

Intermate Advanced Print Server IAPS IPDS 200

Getting Started – 2nd edition



1 Package contents and documentation

- Intermate Advanced Print Server IPDS (IAPS IPDS).
 - EMI/EMC: All interfaces intended for external connections are protected against emissions.
 - Agency compliance: EU: CE Marking EN 55022 Class A, CE Marking EN55024. USA: FCC Part 15 Class A
- A power supply (AC/DC adapter).
- A cross-over (cross-wired) RJ45 Ethernet male cable.
- Getting Started (this brochure)
- Documentation & Utilities CD. Most of the IAPS documentation is not on the CD. There is quite a lot of material on the product support portal <http://www.intermate.com/iaps> (a link is provided from the CD).
- The IAPS on-line help is very extensive. Use it to supplement these instructions, especially for section 6.



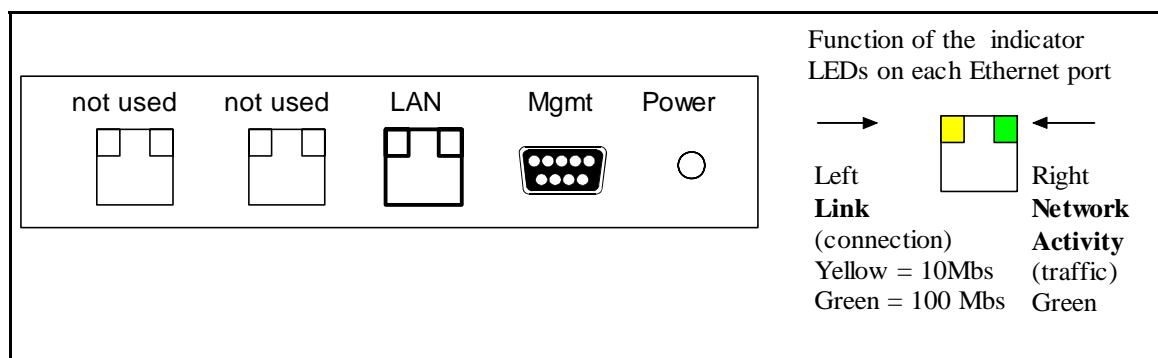
2 System requirements

- The host must be capable of printing IPDS on TCP/IP.
- Target printer requirements:
 - The IAPS can be used with most PCL 5e- or PostScript (level 2)-compliant page printers.
 - To achieve full IPDS control, the printer must support SNMP v.1 printer-MIBs.
 - The printer must support TCP/IP raw socket print (for example be able to print to “port 9100”).
- For network attachment you need a LAN drop cable with an Ethernet RJ45 male connector (not included).
- For configuring the print server you need a browser. Java Script must be enabled and the browser must be able to handle frame sets.

3 Hardware installation

All network connectors are 8-pin shielded RJ-45. Each controller provides 10/100 Mbps auto-sensing fast connection. The connectors are on the back panel of the unit.
This product only uses the Ethernet port labelled LAN.

Back panel:



- 1) Connect the print server's LAN connector to the LAN using your LAN drop cable (or to your PC using the cross-over cable).

- 2) Connect your AC/DC adapter to the print server's DC power inlet and a power source.
- 3) To ensure that the unit is ready, check the indicator LEDs according to the following instructions.

When a connection is established, the left LED on the interface should be lit (Link = green or yellow/orange). If the left LED on the LAN connector is not lit, do the following:

1. Make sure that all cables are firmly connected
2. If you are using an Ethernet wall outlet, make sure that the outlet is connected to an Ethernet switch or hub.
3. Make sure that you are using the correct cable between the IAPS hardware and the PC or LAN. Use the cross-over for a direct connection between the two; otherwise, use a straight-through drop cable.

Front panel – Indicator LEDs:



The Error LED lights red briefly every time the IAPS is powered on — and every time a reboot is done by other means.

The IAPS is ready when Power is on (green) and Error is off. **Important!** If the red Error LED does not turn off by the time the Power LED turns green, or very shortly thereafter, the unit is defective and needs to be returned to your point of purchase.

Tips about powering on and off

- To power on or off, insert or remove the jack from the Intermate Advanced Printer Server (IAPS) – or the plug from the mains. It can take up to 40 seconds in all from connecting to the mains until the IAPS is ready.
- On restoral of lost power, the IAPS will automatically turn on again and reboot
- Saved changes get committed about once a minute. Therefore, if you have saved one or more changes, wait for about a minute before powering off.

4 Initial contact A: about the user names and passwords

Login: User names and passwords are **case-sensitive**.

Initial password for the admin account is **admin**. **Initial password** for the designer account is **designer**.

5 Initial contact B: choose one of three methods for IP settings

5.1 IP settings via DHCP server

When connected, the IAPS will attempt to obtain its IP settings via DHCP. To connect to the IAPS, enter the IP address into your browser's address field.

Tip: If you do not have access to view the lease list on the DHCP Server, use the IMCU (see next section) to detect and initiate contact to the IAPS.

5.2 IP settings configured through the Intermate Management and Configuration Utility (IMCU)

The IMCU is a free utility provided on the CD (and on our web-site). The IMCU will discover the IAPS on its MAC address (via UDP). You can configure IP address, Subnet mask and Gateway from the IMCU and then connect to the IAPS. Or you can use the IMCU to detect an IAPS whose IP settings have been made via DHCP.

Tip: The IMCU installs as a Windows service (as opposed to a program). You start the IMCU with a browser, typically using the PC loop-back address <http://127.0.0.1>.

Note: If you need help installing or using the IMCU, please read "TCP/IP Setup Guide using the IMCU", which accompanies the IMCU on the CD and on www.intermate.com/imcu.

If there is an active DHCP server on the network in which you will place your IAPS, but you don't want it to be used, be sure to disable DHCP in the IAPS to avoid accidental overwriting of your settings. After you log in, use the menu **Configuration > Print Server** to select DHCP = No.

Once you have a static IP address, you can connect to the IAPS by entering the IP address into your browser's address field. Or, you can continue to use the IMCU as your entry tool.

5.3 IP settings configured through the default static IP address

If no DHCP server is available, and you do not want to install the IMCU:

- 1) Wait for about 5 minutes after physical connections are established. At this point, the IP address in the IAPS defaults to the static address **10.0.0.1**.
- 2) Configure your PC manually with an IP address within the same subnet (e.g. set the PC's IP address to 10.0.0.2).

Note: There may be restrictions in your network for this subnet, or there may be a conflict. If so, you can isolate the PC and the IAPS in their own network through a hub or a switch,- or you can simply connect the PC to the IAPS directly through the cross-wired Ethernet cable provided.

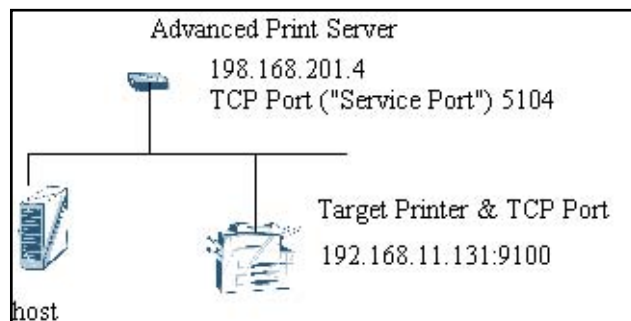
- 3) Open a browser and type in http://10.0.0.1. After you log in, use the menu **Configuration > Print Server** to set the desired IP address, subnet mask and Gateway – and set DHCP = No.
- 4) When you are finished with the configuration, you need to ensure that all settings are properly saved before you remove the power supply and move the IAPS. To do this you can:
 - a) simply wait for about a minute and then remove the power supply. Or
 - b) force a reboot from the GUI and remove the power supply as soon as you see the Error LED turn red on the front panel. To force a reboot, choose **Actions > Halt and Reboot** in the menu. Click the Halt All Services button (at the bottom of the page). When the overall Halt Status reads “halted successfully”, a Reboot System button will appear at the bottom of the page. Click it.
- 5) Attach the IAPS to its proper place in the network using a LAN drop cable. Restore power.
- 6) Remember to restore your PC's IP settings.

6 Finish print server configuration

Path: Configuration > Print Server

Network Settings are mandatory except for DNS Server IP Address. You only need to enter a DNS if you want to refer to a target printer by a host name (instead of an IP address) in a service definition.

7 IPDS printer configuration: overview



The host prints to the IAPS which then re-directs the data to a Target Printer.

You configure a **Service** in order to control the re-direction. Thus, the IPDS printer you define on the host must print to the IAPS IP address and the TCP Port (“Service Port” in the GUI) for the desired Service – for example, as shown in the figure, 198.168.201.4 port 5104.

In turn, the Service sends the job on to the Target Printer – for example, as shown in the figure,

192.168.11.131. In the Service definition, the Target Printer is identified by “Target Hostname/IP” and TCP Port (“Target Port/Queue” in the GUI).

The other key configurable object in the IAPS is the **IAPS Driver**. The Driver tells the service which printer characteristics to emulate. In a Service configuration, you must use a Driver which is appropriate for the Target Printer. The IAPS can contain an unlimited number of Drivers.

8 IAPS-Driver configuration in the IAPS GUI

The product you buy may include one or more Drivers that are completely tailored to one or more specific printer models that you print to. If so, go directly to step 5) below, page 4 to check and fine-tune a Driver.

Path: Configuration > Drivers

- 1) Click Add to open up a line for your new Driver.
- 2) Type in a Driver Name – please check the on-line help for naming restrictions.
- 3) Select a Master Template from the pull-down list.
 - PCL, PostScript, and PCL Full Image refer to the printer language (“back-end”) for your output.

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- We suggest using a “Generic” template, so that the driver will inherit a large number of suggested settings for Input Trays (including 11 paper definitions) and Output Bins. Choose the A4-variant if you want the suggested Input Tray settings to specify A4 paper for your input trays; choose the Letter-variant if you want these settings to specify Letter.
- 4) Click Save Changes. The result is a new Driver where all settings have been copied from the chosen template.
 - 5) The IPDS application you print from may use different tray and bin mappings than the ones included. So you should always check the mappings in both the Paper In (Input Trays) settings and the Paper Out (Output Bins) settings.
 - 6) If you will be printing with finishing options, configure the desired options in the Paper Out (Output Bins) settings.
 - 7) Optional: Check the Miscellaneous settings. These settings depend on the printer language and can include supported resolutions; font caching; and color/greyscale settings; job begin/job end strings, “alternate” duplex selection strings, and so on. There is also a text field for your Configuration Notes.
 - 8) Tweaking. Even if the driver works with its default values for a particular *kind* of target printer, you may need to adjust the driver for the best possible results on a *specific printer*. For example, input tray offsets are dependent on specific physical printer characteristics. And it can be necessary to re-define paper and tray selections in order to meet company standards.

9 IAPS-service configuration

Path: Configuration > Services

Service Port: Be sure to adjust the Service Port number so it matches the IPDS port number used by the IPDS printer definition on the host.

Target Type: If this parameter is shown, it means that you can choose the desired performance (in pages per minute – ppm) for the service. And, if your license includes color, you can choose color or b/w.

Target Hostname/IP and Target Port: Enter the Hostname or IP of the network-attached printer you want to use. If you use a hostname, you must have a DNS server configured in Configuration > Print Server.

Target Service Type: Select Raw Socket or LPR.

Target Port/Queue: Enter a TCP target port; Port 9100 is the most commonly used with Raw Socket.

Driver: Select a driver that is compatible with the target printer. If you cannot find one on the list, go to section 8 above, page 3.

Finishing: If this parameter is shown, it will either be read-only or configurable with a check-box. If it is configurable, then you can allocate a finishing license to the service.

IPDS Config: Emulator Setup: Click on the link to inspect the emulator setup and adjust as desired.

Activate: In order for the Service to receive and process IPDS print, you must activate it.

10 IPDS printer definition on the host

Be sure to configure your IPDS printer definition to print to the IAPS IP address – *not* to the target printer address. Double check to make sure that the IPDS port number used in this printer definition matches the Service Port number for the IAPS service you want to use.

11 Notices

Publication notice: iaps200-gs02. Conforms with release 3.0 – (IPDS Code G50-30-x) in the series-200 IAPS IPDS models. 28 November 2005. © Copyright 2005 Intermate A/S. Kongevejen 194A. DK-3460 Birkerød Denmark. Tel: +45 72 26 04 00 Fax: +45 72 26 04 04

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