Intermate Advanced Print Server
IAPS TN5250e 200
Getting Started
– Edition 2a

1 Package contents and documentation

- Intermate Advanced Print Server (IAPS) hardware
  - 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
- An external power supply (AC/DC adapter)
- A cross-over (cross-wired) RJ45 Ethernet male cable
- "Getting Started" (this document) for physical installation and initial configuration of the IAPS TNe
- Documentation & Utilities CD
- Additional documentation is posted on the product support portal www.intermate.com/iaps - select IAPS TN5250e. Among other things, you will find a pdf version of the online help, which is an extensive options reference. Use it to supplement these instructions.

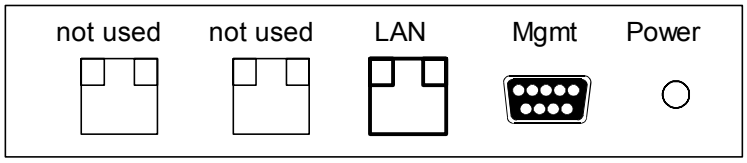
2 System requirements

- The iSeries host operating system must support TN5250e printing.
- Target printer requirements:
  - The IAPS can be used with most PCL 5e-compliant page printers.
  - The printer must support TCP/IP raw socket print (e.g. via port 9100) and/or LPR print (port 515).
  - SNMP v.1 printer-MIBs is recommended to support status information:
- 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 frames.
- To use the IDB Editor for advanced SCS configuration file editing available through the IAPS TNe Web GUI, you must have Java Runtime Environment 1.5. The system will offer to install it if you don't already have it. You must have administrator rights on the PC in order to have it installed.

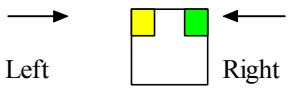
3 Hardware installation

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:



Function of the indicator LEDs on each Ethernet port



Left
Link
(connection)
Yellow = 10Mbs
Green = 100 Mbs

Right
Network
Activity
(traffic)
Green

1) Connect the print server's LAN connector to the LAN using your LAN drop cable (or – for configuration purposes – use the cross-over cable to temporarily connect the LAN connector to your PC).
2) Connect the AC/DC adapter to the print server's DC power inlet and a 110-230V power source.

3) To ensure that the unit is ready, check the indicator LEDs according to the following instructions.

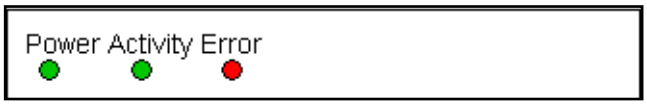
When a connection is established, the left LED on the interface should be lit (Link = green or yellow/orange). If the left LED on the LAN connector is not lit, do the following:

a) Make sure that all cables are firmly connected

b) If you are using an Ethernet wall outlet, make sure that the outlet is connected to an Ethernet switch or hub.

c) 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 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.
- If power is lost and then restored, 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

Default password for the admin account is **admin**.

Default password for the designer account is **designer**

User names and passwords are case-sensitive.

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 Appliance Launcher (see next section) to detect and initiate contact to the IAPS.

5.2 IP settings configured through the Intermate Appliance Launcher

Make sure you know the settings you will use for Device Name, LAN IP, and (if you use it) GateManager. We recommend using the Launcher Settings Sheet even if you do not use the Appliance Launcher. The Appliance Launcher and templates for the Settings Sheets are found on the Document & Utilities CD and on the product support port.

1) Make sure the PC you are running the Appliance Launcher from is connected to the same physical network as the IAPS itself. Alternatively use the cross-over cable to connect your PC directly to the IAPS.

2) Run the Appliance Launcher, following the instructions on the screen and set the desired IP settings remember to set DHCP = No if you are configuring a fixed IP address.

3) If you are enrolling the IAPS in a GateManager:

   a) Wait a few minutes after having finalized the Appliance Launcher configuration. If you are out in the field and the GateManager Console user is located somewhere else, contact that person to let them know that you have finished the installation.

   b) Check through the GateManager Console that the IAPS has announced itself.

4) If you have used a cross over cable between the IAPS and your PC, connect the IAPS to its permanent position on the LAN

Tip: The Appliance Launcher is supported on IAPS TNe version G53-22c-018 (September 2006) or higher. Use the Intermate Management & Configuration Utility (IMCU), if you need to detect or configure older IAPS TNe versions. The IMCU is found on the Documentation & Utilities CD and on http://www.intermate.com/imcu.

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, select **Actions: Reboot** in the menu.

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 "Configuration: Print Server" on the IAPS

Network Settings as described above are mandatory except for DNS Server IP Address, which is only needed if you want to make configurations which refer to a target printer or an IBM host by DNS name (instead of IP address) Optional: finish the Print Server configuration by adding Device Identification and System Time.

7 Host configuration

The IBM host will auto-configure devices and writers with the information received from the IAPS. To ensure this, the following three system values (SYSVAL) must be configured as follows:

- **QAUTOCFG:** Controls the automatic configuration of devices. Must be set to '1'.
- **QAUTORMT:** Controls the automatic configuration of remote controllers. Must be set to '1'.
- **QAUTOVRT:** Controls the automatic configuration of virtual devices. Must be set to an adequate number of devices.

Important: No-one except the system administrator for the IBM host should change these values.

8 TN5250e\HPT and TN5250e\SCS configuration overview

This overview does not show the paths to various menu items; these paths are shown in later sections.

The IAPS TN5250e is available in two variants: TN5250e\HPT and TN5250e\SCS.

- **TN5250e\HPT** is a TN5250 Print Server that services SCS/DCA and ASCII transparent jobs using Host Print Transform (HPT).
- **TN5250e\SCS**. (also known as SCS/TN5250e) includes a license that gives the option of allowing the IAPS transform SCS/DCA using Intermate's "IDB Transform Engine". The alternative of using HPT is also available.

The **TNe Session** is the key to using this print server. The number of sessions you may have activated at any one time depends on your license.

Before configuring a session, you must configure at least one **target printer**. If you are enable SCS for the session, you must also have at least one suitable "**IDB-file**" (a special SCS configuration file) available in the "**IDB Collection**".

Finally - besides entering an IP address or DNS Name for an **IBM host** and a name for the **Device Description**, you must always take a look at the **TNe** settings and adjust them as necessary.

When the session is **activated**, it contacts the IBM host specified for the session. The host creates both a virtual printer device (DEVD) and an output queue with the same name. This is the name you have designated as the Device Description for the session. You can link to some tips on **test printing** from http://www.intermate.com/iaps > select the IAPS TNe Support and Download Portal.

9 Naming objects on hosts (e.g. DEVDs)

The characters used in names for objects on the host, such as Device Decriptions (DEVDs), should be chosen from the US ASCII 7-bit character set, decimal range 33-122 (hexadecimal range 21-7A). Broadly speaking, this means no non-printing characters, no spaces, no national characters and very few characters other than letters and numbers. You can link to a 7-bit ASCII table from http://www.intermate.com/iaps > select the IAPS TNe Support and Download Portal.
Important: Your network environment may require additional restrictions. In the IBM host environment, names are not

case-sensitive. But in many network environments, such names are case-sensitive. If you want to maximize robustness, use only lower-case letters a to z; digits 1 to 9 and whatever characters (such as dot, hyphen or underscore) that work on your network environment. On the IBM host, the lower case letters will be changed to upper case.

10 Target Printer configuration on the IAPS

Path: Configuration: Target Printers

7) Click Add to open up a line.
8) Type in a Name of your choosing (maximum 128 characters).
9) Type in an IP address or a DNS Name (maximum 256 characters) for the printer. To use a DNS Name you must also enter and save the address of a DNS server in Configuration: Print Server.
10) Select the type of printing you want on this printer: Raw Socket or LPR.
11) If you choose Raw Socket, and don't want to use the default port 9100, change the value in the Port field. If you choose LPR, type in a queue name (maximum 128 characters). Note: LPR always uses port 515.
12) Click Save Changes. The printer will now appear on the drop-down list in Configuration: TNe Session.

11 TN5250e Session configuration – a few pointers

Path: Configuration: TNe Sessions: [Fields]

Host: IP. Type in an IP address or a Fully Qualified DNS Name, max 256 characters. To use a DNS Name you must enter and save the address of a DNS server in Configuration: Print Server.

Host: Device Description. Type in a name to be used as a Device Description (DEVD) on the host – maximum 10 characters. If you configure more than one session with the same Device Description, you may only activate one of these sessions at a time. Any given Device Description should be used with only one type of session (SCS or HPT) – see the online help for more information about this.

Configuration: Enable SCS or HPT. This pull-down will only be displayed if you have an SCS license.

Configuration: **SCS IDB File**. This pull-down will only be displayed if you have an SCS license, and the setting will be ignored if you enable HPT instead of SCS. **Note**: The IAPS is delivered with at least one IDB file in the collection (IAPS_DEFAULT.IDB). From the IDB Collection page you can link to a page for **basic** editing of an IDB file. If you have logged in as "designer", you will have access to **advanced** editing of the IDB file. The on-line help tells you how to edit IDB-files or add additional IDB-files to the collection.

Important: Save all settings on the **TNe Sessions page before** going on to the **TNe > Setup screen**.

Configuration: TNe > Setup. How you configure these settings depends on whether you use HPT or SCS for the session in question. Fields on the TNe > Setup screen will reflect this automatically. See the on-line help for details about all the options on the TNe > Setup screen.

Activate: To activate a session, set a check in the activate box and click Save**.** When you activate a configured session, the IAPS establishes a connection to the host which you can leave open indefinitely. Your license controls the number of sessions you can have activated at any one time. You can configure and save as many sessions as you like. While a session is activated, it is not possible to edit its configuration.

12 Notices