Packaging Acrobat 6.0x with LANDesk

Distribution Issues for Adobe Acrobat 6.0

Key issues:
Acrobat, LANDesk, Package Building, MultiCast, MSI.

Adobe Acrobat is a popular and widespread application which desktop managers need to support throughout their enterprise. In practice Acrobat is a difficult product to manage on the desktop.

Although Acrobat 6.0 is packaged in the MSI format, it is done so poorly.

- Running any of the Acrobat 6 packages through validation with an MSI Tool will produce a long list of errors.

- The Adobe packages do not support upgrades very well, they will typically leave other versions of Acrobat installed. This applies to both version (4,5,6) and level (Reader, Elements, Standard, Pro).

- Updates are not provided in consistent forms. The update from 6.0 to 6.01 was distributed properly as an MSP Patch file. However, reader is available in an updated 601 Installation package while the full versions are not! The 6.02 update installs as an independent application and causes any future installs from lower base packages to fail.

- This product is further confused by the fact that there are 4 primary levels with the current version of Acrobat: Reader (free) and Elements, Standard, and Professional, with differing upgrade paths.

Acrobat does not work well with Third Party Packagers such as LANDesk ESWD, and I had problems with the tool Adobe provides for editing Transforms for Acrobat.

Best Practice Tip

To gain the benefits of LANDesk Multicasting while using scripted MSI installs or other vendor provided silent installs, wrap the distribution point into an ESWD package and run the install from the %temp% directory or the \LDCLIENT\SDMCACHE directory. Housekeeping should eventually delete files left behind in these locations.

I generally favor the SDMCache directory because the %temp% directory can and does change where the former is a fixed location. Further I find LANDesk does a fairly good job of housekeeping on the SDMCache directory, by default files here are deleted after 2 days, 14 days if the machine is a Multicast representative.

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Step One: Removing Old Versions of Acrobat

Because Adobe's package leaves old versions untouched, proper installation requires un-installation of the old version, the first step in deploying Acrobat is to remove any and all old versions. I have not looked at versions 3 and lower, Versions 4 and 5 (all levels) use the same uninstall commands. It takes two simple commands to uninstall these. Version 6.x is distributed in an MSI format, so it is easy to construct command lines to remove them. You should remove the 6.02 update before any underlying 6.0/6.01 products

Following is the Removal of versions 4-6 of Acrobat in LANDesk ESWD format (should also work with Symantec and Zen Packagers). One of the neat things about MSI is that you can specify the product code without having the MSI available to uninstall it. Just open the MSI file in a package tool like Masai or Wise and find the Product Code.

```
RUNATSTART: "net", para="stop "print spooler""

IF LOCATE("uninst.isu", c:\program files\common files\adobe\acrobat
4.0\nt\)
RUNATMIDDLE: "C:\WINDOWS\IsUninst.exe", para=" -f"C:\Program
Files\Common Files\Adobe\Acrobat 4.0\NT\Uninst.isu" -c"C:\Program
Files\Common Files\Adobe\Acrobat 4.0\NT\Uninst.dll" -y -a"
ENDIF

IF LOCATE("uninst.isu", c:\program files\common files\adobe\acrobat
5.0\nt\)
RUNATMIDDLE: "C:\WINDOWS\IsUninst.exe", para=" -f"C:\Program
Files\Common Files\Adobe\Acrobat 5.0\NT\Uninst.isu" -c"C:\Program
Files\Common Files\Adobe\Acrobat 5.0\NT\Uninst.dll" -y -a"
ENDIF

REM Remove the 6.02 Update!
RUNATMIDDLE: "msiexec.exe", para="/X {AC76BA86-0000-0000-0000-
6028747ADE01} /QN"
rem RUNATMIDDLE: "msiexec.exe", para="/X {AC76BA86-0000-0000-0000-
6028747ADE00} /QN"

REM Remove Reader 6.01/6.00
RUNATMIDDLE: "msiexec.exe", para="/X {AC76BA86-7AD7-1033-7B44-
A00000000001} /QN"

REM Remove Standard 6.0
RUNATMIDDLE: "msiexec.exe", para="/X {AC76BA86-1033-0000-BA7E-
000000000001} /QN"

REM Remove Professioanl 6.0
RUNATMIDDLE: "msiexec.exe", para="/X {AC76BA86-1033-0000-7760-
000000000001} /QN"

REBOOT: system
```

The Reboot presents a severe problem for distribution. Ideally you assign the task and it completes or fails. Two part jobs are a big nuisance. LANDesk

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Package builder does not support resume after reboot, nor does it execute commands in a linear order. If you don't reboot, Acrobat will not install.

The solution here is to use the Task Scheduler to run a script to continue processing after the reboot. Write a batch file to create a scheduled task using the SCHTASKS utility to add your job and invoke it with RUNATMIDDLE or RUNATEXIT. If you prefer to RUNATSTART, you cannot use a batch file (because it may not be copied yet) and instead must specify all parameters in the para="" space.

In a batch file the following sets a script to run at start.

```
schtasks /create /SC ONSTART /RU "SYSTEM" /TN PRO /TR
"C:\LDCLIENT\SDMCACHE\DO-ACROPRO.BAT"
```

Unfortunately there is no option to run only the next time the system starts. To prevent this script from running every time you start, the first line of the DO-ACROPRO.BAT file should be: `schtasks /delete /TN PRO /F`

Followed by: `NET STOP "PRINT SPOOLER"`.

Acrobat's Distiller component sets itself up as a printer; installs and especially uninstalls seem to work better if the print spooler is stopped.

> **Note on the SchTasks and the AT Command.**
>
> The SchTasks command is new with Windows XP, while it should work if copied back to Windows 2000, it is only available on Windows XP and 2003 Server. The SchTasks command manages the Windows Scheduled Tasks list, the AT command manages a separate task list that is invisible to scheduled tasks. The AT command does not allow you to schedule a job for the next system start.

Acrobat Professional or Standard 6.02 in 4 acts.

There are three things to install: Acrobat 6.0, the 6.01 patch, the 6.02 patch. Then for the fourth act, there are some settings that need to be taken care of for the end user's convenience.

The original 6.0 package is a straightforward silent MSI install. Typically the only setting you'll need is to feed the Serial Number, if you need to tweak more you may need to create a custom transform. You'll also need to provide your own valid serial number. The L*V switch causes a verbose log to be created. This is useful for troubleshooting.

```
MSIEXEC.EXE /QN /I"C:\LDCLIENT\SDMCACHE\ACROPRO.MSI"
ISX_SERIALNUMBER=XXXX-XXXX-XXXX-0000-0000-1111 /L*V PRO6.TXT
```

You can add the 6.01 patch into the installation line, but it didn't always work for me. If you extract the files from the 601patch executable, there are only 3 files,

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the MSP file, MSPLauncher.exe and defaultMSP.ini. Edit defaultMSP.ini with the switches you'll need so that the whole file looks like this:

```
[MSPCmdLine]
MSPCmdLine=/p Ac60PrP1.msp REINSTALLMODE=omus REINSTALL=ALL
REBOOT=REALLYSUPPRESS /QN /L*V PR06P1.TXT
```

The switches are telling the patch to reinstall all its files, and the reboot switch prevents a package from rebooting where it normally would. Installing Acrobat won't cause a reboot, but applying this patch will!

The 6.02 patch runs best directly from its distribution file. If you do want to use MSIEXEC you will need it in a separate folder because the file setup.ini, which is required, is not the same as setup.ini for the base package. The switches for the silent install are /S /V/QN. If you need to pass more switches, or even just enable logging for troubleshooting, then I recommend placing it in a subfolder and using MSI.

Post Install

After Installation there are several nuisances that end users will face.

- Register Acrobat.
- Accepting Adobe's certificate in MS Office Applications.

Thankfully, taking care of these results in a few pages of easily captured registry changes. There is nothing unusual or complex about using the Package Builder Wizard to package this step of the install.

Accordingly final two commands in the batch file are:

```
MyAcrobatRegistryPackage.exe /An /polite=0
%windir%\system32\poweroff.exe /reboot 0
```

The /An switch to forces the package to run silently, while polite further suppresses asking the user about things like reboots.

Reboot the computer. The Shutdown command included with Windows XP (and available in the resource kits for earlier versions) and LANDesk's POWEROFF (installed by LANDesk in system32) command both accomplish the task. The reboot switch makes poweroff reboot instead of shutdown, the 0 tells it to wait only 0 seconds instead of the default 10 minutes.

Installing the Reader

The original Package for Reader 6.00 and the updated Package for 6.01 maintain the same product code. Running Reader 6.01.MSI where Reader 6.0 is already installed will update the product.

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If Reader 6.0x has been deployed (unlike the full versions), it will by default try to update itself, likely you will find most copies of Reader 6 are already at 6.02.

The Reader is not a print driver. As a safety precaution I still stop the spooler before the installation, but at the end I restart the spooler and skip rebooting.

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