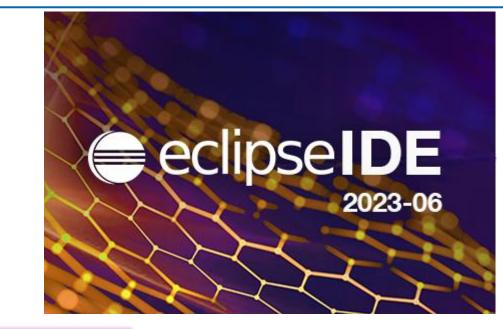
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What's New in DevOps Model RealTime 12

updated for the DevOps 2023.12 release

Overview

- Model RealTime 12 is based on Eclipse 2023-06 (4.28)
- Two brandings of the product are available (HCL and IBM). There is no differences in functionality between them.
 - Only difference is in the licensing mechanism and branding (e.g. documentation)



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DevOps Model RealTime Version: 12.0.0 (part of DevOps 2023.12) Build: 12.0.0.v20231205_1706

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 Visit https://model-realtime.hcldoc.com/help/topic/com.ibm.xtools.rsarte.webdoc/users-guide/overview.html

- Compared to RSARTE/RTist 11.3, Model RealTime 12 includes new features and bug fixes from 4 quarterly Eclipse releases:
 - 2022.09 (<u>https://www.eclipse.org/eclipse/news/4.25/platform.php</u>)
 - 2022.12 (<u>https://www.eclipse.org/eclipse/news/4.26/platform.php</u>)
 - 2023.03 (<u>https://www.eclipse.org/eclipse/news/4.27/platform.php</u>)
 - 2023.06 (<u>https://www.eclipse.org/eclipse/news/4.28/platform.php</u>)
- ▶ For full information about all improvements and changes in these Eclipse releases see the links above

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Some highlights are listed in the next few slides...



Eclipse 4.28 (2023.06)

- New preference to enable word wrap automatically
 - General Editors Text Editors Enable word wrap when opening an editor
 - Applies to all text editors including the Code editor

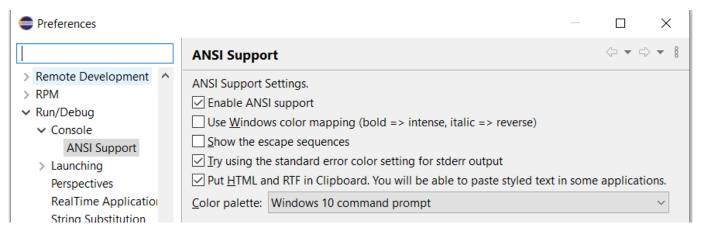
Preferences					\times
type filter text		Text Editors		<> ▼ <	> ▼ 8
 General Appearance 	^	Some editors may not honor all of these settings.			^
 Compare/Patch Content Types 		See <u>'Colors and Fonts'</u> to configure the font.			
✓ Editors		Undo history size:	200		
Autosave File Associations		Displayed tab width:	4		
Large File Associa		Line spacing (extra % of font height):	0		
> Structured Text Ec		Enable word wrap when opening an editor			
> Text Editors		Insert spaces for tabs			

🏶 ge	etPorts () ×	
Sho	wing code from the model <u>getPorts () : std::string</u>	
1	<pre>const RTActor_class* actorData = getActorData();</pre>	^
2		
3	const RTPortDescriptor*	
4	<pre>portDescriptor = actorData->ports; std::string strResult = "[";</pre>	
5	<pre>bool firstPort = true;</pre>	
6	<pre>for (int i = actorData->numPorts;</pre>	
	<pre>i >= 0; ++portDescriptor) {</pre>	
7	RTProtocol* port = RTObjectOf(
	<pre>RTProtocol, portDescriptor->offset, this);</pre>	
8	<pre>if (port->getName() ==</pre>	
	<pre>"external" && port->getInfo()->protocol-</pre>	
	<pre>>name == "External")</pre>	
9	continue; // Skip the	~

Eclipse 4.28 (2023.06)

- The Eclipse console now supports ANSI escape codes for producing styled output
 - The SGR (Select Graphic Rendition) control sequences are supported
 - Rendering can be controlled by preferences in Run/Debug - Console - ANSI Support
 - You can use this to make application printouts easier to read

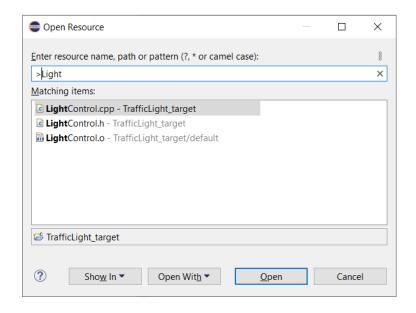
9	₽ C++ <transition> - Initial</transition>
S	Showing code from the tile Initial
	29 static const char * CSI = "\33[";
	30 std::cout << CSI << "4m" << "Underlined" << CSI << "0m" << std::endl;
	31 std::cout << CSI << "21m" << "Double underlined" << CSI << "0m" << std::endl;
	32 std::cout << CSI << "51m" << "Framed" << CSI << "0m" << std::endl;
	33 std::cout << CSI << "1m" << "Bold" << CSI << "0m" << std::endl;
	34 std::cout << CSI << "3m" << "Italic" << CSI << "0m" << std::endl;
	35 std::cout << CSI << "42m" << "With background color" << CSI << "0m" << std::end
	36 std::cout << CSI << "36m" << "With foreground color" << CSI << "0m" << std::end
	<pre>37 std::cout << "Normal" << std::endl;</pre>



app.tcjs[C/C++ Application] [pid:8] RT C++ Target Run Time System - Release 7.1.12
RT C++ Target Run Time System - Release 7.1.12
Underlined
Double underlined
Framed
Bold
Italic
With background color
With foreground color
Normal

- Changes in the Open Resource dialog
 - Now the string you type in this dialog is searched in all parts of file names
 - It's no longer necessary to prefix the search string with an asterisk (*) to accomplish this
 - You can use a leading angle bracket (>) to enforce the old behavior (can be useful in case of too many matches)

Light		×
latching items:		
LightControl.cpp - TrafficLight_target		
LightControl.h - TrafficLight_target		
LightControl.o - TrafficLight_target/default		
TrafficLight.cpp - TrafficLight_target		
TrafficLight.h - TrafficLight_target		
TrafficLight.o - TrafficLight_target/default		
TrafficLight_target		
🗟 Traffic Light Component.emx - TL		



- Several improvements in the C++ parser have been implemented
 - Especially for supporting features of C++ 20 and C++ 23
- For more information about CDT improvements see <u>https://github.com/eclipse-cdt/cdt/blob/main/NewAndNoteworthy/CDT-11.0.md</u> <u>https://github.com/eclipse-cdt/cdt/blob/main/NewAndNoteworthy/CDT-11.1.md</u> <u>https://github.com/eclipse-cdt/cdt/blob/main/NewAndNoteworthy/CDT-11.2.md</u>

Newer EGit Version in the EGit Integration

- The EGit integration in Model RealTime has upgraded EGit from 6.2 to 6.6
 - This is the recommended and latest version for Eclipse 2023.06
- This upgrade provides several new features and bug fixes
 - For detailed information about the changes see <u>https://wiki.eclipse.org/EGit/New_and_Noteworthy/6.3</u> <u>https://wiki.eclipse.org/EGit/New_and_Noteworthy/6.4</u> <u>https://wiki.eclipse.org/EGit/New_and_Noteworthy/6.5</u> <u>https://wiki.eclipse.org/EGit/New_and_Noteworthy/6.6</u>
- Note: There is a known issue in this version of EGit that merge and rebase operations could fail due to false conflicts if commits involve model files together with other types of files.

- Because of this problem the EGit Integration is currently EXPERIMENTAL
- If you run into the problem, abort the merge/rebase and redo it instead from the Git command-line

New Location for Info Centers

• As part of the product rename, the online documentation was moved to a new location

- There are two versions, depending on branding
 - HCL: <u>https://model-realtime.hcldoc.com/help/index.jsp</u>
 - IBM: <u>https://www.ibm.com/docs/dmrt/12.0</u>

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