

Product Documentation

# Embarcadero® DBArtisan™

New Features Guide

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# Contents

Data Governance	5
Other Datasource Registration Updates	9
User Interface and Navigator/Explorer Updates	10
SQL Server Updates	11
Oracle Updates	11

CONTENTS

# **NEW FEATURES**

New features for this release fall into the following categories:

- Data Governance
- Other Datasource Registration Updates
- User Interface and Navigator/Explorer Updates
- <u>SQL Server Updates</u>
- Oracle Updates

## DATA GOVERNANCE

DBArtisan now integrates with Embarcadero Connect, Embarcadero's data governance repository. This lets DBArtisan participate in governance schemes aimed at control and centralization of data-related resources, providing controlled access to those resources, and distributing relevant information on those resources.

New functionality areas include:

- Enabling and Connecting to an Embarcadero Connect Server
- Embarcadero Connect and Datasource Management
- Embarcadero Connect Model Metadata and the SQL Editor

### ENABLING AND CONNECTING TO AN EMBARCADERO CONNECT SERVER

The Options Editor's **Connect** tab lets you configure Embarcadero Connect server usage:

Connect	
Vse Connect Connect <u>U</u> RL:	http://romlabercon01:8080
*Note: to be able to mod restrictions are imposed	lify the Connect URL, please make sure you are not logged in and no by the Administrator.

**Use Connect** enables connections to an Embarcadero Connect server while **Connect URL** lets you provide an address.

A control on the main window's status bar provides current configuration/status information on the Connect server.

Conn	ect not Configured	
1	Not Logged In	
	🤣 Admin Logged In	

Double-clicking the control initiates an action appropriate to the current status. For example if Connect server usage is enabled and properly configured, but DBArtisan is not currently logged in, then double-clicking the status control opens a login dialog.

Embarcadero Co	nnect - Log In 🛛 💌
<u>C</u> onnect URL:	http://romlabercon01:8080
<u>U</u> ser:	
<u>P</u> assword:	
<u>K</u> eep me sign	ed in
	OK Cancel

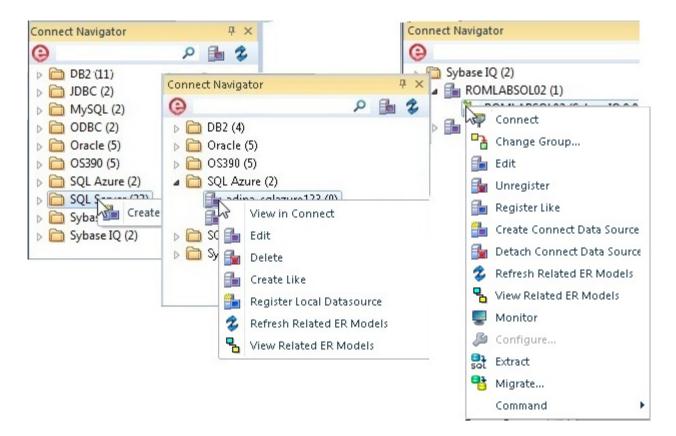
# **NOTE:** Three new HKLM/HKCU registry settings (**ConnectURL**, **UseConnect**, and **AllowKeepMeSignedIn**) let you lock down those features.

### EMBARCADERO CONNECT AND DATASOURCE MANAGEMENT

A new Connect Navigator, similar to the existing Navigator/Explorer, lets you work with datasource definitions residing on an Embarcadero Connect server.

The Navigator hierarchy shows

- Datasource groups
- Datasource definitions residing on the Embarcadero Connect repository
- Locally datasources that were registered using definitions in the Embarcadero Connect repository



In order to make use of a Connect datasource, you must register it as a local datasource. This creates a local copy of the datasource definition, accessible in the existing Navigator/Explorer. Key connectivity information, the **Connection Information** tab settings (excluding **Datasource Name**) and a custom JDBC driver if supplied, is not editable in the resulting local datasource definition. **Security Parameters** tab information, such as **User ID** and **Password**) is not copied to the local datasource definition.

By default, when you register a Connect server datasource as a local datasource, the local definition is "attached" to the Connect version. The local definition's key connectivity information is synchronized with the Connect server definition on each attempt to connect to the datasource.

An attached datasource has a distinctive icon:

### 2

You can subsequently detach an attached datasource definition, leaving that definition available as a local datasource. The datasource will no longer be synchronized with the corresponding definition on the Connect server.

While the attach and detach operations can be used against individual datasource definition, the Connect Navigator also offers a **Reconcile Datasources** operation that lets you manage multiple Connect datasources simultaneously.

	Local Name	Туре	Server/Instance Name	
ROMLABORCL11g_2	ROMLABORCL11g_2	Oracle	ROMLABORCL11g_2	
				Þ
nmatched Connect data sources (Sele	Type	ind link)		
ROMLABSY157_1_Conn ROMLABSQL05_2	Sybase MS SQL			
nmatched local data sources (Select lo	ocal data sources to export to Conne	ect and link)		
	Туре			
Data Source Name	Type			
Data Source Name SAMDB 10	DB2			

The three lists offer the following options:

- Matching data sources lists Embarcadero Connect server datasource definitions and local datasource definitions with identical connection information details but that are currently not attached. Selecting an entry from this list attaches the local datasource to the Connect datasource, ensuring that any changes to the Connect server definition will be copied to the local datasource definition on the next attempt to connect to the datasource
- Unmatched Connect data sources lists Embarcadero Connect server datasource definitions for which there are no local datasource definitions with matching connection information. Selecting an entry from this list creates a matching local datasource definition and attaches the local definition to the matching Connect server datasource definition.
- Unmatched local data sources lists local datasource definitions for which there are no Embarcadero Connect server datasource definitions with matching connection information. Selecting an entry from this list creates a matching Connect server datasource definition and attaches the local definition to the Connect server datasource definition.

In addition to local DBArtisan use of Connect datasources, the Connect Navigator lets you create, edit, and delete datasource definitions on the Connect server.

## EMBARCADERO CONNECT MODEL METADATA AND THE SQL EDITOR

DBArtisan integrates with Embarcadero Connect, a product that allows easy distribution of data governance repository metadata to the enterprise. Specifically, if a database or schema has associated model data in Connect, model data such as alerts and attribute/entity descriptions can be displayed/included in the SQL Editor in the following ways:

- Attribute/Entity descriptions can be included in Code Assist proposals
- On explicitly formatting a script, metadata for tables and views referenced in SELECT, CREATE PROCEDURE, CREATE FUNCTION, CREATE TRIGGER, CREATE VIEW statements are added in a single comment block above the referencing statement
- When hovering the mouse over a table column name, table name or view name, a tooltip showing the entity/attribute description is displayed
- Warning icons are displayed in the window gutter beside lines referencing objects whose metadata includes alerts
- On execution of a script referencing objects whose metadata includes alerts, the error pane opens with an entry for each referenced object.

#### To use model metadata in the SQL Editor

- 1 Ensure that Connect repository usage is enabled and that you are logged in to the Connect Server.
- 2 Configure the **Metadata** features on the **ISQL > Code Assist** page of the Options editor.

#### Metadata

Show object metadata in the ISQL window in tooltips

Show object metadata in the gutter of the ISQL window

Show object metadata in the code complete proposals

Insert object metadata in the ISQL window when formatting

# OTHER DATASOURCE REGISTRATION UPDATES

The Datasource Registration Wizard has been simplified so that all connection information is, as in earlier releases, provided on a single page.

Database Type Connection Information Security Parameters Custom Driver Properties Datasource Properties Datasource Group	Available database types: IBM DB2 Microsoft SQL Server MySQL Oracle Sybase Adaptive Server Sybase IQ Microsoft SQL Azure Generic ODBC Generic JDBC					
Database Type Connection Information Security Parameters Custom Driver Properties Datasource Properties Datasource Group	Registration Type:       Use alias information in the SQL.INI file         Sybase Server:       Use alias information in the SQL.INI file         Host:       Use data from the LDAP server         Port:       Default DB (optional)         Datasource Name:					

Additional improvements include:

- When using the Sybase JConnect driver, you now provide the sql.ini alias name as opposed to the host and port.
- When using the Oracle Thin JDBC driver, DBArtisan now lets you provide a tnsnames.orai alias name as opposed to host, port, and SID/service details.

In both cases, if the information in the alias file changes, those changes do not have to be made manually in DBArtisan.

# USER INTERFACE AND NAVIGATOR/EXPLORER UPDATES

#### **Bookmarks Enhancements**

The number of Navigator/Explorer Bookmarks you can create has been increased from 64 to 256. In addition, DBArtisan will no longer allow you to create multiple bookmarks referencing the same Navigator/Explorer node.

## SQL SERVER UPDATES

#### SQL Server 12 SQL Features

This release introduces dedicated SQL Editor support for SQL Server 12 Transact SQL. DBArtisan features such as SQL execution, debugging, formatting/editing, and automated error detection and coding assistance, now work seamlessly against SQL Server version 12. Specific updates have been made to accommodate reserved words/keywords, buillt-in functions, and updates to the ALTER, CREATE, DROP and other statements.

## **ORACLE UPDATES**

#### DBMS\_SCHEDULER Support

In previous releases, DBArtisan supported the DBMS\_JOB package through its Oracle Job Queue mechanism. As of this release, DBArtisan provides support for the DBMS\_SCHEDULER package. Support includes all DBMS\_SCHEDULER action types, Oracle's calendaring syntax, as well as commonly used attributes.

DBMS\_SCHEDULER support is implemented in DBArtisan with four new object types, available in the Datasource Navigator/Explorer under a new **Scheduler** node:

🔯 Scheduler					
🗞 Chains					
😈 Jobs					
Programs					
G Schedules					

Three new wizards/editors are available:

• **Schedules Wizard** - Builds and submits a call to DBMS\_SCHEDULER.CREATE\_SCHEDULE call.

Properties		
-	Property	Value
DDL View	Creation	
	Owner	<b></b>
	Name	
	Attributes	
	Description	
	Repeat Interval	
	Start Date	
	End Date	

• **Programs Wizard** - Builds and submits a call to DBMS\_SCHEDULER.CREATE\_PROGRAM with optional DBMS\_SCHEDULER.DEFINE\_PROGRAM\_ARGUMENT calls, letting you create a program.

Action		Pr	operty	r		Value			
Arguments	5		Crea	ation					
DDL View			Own	er		ADINA 👻			
DDI MIN			Name			MYPROG			
			Desc	cription					
				oled					
				e Of Progr	am				
			Prog	ram Type		Stored P	-		
			Proc	edure Owne	er	ADINA			
			Proc	edure Name	;	QWE		-	
		ion Jume	nte	ĭ≊ X					
-	-	L Vie	_	Position	Name	Туре	Direction	Default Value	Value
				1	AN_	NUMBER	IN		12
				2	LUNA_	NUMBER	IN		

• Jobs Wizard - Builds and submits a call to DBMS\_SCHEDULER.CREATE\_JOB with optional DBMS\_SCHEDULER.SET\_JOB\_ARGUMENT\_VALUE, DBMS\_SCHEDULER.SET\_ATTRIBUTE, and DBMS\_SCHEDULER.ENABLE calls.

Properties	Pr	operty		Va	lue							
Action	-	Creation			lue							
Arguments	_	Owner			ADINA							
DDL View		Name		MYJOB								
	Ξ	Attributes Enabled	Properties		Pr	operty			Value			
		Description	Action			Туре	Of Job					
		Job Class	Argument	s		Job Ty	pe		Store	d Procedu	re .	-
		Schedule	DDL View				dure Owne		ADIN	A		-
		Schedule T				Proce	dure Name	•	QWE			-
		Properties			1							
		Auto Drop	Properti	es		X						
		Restartable	Action				1 Marca	Lт		Dimension	D.C. hV/L	Malaal
		Priority	Argume	nts	F	osition	Name	Тур	e	Direction	Default Value	Value
		Max Runs	DDL Vie	N		1	AN_	NU	MBER	IN		12
		Max Failures				2	LUNA_	NU	MBER	IN		
		Logging Lev	el									
		Stop On Win	dow Close									
		Instance Stic	kiness					_				
		Job Weight										

Against jobs, three DBMS\_SCHEDULER-specific object actions are available:

- **Enable/Disable** Corresponds to DBMS\_SCHEDULER.DISABLE or DBMS\_SCHEDULER.ENABLE calls.
- **Run Job** Corresponds to a DBMS\_SCHEDULER.RUN\_JOB call.

• **Stop Job** - Corresponds to a DBMS\_SCHEDULER.STOP\_JOB call.

The **Enable/Disable** action is also available against programs.

#### Suppression of time component in DATE datatype results

In the Results window of the ISQL Editor, display of Oracle DATE datatype results can now be configured to suppress display of time components (DD:MM:SS) if the time component is all zeroes. The Options Editor (**File > Options > Connection > Oracle**) now has a **Hide time portion of DATE datatype if zero** control that controls this feature.

Options	
Type filter text	Oracle Connection Settings
<ul> <li>Connection</li> <li>Sybase</li> <li>Sybase IQ</li> <li>SQL Server</li> <li>Oracle</li> </ul>	<ul> <li>✓ Hide time portion of DATE datatype if zero</li> <li>Client Selection</li> <li>✓ Enable Client Selection</li> </ul>

NEW FEATURES