



IBM Cognitive Systems 


# Hitchhikers Guide to Accessing and Managing IBM i OS

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QUSER  
November 16, 2017


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Cognitive Systems  IBM



## What is System Access & Management

 User Accessing the IBM i


 Managing IBM i System


 DB Engineer playing with the DB2 on i

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Cognitive Systems  **Agenda** 

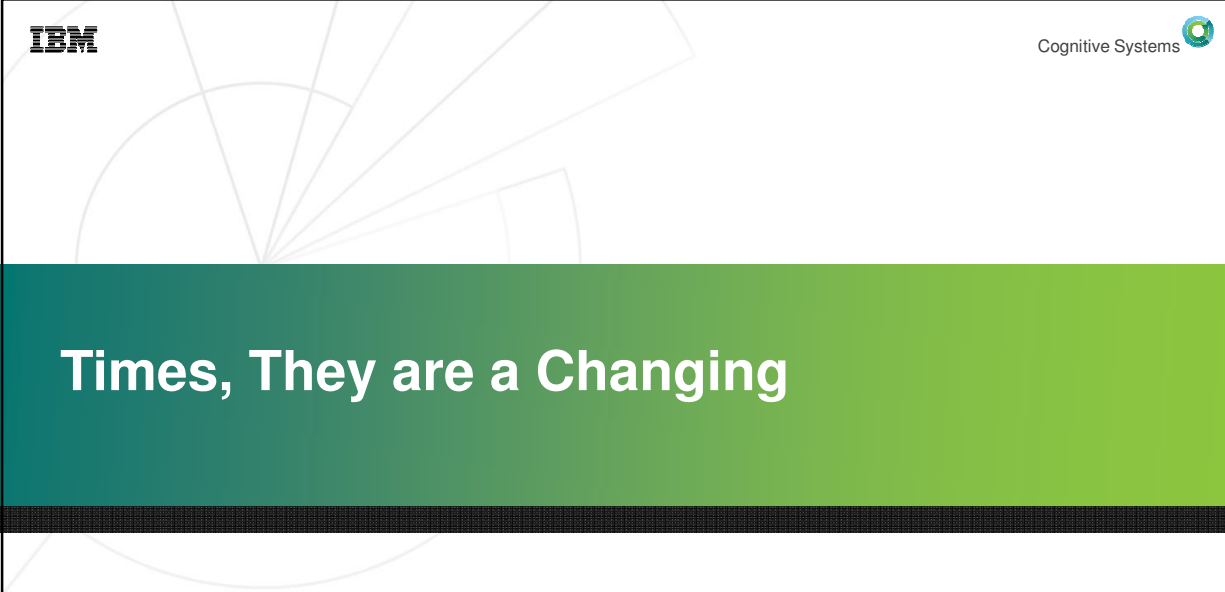
- Times, They are a Changing
- Why the Change?
- Functional Overview
  - Connection Configuration
  - 5250 Emulation
  - Data Transfer
  - Console
  - Printer Output
  - Integrated File System
  - Database Tools
  - SSH Terminal
  - Navigator
  - IBM i ARE
- Deployment / Migration
- Summary







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# Times, They are a Changing



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Cognitive Systems  **IBM i ACS – New Client** 

- Released May 2013
  - Not so new!
- Runs anywhere that has Java™
  - Java 1.6 or later
  - Current Java 1.8 Recommended
- This includes:
  - Windows
  - Mac
  - Linux
  - AIX
  - IBM i





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Cognitive Systems  **IBM i ACS** 

- IBM i Access Client Solutions
  - The core of the product is a Java client that is not platform specific.
  - Runs on most full featured client/server Operating Systems that support Java 6.0 or higher such as most versions of Windows, Mac and Linux.
  - Same deployment, configuration, settings, problem determination across all platforms.
  - Features include:
    - 5250 Display and Printer Emulation
    - Printer Output
    - Integrated File System
    - Data Transfer & Database Tools (SQL Scripts, Visual Explain, Schemas)
    - 5250 LAN Console and Virtual Control Panel
    - SSH Terminal Integration



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Cognitive Systems  **IBM i ACS – 3 Products in 1** 

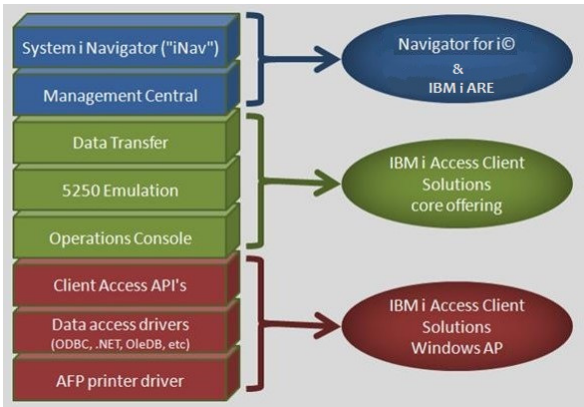
- Base Package (Platform Independent)**
  - 5250 display and printer emulator
  - Data transfer
  - Printer Output
  - Console consolidation
  - Many other features
- Windows Application Package**
  - Windows Installer MSI Package
  - Data drivers (ODBC, OLEDB, .Net)
  - Printer drivers
- Linux Application Package**
  - RPM and Debian Install Packages
  - ODBC driver

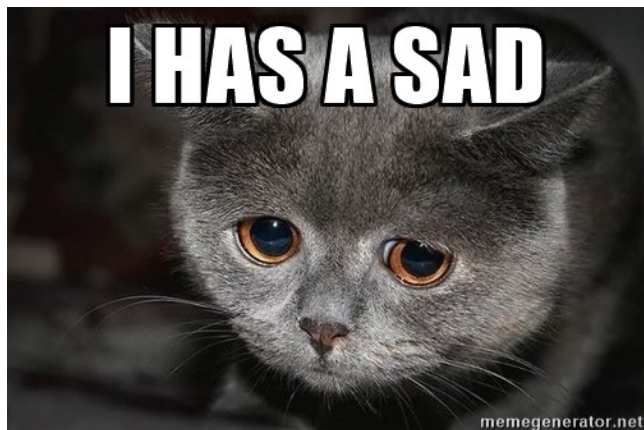
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Cognitive Systems  **Decoupling Access for Windows** 

- IBM i Access for Windows or Client Access has been the platform for nearly everything needed to interact with your IBM i OS for a long time. From end users just needing a 5250 session, to a System Administrator, the same product and maintenance overhead is needed
- Many of these functions are now available in different ways depending on the needs of the user or application environment.
- Access for Windows major functions and where those functions are provided




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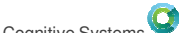


# Why the Change?



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## IBM i Access for Windows


- Windows only solution....mid 90's
- Primary interface for many
- 5250 emulator
- Console
- OS Management
- Much more




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## What did we have in the past?




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**IBM i Access for Windows**

- 5250
- Console
- Data Transfer
- ODBC, .Net, etc.
- GUI Navigator
- Spool file
- IFS file transfer
- PTF Management
- Dashboard
- Run SQL Script
- Visual Explain
- API's
- ...




**IBM I Access for Linux**

- 5250 (it was terrible)
- ODBC



This space intentionally left blank.

**nothing**




This space intentionally left blank.


**nothing**

**Windows no longer is the only OS or device that is required**


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13

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## Strategy







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**Windows  
Install  
Only**

➔

**Any Device**

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### Core issues

- No support for Linux & Mac
- No support for Mobile
- Difficult to deploy for many users
- Difficult to update
- Development is costly
- Existing support is OLD – The world has changed!





### Solution themes

- Device & OS Neutral
- Flexible
- Easy to install and maintain
- Simple for a single user or 1000's
- Improved administrator situation
- Cost effective to create






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## IBM i Access Family

- IBM i Access for Windows (5770XE1)
  - Client Access
  - Most mature and widely used product
    - System i Navigator
    - 5250 Display and Printer Emulation
    - Data Transfer
    - Operations Console & Virtual Control Panel
- IBM i Access for Web (5770XH2)
  - IBM i System Hosted HTML based web product
  - Very robust capability that has been well received
    - 5250 Display
    - Print Access
    - Database Access
- IBM i Access for Linux (5770XL1)
  - Lightly embraced product specifically for Linux RPM Operating Systems
    - ODBC provider
    - 5250 Display
    - Remote Command





- Data Access Providers
- Remote Command
- Print Drivers





**Gone Mobile**

- Integrated File System
- Commands
- Jobs

**Just Gone!**



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Cognitive Systems  **Where are we now and for the future?** 

			
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<p><b>IBM i ACS Base</b></p> <ul style="list-style-type: none"> <li>- 5250</li> <li>- Console</li> <li>- Data Transfer</li> <li>- Spool file</li> <li>- IFS file transfer</li> <li>- Run SQL Scripts</li> <li>- Visual Explain</li> </ul> <p><b>IBM i ACS Win AP</b></p> <ul style="list-style-type: none"> <li>- ODBC, .Net, OLEDB Drivers</li> <li>- APIs</li> </ul> <p><b>Navigator for i</b></p> <ul style="list-style-type: none"> <li>- PDI</li> <li>- PTF</li> <li>- Database</li> <li>-Gui Interface</li> </ul> <p><b>ARE</b></p> <ul style="list-style-type: none"> <li>- Multi System Mgt</li> <li>- PTF distribution</li> </ul>	<p><b>IBM i ACS Base</b></p> <ul style="list-style-type: none"> <li>- 5250</li> <li>- Console</li> <li>- Data Transfer</li> <li>- Spool file</li> <li>- IFS file transfer</li> <li>- Run SQL Script</li> <li>- Visual Explain</li> </ul> <p><b>IBM i ACS Linux AP</b></p> <ul style="list-style-type: none"> <li>- ODBC</li> </ul> <p><b>Navigator for i</b></p> <ul style="list-style-type: none"> <li>- PDI</li> <li>- PTF</li> <li>- Database</li> <li>-Gui Interface</li> </ul> <p><b>ARE</b></p> <ul style="list-style-type: none"> <li>- Multi System Mgt</li> <li>- PTF distribution</li> </ul>	<p><b>IBM i ACS Base</b></p> <ul style="list-style-type: none"> <li>- 5250</li> <li>- Console</li> <li>- Data Transfer</li> <li>- Spool file</li> <li>- IFS file transfer</li> <li>- Run SQL Script</li> <li>- Visual Explain</li> </ul> <p><b>Navigator for i</b></p> <ul style="list-style-type: none"> <li>- PDI</li> <li>- PTF</li> <li>- Database</li> <li>-Gui Interface</li> </ul> <p><b>ARE</b></p> <ul style="list-style-type: none"> <li>- Multi System Mgt</li> <li>- PTF distribution</li> </ul>	<p><b>IBM i Access Mobile</b></p> <ul style="list-style-type: none"> <li>- 5250</li> <li>- GUI Management</li> <li>- DashBoard</li> <li>- Run SQL Statement</li> </ul>
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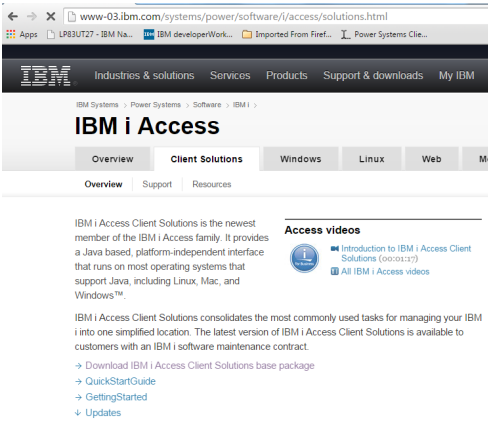
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## How do you get it ???

<http://www.ibm.com/systems/power/software/i/access/solutions.html>



# NO ESS!

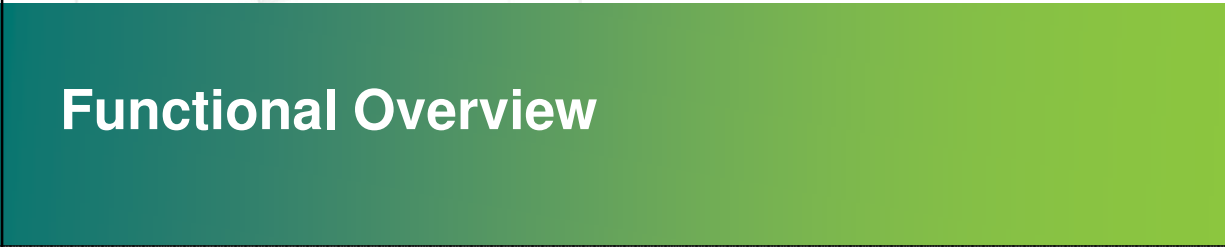


**GO GET IT TODAY!!!**

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The screenshot shows a browser window with the URL [www-03.ibm.com/systems/power/software/i/access/solutions.html](http://www-03.ibm.com/systems/power/software/i/access/solutions.html). The page title is "IBM i Access" and it features a navigation menu with "Overview", "Client Solutions", "Windows", "Linux", and "Web". The main content area includes a description of IBM i Access Client Solutions as a Java-based, platform-independent interface for managing IBM i systems. It also lists "Access videos" such as "Introduction to IBM i Access Client Solutions" and "All IBM i Access videos".



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# Functional Overview


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The slide features a large green horizontal bar with the text "Functional Overview" in white. The background is white with a faint, light gray geometric pattern of lines and arcs. The IBM logo is in the top left and the Cognitive Systems logo is in the top right. The copyright notice is at the bottom left.

Cognitive Systems  **Common Questions** 

- What is it supported connecting to?
  - Supported connecting to IBM i OS r7.3, r7.2, r7.1 and r6.1
- Do I need any extra licenses? Any extra ports, protocols?
  - No, IBM i OS supports IBM i Access Client Solutions exactly the same as IBM i Access for Windows
  - Checks out the same 57xxXW1 Licenses for 5250 and Data Transfer
  - Connects to the same IBM i Access Host Servers on the same ports in the same way
    - Exit programs will continue to have the same impact
    - Application Administration local policies will still be applied
- Do I need to uninstall IBM i Access for Windows first?
  - For ACS core offering, no
  - For the Windows Application Package, yes.



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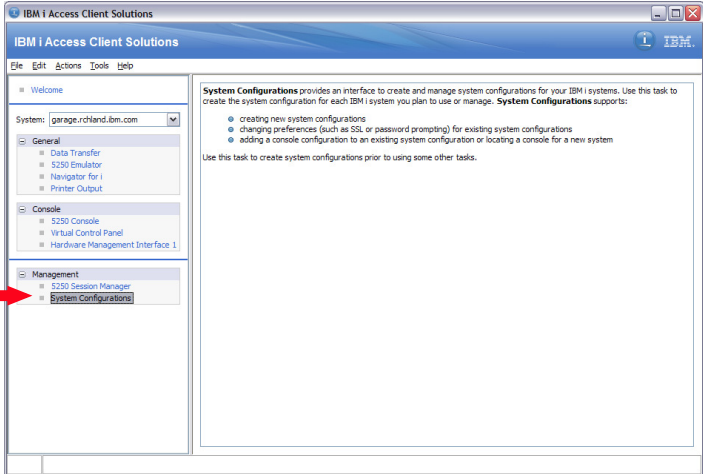


# Functional Overview: Connection Configuration



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Cognitive Systems  **System Configurations** 

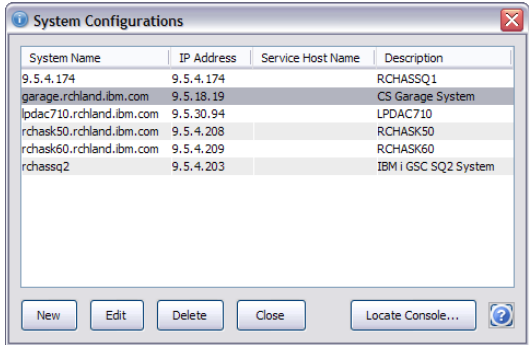
- Use the System Configurations panel to store connection information on the IBM i Systems that will be used



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Cognitive Systems  **System Configurations** 

- Create, Edit or Delete connection information for IBM i Systems that are used.
  - 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

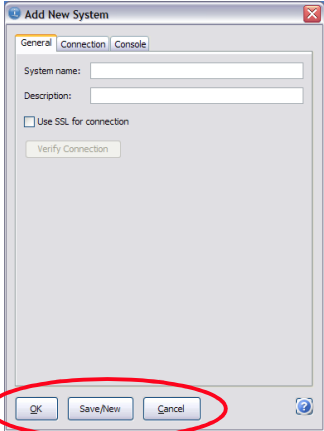
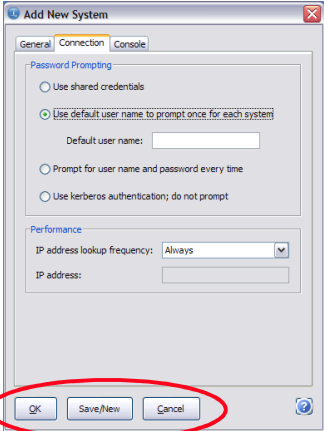


System Name	IP Address	Service Host Name	Description
9.5.4.174	9.5.4.174		RCHASSQ1
garage.rchland.ibm.com	9.5.18.19		CS Garage System
lpdac710.rchland.ibm.com	9.5.30.94		LPDAC710
rchask50.rchland.ibm.com	9.5.4.208		RCHASK50
rchask60.rchland.ibm.com	9.5.4.209		RCHASK60
rchassq2	9.5.4.203		IBM i GSC SQ2 System

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### System Configurations

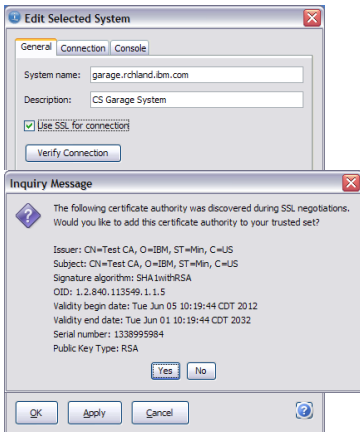
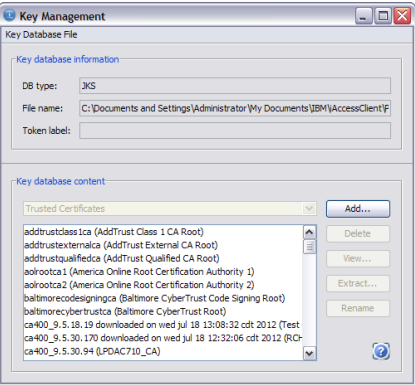



- OK - Saves the information entered and closes the panel
- Save/New - Saves the information entered and clears the panel
- Cancel - Closes the panel without saving anything

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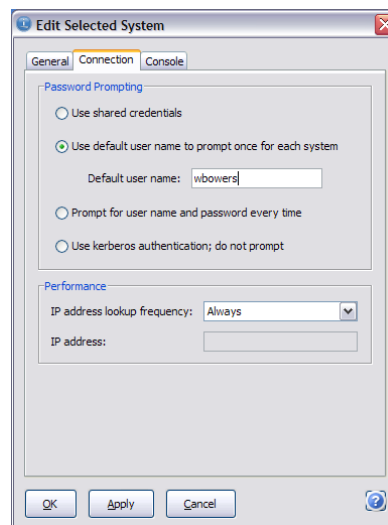
### System Configurations - SSL



- 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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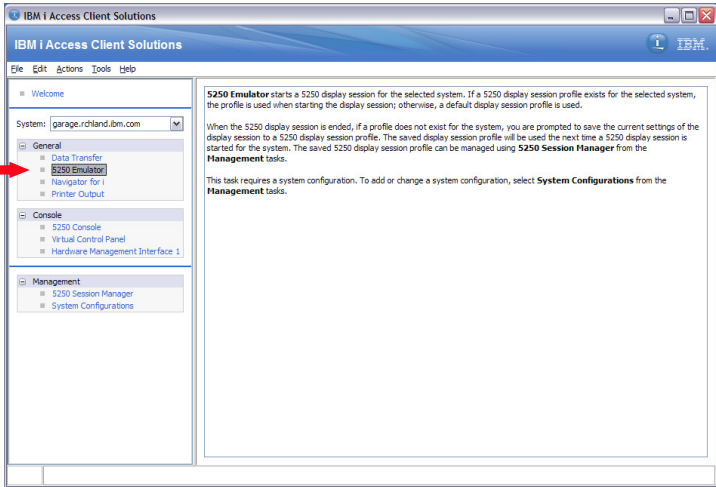
- Use default user name to prompt once for each system
  - Caches credentials for duration of desktop session
- Prompt for user name and password every time
- Use Shared credentials
  - First time for desktop session that a connection is made to a System configuration using this option the user will be 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





## Functional Overview: 5250 Emulation

Cognitive Systems  **5250 Emulation** 

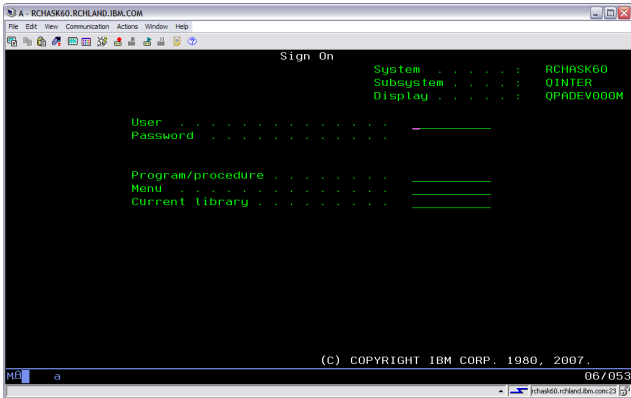
- Opens an Enhanced 5250 Telnet Emulator session to the current System



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Cognitive Systems  **5250 Emulation** 

- Provides nearly identical interaction, look and feel to the Access for Windows PC5250 emulator
  - Keyboard Mapping
  - Keystroke Macros
  - Edit Colors
  - Toolbar Customization
  - Pop-Up keypad
  - Window Setup
  - Hotspots
  - Printer Emulation
- Also some New features
  - Tabbed Sessions
  - Mouse Wheel
  - Simplified Codepage
  - Screen History
  - Watermarks
  - Default Session

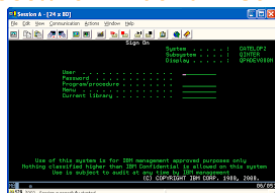


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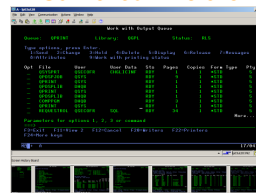
### Let's Talk More about the Emulator



Access for Windows – PC5250



ACS – 5250 Emulator



### Mouse Wheel! Touch Pad !!



Touch Pad Too!!

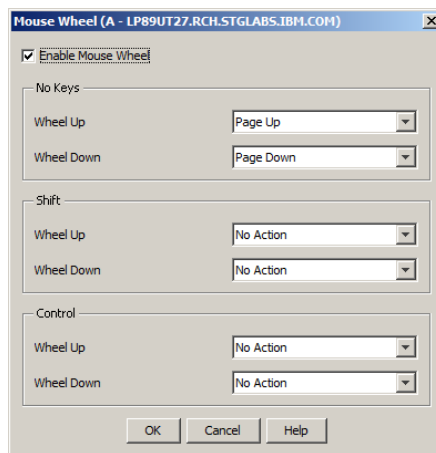


Mouse wheel recognition!

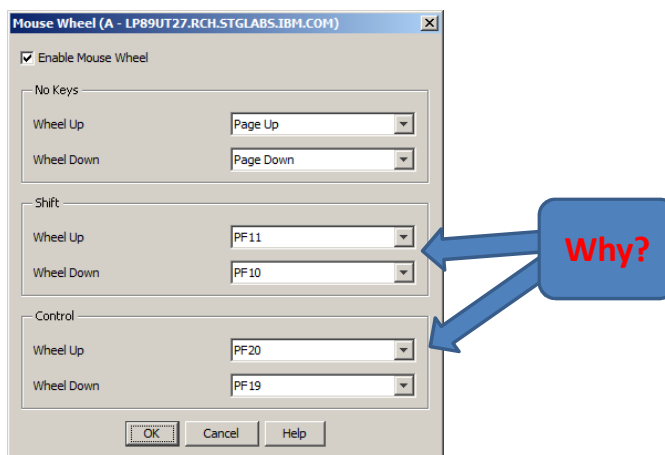






- Edit->Preferences->Mouse Wheel

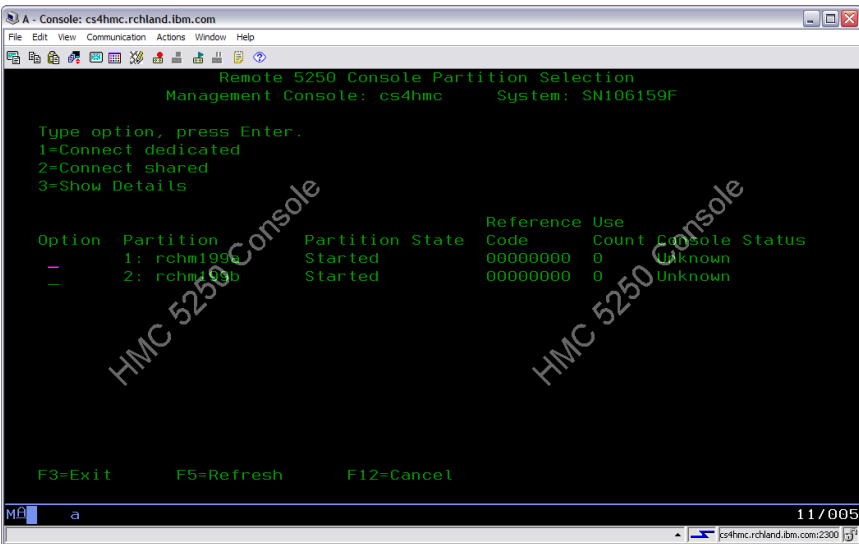


Mouse wheel options – How Wayne likes it!!



Cognitive Systems  Watermark Support 

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The screenshot shows a terminal window titled "Console: cs4hmc.rchland.ibm.com". The main display is a "Remote 5250 Console Partition Selection Management Console" for system SN106159F. It prompts the user to "Type option, press Enter." with three choices: 1=Connect dedicated, 2=Connect shared, and 3=Show Details. Below this is a table of partitions:

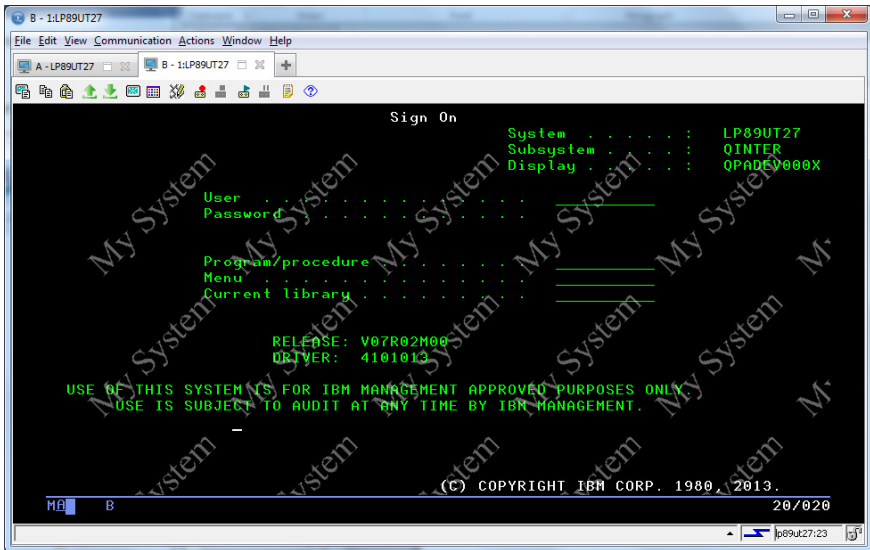
Option	Partition	Partition State	Reference Code	Use Count	Use Status
1	rchm199	Started	00000000	0	Unknown
2	rchm199	Started	00000000	0	Unknown

At the bottom, it lists function keys: F3=Exit, F5=Refresh, and F12=Cancel. The status bar shows "11/005" and the URL "cs4hmc.rchland.ibm.com:2300".

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Cognitive Systems  Watermark Support 

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The screenshot shows a terminal window titled "B - 1:LP89UT27" with a "Sign On" prompt. The system information is as follows:

```

System . . . . . LP89UT27
Subsystem . . . . . QINTER
Display . . . . . QPAD0000X
  
```



There are input fields for "User", "Password", "Program/procedure", "Menu", and "Current library". Below these, the release and order numbers are shown:

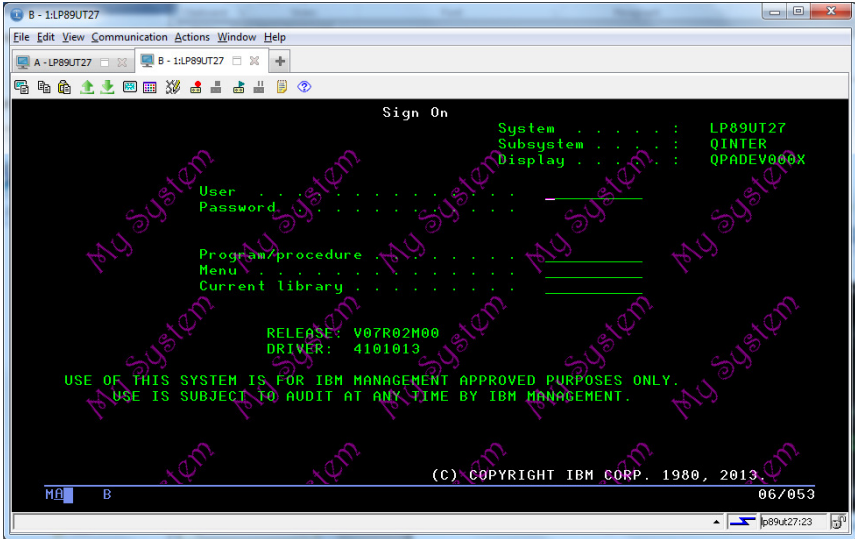
```

RELEASE: V07R02M00
ORDER: 4101013
  
```



A warning message states: "USE OF THIS SYSTEM IS FOR IBM MANAGEMENT APPROVED PURPOSES ONLY. USE IS SUBJECT TO AUDIT AT ANY TIME BY IBM MANAGEMENT." The footer includes the copyright notice "(C) COPYRIGHT IBM CORP. 1980, 2013." and the date "20/020".

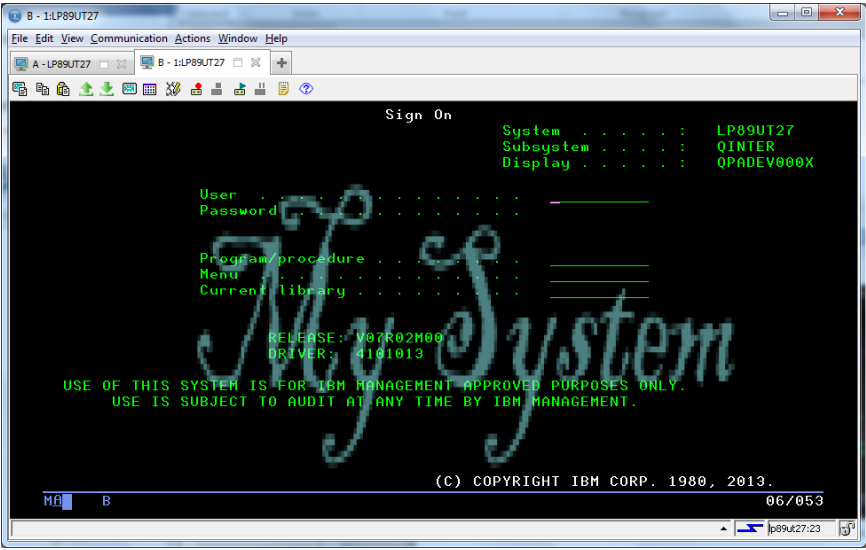
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Cognitive Systems  Watermark Support 





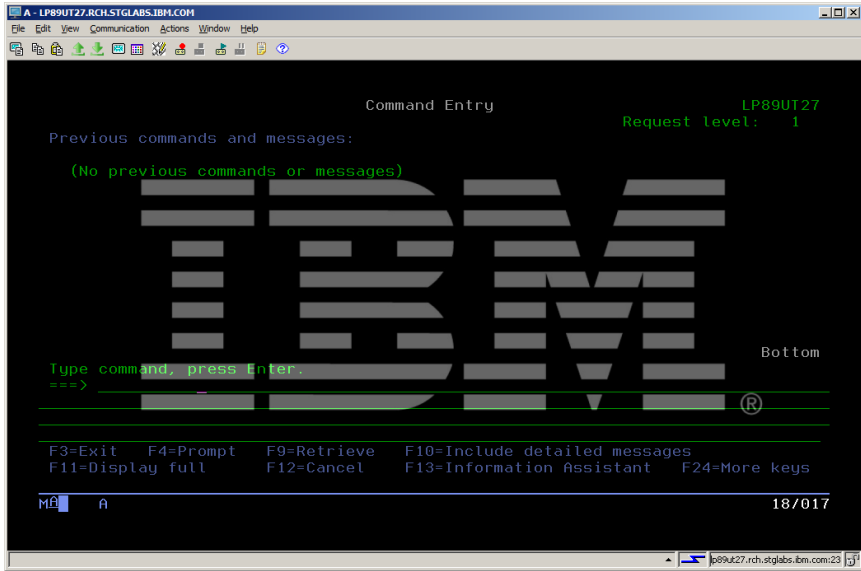
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Cognitive Systems  Watermark Support 





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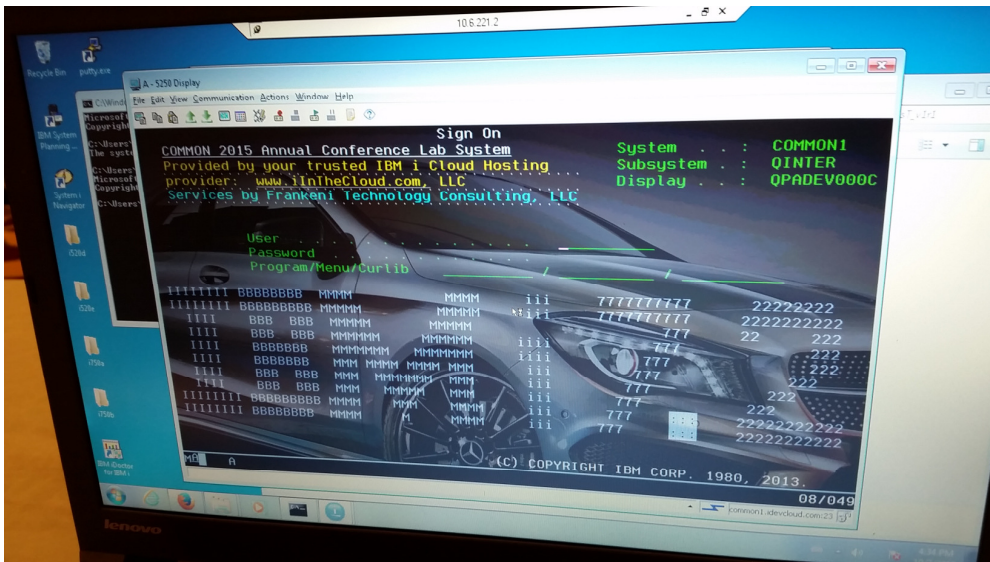
Cognitive Systems  Watermark Support 



The screenshot shows a terminal window titled "A - LP89UT27.RCH.STGLABS.IBM.COM". The terminal displays "Command Entry" and "Request level: 1". Below this, it says "Previous commands and messages: (No previous commands or messages)". A large, stylized watermark logo is centered on the screen. At the bottom, there are function key definitions: F3=Exit, F4=Prompt, F9=Retrieve, F10=Include detailed messages, F11=Display full, F12=Cancel, F13=Information Assistant, and F24=More keys. The terminal also shows "Type command, press Enter." and "Bottom". The date "18/017" is visible in the bottom right corner.

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Cognitive Systems  Watermark Support 

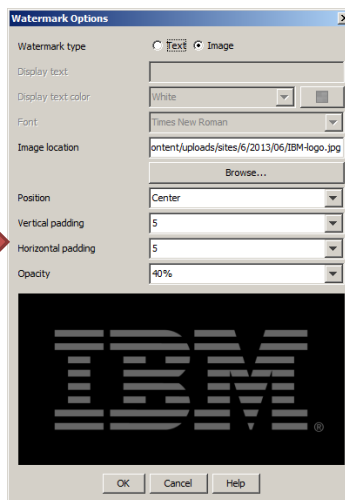


The screenshot shows a computer monitor displaying a terminal window titled "A - S250 Display". The terminal displays "Sign On" information: "COMMON 2015 Annual Conference Lab System", "Provided by your trusted IBM i Cloud Hosting provider: www.iInTheCloud.com, LLC", and "Services by Frankeni Technology Consulting, LLC". It also shows system details: "System : COMMON1", "Subsystem : QINTER", and "Display : QPADEV000C". A large watermark logo is overlaid on the terminal output. The terminal prompts for "User", "Password", and "Program/Menu/Curlib". The date "08/049" is visible in the bottom right corner.

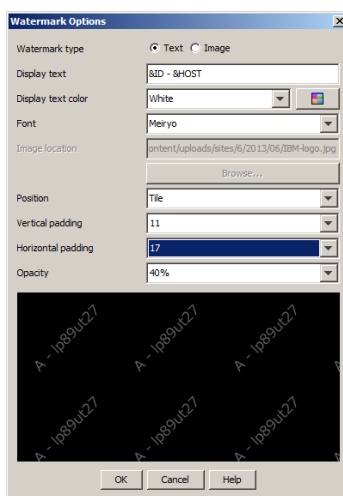
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# Image watermarks

Center, tile,  
or stretch!





# Text watermarks

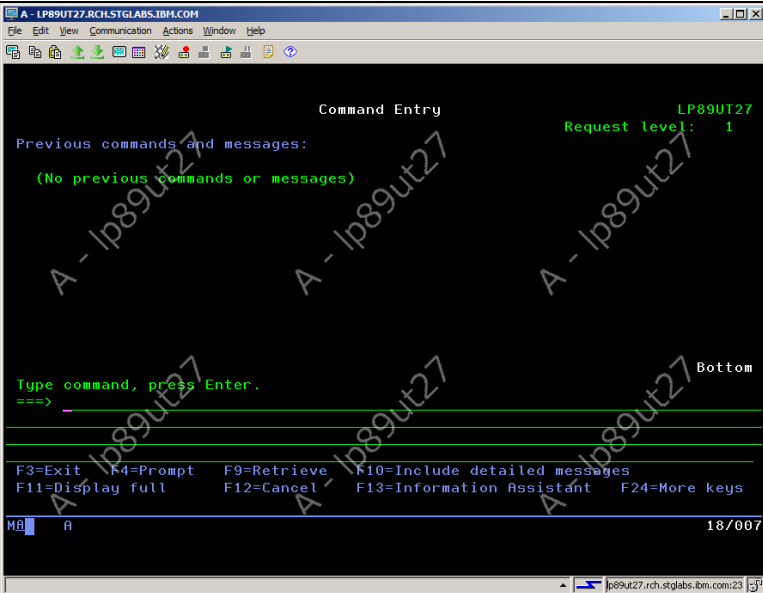


Cognitive Systems  **Text Watermark - Keywords** 



- **&COMPN**  
Computer name
- **&HOST**  
Host name defined within the emulator session
- **&ID**  
Current session ID
- **&NAME**  
Current session name
- **&USERN**  
User name that started the JVM **\*NOT IBM i user profile**

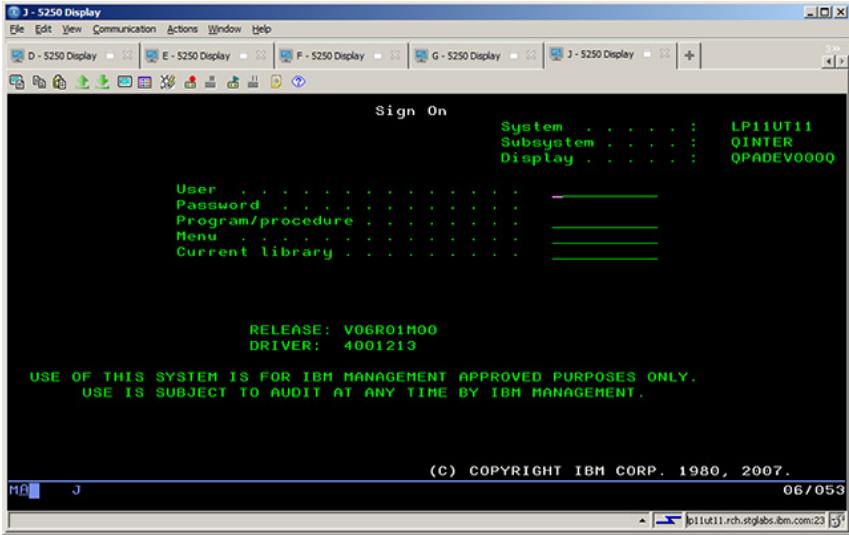
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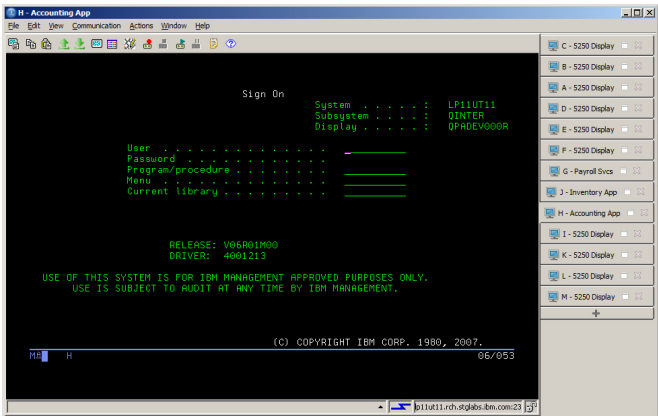
Cognitive Systems  **TABS!** 




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Cognitive Systems  **Many Tabs** 

- Drag them around (even between windows)
- Detach them to their own window
  - Choose where to place them on the screen

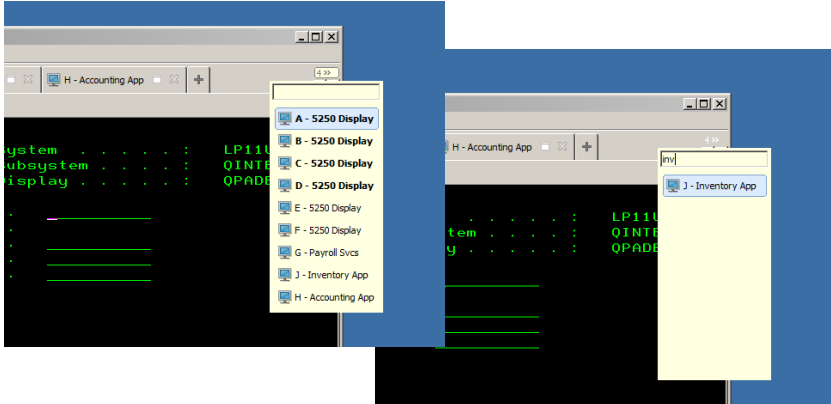


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## TABS!

- Not enough room on the screen? NO PROBLEM!

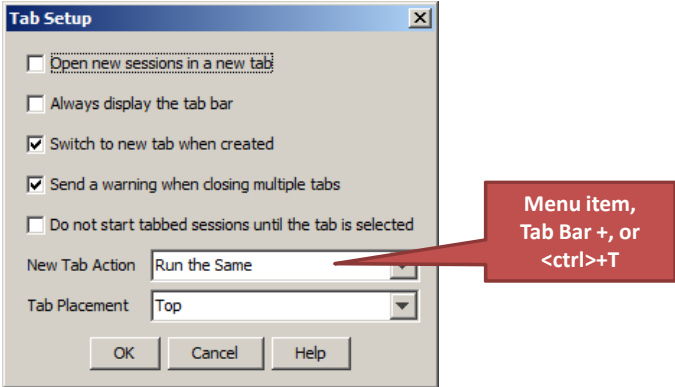


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## TABS!

- Edit->Preferences->Tab Setup

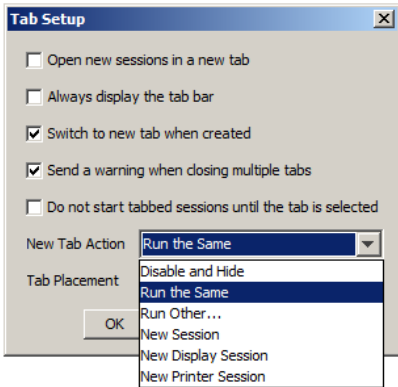


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Cognitive Systems  **TABS!** 

- Edit->Preferences->Tab Setup

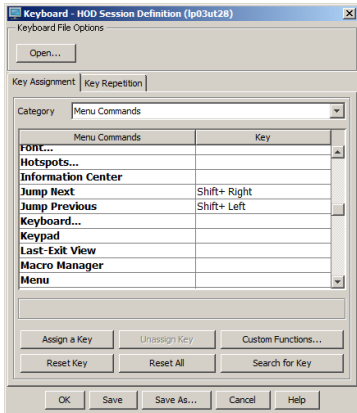


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Cognitive Systems  **TABS!** 

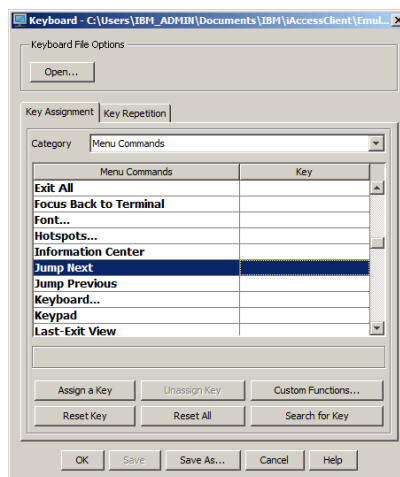
Yes, you can switch between tabs with the keyboard

- <alt>+<tab> switches between windows
- <ctrl>+<tab> switches between tabs within a window (you can customize)
- You can also define a key sequence for "Jump Next" and "Jump Previous", which will traverse all 5250 sessions (different tabs and windows)

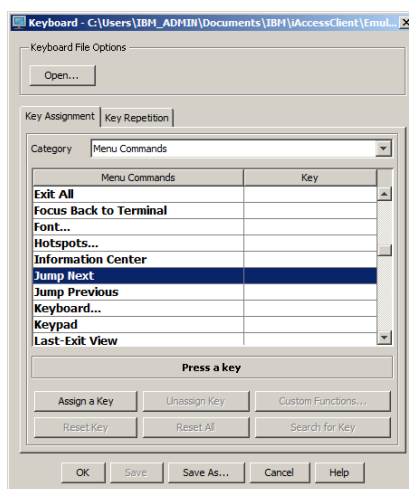


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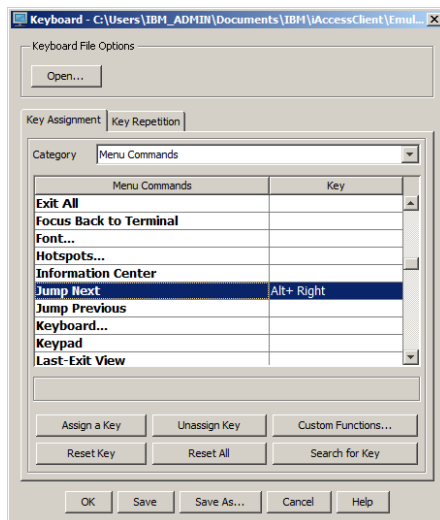
## Reworked keyboard mapping interface



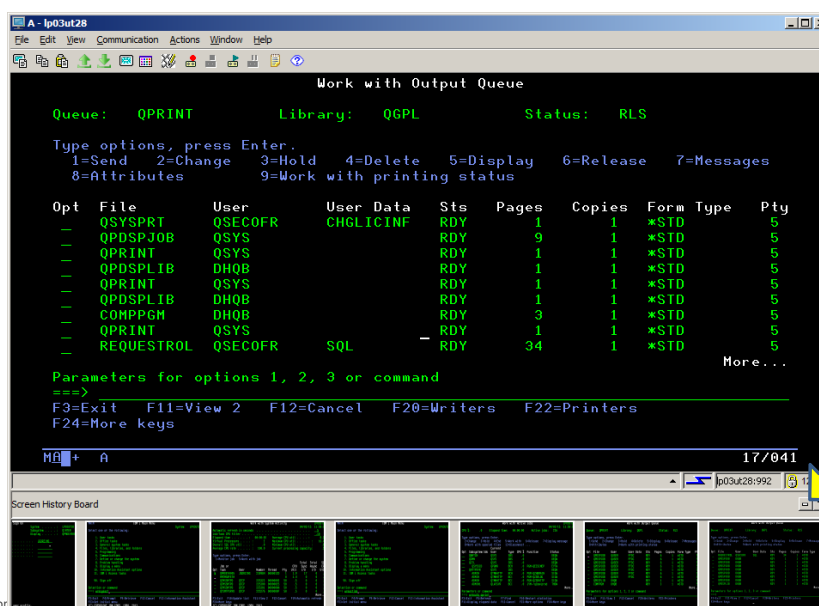
## Reworked keyboard mapping interface




## Reworked keyboard mapping interface



## Screen History



Cognitive Systems  IBM

## Screen History

**LP11UT11**

- [-] Connection
  - Advanced
  - Associated Printer
  - Backup Servers
  - ENPTUI
  - Proxy Server
  - TLS/SSL
  - SLP
- [-] Screen
  - Font
  - Print Screen
  - Preferences**
  - Start Options
  - Language

Preferences

Show Border  Yes  No

Graphical OIA  Yes  No

Textual OIA  Yes  No

Keypad  Yes  No

Toolbar  Yes  No

Toolbar Text  Yes  No

Status Bar  Yes  No

Macro Manager  Yes  No

Right Mouse Button  Popup Keypad  Context Menu

Scratch Pad  Yes  No

'Save' in Scratch Pad  Yes  No

Quick Connect  Yes  No

Search Text  Yes  No


Screen History Options

Screen History  Yes  No

History Screen Type  Simple(Text)  Traditional(Screen)

↘

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Cognitive Systems  IBM

## Screen History

A - lp03ut28

File Edit View Communication Actions Window Help

Work with Output Queue

Queue: QPRINT    Library: QGPL    Status: RLS

Type options, press Enter.

1=Send 2=Change 3=Hold 4=Delete 5=Display 6=Release 7=Messages  
8=Attributes 9=Work with printing status

Opt	File	User	User Data	Sts	Pages	Copies	Form	Type	Pty
—	QSYSPRT	QSECOFR	CHGLICINF	RDY	1	1	*STD		5
—	QPDSPJOB	QSYS		RDY	9	1	*STD		5
—	QPRINT	QSYS		RDY	1	1	*STD		5
—	QPDSPLIB	DHQB		RDY	1	1	*STD		5
—	QPRINT	QSYS		RDY	1	1	*STD		5
—	QPDSPLIB	DHQB		RDY	1	1	*STD		5
—	COMPFGH	DHQB		RDY	9	1	*STD		5
—	QPRINT	QSYS		RDY	1	1	*STD		5
—	REQUESTROL	QSECOFR	SQL	RDY	34	1	*STD		5

More...

Parameters for options 1, 2, 3 or command  
=>>

F3=Exit F11=View 2 F12=Cancel F20=Writers F22=Printers  
F24=More keys

17/041

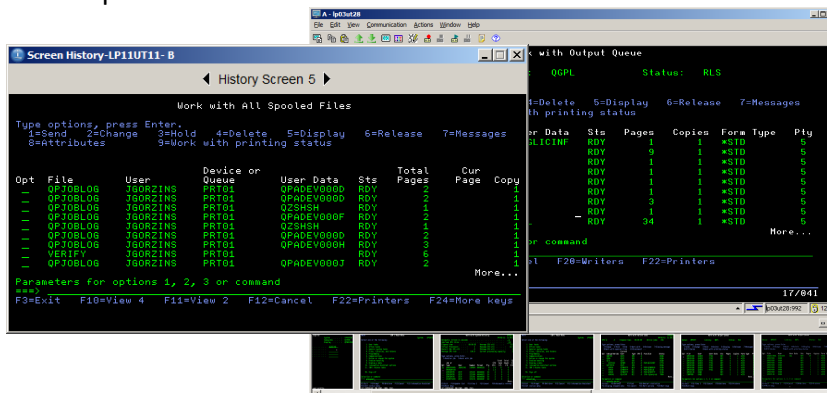
Screen History Board

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## Screen History

### History Screen

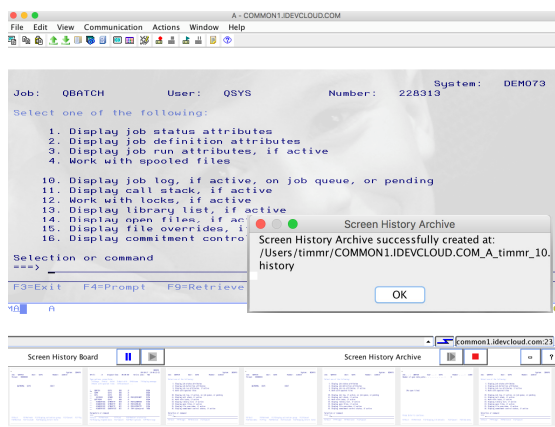
- When clicked on a thumbnail, a new window would pop-up showing the contents of the navigated screen (history screen)
- One can also navigate the other history screens (if any) from a history screen, by using the next and previous button on it





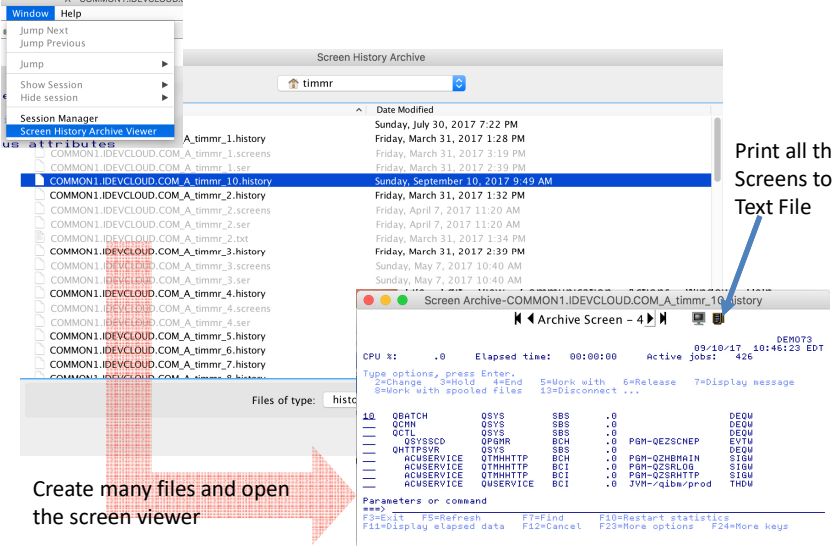
## Screen History - Archive

### Screen History

- Expanded from 15 screens to unlimited
- Easy to use controls
- Save the screens you want
- Click Stop to create a Archive file
- View list of Files





Cognitive Systems  **Screen History - Archive** 

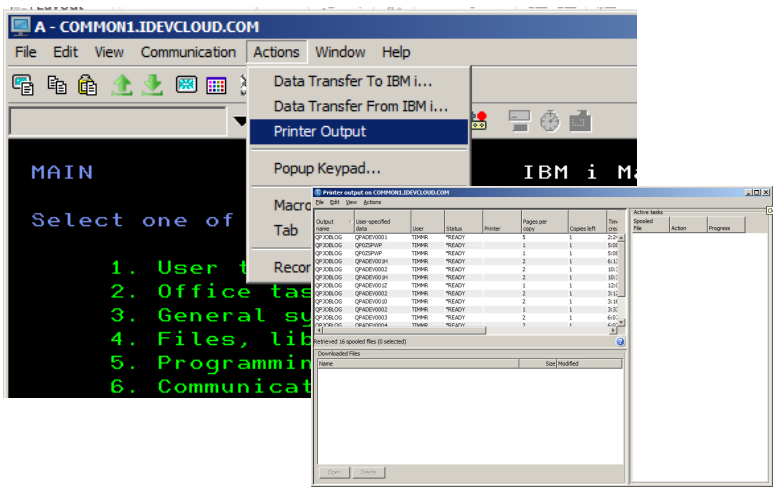


Print all the Screens to Text File


Create many files and open the screen viewer

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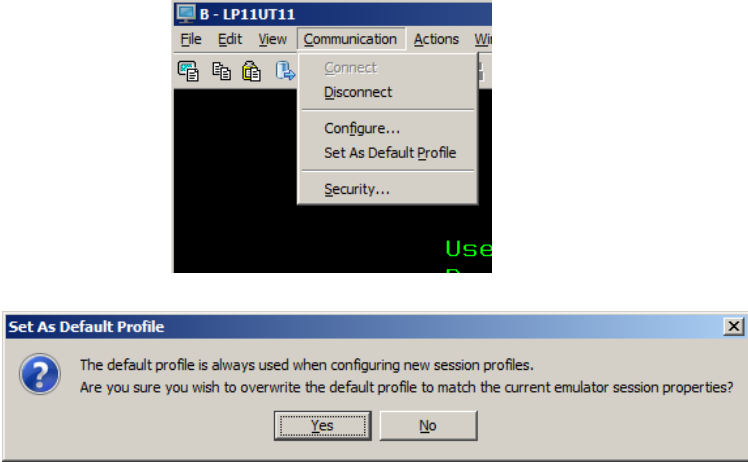
Cognitive Systems  **Easily launch Other ACS Functions** 




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Cognitive Systems  IBM

## Default Profile





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Cognitive Systems  IBM

## Default Profile


- Your current preferences will now be set as the default settings for all new 5250 sessions you create!
- This includes (but is not limited to)
  - Key mappings
  - Color mappings
  - Watermark settings
  - Screen history
  - SSL setting
  - Bypass signon
  - Screen Size (27x132)

© 2016, 2017 IBM Corporation




# Functional Overview: Data Transfer

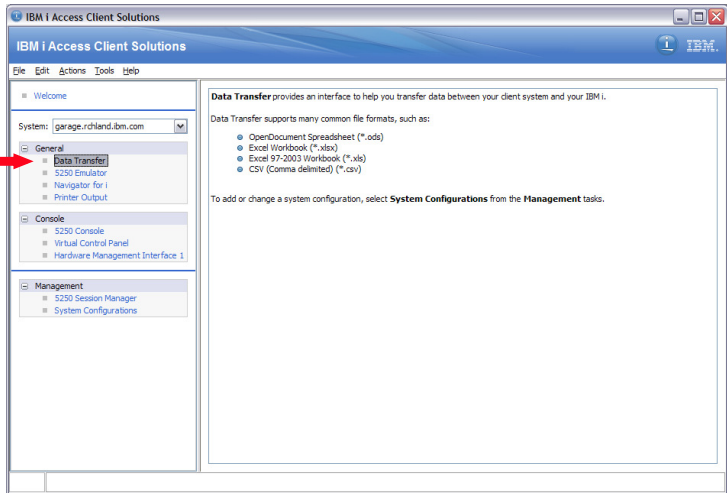
© 2016, 2017 IBM Corporation



## Data Transfer



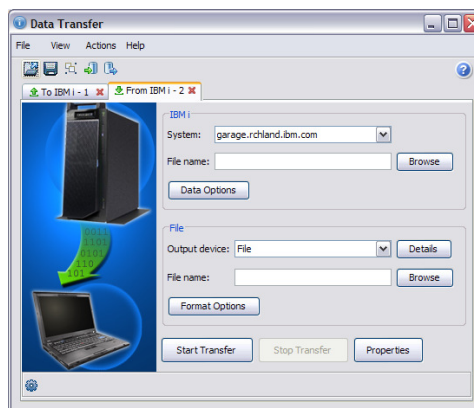
- Select the Data Transfer option
  - Will default to the current System



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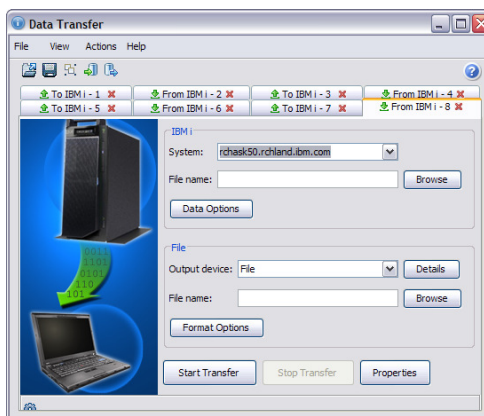


- Displays the Data Transfer interaction panel
  - Starts out with a Data Transfer to IBM i and Data Transfer from IBM i tab to the current System on the main panel



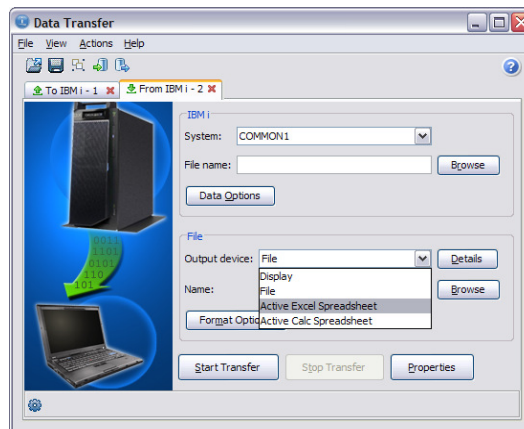
© 2016, 2017 IBM Corporation

- Data Transfer interaction panel
  - Starts out with a Data Transfer to IBM i and Data Transfer from IBM i tab to the current System on the main panel
  - All active Data Transfer requests are displayed in a tab on this panel
  - Open Saved Requests
  - Save Requests
  - Create IBM i Files
  - Data Transfer Migration

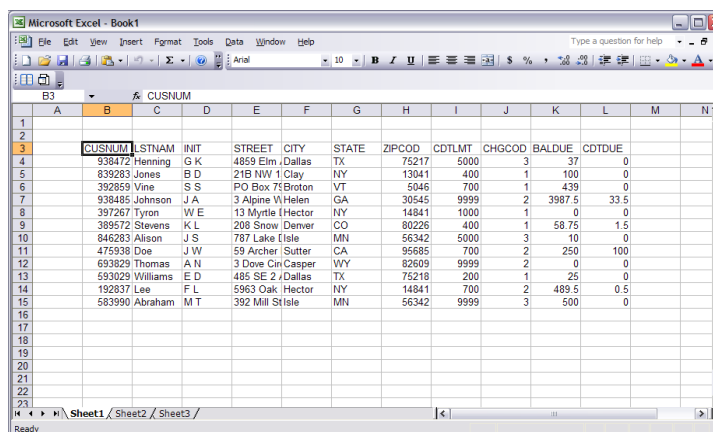


© 2016, 2017 IBM Corporation

- Data Transfer mechanism to interact directly with spreadsheet
  - On a Data Transfer From IBM i Select “Active Excel Spreadsheet” for the output device.
  - Data Options can be used to modify query

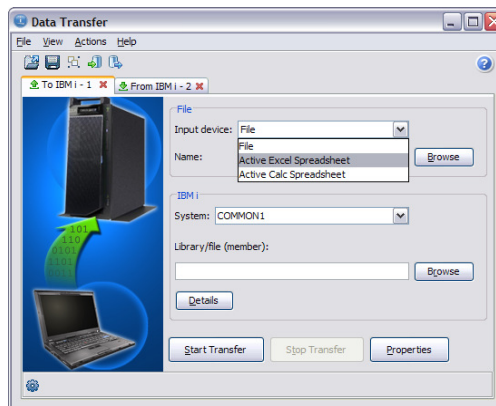


- Data Transfer mechanism to interact directly with spreadsheet
  - The results of the data transfer are placed into the active Excel spreadsheet book at the currently selected cell.



	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1														
2														
3		CUSNUM	LSTNAM	INIT	STREET	CITY	STATE	ZIPCOD	CDTLMT	CHGCOO	BALDUE	CDTDUE		
4		938472	Hanning	G K	4859 Elm	Dallas	TX	75217	5000	3	37	0		
5		839283	Jones	B D	218 NW 1	Clay	NY	13041	400	1	100	0		
6		392859	Vine	S S	PO Box 75	Broton	VT	5046	700	1	439	0		
7		938485	Johnson	J A	3 Alpine W	Helen	GA	30545	9999	2	3987.5	33.5		
8		397267	Tyron	W E	13 Myrtle	Hector	NY	14841	1000	1	0	0		
9		389572	Stevens	K L	208 Snow	Denver	CO	80226	400	1	58.75	1.5		
10		846283	Alison	J S	787 Lake	Iisle	MN	56342	5000	3	10	0		
11		475938	Doe	J W	59 Archer	Sutter	CA	95685	700	2	250	100		
12		693829	Thomas	A N	3 Dove Cir	Casper	WY	82609	9999	2	0	0		
13		593029	Williams	E D	485 SE 2	Dallas	TX	75218	200	1	25	0		
14		192837	Lee	F L	5963 Oak	Hector	NY	14841	700	2	489.5	0.5		
15		583990	Abraham	M T	392 Mill	Stlale	MN	56342	9999	3	500	0		
16														
17														
18														
19														
20														
21														
22														
23														



- Data Transfer mechanism to interact directly with spreadsheet
  - On a Data Transfer to IBM i Select “Active Excel Spreadsheet” for the Input device.
  - The selection from the Excel Spreadsheet will be uploaded to the file on the IBM i



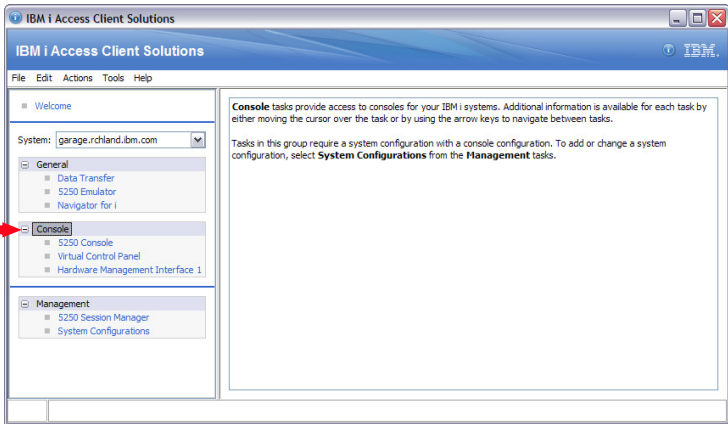
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## Functional Overview: Console

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Cognitive Systems  **Console** 

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





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Cognitive Systems  **Console** 

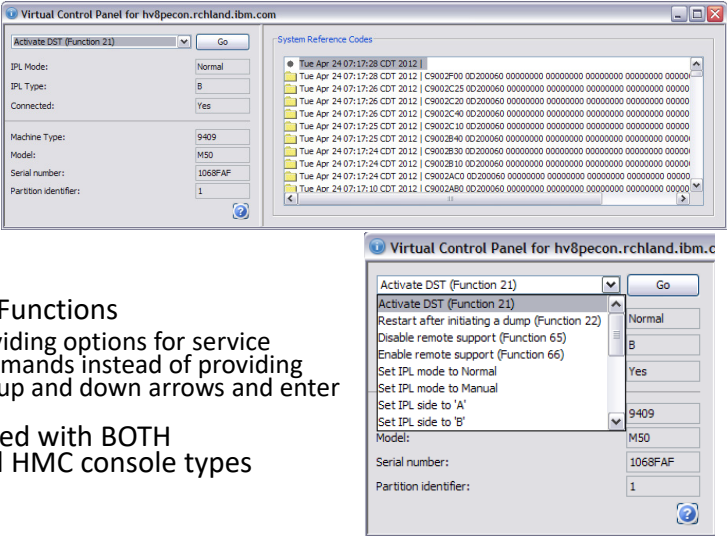
- 5250 Console



© 2016, 2017 IBM Corporation



Cognitive Systems  **Console** 

- Virtual Control Panel

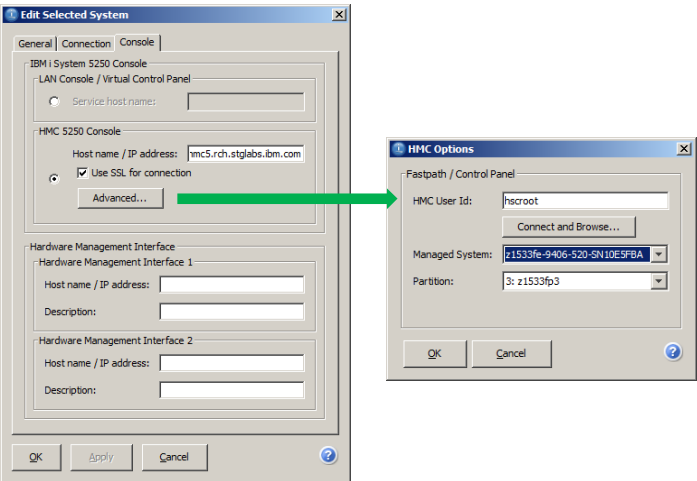


- Service Functions
  - Providing options for service commands instead of providing the up and down arrows and enter
- Supported with BOTH LAN and HMC console types


© 2016, 2017 IBM Corporation

Cognitive Systems  **Console** 

- Console Configuration
- Only Client Console supported with r7.3 IBM i OS
  - LAN Console




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# Functional Overview: Printer Output

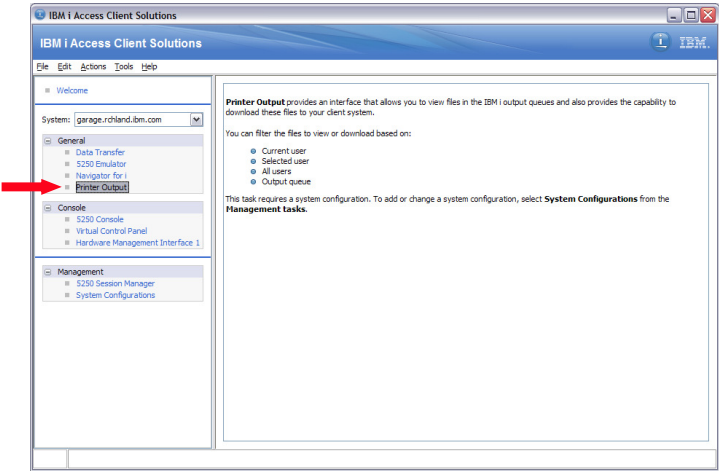
© 2016, 2017 IBM Corporation



## Printer Output

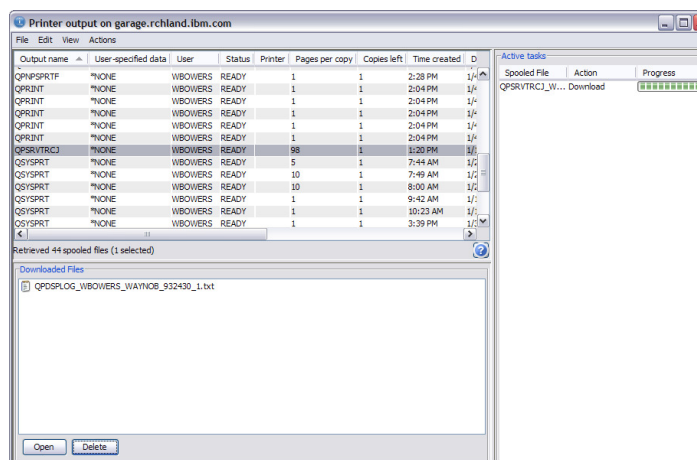


- Lists and allows interaction with the printer output on the IBM i OS System



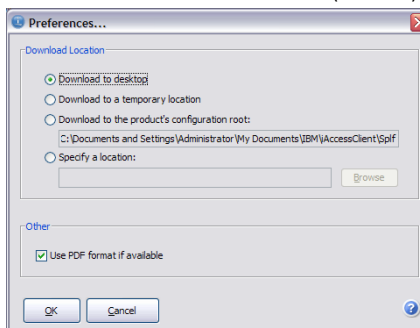
© 2016, 2017 IBM Corporation

- Printer Output user interface
  - Allows the user to view, and download spooled files.





© 2016, 2017 IBM Corporation

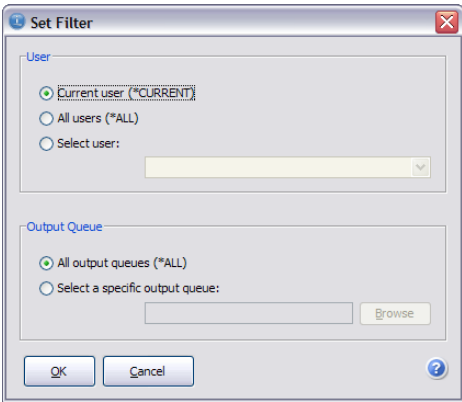
- Edit -> Preferences
  - Download location
    - Where the downloaded file will be stored on the local workstation
  - Other
    - Determines if the printed output should be downloaded in PDF format if available
      - Requires IBM i OS r7.1 or later with the IBM Transform Services for i (5770TS1) product installed
      - If this is unchecked a .txt file will be generated





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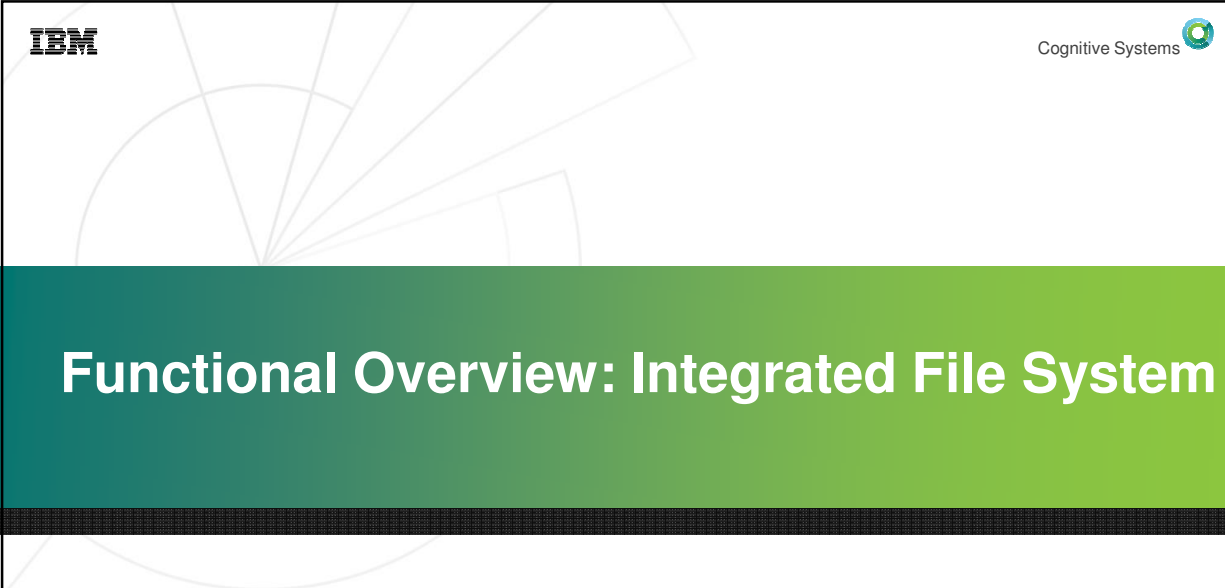
Cognitive Systems  **Printer Output** 

- View -> Set Filter
  - Allows the user to specify how the list of printed output is generated.
  - Either the User, Output Queue or both filters may be modified.



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 Cognitive Systems 



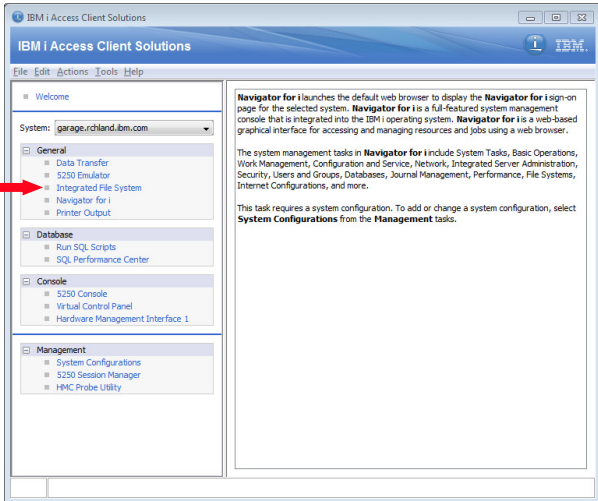
# Functional Overview: Integrated File System

© 2016, 2017 IBM Corporation





Cognitive Systems  **Integrated File System** 

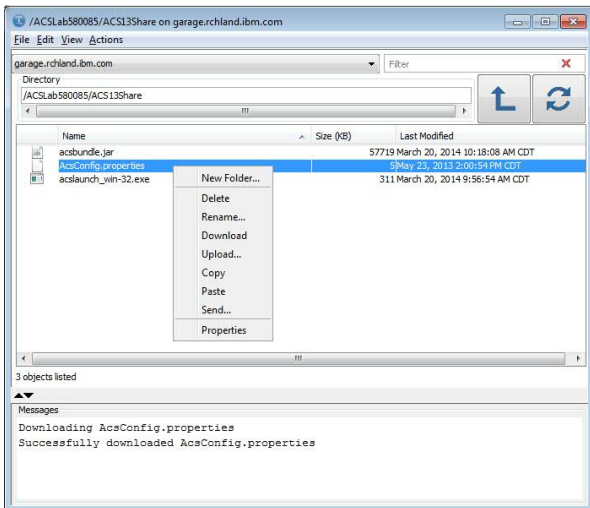
- Lists and allows interaction with the Integrated File System on the IBM i OS System





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Cognitive Systems  **Integrated File System** 

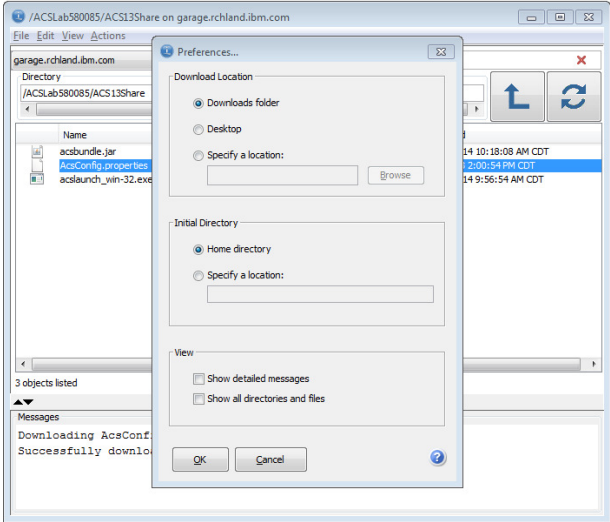
- Integrated File System user interface
  - Allows the user to interact with IFS files and directories.





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Cognitive Systems  **Integrated File System** 

- Edit -> Preferences





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## Functional Overview: Database Tools

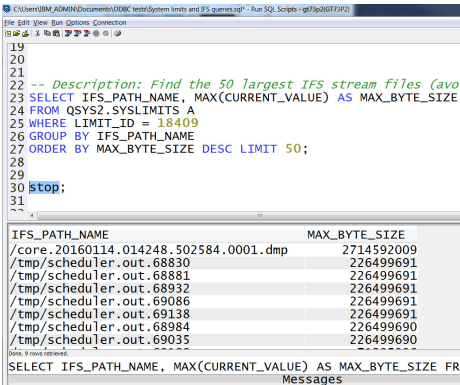
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Cognitive Systems 
Database Tools




## Run SQL Scripts

**Highlights:**

- Faster Startup Time
- Line Numbers
- Highlighting
- Color Coding
- Improved Usability
- Status Bar
- Reconnect
- Editor features
- Save Results
- Graphical Debugger
- Built-in examples



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Cognitive Systems 
Database Tools


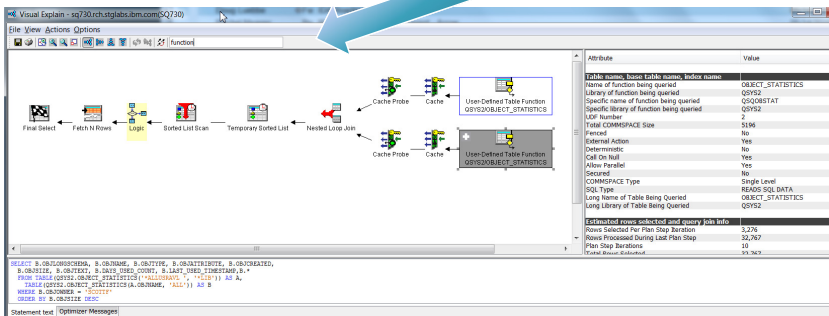
## Visual Explain

**Launch from:**



- Run SQL Scripts
- Analyze
- Show Statements

- **Better than before**
- Search





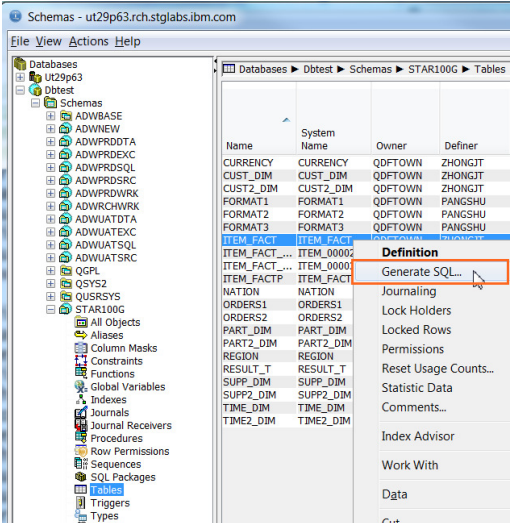
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Cognitive Systems 
Database Tools


## Schemas in ACS



**ACS-based Actions:**

- Definition
- Description
- Generate SQL
- Properties
- Rename
- New Database Object
- Explain
- Data
  - View, Clear, ...
- Actions in Visual Explain
- ...



The screenshot shows the 'Schemas' view in ACS. On the left, a tree view shows the database structure. On the right, a table list is displayed with columns for Name, System, Owner, and Definer. A context menu is open over the 'ITEM\_FACT' table, with the 'Generate SQL...' option highlighted.

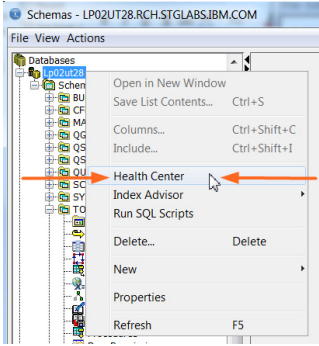
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Cognitive Systems 
Database Tools


## ACS Version 1.1.7.1 (July, 2017)



- **General**
  - Add Database Health Center
  - Add help text to dialogs
- **Run SQL Scripts**
  - Add Performance Monitor pulldown
  - Direct launch buttons
  - More Insert from Examples
- **SQL Performance Center**
  - Import SQL Performance Monitor
  - Import SQL Plan Cache Snapshot
  - Import SQL Plan Cache Event Monitor
  - New SQL Performance Monitor
  - New SQL Plan Cache Snapshot
  - New SQL Plan Cache Event Monitor

- **Schemas**
  - Journal - View Entries
  - Add Include... filtering support for Tables and Indexes
  - All Objects - Permissions action



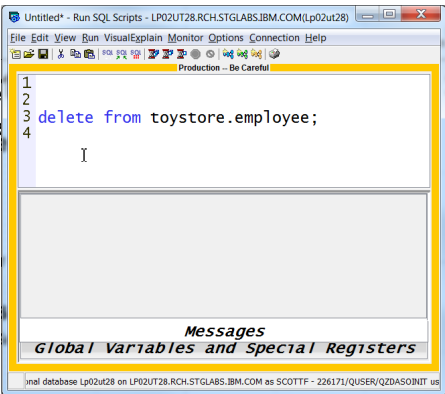
The screenshot shows the 'Schemas' view in ACS. A context menu is open over the 'QU' table, with the 'Health Center' option highlighted. Other options include 'Open in New Window', 'Save List Contents...', 'Columns...', 'Include...', 'Index Advisor', 'Run SQL Scripts', 'Delete...', 'New', 'Properties', and 'Refresh'.

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Cognitive Systems  **Database Tools** 

## ACS Version 1.1.7.2 (October, 2017)

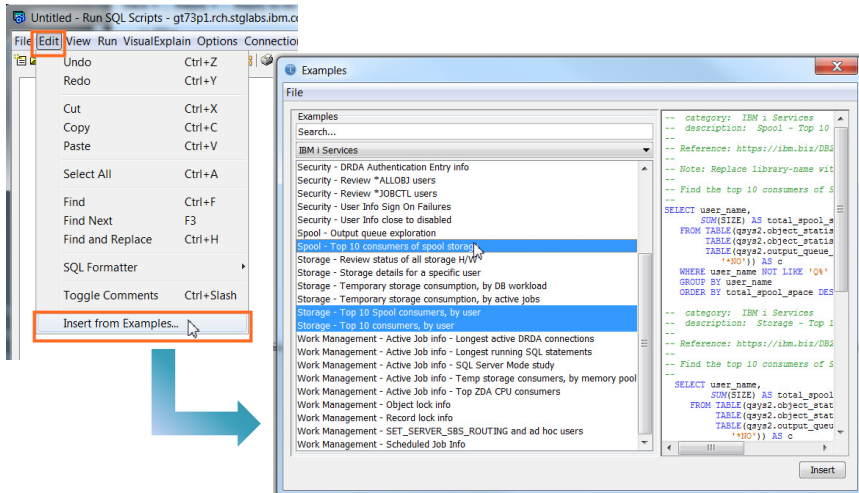
- Database Maintenance Lists**
  - Alter Tables
  - Index Builds
  - Reorganize Physical File Members
  - Other long running DB operations
- Schemas**
  - More actions
  - More columns for Tables
- Run SQL Scripts**
  - Custom Border Settings
  - More Insert from Examples



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Cognitive Systems  **Database Tools** 

## Insert From Examples

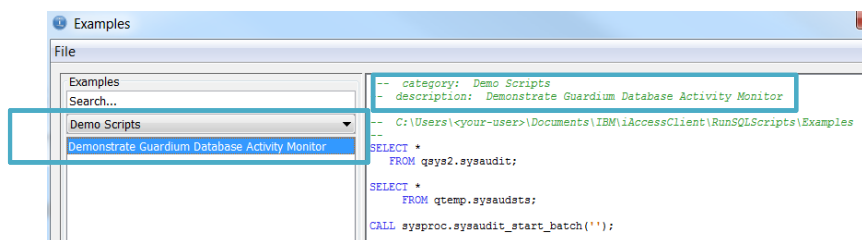


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## Adding examples to Run SQL Scripts

- 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\**
- 3) Find your script with Search or via the Examples pane.





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## Functional Overview: SSH Terminal

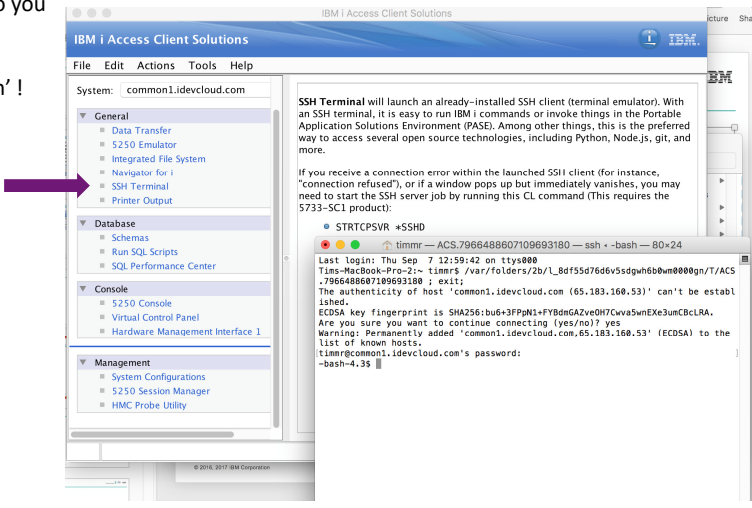
© 2016, 2017 IBM Corporation

Cognitive Systems  **SSH Terminal** 



## ACS Version 1.1.7.2 (October, 2017)

Easy access to you favorite shell


Your new 'qsh' !



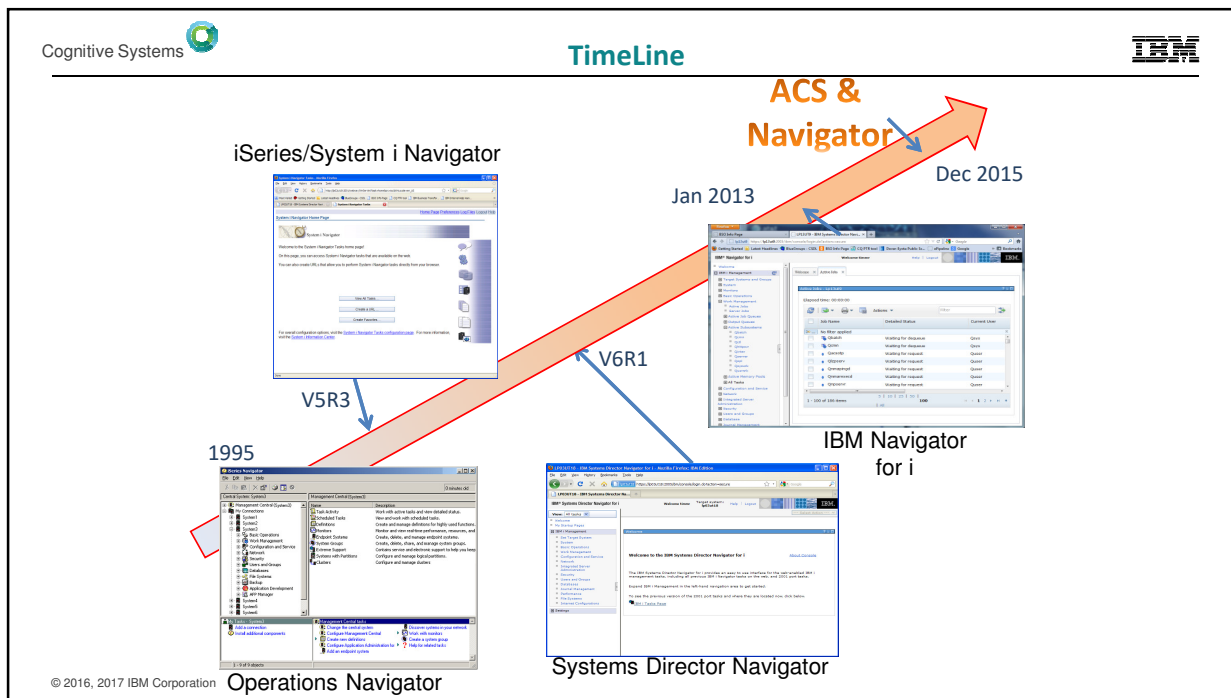
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 Cognitive Systems 

# Functional Overview: Navigator



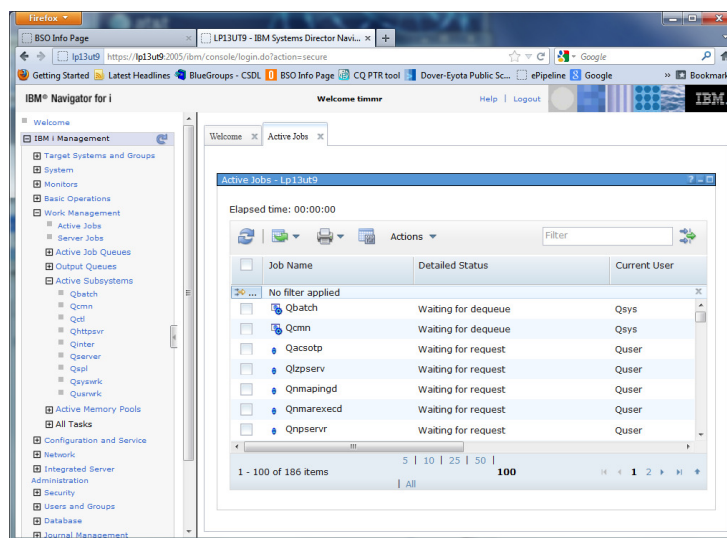
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- Cognitive Systems  **IBM i Access Client Solutions & Navigator** 
- IBM i Access Client Solutions does not provide any Navigator interface instead relying on the IBM Navigator for i web based infrastructure that was introduced with IBM i OS r6.1 and has continually been enhanced since
    - Name change from IBM Systems Director Navigator to IBM Navigator for i indicates a very large investment into improving the performance and usability of this interface
    - Key IBM i OS solutions like Performance Data Investigator and HAS tools are only available in Navigator for I
    - r7.2 GA timeframe introduces monitors and PTF interaction
    - A few things have had reliance on System i Navigator
      - Run SQL Scripts (NOT Anymore, Delivered December 2015)
      - Database Visual Explain (NOT Anymore, Delivered August 2016)
      - Management Central Multiple System Interaction (Monitors, Fixes, etc.)
- © 2016, 2017 IBM Corporation



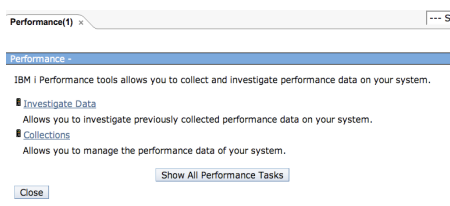
## IBM Navigator for i



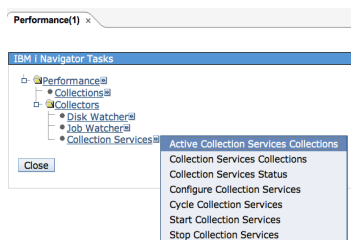
## Performance Tasks



- "Performance" is a major function within this Web console

- Investigate Data  
"Performance Data Investigator"
- Collections




- All Performance Tasks
  - Active Jobs
  - Disk Status
  - System Status
  - Define, start, stop and manage performance data collectors



Cognitive Systems  

## Investigate Data

**Folders (content packages) contain Perspectives (views) and are a logical grouping of related charts/tables that benefit from being rendered side-by-side for reference or context.**



**Perspectives**

- Performance Explorer
- Disk Watcher
- Job Watcher
- Health Indicators
- Collection Services
- SQL Performance Data

**Selection**

IBM Performance Tools (option 3)  
Job Watcher feature

Health Indicators (based off of Collection Services data) – a great way to assess overall health of your system



NEW – SQL Performance Data!!

**Collection**

Collection Library: QPFRDATA  
Collection Name: Most Recent

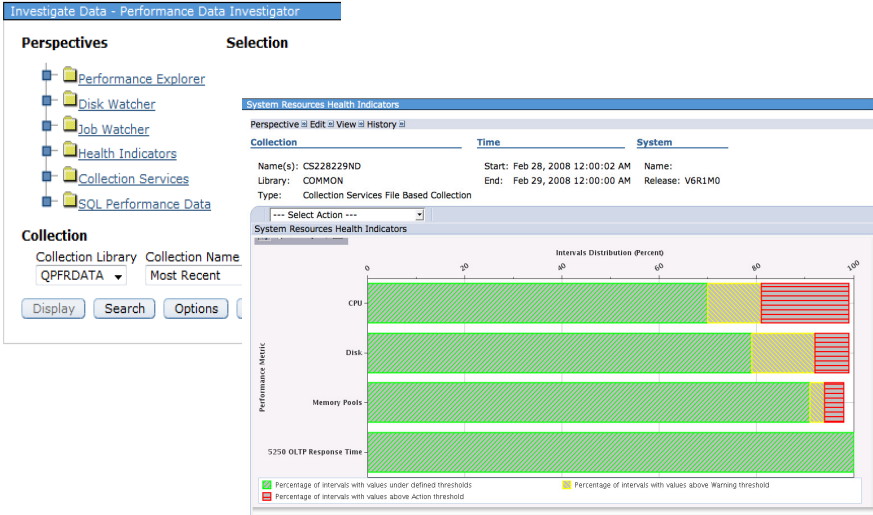
Display Search Options Close

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## Health Indicators

Investigate Data - Performance Data Investigator



**Perspectives**

- Performance Explorer
- Disk Watcher
- Job Watcher
- Health Indicators
- Collection Services
- SQL Performance Data

**Collection**

Collection Library: QPFRDATA  
Collection Name: Most Recent

Display Search Options

**System Resources Health Indicators**

Collection	Time	System
Name(s): CS228229ND	Start: Feb 28, 2008 12:00:02 AM	Name:
Library: COMMON	End: Feb 29, 2008 12:00:00 AM	Release: V6R1M0
Type: Collection Services File Based Collection		

--- Select Action ---

**System Resources Health Indicators**



Intervals Distribution (Percent)

Performance Metric

- CPU
- Disk
- Memory Pools
- 5250 OLTP Response Time

■ Percentage of intervals with values under defined thresholds  
■ Percentage of intervals with values above Warning threshold  
■ Percentage of intervals with values above Action threshold

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## Collection Services

- CPU Utilization and Waits Overview

Collection Services

- CPU Utilization and Waits Overview
- CPU Utilization by Thread or Task
- Resource Utilization Overview
- Job Statistics Overviews
- Waits
- CPU
- Disk
- Physical Disk I/O
- Synchronous Disk I/O
- Page Faults
- Logical Database I/O
- Virtual I/O
- Communications
- 5250 Display Transactions
- Physical System
- Java
- Collection Services Database Files

Collection

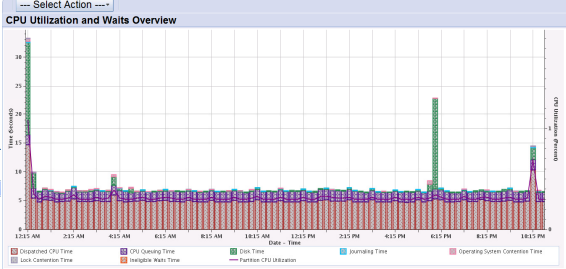
Collection Library Collection Name  
 QPFRDATA Q16800002 (\*CSFILE)

Display Search Options Close

Name(s): Q168000002 Start: Jun 16, 2012 12:00:02 AM Name: ISZ1LP13  
 Library: QPFRDATA End: Jun 17, 2012 12:00:00 AM Release: V7R1M0  
 Type: Collection Services File Based Collection



--- Select Action ---

### CPU Utilization and Waits Overview



Legend: Occupied CPU Time, CPU Queuing Time, Lock Time, Ineligible Wait Time, Journaling Time, Operating System Contexts Time, Purge CPU Utilization, Lock Contention Time

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Cognitive Systems  

## Job Watcher – CPU Utilization and Waits Overview

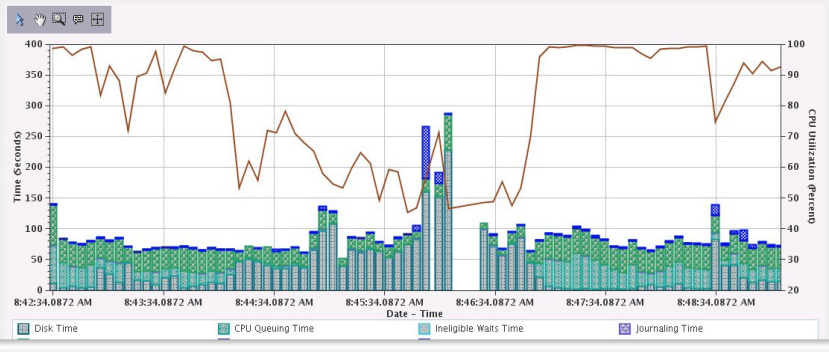
Investigate Data

Perspectives > CPU Utilization and Waits Overview

### CPU Utilization and Waits Overview

--- Select Action ---

### CPU Utilization and Waits Overview



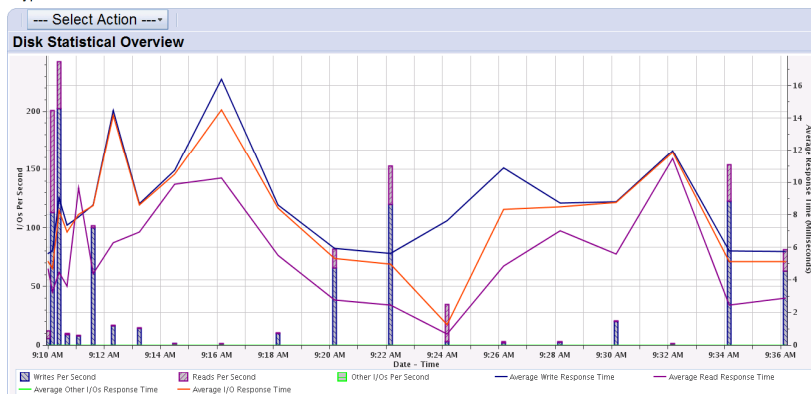
Legend: Disk Time, CPU Queuing Time, Ineligible Waits Time, Journaling Time

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# Disk Watcher – Disk Statistical Overview

Collection Time System

Name(s): Q228091044 Start: Aug 16, 2010 9:10:47 AM Name: ISZ1LP11  
 Library: QPFRDATA End: Aug 16, 2010 9:37:10 AM Release: V6R1M0  
 Type: Disk Watcher File Based Collection

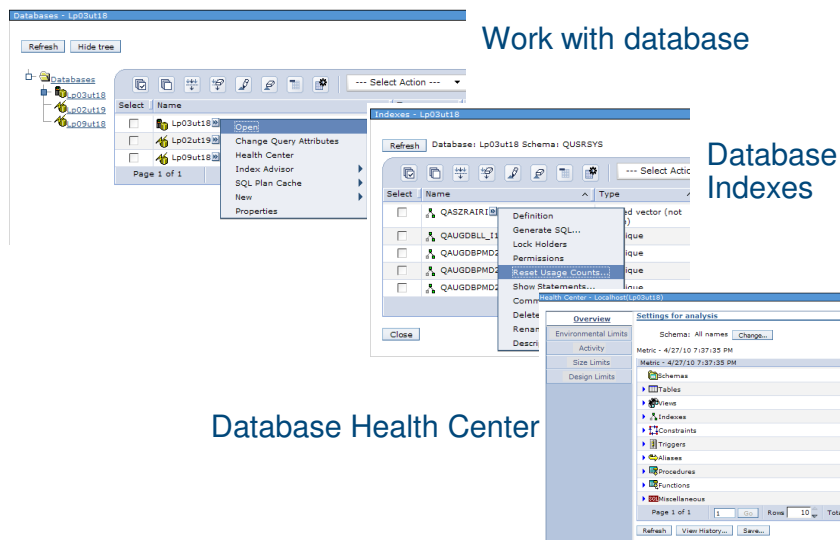


## Performance Data Investigator – New Database Perspective

- Robust graphical interface enabled by Collection Services support.
- New breakdown makes it easier to notice “what changed”?

The screenshot shows the IBM Systems Director Navigator for i Performance Data Investigator interface. On the left is a navigation tree with categories like IBM i Management, System, and Performance. The main area displays a 'Performance Data Investigator' window with a 'Perspectives' tree. A red box highlights the 'Physical I/O Overview - Detailed' perspective. Below this, a 'Physical I/O Overview - Detailed' chart shows asynchronous reads and writes per second over time. A 'New!!!' callout is present in the bottom right corner of the interface.

# Database tab - Basics



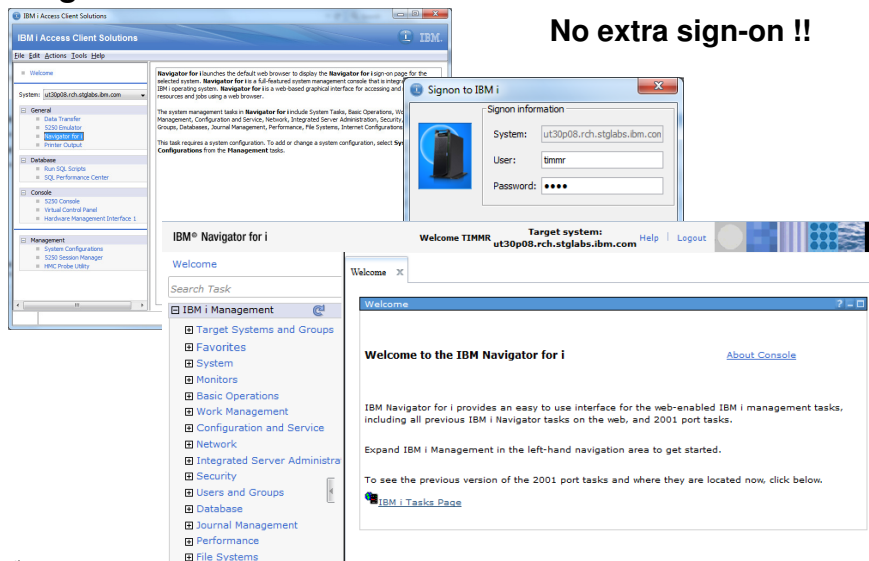
**Work with database**

**Database Indexes**

**Database Health Center**


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# ACS & Navigator

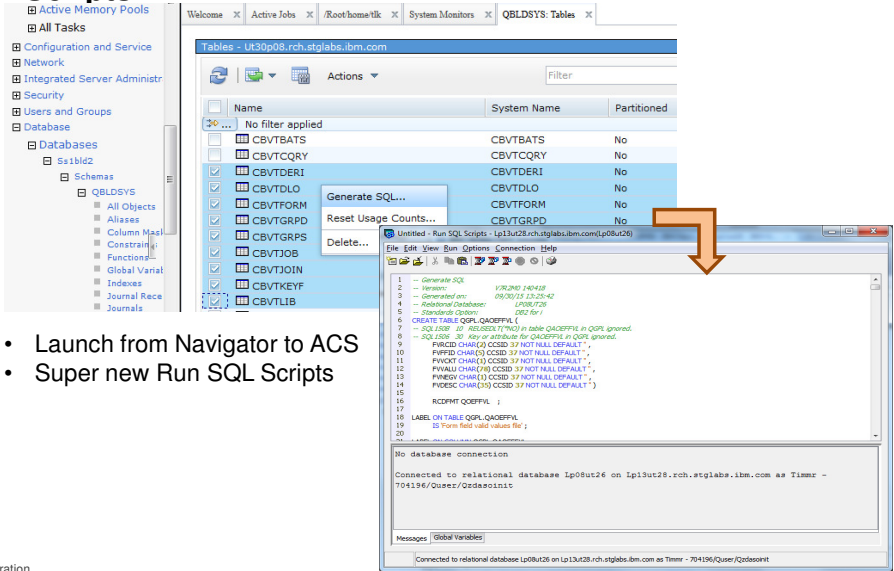


**No extra sign-on !!**

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## Run SQL Scripts



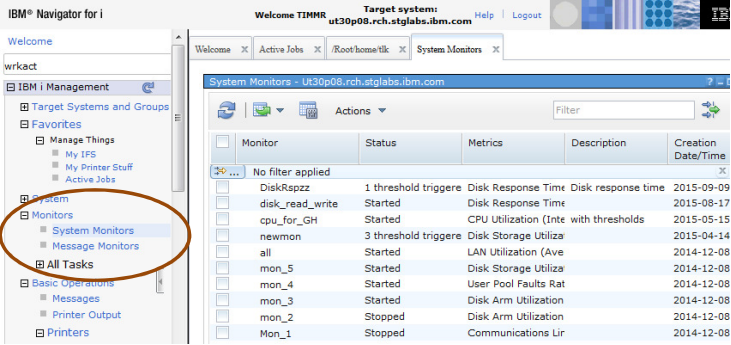
- Launch from Navigator to ACS
- Super new Run SQL Scripts

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## Create Monitors

- Monitor System Performance Metrics
- Set thresholds
- Take actions when threshold is reached
- Or when it goes under
- Monitor for Messages



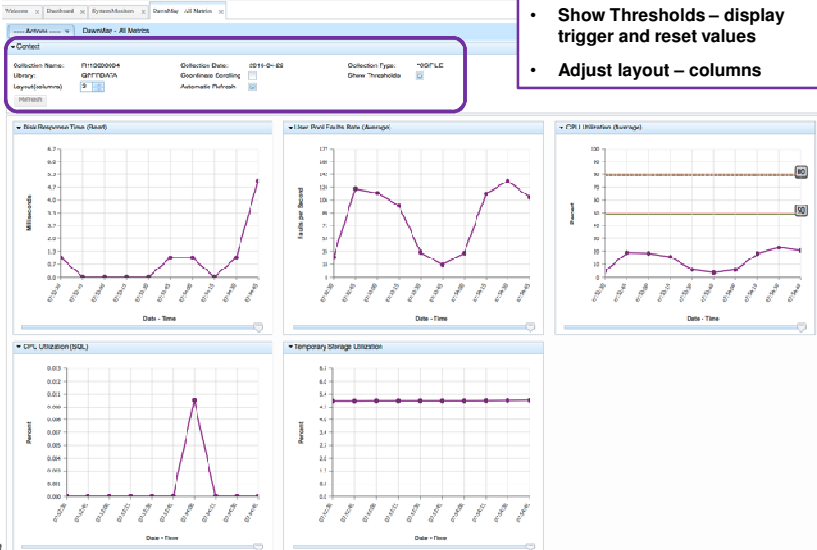
Monitor	Status	Metrics	Description	Creation Date/Time
DiskRspzz	1 threshold trigger	Disk Response Time	Disk response time	2015-09-09
disk_read_write	Started	Disk Response Time		2015-08-17
cpu_for_GH	Started	CPU Utilization (Inte	with thresholds	2015-05-15
newmon	3 threshold trigger	Disk Storage Utiliza		2015-04-14
all	Started	LAN Utilization (Ave		2014-12-08
mon_5	Started	Disk Storage Utiliza		2014-12-08
mon_4	Started	User Pool Faults Rat		2014-12-08
mon_3	Started	Disk Arm Utilization		2014-12-08
mon_2	Stopped	Disk Arm Utilization		2014-12-08
Mon_1	Stopped	Communications Lir		2014-12-08

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## System Monitors – All Metrics

- Coordinate scrolling
- Show Thresholds – display trigger and reset values
- Adjust layout – columns

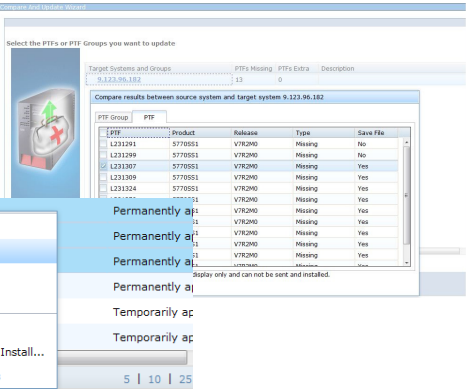


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## PTF Compare and Update

- Compare PTFs and PTF groups on different systems
- Send and install PTFs/PTF groups to multiple systems
- Multi-system PTF comparison

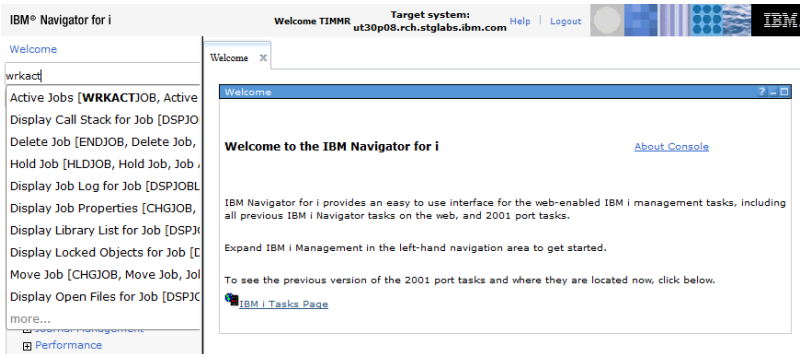


PTF Group	PTF	Product	Release	Type	Save File
	L231294	5770551	V7R2M0	Missing	No
	L231299	5770551	V7R2M0	Missing	No
	L231307	5770551	V7R2M0	Missing	Yes
	L231309	5770551	V7R2M0	Missing	Yes
	L231324	5770551	V7R2M0	Missing	Yes
	L231325	5770551	V7R2M0	Missing	Yes
	L231326	5770551	V7R2M0	Missing	Yes
	L231327	5770551	V7R2M0	Missing	Yes
	L231328	5770551	V7R2M0	Missing	Yes
	L231329	5770551	V7R2M0	Missing	Yes
	L231330	5770551	V7R2M0	Missing	Yes
	L231331	5770551	V7R2M0	Missing	Yes
	L231332	5770551	V7R2M0	Missing	Yes
	L231333	5770551	V7R2M0	Missing	Yes
	L231334	5770551	V7R2M0	Missing	Yes
	L231335	5770551	V7R2M0	Missing	Yes
	L231336	5770551	V7R2M0	Missing	Yes
	L231337	5770551	V7R2M0	Missing	Yes
	L231338	5770551	V7R2M0	Missing	Yes
	L231339	5770551	V7R2M0	Missing	Yes
	L231340	5770551	V7R2M0	Missing	Yes
	L231341	5770551	V7R2M0	Missing	Yes
	L231342	5770551	V7R2M0	Missing	Yes
	L231343	5770551	V7R2M0	Missing	Yes
	L231344	5770551	V7R2M0	Missing	Yes
	L231345	5770551	V7R2M0	Missing	Yes
	L231346	5770551	V7R2M0	Missing	Yes
	L231347	5770551	V7R2M0	Missing	Yes
	L231348	5770551	V7R2M0	Missing	Yes
	L231349	5770551	V7R2M0	Missing	Yes
	L231350	5770551	V7R2M0	Missing	Yes
	L231351	5770551	V7R2M0	Missing	Yes
	L231352	5770551	V7R2M0	Missing	Yes
	L231353	5770551	V7R2M0	Missing	Yes
	L231354	5770551	V7R2M0	Missing	Yes
	L231355	5770551	V7R2M0	Missing	Yes
	L231356	5770551	V7R2M0	Missing	Yes
	L231357	5770551	V7R2M0	Missing	Yes
	L231358	5770551	V7R2M0	Missing	Yes
	L231359	5770551	V7R2M0	Missing	Yes
	L231360	5770551	V7R2M0	Missing	Yes
	L231361	5770551	V7R2M0	Missing	Yes
	L231362	5770551	V7R2M0	Missing	Yes
	L231363	5770551	V7R2M0	Missing	Yes
	L231364	5770551	V7R2M0	Missing	Yes
	L231365	5770551	V7R2M0	Missing	Yes
	L231366	5770551	V7R2M0	Missing	Yes
	L231367	5770551	V7R2M0	Missing	Yes
	L231368	5770551	V7R2M0	Missing	Yes
	L231369	5770551	V7R2M0	Missing	Yes
	L231370	5770551	V7R2M0	Missing	Yes
	L231371	5770551	V7R2M0	Missing	Yes
	L231372	5770551	V7R2M0	Missing	Yes
	L231373	5770551	V7R2M0	Missing	Yes
	L231374	5770551	V7R2M0	Missing	Yes
	L231375	5770551	V7R2M0	Missing	Yes
	L231376	5770551	V7R2M0	Missing	Yes
	L231377	5770551	V7R2M0	Missing	Yes
	L231378	5770551	V7R2M0	Missing	Yes
	L231379	5770551	V7R2M0	Missing	Yes
	L231380	5770551	V7R2M0	Missing	Yes
	L231381	5770551	V7R2M0	Missing	Yes
	L231382	5770551	V7R2M0	Missing	Yes
	L231383	5770551	V7R2M0	Missing	Yes
	L231384	5770551	V7R2M0	Missing	Yes
	L231385	5770551	V7R2M0	Missing	Yes
	L231386	5770551	V7R2M0	Missing	Yes
	L231387	5770551	V7R2M0	Missing	Yes
	L231388	5770551	V7R2M0	Missing	Yes
	L231389	5770551	V7R2M0	Missing	Yes
	L231390	5770551	V7R2M0	Missing	Yes
	L231391	5770551	V7R2M0	Missing	Yes
	L231392	5770551	V7R2M0	Missing	Yes
	L231393	5770551	V7R2M0	Missing	Yes
	L231394	5770551	V7R2M0	Missing	Yes
	L231395	5770551	V7R2M0	Missing	Yes
	L231396	5770551	V7R2M0	Missing	Yes
	L231397	5770551	V7R2M0	Missing	Yes
	L231398	5770551	V7R2M0	Missing	Yes
	L231399	5770551	V7R2M0	Missing	Yes
	L231400	5770551	V7R2M0	Missing	Yes



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Cognitive Systems  **Find What You are Looking For** 

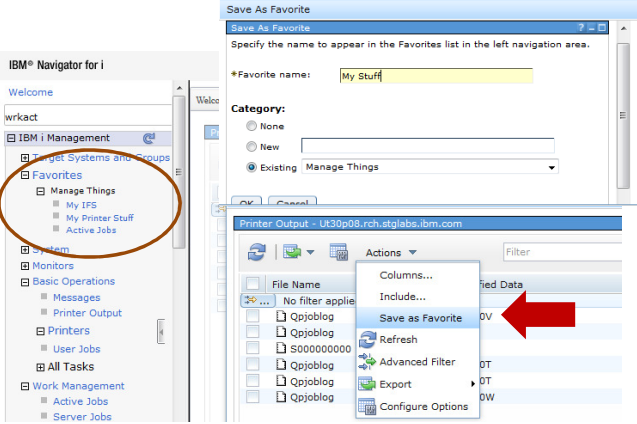
- New search menu
- Enter a phrase, CL Command, idea
- Corresponding options are displayed
- Click and go directly there



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Cognitive Systems  **Favorites** 

- Create your own navigation list
- Click on any Table, 'Save as Favorites'
- Enter your tree node
- Create the name



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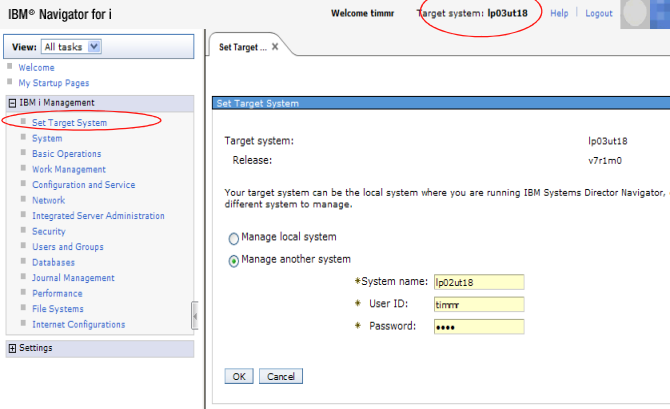


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## Set Target System


- Set Target System
  - Specify the remote system you want to work with.
  - Supports system at all supported releases

Current system being managed!!!



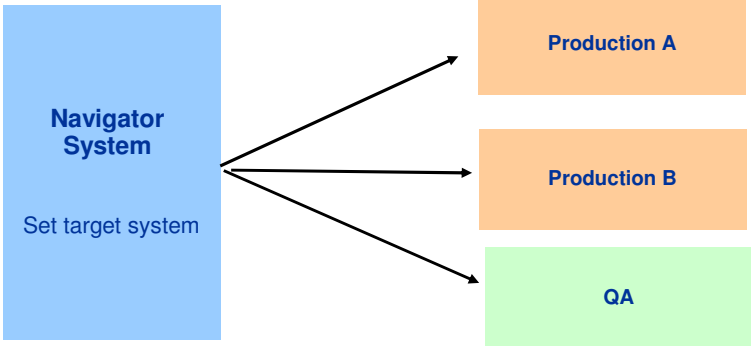
- Specify System Name
- User ID
- Password
- Click OK
- \*Close / Restart Open tabs

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## Why Set Target System ?

- Allows for a client server relationship
- Run Navigator on one system, manage any other system in your network
- Means you DON'T need to run navigator on your production machine





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# Functional Overview: IBM i ARE

## Administration/Application Runtime Expert


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## IBM Application Runtime Expert for i

### Why use it?

- Enhanced Serviceability
  - Run on failing system to identify and **fix** problems
  - One tool to check the entire software stack
    - Runtime Expert checks everything, every time
- Product Testing
  - Understand product installation
    - Build verification
- System Validation
  - Ensure your systems are in expected state
  - Help debug issues with your own systems
- Pre-requisite Checking
  - Most software products have pre-reqs – ARE can check these for you
- Schedule Automatic Verifications



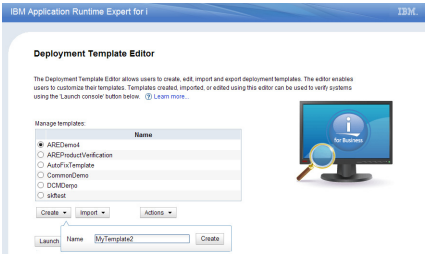
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Cognitive Systems  **Tools for Managing PTFs** 

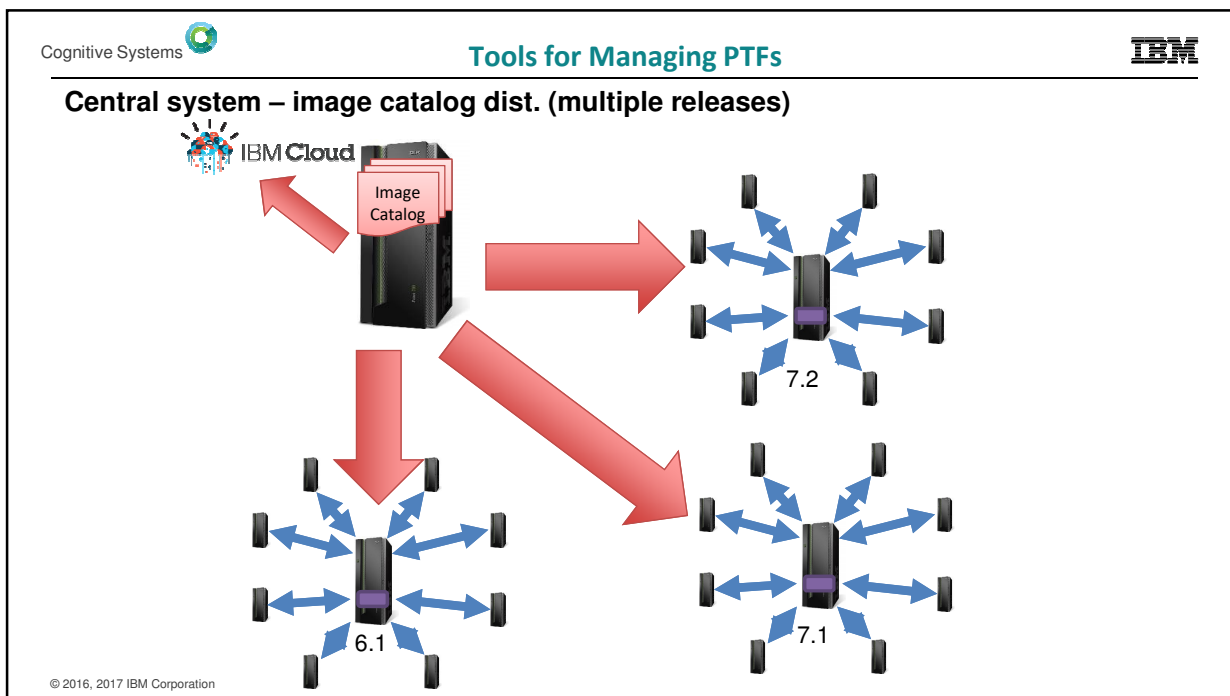
# ARE



## Administration Runtime Expert

- Compare PTF levels across systems
- Compare PTF levels against IBM cloud
- Send PTF's from one system to another via \*SAVF
- Load PTF's from image catalogs
- Scheduled PTF verifications
- Send an email when something is wrong
- Compare an endless number of other system attributes

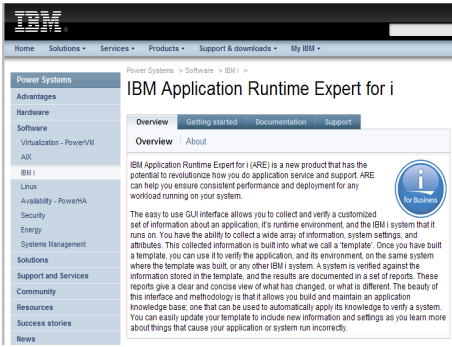


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How do you get it?


- GUI LPP – 5733ARE
  - Runs on IBM i 6.1 and higher
  - ~~Very reasonably priced!~~
  - Now a No Charge Feature!
- Core is part of the base OS
  - Available on IBM i 5.4 and newer
  - Apply latest HTTP and Java Group PTFs
- Articles
  - Turning Big Problems Into Small Ones  
<http://www.ibm.com/systems/power/software/i/are/index.html>
  - You and i – ARE Solving Problems [http://ibmsystemsmag.com/ibmi/application\\_runtime\\_expert/33004p1.aspx](http://ibmsystemsmag.com/ibmi/application_runtime_expert/33004p1.aspx)
  - Do You Need an Application Runtime Expert? [http://ibmsystemsmag.com/you\\_and\\_i/2010/07/you-and-i-are-solving-problems.html](http://ibmsystemsmag.com/you_and_i/2010/07/you-and-i-are-solving-problems.html)
  - Do You Need an Application Runtime Expert? <http://ibmsystemsmag.com/idevelop/2010/07/do-you-need-an-application-runtime-expert.html>
- Product Web site contains install instructions, fix information, and documentation
  - <http://www.ibm.com/systems/power/software/i/are/index.html>



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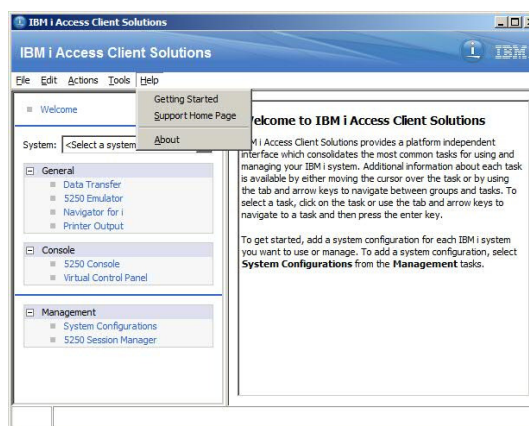




# Deployment

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- IBM i Access Client Solutions is identified as LPP 5733-XJ1
  - Not an IBM i OS installable LPP
- The GA version of the product is available to customers with valid SWMA and IBM i OS r6.1, r7.1 or r7.2 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

- 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 to the client operating system, it is deployed.**
  - There is no Windows Based Installer (setup.exe) installation program for the core of the product.
- **Access Client Solutions Deployment**
  - The deployment involves the client bundle being placed wherever it is desired to be executed from, and determining where the product settings are going to be stored.
- **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 1.6 or higher (Java 1.8 recommended) 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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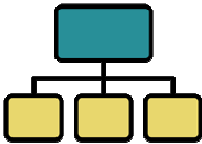
### Deployment: Options

**Computer (local)**

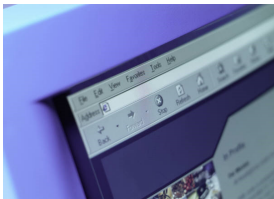


**USB Thumb Drive**







**Network Share**



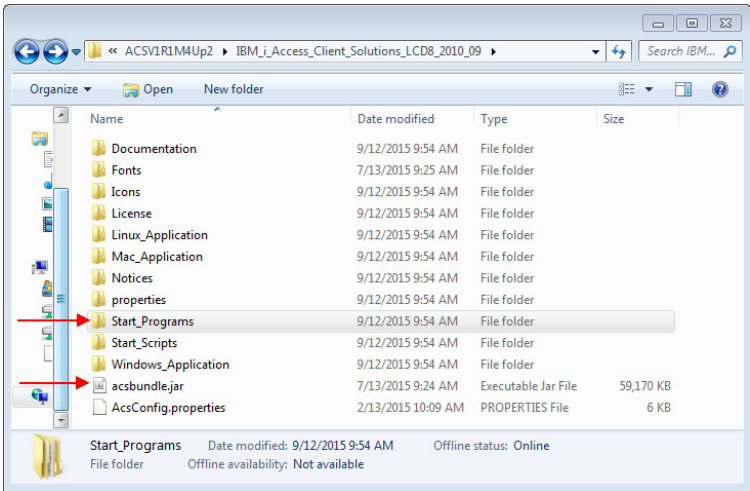
**Intranet ([http:// URL](#))**

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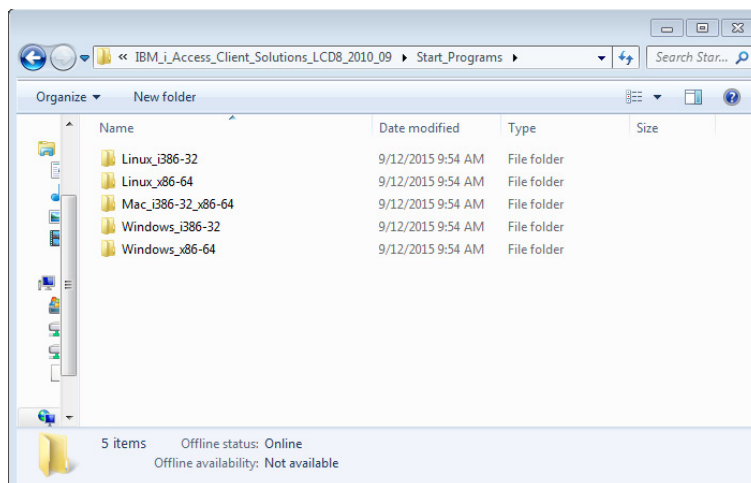
### Deployment

## What you get in the package



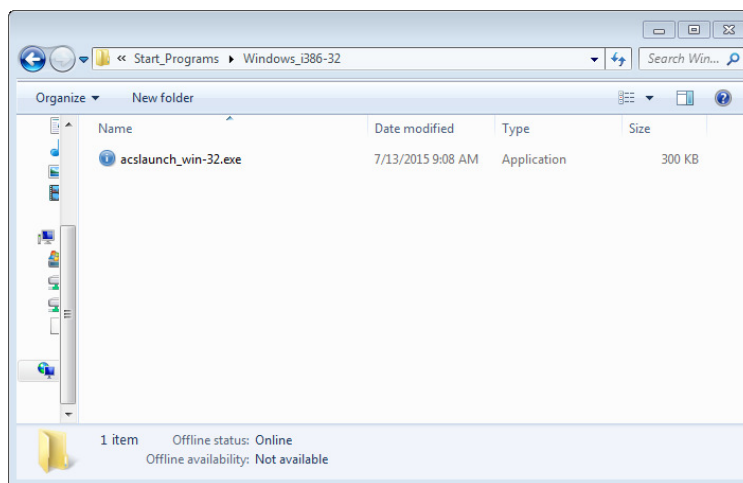
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## Start Programs – Operating System specific launch executables



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## Start Programs – Operating System specific launch executables



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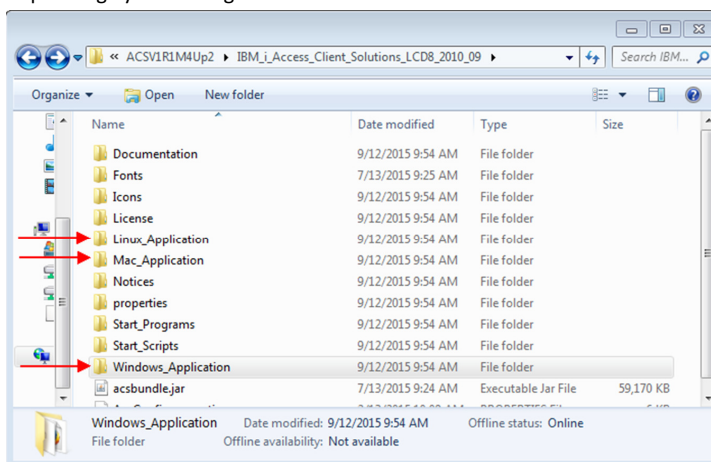




## Provided Deployment/Install Scripts



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



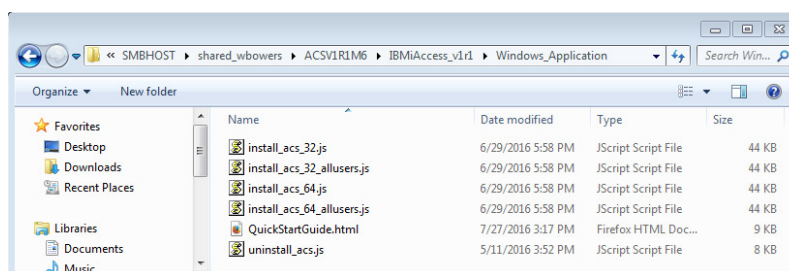
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## Provided Windows Deployment/Install Script



- 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, .dtxx & .dtxf if they haven't already been created.



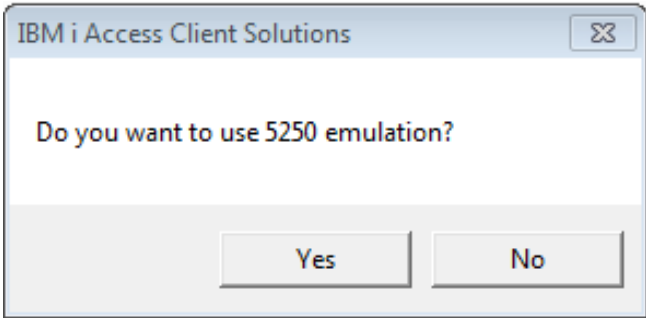
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Provided Windows Deployment/Install Script

- Deployment Prompts





IBM i Access Client Solutions

Do you want to use 5250 emulation?

Yes No

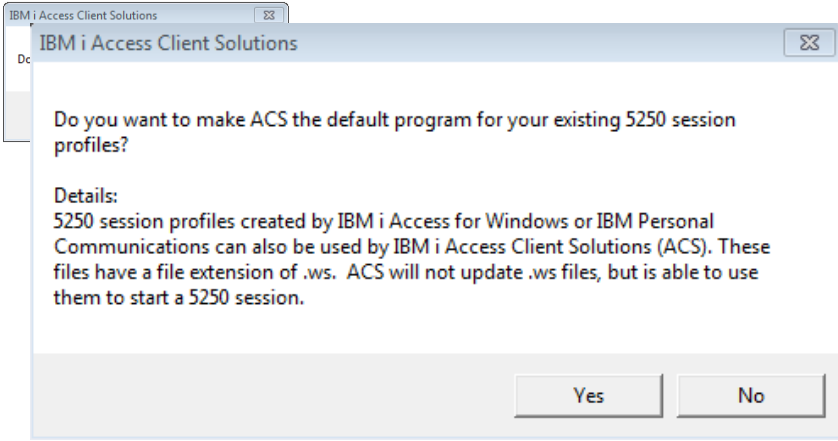
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Provided Windows Deployment/Install Script

- Deployment Prompts



IBM i Access Client Solutions

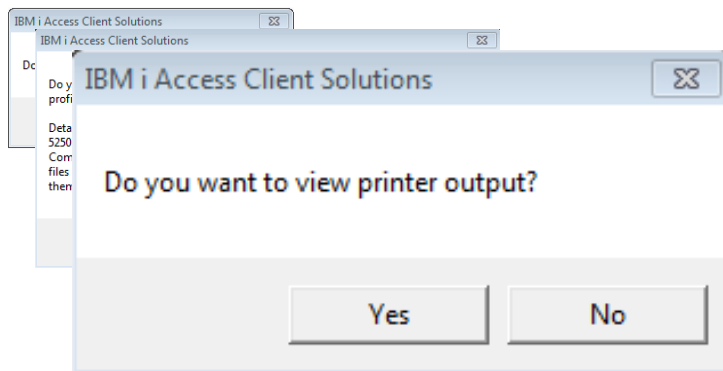
Do you want to make ACS the default program for your existing 5250 session profiles?

Details:  
5250 session profiles created by IBM i Access for Windows or IBM Personal Communications can also be used by IBM i Access Client Solutions (ACS). These files have a file extension of .ws. ACS will not update .ws files, but is able to use them to start a 5250 session.

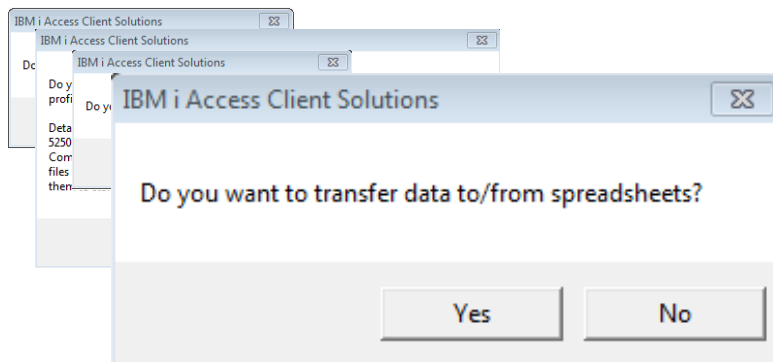
Yes No



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- Deployment Prompts

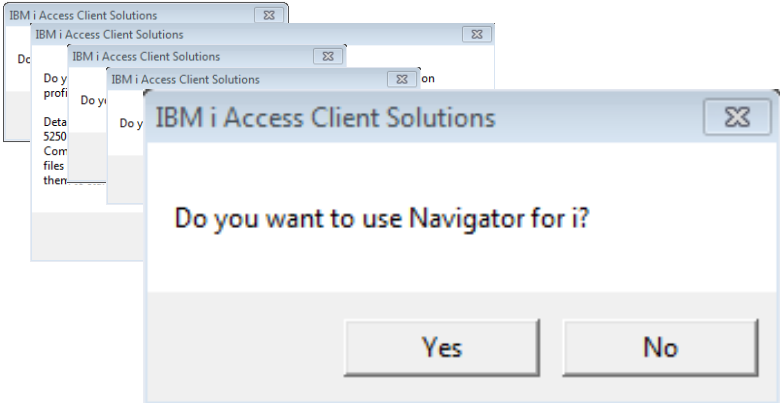


- Deployment Prompts





Cognitive Systems  Provided Windows Deployment/Install Script 

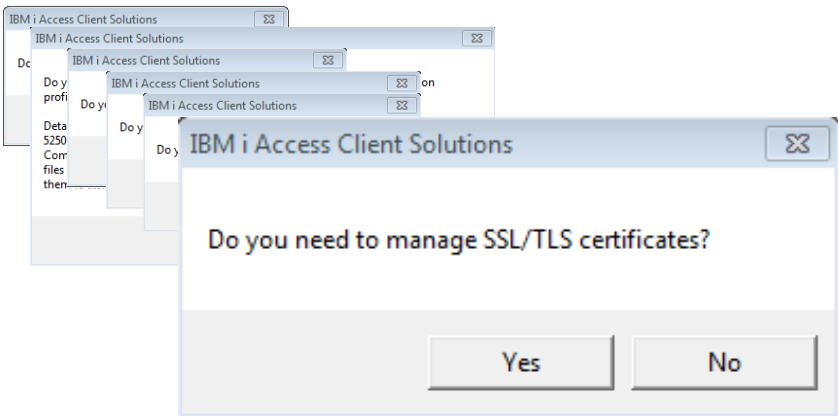
- Deployment Prompts



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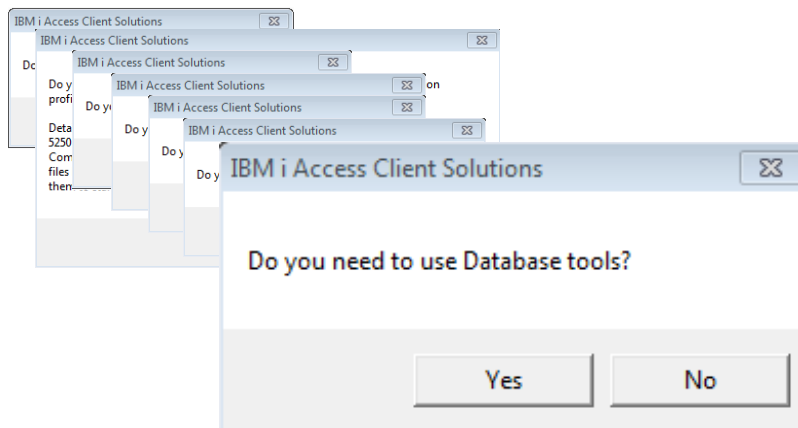
Cognitive Systems  Provided Windows Deployment/Install Script 

- Deployment Prompts

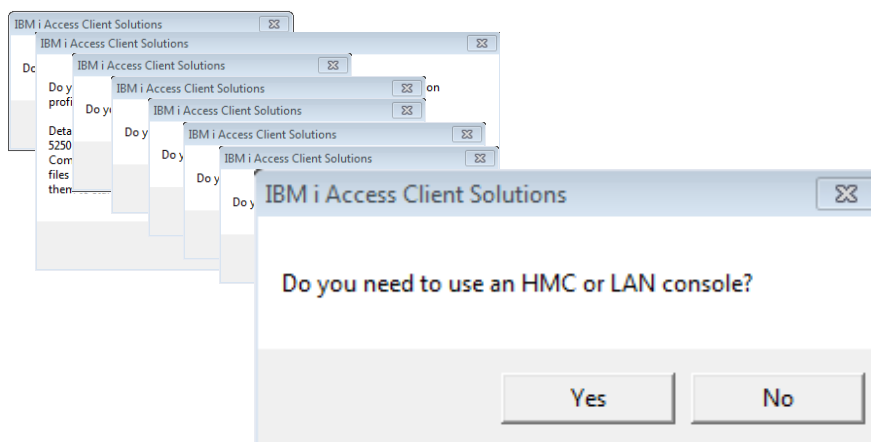


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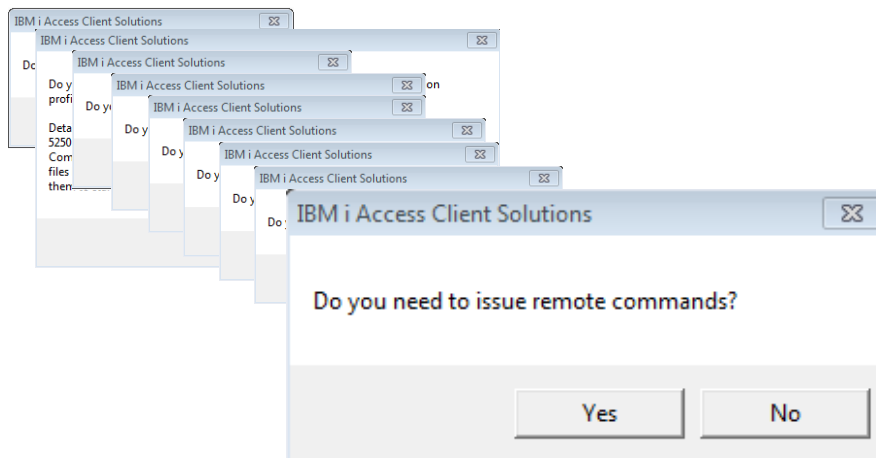
- Deployment Prompts



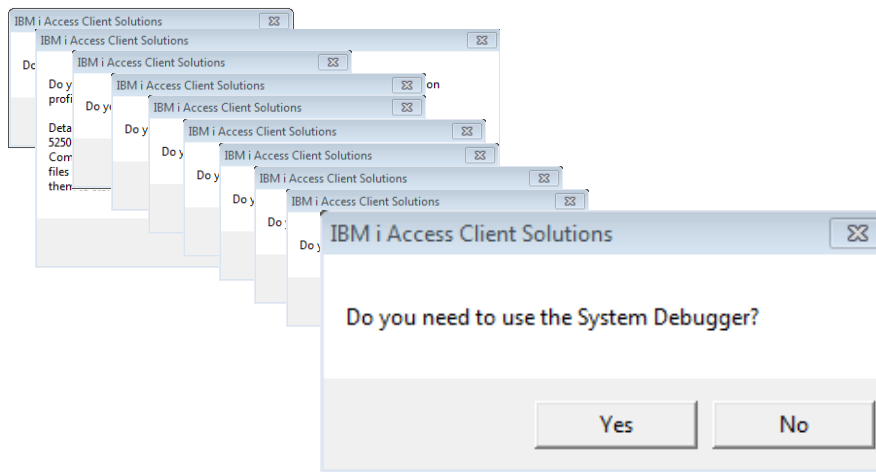
- Deployment Prompts



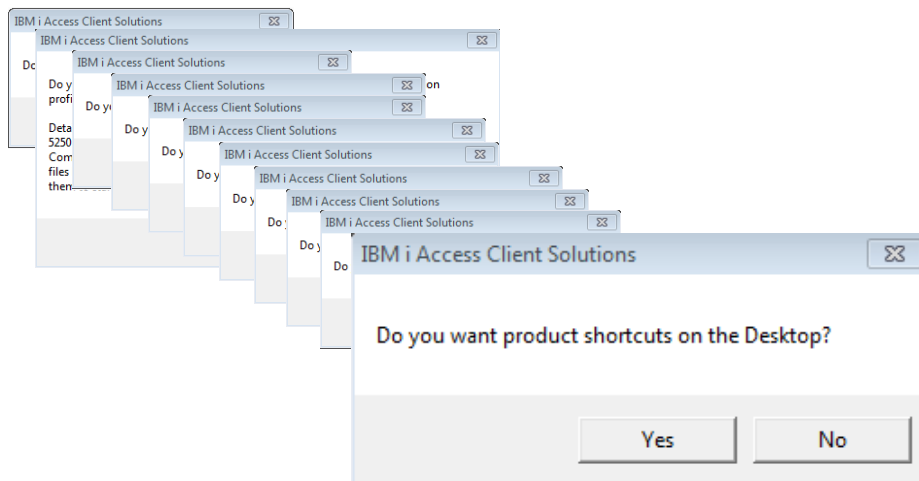
- Deployment Prompts



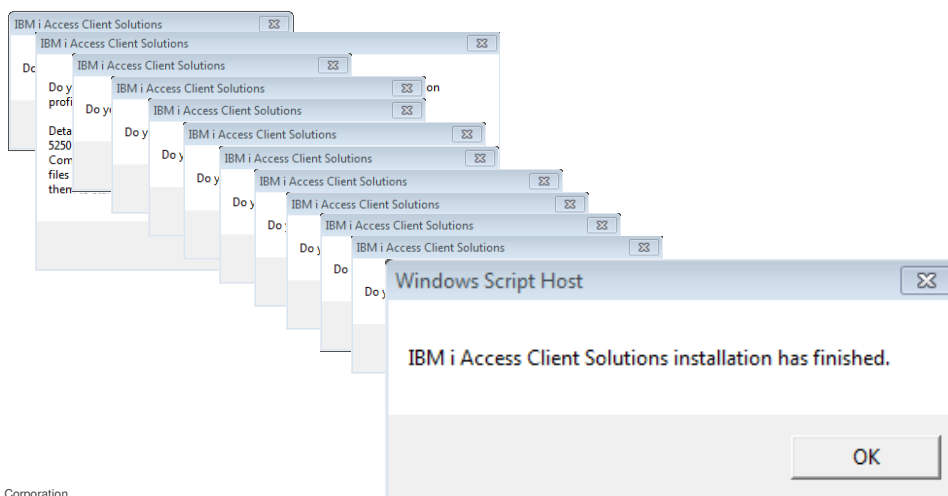
- Deployment Prompts





- Deployment Prompts

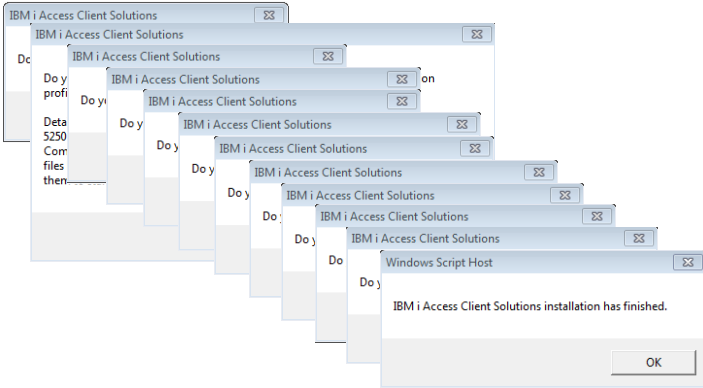
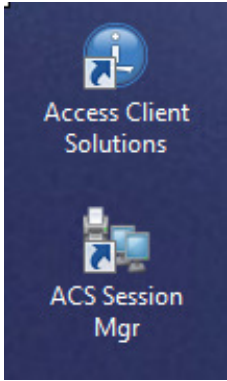


- Deployment Prompts





Cognitive Systems  **Provided Windows Deployment/Install Script** 

- **Deployment Prompts**

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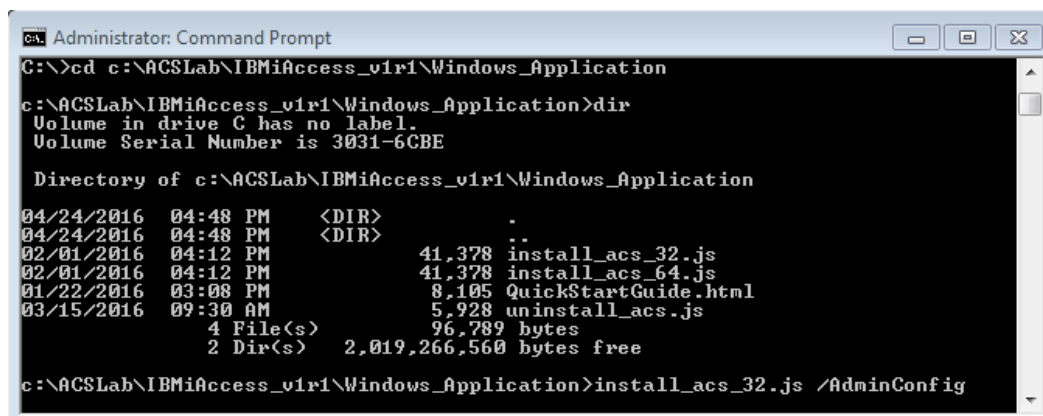
Cognitive Systems  **Provided Deployment Scripts** 

- IBM i Access Client Solutions v1r1m4 Update 3 (October 2015) provided an update to these deployment scripts for Windows to allow an Administrator to control some of the deployment behavior and how the client behaves for the user.
  - An Administrator runs the script passing a parameter of `/AdminConfig`
    - The Administrator is then presented with a series of questions about the deployment, like if ACS should be ran locally or remotely, what functions will the user have, and if desktop icons should be created.
  - The IBM i Access Client Solutions product files are placed in a central location
  - Users run the deployment script and IBM i Access Client Solutions is deployed to their Windows workstation.
- More Details
  - <https://www.ibm.com/developerworks/ibmi/library/i-ibmi-access-client-solutions-customization-trs/>
  - <http://www-01.ibm.com/support/docview.wss?uid=nas8N1020967>

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- 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

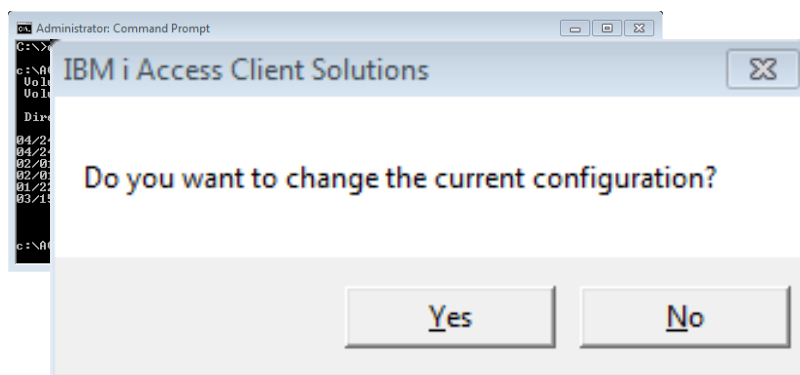
04/24/2016  04:48 PM    <DIR>          -
04/24/2016  04:48 PM    <DIR>          ..
02/01/2016  04:12 PM             41,378  install_acs_32.js
02/01/2016  04:12 PM             41,378  install_acs_64.js
01/22/2016  03:08 PM              8,105  QuickStartGuide.html
03/15/2016  09:30 AM              5,928  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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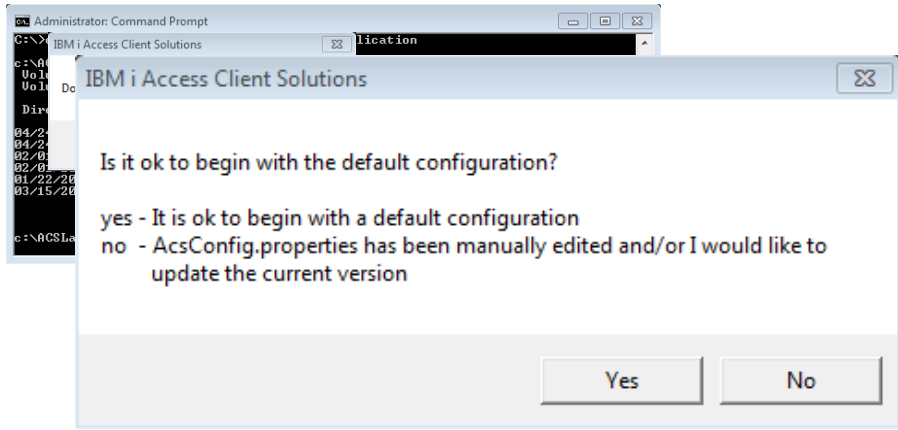
- Administrator Preparing Deployment



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Cognitive Systems  **Provided Deployment Scripts** 



- Administrator Preparing Deployment



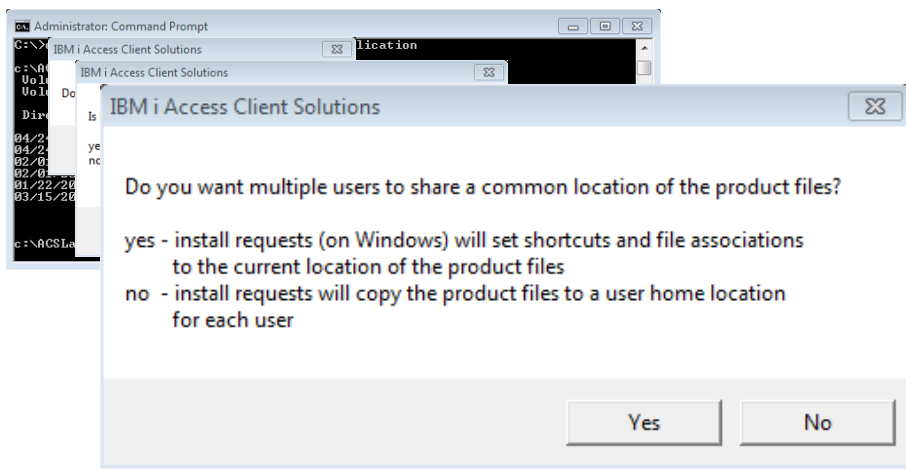
The screenshot shows a Windows Administrator Command Prompt window in the background with the following text:  
C:\> IBM i Access Client Solutions  
c:\> dir  
04/20/2016 02:00  
04/20/2016 02:00  
01/22/2016 03:15/2016  
c:\> \ACSLe

The foreground dialog box is titled "IBM i Access Client Solutions" and contains the following text:  
Is it ok to begin with the default configuration?  
yes - It is ok to begin with a default configuration  
no - AcsConfig.properties has been manually edited and/or I would like to update the current version  
Buttons: Yes, No

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Cognitive Systems  **Provided Deployment Scripts** 



- Administrator Preparing Deployment



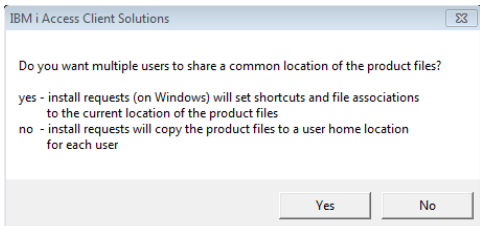
The screenshot shows a Windows Administrator Command Prompt window in the background with the following text:  
C:\> IBM i Access Client Solutions  
c:\> dir  
04/20/2016 02:00  
04/20/2016 02:00  
01/22/2016 03:15/2016  
c:\> \ACSLe

The foreground dialog box is titled "IBM i Access Client Solutions" and contains the following text:  
Do you want multiple users to share a common location of the product files?  
yes - install requests (on Windows) will set shortcuts and file associations to the current location of the product files  
no - install requests will copy the product files to a user home location for each user  
Buttons: Yes, No



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Cognitive Systems  **Provided Deployment Scripts** 

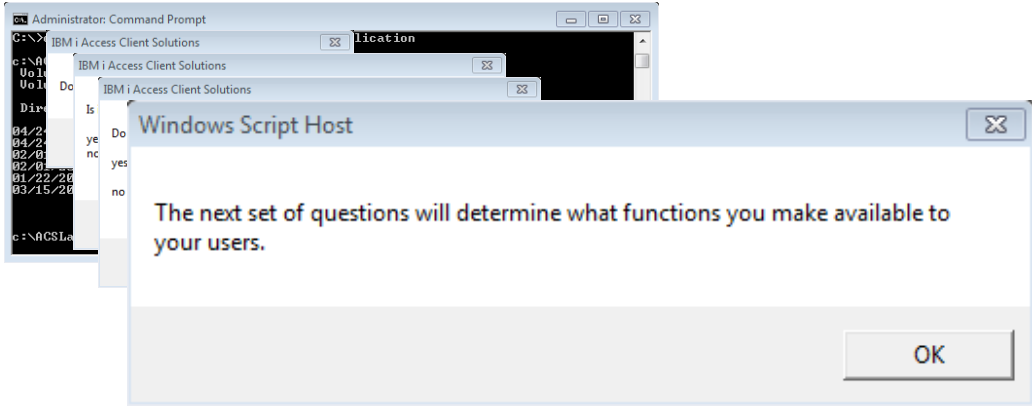
- Administrator Preparing Deployment
  - Where should the product be ran from?
  - No => Copy the IBM i ACS deployment to Windows User's Home Directory
    - To update the product, update the central location and re-run install script
  - Yes => Run the product from the location the install script is being ran from
    - May be a Network or Local location
    - To update the product just update the deployment location via file copy





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Cognitive Systems  **Provided Deployment Scripts** 

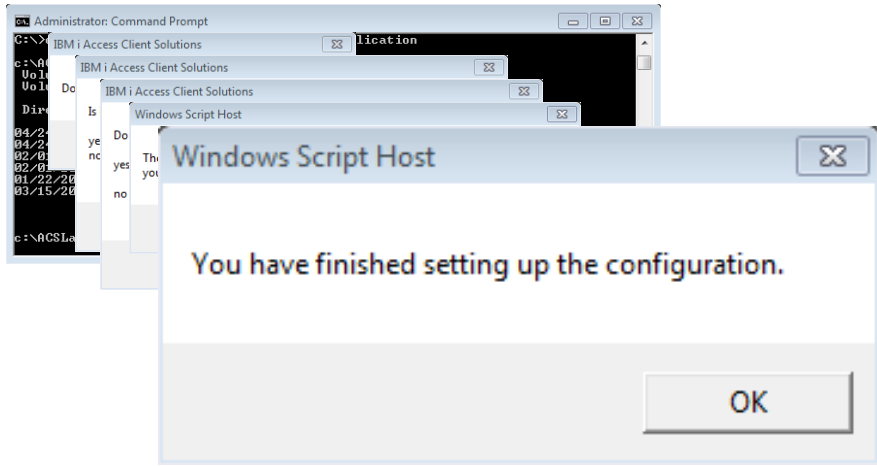
- Administrator Preparing Deployment





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Cognitive Systems  **Provided Deployment Scripts** 

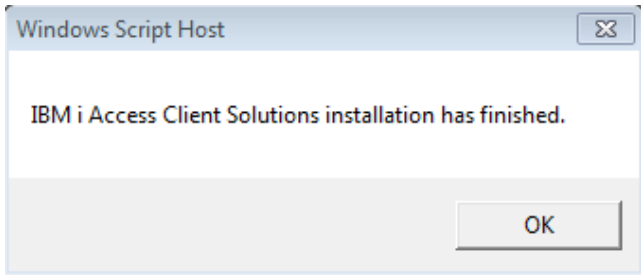
- Administrator Preparing Deployment



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Cognitive Systems  **Provided Deployment Scripts** 

- Administrator Preparing Deployment
  - User running the Deployment

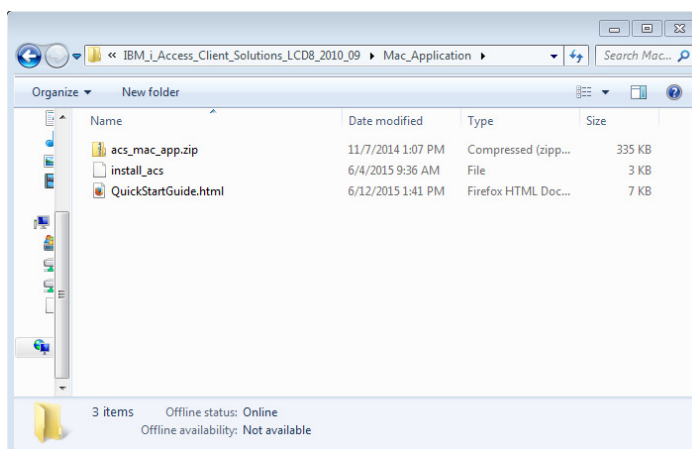


- Deployment scripts supports a /Q option to be passed to the script to silently deploy the client. Automatically accepting the End User License Agreement and not showing this completion message.

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## Provided Mac Deployment/Install Script

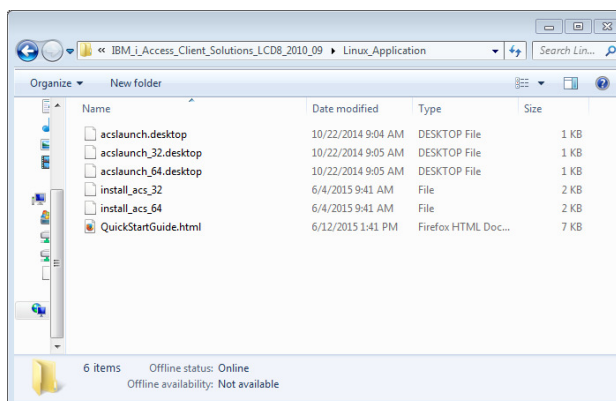
- Provided install\_acs Javascript on Mac will copy the IBM i Access Client Solutions deployment to the Mac OS Applications folder.



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## Provided Linux Deployment/Install Script

- 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/




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# Migration

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## Migration

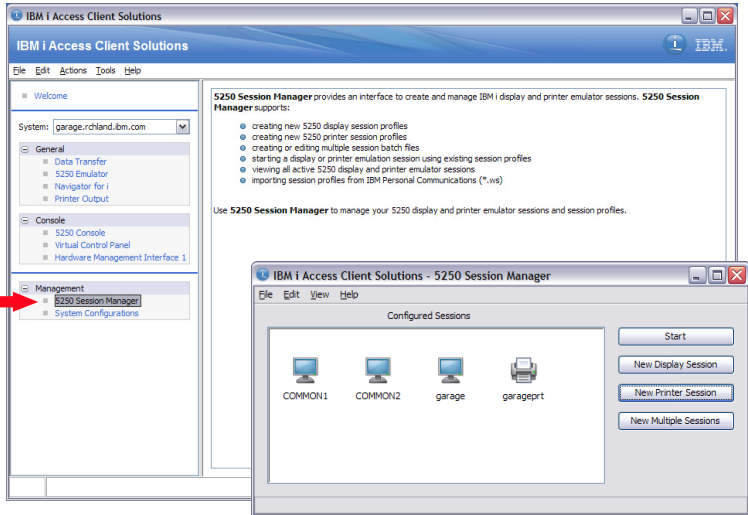


- IBM i Access Client Solutions provide several tools to assist with migrating from the IBM i Access for Windows client environment to IBM i Access Client Solutions
  - 5250 Migration Tools
    - Workstation file and keyboard map migration
    - Macro migration
    - Legacy File Associations
  - Data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



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Cognitive Systems  5250 Migration 

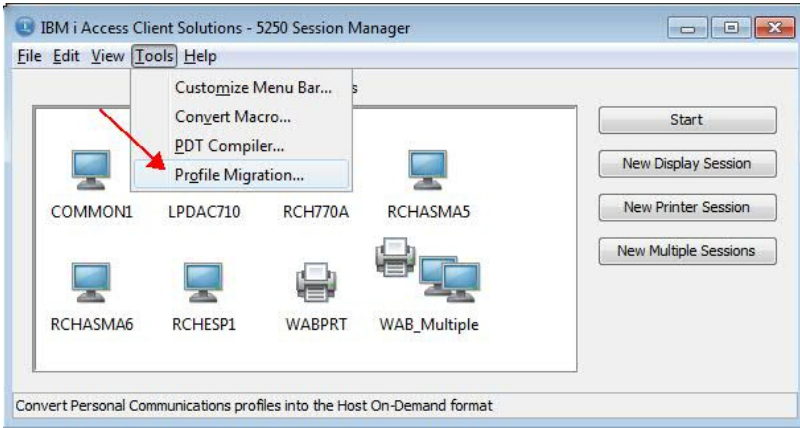
- 5250 Session Manager





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Cognitive Systems  5250 Migration 

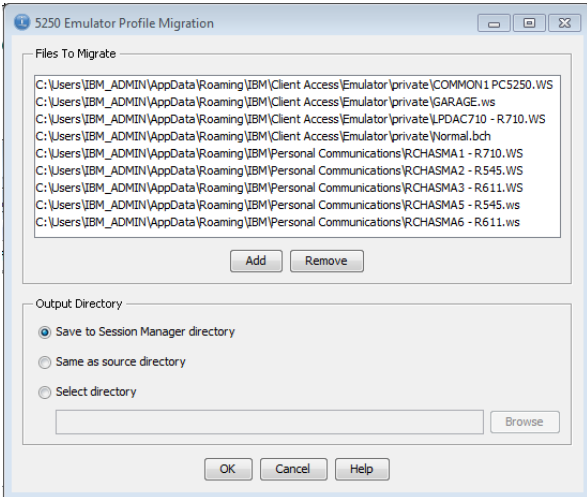
### Migration – 5250 session profiles



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Cognitive Systems  **5250 Migration** 

## Migration – 5250 session profiles





Files To Migrate

- C:\Users\IBM\_ADMIN\AppData\Roaming\IBM\Client Access\Emulator\private\COMMON1 PC5250.WS
- C:\Users\IBM\_ADMIN\AppData\Roaming\IBM\Client Access\Emulator\private\GARAGE.ws
- C:\Users\IBM\_ADMIN\AppData\Roaming\IBM\Client Access\Emulator\private\LPDAC710 - R710.WS
- C:\Users\IBM\_ADMIN\AppData\Roaming\IBM\Client Access\Emulator\private\Normal.bch
- C:\Users\IBM\_ADMIN\AppData\Roaming\IBM\Personal Communications\RCHASMA1 - R710.WS
- C:\Users\IBM\_ADMIN\AppData\Roaming\IBM\Personal Communications\RCHASMA2 - R545.WS
- C:\Users\IBM\_ADMIN\AppData\Roaming\IBM\Personal Communications\RCHASMA3 - R611.WS
- C:\Users\IBM\_ADMIN\AppData\Roaming\IBM\Personal Communications\RCHASMA5 - R545.ws
- C:\Users\IBM\_ADMIN\AppData\Roaming\IBM\Personal Communications\RCHASMA6 - R611.ws

Output Directory

- Save to Session Manager directory
- Same as source directory
- Select directory

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Cognitive Systems  **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.

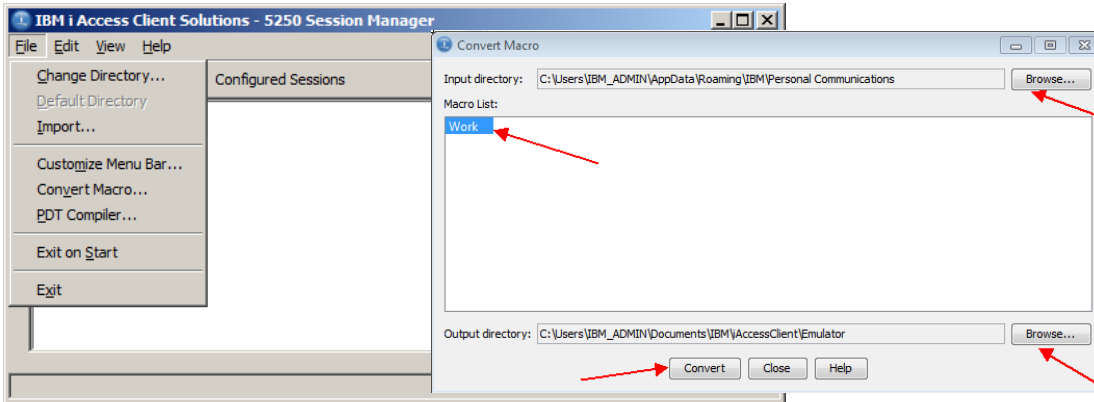
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Cognitive Systems  **5250 Migration** 

## What about my old macros?

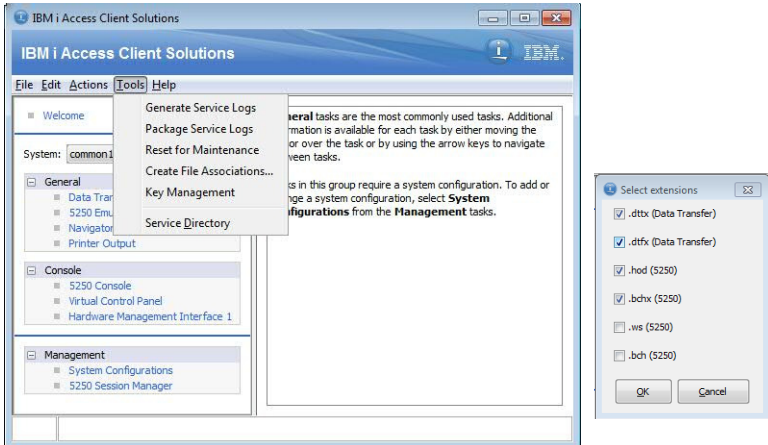
- File->Convert Macro
- VBScript capabilities **NOT** converted



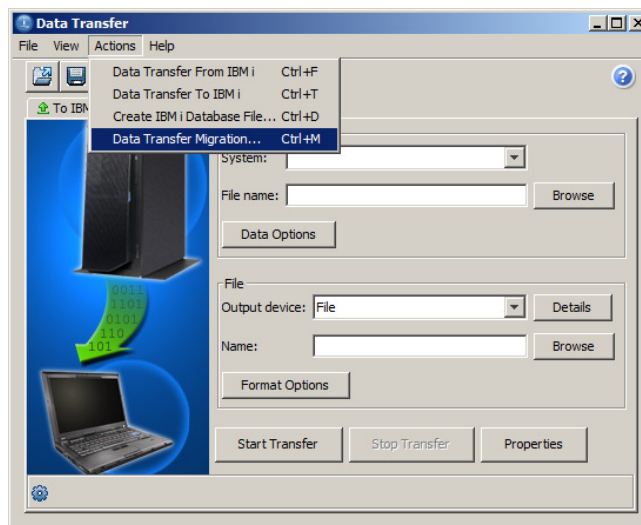
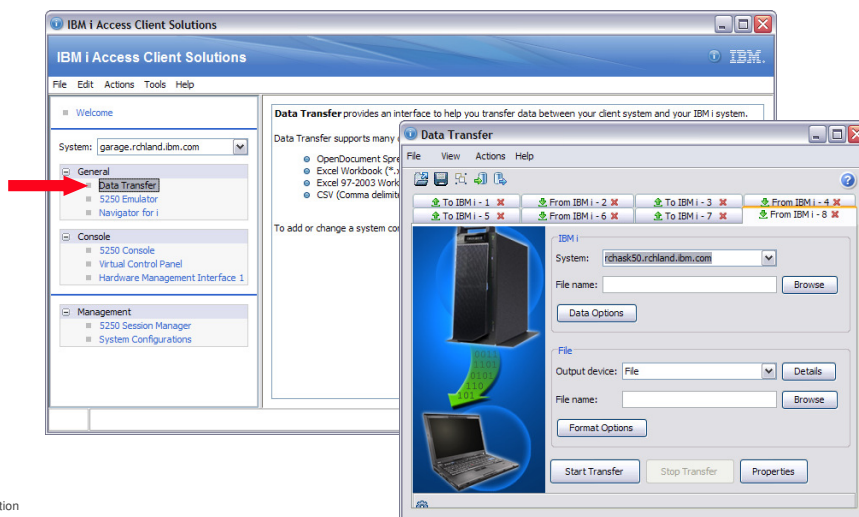
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Cognitive Systems  **5250 Migration** 

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



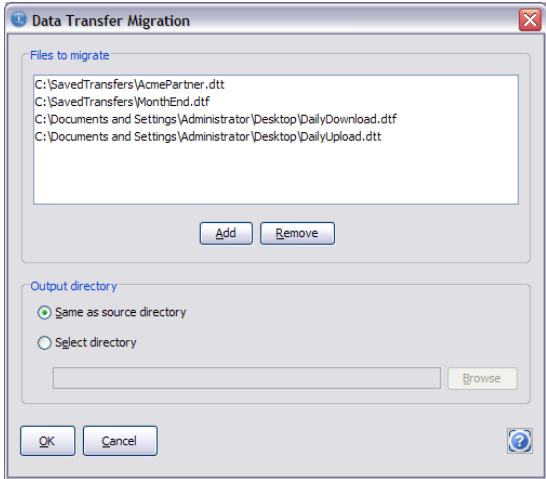
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## Data Transfer Migration

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

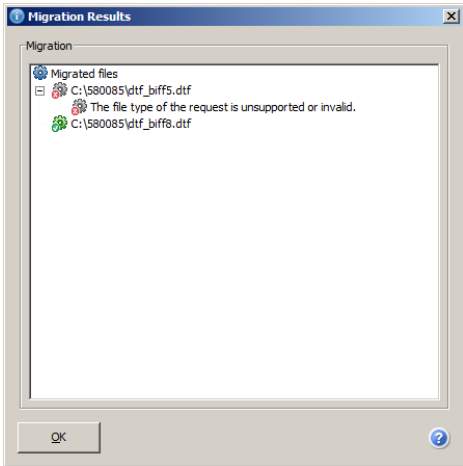


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## Data Transfer Migration

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

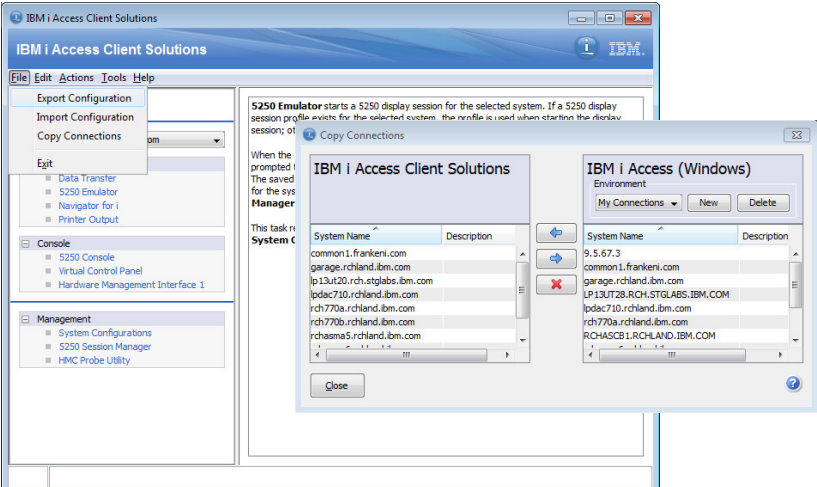


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## Migration - System Connections


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





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# What have we learned?





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Cognitive Systems  **What have we learned** 

- IBM i Access for Windows?
  - Future not so bright
- Replacement for functions (big picture)?
  - Combination of ACS core offering, ACS application packages, Navigator for i, Application Runtime Expert (ARE), IBM i Access for Web/Mobile
- How to live without System i Navigator?
  - Common "access" tasks can be completed with only the AP
  - Others can be easily done with command-line utilities or the ACS base offering

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Cognitive Systems  **Summary** 

- Times, They are a Changing
- Why the Change?
- Functional Overview
  - Connection Configuration
  - 5250 Emulation
  - Data Transfer
  - Console
  - Printer Output
  - Integrated File System
  - Database Tools
  - SSH Terminal
  - Navigator
  - IBM i ARE
- Deployment / Migration
- Summary

A blue rectangular box containing a white circle with a stylized 'Q' inside, followed by the text 'USER' in white capital letters.

A cartoon illustration of a dolphin leaping out of a target-like graphic consisting of concentric red and orange circles. Above the dolphin, the text 'SO LONG AND...' is written in a bold, red, sans-serif font. Below the dolphin, the text 'Thanks for all the fish!' is written in a white, cursive font.

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# Questions





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IBM

- Be part of the voice to IBM – help enhance the IBM i and AIX operating systems
- Submit feature requests and requirements to IBM

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---	--

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## Useful links

- Access Client Solutions
  - <http://www-03.ibm.com/systems/power/software/i/access/solutions.html>
- Administration Runtime Expert (ARE)
  - <http://www-03.ibm.com/systems/power/software/i/are/>
- IBM RFE community (submit requests to the "IBM i" product)
  - <https://www.ibm.com/developerworks/rfe/>

## Power Systems Social Media

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<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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#

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