

ARCAD 5250 Emulator for RDi and Eclipse

Tutorial

For IBM Rational Developer for i version:7.5+For Eclipse version:3.4+

Date: Jun-09

© Copyright 1992, 2009 by ARCAD Software, Inc. All rights reserved.

The following terms are names owned by International Business Machines Corporation in the United States, other countries, or both: AS/400[®], ClearCase[®], ClearQuest[®], DB2[®], DB2[®] Connect, DB2[®] Universal Database, ibm.com[®], IBM[®], iSeries[®], System i[™], OS/400[®], Rational[®], WebSphere[®]. Java and all names based on Java are owned by Sun Microsystems, Inc. in the United States, other countries, or both. Microsoft[®] and Windows[®] are registered trademarks of Microsoft Corporation in the United States and/or other countries. Eclipse[®] is a registered trademark of Eclipse Foundation, Inc. Other names of companies, products or services are the property of their respective owners.

ARCAD 5250 EMULATOR FOR RDI AND ECLIPSE

Use this plug-in to start 5250 emulation sessions from within an Eclipse-based IDE, such as Eclipse version 3.4 and higher, or IBM's Rational Developer for i version 7.5 and higher.

MAIN FEATURES AND FUNCTIONS

Using this emulator plug-in, you can:

- Open any number of 5250 sessions on any number of machines.
- Customize appearance: colors, typeface, cursor shape, and more.
- Customize your connection: Supports 24x80 and 27x132 modes, the code page, and system requests.
- Customize your keyboard: Assign functions to keys.
- Use standard copy/paste hotkeys Ctrl+C and Ctrl+V.
- Automatically resize the emulator window, depending on the size of the editing area.
- Record macros to handle repetitive activities.

INSTALLATION PREREQUISITES

None.

NOTE: The use of this plug-in does not require you to install any software on the IBM i server.

INSTALLING THE PC COMPONENTS

After you have downloaded the zipped archive file from the ARCAD Web site and stored it on your computer, use these instructions to install the software into your IDE:

- 1. From the workbench, choose **Software Updates** on the **Help** menu.
- 2. Activiate the Available Software tab.
- 3. Click Add Site..., then Archive.
- 4. Browse for and select the zip file; click Open, then click OK.
- 5. Check the box associated with your archive site; then click Install....
- 6. Click Finish.
- 7. Monitor the progress of the install wizard; then click \underline{Yes} when prompted to restart the workbench.

To begin, proceed with the instructions in the next topic.

Tutorial - Document Version 08.08.x

CREATING A 5250 EMULATION SESSION

1. From the WDSc workbench, open the **Resource** perspective by choosing **Window>Open Perspective>Other>Resource** on the menu bar, like this:



 Use the New Project wizard to create a new project. To start the wizard, choose File>New>Project on the menu bar (or right click in the Navigator and choose New>Project). The wizard opens:

New Project	
Select a wizard	
Create a new project resource	
Wizards:	
type filter text	
Java Project Java Project Java Project Seneral Project CVS CVS CS Cospinal Modeling Framework Graphical Modeling Framework Discription	
Show All Wizards. ⑦ < Back	Cancel

Expand General and choose Project. The New Project wizard opens.

Tutorial – Document Version 08.08.x

On the **Project** page, provide a meaningful name for your project. For our example we'll name our project **My5250Sessions**, as shown here.

🗿 New Projec	t	
Project Create a new pr	oject resource.	
Proiect name:	- My5250Sessions	
Use default l		
Location: C:\D	ocuments and Settings\Holmes\IBM\rationalsdc	Browse
	e file system : default	
Working sets -		
📃 Add project	to working sets	
Working sets:		Select
working sets.		
0	< Back Next > Finish	Cancel

You can use the defaults for the remaining values. (Note that you can include this new project in one or more working sets, if you want.) When you click Finish, your new project should appear among any other projects you have defined.

File	Edit	Navig	ate	Searc	h Pro	ject	Run	Win	dow	Help
1 12	• 🛛	≙ :	P	• 🚳	Q	1. 1	8 -	2	- [5]	- 🐤 🗲
₽ P	roject	Explor	er 🕅						E 4	₽
Ξĺ	🗃 My 5	5250Se	ssion	IS						
				5501						

(If it does not appear, check your filters and working sets; you might need to explicitly include it.)

You are now ready to start an emulator session.

Tutorial – Document Version 08.08.x

3. Use the **ARCAD 5250 emulator session** wizard to create a new emulator session. To start the wizard, choose **File>New>Other** on the menu bar. In the list of available wizards, expand the **Arcad** node and choose the wizard named **5250 Emulator Session**, as shown here:

Wizards: type fitter text	New	
type fiter text G Closs G Closs G Interface A Java Project A Java Project S Plugan Project C Chronal C S250 Emulator Session	Select a wizard	
Gr Closs Gr Interface Java Project X. Java Project from Existing Ant Buildfile Brug-in Project Brug-in Project Brug-in State Brug-in State	Wizards:	
Contendate Interface Contend Sava Project Sava Project from Existing Ant Buildfile SPlug-in Project Control Control S250 Emulator Session	type fiter text	
· Connection Profiles	G' Interface 관 Java Project 북 Java Project from Existing Ant Buildile 양 Plugan Project ₩ 같은 General 는 Canad	

Click Next >.

4. An ARCAD splash screen appears for a few moments; after it clears, the wizard prompts you for a container for your 5250 session. Click Browse and choose the project you created in the previous step.

ssion
new file with *.5250 extension that allows a 5250
Sessions Browse
n 5250
< Back Next > Finish Cancel

Click Next > to supply connection information.

0		
iSeries 525	0 Session	
Connection p	arameters	
Host : arcad	04 Port : 23 Device :	
Screen size :	27×132 24×80 Code Page	e : 37 💌
?	< Back Next >	Finish Cancel

Provide the host system's name or its IP address. (This is your IBM i server.) Accept the default settings for the other parameters.

An emulator session should now appear. At this point, you can sign onto your IBM i server and begin using the ARCAD Emulator from within your IDE.

USING AN ALREADY-EXISTING SESSION

The ARCAD emulator is technically an editor. This means that, under normal circumstances, its window remains open no matter what perspective you switch to, unless you deliberately close it.

Closing an emulator session window does not delete the session definition. If you do close it, you can easily re-open it by following these steps:

- 1. Expand the 5250 emulator project you created in the Resource perspective, and
- 2. Double-click the session definition.

Note: This is the same as right-clicking the item and choosing **Open**.



In some cases when you double click a session definition, an XML document appears instead of the emulator session. If this occurs: close the XML document, right click on the session you are trying to open, and choose **Open With > 5250 Session Editor**. This will open the graphical emulator session you are looking for.

RENAMING EMULATOR SESSIONS

You can rename your emulator session after creating it, but the extension must remain .5250 in order for it to function.

Renaming a session is similar to renaming any file – you can right click it and choose **Rename** on the context menu (OR you can select it and click once to activate renaming):

RCAD04.525	0			
	10			
	-			Cancel
		Preview >	Preview >	Preview > OK

CREATING MULTIPLE SESSIONS

The easiest way to create another session is to copy an existing session. Right click the existing session and choose **Copy**. Then right click within the **Navigator** view and choose paste. Rename the session when prompted, but remember:

- 1. DO NOT change the extension. It must be .5250.
- 2. If your new session should connect to a system that is different from the original session, you'll need to adjust the connection information as described in the next topic.

CHANGING SESSION PARAMETERS

You can manage connection settings and emulator appearance settings in the session properties. Note that settings changes take effect *after* the emulator session is closed and reopened.

RECOMMENDATIONS

Tutorial – Document Version 08.08.x

- **Before changing any session settings**, we recommend copying your initial session to create a new session, and naming the copy **Default Session**. Preserving this session in its default state will allow you to easily create new sessions with the original settings. (See the description of the **Restore Defaults** button under
 - Known issues on page 10).
 - When customizing the color settings in the emulator, note that the contents of the dropdown color list are static, and the names you see there reflect the emulator's original default color sets. Customizing the colors does not change the color set names in the list, but the RGB color sliders do identify the customized shade for the selected color set.

Managing connection settings

To access the connection settings for your emulator session, follow these steps:

- 1. Expand the emulator project that contains your session definitions.
- 2. Right click the session whose settings you want to change.
- 3. Choose **Properties** on the context menu to access the session's settings pages.
- 4. On the **Properties** dialog, click **Connection** in the left pane to display connection settings page in the right pane.

Adjust your connection settings as needed. Typically, the only setting you will change on this page is the system name.

If the system name does not work for you, supply the system's network IP address instead.

Managing appearance settings

You can change the colors, font, and cursor characteristics of your emulator session.

To access the appearance settings for your emulator session, follow these steps:

- 1. In the Resource perspective, expand the emulator project that contains the session definition whose colors you want to change.
- 2. Right click the desired session definition and choose **Properties** on the context menu.
- 3. In the left pane of the session's **Properties** dialog, choose **Display attributes**. The **Display attributes** page of the emulator properties appears in the right pane:

Properties for ARC		
type filter text	Display attributes	⇔ • • • •
Resource - Connection Display ambulies - Run/Debug Settings	Colors Backgound Image: Colors Backgound Image: Colors Scale Image: Colors Scale Image: Colors Backgound Image: Colors Font Image: Colors Foot: Image: Colors Backgound Image: Colors Backgound Image: Colors Backgound Image: Colors Modificators of daplay attributes will be taken into account only at the time of the next op	writes of the view
	Restr	ore Defaults Apply
0		OK Cancel

Changing display colors

The **Colors** section of the **Display attributes** page consists of two tools and a sample area, shown here:



The **Colors** selector identifies what default color set you want to change; and the **Choice of colors** sliders set the Red, Green, and Blue (RGB) color values on a scale of 0 to 255, where 0 = black and 255 = white. The combination of the red, green, and blue color slider values creates the final color choice for the color set, and this is reflected in the **Appear** preview area.

The color sets in the **Colors** selection list consist of these static values:

- Background Affects the background color only (black by default).
- Blue Affects any text that was originally blue by default.
- Green Affects any text that was originally green by default (most panel text).

Pink Affects any text that was originally pink by default (Panel/Menu IDs, instruction text, function key and option text).

- Red Affects any text that was originally red by default.
- Turquoise Affects any text that was originally turquoise by default.
- White Affects any text that was originally white by default (messages, panel titles).
- Yellow Affects any text that was originally yellow by default.
- Cursor Affects only the cursor color.

When you customize a color set, its name in the list does not change. This means that if you change the **Turquoise** color set to bright green color by setting its RGB sliders to 0, 232, and 0 respectively, the color set will still be called **Turquoise** in the list, even though its color is now bright green. If want to change that color set again, you will have to remember that text that is bright green in your emulator is controlled by the Turquoise color set.

On the **Display attributes** page, to change a color set, do the following:

- 1. Choose a color set in the **Colors** dropdown list.
- 2. Adjust the RGB color sliders until the text in the preview area reflects the appearance you want.
- 3. Click Apply.
- 4. Close and re-open the emulator session to enact your changes.

Changing display fonts

The Font area of the Display attributes page looks like this:

ARCAD 5250 EMULATOR FOR ECLIPSE

Tutorial – Document Version 08.08.x

Font
Face : Bodoni MT Style : O Normal O Bold O Italic

To change the emulator font, follow these steps:

- 1. Choose a font face from the Face dropdown list.
- 2. Choose one of the style options -- Normal, Bold, or Italic.
- 3. Click Apply.
- 4. Close and re-open the emulator session to enact your changes.

Changing the cursor appearance

The Cursor area of the Display attributes page looks like this:

Cursor : Height : • Full Height Half Height Line Rule : • None Horizontal Vertical Cross

To change the cursor appearance in the emulator, do the following:

- 1. Choose one of the three cursor height options.
- 2. Choose one of the four cursor rule options.
- 3. Click Apply to save your choices.
- 4. Close and re-open the emulator session to see your changes.

TROUBLESHOOTING INFORMATION

This is a list of corrected and known issues.

Corrected issues

- **Default telnet port:** You can now change the default telnet port in the emulator preferences. Refer to **Window>Preferences>ARCAD5250>Default>Connection**. (This was corrected in version 1.0.0.3.)
- **Connecting to named sessions:** You can now assign a device name when you create a session definition, and you can edit the device name in the session properties.
- **Cursor refresh:** The cursor can now be refreshed in situations where the editing window is smaller than the 5250 session display (during a typeface change, for example). (This was corrected in version 1.0.0.4.)

Known issues

- **Key management:** The **F5**, **F6**, **F7**, and **F8** keys in the **Debug** perspective do not work when debugging a program, because the keys are pre-empted by this emulator function.
- **Restore Defaults:** The **Restore Defaults** buttons in the *Session properties* dialog do not restore property settings to their original default values. (See *Recommendations* on page 7.)