

User Manual

applidis

ezPrint

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1 Forewords

AppliDis ezPrint is composed of two distinct components:

A Server Module to be deployed on Microsoft TSE servers and a Client Module to be deployed on your workstations: (the following operating systems are supported, from Microsoft Windows 95 up to Microsoft Windows Seven). A single setup utility allows you to install the server and/or the client components.

The installation procedure describes the server and the client installation.

Systancia kindly reminds you that the AppliDis ezPrint software is not aimed at being deployed on servers containing another AppliDis software version. ezPrint functionalities are already available within the full AppliDis product software. Installing AppliDis ezPrint on AppliDis servers may not be compatible and is not supported by Systancia.

Table of contents

1	Forewords	2
2	AppliDis ezPrint benefits	5
3	Requirements	6
3.1	Client requirements	6
3.1.1	Windows Operating systems	6
3.1.2	User account	6
3.2	Server requirements	7
3.2.1	Operating system	7
3.2.2	Windows 2008 specific case	7
3.2.3	Terminal Server service configuration	8
3.2.4	Remote APP configuration	9
3.2.5	User account	9
4	Installation procedure	10
4.1	Client Installation	10
4.2	Server installation	11
5	Configuration	12
5.1	Server Settings	12
5.1.1	Transfer rate configuration	12
5.1.2	Compression mode settings	13
5.1.3	Option settings configuration	14
5.1.4	License configuration	18
6	Printing	19
6.1	Printer selection	19
6.2	Data transfer	19
6.3	Printing from you own local machine	20

Table of Illustrations

Figure 1 - Server Manager	7
Figure 2 - Server roles summary.....	7
Figure 3 - Configuration of Microsoft terminal Server services	8
Figure 4 - RemoteApp Deployment Settings.....	9
Figure 5 - AppliDis Universal Printer InstallShield Wizard	10
Figure 6 - AppliDis ezPrint installation mode selection	10
Figure 7 - AppliDis ezPrint server component installation.....	11
Figure 8 - AppliDis ezPrint transfer configuration.....	12
Figure 9 - AppliDis ezPrint client zone transfer rate settings	13
Figure 10 - AppliDis ezPrint compression configuration	14
Figure 11 - AppliDis ezPrint configuration options (Restart print jobs after disconnection)	14
Figure 12 - Print data transfer from the server to the client.....	15
Figure 13 - AppliDis ezPrint NTFS rights check on spool directory	15
Figure 14 - AppliDis ezPrint Universal Printer per-session	17
Figure 15 - AppliDis ezPrint global marking mode configuration	18
Figure 16 - AppliDis ezPrint license configuration.....	18
Figure 17 - AppliDis ezPrint selection box.....	19
Figure 18 - Printing data transfer dialog box	20
Figure 19 - Printers selection on the workplace	20
Figure 20 - Printing properties selection from your own local machine	21
Figure 21 - Local printer selection	21

2 AppliDis ezPrint benefits

The AppliDis ezPrint module provides a universal driver since most all the printers are supported thanks to driver virtualization.

The following printers are also compatible:

- ✓ Low cost printers, BW/Colour, Laser, Ink,...
- ✓ High resolution laser printers,
- ✓ PCL3, PCL4, PCL6 or PostScript,
- ✓ Printers with magazine management...

Easy to use...

The solution provides:

- ✓ A support to **any required settings** (settings supported by the destination printer),
- ✓ There is no need to install any driver per device on the application servers,
- ✓ There is no need to tune up any redirection or printer assignment script or network configuration,
- ✓ It prints the same way on network or local printers without any constraints.

Enhanced performance with printing flows reduction...

The AppliDis ezPrint module drastically reduces the print data volume:

- ✓ Thanks to the EMF Microsoft native print format and compression features, AppliDis ezPrint reduces the amount of print data transiting from the server to the client.

The AppliDis ezPrint module provides a Quality of Service (QoS) with a transfer rate management:

- ✓ It defines a quality of service level thanks to a transfer rate limitation. The transfer rate can be defined according to the client localization.
- ✓ It manages the transfer rate according to network ranges.

3 Requirements

3.1 Client requirements

3.1.1 Windows Operating systems

The AppliDis Universal Printer is compatible with the following operating systems and MSTSC versions:

Operating System	RDP Version	32 bits	64 bits
Windows XP	5.1.2600,0	✓	✗
Windows XP SP1	5.1.2600.1106	✓	NA
	5.2.3790.1830	NA	✓
Windows XP SP2	5.2.3790.3959	NA	✓
	5.1.2600.2180	✓	NA
	6.0.6000	✓	✓
Windows XP SP3	6.0.6001	✓	NA
	6.1.7600	✓	NA
Windows Vista	6.0.6000	✓	✓
Windows Vista SP1	6.0.6001	✓	✓
Windows Vista SP2	6.0.6002	✓	✓
	6.1.7600	✓	✓
Windows Seven	6.1.7600	✓	✓

3.1.2 User account

The client or the server installation will require Administrator privileges on the local machine. This is not applicable with Microsoft Windows 9x.

3.2 Server requirements

3.2.1 Operating system

The AppliDis ezPrint can be installed on the following operating systems:

- ✓ Microsoft Windows 2000 Server (Service Pack 4).
- ✓ Microsoft Windows 2003 Server (with or without Service Pack 1).
- ✓ Microsoft Windows 2003 Server 64 bits
- ✓ Microsoft Windows 2008 Server 32 bits
- ✓ Microsoft Windows 2008 Server 64 bits
- ✓ Microsoft Windows 2008 R2 Server

Servers must be turned into the "**Application Server mode**" (Microsoft Terminal Server Mode).

3.2.2 Windows 2008 specific case

A server with one 2008 Windows Server edition, must have Terminal Server role installed.

In the **Server Management** window, check if the role is installed:

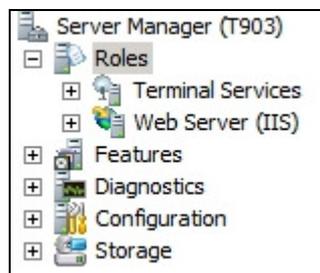


Figure 1 - Server Manager

This role can be installed from the "**Role summary**" menu, in **the Server Management** screen:

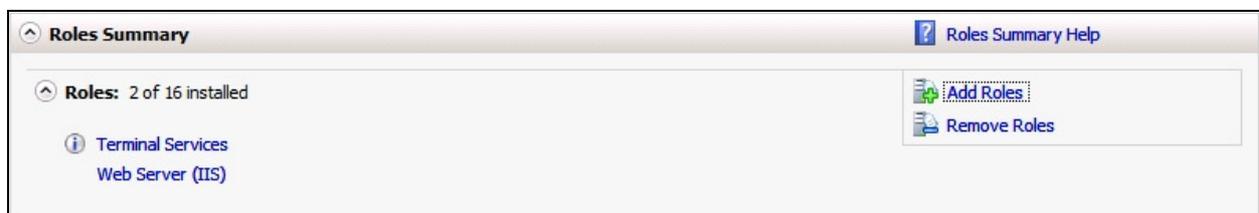


Figure 2 - Server roles summary

3.2.3 Terminal Server service configuration

Go to **Start - > Administration tool - > Terminal Server Services -> Configuration of Terminal Server services.**

Right-click on the line "**Restrict each user to a single session**", select "**Properties**" and check that the "**Restrict each user to a single session**" box is not checked.

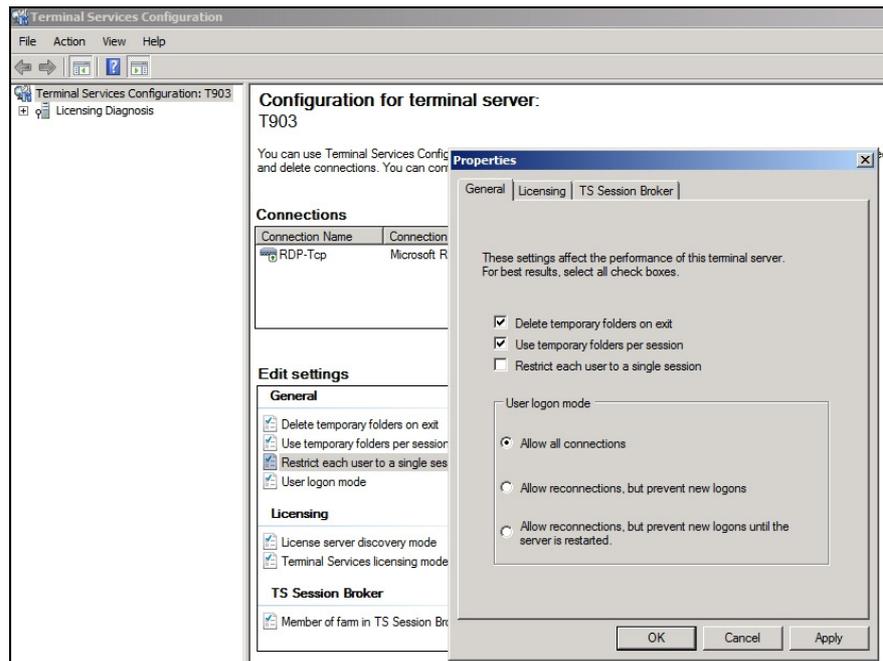


Figure 3 - Configuration of Microsoft terminal Server services

3.2.4 Remote APP configuration

Go to **Start - > Administration tool - > Terminal Server Services - > Remote APP TS Manager**.

On the line "**Terminal Server settings**" click on "**Edit**" and check that the "**Display a remote desktop connection with this Terminal Server in TS Web access**" box is checked.

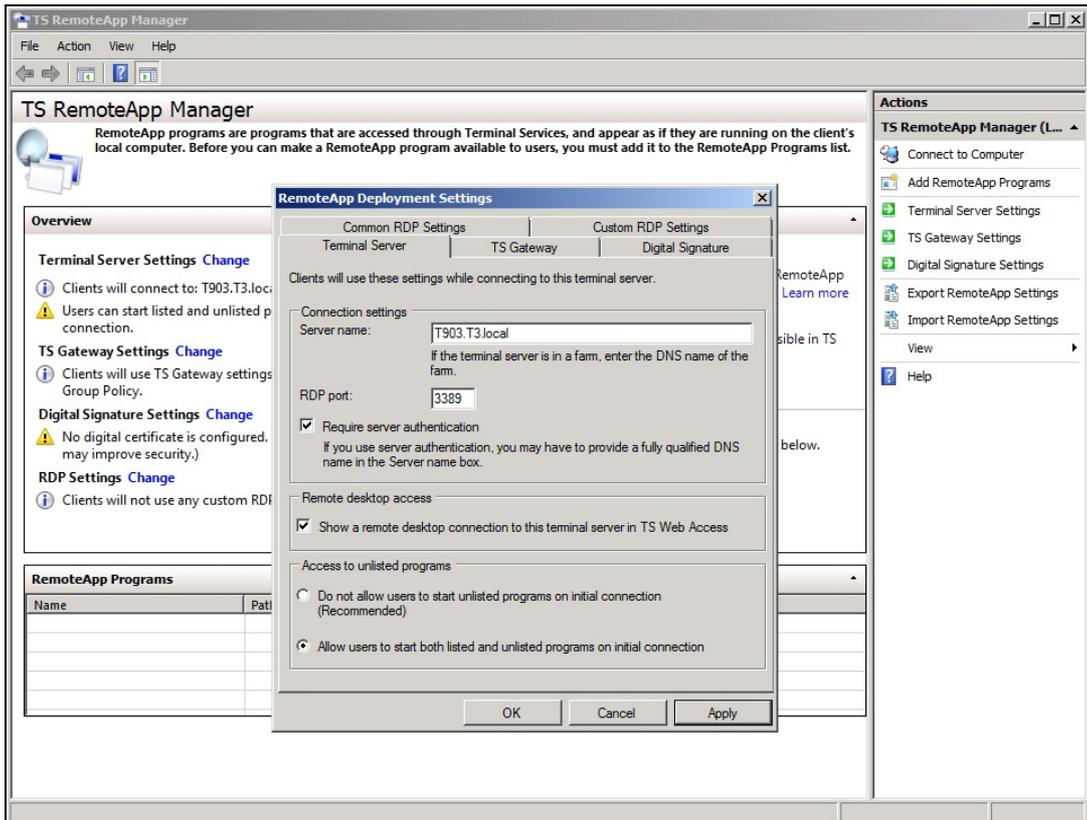


Figure 4 - RemoteApp Deployment Settings

Also ensure that the option "**Authorize users to start indexed and non-indexed programs**" is selected in "**Access to non-indexed programs**".

3.2.5 User account

The client or the server installation will require Administrator privileges on the local machine. This is not applicable with Microsoft Windows 9x.

4 Installation procedure

4.1 Client Installation

First, please logon to the client with local administrator rights.

Start the AppliDis ezPrint setup utility launching the "setup.exe".

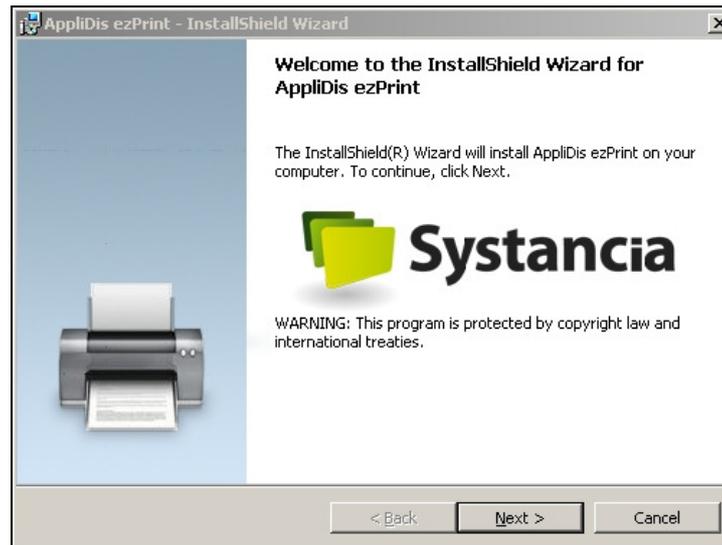


Figure 5 - AppliDis Universal Printer InstallShield Wizard

Select the installation mode. Make sure the "Client" mode is selected (Radio buttons may be grayed out on the clients' side).

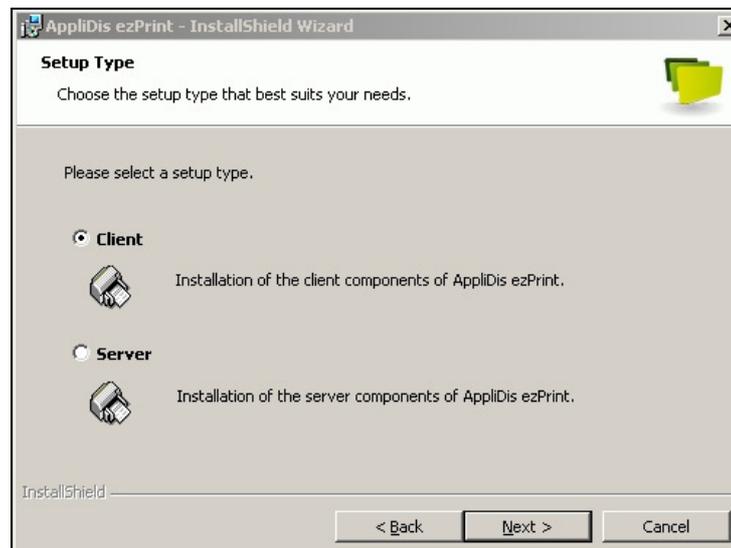


Figure 6 - AppliDis ezPrint installation mode selection

The installation is now completed on the local workstation and ready to accept any new Microsoft RDP session.

4.2 Server installation

Please connect to the server directly from the console as a user with local administrator rights (**do not install** it through a Microsoft Terminal Server session).

From the Add/Remove menu, select "Add or Remove programs". Look up and select the AppliDis ezPrint "setup.exe" utility.

Start the AppliDis ezPrint setup utility "Setup.exe".

Select the installation mode. Make sure the "Server" mode is selected.



Figure 7 - AppliDis ezPrint server component installation

Click "**Next**", then "**Install**" and finally "**Finish**".

5 Configuration

5.1 Server Settings

From the server control panel, you find a new entry "**AppliDis ezPrint**". Select this item to manage the AppliDis ezPrint driver settings.

These settings are applied to the entire server. All the connected users will be affected. Only local administrators are granted to update the configuration.

5.1.1 Transfer rate configuration

Default rate setting

The Transfer tab enables you to define transfer rates limitation between the server and the client. The rate can be defined from 1 to 1000 KB/s. This rate is the data amount per second transferred from the server to the client into the Microsoft RDP session (Virtual Channels).

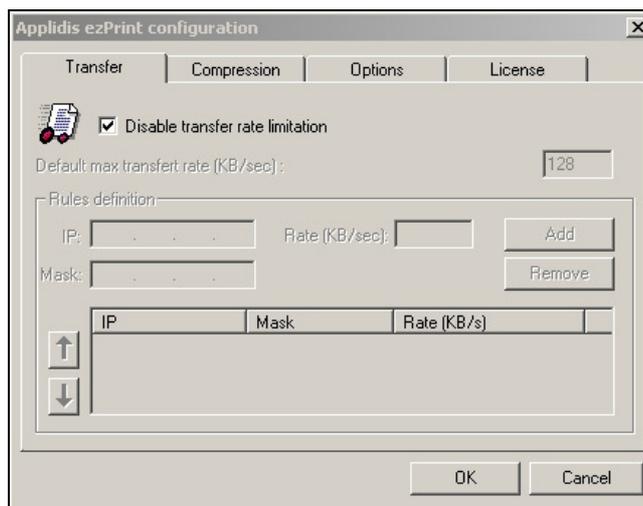


Figure 8 - AppliDis ezPrint transfer configuration

Rate setting per network

The frame "rule setting" enables a maximal transfer rate to be defined according to the client network (IP address). Define your own network list with per network rate value and then click on the "Add" button. Upper listed rules take precedence, the first matching value fits.

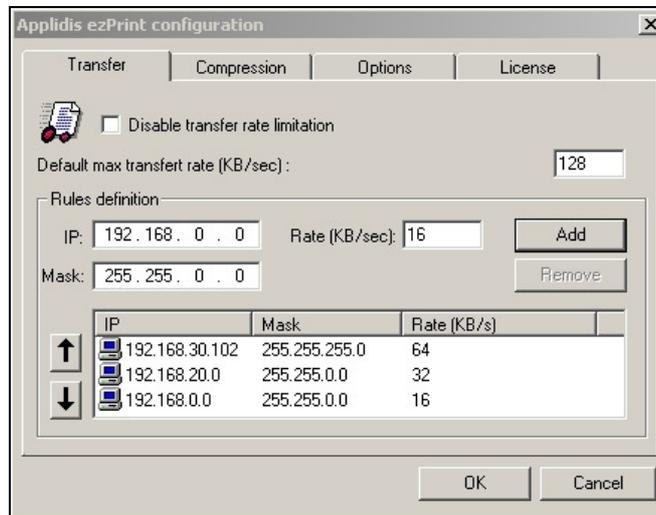


Figure 9 - AppliDis ezPrint client zone transfer rate settings

Sample setting zones

For instance, the following settings (table below) enable a 64KB/s rate to be assigned for all the clients located within the 192.168.20.0/24 network (IP addresses from 192.168.20.0 to 192.168.20.255). A client located into the 192.168.30.0/24 network will get a transfer rate of 32 KB/s. All the clients located into the 192.168.0.0/16 network (IP addresses from 192.168.0.0 to 192.168.255.255) will be assigned to a transfer rate of 16 KB/s, excepted both networks listed previously. Rules are applied scanning the list from top to bottom, thus rules listed at the top will always take precedence.

To define a single IP address, for instance, the client with IP 192.168.20.101, define the IP 192.168.20.101 and the mask 255.255.255.255.

Address	Mask	Rate	Sample matching IPs.
192.168.20.102	255.255.255.255	128	192.168.20.102
192.168.20.0	255.255.255.0	64	192.168.20.101, 192.168.20.102
192.168.30.0	255.255.255.0	32	192.168.30.101
192.168.0.0	255.255.0.0	16	192.168.20.101, 192.168.20.102, 192.168.30.101, 192.168.0.101

Table 1 - Zone configuration sample

5.1.2 Compression mode settings

The compression can be enabled (ZIP method by default) or disabled (no compression).

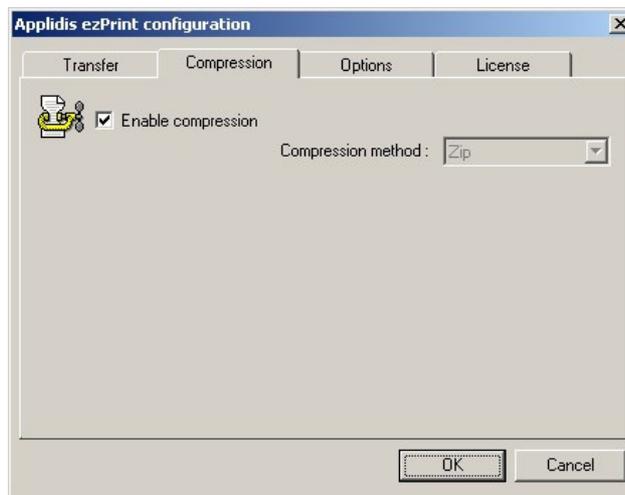


Figure 10 - AppliDis ezPrint compression configuration

5.1.3 Option settings configuration

Resume transfer after a disconnection

When this parameter is enabled, AppliDis ezPrint resumes the print job, after a data transfer fails due to a session breakdown. If the feature is disabled, the print job is cancelled if a disconnection occurs.

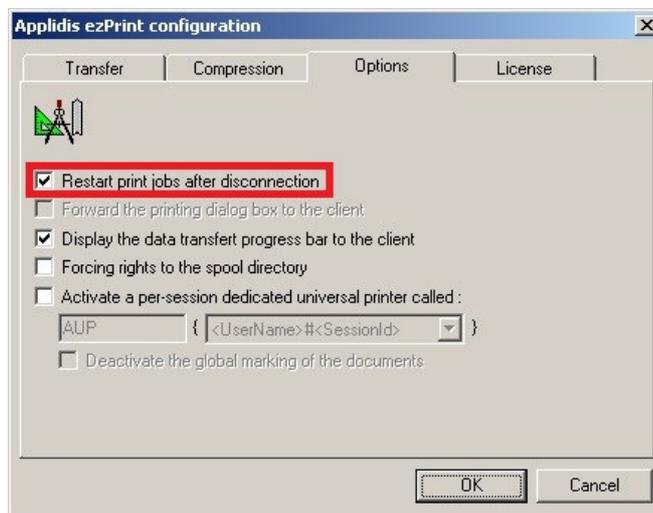


Figure 11 - AppliDis ezPrint configuration options (Restart print jobs after disconnection)

Transfer progression display

A transfer progression bar is displayed to the user while data is being transferred to the client workstation. The transfer can be cancelled by clicking on the "cancel" button.

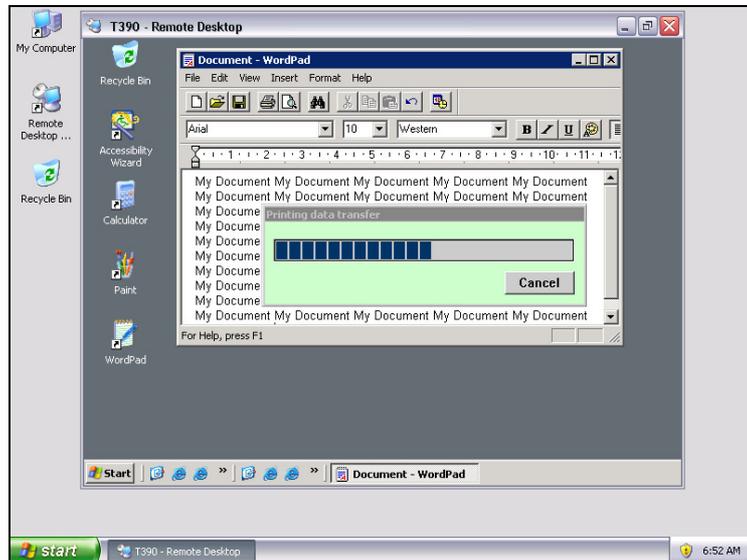


Figure 12 - Print data transfer from the server to the client

Forcing rights to the spool directory

Enabling this option will force ezPrint to check the NTFS rights on the spool directory, and correct them in case there is a mistake.

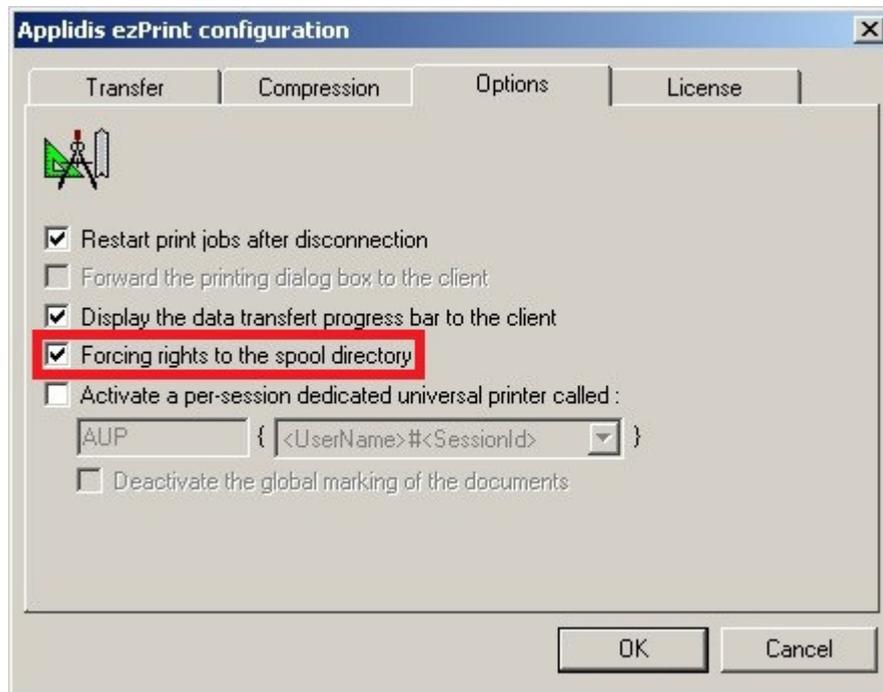


Figure 13 - AppliDis ezPrint NTFS rights check on spool directory

Activate a per-session dedicated universal printer

With a dedicated universal printer per named session, a universal printer can be created for each session opened on the application servers and Windows desktop servers, creating a universal printer for each connected user.

With the universal printer, each AppliDis application server has access to a unique printer named "AppliDis Universal Printer". Each print request from a server to this universal printer is processed and redirected to the corresponding session, based on the name of the document. Each document is marked for being sent into the session requesting the print operation. This marking consists of:

- Identifier for the session in which the print request was made,
- User's login.

This is necessary to ensure the print jobs are sent to the correct Microsoft TSE/RDS session. The identifiers enable the creation of a temporary storage area in the nominated print spooler.

However, this approach suffers from a number of limitations:

- The documents need to be marked with the session identifier before the print request is actually made in the Microsoft TSE/RDS session; if they are not, the document will not be marked and therefore will not be processed. This can happen, for example, if an application is launched using the "print" command to create a direct print (e.g. a right-click on a Word document followed by selection of the "Print" command in the context menu). In this case, the print request is handled by the Microsoft Windows operating system ahead of all other programs.
- The print request must be made directly by a program from the session. In the cases where a program attempts to perform a print operation by sending the name of the target printer to a program from another session (e.g. a service whose purpose is to generate print jobs), the print job will actually be handled by the other session (in which case the session ID marking information will either be lost or will not match the original session). Furthermore, in this case, user details will no longer be those of the user who issued the print request (e.g. for a service, the effective username will be the name associated with the account running the service).

In order to overcome these limitations, the "dedicated universal printer per named session" mechanism was introduced to generate a universal printer dedicated to the user's Microsoft Terminal Server session. This printer is visible only by the user in question (and by administrators). The name of this printer contains all necessary identifiers for marking print jobs. This marking may include (per configuration) a combination of the following information: session ID, user name, server name. The name of this printer must contain at least the session ID. If the printer name has not been configured to contain the user name, the printer name will contain the name of the user sending the print job, in the same way as the common universal printer for an application server.

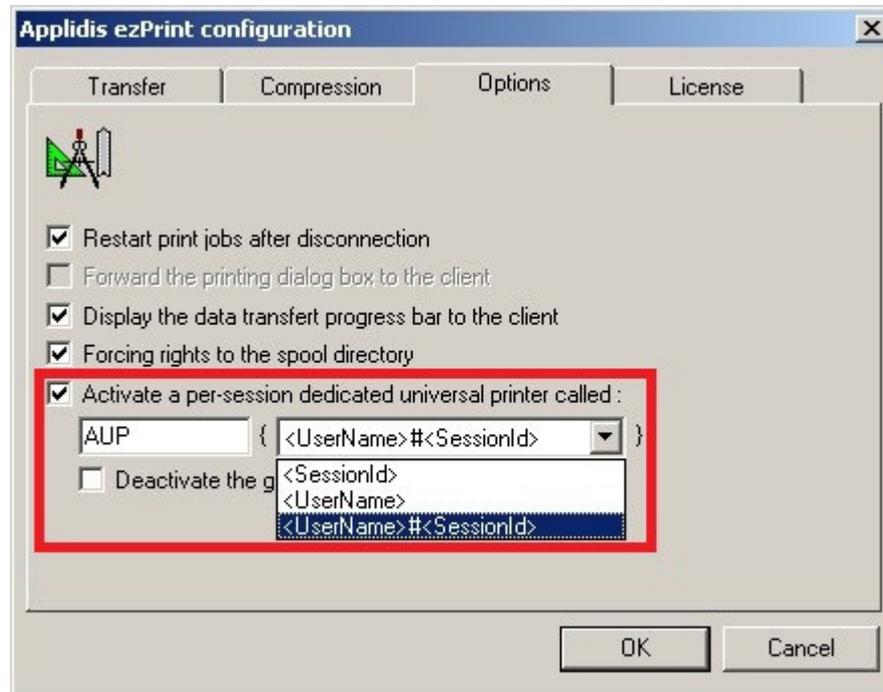


Figure 14 - AppliDis ezPrint Universal Printer per-session

Deactivate the global marking of the documents

When universal printing per-session mode is used, documents marking is no more required, because all the needed information to retrieve the appropriate user session are already included in the printer's name: user name and session ID.

This is why the global marking of documents and processes, used for the standard universal printer mode, can be disabled using the associated option.

However, when the global documents and processes function is disabled, the standard ezPrint printer will no more be able to retrieve the user session, and printings will be lost. That is why, when the global marking mode is disabled, only universal printers per-session can be used.

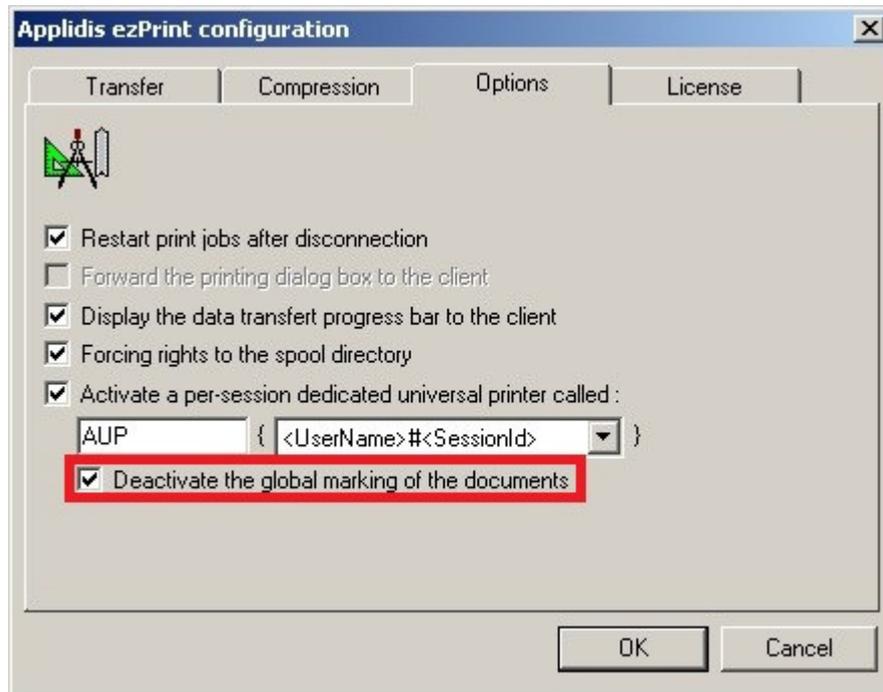


Figure 15 - AppliDis ezPrint global marking mode configuration

5.1.4 License configuration

The license tab displays your licensing status, either set as 'demo mode' or 'licensed'. The provided license key must be entered into the dedicated edit box.

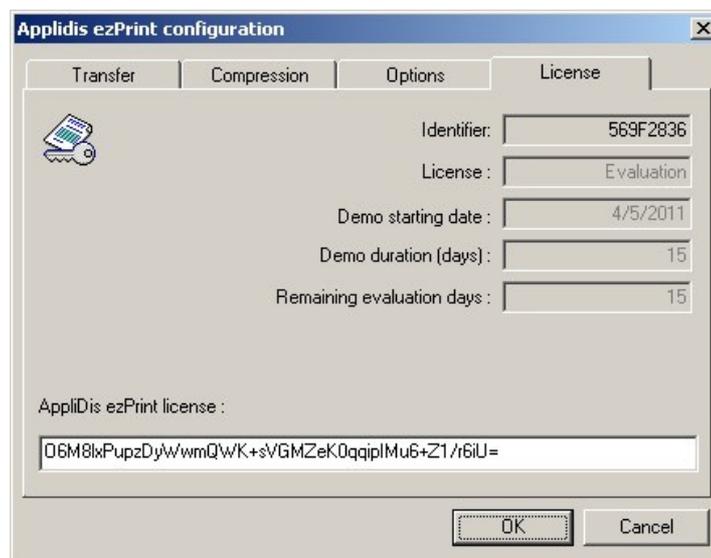


Figure 16 - AppliDis ezPrint license configuration

At the time of the installation, you are granted to use the product during **15 days** for evaluation purpose. As soon as the evaluation period is expired, the software is locked and cannot be used anymore.

6 Printing

6.1 Printer selection

If you wish to print a document while using the universal printer, select the **AppliDis EzPrint** if it is not defined as your default printer.

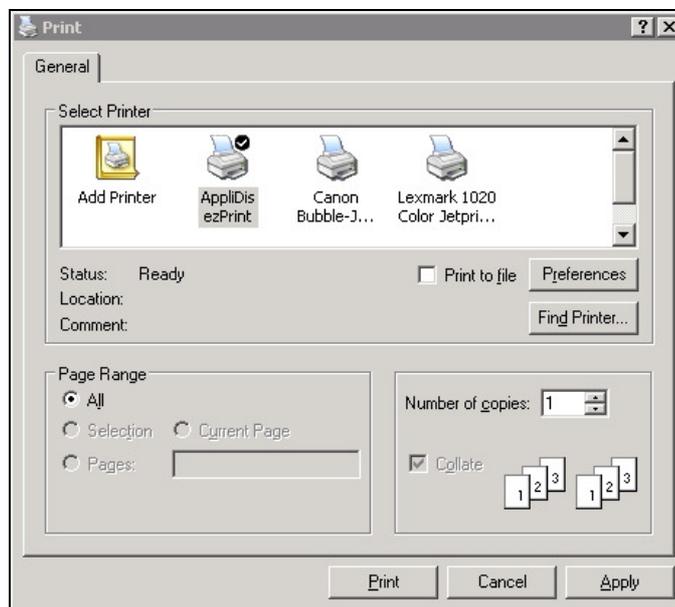


Figure 17 - AppliDis ezPrint selection box

You may want to print a specific range of pages (for instance the last 10 pages of a document). Specify then these settings directly into the properties dialog box.

6.2 Data transfer

Data is transferred from the server to the client. The transfer speed may vary according to settings defined by the administrator, the document size and the bandwidth. The Cancel button stops the transfer while data is transferred.

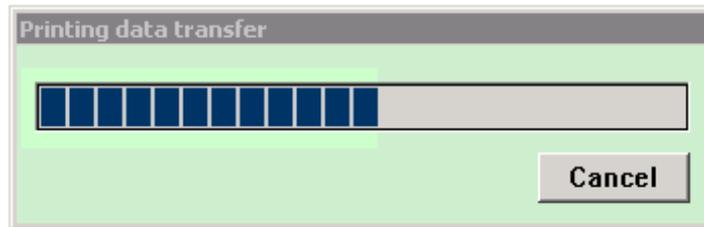


Figure 18 - Printing data transfer dialog box

6.3 Printing from you own local machine

When the print job transfer is completed on the client side, the client's print window appears locally. You may now select the target printer (Figure 16).

You can, if desired, select dedicated printer settings (Figure 17). The dialog box displayed is now completely depending from your own printer driver selected.

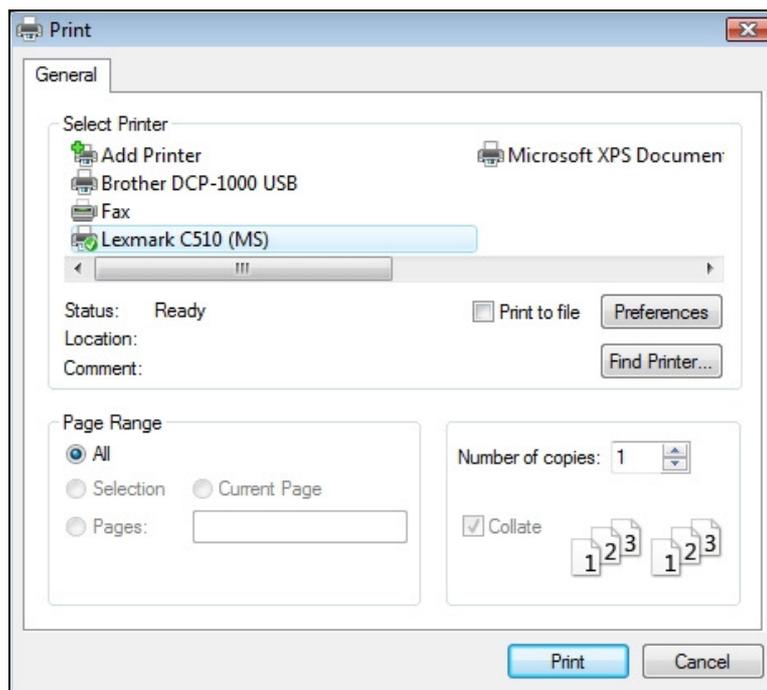


Figure 19 - Printers selection on the workplace

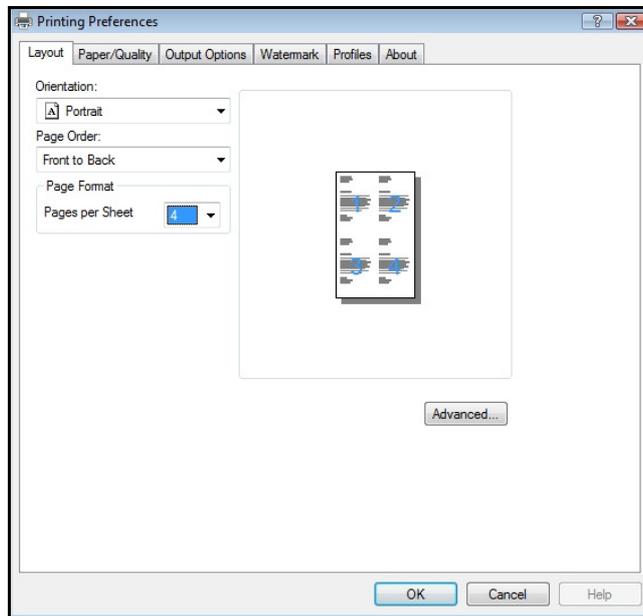


Figure 20 - Printing properties selection from your own local machine

Note: Selecting some specific pages (page ranges for instance), must be done directly within the universal printer dialog utility from the server. Thus, from the client side, you do not have any other possible configuration settings. Nevertheless, other options may be amended.

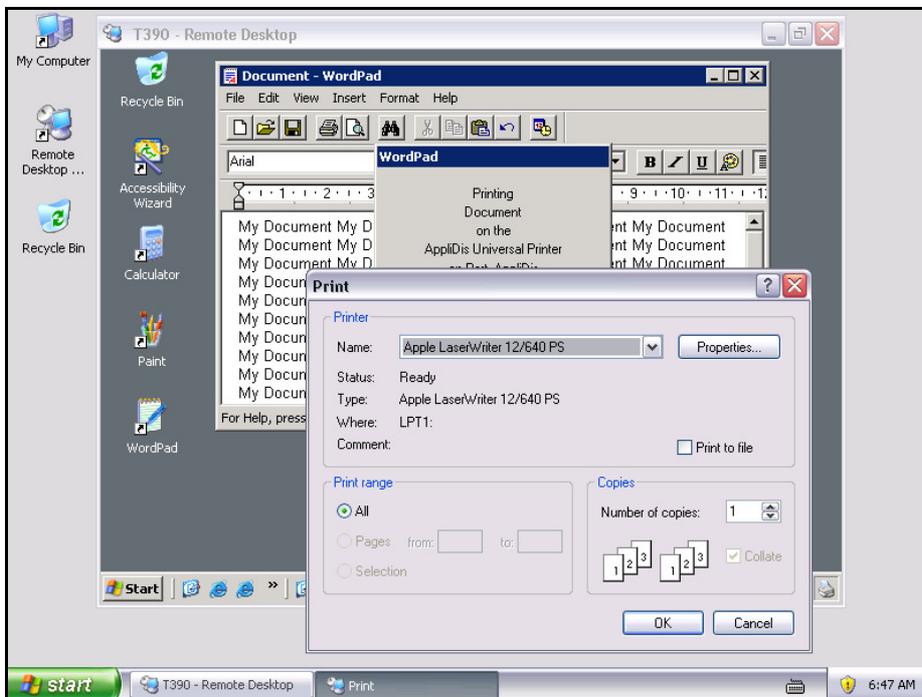


Figure 21 - Local printer selection

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