**IBM**

IBM System i™

# Administration of
# iSeries Access for Windows
# Advanced Tips

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*i want stress-free IT.*

*i want control.*

*i want an i.*

# Agenda

**Administrative tools to assist you in managing your network PCs**

- **Install/Upgrade/Service**
  - **Facts and Tips**
  - **Tailored Installs**
  - **Silent Installs**
  - **Scheduling**
- **Windows Installer Technical Preview**
  - **Facts and Tips**
  - **Transforms**
  - **User Interface Levels**
  - **Deployment**
  - **Command Line options**
- **Controlling functions**
  - **Microsoft Policies**
  - **iSeries Navigator Application Administration**

# Installing, Updating, Managing Facts and Tips

**iSeries Licensed Program – Product No. 5722-XE1**

Three versions currently supported: V5R2M0, V5R3M0, V5R4M0

# iSeries Access installed in iSeries IFS

**iSeries Access client Install Image placed in IFS in:**

– \QIBM\ProdData\Access\Windows\Install\Image

– Service Packs update this image

– Installs and services all components included with product including SSL, iSeries Toolbox for Java, iSeries Navigator, JRE, PC5250, printer drivers, and Data Access components

– Installs and services iSeries Navigator Plug-ins

– Also ships on the iSeries Setup and Operations CD

– Can create customized install CD images

# iSeries NetServer

**iSeries NetServer**

**Shared Directory**

If installs are done from QIBM directory, end users will automatically get new service pack code and future upgrades when new code placed on iSeries

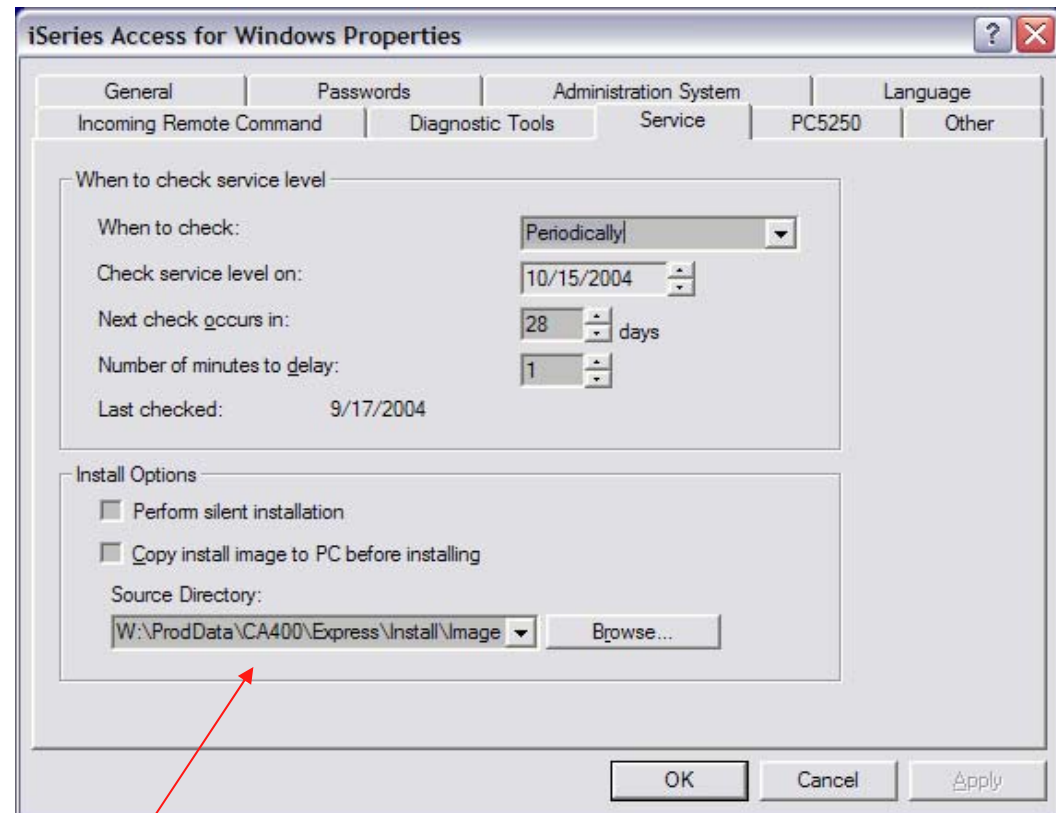\QIBM\ProdData\Access\Windows\Install\Image
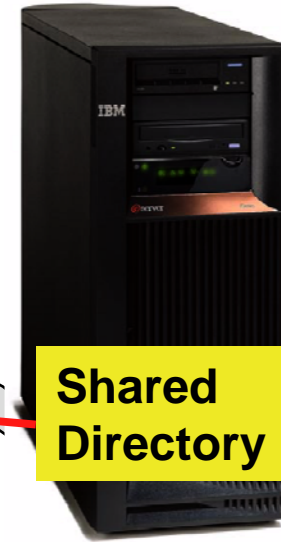
- QIBM ships with a "read only" share access
- Thus, all users can access iSeries Access for Windows code on the iSeries

# Service

**Strategic way to handle service for end-users**

- **Automatic Check Service Level**

- **Check Service Level services all components included in product**

- **Check Service Level can also service:**
  - **iSeries Navigator Plug-ins**



**Note:**

**In example above, there was a Mapped Drive to W:\\\<iSeries>\QIBM, so iSeries Access for Windows filled in the rest of the address.**

**Could also use service Source Directory of \\<iSeries>\QIBM to avoid assigning a persistent drive letter mapping**

# Install and Service Pack Tips

**Make sure you have the latest Service Pack before rolling out new installs**

- Roll out new clients from merged image and get new release and latest service pack in one step
- Merged install image eliminates the need for an extra reboot

&ndash; **Save disk space on PCs**

- If a Service Pack has been well-tested, and you are confident in it, you can have your end-users install it without enabling service pack uninstall.
- This eliminates the need for an \Archive directory containing files from the previous service level.
- RMVPTF and reinstall from install image could be used to get back to the prior service level if necessary.
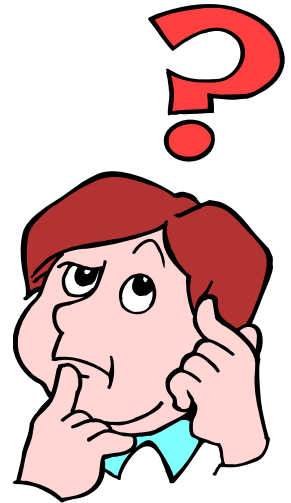
# FTP Service Packs for Testing

**Suggest using FTP download for validation testing**

- **Don't place downloaded Service Pack in the  iSeries LPP (QIBM directory, ie, \Install\Image) because:**

  1. **It will interfere with APYPTF**

  2. **Check Service Level (by default) looks in the QIBM directory for updates**

- **Place in another directory in the iSeries IFS or on another server or on single PC**

m.com/servers/eserver/iseries/access/casp.htm

**Latest Service Packs for Supported Releases**

- To see service packs for every release, refer to Service Pack History for All Releases.
- For problems downloading a service pack, click here.
- For support information on iSeries Access and the Microsoft Windows operating systems, click here.

| iSeries Access for Windows (Client Access Express) (5722-XE1) Release Level | Latest Service Pack PTF Number | Server Maintenance | Date PTF was Available | Installed File Date | Target for Next Service Pack |
|---|---|---|---|---|---|
| V5R3M0 | SI18651 replaces SI18398. SI18651 contains fixes for Management Central and iSeries Navigator. If you have already installed SI18398, refer to the readmesp.txt for SI18651. | Refer to Server Notes | June 29, 2005 | 06/05/2005 | September 30, 2005 |
| V5R2M0 | SI16915 | Refer to Server Notes | May 12, 2005 | 08/10/02 | November 18, 2005 |
| V5R1M0 | SI11806 | Refer to Server Notes | April 30, 2004 | 05/08/01 | Not in plan |

**Problems downloading a Service Pack?**

*http://www.ibm.com/eserver/iseries /access/casp.htm*

# Get fixes from IBM

**Order Service Packs through normal IBM channel
and install on the iSeries**

**iPTF**

- **Internet PTF** - will send you a CD because image is too big to download over Internet.

**SNDPTFORD**

- **Send PTF Order** -  will send you a CD because image is too big to download over Internet

**CUMTAPES**

- Service Pack included on CUMTAPES too, but may not be the latest one available

m.com/servers/eserver/iseries/access/casp.htm

| | | | | | |
|---|---|---|---|---|---|
| V5R3M0 | SI18651 replaces SI18398. SI18651 contains fixes for Management Central and iSeries Navigator. If you have already installed SI18398, refer to the readmesp.txt for SI18651. | Refer to Server Notes | June 29, 2005 | 06/05/2005 | September 30, 2005 |
| V5R2M0 | SI16915 | Refer to Server Notes | May 12, 2005 | 08/10/02 | November 18, 2005 |
| V5R1M0 | SI11806 | Refer to Server Notes | April 30, 2004 | 05/08/01 | Not in plan |

**Problems downloading a Service Pack?**

Try one of these:

- Review the Software Knowledge Base Article:   Problems Downloading Files from the FTP Site, including Client Access Service Packs.

- Order the PTF to install on your iSeries:
  - Use SNDPTFORD to order the PTF (product 5722XE1) and install it on your iSeries. Since the service pack PTFs generally exceed the size limit to be sent electronically, you can receive the PTF on media by changing the "Delivery Method" (DELIVERY) parameter on SNDPTFORD to *ANY. (The parameter defaults to *LINKONLY.)
  - Use Internet PTF Delivery (iPTF). To find out about this service and the requirements, go to http://www.ibm.com/eserver/iseries/support/  and from the left menu, select "Fixes".

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# Use IFS as a Virtual Optical Device

- **You can obtain a Service Pack CD electronically and place it directly in the IFS in a Virtual Optical Device (just like a real iSeries Optical Device)**

- **You can then download a CD image of the PTF and make your IFS look like a CD Drive**

- **You can install the PTF from this CD image thus eliminating the need to either use:**
  - **iPTF**
  - **SNDPTFORD**

- **Install the iSeries Navigator plug-in**
  - **Required one time only if you choose to download using iSeries Navigator**
- **Download the self-extracting .exe file**
  - **Run the .exe file and install the files in the default directory:**
    - **jvopnav\com\ibm\as400\opnav**
- **Consider using software managers called "download managers" to allow you to resume interrupted or failed downloads, such as:**
  - **GetRight®**
  - **Go!Zilla**
  - **Netzip**
  - **SmartDownload**
- **For more information, go to:**
  - **http://www-912.ibm.com/ supporthome.nsf/document/27321011**

*This option of ordering the official Service Pack PTF may be a more attractive alternative than downloading the Service Pack PTF from the iSeries Access webpage*

# Install and Service Pack Tips

**Keep end-users from installing a service pack until you are ready**

- **Text file SP.TXT placed in the service pack image directory can prevent anyone from installing the service pack until you are ready**
  - **'N' as the 1st character in the file prevents install**
  - **'Y' or no SP.TXT file at all will allow the install**
    **Second text line can contain a message to users that will appear during Check Service Level**

- **Same method used to prevent all end-users from upgrading via Check Service Level to a new release**

- **Additional control values for a merged image:**
  - **'U'   allows an upgrade, but stops a service pack**
  - **'S'   allows a service pack, but stops an upgrade**
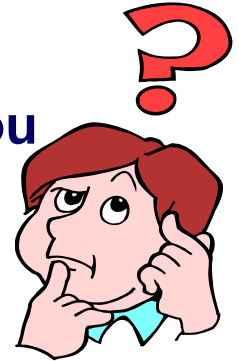
*Documented in User's Guide - look in Index for 'SP'*

# Installation Setup Types

– **Typical**

- Just a guess on what most users will install; only 2 components of iSeries Navigator gets installed

– **PC5250 User**

- Only 5250 emulation installed

– **Custom**

- User can select which components to install

– **Full**

- Installs everything
- Has new meaning with Tailored Install function



**Type of Installation**

Select the type of installation by pressing one of the buttons.

Typical
Installs required programs and most components. (License required)

PC5250 User
Installs required programs and 5250 Display and Printer Emulator. (License required)

Custom
You may select which components to install. (Typical components are pre-selected.)

Full
Installs all components. (License required)

Help     < Back     Next >     Cancel
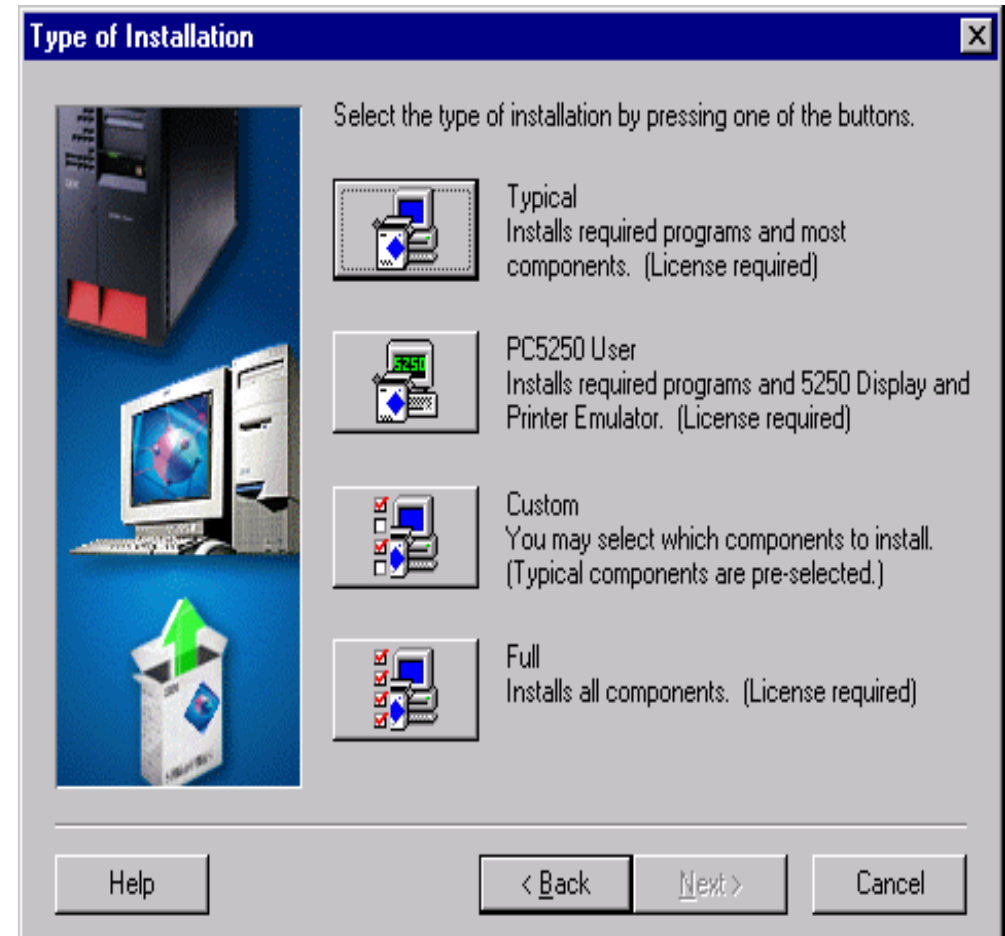
# Installation Categories

1. **New installation of iSeries Access for Windows**
   - **If done from the iSeries using iSeries NetServer, iSeries Access for Windows automatically sets end-user up properly for later service packs and upgrades**

2. **Upgrade Install**
   - **From one release of iSeries Access for Windows to the next release**
   - **Intend to always support N-2 to N**
   - **Default is to upgrade to new release with same set of components**
   - **Can add additional components during upgrade**
   - **Can remove existing components during upgrade process**

3. **Re-Install same release**
   - **Functionally very similar to upgrade install**
   - **Will install over a service pack level, returning end-user to same level as installation image**

# Install and Service Pack Tips
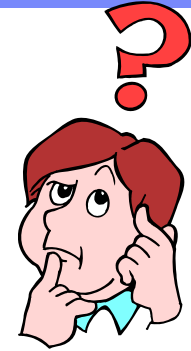
**iSeries Netserver**
**Guest User profile**

– **For users that normally do not have access to this iSeries - but you wish to give them access to client code or service packs**
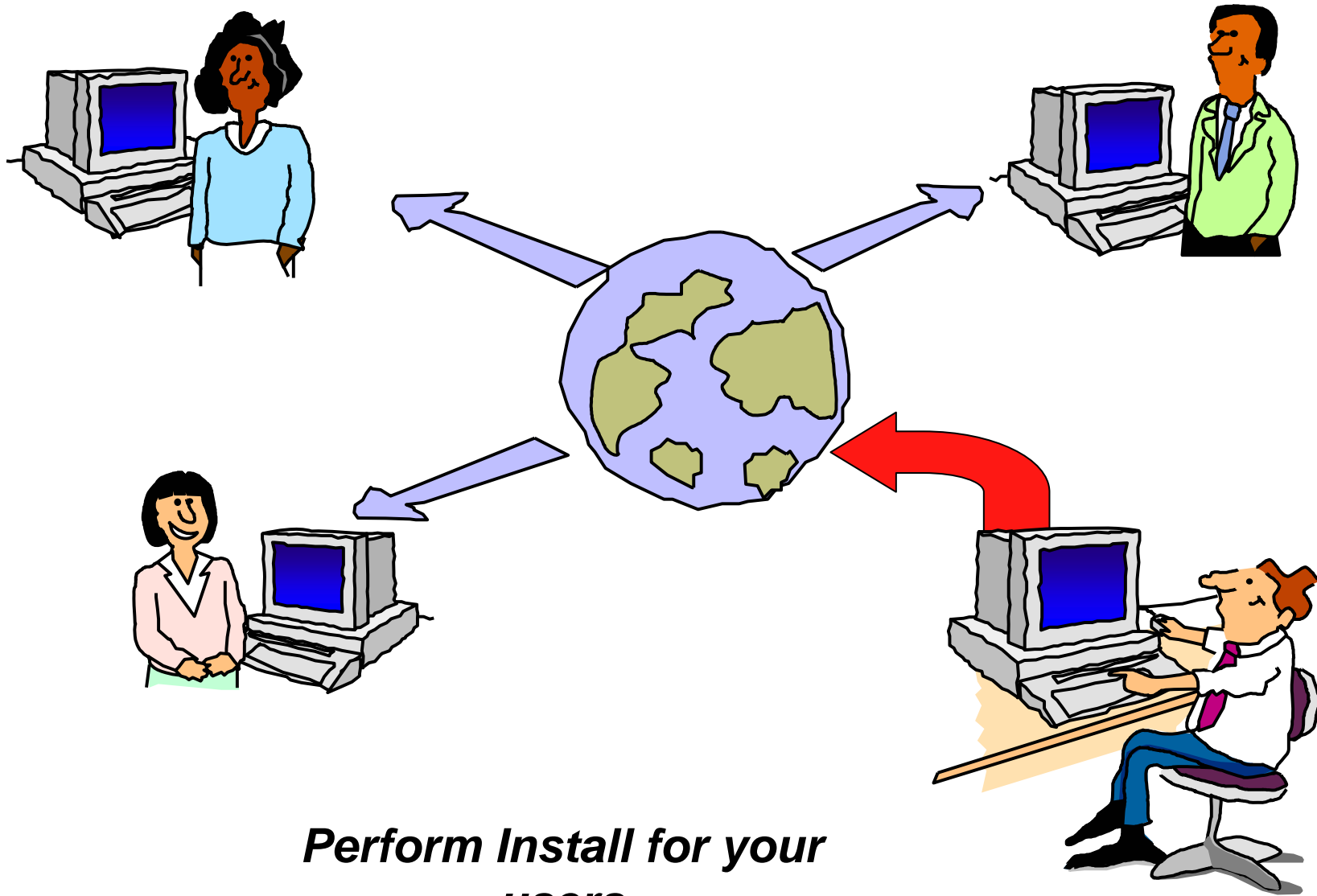
**Perform Install for your users**

Tailored
Install

# Tailored Install

## Would you like to control which iSeries Access for Windows components your users install?
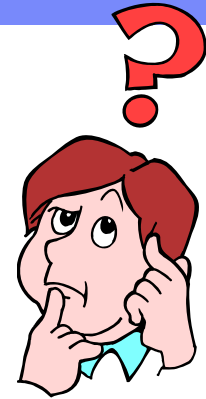
You can use <u>Tailored Install</u> to:

- **Create a custom installation image by excluding the unwanted components from a master installation image.**

- **Use this customized installation image for installations across your network**

- **Users can easily install iSeries Access functions by selecting a single option**

**Create Tailored Installation Image**

You can create your own tailored installation image so that your users can install only those components you want them to install.

By default, all components will be included in the installation image. Simply deselect the components you want to exclude.

If the Secure Sockets Layer (SSL) support is available, the SSL support can be included in the tailored image.

Next >      Cancel

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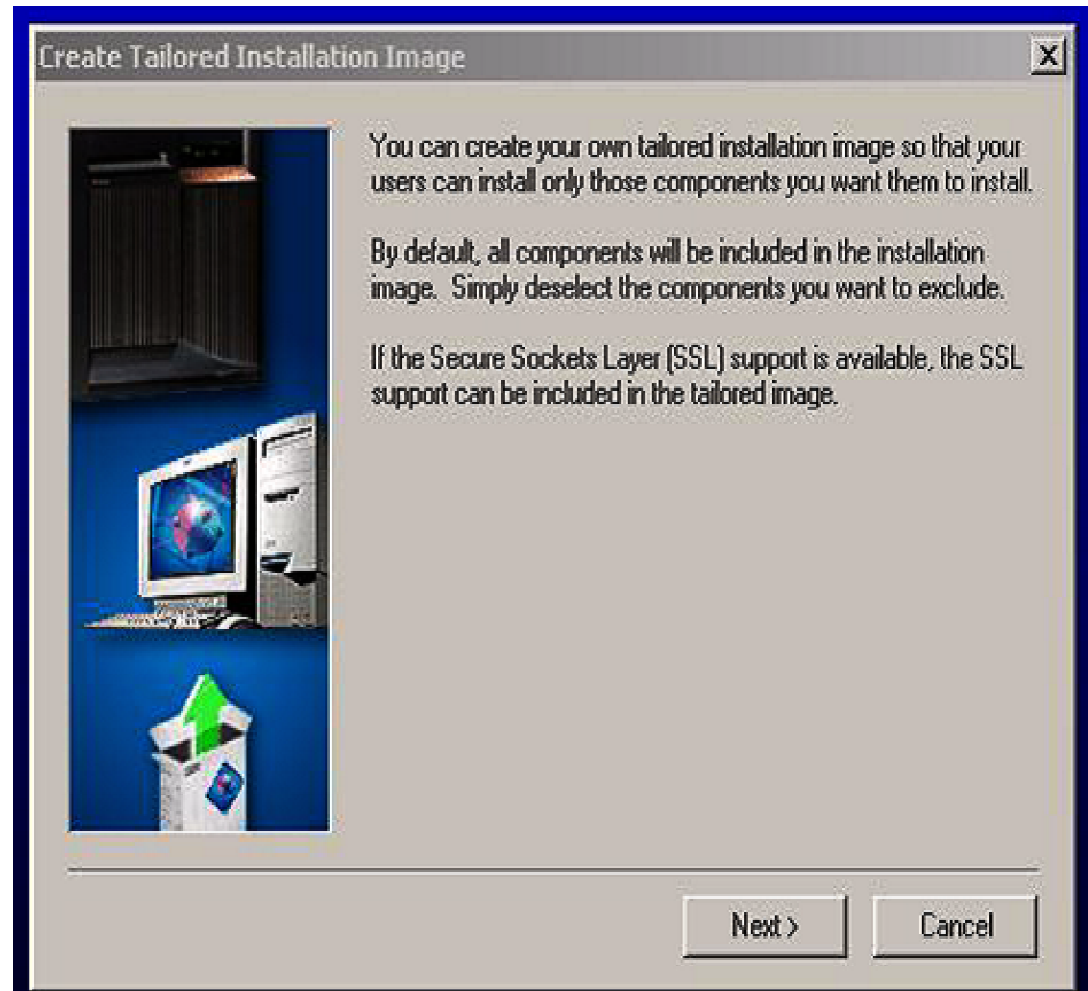
# Steps to set up your own 'Tailored' Install

## Find Tailored Install Wizard

- **Stored in Client Access folder**

  **QIBM->**

  **ProdData->**

  **CA400->**

  **Express->**

  **Install->**

  **Image->**



- **Start Cwbinimg.bat program**
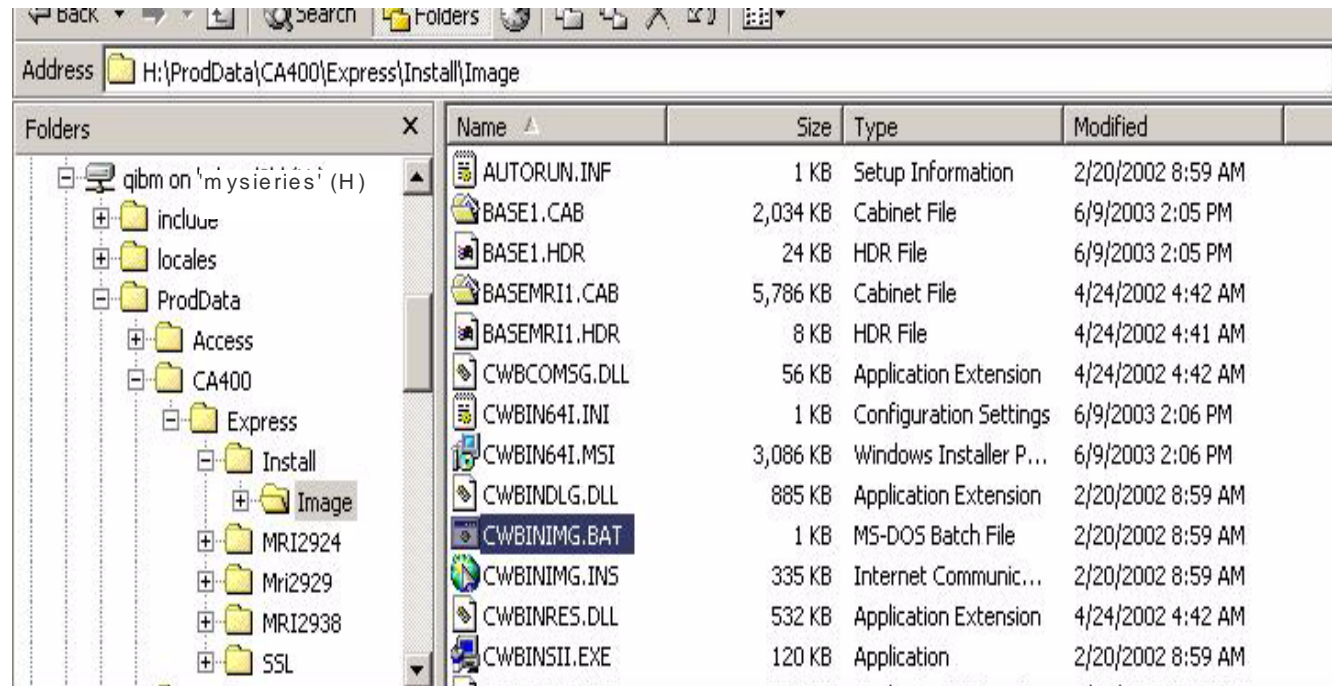
# Run Wizard to create a Tailored Install Image
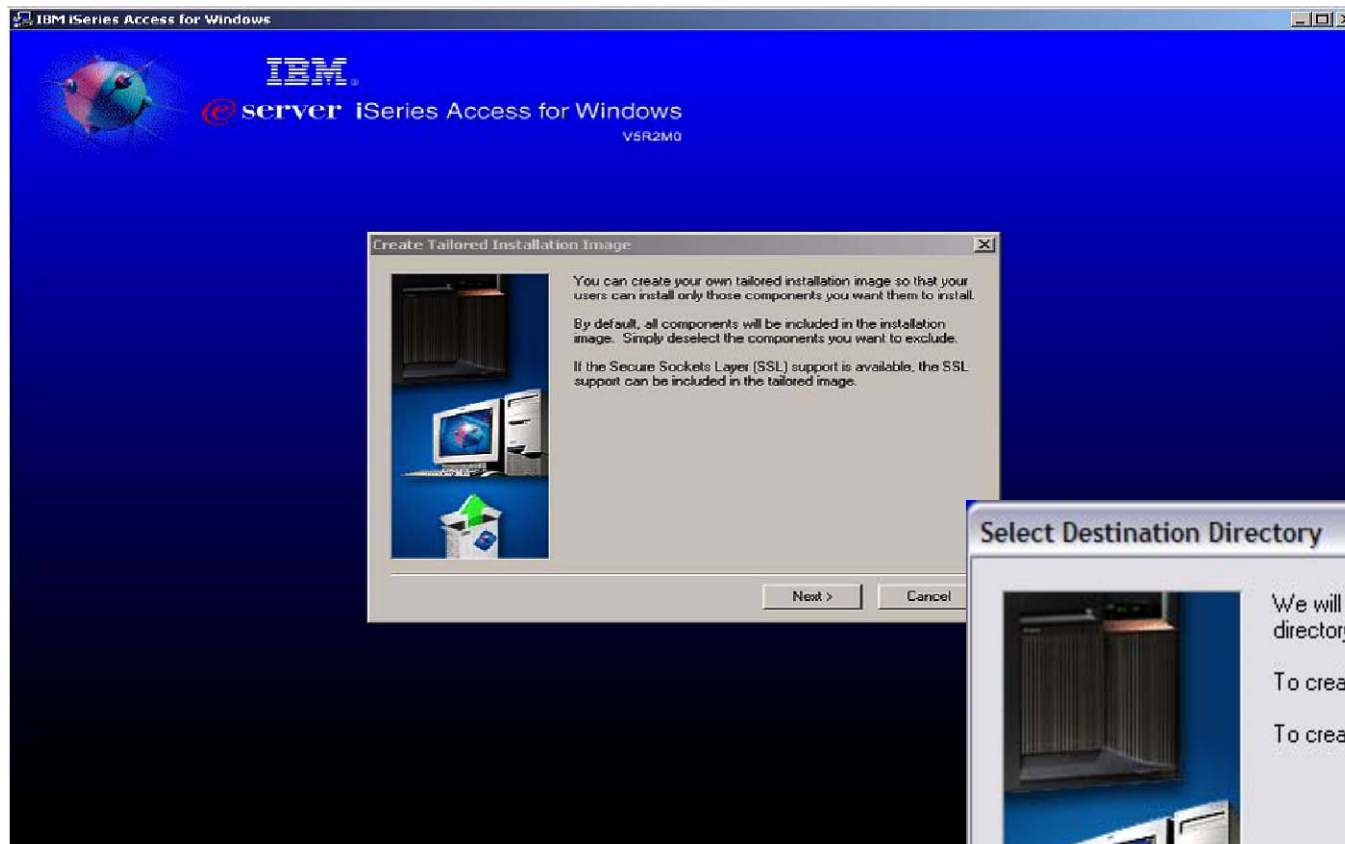


**Run Tailored Install wizard**

**Select where you want this saved**

- Could be in iSeries IFS or PC server...
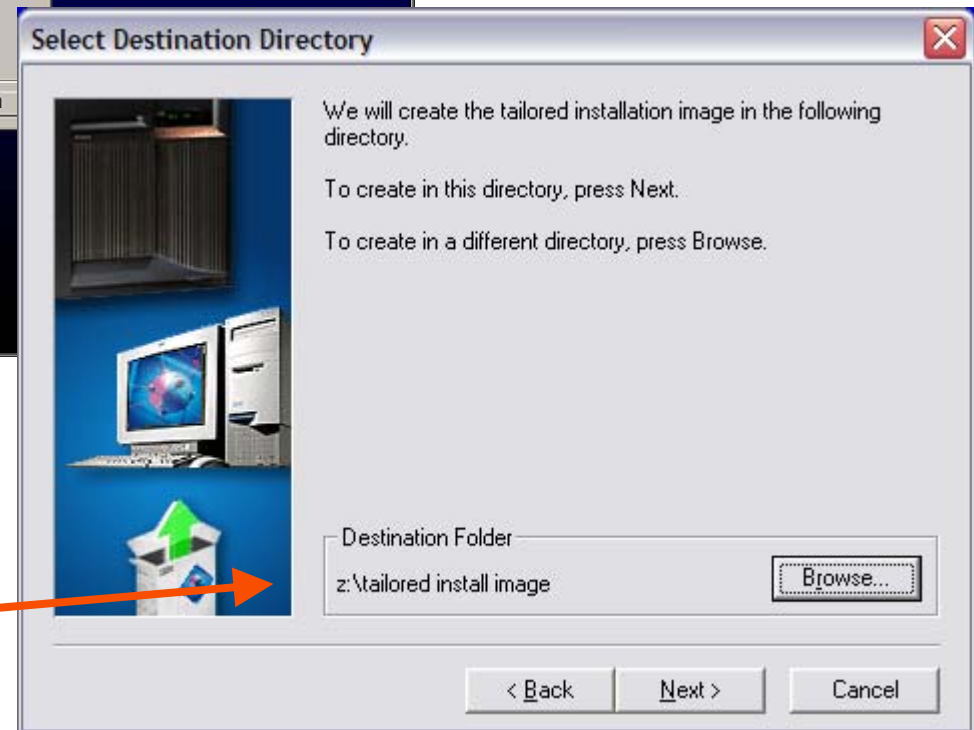
# Example

## Only want to provide ODBC and Printer Drivers for your end users

- **Build tailored install that only enables end users to install only ODBC and Printer drivers**

- **Deselect all items you don't want users to use. Program will tell you if there is a pre-req you must install**

- **Note: this option requires 23MB of space.**
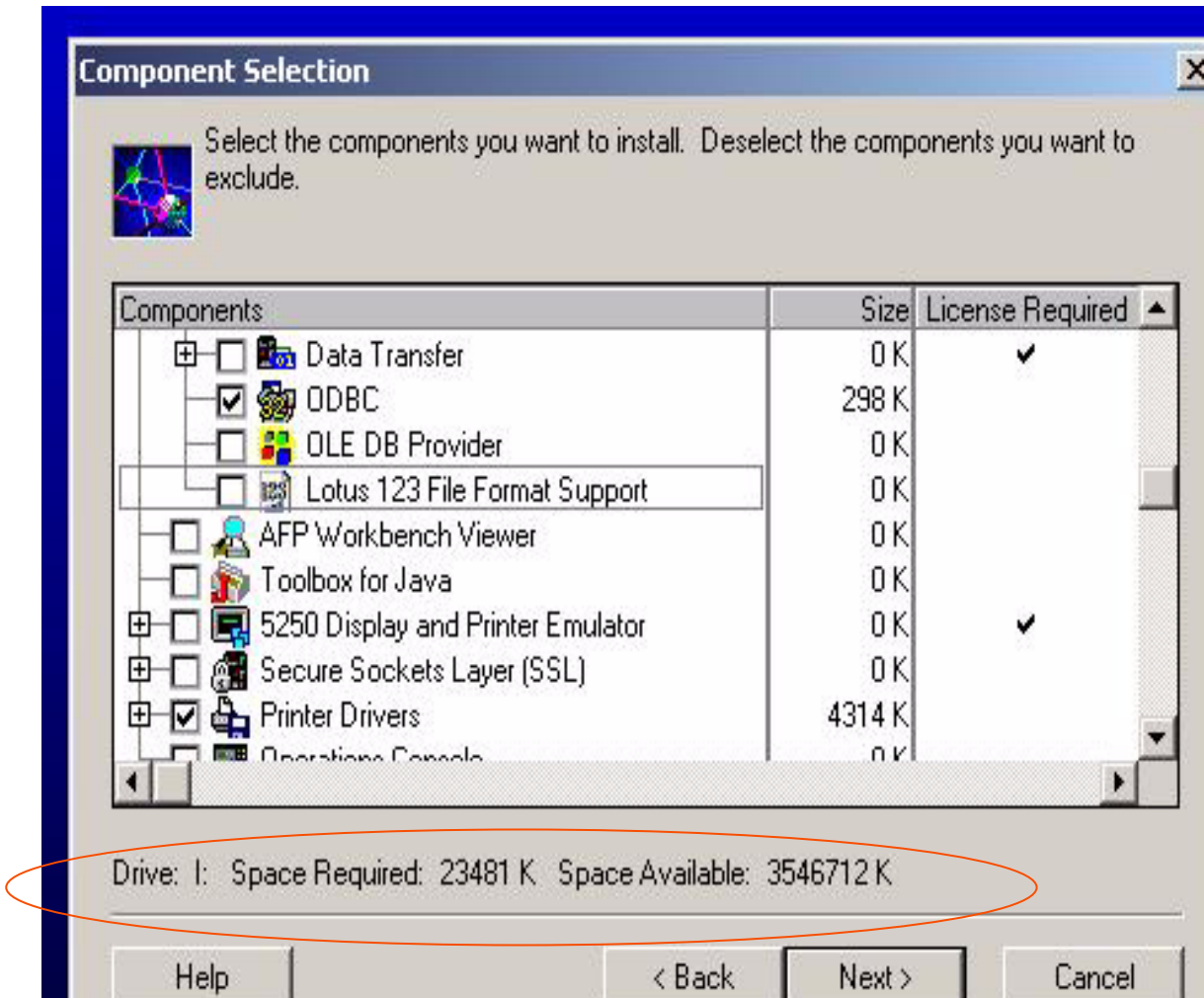
# Use Full Install option

**Users now simply:**

- **Point to Folder where your Tailored Install is**

- **Click on 'Setup.exe' to start the iSeries Access for Windows Install Program**

- **Then simply select 'Full' install**
  - **Users get only the functions you created in the Tailored Install**

**Note: If stored on iSeries, can use i5/OS authorities to restrict users or groups from install images that they should not be installing/upgrading from**
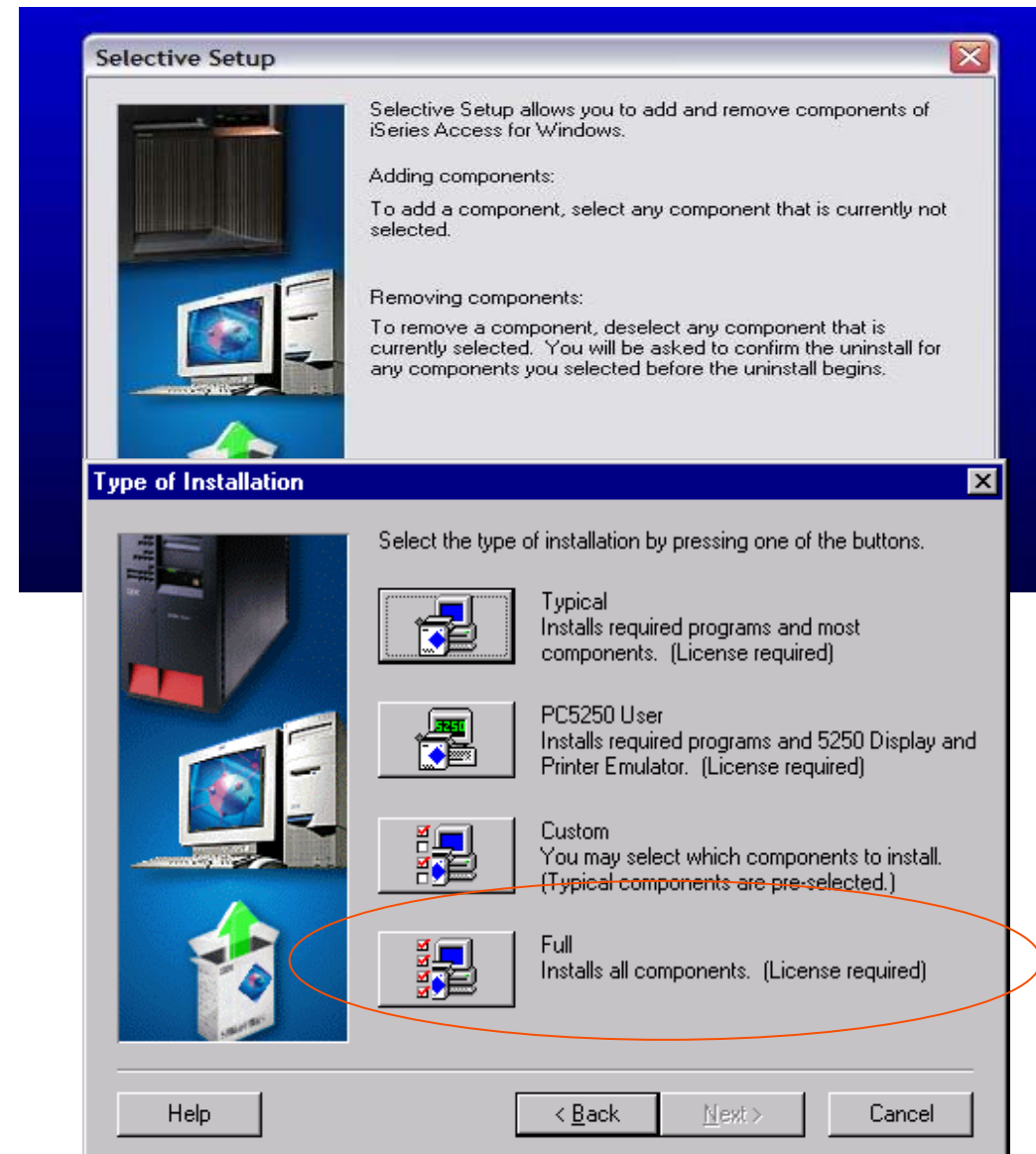
# Servicing the Tailored Install Image

## Problem

– When you create the Tailored Install, the Program Temporary Fixes (PTFs) in the QIBM directory at that time are also applied to the newly created tailored image.

– However, this tailored installation image is not updated when <u>future</u> PTFs are applied to or removed from the iSeries server

– Because they are in a folder unknown to i5/OS

## Solution

1. After applying PTF to official LP IFS location, you can recreate the Tailored Install image by pointing back at QIBM, re-running Tailored Install, and storing on top of your old image.

2. Go to iSeries Access web site and download PTFFORM.  This can be used to your Tailored Image.

   • Only updates to functions in your tailored image will be updated.  Thus users will not be able to select components that you did not include in your tailored install when using Selective Install.

## For information on Tailored Install images see:

– http://publib.boulder.ibm.com/pubs/html/as400/infocenter.html

– Find 'iSeries Access'.  Then follow path of 'Administration', then 'Installing or migrating multiple PCs', to 'Tailored Install'

**i want an i.**

# PTFFORM

**Use PTFFORM to add new Service Pack to Tailored Install image**

**3**

| Level | | | | | |
|---|---|---|---|---|---|
| V5R3M0 | SI17742 Replaces SI17411. If you have installed SI17411, refer to the service pack readme | **1** Refer to Server Notes | April 1, 2005 | 03/04/2005 | June 24, 2005 |
| V5R2M0 | SI16136 | Refer to Server Notes | November 17, 2004 | 08/09/02 | May 13, 2005 |
| V5R1M0 | SI11806 | Refer to Server Notes | April 30, 2004 | 05/08/01 | Not in plan |

www.ibm.com/eserver/iseries/access

PTFFORM.EXE
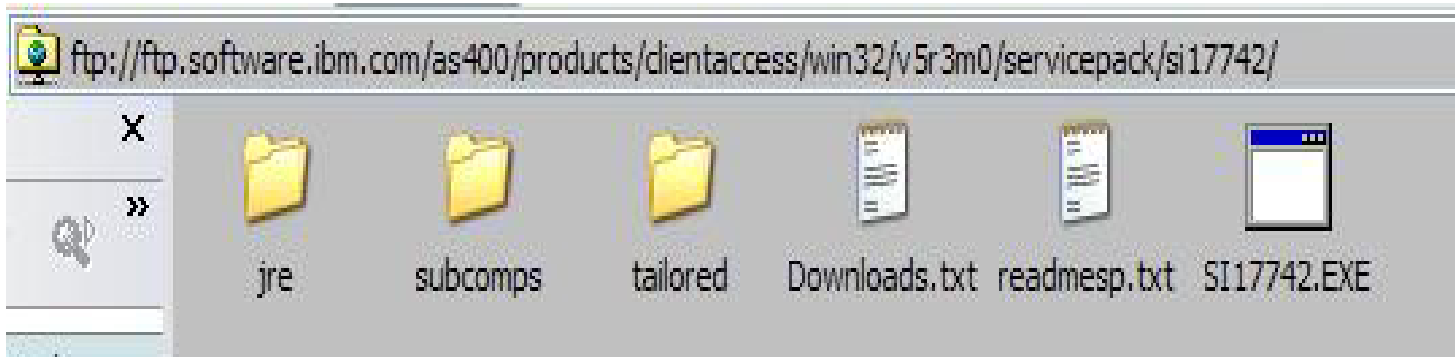
**PTFFORM only puts in fixes for code that is contained in Tailored Install image**

ftp://ftp.software.ibm.com/as400/products/clientaccess/win32/v5r3m0/servicepack/si17742/

jre    subcomps    tailored    Downloads.txt    readmesp.txt    SI17742.EXE

**2**

**Silent Install**

Detailed information on Silent Install is on the web in the IBM iSeries Information Center under

"Connecting to the iSeries"->
iSeries Access->
iSeries Access for Windows ->
Installation and Setup ->
Setup your PC ->
Install iSeries Access for Windows on the PC ->
 Install on multiple PCs".

# Silent Install

**Can be used for:**

- Initial Install

- Upgrades to a new release

- Selective installs after already installed to add/remove component.

- Service Packs

- A way to restrict the set of initial components that an end user receives

- Allows you to quickly and easily copy duplicate installations across your network

- Eliminates the need for end users to have to respond to any prompts during the installation process

- All installation categories except Selective install should launch setup.exe from the install source.

- Selective Setup should launch setup.exe from the PC's ...\Client Access directory.

# Using Silent Install

## Create a response file

- **A response file records the selections made in response to the prompts in the installation process.**
- **You perform the desired type of install on your PC, recording installation choices into install scripts (.iss files)**
  - For example, setup.exe -r -f1C:\MyDir\v5r2v5r3upg.iss

## Start the silent installation

- **During a silent installation, the setup program will use the response file to get the information necessary to complete the installation**
- **Schedule or run setup.exe on the end-user PC's with the proper parameters specifying the response file location (or use CheckService Level)**
  - For example, setup.exe -s -f1\\iSeries\Express\Response\v5r2v5r3upg.iss -f2C:\Temp\v5r2v5r3upg.log

## Check the log file return codes to see if your install was successful

- **The Log file tracks installation results.  You can specify location/name of the Log file**
- **Silent.txt file in the ...\Client Access directory lists the components installed silently and successfully**

# Check Service Level for Silent Installs

**Use this for Service Packs and Upgrades**

**Eliminates the need for confusing command line parameters, but does require specific names for the response files**

- •SLTSP.ISS - for service packs (This file must reside in the same directory as the service pack image)

- •SLTUP.ISS - for upgrades (This file must reside in the same directory as the upgrade image)
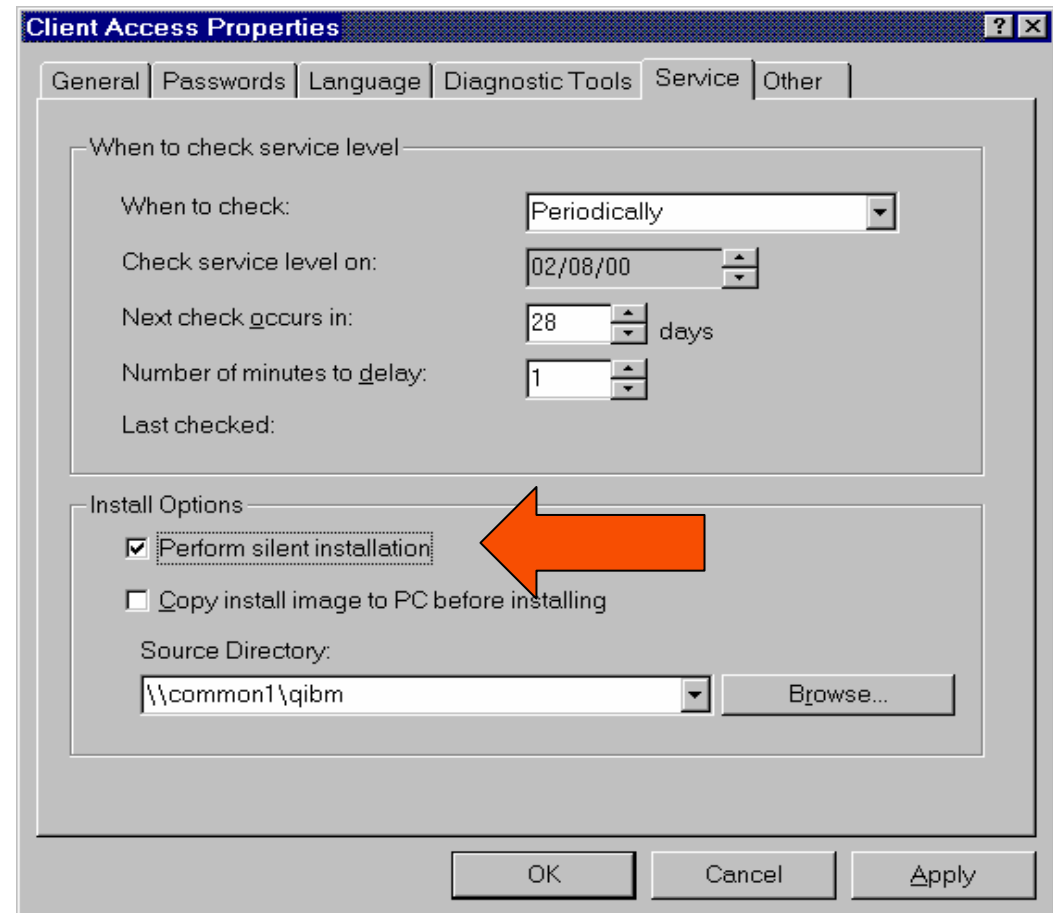


•If rebooting automatically, consider using SCHEDCHECK parameter on cwbckver.exe and schedule during the middle of night.  Look in online iSeries Access for Windows User's Guide index for *cwbckver* for more information on the SCHEDCHECK parameter
•If not rebooting automatically, Check Service Level will come out of silent mode and prompt user for reboot

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# Errors using Silent Install

**Most silent install errors involve a dialog out of order from what was recorded (-12 return code in silent log)**

- **The best way to debug this is to start a manual install on the failing PC and proceed through the install wizard panels until the confirm panel prior to file transfers**

- **The majority of the dialog errors occur prior to the confirmation panel**

- **See if any unexpected dialogs appear that were not anticipated during recording**

# Silent Install Upgrade and Service Pack Install Tip

**Use Incoming Remote Command component of iSeries Access for Windows with Silent Install Upgrades or Silent Service Pack Installs**

- **Start service on NT/2000/XP/2003 client**

  - **Specify to log on as Local System Account to satisfy Administrator authority restriction needed for install**

  - **No need to "Allow Service To Interact With Desktop" for a Silent Upgrade or Service Pack Install**

- **RUNRMTCMD on iSeries specifying setup.exe/setupsp.bat and userid/password of Administrator account on PC**

  - **RUNRMTCMD CMD('w:\proddata\Access\Windows\install\image\setupsp.bat -s -f1\\myserver\silentshare\sltsp.iss') RMTLOCNAME(PCNAME *IP) RMTUSER(PCUSER) RMTPWD(PCPASSWD)**

- **REXEC from a TCP/IP client can also be used to submit setup.exe**

Combine use of **Tailored Install** with **Silent Install** function
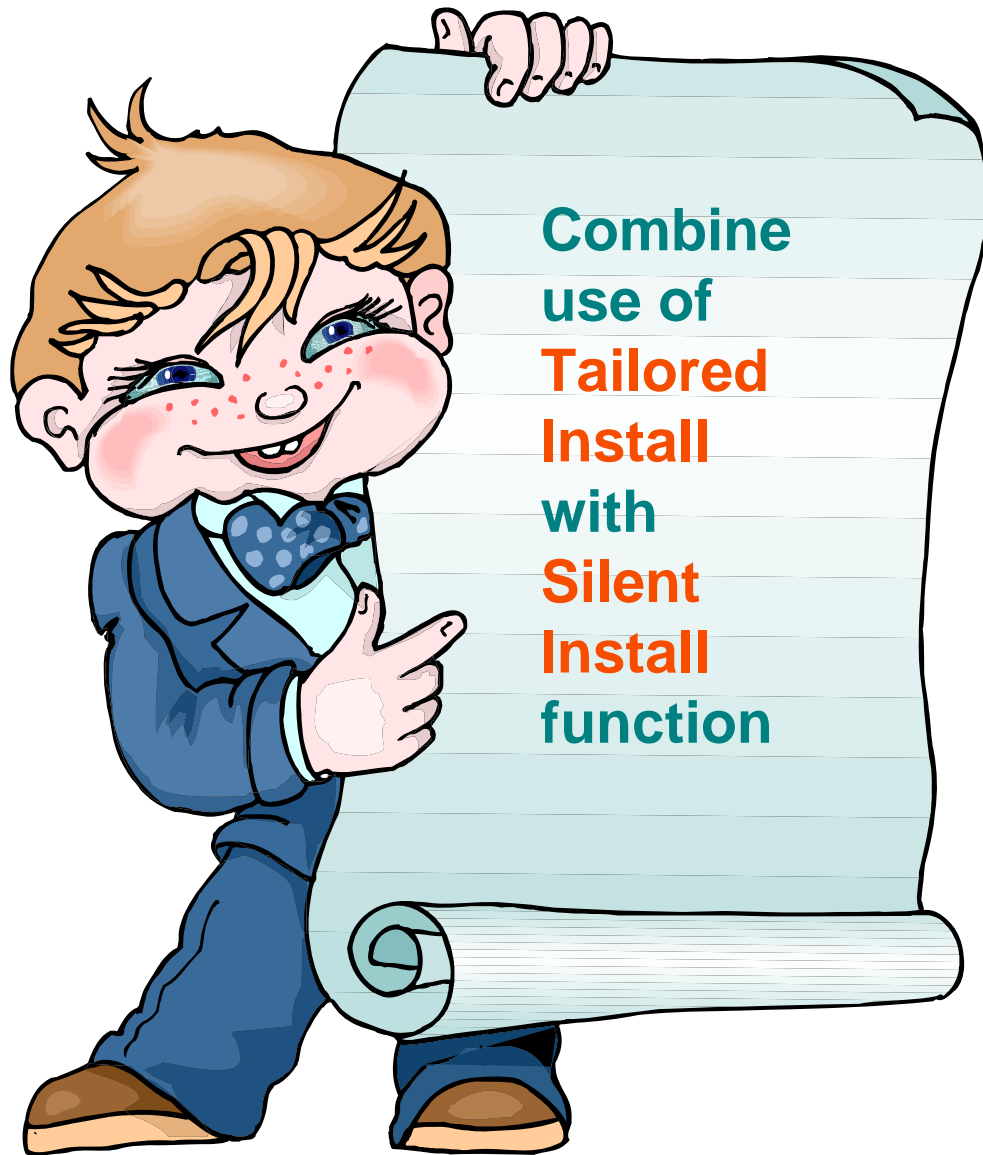
# Combine use of Tailored and Silent Install

- **You wish your users to:**
  - Have only selected parts of iSeries Access for Windows installed on their PC
  - And you don't want them to find additional Access for Windows functions in the Selective Install windows
  - Get it installed on their PCs without user intervention
  - Want updates (service packs) and new releases to automatically get installed on those end user PCs

- **Use a combination of Tailored Install and Silent Install and a few PC commands (wizards) to do this**

- **From then on Access for Windows will keep desktop users up to date.**

- **Use new PTFFORM to update Tailored Install directory with fixes**

*Steps to perform...*

# Example: You want your users to install only the ODBC driver and not have any install options.
## Step 1: Create Tailored Install Image of ODBC driver
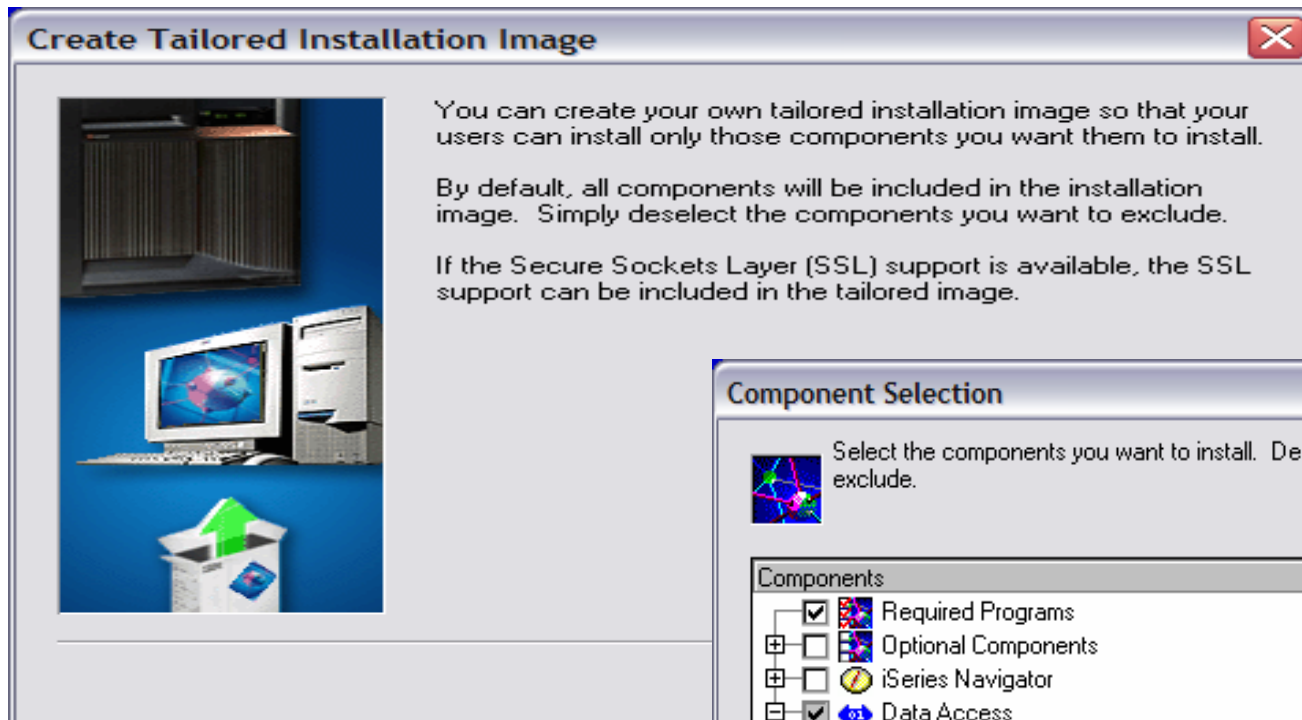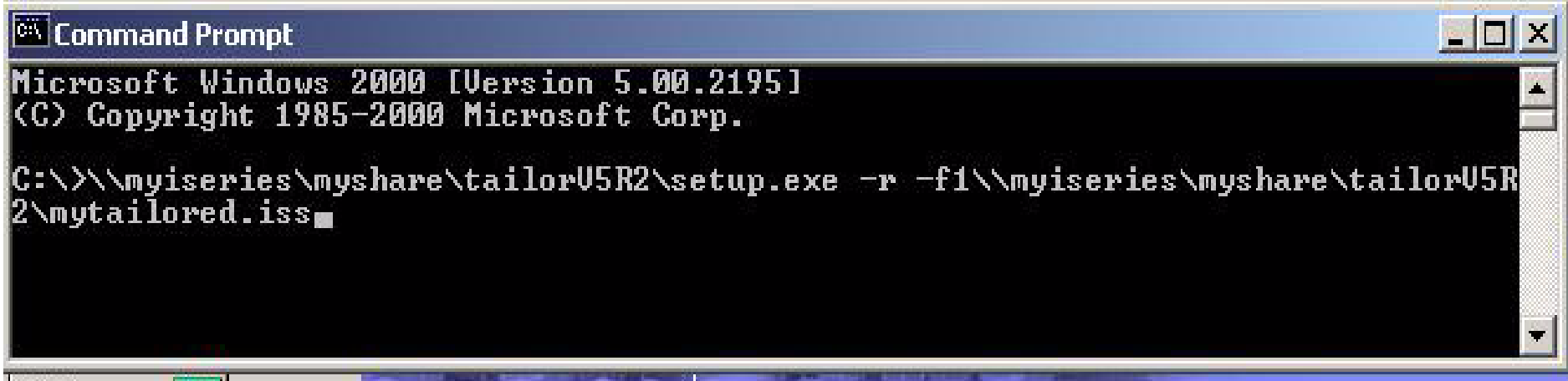


**You use the Tailored Install wizard to capture only the Windows ODBC driver**
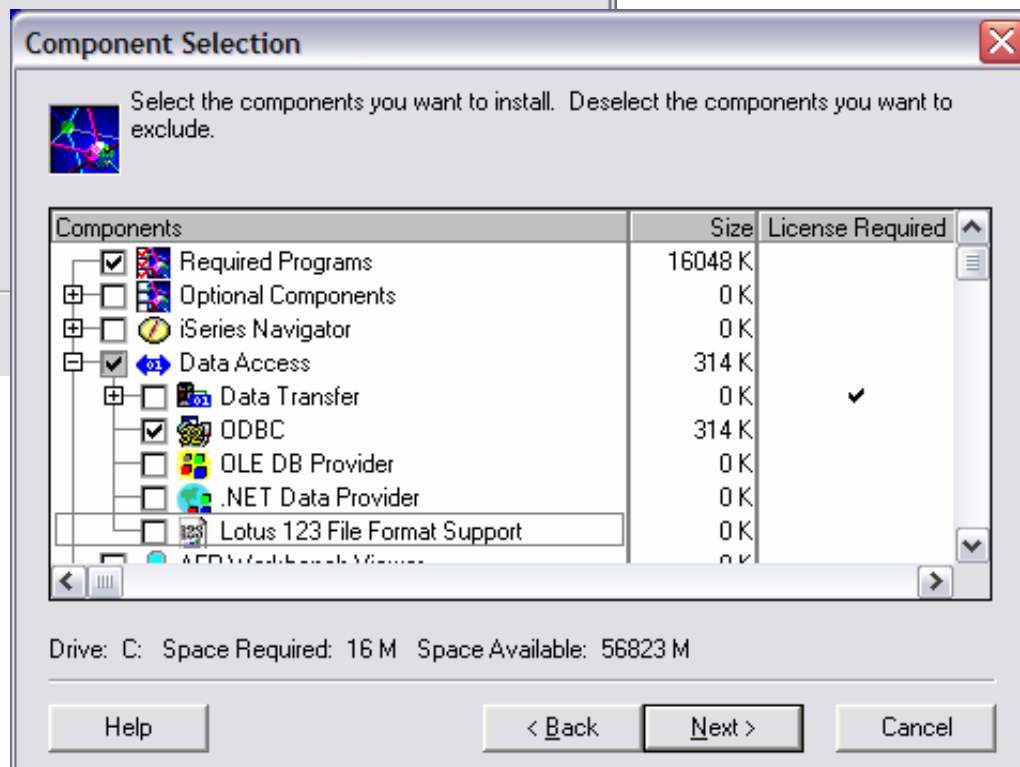
# Step 2. Record Silent Install from the Tailored Install Image

```
Command Prompt                                              _ □ X

Microsoft Windows 2000 [Version 5.00.2195]
(C) Copyright 1985-2000 Microsoft Corp.


C:\>\\myiseries\myshare\tailorV5R2\setup.exe -r -f1\\myiseries\myshare\tailorV5R
2\mytailored.iss■
```

**Set up to record a Silent Install Response File**

Using 'universal naming convention' (UNC) rather than mapping a drive - so it can be found without a mapped drive

➤ **Do not have any version currently installed on your PC**

➤ **Know the location of your tailored install (example assumes located on iSeries)**

➤ **Identify the location you want to store your response file (not in QIBM directory)**

➤ **Bring up a command prompt**

➤ **Type in Silent Install command**

– **'setup -r -f1d:\dir\file.iss' to identify where responses are to be stored**

➤ **This starts the iSeries Access Install program**

# Recording the install of Tailored Install folder
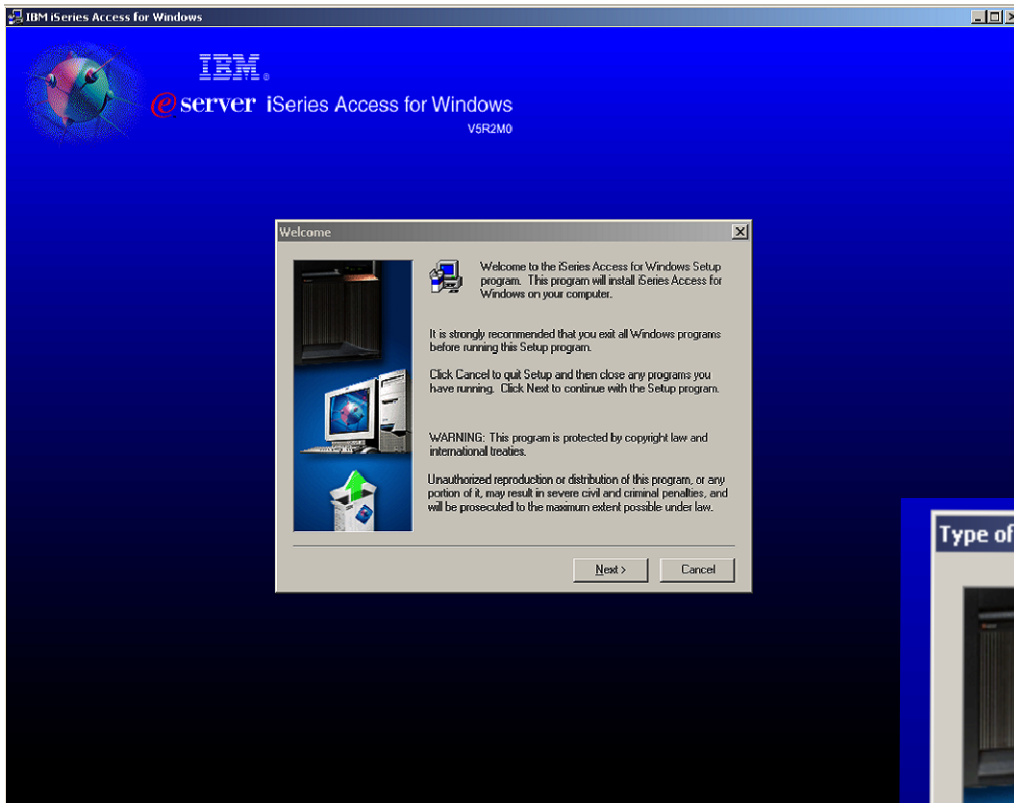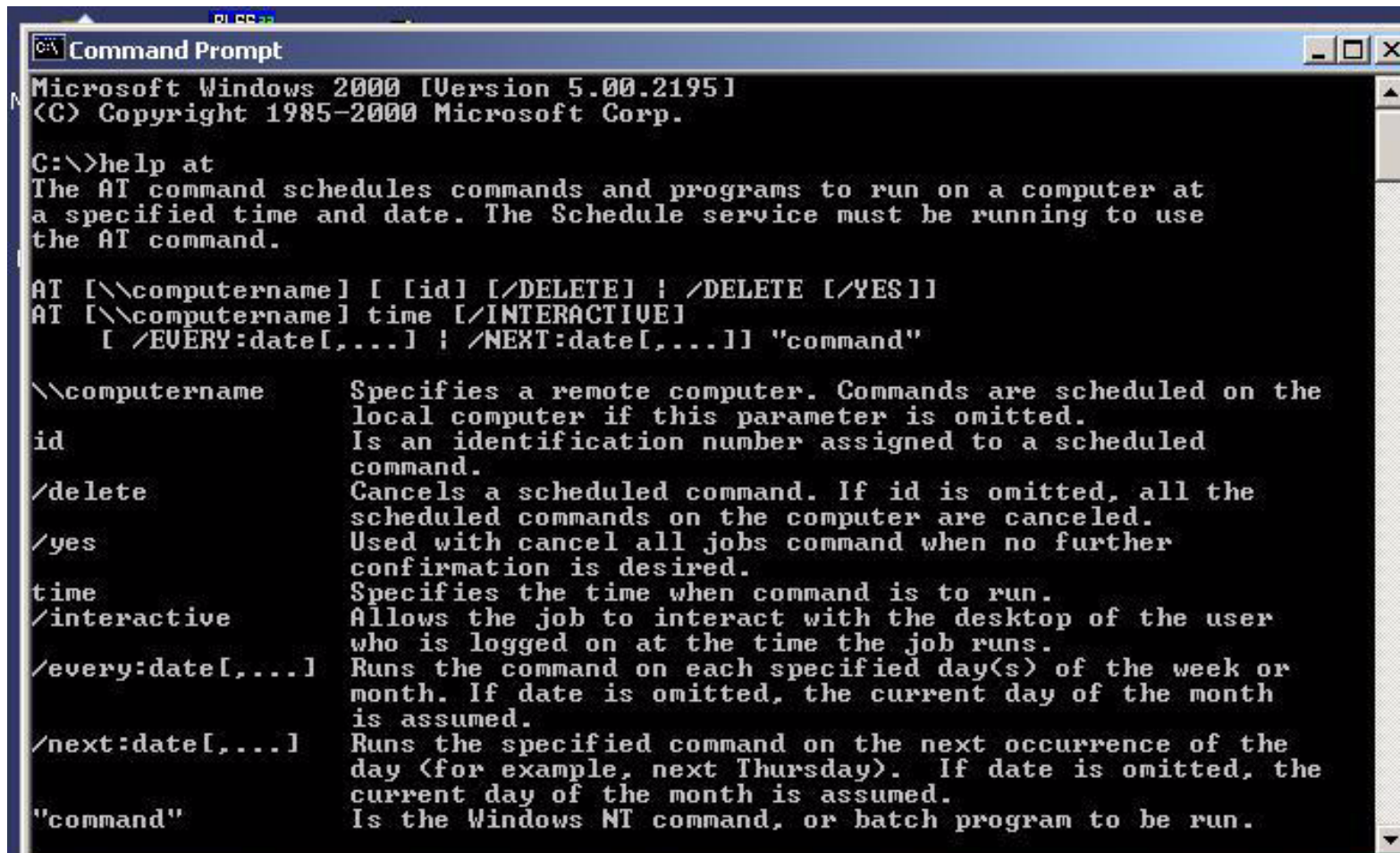


- Now select 'Full' install to capture steps to install everything that is in the Tailored Install file



Note: during this step this image is also being installed on your PC. You probably want to uninstall it after completing this step.
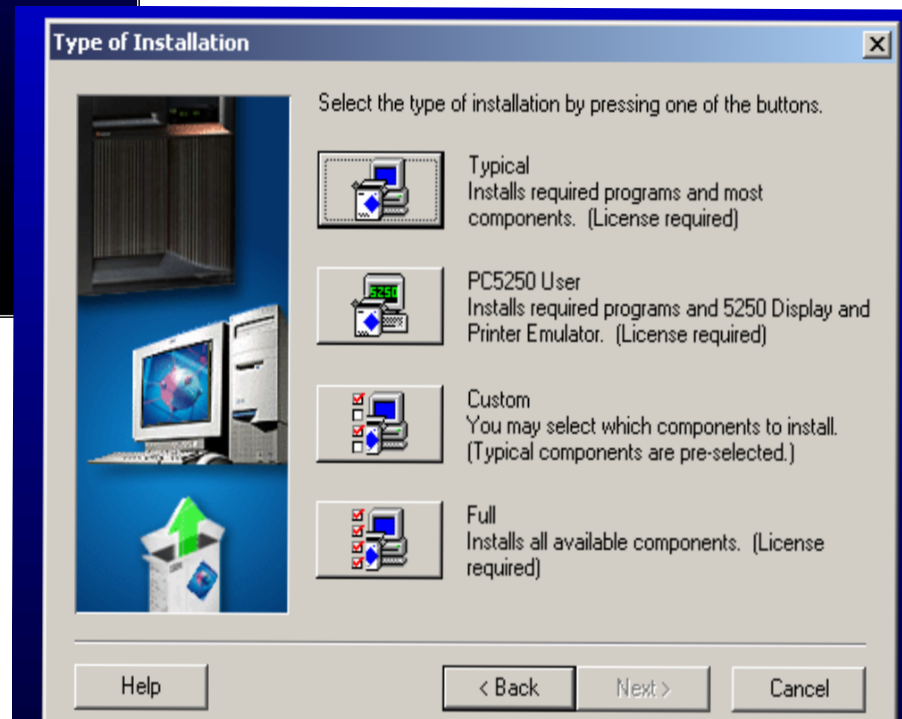
# Step 3. Schedule Silent Install for PC Desktop



- ◆ **Bring up Command prompt**
- ◆ **Use 'AT' command... or some other scheduler program/wizard**

# Add the Silent Install response file to the AT "Command" step

```
Command Prompt

Microsoft Windows 2000 [Version 5.00.2195]
(C) Copyright 1985-2000 Microsoft Corp.

C:\>\\myiseries\myshare\tailorV5R2\setup.exe -s -f1\\myiseries\myshare\tailorV5R
2\mytailored.iss
```

**Schedule the Silent Install for end user's desktop**

```
Microsoft Windows 2000 [Version 5.00.2195]
(C) Copyright 1985-2000 Microsoft Corp.

C:\>help at
The AT command schedules commands and programs to run on a computer at
a specified time and date. The Schedule service must be running to use
the AT command.

AT [\\computername] [ [id] [/DELETE] | /DELETE [/YES]]
AT [\\computername] time [/INTERACTIVE]
    [ /EVERY:date[,...] | /NEXT:date[,...]] "command"

\\computername     Specifies a remote computer. Commands are scheduled on the
                   local computer if this parameter is omitted.
id                 Is an identification number assigned to a scheduled
                   command.
/delete            Cancels a scheduled command. If id is omitted, all the
                   scheduled commands on the computer are canceled.
/yes               Used with cancel all jobs command when no further
                   confirmation is desired.
time               Specifies the time when command is to run.
/interactive       Allows the job to interact with the desktop of the user
                   who is logged on at the time the job runs.
/every:date[,...]  Runs the command on each specified day(s) of the week or
                   month. If date is omitted, the current day of the month
                   is assumed.
/next:date[,...]   Runs the specified command on the next occurrence of the
                   day (for example, next Thursday).  If date is omitted, the
                   current day of the month is assumed.
"command"          Is the Windows NT command, or batch program to be run.
```

*i want an i.*

**Windows Scheduler Service to schedule Check Service**
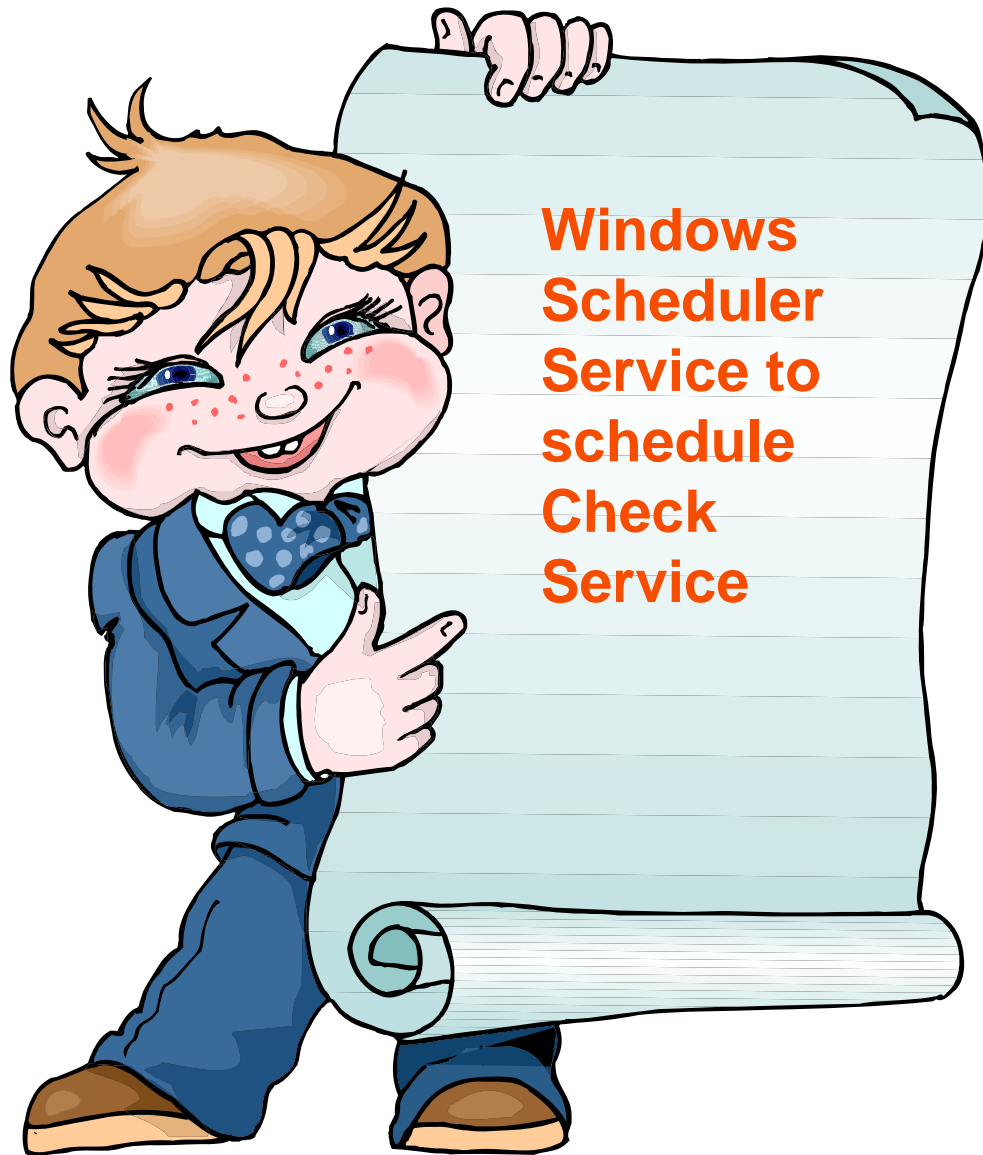
# Using Windows scheduler function

**Cannot install or service if user does not have Administrator Authority**

**To circumvent this problem:**

- **'Check Service Level' can be invoked via a scheduler running under administrator authority to install service packs or upgrades**

- **Steps:**
    - **Sign onto Windows as an administrator.**
    - **Configure Windows schedule service**
    - **Set check service level properties**
    - **Schedule check service level**

# Install and Service Pack Tips (continued)

**Administrator can set up Access for Windows for Silent updates...**
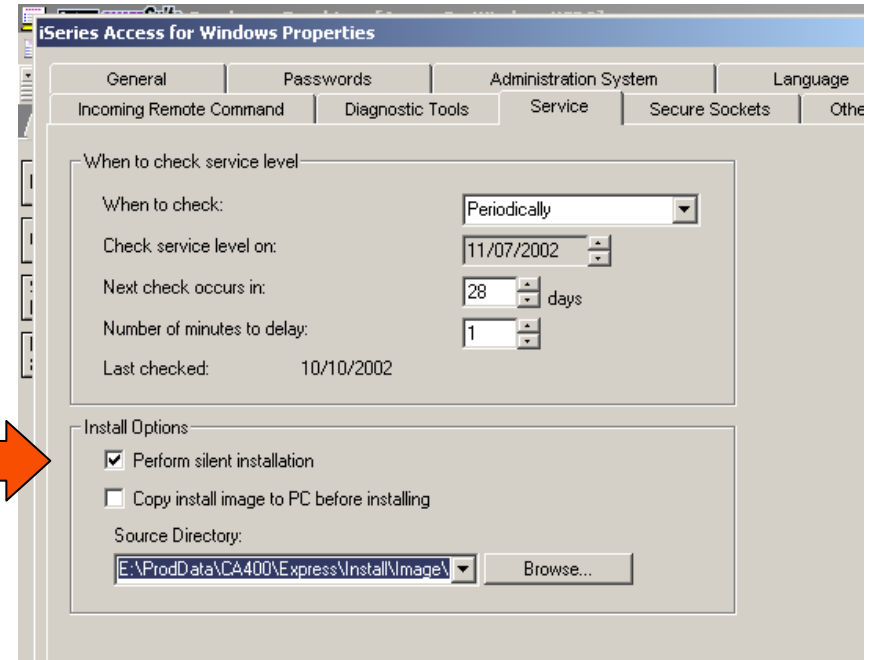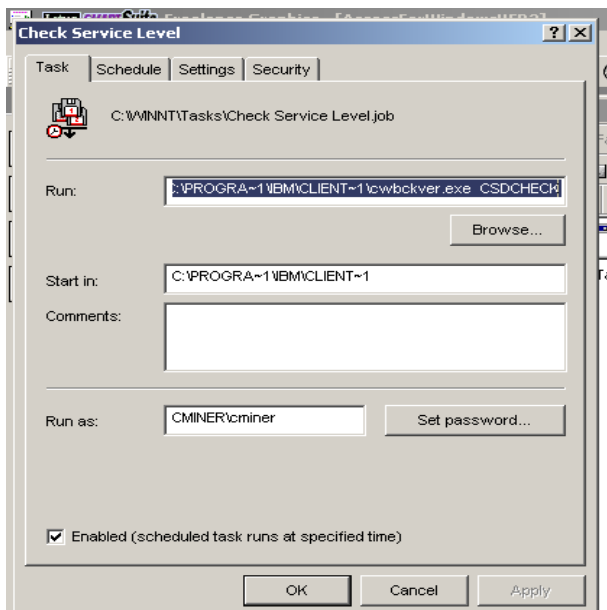




**Need Administrator's userid/password in here**
Note: Userid/password must be same on Windows as on iSeries

**Using the Windows Installer Technical Preview**
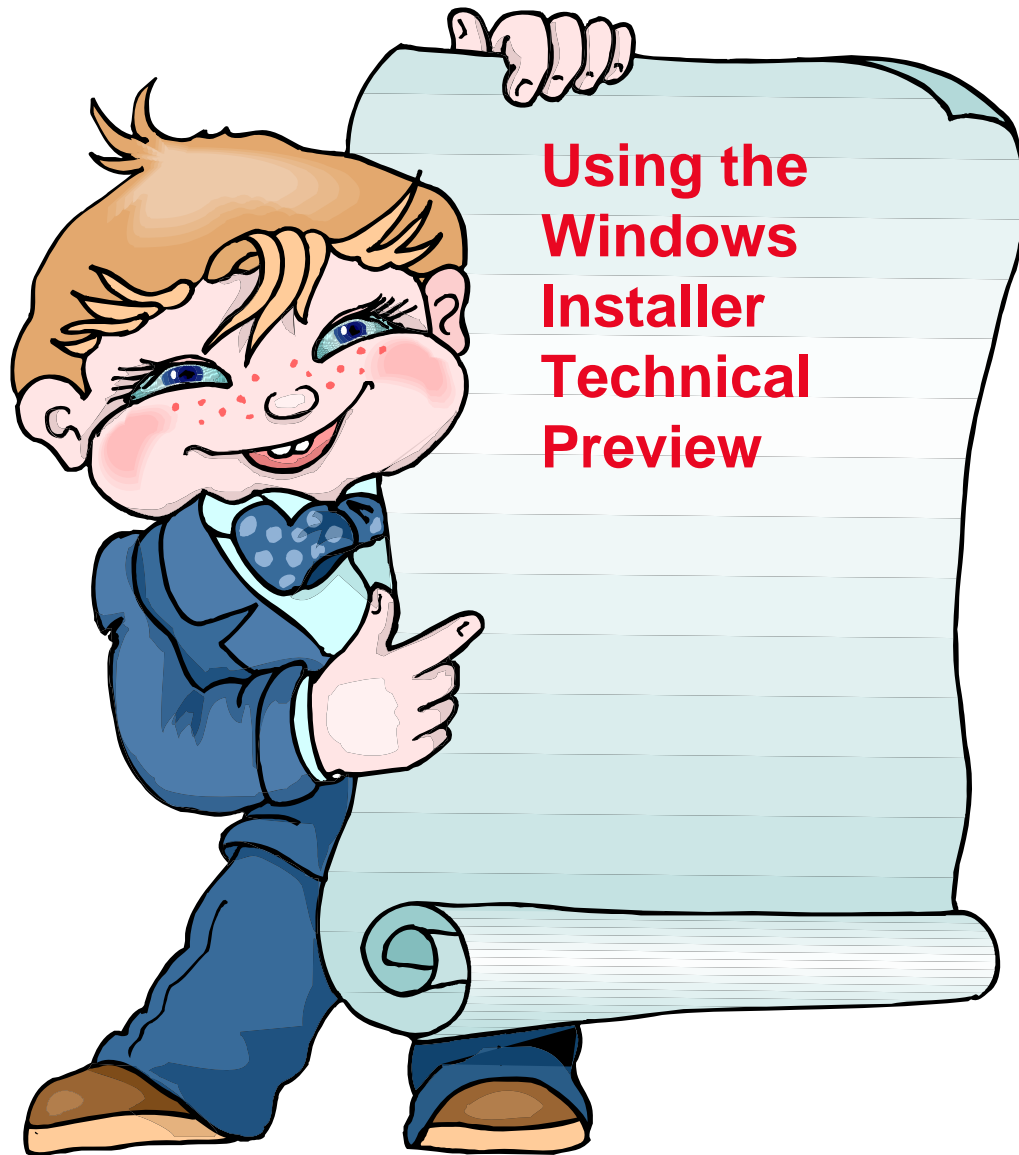
# The Windows Installer Technical Preview

– iSeries Access for Windows released a version of its installer program featuring the Windows Installer technology.

– Windows Installer has become the industry standard for installations on the Windows platform.

– Windows Installer provides administrators with standard mechanisms to manage installations, customize install packages, set install policies and install service packs.

– The Windows Installer Technical Preview can be deployed to multiple desktop users with several deployment systems, such as Microsoft® Active Directory® and Microsoft Systems Management Server.

# Advantages of using WITP

- – Same level code as the official version of iSeries Access for Windows.

- – Service Packs are released in the same schedule as for the official version.

- – Standard installation technology.

- – Customizing an installation package is simpler with transforms.

- – Silent installs are simpler. No response files longer needed.

# WITP limitations

- Includes a subset of the iAW features:
  - Required Programs, Data Access features, PC5250, Printer Drivers, Incoming Remote Command, Directory Update, SSL, Headers, Libraries and Documentation

- Supports English language only.

- Supports the 32-bits versions of Windows XP, Windows 2000 and Windows Vista (starting at SP4).

- Available only as a download from the web.

- Check Service Level is not supported.

# What to do if you require iSeries Navigator or other features not included with the Tech Preview

- You should use the official iSeries Access for Windows installation media.

- In order to restrict what components your users can install, you will use tailored images.

- In order to perform silent installations, you will need to create a response file.

- Options to deploy the official installation media of iSeries Access for Windows:
  - If iSeries Access for Windows is already installed on your clients, then use Check Service Level to install a service pack or upgrade to V5R4.
  - Install from a network share.
  - Use SMS to push your installation package.
  - *Active Directory only supports deploying MSI installation packages, so it can't be used to deploy the official installation media of iSeries Access for Windows.*

# Get the Tech Preview

- You can download the Windows Installer Technical Preview at **http://www14.software.ibm.com/webapp/download/search.jsp?go=y&rs=iawb**
- Select the latest service level available.
- You will need to register in order to be able to download the installation image.

# What is the MSI package

- A Windows Installer package is formed by a MSI file and source files.

- Installation's logic and data is defined in files with an extension of .MSI; they are referred to as MSI files or MSI packages.

- A MSI file is a relational database. The tables within the MSI database describe:
  - installation logic, such as the sequence of actions
  - metadata about the resources that are to be installed

- The functionality of an application is separated in features. A feature is a piece of functionality that can be installed independently.

# Installation Setup types

- **Complete**
  - Installs everything

- **Custom**
  - Allows end user to select what to install

- **PC5250 User**
  - Only 5250 emulation installed
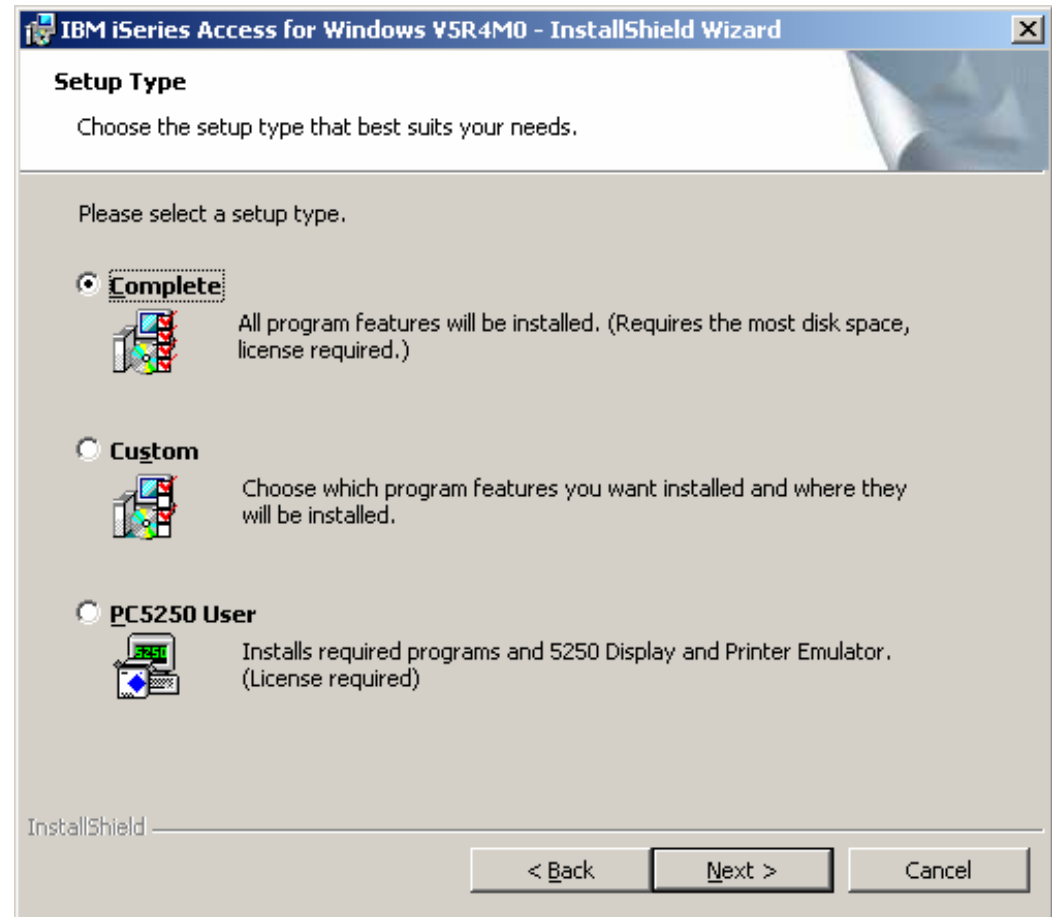
# Installation Categories

1. **New installation of iSeries Access for Windows**

2. **Upgrade Install**
   - **From one release of iSeries Access for Windows to the next release**
   - **Intend to always support N-2 to N**
   - **Default is to upgrade to new release with same set of components**
   - **Can add additional features during upgrade**
   - **Can remove existing features during upgrade process**

3. **Maintenance Install**
   - **Modify**
     - **Add and remove individual features**
     - **New features are installed with the latest service pack level applied**
   - **Repair**
     - **Reinstalls the product**
     - **Recreates files/registry entries that were accidentally deleted**

# Servicing the Technical Preview Image

- **Servicing an installation made with the Technical Preview is different to servicing an installation from official media:**
  - Service packs are only provided as a full image in the Technical Preview web site.
  - Updates made to the System i cannot be rolled out to an installation done with the Technical Preview since installation media is different.

- **In order to install a Windows Installer service pack:**
  - Go to the Technical Preview web site and download the latest service pack available.
  - Launch iSeriesAcccessWI.exe to uncompress the full image.
  - Launch setup.exe.

- **Since there's no such concept of tailored image, there's no need to run a tool such as PTFFORM.**

- **New users can use the service pack image as the source for new installations. Transforms must be applied for new installations.**

# Logging

- By default **two log files are created** in the current user's **temporal folder**:
  - **xe1instlog.txt** - keeps history of all installation activity.
  - **xe1instlogmsi.txt** - logs the last install task.

- **xe1instlogmsi.txt** is specified in **setup.ini**, in the **CmdLine** key:

```
setup.ini - Notepad
File  Edit  Format  View  Help
[Startup]
CmdLine=/l* "%temp%\xe1instlogmsi.txt"
```

- The **/l** option is used to specify logging settings.

- The * flag logs all information, except for verbose output. It's the same as specifing /l*iwearucmop*.

- **"%temp%\xe1instlogmsi.txt"** is the path to the log file.

# Logging

- You can **change** the /l settings in **setup.ini**.

- You can **override** the default logging settings at the **command line**, by running setup.exe with the /l option; for example:
    - **setup /v"… /l*v  log.txt"** - creates a verbose log called log.txt in the current directory.
    - **setup /v"… /laep log.txt"** - logs error messages, start up of actions and properties' values only.

- You can set the **Logging policy** to default the logging options **for all users**
    1. Open the key HKEY_LOCAL_MACHINE\SOFTWARE\Policies\Microsoft\Windows\Installer
    2. Create a string value called **Logging** and set it to the parameters you want.
    3. If you want a full, verbose log, set Logging to voicewarmup
    4. You cannot write * or + in the registry.

    Whenever a MSI package is invoked, a log file is created in the temp directory with a name of **MSIxxxxx.log**, where xxxxx are random characters.

- You also can set this policy within a GPO in AD.
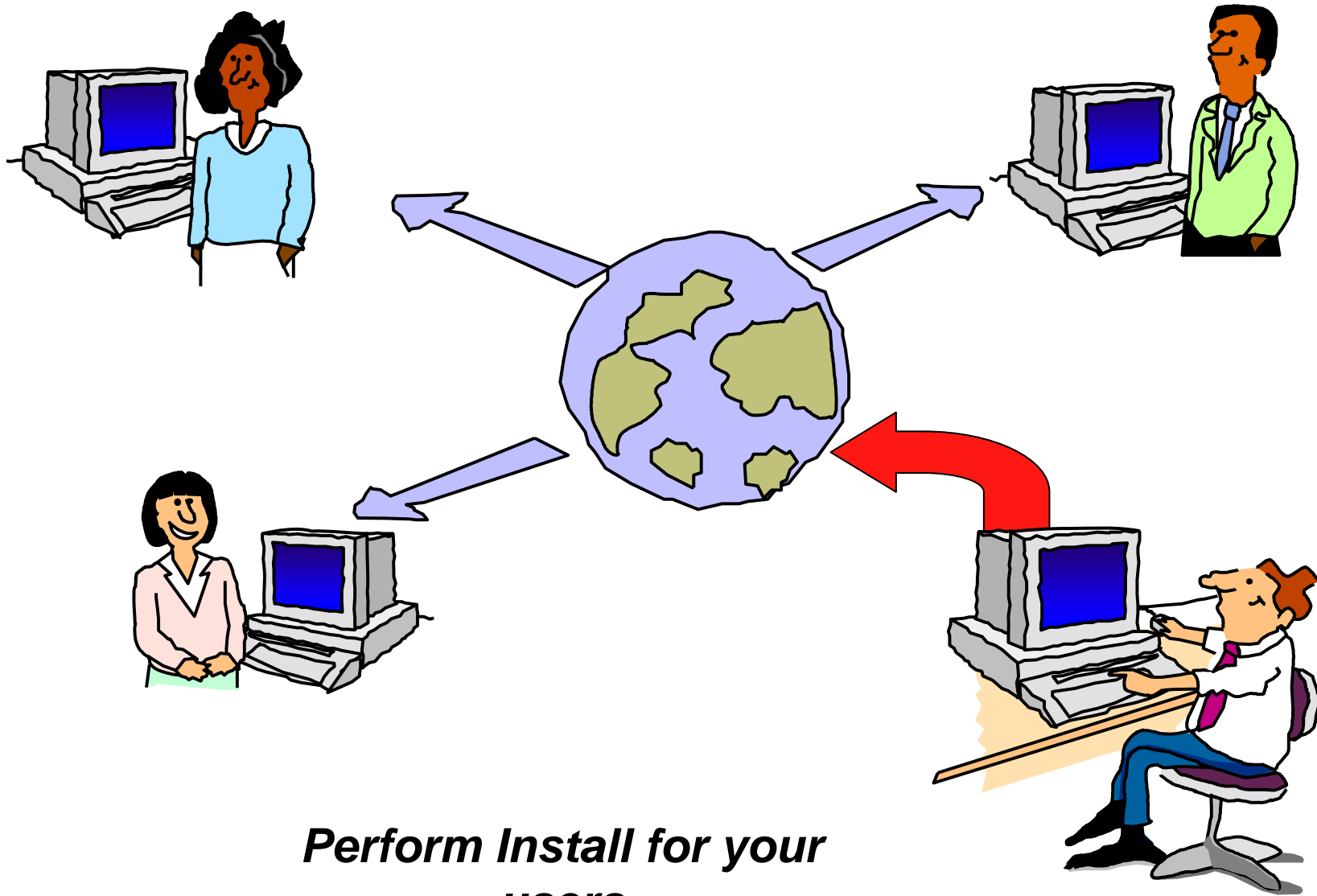
**Perform Install for your users**

**Transforms:**
customizing the installation package
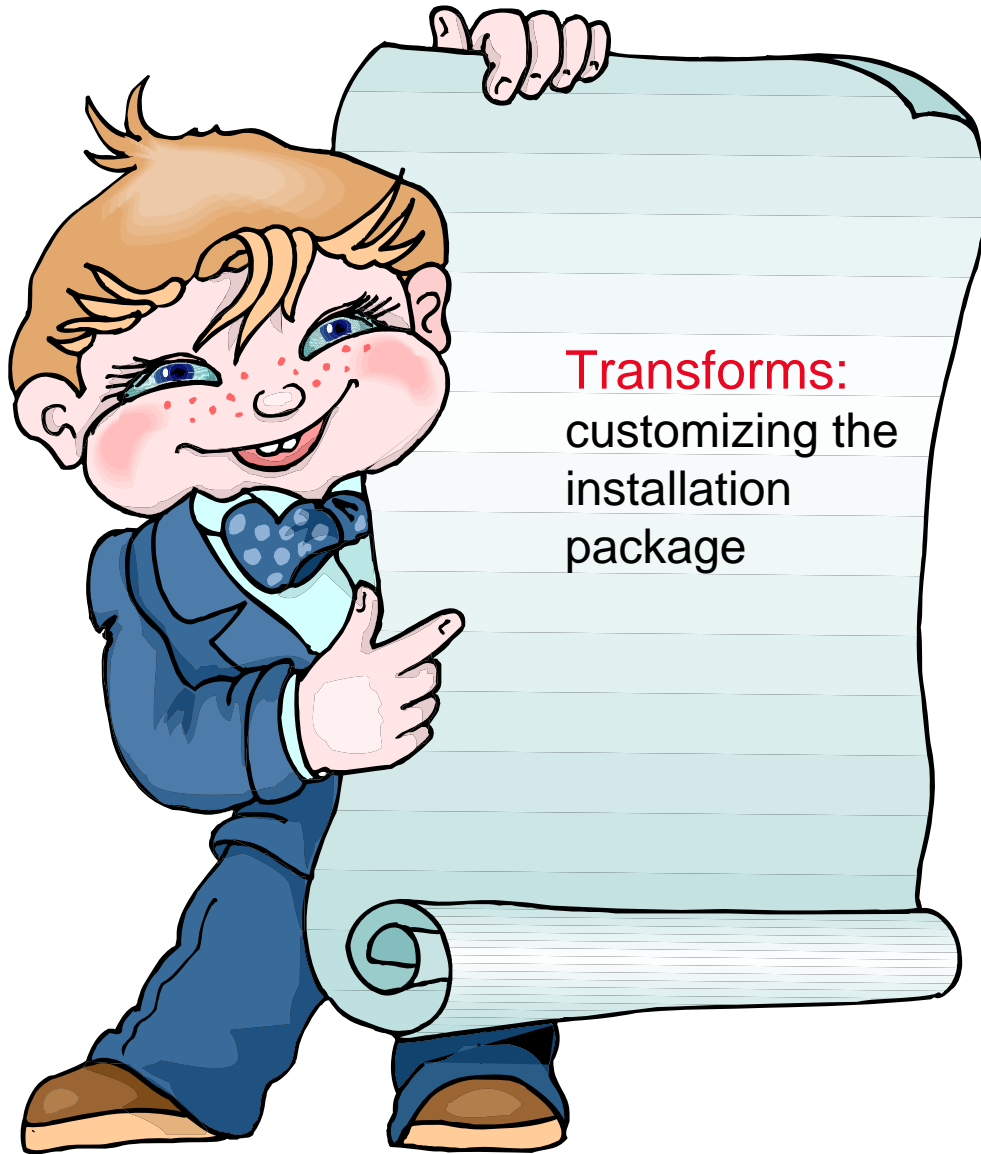
*Transforms replace Tailored Installs.*

# Transforms

**Would you like to control which iSeries Access for Windows features your users install?**

You can use <u>**Tranforms**</u> to:

- **Modify the MSI package by excluding the unwanted features**

- **Apply the transform to installations across your network**

- **Users can easily install iSeries Access functions by selecting a single option**
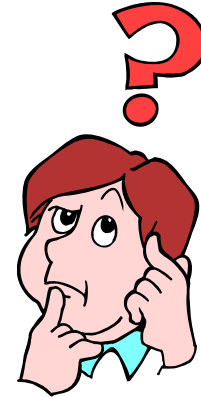
# What are Transforms

- **Windows Installer transforms are the means to customize a MSI package.**

- **Transforms are files that describe modifications to the MSI database. Such modifications are applied at install time.**

- **Transforms have an extension of .MST.**

- **With transforms you can restrict what features can be installed by end users. You can preselect, hide and disable features.**

- **Tailored install is not necessary.**

- **Transforms allow administrators to create customizations for different work groups in the organization by defining different customizations.**

- **Several tools are available to create transforms. A commonly used tool is Microsoft Orca, which is part of the Microsoft Platform SDK.**

# What are transforms?

| Original MSI | | Transform | | Result _at install time_ |
|---|---|---|---|---|

| Original MSI | Transform | Result |
|---|---|---|
| feat1 - Install | | feat1 - Install |
| feat2 - Install | feat2 - Don't install | feat2 - Don't install |
| feat3 - Don't install | feat3 - Install | feat3 - Install |
| feat4 - Don't install | feat4 - Hide feature | feat4 - Hide (Don't install) |
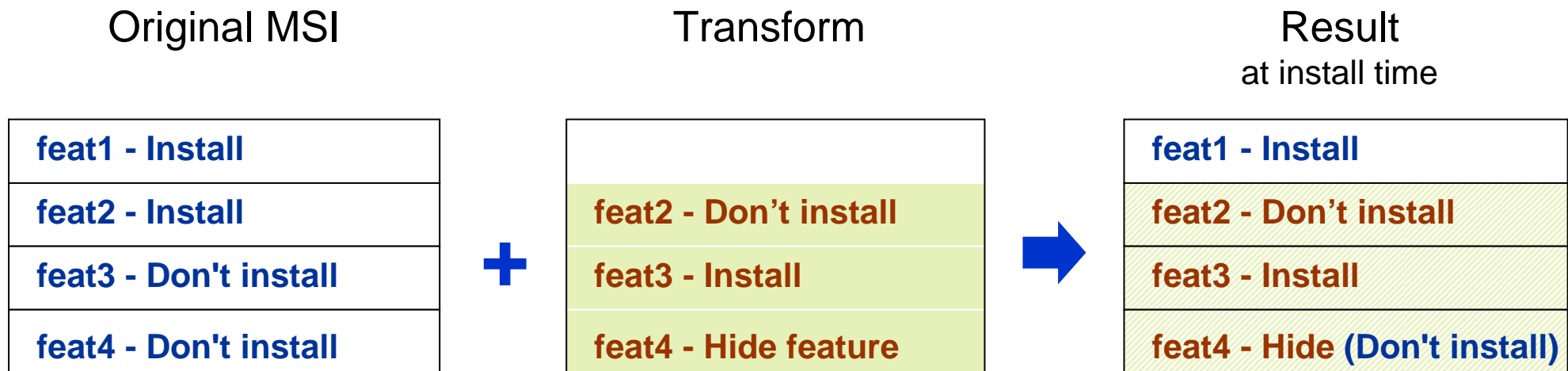
- Transforms are applied at install time

- The original MSI file is not altered

- The transform file is saved along with the MSI file, and it gets applied everytime an install task is started

# Steps to create your own transform

## 1. Open cwbinstall.msi in transform mode

- Open Orca.

- From the File menu, select Open and browse for **cwbinstall.msi**.

- From the Transform menu, select New Transform.

This will turn Orca into Transform mode, and now you can start modifying the MSI file.
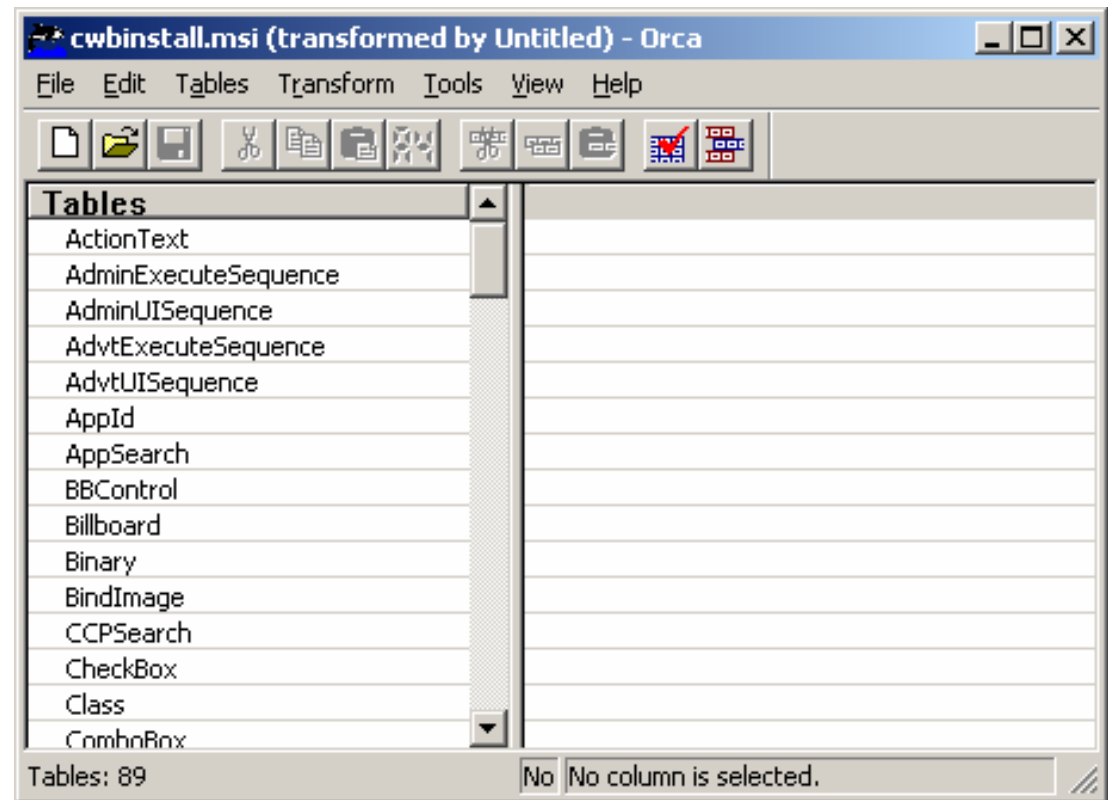
# Steps to create your own transform (continued)

## 2. Modify the tables

- From the left pane, select the table to modify.

- In the right pane, you can modify an existing field's value, as well as add and remove rows.

- Tables with modifications are indicated by a green mark next to them.

- In the example, we are changing the Level of feature ssl from 125 to 100 so it gets preselected.

# Steps to create your own transform (continued)

## 3. Generate the transform file

- From the Transform menu, select Generate Transform.

- Give your transform a meaningful name.

- Transforms are created with a file extension of .MST.

- Make sure the transform file is saved to the install image directory.
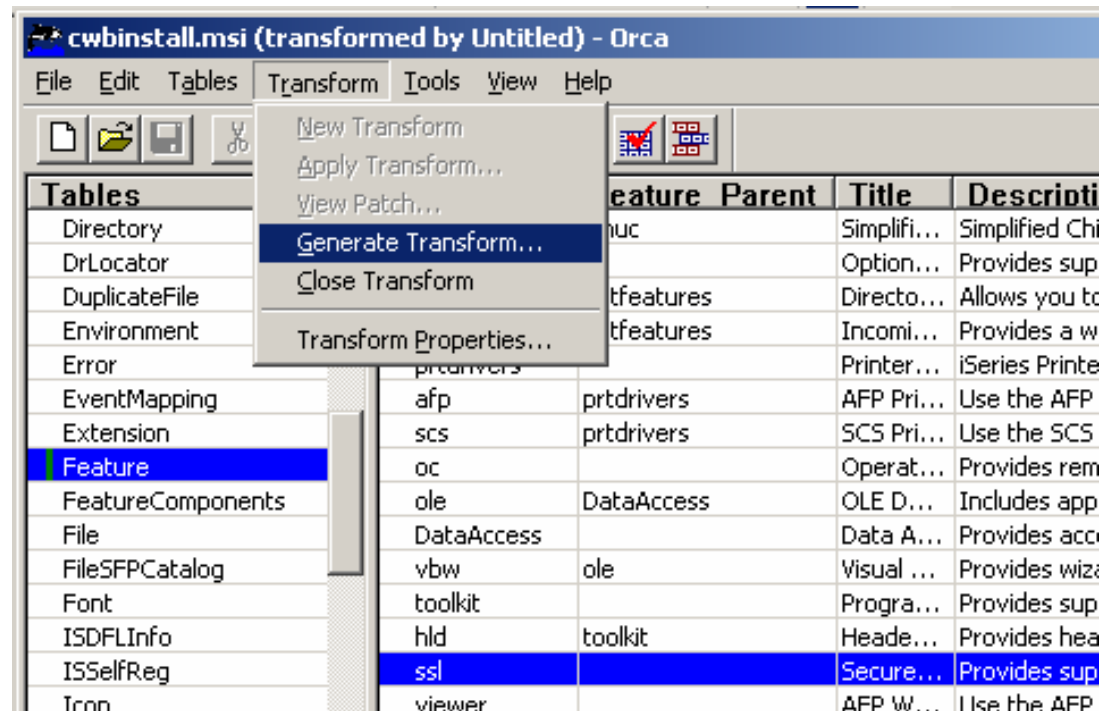
# Apply the transform

- **In a command prompt window, type**
  **setup /vTRANSFORMS=MyTransform.mst**

```
\> setup.exe
```
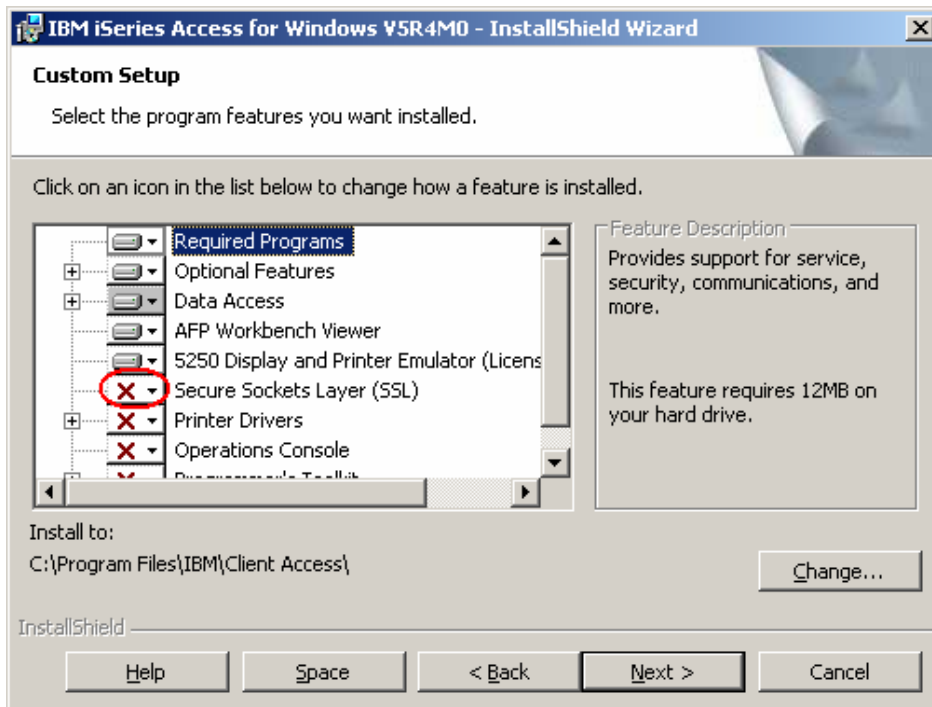
```
\> setup.exe /vTRANSFORMS=MyTransform.mst
```

*i want an i.*
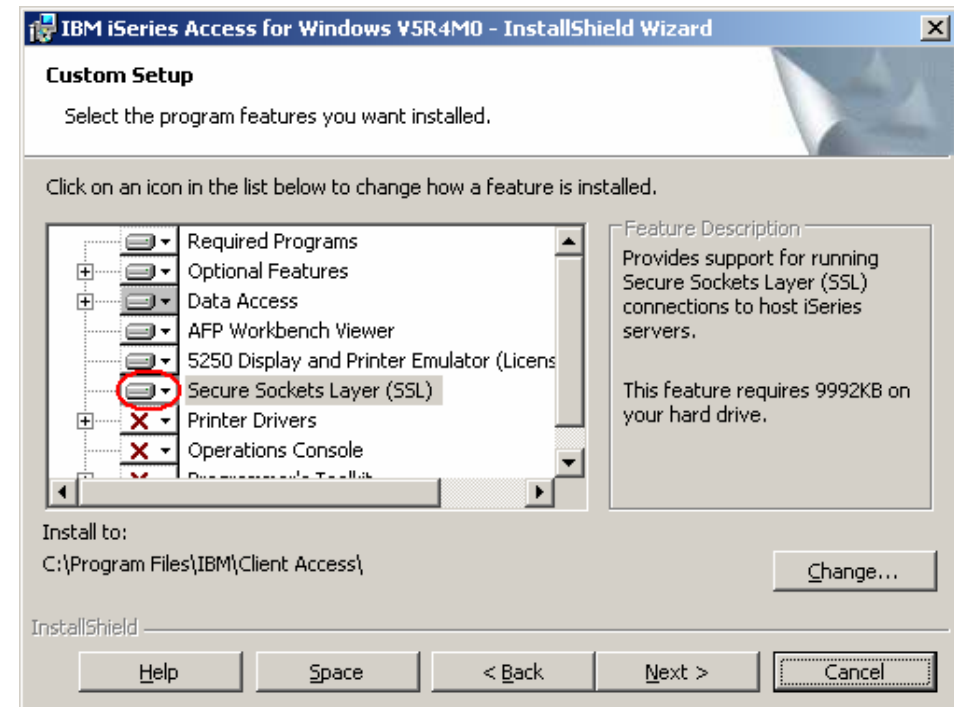
# Example

**Only want to provide ODBC and Printer Drivers for some of your users**

- **Create a transform that enables end users to install only ODBC and Printer drivers.**

- **Disable all features you don't want users to use.**

- **No need to create a tailored image. The transform can be applied to the original image.**

# Example (continued)

A level of 0 disables the feature

1. Open cwbinstall.msi with Orca and select Transform>New Transform.

2. Open the Feature table.

3. Change the Level field to 0 for all features, except the ones you want to install:
   - **req**
   - **emuc, emuk, emup, emus, emut**
   - **DataAccess**
   - **Odbc**

4. Save the transform as odbc_pc5250_only.mst

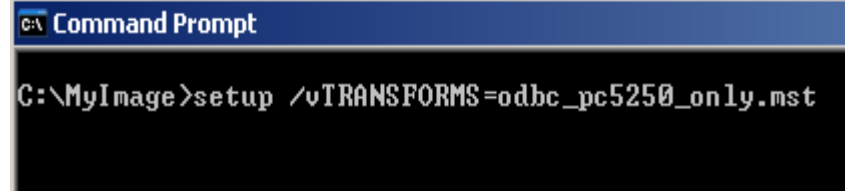| Tables | | Feature | Feature... | T... | D... | D... | Le... | Directo... | Attribu |
|---|---|---|---|---|---|---|---|---|---|
| CreateFolder | | optfeatures | | O... | Pro... | 4 | 0 | INSTALLDIR | 8 |
| CustomAction | | dir | optfeatures | D... | All... | 6 | 0 | INSTALLDIR | 8 |
| Dialog | | irc | optfeatures | I... | Pro... | 8 | 0 | INSTALLDIR | 8 |
| Directory | | ole | DataAccess | O... | Inc... | 22 | 0 | INSTALLDIR | 8 |
| DrLocator | | viewer | | A... | Us... | 26 | 0 | INSTALLDIR | 8 |
| DuplicateFile | | dt | DataAccess | D... | Pro... | 12 | 0 | INSTALLDIR | 8 |
| Environment | | dtexcel | dt | D... | Pro... | 14 | 0 | INSTALLDIR | 8 |
| Error | | oc | | O... | Pro... | 38 | 0 | INSTALLDIR | 8 |
| EventMapping | | mp | DataAccess | .... | Pro... | 18 | 0 | INSTALLDIR | 8 |
| Extension | | prtdrivers | | P... | iSe... | 36 | 0 | INSTALLDIR | 8 |
| Feature | | afp | prtdrivers | A... | Us... | 32 | 0 | INSTALLDIR | 8 |
| FeatureComponents | | scs | prtdrivers | S... | Us... | 34 | 0 | INSTALLDIR | 8 |
| File | | vbw | ole | Vi... | Pro... | 20 | 0 | INSTALLDIR | 8 |
| FileSFPCatalog | | toolkit | | P... | Pro... | 40 | 0 | INSTALLDIR | 8 |
| Font | | hld | toolkit | H... | Pro... | 40 | 0 | INSTALLDIR | 8 |
| ISDFLInfo | | ssl | | S... | Pro... | 30 | 0 | INSTALLDIR | 8 |
| ISSelfReg | | lotus123 | DataAccess | L... | Pro... | 24 | 0 | INSTALLDIR | 8 |
| Icon | | emuc | | 5... | PC... | 28 | 1 | INSTALLDIR | 8 |
| IniFile | | emus | emuc | S... | PC... | 0 | 1 | INSTALLDIR | 8 |
| IniLocator | | emut | emuc | T... | Tra... | 0 | 1 | INSTALLDIR | 8 |
| InstallExecuteSequence | | emuk | emuc | K... | Kor... | 0 | 1 | INSTALLDIR | 8 |
| InstallUISequence | | emup | emuc | Si... | Sim... | 0 | 1 | INSTALLDIR | 8 |
| IsolatedComponent | | req | | R... | Pro... | 2 | 1 | INSTALLDIR | 24 |
| LaunchCondition | | DataAccess | | D... | Pro... | 11 | 100 | INSTALLDIR | 8 |
| ListBox | | odbc | DataAccess | O... | Pro... | 16 | 100 | INSTALLDIR | 8 |
| ListView | | | | | | | | | |
| LockPermissions | | | | | | | | | |
| MIME | | | | | | | | | |

# Example (continued)

## Apply the transform

Two ways to apply the transform:

**1. Your users can apply it at the command line:**

   a) Type:
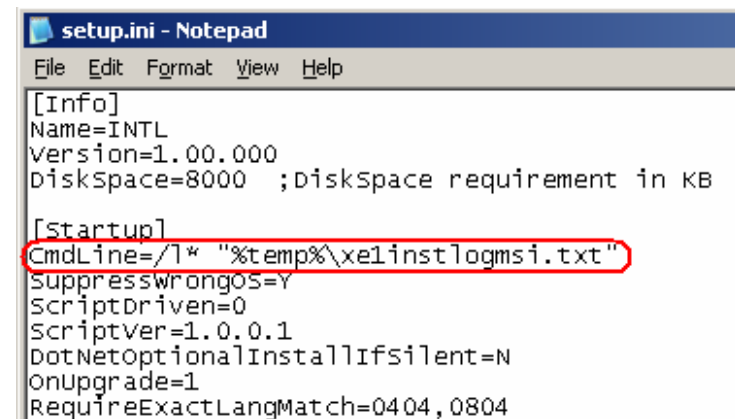   **setup /vTRANSFORMS=odbc_pc5250_only.mst**

or

**2. You can modify setup.ini, and users will get the transform automatically:**

   a) Open **setup.ini** and locate the **CmdLine** key, under the **[Startup]** section.
   b) Append the string **TRANSFORMS= odbc_pc5250_only.mst** to CmdLine.
   c) When user runs setup.exe, the transform will get applied.



**Command Prompt**

```
C:\MyImage>setup /vTRANSFORMS=odbc_pc5250_only.mst
```



```
setup.ini - Notepad
File  Edit  Format  View  Help
[Info]
Name=INTL
Version=1.00.000
DiskSpace=8000  ;DiskSpace requirement in KB

[Startup]
CmdLine=/l* "%temp%\xe1instlogmsi.txt"
SuppressWrongOS=Y
ScriptDriven=0
ScriptVer=1.0.0.1
DotNetOptionalInstallIfSilent=N
OnUpgrade=1
RequireExactLangMatch=0404,0804
```

# Example (continued)

- If user selects the **Complete** option, only **enabled features will be installed**.

- If user selects the **Custom** option, only **enabled features will be visible** in the feature selection tree.

- If installation is launched with **basic or none user interface**, only **enabled features will be installed**.
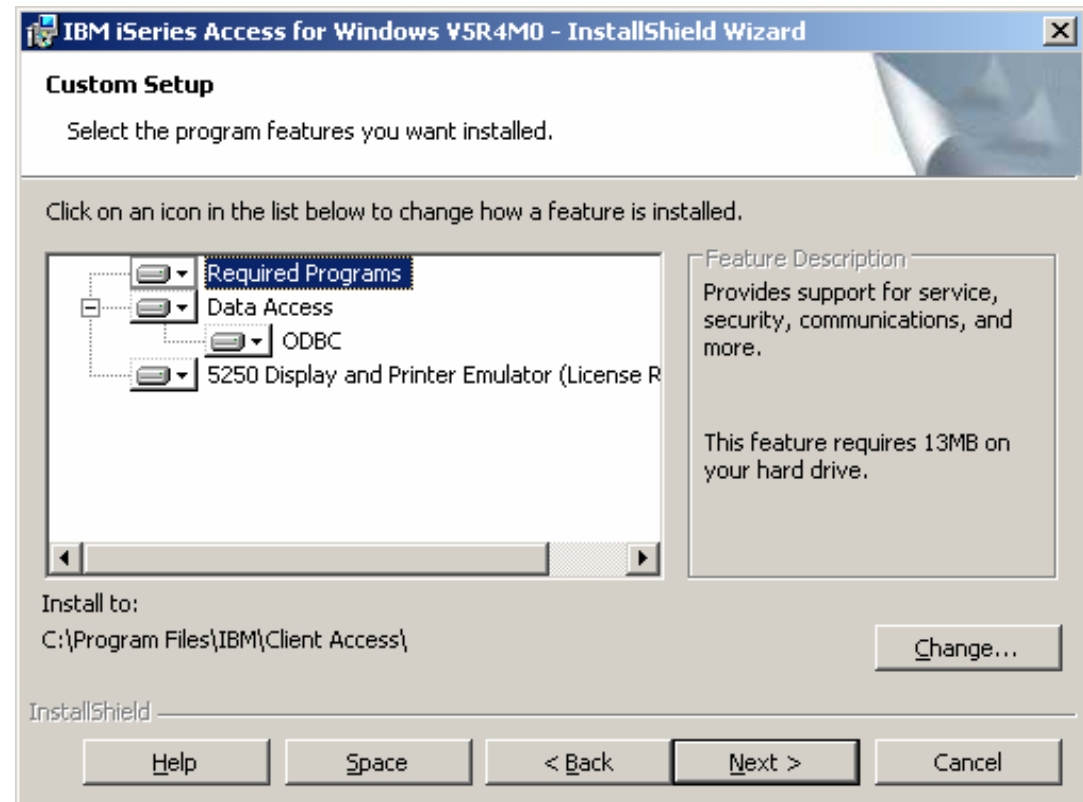
# Example 2

**Want to provide 5250 Emulator predefined workstation file**

- Create a transform that allows **rolling out a predefined PC5250 workstation file (.ws)**

- The .ws file must be created previously with the **Start or Configure Session** option of PC5250.

- The file will be **installed to the default store location** for .ws files :
  **<iSeries Access for Windows install path>\Emulator\Private**

- Process overview:
  1. **Specify** new file's **attributes** in the **File table**.
  2. **Associate** the new file to the **Private component** in the **File table** (Private is an existing component that installs files to the Private folder).
  3. **Add** the file to the **installation disk description**, in the **Media table**.
  4. **Copy** the **.ws file** to the **install image**.
  5. **Create** the **transform**.

# Example 2 (continued)

1. Open cwbinstall.msi with Orca and select Transform>New Transform.

2. Open the File table.

3. Right-click on the right pane and select Add Row.

4. Enter the following values:
   - **File = *MyWsFile***
   - **Component = Private.F31673CE_BEBC_4A92_BA93_3F0BC0ABC296**
   - **FileName = *My5250Session.ws***
   - **FileSize = *622***
   - **Version =** <leave it blank>
   - **Language =** <leave it blank>
   - **Attributes = 8192**
   - **Sequence = 5000**
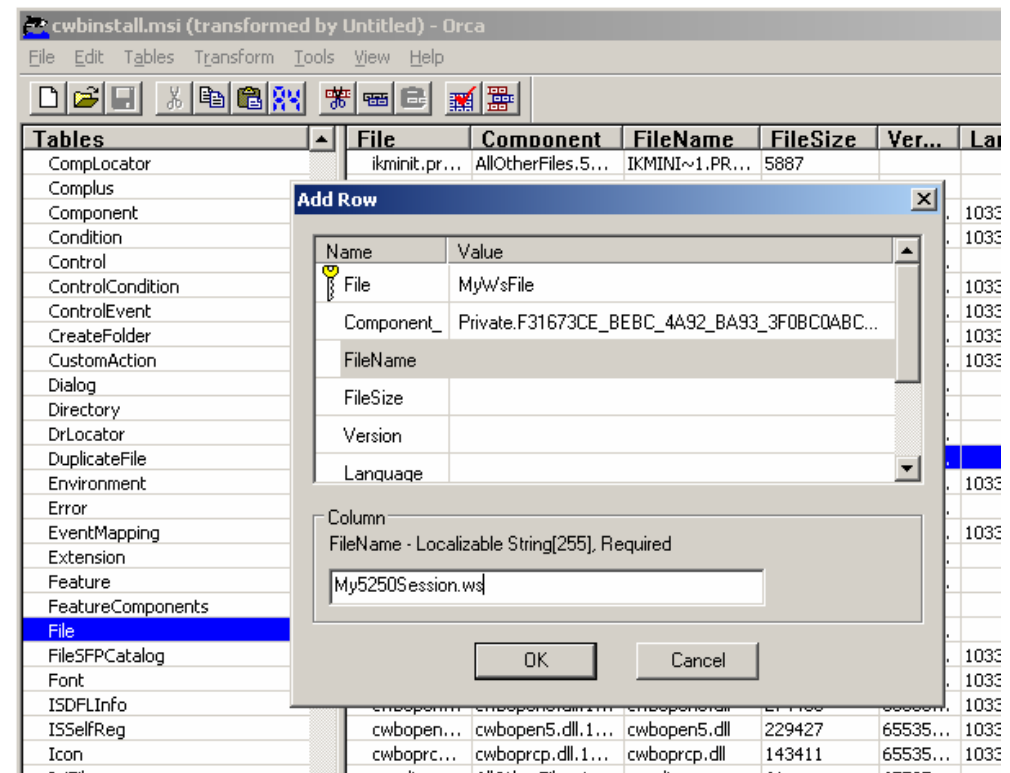
Values in *red and italics* are your choice.

# Example 2 (continued)

5.  Open the Media table and add a new row with the following values:
    - **DiskId** = **22**
    - **LastSequence** = **5000**
    - **DiskPrompt** = **1**
    - **Cabinet** = <leave it blank>
    - **VolumeLabel** = **DISK1**
    - **Source** = <leave it blank>

6. Save the transform as rollout_ws.mst.

7. In your source installation directory, recreate the Private directory tree. For example, supposing that your installation image is located in C:\MyImage, create the following directory structure:

**C:\MyImage\Program Files\IBM\Client Access\Emulator\Private**

8. Copy the .ws file to your source image under the directory created on step 7.

# Example 2 (continued)

## Apply the transform

Two ways to apply the transform:

1. **Your users can apply it at the command line:**
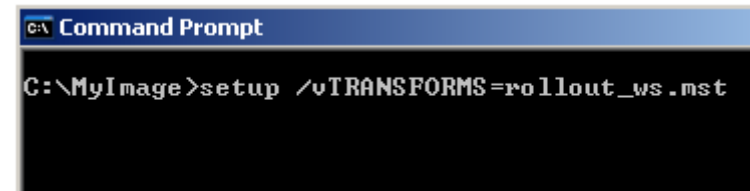
   a) Type:
      **setup /vTRANSFORMS=rollout_ws.mst**

```
Command Prompt
C:\MyImage>setup /vTRANSFORMS=rollout_ws.mst
```
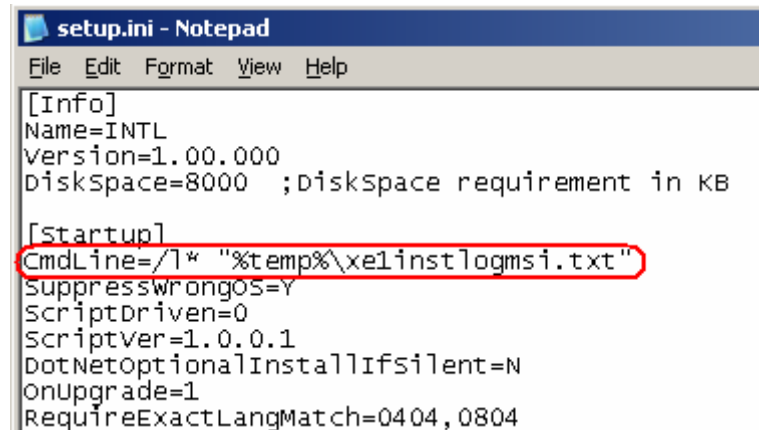
or

2. **Modify setup.ini so users get the transform by just launching setup.exe:**

   a) Open **setup.ini** and locate the line saying **CmdLine**, under the **[Startup]** section.

   b) Append the string **TRANSFORMS= rollout_ws.mst** to CmdLine.

```
setup.ini - Notepad
File  Edit  Format  View  Help
[Info]
Name=INTL
Version=1.00.000
DiskSpace=8000   ;DiskSpace requirement in KB

[Startup]
CmdLine=/l* "%temp%\xe1instlogmsi.txt"
SuppressWrongOS=Y
ScriptDriven=0
ScriptVer=1.0.0.1
DotNetOptionalInstallIfSilent=N
OnUpgrade=1
RequireExactLangMatch=0404,0804
```

*i want an i.*

# Use Complete or PC5250 User Install option

- On the iSeries Access for Windows Install Wizard select 'Complete' setup or 'PC5250User' setup.

- The .ws file will be installed to the Emulator\Private folder.



- When users launch 'Start or Configure Session', the preconfigured .ws file will be listed.
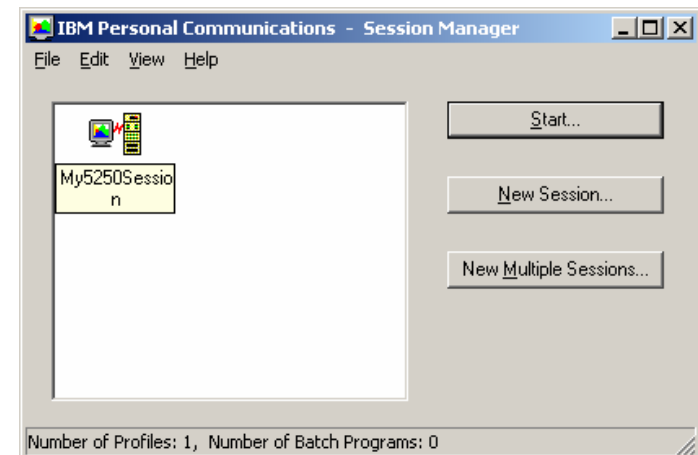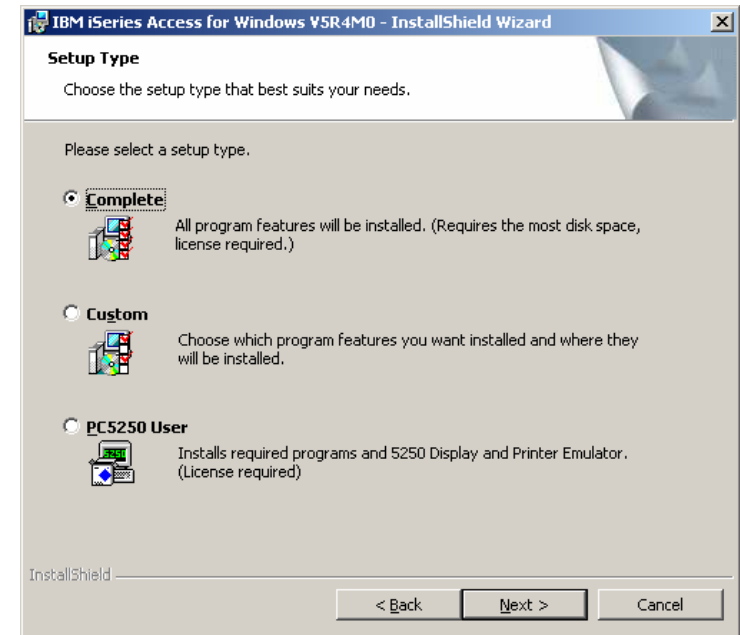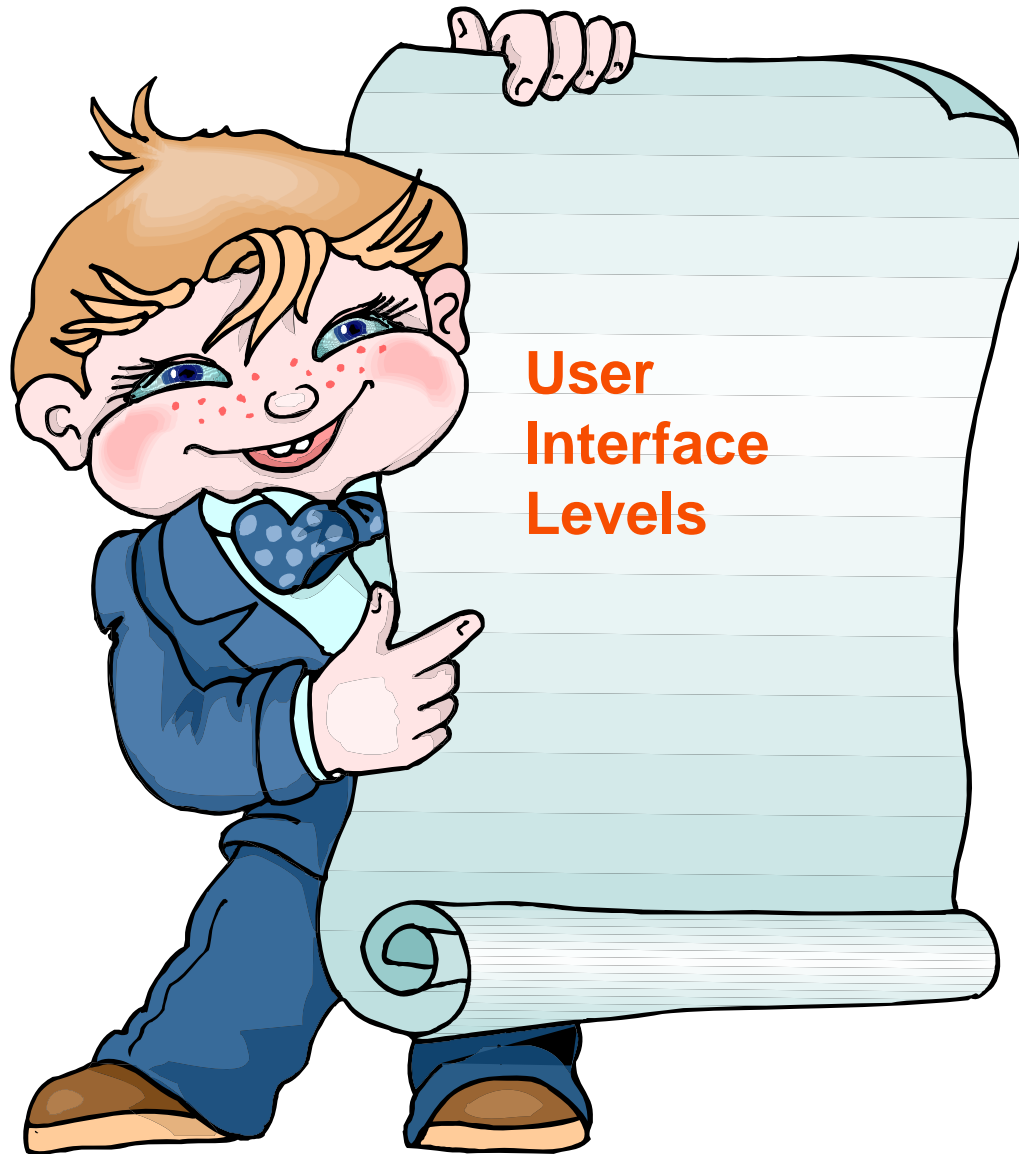
**User Interface Levels**

*There are more user interface levels than just a silent install when using Windows Installer.*

# User Interface Levels

– In Windows Installer, an installation's **user interface** can have several **levels**:

| Level | Command line option | UILevel value | Description |
|---|---|---|---|
| Full (default) | /qf | 5 | The Install Wizard is launched. User can change all installation options. |
| Basic | /qb | 3 | Only progress bar and error messages are shown. User still can cancel instalation. |
| Silent | /qs | 2 | No dialogs displayed. There's no indication about installation in progress. |

Full user interface
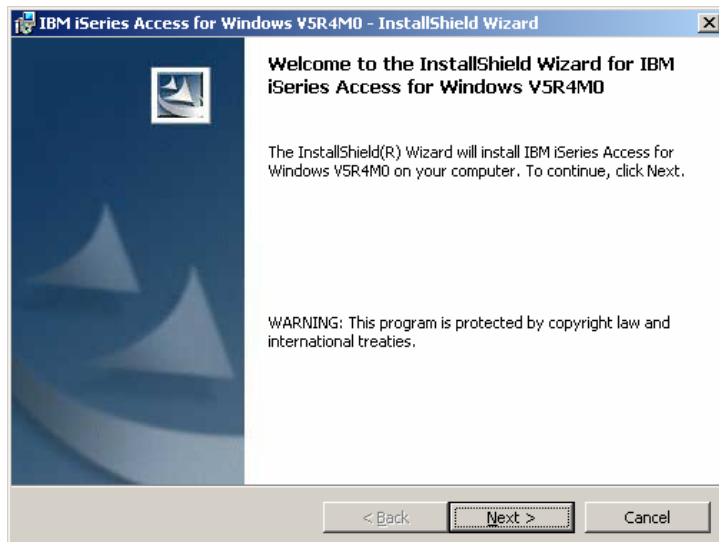
Basic user interface
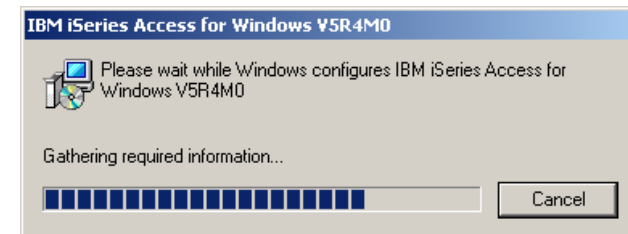
# User Interface Levels (continued)

- By default, launching setup.exe will initiate with full user interface.

- The level of user interface can be changed in several ways:
  - At the **command line**
    - Type **setup /v/"… q[f|b|n]"**

  - In **setup.ini:**
    - Append the string **/q[f|b|n]** to the CmdLine key.

  - With a **transform**
    - Create a transform that modifies the value of **property UILevel** in the **Property** table.

# User Interface Levels (continued)

- **Silent and basic UI** installations **do not require a response file** as in previous releases.

- **Default settings** defined in the MSI package **are used**. The **defaults** can be **overridden** via **public properties and transforms**.

- A **full UI** allows users to **change installation settings**.

- A **basic UI** is useful if you **don't want your users to change installation settings** but you still want to **get error messages**.

- A **silent install** is useful if you **don't want users to change any settings** and **no visual notifications** are needed, like in **overnight installations**.

Deployment
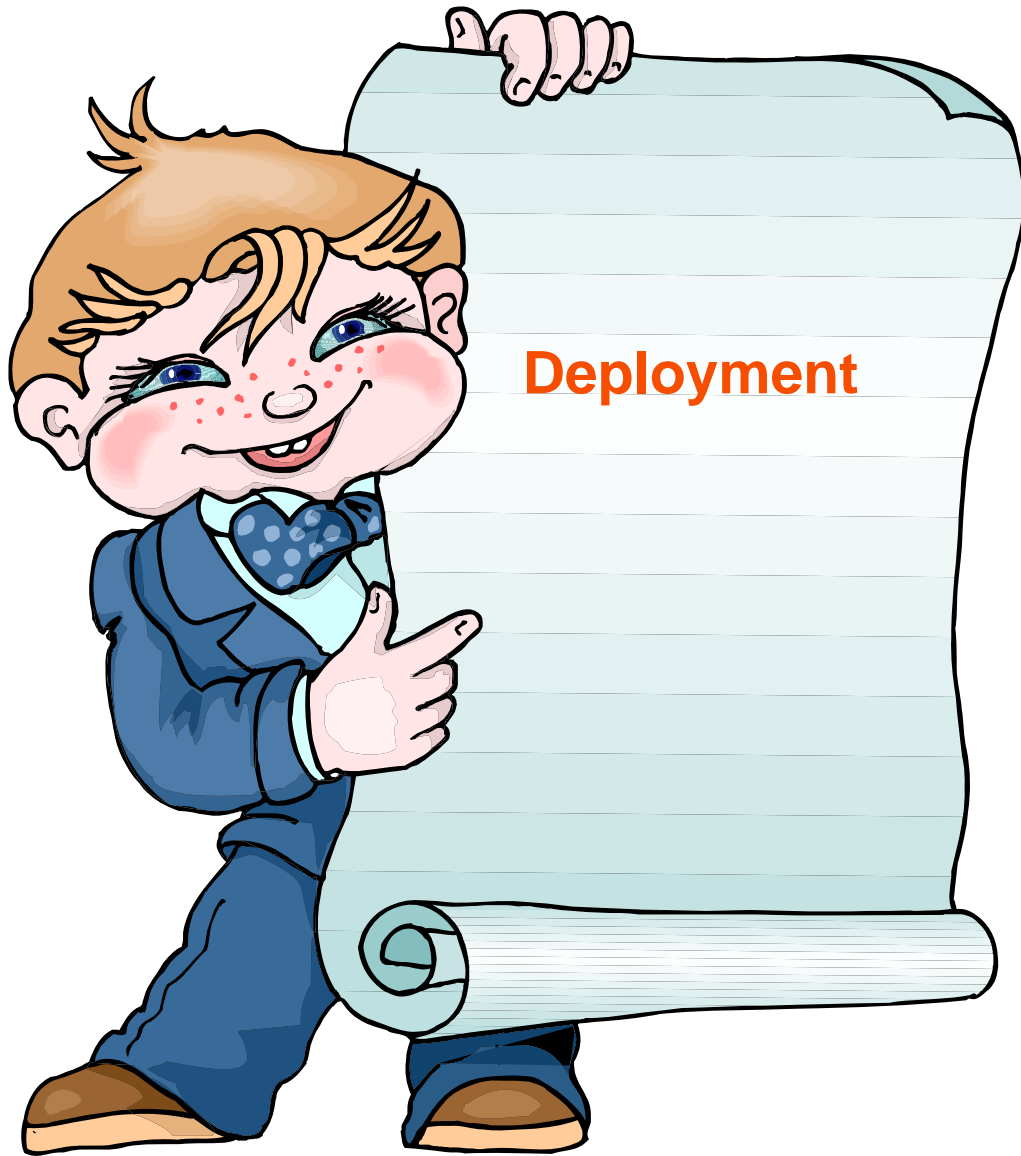
# Deploying iSeries Access for Windows using Active Directory

- iSeries Access for Windows can be deployed throughout the company using Active Directory.

- Active Directory is Microsoft's directory service; it comes with Windows 2000 Server and Windows Server 2003.

- Links:
  - Software Installation and Maintenance (Windows 2000 Server):

    *http://www.microsoft.com/technet/prodtechnol/windows2000serv/maintain/featusability /inmnwp.mspx*

  - Group Policy Software Installation Extension Technical Reference (Windows Server 2003):

    *http://technet2.microsoft.com/WindowsServer/en/library/6d7cb788-b31d-4d17-9f1e-b5ddaa6deecd1033.mspx?mfr=true*

  - Fixing Software Installation policy setting problems (Windows Server 2003):

    *http://technet2.microsoft.com/WindowsServer/en/library/2bd36720-ed2e-47ed-a80d-fa43a403b4361033.mspx?mfr=true*

# Deploying iSeries Access for Windows using Active Directory

- Active Directory is organized in domains. Generally a domain corresponds to a company's site.

- Domains are broken down into organizational units (OUs). OUs may represent the organization's business structure, each OU corresponding to a department.

- Group Policy Objects (GPO) are objects defining security and access settings. GPOs are applied to the members of an OU or the domain.

**MyCompany.com**

**A.MyCompany.com**    **B.MyCompany.com**

**B.MyCompany.com/OU1**

OU1

OU2    OU3
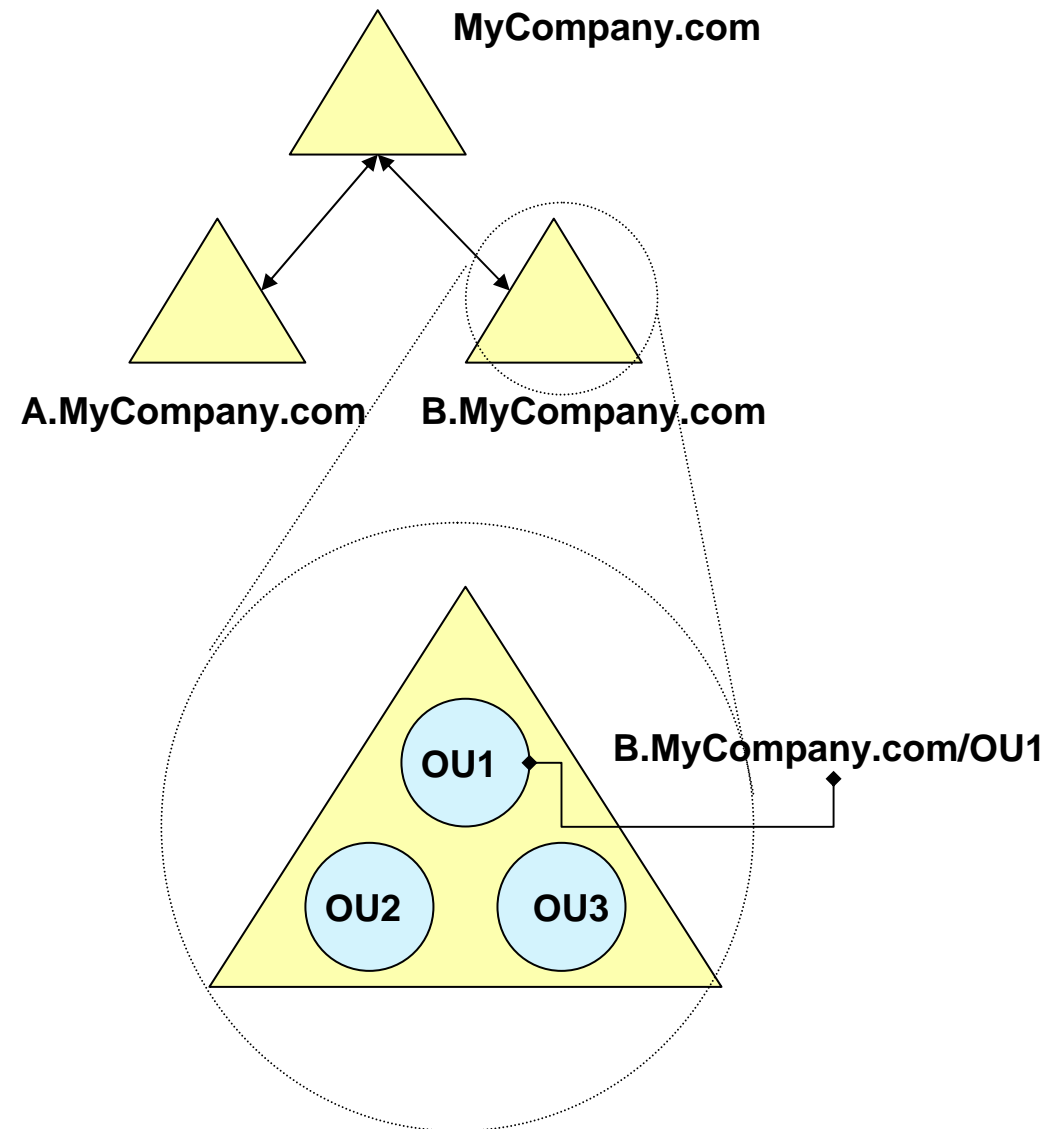
# Deploying iSeries Access for Windows using Active Directory

- Installation packages are created within a GPO.

- An installation package is rolled out to the members of the OU to which the GPO is applied.

- Multiple customizations can be distributed to different OUs by creating separated GPOs, each defining a different set of transforms.

Install package

**GPO_A**

**Applied to**

cwbinstall.msi
+ **Transform_1**

Install package

**GPO_B**

**Applied to**

cwbinstall.msi
+ **Transform_2**

OU1

OU2
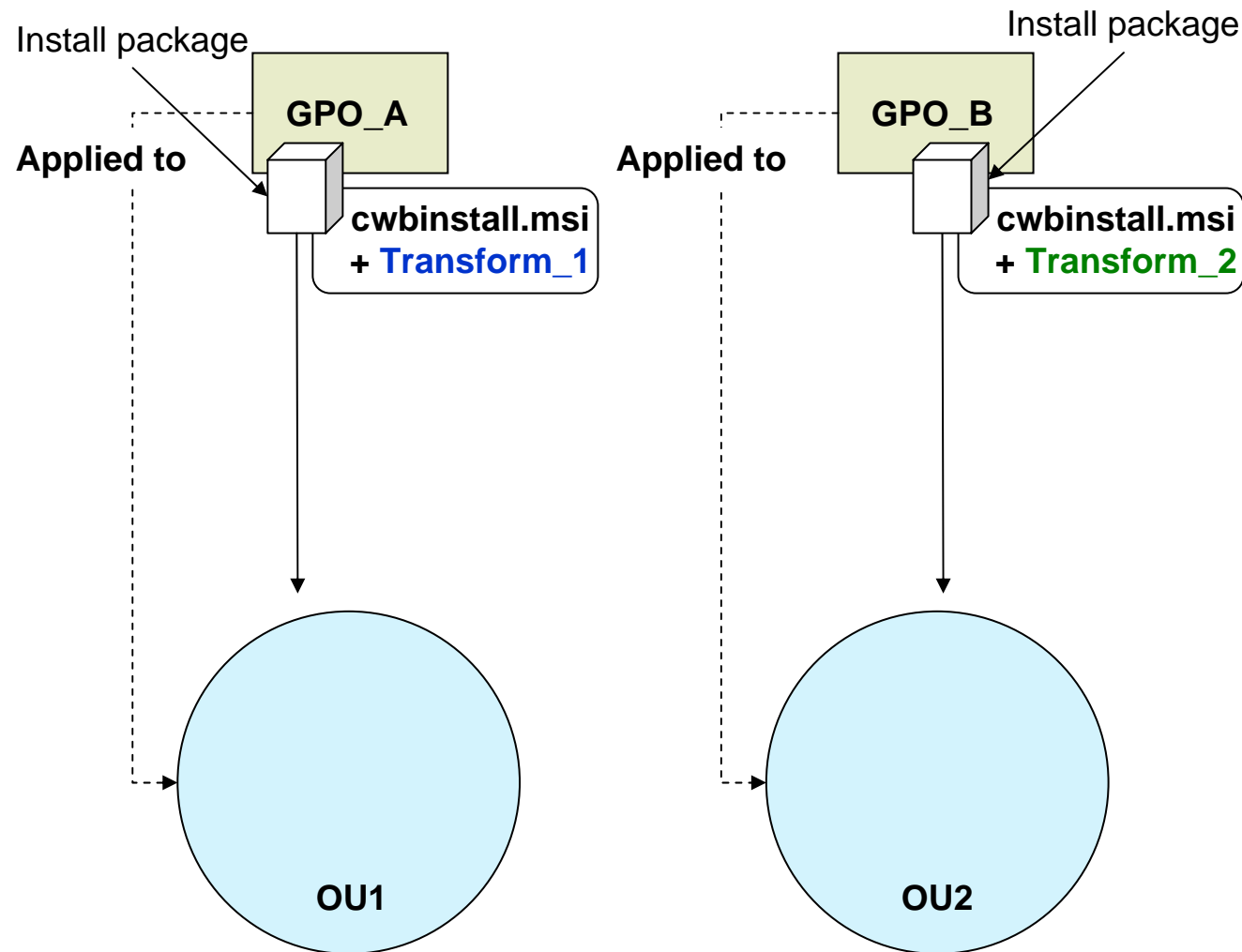
# Deploying iSeries Access for Windows using Active Directory

1. Create a network drive that points to the location of your installation image.

2. Create a Group Policy Object:

   - Start > Programs > Administrative Tools > Active Directory Users and Computers.

   - Right click on the target OU and select Properties.

   - In the Group Policy tab, click the New button to create the GPO and click Edit to bring up the Group Policy dialog.
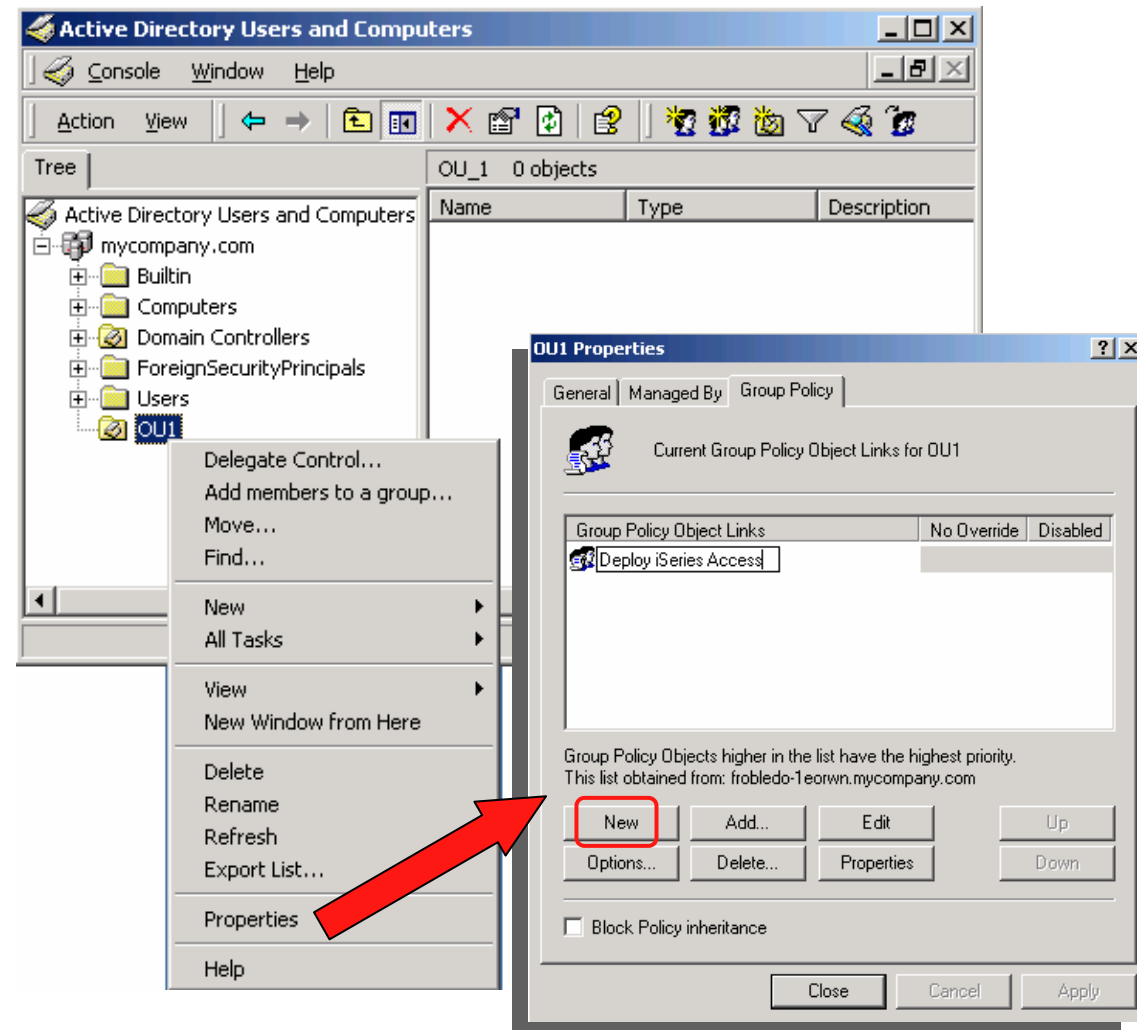
# Deploying iSeries Access for Windows using Active Directory

3. Go to Computer Configuration > Software Settings.

4. Right click on Software Installation and select New > Package.

5. From the Open dialog, browse for cwbinstall.msi.

6. In the Deploy Software dialog, choose "Advanced published or assigned".
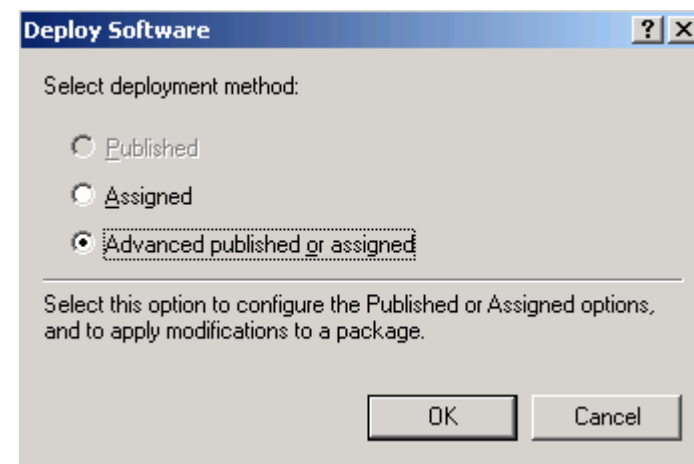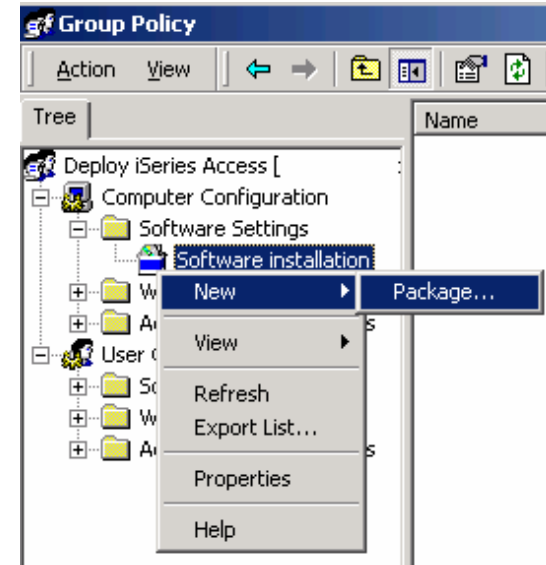
# Deploying iSeries Access for Windows using Active Directory

7. In the Modifications tab, click Add and select the transform(s) to be applied to computers in the current GPO.

8. Click OK to finish.
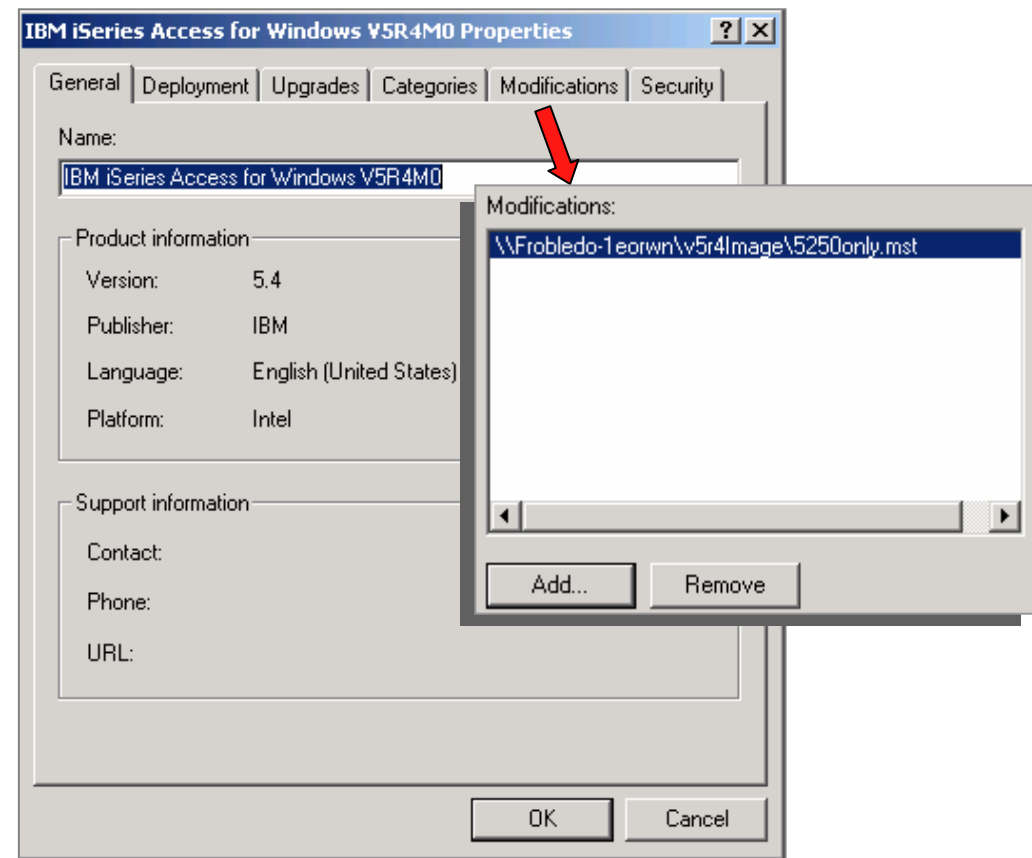


The new package will be listed in the right pane of the GPO.
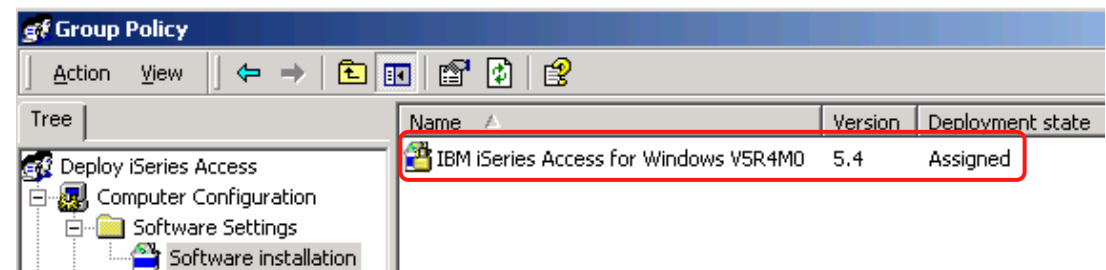
# Deploying iSeries Access for Windows using Active Directory

**Notes:**

- iSeries Access for Windows will be installed on every computer within the OU the next time they are rebooted.

- Product is installed silently at startup time under the System account. No user with administrative permissions is required to log in.

- If V5R2 or V5R3 is found on the target computer, it will be upgraded to v5r4 (note that unsupported features by the Technical Preview will be removed).

- iSeries Access for Windows can only be assigned to computers. Other deployment methods –assigning to users and publishing- are not supported.

# Deploying iSeries Access for Windows using SMS

- **Microsoft Systems Management Server (SMS) is a software to centrally managing client computers and servers.**

- **Some features of SMS are:**
  - **Hardware and software inventory**
  - **Software distribution**
  - **Software metering**
  - **Security**

- **SMS enables scheduled installations, deployment based on software or hardware criteria and monitoring.**

- **Links:**
  - **SMS concepts:**
    **http://www.microsoft.com/technet/prodtechnol/sms/sms2003/cpdg/default.mspx?mfr=true**

  - **Distributing Windows Installer packages**
    **http://www.microsoft.com/technet/sms/20/deplymsi.mspx**

*i want an i.*

# Deploying iSeries Access for Windows using SMS

- SMS is organized in sites. A site defines the management boundaries of SMS.

- A site contains computers, users, groups and other resources.

- SMS can define a hierarchy of sites. Generally, a site corresponds to a physical location in the organization.

- Computers and users in a site can be further organized into collections.

- Each collection has a set of rules that determines membership criteria.

# Deploying iSeries Access for Windows using SMS

- Software is distributed to clients in one or more targeted collections.

- A software deployment is defined in a package. A package contains information about the source installation image and a program that specifies which command(s) are to be executed in client computers.

- Once a package is created and copied to the distribution points, the package is advertised to target collections.

- The software package will be rolled out to all clients within the collection.

- You can distribute different customization types by creating separate packages, each with a different set of transforms applied, and rolling out each to a separate collection.

# Deploying iSeries Access for Windows using SMS

**Create a SMS package:**

1. Copy your iSeries Access for Windows installation image to a network share, as well as any transforms being applied.

2. Open the SMS Administrator Console and create a new package.

3. In the General tab enter the description of the software package.

4. In the Data Source tab select 'This Package Contains Source Files'.

5. Click the Set button and browse for the location of your source image.

*i want an i.*

# Deploying iSeries Access for Windows using SMS

**Once the package is created, specify the following settings:**

1. Optionally, define access accounts permissions to the installation source.

2. Create the program specifying the command to be executed at the target computers.

3. Set the distribution points at which the installation source will be available.

4. Advertise the package.

# Deploying iSeries Access for Windows using SMS

**To create a program:**

1. Create a new program.

2. Define **setup.exe** as the target command line.

3. Define several run-time settings, such as how the program will be displayed, whether a user must be logged on for the program to run, and what action to do after the program ends.

4. In the Environment tab, check the 'Run with administrative rights' option.

5. In the Advanced tab, choose the 'Run once for the computer' option

6. In the Windows Installer tab, import cwbinstall.msi data.

# Deploying iSeries Access for Windows using SMS

**To set the distribution points:**

1. Start the **New Distribution Points Wizard**.

2. Select one or more **distribution points** for the package.

3. Optionally, select **distribution groups**.

# Deploying iSeries Access for Windows using SMS

**To advertise the package:**

1. Create a new **advertisement**.

2. Select the **package and program** just created.

3. Select the target **collections** for the advertisement.

4. Set the **start date and time** for the advertisement, and optionally set the **schedule for the program** to run at target computers.

When the advertisement is created, the package is rolled out to members of the target collections at the specified schedule.

# Installing from a network share

- You can share an installation image residing on the network, either at your NetServer or a Windows share.

- Your desktop users can map a drive to the network share.

- Users then will run setup.exe from the network drive to start iSeries Access for Windows installation.

- If one or more transforms must be applied:
    - Make sure that the transform file(s) are located in the source directory.
    - Instruct your users to type setup.exe /v/"TRANSFORMS=transform1.mst, transform2.mst…" or
    - Modify setup.ini to include any command options in the CmdLine key.

Command
Line Options

# Technical Preview command line options

**setup.exe command line options:**

- **/s** - setup.exe initialization dialogs are suppressed. This doesn't affect the internal UI level.
- **/v** - passes arguments in to cwbinstall.msi. If the arguments being passed contain spaces, then they must be enclosed in quotation marks.

**cwbinstall.msi command line arguments (passed in through the /v option):**

- **/q[f|b|n]** - sets the installation UI level.
- **/l[arguments] log_name.ext** - creates a log file.
- **TRANSFORMS=transform1.mst,transform2.mst...** - applies the list of transforms to the MSI.
- **ADDLOCAL=feat1,feat2,...** - sets the specified features to be installed.
- **REMOVE=feat1,feat2,...** - removes the specified features.
- **CWBINSTALLTYPE=[Custom|Complete|PC5250User]** - sets the install type:
  - Custom: installs the default features –and in full UI, allows users to change the feature selections.
  - Complete: installs all features
  - PC5250: installs required programs and PC5250 emulation support.

# Technical Preview command line options

**Examples:**

- **setup.exe /s/v"/qn"** - Initiates a completely silent installation (suppreses setup.exe initialization dialogs and wizard dialogs).

- **setup.exe /v"ADDLOCAL=req,emuc,mp /l*v log.txt"** - Initiates a full UI Installation; preselects "req" (Required Programs), "emuc" (PC5250 emulator) and "mp" (.NET managed provider) features; creates a verbose log called log.txt; user is able to change the features selections.

- **setup.exe /v"CWBINSTALLTYPE=Complete /qb"** - Install all features; show only progress bar; user won't be able to change the features selections.
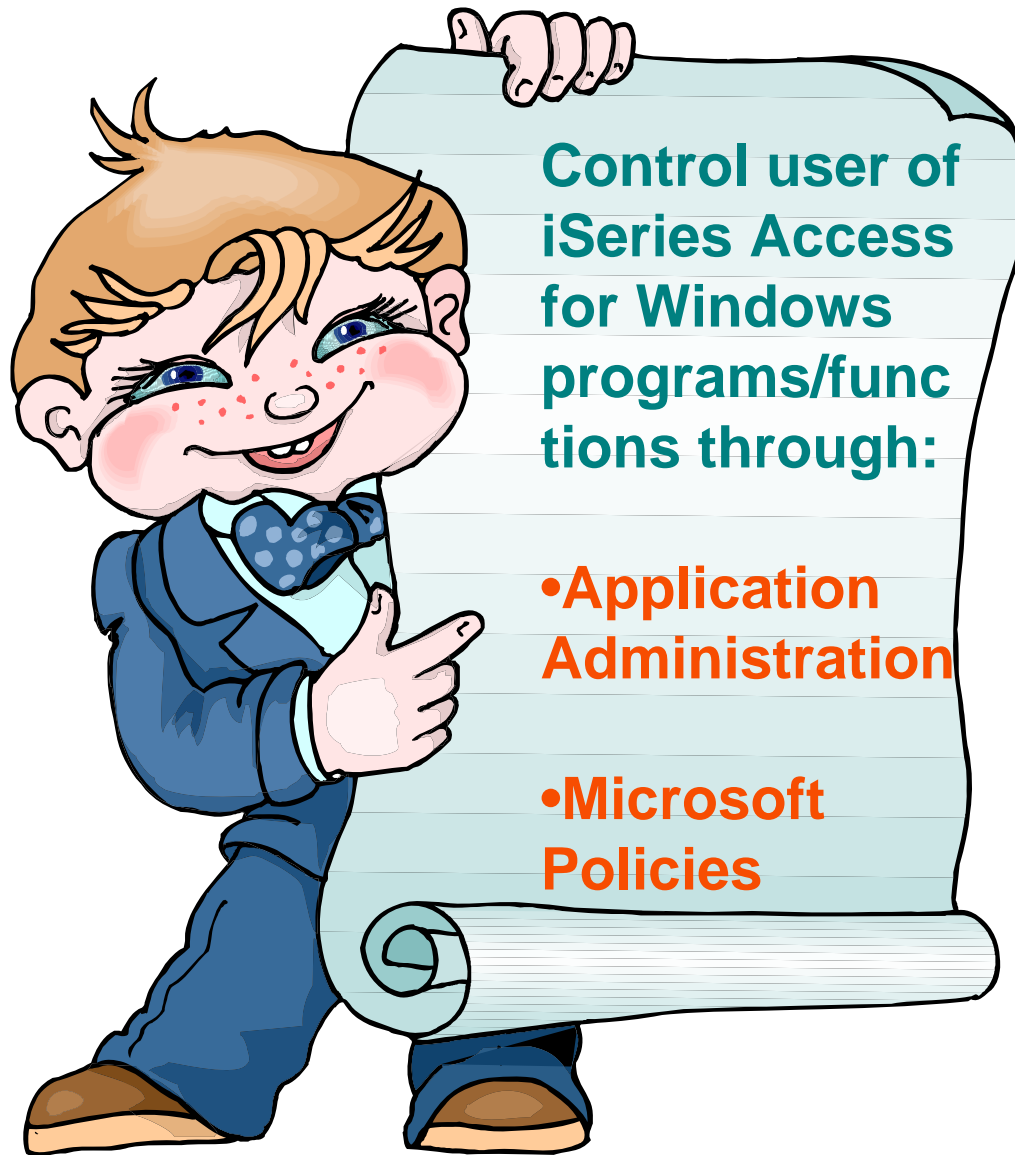
Control user of iSeries Access for Windows programs/functions through:

- Application Administration

- Microsoft Policies

# Control Access to iSeries Access for Windows

## Policy Administration

- Based on Microsoft System Policy support

- PC user has one set of policies for connectivity to all iSeries servers

- Can set policies on a specific PC as well as users and groups

- Can be used to 'configure' as well as restrict functions

- Over 150 policies available!

- Uses Microsoft System Policy Editor and Client Access Policy templates

**The Microsoft Way...**

- Preferred method for those familiar or already using Microsoft System Policies

## Applications Administration

- Based on i5/OS user profiles -- thus supports users and groups

- User profile can roam with user (from any PC)

- A user can have different profiles for different iSeries

- Can restrict usage of Operations Navigator functions, Client Access functions, APIs available for use by other plug-ins

- Easy-to-use Operations Navigator GUI

**The iSeries Way...**

- Preferred method for those who want to control access via i5/OS user profiles

# Using Policies: Get the Microsoft System Policy Editor

**Go to Microsoft web page and download and install "Office XP Resource Kit"**

– http://www.microsoft.com/ windows/default.mspx

– Search on 'download system policy editor'
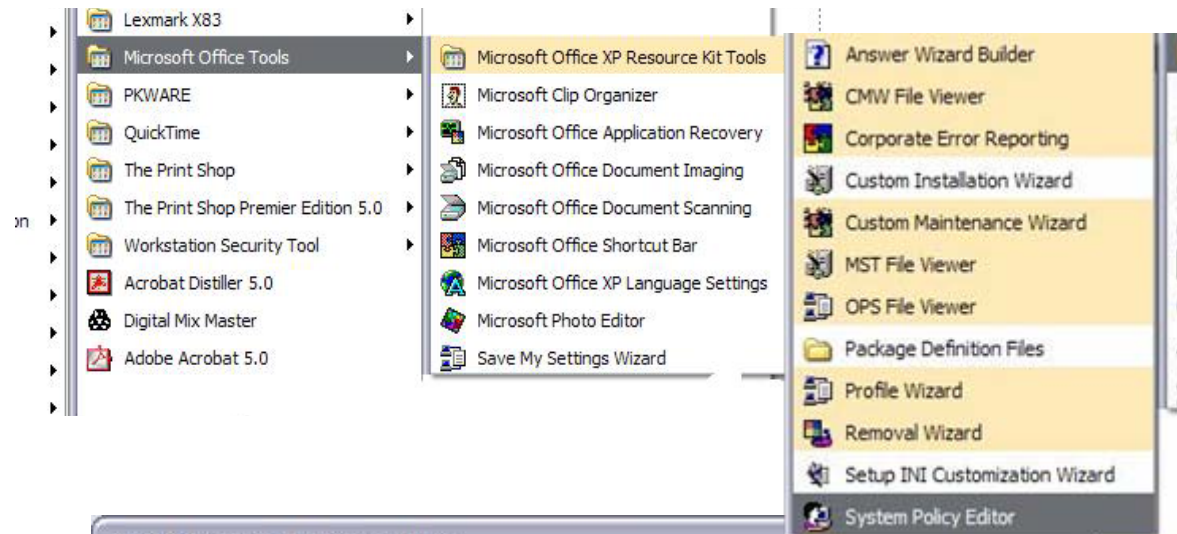
**The Microsoft System Policy Editor is in the Office XP Resource Kit**

– To find it click:

- Start → Programs →
- Microsoft Office Tools →
- Microsoft Office XP Resource Kit Tools → System Policy Editor
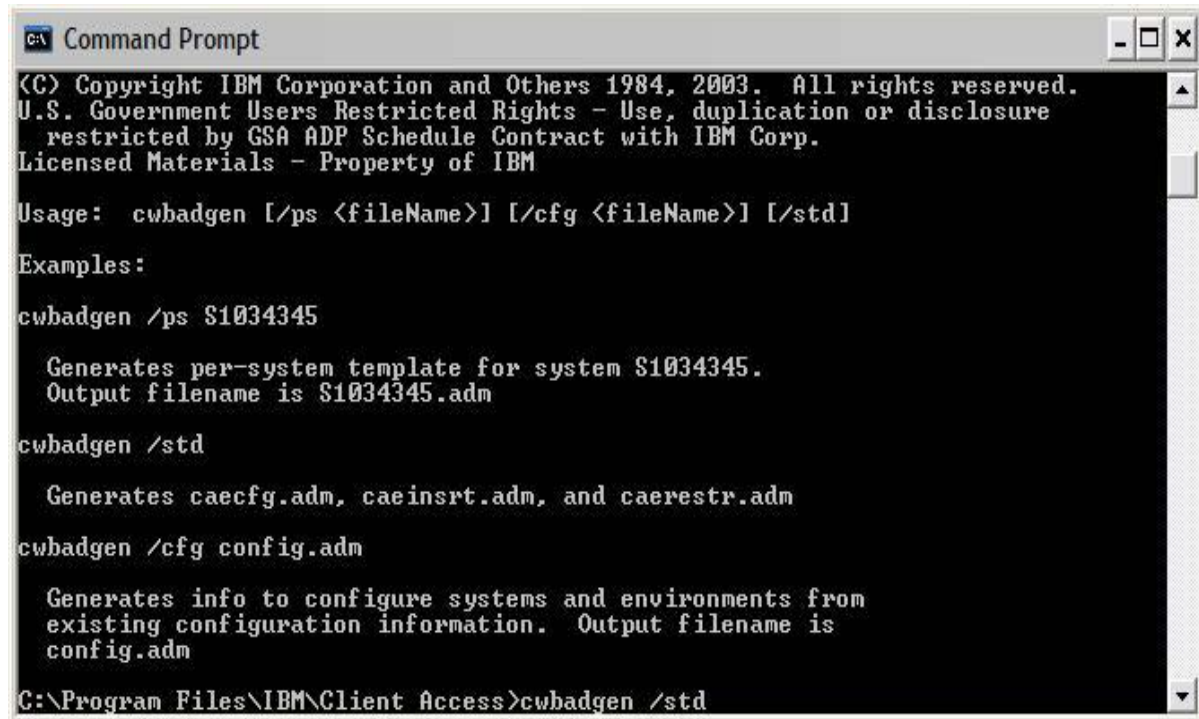
Note: Get the Policy Editor which matches your Windows Operating System

*i want an i.*

# Create iSeries Access for Windows Templates

**Create iSeries Access for Windows Policy Templates that can be used with the Microsoft System Policy Editor**

- **Run iSeries Access for Windows CWBADGEN utility to create the templates**

- **CWBADGEN is in Program Files/IBM/Client Access path**

- **On a DOS prompt, run CWBADGEN /std to create the templates**



```
Command Prompt

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U.S. Government Users Restricted Rights - Use, duplication or disclosure
  restricted by GSA ADP Schedule Contract with IBM Corp.
Licensed Materials - Property of IBM

Usage:  cwbadgen [/ps <fileName>] [/cfg <fileName>] [/std]

Examples:

cwbadgen /ps S1034345

   Generates per-system template for system S1034345.
   Output filename is S1034345.adm

cwbadgen /std

   Generates caecfg.adm, caeinsrt.adm, and caerestr.adm

cwbadgen /cfg config.adm

   Generates info to configure systems and environments from
   existing configuration information.  Output filename is
   config.adm

C:\Program Files\IBM\Client Access>cwbadgen /std
```

# Create Policies (example PC5250)

**Start Microsoft System Policy Editor and from toolbar select:**

1. Options → Policy Editor → Add

    – Go to the Program Files/IBM/Client Access directory and select the **caerestr.adm** file that was created by CWBADGEN utility and **add it** to the Microsoft System Policy Editor list

2. File → Open Registry → Local User

    • Double click on the **IBM iSeries Access Runtime Restrictions** template

    • Select PC5250 emulation and **set the restrictions** you wish to impose, then click OK.

**Default User Properties**

Policies

- ⊞ OLE DB Provider
- ⊞ .NET Data Provider
- ⊟ PC5250 Emulation
    - Prevent configuration of display sessions
    - Prevent configuration of printer sessions
    - Prevent usage of PC5250 Emulator
    - Prevent changing of .WS profiles
    - Prevent menu configuration
    - Prevent toolbar configuration
    - Prevent multi-session configuration
    - Prevent keyboard configuration
    - Prevent mouse configuration

OK    Cancel

# PC5250 Restriction Options

- Prevent usage of PC55250 emulator
- Prevent configuration of display sessions
- Prevent configuration of printer sessions
- Maximum number of PC5250 sessions
- Prevent changing of .WS profiles
- Prevent menu configuration
- Prevent toolbar configuration
- Prevent multi-session configuration
- Prevent keyboard configuration
- Prevent mouse configuration
- Prevent JavaTM applet execution
- Prevent access to macros
- Prevent profile imports in Emulator Session Manager
- Prevent profile deletion in Emulator Session Manager
- Prevent directory changes in Emulator Session Manager

# Centrally Manage 5250 Use

## Let's say you would like to control:

- **What the users can do with PC5250**
  - Number of sessions they can start, systems they can connect to, change keyboard mappings, etc

- **Manage all of this on your server so you could change something in a single location and make it available to all users**
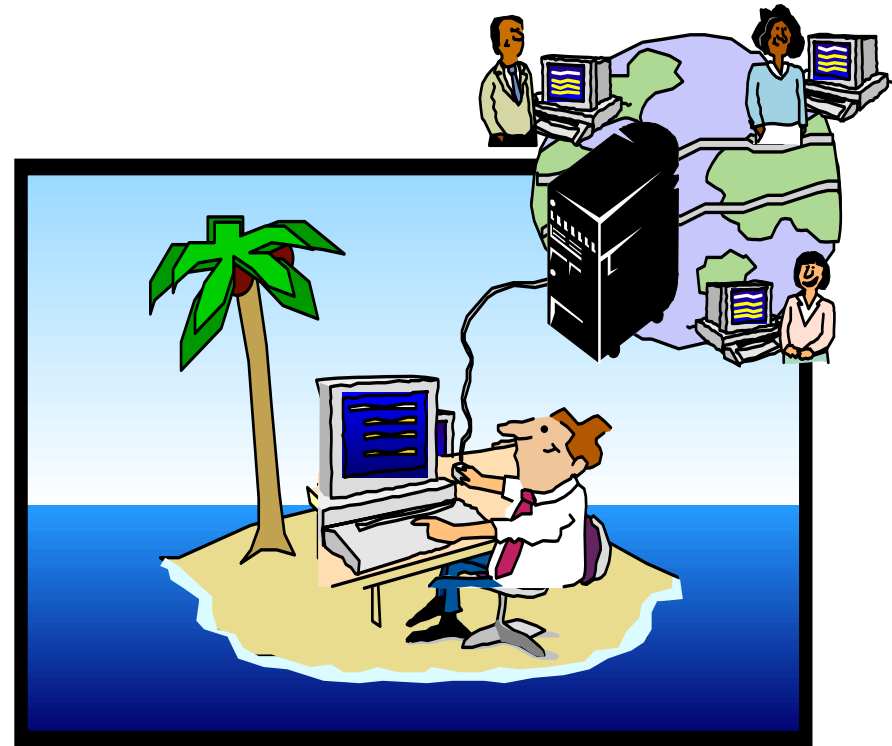
# PC5250 Enhancement – V5R1

## Can have multiple 5250 sessions with just one .WS profile

- This gives you ability to:
  - Set up and manage the iSeries servers your users connect to
  - Make all 5250 workstation sessions look identical
    - Screen settings
    - Keyboard
    - ….
  - When you make a change to these profiles, it will automatically be made for all users

Shared Diectory

.WS profile stored in here
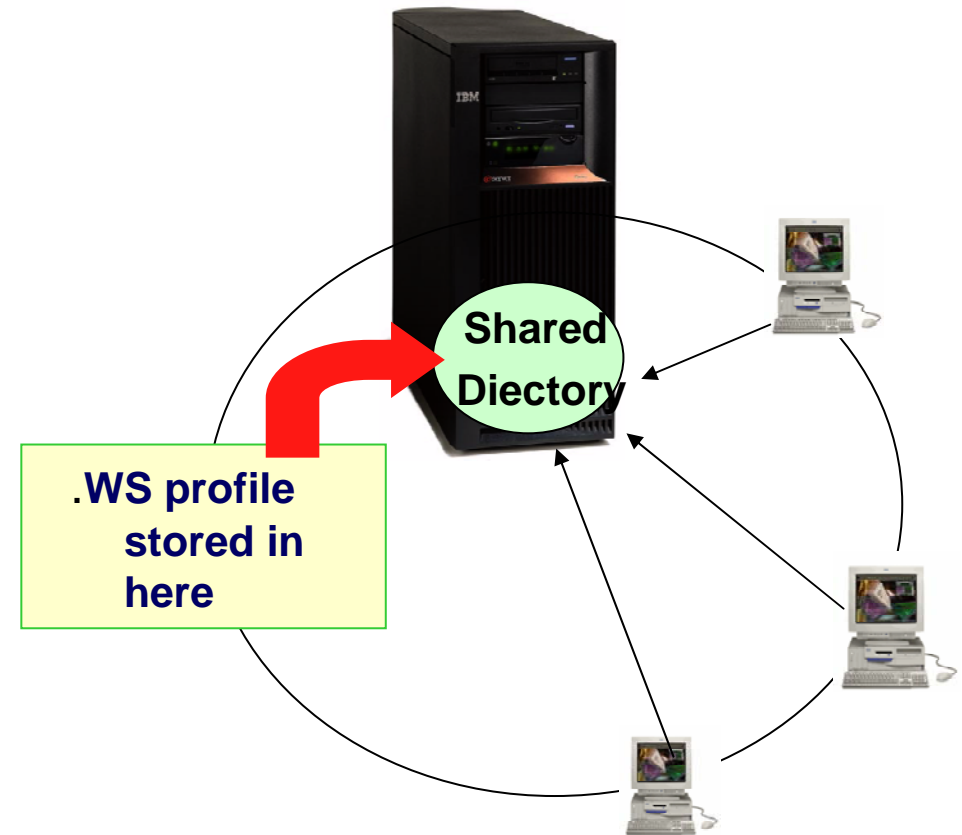
See Appendix A for directions on how to do this

# Steps to use the shared .WS profile concept

1. Set up a shared directory and give all users 'read only' access to it

2. Use Session Manager to configure the connections/sessions for your users and save these Profiles in your shared directory

3. Install iSeries Access for Windows and PC5250 on each user's PC

4. Go into iSeries Access for Windows Properties and set each users PC5250 default path to point to the shared directory you created.

# Store Profiles on Server

**Go into iSeries Access for Windows, select 'Emulator', then select to** *Start or Configure Session*

- **This is called the Session Manager. It enables you to:**
  - **Start a new session**
  - **Configure a new batch session**
  - **Start an existing session**

- **Select 'New Session'**
  - **Now configure the sessions/connections that you wish to provide to your users.**
  - **Save them in your shared directory**



*i want an i.*
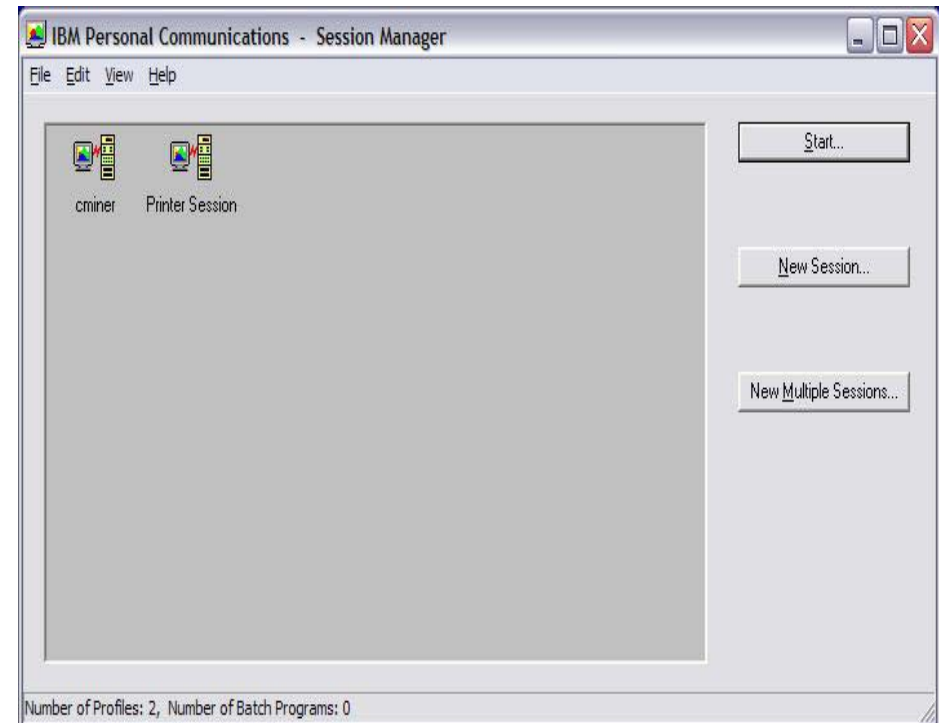
# At the User's PC

## Set PC5250 to look for 5250 emulator files on shared directory

**Bring up iSeries Access for Windows Properties and select the PC5250 tab**

- **Copy any files stored in the \Private folder to your shared directory**

- **Change the default from the iSeries Access installation directory to User specified path**

- **Then put in server address that all your users have read-only access to**

This needs to be done for every iSeries Access for Windows user. If more than one user on a single PC, use CWBCFG command from a DOS prompt to change path for all users.
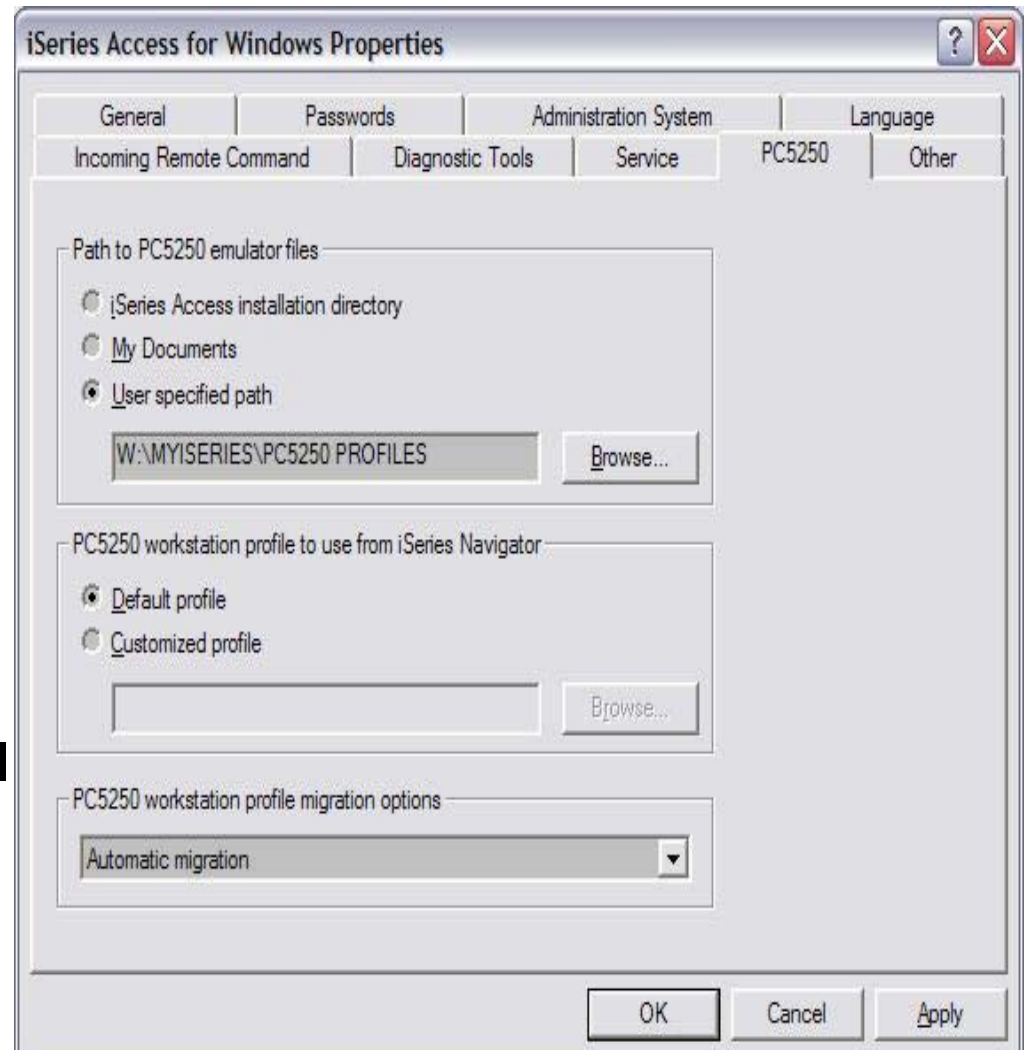
# At the User's PC

**Go back into the Session Manager**

- – **Start → Programs → iSeries Access for Windows, select 'Emulator', then select to *Start or Configure Session***

- – **Put the sessions you want the user to have access to on the user's desktop**
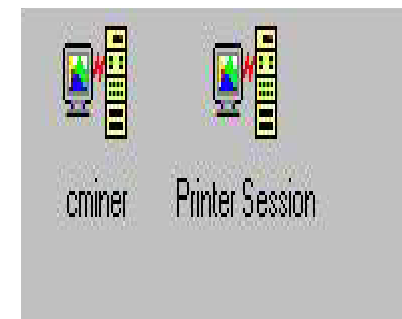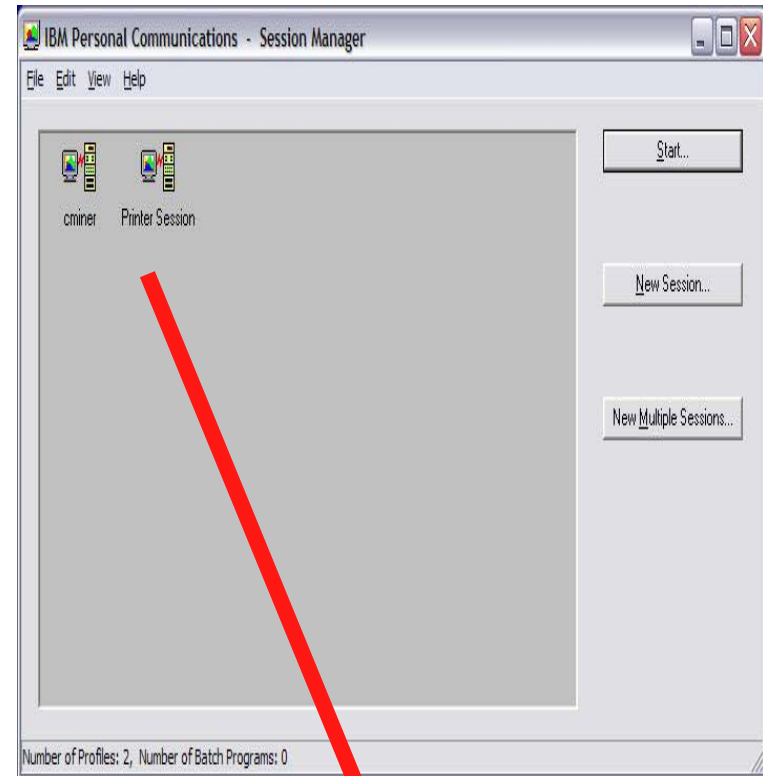
# Menu-Bar Customization Utility

- **Use Menu Bar Customization Utility to eliminate the items you don't want users to be able to perform.**

  - **For example, disable users' ability to create "new" connections, remove Properties…**

- **When you are finished, store this also in your shared directory**
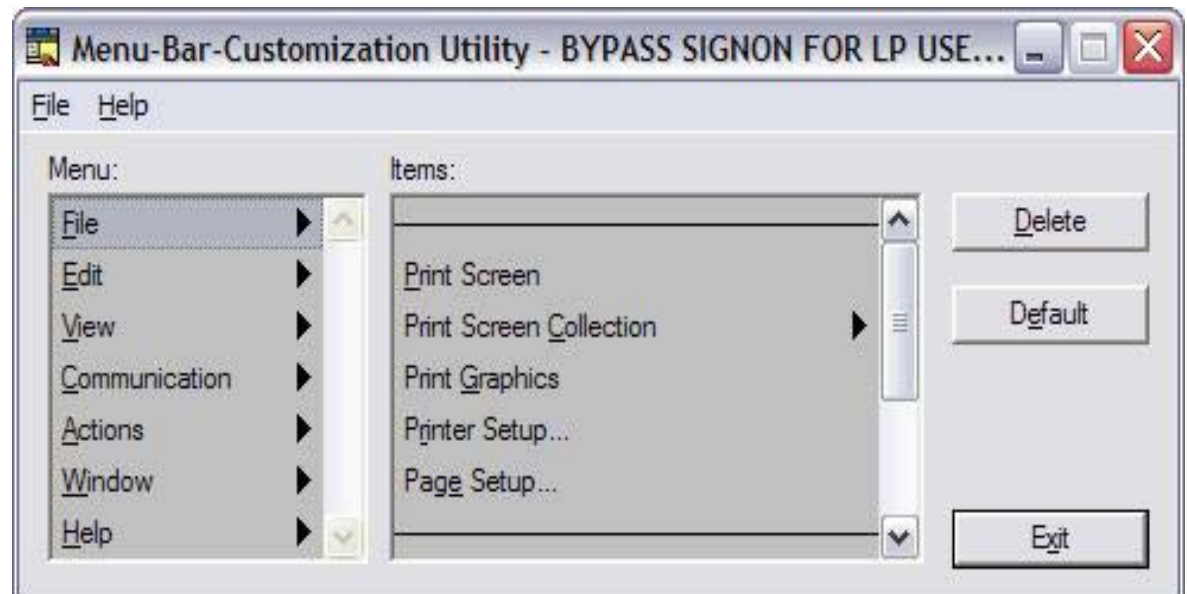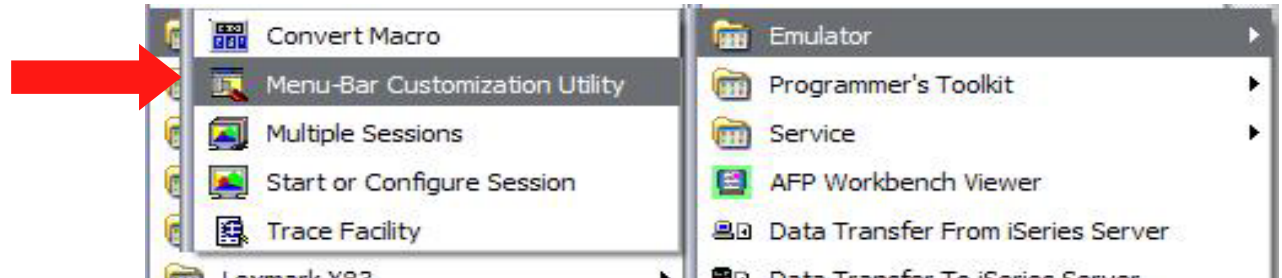
# Store Policies on a Shared Directory

## Still in the System Policy Editor

- **Select File → Save As**

- **Save the Policy Files you just created on a shared directory that each PC user has read only access to**

  – **The file getting saved has a .POL file extension.**
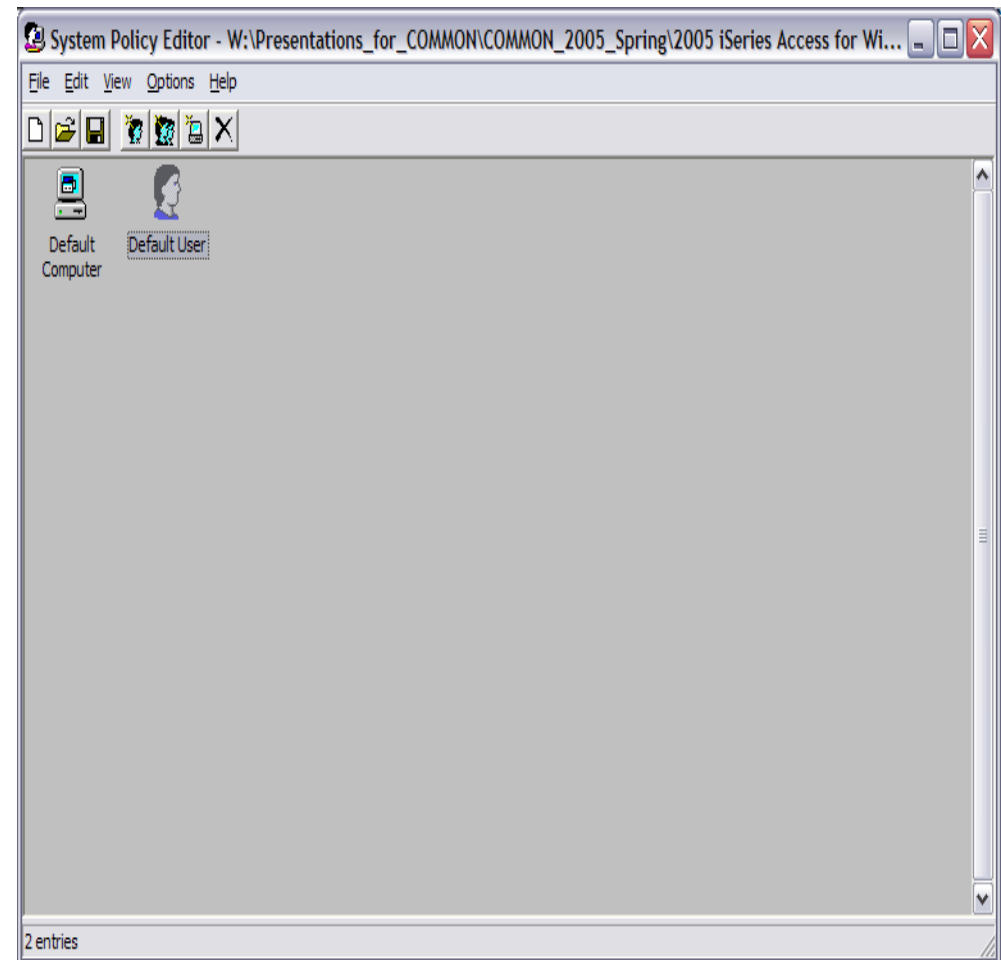
# Get address of .POL file on every PC desktop

**When Windows is started, it needs to load the policy information to put into effect before completing its boot-up.**

**Provide Windows with the location where the policy file is stored.**

- Use the iSeries Access for Windows **CWBPOLUZ.exe** command to to tell Windows where the policy file is stored.
  - **Download this command from** **http://www.ibm.com/eserver/iseries/ access/cadownld.htm**

**How to get CWBPOLUZ.exe to run on every PC**

- **Manually run this command on each PC when you are setting it up**
  - This could be directly at the PC
  - Or you could Log onto the PC remotely
- **Use iSeries Access for Windows Incoming Remote Command to get this command run on remote PCs**
- **REXEC, etc**

# Application Administration Overview

- **Manage access to functions on a "per iSeries user" basis**
  - iSeries Navigator
  - iSeries Access for Windows functions
  - Other client and host applications
  - Ability to even restrict users with All Object privilege

- **Easy to use interface**

- **\*SECADM authority required on iSeries to manage Application Administration settings**
  - \*ALLOBJ required for some Advanced Settings





*i want an i.*

# Application Administration



- **_Can access from Task Bar also_**

# Application Administration - By User or Group

**Individual users and groups can be given more or less access capabilities**



- **Use user or group properties**
- **Capabilities button**
- **Applications tab**

# Application Administration - by system

- **Host Applications**
- **iSeries Navigator (including Management Central)**

**Disk management is not available by default**

# Application Administration – iSeries Access

All Application Administration information is stored on the iSeries server, and roams with users when they use iSeries Access for Windows on a different PC

Can control use of the following iSeries Access for Windows functions:

- **PC5250**
- **Data Transfer**
- **ODBC**
- **OLE DB**
- **Remote Program Calls**
- **iSeries Access for Windows/ iSeries Navigator commands**
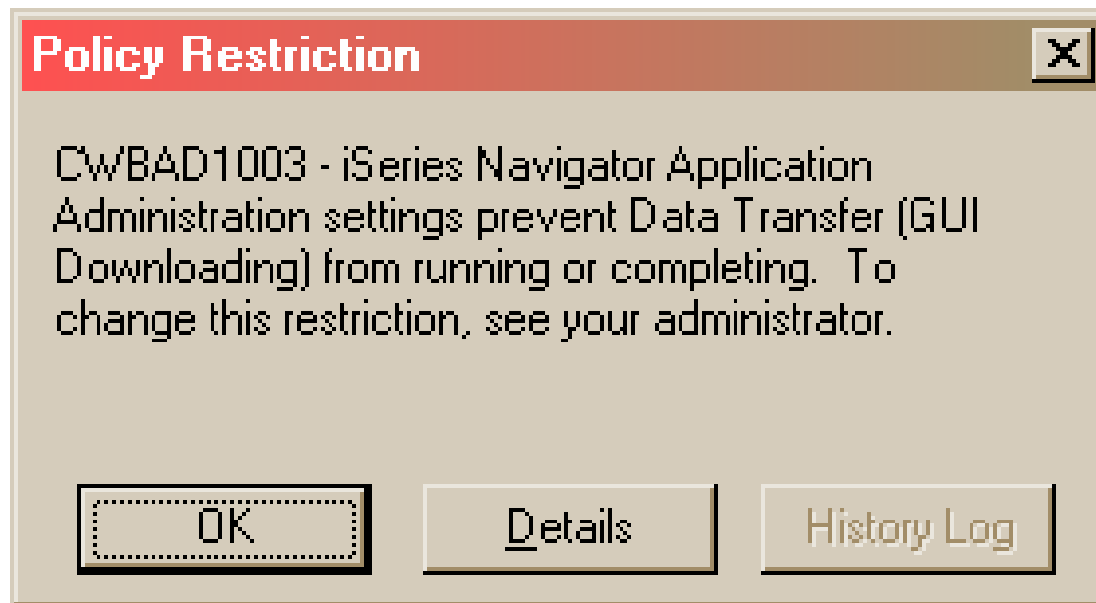
**iSeries Access for Windows**

Application Administration - Rchas1dd

Select the functions or applications available to users.

| iSeries Navigator | Client Applications | Host Applications |

| Function | Default Access | All Object Access | Customized Access |
|---|---|---|---|
| iSeries Access for Windows | ☑ | ☑ | |
| 5250 Display and Printer Emulator | ☑ | ☑ | |
| Data Transfer | ☑ | ☑ | |
| Download from server | ☑ | ☑ | |
| GUI Downloads | ☑ | ☑ | |
| Use of RTOPCB | ☑ | ☑ | |
| Autostart Downloads | ☑ | ☑ | |
| Excel Add-in Downloads | ☑ | ☑ | |
| ActiveX Automation Downloads | ☑ | ☑ | |
| Upload to server | ☑ | ☑ | |
| ODBC Support | ☑ | ☑ | |
| OLE DB Provider | ☑ | ☑ | |
| Remote Command - Command Line | ☑ | ☑ | |

# Type of error message end user might receive

**Policy Restriction**

CWBAD1003 - iSeries Navigator Application Administration settings prevent Data Transfer (GUI Downloading) from running or completing.  To change this restriction, see your administrator.

[ OK ]   [ Details ]   [ History Log ]

# Application Administration
# for iSeries Access for Windows

**Central Settings**
New in V5R2

**Applies to iSeries Access for Windows functions only**

**Central Settings**

#1

**Administration System**

New in V5R2

**Local Settings**

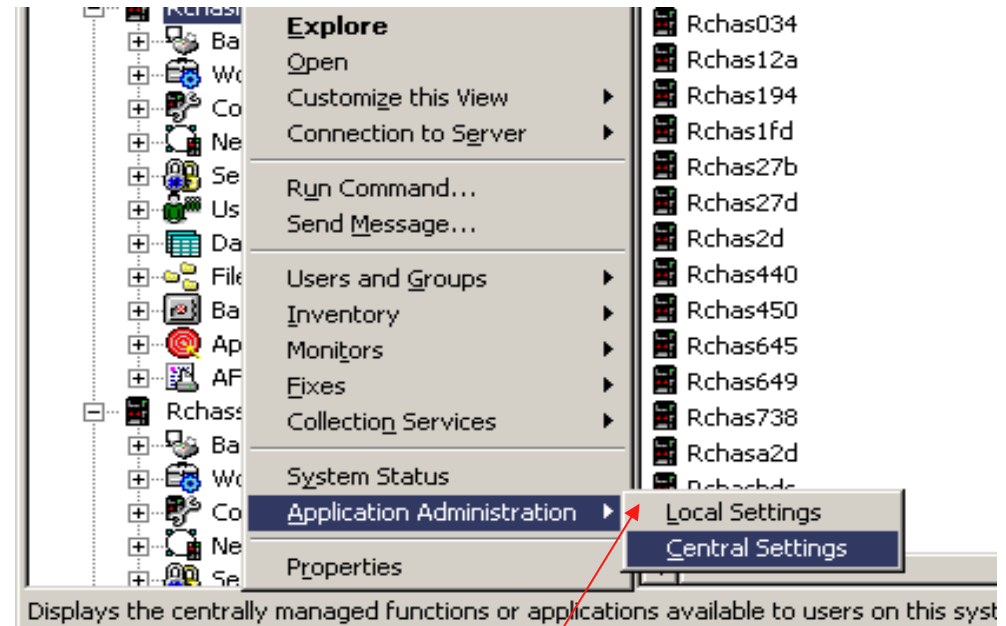**Local Settings**

#2

#3
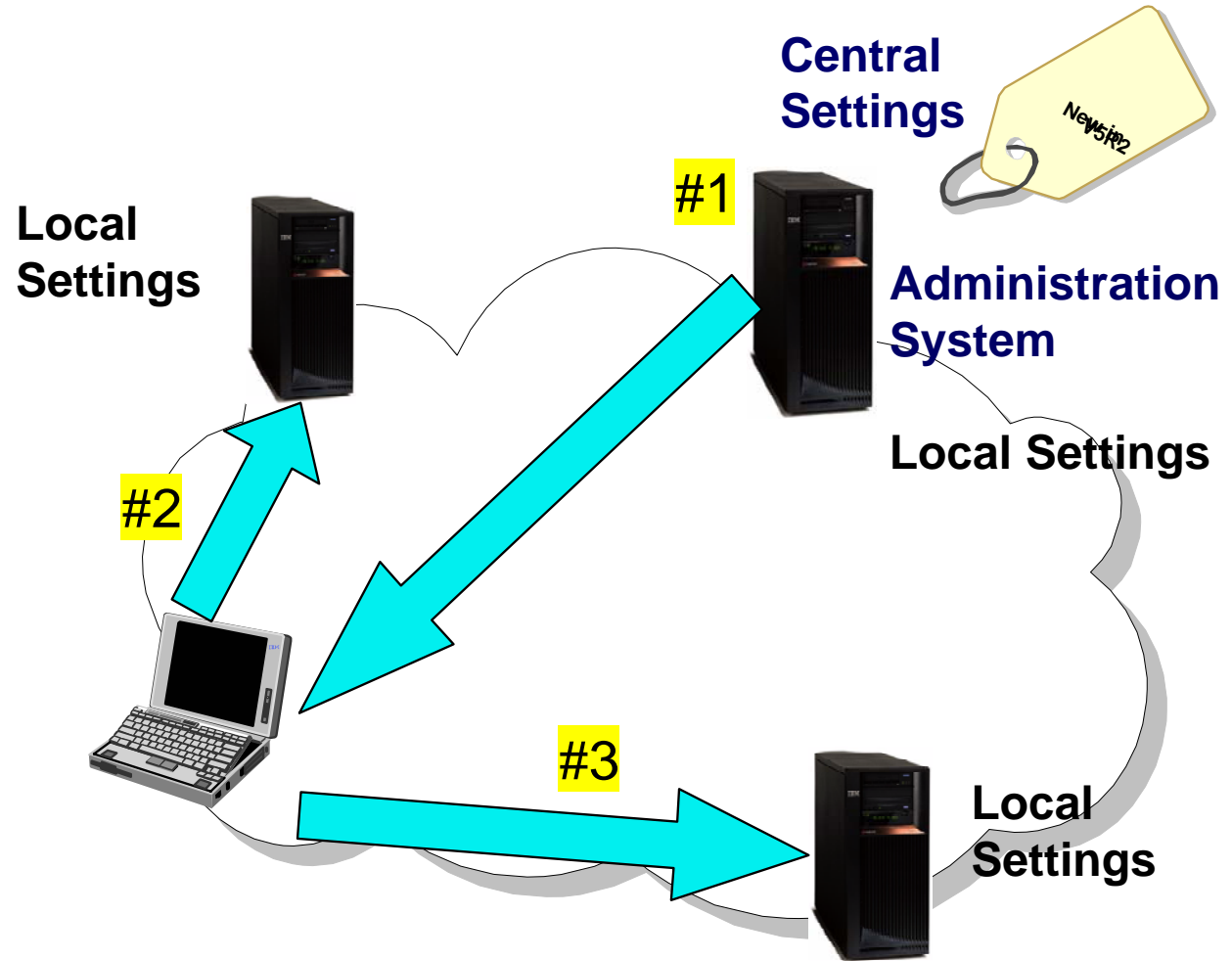
**Local Settings**

# Application Administration - Local Settings

## Local Settings

- Can reside on any iSeries
- Were the only type of administrative settings supported by Application Administration prior to V5R2.

They are now called Local

Settings because:

- – Each iSeries maintains its own set of Application Administration settings.

- – When an iSeries Access for Windows client accesses multiple iSeries servers, it will use whatever Local Settings were defined on each server it connects to...

# Application Administration - Central Settings

**Central Settings:**

- **Affect iSeries Access for Windows properties that apply to all iSeries servers that the client may access.**
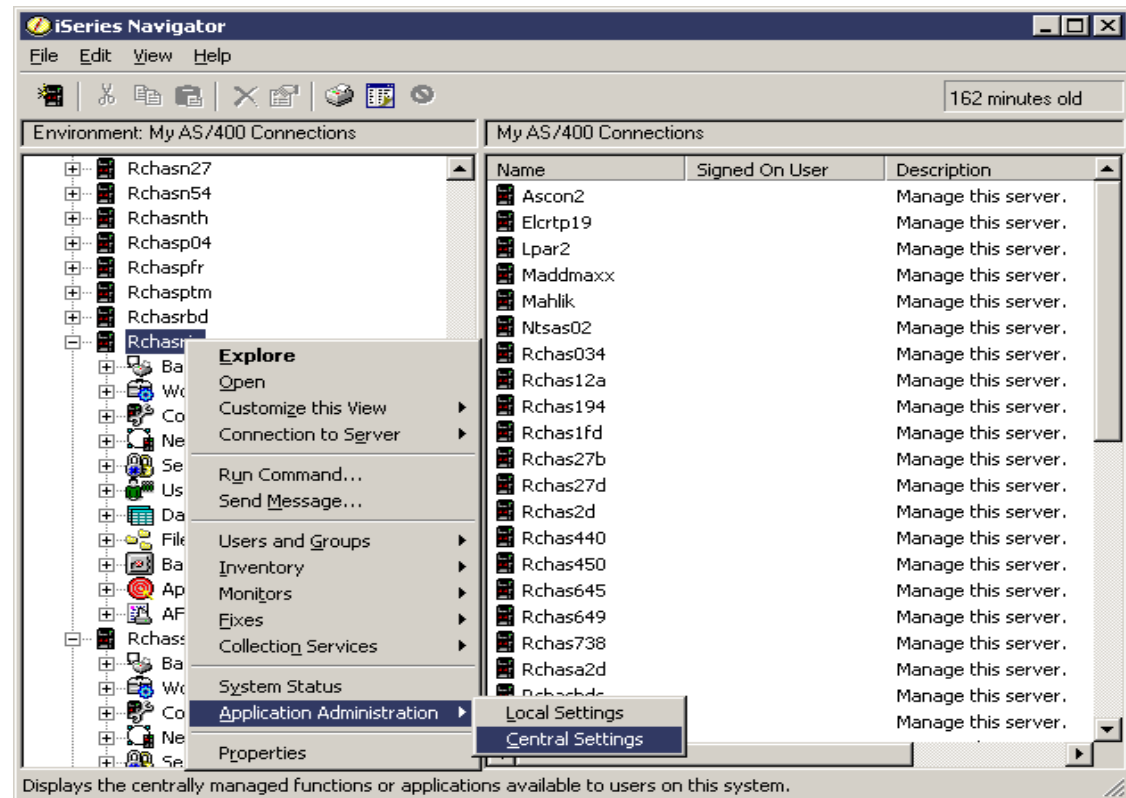


**Central settings:**

- **Can only be used on OS/400 and iSeries Access for Windows V5R2 or later**
- **One iSeries must be configured as an "Administration System".**
- **iSeries Access for Windows clients will retrieve central settings from the "Administration System"**

*i want an i.*

# Example – Central Settings

**Will apply to all systems a user connects to in this network**

# Central Settings - Advanced

**Central Settings support Advanced Settings**

**This allows an administrator to customize many of the properties used by iSeries Access for Windows, such as:**

- **Defining a set of environments to be used by the client**

- **Customize many of the connection, service, language, and password used by the clients**
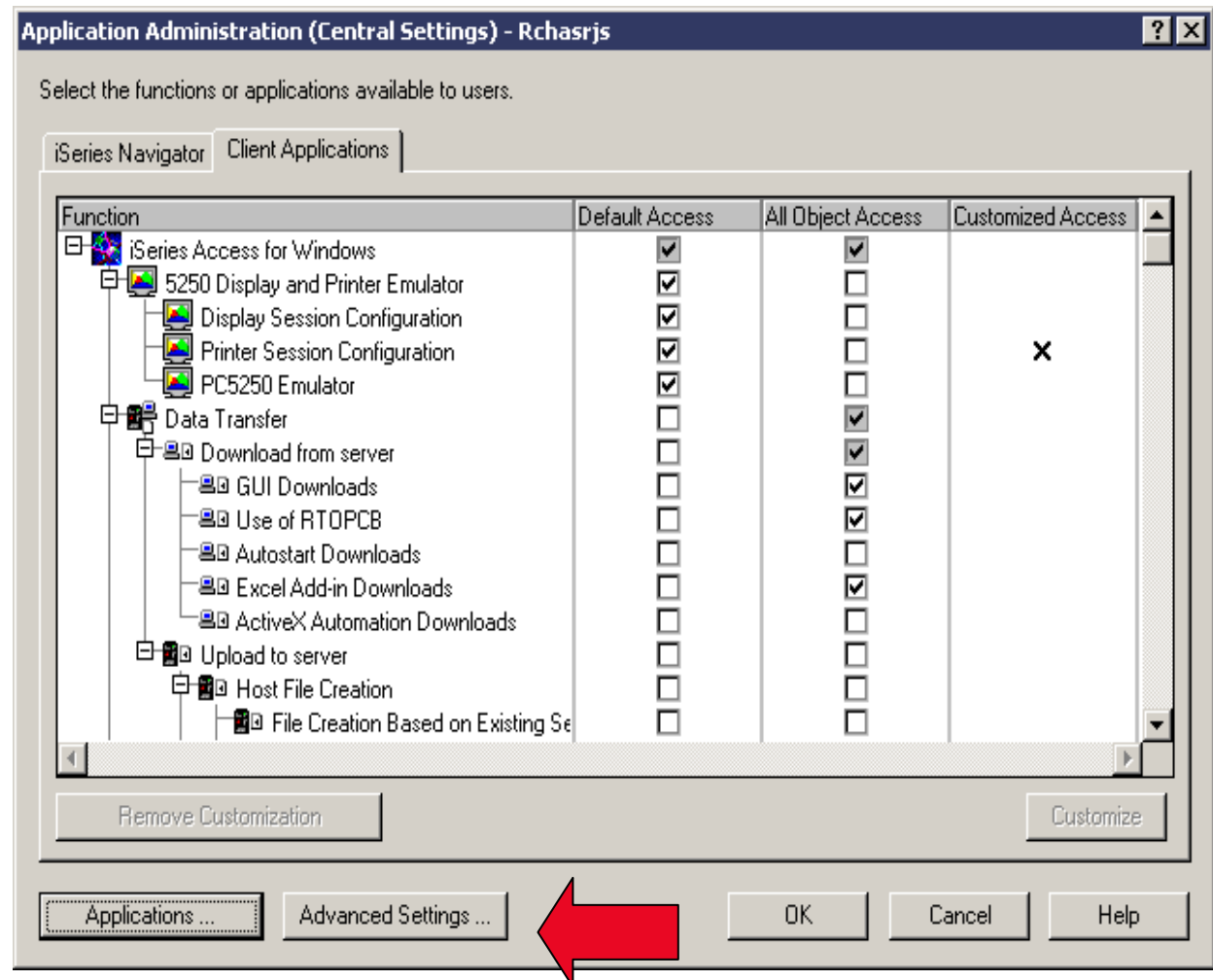
# Example of an Advanced Setting

## Connections:  Signon information; Performance
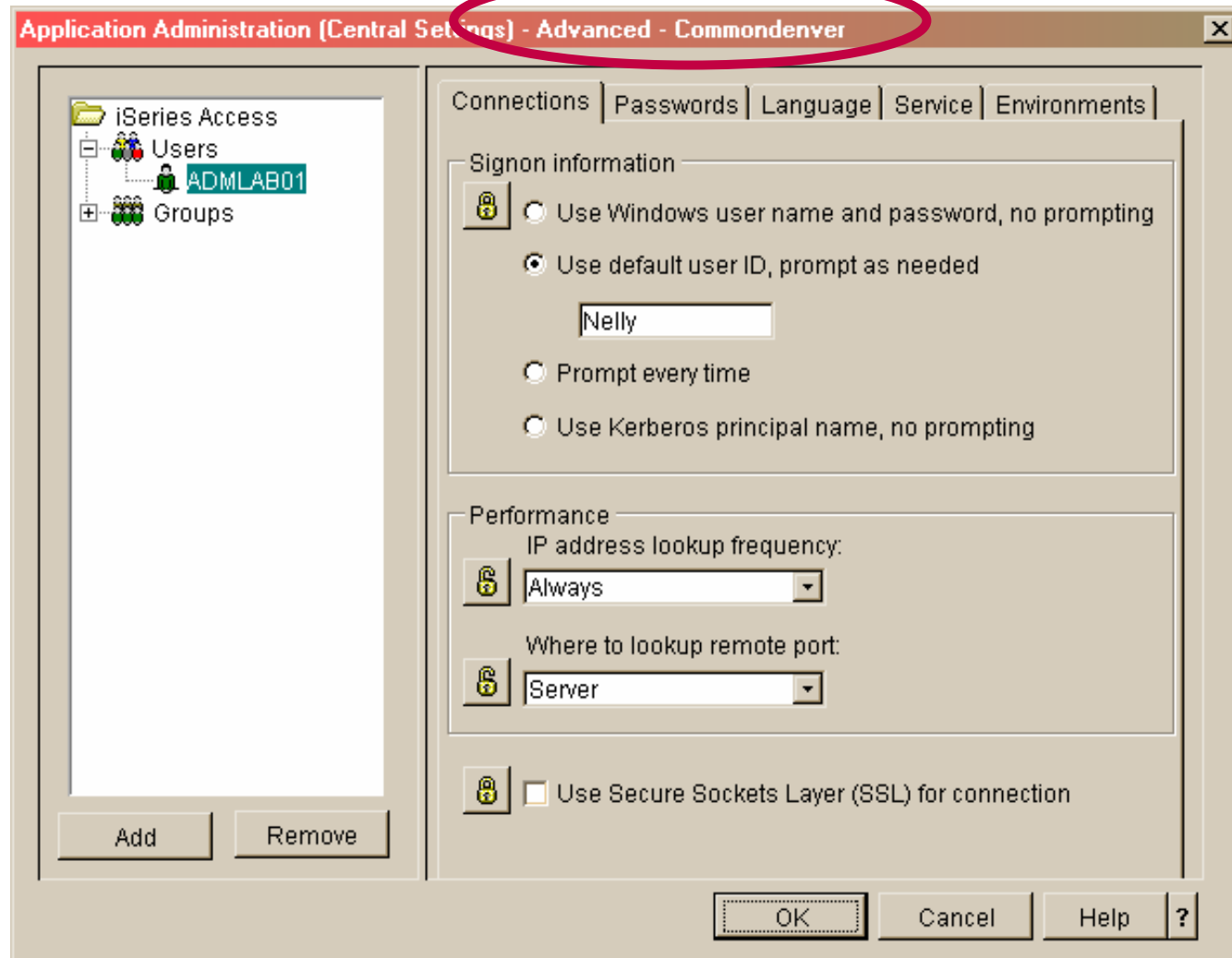
# Example of an Advanced Settings

**Prohibit users from defining additional environments**

*i want an i.*
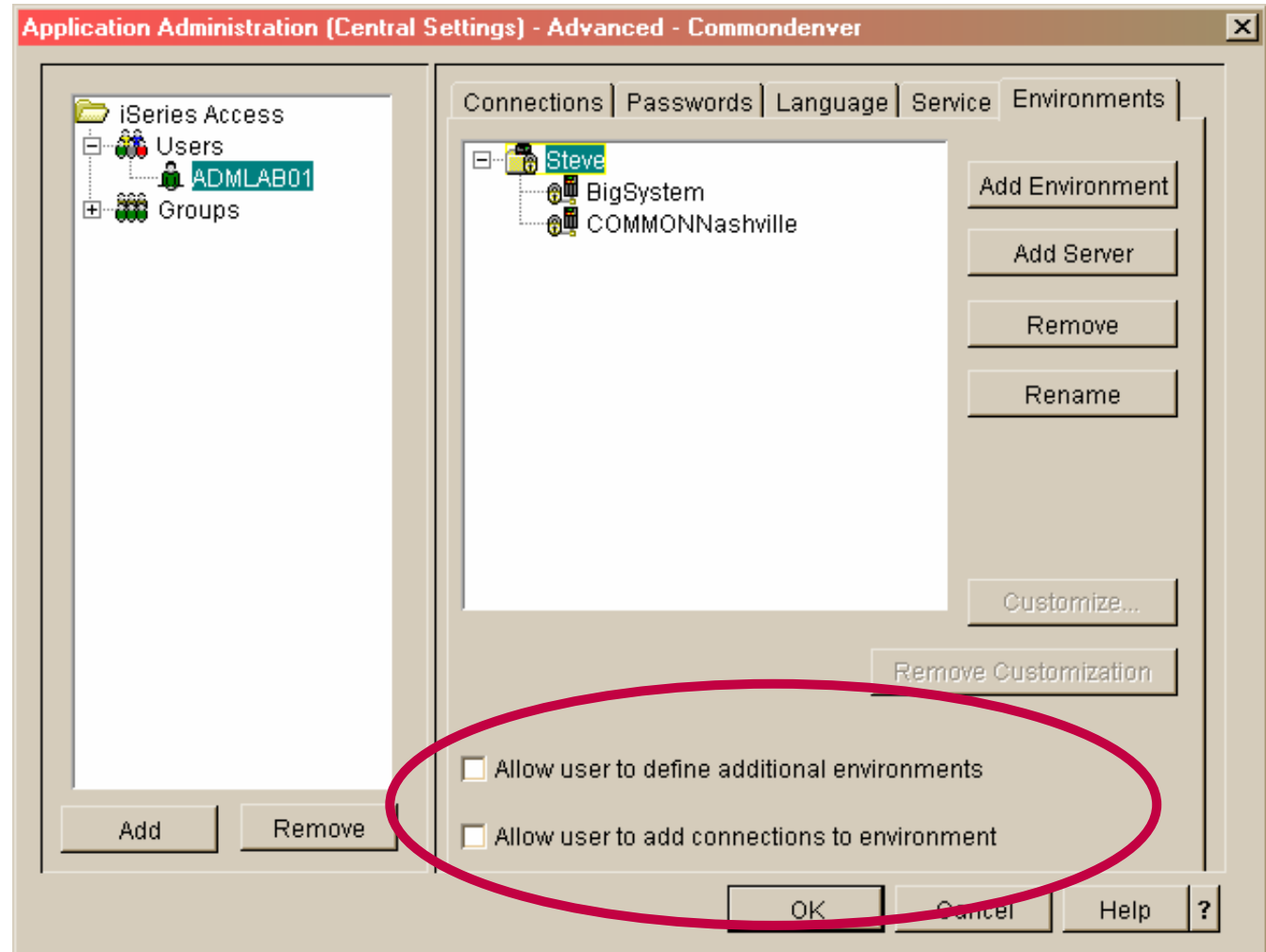
# Identify a "Central" System

In order to use a "Central System, you must set up a system in the network to be the "Administration system"

1. **Start iSeries Navigator and point to system you want to be the Administration System**

2. **Right click on the system name and select "Properties"**

3. **Click the Administration System Tab**

4. **Check "Administration System" button to set the system as your Administration System**



**Rchasd8b Properties**

General | Connection | Licenses | Restart
Administration System | Directory Services | Service | Plug-ins

○ Not an administration system

● Administration system

**System information**

Scan frequency:

● Every client session

○ Number of days: 7

☑ Administer users by default

Customize Administration of Users...

Set Installation Image Administration System

OK | Cancel | Help | ?

# Identify a "Central" System (continued)

The key of the Central Settings concept is to make it transparent to end users.

- **You should also set up this system in your iSeries Access for Windows install image.**

- **Select the "Set Installation Image Administration System" button to do this.**

- **Then any PC user installing iSeries Access for Windows from this system will automatically be set up with this system being their "Central System"**

**Rchasd8b Properties**

| General | Connection | Licenses | Restart |
| Administration System | Directory Services | Service | Plug-ins |

- ○ Not an administration system
- ● Administration system

System information

Scan frequency:

- ● Every client session
- ○ Number of days: 7

☑ Administer users by default

Customize Administration of Users...

Set Installation Image Administration System

OK    Cancel    Help    ?

This also saves administration costs as this is the only system in your network where you would need to install iSeries Access for Windows.

– Additionally, in the future, you would only need to apply Service Packs and new releases to this system.

*i want an i.*

# Set up PCs to know which system is "Central" System

**For PCs with code already installed**

- **Go to each PC and open up the iSeries Access for Windows "Properties" panel.**

- **Go to "Administration System" tab, and set the system name for the user.**
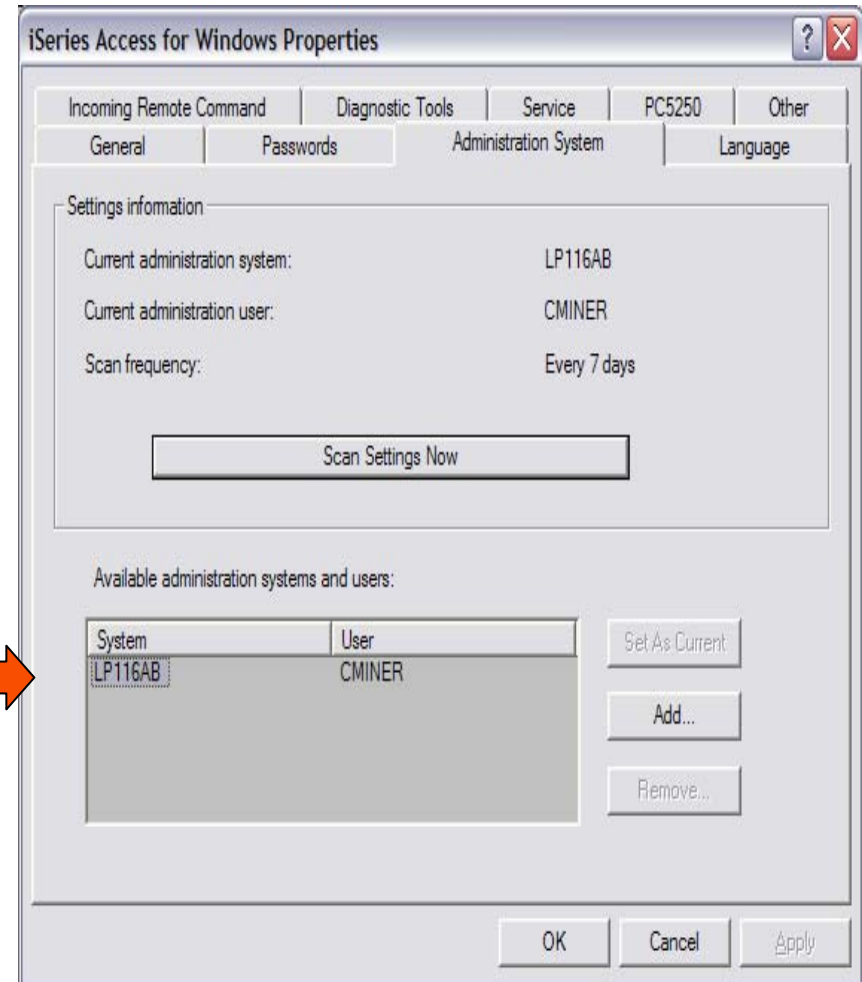
# Summary

**Lots of administrative tools to assist you in managing your network PCs**

- **iSeries Access for Windows Install/Upgrade**
  - **Facts and Tips**
  - **Tailored Install**
  - **Silent Install**
  - **Scheduling**
- **Windows Installer Technical Preview**
  - **Facts and Tips**
  - **Transforms**
  - **User Interface**
  - **Deployment methods**
  - **Command line options**
- **Microsoft Policies**
- **iSeries Navigator Application Administration**

# IBM Certification Testing – Here at COMMON!!

➢ Where and When ?
  ➢ Room 202A
  ➢ 8:30 – 5:00 Tuesday thru Thursday
➢ What's in it for me ?
  ➢ Portable credential
  ➢ Proof that you can "Walk the Talk"
  ➢ Peer and Employer recognition
  ➢ Industry recognition
➢ How much does it cost ?
  ➢ **NOT** $190 that you pay at external testing centers
  ➢ **Special Discounted price of $95 !!**
➢ What tests are available?
  ➢ System i (of course)
  ➢ All "other" System Group platforms
  ➢ Software

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