device name).

Once the LODRUN command is executed, the upgrade procedure confirms your OS release and copies the compatible MarkMagic 8.1 or MarkMagic 8.6 libraries from the CD to QTEMP. MarkMagic will load automatically and prompt you at various points for information such as your product keys, device types, and default version (see Setting MarkMagic Versions).

If you are upgrading from a previous version, you will get the following message: *MarkMagic is about to be updated from a previous version*. During the upgrade the following messages will be displayed:

- Your existing version of MarkMagic is about to be upgraded. Enter C to cancel or G to continue the upgrade (C G)

- MarkMagic is about to be upgraded from a previous version. Which version should be the system wide default (6.1, 8.1) (We recommend that you choose your current production version and test MarkMagic 8 based off *SESSION or *USER version control. Once satisfied with MarkMagic 8, the system version can be changed. See WRKMMVSN and SETMMVSN later in this section for more information on version control.

| | | Set Mark | Magic Par | ameters | | | | |
|------------|----------------------|--------------------|---|----------------|--------|--------|--------------------|---------------|
| | 12/23/13 16:31:24 | CPU ser Process | el type: ial num: or group: partitn: | 10B0728 P10 | | | ersion: od lvl: | 8.6 131005 |
| Type choic | ces, press Ente | er. | | | | | | |
| Printer | device types | <u>*ALL</u> | | | | F4 for | list | |
| F3=Exit | F5=Refresh | F8=Product | Keys | F10=Prod | Key De | etail | Mo F12=Ca | ore ancel |

Towards the end of the installation process, you will see the Set MarkMagic Parameters screen. Add any additional device types or ***ALL** to test with all available device types.

Press F8 to Set MarkMagic product keys (Call your account manager or CYBRA Sales at 914-963-6600 Option 3) for a MarkMagic 8 rental key. The Default 45 day Labels Runtime (Print Only) product key is enabled if no product key is entered.

| | | зет магкма | agic Pro | oduct k | keys | | |
|--|-----------------|---|---|---|--|--|--|
| Date: 12/23/13 Time: 16:35:57 | | CPU model type: 520 Version: 8.6 CPU serial num: 10B0728 Mod lvl: 1310 Processor group: P10 Logical partitn: 001 | | | | | |
| Type choices, pres | ss Enter. | | | | | | |
| Product keys 1. 88CD2 ED86B () | <u>C66C0</u> BB | (101 04 00 00 00 00 00 00 00 00 00 00 00 | xpiratic nm/dd/yy / <u>15</u> / / <u>00</u> / / <u>00</u> / / <u>00</u> / / <u>00</u> / / <u>00</u> / / <u>00</u> / |) 14 00 00 00 00 00 00 00 00 00 00 00 00 00 | LPAR 1 0 0 0 0 0 0 0 0 0 0 0 0 0 | Maximum Users <u>999999</u> 0 0 0 0 0 0 0 | Maximum Printers <u>999999</u> 0 0 0 0 0 0 0 0 |
| F3=Exit F5=Ret | fresh | <u>00</u> F8=Work (| / <u>00</u> / with lia | <u>00</u> cense i | <u>0</u> informati | 0 ion F12 | <u>0</u> 2=Cancel |

The rental key you will be given will enable ALL MarkMagic features. Customers who receive permanent keys will require multiple product keys to activate the following MarkMagic 8 optional features:

- Print Monitor Option
- PDF Fax & Email Option
- Laser Printer 2D Option
- RFID Printing Option (Quick Comply)
- FormWeaver Option
- PrintTransformer Option
- On Demand Option

Once the installation is complete, **please sign off** your QSECOFR session to close and deallocate any open files. We recommend you sign back on and confirm your default MarkMagic version selection by entering MRKMAG80/WRKMMVSN and checking the "Current System Version" before you begin using your new version.

SETTING MARKMAGIC VERSIONS:

The Work MarkMagic Version command displays current system and user version settings and is the preferred method to switch the active version based on user and *SYSTEM. To use this command, type **MRKMAG80/WRKMMVSN** and press Enter.

Note: *SECOFR authority is required to change other User and system default settings.

The Set MarkMagic Version command is an alternate method to switch the active version based on user, session, or system wide. To use this command, type **MRKMAG80/SETMMVSN** and press F4. The SETMMVSN command settings are referred to by the system for all non-qualified calls to MarkMagic. Note: *SECOFR authority is required to change other User and system default settings.

Note:

- SESSION version overrides are controlled by a data area in QTEMP and only work for interactive jobs. Any print job submitted to batch will default back to either the *SYSTEM or *USER version override.
- USER version overrides are controlled by a data area in MRKMAGUSRP. *USER overrides will not be found if a CHGJOB was issued and the user was changed or the user was changed in the SBMJOB command.

When starting MarkMagic via the STRMRKMAG command, you can override the default version. Type STRMRKMAG and press F4. Select a version and press Enter

TO REVERT TO A PREVIOUS MOD LEVEL:

The installation program does not delete your previous libraries; they are renamed and saved in SAVF format. If, after installation, you wish to revert back to your previous modification level, contact CYBRA Support for assistance in restoring the following saved libraries.

<u>Note:</u> During the MarkMagic 8 upgrade, programs in your older MarkMagic version (MRKMAG60 or MRKMAG70) are replaced with newer programs that allow MarkMagic 8 to run side by side with 6.1/6.5 and/or 7.2/7.7. A copy of the original MRKMAG60 or MRKMAG70 programs, depending on which version you upgraded from, are saved to a SAVF in the production library (MRKMAG60 or MRKMAG70). The name of the file is MMxxyyyyy where xx = production library number (60 or 70) and yyyyy = the version 8 mod level you upgrade to (131005). These older programs can be restored to your live production library. Please contact <u>help@cybra.com</u> or 914-963-6600 option 4 for assistance.

3. TROUBLESHOOTING

Two MarkMagic Installation Logs are created upon completion of installation. The summary log contains MarkMagic installation comments, while the detail log also includes the full job log. The log's details are: <u>Spooled Filename</u>: MARKMAGIC <u>User</u> <u>data</u>: INSTALLLOG

In addition, the detail log is written to the following database file: <u>Library</u>: QGPL <u>File</u>: MMINSLOG

If you have trouble installing MarkMagic 8 we request that you e-mail us the summary log immediately following your installation. If the installation is unsuccessful, there will most likely not be a printed install log. Please send the log file in QGPL to <u>help@cybra.com</u>

F. DOWNLOAD INSTRUCTIONS - UPGRADE

1. BEFORE YOU BEGIN

UPGRADE NOTES:

- If you upgraded from MarkMagic V6.1 or V6.5 or V7.2 or V7.7 to V8.1 or 8.6, your formats will be available in both versions, in each of your user libraries. Any changes to formats or new formats created after the installation will have to be exported out of one version and imported into the other version.
- Although this situation is unlikely, it important to understand • MarkMagic 8 will upgrade from the most recent MarkMagic version on your system, even if an older version is set as your system default. **Example:** If both 6.1 (MRKMAG60) and 7.2 (MRKMAG70) are installed and 6.1 is your *SYSTEM default running your everyday production, MarkMagic will "see" 7.2 and upgrade any formats, jobs, graphics, and monitors found in 7.2. Note: renaming or deleting MRKMAG70 in this scenario will not force the upgrade of your 6.1 objects. In other words, the upgrade program does not allow a user to "skip over" a version. Please use the MRKMAG60/WRKMMVSN or MRKMAG70/WRKMMVSN command to help determine if multiple MarkMagic versions are installed and which is the most recent (more WRKMMVSN details can be found later in this section).

Do <u>not</u> remove or rename the MarkMagic product library MRKMAG60, MRKMAG70, or any MarkMagic User Libraries (MRKMAGDTA, etc.). The installation process will convert your existing formats to the new version.

Before installing your new version, make sure that:

- No one has the MarkMagic library (MRKMAG60 or MRKMAG70) or the MarkMagic User library (MRKMAGDTA) in his or her library list, and also make sure that no one is working with MarkMagic or JMagic.
 For example, to see if someone is using MarkMagic sign on with SECOFR authority and enter WRKOBJLCK OBJ(MRKMAGxx) OBJTYPE(*LIB). Also, enter the Work with Active Jobs (WRKACTJOB) command on an OS/400 command line. Look at the column "Function" for CMD-STRMRKMAG.
- The MarkMagic library (MRKMAGDTA) is not locked. To see if the MarkMagic User library files are "locked," enter the Work with Object Locks (WRKOBJLCK OBJ(DEVPF.xx) OBJTYPE(*FILE)) command on the AS/400 command line, and

press F4. Type DEVPFxx for the object name, MRKMAGDTA for the library, and *FILE for the object type, and press ENTER. Look at the column "Users" to see who is working with MarkMagic. Ask them to sign off the system in order to release the MarkMagic libraries and files.

- If you are upgrading from MarkMagic 6, 7 or 8 and using the MarkMagic Monitor Option, please make sure to end your monitor before upgrading. Type: CALL PGM(MRKMAG60/ENDMONPGM) PARM(' '), and press Enter to end the MarkMagic 6 print monitor (use MRKMAG70 to end MarkMagic 7 and MRKMAG80 to end MarkMagic 8)
 - Note: Start the MM System Version of the Monitor after an upgrade.
- We recommend that you save your MarkMagic libraries (MRKMAG60, or MRKMAG70, and MRKMAGDTA) and User libraries prior to installation.
- Depending on your system's OS release, click on the appropriate MarkMagic 8 link (MarkMagic 8.1 for OS releases V5R3 through V5R4 or MarkMagic 8.6 for OS release V6R1MO and above) to download. If you are prompted to open or save the .zip file, save it to a temporary directory on your PC.
- Once the download is complete, find the downloaded file and extract the zip file contents. The enclosed file will have an .EXE extension. Double click on the icon to begin the MarkMagic 8 InstallAnywhere installation process.

| InstallAnyw | rhere |
|----------------|---|
| | InstallAnywhere is preparing to install |
| | 94% |
| | Cancel |
| (C) 2012 Flexe | era Software LLC. |

- Make sure any firewalls that you may have installed do not block the install, and also confirm that FTP is configured and running on your System i.
- NOTE: Windows XP SP2 users will have to temporarily disable the Windows Firewall by clicking START > CONTROL PANEL > WINDOWS FIREWALL and clicking the radio button for "Off". Once the Firewall is disabled, the MarkMagic 8 install process will complete without any errors.



Follow the MarkMagic 8 installation prompts by clicking "Next"



• You will reach the "MarkMagic 8 iSeries Installer" panel. There you enter the name or IP address of the CPU on which you would like to install MarkMagic 8. Also enter your iSeries user id and password (we recommend your ID have QSECOFR authority). Then click "Next".



• You will be presented with the "Pre-Installation Summary". Click Install.



• When the MarkMagic 8 process is completed, you will have a library named MM80TEMP on the System i. At this point you can restart your Windows XP SP2 Firewall, if applicable.



2. INSTALLATION

Sign on to a new session as **QSECOFR**, confirm both QTEMP and QGPL are on your library list and then enter the following command:

MM80TEMP/INSTALL

If you are upgrading from a previous version, you will get the following message: *MarkMagic is about to be updated from a previous version*. During the upgrade the following messages will be displayed:

- Your existing version of MarkMagic is about to be upgraded. Enter C to

cancel or G to continue the upgrade (C G)

- MarkMagic is about to be upgraded from a previous version. Which version should be the system wide default (6.1, 8.1) (We recommend that you choose your current production version and test MarkMagic 8 based off *SESSION or *USER version control. Once satisfied with MarkMagic 8, the system version can be changed. See WRKMMVSN and SETMMVSN later in this section for more information on version control.

| | | Set MarkMagic Pa | arameters | |
|------------|----------------------|---|---------------------|---------------------------------|
| | 12/23/13 16:31:24 | CPU model type: CPU serial num Processor group Logical partitr | : 10B0728 b: P10 | Version: 8.6 Mod lvl: 131005 |
| Type choic | ces, press Ente | r. | | |
| Printer | device types | <u>*ALL</u> | F4 | 4 for list |
| F3=Exit | F5=Refresh | F8=Product Keys | F10=Prod Key Deta | More ail F12=Cancel |

Towards the end of the installation process, you will see the Set MarkMagic Parameters screen. Add any additional device types or ***ALL** to test with all available device types.

Press F8 to Set MarkMagic product keys (Call your account manager or CYBRA Sales at 914-963-6600 Option 3) for a MarkMagic 8 rental key. The Default 45 day Labels Runtime (Print Only) product key is enabled if no product key is entered.

| | Set I | MarkMagic Product | кеуз | | |
|---|---|--|--|---|---|
| Date: 12/23/13 Time: 16:35:57 | CPU model type: 520 Version: 8.6 CPU serial num: 10B0728 Mod lvl: 131005 Processor group: P10 Logical partitn: 001 | | | | |
| Type choices, press Ent | er. | | | | |
| Product keys 1. 88CD2 ED86B C66C0 | BB101 | Expiration (mm/dd/yy) 04 / 15 / 14 00 / 00 / 00 00 / 00 / 00 00 / 00 / 00 | LPAR 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | Maximum Users 999999 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | Maximum Printers <u>9999999</u> 0 0 0 0 0 0 0 0 0 0 |
| F3=Exit F5=Refresh | F8=1 | Jork with license | informa | tion F1 | 2=Cancel |

Chapter F. DOWNLOAD INSTRUCTIONS - UPGRADE

The rental key you will be given will enable ALL MarkMagic features. Customers who receive permanent keys will require multiple product keys to activate the following MarkMagic 8 optional features:

- Print Monitor Option
- PDF Fax & Email Option
- Laser Printer 2D Option
- RFID Printing Option (Quick Comply)
- FormWeaver Option
- PrintTransformer Option
- On Demand Option

Once the installation is complete, **please sign off** your QSECOFR session to close and deallocate any open files. We recommend you sign back on and confirm your default MarkMagic version selection by entering MRKMAG80/WRKMMVSN and checking the "Current System Version" before you begin using your new version.

SETTING MARKMAGIC VERSIONS:

The Work MarkMagic Version command displays current system and user version settings and is the preferred method to switch the active version based on user and *SYSTEM. To use this command, type MRKMAG80/WRKMMVSN and press Enter. Note: *SECOFR authority is required to change other User and system default settings.

The Set MarkMagic Version command is an alternate method to switch the active version based on user, session, or system wide. To use this command, type **MRKMAG80/SETMMVSN** and press F4. The SETMMVSN command settings are referred to by the system for all non-qualified calls to MarkMagic. Note: *SECOFR authority is required to change other User and system default settings.

Note:

- SESSION version overrides are controlled by a data area in QTEMP and only work for interactive jobs. Any print job submitted to batch will default back to either the *SYSTEM or *USER version override.
- USER version overrides are controlled by a data area in MRKMAGUSRP. *USER overrides will not be found if a CHGJOB was issued and the user was changed or the user was changed in the SBMJOB command.

When starting MarkMagic via the STRMRKMAG command, you can override the default version. Type STRMRKMAG and press F4. Select a version and press Enter

TO REVERT TO A PREVIOUS MOD LEVEL:

The installation program does not delete your previous libraries; they are renamed and saved in SAVF format. If, after installation, you wish to revert back to your previous modification level, contact CYBRA Support for assistance in restoring the following saved libraries.

<u>Note:</u> During the MarkMagic 8 upgrade, programs in your older MarkMagic version (MRKMAG60 or MRKMAG70) are replaced with newer programs that allow MarkMagic 8 to run side by side with 6.1/6.5 and/or 7.2/7.7. A copy of the original MRKMAG60 or MRKMAG70 programs, depending on which version you upgraded from, are saved to a SAVF in the production library (MRKMAG60 or MRKMAG70). The name of the file is MMxxyyyyy where xx = production library number (60 or 70) and yyyyyy = the version 8 mod level you upgrade to (131005). These older programs can be restored to your live production library. Please contact <u>help@cybra.com</u> or 914-963-6600 option 4 for assistance.

3. TROUBLESHOOTING

Two MarkMagic Installation Logs are created upon completion of installation. The summary log contains MarkMagic installation comments, while the detail log also includes the full job log. The log's details are:

Spooled Filename: MARKMAGIC User data: INSTALLLOG

In addition, the detail log is written to the following database file: <u>Library</u>: QGPL <u>File</u>: MMINSLOG

If you have trouble installing MarkMagic 8 we request that you e-mail us the summary log immediately following your installation. If the installation is unsuccessful, there will most likely not be a printed install log. Please send the log file in QGPL to <u>help@cybra.com</u>

G.JMAGIC INSTALLATION

1. BEFORE YOU BEGIN

To load JMagic 8 on *any* PC running Windows NT, 2000, XP, Vista, Windows 7 and Windows 8.

Minimum Hardware Requirements:

| Processor | 1.5 GHz Intel Pentium IV, or higher |
|-------------------------|-------------------------------------|
| Display | SVGA, 1152x864 (recommended |
| | minimum resolution) |
| Memory requirements | 512MB RAM |
| Disk space requirements | 75 MB for JMagic |
| | 70 MB for Java Virtual Machine |

Note: To use JMagic 8, MarkMagic version 8.1 or 8.6 must be active on the System i.

2. INSTALLATION

Download JMAGIC81SETUP.ZIP from our website or copy the JMAGIC81SETUP.ZIP from our installation CD and extract the enclosed file to a temporary subdirectory.

Double click the file JMagic81setup.exe to launch the JMagic InstallShield Wizard and follow the prompts. We recommend the "Typical" installation which installs both the JMagic8 application the MarkMagic8 5250 online help.

The wizard will prompt you to select an existing subdirectory, or create a default product destination subdirectory, for example: *"X":\Program Files\CYBRA Corporation\Jmagic81.* (Where "X" is your drive letter) as well as the Follow the steps to complete the installation.

Navigate to the Start menu Programs folder then CYBRA Corporation, and then click on the icon "JMagic 8.1" to start JMagic. Sign on to the System i to initiate communications with MarkMagic 8.1 or 8.6

Note: During a Typical JMagic 8.1 installation, 5250 Web Help is automatically installed to C:|*Program Files*|*CYBRA Corporation*|*Help* See section "H" for 5250 Web Help details.

| 즈 JMagic 8.1 | | |
|--|--------------------------------------|-----------------|
| in the second seco | | Choose Features |
| MAGIC | Install Set Typical | ~ |
| ABRA | JMagic 8.1 | × |
| | Description This installs JMagic 8.1 | |
| InstallAnywhere ————— Cancel | | Previous Next |

3. 5250 Web Help installation

Pressing the F1 key in your 5250 (GreenScreen) session will automatically open your default web browser with the page corresponding to your inquiry.

Note: Web Help can be installed on any PC by checking off just the Help option during the JMagic81setup.exe install.

While we highly recommend installing the 5250 Web Help into the default directory, you are able to change this if needed.

Run the MRKMAG80/SETMMPRM command, and page down once to the second screen. You will be able to change the path to the web help.

Example:

| Set MarkMagic Parameters | | | |
|---|--|---------------------------------|--|
| Time: 17:23:34 | CPU model type: 520 CPU serial num: 10B0728 Processor group: P10 Logical partitn: 001 | Version: 8.6 Mod lvl: 131005 | |
| Type choices, press Enter. Company name | Your Company Name | name | |
| Default menu type | <u>D</u> | D=Design view L=List view | |
| Keep job history | <u>100</u> | 7 - 999 (days) | |
| Keep archived records . : | <u>100</u> | 7 - 999 (days) | |
| PC path to MarkMagic Web H | lelp : <u>C:\Program Files\CYBR</u> p | A Corporation\Hel | |
| MarkMagic JVM Subsystem Print Logging On : | N | | |
| F3=Exit F4=Prompt F5 | | Bottom | |

Altering the default path with the SETMMPRM command changes this parameter globally, so you will need to make sure the path you set in SETMMPRM matches the path on the user's pc.

MarkMagic Support : 914-963-6600 Option 4 • Fax: 716-712-0666 • help@cybra.com

