

406172 / 32MP

IBM eServer iSeries



Session:

PC5250 Display Emulation Everything You Need To Know

Mark Vanderwiel
iSeries Access Development

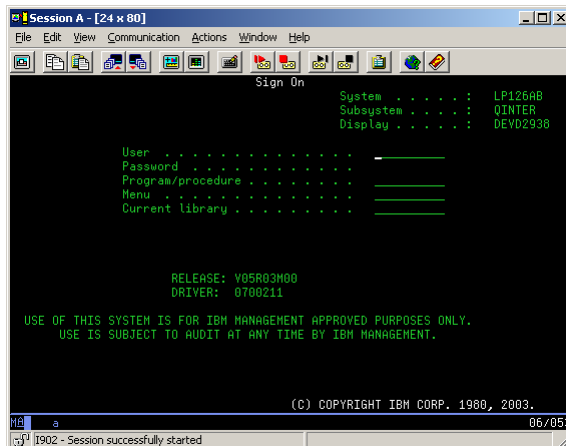
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why "i"? it's simple.

5250 Emulation Overview

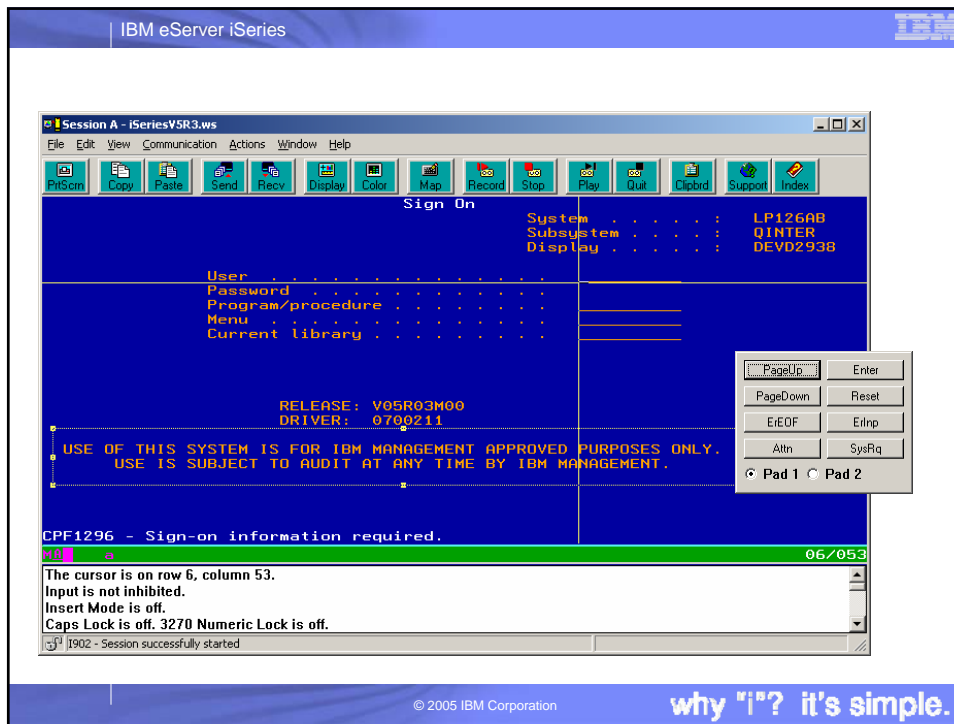
Functions

- 5250 Telnet emulation
- iSeries Print emulation
- Customizable
 - Toolbar
 - Keyboard
 - Colors
 - KeyPad
 - More!



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Getting Started

- Install
- Ways to start PC5250
 - Session Manager
 - iNavigator
 - Desktop Icon
 - Run pcsws.exe
 - Start *.ws



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Installing PC5250

- Selective Setup

Components	Size	License Required
<input checked="" type="checkbox"/> Required Programs	0 K	
<input checked="" type="checkbox"/> Optional Components	0 K	
<input checked="" type="checkbox"/> iSeries Navigator	0 K	
<input checked="" type="checkbox"/> Data Access	0 K	
<input checked="" type="checkbox"/> AFP Workbench Viewer	0 K	
<input checked="" type="checkbox"/> Toolbox for Java	0 K	
<input checked="" type="checkbox"/> 5250 Display and Printer Emulator	0 K	✓
<input type="checkbox"/> Korean PC5250	0 K	✓
<input type="checkbox"/> Simplified Chinese PC5250	0 K	✓
<input type="checkbox"/> Traditional Chinese PC5250	0 K	✓

Drive: C: Space Required: 0 M Space Available: 13772 M

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Ways to start PC5250

- Session Manager

IBM Personal Communications - Session Manager

Start...
New Session...
New Multiple Sessions...

Number of Profiles: 1, Number of Batch Programs: 1

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Ways to start PC5250

- iNavigator

The screenshot shows the iSeries Navigator interface. On the left, a Windows Explorer window displays the 'C:\Documents and Settings\All Users\Start Menu\Programs\IBM iSeries' folder. A red arrow points from the 'iSeries Navigator' icon in this folder to the 'iSeries Navigator' application window. In the application window, the 'File' menu is open, and the 'Display Emulator...' option is highlighted. The application window also shows a tree view of connections and a list of services on the right.

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Ways to start PC5250

- Desktop Icons
 - New -> iSeries Desktop Icon

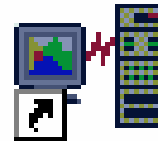
The screenshot shows the 'iSeries Desktop Icon' dialog box. The 'Application' field is set to 'PC5250 Emulator'. A red arrow points from the dialog box to a small icon representing the PC5250 Emulator. Below the icon, a text box reads 'PC5250 Emulator icon - ISeriesV5R3.AS4'. The dialog box has 'Back', 'Next', 'Cancel', and 'Help' buttons.

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Ways to start PC5250

- Launch the program directly
 - Start -> Run -> PCSWS.EXE
- Launch a *.WS profile
 - Start ->Run ->Browse to profile-> iSeriesV5R3.WS
- Create your own shortcuts
 - Drag-n-Drop from Session manager
 - New -> Shortcut



iSeriesV5R3

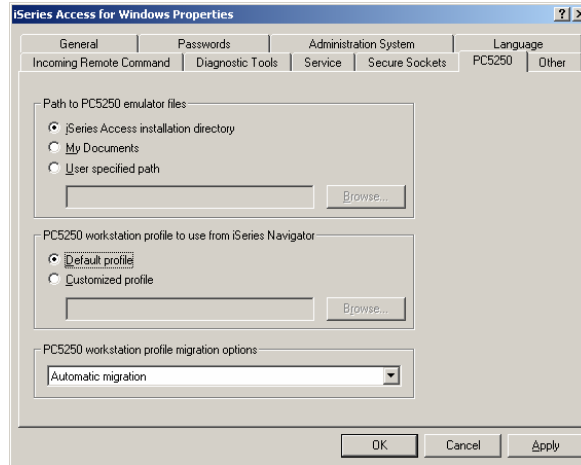
Session Profiles

- What are they?
 - Files with PC5250 configuration information:
 - Single session .WS
 - Multiple sessions .BCH
 - Other PC5250 configuration file extensions:
 - Toolbar: .BAR
 - Popup-Keypad: .PMP
 - Macro: .MAC
 - Keyboard: .KMP
 - Mouse Pad: .MPP

```
[Profile]
ID=WS
Version=7
[CT]
trace=Y
[Telnet5250]
HostName=ISERIESV5R3
Security=CA400
SSLClientAuthentication=Y
[Communication]
Link=telnet5250
Session=5250
[5250]
HostCodePage=037-U
PrinterType=IBM3812
[Keyboard]
CuaKeyboard=2
Language=United-States
IBMDefaultKeyboard=N
```

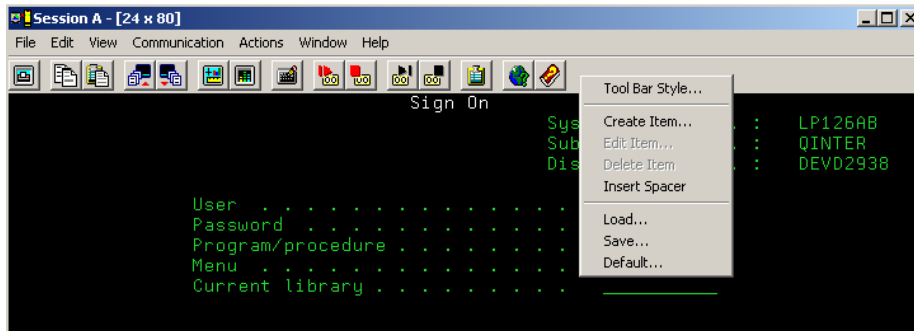
Session Profiles

- Where are they?
 - iSeries Access Properties in Control Panel
- Network paths
 - Multi-user sharing
 - Templates
- Migration
 - Default will handle most cases



Toolbars

- Right click to customize



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Toolbars

- Styles

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Toolbars

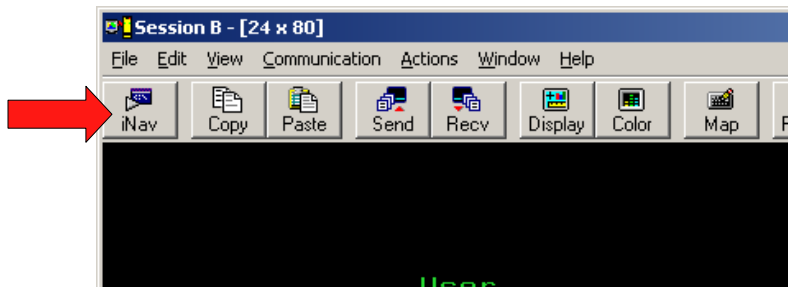
- Add item
 - Application
 - Key Action
 - Menu Action
 - Macro

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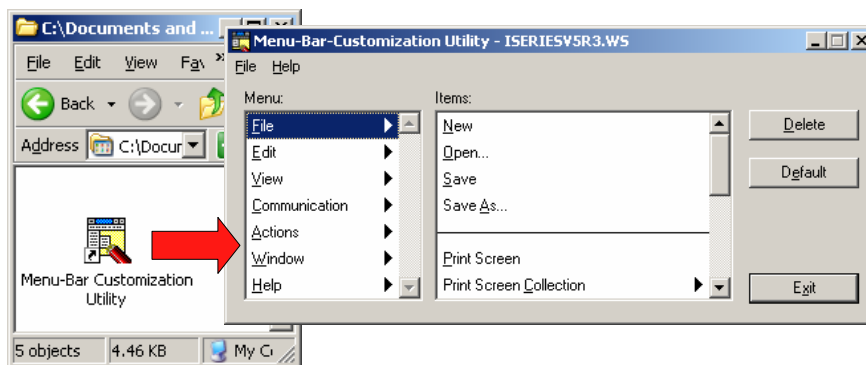
Toolbars

- Launch Application



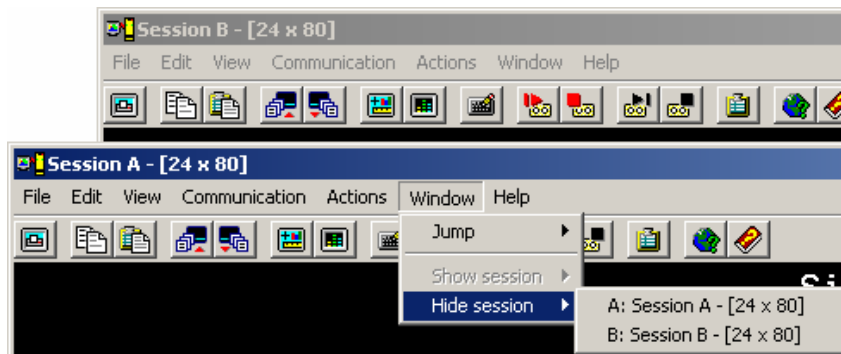
Menu Bar

- Remove unneeded menu items



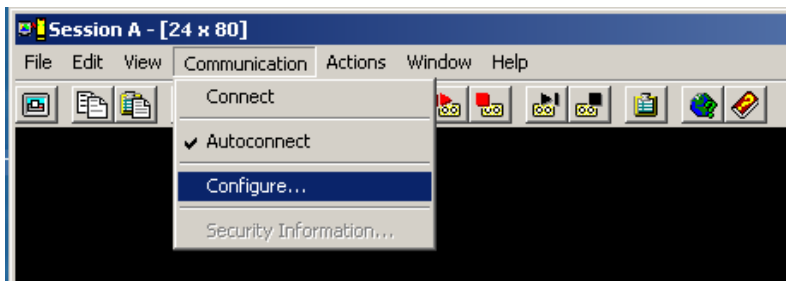
Session Control

- Session hiding/jumping



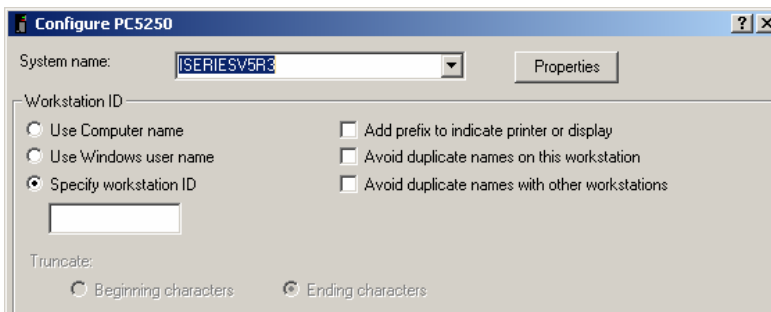
Communication Configuration

- Connection and device settings



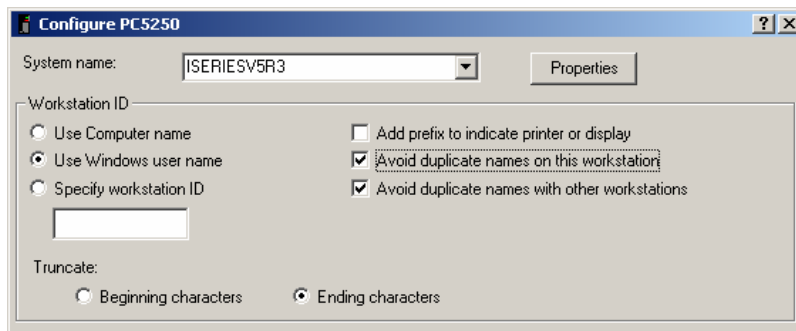
Device ID's

- Default settings
 - Device ID QPADEVnnnn is automatically generated
 - No association between users/pc's and devices



Device ID's

- Named
 - QAUTOVRT needs to be set



Device ID's

- Named device ID benefits
 - Associate device ID with user profile, workstation, ...
 - Route to subsystems based upon device name
 - Enables disconnected job support
 - QAUTOVRT needs to be set to high enough value
- Disconnected job support
 - Requires SAME device id AND user profile
 - QDSCJOBTV when to clean up disconnected unused jobs
 - QINACTIV timeout for action on idle jobs
 - QINACTMSGQ action taken for idle jobs (*ENDJOB, *DSCJOB)
 - Disconnected jobs hold system resources, you must manage them carefully

Secure Sockets Layer (SSL)

- Recommended for all Telnet/5250 sessions
- Install SSL component
- Download Certificate Authority (CA) certificate
- Enable SSL
 - System configuration
 - Per Session configuration
- Server authentication
- Client authentication

SSL = A Matter of Trust...

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Secure Sockets Layer - Installing

- Selective Setup

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Secure Sockets Layer – Download CA and Enable

- Using iNavigator

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Secure Sockets Layer – CwbCoSSL utility

This tool will allow Certificate Authorities (CA) certificates to be placed in the iSeries Access key databases.

If using an iSeries CA, select your iSeries system name and then press the download button

Start CA download from... I6SERIESV5R3 Just place in a pc file

If using a CA from another source, enter a label and then press the store button

Certificate Authority text label: Store CA from file...

Click buttons below to launch SSL related programs

Key Database Configuration

Verify Connections

iSeries DCM PC Key Mgt. Java Key Mgt. iSeries Access Properties Telnet Client Authentication iSeries Navigator SSL Non-SSL

www.ibm.com/eserver/iseries/clientaccess Trace Cancel Help

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Secure Sockets Layer

- iNavigator system properties

Environment: My Connections

Management Central (IseriesV5r3)

My Connections

iSeriesV5R3

Explore

Open

Customize this View

Connection to Server

Run Command...

Send Message...

Display Emulator...

Users and Groups

Inventory

Fixes

Collection Services

System Values

System Status

Application Administration

Properties

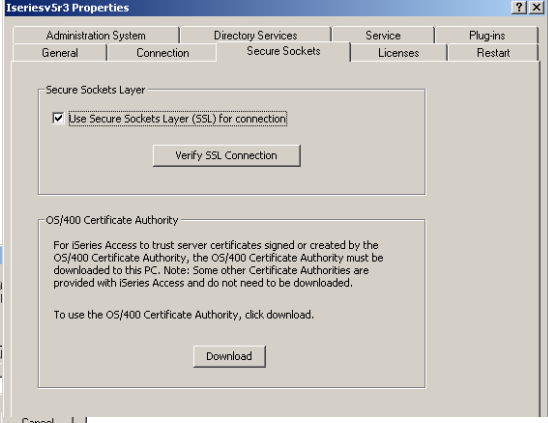
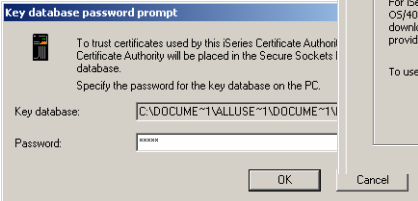
Location: C:\Program Files\IBM\Client Access 1.62 KB My Computer

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Secure Sockets Layer

- iNavigator system properties
 - Must restart iNavigator
- Enable SSL
 - Must restart iNavigator
- Download CA
 - Password prompt ("ca400")

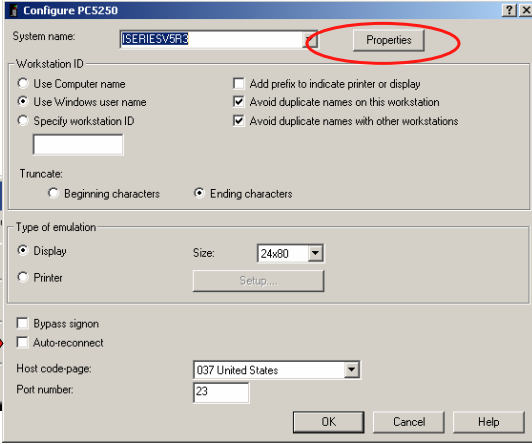
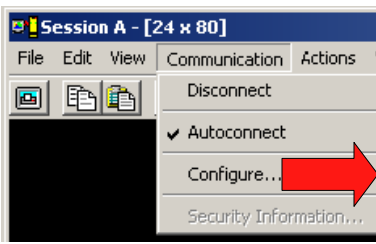
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Secure Sockets Layer

- PC5250 configuration

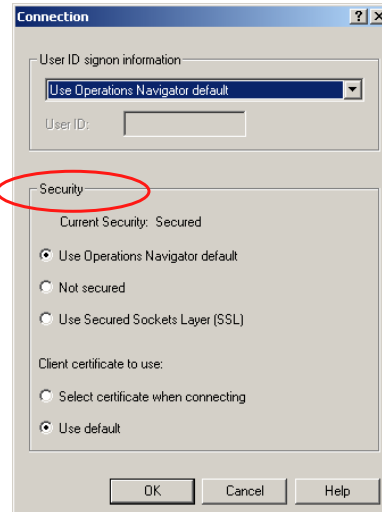



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Secure Sockets Layer

- PC5250 connection properties
 - Use iNavigator setting
 - Override setting
 - Ignore Client certificate to use
 - Port will change to 992 for SSL use



Secure Sockets Layer

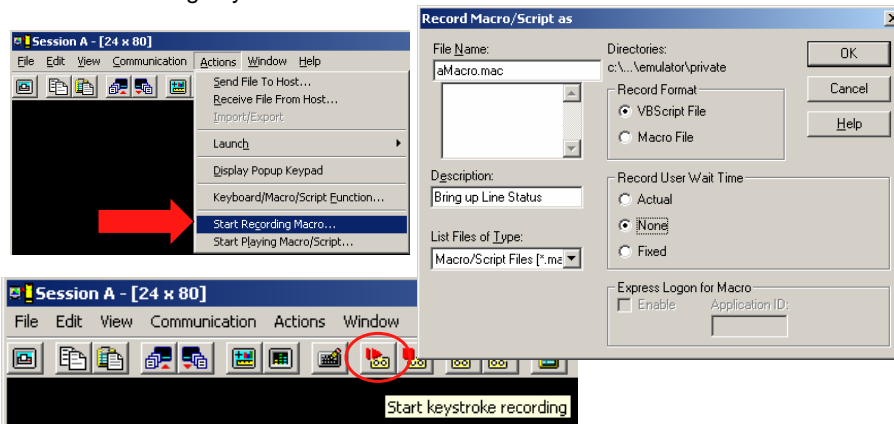
- Common problems
 - PC
 - Forgot to use the CA Download button
 - PC Key database(s) are missing or corrupt. Check location from the Control Panel.
 - Past expiration date
 - Java Runtime Environment (JRE) is corrupted
 - iSeries Digital Certificate Management (DCM)
 - CA has been changed
 - CA has been marked as "untrusted"
 - System certificate not assigned to iSeries Access servers (i.e. Telnet server)
 - System certificate expired
 - Telnet server configured for SSL Client Authentication only
 - Need to create/buy and distribute client certificates
 - Default Port 992 changed or restricted
 - CwbCoSSL client utility very helpful in diagnostics

Macros

- How to setup and use
 - Recording
 - Customizing
 - Reduce wait times
 - Launch app
 - Playing

Macros

- Start Recording keystrokes and actions

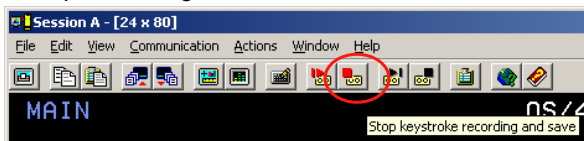


Macros

- Recording...

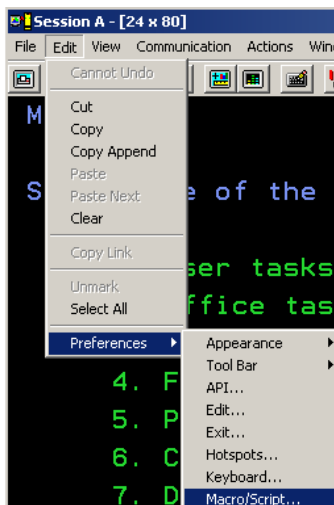


- Stop Recording and save macro



Macros

- Customize your macros...



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Macros

- Customize your macros...

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Macros

- Play your macros...

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Administration

- Application Administration
 - Via iNavigator

The screenshot shows the iSeries Navigator application window. The 'Environment' is set to 'My Connections'. The left pane shows a tree view with 'My Connections' expanded to 'Iseriesv5r3'. A context menu is open over 'Iseriesv5r3', and the 'Application Administration' option is selected, which has opened a sub-menu where 'Local Settings' is highlighted. A red arrow points to this 'Local Settings' option.

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Administration

- Settings
 - See Info Center for more ways to use this

The screenshot shows the 'Application Administration (Local Settings) - Iseriesv5r3' dialog box. It contains a table with columns for 'Function', 'Default Access', 'All Object Access', and 'Customized Access'. The 'Function' column is expanded to show several options, all of which have checkmarks in the 'Default Access' and 'All Object Access' columns.

Function	Default Access	All Object Access	Customized Access
Series Access for Windows	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
5250 Display and Printer Emulator	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Data Transfer	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
ODBC Support	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
OLE DB Provider	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Remote Command - Command Line	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
.NET Data Provider	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	

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	iSeries	

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