



IBM i Access Client Solutions Administration Secrets

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Business Architect for Systems
Management



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Agenda



- IBM i Access Client Solutions Administration Secrets
 - Meet IBM i Access Client Solutions
 - Java Changes
 - Deployment
 - User Settings Location
 - Auto Import Configurations
 - Manual Settings
 - Application Administration
 - Summary
 - Backup
 - Migration
 - Windows Application Package
 - Connection Configuration
 - Console Configuration

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Deployment

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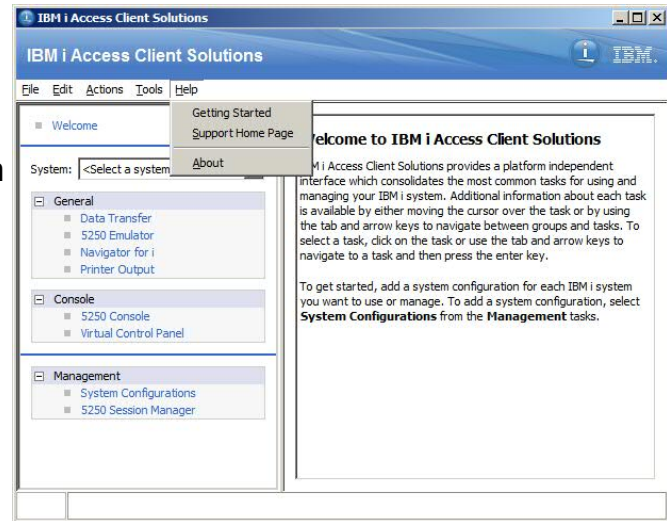


Product Availability

- IBM i Access Client Solutions is identified as LPP 5733-XJ1
 - Not an IBM i installable LPP
- The GA version of the product is available to customers with valid SWMA for IBM i 6.1, 7.1, 7.2 or 7.3 and is downloaded from the IBM i Access Client Solutions or IBM Entitled Software Support (ESS) websites
 - Technote with example instructions
 - <http://www-01.ibm.com/support/docview.wss?uid=nas8N1010355>
- Product distributed in zip files
 - Platform Independent Core Java product
 - From IBM i ACS website: IBMiAccess_v1r1.zip
 - On ESS: IBM_i_Access_Client_Solutions_LCD#_*.zip
 - Contains product jar and other supporting files

Documentation

- Main User Interface provides an easy to use launch point for features
- Product contains Documentation folder containing "QuickStartGuide" and "GettingStarted" documents
- "GettingStarted" can also be launched from Main User Interface



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Deployment

- IBM i Access Client Solutions is not installed - it is deployed
 - There is no Windows Based Installer (setup.exe)
- Access Client Solutions Deployment
 - Place client bundle in desired location
 - Determine location for other product settings
 - 5250 Session Files
 - KeyBoard files
 - Data Transfer Files

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Deployment



- **Client Bundle**
 - Contains the Java executable Jar, properties file, platform specific start executables and javascript start samples, product documentation, and licensing notices
 - All that is required to be deployed is the Java executable Jar
 - The rest is optional
- **No JRE distributed**
 - IBM i Access Client Solutions does not deploy a specific JRE
 - Relies on a Java 8 or JRE to be accessible on the client OS

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Deployment: Initial Questions



- When thinking about deployment, ask yourself where you want to put:

1. the product image? (jar file)

2. the user's settings?
(system configurations,
5250 sessions, etc.)

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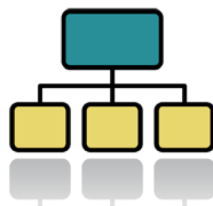
Deployment: Options



Computer (local)



USB Thumb Drive



Network Share



ACS Client



User Config



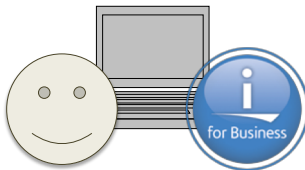
Intranet (<http://> URL)

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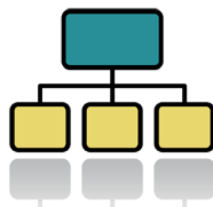
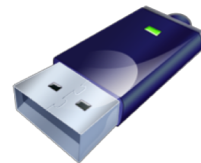
Deployment: Options



Computer (local)



USB Thumb Drive



Network Share



Intranet (<http://> URL)

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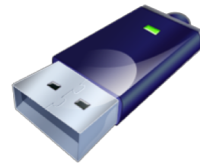
Deployment: Options



Computer (local)



USB Thumb Drive



Network Share



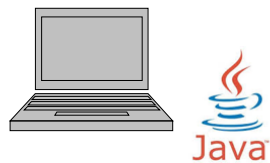
Intranet ([http:// URL](#))

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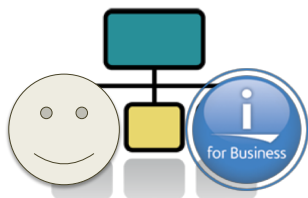
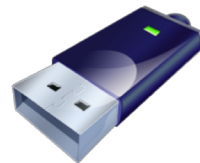
Deployment: Options



Computer (local)



USB Thumb Drive



Network Share



Intranet ([http:// URL](#))

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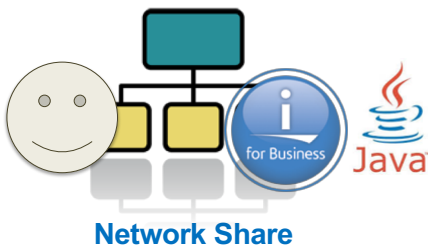
Deployment: Options



Computer (local)



USB Thumb Drive



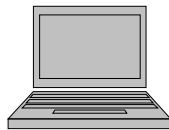
Intranet ([http:// URL](#))

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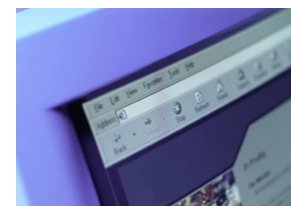
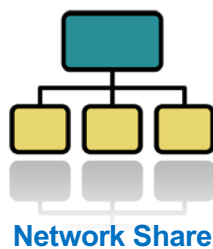
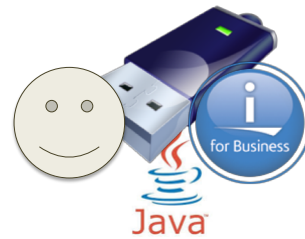
Deployment: Options



Computer (local)



USB Thumb Drive



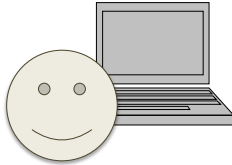
Intranet ([http:// URL](#))

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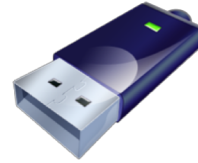
Deployment: Options



Computer (local)



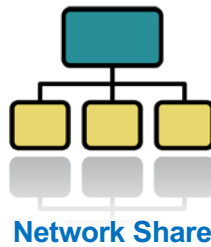
USB Thumb Drive



Oracle has deprecated Java webstart capability in Java 9 and later



Intranet (http:// URL)

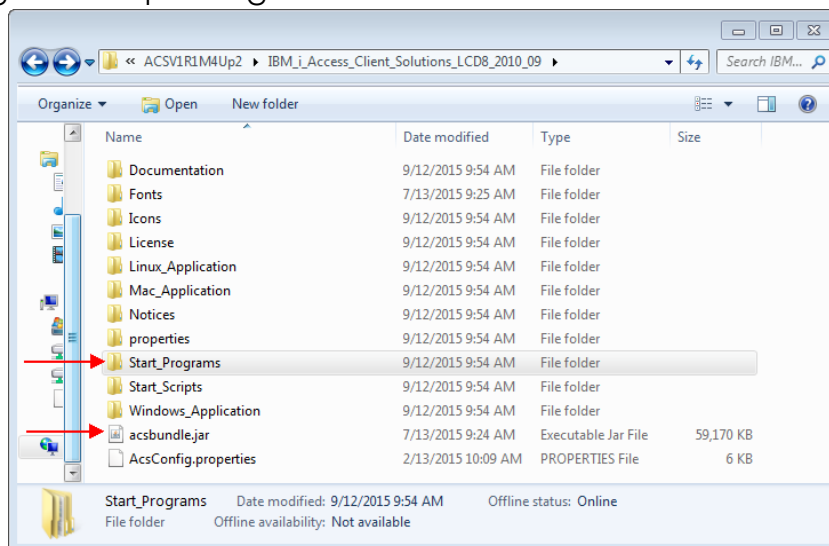


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Deployment



What you get in the package

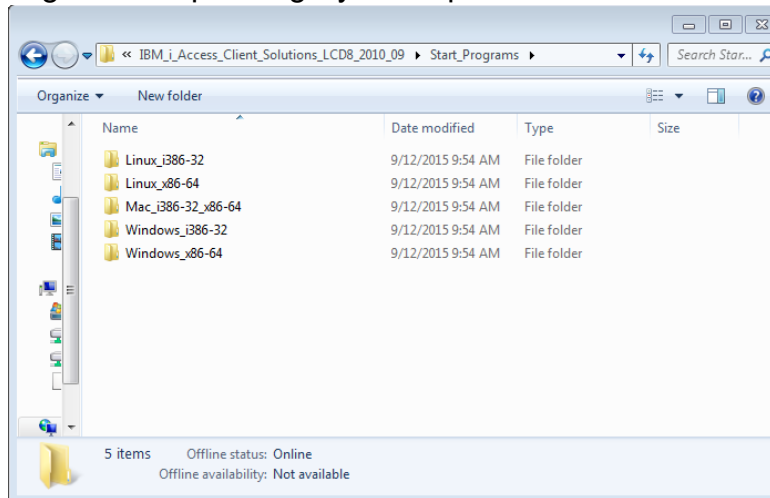


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Deployment



- Start Programs – Operating System specific launch executables



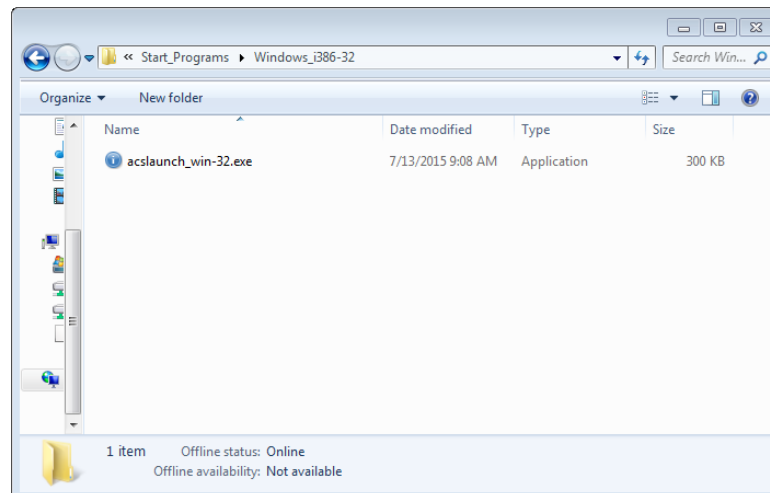
- The bitness of the of the launcher should match the bitness of Java installed on the workstation. It is recommended that bitness also match the client OS bitness.

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Deployment



- Start Programs – Operating System specific launch executables

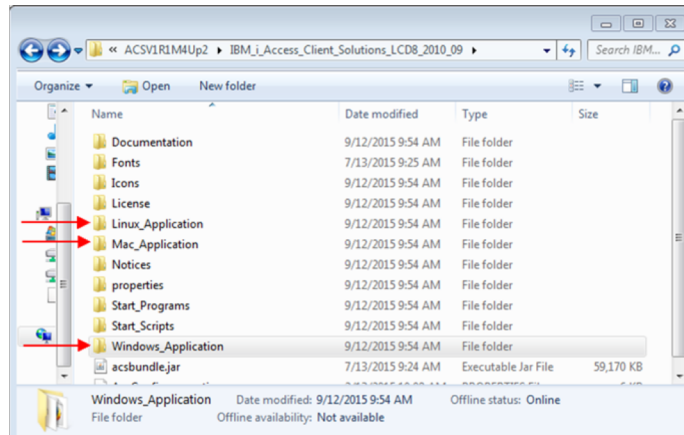


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Deployment/Install Scripts



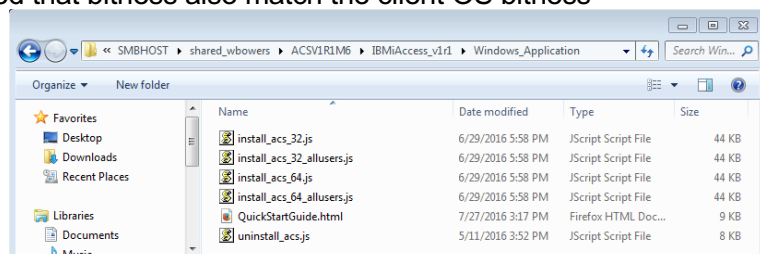
- IBM i Access Client Solutions provides Operating System specific Application deployment scripts to make deployment easier for an user
- Javascript will copy the IBM i Access Client Solutions deployment to a specific location that makes sense for the Operating System being used



Deployment/Install Scripts



- Provided install_acs script on Windows will copy the IBM i Access Client Solutions deployment to C:\Users\<WindowsUser>\IBM\ClientSolutions
- Provided install_acs_*_allusers script will copy the IBM i Access Client Solutions deployment to C:\Users\Public\IBM\ClientSolutions
- Deployment will ask the user which functions they want to use, if it should create shortcuts on the Desktop for the Main User Interface and 5250 Session Manager. It will also create file associations for the .hod, .bchx, .dtx & .dtfx if they haven't already been created
- The bitness of the of the install script should match the bitness of Java installed on the workstation. It is recommended that bitness also match the client OS bitness



Deployment/Install Scripts – Administrator



- Administrator Preparing Deployment

```

Administrator: Command Prompt
C:\>cd c:\ACSLab\IBMiAccess_v1r1\Windows_Application

c:\ACSLab\IBMiAccess_v1r1\Windows_Application>dir
Volume in drive C has no label.
Volume Serial Number is 3031-6CBE

Directory of c:\ACSLab\IBMiAccess_v1r1\Windows_Application

04/24/2016  04:48 PM    <DIR>          .
04/24/2016  04:48 PM    <DIR>          ..
02/01/2016  04:12 PM             41,378  install_acs_32.js
02/01/2016  04:12 PM             41,378  install_acs_64.js
01/22/2016  03:08 PM              8,105  QuickStartGuide.html
03/15/2016  09:30 AM              5,928  uninstall_acs.js
               4 File(s)              96,789 bytes
               2 Dir(s)  2,019,266,560 bytes free

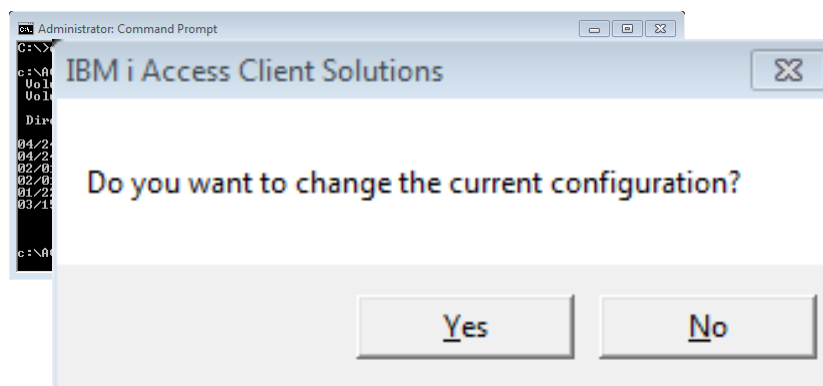
c:\ACSLab\IBMiAccess_v1r1\Windows_Application>install_acs_32.js /AdminConfig
  
```

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Deployment/Install Scripts – Administrator



- Administrator Preparing Deployment

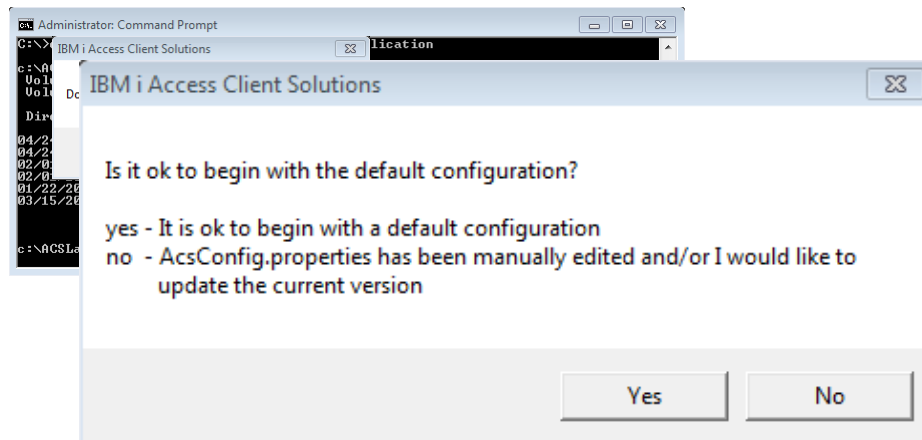


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Deployment/Install Scripts – Administrator



- Administrator Preparing Deployment

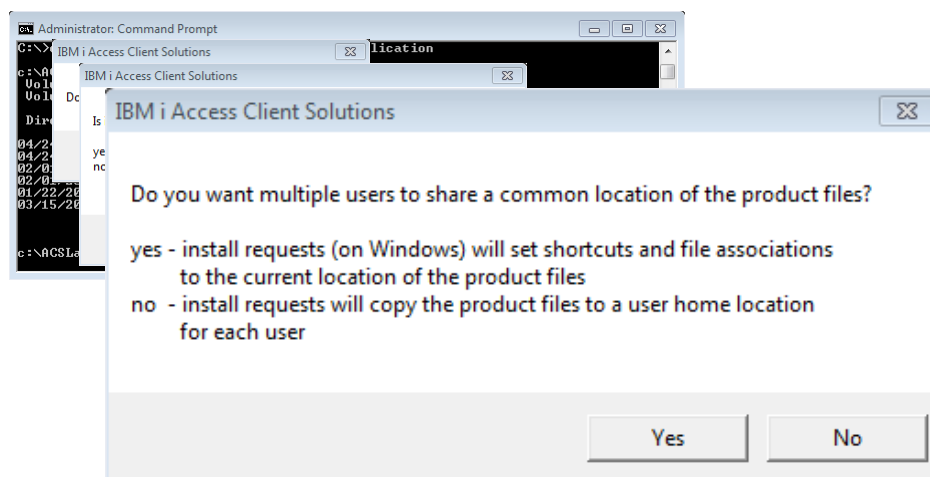


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Deployment/Install Scripts – Administrator



- Administrator Preparing Deployment

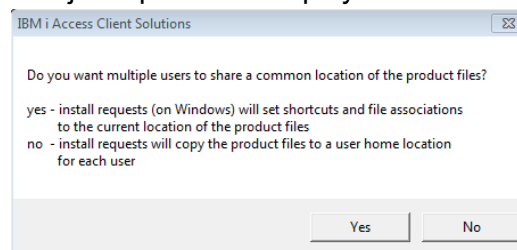


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Deployment/Install Scripts – Administrator



- Where should the product be run from?
- No => Copy the IBM i ACS deployment to the client workstation directory appropriate for the install type, current user or all user
 - To update the product, update the central location and re-run install script
- Yes => Run the product from the location the install script is being ran from
 - May be a Network or Local location
 - To update the product just update the deployment location via file copy



Deployment/Install Scripts – Administrator

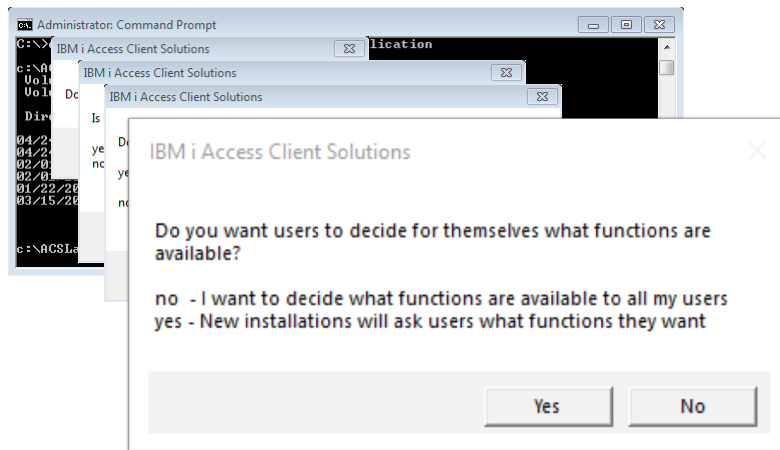


- Would be the Option used for a Network deployment.
 - The install script would be ran from the pre-setup deployment image on a network server
 - IBM i ACS will not be copied down to the individual client workstation
 - File Associations and Desktop icons will point to the network location
 - Client's path to the network location needs to be persistent
 - Works the best with Unix/Linux/Posix type file systems hosting the network share
- Can also be used to copy the IBM i ACS Image to a chosen location on each workstation and then run the install script from there
 - File Associations and Desktop icons will point to this location

Deployment/Install Scripts – Administrator



- Administrator Preparing Deployment

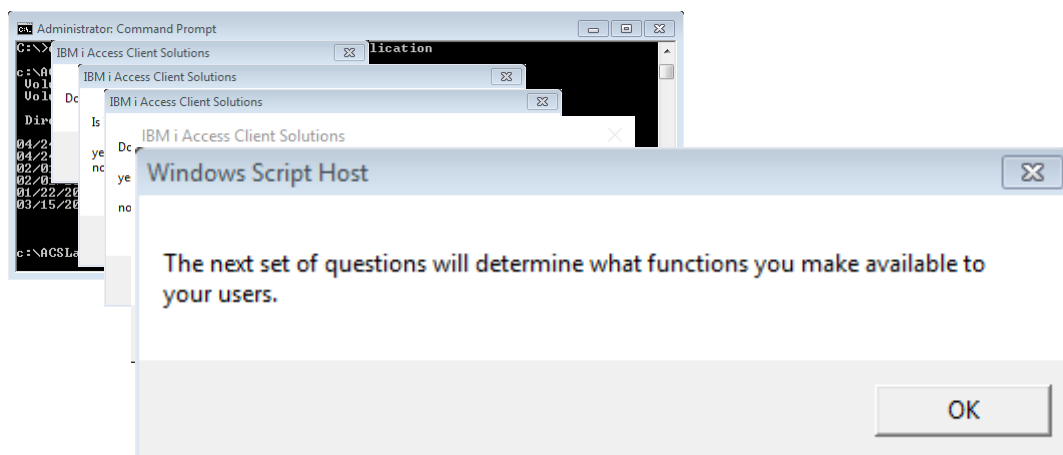


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Deployment/Install Scripts – Administrator



- Administrator Preparing Deployment



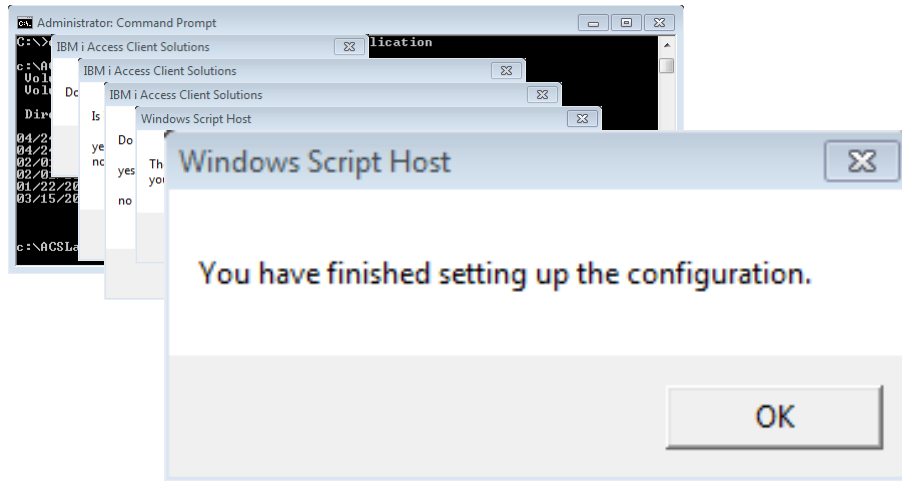
Following this will be the same set of questions about what functions to allow

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Deployment/Install Scripts – Administrator



- Administrator Preparing Deployment

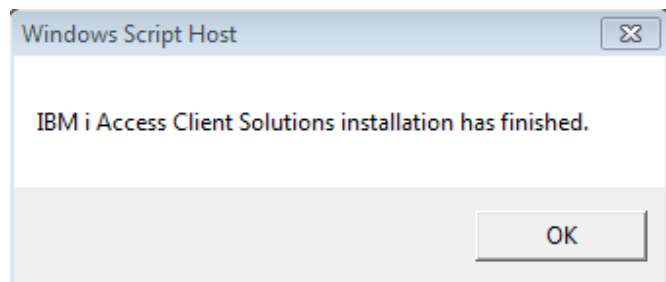


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Deployment/Install Scripts – Administrator



- Administrator Preparing Deployment
- User running the Deployment



- Deployment scripts supports a /Q option to be passed to the script to silently deploy the client. Automatically accepting the End User License Agreement and not showing this completion message.

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Deployment/Install Scripts – Administrator



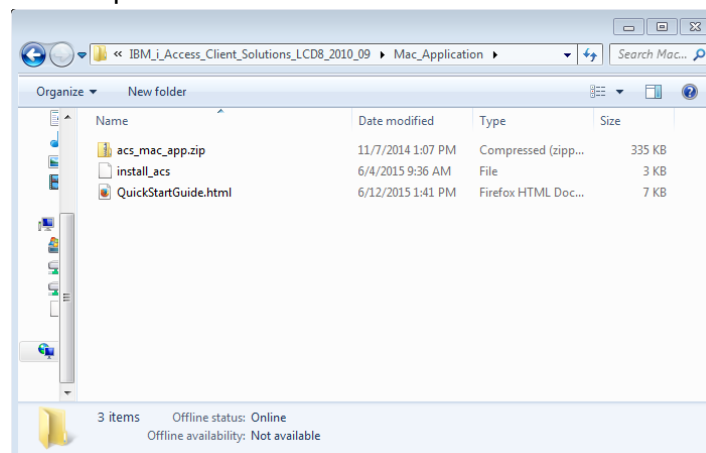
- Administrator Preparing Deployment
 - /AdminConfig capability to customize the IBM i ACS deployment image is only available with the Windows deployment scripts
 - An IBM i ACS deployment image that has been customized via /AdminConfig on Windows can be used to deploy on Mac and Linux and the functions that are allowed or not will be followed on those platforms as well
- Custom Configuration Location
 - User can all have a unique location for their configuration files
 - `com.ibm.iaccess.AcsBaseDirectory=Z:\SomePath\Developer_Configuration`

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Mac Deployment/Install Scripts



- Provided install_acs Javascript on Mac will copy the IBM i Access Client Solutions deployment to the Mac OS Applications folder.
 - IBM i ACS on Mac requires Java JDK

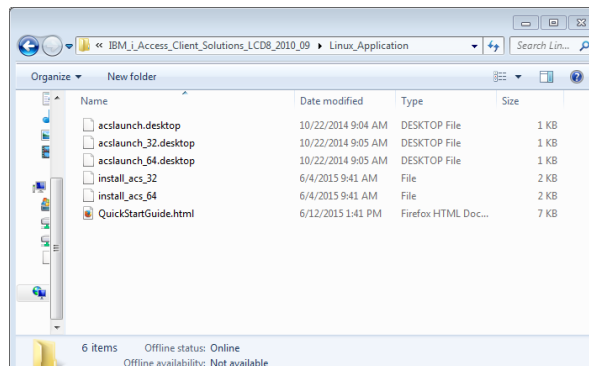


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Linux Deployment/Install Scripts



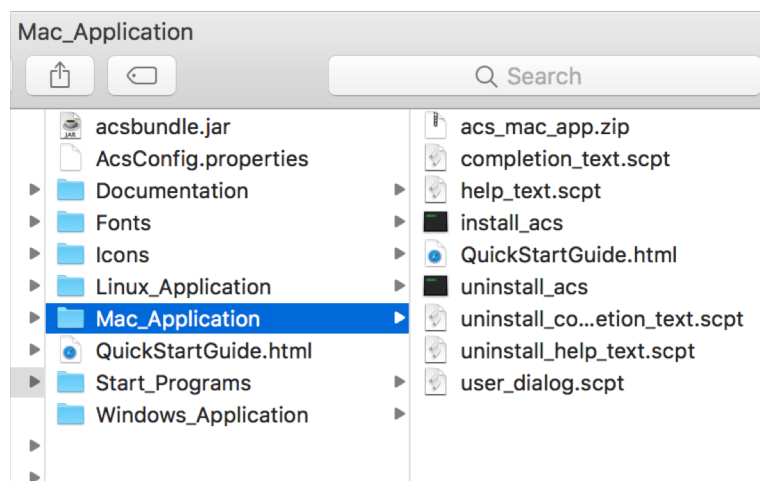
- Provided install_acs Javascript on Linux will copy the IBM i Access Client Solutions deployment to the locations of
 - /usr/share/applications/
 - /opt/ibm/iAccessClientSolutions/
- The bitness of the of the install script should match the bitness of Java installed on the workstation. It is recommended that bitness also match the client OS bitness.



Uninstall – Start over



To remove.. Or Start over, run the Corresponding uninstall script



Other links for information...



- Config DevWorks Article

<https://www.ibm.com/developerworks/ibmi/library/i-ibmi-access-client-solutions-customization-trs/index.html>

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The slide features a background with faint, light-gray geometric lines, including arcs and straight lines radiating from a point. A solid blue gradient bar, transitioning from a darker blue on the left to a lighter blue on the right, spans the width of the slide. The text "Manual Settings" is centered in white on the darker portion of this bar.

Manual Settings



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Limiting Function



- There are two approaches to limiting the functions that the user has access to when running IBM i Access Client Solutions
 - List of Excluded Components tied to the product deployment
 - Runtime restrictions stored on the client workstation

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Excluding Components

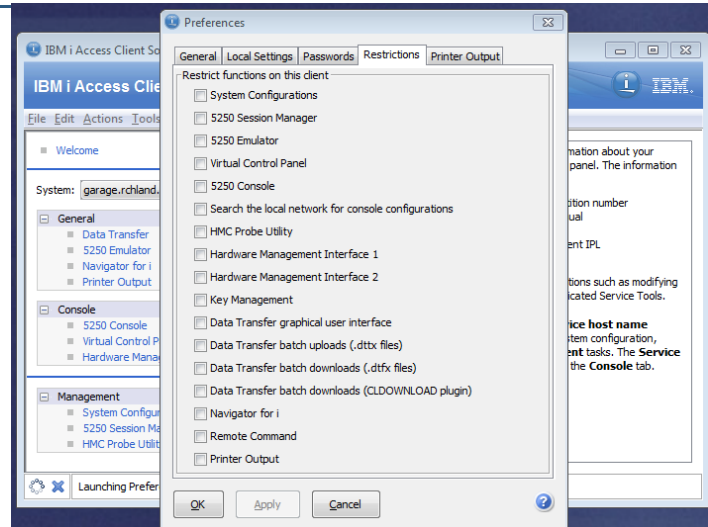


- What the IBM i ACS install_acs* scripts use to determine functions available to the user
- Deployed via AcsConfig.properties file next to or within acsbundle.jar
 - Property must be set:
 - com.ibm.iaccess.ExcludeComps
 - Set this property to a comma-separated list of function keywords
- Example function keywords which may be specified are:
 - **DATAXFER** - Data Transfer to/from IBM I
 - **EMULATOR** - 5250 Display/Print emulation and 5250 Session Manager
 - **KEYMAN** - SSL certificate management
 - **OPCONSOLE** - Operations console and Virtual Control Panel
 - **SPLF** - Printer Output
 - **HWCONSOLE** - Hardware management interface
 - **L1CPLUGIN** - Navigator for i

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Runtime Restrictions

- Can be set via the IBM i Access Client Solutions application when ran with Administrator or Root level authority.
- GUI interface from Edit -> Preferences



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Runtime Restrictions

- Can be set via the IBM i Access Client Solutions application when ran with Administrator or Root level authority.
- Command Line option to restrict, unrestrict, list, export/import

```

Administrator: Command Prompt
Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.

C:\Windows\system32>cd c:\IBMiACS

c:\IBMiACS>dir
Volume in drive C has no label.
Volume Serial Number is 3031-6CBE

Directory of c:\IBMiACS

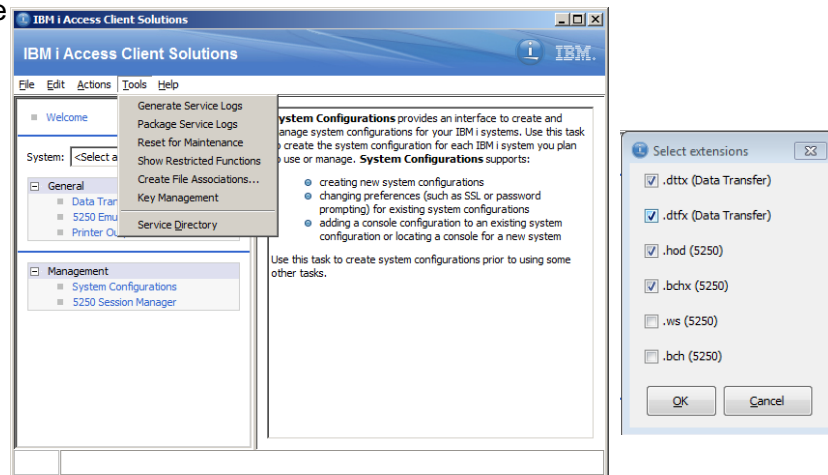
04/18/2015  08:39 PM    <DIR>          .
04/18/2015  08:39 PM    <DIR>          ..
02/05/2015  01:03 PM             59,878,421  acshbundle.jar
12/02/2014  05:45 PM              5,856  AcsConfig.properties
02/05/2015  12:49 PM             307,200  acslaunch_win-32.exe
02/05/2015  12:48 PM             457,216  acslaunch_win-64.exe
03/07/2015  10:41 PM    <DIR>          CompanyA
04/18/2015  08:39 PM    <DIR>          CompanyB
               4 File(s)      60,648,693 bytes
               4 Dir(s)    9,847,738,368 bytes free

c:\IBMiACS>acslaunch_win-32.exe /PLUGIN=restrict /restrict=console,vcp,hmi1,hmi2
  
```

Creating File Associations



- Easy GUI option!
 - Only supported on Windows
 - Must launch via acslaunch*.exe Start Program or acsbundle.jar from default product file structure



Creating File Associations



- Can also be done by the command line

```
acslaunch_win-32.exe /plugin=fileassoc
```

Other AcsConfig.properties Settings



```

1 #####
2 # Configuration Location:
3 #
4 # com.ibm.iaccess.AcsBaseDirectory determines the configuration location.
5 #
6 # Special keywords are provided which can be used when defining the configuration
7 # path. When the keywords are used in the specified path, the keywords will be
8 # substituted with the text or path they define. Only one keyword can be used
9 # in the configuration path. The special keywords and their meanings are:
10 #
11 # (USER) - The current user id. This keyword can be anywhere in the path
12 # The following keywords can only be at the beginning of the specified path:
13 # (PRODUCTDIR) - the path to the same directory as acsbundle.jar
14 # (TMPDIR) - the path to a platform specific temporary directory
15 # (ROOT) - the path to the root of the file system
16 # (HOME) - the path to the user's home directory
17 # (DEFAULT) - the default path the product would normally use
18 #
19 # Technical Note:
20 # We do not recommend sharing a configuration between multiple users.
21 # For example, if X were a shared network drive, the following setting may
22 # cause unpredictable results:
23 # com.ibm.iaccess.AcsBaseDirectory=X:/Shared_Network_drive/config_directory
24 # There are several problems with multiple users sharing this configuration path:
25 # 1. Unpredictable results will occur if multiple users simultaneously use the
26 # configuration.
27 # 2. This example assumes each user has the X drive mapped to the same location.
28 # 3. Using a network drive in the configuration would not work from a Linux or
29 # Mac client. Using the provided keywords, as in the examples below,
30 # will work on Windows, Linux and Mac.
31 #
32 # When sharing a configuration path between multiple users, the (USER)
33 # keyword should be used to avoid collisions with other users. It will
34 # be substituted with the user id of the current user.
35 #
36 # When setting the configuration path, use a forward slash ('/') instead of a
37 # backward slash ('\') as the directory separator. This will work on all
38 # operating systems including Windows.
39 #
40 # Here are some recommended sample configurations:
41 #
42 # Example 1 - local configuration for current user (default):
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```

Other /PLUGIN= functions



- GettingStarted Sections 9.1.# documents many functions that IBM i ACS can do from a command prompt/file/script by passing the acslaunch.exe the /PLUGIN= parameters

9.0 Advanced Topics

9.1 More command-line Options

Many of the functions that are available from the main GUI are also available from the command-line. These functions may be invoked by providing the appropriate parameters to any of the command-line options shown in: [section 7.3 Starting the Product \(using the command-line\)](#)

For example:

```
Start_Programs\Windows_x86-64\acslaunch_win-64.exe parm1 parm2 ...
```



Application Administration

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Application Administration



- Administration tool that allows an IBM i OS System Admin to set some of what functions of Navigator and IBM i Access are available based on IBM i User Profile
 - IBM Navigator for i -> System -> Application Administration
- Articles by Dawn May in her “i Can” Blog for IBM Systems Magazine
 - Application Administration with Navigator for i
 - <http://www.ibmsystemsmag.com/Blogs/i-Can/February-2017/Application-Administration-with-Navigator-for-i/>
 - Application Administration with Access Client Solutions
 - <http://www.ibmsystemsmag.com/Blogs/i-Can/February-2017/Application-Administration-with-Access-Client-Solu/>

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Application Administration



Application Administration (Local Settings) - localhost

Select the functions or applications available to users.

Select	Function	Default Access	All Object Access	Customized Access
<input type="radio"/>	▼ localhost	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="radio"/>	▶ System	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="radio"/>	▶ Monitors	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="radio"/>	▶ Basic Operations	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="radio"/>	▶ Work Management	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="radio"/>	▶ Configuration and Service	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="radio"/>	▶ Network	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="radio"/>	▶ Integrated Server Administration	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="radio"/>	▶ Security	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="radio"/>	▶ Users and Groups	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="radio"/>	▶ Databases	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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<input type="radio"/>	▶ Performance	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="radio"/>	▶ File Systems	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="radio"/>	▶ AFP Manager	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Page 1 of 1 1 Go Rows 15 Total: 15 Selected: 0

[Remove Customization](#) [Customize](#)

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Application Administration



Application Administration (Local Settings) - localhost

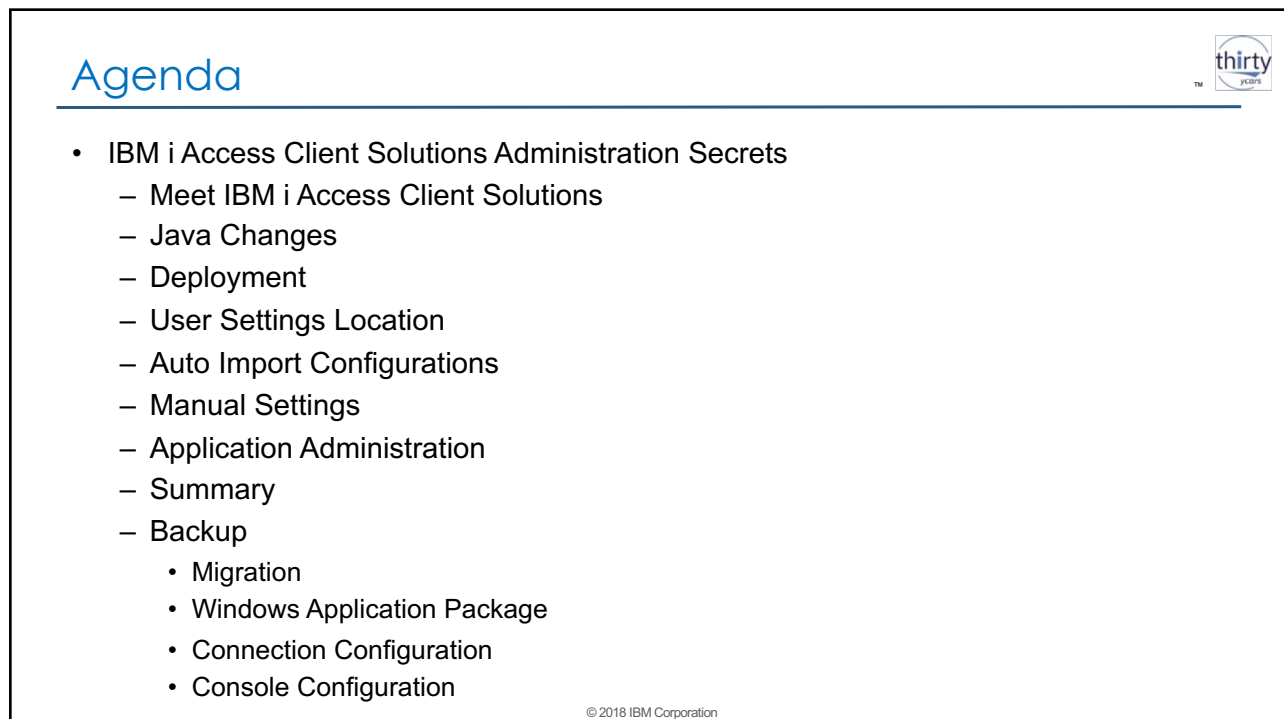
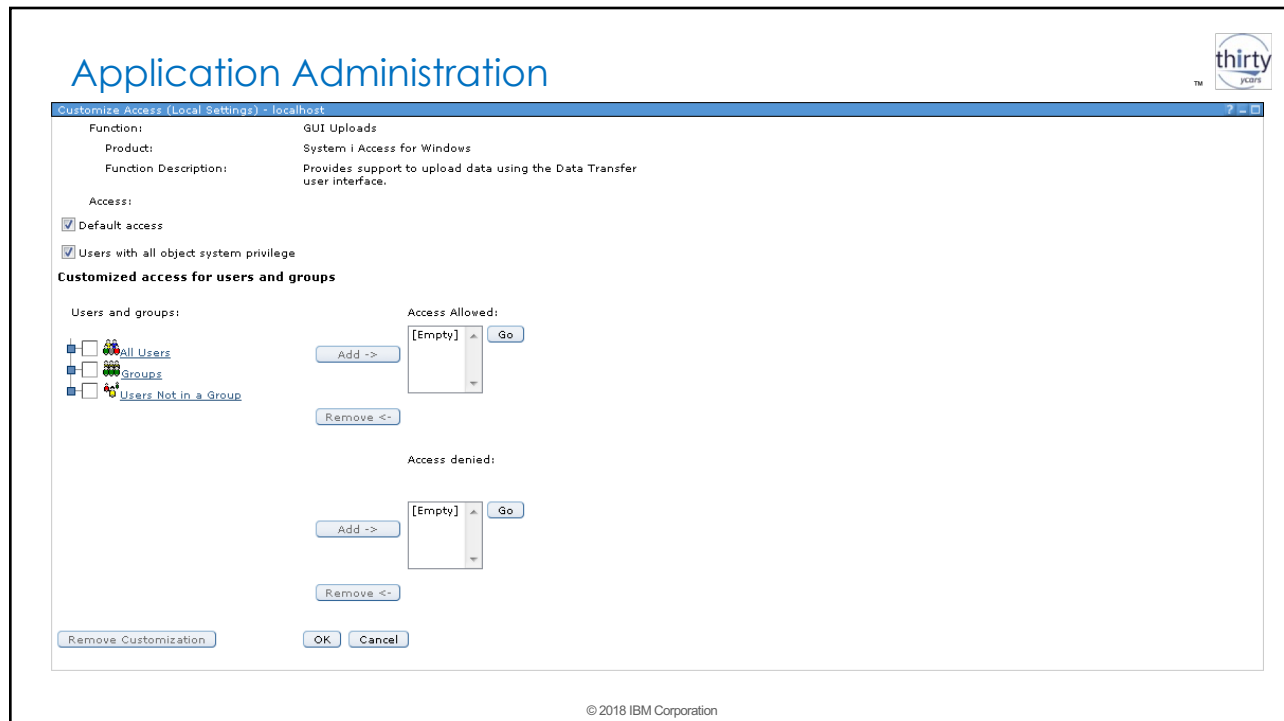
Select the functions or applications available to users.

Select	Function	Default Access	All Object Access	Customized Access
<input type="radio"/>	▼ System I Access for Windows	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="radio"/>	▶ S250 Display and Printer Emulator	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="radio"/>	▶ Data Transfer	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="radio"/>	▶ Download from server	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="radio"/>	▶ GUI Downloads	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="radio"/>	▶ Use of RTOPCB	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="radio"/>	▶ Autostart Downloads	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="radio"/>	▶ Excel Add-in Downloads	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="radio"/>	▶ ActiveX Automation Downloads	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="radio"/>	▶ Upload to server	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="radio"/>	▶ Host File Creation	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="radio"/>	▶ Appending or Replacing Host Files	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="radio"/>	▶ GUI Uploads	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="radio"/>	▶ Use of RFROMPCB	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="radio"/>	▶ Autostart Uploads	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="radio"/>	▶ Excel Add-in Uploads	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="radio"/>	▶ ActiveX Automation Uploads	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="radio"/>	▶ ODBC Support	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Page 1 of 2 1 Go Rows 18 Total: 21 Selected: 0

[Remove Customization](#) [Customize](#)

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User Settings Location

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AcsConfig.properties

- IBM i Access Client Solutions uses a product configuration file, named "AcsConfig.properties"
- AcsConfig.properties is simply a list of configuration properties and values.
- These properties may also be specified on the command line
-D<property>=<value>
- One such property is
com.ibm.iaccess.AcsBaseDirectory

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AcsBaseDirectory



- The value of this property determines:
 - The location of user settings
 - The location of service logs/dumps/etc
 - The default directory used by the 5250 session manager (this can be configured separately if desired)
- The value is expected, therefore, to be a directory name on a filesystem. It can be
 - Left blank (which leaves behavior at the default location)
 - The path of a hardcoded directory name (fully-qualified is highly recommended)
 - A constructed path using special keywords (next slide)

Tip: use forward slashes ('/'), not backslashes ('\')

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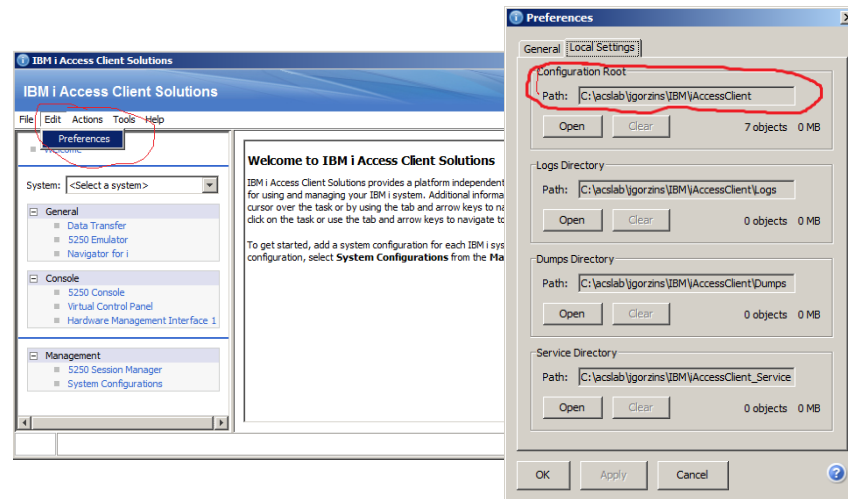
AcsBaseDirectory: Special Keywords



- {USER} : would be the current username (valid anywhere in the path)
- {PRODUCTDIR} : would mean the product's location in the file system (valid only at the beginning)
- {TEMPDIR} : would be the temporary directory (valid only at the beginning)
- {ROOT} : the root of the file system where the product is located (valid only at the beginning)
- {CWD} : the current working directory (valid only at the beginning)
- {HOME} : the user's home directory (valid only at the beginning)
- {DEFAULT} : the default place the product normally puts its settings (valid only at the beginning)

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Verifying Location



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Cheat notes... Common Configurations



Default ("My Documents" on Windows, home dir otherwise)

```
com.ibm.iaccess.AcsBaseDirectory=
```

Network share

```
com.ibm.iaccess.AcsBaseDirectory=
com.ibm.iaccess.AcsBaseDirectory={PRODUCTDIR}/config_directory/{USER}
```

Thumb drive!

```
com.ibm.iaccess.AcsBaseDirectory={PRODUCTDIR}/config_directory
```

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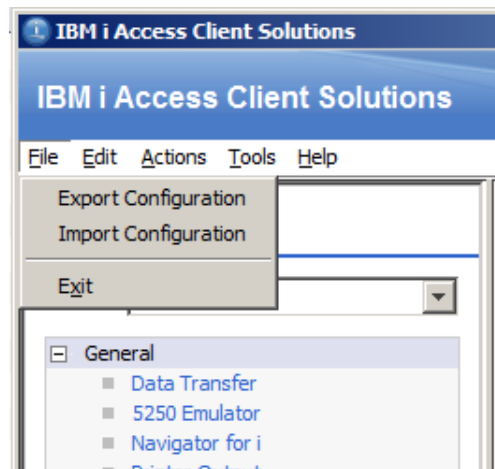
Auto Import Configurations

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Export/Import



- IBM i Access Client Solutions has a mechanism for saving (exporting) and restoring (importing) a user's settings and preferences
- When a configuration is exported, all information is stored in an **export file**
- Stored data includes emulator session profiles

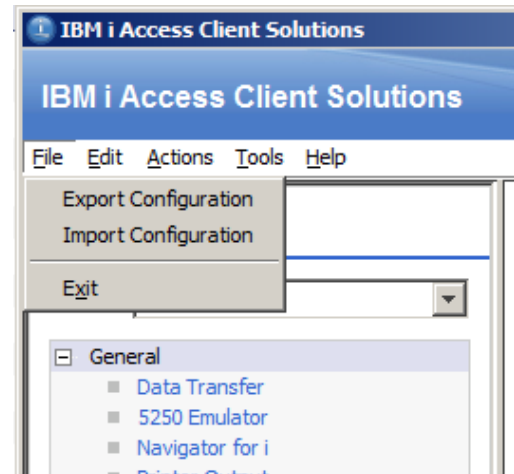


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Export/Import



- An export file can therefore be used to
 - Back up settings
 - migrate settings from one PC to another
 - Propagate settings to multiple PC's
- Importing an export file will only add new configuration items
 - It will not delete or change existing configuration items



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Auto Import



- So what is “autoimport”?
 - Allows an export file to be automatically imported when the product starts up
 - Useful for an administrator to automatically roll out settings
- Deployed via AcsConfig.properties
 - Two properties must be set:
 - com.ibm.iaccess.autoimport
 - com.ibm.iaccess.autoimport.version

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Auto Import



- `com.ibm.iaccess.autoimport`
 - Can contain special config keywords
- `com.ibm.iaccess.autoimport.version`
 - Typically set to a numeric value
 - Dictates whether the file (specified by `com.ibm.iaccess.autoimport`) is imported. The import happens if this value **differs** from the last file imported via the “autoimport” feature.
 - A value of “*” can be used for the version and the import will be performed on every launch. Could lead to consistently slower launch times.

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Questions



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Backup Information

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Migration

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Migration



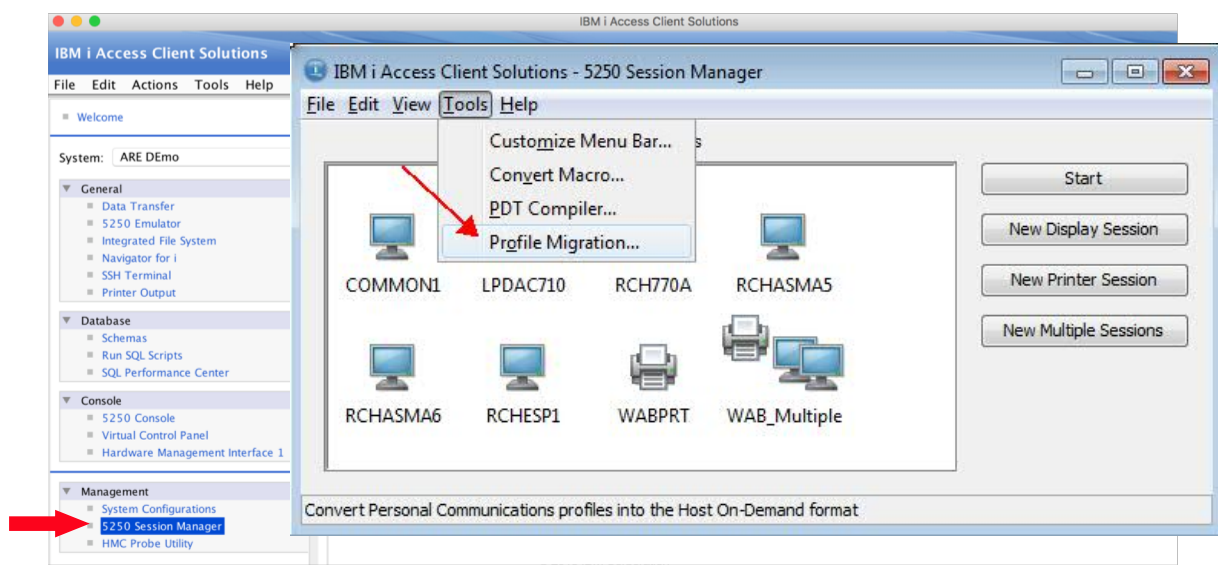
- IBM i Access Client Solutions provide several tools to assist with migrating from the IBM i Access for Windows client environment to IBM i Access Client Solutions
 - 5250 Migration Tools
 - Workstation file and keyboard map migration
 - Macro migration
 - Legacy File Associations
 - Data Transfer
 - Saved Data Transfer migration
 - System Connections

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5250 Migration



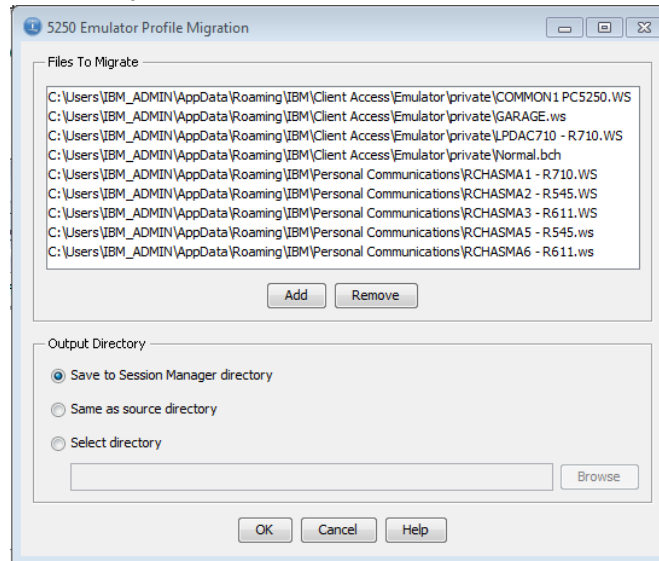
Migration – 5250 session profiles



5250 Migration



Migration – 5250 session profiles

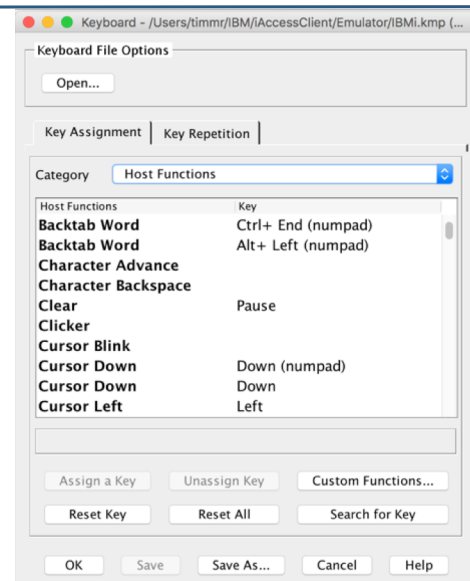


5250 Migration



Migration – 5250 session profiles

- Key mappings are also converted. A converted .kmp file will be saved in the same location that the new .hod file is created and will be referenced by that .hod file

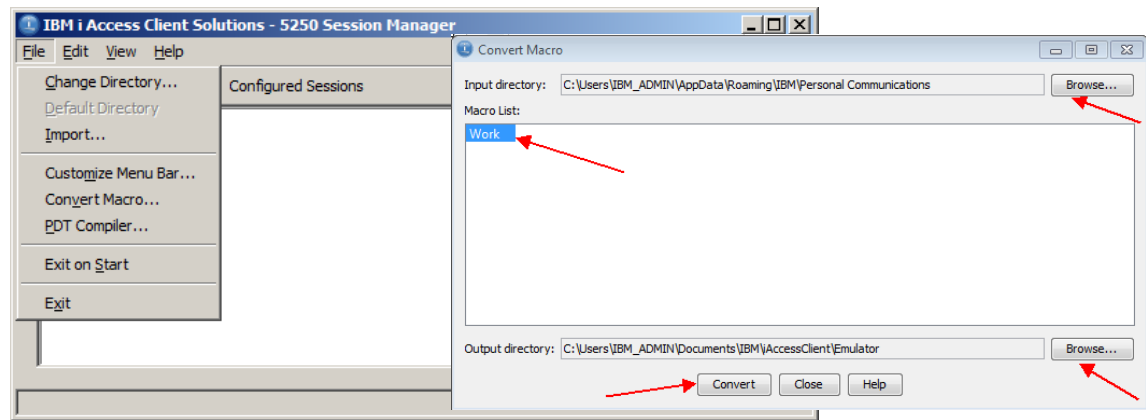


5250 Migration



What about my old macros?

- File->Convert Macro
- VBScript capabilities **NOT** converted

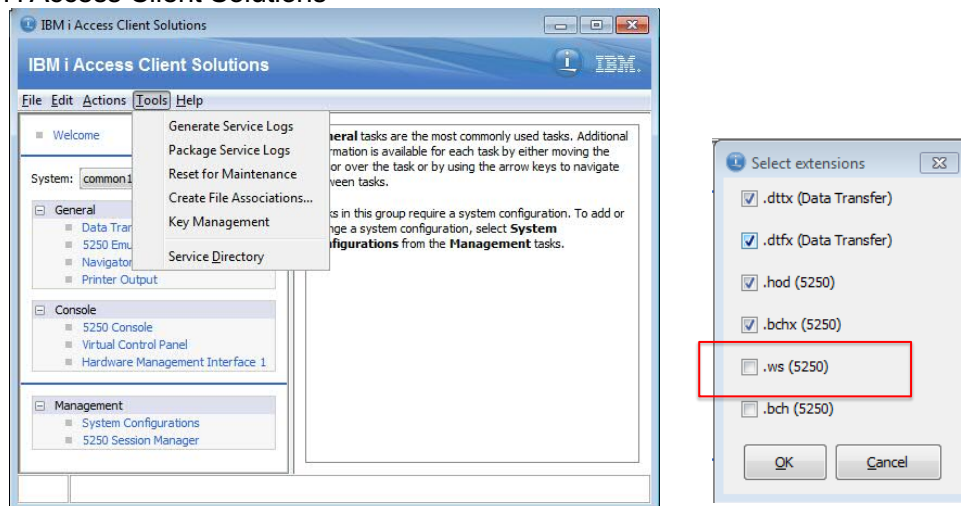


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5250 Migration



- Create File Association for IBM i Access for Windows saved .ws or .bch file to be opened with IBM i Access Client Solutions

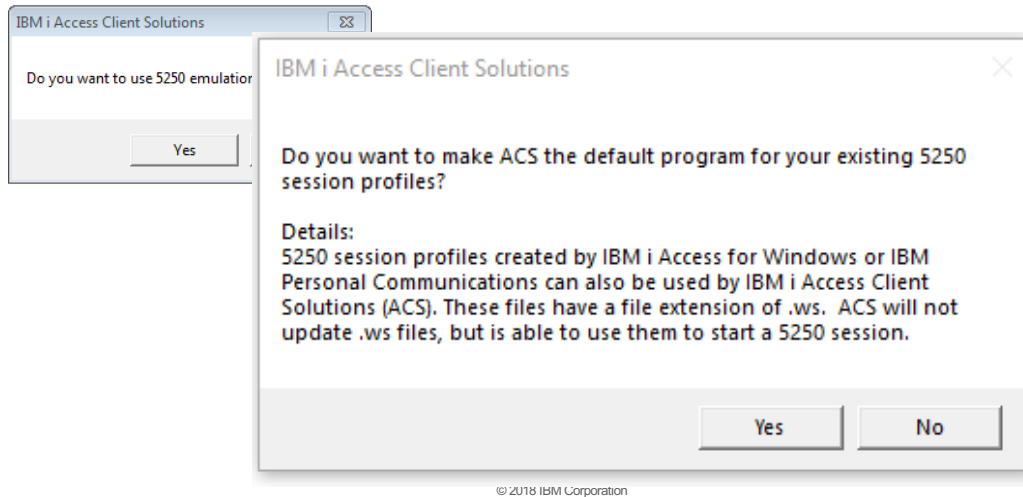


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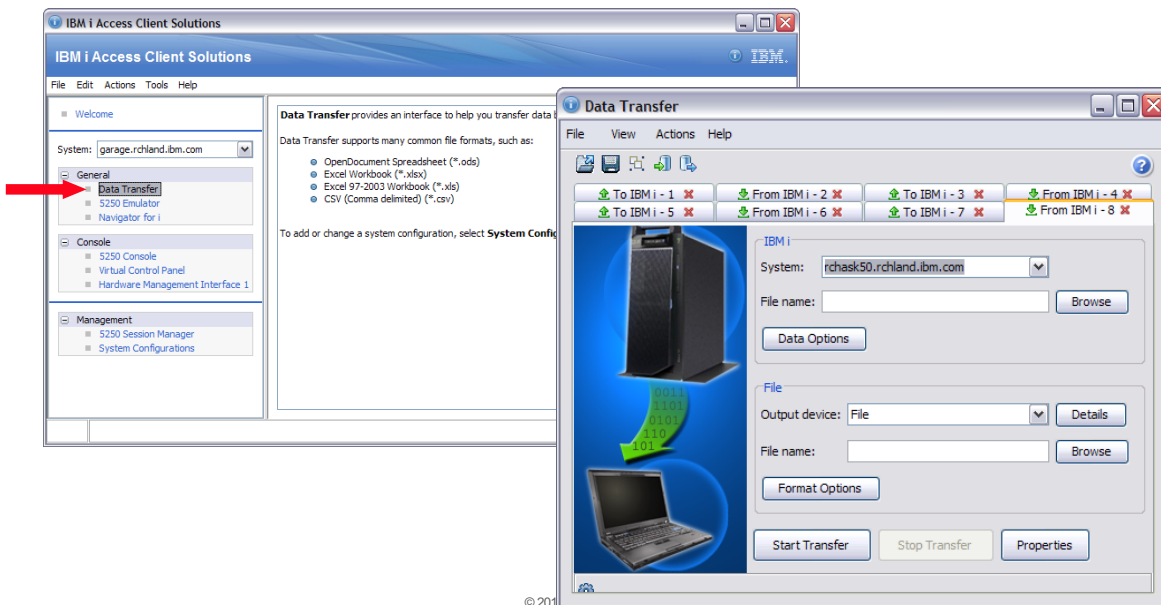
5250 Migration



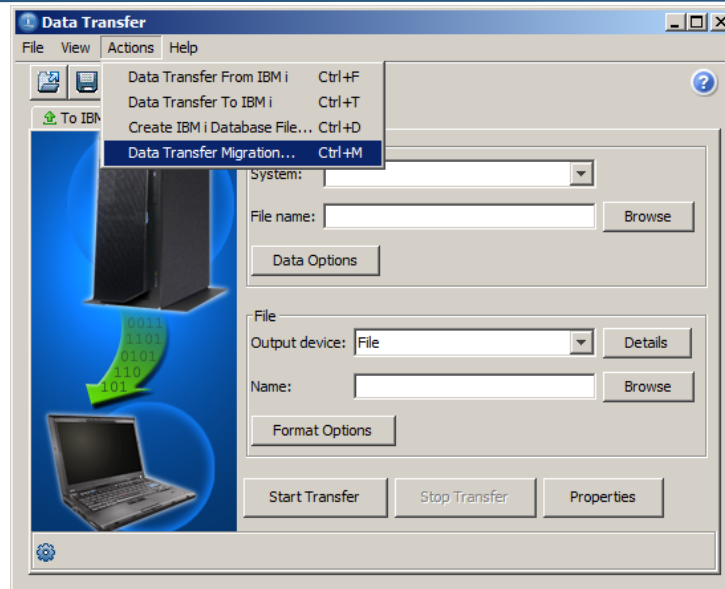
- Create File Association for IBM i Access for Windows saved .ws or .bch file to be opened with IBM i Access Client Solutions
- Can be set during IBM i ACS deployment script on Windows



Data Transfer Migration



Data Transfer Migration

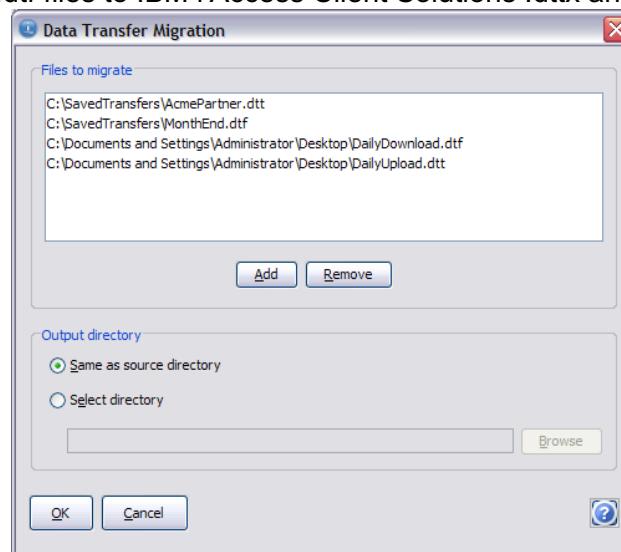


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Data Transfer Migration



- Migrates saved .dtt and .dtf files to IBM i Access Client Solutions .dttx and .dtfx files

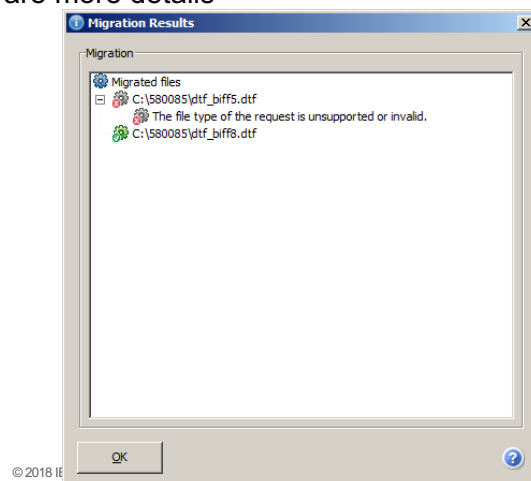


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Data Transfer Migration



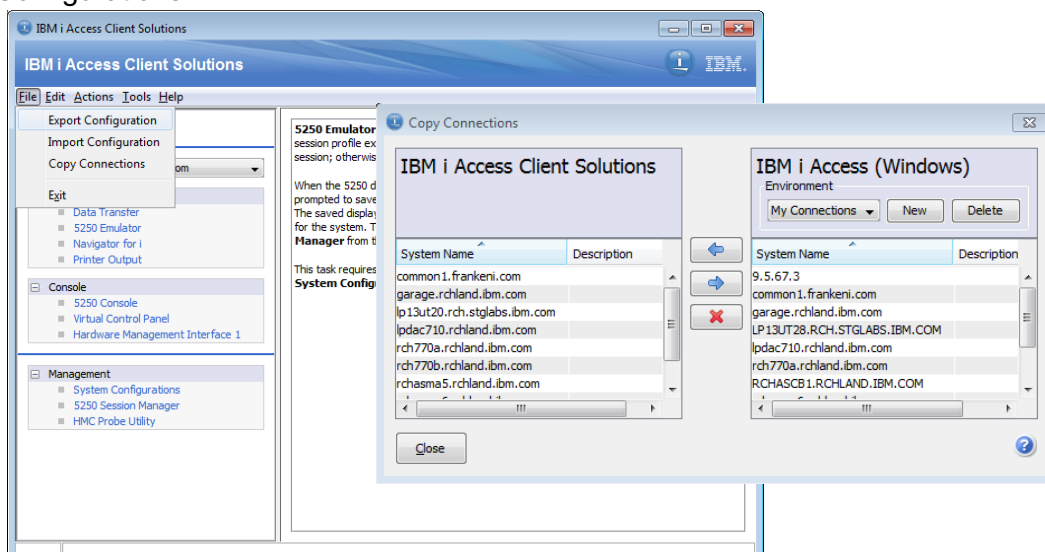
- Results of Migration
 - Green check indicates success
 - Red x indicates failure and there are more details



Migration – System Connections



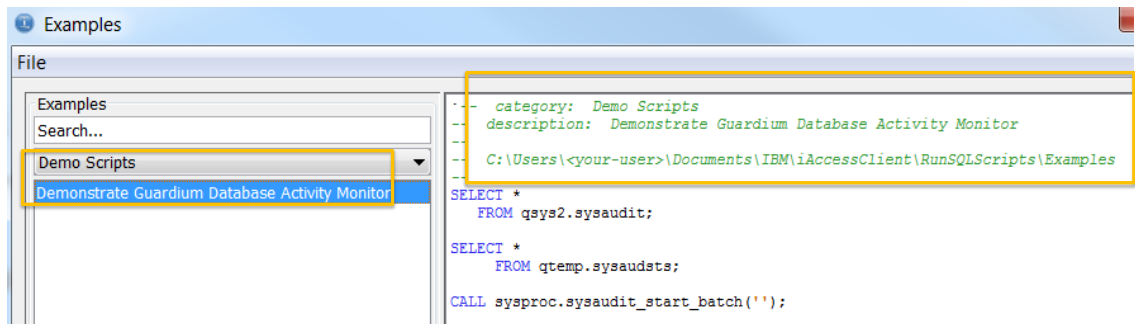
- IBM i Access Client Solutions Copy Connections can be used to move System Configurations



ACS Insert from Examples for Run SQL Scripts



- 1) Add the following comments to your Run SQL Script
 - **category:** Demo Scripts
 - **description:** Demonstrate Guardium Database Activity Monitor
- 2) Save the script to the following path
C:\Users\<your-user>\Documents\IBM\iAccessClient\RunSQLScripts\Examples
- 3) Find your script with Search or via the Examples pane



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Windows Application Package

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Windows Application Package



- **Base Package (Platform Independent)**

- 5250 display and printer emulator
- Data transfer
- Printer Output
- Console consolidation
- Other misc features



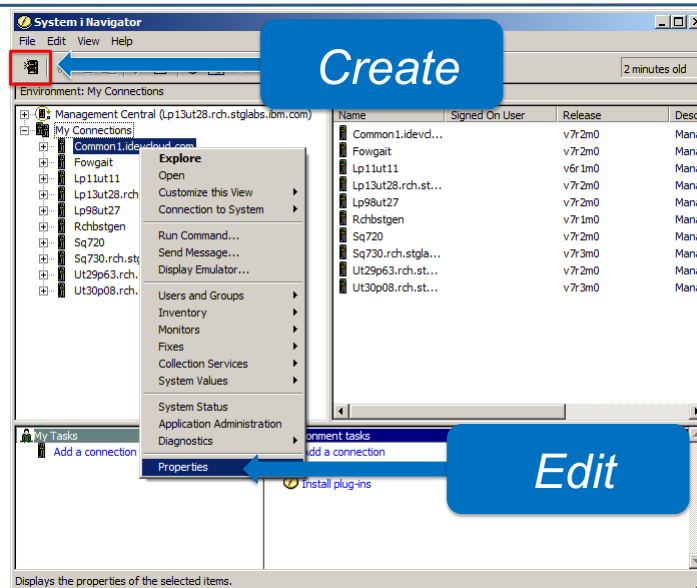
- **Windows Application Package**

- Windows Installer MSI Package
- Data drivers (ODBC, OLEDB, .Net)
- Printer drivers



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Create or Edit a Connection



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Create or Edit a Connection



- Two non-Navigator ways to do this:
 1. Use command line tool
 2. Use IBM i ACS Base Package

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Create or Edit a Connection



- Command-line tool: cwbcfg.exe

```

Administrator: Command Prompt

Format of command is:
cwbcfg [/host hostname] [/ipaddr address] [/uid userid]
      [/fips switch] [/ssl switch] [/dns] [/pc5250path path] [/del] [/r] [/s]

userid can be the actual userid or can be one of the following:
*WINLOGON - defaults to using Windows logon security
*PROMPTALWAYS - prompts at least once each time you run a program
*KERBEROS - use Kerberos principal name, no prompting

switch is 0 to turn FIPS mode off, or 1 to turn it on
switch is 0 to turn SSL mode off, or 1 to turn it on

path can be the actual path for PC5250 files or one of the following:
*MYAPPDATA - within each user's Application Data folder
*ALLUSERSAPPDATA - within the All Users Application Data folder

address can be the actual IP address of the host, or one of the following:
*ALWAYS - look up the address every time a connection is attempted
*HOURLY - look up the address if an hour expired since last lookup
*DAILY - look up the address if a day expired since last lookup
*WEEKLY - look up the address if a week expired since last lookup
*STARTUP - look up the address if Windows has been started since
           last lookup
Note: If the IP address is specified, the IP address lookup frequency
      will be Never, since the specified address will always be used.

/r replaces existing configuration information
/s configures the host only in .default (mainly for services)
/dns enables DNS search to check if the system has a valid IP address
/del deletes existing configuration

C:\Users\IBM_ADMIN>_
  
```

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Create or Edit a Connection

- Create a connection for "common2.idevcloud.com that uses Windows logon and ssl

```

Administrator: Command Prompt
C:\Users\IBM_ADMIN>cwbcfg /host common2.idevcloud.com /uid *WINLOGON /ssl 1

IBM i Access for Windows
Version 7 Release 1 Level 0
Configuration Utility
(C) Copyright IBM Corporation and Others 1984, 2010. All rights reserved.
U.S. Government Users Restricted Rights - Use, duplication or disclosure
restricted by GSA ADP Schedule Contract with IBM Corp.
Licensed Materials - Property of IBM

Creating configuration for COMMON2.IDEUCLOUD.COM
C:\Users\IBM_ADMIN>
  
```

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Create or Edit a Connection

- Edit a connection for "common2.idevcloud.com that uses Windows logon and ssl (the key here is /r)

```

Administrator: Command Prompt
C:\Users\IBM_ADMIN>cwbcfg /host common2.idevcloud.com /ssl 0 /r

IBM i Access for Windows
Version 7 Release 1 Level 0
Configuration Utility
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U.S. Government Users Restricted Rights - Use, duplication or disclosure
restricted by GSA ADP Schedule Contract with IBM Corp.
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Creating configuration for COMMON2.IDEUCLOUD.COM
C:\Users\IBM_ADMIN>
  
```

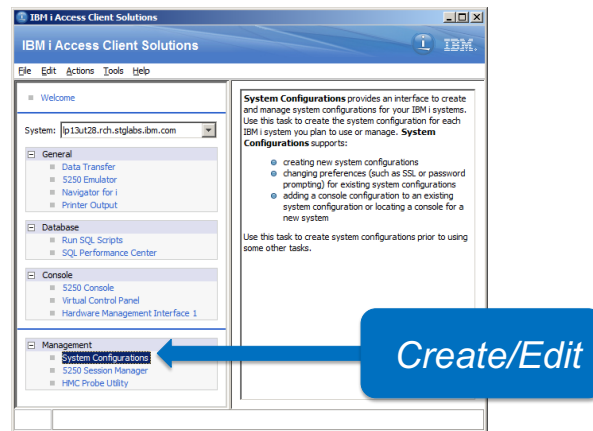
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Create or Edit a Connection



If you have ACS Base Package handy.....

- 1) Create/edit a system configuration ("connection") in core ACS

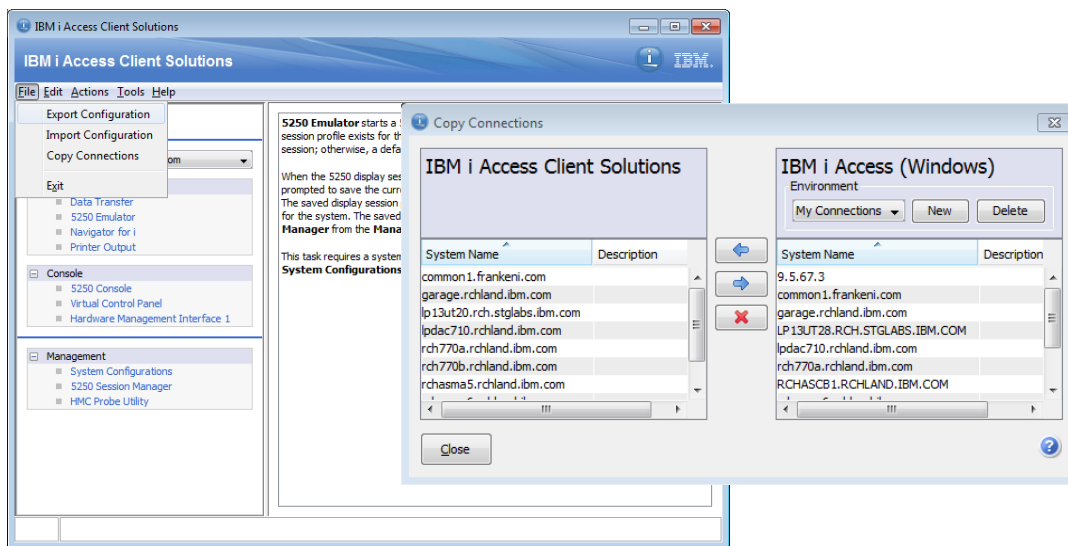


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Migration – System Connections



- IBM i Access Client Solutions Copy Connections can be used to move System Configurations



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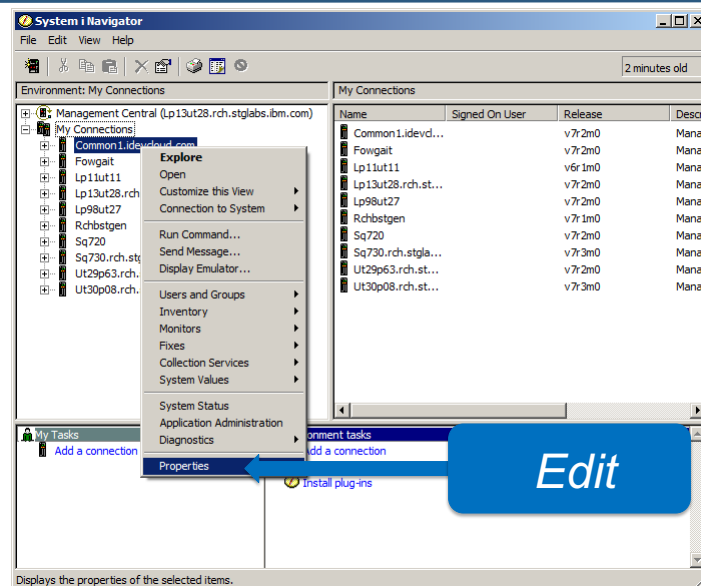
Copy Connections note



- What about "Use Windows user name and password, no prompting"?
- ACS has "Use shared credentials." This maps to the "Use Windows user name and password" option in Windows

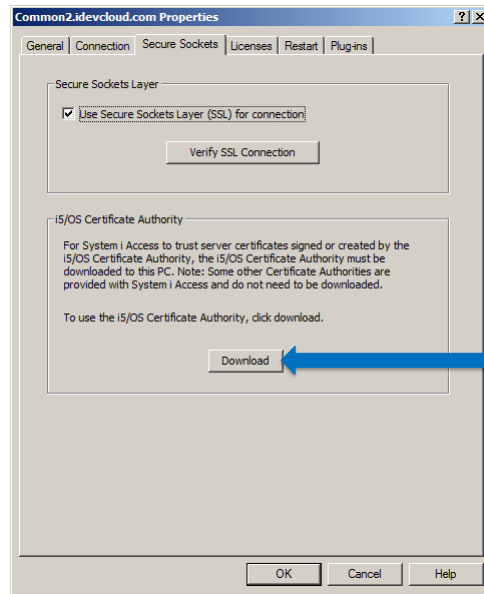
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Trust an SSL certificate



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Trust an SSL certificate



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- Two non-Navigator ways to do this:

1. cwbcossil.exe utility
2. Use IBM i ACS Base Package

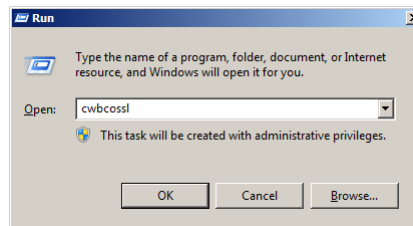


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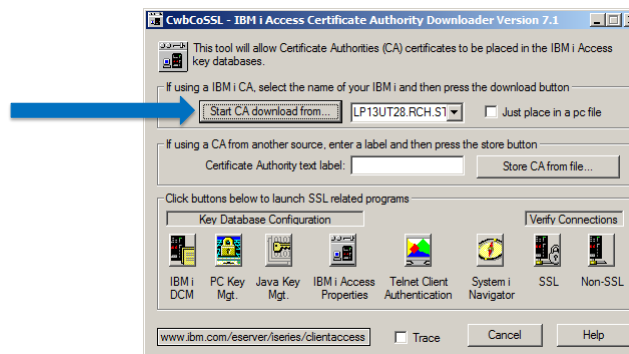


- cwbcossl utility



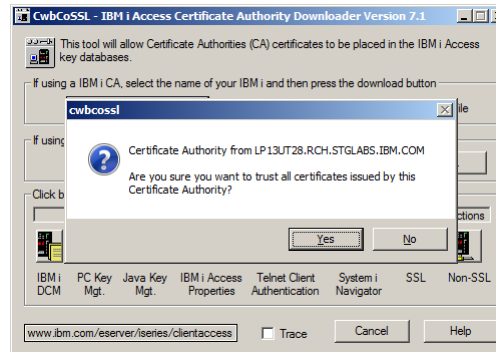
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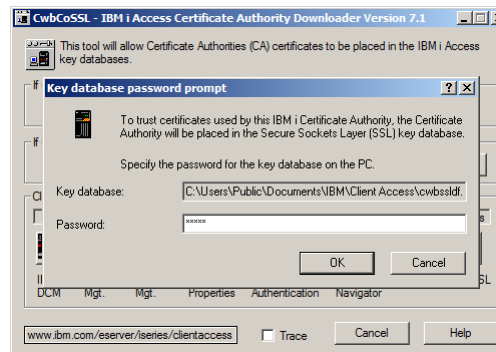
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Default password:
ca400

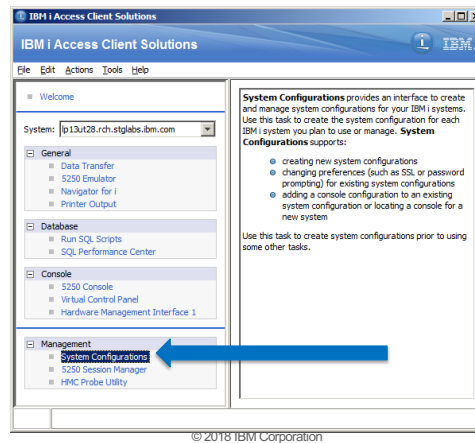
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Trust an SSL certificate



If you have IBM I ACS Base Package handy.....

- 1) Go to create/edit a system configuration ("connection") in ACS Base Package

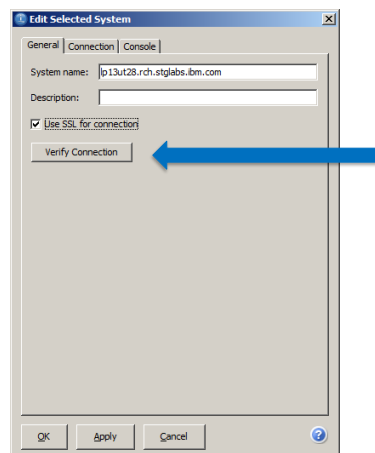


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- 2) Enable SSL and verify connection

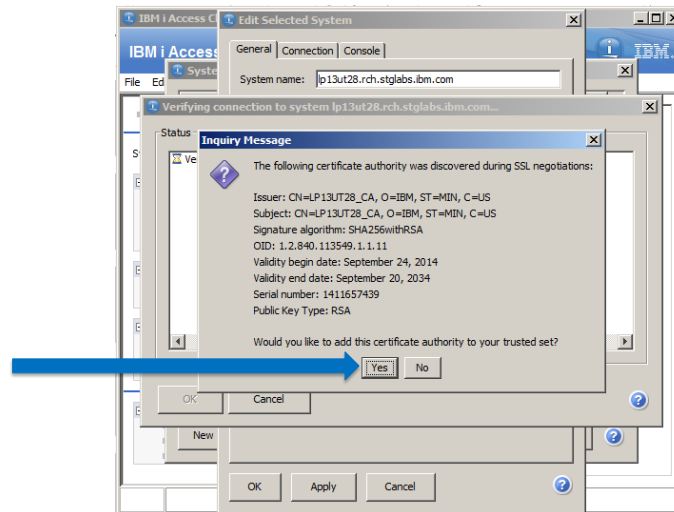


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Trust an SSL certificate



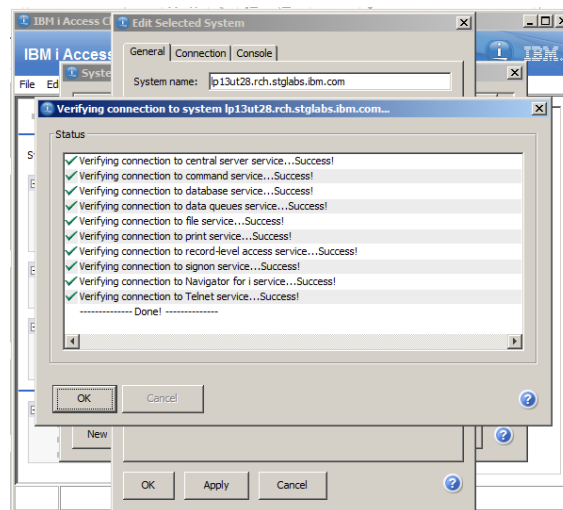
3) Accept the certificate



Trust an SSL certificate



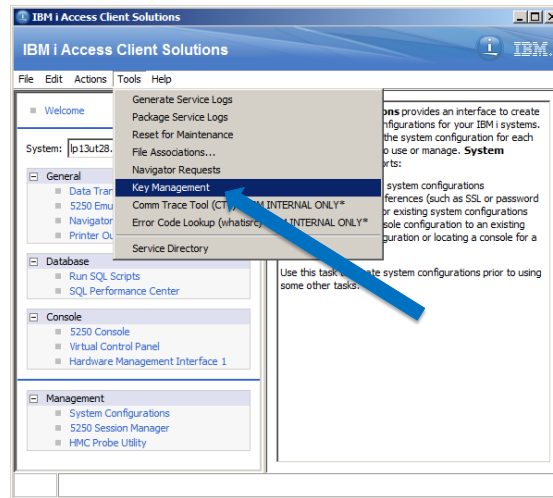
3) Accept the certificate



Trust an SSL certificate



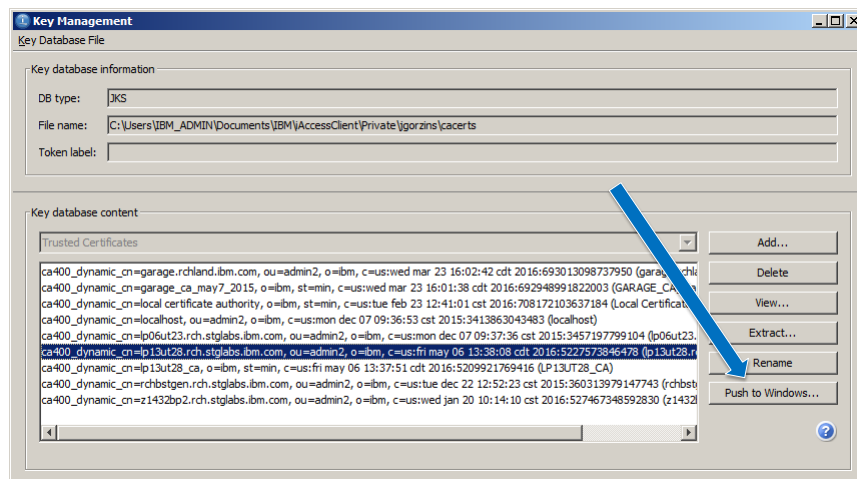
4) "Tools->Key Management"



Trust an SSL certificate



5) Select the certificate and click the "Push to Windows" button

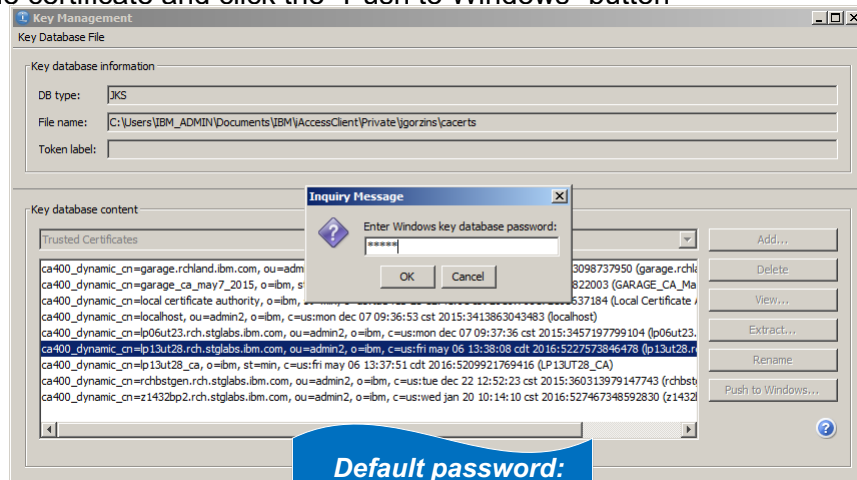


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Trust an SSL certificate



5) Select the certificate and click the "Push to Windows" button

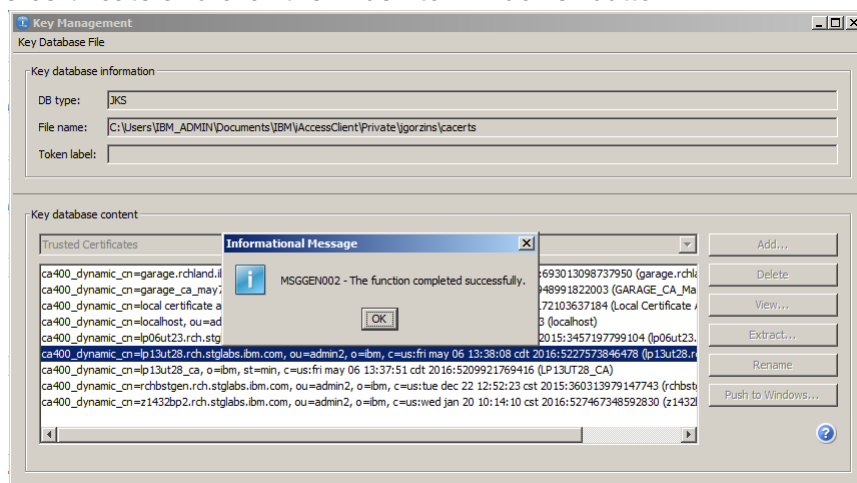


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Trust an SSL certificate



5) Select the certificate and click the "Push to Windows" button



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Incoming Remote Command



- IBM i OS CL command - RUNRMTCMD
 - Send workstation command and workstation credentials to REXEC daemon running on the workstation TCP/IP Port 512
 - IBM i Access for Windows Incoming Remote Command service was such a REXEC daemon
 - Windows Server OS also provided an REXEC daemon
 - REXEC spec has significant issues, key being that it does not provide for SSL communications so credentials and command are passed in clear text
 - Microsoft last provided their REXEC daemon in the Windows Server 2003 SDK, and documents that it is deprecated and not guaranteed to work in newer Windows OS environments
 - IBM does not include it's Incoming Remote Command with IBM i Access Client Solutions Windows Application Package

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Incoming Remote Command - Options



- IBM i OS CL commands - STRPCO and STRPCCMD
 - Also sends workstation command
 - Uses active 5250 Telnet connection from compatible 5250 emulator
 - If 5250 Telnet connection is SSL Enabled, command is sent encrypted
 - No credentials provided or required as 5250 Telnet connection is already authenticated and runs under account that launched 5250 emulator
 - IBM i OS CL commands STRPCO and STRPCCMD must be ran from the interactive job that was started from the 5250 emulator on the workstation that the command will be ran on
 - Supported by the IBM i Access Client Solutions Base Package 5250 emulator

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Incoming Remote Command - Options



- IBM i Access For Windows r7.1 is still supported on Windows Server 2012 R2 and Windows 8.1 and earlier Windows OS versions
- Still includes now deprecated Incoming Remote Command REXEC daemon
- Install and use the Microsoft Windows Server 2003 SDK provided REXEC daemon
- OpenSSH also possible
 - Run OpenSSH daemon on PC
 - "Desktop" not available

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Connection Configuration



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System Configurations



- Use the System Configurations panel to store connection information on the IBM i Systems that will be used



System Configurations



- Create, Edit or Delete connection information for IBM i Systems
 - System Name: What is entered by the user to connect to this host
 - IP Address: What the PC's DNS environment last returned when connecting to the System Name
 - Service Host Name: The System's Console host name or IP address as configured
 - Description

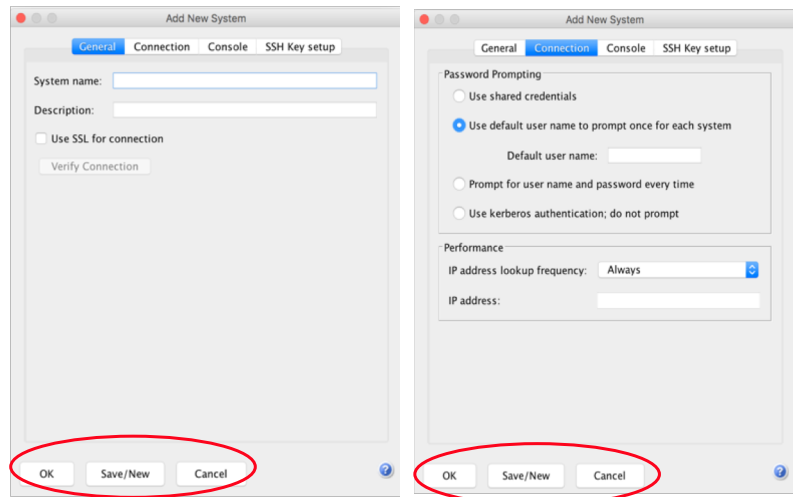
System Name	IP Address	Service Host Name	Description
IBMDemo.lnTheCloud.com			
IFS System	9.5.53.206		
Int Test 1PD	9.5.53.28	db2mhmc1	Integration Test 1PD
Int Test 1PE	9.5.53.30	db2mhmc1	Integration Test 1PE
Jim Diephuis Machine	9.5.110.133		
ip08ut27.rch.stglabs.ibm.com			
ip13ut28.rch.stglabs.ibm.com			
ip59ut29			
ipdac710.rchland.ibm.com			
MarkGoff ut32p8	9.5.105.129		
resync1	9.5.53.191	rchhmc11.rch.stglabs.ibm.com	
resync4	9.5.90.57	rchhmc11	
Scotts DB	9.5.41.95		
Scotts DB Demo	9.5.36.63		
Scotts DB2 Sys2	9.5.54.35		
sq710.rch.stglabs.ibm.com			
sq730.rch.stglabs.ibm.com			
sync1	9.5.53.112		
sync2		rchhmc11	
svnc4	9.5.90.55	rchhmc11	

Buttons at the bottom: New, Edit, Copy, Delete, Close, Locate Console...

System Configurations

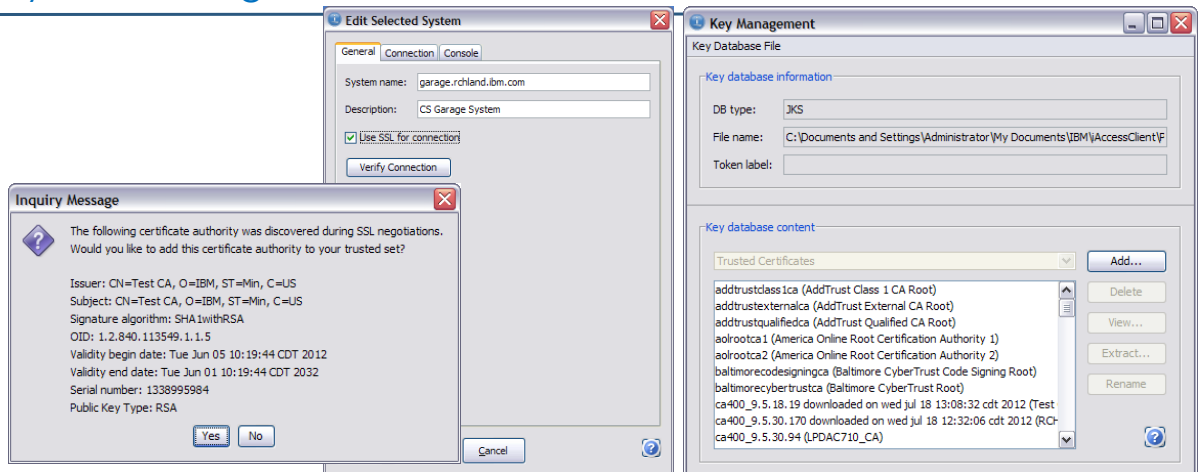


- OK - Saves the information entered and closes the panel
- Save/New - Saves the information entered and clears the panel
- Cancel - Closes the panel without saving anything



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System Configurations - SSL

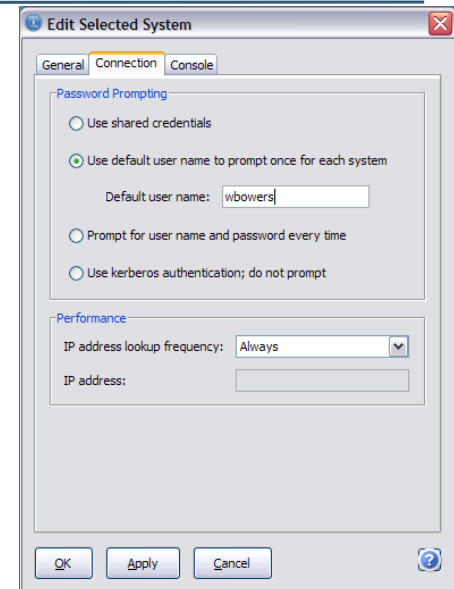


- Use SSL specifies that the connection will be secured
- If the Certificate Authority negotiated is not trusted, the user will be prompted to add to trusted list
- There still is a Key Management utility if needed

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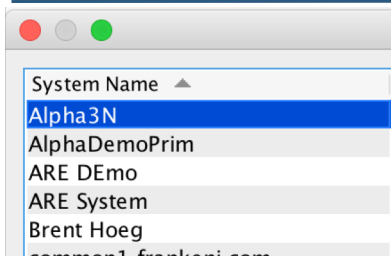
System Configurations - Authentication

- Use default user name to prompt once for each system
 - Caches credentials for duration of desktop session
- Prompt for user name and password every time
- Use Shared credentials
 - Only the first time the user is prompted to provide User name & Password
 - These credentials will be cached for use by all System configurations set to this option
- Use Kerberos authentication; do not prompt
 - No further IBM i Access Client Solutions configuration needed



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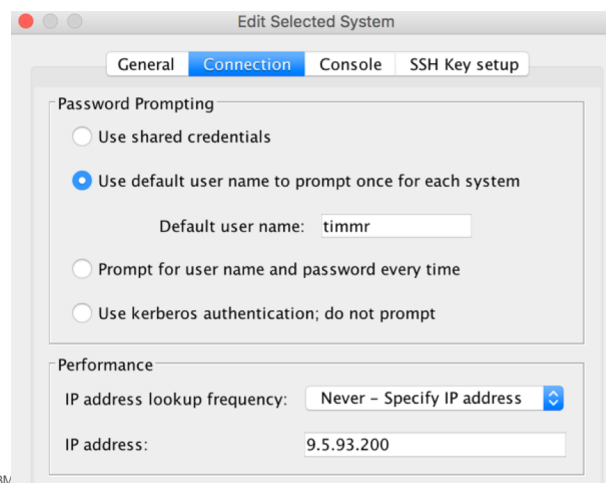
System Configurations – Using a Custom/Alias Name



Use your own custom name

Performance

- IP Address Lookup Frequency
 - Never – Specify IP Address
- IP Address
 - Use the IP Address vs the System name



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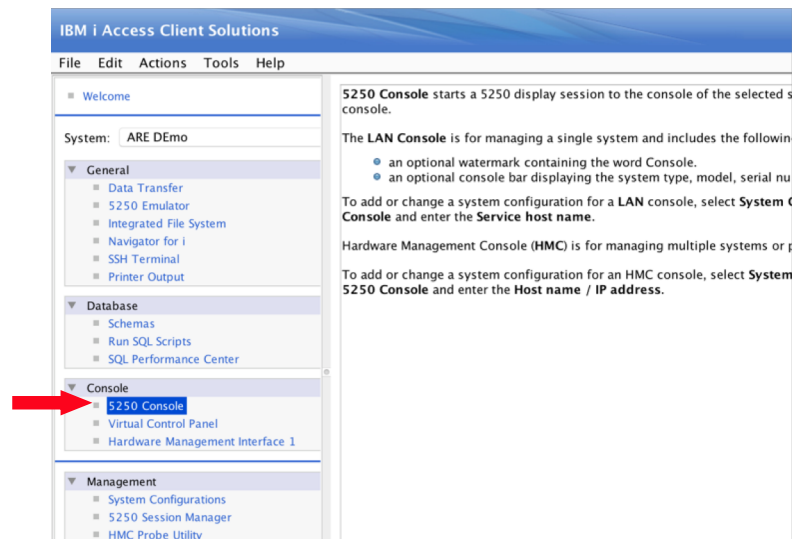
Console Configuration

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Console



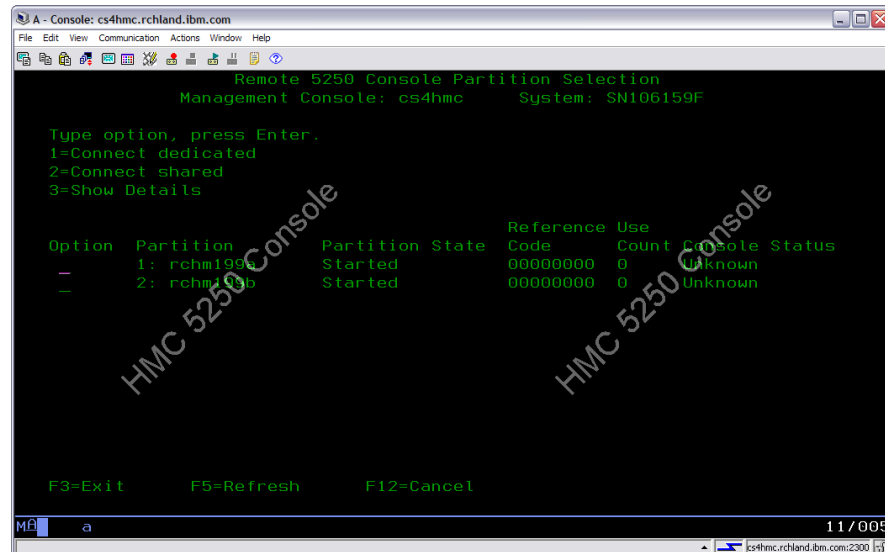
- 5250 Console – Opens a interactive console to the current System
- Virtual Control Panel – Opens a Virtual Control Panel



5250 Console



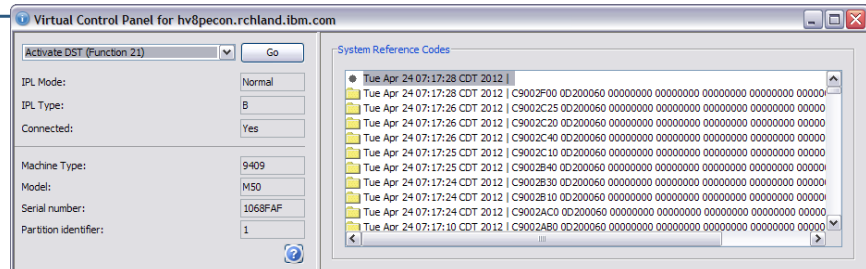
- 5250 HMC Console



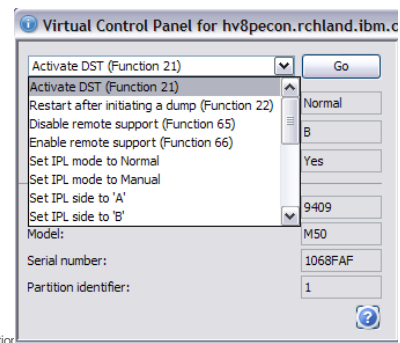
Virtual Control Panel



- Virtual Control Panel



- Service Functions
 - Providing options for service commands instead of providing the up and down arrows and enter
- Supported with LAN and HMC console types



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Console Configuration – LAN Console



- Service host name – Network Host Name or IP address of the Service Tools LAN Adapter port on the IBM i Operating System

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Console Configuration – HMC Console



- Host name / IP address of the HMC managing this IBM i OS System
- Use SSL for connection – Between client and HMC – Requires HMC setup

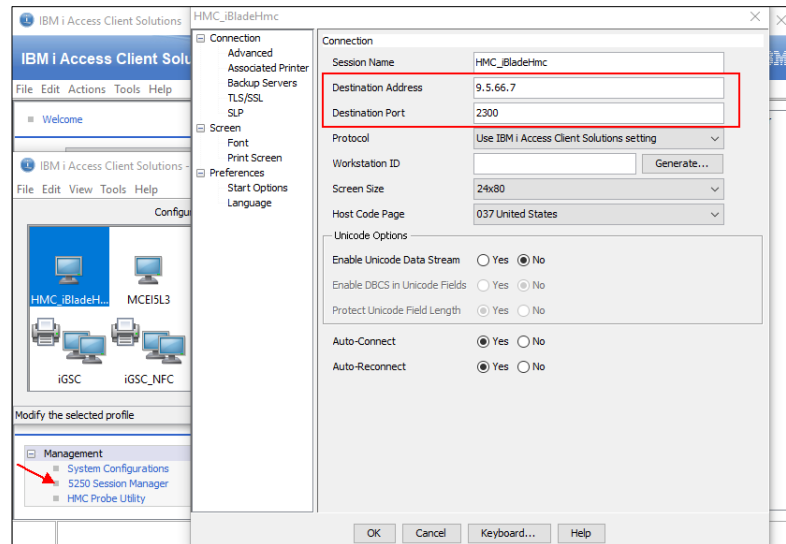
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- Advanced
 - Optional configuration pointing to specific System and Partition

Console Configuration – HMC Console



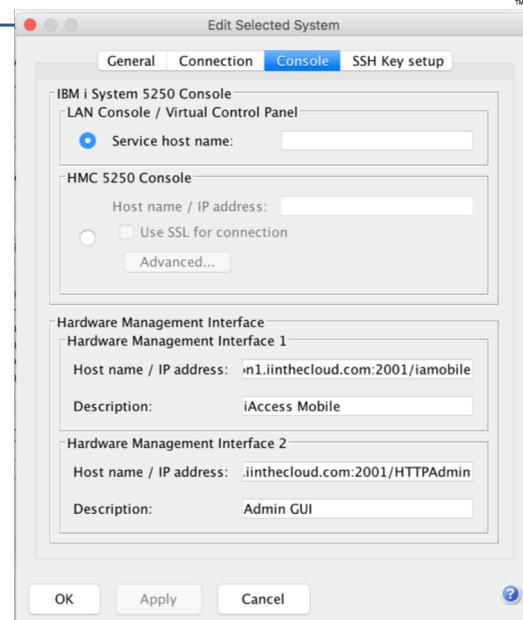
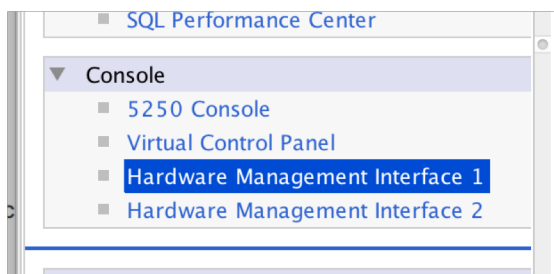
- Can be done directly from 5250 Session Manager



Shortcuts to other interfaces

Create quick links to other management interfaces

- Web Admin GUI
- iAccess Mobile
- HMC
- Storage server



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Questions



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Power Systems Social Media

IBM Power Systems Official Channels:



<https://facebook.com/IBMPowerSystems>



<https://twitter.com/IBMPowerSystems>



<https://www.linkedin.com/company/ibm-power-systems>



<http://www.youtube.com/c/ibmpowersystems>



<https://www.ibm.com/blogs/systems/topics/servers/power-systems/>

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