



IC-Link Version 2.8 User Manual

User Manual Release Date 11/2004



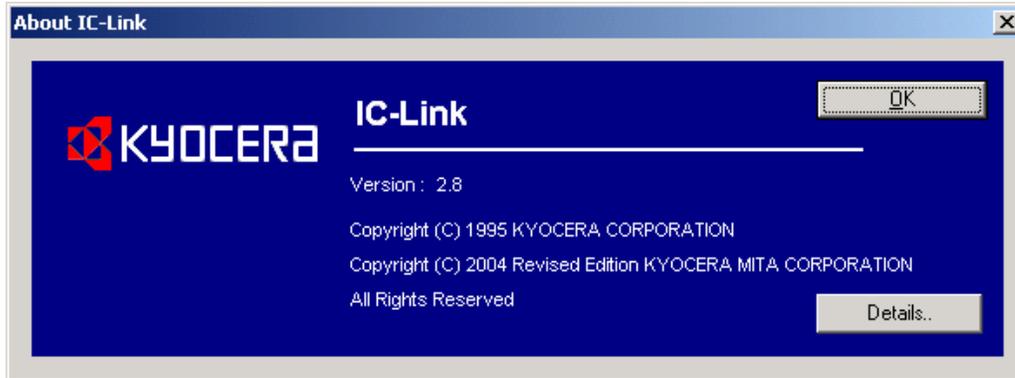
IC Link for Windows

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IC Link for Windows

Introduction



Kyocera IC Link 2.8 is an application used for managing Resources such as Bitmap Fonts, Macros, Host-File Forms, Program Data, Multi-Part Forms, EMCR Macros, Bitmap Image Macros, and JPEG Image Macros on Kyocera Printers. These Resources are defined and added into the IC Link Project Files and can be written to and stored on PC Memory Cards (Compact Flash Card and PCMCIA Cards) or the printer Hard Drive / Micro Drive. In addition, IC Link also adds the ability to export project files into data formatted for EPROM (Eraseable Programmable Read Only Memory) and OTP (One Time Program) chips, which are installed into IC sockets located on the printer's controller PCB.

The ability to create an IC Link Project File and supply these Resources to the Kyocera Printer enables additional features to help customers from many different market arenas realize more efficient work flow and cost savings. These Resources contribute to key features and applications such as:

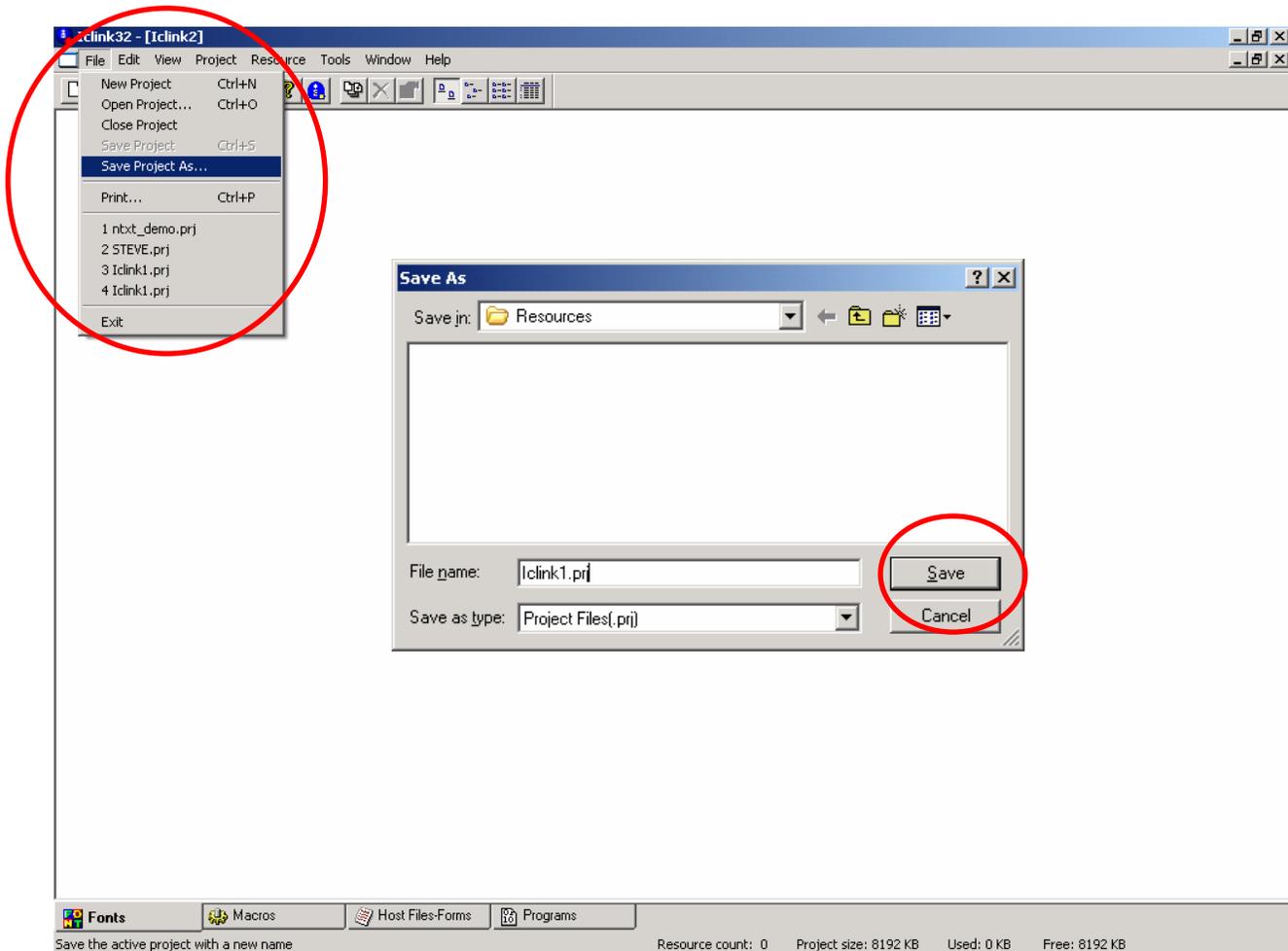
- **Electronic Forms** – IC Link will build PRESCRIBE based macros onto the printer for use as an electronic form. In addition rasterized data from Bitmap and JPEG image files can be converted into a PRESCRIBE based macro to accommodate a wider variety of form options.
- **Multi-Part Forms** – IC Link will build the necessary PRESCRIBE based macros into a Multi-Part Form that will produce a Multi-Part form overlay from a single spooled print file. The ability to pull paper from different cassettes means that different media types from different paper sources can be used in the same Multi-Part form application. The Multi-Part form output to Stacker Trays (Face Up / Face Down) or a Mailbox bin can also be defined.
- **EMCR Creator** – IC Link will build the PRESCRIBE based macros to overlay onto print data sent to a particular cassette. Allowing a form to exist “electronically” in the cassette.
- **KPDL Font Downloader** – IC Link will download licensed .pfb (PostScript) fonts to Compact Flash Card or Hard Disk / Micro Drive in the printer. These fonts can then be recognized and called in the KPDL (PostScript) emulation mode.
- **LDFC Font Viewer** – IC Link LDFC font viewer is a tool for viewing Kyocera LDFC fonts (Kyocera bitmap fonts) to aid in isolating bitmap font challenges.
- **PRESCRIBE Samples** – IC Link PRESCRIBE samples is a tool for viewing PRESCRIBE command format and parameters. The tool also provides a sample command syntax which can be sent directly to the print device to confirm the command syntax and functionality.

This information has been documented to assist you with using IC Link and all of its features. Additional support for specialized project files can be obtained through the Kyocera Mita Helpdesk at 1-800-255-6482 or from your Regional Network Solutions Group.

IC Link for Windows

Creating an IC Link Project

1. From the IC Link menu bar select [**File>Save Project As...**].
2. This will prompt you for a Folder location, Project File Name in the **Save As** dialogue box.
3. Once you have defined the IC Link Project File name, click on the **Save** button to save the IC Link Project File.
4. The IC Link Project file is now ready to receive its Resources (Fonts, Macros, Host-File Forms, Multi-Part Forms, EMCR Macros, Bitmap Image Macros, and JPEG Image Macros. Details for each of these resources are explained in the following pages.



IC Link for Windows

Setting Preferences

Global Options and File Mappings

Preferences define IC Link Startup options and the File Mappings (extensions) for the Resource files. These settings can be accessed as follows:

1. From the menu bar select **[Edit>Preferences...]**. This will display the **Preferences** dialogue box.
2. The IC Link Startup Options and Font Messages can be set up under the **Global Options** tab.
3. The IC Link File Mappings (Resource file extensions) can be defined under the **File Mappings** tab. The Default File Mapping table defines how the Resource files are imported into IC Link i.e. – Font, Macro, Application File, PRESCRIBE Macro, PCL Macro or Application Generated form. Additional File Mappings can be added and modified as well.

The screenshot shows the IC Link32 application window with the 'Edit > Preferences...' menu option selected. The 'Preferences' dialog box is open, showing the 'File Mappings' tab. A red circle highlights the 'File Mappings' tab, and a red arrow points to the table below. Another red arrow points from the 'Add new' button in the dialog box to the table. A third red arrow points from the 'Remove' button in the dialog box to the table.

Default File Mapping List

Description	Extension	Type
TrueType Font	ttf	Font
HP PCL EO Font	sfs	Font
HP Bitmap Portrait Font	sfp	Font
HP Bitmap Landscape Font	sfl	Font
Kyocera Bitmap Font	ldf	Font
PCL Macro	pcl	Macro
PRESCRIBE Macro	pre	Macro
PRESCRIBE Macro	mcr	Macro
Application Generated Form	prn	Form
Program Data	prg	Data

IC Link for Windows

Project Menu

Project Settings

The **Project Settings** define the IC Card Image type and Capacities. The Project Settings can be accessed as follows:

1. From the IC Link menu bar select [**Project>Settings...**]. This will display the Project Settings dialogue box where the Image and Card Capacity settings are defined as follows:

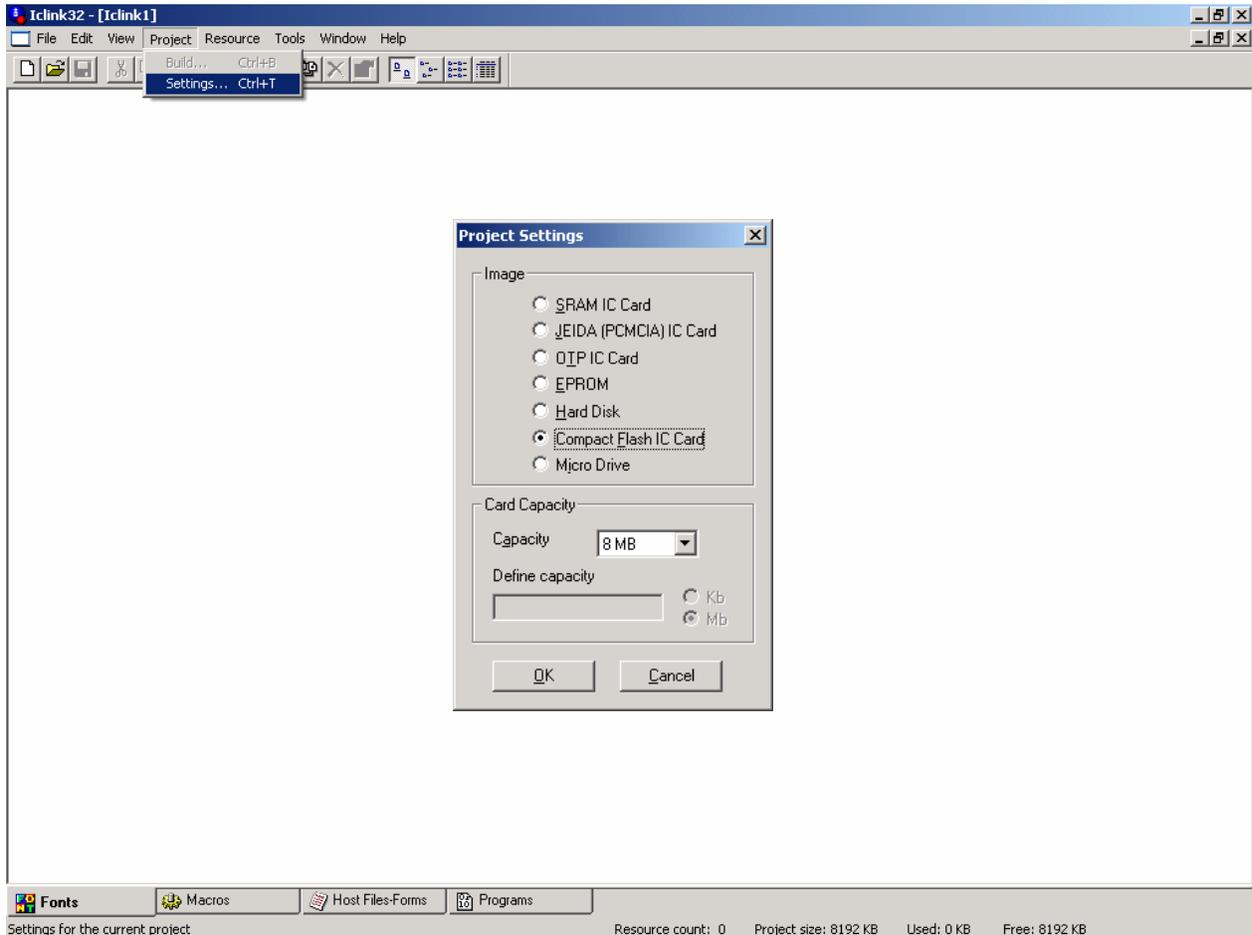
Image Settings

- SRAM IC Card
- JEIDA (PCMCIA) IC Card
- OTP IC Card
- EPROM
- Hard Disk
- Compact Flash IC Card
- Micro Drive

Card Capacity

- 32 KB ~ 128 MB
- Custom Settings

2. Once you have defined the Project Settings Image and Card Capacity, click on the **OK** button to submit the settings with the Project File.



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Project Menu

Project Build

Project Build is the action of building the Resource Files (fonts, macros, host-file forms, and program files) onto the Build Target in the printer which could be an IC Card in printer, Hard Disk / Micro Drive in printer, Export File for EPROM, or an Export File for JEIDA (PCMCIA) Card. The Project Build settings can be accessed as follows:

1. From the IC Link menu bar select [**Project Build...**]. This will launch the **Project Build** settings dialogue box.
2. In the **Project Build** box you can define the following:

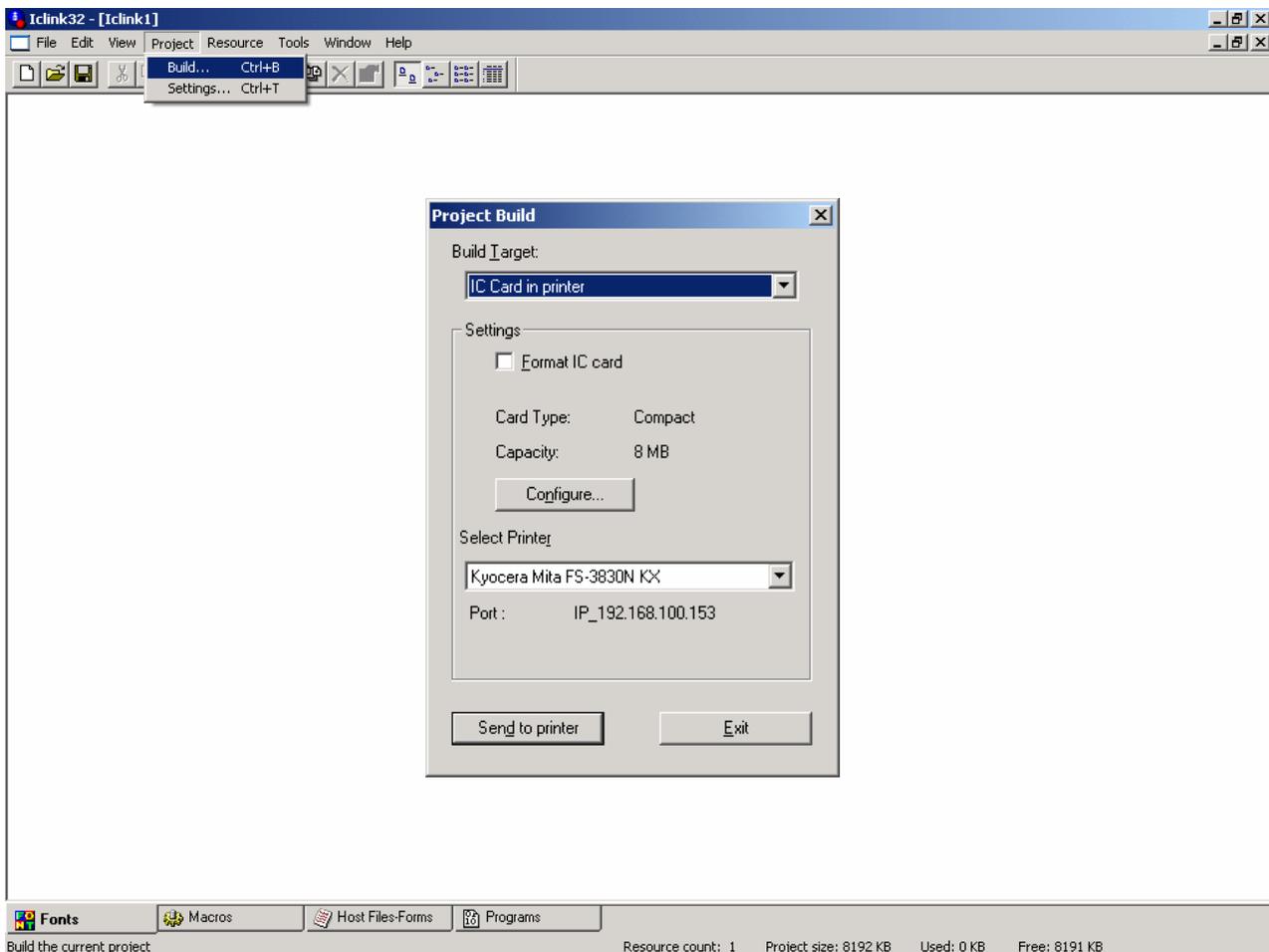
Build Target – destination for the IC Link Project Files.

Format IC Card or Format hard disk / micro drive – will format (erase) the target image device (IC card, Hard Drive or Micro Drive).

Configure – will launch the Project Settings dialogue box.

Select Printer – selects the target printer and displays the Port (LPT or IP Address).

Send to printer – executes the Project Build and builds the IC Link Project files onto the Build Target.



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Resource Menu

Add & Delete IC Link Project Resource Files

Resource files can be Fonts, Macros, Hosts-Files Forms, and Program files. These files and various combinations of them can enhance printing environments and provide an added value to the Kyocera print system. Features such as Electronic Form overlays, Specialized Fonts, Multi-Part Forms, and Application Program Interfaces (API's) can be enabled on the Kyocera print system. Resource files can be added or deleted from the IC Link Project file as follows:

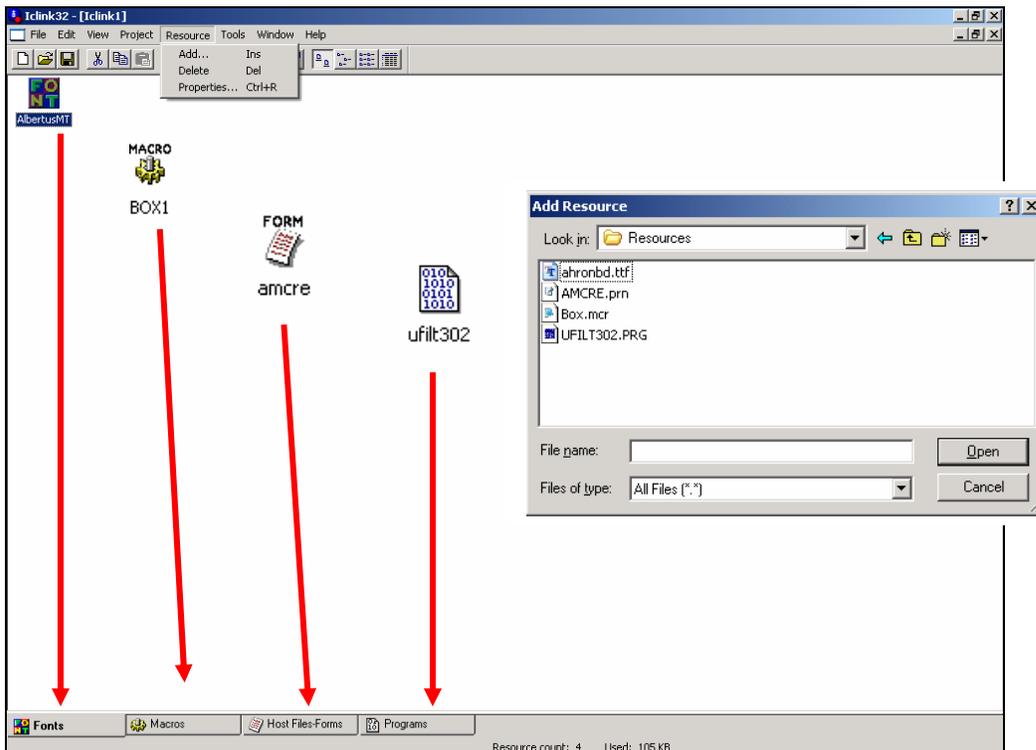
1. From the IC Link menu bar select **[Resource>Add...]**, and from the **Add Resource** dialogue box browse to the file you want to add to the IC Link Project. Selection of the Resource file is limited to the following files types:

Description	Extension	Type
TrueType Font	ttf	Font
HP PCL EO Font	sfs	Font
HP Bitmap Portrait Font	sfp	Font
HP Bitmap Landscape Font	sfl	Font
Kyocera Bitmap Font	ldf	Font

Description	Extension	Type
PCL Macro	pcl	Macro
PRESCRIBE Macro	pre	Macro
PRESCRIBE Macro	mcr	Macro
Application Generated Form	prn	Form
Program Data	prg	Data

NOTE: IC Link will automatically detect the file extension, and add the Resource file to the appropriate location in the IC Link Project (Font, Macro, Host-File Form, and/or Program Data). The file type association may be modified by using the File Mapping feature under the Preferences Settings.

2. To delete a Resource File from your IC Link Project, highlight it in the work area, and select Delete from the Resource menu or press the Delete key on the keyboard.
3. Properties of each Resource File can be displayed by highlighting the Resource File icon and Right-Mouse Clicking on it (see next page for more details).



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Resource Menu

Resource File Properties

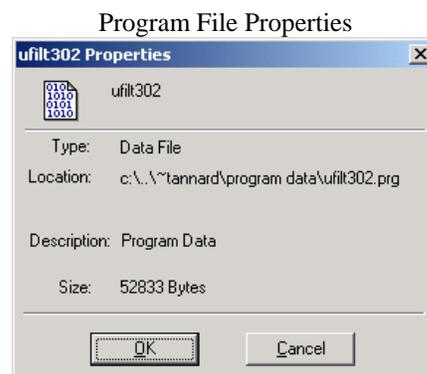
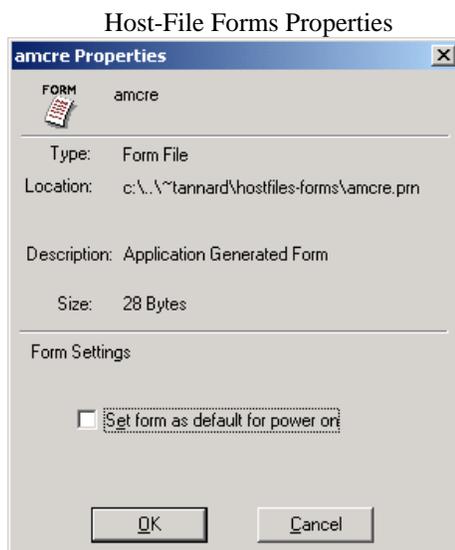
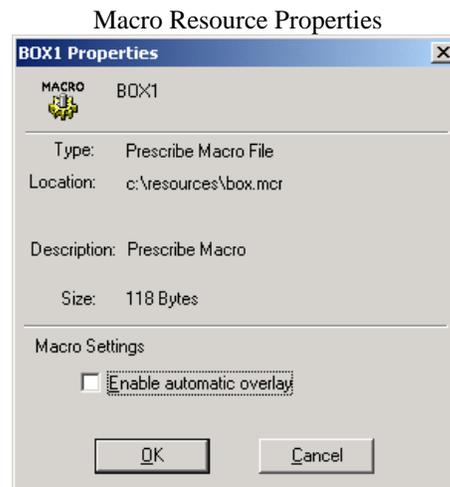
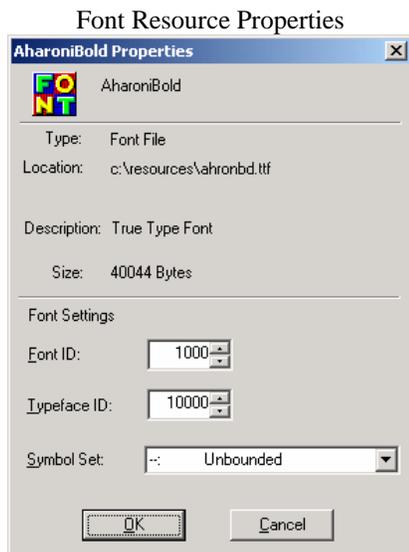
Each of the IC Link Project Resource Files has properties associated with them as follows:

Font Resource Properties – defines resource type, location, description, and size. Resource settings include Font ID #, Typeface ID #, and Symbol Set. The Font ID # can be adjusted and is used for PRESCRIBE FONT command.

Macro Resource Properties – defines resource type, location, description, and size. Resource settings include ,macro automatic overlay enable.

Host-File Forms Properties – defines resource type, location, description, and size. Resource settings include Set form as default for power on. This setting sets the printer FRPO Interface Dependent Parameter I0 (partition name) to the name of the Resource file. This is useful for setting partition files to boot at power up for Universal Filter API's, AMCR(Automatic) macros and EMCR (Cassette assigned) macros.

Program File Properties – defines resource type, location, description and size.



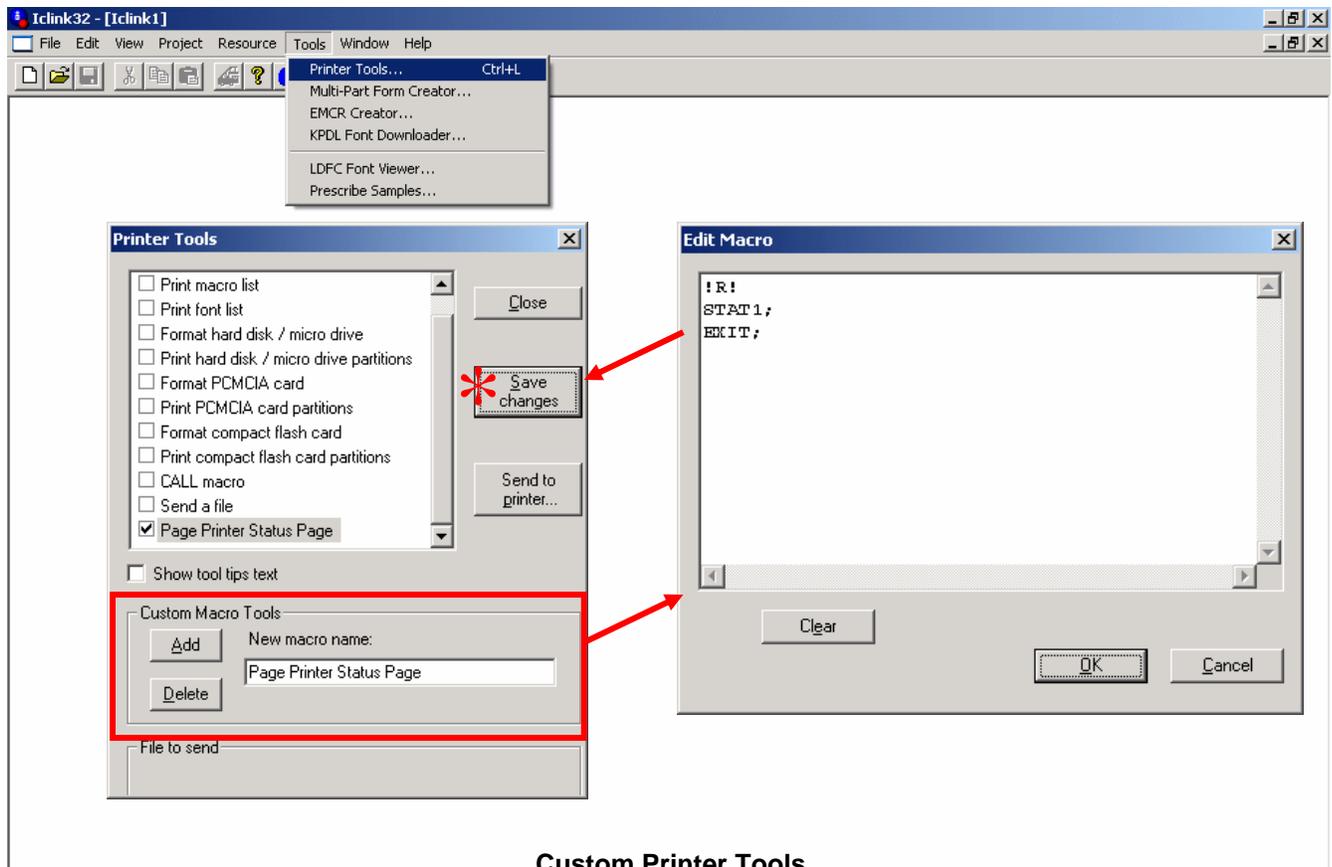
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Tools Menu

Printer Tools

Printer Tools enables you to test IC-Link Projects and Resource Files by executing some specialized command that will produce a list or execute a specific command relative to Macro, Font, Host-File Form, and/or Program File project build. The list of standard Printer Tools include:

- | | |
|---|--|
| <ol style="list-style-type: none"> 1. <u>Print macro list</u> – prints list of RAM and CF card resident macros. 2. <u>Print font list</u> – prints list of RAM and CF card resident fonts. 3. <u>Format hard disk / micro drive</u> – formats the printer hard disk or micro drive. 4. <u>Print hard disk / micro drive partitions</u> – prints a HDD Partition List. 5. <u>Format PCMCIA card</u> – formats the PCMCIA card in the printer. | <ol style="list-style-type: none"> 6. <u>Print PCMCIA card partitions</u> – prints a Partition List of the PCMCIA card. 7. <u>Format compact flash card</u>- formats the compact flash card in the printer. 8. <u>Print compact flash card partitions</u> – prints a Partition List of the compact flash card. 9. <u>Call macro</u> – Prints macro stored on printer. 10. <u>Send a file</u> – sends a file to the printer. |
|---|--|



Custom Printer Tools

In addition to the standard Printer Tools – you can also create your own **Custom Printer Tools** that can be customized to fit a specific IC Link Project File.

1. From the [**Custom Macro Tools**] under the Printer Tools dialogue box, select the [**Add**] button.
2. Double click on the [**New macro name:**] field and enter a name for your customized macro tool. This will add the new tool to the Printer Tool list.
3. Place a “check mark” in the box next to your new tool and double click on it. This will launch the [**Edit Macro**] dialogue box.
4. Type the PRESCRIBE command for your customize macro tool into the text area and click on the [**OK**] button.
5. On the [**Printer Tools**] dialogue box, click on the [**Save Changes**] button to lock in the new customized macro tool.

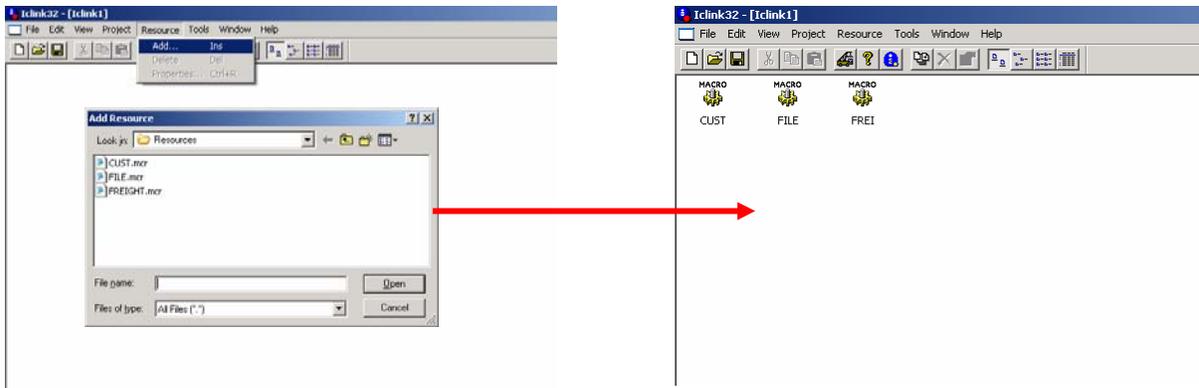
IC Link for Windows

Tools Menu

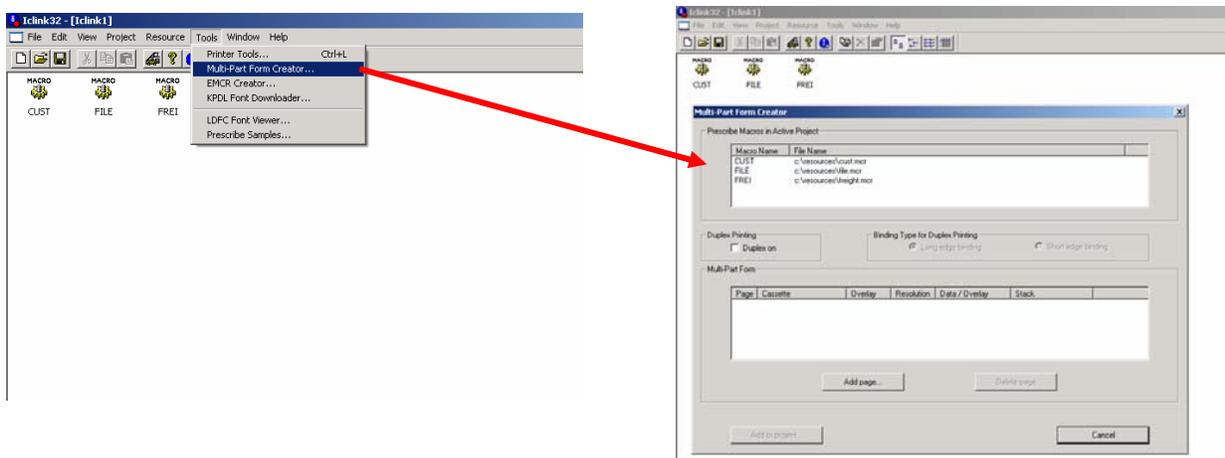
Multi-Part Form Creator

Multi-Part Form Creator will build PRESCRIBE based macro files into a CCPY command. By means of the CCPY command, the Kyocera-Mita printers can print multiple copies from different cassettes when a print file is sent to the printer. Each printed page can utilize a different macro and cassette to apply different forms (Customer Copy, File Copy, Freight Copy).

- Using the **[Resource>Add]** feature of IC Link, you can add the PRESCRIBE based macro files into the IC Link Project File. In this example, the PRESCRIBE macros CUST, FILE, and FREI have been added to the IC Link Project File.



- Once the PRESCRIBE macros have been added, you can launch the Multi-Part Form Creator from the **[Tools>Multi-Part Form Creator...]** drop down menu. This will launch the Multi-Part Form Creator dialogue box, which will contain the three PRESCRIBE macro files available for the Multi-Part Form.



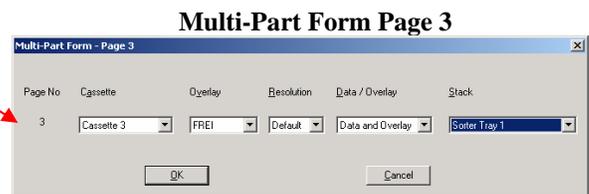
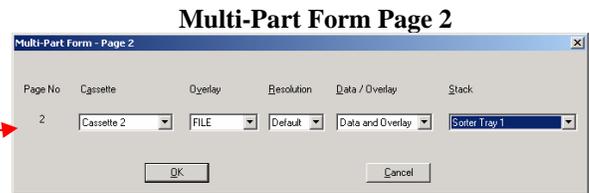
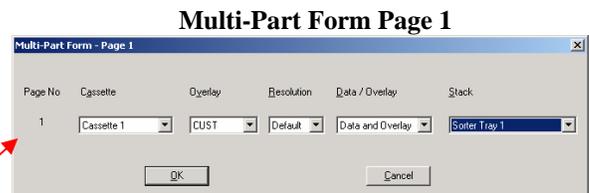
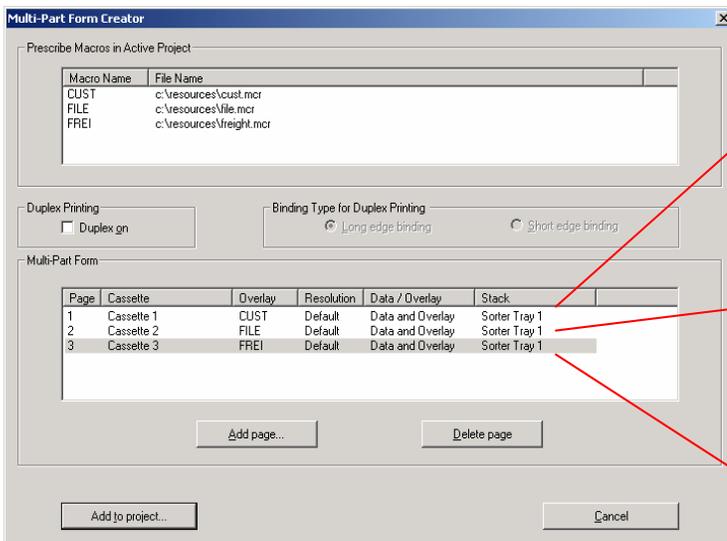
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Tools Menu

Multi-Part Form Creator (continued)

3. With the Multi-Part Form Creator active you can begin to configure your Multi-Part Form with the following parameters:
 - a. Add Page – activates a “**Multi-Part Form Page**”, where the settings can be applied for each of the pages in the Multi-Part Form. Each time you click on “**Add Page**” – it allows you to create a separate page with different Cassette, Overlay, Resolution, Data/Overlay, and Stack settings.
 - b. Cassette – selects the cassette from which the print page should be taken from.
 - c. Overlay – assigns the PRESCRIBE macro (Customer, File, or Freight) to the cassette.
 - d. Resolution – selects the PRESCRIBE and/or Laser-Jet raster graphics resolution. The resolution of vector graphics and fonts will not be effected from this setting.
 - e. Data/Overlay – The overlay can be printed out separately or with the print data.
 - f. Stack – the stack position of the printer can be defined.
 - g. OK – will add the Cassette, Overlay, Resolution, Data/Overlay, and Stack settings to the Page.
 - h. Add to Project – will build the Multi-Part form into an IC Link Project file and create a Ccpy Enable and Ccpy Disable files (ccpy on.prm and ccpy off.prm).

4. As each Multi-Part Form Page is configured, click on the **OK** button for each entry. This will create an entry under the **Multi-Part Form** field for each page you have configured (i.e. – Multi-Part Form Page 1, Multi-Part Form Page 2, and Multi-Part Form Page 3)..

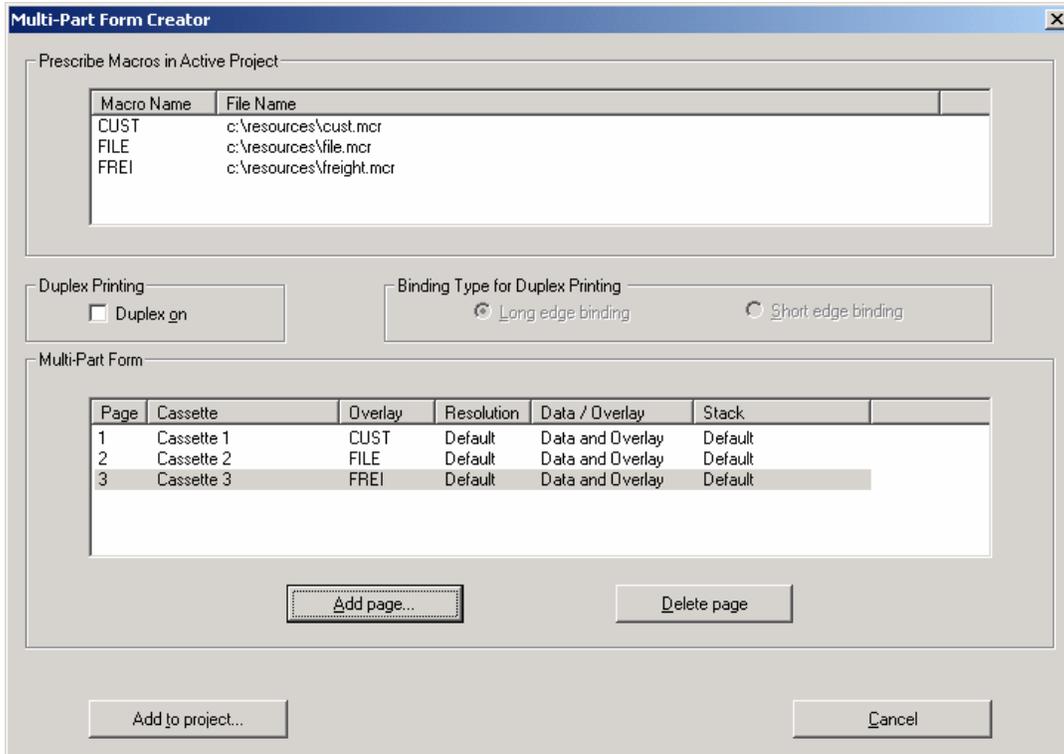


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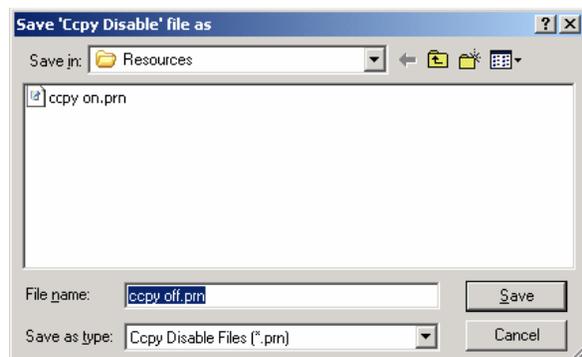
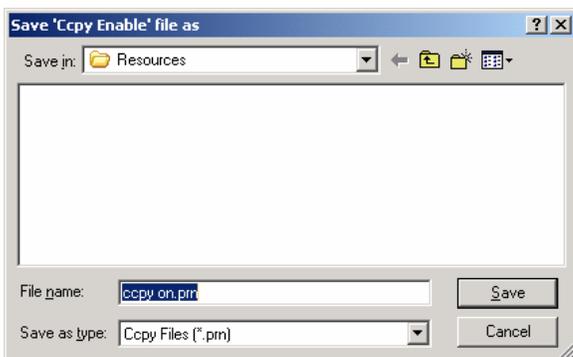
Tools Menu

Multi-Part Form Creator (continued)

- After all the pages have been configured and created in the Multi-Part Form Creator, click on the “**Add to project...**” button. This will create two files called **ccpy on.prn** and **ccpy off.prn** which can be saved onto the local PC and added into the IC Link Project File under the “**Host-File forms**” tab of IC Link.



- The two files which will be created are the CCPY Enable (**ccpy on.prn**) and the CCPY Disable (**ccpy off.prn**) files. A copy of each of these files can be saved onto the PC as shown in the figures below, and will also be added to the IC Link Project file under the Host-File forms tab as *.prn files.

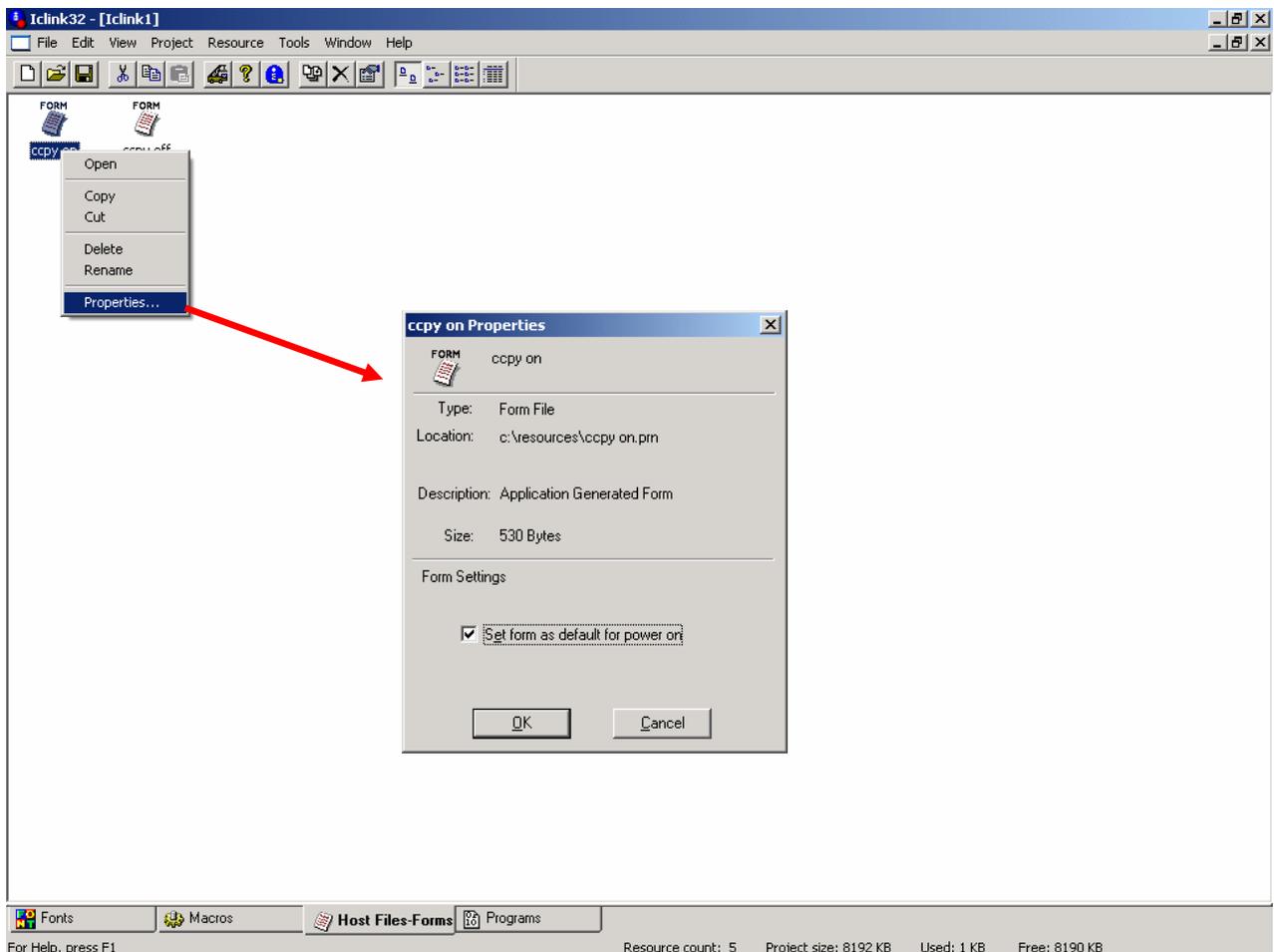


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Tools Menu

Multi-Part Form Creator (continued)

7. The **ccpy on.prn** and **ccpy off.prn** files are now located in the “**Host-Files Forms**” in the IC Link Project File now and ready to be built onto the target storage device of the printer (HDD, Microdrive, or Compact Flash Card). These files are the “**ON**” and “**OFF**” triggers for the Multi-Part Form feature.
8. The Multi-Part Form can be turned ON and OFF in the following manner.
 - a. Right Mouse Click on the **ccpy on** file, this will launch the **ccpy on** file properties.
 - b. Under the **ccpy on** Properties, select the check box for “**Set form as default for power on**” and then click on the **OK** button. This will make the ccpy on.prn execute at printer power ON and start the Multi-Part form feature.



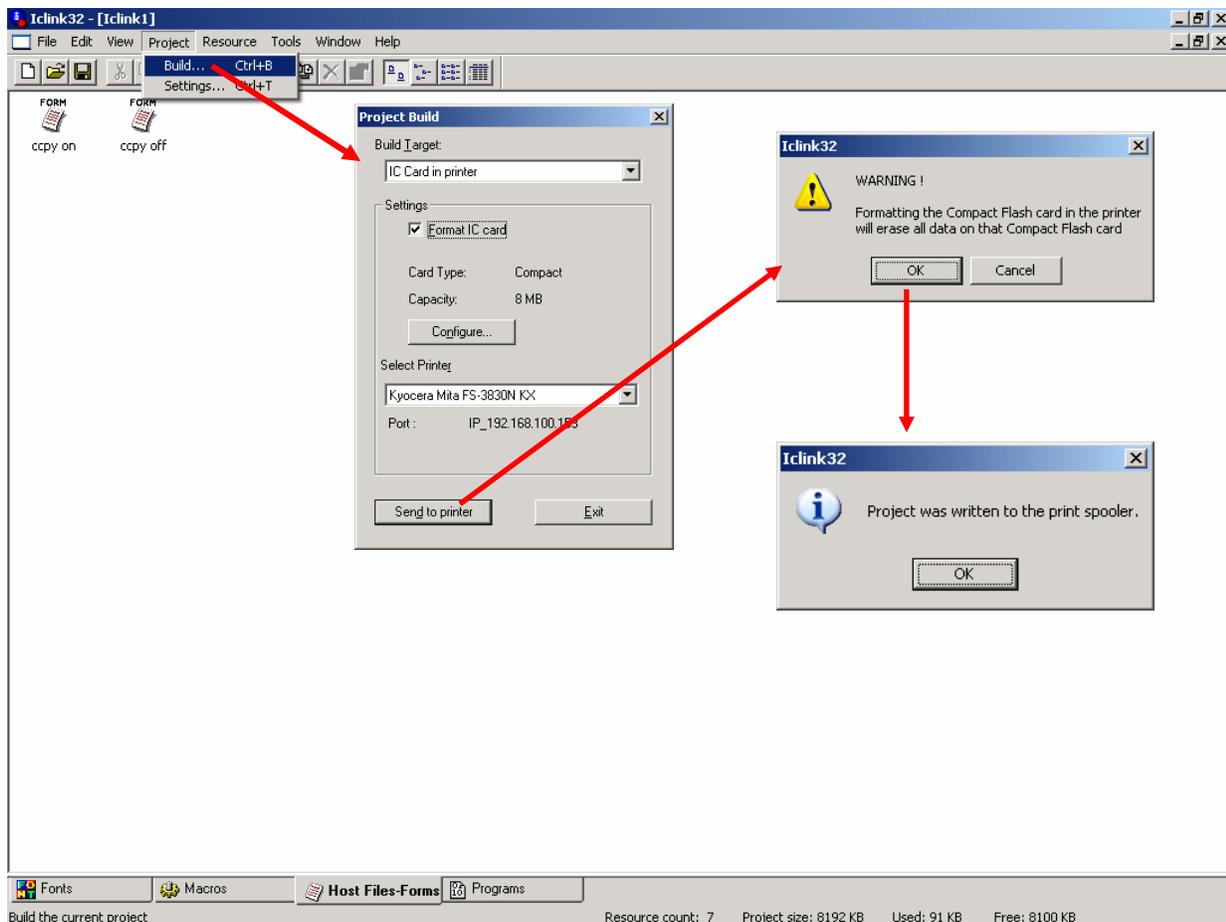
IC Link for Windows

Tools Menu

Multi-Part Form Creator (continued)

9. After setting the **ccpy on.prn** properties, select [**Project>Build**] from the drop down menu. This will launch the “**Project Build**” dialogue box where you can check/configure the Project Settings as follows:
 - a. Build Target – defines the target storage device for the project file (IC Card in printer, Hard Disk/Micro Drive in printer, Export File for EPROM, or Export File for JEIDA (PCMCIA) Card.
 - b. Format IC card – will format the PCMCIA or CF card before building the project file to the card.
 - c. Configure – defines the IC Card type and size.
 - d. Select Printer – sets the target printer.
 - e. Send to Printer – sends the project file to the printer.
10. After all the Project Build settings have been completed, click on the [**Send to printer**] button, a WARNING message will display warning the Format of the Compact Flash Card will erase all data on that Compact Flash Card.
11. Click on the [**OK**] button, and a message will display “**Project was written to the print spooler**”.
12. The printer LCD will flash “**Processing**” and then return to the “**Ready**” state. Turn the printer power “**OFF**” and then “**ON**” to start the Multi-Part Form Macro.
13. Send your print data to the printer. The Multi-Part Form will be active for any print jobs sent to the printer.

NOTE: Using Logical Printer Ports, it is possible to accommodate multiple Multi-Part Forms projects on one printer or to dedicate to one specific Printer Port using a PRESCRIBE RWER command to trigger the ccpy on.prn at the Start of Job String.



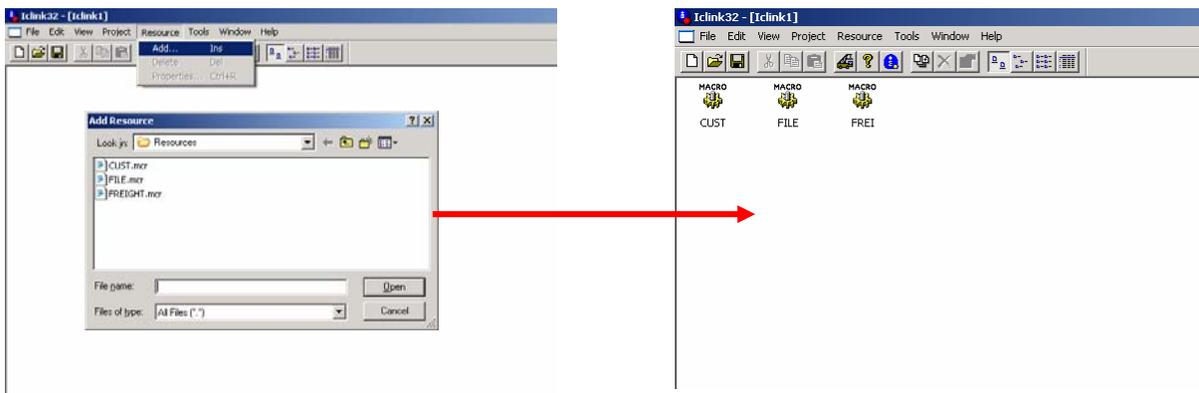
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Tools Menu

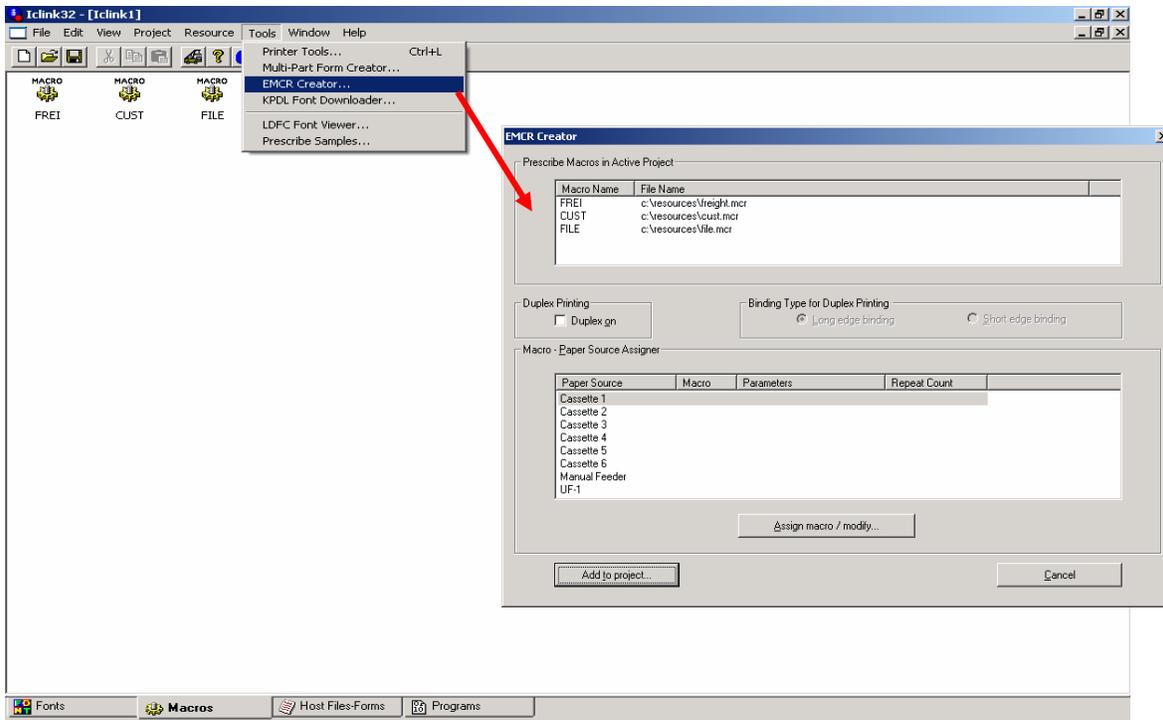
EMCR Creator

By means of the PRESCRIBE EMCR command, the Kyocera Mita printers can have PRESCRIBE based macros assigned to a cassette, so that when print jobs are pulled from that cassette the macro will overlay with the print data. Each cassette can use a macro to apply a different form. Using EMCR is similar in concept to having pre-printed materials in the cassettes, less the expense of the pre-printed materials. The number of EMCR macros is limited to the number of cassettes.

- Using the **[Resource>Add]** feature of IC Link, you can add the PRESCRIBE based macro files into the IC Link Project File. In this example, the PRESCRIBE macros CUST, FILE, and FREI have been added to the IC Link Project File.



- Once the PRESCRIBE macros have been added, you can launch the EMCR Creator from the **[Tools>EMCR Creator...]** drop down menu. This will launch the EMCR Creator dialogue box, which will contain the three PRESCRIBE macro files available for the EMCR.



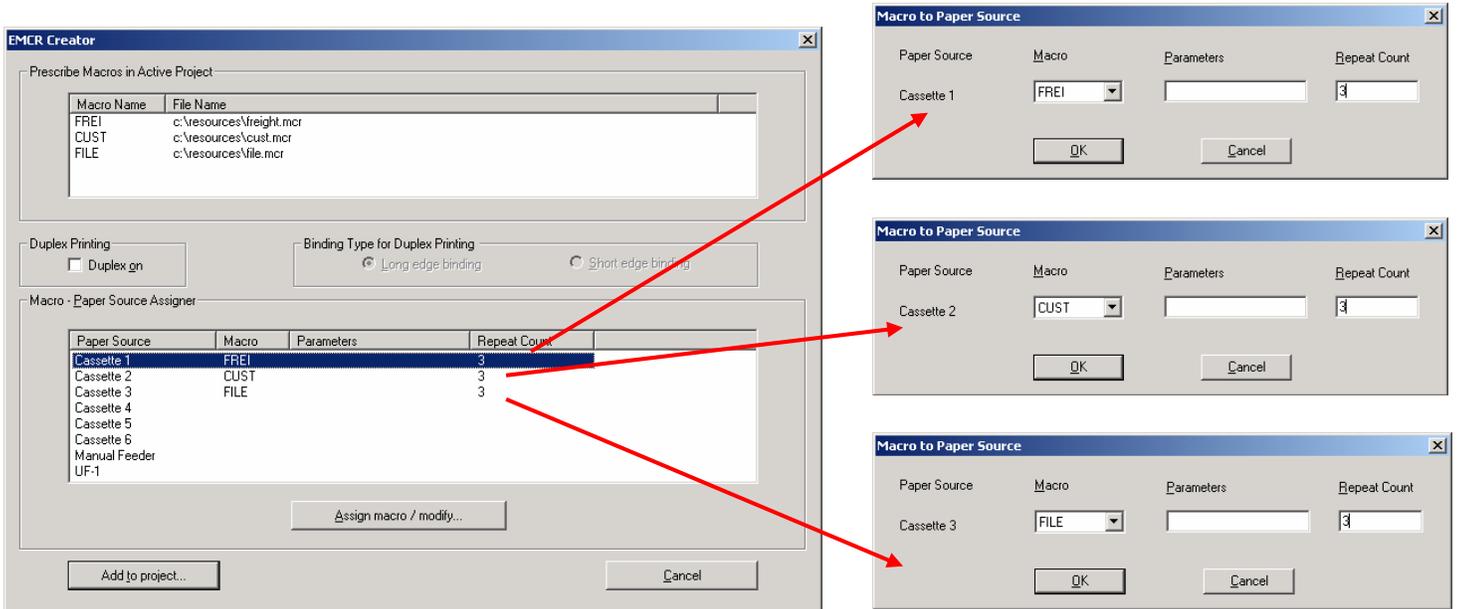
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Tools Menu

EMCR Creator (continued)

3. With the EMCR Creator active you can begin to configure your EMCR Macro by selecting the Paper Source, clicking on the “**Assigning Macro / modify...**” button and defining the following parameters in the “**Macro to Paper Source**” dialogue box :
 - a. **Macro** – Drop down menu lists the available macros to assign to the Paper Source.
 - b. **Parameters** – Open text field which allows additional PRESCRIBE Commands associated with the Macro file such as resolution settings or macro positioning.
 - c. **Repeat Count** – Allows repeat count for the Macro to be assigned.

4. As each “**Macro to Paper Source**” is configured, click on the [OK] button to register each setting. This will create an entry under the **Macro – Paper Source Assigner** field for each Cassette you have configured (i.e. – Cassette 1, Cassette 2, Cassette 3 etc.).

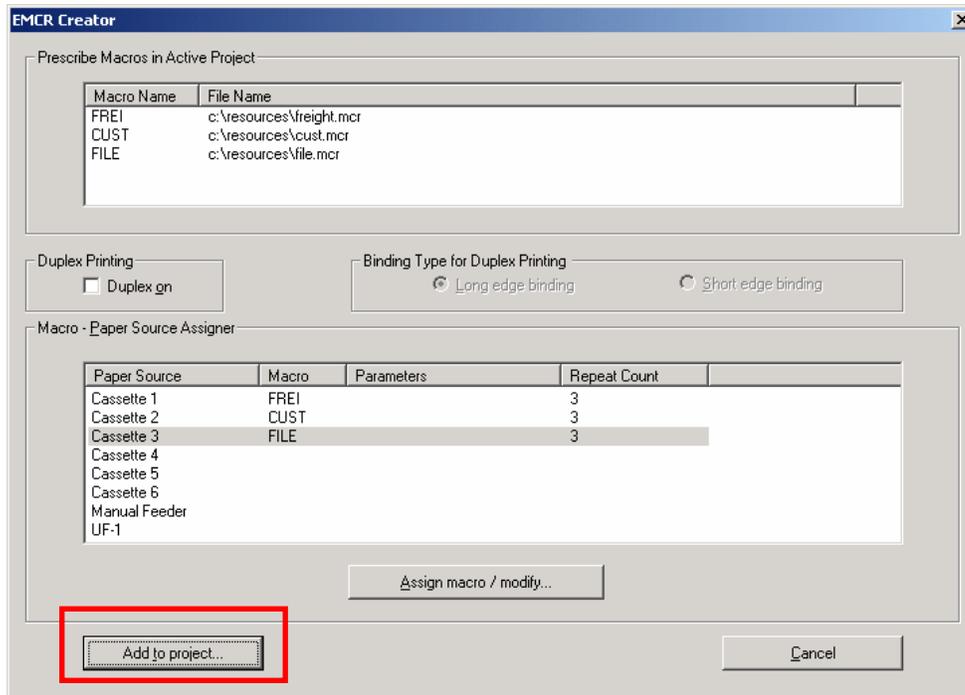


IC Link for Windows

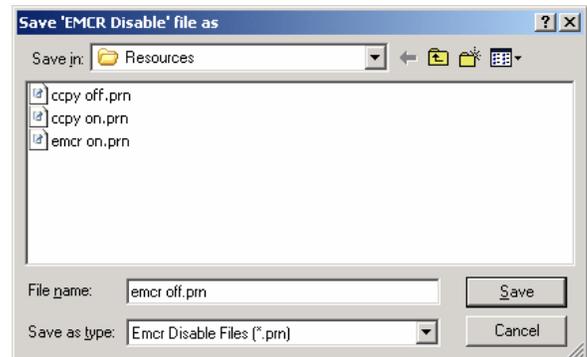
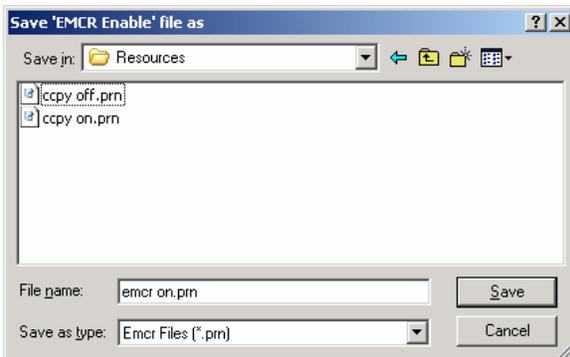
Tools Menu

EMCR Creator (continued)

- After all the pages have been defined in the EMCR Creator, click on the **[Add to project...]** button. This will create two files called **ccpy on.prn** and **ccpy off.prn** which can be saved onto the local PC and added into the IC Link Project File under the **“Host-File forms”** tab of IC Link.



- The two files which will be created are the EMCR Enable (**emcr on.prn**) and the EMCR Disable (**emcr off.prn**). One copy of each of these files can be saved onto the PC as shown in the figures below, and will also be added to the IC Link Project file under the Host-File forms tab as *.prn files.

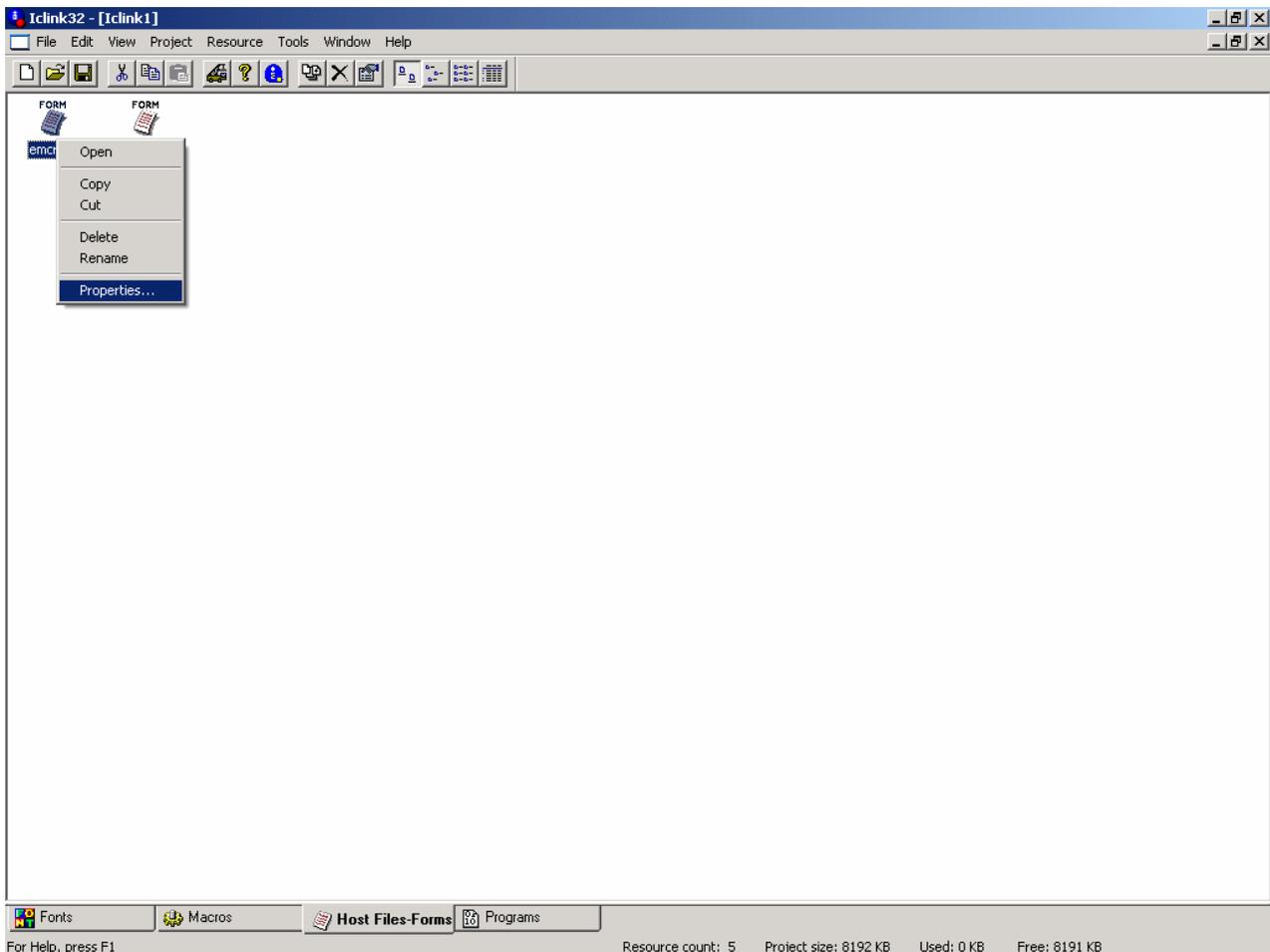


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Tools Menu

EMCR Creator (continued)

7. The emcr on.prn and emcr off.prn files are now located in the “**Host-Files Forms**” of the IC Link Project File and are ready to be built onto the target storage device of the printer (HDD, Microdrive, or Compact Flash Card). These files are the “**ON**” and “**OFF**” triggers for the EMCR Macro feature.
8. The EMCR Macro auto start can be set up in the following manner.
 - a. Right Mouse Click on the emcr on.prn file, this will launch the emcr on.prn file properties.
 - b. Under the emcr properties, select the check box for “**Set form as default for power on**” and then click on the **OK** button. This will enable the EMCR Macro to start up at machine power up and keep it running all the time.

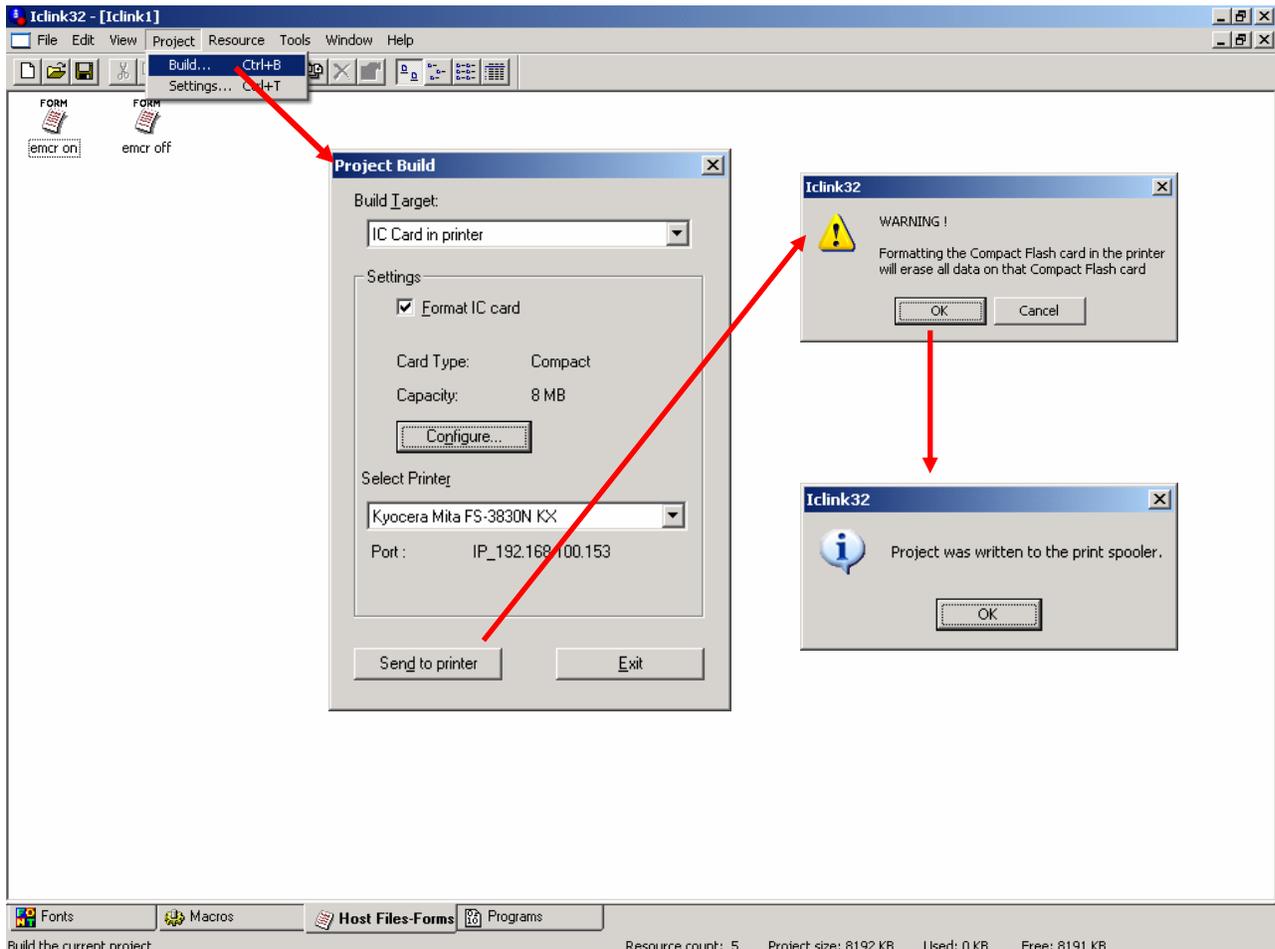


IC Link for Windows

Tools Menu

EMCR Creator (continued)

9. After setting the emcr on.prn properties, select [**Project>Build**] from the drop down menu. This will launch the “**Project Build**” dialogue box where you will need to configure the Project Build settings as follows:
 - a. Build Target – defines the target storage device for the project file (IC Card in printer, Hard Disk/Micro Drive in printer, Export File for EPROM, or Export File for JEIDA (PCMCIA) Card.
 - b. Format IC card – will format the PCMCIA or CF card before building the project file to the card.
 - c. Configure – defines the IC Card type and size.
 - d. Select Printer – sets the target printer.
 - e. Send to Printer – sends the project file to the printer.
10. After all the Project Build settings have been completed, click on the [**Send to printer**] button, a WARNING message will display warning the Format of the Compact Flash Card will erase all data on that Compact Flash Card.
11. Click on the [**OK**] button, and a message will display “**Project was written to the print spooler.**”.
12. The printer LCD will flash “Processing” and then return to the “Ready” state. Turn the printer power “**OFF**” and then “**ON**” to start the EMCR Macro.
13. Send your print data to the printer. Because the EMCR Macro is dependent on its assigned cassette, the EMCR Macro will not be initiated until a print job is sent to the respective cassette.



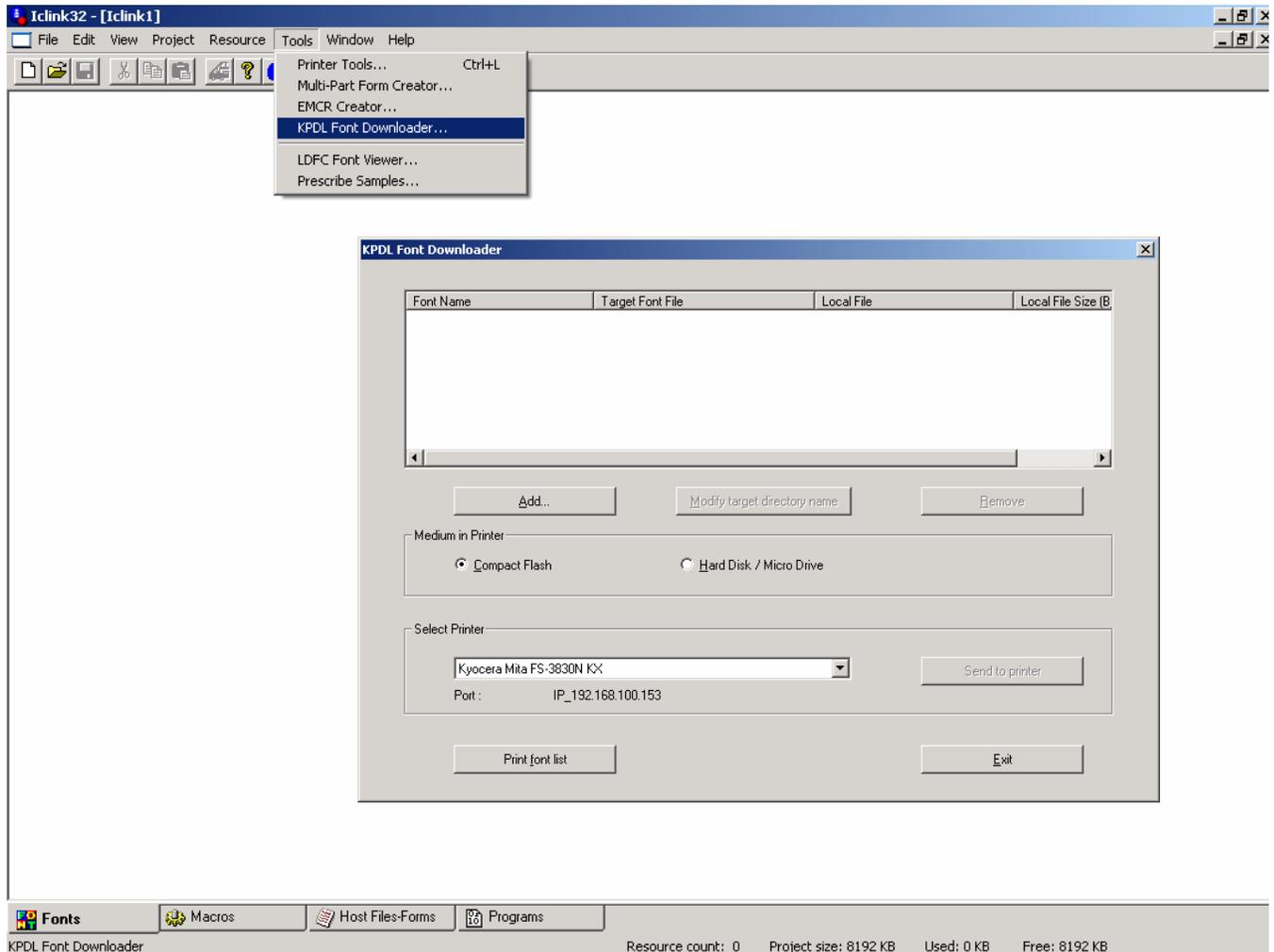
IC Link for Windows

Tools Menu

KPDL Font Downloader

KPDL Font Downloader is a PostScript font tool that has been built into IC Link. It gives you the ability to download PostScript (*.pfb) fonts to the Kyocera printer (the printer must support KPDL). Like the Bitmap fonts mentioned under the “Resource Menu” on page 6, the PostScript fonts can also be saved to a Compact Flash Card and the Printer HDD or Micro Drive.

1. Launch the KPDL Font Downloader tool by selection [**Tools>KPDL Font Downloader ...**]. This will display the **KPDL Font Downloader** dialogue box, where you can select the PostScript font and where on the printer to store the fonts.

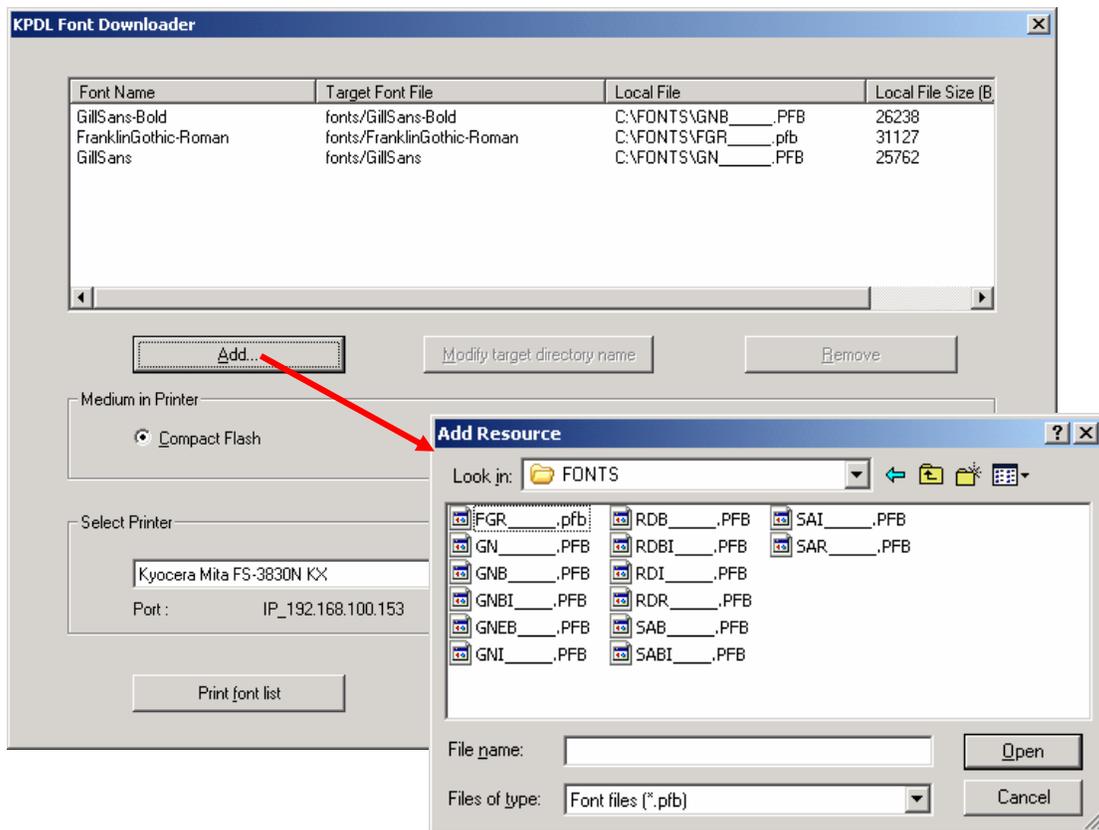


IC Link for Windows

Tools Menu

KPDL Font Downloader (continued)

2. With the KPDL Font Downloader active, select the **Add** button, and select the PostScript fonts (*.pfb) files you wish to load onto the printer.
3. Select the PostScript fonts you wish to download to the printer and click on the **OK** button. This will add the fonts to the KPDL Font Downloader, and populate the font information field with the *Font Name*, *Target Font File*, *Local File Path* and the *Font File Size*.

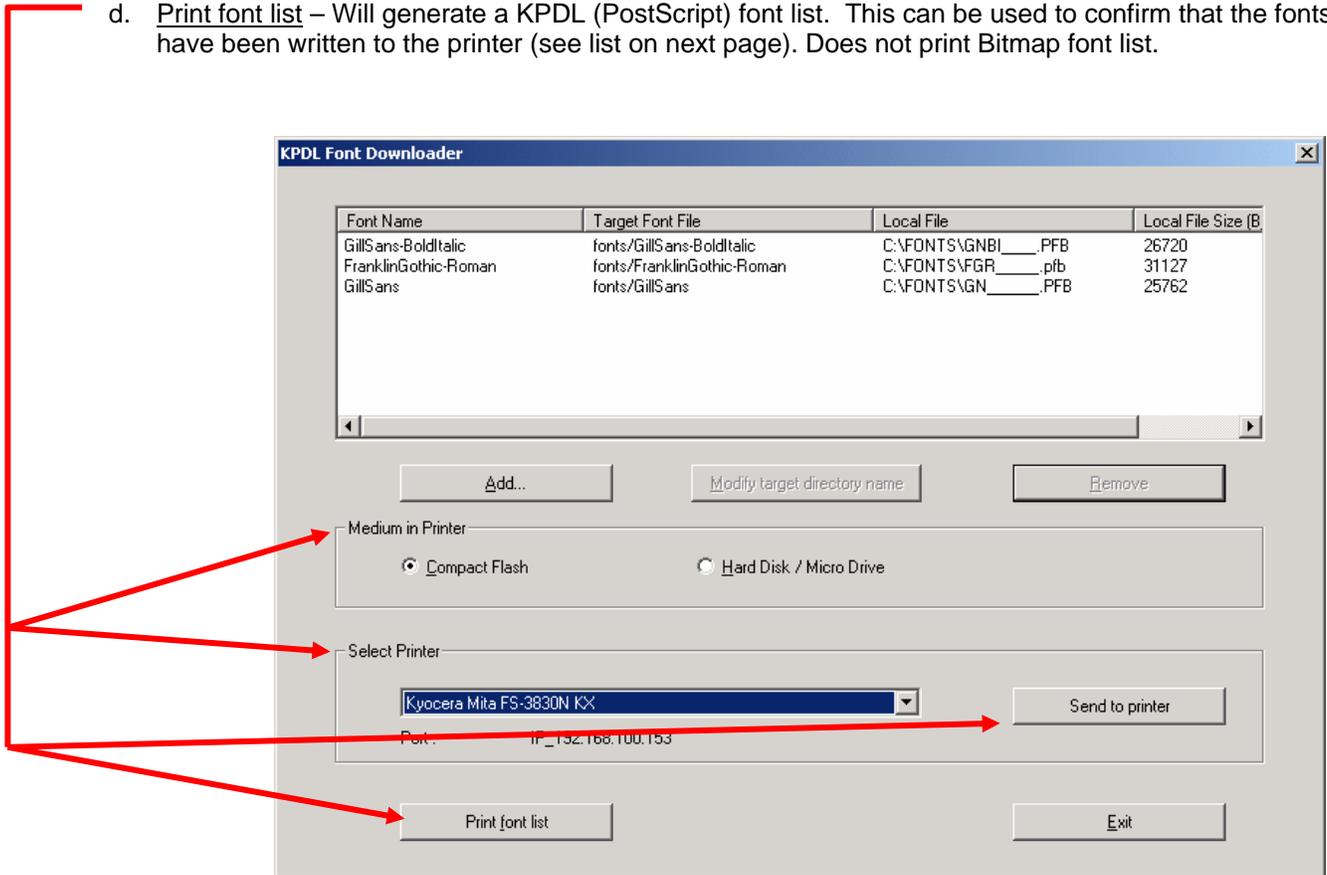


IC Link for Windows

Tools Menu

KPDL Font Downloader (continued)

4. With the fonts loaded into the Font Downloader, make the following selections:
 - a. Medium in Printer – Target storage for the fonts, Compact Flash or Printer Hard Disk / Micro Drive
 - b. Select Printer – From the drop down menu, select the target printer. This selection will list all the available print devices relative to the Windows Print Drivers loaded on the PC.
 - c. Send to Printer – Will send the fonts to the target printer and storage medium.
 - d. Print font list – Will generate a KPDL (PostScript) font list. This can be used to confirm that the fonts have been written to the printer (see list on next page). Does not print Bitmap font list.



5. Once the “**Send to printer**” button has been selected, the selected fonts will be downloaded to the the printer and stored on the selected Medium (Compact Flash Card or Hard Disk / Micro Drive).
6. To confirm that all the selected fonts have been properly loaded to the printer, click on the **Print font list**. A User Defined Scalable Font List will print out at the printer. The list should contain all the fonts loaded with the KPDL Font Downloader (See the next page for an example of the Font List).

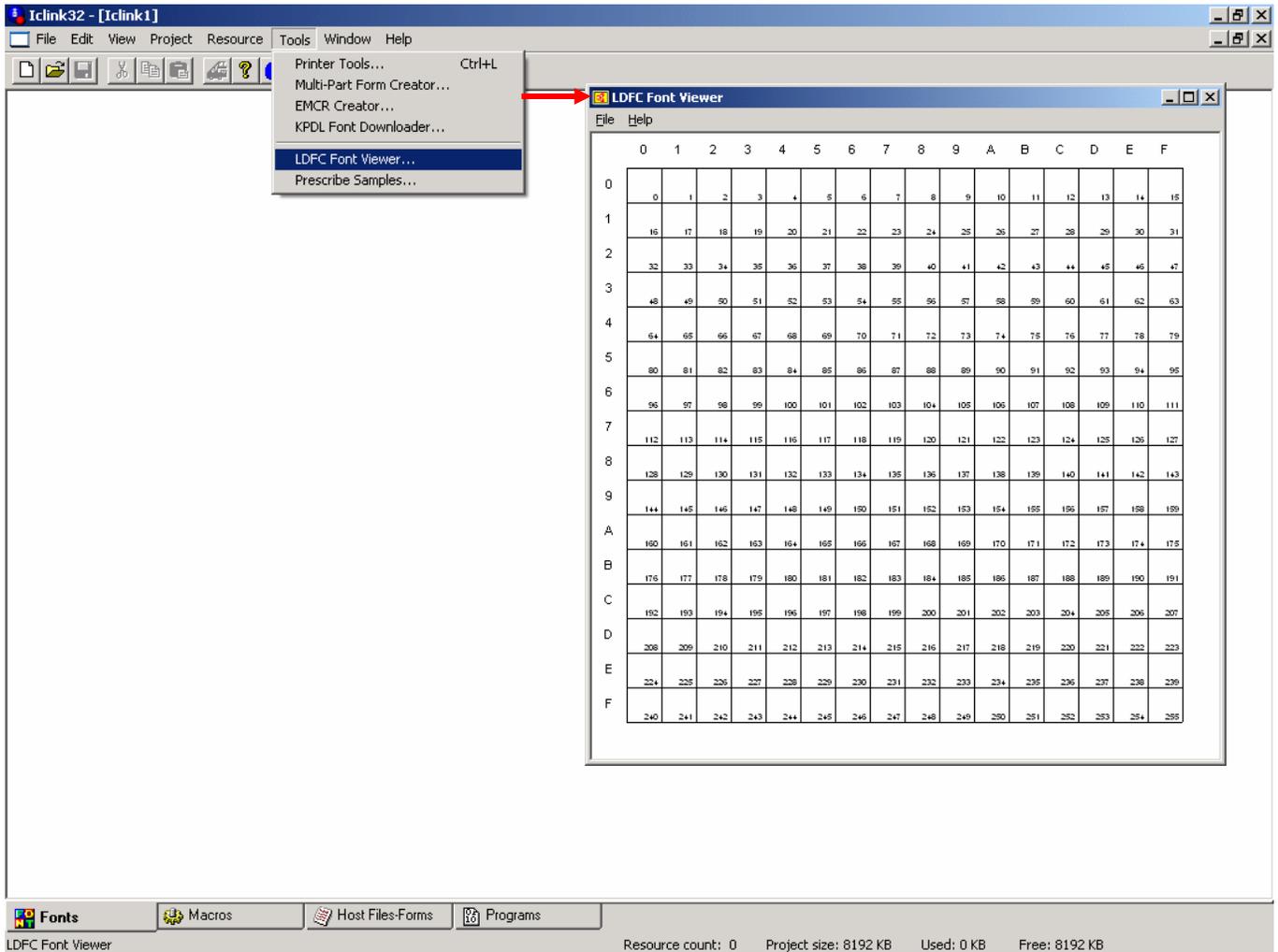
IC Link for Windows

Tools Menu

LDFC Font Viewer

LDFC Font Viewer is a tool built into IC Link for viewing the Kyocera created LDFC Bitmap fonts. Historically these types of fonts would have been created using a legacy Kyocera Utility called Font Logo Master. This tool would be more commonly used for legacy Kyocera Bitmap Fonts. Another method for viewing the Bitmap font is to print a Font Status Page, and is described in the following pages under Font Status Page.

1. Select the [Tools>LDFC Font Viewer ...] from the menu bar. This will launch the LDFC Font Viewer.

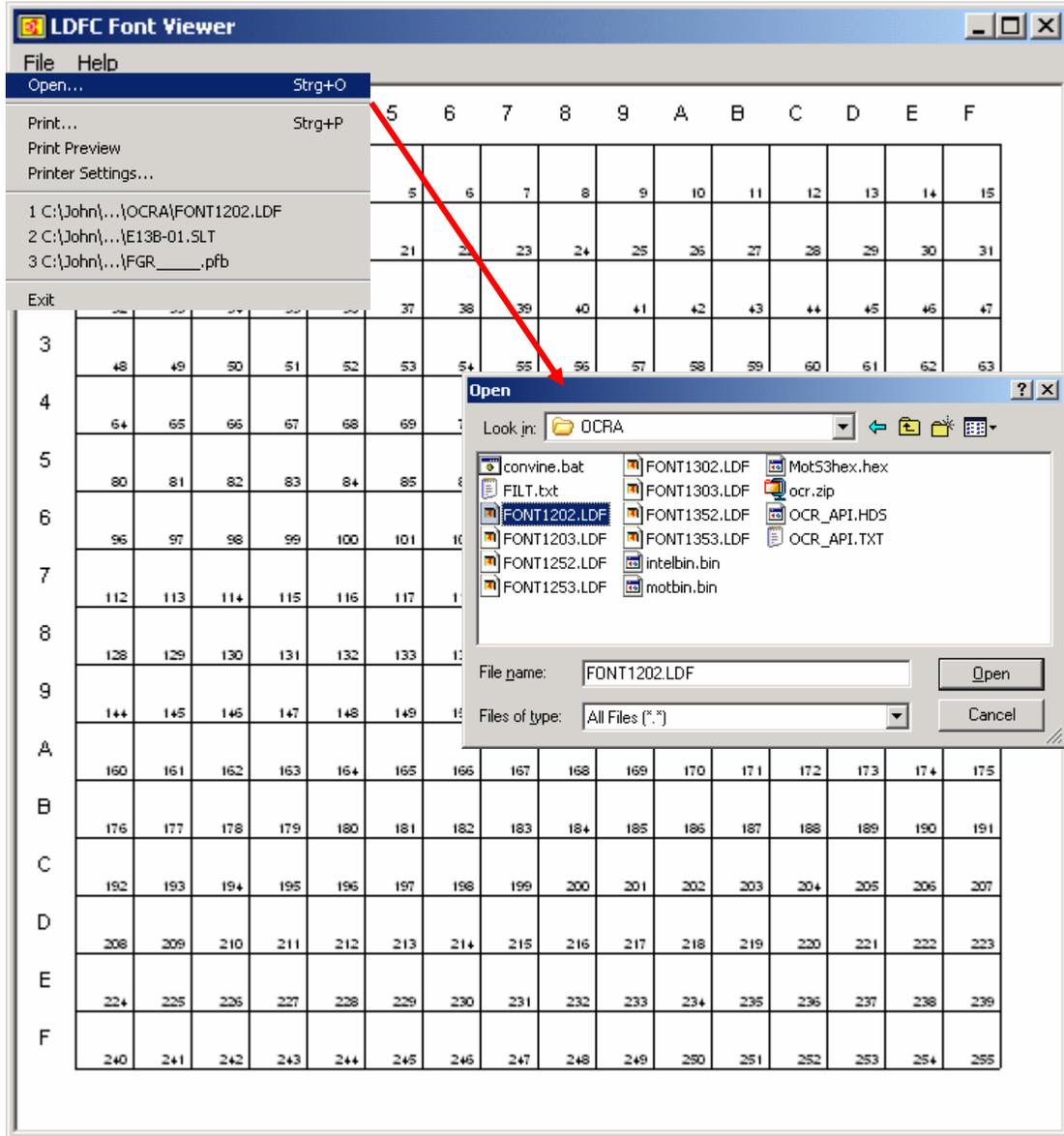


IC Link for Windows

Tools Menu

LDFC Font Viewer (continued)

2. With the LDFC Font Viewer running, select [**File>Open**], and browse to your folder location which has the Kyocera Bitmap Fonts. Select the Font file (*.LDF) and click on the **Open** button.



IC Link for Windows

Tools Menu

LDFC Font Viewer (continued)

- This will load the selected Kyocera Bitmap font (*.LDF) into the Font Viewer. The Font Viewer will display a Character Map of the font. This information can be useful in isolating a font and/or printer symbol set issue with an LDF font.

NOTE: The LDFC Font Viewer will only display the Font Status Page for a Kyocera Bitmap font with the LDF font extension. To create a Font Status Page for standard Bitmap fonts please see the following pages under the **Font Status Page** title.

FONT1202.LDF - LDFC Font Viewer																
File Help																
	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
2	!	"	#	\$	%	&	'	()	*	+	,	-	.	/	
3	0	1	2	3	4	5	6	7	8	9	:	;	<	=	>	?
4	a	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
5	P	Q	R	S	T	U	V	W	X	Y	Z	[	\	\]	^	Y
6	H	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o
7	p	q	r	s	t	u	v	w	x	y	z	{	|	}	~	
8	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143
9	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159
A	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175
B	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191
C	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207
D	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223
E	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239
F	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255



IC Link for Windows

Font Status Page

A Bitmap Font Status Page can be printed from the printer, by issuing the following PRESCRIBE command to the printer: **!R! FSTS; EXIT;**

This command will instruct the print controller to print a Font Status Page of the active bitmap font, and will represent the font characteristics with a table of mapped bits for each character used in the font. This type of font information is critical for advanced troubleshooting efforts with fonts and/or printer symbol set issues.

FONT STATUS PAGE																	
Font Name	Courier					Scale Factor (ORU)	2048					Stroke Weight	0				
Symbol Set	10U(341)					Pitch (in ORUs)	1229					Typeface	4099				
Orientation	Portrait					Height (in ORUs)	2048					Style	0				
Spacing	Fixed					Point size (in points)	18										
0	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F	
0	0	▶		0	@	P	`	p	Ç	É	á	::	L	ll	α	≡	
1	☺	◀	!	1	A	Q	a	q	ü	æ	í	☒	⊥	⊟	ß	±	
2	☹	↕	"	2	B	R	b	r	é	Æ	ó	☒	⊤	⊥	Γ	≥	
3	♥	!!	#	3	C	S	c	s	â	ô	ú	|	†	ll	π	≤	
4	♦	¶	\$	4	D	T	d	t	ä	ö	ñ	†	—	⊥	Σ	∫	
5	♣	§	%	5	E	U	e	u	à	ò	Ñ	‡	†	F	σ	J	
6	♠	—	&	6	F	V	f	v	å	û	ª	||	†	π	μ	÷	
7	•	↓	'	7	G	W	g	w	ç	ù	º	π	||	||	τ	≈	
8	◻	↑	(	8	H	X	h	x	ê	ÿ	¿	‡	ll	≠	Φ	°
9	◻	↓	)	9	I	Y	i	y	ë	Ö	¬	||	¶	J	θ	·
A	◻	→	*	:	J	Z	j	z	è	Û	¬	||	ll	¶	Ω	·	
B	♂	←	+	;	K	[	k	{	ï	ç	½	¶	¶	■	δ	√
C	♀	L	,	<	L	\	l	|	î	£	¼	¶	||	■	∞	n	
D	♪	↔	-	=	M	]	m	}	î	¥	¡	ll	=	||	φ	²
E	♪	▲	.	>	N	^	n	~	Ä	Pt	«	¶	||	■	ε	■	
F	☼	▼	/	?	O	_	o	△	Å	f	»	¶	±	■	∩		

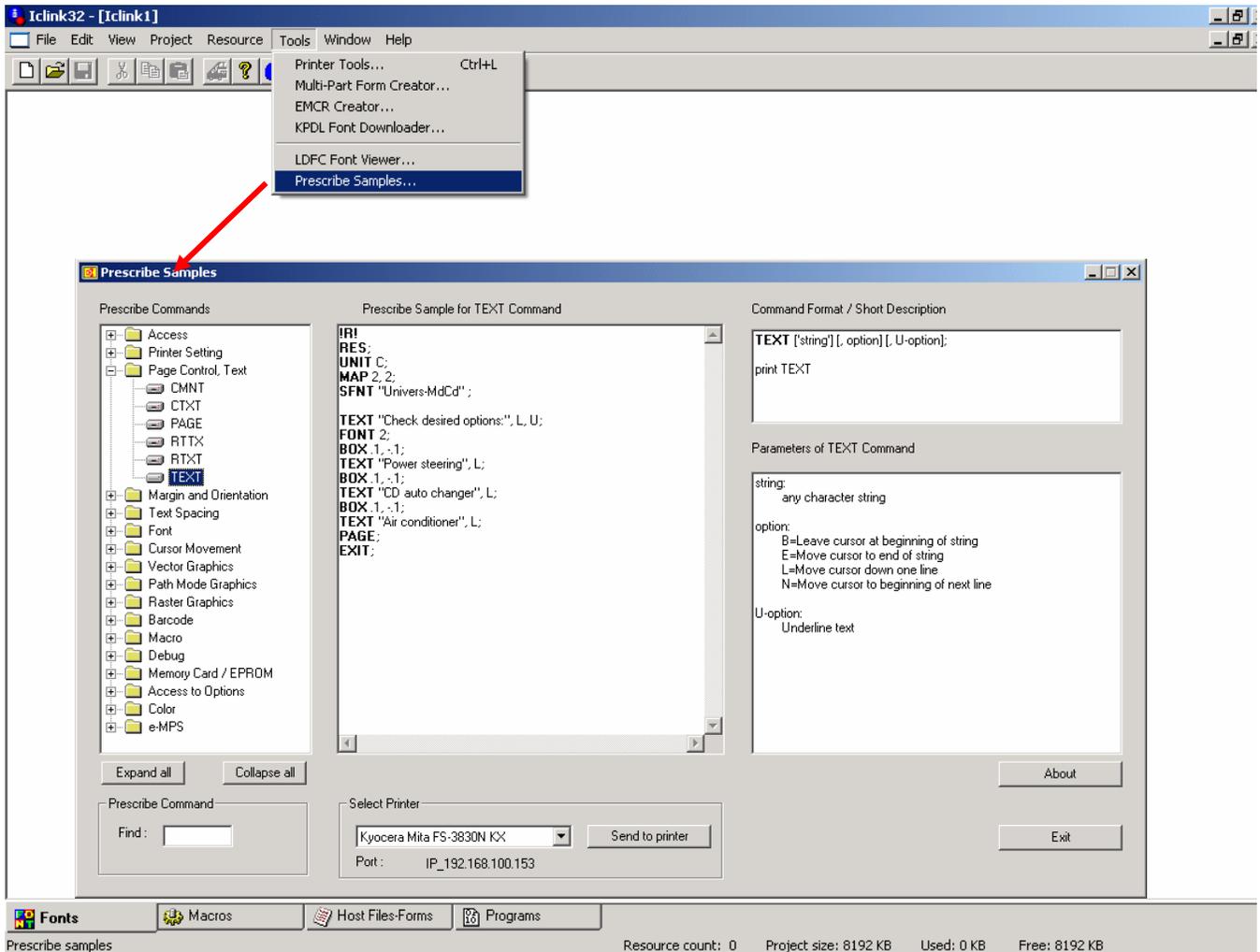
IC Link for Windows

Tools Menu

PRESCRIBE SAMPLES

PRESCRIBE Samples is a tool for viewing PRESCRIBE commands, the command format and parameters. Each of the PRESCRIBE commands has a working template which can be sent to any of the Kyocera printers to demonstrate the command's function. With the PRESCRIBE Samples module running you can view all the PRESCRIBE Commands which are arranged into separate folders by category.

- To access the PRESCRIBE Samples, select [**Tools>Prescribe Samples...**] from the menu bar in IC Link. This will launch the PRESCRIBE Samples module of IC Link.

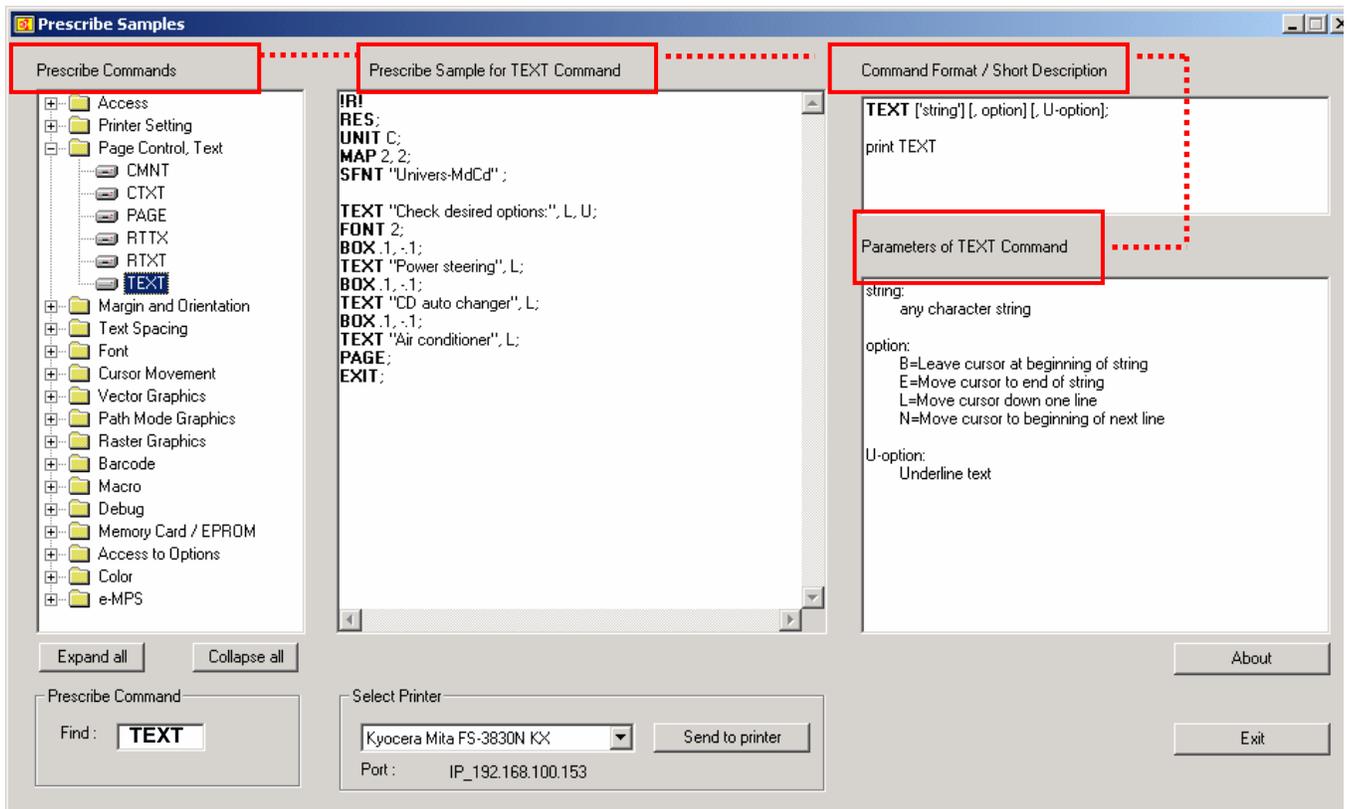


IC Link for Windows

Tools Menu

PRESCRIBE SAMPLES (continued)

2. Select the [Page Control, Text] folder under the Prescribe Commands field to open up the folder and display the selection of Prescribe commands relative to Page Control.
3. Select the [TEXT] command, and note the **Prescribe Sample for TEXT Command**, **Command Format / Short Description**, and **Parameters of TEXT Command** fields. You now have a visual of the PRESCRIBE Command, Sample of the command, command syntax format, and command parameter values.



Additional features of the PRESCRIBE Sample module include:

- Prescribe Command Search – will search for a particular PRESCRIBE command.
- Select Printer / Send to printer – allows the user to define the target printer and to send the PRESCRIBE Sample to the printer.

NOTE: The PRESCRIBE Sample for Text Command can be copied and pasted into Text Pad or Notepad to use as a template to customize the command syntax to meet your requirement.

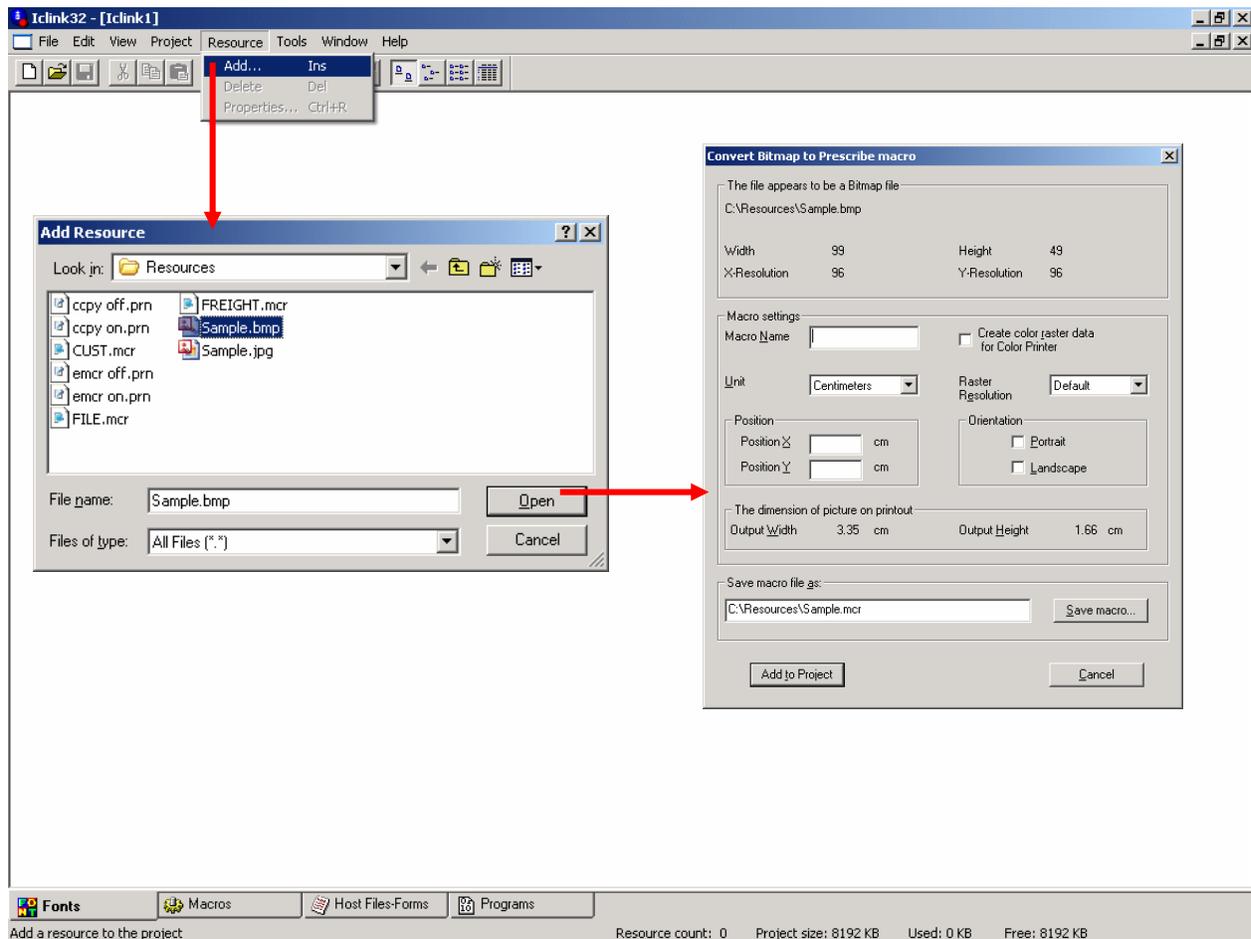
IC Link for Windows

IC Link Image Converter

IC Link also comes equipped with an image converter which will encompass rasterized data from a *.BMP or *.JPEG file with PRESCRIBE Macro commands. Keeping in mind the quality of the scanned image, this feature of IC Link can be used as a method to create simple PRESCRIBE based forms from scanned images. Generally the *.BMP converted image is used for Kyocera monochrome printers and the *.JPEG converted image can be used for Kyocera color printers.

Converting *.BMP or *.JPEG Image for PRESCRIBE Macro

1. From the IC Link menu bar, select [**Resource>Add**]. An Add Resource dialogue box will appear, and you can browse to the location of the *.bmp or *.jpeg file and select it and click on the **Open** button. This will launch the Convert Bitmap to Prescribe macro or Convert JPEG to Prescribe macro dialogue box (depending on the type of image you have selected).



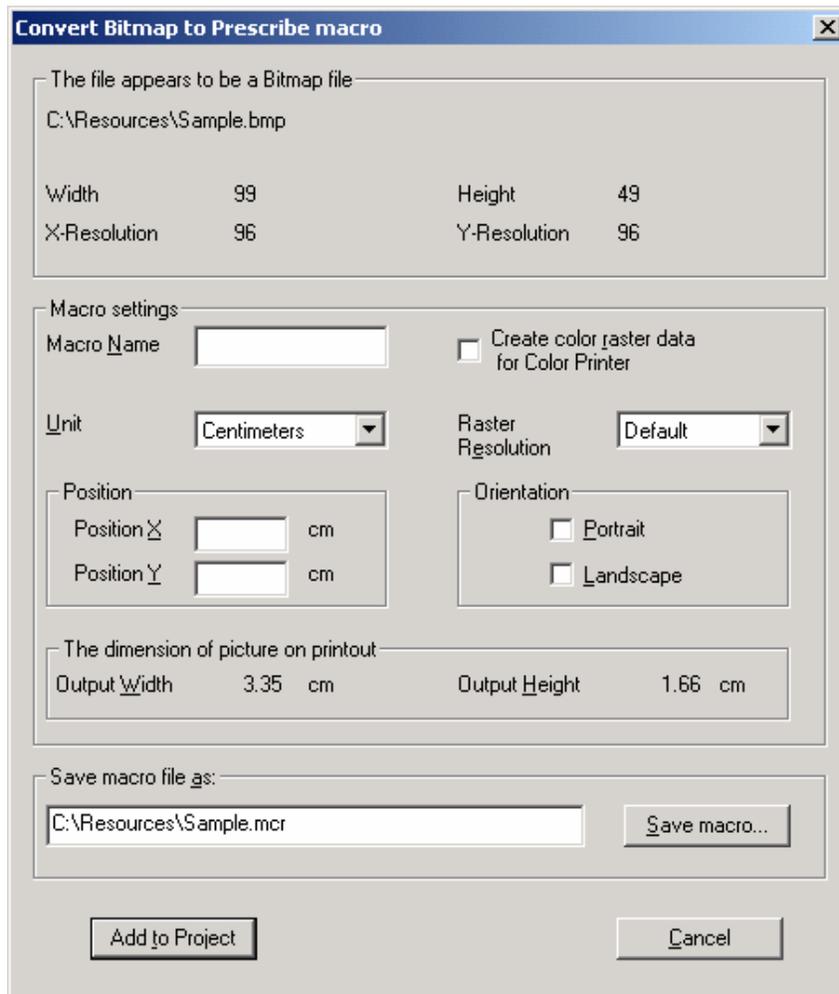
IC Link for Windows

IC Link Image Converter

Converting *.BMP or *.JPEG Image for PRESCRIBE Macro

*.BMP Conversion

- With the Bitmap Conversion dialogue box open, you make settings which will define the characteristics of the PRESCRIBE macro as follows:



Macro Name – Select name of macro. Macro name is limited to 4 characters.

Unit – Unit of measurement for the *.bmp file (Centimeters, Inches, Dots).

Position X / Position Y – Defines the position of the macro file with respect to the X (left to right) and Y (top to bottom) coordinates on the page. If this position is not defined here – then it must be defined in the actual macro file.

Width/Height - Identifies the width and height of the scanned image on print out.

Create Color Raster Data for Color Printer –Defines the data as “rasterized for color. This will only support bitmap images scanned as color data.

Raster Resolution – Defines the Width and Height of the bitmap file being converted. Defined in DPI as follows (100, 150, 200,300, or 600). The default of the scanner is 300 DPI.

Orientation – Defines page orientation. If left blank, the page orientation will follow what is set on the printer.

Save macro – saves the macro file onto the PC for future use.

- Once you have defined all the macro settings and saved the macro onto to the PC by clicking on the **[Save macro...]** button,, you can add it to the IC Link Project File by clicking on the **[Add to Project]** button. This will create a Macro Icon under the **[Macro]** tab of the IC Link Project File.
- After the macro file has been added to the IC Link Project File, then you can build it to the Printer following the instructions for under the **Project Menu – Project Build and Project Settings** on page 6 of this document.

IC Link for Windows

IC Link Image Converter

Converting *.BMP or *.JPEG Image for PRESCRIBE Macro (continued)

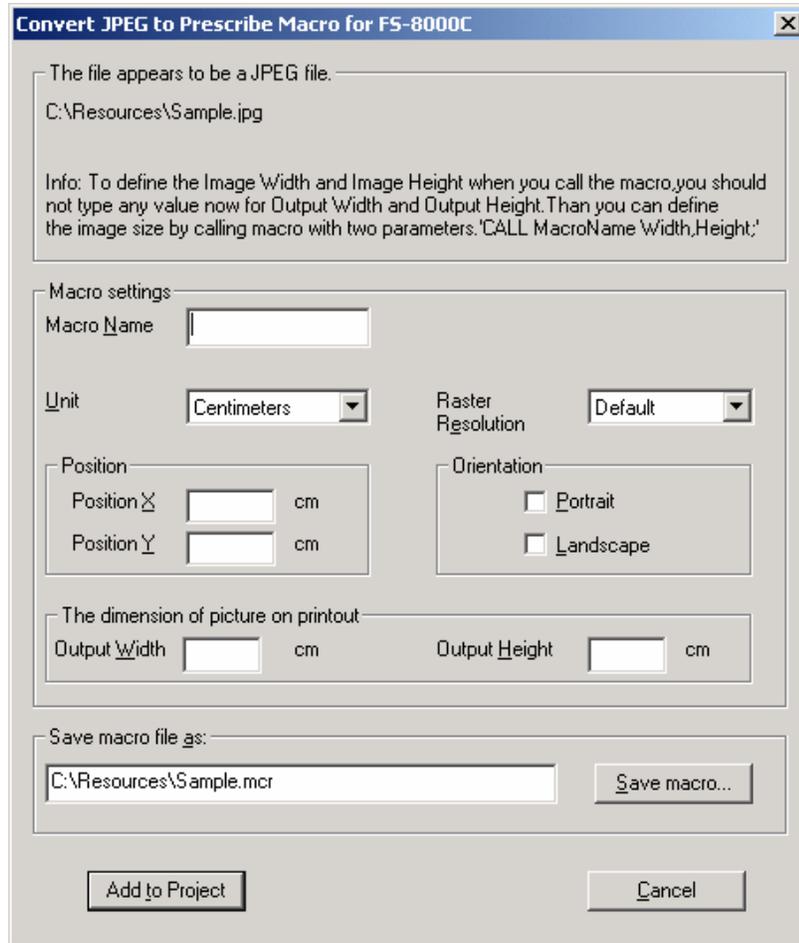
*.JPEG Conversion

1. With the JPEG Conversion dialogue box open, you make settings which will define the characteristics of the PRESCRIBE macro as follows:

Macro Name – Defines the Macro name. Requires four letters to define the name.

Unit – Defines the Unit of measurement for the Macro. Accept default settings.

Position - Defines the position of the macro file with respect the X (left to right) and Y (top to bottom) coordinates on the page. If this position is not defined here – then it must be defined in the actual macro file.



Raster Resolution – Defines the Width and Height of the bitmap file being converted. Defined in DPI as follows (100, 150, 200,300, or 600). The default of the scanner is 300 DPI.

Orientation – Defines page orientation. If left blank, the page orientation will follow what is set on the printer.

Output Width and Output Height – Defines the Image Width and Height. It is not necessary to define any values here, as the Width and Height can be defined in the Macro Call with two parameters in the Call statement.

!R! CALL <macroname>**W,H**;EXIT;

W = Image Width
H = Image Height

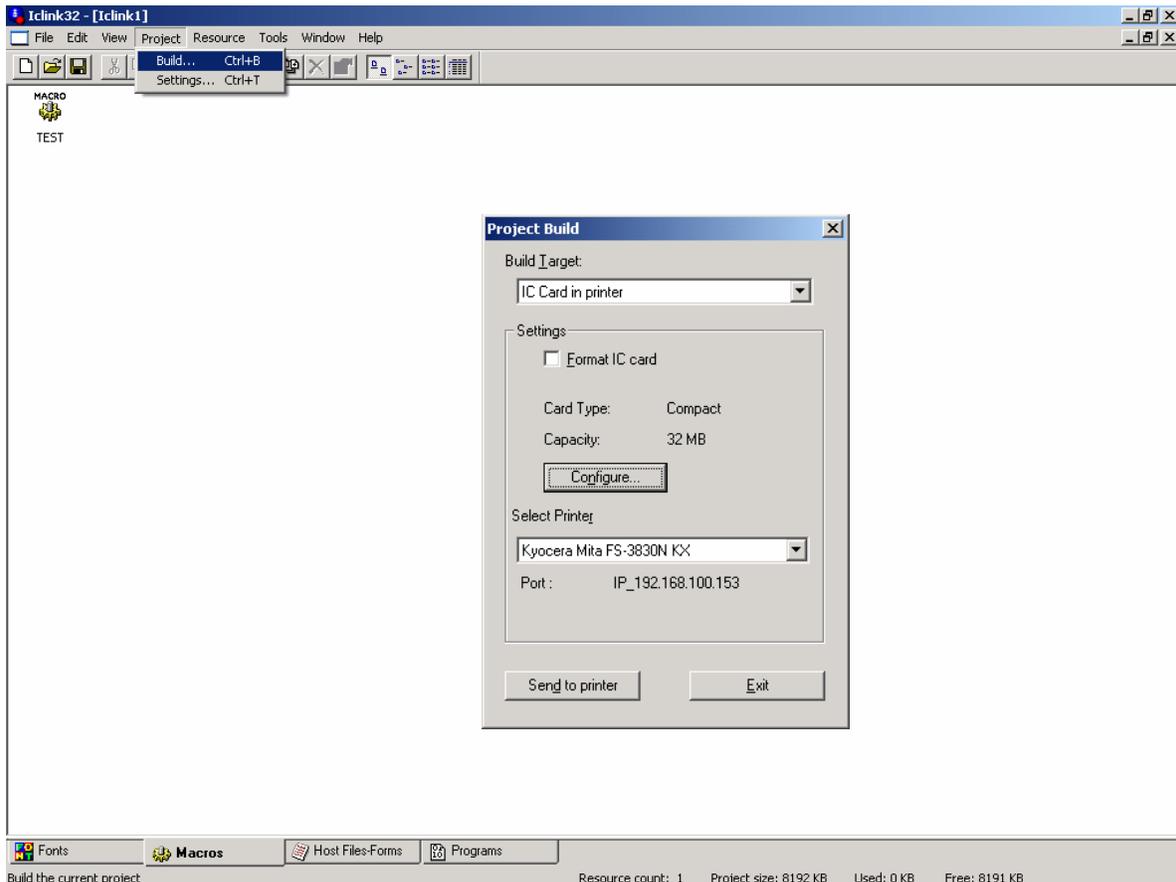
2. Once you have defined all the macro settings and saved the macro onto to the PC by clicking on the [Save macro...] button, you can add it to the IC Link Project File by clicking on the [Add to Project] button. This will create a Macro Icon under the [Macro] tab of the IC Link Project File.

IC Link for Windows

IC Link Image Converter

Converting *.BMP or *.JPEG Image for PRESCRIBE Macro (continued)

3. After the Bitmap Converted macro file has been added to the IC Link Project File, you can build it to the Printer by selecting [**Project>Build**]. This will launch the Project Build dialogue box and you can Configure the IC Memory Card Settings and Select the target printer to build the IC Link Project File. *Additional details on Project Builds can be referenced on page 6 of this User Guide.*



IC Link for Windows

KX Print Driver Prologue / Epilogue Feature

Initiating PRESCRIBE Macros from Microsoft Windows

The Kyocera Extended Print Driver, KX Print Driver, has an added module called Prologue / Epilogue. This module allows the user to start (Prologue) and to end (Epilogue) a Windows print job with a text based file (Notepad or Wordpad) containing PRESCRIBE commands. This feature is generally used to initiate a CALL for a Macro or an AMCR for a Macro. These Macro's are described as follows:

CALL Macro – will call a macro to overlay with print data on the first page.

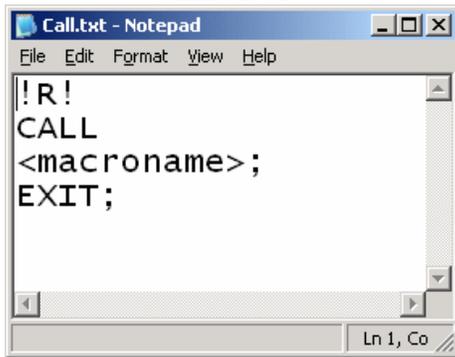
AMCR Macro – will call a macro to overlay with print data on all pages printed to the printer.

In each case a PRESCRIBE Macro is required to be built onto the printer. The following instructions outline the process of creating the trigger to initiate or call these macros using the Kyocera KX Print Driver Prologue / Epilogue feature as follows:

CALL Macro / AMCR Macro

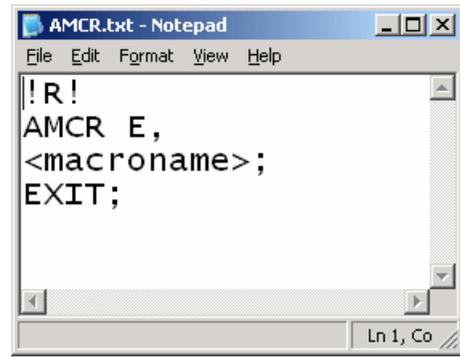
1. Determine which type of Macro you are setting up on the printer. **CALL, AMCR, EMCR.** Using Microsoft Notepad and the sample templates given below, create the Microsoft Notepad as follows:

CALL Macro



```
!R!  
CALL  
<macroname>;  
EXIT;
```

AMCR Macro



```
!R!  
AMCR E,  
<macroname>;  
EXIT;
```

NOTE: In both cases for the CALL Macro and the AMCR Macro, the *<macroname>* is substituted with the actual macro name.

2. Save the Notepad file to a folder on the PC, the file will need to exist in a permanent location on the PC so it is important to select a folder that does not have a chance of being deleted or moved at a later time.

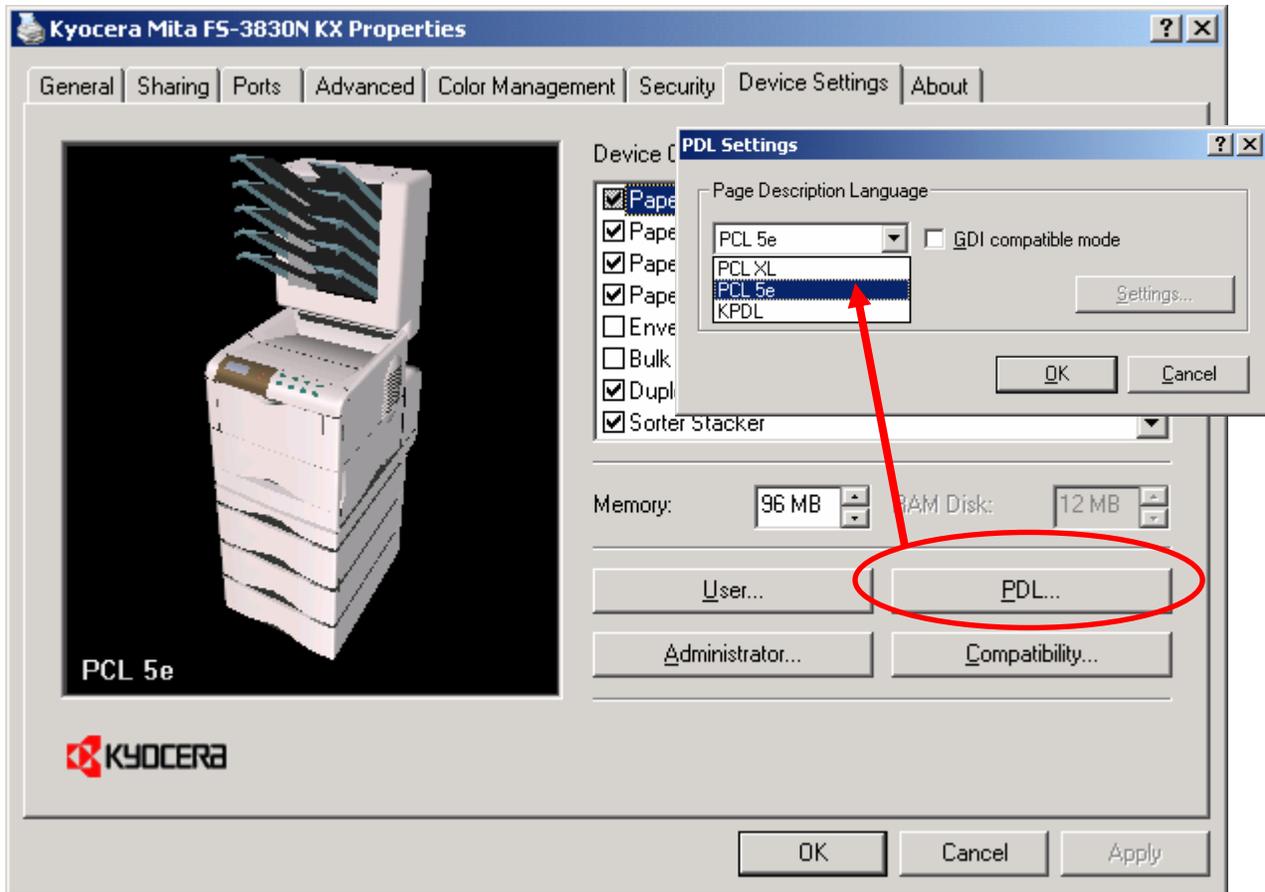
IC Link for Windows

KX Print Driver Prologue / Epilogue Feature

Initiating PRESCRIBE Macros from Microsoft Windows (continued)

3. Go to the Printers Folder on you PC and open the properties of the KX Print Driver you are using for the target printer.
4. Select the **Device Settings** tab.
5. Click on the **PDL** button to display the PDL settings of the print driver.
6. Using the drop down menu under the Printer Description Language, select **PCL 5e** and click **OK**.
7. Click **OK** again to close the print driver properties and set the PDL change.

NOTE: The print driver PDL will change to PCL 5e and be displayed in the lower left hand corner of the illustration of the printer.

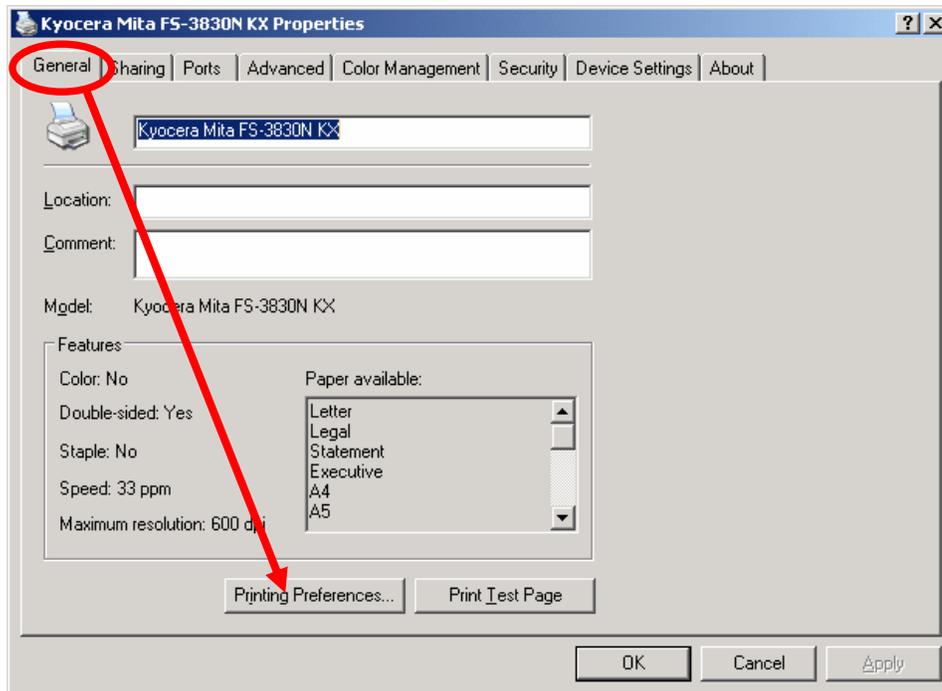


IC Link for Windows

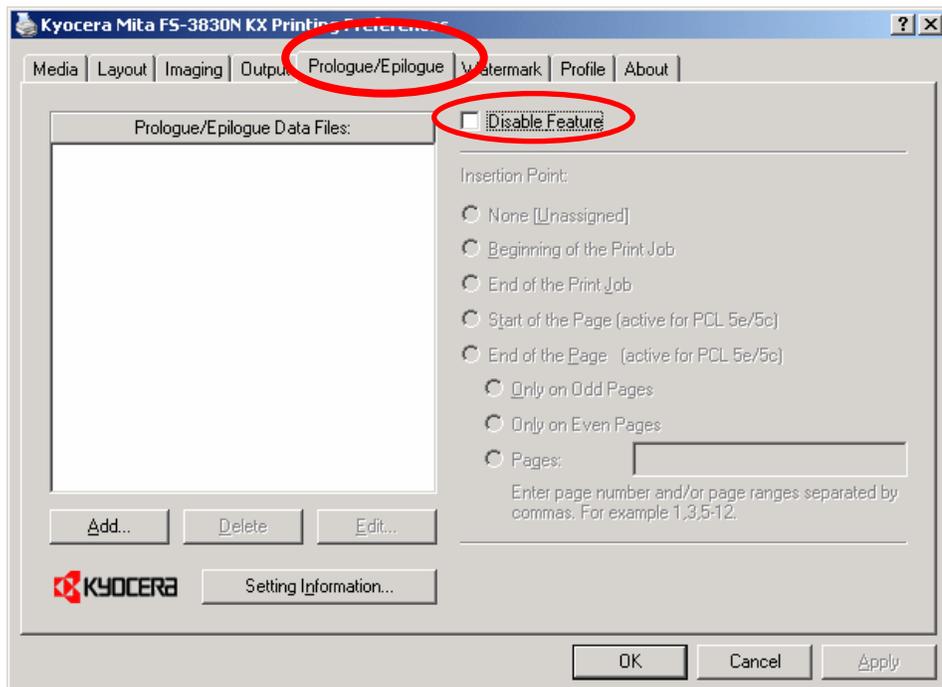
KX Print Driver Prologue / Epilogue Feature

Initiating PRESCRIBE Macros from Microsoft Windows (continued)

7. Open the Print Driver properties again and click on the **General** tab.
8. Click on the **Printing Preferences** button. This will display the print driver printing preferences.



9. With the Printing Preferences displayed, Select the **Prologue / Epilogue** tab and un-check the Prologue / Epilogue **Disable Feature** by clicking on the check box.

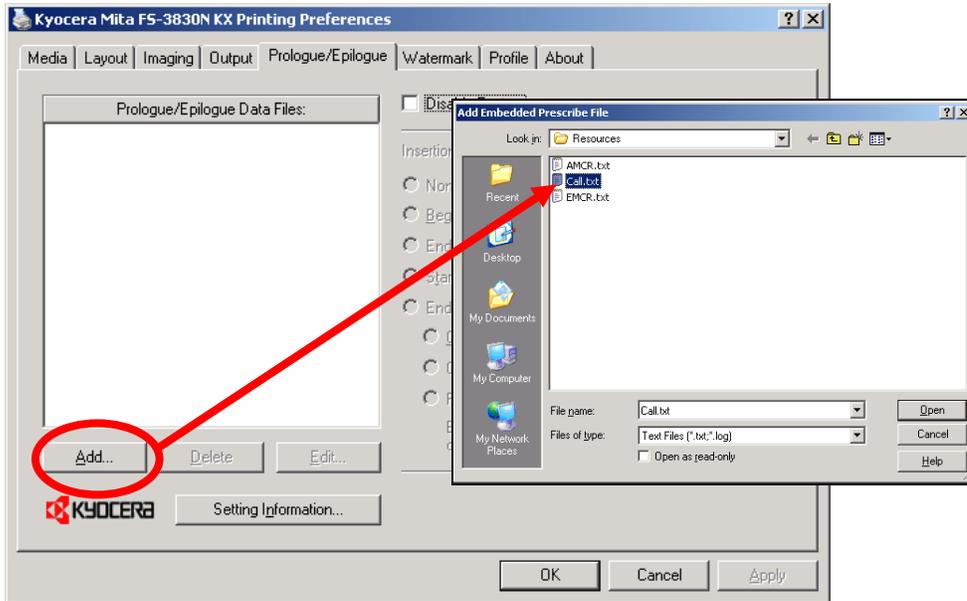


IC Link for Windows

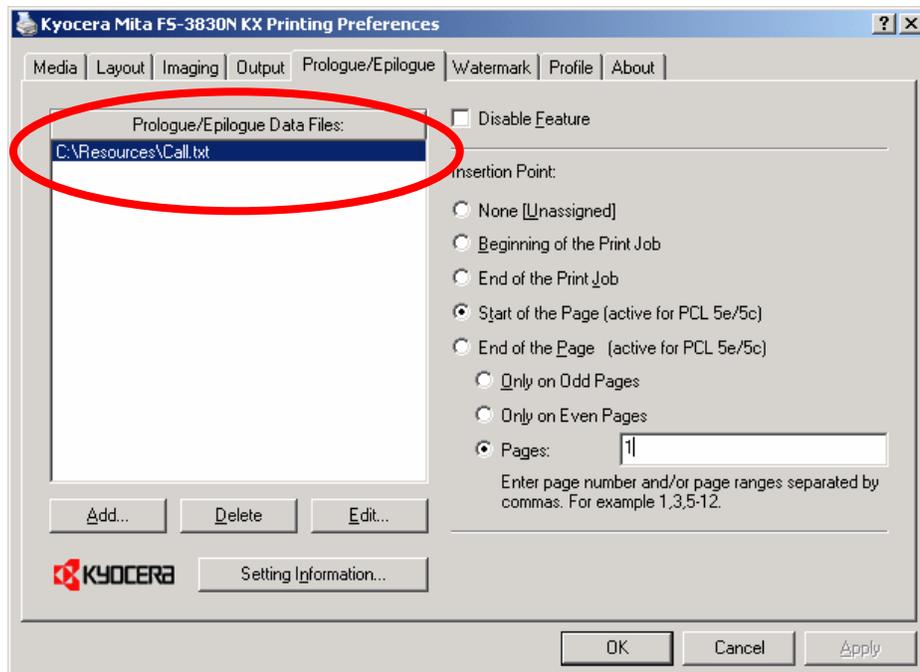
KX Print Driver Prologue / Epilogue Feature

Initiating PRESCRIBE Macros from Microsoft Windows (continued)

10. With the **Prologue / Epilogue** feature enabled, select the **Add** button.
11. Browse to the Notepad file with the PRESCRIBE Call statement for the desired macro, select it and click on the **Open** button.



12. The Notepad file with the PRESCRIBE Call statement will be added to the **Prologue/Epilogue Data Files:** field of the driver.

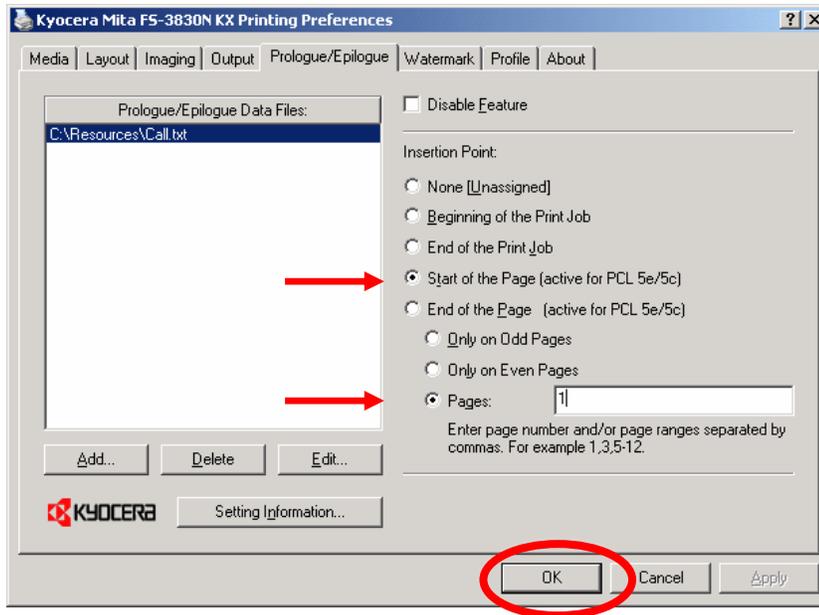


IC Link for Windows

KX Print Driver Prologue / Epilogue Feature

Initiating PRESCRIBE Macros from Microsoft Windows (continued)

13. Select **Start of the Page (active for PCL 5e/5c)**, and enter the page number or ranges of pages you wish to insert the PRESCRIBE Call statement at. In this case, you will enter in a **1**, and click the **OK** button to submit the settings.



The Prologue/Epilogue feature of the KX Print Driver has now been configured with the PRESCRIBE Call statement to initiate a PRESCRIBE Macro at the start of page 1. Each time you print from this print driver, the PRESCRIBE Macro will execute and overlay a form or execute the macro.

As there are other considerations for printing environments, there are also other methods for calling or initiating a PRESCRIBE based macro. To learn more about these methods, please contact your Authorized Kyocera Mita Dealer.