



Configuring IPDS Client Multiple Session Support

Illustrated with a case using DATAMAX Printers

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Note 1: This guide can also be used with other types of printers than DATAMAX

Note 2: Help on configuring the parameters for each session is found in the on-line help for the program.

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1 Introduction to the product and scope of the guide

The Intermate A/S IPDS Client is a software package that is compatible with all of the Microsoft Windows™ 32 bit operating system environments (Win 2003 Server, Win XP Professional, Win 2000 Advanced Server, Win 2000 Server, Win 2000 Professional, Win 95/98/ME, and Win NT). It appears to the host as a standard TCP/IP attached IPDS printer, and subsequently the PC must be network attached. The software acts as a raster image processor (rip), which converts the IPDS data on a page-by-page basis into full-page bitmap images of the information received from the IBM host. These images are then passed in a GDI format to a selected Windows DATAMAX print driver for final formatting and delivery to the target printer. The target printer can be Parallel Centronics, USB or LAN attached as specified in the Port definition of the Datamax driver.

The IPDS Client software is offered in a configuration that supports a single printer or in a multiple session configuration that can support up to four printers. The number of sessions is controlled by the license key entered into the program, and which is locked to the PC's HDD serial number.

This document outlines the steps that need to be followed in order to activate the multiple session capability.

Information on configuring parameters for each session is found in the on-line help.

2 Illustrative Example – The Specialty Ticket Printing Co.

The fictitious Specialty Ticket Printing Co. is a multinational company with offices throughout the world. They use a network of IBM iSeries midrange hosts to manage their worldwide customer database. Their network of IBM iSeries servers allows them to easily manage the printing of many different types of tickets for their customers, at any of their office locations throughout the world.

Some years ago, the company invested in a set of unique fonts for producing specialty characters and icons on their tickets. Over the years, the use of these specialty characters and icons on their tickets has become their signature trademark in the eyes of most of their customers. It happens that the font set was ordered in the IBM Advanced Function Presentation (AFP) format because this method of printing is fully integrated into the operating system used by these IBM servers and therefore AFP compliant applications are quite easy to use and maintain. In the past, the number of AFP capable industrial printers available in the marketplace was very limited so the company has historically printed their ticket stock via sheet fed laser printers.

In the last few months, The Specialty Ticket Printing Co. has entered into a new line of business. They have been approached by some large organizations who frequently receive visitors into some of their office locations. The organizations want to phase out the use of the plastic visitor badges and replace the badge system with disposable visitor tickets. The tickets will contain barcode representations of some of the personal information (name, organization represented, method of reaching the office) provided by the visitors. The ticket system will allow the organizations to better track who is visiting their offices and also see where the visitors physically go after obtaining their ticket from the visitor welcome desk. The customers want special pre-printed continuous form ticket stock delivered to their locations. The stock will be fed into equipment that will verify a visitor's credentials and then print the information as a barcode on the pre-printed ticket stock.

The Specialty Ticket Printing Co. has approached their local DATAMAX reseller because they are interested in using the DATAMAX ST class of printers for producing the tickets for this new line of business. Each Specialty Ticket Printing Co. office servicing customers in this new market will need to have four DATAMAX printers per production line and all of the printers will need to be compatible with the IBM AFP application format and the unique IBM IPDS data stream.

The four printers required are as follows:

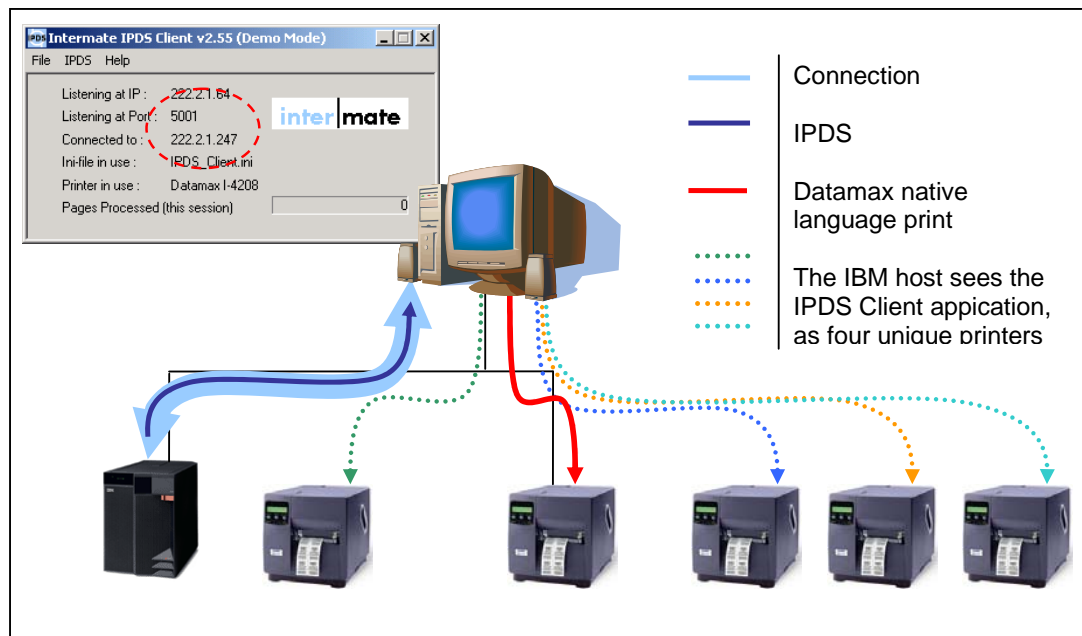
- ST-3210 - Print the Actual Tickets for Delivery to Customers
- E-4204 - Print Compliance Labels Showing Labels Were Produced to Customer Specification
- I-4308 - Print Mailing Labels
- W-8306 - Print Commercial Shipping Labels for Shipping Services like DHL, FedEx, and UPS

In this example, the DATAMAX reseller needs to explain to the IT department of The Specialty Ticket Printing Co. how to install an Intermate IPDS Client multi-session software license at a remote location. One license will be needed to support each individual four printer production line as they are brought online.

The steps that need to be followed, to install the Intermate IPDS Client software in its multi-session format, are outlined on the following pages.

The information regarding how to create a proper printer definition on an IBM iSeries host and how to configure the IPDS Client application to work with a DATAMAX printer will be found in the Online Help of the IPDS Client application itself.

For reference purposes, a network diagram of a typical IPDS Client multi-session license installation at a remote Specialty Ticket Printing Co office location is shown below:



3 Program installation

3.1 The basis for multiple session support

The IPDS Client software uses the standard Windows™ installation wizard in order to properly link itself into the Microsoft operating system running on the PC where it will be installed. If the customer accepts the default settings programmed into the installation wizard, the software program will be installed in the folder named Program Files\Intermate\Intermate IPDS Client.

Multiple session support is based on running more than one instance of the software at the same time. You can do this quite spontaneously if you like. However, it is often helpful to make and re-use configurations for each printer you want to print to – sometimes even for several variants of IPDS print jobs to the same printer.

This guide shows you how to save separate configurations so that they can be re-used easily.

To keep things simple, it shows the creation and management of exactly four configurations. Actually, it is possible to create multiple configurations, but only four can be simultaneously active. Each session must use a different IPDS port.

Each configuration must have its own so-called Ini-file, with its own name. All you need to do is put several different Ini-files in the IPDS Client installation folder. Use the program to select the desired Ini-file for any given session.

This guide goes further and shows you how to create icons for easy access to each configuration. This approach requires creating a folder for each configuration you want; and in this folder, you will have both an Ini-file and a copy of the exe file. You then create a short-cut which will call the correct exe version, which in turn will use the correct Ini-file.

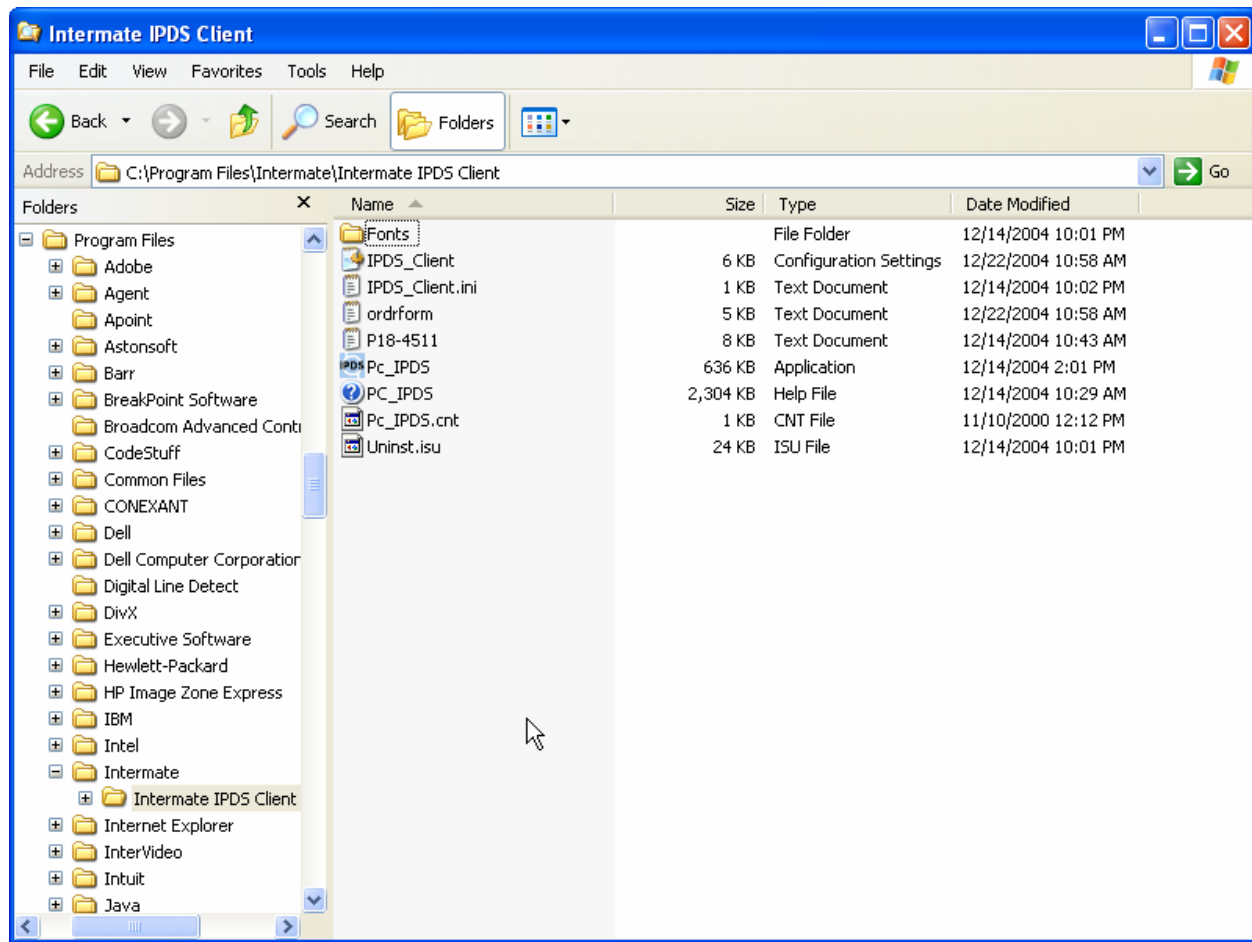
3.2 Managing multiple session support via icons – step by step

In order to activate the multiple session support of the IPDS Client software, the customer should open the Windows 2003, Windows XP, Windows 2000, Windows NT, or Windows explorer program after the IPDS Client software has been successfully installed onto their PC. They will need to navigate to the folder where IPDS Client has been installed. In our example, we accepted the installation wizard defaults.

Figure 1 below illustrates the use of the Windows XP explorer program to reach the C:\Program Files\Intermate\Intermate IPDS Client folder.

After the installation wizard has been used to install the IPDS Client software onto the target PC, use the Windows 2003, Windows XP, Windows 2000, Windows NT, or Windows explorer program to navigate to the folder named <Drive Letter>:\Program Files\Intermate\Intermate IPDS Client.

Figure 1 Finding the IPDS Client folder



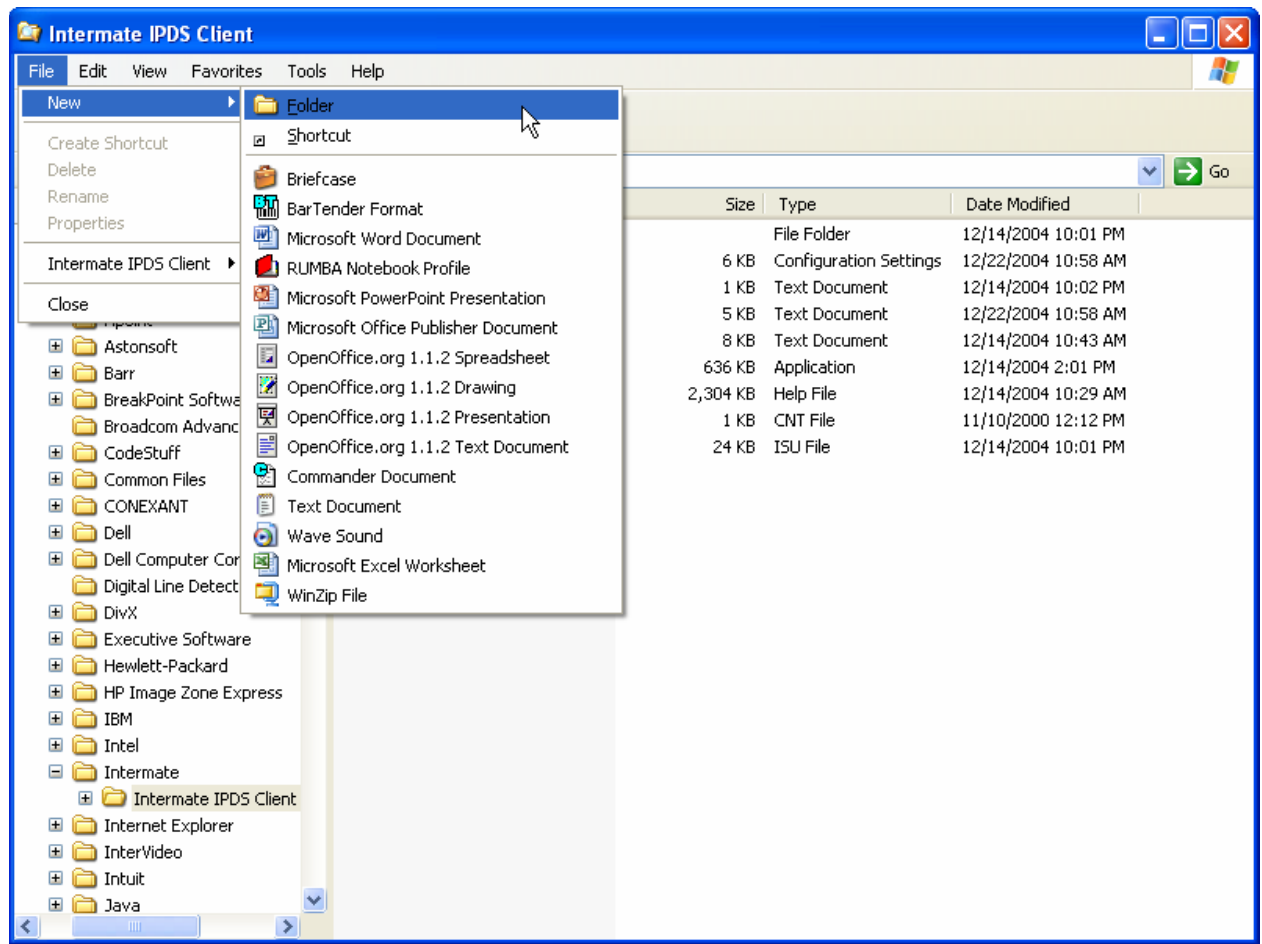
In order to activate the multiple session capability of the IPDS Client software, it will be necessary to make some copies of the files named **ipds_client.ini** and **Pc_IPDS.exe** that are shown above in Figure 1 above.

The first step in activating the multiple session support of the IPDS Client software will be to create some new folders in the Program Files\Intermate\Intermate IPDS Client location for the multiple sessions. In our example, we are activating all four of the available sessions offered by an IPDS Client software license. Figure 2 below illustrates how to create a folder to hold the configuration for each of the new multiple sessions (Session 2, Session 3, and Session 4).

The configuration files for activating the first session (Session 1) have already been installed into the C:\Program Files\Intermate\Intermate IPDS Client folder by the installation wizard so no further effort is needed to support this session.

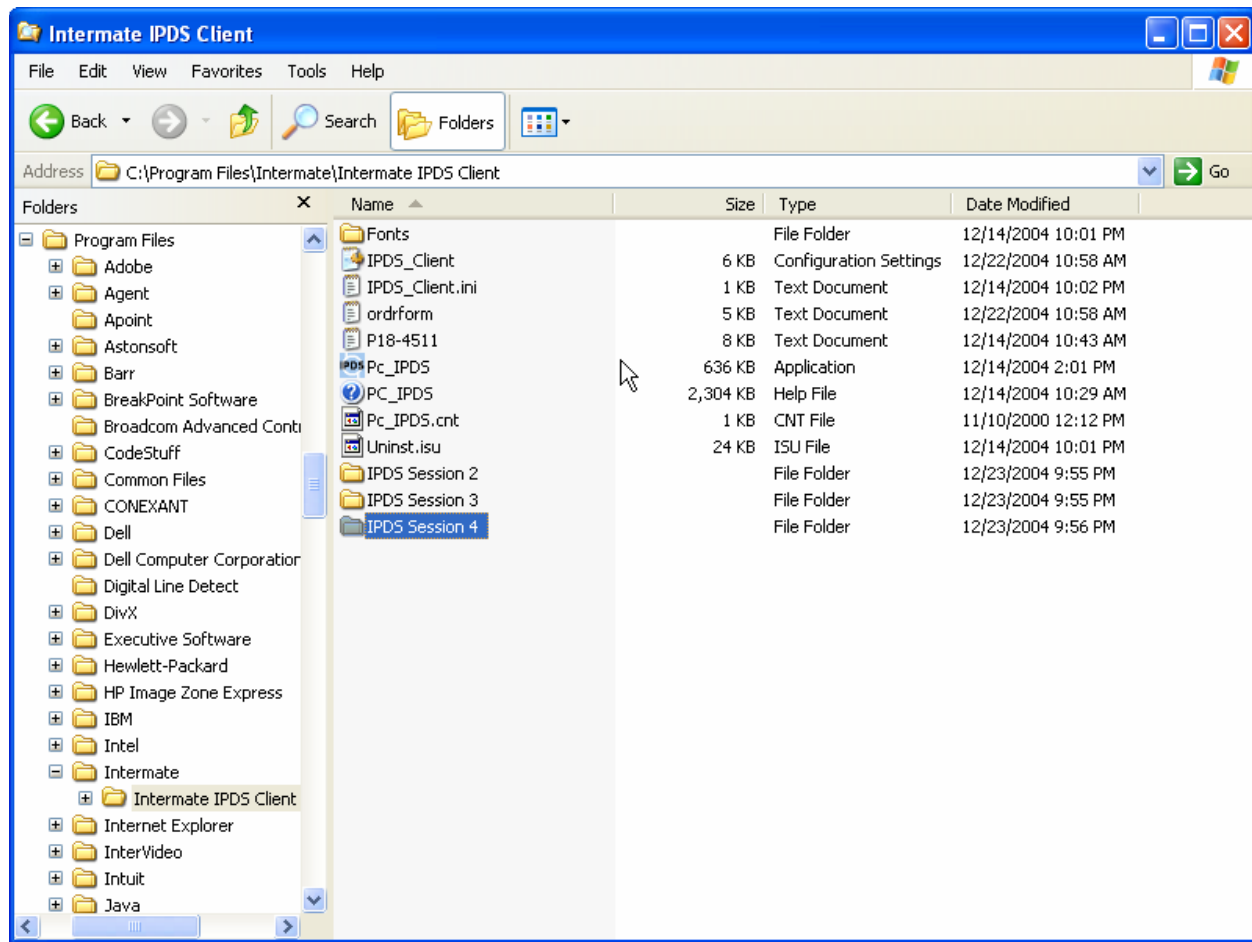
About Figure 2 below: By clicking on the pull down menu selection File, it is possible to create new folders. In order to support the full multiple session capability of IPDS Client (four sessions), the customer will need to create three new folders. In our example, we have named the new folders IPDS Session 2, IPDS Session 3, and IPDS Session 4.

Figure 2 Creating new folders for handling multiple sessions



About Figure 3 below: The new folders have been successfully created. After creating the new folders, the customer will need to copy the ipds_client.ini file and the Pc_IPDS.exe file into each of the new folders.

Figure 3 The new folders have been created

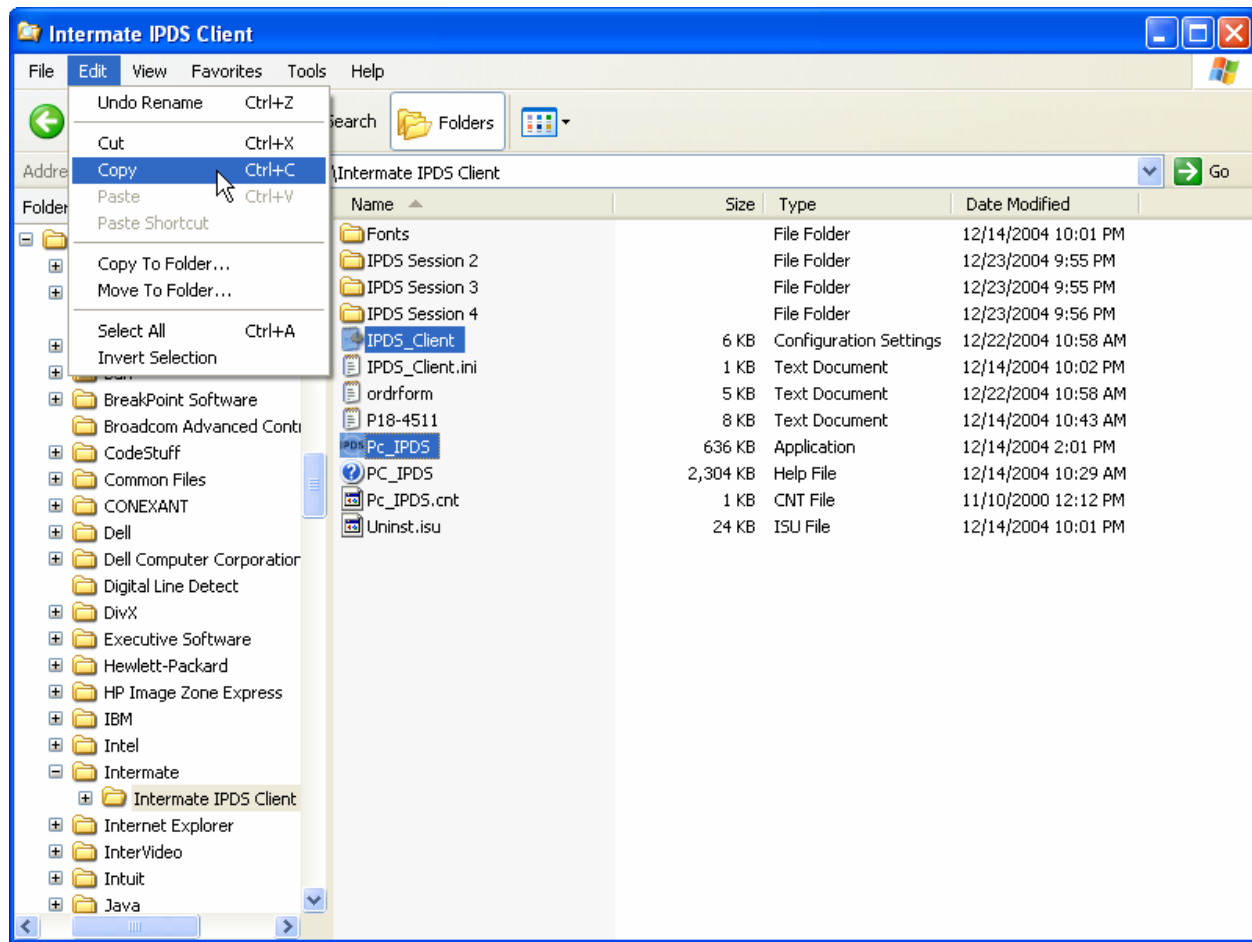


About Figure 4 below. This figure illustrates the highlighting of the ipds_client.ini and Pc_IPDS.exe files so that they can be copied into each of the new folders. There will frequently be two files with almost the same name in the <Drive Letter>:\Program Files\Intermate\Intermate IPDS Client folder. One file is named IPDS_Client.ini while the other file is named IPDS_Client.ini.log. The file that needs to be copied will be of the type Configuration Settings as shown above.

In our example, we will need to execute the copy function three times to move the two files into each of the three new folders. The two files shown in Figure 4 were highlighted by using the following procedure. First click on the ipds_client.ini file with the mouse. After it is highlighted, you can then press and hold the Ctrl key while clicking on the Pc_IPDS.exe file. After the two files are both highlighted, the Ctrl key can be released.

After the two files have been copied into each of the three folders, it will be a good idea to change the name of the ipds_client.ini file in each of these folders to a unique name.

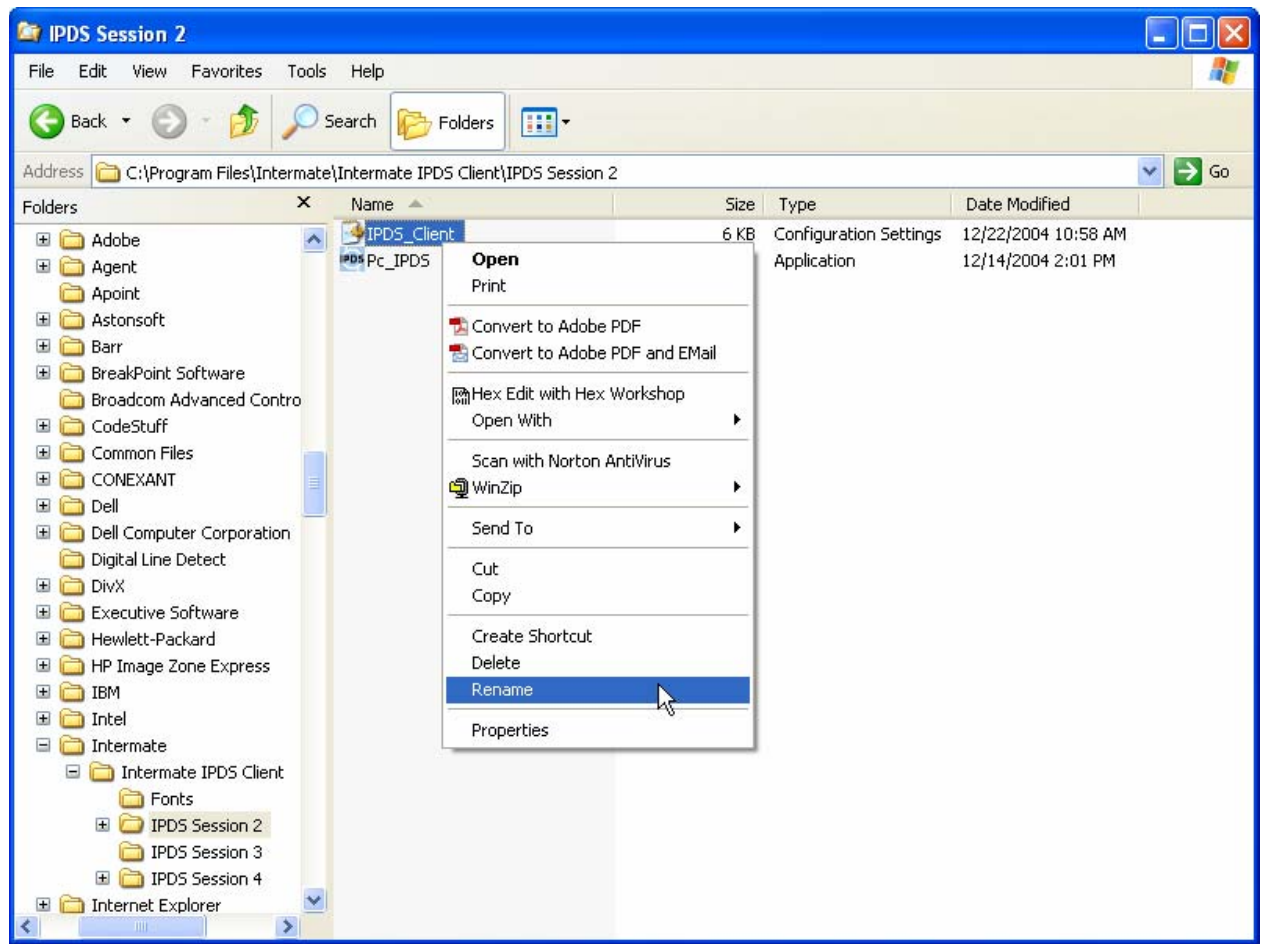
Figure 4 Copying ipds_client.ini and PC_IPDS.exe files to the new folders



About Figure 5 below: By right clicking with your mouse on the name of the ipds_client.ini file in one of the new folders, a drop down box will be displayed that will allow you to rename the file.

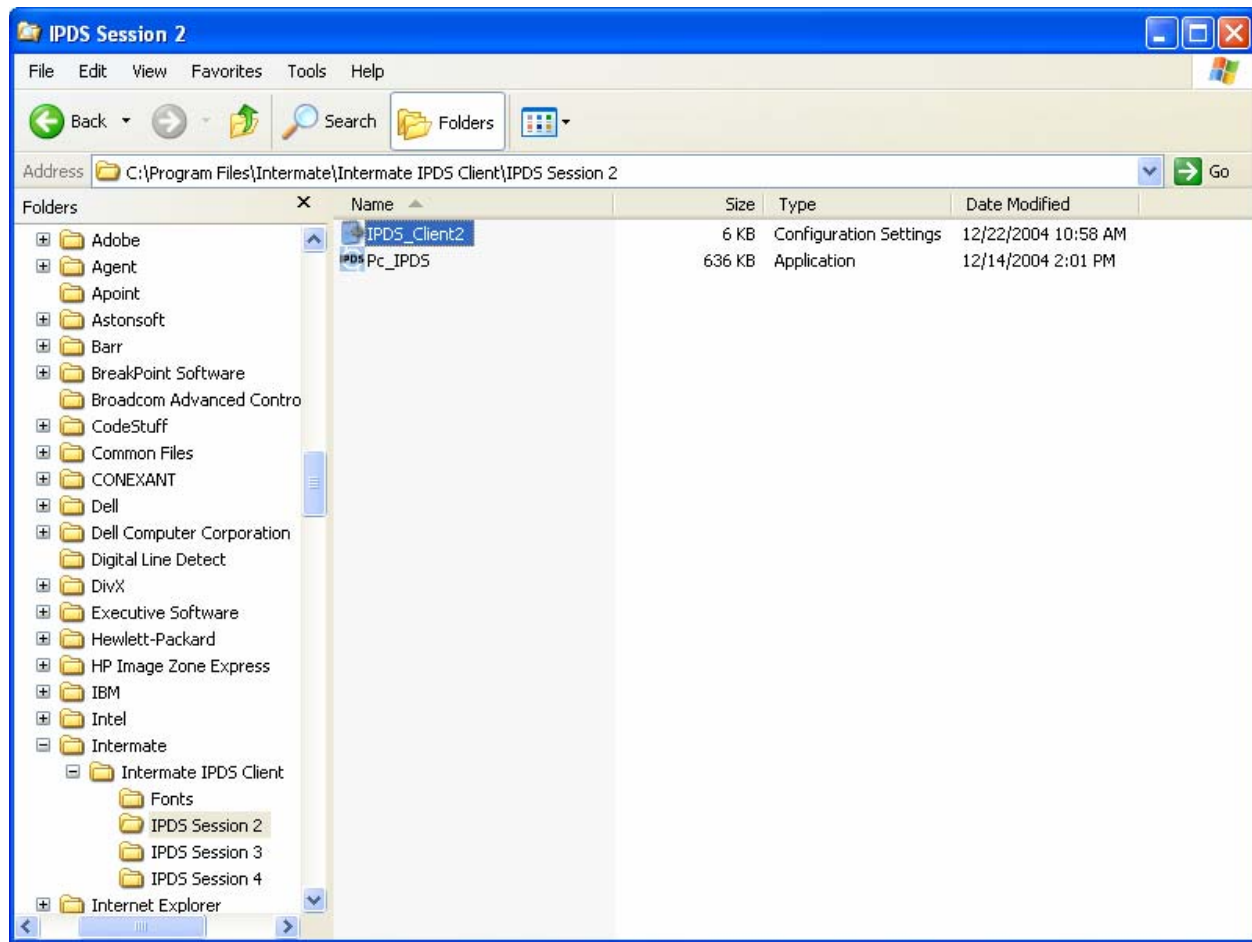
In our example, we are adding a number to the end of the ipds_client file name in order to designate the session to which the file is associated. Thus the name of the file will be changed to ipds_client2.ini in the folder named IPDS Session 2, ipds_client3.ini in the folder named IPDS Session 3, and ipds_client4.ini in the folder named IPDS Session 4.

Figure 5 Renaming folders



About Figure 6 below: The ipds_client.ini has been successfully renamed to ipds_client2.ini. After all three changes have been made for Session 2, Session 3, and Session 4; the customer can minimize their Windows Explorer application and double click on the desktop icon that will activate the IPDS Client application.

Figure 6 Example of re-named files



4 Configuring the Multiple Sessions by Using the IPDS Client Application Menus

Figure 7 Default session parameters

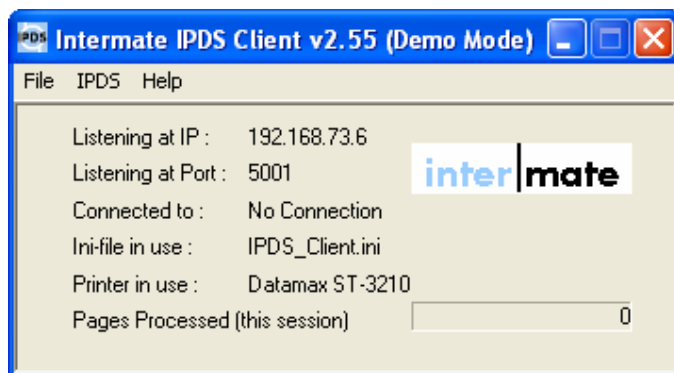


Figure 7 highlights the default session parameters of IPDS Client (Session 1).

The important parameters to note are the IP Address of the adapter in the PC to which the session has bound itself, the TCP port that will be used by the session, and the Ini-file in use that is being used to store the session configuration values.

Figure 8 Select Ini-file for this session: IPDS > Change-Ini file

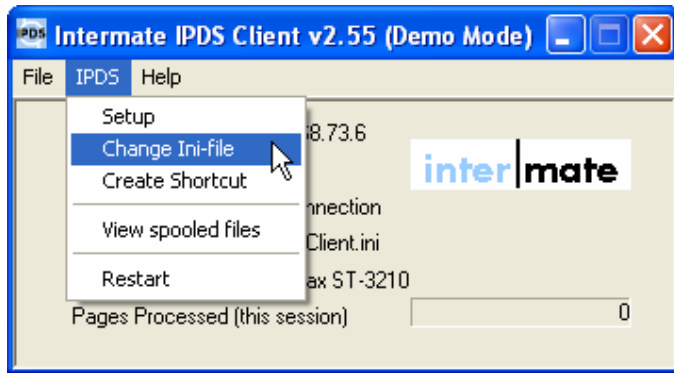


Figure 8

In order to create a new session, the **IPDS Client** software must be linked to a new initialization file. In order to display the Change Ini-file dialog box selection, you must click on the IPDS choice in the pull down menu. Once you have located the **C**hange Ini-file selection, you will need to left click on it with your mouse to select it.

Figure 9 Browse for the desired file

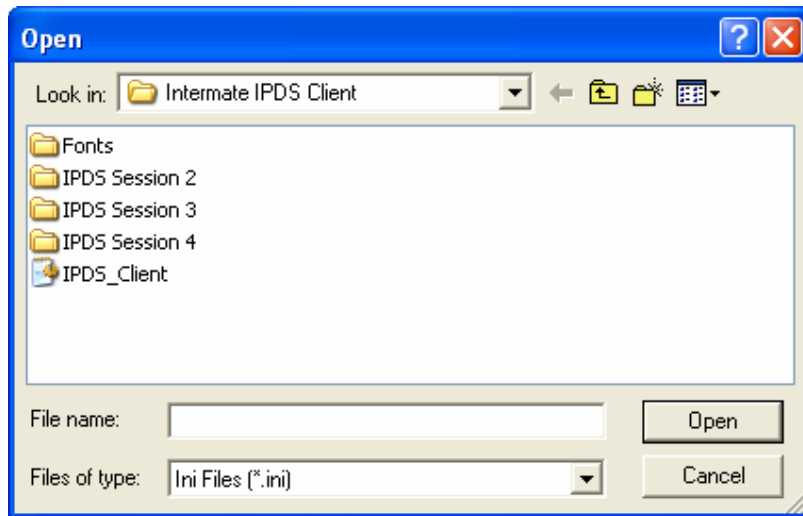


Figure 9

Left clicking on the Change Ini-file selection will bring you to this dialog box. You will need to navigate to the ipds_client2.ini file in the IPDS Session 2 folder in order to start the process of creating the second session. After the second session has been completed, you will need to re-execute the same steps (from within the IPDS Session 3 and IPDS Session 4 folders) to create sessions three and four.

Figure 10 Select the desired file

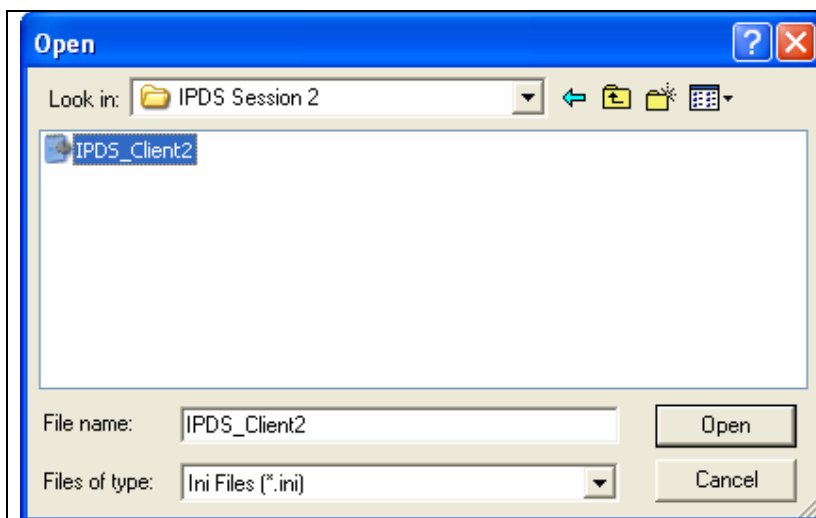


Figure 10

You can reach this location from the dialog box shown in Figure 9 by double clicking on the folder name IPDS Session 2. Next you should highlight the file named ipds_client2.ini and then press the **O**pen radio button to select this new initialization file.

Figure 11 Save settings not necessary

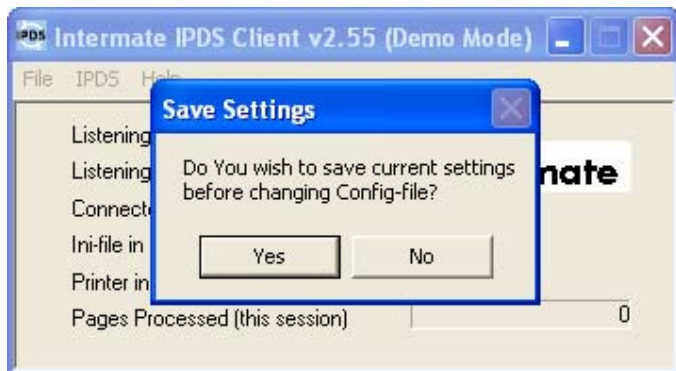


Figure 11
When you press the Open radio button in Figure 10, it will cause the Save Settings message to be displayed. Since you are creating a completely new session, you can press the No radio button to continue.

Figure 12 Create Shortcut

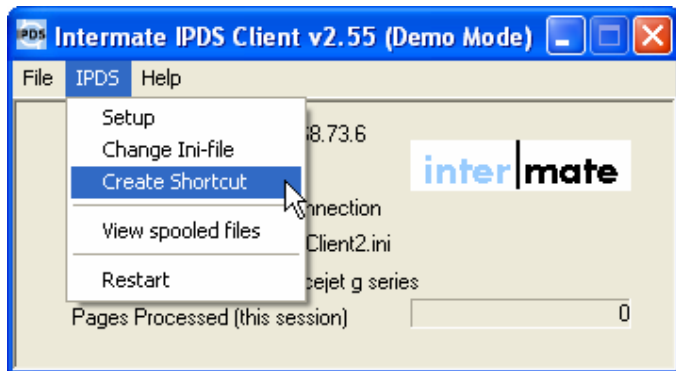


Figure 12
Now that the new **IPDS Client** session is linked to the initialization file named ipds_client-2.ini, you will need to create a desktop icon for starting session 2.
You will need to click on the pull down menu choice IPDS to reach the Create Shortcut selection. To activate this selection, you must highlight this choice in the list and left click it with your mouse

Figure 13 Configure the shortcut

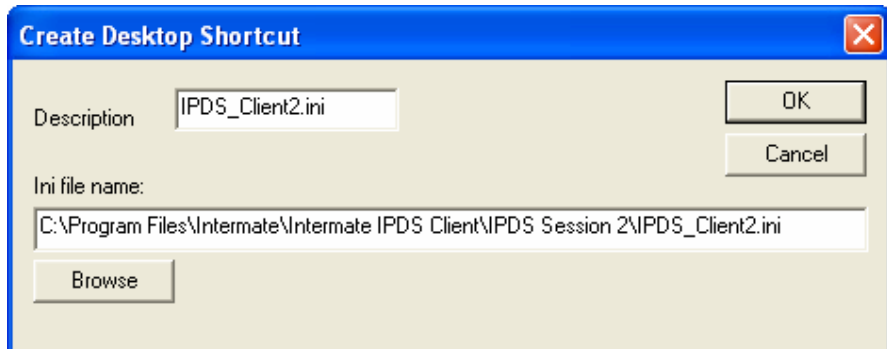


Figure 13
Choosing the Create Shortcut selection outlined in Figure 12 will bring you to the dialog box shown here in Figure 13. The Description field includes the text that will be displayed below the desktop icon for the session. You can edit the field to include descriptive text appropriate for your installation and then press the OK radio button.

Figure 14 Example of a naming scheme to keep track of the sessions

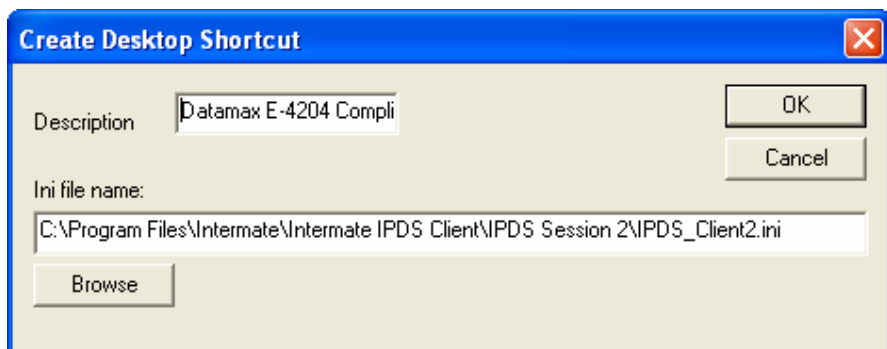


Figure 14
In our case, The Specialty Ticket Printing Co. wants to change the name of each session to reference the particular model of DATAMAX printer being serviced.

Figure 15 Select a port for the particular session

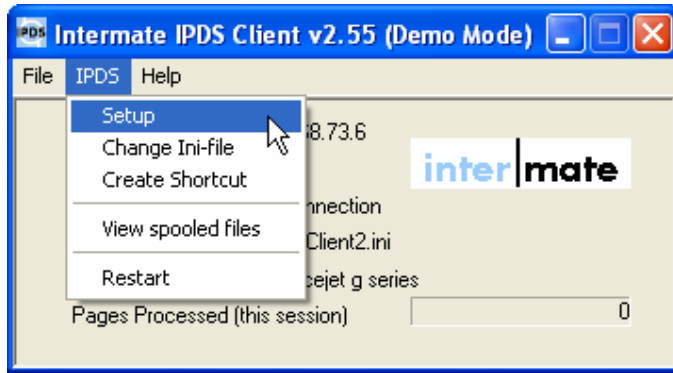


Figure 15

The last step required in the creation of a multiple session is to change the Listening at Port: parameter value.

Since all **IPDS Client** sessions on any particular PC will typically be using the same TCP/IP address, the TCP port value chosen in this parameter will be used to make each session unique. To reach the port setup menu, you will need to click on the IPDS choice in the pull down menu and then left click on Setup.

Figure 16 Select the port from the drop down list

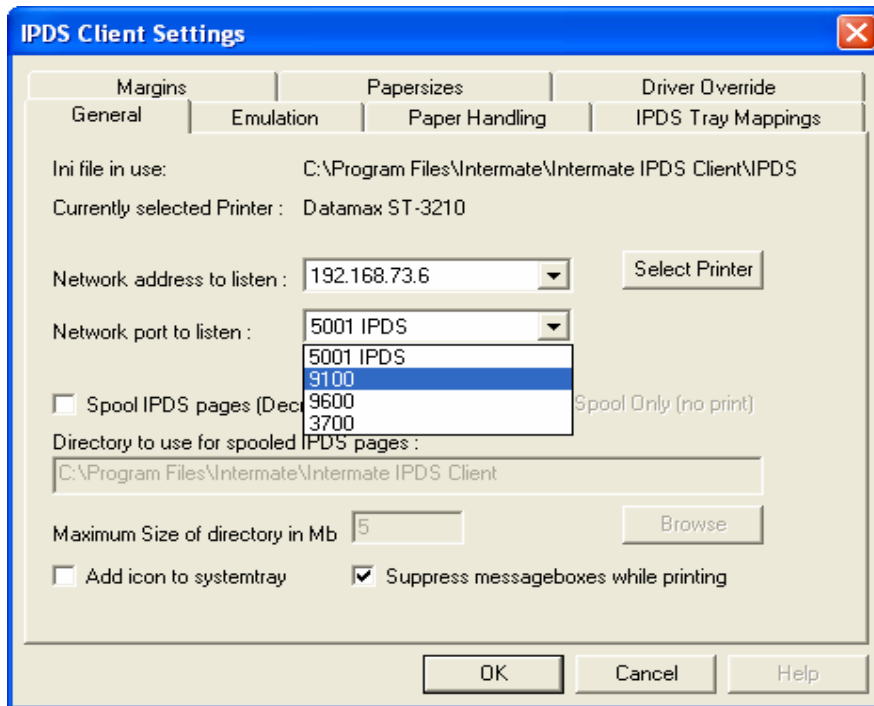


Figure 16

In order to change the TCP port used by a particular **IPDS Client** session, you will need to click on the arrow to the right of the field named Network port to listen:

This will cause a list of choices to be displayed.

There are four different port choices available. When configuring a total of four sessions, each session must be assigned to one of these unique port values. If two sessions are pointed to the same TCP port and are using the same TCP/IP address, a conflict will occur. In this condition, at least one of the two sessions (and possibly both of the sessions) will be automatically disabled.

Figure 17 Select Printer

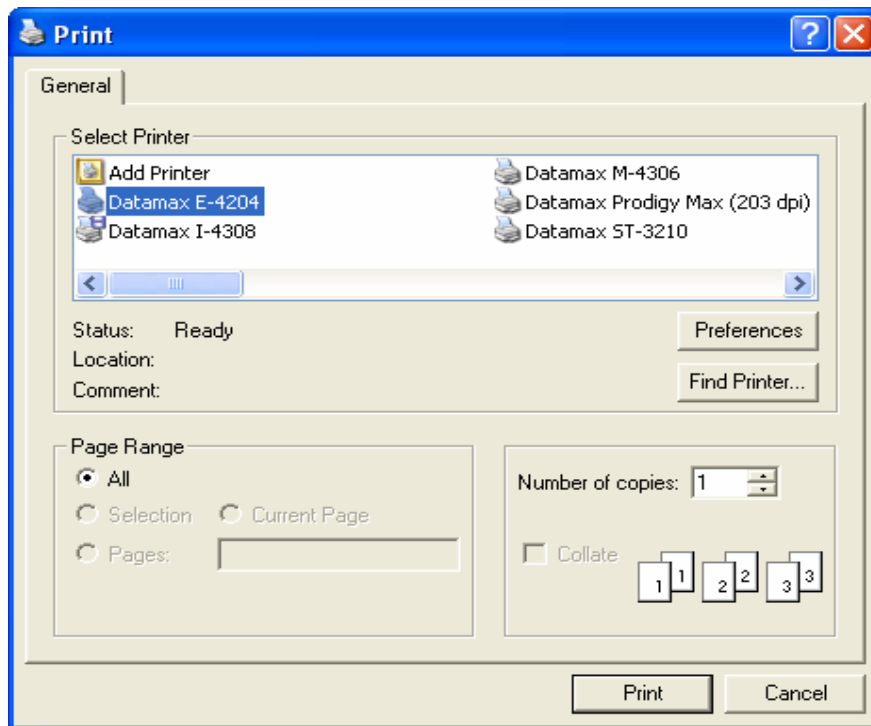


Figure 17

Pressing the Select Printer radio button from the panel displayed in Figure 16 will allow you to link the new session to the proper DATAMAX printer through the usual Microsoft operating system provided printer selection dialog box. You need to highlight the correct printer and then click Print to select your highlighted choice

Figure 18 Save Settings not necessary

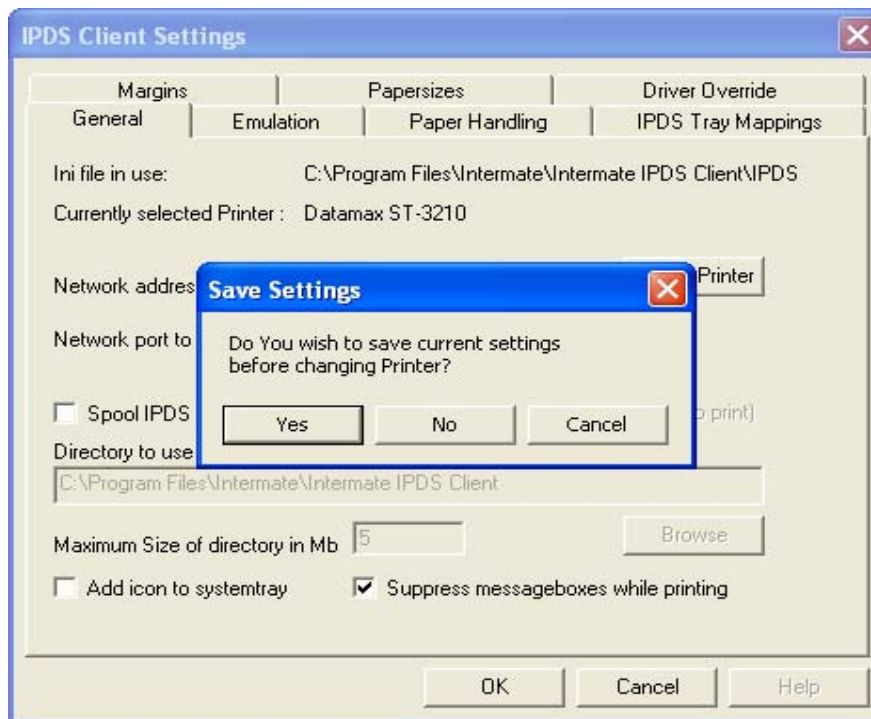


Figure 18

When you click Print in Figure 17, it will cause the Save Settings message to be displayed. Since you are creating a completely new session, you can press the No radio button to continue.

Figure 19 Session is now linked to the correct printer and port

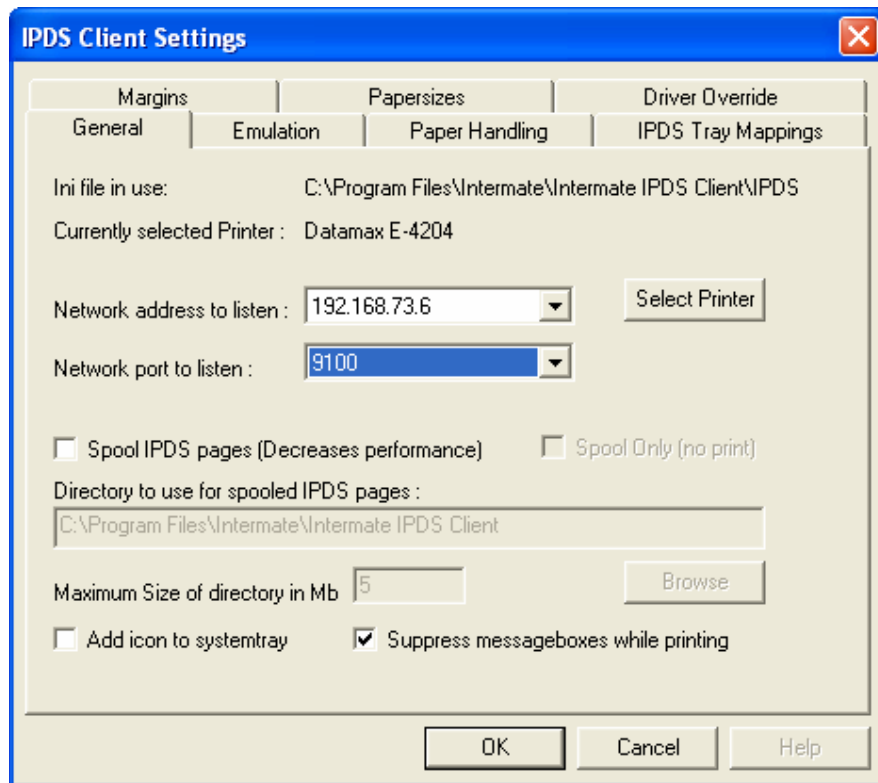


Figure 19

The new session has now been linked to the correct printer and the TCP port was successfully changed from 5001 to 9100.

After performing the steps outlined in Figure 8 - Figure 19 three separate times, our example highlighting how to enable all four IPDS Client sessions is now complete. As shown above, each session has a unique initialization file managing its configuration parameters and each session is listening on a different TCP port. See Figure 20 below

Figure 20 All four sessions are configured and running

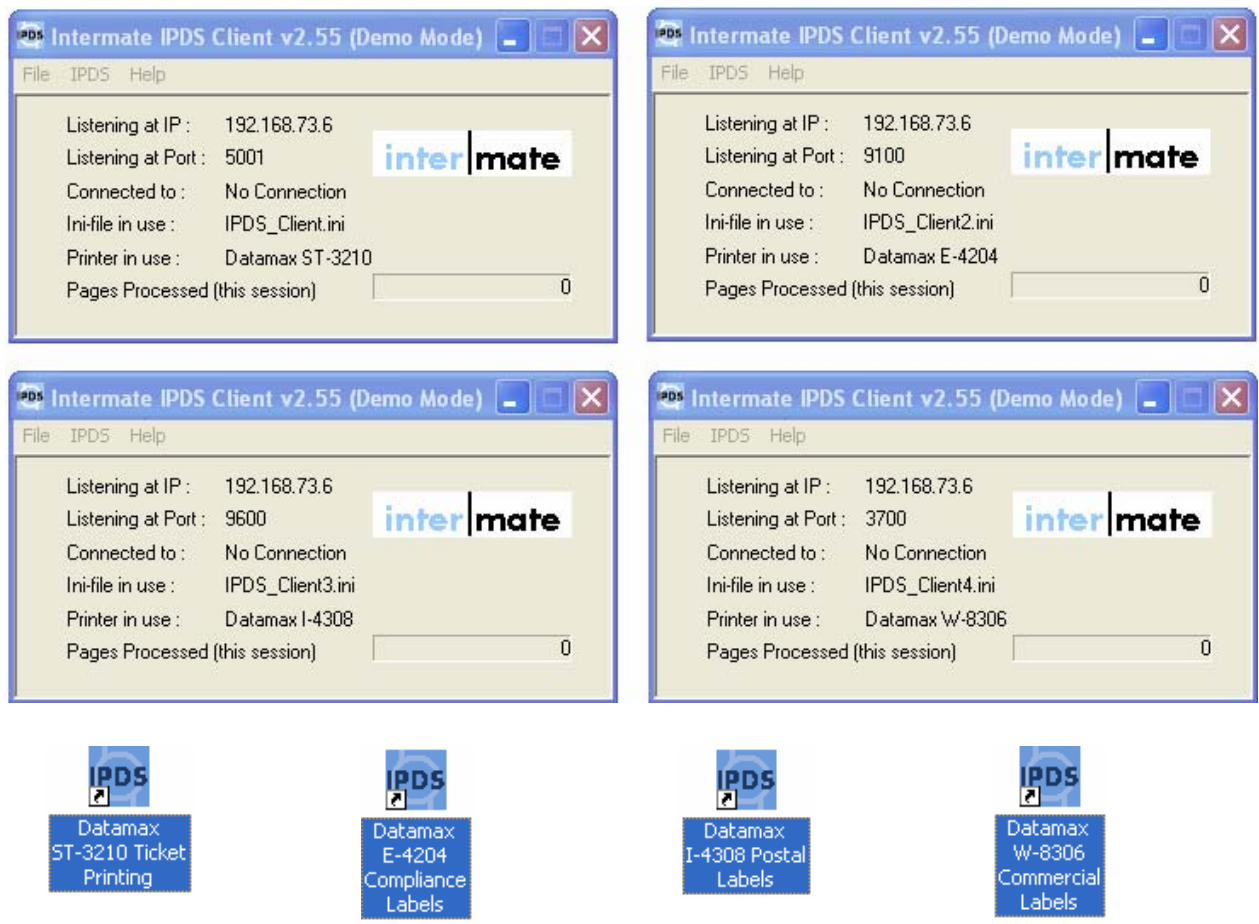


Figure 21 Get active sessions displayed as icons

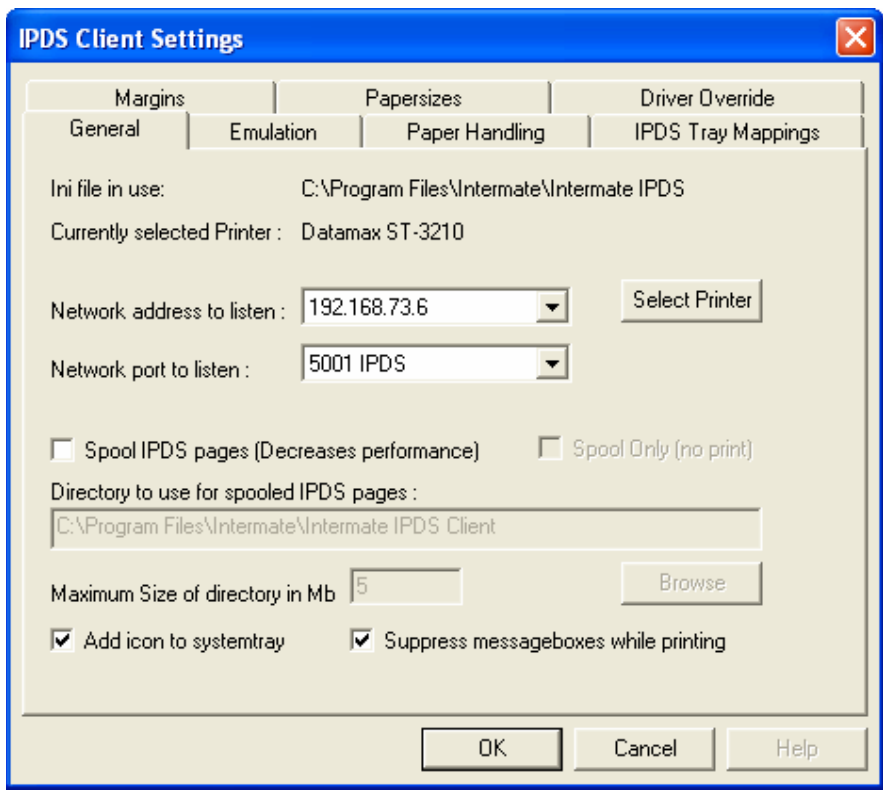


Figure 21

In order to minimize the amount of space taken up by the session descriptions at the bottom of your display, you can have the active sessions displayed as icons in the system tray area near the time of day.

In order to activate this option, you must click the box "Add icon to system tray" so that a checkmark appears in the box.

See the result on Figure 22 below

Figure 22 Active sessions shown on task bar



Figure 22
The sessions will appear as small IPDS logos near the time of day when the system tray icon parameter has been activated.

5 Notices

Publication information

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