

Script Install/Uninstall

Documentation

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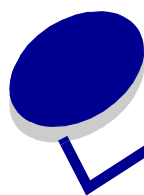
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1

Introduction to Script Install

Overview

Script Install is a powerful tool that installs printer drivers on one or several remote client workstations from your office. You can run installations or software updates on multiple machines at the same time.

Script Install installs printer drivers, and with your help it will pre-configure them. It will create network ports so your drivers correctly point to your printers' network adapters. Script Install also tailors and installs Driver Profiler, and a broad range of network printer protocol support. Script Install can distribute most (or all, depending on your operating system) of the software on the drivers CD that shipped with your printer to remote clients from a central location. Script Install can even create network ports using the following protocols: TCP/IP, Standard IP, Microsoft Line Port Remote (LPR), and UNC.

This versatile utility supports Windows 98 Second Edition, Windows Me, Windows NT 4.0, Windows 2000, Windows XP, and Windows Server 2003.

Tips for using script tools

Use the **Script outline** to get a feel for how install scripts flow. Note, however, that this outline has more components than a functional install script would contain; all possible script components are included to demonstrate their syntax and structure. Also, use the descriptions of sections and keys in the **Script explanations** for detailed explanations of how each part of a script functions.

Note: All components are not available for every printer.

This document provides guidelines on using Script Install in the most common situations, as well as a sample install script for each situation. After reading these examples and referring to the **Script outline** and the **Script explanations**, you will very quickly be ready to create your own scripts.

We recommend keeping these important points in mind while creating scripts for your precise needs:

- Bidirectional support must be installed whenever you create a network port or install network support. You can install the necessary bidirectional support in the same scripts which install these resources.
- Script install works across multiple platforms. That is, you can create one script that works on Windows NT as well as on Windows 2000, Windows XP, and Windows Server 2003. If you have a network of mixed operating systems which includes Windows NT, Windows 2000, and

Windows XP clients whose users have administrative rights, you can even create one script that works on Windows 98 Second Edition, Windows Me, Windows NT, Windows 2000, Windows XP, and Windows Server 2003.

- All Windows NT, Windows 2000, Windows XP, and Windows Server 2003 computers must have sufficient access rights to the account performing the installation.

Conventions used in the book

The scripts used in this book use a generic printer name:

Printer1=Laser Printer xxxx PS3

When you see this convention you will need to replace it with your printer name (Laser Printer) and model (xxxx). There are some instances where only the model (xxxx) will need to be used.

Note: The **RealName** of a printer is either the printer **Model** (when the stream is **PCL**) or the printer **Model** with the PostScript level appended.

Special note about Windows XP and Windows Server 2003

In order to carry out a push install to a Windows XP or Windows Server 2003 target machine, you must configure the target machine to let local users authenticate as themselves and not as guests. This is done by modifying your Local Security Policy. You can verify these settings through the following steps:

- 1 From the control panel, select **Administrative Tools → Local Policy → Security Options**.
- 2 The Security Options have two settings. Make sure you disable **Network access: Sharing and security model for local accounts** and enable **Classic - local users authenticate as themselves**.

Special not about Windows XP SP2 and Windows Server 2003 SP1

In addition to the previous steps, to carry out a puch install to a Windows XP SP2 target machine the Windows Firewall must be congifured to allow printer and file sharing.

- 1 Complete steps 1 and 2 above.
- 2 From the operator panel, select **Windows Firewall → Exceptions** tab.
- 3 Under the Exceptions tab, check **File and Print Sharing** from the list of exceptions.
- 4 Click **OK**.

2 Launch options

Script Install is launched from a command prompt.

Launch from command prompt

When Script Install is launched from a command prompt, provide the path to the correct version of `InstallGui.exe` (either on the drivers CD or an image of the CD), as well the launch parameters. The `InstallGui.exe` file you want is located on the CD in the following directories:

```
\install\x86\InstallGui.exe
```

Therefore, from a CD drive, the launch path looks something like this:

```
e:\install\x86\InstallGui.exe
```

When using a network image of the drivers CD, the launch path might look something like this:

```
L:\source\driverscd\install\x86\InstallGui.exe
```

Or perhaps it might look like this (a universal path):

```
\\images\print_resource\driverscd\install\x86\InstallGui.exe
```

Supply launch parameters to tell Script Install where to find the script file, where to write the log file, and whether to run in silent mode or feedback mode.

`/I:<path><filename>` tells Script Install where to find your script.

`/O:<path><filename>` tells Script Install where to generate your log file (silent mode only).

See the [Glossary](#) for detailed descriptions of these parameters.

In summary, you will launch Script Install from a command line with an instruction that looks something like the following:

```
E:\install\x86\InstallGui /I:L:\source\scripts\script.isf /O: C:\script.log
```

The Parameters for Install GUI are:

```
/I: path\filename.isf
```

```
/L: ISOCode
```

```
/O: path\outputlog.txt
```

```
/V: variable1=variable_value (replaces a VARIABLE in the script with VARIABLE_VALUE)
```

Using the drivers CD interface to Create a Script for Personal Installation

- 1** Open command line prompt.
- 2** Enter launch command:
`\install\x86\InstallGui.exe.`
- 3** Select **Personal Installation** → **Next**
- 4** Select **Custom** → **Next**
- 5** Select the components you want to install.
- 6** Click **Install**.

Your script file is now ready to be used.

Using the drivers CD interface to Create a Script for Network Installation

- 1** Open a command line prompt
- 2** Enter launch command
`\install\x86\InstallGui.exe`
- 3** Select **Network Installation** → **Next**.
- 4** Select **Local installation**.
- 5** Select port from list → **Next**.
- 6** Select the desired printer from the list → **Next**.
- 7** Select the components you want to install.
- 8** Click **Install**.

Your script file is now ready to be used.

3

Glossary

feedback mode

Script Install runs in *feedback mode* when it is launched from a command line with the argument `/f`. Script Install broadcasts status and error messages to the screen of the computer where it is running. Note that for *push installs*, this information is broadcast to the computer running the *push install*, and not the target computer.

key

This is a variable within a section. Each section must have at least one key. See the [Script outline](#) and the [Script explanations](#) for examples and explanations of specific keys.

log file

This is a file which stores a step by step transcript of status and error messages returned by Script Install. *Log files* have the file extension `.log`. A log file is created in the TEMP directory each time Script Install runs. You can change the name and location of your desired *log file* by using the `/o` command discussed in [Launch options](#). One *log file* can contain transcripts of many installation executions. Each transcript within a *log file* is time stamped. When Script Install encounters an existing *log file* with the same name as one it is set to generate, it does not destroy the existing *log file*. Instead it appends the transcript it is creating to the end of the existing *log file*.

pull install

Script Install runs on the target computer where the software is installed. *Pull installs* work for all operating systems. *Pull installs* are also known as local installs.

push install

Script Install runs on one central computer, sending all software to remote target computers. The target computers need to be turned on and connected to the network, but users do not need to be logged on while Script Install runs. *Push installs* only work when all target computers, as well as the central computer, are running Windows NT, Windows 2000, Windows XP, or Windows Server 2003. *Push installs* are also known as remote installs.

script

This is the data file used as an instruction set for Script Install. It contains sections, each of which has at least one *key*. Most *keys* need a *value*. It is stored in the format `<scriptname>.isf`. These components follow the same structure as any Windows `.isf` file:

```
[section]
key=value
```

section

Sections divide *scripts* into related topics. They also determine how *keys* are interpreted. For example, in the `[drivers]` section, the key `printer1=<printrname>` tells Script Install which

printer driver to install. See the [Script outline](#) and the [Script explanations](#) for examples and explanations of section flow.

```
[drivers]  
printer1=coming in
```

silent mode

Script Install runs in *silent mode* when it is launched from a command line; that is, there is no output to the screen. A transcript of the installation is saved to a *log file*.

value

This is the text or numeric assignment for a *key* variable. Note that some *keys* do not require *values*. See the [Script outline](#) and the [Script explanations](#) for examples and explanations of specific values.

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Driver Profiler

You can automate driver configuration by creating driver profiles, and then use Script Install to apply these profiles during driver installation.

Note: Driver Profiler is not available for Windows X64.

A driver profile contains a group of saved printer driver settings and other data for parameters such as:

- Print orientation and N-Up (Document Settings)
- Installation status of a duplex unit or an output tray (Printer Options)
- User-defined paper sizes (Custom Papers)
- Simple text and watermarks
- Overlay references
- Font references
- Form associations

You must use the Driver Profiler application and the printer drivers located on the drivers CD to create driver profiles. See the Driver Profiler online Help (run Driver Profiler and click **Help**) for more information.

Note: To store printer driver profiles in a Driver Configuration File, you must first install the driver on a system that has the Driver Profiler installed.

Created profiles are stored in a Driver Configuration File (.dcf). The individual profiles inside the .dcf are identified by their Short Description. Steps 1 and 2 which follow point Script Install to the .dcf that contains the profiles you want to use to create printer objects.

A .dcf can contain profiles for any number of printer models and any number of drivers (PostScript or PCL, Windows 98 Second Edition, Windows Me, Windows NT, Windows 2000, Windows XP, and Windows Server 2003). Profiles can be added to an existing .dcf by specifying an existing configuration file in the Driver Profiler when creating a profile. New profiles are then appended to the existing configuration file. No two profiles in the same .dcf can have the same Short Description.

You can generate driver configurations with the Driver Profiler, and what you generate can be used by Script Install.

Once you create the profile, you are ready to use Script Install:

- 1 For each printer you want to install with a .dcf profile, add a line to the [Printer1] section in the format `CfgFile=c:\Program Files\Dell\Printer Software\profile.dcf` so the argument after the equals sign specifies the name and location of the .dcf file you create
- 2 Add the line `CfgEntry=short name` so the argument after the equals sign is the phrase you entered for Profile Short Description while creating the profile.

Creating a driver profile

- 1 Click **Start** → **(All) Programs** → **Dell** → **Printer Software** → **<printer model>** → **Driver Profiler**.
- 2 Select the desired printer from the list.
- 3 Click **Creat Profiles**.
- 4 Enter the filename you want for the profile → **Next**.
- 5 Enter a short and long (optional) description for the profile.
- 6 Select the profile data you want to included in this profile → **Next**.
- 7 Select printer properties (Install options, Overlay, etc.) → **OK**.
- 8 Select the print preferences (Print Quality, paper options, etc.) → **OK**.

Your profile is now created.

5

Push install

This is an example push install scenario.

You have a new Laser Printer xxxx (see **Conventions used in the book** for more information.) You need all the printer driver installations for seven users to run at once so you can troubleshoot any problems that come up before tomorrow's big printing deadline.

- 1 All the target computers are running Windows NT, so you create a script with a `[computer]` section.
- 2 Add the section `[Defaults]` to specify the username and password that will gain administrative access to all the target computers to your script file, `atonce.isf`.
- 3 Create an additional file, `list.cmp`, with a `[ComputerList]` section. Under that section, you may list your computers by either host name or IP address. Your script file and computer list file will look something like this:

atonce.isf

```
[Install]
Driver=1
Update_Software=0
DriverProfiler=0
Port=1
Language=EN
Tools=0

[ENetwork]
EStatusWindow=1

[Drivers]
Printer1=Laser Printer xxxx PS3

[Printer1]
Model=Laser Printer xxxx
Stream=PS
Name=Accounting 3 (xxxx)
RealName=Laser Printer xxxx PS3
Port=portAcT
Share=0
```

```

ShareName=Printer
Alt9xDrv=0
Default=0
Published=1
CfgFile=L:\source\profiles\profiles.dcf
CfgEntry=xxxx Accounting
Comment=high speed mono laser for Accounting
Location=Accounting printer room 2

[Defaults]
EUserName=ao`~S^]
EPassword=mIHt
ComputerList=list.cmp

[Ports]
port1=ENetIP

[Port1]
Name=Port1
ipaddress=xxx.xxx.xxx.xx

```

list.cmp

```

[ComputerList]
Thompson.subdomain.mycompany.com
Miller-NT.subdomain.mycompany.com
Blackhole.subdomain.mycompany.com
Gabriel.subdomain.mycompany.com
Honeydew.subdomain.mycompany.com
station12.subdomain.mycompany.com
192.168.236.24
Barrows-NT.subdomain.mycompany.com

```

This script creates a network port “portAcT” to handle communication with the new printer network adapter. It installs TCP/IP network support software to be used by the printer driver. It installs bidirectional support with a status window so the users’ computers can receive messages from the printer and display these messages for the users. Finally, the script installs the printer driver itself: a PostScript 3 driver for the Laser Printer xxxx, with the name “Accounting 3 (xxxx).” The printer is not shared across the network. The driver is pre-configured based on the profile stored in the Driver Configuration File named **profiles.dcf**. All these resources are installed onto the workstations Thompson, Miller-NT, Blackhole, Gabriel, Honeydew, station12, 192.168.236.24, and Barrows using your common administrator account.

- 4 Ensure all target workstations are turned on (though users do not need to be logged on).

- 5 Launch Script Install to run this script from your machine:

```
L:\source\driverscd\install\x86\InstallGui.exe /  
I:L:\source\scripts\atonce.isf  
/O:L:\source\scripts\atonce.log
```

(This command launches Script Install from an image of the drivers CD on your L: drive, and identifies the script `atonce.isf` for processing. It also tells Script Install to run in silent mode, and directs the output to a log file in the same directory as your script.)

- 6 Occasionally check the output file `atonce.log`. Soon it reflects installation on all the workstations you targeted. Everyone is happy with the new printer, and you never had to leave your desk.

Now suppose your users all have a graphics program which does not work well with PostScript printer drivers.

- 1 Use the utility `writeini.exe` to change your script as shown, so it will now install a PCL driver for your Laser Printer xxxx to the same target computers. Accomplish this by running `writeini.exe` four times:

```
writeini L:\source\scripts\atonce.isf drivers printer1 "Laser Printer  
xxxx"  
  
writeini L:\source\scripts\atonce.isf printer1 name "Laser Printer xxxx"  
  
writeini L:\source\scripts\atonce.isf printer1 realname "Laser Printer  
xxxx"  
  
writeini L:\source\scripts\atonce.isf printer1 stream pcl
```

Note: See [Script modification utility](#) for a complete description of the `writeini.exe` utility, including ways to make it more powerful.

- 2 Launch the same script in the same manner as before:

```
L:\source\driverscd\install\x86\InstallGui /I:  
L:\source\scripts\atonce.isf  
/O: L:\source\scripts\atonce.log
```

This time the script installs the PCL driver for the printer.

6

Pull install

This is an example pull install scenario.

You have a new Laser Printer xxxx (see **Conventions used in the book** for more information.) Fifty users need printer drivers installed on their computers. Most users should be comfortable launching a batch file from an e-mail client.

- 1 Using any text editor, create a script similar to `xxxx.isf` shown here:

xxxx.isf

```
[Install1]
Drivers=1
Update_Software=0
DriverProfiler=0
ENetwork=1
Ports=1
Language=EN

[ENetwork]
EStatusWindow=1

[Drivers]
Printer1=Laser Printer xxxx PS3

[Printer1]
Model=Laser Printer xxxx
Stream=PS
Name=Color Printer G
RealName=Laser Printer xxxx PS3
Port=portGxxxx
Share=1
ShareName=Printer
Alt9xDrv=0
Default=0
CfgFile=L:\source\profiles\profiles.dcf
CfgEntry=xxxx Room G
```

```
Comment=High end color printer for department D15
Location=Room G
```

```
[Ports]
port1=ENetIP
```

```
[Port1]
Name=Port1
IP Address= xxx.xxx.xxx.xx
```

This install script creates a logical port “portxxx” to handle communications with the new printer network adapter. It installs TCP/IP network support software to be used by the printer driver. It installs bidirectional support with a status window, so the user’s computers can work bidirectionally with the printer to receive messages from the printer and display these messages for the user. Finally the script installs the printer driver itself: a PostScript driver for the Laser Printer xxx, with the name “Color Printer G” and the network share name “Printer.” The driver is pre-configured based on the profile stored in the Driver Configuration File named `profiles.dcf`.

- 2 Copy the script to your LAN drive, in a folder you’ve created to hold install scripts and the log files they generate.

Now you have:

```
L:\source\scripts\xxx.isf
```

- 3 Create an image of the drivers CD at:

```
L:\source\driverscd\
```

- 4 Design a batch file to use your script as a guide for executing the Script Install. Your batch file looks like this:

newprinter.bat

```
L:\source\driverscd\install\x86\InstallGui /I: L:\source\scripts\xxx.isf
/O: L:\source\scripts\xxx.log
```

The batch file is only one line, but it contains everything you’ll need. The `/I` argument tells `InstallGui` where to get its input (your script). The `/O` argument tells `InstallGui.exe` where to deposit the log file which records what happens when Script Install processes your script.

Since all your users run the same batch file, you end up with one big log file named `xxx.log`. This contains a synopsis of each installation attempt and tells you whether the software installation went successfully and details any problems encountered.

- 5 Send an e-mail to your 50 users with the batch file attached. For example,

To: Department D15
From: IS Staff
Subject: New Color Laser

Dear Department D15,

Please double-click the attachment named "newprinter.bat." This allows you to use the new color laser printer in room G. To print to the new printer, click File, Print, and then select Color Printer G. If you do not see this printer as a choice, please call John for help.



newprinter.bat

-John x1066

- 6 Occasionally check the output file `xxxx.log`. It accumulates time-stamped synopses of installations. Everyone is happy with the new printer, and you never had to leave your desk.

Note: Pull installs will not work for Windows NT, Windows 2000, Windows XP, or Windows Server 2003 systems unless the user accounts running the pull installs have administrator rights. See [Special note about Windows XP and Windows Server 2003](#) for information about how to modify the Local Security Policy so that a Windows XP or Server 2003 machine can accept a pull install.

Now suppose that your users are not comfortable using their workstations for unfamiliar tasks. Rather than having your users launch a batch file themselves from an e-mail client, you can tailor their network logon script to launch Script Install for them when they log on to their accounts.

These lines, added to a network logon script, automatically run Script Install for each target user, but only if it has not already run:

```
if exist c:\dunscrpt.out goto continue

L:\source\driverscd\install\x86\InstallGui /I: L:\source\scripts\xxxx.isf
/O: L:\source\scripts\xxxx.log

>c:\dunscrpt.out echo Installation already attempted on this workstation
:continue
```



Uninstall scripts

The language used to create an uninstall script and the structure of components in the script remains quite similar to those created for install scripts. Like install scripts, uninstall scripts are made up of sections with variable keys and their values (if required).

For example, an uninstall script follows this format:

```
[Parent_Section]
Component=<flag>
```

Enter **Uninstall** in the Parent Section to specify that this is an operation that uninstalls the components named in the "Component" section. The *flag* section determines how to uninstall. If the flag equals 1, the component will be removed if it has no subcomponents or if all subcomponents related to it have been removed. If the flag equals 2, the component and all related subcomponents will be removed.

Here is an example of a simple uninstall script that removes the printer object and related software components (including the driver) for a fictional printer named "Pinion":

```
[Uninstall]
Printers=1
[Printers]
Pinion=2
```

Given that the flag equals 2, this script will remove the printer object and all related software components for the Pinion printer when run.

To run your uninstall script , enter the following in the command prompt:

```
/I:<script_file_name>
```

In the <script_file_name> section, substitute the name of the uninstall script that you created and the .ini file extension. If your script file is named delete.isf for example, the command looks like this:

```
/I: delete.isf
```

Uninstall Parameters

```
/S
```

Calls an interface on the screen. By default there is no output on the screen and a transcript is recorded in the log file.

```
/L:<ISO language code>
```

Specifies the language used by the interface.

/I:<input script file>

Uses the ISF (Install Script File) created for the installation for uninstallation parameters.

/O:<output log file

Names the file for the results, messages and errors of the uninstallation.

/R:<name of the XML file asnd Custom GUI file>

8

Port creation

Script Install can create IP, TCP/IP, LPR and UNC network ports, according to the `protocol` value that you specify. See the following table to ensure that your target operating system supports the type of port that you want to create.

Windows operating system support for port options

Type of Port	Protocol Value	Port Name	9x	NT	2000	XP and Server 2003
TCP/IP	TCPIP		X	X	X	X
LPR	LPR			X	X	X
Standard IP	IP		X	X	X	X
UNC	UNC	\\server\printer (Windows NT, Windows 2000, Windows XP, and Windows Server 2003 only)		X	X	X

In order to create LPR ports through Script Install, the target system must have Microsoft TCP/IP Printing support installed.

Installing Microsoft TCP/IP Printing support in Windows NT

- 1 Go to **Start** → **Settings** → **Control panel**.
- 2 Double-click **Network**.
- 3 Click the **Services** tab, click **Add** → **Microsoft TCP/IP Printing**.
- 4 Click **OK** and follow the prompts.

Installing Microsoft TCP/IP Printing support in Windows 2000, Windows XP, and Windows Server 2003

- 1 Go to **Start** → **Settings** → **Control panel**.
- 2 Go to **Add/Remove Programs**.

- 3** Click **Add/Remove Windows Components**.
- 4** Place a check mark on **Other Network and Print Services**.
- 5** Click **Details** and make sure that **Print Services for Unix** is checked. Click **OK**.
- 6** Click **Next** and follow the prompts.

Note: If the creation of an IP or LPR port should fail, the printer object will be created and associated with LPT1. In the event that LPT1 is unavailable, the install will fail. If the installation fails, check the logfile for returned error messages.

See [Troubleshooting](#) for additional information. For additional information about creating ports through scripts, see [\[Ports\]](#) and [\[Port1\]](#).

Note: Port creation requires bidirectional support. See [\[ENetwork\]](#).

9

Script modification utility

`Writeini.exe` changes the value of one key parameter within an existing install script.

It is run in the format:

```
writeini <script file> <section> <key> <value>
```

The `<script file>` parameter includes both the name and directory path of a script. Suppose you have a script which installs the Laser Printer xxxx PostScript 3 driver. The `[Drivers]` section of the script appears as:

```
[Drivers]
printer1=Laser Printer xxxx PS3
```

To change the script so it installs the Laser Printer yyyy driver, run `writeini.exe` as shown to change the script's `[Drivers]` section:

```
writeini a:\script.isf drivers printer1 "Laser Printer yyyy"
```

Note: When, as in the previous example, the value you are entering contains spaces, enclose it in quotation marks so `writeini.exe` handles it correctly.

When you check your script, you find it appears:

```
[Drivers]
printer1=Laser Printer yyyy
```

`Writeini.exe` is a very useful tool when sufficiently automated. The following batch file demonstrates how to use `writeini.exe` to modify a base script. Every time you run the batch file, it creates a new script named `written.isf` which installs a different network printer.

next.bat

```
cd c:\temp
copy L:\source\scripts\script.isf .\written.isf
L:\source\driverscd\install\writeini .\written.isf Drivers Printer1 %1
L:\source\driverscd\install\writeini .\written.isf Printer1 Model %2
L:\source\driverscd\install\writeini .\written.isf Printer1 Stream %3
L:\source\driverscd\install\writeini .\written.isf Printer1 Name %4
L:\source\driverscd\install\writeini .\written.isf Printer1 Realname %1
L:\source\driverscd\install\writeini .\written.isf Printer1 Port %5
L:\source\driverscd\install\writeini .\written.isf Printer1 Sharename%6
L:\source\driverscd\install\writeini .\written.isf Port1 IPAddress %7
```

```
L:\source\driverscd\install\writeini .\written.isf Port1 Portname%5
L:\source\driverscd\install\x86\InstallGui /I: c:\temp\written.isf
```

At the command prompt, enter the following to run **next.bat**:

```
next "Laser Printer xxxx PS3" "Laser Printer xxxx" ps "My xxxx" portGT Printer
192.168.236.24
```

This batch file creates a copy of your initial install script and places the copy in your c:\temp directory. It then modifies the install script to correctly install the Laser Printer xxxx PostScript 3 driver, and creates a logical port to communicate with the network adapter. All the new information is passed in as the seven parameters you supply when you run the batch file.

In the field

Utilities like **writeini.exe** and Script Install make things easier when you need to send your IS staff abroad. With only a CD and a floppy diskette, your IS staff can easily install printer drivers at locations remote from your network.

Put a script on the floppy, as well a **.dcf** containing driver profiles for each printer to be installed. Include a batch file to launch Script Install (see the example **newprinter.bat**). If more than one printer is involved, you may want to provide a batch file such as **next.bat** to tailor your scripts. Or provide a separate script for each printer your staff might need to install. Scripts take up such little disk space, there is no practical limit to how many you can provide. You may want to send only a very simple batch file to run **writeini.exe**, perhaps one that tailors scripts for the IP addresses of the various network adapters your staff will encounter.

10

Update software

You have just gotten a new printer. You would like to replace the software and drivers on your network with their most recent versions contained on the drivers CD that shipped with your new printer.

It is possible to do a push install software update, replacing outdated software with the version from your current drivers CD by running a Software Update.

Use this simple command line entry to update software on one system:

```
E:\install\x86\InstallGui
```

(Assuming the drivers CD is in your **E:** drive.)

Note: You cannot run a Software Update in conjunction with any other Script Install function. When a Software Update is requested, any other components of an install script are ignored.

You can run a Remote Software Update to update software on multiple computer systems. Create a script to do this. Set the `Update_Software` key in the `[Install]` section to `1`, then declare which computers are to be targets, and provide account information so Script Install can access the target computers. Your script will look something like this:

```
[Install]
Update_Software=1
Language=EN

[Computer]
Computer1=

[Computer1]
ComputerName=HAANS
UserName=kraken
Password=seafood
```

Be sure the accounts you provide have administrative rights. A Remote Software Update is essentially a push install. You will find useful details about the sections `[Computer]` and `[Computer1]`.

Note: Remote Software Updates only work on Windows NT, Windows 2000, Windows XP, and Windows Server 2003 systems.

11

Troubleshooting

Remember that the same things that cause problems with any conventional installation also cause problems for Script Install. Whenever you encounter problems:

- Check your script; be sure that you have included all the matching sections that are required by the options you have selected. See [Script explanations](#) for a list of supported keys and their required matching sections.
- Ensure the target computer, the source computer, the printer(s), and the network adapter(s) have power and are free from error states. Issue a ping command to them to verify that they are on the network.
- Check for background software running on either the source or target computer (if they are different) which may interfere with the installation routine or the resources it requires.
- Ensure target computers are running accounts with sufficient access rights when using Windows NT, Windows 2000, Windows XP, or Windows Server 2003. See [Special note about Windows XP and Windows Server 2003](#) for information about how to modify the Local Security Policy so that a Windows XP computer can accept a push install.
- You may be attempting to install components that are incompatible with the type of installation you are performing, or with the operating system of the target computer. For example, you may have attempted a push install to a Windows 98 computer.

Note: In the event that Script Install provides a Microsoft error code number, the corresponding Microsoft error code string automatically appears next to the number.

12

Script outline

This sample script contains all the possible sections and keys that are supported by Script Install, so you can see how they fit together. You may want to print this section and use it for reference.

```
[Install][See script explanation for \[Install\]]  
Drivers=1  
Update_Software=1  
DriverProfiler=1  
Ports=1  
ENetwork=1  
Connect_Printer=1  
Tools=1  
AllowReboot=0  
  
[Computer] [See script explanation for \[Computer\]]  
Computer1=  
Computer2=  
Raindrop=  
  
[Computer1][See script explanation for \[Computer1\]]  
EComputerName=Kh4fPM@s*  
EUserName=|GmSjBf4  
EPassword=&xfSi1TGt  
  
[Computer2]  
ComputerName=mesopotamia  
Username=gilgamesh  
Password=catal_huyuk  
  
[Raindrop]  
ComputerName=HAL  
UserName=Dave  
Password=open_door_HAL  
  
[ENetwork][See script explanation for \[ENetwork\]]  
StatusWindow=1  
  
[Drivers][See script explanation for \[Drivers\]]  
Printer1=Laser Printer xxxx PS3  
  
[Printer1][See script explanation for \[Printer1\]]  
Model=Laser Printer xxxx  
Stream=PS [Options are: PS, PCL.]
```

```
Name=xxxx
RealName=Laser Printer xxxx PS3
Port=CPAPort
Share=1
ShareName=Printer
Alt9xDrv=1
AltNTDrv=1
Published=0
Default=0
ScreenFonts=1
CfgFile=c:\printer_profiles\xxxx.dcf
CfgEntry=xxxx PostScript
Comment=Script Install has taken its first step into a larger world.
Location=Everywhere.

[DriverProfiler][See script explanation for \[DriverProfiler\]]
RunDrvCfgTool=1
INSTALLDIR=C:\Program Files\Driver Profiler

[Ports][See script explanation for \[Ports\]]
Port1=ENetIP [Options are: ENetIP, LPR, IP UNC]

[Port1][See script explanation for \[Port1\]]
PortName=CPAPort
IPAddress=192.168.236.24

[Tools][See script explanation for \[Tools\]]
LPSU=1
PSSU=1
HPOpenView=1
CAUniCenter=1
ScanBack=1
DNP=1
ScreenFonts=1

[LPSU]
InstallDir=c:\.....

[ScanBack]
InstallDir=c:\.....

[DNP]
InstallDir=c:\.....

[PSSU]
InstallDir=c:\.....
```

13

Script explanations

The following table contains a list of all the sections and keys that Script Install currently supports. Use this table to ensure that your script includes all the required matching sections.

Note: You need only include a matching section when the value of the key that requires it is set =1. If the value is =0, Script Install will not look for that particular matching section.

Table of sections, supported keys, and required matching sections		
Section	Supported Keys	Required Matching Section
[Install]	Drivers	[Drivers]
	Update_Software	
	DriverProfiler	[DriverProfiler]
	Ports	[Ports]
	Language	
	ENetwork	[ENetwork]
	Connect_Printer	[ConnectPrinter]
	AllowReboot	
	Tools	[Tools]
	OS	
[Computer]	Computer1 ⁽¹⁾	[Computer1] ⁽¹⁾
	Computer2 ⁽¹⁾	[Computer2] ⁽¹⁾
[ENetwork]	EStatusWindow	
[Drivers]	Printer1 ⁽¹⁾	[Printer1] ⁽¹⁾
	Printer2 ⁽¹⁾	[Printer2] ⁽¹⁾
[DriverProfiler]	RunDriverProfiler	
	INSTALLDIR	

⁽¹⁾ These keys and their corresponding matching sections are user-defined, meaning that any name may be substituted for these keys and their respective matching sections. Likewise, additional keys and matching sections may be created to suit your needs (for example, Printer 20, Printer 21... and so on).

Table of sections, supported keys, and required matching sections		
Section	Supported Keys	Required Matching Section
[Computer1] ⁽¹⁾	ComputerName	
	UserName	
	Password	
	EComputerName	
	EUserName	
	EPassword	
[Printer1] ⁽¹⁾	Model	
	Stream	
	Name	
	RealName	
	Port	
	ScreenFonts	
	Share	
	ShareName	
	Alt9xDrv	
	AltNTDrv	
	Published	
	Default	
	CfgFile	
	CfgEntry	
	Comment	
	Location	
[Ports]	Port1 ⁽¹⁾	[Port1] ⁽¹⁾
[Port1] ⁽¹⁾	Name	
	IPAddress	
	CommunityName	
[DeletePrinters]	Printer1 ⁽¹⁾	[Printer1] ⁽¹⁾
[DeletePorts]	Port1 ⁽¹⁾	
⁽¹⁾ These keys and their corresponding matching sections are user-defined, meaning that any name may be substituted for these keys and their respective matching sections. Likewise, additional keys and matching sections may be created to suit your needs (for example, Printer 20, Printer 21... and so on).		

Table of sections, supported keys, and required matching sections		
Section	Supported Keys	Required Matching Section
[Defaults]	UserName	
	Password	
	EUserName	
	EPassword	
	ComputerList	[ComputerList]
[ComputerList]	(See [ComputerList])	
[Tools]	HPOpenView CAUniCenter LPSU PSSU ScanBack DNP ScreenFonts	
⁽¹⁾ These keys and their corresponding matching sections are user-defined, meaning that any name may be substituted for these keys and their respective matching sections. Likewise, additional keys and matching sections may be created to suit your needs (for example, Printer 20, Printer 21... and so on).		

The following pages examine all available sections individually, and describe how they function in a script.

[Install]

- **[Install1]** is the main section of Script Install. The keys under the **[Install1]** section will specify what to install, and which other sections to look for and process. Script Install processes a key when its value is set =1.
- **AllowReboot** is a special case. This key is only considered when a computer needs to be rebooted after completing a script. A value of 1 provides an affirmative answer to the reboot prompt, and a value of 0 provides a negative answer. The third option is a null value ("**AllowReboot=**"). A null value does not provide an answer to the reboot request, so the request will go unanswered by Script Install. This means that the prompt to reboot will then have to be answered at the target workstation where the install took place.
- When your target computer is running Windows NT, Windows 2000, Windows XP, or Windows Server 2003, **AllowReboot** can virtually always be set to 0 without causing

problems. When your target computer is running Windows 98 Second Edition, or Windows Me however, it is advisable to set **AllowReboot=1**.

Note: Your script must include an **[Install]** section with at least one key set =1. Otherwise, Script Install will fail.

```
[Install]
Driver=1
Update_Software=1
DriverProfiler=1
Ports=1
ENetwork=1
Tools=1 [Installs the various management tools.]
AllowReboot=0 [Valid only for pull installs. 1 reboots without prompting, 0 never reboots, no value prompts for reboot.]
```

[Computer]

- This section tells Script Install which remote computers to target for push installs.
- Use this section to install software to all the target workstations at once.
- Push installs will only work with Windows NT, Windows 2000, Windows XP, and Windows Server 2003 machines.

```
[Computer]
Computer1= [No value needed. Key can be anything, must have a matching section.]
Computer2= [No value needed. Key can be anything, must have a matching section.]
Raindrop= [No value needed. Key can be anything, must have a matching section.]
```

[Computer1]

- The specified account must have administrative rights. Otherwise, Script Install lacks the permissions it needs to perform the tasks in the script. You can provide your own administrator account to enable each installation.
- This section contains specific information about the workstation declared to be **Computer1** in the **[Computer]** section.
- When you use the drivers CD interface to generate a script for Remote Computers, the drivers CD interface automatically encrypts the data you enter, placing an **E** before the fields **ComputerName**, **UserName**, and **Password**, as shown in the following example.

```
[Computer1]
EComputerName=Kh4fPM@s
```

```
EUserName=|GmSjBf4  
EPassword=&xfSi1TGt
```

Note: While it is impossible to learn account information from the encrypted values for the **EComputerName=**, **EUserName=** and **EPassword=** keys, it is still possible to use encrypted text information to gain access to a machine by copying and pasting encrypted strings from one script to another. Therefore, care should be taken to protect all scripts from unauthorized access, even those scripts using encrypted values. This is especially important when a script contains a username and password with administrative rights to several machines.

- The following section contains specific information about the workstation declared to be **Computer2=** in the **[Computer]** section. Note that the identifying information for this workstation has not been encrypted:

```
[Computer2]  
ComputerName=Amethyst  
Username=PaulZ  
Password=C++monkey
```

- The following section contains specific information about a computer that, instead of calling **[Computer3]**, we will simply call **[Raindrop]**. A randomly chosen word works fine to specify a workstation. Any word will do as long as it is declared in the **[Computer]** section, and has this corresponding section of its own:

```
[Raindrop]  
ComputerName=Minerva  
Username=Fern  
Password=cappuccino
```

[ENetwork]

- This section installs bidirectional support for printer drivers.
- Bidirectional support must be installed to create a network port or install network support.
- You must set a value for **EStatusWindow** to install bidirectional support. However, all the resources requiring bidirectional support will work equally well whether you set the value to 1 or 0.
- If you set **EStatusWindow=1**, the target computer is configured to launch a window with significant messages from the printer (usually error messages or low supplies warnings) whenever such messages are generated by the printer.

```
[ENetwork]  
EStatusWindow=1
```


[Drivers]

Use this section to install a printer driver or drivers.

```
[Drivers]
Printer1=1
```

[Printer1]

- This section provides specific information about the printer declared to be **Printer1** in the **[Drivers]** section.
- You must have one of these sections for each printer driver defined in the **[Drivers]** section. The next printer specifics section would be **[Printer2]**, and so on.

```
[Printer1]
*Model=Laser Printer xxxx
Stream=PS [Options are: PS, PCL.]
Name=xxxx [Can be anything]
RealName=Laser Printer xxxx PS3 [See notes on the [Drivers] section.]
Port=CPAPort [Must match an existing port or a port that is created in the ports section.]
Share=1 [Valid only for Windows NT, Windows 2000, Windows XP, and Windows Server 2003.]
ShareName=Printer [Valid only for Windows NT, Windows 2000, Windows XP, and Windows Server 2003.]
Alt9xDrv=1 [To install alternate 9x drivers, otherwise 0 (Default).]
AltNTDrv=1 [To install alternate NT drivers, otherwise 0 (Default).]
Alt2000Drv=1 [To install alternate 2000/XP/Server 2003 drivers, otherwise 0 (Default).]
Published=0 [Valid only for Windows NT, Windows 2000, Windows XP, and Windows Server 2003.]
Default=0 [A value of 1 would make this the default printer.]
ScreenFonts=1 [A value of 1 would install screen fonts.]
CfgFile=c:\printer_profiles\timspfiles.dcf [.dcf file must exist in this location.]
CfgEntry=xxxx PostScript [This is the "Profile Short Description" entered for profile at creation. See Driver Profiler for more information.]
Comment=Color printer with duplex option. [Can be anything.]
Location=Main printer room. [Can be anything.]
ScreenFonts=1 [To install Screen Fonts, otherwise 0 (Default).]
```

[DriverProfiler]

- This section installs the Driver Profiler.

- The Driver Profiler can only be installed during pull installs.
- Use the Driver Profiler to create profiles (stored in `.dcf` files) that predetermine how printer drivers will be configured during future installations. For details on the Driver Profiler, see [Driver Profiler](#).

```
[DriverProfiler]
RunDrvCfgTool=1
INSTALLDIR=C:\Program Files\Dell\Printer Software\Lexdcm.exe[This is the target
directory for installation.]
```

[ConnectPrinter]

- This section creates connections to network printers. This is equivalent to doing a network Point and Print on Windows NT or Windows 2000.
- There is no limit to the number of network printers to which you can connect. However, each printer must be given a unique name.
- Valid only for pull installs on Windows NT, Windows 2000, Windows XP, and Windows Server 2003.

```
[ConnectPrinter]
Printer1=\\Server\printerX
```

[Ports]

- This section tells Script Install you are creating a network port.

```
[Port]
Port1= [No value needed. Variable can be ENetIP, StandardIP (Standard TCP/IP port) or LocalPort
(Local port).]
Protocol= [Valid values are TCPIP, LPR, IP, UNC.]
```

[Port1]

- This section contains specific information about the port declared to be `Port1` in the `[Port]` section.
- You must have one of these sections for each port defined in the `[Port]` section.
- The values you enter provide information about the printer network adapter.

- Note the default **CommunityName** is **public** for any network adapter. If public is not accepted, run an SNMP diagnostic on the network adapter's IP address.
- Bidirectional support must be installed to create a network port. See section description for **[ENetwork]**.
- Depending on which port protocol you want to use to create a port, you need to specify a **HostName** or **IPAddress**. See the following table for a list of required parameters.

Port Parameters by Protocol				
Protocol Value	Host Name	IP Address	Port Name	Community Name
TCPIP	(1)	(1)	Required	Required
LPR	(1)	(1)	Required	Required
IP		Required	Required	Required
UNC	Required		Required	Required
(1) A Host Name or an IP address is required.				

- Typically, numeric variables in an install script are boolean, meaning that possible values are either 0 or 1. A value of 1 means the corresponding section will be processed, the corresponding software will be installed, or the corresponding action will be taken. A value of 0 means the opposite.
- The IP address key accepts numeric values.
 - **IPAddress=** (accepts an IP address, such as 192.168.236.24)

[Port 1]

Name=Port Name [For a UNC port, this should be the UNC path, and the port type should be

[LocalPort]

IPAddress=printer.mycompany.com [Enter an IP address or host name for Standard ports.]

[ComputerList]

- The section **[ComputerList]** contains a list of computer names, one computer name per line. Each of the listed computer names from this section will be used with the default user name and password values specified in the section **[Defaults]**. For more information about how **[ComputerList]** works with **[Defaults]**, see **[Defaults]**.
- There are three ways in which a computer name can be specified under the section **[ComputerList]**:

[ComputerList]

- By computer short name alone
- By computer short name and domain name
- By IP address

```
[ComputerList]
Woody
Buzz1
Buzz2.blackhole.mycompany.com
Slinky
192.168.236.24
```

Note: The `[ComputerList]` section is optional, and is not generated automatically in script files created through the drivers CD. If needed, this section must be added with a text editor.

The following example shows how either a TCP/IP or LPR port may be created.

```
[Port1]
HostName=artichoke1.port.mycompany.com [IP host name of the network adapter. The IP
address of the network adapter can be substituted.]
IPAddress=192.168.236.24
PortName=Lexington [This can be anything.]
CommunityName=public
```

[Defaults]

- The `[Defaults]` section consists of the following possible keys:

```
[Defaults]
EUserName=ao`~S^]
EPassword=mIHt
ComputerList=list.cmp
```

or

```
[Defaults]
UserName=gates
Password=$$$rich$$$
ComputerList=e:\install\list.cmp
```

- The key `ComputerList` may have as its value the full path to the referenced file or simply the file's name. If only the name of the file is used as a value, Script Install will look for the file in the current directory. The file defined under this key is used to list additional remote computers to be used in this given script install. The file can be a `.cmp` file generated through the drivers CD, another script file, or any other text file having a section `[ComputerList]`. All the computers and their attributes from the reference file will be parsed and used in a script install in addition to those specified directly in the current script file.

- The values listed for the keys **EUserName**, **EPassword** or **UserName**, **Password** of the **[Defaults]** section specify the following:
 - The username and password for computer names within the current script file,
 - The username and password for computer names listed in the **.cmp** file that do not specifically have a username and password associated with them
 - The username and password for all computer names from the section **[ComputerList]**.

[Tools]

- The **[Tools]** section consists of the following:

```
[Tools]
LPSU=1
PSSU=1
HPOpenView=1
CaUniCenter=1
ScanBack=1
DNP=1
ScreenFonts=1
```

- This section installs

1 The Snap-In for HP Openview Network Node Manager and CA UniCenter Setup Utility.

The Snap-In lets you install, connect, and configure network printing devices. Installation of the Snap-In requires that HP Openview and/or CA UniCenter Utility be previously installed on your system. For additional information, refer to the specific management tools documentation.

2 Local Printer Settings Utility for printer models that do not have operator panels.

The Local Printer Settings Utility lets you manage a printer's various setup options from your computer for printers without an operator panel.

3 IP Setup Utility

The IP Setup Utility lets end-users configure the basic TCP/IP properties of your network devices such as the TCP/IP address and host name, subnet mask, and gateway address. The IP Setup Utility has the ability to search local and remote subnets for network devices and then remotely assign TCP/IP settings for each new device. This means you can set up one or many print servers using this utility without having to actually visit the printers.

4 ScanBack™ Utility for management of remotely scanned documents.

The ScanBack Utility lets you create a scanning profile that establishes set parameters for scanned files. The profile defines various attributes such as file type, name and the output location on your network. The profile can then be accessed from a network scanner

letting you save the scanned file according to the parameters established in the specific profile.

Note: This utility may not be included on this CD and/or may not be available for all printers.

- 5 Screen Fonts are installed on your Windows operating system from the CD to match your printer's resident scaleable fonts. Screen Fonts work in conjunction with the existing Windows system fonts to allow the documents displayed on your computer screen to match the output from your printer. When you install Screen Fonts, you have access to the full set of resident printer fonts in your Windows applications for both PostScript and PCL emulations.

Note: This utility is not supported in Windows x64 environments.

6 Drag'N'Print™

The Drag'N'Print Utility allows end-users to print batches of files, URL's, or complete file directories simply by dragging them to an Drag'N'Print enabled printer. Files are simply copied to the printer and printed, and URL's are sent to the printer and printed directly from the Internet. Users can also schedule stored file lists and frequently visited Web pages to print at a specified time.

Note: This utility is not supported in Windows x64 environments.