# Designer SDK Object Model Diagrams

Business Objects Universe Designer API 3.1 Service Pack 2

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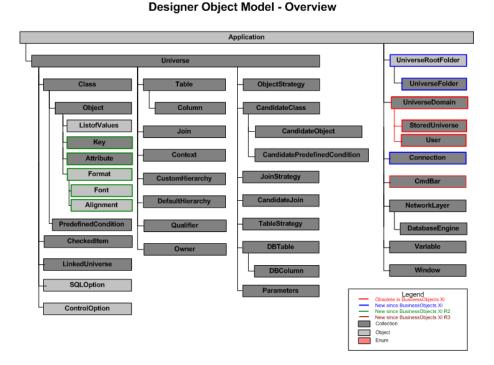
2009-07-17

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Designer Object Model - overview





Designer Object Model - commands

# **Designer Object Model – Commands**

#### Command

Application As Application (R)
Parent As Object (R)
Caption As String (R)
Help As String (R)
State As DsCommandState (R/W)
ID As Long (R)

Function Execute(Name As String, [ClassName As String]) As Object

### Commands

Application As Application (R)
Parent As Object (R)
Count As Long (R)

Function Item(Index As Variant) As Parameter (Read-only) Function ItemID(DsCommandID As ID) (Read-only)

#### **DsCommandState**

dsEnabled dsDisabled dsHidden

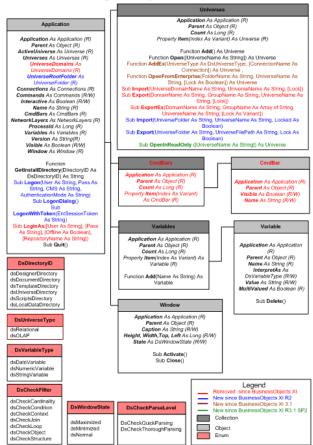
#### DsCommandIF

dsCmdFileNew = 1, dsCmdFileWizardNew = 2 dsCmdFileOpen = 3, dsCmdFileClose = 4, dsCmdFileSave = 5, dsCmdFileSaveAs = 6, dsCmdFileSaveAll = 7, dsCmdImportUniverse = 8 dsCmdExportUniverse= 9, dsCmdToolConnection = 10, dsCmdViewFormulaBar = 11, dsCmdViewStatusBar = 12, dsCmdToolOption = 13, dsCmdToolLoginAs = 14, dsCmdToolPassword = 15, dsCmdRunBusinessReporter = 16, dsCmdRunBusinessAdministrator = 17, dsCmdViewToolbars = 18. dsCmdFilePrint = 19, dsCmdFilePrintPreview = 20, dsCmdFilePageSetup = 21, dsCmdUniverseParameters = 22, dsCmdViewStructure= 23, dsCmdZoomIn = 24, dsCmdZoomOut = 25 dsCmdInsertTable = 26 dsCmdInsertCandidateObject = 27, dsCmdInsertJoin dsCmdInsertContext = 29, dsCmdInsertAlias = 30, dsCmdInsertPersonalObject = 31, dsCmdInsertUniverse = 32, dsCmdInsertClass = 33. dsCmdInsertSubClass = 34 dsCmdInsertObject = 35, dsCmdInsertCondition = 36. dsCmdHideObject = 37, dsCmdCheckIntegrity = 38, dsCmdDetectCardinality = 39, dsCmdDetectJoins = 40, dsCmdDetectAlias = 41, dsCmdDetectContext = 42, dsCmdToolsDimentions = 43, dsCmdToolsListOfValues = 44, dsCmdEditLinks = 45. dsCmdAggregateAware = dsCmdDetectLoops = 47, dsCmdViewListMode = 48. dsCmdFind = 49, dsCmdFindNext = 50, dsCmdEditJoin = 51. dsCmdEditContext = 52, dsCmdRenameTable = 53, dsCmdViewLineCount = 54. dsCmdViewGrid = 55, dsCmdViewPageLimit = 56, dsCmdCut = 57. dsCmdCopy = 58, dsCmdClear = 59, dsCmdPaste = 60. dsCmdSelectAll = 61, dsCmdViewTableValue = 62, dsCmdArrangeTable = 63, dsCmdTogleTableView = 64, dsCmdFormatObject = 65, dsCmdResetFormatObject = 66 dsCmdEditClassProperties = 67, dsCmdEditObjectProperties = 68, dsCmdEditConditionProperties = 69

Designer Object Model - core

chapter

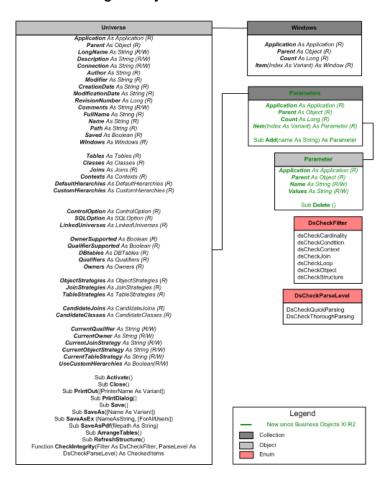
## **Designer Object Model - Core**



Designer Object Model - universes



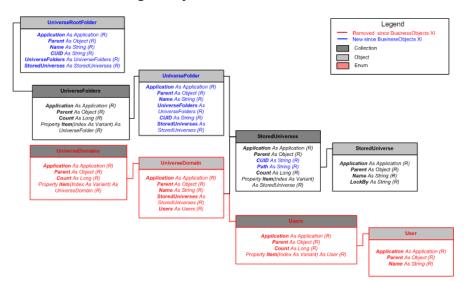
### **Designer Object Model - Universes**



Designer Object Model - universe folders



### **Designer Object Model - Universe Folders**



Designer Object Model - connections



### Connections

#### Connection

Application As Application (R)

Parent As Object (R)

Count As Long (R)

Property Item(Index As Variant) As Connection (R)

Function Add(Name As String, Type As DsConnectionType, NetworkLayer As String,

DeconnectionType, NetworkLeyer As String,
DatabaseEngine As String, DatabaseSource As
String], [UserName As String], [Password As String],
[Server As String], [UseSingleSignOn As Boolean]) As
Connection

Function AddSAPBW[AuthenticationType As DsAuthentication, Name As String, Type As DsConnectionType, NetworkLayer As String, DatabaseEngine As String, [Language As String], [Cilient As Long, [Catalog As String], [DatabaseSource As String], [Server As String], [UserName As String], [Password As String], [SystemNumber As Long], [SystemID As Long], [LogonGroup As String]) As Connection

Function AddEssbase(AuthenticationType As DsAuthenticationEssbase, Name As String, Type As DsConnectionType, NetworkLayer As String, DatabaseEngine As String, Catalog As String, DatabaseSource As String, Server As String, AliasTable As String, MeasuresDimension As String, [UserName As String], [Password As String]) As Connection

Function AddMSAS (Authentication Type As DeAuthenticationMSAS, Name As String, Type As DeConnectionType, NetworkLayer As String, DatabaseEngine As String, Catalog As String, DatabaseSource As String, Server As String, [UserName As String], [Password As String]] As Connection

Function AddDialog() As Connection

#### Connection

Application As Application (R) AliasTable As String (R) Catalog As String (R) ClientNumber as Integer (R)

Language As String (R) LoginMode As String (R)

LogonGroup As String (R) MeasuresDimension As String (R) SystemId As String (R)

SystemNumber As String (R)
Parent As Object (R)
Name As String (R)
CUID As String (R)
Type As DsConnectionType (R)

Type As DsConnectionType (R)
UseBOUserPass As Boolean (R/W)
UseSingleSignOn As Boolean (R/W)

NetworkLayer As String (R)
DatabaseEngline As String (R/W)
DatabaseSource As String (R/W)
UserName As String (R/W)
Password As String (R/W)
Server As String (R/W)
ActiveState As DsConnectionState (R/W)

ActiveTime As Long (RW)
ArrayBindSize As Long (RW)
IsAsynchMode As Boolean (RW)
LoginTimeOut As Long (RW)
PerformCostEstimate As Boolean (RW)
ArrayFetchSize As Long (RW)

Sub Test() Sub Delete()

#### DsConnectionState

dsDisconnectAfterEachTransaction dsKeepActiveForxx dsKeepActiveWholeSession

#### DsAuthenticationEssbase

dsUserNamePassword dsCredentialMapping

#### DsAuthenticationMSAS

dsUserNamePassword dsCredentialMapping dsSingleSign dsUserFinanceSecurity

#### DsAuthentication

dsUserNamePassword dsCredentialMapping dsSingleSign

#### DsConnectionType

dsPersonal dsSecured dsShared

#### Legend

Removed\_since BusinessObjects XI
New since BusinessObjects X
New Since BusinessObjects XI R3 SP2I

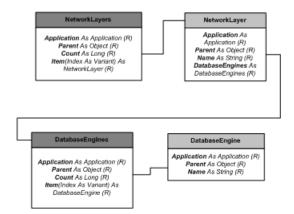
Collection Object

Enum

Designer Object Model - network layers



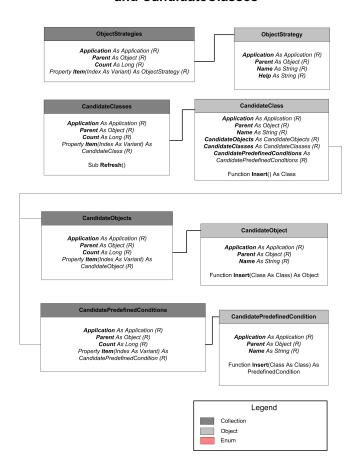
# **Network Layers**



Designer Object Model - object strategies and candidate classes

# 81

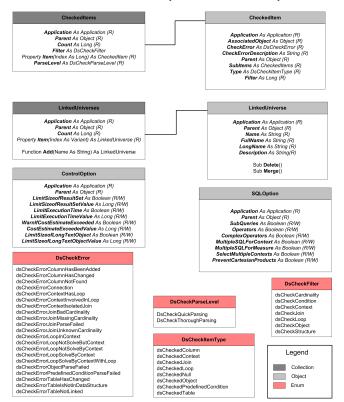
# Designer Object Model - ObjectStrategies and CandidateClasses



Designer Object Model - linked universes



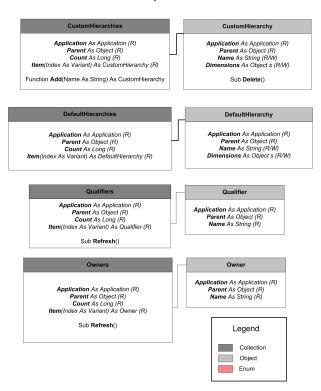
### Designer Object Model LinkedUniverses, SQLOption and ControlOption



Designer Object Model - custom hierarchies



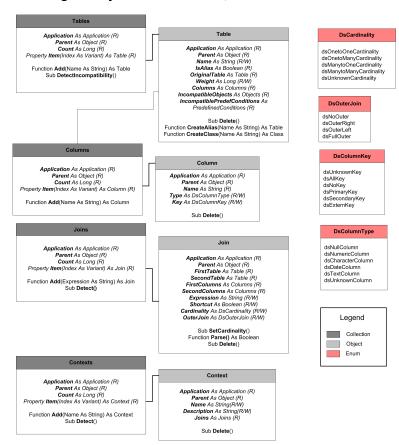
# CustomHierarchies, DefaultHierarchies, Qualifiers, and Owners



Designer Object Model - tables, joins and contexts

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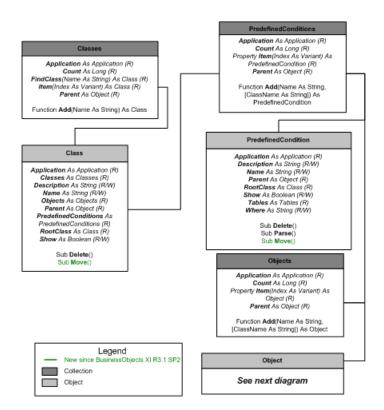
### **Designer Object Model - Tables, Joins and Contexts**



Designer Object Model - classes and objects (1 of 2)

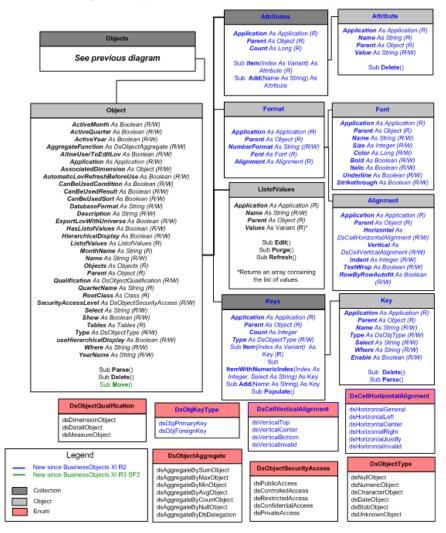
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# Designer Object Model - Classes and Objects (1/2)



Designer Object Model - classes and objects (2 of 2)

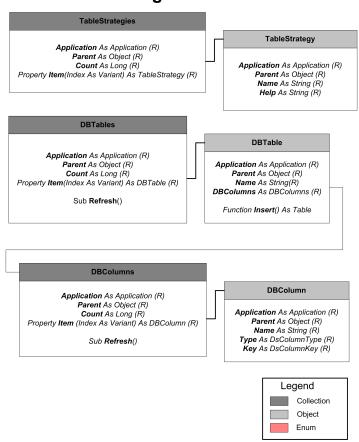
# Designer Object Model - Classes and Objects (2/2)



Designer Object Model - table strategies



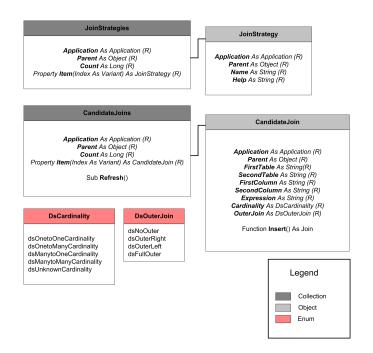
# Designer Object Model TableStrategies and DB Tables



Designer Object Model - join < strategies

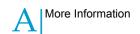


# **Designer Object Model - JoinStrategies and CandidateJoins**



# More Information





Information Resource	Location	
SAP BusinessObjects product information	http://www.sap.com	
SAP Help Portal	Select http://help.sap.com > SAP BusinessObjects.  You can access the most up-to-date documentation covering all SAP BusinessObjects products and their deployment at the SAP Help Portal. You can download PDF versions or installable HTML libraries.  Certain guides are stored on the SAP Service Marketplace and are not available from the SAP Help Portal. These guides are listed on the Help Portal accompanied by a link to the SAP Service Marketplace. Customers with a maintenance agreement have an authorized user ID to access this site. To obtain an ID, contact your customer support representative.	
SAP Service Marketplace	<ul> <li>http://service.sap.com/bosap-support &gt; Documentation</li> <li>Installation guides: https://service.sap.com/bosap-inst guides</li> <li>Release notes: http://service.sap.com/releasenotes</li> <li>The SAP Service Marketplace stores certain installation guides, upgrade and migration guides, deployment guides, release notes and Supported Platforms documents. Customers with a maintenance agreement have an authorized user ID to access this site. Contact your customer support representative to obtain an ID. If you are redirected to the SAP Service Marketplace from the SAP Help Portal, use the menu in the navigation pane on the left to locate the category containing the documentation you want to access.</li> </ul>	
Developer resources	https://boc.sdn.sap.com/ https://www.sdn.sap.com/irj/sdn/businessobjects-sdklibrary	

Information Resource	Location
SAP BusinessObjects articles on the SAP Community Network	https://www.sdn.sap.com/irj/boc/businessobjects-articles These articles were formerly known as technical papers.
Notes	https://service.sap.com/notes  These notes were formerly known as Knowledge Base articles.
Forums on the SAP Community Network	https://www.sdn.sap.com/irj/scn/forums
Training	http://www.sap.com/services/education  From traditional classroom learning to targeted e-learning seminars, we can offer a training package to suit your learning needs and preferred learning style.
Online customer support	http://service.sap.com/bosap-support  The SAP Support Portal contains information about Customer Support programs and services. It also has links to a wide range of technical information and downloads. Customers with a maintenance agreement have an authorized user ID to access this site. To obtain an ID, contact your customer support representative.
Consulting	http://www.sap.com/services/bysubject/businessobjectscon sulting  Consultants can accompany you from the initial analysis stage to the delivery of your deployment project. Expertise is available in topics such as relational and multidimensional databases, connectivity, database design tools, and cus tomized embedding technology.

