



APWI - IPDSXpress - Getting Started & Quick Guide

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1 About this program

The IPDSXpress is a software-based print server.

When the IBM host sends a data stream to this print server, it converts IPDS into a format supported by Windows print drivers and redirects the data stream to the selected driver. From that point on, the Windows driver is in control of what happens.

The IPDSXpress installs as a Windows Service. You configure and monitor the print server and the IPDS Services through a web-browser-based Administration GUI. Performance is dependent on the PC's capabilities.

The software can be downloaded free for trial purposes. In Demo mode all output includes a banner and only one input/output session is supported. "Full Image Color Support" (FS45) is included. This functionality enables printing of color pictures (continuous toned images).

To enable production printing without the banner, purchase a license key. The key is available in variants enabling from 1 to 256 sessions (1, 2, 4, 8, 16, 32, 64, 128, 256). Any license can be ordered with or without Full Image Color Support. Note that all licenses have basic color support as described below (section 7.3.2 on page 15).

Instructions for purchasing and entering a license key are included in the software.

For full specifications, including the supported IPDS Print Platforms, please refer to the product data sheet.

2 System requirements

The following information is also provided as a part of the installation program.

The IPDSXpress runs on Windows XP, Windows 2000, and Windows NT 4.0 (SP6). Processor minimum: 1 GHz – for example Pentium III.

Because the program installs as a Windows Service, administrator rights are required to run the install program. Administrator rights are also required to manage the Windows Service (start, restart, and stop).

This program should be installed on a PC that can function as a server in your network environment. Usually this means that the PC should have a fixed IP address. Alternative: Your network administrator may allow or even require registration of the PC by hostname.

The hard disk on the PC should have at least 10 MB free before this program is installed. Included in this requirement is 3-4 MB for resident fonts and code pages. The program can manage storage of up to 55 MB fonts downloaded from the host. Calculate very roughly with an average of 50 Kb per captured font set.

The PC should have minimum 256 MB RAM. Each active host session requires about 3 MB of RAM for handling host resources.

The web-browser used for IPDSXpress Administration (configuration, monitoring) must have JavaScript enabled and must be able to handle framesets. The install program allows you to select the browser to use from those installed on the PC.

Before installing the program, you may want to see which ports on your PC are already used. To do this, open a command prompt and type: `netstat -a -n`

Look at all the TCP ports where the State is "Listening". If you find that port 8181 is used, when the install program asks you about a port for contacting the Administration GUI, enter a different, unused port.

3 Documentation for users

The install program saves this Getting Started and Quick Guide file (PDF), the license text, system requirements, and the release notes (txt files) into the destination folder for the program files

The **Getting Started and Quick Guide** document includes the basics of configuring and using the print server as well as tips on managing the Windows Service and tips on port management.

Release notes can be helpful even if this is the first time you have used this product.

The on-line help serves as an extensive options reference manual.

Product support portal: <http://www.apwi.com/ipdsxpress.htm>. This is where you will find links to product information and information on how to purchase a license key for production printing.

4 Installation tips

4.1 The install program IPDSXpressSetup.exe file

The IPDSXpressSetup install program is a self-extracting .exe file which will guide you through the installation. You can run it directly from the download page (Run or Open) on our website, or Save it to your own drive and run it from there.

4.1.1 Naming conventions for the install program

Example: IPDSXPRESS-10rc-008.exe

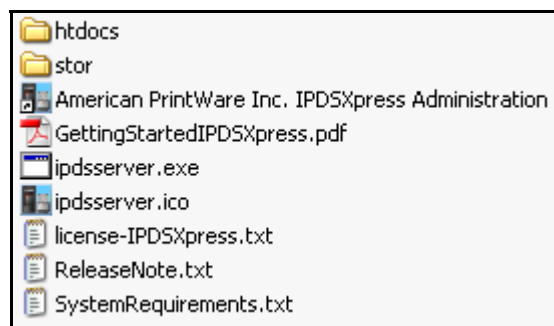
IPDSXPRESS is the program module code. 10 stands for release 1.0. 008 is the build number for the product.

In this example, rc indicates that build 008 is a release candidate for release 1.0.

4.2 Files saved to your computer when you install

The install program will propose **C:\Program Files\American PrintWare Inc\IPDSXpress** as the destination folder. If your operating system is not in English you will, of course, have to select a different placement. The program will support your browsing to a destination.

Figure 1 Files saved to your computer in the IPDSXpress folder



4.3 Windows service – installed and started automatically

The name of the Windows service is “**IPDSXpress**.” Tips on using Windows for service management are in section 10, starting on page 21.

4.4 Http port for the web-browser-based Administration GUI

The install program will propose port 8181.

Do not change this unless you know that UDP or TCP port 8181 is used for other purposes on the PC where you will be running this product. A tip on determining whether or not the port is used is given at the end of section 2 on System Requirements.

The install program writes the port number to the Windows registry.

4.4.1 If you need to change the http port after installation ...

If you should need to change the http port after having installed the product, uninstall the program and then run the install program again, entering the new port.

4.5 Choice of web browser

The install program will try to detect the current default browser. If it cannot, it will propose Microsoft Internet Explorer (MSIE) C:\Program Files\Internet Explorer\iexplore.exe. You must edit this if:

- you use a localized version of Windows (a version in a language other than English - for example Danish)
- or you use a different browser than Microsoft Internet Explorer
- or you have MSIE installed on a non-standard path.

The string for the path name shown in the field may include quotation marks (""). For example:

```
"C:\Program Files\Internet Explorer\iexplore.exe" -nohome
```

If you edit the install program's proposal, be sure to use these marks exactly as shown, surrounding the full path name.

4.6 Shortcuts for accessing the Administration GUI

The install program will add a shortcut to the Windows Start menu, Programs group, using the path for the destination folder. Default is American PrintWare Inc > IPDSXpress > **IPDSXpress Administration**.

The install program will also offer to place a shortcut to **IPDSXpress Administration** on the desktop.



5 Using the web-browser-based Administration GUI

5.1 What the Administration GUI is used for

Use the Administration GUI if you want to change or examine a configuration, delete captured fonts from the hard disk, order or enter a license key, change the password, check the current status of the configured IPDS Services, or stop the IPDS Services.

5.2 Accessing the Administration GUI

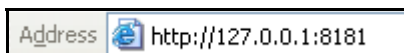
N.N.N.N = the IP address of the machine on which the product is installed.

nnnn = the http port number. This will be 8181 unless you have chosen another port during the installation process (section 4.4, page 4).

Local access:

On the machine the program is installed on, you can use a short cut as described above (section 4.6, page 5).

Or: Open the browser. Type http:// and the loop-back address - typically 127.0.0.1 – followed by a colon and the port number nnnn in the address field. For example `http://127.0.0.1:8181`



Or, open the browser and type `http://localhost:8181`

Remote access:

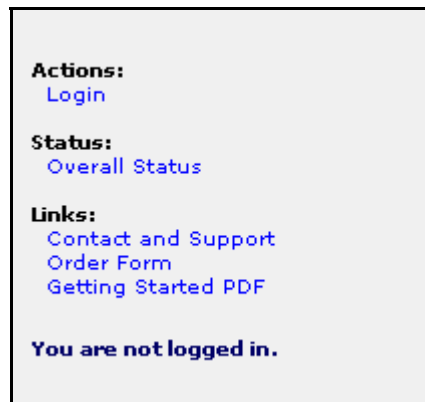
Open the browser. Type `http://N.N.N.N:nnnn` in the address field. For example

`http://192.168.201.43:8181`  `http://192.168.201.43:8181`

5.3 Menu before logging in

As shown in the next figure, if you are not logged in, you can open the "Status: Overall Status" page. In addition, you can open the "Order Form" (in the "Links" group), open the "Getting Started & Quick Guide" PDF-file (new window) and view "Contact and Support" information, including a link to the product support portal. For all other purposes, you need to enter a login password.

Figure 2 Menu when you are not logged in



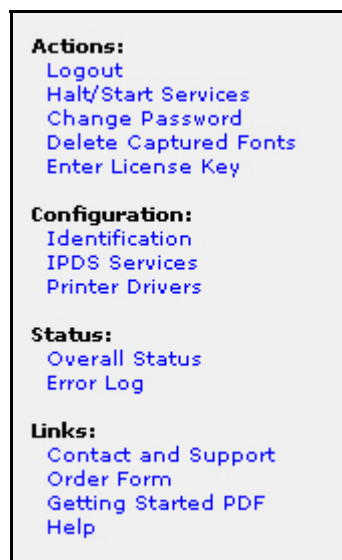
5.4 Login to the Administration GUI – password and change password

The user password is case-sensitive. **The initial password is admin.**

After login, you can change the password; see the "Actions" group on the menu.

5.5 Menu when logged in

Figure 3 Menu when logged in



For explanations of the various "Actions" and "Status" items, see the on-line "Help". Help is located in the "Links" menu group and opens a new browser instance.

6 Configuration overview

6.1 What you configure on the IPDSXpress

- Identification (see the on-line help for an explanation)
- IPDS Services
- Printer Drivers

The **IPDS Service** is the key to using this product.

You can configure and use as many Services as you have session licenses for (1-256).

When you configure an IPDS Service, you must assign a **Service Port** number, select a **Printer Driver** and adjust the **Emulator Setup**.

Before actually configuring and using an IPDS Service, you must make sure that you have suitable Printer Drivers available.

The list of **Printer Drivers** is generated from the Windows printer drivers you have installed on the PC running the IPDSXpress. Of course, not all of them will be suitable for IPDS printing.

Note in particular that it is not possible at this time to “print to file”.

Printer drivers that are suitable may be able to be used without further configuration, but you should always take a look at the configuration as shown in section 7 “Configuration tips: Printer Drivers” on page 9.

6.2 IPDS printer definition on the host and choice of Service Port number

When you print from the host, the host will send the job to the PC's IP address or host name and a Service Port. The IPDSXpress converts and redirects the print stream from itself to the target printer.

Important! Be sure to configure your IPDS printer definition on the host to print to the IP address of the PC running IPDSXpress – **not** to the desired target printer. And double check to make sure that the IPDS port number used in this printer definition matches the Service Port number for the IPDS Service you want to use.

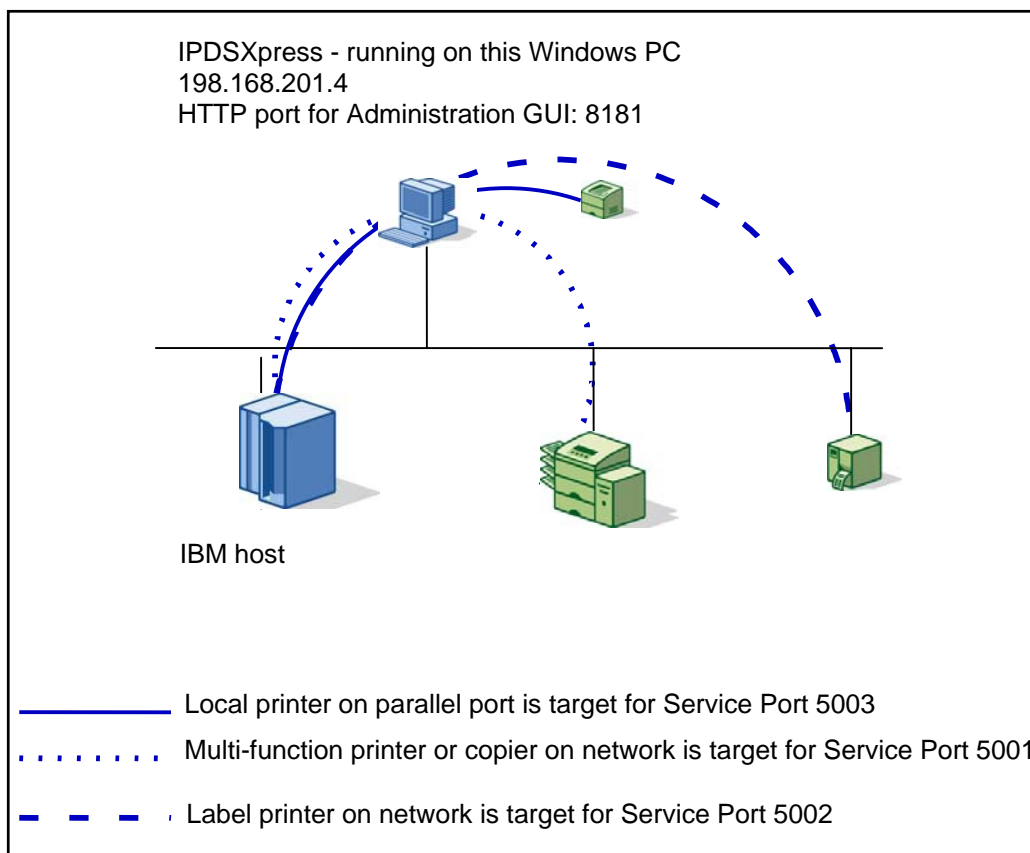
In the **example** in Figure 4 on page 8, the IPDSXpress is installed on a Windows PC with IP address 198.168.201.4 and three IPDS Services configured and activated.

The IBM host can send print to

- **198.168.201.4:5001** (which redirects the print to an MFP/MFC on the network),
- **198.168.201.4:5002** (which redirects the print to a label printer on the network). or
- **198.168.201.4:5003** (which redirects the print to a local printer on the PC's parallel port).

The host doesn't have to know anything at all about the target printer or that printer's IP address.

Figure 4 Example of redirection – corresponding to selected configuration settings shown below



Important. The printers on the network (illustrated on Figure 4 as an MFP/MFC and a label printer) must be defined on the PC as a “local printer” (not a “network printer”) on a “Standard TCP/IP Port.” The IPDSXpress cannot detect printers set up as “network” printers.


Figure 5 Add Printer Wizard

Add Printer Wizard

Local or Network Printer
The wizard needs to know which type of printer to set up.

Select the option that describes the printer you want to use:

☒ Local printer attached to this computer
☐ Automatically detect and install my Plug and Play printer
☐ A network printer, or a printer attached to another computer

 To set up a network printer that is not attached to a print server, use the "Local printer" option.

6.3 Coordinating changes in Windows drivers with IPDSXpress

It is a combination of Windows driver settings and IPDSXpress Printer Driver settings that control print results.

Nothing you configure in IPDSXpress will affect the Windows driver's configuration.

The IPDSXpress receives and uses information from the Windows driver. However, once you have Saved an "Input Tray" page, the Windows' driver's choice of Paper Type setting for a given tray will be ignored.

If you delete or rename a Windows driver used by an IPDS Service while it has an active host session underway, the print will fail. There will be no error reported to the host, but there will be an error message – Error code 1801 – in the IPDSXpress Error Log.

If you delete or rename a Windows driver without also actively performing an Update on the IPDSXpress Printer Drivers main page, and then try to print on a service targeting that driver, the print will fail. There will be no error reported to the host, but there will be an error message – Error code 1801 – in the IPDSXpress Error Log.

You can prevent most printing problems by using the following procedures:

	Before change	After change	
Procedure→ Windows driver change↓	Stop IPDS Service (Actions: Halt/Start Service)	Update "Configuration: Printer Drivers" (main page)	Check/adjust Tray and Paper Type settings on "Configuration: Printer Drivers > Input Trays"
Add		✓	✓
Modify	✓	✓	✓
Delete	✓	✓	

7 Configuration tips: Printer Drivers

7.1 Populate and update the list of Printer Drivers on the IPDSXpress

After installation, the first time you select Configuration: Printer Drivers, the list will be blank, see Figure 6.

Figure 6 Configuration: Printer Drivers - blank on first showing

Configuration: Ouput Drivers ?

Important: Click the "Update" button to populate the list of Windows printer drivers - and after adding, modifying or deleting a Windows printer driver on this PC.

0 drivers detected

Windows Driver Name **Input Trays** **Miscellaneous**

Update

Click the "Update" button. The IPDSXpress will detect all Windows drivers that are installed as "local" printers on the PC. If an installed driver does not show up, the driver is probably defective.

An example of the result of an Printer Drivers "Update" is shown in Figure 7. The Update will also populate the list of Printer Drivers in the configuration screen for your IPDS Services.

Important: You should also click on Update any time a new Windows driver has been added to or modified on the PC on which IPDSXpress is running.

See also section 6.3 “Coordinating changes in Windows drivers with IPDSXpress ” on page 9

Figure 7 Configuration: Printer Drivers – Setups are done on two separate screens see below!

6 drivers detected		
Windows Driver Name	Input Trays	Miscellaneous
Kyocera FS-7000	Trays	Misc
HP LaserJet 5Si to file	Trays	Misc
FinePrint	Trays	Misc
Datamax W-8306	Trays	Misc
Click to Convert II	Trays	Misc
Adobe PDF	Trays	Misc

7.2 Printer Driver configuration: Input Trays

You should always check this screen. At the very minimum, you must look at the each detected tray's Paper Type and mapping to an IPDS Tray # and make sure that these settings match the requirements of your job. You may also need to define offsets to adjust the position of the image on the physical page. Offset settings affect all IPDS jobs and are not affected by any IPDS commands in the job. Offsets are unique for each physical printer.

How you configure Input Trays depends on the properties of the printer and the Windows driver you use with that printer. This configuration is highly variable – see the examples on Figure 8, page 10, and Figure 9, page 11.

Things to watch out for:

The first time you work with a configuration, the Paper Type for all trays is usually the same; this is determined by defaults defined for the Windows printer driver. Once you Save a choice of your own, the settings in the Windows printer driver will not over-write your settings.

A Windows driver may have disabled a tray without this being visible in the IPDSXpress GUI. Remembering to “Update” the main page for Printer Drivers after any changes to the Windows drivers can prevent most problems, but Windows has been known to do unpredictable things.

In some drivers, Offset X and Offset Y may not work in duplex.

Figure 8 Configuration: Printer Drivers > Input Trays (example 1 – a label printer)

Windows Driver Name: Datamax W-8306							
Unit for offsets and extents = 1/7200 of an inch.							
Detected Tray	Paper Type	IPDS Tray #	Front Offset X	Front Offset Y	Back Offset X	Back Offset Y	Rotation
Internal Spool	Multipurpose 2 x 1 <input type="button" value="v"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	0 degrees <input type="button" value="v"/>

Figure 9 Configuration: Printer Drivers > Input Trays (example 2 “cassette” = input tray)

Windows Driver Name: Kyocera FS-7000

Unit for offsets and extents = 1/7200 of an inch.

Detected Tray	Paper Type	IPDS Tray #	Front Offset X	Front Offset Y	Back Offset X	Back Offset Y	Rotation
Automatically Select	A4	0	0	0	0	0	0 degrees
Auto Select	A4	1	0	0	0	0	0 degrees
Cassette 1 (PF-30)	Legal	2	0	0	0	0	0 degrees
Cassette 2 (PF-30)	A4	3	0	0	0	0	0 degrees
Cassette 3 (PF-30)	A4	4	0	0	0	0	0 degrees
Cassette 4 (PF-30)	A4	5	0	0	0	0	0 degrees
Cassette 5 (PF-30)	A4	6	0	0	0	0	0 degrees
Cassette 6 (PF-30)	A4	7	0	0	0	0	0 degrees
Optional (EF-1/UF-1)	A4	8	0	0	0	0	0 degrees
Multi-Purpose Tray	A4	9	0	0	0	0	0 degrees

If you need a Paper Type that does not show up on the drop-down list of Paper Types, you can add one. Click the “Add” button and fill out a name, Extent X and Extent Y – see next Figures.

Figure 10 Add Custom Paper Definition

Paper Type Specifications

You can see a list showing the characteristics of all Paper Types (detected and custom) by clicking [here](#) (right-click if you want to display the list in a new window).

Custom Paper Type Definitions:

Unit for offsets and extents = 1/7200 of an inch.

Name	Extent X	Extent Y	Border X	Border Y
<input type="button" value="Add"/>				

Figure 11 Add Custom Paper Definition - line opened after “Add”

Name	Extent X	Extent Y	Border X	Border Y	
	0	0	0	0	<input type="button" value="Delete"/>
<input type="button" value="Add"/>					

When you Save Changes, provided that you have entered a value for Name, the Custom Paper Definition will be included on the Paper Types drop-down list.

If you right-click on the list of Paper Type Specifications, it will be easy for you to find an appropriate value in 1/7200 inch. See the examples in the next two Figures.

Figure 12 Lists of Paper Types and their measurements (Example 1)

Configuration: Printer Drivers > Input Trays > Paper Definitions

[« Back to Input Trays page. \(Use this link only if you haven't opened a new window for this list. If you have opened a new window, simply close it to return to the "Input Trays" page.\)](#)

Windows Driver Name: Datamax W-8306

Paper Type Measurements:

Unit for paper extents = 1/7200 of an inch.

Name	Extent X	Extent Y	Border X	Border Y
USER	58320	43200	360	0
Address	7920	28800	360	0
Clear Address	10152	28800	360	0
File Folder	4752	24768	360	0
Internet Postage	23688	25200	360	0
Large Address	10152	28800	360	0
Multipurpose 1 x 2 5/8	7920	18936	360	0
Multipurpose 2 x 1	15120	7200	360	0
Multipurpose 2 x 1½	15120	10800	360	0
Multipurpose 2 x 4	15120	28800	360	0
Multipurpose 2¼ x 5½	16920	39600	360	0
Multipurpose 3 3/16 x 1¾	23688	12600	360	0
Multipurpose 3 x 2	22320	14400	360	0
Multipurpose 3 x 3	22320	21600	360	0
Multipurpose 3½ x 2	25920	14400	360	0
Multipurpose 4 x 2	29520	14400	360	0
Multipurpose 4 x 3	29520	21600	360	0
Multipurpose 4 x 4	29520	28800	360	0
Multipurpose 4 x 5	29520	36000	360	0
Multipurpose 4 x 6	29520	43200	360	0
Multipurpose 4 x 6½	29520	46800	360	0
Multipurpose 4 x 8	29520	57600	360	0
Multipurpose 6 x 4	43920	28800	360	0
Multipurpose 8½ x 6	61920	43200	360	0
Name Badge	18720	22536	360	0
Return Address	4320	12600	360	0
VHS Face	13320	21600	360	0
VHS Spine	6120	41400	360	0

Figure 13 Lists of Paper Types and their measurements (Example 2 – A4-Letter at the bottom was added as a Custom Definition)

Configuration: Printer Drivers > Input Trays > Paper Definitions

[« Back to Input Trays page. \(Use this link only if you haven't opened a new window for this list. If you have opened a new window, simply close it to return to the "Input Trays" page.\)](#)

Windows Driver Name: Kyocera FS-7000

Paper Type Measurements:


Unit for paper extents = 1/7200 of an inch.

Name	Extent X	Extent Y	Border X	Border Y
Letter	61200	79200	1800	1200
Tabloid	79200	122400	1800	1800
Legal	61200	100800	1800	1200
Executive	52176	75600	1800	1200
A3	84180	119052	1800	1800
A4	59520	84180	1800	1200
A5	41952	59520	1800	1800
B4 (JIS)	72840	103176	1800	1800
B5 (JIS)	51588	72840	1800	1800
Envelope #9	27888	63888	1800	1800
Envelope #10	29676	68400	1800	1800
Envelope DL	31176	62352	1800	1800
Envelope C5	45912	64908	1800	1800
Envelope Monarch	27888	54000	1800	1800
6 3/4 Envelope	26076	46800	1800	1800
A6	29760	41976	1800	1800
B6	36288	51624	1800	1800
A4-Letter	59520	79200	1800	1200

7.3 Printer Driver Configuration: Miscellaneous

The “Miscellaneous” setup allows you to configure “Supported Resolutions” and “Color Support”.

Figure 14 Configuration: Printer Drivers > Miscellaneous

Configuration: Output Drivers > Miscellaneous 

[« Back to "Printer Drivers " main page](#)

Windows Driver Name: Kyocera FS-7000

Supported Resolutions:

<input checked="" type="radio"/> Any	<input type="radio"/> Select	<input type="radio"/> User-Defined
	<input type="checkbox"/> 75 dpi	DPI x <input type="text" value="300"/>
	<input type="checkbox"/> 150 dpi	DPI y <input type="text" value="300"/>
	<input type="checkbox"/> 300 dpi	
	<input type="checkbox"/> 600 dpi	

Color Support:

☐ Check this box to let the printer perform color printing (color printer) or color simulation (monochrome printer).
(If this box is not marked, IPDS Client 2005 will perform color simulation.)

7.3.1 About “Supported Resolutions”

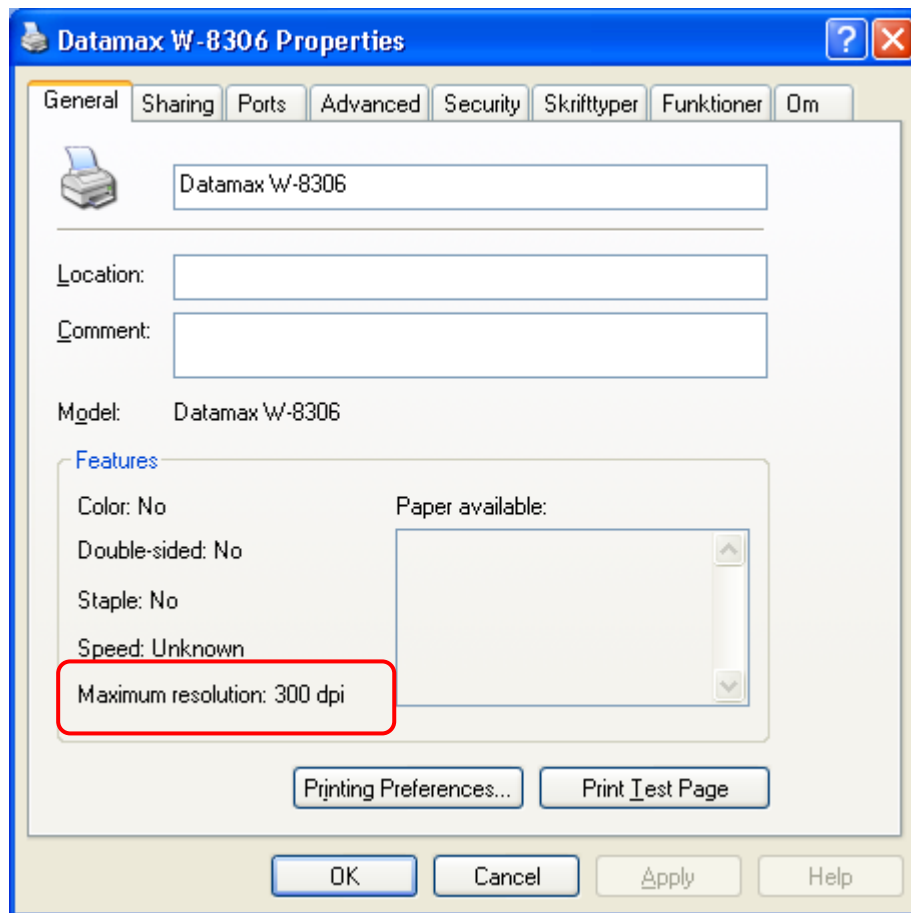
“**Any**” means that the exact resolution used by the job gets used in the output. This is the ideal setting, and it is provided as default, but it is not supported in all printers. You may have to experiment.

Other values

Some printers - for example many thermo transfer printers - have a Maximum Resolution in dpi (usually shown in Properties for the Windows driver – see Figure 15 on page 15). If the target printer for the Printer Driver you are configuring is limited in this way, and the maximum is one of the four values provided under “**Select**”, set a mark in the appropriate checkbox. If not, choose “**User-Defined**” (and then enter values for DPI x and DPI y). If you use “**Select**”, besides marking the maximum resolution, you can mark lower resolutions.

If the job uses resources with a resolution other than the one(s) marked, IPDSXpress will re-scale output to the closest of the marked resolutions or to the highest possible of the marked resolutions. This depends on the type of fonts and graphics found in the output.

Figure 15 "Properties" showing max dpi for a printer



7.3.2 About Color Support

Basic color support and "full" color support

All IPDSXpress licenses include basic color support, depending on the characteristics of the printer. Basic color support includes text, graphics, barcodes, and all kinds of images *except* continuous toned images (pictures). However, in order to print continuous toned images, you need a license covering FS45 Full Image Color Support.

The color models (color spaces) supported are determined by standard IPDS architecture. Colors for text, graphics and barcodes can be defined using a number of different color models, such as OCA, CIELAB, CMYK, RGB and OCA. Colors for images are limited to OCA unless FS45 Full Image Color Support is used.

The "Color Support" setting on Configuration: Printer Drivers > Miscellaneous

Marking the checkbox means that you will allow the printer to perform whatever color or color simulation it is capable of.

If the target printer is a color printer, you will most likely want to mark the box. If the target printer is a monochrome printer, it can be a good idea to mark the box and see if you are satisfied with the results. If not, remove the mark. IPDSXpress will then perform gray-scale color simulation, which may well give you a more satisfactory result.

8 Configuration tips: IPDS Services on IPDSXpress

Figure 16 Configuration: IPDS Services

Configuration: IPDS Services ?

1 service

#	Activate	Service Port	Output Driver	IPDS Config
1	<input type="checkbox"/>	5001	--Select Driver-- pdfFactory Pro Kyocera FS-7000 HP LaserJet 5Si to file FinePrint Datamax W-8306	Emulator Setup

Save Changes

8.4 Activate Service

For technical reasons, the IPDS Service can only be used if the “Activate” checkbox is marked. You may wish to remove activation for certain IPDS services if, for example, you want to exploit that fact that you can simplify the Overall Status to only show activated IPDS services. .

8.5 Service Port Assignment

For information about Service Port assignment, see section 6.2 on page 7.

8.6 Printer Driver drop-down list

If there are no drivers on the “Printer Driver” drop-down list, go to “Configuration: Printer Drivers” and click Update.


8.7 Emulator Setup for an IPDS Service

An example of an “Emulator Setup” for a given service is shown on Figure 17, page 17.

The settings provided as default rarely need changing. The on-line help gives a detailed description of each parameter as well as its default and alternative values. The description of the VPA Setting in the on-line help is supplemented with illustrations in this publication.

For information on the IPDS Capture Tool (bottom of the page), see the on-line help and visit the product support portal.

Figure 17 Configuration: IPDS Services> Emulator Setup (default settings)

Configuration: IPDS Services > Emulator Setup 

[< Back](#)

Service #1

Service Port: 5001

Emulation :

IPDS Resolution :

Valid Printable Area (VPA) :

Default Code Page :

Code Page Version :

Duplex :


Reporting Supression : ☐ VPA Exceptions ☐ Undefined Char Exceptions ☐ Intervention Required

Font Capture Setting :

Default Font :

Default Font Size : (Unit: 1/100 pt. Range: 0-4800)

Font Substitution :

Trace and Capture 

Enable IPDS Data Capture : ☐ IPDS Capture Tool IP Address :

Save Changes

You do not need to do anything special to activate saved changes.
They will take effect starting with the next IPDS session on this IPDS service.

8.8 About “Valid Printable Area” on Emulator Setup

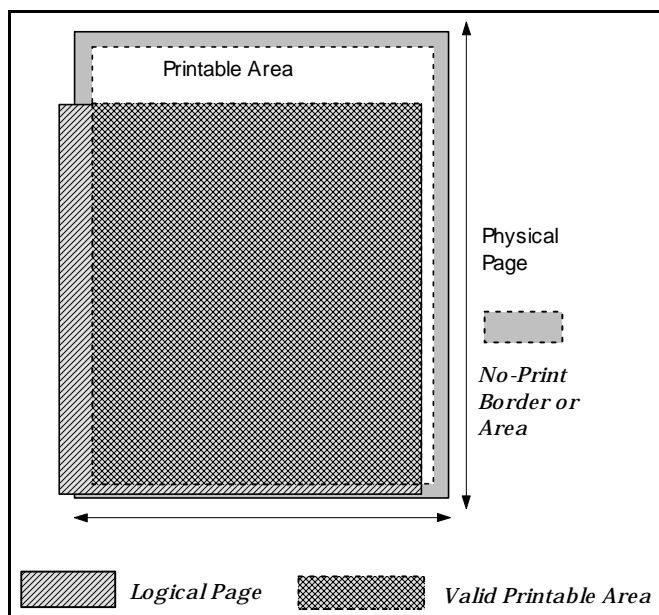
The Valid Printable Area is the intersection of the printer-defined “IPDS printable area” (PA) and the host-defined logical page. Content on an IPDS page outside the VPA will be clipped and a VPA exception may be reported.

The VPA option controls the placement of printed output on the page through controlling how the printer defines and uses the IPDS printable area. It makes it possible for the chosen Emulation to apply borders and/or move the logical page relative to the printable area.

8.8.1 Basic concepts

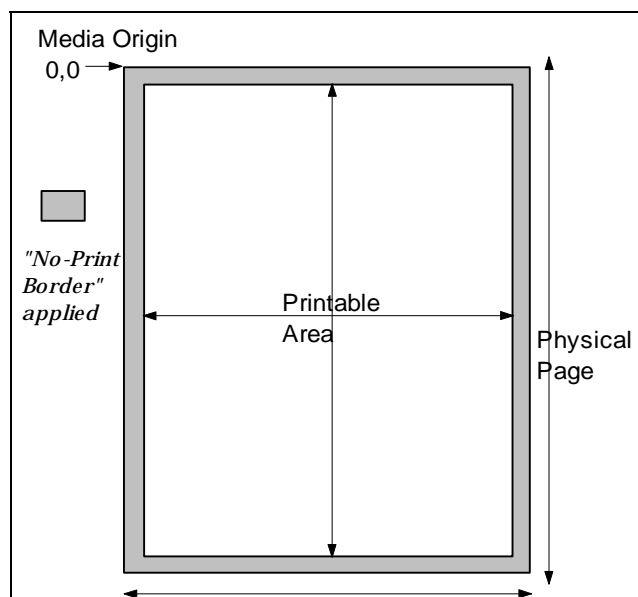
The drawing below illustrates a logical page which is only partially in the Printable Area. It will be clipped on the left side and bottom. The double-hatched area is the Valid Printable Area.

Figure 18 Illustration of Valid Printable Area



8.8.2 The “Border” VPA Setting

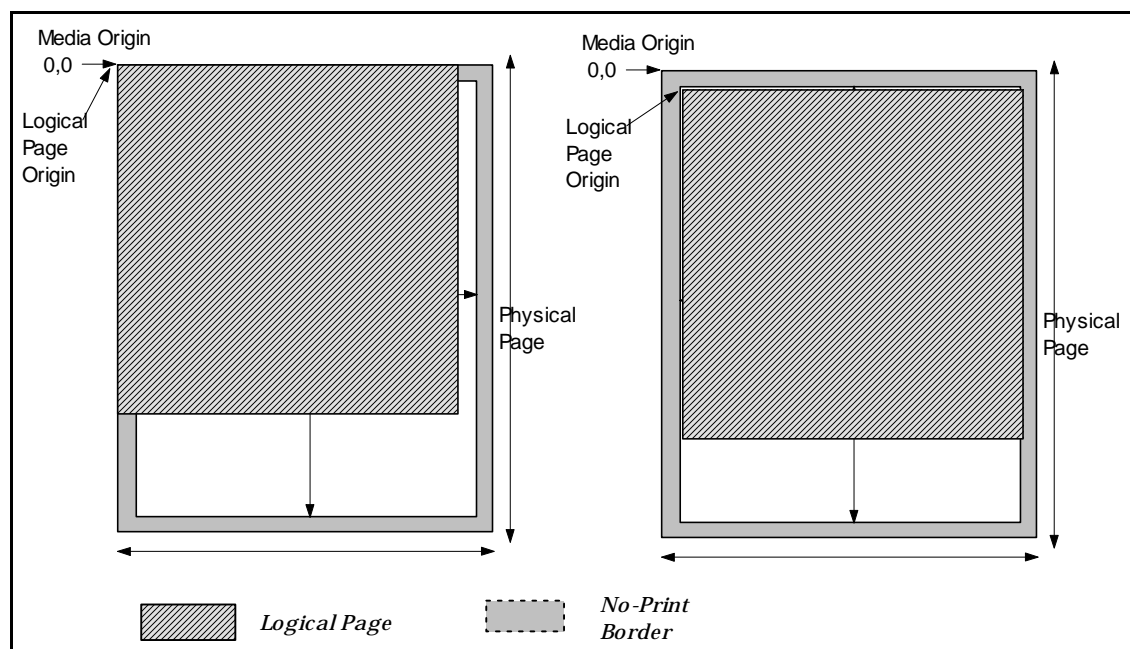
Figure 19 “Border”



8.8.3 The “Move VPA Setting” – and “Move Alternate”

If you find that the logical page falls outside of the Printable Area (defined as in “Border”), the “Move” setting places the logical page as much as possible within the Printable Area. There may be some clipping. This is a useful setting when printing from old applications where the No-print Border was not taken fully into account.

Figure 20 From “Border” to “Move”

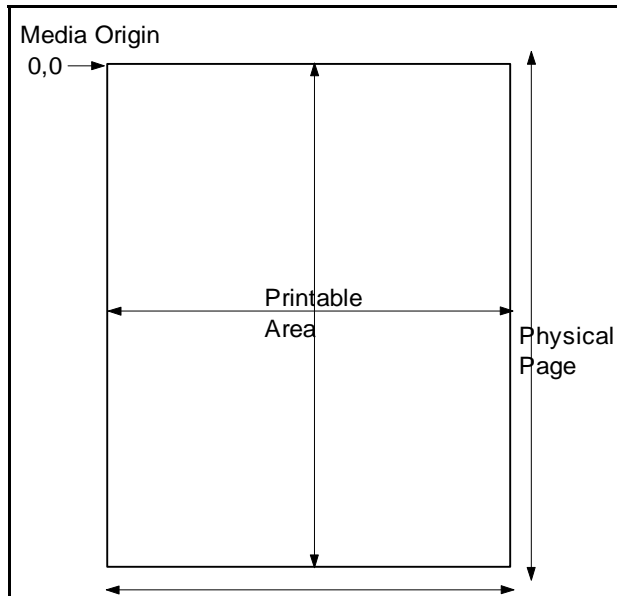


“Move Alternate” works in the same way as “Move”, except that the logical page gets reduced in size in order to fit inside the IPDS printable area. This setting is a special option used for adjusting a mismatch between the logical paper size and the physical paper size. It corresponds to the setting “Print” on the IBM Network Printer 24.

8.8.4 The “Edge” VPA setting

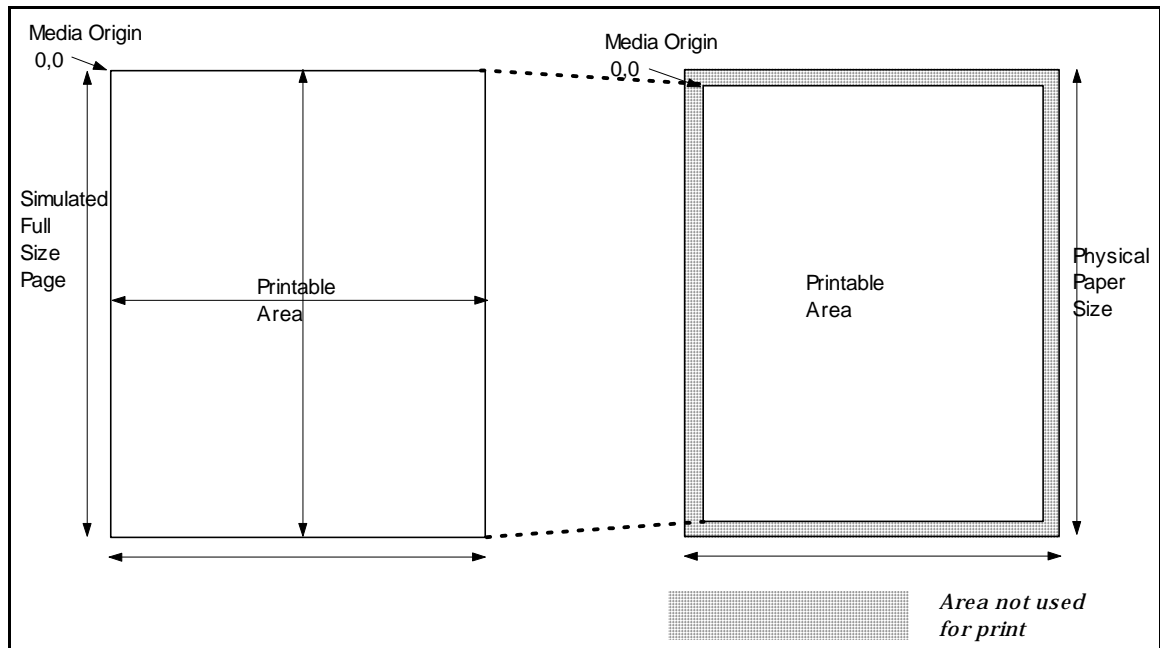
This setting can be used if you want to exploit a printer’s ability to print on the entire paper, with no No-Print Border. Because print quality can deteriorate close to the paper edges, it is often preferable to use “Border”, even though the printer is capable of edge-to-edge printing.

Figure 21 “Edge”



8.8.5 The “Fit” VPA setting

Figure 22 “Fit”



The IPDS printable area reported to the host is equal to the physical page, edge to edge. However, the measurements are actually compressed a little, just as if the physical Media Origin were moved slightly down and to the right. So, when the page is actually printed, the page image is compressed in both the horizontal and the vertical direction. The compression factor is equal to the ratio between the printable area and the physical page. The resulting compressed page fits inside the printable area. The aspect ratio is not preserved exactly, but the effect is usually not noticeable.

9 Tips on port management

9.1 Port for using the GUI

As mentioned in connection with “System Requirements”; before installing the program you may want to see which ports on your PC are already used. Open a command prompt and type:

```
netstat -a -n
```

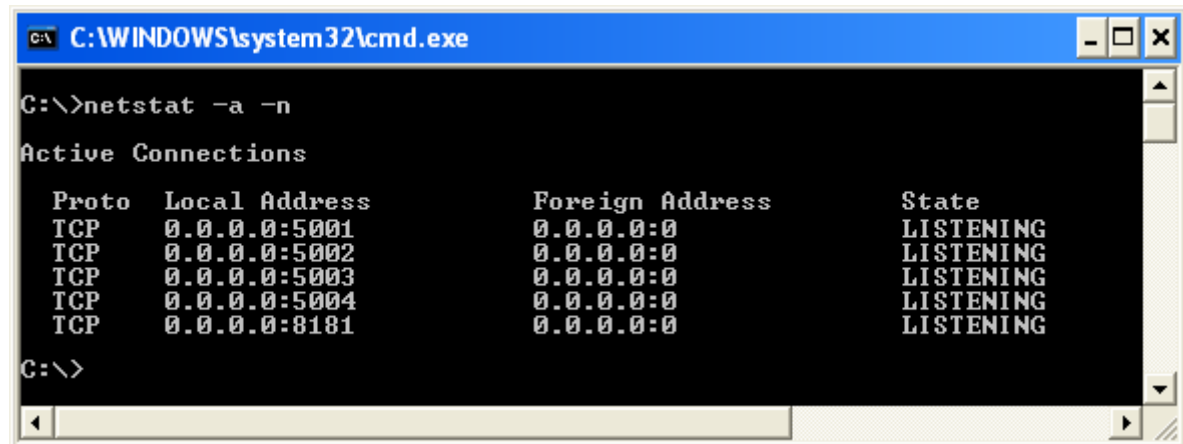
Look at all the TCP ports where the "State" is "Listening". If port 8181 is used, when the installation program asks you about a port for contacting the Administration GUI, enter an unused port.

9.2 IPDS Service Ports

Once you have the program installed, before configuring a "Service" Port for an IPDS Service, you may want to check the TCP ports again.

The following screen shot shows what a portion of the reply to the netstat command would look like if you had the IPDSXpress Administration running on port 8181 and four IPDS Services configured with the most typical port numbers: You can see that the PC is listening on ports 5001-5004 and port 8181.

Figure 23 Netstat active connections



9.3 Personal firewall

If you are using a personal PC firewall (for example the firewall in Windows XP SP2), you need to manually open the port for using the Administration GUI (the installation program will suggest 8181). In addition, you need to open each port (typically 5001 and up) you will use to receive IPDS jobs on.

10 Tips on managing the Windows Service

10.1 How to access Windows' Services management

There are several ways to get to the Services screen, depending on your Windows installation. For example:

- Right-click on My Computer to bring up the context menu. Click "Manage". This opens the "Computer Management" Window. Open "Services" (nested under Services and Applications in the list).
- Open the Control Panel. Double-click "Administrative Tools". Open the "Computer Management" window. Open "Services" (nested under Services and Applications in the list).
- Open the Control Panel. Open Services directly from this list.

10.2 Windows Service “Stop”, “Restart”, and Start”

Warning: If you have IPDS Services running, **before you Stop or Restart the “IPDSXpress” Windows Service** you must **stop the IPDS Services** using “Halt/Start IPDS Services” in the “Actions” group of the Administration GUI..

Restarting a Windows Service affects the IPDSXpress in the same way that rebooting a hardware-based print server does.

Figure 24 Computer Management - Windows service is started – you can Stop or Restart the Service

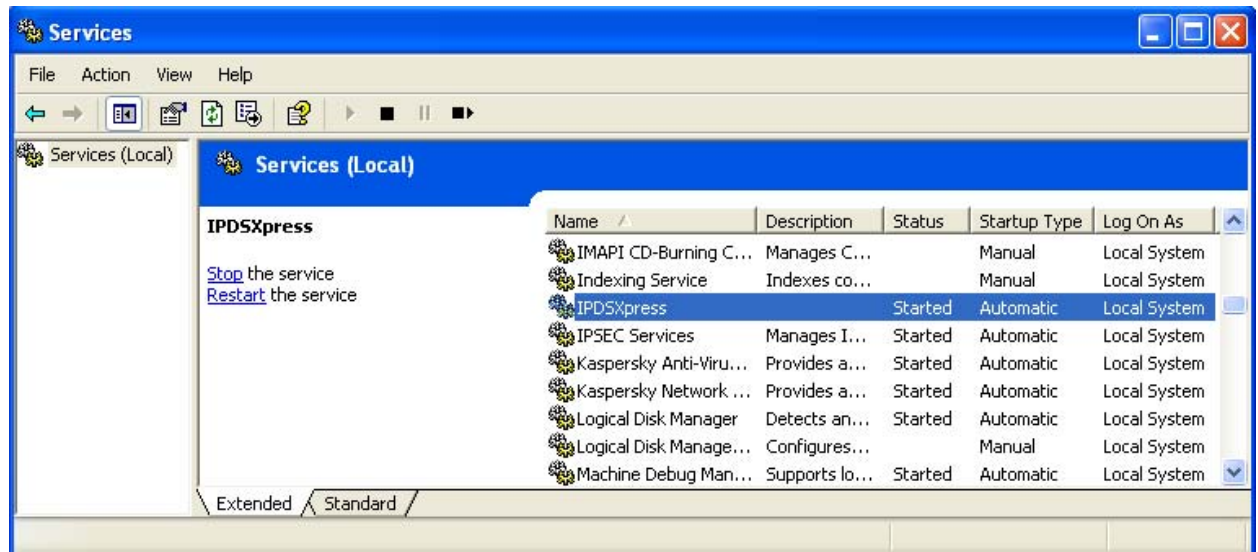
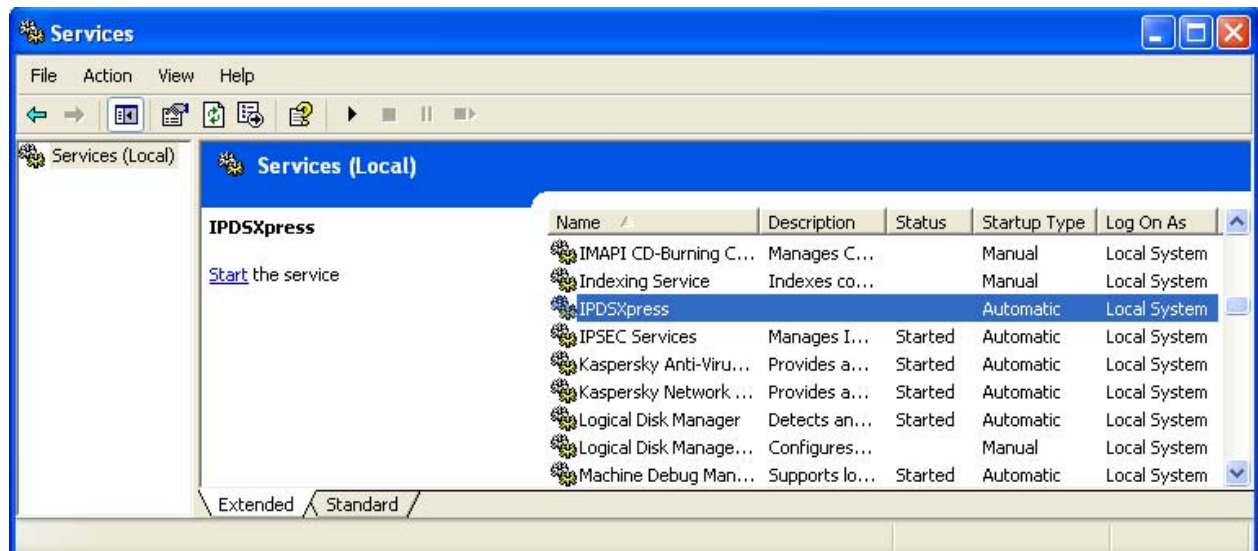


Figure 25 Computer Management - Windows service is stopped – you can Start the service



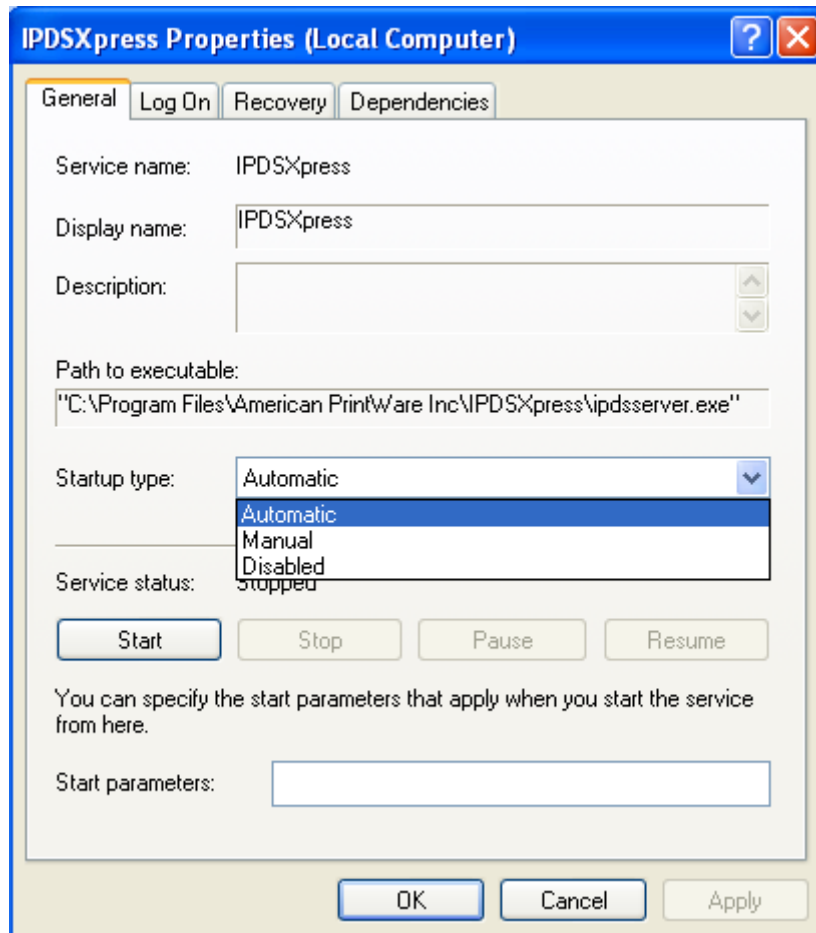
10.3 How to change “Startup type” for the Windows Service

When you install the program, the Windows Service is automatically started, and the “Startup type” is “Automatic”. This means that the Windows Service starts every time you start the PC.

If you want to change the Startup type:

- 1) Open Computer Management > Services and Applications > Services.
- 2) Use the context menu (right-click) on the IPDSXpress line (highlighted in the screen shots in section 10.2) and choose Properties.

Figure 26 Windows Service Properties for IPDSXpress



- 3) If you do not want the IPDSXpress Windows Service to start automatically every time the PC is started, change the Startup type from Automatic to Manual. From that point on, you must use Computer Management every time you want to Start the Windows Service.

11 Notices

11.1 Publication

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11.2 Acknowledgements

Barcode Engine for Datamatrix & MaxiCode by TEC-IT, Datenverarbeitung GmbH, <http://www.tec-it.com> (right-click if you want to choose to open this link in a new window).

This product includes the FreeType Software font engine.

IPDSXpress is based on Intermate IPDS Ultra technology.

11.3 Disclaimers

The printer products shown in the “Printer Driver” example are those that happen to be at hand. APWI makes no endorsement of any of them.

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