



DBArtisan® 8.6 New Features Guide

Published: January 13, 2009

Embarcadero Technologies, Inc.
100 California Street, 12th Floor
San Francisco, CA 94111 U.S.A.

This is a preliminary document and may be changed substantially prior to final commercial release of the software described herein.

The information contained in this document represents the current view of Embarcadero Technologies, Inc. on the issues discussed as of the date of publication. Because Embarcadero must respond to changing market conditions, it should not be interpreted to be a commitment on the part of Embarcadero, and Embarcadero cannot guarantee the accuracy of any information presented after the date of publication.

This reviewer's guide is for informational purposes only. EMBARCADERO MAKES NO WARRANTIES, EXPRESS OR IMPLIED, AS TO THE INFORMATION IN THIS DOCUMENT.

Complying with all applicable copyright laws is the responsibility of the user. Without limiting the rights under copyright, no part of this document may be reproduced, stored in or introduced into a retrieval system, or transmitted in any form or by any means (electronic, mechanical, photocopying, recording, or otherwise), or for any purpose, without the express written permission of Embarcadero Technologies, Inc..

Embarcadero may have patents, patent applications, trademarks, copyrights, or other intellectual property rights covering subject matter in this document. Except as expressly provided in any written license agreement from Embarcadero, the furnishing of this document does not give you any license to these patents, trademarks, copyrights, or other intellectual property.

© 2009 Embarcadero Technologies, Inc. All rights reserved.

Embarcadero Technologies, Inc., and all of the company's products are either registered trademarks or trademarks of Embarcadero Technologies, Inc. in the United States and/or other countries.

The names of actual companies and products mentioned herein may be the trademarks of their respective owners.

Contents

NEW FEATURES SUMMARY	5
TOP NEW FEATURES	7
User Interface Improvements	7
Toolbar	7
Object and Wizard Updates	7
Improved Options Dialog	8
Sybase Cluster Edition	8
Instance/Cluster Connection	8
Available Instance Information in Datasource Explorer	8
Updated Wizard/editor	9
Explain plan	9
Graphical Query Plan Support for Oracle	9
Updated Look for the Traditional Tree-based View	10
DB2 Shared Explain Plan	10
SQL Execution	10
SQL Server 2008 Date/Time support	10
Double Byte Character Display and Unicode Support	10
SQL Pre-processor	10
Transactional Support	11
Data editor	11
LOB and XML support	11
SQL Server 2008 Date/Time support	11
Double Byte Character Display and Unicode Data Support	11
Database Object Management	11
Sybase Partitions	11
Sybase Data Cache	12
Sybase Device Enhancements	12
SQL Server Login Updates	12
DB2 Automatic Storage	12
Oracle Tablespaces	13
Extraction and Migration Wizards	13
Data Source and Database Selection	13
Object and Dependency Selection	14
Dependency Defaults	14

Preview Option	15
Additional Currency Features.....	15
ADDITIONAL RESOURCES.....	16
Licensing Your Embarcadero Technologies Product.....	16
Embarcadero Technologies Product Support.....	16
Embarcadero Technologies Technical Support.....	16
Embarcadero Technologies on the Web	16

New Features Summary

Oracle Graphical Query Plan support

Graphical Query Plan support, previously provided for other DBMS platforms, is now available for Oracle. With the ISQL editor in Show Plan mode, executing a script now displays a graphical representation of the query plan for the script. You can drill down to view details on individual steps, toggle between graphical and tree-based views, and make use of a number of viewing options.

XML Support

Support for XML has been expanded for release 8.6. XML parameters can now be passed to stored procedures. DBMS-specific upgrades include:

- Results grid and Data editor support on Oracle
- Optional inclusion/exclusion of XML columns when collecting statistics against DB2

Unicode Support

Similarly, support for Unicode has been expanded for release 8.6. Previously only supported in the Text editor, now the Results grid and Data editor support Unicode characters. Datatypes that can be displayed or entered differ according to the DBMS platform.

SQL Pre-processor

DBArtisan 8.6 offers SQL preprocessing similar to C language compiler directives. The ISQL Editor supports simplified versions of the `#define` and `#include` directives.

Expanded DBMS support

DBArtisan functionality available for Microsoft SQL Server 2000 and Microsoft SQL Server 2005 is now available for Microsoft SQL Server 2008. DBArtisan 8.6 also introduces support for Sybase 15 Cluster Edition. To account for Sybase clustered servers, 8.6 features updates to the data source registration process and a revamped Data Cache editor.

Extraction and Migration Wizards

The extraction/ migration wizards feature a more intuitive user interface. Improvements include:

- Text search qualification to narrow choices during data source or database selection
- Side-by-side object type and specific object selection for improved dependency handling
- Dependency defaults specified on a DBMS-by-DBMS basis.
- A new preview pane provides detail on the results of the extraction/migration

Additional currency features

As with other releases of DBArtisan, Embarcadero has responded to customer requests for additional or improved feature support. General improvements include Vista support upgrades and 64-bit Backup Analyst support.

Top New Features

Top new features for this release fall into the following functional categories:

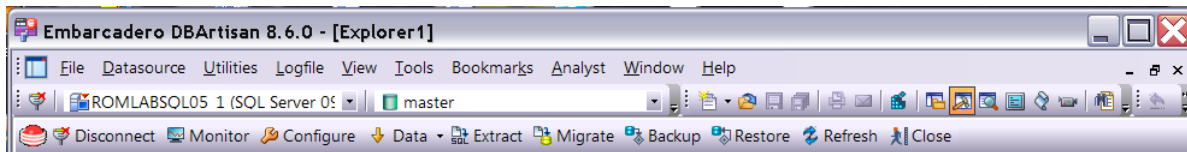
- [User Interface Improvements](#)
- [Sybase Cluster Edition](#)
- [Explain plan](#)
- [SQL Execution](#)
- [Data editor](#)
- [Database Object Management](#)
- [Extraction and Migration Wizards](#)

User Interface Improvements

DBArtisan 8.6 continues the reworking of object editors and wizards. Aimed at improving workflow and the user interface experience, the new editors and wizards adopt a .NET look and feel, and are being reworked for consistency.

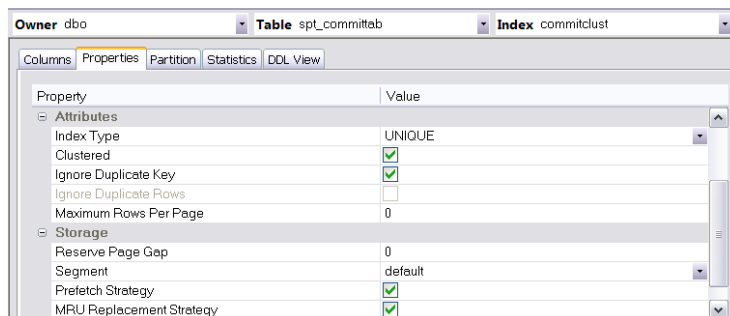
Toolbar

DBArtisan now provides greater control over the toolbars displayed in the application. Freeing up real estate by eliminating infrequently used commands, default display now includes a single toolbar. Additional toolbars can be added as needed.



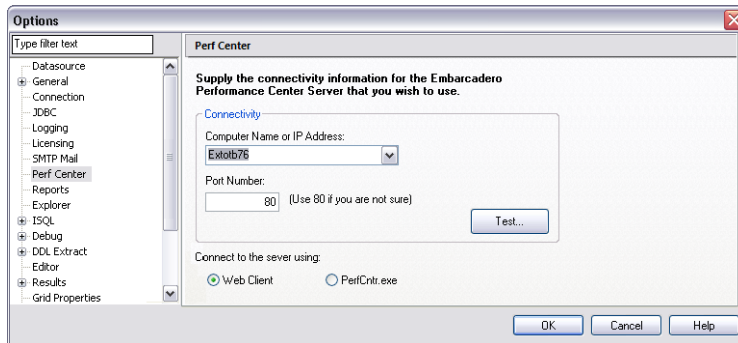
Object and Wizard Updates

General improvements to the DBArtisan object editors and wizards include replacement of TRUE/FALSE combo boxes with check box controls.



Improved Options Dialog

The Options editor has been substantially reworked.



Key improvements include:

- Page navigation is now tree-based. Expand/collapse icons provide access to tabbed pages.
- A text filter lets you type search text and have only those pages with the specified content displayed in the page navigation tree

Sybase Cluster Edition

This release introduces support for Sybase Cluster edition.

Instance/Cluster Connection

Data source registration lets you specify connection to an instance or to the entire cluster.

Available Instance Information in Datasource Explorer

Related updates include Datasource Explorer display of the instance name for data caches.

Instance Name	Data Cache Name	Type	Status	Configured
N/A	aaaa	Mixed	Active	3,072
instance1	dasadasd	Mixed	Active	2,048

Updated Look for the Traditional Tree-based View

The standard tree-based view for query plans is still available. Icons displayed in the traditional tree view have been updated for a more graphical look. DBArtisan lets you toggle between the two views.

Operation	Options	Cost	Optimizer	Cardinality	Bytes	Position	Object Instance
Query Plan							
SELECT STATEMENT		25	ALL_ROWS	2033	193135	25	
MERGE JOIN	CARTESIAN	25		2033	193135	1	
TABLE ACCESS--HR.JOBS (TABLE)	FULL	3	ANALYZED	19	627	1	2
BUFFER	SORT	22		107	6634	2	
TABLE ACCESS--HR.EMPLOYEES (TABLE)	FULL	1	ANALYZED	107	6634	1	1

DB2 Shared Explain Plan

Explain Plan tables can now be stored in either SYSTOOLS or in the default schema. You specify your choice on the Options dialog.

SQL Execution

SQL Server 2008 Date/Time support

Procedure execution has been updated to support datatypes newly available with SQL Server.

Name	Type	NULL	Default	Value
@indate	date	<input type="checkbox"/>	<input type="checkbox"/>	07/11/1999 12:00 AM
@intime	time	<input type="checkbox"/>	<input type="checkbox"/>	12:00:00 AM

Double Byte Character Display and Unicode Support

Support for Unicode data types, including character, varchar and clob on SQL Server, Sybase, Oracle and DB2, has been added to the SQL Results view. If the Regional code page selected in the OS supports the characters used in the Unicode fields, the data will be displayed correctly in the results view. This is also true of fields containing double byte data reflective of the Regional code page.

id	c1	c2	c3
1	ф	хмярюмжхь	хмярюмжхь хмярюмжхь
2	й	фывапролд	фывапролд фывапролд

SQL Pre-processor

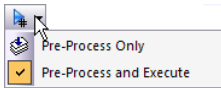
DBArtisan 8.6 provides SQL preprocessing similar to C language compiler directives. The ISQL Editor supports a simplified version of the following

- `#define` - provides a simple, global search and replace function within a script. This is useful, for example, with variable substitution at execution time (`#define &&owner dbo`).

Note: Variables must be prefixed with “&&”.

- `#include` – provides a means to include the contents of a file in a script at the location of the directive, during execution. File locations, specified globally or by data source, are selected in the Options editor.

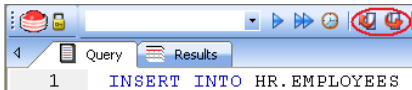
Preprocessing execution options are controlled by the Preprocess button on the ISQL toolbar. It lets you set the mode for subsequent executions:



Directives can be preprocessed only or can be both preprocessed and immediately executed.

Transactional Support

Auto-commit can be disabled for any platform and transactional management, via the UI or script, can be used instead. Addition isolation level support has been added to DB2.



Data editor

LOB and XML support

XML data and other LOB data can now be modified and added in the data editor.

WAREHOUSE_ID	WAREHOUSE_SPEC	WAREHOUSE_NAME
1	<?xml version="1.0"?> <Warehouse> <Building>Owned</Building> <Area>25000</Area>	Southlake, Texas

SQL Server 2008 Date/Time support

Fields of Date or Time data types can be modified in data editor.

Double Byte Character Display and Unicode Data Support

Unicode characters or double byte data in a table can be modified in the Data editor.

Database Object Management

Sybase Partitions

New in Sybase ASE 15 are three forms of semantic partitioning. In addition to the existing round robin partitioning, range, hash and list variations are now available. The DBArtisan wizards and editors for tables and indexes have been upgraded to provide support for these options.

Column	Datatype	Name	Value(s)	Segment
c1	int	1st_partition	100	default
		2nd_partition	MAX	system

In addition, support is provided for the following, related Sybase features: Update Statistics, Delete Statistics, Reorganize, Truncate Table, DBCC Check allocation, Check Table, and Check Index.

Sybase Data Cache

Object binding and memory pool additions do not have to be created immediately. Rather, the information is collected and only committed when Alter is executed.

```

Preview: Alter
1 EXEC sp_poolconfig 'testcache','2K','4K','2K',
2 go
3 EXEC sp_poolconfig 'testcache','4K','wash=2M',
4 go
5 EXEC sp_poolconfig 'testcache','4K','local asy
  limit=512','instance instance2'
6 go
7 EXEC sp_poolconfig 'testcache','2K','wash=1M',
8 go
  
```

Sybase Device Enhancements

Devices now include properties to improve the performance of a device with high write activity by disabling DSync. In addition, you can force the device to write directly to disk rather than using buffers by enabling DirectIO. Finally the size parameter has been modified to accommodate large devices by letting you specify size in kilobytes, megabytes, gigabytes or terabytes.

Size	1	TB
Default Device	False	KB
dsync	False	MB
directio	False	GB
		TB

SQL Server Login Updates

The Login editor has been updated to include support password policy enforcement, password expiry, login encryption using certificates or asymmetric key, and abilities to immediately change the password and enable/disable logins.

Authentication	
Account type	STANDARD
Password	*****
Check policy	<input checked="" type="checkbox"/>
Check expiration	<input checked="" type="checkbox"/>
Must change	<input type="checkbox"/>
Domain	
Certificate	
Asymmetric key	

In addition, it is now easier to add a login to specific databases.

Databases where the Login does NOT have a User account		Databases where the Login HAS a User account				
AdventureWorksDW	<input type="button" value="Add.."/> <input type="button" value="Remove"/>	<table border="1"> <thead> <tr> <th>Database</th> <th>User</th> </tr> </thead> <tbody> <tr> <td>AdventureWorks</td> <td>SomeUser</td> </tr> </tbody> </table>	Database	User	AdventureWorks	SomeUser
Database		User				
AdventureWorks	SomeUser					
master model msdb tempdb						

DB2 Automatic Storage

The Tablespace editor has been updated to include options to enable automatic storage and provide resize options. Disk usage is now available on the Space tab.

Tablespace	
Type	LARGE
Use Automatic Storage	<input checked="" type="checkbox"/>
Managed By	DATABASE
Database Partition Group	IBMDEFAULTGROUP
Buffer Pool	IBMDEFAULTBP
Drop Recovery	<input checked="" type="checkbox"/>
Performance	
Page Size	4 KB
Extent Size	Pages
Prefetch Automatic	<input type="checkbox"/>
Prefetch Size	Pages
Overhead	0.000000
Transfer Rate	0.000000
File System Caching	<input checked="" type="checkbox"/>
Automatic Storage	
Auto Resize	<input checked="" type="checkbox"/>
Initial Size	
Increase Size	MB
Max Size Unlimited	<input type="checkbox"/>
Max Size	MB

Buffer pools also reflect options for specifying automatic storage. You can also now modify the number of pages to use in a block.

Property	Value
Creation	
Name	IBMDEFAULTBP
Storage	
PageSize	4 KB
Automatic size	<input checked="" type="checkbox"/>
Number of Pages	-2
No. of Block Pages	0
Block Size	0

Oracle Tablespaces

Updates to the Tablespace editor include new 10g options for setting a table space as the default and renaming a tablespace. Other improvements include bigfile support, and upgraded UI support for the CHANGE STATUS, COALESCE, and SET UNDO TABLESPACE commands.

Datasource Explorer display for Oracle tablespaces has been updated to indicate Extent Management and Segment Space Management.

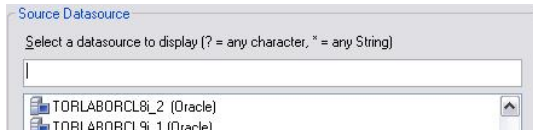
Tablespace Name	Status	Extent Management	Segment Space Management	Size (M)	Used (M)	Free (M)	% F...
LIVETESTS	ONLINE	LOCAL	MANUAL	40.06	1.00	39.06	97.50
TBS_02	ONLINE	LOCAL	AUTO	1.00	0.06	0.94	93.75
IO_TBS	ONLINE	LOCAL	AUTO	20.00	1.00	19.00	95.00
SYSAUX	ONLINE	LOCAL	AUTO	982.25	912.00	70.25	7.15

Extraction and Migration Wizards

DBArtisan 8.6 continues with improvements to the recently revamped Extraction and Migration Wizards. The key functional addition is finer control over dependencies for ad hoc extraction. As well, both wizards now provide a more intuitive user interface.

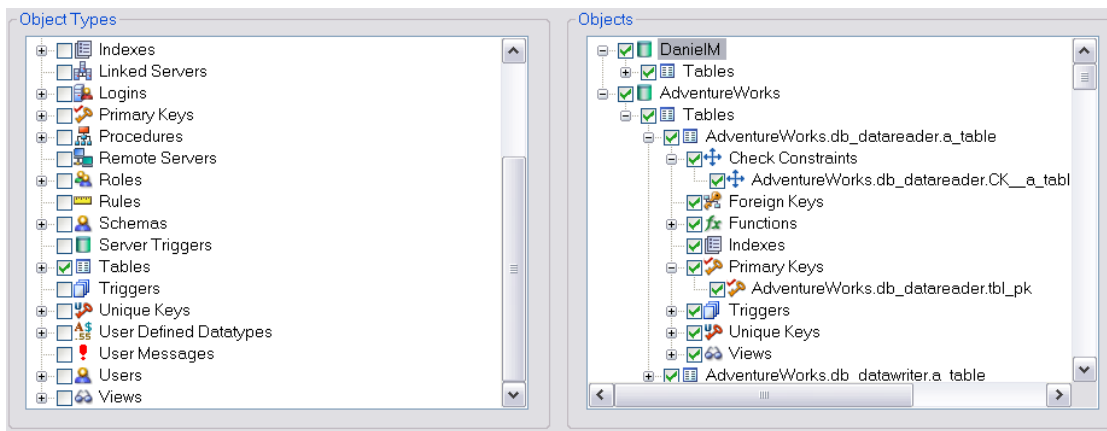
Data Source and Database Selection

There are now search boxes included in the selection to assist in locating and selecting the target data source or database.



Object and Dependency Selection

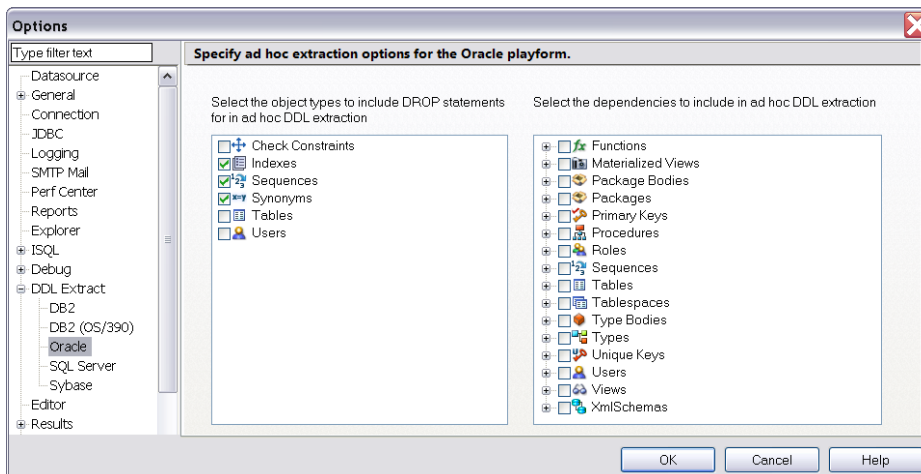
It is often confusing to determine which items are actually going to be included in an extraction or migration job because different dependency selections can result in different objects being selected. This is further complicated by deselection of individual objects being overridden and re-included as being part of a dependency. You can now select which child objects are included when extracting or migrating a parent.



Object type refinement is included on the same page as the individual object selection. Both trees stay synchronized as you make selections. The child objects can be individually selected or deselected using the objects tree.

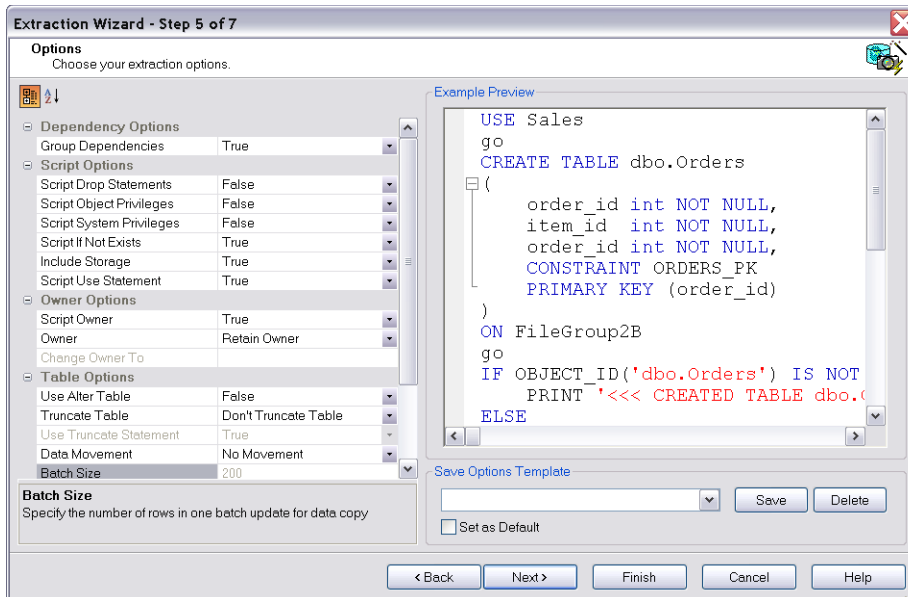
Dependency Defaults

The Options editor lets you specify parent/child dependency defaults on a DBMS-by-DBMS basis.



Preview Option

As an aid in understanding the effect of changing extraction or migration options, wizard a preview pane has been added. The preview updates as options are selected or changed, and reflects what will happen when the job is run.



Additional Currency Features

In response to customer requests, a number of new or enhanced features are now available. General enhancements include:

- **Vista support upgrades** - New Windows Vista support upgrades include support for Vista scheduling practices, and enhanced support for user types, display technology, and MSXML 3.0 compilation
- **64-bit Backup Analyst support** - DBArtisan 8.6 introduces Backup Analyst support on 64-bit operating systems (Windows XP Professional, Windows Server 2003, and Windows Vista) hosting Microsoft SQL Server 2000 and Microsoft SQL Server 2005
- **Additional XML support** - Stored procedures can now take XML input, implemented as LOB data, at execution or debugging time
- **Virtualized Text editor content** - The DBArtisan text editor has been updated to provide better performance when working with large files, such as extracted schema, large CLOB data or other ASCII results.

DBMS-specific updates include the following:

- Against **DB2** data sources, the Update Statistics function now lets you optionally exclude XML columns when collecting statistics for a table

Additional Resources

Licensing Your Embarcadero Technologies Product

All Embarcadero Technologies products include a 14-day trial period. To continue using the product without interruption, we recommend that you license it as soon as possible. To license your product, use the License Request Wizard found in the Help menu of your respective product. If you have not yet purchased your Embarcadero Technologies product, contact sales@embarcadero.com, or uk.sales@embarcadero.com for sales in the EMEA region.

Embarcadero Technologies Product Support

The Embarcadero Technologies Web site is an excellent source for additional product information, including white papers, articles, FAQs, discussion groups, and the Embarcadero Knowledge Base. Go to <http://www.embarcadero.com/services/index.html>, or click any of the links below, to find:

- [Documentation](#)
- [Online Demos](#)
- [Technical Papers](#)
- [Discussion Groups](#)
- [Knowledge Base](#)

Embarcadero Technologies Technical Support

If you have a valid maintenance contract with Embarcadero Technologies, the Embarcadero Technical Support team is available to assist you with any problems you have with our applications. Our maintenance contract also entitles registered users of Embarcadero Technologies products to download free software upgrades during the active contract period. Evaluators receive free technical support for the term of their evaluation (14 days).

We encourage you to open technical support cases via the [Technical Support request form](#) at the [Embarcadero Technologies Web site](#). For additional information about Embarcadero Technologies Technical Support, go to the Support page on our Web site.

Embarcadero Technologies on the Web

To download evaluations of other Embarcadero Technologies products or to learn more about our company and our products visit us at www.embarcadero.com.