SYBASE®

Connection Reference

InfoMaker®

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Contents

About This Book

Audience

This book is for anyone who uses InfoMaker® to connect to a database. It assumes that you are familiar with the database you are using and have installed the server and client software required to access the data.

How to use this book

This book describes the database parameters and preferences you use to connect to a database in InfoMaker.

Related documents

For information about connecting to a database in the InfoMaker development environment, see *Connecting to Your Database*.

For a complete list of InfoMaker documentation, see the preface of *Getting Started*.

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CHAPTER 1

Database Parameters

About this chapter

This chapter describes the syntax and use of each database parameter that you can set in InfoMaker.

Database parameters and supported database interfaces

The following table lists each supported database interface and the database parameters you can use with that interface in InfoMaker.

The database parameters are described in alphabetical order following the table.

Database interface	DBParm parameters	
DIR Sybase DirectConnect™	AppName	Locale
	Async	LowerCaseIdent
	Block (DirectConnect and Adaptive Server Enterprise)	MaxConnect
	CharSet	PacketSize (DIR, SYC)
	CommitOnDisconnect	PBCatalogOwner
	CursorUpdate	Request
	DateTimeAllowed	ShowWarnings
	DBGetTime	SQLQualifiers
	DBTextLimit	StaticBind
	DecimalSeparator	SystemOwner
	DelimitIdentifier	TableCriteria
	FormatArgsAsExp	TrimSpaces
	HostReqOwner	TRS
	KeepAlive	UseProcSyntax
		UTF8

Database interface	DBParm parameters	
IN9 Informix	Async CommitOnDisconnect DateTimeAllowed DBGetTime DecimalSeparator DelimitIdentifier DisableBind	INET_DBPATH INET_PROTOCOL INET_SERVICE OJSyntax Scroll ThreadSafe
JDB JDBC	Async CommitOnDisconnect Date DateTime DBGetTime DelimitIdentifier DisableBind Driver FormatArgsAsExp IdentifierQuoteChar JavaVM (JDB only) LoginTimeOut	MsgTerse NumericFormat OJSyntax PBCatalogOwner Properties StaticBind TableCriteria Time TraceFile TrimSpaces URL
ODBC **Using DBParms with ODBC** These DBParm parameters are supported by the InfoMaker ODBC interface only if *both* the ODBC driver you are using and the back-end DBMS support the feature	Async Block (ODBC, OLE DB, and Oracle) CallEscape CommitOnDisconnect ConnectOption ConnectString CursorLib CursorLock CursorScroll Date DateTime DBGetTime DecimalSeparator DefaultProcOwner DelimitIdentifier DisableBind FormatArgsAsExp	IdentifierQuoteChar InsertBlock LoginTimeOut MsgTerse NumericFormat OJSyntax PacketSize (ODBC) PBCatalogOwner PBNewSPInvocation PBTrimCharColumns PBUseProcOwner RPCRebind SQLCache StaticBind StripParmNames TableCriteria Time

Database interface	DBParm parameters	
OLE DB	Block (ODBC, OLE DB, and Oracle)	MaskPassword
	CacheAuthentication	Mode
	CommitOnDisconnect	OJSyntax
	DataLink	PBCatalogOwner
	DataSource	PBMaxBlobSize
	DateFormat	PBTrimCharColumns
	DateTimeFormat	PersistEncrypted
	DecimalSeparator	PersistSensitive
	DelimitIdentifier	Init_Prompt
	DisableBind	ProtectionLevel
	EncryptPassword	Provider
	IdentifierQuoteChar	ServiceComponents
	ImpersonationLevel	StaticBind
	IntegratedSecurity	TimeFormat
	LCID	Timeout
	Location	
O84 Oracle 8.x and Oracle8*i* O90 Oracle9*i* O10 Oracle 10*g*	Async	MixedCase
	Block (ODBC, OLE DB, and Oracle)	NCharBind (O90 and later)
	CnnPool (O90 and later)	NumbersInternal
	CommitOnDisconnect	ObjectMode
	ConnectAs (O90 and later)	OJSyntax
	Date	PackageProcs
	DateTime	PBCatalogOwner
	DBGetTime	PWDialog
	DecimalSeparator	QualifyPublic
	DelimitIdentifier	SQLCache
	DisableBind	StaticBind
	DisableUnicode (O84 only)	SvrFailover
	FoDelay	TableCriteria
	FoDialog	ThreadSafe
	FoRetryCount	Time
	FormatArgsAsExp	TimeStamp (O90 and later)

Database interface	DBParm parameters	
SYC Sybase Adaptive Server® Enterprise **Set Release** The Release database parameter must be set to the version of your Open Client® software (11 or higher) to use DS_* and Sec_* parameters.	AppName Async Block (DirectConnect and Adaptive Server Enterprise) CharSet CommitOnDisconnect CursorType CursorUpdate DateTimeAllowed DBGetTime DBTextLimit DelimitIdentifier DS_Alias DS_Copy DS_DitBase DS_Failover DS_Password DS_Principal DS_Provider DS_TimeLimit FoDialog FormatArgsAsExp Host KeepAlive Language Locale Log	MaxConnect OJSyntax PacketSize (DIR, SYC) PBCatalogOwner PWDialog PWEncrypt Release Sec_Channel_Bind Sec_Confidential Sec_Cred_Timeout Sec_Data_Integrity Sec_Data_Origin Sec_Delegation Sec_Keytab_File Sec_Mechanism Sec_Mutual_Auth Sec_Network_Auth Sec_Replay_Detection Sec_Seq_Detection Sec_Server_Principal Sec_Sess_Timeout StaticBind SvrFailover SystemProcs TableCriteria TrimSpaces UTF8

AppName

Description

If the DBMS supports it, specifies the application name you want to use when connecting to the database in InfoMaker.

When to specify AppName
You must specify the AppName parameter *before* connecting to the database.

Applies to

DIR Sybase DirectConnect
SYC Sybase Adaptive Server Enterprise

Syntax

AppName = '*application_name*'

Default value

InfoMaker sets the CS_APPNAME connection property to InfoMaker, as follows:

```
AppName = 'InfoMaker'
```

Usage

Adaptive Server databases It is useful to specify a different AppName value for each of your Adaptive Server applications. If you are an administrator, you can query the MASTER.DBO.SYSPROCESSES table to determine which applications are running on the database server. The value specified for AppName displays in the program_name column of the MASTER.DBO.SYSPROCESSES table, making it easy to identify the applications.

Examples

Example 1 To set the application name to Test, type the following in the Application Name box on the Network tab in the Database Profile Setup dialog box:

```
Test
```

Example 2 (*Does not apply to DirectConnect*) You can set the AppName and Host parameters in a single DBParm statement to specify both the application name and the host name. To set the application name to Sales and the host name to Fran, type Sales in the Application Name box and Fran in the Workstation Name box on the Network tab in the Database Profile Setup dialog box.

See also

Host (applies only to SYC Sybase Adaptive Server Enterprise)

Async

Description

Allows you to perform asynchronous operations on your database in InfoMaker. You can also switch to another Windows process while the retrieval takes place.

By default, InfoMaker operates synchronously.

Applies to

DIR Sybase DirectConnect
IN9 Informix
JDB JDBC
ODBC (if driver and back-end DBMS support this feature)
O84 Oracle 8.x and Oracle8*i* (8.1.5 and higher database connections only)
O90 Oracle9*i*
O10 Oracle 10*g*
SYC Sybase Adaptive Server Enterprise

Syntax

Async = *value*

Parameter	Description
value	A value specifying synchronous or asynchronous operation. Values are: • **0** (Default) Synchronous operation • **1** Asynchronous operation

Default value

Async = 0

Usage

Enabling asynchronous operation in InfoMaker is useful when you are executing a complex SQL statement that takes several minutes to return results. If the Async parameter is set to 1, you can do either of the following while the SQL statement is executing:

- Work in another window
- Cancel the statement before it retrieves the first row of data

When to set Async If you are communicating with the database in code, you can reset the Async value at any time before or after the Transaction object has connected to the database.

How data is retrieved When you retrieve data in a form or report, the following steps occur in order:

1 The database server compiles and executes the SQL statement.

2 InfoMaker retrieves (fetches) the first row of data.

3 InfoMaker retrieves each subsequent row of data.

What happens before the first row is retrieved While the server is compiling and executing the SQL statement and before InfoMaker retrieves the first row of data, you must have done *both* of the following to enable asynchronous operation (allowing you to cancel the current operation before it retrieves the first row of data):

- Coded a RetrieveRow event for the form or report (the code can contain only a comment)
- Set the Async parameter to 1

What happens after the first row is retrieved After the first row of data is retrieved and between subsequent row fetches, you must have done only the following to enable asynchronous operation:

- Coded a RetrieveRow event for the form or report

After the first row is retrieved, InfoMaker operates asynchronously *without your having to set the Async parameter to 1*, so you can cancel the current operation anytime after it retrieves the first row of data. Therefore, the Async parameter has no effect in InfoMaker after the first row of data is retrieved.

Examples

Example 1 To enable asynchronous operation, select the Asynchronous check box on the Transaction tab in the Database Profile Setup dialog box.

Example 2 You can set the Async and DBGetTime parameters in a single DBParm statement. DBGetTime specifies the number of seconds you want InfoMaker to wait for a response from the DBMS when you retrieve rows in a form or report. To enable asynchronous operation and set the DBGetTime parameter to 20 seconds, select the Asynchronous check box and type 20 in the Number Of Seconds To Wait box on the Transaction tab in the Database Profile Setup dialog box.

See also

DBGetTime

Block (ODBC, OLE DB, and Oracle)

Description

For those interfaces that support it, Block specifies the cursor blocking factor when connecting to a database. The blocking factor determines the number of rows that a report can fetch from the database at one time.

Using the Block parameter can improve performance when accessing a database in InfoMaker.

Applies to

ODBC (if driver and back-end DBMS support this feature)
OLE DB
O84 Oracle 8.x and Oracle8*i*
O90 Oracle9*i*
O10 Oracle 10*g*

Syntax

Block = *blocking_factor*

Parameter	Description
blocking_factor	The number of rows you want the report to fetch from the database at one time. The blocking factor can be a number from 1 to 1000, inclusive. To turn off block fetching, set Block to 1.

Default value

The default value for the Block parameter depends on the DBMS you are accessing, as summarized in the following table:

DBMS	Block default value

ODBC	For most reports, the Block default value is the following, *up to a maximum of 32K per column*:
	`Block = 1000`
	If you specified that the report should retrieve only as many rows as needed from the database (Retrieve.AsNeeded property), the Block default value is the following, *up to a maximum of 32K per column*:
	`Block = 100`

OLE DB	InfoMaker sets the blocking factor to 1
Oracle	InfoMaker sets the blocking factor to 300 rows.

Using the default blocking factor
You should not have to set a non-default value for Block. In most cases, the default blocking factor used by InfoMaker should meet your needs.

Usage

Requirements for ODBC data sources To use the Block parameter with an ODBC data source, your ODBC driver must:

- Be ODBC Version 2.0 compliant or higher, *and*
- Support the SQLExtendedFetch API call

The Adaptive Server® Anywhere ODBC driver that comes with InfoMaker meets both of these requirements.

For information about whether your ODBC driver meets these requirements, see the documentation that comes with your driver.

Determining the Block value for ODBC data sources InfoMaker searches the following in this order to determine the Block value for ODBC data sources:

1 The section for your database profile in the registry or the value of the Transaction object property (in an application)

2 The section for your ODBC driver in the PBODB105 initialization file

If InfoMaker does not find a Block value in these locations, it uses the default Block value for the DBMS you are accessing.

Turning off block fetching To turn off block fetching for an ODBC data source or Oracle database, set the Block parameter to 1.

Examples

To set the blocking factor for reports to 50 rows:

- **Database profile** Type 50 in the Retrieve Blocking Factor box on the Transaction tab in the Database Profile Setup dialog box.

Block (DirectConnect and Adaptive Server Enterprise)

Description

Specifies the internal blocking factor used by the Sybase Client Library (CT-Lib) interface when declaring a cursor. The blocking factor determines the number of rows fetched from the database at one time when CT-Lib makes a physical request for data.

The Block DBParm parameter applies only to declared cursors and *not* to DataWindow objects.

Applies to

DIR Sybase DirectConnect
SYC and SYJ Sybase Adaptive Server Enterprise

Syntax

Block = *blocking_factor*

Parameter	Description
blocking_factor	The number of rows fetched from the database at one time when CT-Lib makes a physical request for data (default = 100 rows)

Default value

Block = 100

Examples

To set the blocking factor to 1000 rows, type the following in the Retrieve Blocking Factor box on the Transaction tab in the Database Profile Setup dialog box:

```
1000
```

CacheAuthentication

Description

Specifies whether the OLE DB data provider can cache sensitive authentication information, such as a password, in an internal cache.

When to specify CacheAuthentication
You must specify the CacheAuthentication parameter *before* connecting to the database.

Applies to

OLE DB

Syntax

CacheAuthentication = '*value*'

Parameter	Description
value	Specifies whether the OLE DB data provider can cache authentication information. Values are: • **True** Tells the OLE DB data provider to cache information. • **False** (Default) Tells the OLE DB data provider not to cache information.

Default value

CacheAuthentication = 'False'

Examples

To tell the OLE DB data provider to cache authentication information, select the Cache Authentication check box on the Security tab in the Database Profile Setup dialog box.

See also

DataLink
IntegratedSecurity

CallEscape

Description

Controls whether the ODBC interface uses call escape syntax for stored procedure calls (the default) or converts the calls to driver-specific native SQL syntax before sending the command to the ODBC driver.

Applies to

ODBC (if driver and back-end DBMS support this feature)

Syntax

CallEscape='*value*'

Parameter	Description
value	Controls whether the ODBC interface uses call escape syntax for stored procedure calls or converts the calls to driver-specific native SQL syntax. Values are: • **Yes** (Default) The ODBC interface uses call escape syntax for stored procedure calls • **No** The ODBC interface converts stored procedure calls to driver-specific native SQL syntax before sending the command to the ODBC driver

Default value

CallEscape = 'Yes'

Usage

When to use Set CallEscape to No if the ODBC driver you are using expects to receive stored procedure calls in native (driver-specific) SQL syntax instead of in call escape syntax.

For information about the stored procedure call syntax your ODBC driver expects, see your vendor's driver documentation.

Level 2 or higher ODBC driver required To use the CallEscape parameter, your ODBC driver *must* meet Level 2 or higher API conformance requirements. CallEscape has no effect when you are using an ODBC driver that meets Core or Level 1 API conformance requirements.

Example of stored procedure call escape syntax The following example shows a call to a stored procedure named sp_test that uses call escape syntax:

```
{call sp_test(1,1)}
```

Examples

To convert stored procedure calls to native SQL syntax before sending the command to your ODBC driver, clear the Use Call Escape Syntax check box on the Syntax tab in the Database Profile Setup dialog box.

CharSet

Description

Specifies the character set you want the Sybase Open Client™ software to use when connecting to a Sybase Adaptive Server Enterprise database or a database accessed through DirectConnect.

When to specify CharSet
You must specify the CharSet parameter *before* connecting to a database.

Applies to

DIR Sybase DirectConnect
SYC Sybase Adaptive Server Enterprise

Syntax

CharSet = '*character_set*'

Default value

None

Usage

When you specify a value for CharSet, InfoMaker:

- Allocates a CS_LOCALE structure for this connection
- Sets the CS_SYB_CHARSET value to the character set you specify
- Sets the SQL Server CS_LOC_PROP connection property with the new locale information

Overriding the Locale parameter If you have previously set a value for the Locale parameter that includes settings for the language and character set you want to use, you can override the character set value by specifying a new value for the CharSet parameter and reconnecting to the database.

Unicode data access InfoMaker can access Unicode data in an Adaptive Server Enterprise (ASE) 12.5 or later Unicode database or in Unicode columns in ASE 12.5 or later. InfoMaker converts between double-byte character set (DBCS) data and Unicode automatically, provided that the CharSet and Language parameters are set with DBCS values (or the Locale parameter is set with DBCS values). For example:

```
CharSet = 'big5'
Language = 'tchinese'
```

Examples

To set the character set to iso_1, type iso_1 in the Character Set box on the Connection tab or Regional Settings tab in the Database Profile Setup dialog box.

See also

Language
Locale

CnnPool

Description

Specifies whether Oracle should maintain connections in a pool. An Oracle connection pool is a group of reusable physical connections spanning several sessions and managed by the Oracle Call Interface (OCI). By default, connection pooling is not used.

Applies to

O90 Oracle9*i*
O10 Oracle 10*g*

Syntax

CnnPool = '*value*'

Parameter	Description
value	Values are: • `Yes` • `No` (Default)

Default value

No

Usage

If `CnnPool='Yes'`, the Oracle9*i* or Oracle 10*g* client creates a connection pool and can connect to Oracle 8, Oracle8*i*, Oracle9*i*, and Oracle 10*g* Server. The pool contains physical connections to Oracle Server and is managed by the OCI. The pool persists until InfoMaker terminates or *OCI.dll* is unloaded.

The DataWindow server can connect to 10 different Oracle servers, as distinguished by service name, concurrently. There can be no more than 20 connections per pool. Each pool is created by the Oracle9*i* or later client and might also contain connections to Oracle8 and Oracle8*i* servers. Once a connection pool has been created, InfoMaker maintains the physical connections until it terminates or OCI.DLL is unloaded.

Examples

To use connection pooling, enter values in the following fields of the Connection tab in the Database Profile Setup dialog box:

- *Profile Name* – Example value: `08i-pool`
- *Server* – Provide the full net service name created by Oracle Net. Example value: `adcora8i.sybase.com`
- *Login ID* – Example value: `scott`
- *Password*
- *Connect as* – Choose an item from the drop-down menu. Example value: `Normal`

Make sure Use Connection Pool is selected.

CommitOnDisconnect

Description

Specifies whether InfoMaker should commit (the default) or roll back all previously uncommitted database updates before disconnecting from a data source.

When to specify CommitOnDisconnect
You must specify a value for CommitOnDisconnect *before* connecting to the database.

Applies to

All database interfaces except SYJ

Syntax

CommitOnDisconnect = '*value*'

Parameter	Description
value	Specifies whether InfoMaker should commit or roll back all previously uncommitted database updates before disconnecting from a data source. Values are: • **Yes** (Default) InfoMaker commits all uncommitted database updates when an application closes. • **No** InfoMaker rolls back all uncommitted database updates when an application closes. With this setting, InfoMaker does not automatically commit updates when you disconnect from the database.

Default value

CommitOnDisconnect = 'Yes'

Usage

Set CommitOnDisconnect to No if you want InfoMaker to roll back uncommitted database updates (instead of automatically committing them when you disconnect from the database).

Examples

To tell InfoMaker to roll back uncommitted database updates instead of committing them when disconnecting from the database, clear the Commit On Disconnect check box on the Connection tab in the Database Profile Setup dialog box.

ConnectAs

Description

Allows the user to connect to the Oracle Server with SYSOPER or SYSDBA system privileges.

Applies to

O90 Oracle9*i*
O10 Oracle 10*g*

Syntax

ConnectAs = '*value*'

Parameter	Description
value	Values are: • SYSDBA • SYSOPER • Normal (Default)

Default value

Normal

Usage

If ConnectAs ='Normal', this parameter is not used. If ConnectAs ='SYSDBA' or ConnectAs ='SYSOPER', Oracle9*i* or later allows the user to connect with SYSDBA or SYSOPER privileges, respectively, provided that these privileges have been granted the user.

If you connect using ConnectAs ='SYSDBA', Oracle9*i* or later uses the SYS schema instead of the schema that might already be associated with the user ID. If you connect using ConnectAs ='SYSOPER', Oracle9*i* or later uses the PUBLIC schema.

Do not use with CnnPool = 'Yes'
Connection pooling cannot be used with this parameter. Do not select Use Connection Pool in the Database Profile Setup dialog box or set CnnPool to 'Yes'.

Examples

To use the SYS schema instead of the schema associated with the User ID, select SYSDBA from the Connect As drop-down list on the Connection page in the Database Profile Setup dialog box, and make sure Use Connection Pool is deselected.

ConnectOption

Description

Sets driver-specific connection options when you are accessing an ODBC data source in InfoMaker. These options specify the following:

- How the ODBC driver prompts for additional connection information
- What type of security to use for a Microsoft SQL Server connection
- Whether the ODBC Driver Manager Trace is on or off and what trace file it uses
- Whether cursors are closed or left open on a SQLTransact call
- How temporary stored procedures are treated for a SQLPrepare call

Certain ConnectOption parameters apply to all ODBC drivers, whereas others apply only to particular ODBC drivers.

For information on each ConnectOption parameter and whether you can use it with your ODBC driver, see the table in the Syntax section.

When to specify ConnectOption
You must specify the ConnectOption parameter *before* connecting to an ODBC data source. The ConnectOption settings take effect when you connect to the database.

Applies to

ODBC (if driver and back-end DBMS support this feature)

Syntax

ConnectOption = ' **SQL_DRIVER_CONNECT**,*value*;
SQL_INTEGRATED_SECURITY,*value*;
SQL_OPT_TRACE,*value*;
SQL_OPT_TRACEFILE,*value*;
SQL_PRESERVE_CURSORS,*value*;
SQL_USE_PROCEDURE_FOR_PREPARE,*value* '

The following table lists the applicable ODBC drivers, purpose, and values for each ConnectOption parameter.

Parameter	Description
SQL_DRIVER_CONNECT	**Driver** Any ODBC driver that supports the SQLDriverConnect API call. **Purpose** Specifies how the ODBC driver prompts for additional connection information (such as the user ID and password) when connecting to an ODBC data source. **Values** The values you can specify are: • **SQL_DRIVER_COMPLETE** (Default) If the connection string contains correct and sufficient information to connect, the driver connects to the specified data source. If any information is incorrect or missing, the driver displays one or more dialog boxes to prompt for the required connection parameters. The driver then connects to the specified data source. • **SQL_DRIVER_COMPLETE_REQUIRED** The driver takes the same actions as it does when SQL_DRIVER_COMPLETE is set. In addition, the driver disables the controls for any information not required to connect to the data source. • **SQL_DRIVER_PROMPT** The driver displays one or more dialog boxes to prompt for the required connection parameters. The driver then connects to the specified data source and builds a connection string from the information specified in the dialog boxes. • **SQL_DRIVER_NOPROMPT** If the connection string contains correct and sufficient information to connect, the driver connects to the specified data source. If any information is incorrect or missing, the driver returns an error.
SQL_INTEGRATED_ SECURITY	**Driver** Microsoft SQL Server ODBC driver (not supplied with InfoMaker). **Purpose** Specifies the type of connection to the Microsoft SQL Server database server. **Values** The values you can specify are: • **SQL_IS_OFF** (Default) Request a normal (nontrusted) connection to SQL Server using standard security. If you specify SQL_IS_OFF, you cannot request a trusted connection to SQL Server using integrated security. • **SQL_IS_ON** Request a trusted connection to SQL Server using integrated security regardless of the login security currently in use on the database server. For more about security mechanisms in Microsoft SQL Server, see the Microsoft documentation.

Parameter	Description
SQL_OPT_TRACE	**Driver** Any ODBC driver. **Purpose** Turns on or turns off the ODBC Driver Manager Trace in InfoMaker to troubleshoot a connection to an ODBC data source. The ODBC Driver Manager Trace provides detailed information about the ODBC API function calls that InfoMaker makes when connected to an ODBC data source. **Values** The values you can specify are: • **SQL_OPT_TRACE_OFF** (Default) Turns off the ODBC Driver Manager Trace. • **SQL_OPT_TRACE_ON** Turns on the ODBC Driver Manager Trace. For instructions on using the ODBC Driver Manager Trace, see "About ODBC Driver Manager" in *Connecting to Your Database*.
SQL_OPT_TRACEFILE	**Driver** Any ODBC driver. **Purpose** Specifies the name of the trace file where you want InfoMaker to send the output of the ODBC Driver Manager Trace. InfoMaker appends the output to the trace file you specify until you stop the trace. To display the trace file, you can use the File Editor (in InfoMaker) or any text editor (outside InfoMaker). **Values** You can specify any filename for the trace file, following the naming conventions of your operating system. By default, if tracing is on and you have not specified a trace file, InfoMaker sends ODBC Driver Manager Trace output to the file \SQL.LOG.
SQL_PRESERVE_ CURSORS	**Driver** Microsoft SQL Server ODBC driver (not supplied with InfoMaker). **Purpose** Specifies whether cursors are closed or left open on a SQLTransact call. **Values** The values you can specify are: • **SQL_PC_OFF** (Default) Close all cursors on a SQLTransact call. • **SQL_PC_ON** Keep server cursors open on a SQLTransact call.

Parameter	Description
SQL_USE_PROCEDURE_FOR_PREPARE	**Driver** Microsoft SQL Server ODBC driver (not supplied with InfoMaker). **Purpose** Specifies how temporary stored procedures are treated for a SQLPrepare call. **Values** The values you can specify are: • **SQL_UP_ON** (Default) Generate temporary stored procedures for a SQLPrepare call. • **SQL_UP_OFF** Do not generate temporary stored procedures for a SQLPrepare call. The SQL statement is stored, compiled, and run at execution time. Syntax error checking does not occur until execution time. • **SQL_UP_ON_DROP** Explicitly drop temporary stored procedures for a subsequent SQLPrepare call or when a statement handle (hstmt) is freed for reuse.

Default value

ConnectOption='SQL_DRIVER_CONNECT, SQL_DRIVER_COMPLETE;
SQL_INTEGRATED_SECURITY,SQL_IS_OFF;
SQL_OPT_TRACE,SQL_OPT_TRACE_OFF;
SQL_PRESERVE_CURSORS,SQL_PC_OFF;
SQL_USE_PROCEDURE_FOR_PREPARE,SQL_UP_ON'

Usage

Microsoft SQL Server ODBC driver The ConnectOption parameter applies only if you are accessing a SQL Server database with the Microsoft ODBC SQL Server driver.

You must obtain the Microsoft SQL Server ODBC driver from Microsoft Corporation. This driver is *not* supplied with InfoMaker.

Examples

To specify nondefault options for the ConnectOption database parameter, complete the Options tab in the Database Profile Setup - ODBC dialog box. Each ConnectOption parameter corresponds to an option in the dialog box, as follows:

ConnectOption parameter	Corresponding option
SQL_DRIVER_CONNECT	Connect Type
SQL_INTEGRATED_SECURITY	Integrated Security
SQL_OPT_TRACE	Trace ODBC API Calls
SQL_OPT_TRACEFILE	Trace File
SQL_PRESERVE_CURSORS	Preserve Cursors
SQL_USE_PROCEDURE_FOR_PREPARE	Use Procedure for Prepare

ConnectString

Description

Specifies the parameters required to connect to an ODBC data source. InfoMaker uses these parameters to connect to the database.

Applies to

ODBC

Syntax

The ConnectString syntax displays on a single line. You must enclose the entire ConnectString in single quotes and separate parameters within the ConnectString with semicolons.

ConnectString = '**DSN** = *data_source_name*; {**UID** = *user_ID*;
PWD = *password*; *driver_specific_parameters*}'

Parameter	Description
data_source_name	A name that identifies the data source.
user_ID	(Optional) The user ID required to connect to the data source.
password	(Optional) The password required by *user_ID* to connect to the data source.
driver_specific_parameters	(Optional) Any other driver-specific parameters required to connect. For example, some ODBC drivers specify the data source directory here. If you are using the PB DataDirect Btrieve ODBC driver, you can specify the value `CDB = 1` here to create a new Scalable SQL (formerly NetWare SQL) data dictionary if one does not already exist. The PB DataDirect Text ODBC driver uses this parameter to specify the century date. You can specify the value CB = 50 here to indicate that years from 00 to 49 be prefixed with '20' and years from 50 to 99 be prefixed with '19'.

Default value

None

Usage

InfoMaker generates the ConnectString automatically when you define an ODBC data source and copies it to the Preview box in the Database Profile Setup dialog box. This happens before you connect to the data source in InfoMaker.

Therefore, *you do not have to enter the ConnectString yourself* when defining an ODBC data source. However, you might need to edit the ConnectString value in the Database Profile Setup dialog box.

You can change the ConnectString parameter if necessary by editing it in the Database Profile Setup dialog box. For example, if you change the name of an existing ODBC data source, edit its database profile to update the connect string with the new DSN (data source name) value.

Examples

Example 1 This example shows a connect string for an ODBC data source that contains the data source name (DSN=Sales), user ID (UID=dba), and password (PWD=sql). Parameters within the connect string are separated by semicolons.

On the Connection tab in the Database Profile Setup dialog box, select Sales from the Data Source drop-down list, select the User ID check box and type dba, and select the Password check box and type sql.

Example 2 This example shows a connect string for a Btrieve data source accessed with the PB DataDirect Btrieve ODBC driver. The connect string consists of two parameters: DSN and CDB (to create a new Scalable SQL data dictionary). Parameters within the connect string are separated by semicolons.

Select Btrieve from the DataSource drop-down list box on the Connection tab in the Database Profile Setup dialog box, and type the following in the Driver-Specific Parameters box:

```
CDB=1
```

Adding Parameters
If the DSN appears in the drop-down list, it is not necessary to add it to the parameters.

CursorLib

Description — Specifies the cursor library to use when connecting to an ODBC data source.

Applies to — ODBC (if driver and back-end DBMS support this feature)

Syntax — **CursorLib** = '*value*'

Parameter	Description
value	The cursor library to use when connecting to an ODBC data source. Values are: • **ODBC_Cur_Lib** Use the ODBC Version 2.0 or higher cursor library. • **If_Needed** Use the ODBC Version 2.0 or higher cursor library if your ODBC driver does not support cursors. • **Driver_Cursors** (Default) Use your data source's native cursor support.

Default value — CursorLib = 'Driver_Cursors'

Examples — To specify use of the ODBC version 2.0 or later cursor library when connecting to an ODBC data source, select Cursor Library from the Cursor Library drop-down list on the Transaction tab in the Database Profile Setup dialog box.

CursorLock

Description — When used with the CursorScroll parameter, specifies locking options for cursors in ODBC data source.

The values you can set for CursorLock control two aspects of cursor locking:

- **Concurrent access** Ensures that multiple users can simultaneously access data that is accurate and current.
- **Collision detection** Detects collisions that occur when multiple users update the same data at the same time.

Applies to — ODBC (if driver and back-end DBMS support this feature)

Syntax

CursorLock = '*lock_value*'

Parameter	Description
lock_value	Specifies the type of locking you want to use for ODBC cursors. Values are: • **Lock** Use the lowest level of locking sufficient to allow updates on table rows. • **Opt** Use **optimistic concurrency control**. This means that table rows are not locked against updates by other users. To detect collisions, compare row versions or timestamps. • **OptVal** Use optimistic concurrency control. This means that table rows are not locked against updates by other users. To detect collisions, compare selected values with their previous values. • **ReadOnly** Prohibit updates on table rows by any user. For more about how the ODBC standard defines lock values, see your ODBC documentation.

Default value

If you do not specify a value for CursorLock, InfoMaker defaults to the cursor lock setting specified by your ODBC driver.

Examples

To set scrolling and locking options for cursors in an ODBC data source, select Dynamic Scrolling from the Scrolling Options drop-down list, and Optimistic Using Values from the Locking drop-down list on the Transaction tab in the Database Profile Setup dialog box.

See also

CursorScroll

CursorScroll

Description

When used with the CursorLock parameter, specifies scrolling options for cursors in an ODBC data source.

The location of a cursor indicates the current position in the result set produced by a SQL statement. **Scrolling** allows a cursor to move through the data in a result set one row at a time.

Applies to

ODBC (if driver and back-end DBMS support this feature)

Syntax

CursorScroll = '*scroll_value*'

Parameter	Description
scroll_value	Specifies the type of scrolling you want to use for ODBC cursors. Values are: • **Forward** The cursor only scrolls forward through the result set. • **Static** The data in the result set does not change. • **KeySet** Specifies that the cursor is **keyset-driven**. When a keyset-driven cursor is opened, the driver saves keys for the *entire result set*. As the cursor scrolls through the result set, the driver uses the keys in this **keyset** to retrieve the current values for each row. • **Dynamic** The driver saves and uses only the keys for the rows specified in the rowset.

Default value

If you do not specify a value for CursorScroll, InfoMaker defaults to the cursor scroll settings specified for your ODBC data source driver.

Usage

For large result sets, it might be impractical to use a keyset-driven cursor that requires the driver to save keys for the entire result set. Instead, you can use a **mixed cursor** by specifying a 32-bit integer value that is the number of rows in your keyset (see Example 2). This number is typically smaller than the result set. The default keyset size is 0.

A mixed cursor uses KeySet scrolling within the specified keyset and Dynamic scrolling outside the keyset.

Examples

Example 1 To set scrolling and locking options for cursors in an ODBC data source, on the Transaction tab in the Database Profile Setup dialog box, select Dynamic Scrolling from the Scrolling Options drop-down list and Optimistic Using Values from the Locking drop-down list.

Example 2 This example sets the number of rows in the keyset to 100. Assume that the entire result set has 1000 rows. When the cursor is opened, the driver saves keys for the first 100 rows of the result set. It then retrieves the next block of 100 keys until the entire result set is retrieved.

Type 100 in the Scrolling Options box on the Transaction tab in the Database Profile Setup dialog box.

See also

CursorLock

CursorType

Description

Supports the scrollable cursor feature introduced in Adaptive Server Enterprise 15.0, including directional scrolling (forwards and backwards) and sensitivity towards independent changes to table.

Applies to

SYC Sybase Adaptive Server Enterprise (15.0 and later)

Syntax

CursorType = *value*

Parameter	Description
value	A string that specifies whether database cursors are scrollable and whether they are sensitive to modifications in data. Values are: • **NonScrollable** (Default) Non-scrollable forward-only cursor. Supports FETCH NEXT syntax. • **ScrollInsensitive** Scrollable insensitive cursor that ignores any data modifications when scrolling in either direction. Supports FETCH NEXT, FETCH PRIOR, FETCH FIRST, and FETCH LAST syntaxes. • **ScrollSemiSensitive** Scrollable semi-sensitive cursor that presents data modifications when scrolling forwards but ignores them when scrolling backwards. Supports FETCH NEXT, FETCH PRIOR, FETCH FIRST, and FETCH LAST syntaxes.

Default value

CursorType='NonScrollable'

Usage

Adaptive Server Enterprise 15.0 allows both scrollable and nonscrollable cursors, which can be either semi-sensitive or insensitive. “Scrollable” means that you can scroll through the cursor result set by fetching any, or many, rows, rather than one row at a time; you can also scan the result set repeatedly. A scrollable cursor allows you to set the position of the cursor anywhere in the cursor result set for as long as the cursor is open.

To use a scrollable cursor, you must use a DECLARE *CursorName* CURSOR SQL statement to declare it with a suitable SELECT statement and you must have the query engine provided in Adaptive Server 15.0 or later.

For sensitive scrolling to work correctly, the table must have a clustered index or a clustered unique constraint, such as a clustered primary key.

All scrollable cursors are read-only and can only be used when the value of the CursorUpdate database parameter is 0 (the default). If you need an updatable cursor, set the CursorUpdate parameter to 1. When CursorUpdate is set to 1, the value of CursorType is ignored. All update cursors are nonscrollable.

Both client and server must be Adaptive Server 15.0 or higher.

Examples

To specify that database cursors support semi-sensitive scrolling (data modifications are presented when scrolling forwards), select Cursor Scrollable SemiSensitive from the Read Only Cursor Type drop-down list on the Transaction tab in the Database Profile Setup dialog box.

See also

CursorUpdate

CursorUpdate

Description

For those interfaces that support it, CursorUpdate specifies whether cursors in your target database are declared read-only or updatable.

Applies to

DIR Sybase DirectConnect
SYC and SYJ Sybase Adaptive Server Enterprise

Syntax

CursorUpdate = *value*

Parameter	Description
value	A number that specifies whether database cursors are declared read-only or updatable. Values are: • **0** (Default) Cursors are declared read-only. Sybase Client Library cursor declarations include the CS_READ_ONLY option. • **1** Cursors are declared updatable. Sybase Client Library cursor declarations include the CS_FOR_UPDATE option. This option applies to all updatable columns in the table.

Default value

CursorUpdate = 0

Usage

Set the CursorUpdate parameter to 1 to declare updatable cursors if you plan to use either of the following SQL statements in your application (*table* represents the table name and *cursor* represents the cursor name):

DELETE FROM *table* **WHERE CURRENT OF** *cursor*
UPDATE *table* **SET** *set_clause* **WHERE CURRENT OF** *cursor*

If you are communicating with the database in a InfoMaker script, you can reset the CursorUpdate value anytime before or after the Transaction object has connected to the database.

When you declare cursors updatable in a database accessed through DirectConnect, the cursor declaration you code must include a FOR UPDATE OF *column_list* clause.

When you use updatable cursors with the DIR interface and a Gatewayless connection to the mainframe, you must set Block = 1 before executing the cursor. You can reset the Block parameter to its default of 100 after you close the cursor within your code.

Examples

To specify that database cursors are declared updatable, select the Cursors Declared Updatable check box on the Transaction tab in the Database Profile Setup dialog box.

DataLink

Description

Specifies that you want to create a file or use an existing file containing your connection information to connect to your data source.

When to specify DataLink
You must specify the DataLink parameter *before* connecting to the database.

Applies to

OLE DB

Syntax

DataLink = '*file_name*'

Default value

None

Usage

The Data Link option allows you to access Microsoft's Data Link API. The Data Link API allows you to define a file or use an existing file that contains your OLE DB connection information. A Data Link file is identified with the suffix *.udl*.

To launch the API, double-click on Manage Data Links under OLE DB Utilities in the Installed Database Interfaces list or select the File Name check box on the Connection tab in the Database Profile Setup dialog box and double-click on the button next to the File Name box.

For more information on using the Data Link API, see Microsoft's Universal Data Access Web site.

Using a Data Link file versus setting the database parameters
If you use a Data Link file to connect to your data source, all other settings you make in the Database Profile Setup dialog box are ignored.

Examples

To use the file *oledb.udl* to connect to an OLE DB data provider, select the File Name check box on the Connection tab in the Database Profile Setup dialog box and enter a name for a new file or select an existing file.

DataSource

Description

Identifies the data source to which you want to connect. The data source can be a file, a database, or an ODBC data source depending on the OLE DB data provider you are using.

When to specify DataSource
You must specify the DataSource parameter *before* connecting to the database.

Applies to

OLE DB

Syntax

DataSource = '*datasource_name*'

Default value

None

Usage

The value of the Data Source parameter varies depending on the type of data source connection you are making. For example, if you are using Microsoft's OLE DB Provider for ODBC, you would enter the actual ODBC data source name for the Data Source value. If you are using Microsoft's OLE DB Provider for SQL Server, you would enter the actual Microsoft SQL Server server name for the Data Source value.

For more information, see the documentation provided by your OLE DB data provider.

Examples

Example 1 To use the Microsoft OLE DB Provider for ODBC to connect to the EAS Demo DB, enter `EAS Demo DB` in the Data Source box on the Connection tab in the Database Profile Setup dialog box.

Example 2 To use the PB DataDirect OLE DB Provider to connect to an Oracle 8 database, enter the data source name in the Data Source box on the Connection tab in the Database Profile Setup dialog box. You should have previously defined the data source name using the PB DataDirect OLE DB Administrator.

Example 3 To use the Microsoft OLE DB Provider for Oracle to connect to an Oracle 8 database, enter the Oracle 8 server name in the Data Source box on the Connection tab in the Database Profile Setup dialog box.

See also

DataLink
Provider

Date

Description

When you update data in the Form painter, InfoMaker builds a SQL UPDATE statement in the background. The Date parameter determines how InfoMaker specifies a date datatype when it builds the SQL UPDATE statement.

Applies to

JDB JDBC
ODBC
O84 Oracle 8.x and Oracle8*i*
O90 Oracle9*i*
O10 Oracle 10*g*

Syntax

The syntax you use to specify the Date parameter differs slightly depending on the database.

The Database Profile Setup dialog box inserts special characters (quotes and backslashes) where needed, so you can specify just the date format.

JDBC and ODBC syntax InfoMaker parses the backslash followed by two single quotes (\' ') as a single quote when it builds the SQL UPDATE statement.

Date = ' \"*date_format*\" '

Oracle syntax InfoMaker parses each set of four consecutive single quotes (' ' ' ') as a single quote when it builds the SQL UPDATE statement.

Date = ' ""*date_format*"" '

Parameter	Description
' \''	**JDBC and ODBC syntax** Type a single quote, followed by one space, followed by a backslash, followed by two single quotes. There is no space between the two single quotes and the beginning of the date format.
' ''''	**Oracle syntax** Type a single quote, followed by one space, followed by four single quotes. There is no space between the four single quotes and the beginning of the date format.
date_format	The date format you want InfoMaker to use when it builds a SQL UPDATE statement to update a data source in the DataWindow painter. For more on display formats, see the *User's Guide*.

Parameter	Description
\'' '	**JDBC and ODBC syntax** Type a backslash, followed by two single quotes, followed by one space, followed by a single quote. There is no space between the end of the date format and the backslash.
'''' '	**Oracle syntax** Type four single quotes, followed by one space, followed by a single quote. There is no space between the end of the date format and the four single quotes.

Default value

The default value for Date depends on the DBMS you are accessing, as summarized in the following table:

DBMS	Date default value
JDBC	If no value is specified for the Date database parameter, InfoMaker looks for a date format in the section for your JDBC driver in the registry. If no date format is found in the registry, InfoMaker uses the JDBC date format escape sequence.
ODBC	If no value is specified for the Date database parameter, InfoMaker looks for a date format in the section for your ODBC driver in the PBODB105 initialization file. If no date format is found in the initialization file, InfoMaker uses the ODBC date format escape sequence.
Oracle	The default Oracle date format. For information, see your Oracle documentation.

Examples

About these examples Assume you are updating a table named Employee by setting the Startdate column to 2006-04-23. This date is represented by the following date format:

```
yyyy-mm-dd
```

Example 1 (JDBC and ODBC syntax) To specify that InfoMaker should use this format for the date datatype when it builds the SQL UPDATE statement, type the following in the Date Format box on the Syntax tab in the Database Profile Setup dialog box:

```
yyyy-mm-dd
```

What happens InfoMaker builds the following SQL UPDATE statement to update the table:

```
UPDATE EMPLOYEE
SET STARTDATE = '2006-04-23'
```

Example 2 (Oracle syntax) To specify that InfoMaker should use this format for the date datatype when it builds the SQL UPDATE statement, type the following in the Date format box on the Syntax tab in the Database Profile Setup dialog box:

```
yyyy-mm-dd
```

What happens InfoMaker builds the following SQL UPDATE statement to update the table:

```
UPDATE EMPLOYEE
SET STARTDATE = '2006-04-23'
```

See also

DateTime
Time

DateFormat

Description

When you update data in the Form painter, InfoMaker builds a SQL UPDATE statement in the background. The DateFormat parameter determines how InfoMaker specifies a date datatype when it builds the SQL UPDATE statement.

Applies to

OLE DB

Syntax

DateFormat = '*date_format* '

Parameter	Description
date_format	The date format you want InfoMaker to use when it builds a SQL UPDATE statement to update a data source in the Form painter. For more on display formats, see the *User's Guide*.

Default value

If no value is specified for the DateFormat parameter, InfoMaker does not use a date datatype.

Usage

When you call stored procedures, the database server might not accept the date format built by InfoMaker. If this occurs, you can try to use another format. For example, for Microsoft SQL Server, try this format:

```
DateFormat='\''yyyy-mm-dd\'''
```

Examples

Assume you are updating a table named Employee by setting the Startdate column to 2006-04-23. This date is represented by the date format `yyyy-mm-dd`.

To specify that InfoMaker should use this format for the date datatype when it builds the SQL UPDATE statement, type the following in the Date Format box on the Syntax tab in the Database Profile Setup dialog box:

```
yyyy-mm-dd
```

What happens InfoMaker builds the following SQL UPDATE statement to update the table:

```
UPDATE EMPLOYEE
SET STARTDATE = '2006-04-23'
```

See also
DateTimeFormat
TimeFormat

DateTime

Description
When you update data in the Form painter, InfoMaker builds a SQL UPDATE statement in the background. The DateTime parameter determines how InfoMaker specifies a DateTime datatype when it builds the SQL UPDATE statement. (A DateTime datatype contains both a date value and a time value.)

Applies to
JDB JDBC
ODBC
O84 Oracle 8.x and Oracle8*i*
O90 Oracle9*i*
O10 Oracle 10*g*

Syntax
The syntax you use to specify the DateTime differs slightly depending on the database.

The Database Profile Setup dialog box inserts special characters (quotes and backslashes) where needed, so you can specify just the DateTime format.

In code, you must use the following syntax:

JDBC and ODBC syntax InfoMaker parses the backslash followed by two single quotes (\") as a single quote when it builds the SQL UPDATE statement.

DateTime = ' \"*DateTime_format*\" '

Oracle syntax InfoMaker parses each set of four consecutive single quotes ("") as a single quote when it builds the SQL UPDATE statement.

DateTime = ' ""*DateTime_format*"" '

Parameter	Description
' \''	**JDBC and ODBC syntax** Type a single quote, followed by one space, followed by a backslash, followed by two single quotes. There is no space between the two single quotes and the beginning of the DateTime format.
' ''''	**Oracle syntax** Type a single quote, followed by one space, followed by four single quotes. There is no space between the four single quotes and the beginning of the date format.
DateTime_format	The DateTime format you want InfoMaker to use when it builds a SQL UPDATE statement to update a data source in the painter. For more on display formats, see the *User's Guide*.
\'' '	**JDBC and ODBC syntax** Type a backslash, followed by two single quotes, followed by one space, followed by a single quote. There is no space between the end of the date format and the backslash.
'''' '	**Oracle syntax** Type four single quotes, followed by one space, followed by a single quote. There is no space between the end of the DateTime format and the four single quotes.

Default value

The default value for DateTime depends on the DBMS you are accessing, as summarized in the following table:

DBMS	Date default value
JDBC	If no value is specified for the DateTime database parameter, InfoMaker looks for a DateTime format in the section for your JDBC driver in the registry. If no DateTime format is found in the registry, InfoMaker uses the JDBC DateTime format escape sequence.
ODBC	If no value is specified for the DateTime database parameter, InfoMaker looks for a DateTime format in the section for your ODBC driver in the *PBODB105* initialization file. If no DateTime format is found in the initialization file, InfoMaker uses the ODBC DateTime format escape sequence.
Oracle	The default Oracle DateTime format. For information, see your Oracle documentation.

Examples

About these examples Assume you are updating a table named Files by setting the Timestamp column to 4/2/03 3:45 pm. This DateTime is represented by the following DateTime format.

Example 1 (ODBC and JDBC syntax) To specify that InfoMaker should use this format for the DateTime datatype when it builds the SQL UPDATE statement, type the following in the DateTime Format box on the Syntax tab in the Database Profile Setup dialog box:

```
m/d/yy h:mm am/pm
```

What happens InfoMaker builds the following SQL UPDATE statement to update the table:

```
UPDATE FILES
SET TIMESTAMP = '4/2/03 3:45 pm'
```

Example 2 (Oracle syntax) To specify that InfoMaker should use this format for the DateTime datatype when it builds the SQL UPDATE statement, type the following in the DateTime Format box on the Syntax tab in the Database Profile Setup dialog box:

```
m/d/yy h:mm am/pm
```

What happens InfoMaker builds the following SQL UPDATE statement to update the table:

```
UPDATE FILES
SET TIMESTAMP = '4/2/03 3:45 pm'
```

See also

Date
Time

DateTimeAllowed

Description

For those interfaces that support it, DateTimeAllowed controls whether columns having a DateTime datatype can appear as unique key columns in the WHERE clause of a SQL UPDATE or DELETE statement. InfoMaker generates an UPDATE statement or a DELETE statement followed by an INSERT statement to update the database from a form.

When you are working in the Form painter, you specify which columns to include in the WHERE clause by selecting them from the Unique Key Columns list in the Specify Update Properties dialog box.

By default, DateTimeAllowed is set to 0 to prohibit DateTime columns from displaying in the Unique Key Columns list and consequently from appearing in the WHERE clause of an UPDATE or DELETE statement. When you set DateTimeAllowed to 1, any DateTime columns in your database table display in the Unique Key Columns list and can be selected to appear in the WHERE clause of an UPDATE or DELETE statement.

When to specify DateTimeAllowed
You must specify a value for DateTimeAllowed *before* connecting to the database.

Applies to

DIR Sybase DirectConnect
IN9 Informix
SYC Sybase Adaptive Server Enterprise

Syntax

DateTimeAllowed = *value*

Parameter	Description
value	Specifies whether you can use DateTime columns as unique key columns in a WHERE clause of a SQL UPDATE or DELETE statement generated by InfoMaker to update the database. Values are: • **0** (Default) Prohibit the use of DateTime columns in the WHERE clause of an UPDATE or DELETE statement. When DateTimeAllowed is set to 0, DateTime columns *do not display* in the Unique Key Columns list in the Specify Update Properties dialog box. You can also specify `'No'` or `'False'` to set this value. • **1** Allow the use of DateTime columns in the WHERE clause of an UPDATE or DELETE statement. When DateTimeAllowed is set to 1, DateTime columns *do display* in the Unique Key Columns list in the Specify Update Properties dialog box so you can select one or more to appear in the WHERE clause. You can also specify `'Yes'` or `'True'` to set this value.

Default value

DateTimeAllowed = 0

Usage

When to set To allow the use of DateTime columns as unique key columns in the WHERE clause of an UPDATE or DELETE statement when you are updating the database from a form, set DateTimeAllowed to 1.

For instructions on using the Specify Update Properties dialog box to specify update characteristics for a form, see the chapter on controlling updates in the *User's Guide*.

What happens when you save the form When you set DateTimeAllowed to 1, select a DateTime column to appear in the WHERE clause, and then save the form, this column continues to display in the Unique Key Columns list even if you set DateTimeAllowed to 0 on a subsequent connection.

Examples

To allow the use of DateTime columns in the WHERE clause of an UPDATE or DELETE statement, select the DateTime Datatype Allowed check box on the Syntax tab in the Database Profile Setup dialog box.

DateTimeFormat

Description

When you update data in the Form painter, InfoMaker builds a SQL UPDATE statement in the background. The DateTimeFormat parameter determines how InfoMaker specifies a DateTime datatype when it builds the SQL UPDATE statement. (A DateTime datatype contains both a date value and a time value.)

Applies to

OLE DB

Syntax

DateTimeFormat = '*datetime_format* '

Parameter	Description
datetime_format	The datetime format you want InfoMaker to use when it builds a SQL UPDATE statement to update a data source in the Form painter. For more on display formats, see the *User's Guide*.

Default value

If no value is specified for the DateTimeFormat parameter, InfoMaker does not use a datetime datatype.

Usage

When you call stored procedures, the database server might not accept the DateTime format built by InfoMaker. If this occurs, you can try to use another format. For example, for Microsoft SQL Server, try this format:

```
DateTimeFormat='\''yyyy-mm-dd hh:mm:ss.fff\'''
```

Examples

Assume you are updating a table named Files by setting the Timestamp column to 4/2/03 3:45 pm. This DateTime is represented by the following DateTime format.

To specify that InfoMaker should use this format for the DateTime datatype when it builds the SQL UPDATE statement, type the following in the DateTime Format box on the Syntax tab in the Database Profile Setup dialog box:

```
m/d/yy h:mm am/pm
```

What happens InfoMaker builds the following SQL UPDATE statement to update the table:

```
UPDATE FILES
SET TIMESTAMP = '4/2/03 3:45 pm'
```

See also

DateFormat
TimeFormat

DBGetTime

Description

Specifies the number of seconds InfoMaker waits for a response from the DBMS when you retrieve rows in a report, form, or query. When you set the Async parameter to 1 to enable asynchronous operation, you can also set the DBGetTime parameter for those DBMSs that support this parameter.

If DBGetTime is set to 0 (the default), InfoMaker waits indefinitely for a DBMS response (the request never times out). If the DBGetTime value expires before the first row is retrieved, your request is automatically canceled.

Applies to

DIR Sybase DirectConnect
IN9 Informix
JDB JDBC
ODBC (if driver and back-end DBMS support this feature)
O84 Oracle 8.x and Oracle8*i* (8.1.5 and higher database connections only)
O90 Oracle9*i*
O10 Oracle 10*g*
SYC Sybase Adaptive Server Enterprise

Syntax

DBGetTime = *value*

Parameter	Description
value	The number of seconds InfoMaker waits for a DBMS response while waiting to retrieve the first row of a report or form.

Default value

DBGetTime = 0

Usage

Requirements for using DBGetTime To use the DBGetTime parameter, you must do *both* of the following:

- Set the Async parameter to 1 to enable asynchronous operation, as shown in the Examples.
- Code a RetrieveRow event for a form or report.

Examples

To enable asynchronous operation and set the DBGetTime parameter to 20 seconds, select the Asynchronous check box and type 20 in the Number Of Seconds To Wait box on the Transaction tab in the Database Profile Setup dialog box.

See also

Async

DBTextLimit

Description

Specifies the maximum length of a text field that DB-Library™ or CT-Library returns when you include the text field in a SQL SELECT statement.

You can set the DBTextLimit parameter if you want to include a long text string in a report without treating the text as a binary large object (blob) datatype.

Applies to

DIR Sybase DirectConnect
SYC and SYJ Sybase Adaptive Server Enterprise

Syntax

DBTextLimit = '*value*'

Parameter	Description
value	The maximum length in bytes of a text field that DB-Library or CT-Library returns when you include the text field in a SQL SELECT statement. The range of valid values is from 0 bytes to 32,763 bytes. When you set DBTextLimit to 0, DB-Library or CT-Library returns the maximum length text field.

Default value

The default value for DBTextLimit is the default specified by SQL Server for the DBTEXTLIMIT DB-Library or CS_TEXTLIMIT CT-Library connection property (see your SQL Server documentation).

Usage

The text field length that DB-Library or CT-Library returns is the lesser of the DBTextLimit value and the setting for the SQL Server global variable @@textsize.

If the setting for @@textsize is less than the value you specify for DBTextLimit, DB-Library or CT-Library returns the @@textsize value.

Examples

To have DB-Library or CT-Library return a text field that is up to 32,000 bytes long when you include the text field in a SQL SELECT statement, type 32000 in the Text Limit in SQL box (when using the SYC interface), or Maximum Length of Long VarChar box (when using the DirectConnect interface) on the Syntax tab in the Database Profile Setup dialog box.

DecimalSeparator

Description

Specifies the decimal separator setting used by the back-end DBMS that you are accessing in InfoMaker. If your DBMS uses a decimal separator other than period (.), which is the default, set DecimalSeparator to the value for your DBMS to ensure that InfoMaker correctly handles numeric strings returned from your database.

Applies to

DIR Sybase DirectConnect
ODBC (if driver and back-end DBMS support this feature)
OLE DB
O84 Oracle 8.x and Oracle8*i*
O90 Oracle9*i*
O10 Oracle 10*g*

Syntax

DecimalSeparator = '*value*'

Parameter	Description
value	The decimal separator setting used by the back-end DBMS that you are accessing in InfoMaker. Values are: • **'.'** (Default) Specifies that your back-end DBMS uses a period (.) as the decimal separator. If you do not specify DecimalSeparator or if you specify a value other than period (.) or comma (,), InfoMaker uses period (.) as the decimal separator. • **','** Specifies that your back-end DBMS uses a comma (,) as the decimal separator.

Default value

DecimalSeparator = `'.'`

Usage

When to set DecimalSeparator The DecimalSeparator parameter currently supports period (.) and comma (,) as valid values. Therefore, if the decimal separator setting for your DBMS is a comma, you should set the DecimalSeparator parameter to `','` (comma) to make sure InfoMaker correctly handles numeric strings returned from your database.

Example using Oracle Assume you are accessing an Oracle database in InfoMaker and the decimal separator setting is a comma (,). Oracle returns to InfoMaker the numeric string '123,50' containing a comma instead of a period as the decimal separator. InfoMaker then sends this string to its decimal conversion routines.

By default, the InfoMaker decimal conversion routines expect a period as the decimal separator. If you set the DecimalSeparator parameter to `','` (comma), InfoMaker correctly handles this string and returns it as `'123,50'`.

Examples

To specify that your DBMS uses a comma (,) as the decimal separator setting, type a comma (,) in the Decimal Separator box on the Syntax tab in the Database Profile Setup dialog box.

See also

NumericFormat

DefaultProcOwner

Description

The DefaultProcOwner parameter lets you set a default owner for a stored procedure. The parameter takes effect only when the stored procedure is not qualified. For ODBC, the PBNewSPInvocation parameter must also be set.

Applies to

ODBC

Syntax

DefaultProcOwner='*value*'

Parameter	Description
value	A string specifying the name of the default owner of the stored procedure

Usage

The parameter can be set dynamically at runtime after connecting to a database. You can also set it in your *PBODB105.INI* file if you want to create and retrieve data into a DataWindow with a stored procedure data source in the DataWindow painter. The runtime setting overrides the setting in *PBODB105.INI*.

You can also cancel the setting at runtime. If you do so, InfoMaker uses the current user as the owner of a non-qualified stored procedure when it obtains the parameters of the stored procedure.

Examples

To set the default owner to `proms` in *PBODB105.INI*:

```
[Adaptive Server Anywhere]
DefaultProcOwner='proms'
```

See also

PBNewSPInvocation

DelimitIdentifier

Description

Specifies whether you want InfoMaker to enclose the names of tables, columns, indexes, and constraints in double quotes when it generates SQL statements. This affects the behavior of any InfoMaker painter that generates SQL syntax.

Applies to

DIR Sybase DirectConnect
Informix 9
JDB JDBC
ODBC (if driver and back-end DBMS support this feature)
OLE DB
O84 Oracle 8.x and Oracle8*i*
O90 Oracle9*i*
O10 Oracle 10*g*
SYC Sybase Adaptive Server Enterprise

Syntax

DelimitIdentifier = '*value*'

Parameter	Description
value	Specifies whether you want InfoMaker to enclose table and column names in double quotes. Values are: • **Yes** Use double quotes • **No** Do not use double quotes

Default value

The default value for the DelimitIdentifier parameter depends on the DBMS you are accessing, as follows:

DBMS	DelimitIdentifer default value
Informix	`DelimitIdentifier = 'No'`
JDBC	Depends on the DelimitIdentifer setting in the registry
ODBC	Depends on the DelimitIdentifer setting in the PBODB105 initialization file
Oracle	`DelimitIdentifier = 'Yes'`
OLE DB	`DelimitIdentifier = 'Yes'`
Sybase DirectConnect	`DelimitIdentifier = 'No'`
Sybase Adaptive Server Enterprise	`DelimitIdentifier = 'No'`

Usage

Informix Informix database servers can create a log of database transactions in either ASCII or non-ASCII format. If the database is creating a non-ASCII log, the setting of the DelimitIdentifier is optional. If the database is creating an ASCII log, you must set DelimitIdentifier = 'Yes' to make the SQL syntax generated by InfoMaker behave as expected.

Sybase Adaptive Server Enterprise When you set DelimitIdentifier to 'Yes', the “set quoted_identifier on” command is automatically sent to Adaptive Server to adjust your database connection on the server. Otherwise, the “set quoted_identifier off” command is sent to the server. This feature occurs with SYC, JDBC, ODBC, and OLE DB interfaces.

Microsoft SQL Server When you set DelimitIdentifier to 'Yes', the “set quoted_identifier on” command is automatically sent to Microsoft SQL Server to adjust your database connection on the server when you use OLE DB. Otherwise, the “set quoted_identifier off” command is sent to the server.

JDBC and ODBC The DelimitIdentifier parameter setting overrides the DelimitIdentifier setting specified for your JDBC driver in the registry and for your ODBC driver in the PBODB105 initialization file.

DirectConnect If you want to use mixed-case identifier names, you must set DelimitIdentifier = 'Yes'. Also, you must set LowerCaseIdent = 'No' to preserve case sensitivity of identifiers stored in the DB2 system catalog.

Examples

To specify that InfoMaker should not enclose table and column names in double quotes when it generates SQL statements, clear the Enclose Table And Column Names In Quotes check box on the Syntax tab in the Database Profile Setup dialog box.

See also

LowerCaseIdent

DisableBind

Description

For those DBMSs that support bind variables, InfoMaker binds input parameters to a compiled SQL statement by default. The DisableBind parameter allows you to specify whether you want to disable this default binding.

When you set DisableBind to 1 to disable the binding, InfoMaker replaces the input variable with the value entered by the application user or specified in code.

Applies to

Informix 9
JDB JDBC
ODBC (if driver and back-end DBMS support this feature)
OLE DB
O84 Oracle 8.x and Oracle8*i*
O90 Oracle9*i*
O10 Oracle 10*g*

Syntax

DisableBind = *value*

Parameter	Description
value	Specifies whether you want to disable the default binding of input parameters to a compiled SQL statement. Values are: • **0** InfoMaker binds input parameters to a compiled SQL statement. • **1** InfoMaker does *not* bind input parameters to a compiled SQL statement.

Default value

DisableBind = 1 for OLE DB, DisableBind=0 for other interfaces

Usage

Bind variables In a SQL statement, a **bind variable** is a placeholder for a column value. By default, InfoMaker associates (binds) data from a variable defined in your application to the bind variable each time the SQL statement executes.

Using bind variables in SQL statements For example, the following SQL statement retrieves those rows in the Books table about books written by Hemingway:

```
SELECT * FROM books WHERE author = "Hemingway"
```

Suppose that you want to execute this statement to get information about books written by other authors. Instead of compiling and executing a new statement for each author, you can define a bind variable that represents the author's name. The user then supplies the author's actual name when the application executes. By using bind variables, you ensure that the statement is compiled only once and executed repeatedly with new values supplied by the user.

If your database supports bind variables and DisableBind is set to 0 to enable binding (the default for all database interfaces except OLE DB), InfoMaker generates the statement with parameter markers (:bind_param) and passes the actual parameter value at execution time. For example:

```
SELECT * FROM books WHERE author = :bind_param
```

Using the DataDirect ODBC driver
The DataDirect wire protocol driver for Sybase Adaptive Server Enterprise does not support the SQL describe parameter function that is necessary to support the DisableBind feature. If you use this driver, setting DisableBind=0 has no effect.

Bind variables and cached statements Using bind variables in conjunction with cached statements can improve the performance of most applications, depending on the application. In general, applications that perform a large amount of transaction processing benefit the most from using bind variables and cached statements.

In order to use cached statements, make sure that DisableBind is set to 0. This enables the binding of input variables to SQL statements in InfoMaker. (For more about using cached statements, see the description of the SQLCache parameter.)

Performance improvements For Adaptive Server Anywhere and Oracle databases, bind variables improve performance by allowing InfoMaker to insert and modify strings that exceed 255 characters.

Bind variables and default column values When DisableBind is set to 0 to enable the use of bind variables, the Form painter does both of the following to get maximum performance improvement from using bind variables when you add rows to a form:

- Generates a SQL INSERT statement that includes all columns (except identity and SQL Server timestamp)
- Reuses this SQL INSERT statement for each row you add to the form

For example, if a table named Order_T contains three columns named Order_ID, Order_Date, and Customer_ID, the Form painter generates the following SQL INSERT statement when DisableBind is set to 0 (default binding enabled):

```
INSERT INTO Order_T(Order_ID, Order_Date, Customer_ID)
       VALUES(:bind_param1, :bind_param2, :bind_param3)
```

If one of these columns is null, the Form painter sets a null value indicator for this column parameter and executes the statement. This behavior is important to understand if you want your back-end DBMS to set a default value for any columns in your form.

To illustrate, suppose that your application users do not enter a value for the Order_Date column because they expect the back-end DBMS to set this column to a default value of TODAY. Then, they retrieve the row and find that a null value has been set for Order_Date instead of its default value. This happens because the SQL INSERT statement generated by the Form painter specified a null value indicator, so the DBMS set the column value to null instead of to its default value as expected.

Setting a default column value when binding is enabled If you are using bind variables (DisableBind set to 0) and want the back-end DBMS to set a column to its default value when your application user does not explicitly enter a value in a new row, you should set an initial value for the form column that mirrors the DBMS default value for this column.

In the Form painter, you can set or modify a column's initial value in the Column Specifications dialog box.

For more about the Column Specifications dialog box, see the *User's Guide*.

Setting a default column value when binding is disabled If you are *not* using bind variables (DisableBind set to 1) and want the back-end DBMS to set a column to its default value when your application user does not explicitly enter a value in a new row, you do *not* need to set an initial value for the form column.

This is because with bind variables disabled, the Form painter generates a SQL INSERT statement for each row added to the form. If a column does not contain an explicit value, it is not included in the SQL INSERT statement.

Using the Order_T table example, if your application user enters 123 as the value for the Order_ID column and A-123 as the value for the Customer_ID column, the Form painter generates the following SQL INSERT statement when DisableBind is set to 1 (binding disabled):

```
INSERT INTO Order_T(Order_ID, Customer_ID)
       VALUES(123, 'A-123')
```

Your back-end DBMS would then set the Order_Date column to its default value as expected, since a value for Order_Date is not explicitly set in the SQL INSERT statement generated by the Form painter.

Examples

To specify that InfoMaker should disable the binding of input parameters to a compiled SQL statement, select the Disable Bind check box on the Transaction tab in the Database Profile Setup dialog box.

See also

SQLCache

DisableUnicode

Description

Specifies whether data is retrieved from the database as ANSI or Unicode. Use this parameter if the client is configured to use a character set that does not allow characters such as the Euro symbol to be converted correctly.

Applies to

O84 Oracle 8.x and Oracle8*i*

Syntax

DisableUnicode = *value*

Parameter	Description
value	Specifies whether data is retrieved from the database as ANSI or Unicode. Values are: • **0** InfoMaker retrieves data as Unicode. • **1** InfoMaker retrieves data as ANSI.

Default value

DisableUnicode =0

Usage

When the client is configured to use a character set such as WE8ISO8859P15, some special characters, including the Euro symbol, are not converted correctly when retrieved from an Oracle8*i* database. The O84 driver retrieves Unicode characters from the database by default, and the Euro symbol is not recognized as a valid Unicode character in this character set.

You can set the DisableUnicode database parameter to retrieve ANSI characters from the database instead of Unicode characters. The retrieved ANSI characters are then converted to a Unicode string.

Examples

To specify that InfoMaker should retrieve ANSI characters from the database, select the Disable Unicode Support check box on the Connection page in the Database Profile Setup dialog box for Oracle8*i*.

Driver

Description

The JDBC driver your application uses to connect to the database.

When to specify Driver
You must specify the Driver database parameter *before* connecting to the database.

Applies to

JDB JDBC

Syntax

Driver = '*driver_name*'

Default value

None

Usage

The driver name identifies the Java class name for the particular driver you are using to connect to the database.

Examples

Example 1 To set the driver name of a Sybase jConnect driver:

- **Database profile** Type the following in the Driver Name box on the Connection tab in the Database Profile Setup dialog box:

```
com.sybase.jdbc.SybDriver
```

Example 2 To set the driver name of an Oracle JDBC Driver:

- **Database profile** Type the following in the Driver Name box on the Connection tab in the Database Profile Setup dialog box.

```
oracle.jdbc.driver.OracleDriver
```

See also

URL

DS_Alias

Description

When you access a Sybase Adaptive Server Enterprise database in InfoMaker through Open Client, DS_Alias is one of several parameters that you can set to enable network-based directory services in your application. (For other directory services parameters, see the See Also section.)

Some directory service providers and drivers support the creation of alias entries. An **alias entry** provides a link to a primary directory entry in a hierarchy, thereby giving users multiple ways to access the primary entry while searching the directory structure for a particular network entity.

For those directory service providers and drivers that support aliases, DS_Alias specifies whether the provider is allowed to follow links for (expand) alias entries while searching the directory hierarchy. The default behavior is to allow expansion of alias entries for providers that support this feature.

You must specify a value for DS_Alias *before* connecting to the database in InfoMaker.

Using third-party directory service providers
For information about the third-party directory service providers and operating system platforms that Sybase has tested with Open Client directory services, see the Open Client documentation.

Applies to

SYC Sybase Adaptive Server Enterprise

Syntax

DS_Alias = *value*

Parameter	Description
value	For those directory services providers and drivers that support aliases, specifies whether the provider is allowed to expand alias entries while searching a directory hierarchy. Values are: • **0** Prohibit provider from expanding alias entries during a directory search. You can also specify `'No'` or `'False'` to set this value. • **1** (Default) Allow provider to expand alias entries during a directory search. You can also specify `'Yes'` or `'True'` to set this value.

Default value

DS_Alias = 1

Usage

When to use To prevent access to your data through directory alias entries, set DS_Alias to 0. This prohibits directory service providers that support aliases from expanding alias entries during a directory search.

Set Release parameter For this parameter to take effect, you *must* also set the Release parameter to 11or higher to specify that your application should use the appropriate version of Sybase Open Client Client-Library (CT-Lib) behavior. See the description of the Release parameter for more information.

Requirements for use To use DS_Alias or any other parameter supporting Open Client directory services, you must meet certain requirements for using directory services in your InfoMaker application. For details, see "Requirements for using Open Client directory services" in *Connecting to Your Database*.

Corresponding CT-Lib connection property Specifying a value for DS_Alias sets the corresponding Sybase CT-Lib connection property named CS_DS_EXPANDALIAS.

Examples

To prohibit directory service providers that support aliases from expanding alias entries during a directory search:

- **Database profile** Clear the Directory Alias Entries check box on the Directory Services tab in the Database Profile Setup dialog box.

See also

DS_Copy
DS_DitBase
DS_Failover
DS_Password
DS_Principal
DS_Provider
DS_TimeLimit
Release

DS_Copy

Description

When you access a Sybase Adaptive Server Enterprise database in InfoMaker through Open Client, DS_Copy is one of several parameters that you can set to enable network-based directory services in your application. (For other directory services parameters, see the See Also section.)

Some directory service providers and drivers support the use of caching. **Caching** allows a directory service provider to use cached information while searching a directory instead of making a request to the directory server agent for information.

For those directory service providers and drives that support caching, DS_Copy specifies whether the provider is allowed to use cached information during a directory search. The default behavior is to allow providers that support this feature to use cached information.

You must specify a value for DS_Copy *before* connecting to the database in InfoMaker.

Using third-party directory service providers
For information about the third-party directory service providers and operating system platforms that Sybase has tested with Open Client directory services, see the Open Client documentation.

Applies to

SYC Sybase Adaptive Server Enterprise

Syntax

DS_Copy = *value*

Parameter	Description
value	For those directory services providers and drivers that support caching, specifies whether the provider is allowed to use cached information when making a directory search. Values are: • **0** Prohibit provider from using cached information during a directory search. You can also specify `'No'` or `'False'` to set this value. • **1** (Default) Allow provider to use cached information when making a directory search. You can also specify `'Yes'` or `'True'` to set this value.

Default value

DS_Copy = 1

Usage

When to use Allowing providers to use cached information during directory searches makes the searches faster, but does not ensure that the provider is using the most up-to-date directory information.

To ensure that the application gets the most recent changes to directory entries when it requests directory information, set DS_Copy to 0 to prohibit providers that support caching from using cached information during a directory search.

Set Release parameter For this parameter to take effect, you *must* also set the Release parameter to 11or higher to specify that your application should use the appropriate version of Sybase Open Client Client-Library (CT-Lib) behavior. See the description of the Release parameter for more information.

Requirements for use To use DS_Copy or any other parameter supporting Open Client directory services, you must meet certain requirements for using directory services in your InfoMaker application. For details, see "Requirements for using Open Client directory services" in *Connecting to Your Database*.

Corresponding CT-Lib connection property Specifying a value for DS_Copy sets the corresponding Sybase CT-Lib connection property named CS_DS_COPY.

Examples

To prohibit directory service providers that support caching from using cached information during a directory search:

- **Database profile** Clear the Use Caching check box on the Directory Services tab in the Database Profile Setup dialog box.

See also

DS_Alias
DS_DitBase
DS_Failover
DS_Password
DS_Principal
DS_Provider
DS_TimeLimit
Release

DS_DitBase

Description

When you access a Sybase Adaptive Server Enterprise database in InfoMaker through Open Client, DS_DitBase is one of several parameters that you can set to enable network-based directory services in your application. (For other directory services parameters, see the See Also section.)

When you use Open Client directory services, a default (active) directory information tree base (DIT base) is specified in the Open Client/Server™ Configuration utility. The **DIT base** is the directory node where directory searches start. This is analogous to the current working directory in MS-DOS file systems.

DS_DitBase lets you specify the name of the directory node where you want searches for directory entries to start. The DS_DitBase value you specify must be a fully qualified name that uses the syntax required by your directory service provider and driver (see the Examples section for illustrations).

The default value for DS_DitBase is the DIT base currently specified as active in the Open Client/Open Server Configuration utility.

You must specify a value for DS_DitBase *before* connecting to the database in InfoMaker.

Using third-party directory service providers
For information about the third-party directory service providers and operating system platforms that Sybase has tested with Open Client directory services, see the Open Client documentation.

Applies to

SYC Sybase Adaptive Server Enterprise

Syntax

DS_DitBase = '*dit_base*'

Parameter	Description
dit_base	The name of the directory node where you want directory searches to start. By default, this is the DIT base currently specified as active in the Open Client/Open Server Configuration utility. The value for *dit_base* must be a fully qualified name that uses the syntax required by your directory service provider and driver. The syntax for specifying the DIT base varies for different providers; see your provider's documentation for details. For examples of how to specify *dit_base* for different directory service providers, see the Examples section.

Default value

The default value for DS_DitBase is the DIT base currently specified as active in the Open Client/Open Server Configuration utility.

Usage

When to use Set DS_DitBase to specify a starting node for directory searches *other than* the DIT base node specified as active in the Open Client/Open Server Configuration utility. For instructions on using the Open Client/Open Server Configuration utility, see your Sybase Open Client/Server configuration guide.

Set Release parameter For this parameter to take effect, you *must* also set the Release parameter to 11or higher to specify that your application should use the appropriate version of Sybase Open Client Client-Library (CT-Lib) behavior. See the description of the Release parameter for more information.

Requirements for use To use DS_DitBase or any other parameter supporting Open Client directory services, you must meet certain requirements for using directory services in your InfoMaker application. For details, see "Requirements for using Open Client directory services" in *Connecting to Your Database*.

Corresponding CT-Lib connection property Specifying a value for DS_DitBase sets the corresponding Sybase CT-Lib connection property named CS_DS_DITBASE.

Examples

About these examples The examples that follow show how to specify a DS_DitBase value for different directory service providers.

See your directory service provider's documentation for complete information about the format your provider requires for specifying the DIT base.

Example 1 (Windows NT Registry) This example shows the syntax for DS_DitBase if your directory service provider is the Windows NT Registry:

Node name: SALES:software\sybase\server\SYS11NT
DS_DitBase: SALES:software\sybase\server

To set DS_DitBase:

- **Database profile** Type the following in the DIT Base box on the Directory Services tab in the Database Profile Setup dialog box. Do *not* end the DS_DitBase value with a backslash (\):

```
SALES:software\sybase\server
```

Example 2 (DCE/CDS) This example shows the syntax for DS_DitBase if your directory service provider is Distributed Computing Environment Cell Directory Services (DCE/CDS):

Node name: /.../boston.sales/dataservers/sybase/SYS11
DS_DitBase: /.../boston.sales/dataservers

To set DS_DitBase:

- **Database profile** Type the following in the DIT Base box on the Directory Services tab in the Database Profile Setup dialog box. Do *not* end the DS_DitBase value with a slash (/):

```
/.../boston.sales/dataservers
```

Example 3 (Banyan STDA) This example shows the syntax for DS_DitBase if your directory service provider is Banyan StreetTalk Directory Assistance (STDA):

Node name: SYS11@sales@chicago
DS_DitBase: chicago

To set DS_DitBase:

- **Database profile** Type the following in the DIT Base box on the Directory Services tab in the Database Profile Setup dialog box. Do *not* start the DS_DitBase value with @:

```
chicago
```

Example 4 (Novell NDS) This example shows the syntax for DS_DitBase if your directory service provider is Novell NetWare Directory Services (NDS):

Node name: CN=SYS11.OU=miami.OU=sales.O=sybase
DS_DitBase: OU=miami.OU=sales.O=sybase

To set DS_DitBase:

- **Database profile** Type the following in the DIT Base box on the Directory Services tab in the Database Profile Setup dialog box:

```
OU=miami.OU=sales.O=sybase
```

See also

DS_Alias
DS_Copy
DS_Failover
DS_Password
DS_Principal
DS_Provider
DS_TimeLimit
Release

DS_Failover

Description

When you access a Sybase Adaptive Server Enterprise database in InfoMaker through Open Client, DS_Failover is one of several parameters that you can set to enable network-based directory services in your application. (For other directory services parameters, see the See Also section.)

Sybase Open Client Client-Library (CT-Lib) requires a directory to map logical server names to network addresses. The source for this directory can be either the Sybase Interfaces file or a network-based directory service provider (such as DCE Cell Directory Services or the Windows Registry).

If you want an application to use a directory source *other than* the Interfaces file, CT-Lib must be able to load the appropriate directory driver. If CT-Lib cannot load the required driver, you can set DS_Failover to specify whether CT-Lib should silently default (fail over) to using the Interfaces file as the directory source.

By default, DS_Failover specifies that CT-Lib should use the Interfaces file as the directory source if it cannot load the requested directory driver.

You must specify a value for DS_Failover *before* connecting to the database in InfoMaker.

Using third-party directory service providers
For information about the third-party directory service providers and operating system platforms that Sybase has tested with Open Client directory services, see the Open Client documentation.

Applies to

SYC Sybase Adaptive Server Enterprise

Syntax

DS_Failover = *value*

Parameter	Description
value	Specifies whether Sybase CT-Lib should silently default (fail over) to using the Interfaces file as the directory source if it cannot load the requested directory driver. Values are: • **0** Prohibit CT-Lib from using the Interfaces file as the directory source if it cannot load the requested directory driver. You can also specify `'No'` or `'False'` to set this value. • **1** (Default) Allow CT-Lib to use the Interfaces file as the directory source if it cannot load the requested directory driver. You can also specify `'Yes'` or `'True'` to set this value.

Default value

DS_Failover = 1

Usage

When to use To prevent CT-Lib from using the Interfaces file as the directory source if it cannot load the requested directory driver, set DS_Failover to 0.

If DS_Failover is set to 0 to prevent use of the Interfaces file and CT-Lib cannot load the requested directory driver, the connection's directory source is undefined. This causes certain operations requiring directory access to fail.

Set Release parameter For this parameter to take effect, you *must* also set the Release parameter to 11or higher to specify that your application should use the appropriate version of Sybase Open Client Client-Library (CT-Lib) behavior. See the description of the Release parameter for more information.

Requirements for use To use DS_Failover or any other parameter supporting Open Client directory services, you must meet certain requirements for using directory services in your InfoMaker application. For details, see "Requirements for using Open Client directory services" in *Connecting to Your Database*.

Corresponding CT-Lib connection property Specifying a value for DS_Failover sets the corresponding Sybase CT-Lib connection property named CS_DS_FAILOVER.

Examples

To prohibit CT-Lib from using the Interfaces file as the directory source if it cannot load the requested directory driver:

- **Database profile** Clear the Enable Failover check box on the Directory Services tab in the Database Profile Setup dialog box.

See also

DS_Alias
DS_Copy
DS_DitBase
DS_Password
DS_Principal
DS_Provider
DS_TimeLimit
Release

DS_Password

Description

When you access a Sybase Adaptive Server Enterprise database in InfoMaker through Open Client 12.5 or higher software, DS_Password is one of several parameters that you can set to enable network-based directory services in your application. (For other directory services parameters, see the See Also section.)

Some directory service providers and drivers require an authenticated principal (user ID) name and password to control an application's access to directory entries. For those providers and drivers, DS_Principal and DS_Password specify the principal name and password your application should use to identify you to the directory service provider.

You must specify a value for DS_Password *before* connecting to the database in InfoMaker.

Applies to

SYC Sybase Adaptive Server Enterprise

Syntax

DS_Password = '*password*'

Parameter	Description
password	The password associated with the principal (user ID) name you specified in the DS_Principal parameter.

Default value

None

InfoMaker does not set DS_Password or the corresponding Sybase Open Client Client-Library (CT-Lib) connection parameter CS_DS_PASSWORD if you do not specify a value.

Usage

When to use If your directory service provider requires an authenticated principal name for directory access, set DS_Password to the password that goes with your directory service principal name.

Set Release parameter For this parameter to take effect, you *must* also set the Release parameter to 11or higher to specify that your application should use the appropriate version of Sybase Open Client Client-Library (CT-Lib) behavior. See the description of the Release parameter for more information.

Requirements for use To use DS_Password or any other parameter supporting Open Client 12.5 directory services, you must meet certain requirements for using directory services in your InfoMaker application. For details, see "Requirements for using Open Client directory services" in *Connecting to Your Database*.

Corresponding CT-Lib connection property Specifying a value for DS_Password sets the corresponding Sybase CT-Lib connection property named CS_DS_PASSWORD.

Examples

To specify MYPASS as your application's password:

- **Database profile** Type the following in the Password box on the Directory Services tab in the Database Profile Setup dialog box:

```
MYPASS
```

See also

DS_Alias
DS_Copy
DS_DitBase
DS_Failover
DS_Principal
DS_Provider
DS_TimeLimit
Release

DS_Principal

Description

When you access a Sybase Adaptive Server Enterprise database in InfoMaker through Open Client, DS_Principal is one of several parameters that you can set to enable network-based directory services in your application. (For other directory services parameters, see the See Also section.)

Some directory service providers and drivers require an authenticated principal (user ID) name to control an application's access to directory entries. For those providers and drivers, DS_Principal and DS_Password specify the principal name and password your application should use to identify you to the directory service provider.

You must specify a value for DS_Principal *before* connecting to the database in InfoMaker.

Using third-party directory service providers
For information about the third-party directory service providers and operating system platforms that Sybase has tested with Open Client directory services, see the Open Client documentation.

Applies to

SYC Sybase Adaptive Server Enterprise

Syntax

DS_Principal = '*principal_name*'

Parameter	Description
principal_name	The principal (user ID) name your application should use to identify you to the directory service provider.

Default value

None

InfoMaker does not set DS_Principal or the corresponding Sybase Open Client Client-Library (CT-Lib) connection parameter CS_DS_PRINCIPAL if you do not specify a value.

Usage

When to use If your directory service provider requires an authenticated principal name for directory access, set DS_Principal to the principal (user ID) name that goes with your directory service password.

Set Release parameter For this parameter to take effect, you *must* also set the Release parameter to 11or higher to specify that your application should use the appropriate version of Sybase Open Client Client-Library (CT-Lib) behavior. See the description of the Release parameter for more information.

Requirements for use To use DS_Principal or any other parameter supporting Open Client directory services, you must meet certain requirements for using directory services in your InfoMaker application. For details, see "Requirements for using Open Client directory services" in *Connecting to Your Database*.

Corresponding CT-Lib connection property Specifying a value for DS_Principal sets the corresponding Sybase CT-Lib connection property named CS_DS_PRINCIPAL.

Examples

To specify JSMITH as your application's principal name:

- **Database profile** Type the following in the Principal Name box on the Directory Services tab in the Database Profile Setup dialog box:

```
JSMITH
```

See also

DS_Alias
DS_Copy
DS_DitBase
DS_Failover
DS_Password
DS_Provider
DS_TimeLimit
Release

DS_Provider

Description

When you access a Sybase Adaptive Server Enterprise database in InfoMaker through Open Client, DS_Provider is one of several parameters that you can set to enable network-based directory services in your application. (For other directory services parameters, see the See Also section.)

When you use Open Client directory services, you must specify your directory service provider names in the Open Client/Open Server Configuration utility so that the required drivers can be loaded for each provider. The default directory service provider is the one currently specified as active in the Configuration utility.

DS_Provider lets you specify a directory service provider name listed in the Open Client/Open Server Configuration utility *other than* the default (active) provider. The default value for DS_Provider is the provider name currently specified as active in the Configuration utility.

You must specify a value for DS_Provider *before* connecting to the database in InfoMaker.

Using third-party directory service providers
For information about the third-party directory service providers and operating system platforms that Sybase has tested with Open Client directory services, see the Open Client documentation.

Applies to

SYC Sybase Adaptive Server Enterprise

Syntax

DS_Provider = '*provider_name*'

Parameter	Description
provider_name	The directory service provider name you want to use for directory services. The provider name is case sensitive. You must specify it *exactly as it appears* in the Open Client/Open Server Configuration utility.

Default value

The default value for DS_Provider is the provider name currently specified as active in the Open Client/Open Server Configuration utility.

Usage

When to use Set DS_Provider to use a directory service provider specified in the Open Client/Open Server Configuration utility *other than* the default (active) provider. For instructions on using the Open Client/Open Server Configuration utility, see your Sybase Open Client/Server configuration guide.

Set Release parameter For this parameter to take effect, you *must* also set the Release parameter to 11or higher to specify that your application should use the appropriate version of Sybase Open Client Client-Library (CT-Lib) behavior. See the description of the Release parameter for more information.

Requirements for use To use DS_Provider or any other parameter supporting Open Client directory services, you must meet certain requirements for using directory services in your InfoMaker application. For details, see "Requirements for using Open Client directory services" in *Connecting to Your Database*.

Corresponding CT-Lib connection property Specifying a value for DS_Provider sets the corresponding Sybase CT-Lib connection property named CS_DS_PROVIDER.

Examples

To specify NTREGISTRY as the directory service provider name:

- **Database profile.** Type the following in the Provider box on the Directory Services tab in the Database Profile Setup dialog box:

```
NTREGISTRY
```

See also

DS_Alias
DS_Copy
DS_DitBase
DS_Failover
DS_Password
DS_Principal
DS_TimeLimit
Release

DS_TimeLimit

Description

When you access a Sybase Adaptive Server Enterprise database in InfoMaker through Open Client, DS_TimeLimit is one of several parameters that you can set to enable network-based directory services in your application. (For other directory services parameters, see the See Also section.)

Some directory service providers and drivers support the use of time limits for a directory search. For those providers and drivers, DS_TimeLimit specifies the maximum number of seconds that a directory search lasts.

By default, DS_TimeLimit specifies that there is no time limit for a directory search.

You must specify a value for DS_TimeLimit *before* connecting to the database in InfoMaker.

Using third-party directory service providers
For information about the third-party directory service providers and operating system platforms that Sybase has tested with Open Client directory services, see the Open Client documentation.

Applies to

SYC Sybase Adaptive Server Enterprise

Syntax

DS_TimeLimit='*value*'

Parameter	Description
value	Specifies the maximum number of seconds that you want a directory search to last. You can also specify `'no_limit'` (the default) to indicate that there is no time limit for the directory search. If the specified time limit expires and the target has not been found, the directory search is unsuccessful and the InfoMaker connection fails.

Default value

DS_TimeLimit = 'no_limit'

Usage

Set Release parameter For DS_TimeLimit to take effect, you *must* also set the Release parameter to 11or higher to specify that your application should use the appropriate version of Sybase Open Client Client-Library (CT-Lib) behavior. See the description of the Release parameter for more information.

Requirements for use To use DS_TimeLimit or any other parameter supporting Open Client directory services, you must meet certain requirements for using directory services in your InfoMaker application. For details, see "Requirements for using Open Client directory services" in *Connecting to Your Database*.

Corresponding CT-Lib connection property Specifying a value for DS_TimeLimit sets the corresponding Sybase CT-Lib connection property named CS_DS_TIMELIMIT.

Examples

To specify that you want the directory search to last a maximum of 120 seconds (2 minutes), type 120 in the Directory Search Time Limit box on the Directory Services tab in the Database Profile Setup dialog box.

See also

DS_Alias
DS_Copy
DS_DitBase
DS_Failover
DS_Password
DS_Principal
DS_Provider
Release

EncryptPassword

Description

Specifies whether you want InfoMaker to encrypt your password automatically when connecting to an OLE DB data provider.

When to specify EncryptPassword
You must specify the EncryptPassword parameter *before* connecting to the database.

Applies to

OLE DB

Syntax

EncryptPassword = '*value*'

Parameter	Description
value	Specifies whether you want InfoMaker to encrypt your password. Values are: • **True** Tells InfoMaker to encrypt the password • **False** (Default) Tells InfoMaker not to encrypt the password

Default value

EncryptPassword = 'False'

Examples

To tell InfoMaker to encrypt your password when connecting to an OLE DB data provider, select the Encrypt Password check box on the Security tab in the Database Profile Setup dialog box.

See also

DataLink
IntegratedSecurity
MaskPassword
PersistEncrypted

FoDelay

Description

Specifies the amount of time (in milliseconds) you want InfoMaker to wait between attempts to fail over to another database server if the current database server goes down.

When to specify FoDelay
You must specify the FoDelay parameter *before* connecting to the database.

Applies to

O84 Oracle 8.x and Oracle8*i* (8.1.5 and higher database connections only)
O90 Oracle9*i*
O10 Oracle 10*g*

Syntax **FoDelay**='*value*'

Parameter	Description
value	Specifies the amount of time in milliseconds you want InfoMaker to wait between attempts to fail over to an another database server.

Default value FoDelay = '10'

Usage You can enter a failover delay value only if you have enabled failover.

This parameter cannot be set dynamically. The value set when the connection is made remains in effect until it is disconnected.

Examples To tell InfoMaker to wait 20 milliseconds between attempts to fail over, type 20 in the Delay box on the Network tab in the Database Profile Setup dialog box.

See also SvrFailover

FoDialog

Description Specifies whether InfoMaker displays a runtime dialog box indicating when a failover occurs.

When to specify FoDialog
You must specify the FoDialog parameter *before* connecting to the database.

Applies to O84 Oracle 8.x and Oracle8*i* (8.1.5 and higher database connections only)
O90 Oracle9*i*
O10 Oracle 10*g*
SYC

Syntax **FoDialog**='*value*'

Parameter	Description
value	Specifies whether you want InfoMaker to display a runtime dialog box indicating when a failover occurs. Values are: • **No** (Default) InfoMaker should not display a dialog box. • **Yes** InfoMaker should display a dialog box.

Default value FoDialog = 'No'

Usage

You can display a runtime dialog box only if you have enabled failover.

This parameter cannot be set dynamically. The value set when the connection is made remains in effect until it is disconnected.

Examples

To tell InfoMaker to display a runtime dialog box when a failover occurs, select the Display Runtime Dialog When Failing Over check box on the Network tab in the Database Profile Setup dialog box.

See also

SvrFailover

FoRetryCount

Description

Specifies the number of times you want InfoMaker to try to fail over to an another database server if the current database server goes down.

When to specify FoRetryCount
You must specify the FoRetryCount parameter *before* connecting to the database.

Applies to

O84 Oracle 8.x and Oracle8*i* (8.1.5 and higher database connections only)
O90 Oracle9*i*
O10 Oracle 10*g*

Syntax

FoRetryCount='*value*'

Parameter	Description
value	Specifies the number of times you want InfoMaker to try to fail over.

Default value

FoRetryCount = '10'

Usage

You can enter a failover retry value only if you have enabled failover.

This parameter cannot be set dynamically. The value set when the connection is made remains in effect until it is disconnected.

Examples

To tell InfoMaker to try 20 times to fail over, enter the value 20 in the Retry Count box on the Network tab in the Database Profile Setup dialog box.

See also

SvrFailover

FormatArgsAsExp

Description

Controls whether InfoMaker converts a report retrieval argument of decimal datatype to scientific (exponential) notation if the argument exceeds 12 digits but has fewer than 16 digits. If FormatArgsAsExp is set to Yes (the default), InfoMaker performs this conversion.

When to specify FormatArgsAsExp
You must specify a value for FormatArgsAsExp *before* connecting to the database.

Applies to

DIR Sybase DirectConnect
JDB JDBC
ODBC interface
O84 Oracle 8.x and Oracle8*i*
O90 Oracle9*i*
O10 Oracle 10*g*
SYC and SYJ Sybase Adaptive Server Enterprise

Syntax

FormatArgsAsExp= '*value*'

Parameter	Description
value	Specifies whether you want InfoMaker to convert a report retrieval argument of decimal datatype to scientific (exponential) notation if the argument exceeds 12 digits but has fewer than 16 digits. Values are: • **Yes** InfoMaker converts a retrieval argument of decimal datatype to scientific notation if it exceeds 12 digits but has fewer than 16 digits. • **No** (Default) InfoMaker leaves the retrieval argument as a decimal and does not perform the default conversion to scientific notation if it exceeds 12 digits but has fewer than 16 digits.

Default value

FormatArgsAsExp = 'No'

Usage

When to use The setting of FormatArgsAsExp might affect the speed of data retrieval in your reports, especially if you are accessing large databases.

If FormatArgsAsExp is set to Yes, InfoMaker converts retrieval arguments of type decimal to scientific notation if the argument exceeds 12 digits but has fewer than 16 digits. Some DBMS optimizers might interpret the resulting scientific notation as a different datatype and scan all rows in the table to find it. This can slow data retrieval if, for example, you are accessing a DB2 database with many large tables.

Setting FormatArgsAsExp to No tells InfoMaker to leave the retrieval argument as a decimal and not convert it to scientific notation. This speeds data retrieval for large databases.

Retrieval argument size limited
The FormatArgsAsExp parameter is relevant only if a retrieval argument of type decimal has fewer than 16 digits.

Examples

To tell InfoMaker to convert a retrieval argument exceeding 12 digits but with fewer than 16 digits to scientific notation, check the Format Arguments in Scientific Notation check box on the Syntax tab (or Transaction tab in the case of the DIR interface) in the Database Profile Setup dialog box.

Host

Description

If your DBMS supports it, specifies the workstation name when connecting to the database in InfoMaker. The Host parameter lets you assign any 10-character label to identify the process you are about to create when you connect to the database. This label helps you distinguish your process from others running on the database server.

When to specify Host
You must specify the Host parameter *before* connecting to the database in InfoMaker.

Applies to

SYC Sybase Adaptive Server Enterprise

Syntax

Host = '*workstation_name*'

Default value

None

Usage

When you specify a value for Host, InfoMaker sets the CS_HOSTNAME connection property to the workstation name you specify.

The value you specify for the Host parameter displays in the hostname column of the MASTER.DBO.SYSPROCESSES table in a SQL Server database. How you use the Host parameter depends on the design of your InfoMaker application.

For example, many sites want to secure their production tables so that updates are possible only through a specific application. To do this, you can grant explicit authority to the InfoMaker application but *not* to users. The application prompts the user for an authorization ID and password, verifies it, and then connects to the database through a single application login ID. Only this application login ID has authorization to update production tables.

In this scenario, you can use the Host parameter to store the name of the user running the application.

Examples

Example 1 To set the host name to Alan, type `Alan` in the Workstation Name box on the Network tab in the Database Profile Setup dialog box.

Example 2 You can use the Host and AppName parameters together to specify both the host name and the application name. To set the host name to Jane and the application name to Sales, type Jane in the Workstation Name box and Sales in the Application Name box on the Network tab in the Database Profile Setup dialog box.

See also

AppName

HostReqOwner

Description

Specifies the name of the host request library defined in a DB2/MVS database.

When to specify HostReqOwner
You must specify the HostReqOwner parameter *before* connecting to the database.

Applies to

DIR Sybase DirectConnect (applies only to Access Service for DB2/MVS and Open ServerConnect™)

Syntax

HostReqOwner = '*owner_id*'

Default value

HostReqOwner = 'Sybase'

Usage

The host request library is a special DB2 table that stores host-resident requests. A host-resident request is a SQL statement that a client application can execute as a procedure. If you do not use Sybase as the owner name for this host request library, you should set the HostReqOwner parameter to an appropriate name for your site.

TRS Support
The HostReqOwner parameter is not applicable to DirectConnect TRS connections.

Examples

To set the name of your host request library to Stratus, type Stratus in the Host Request Lib Owner box on the System tab in the Database Profile Setup dialog box.

See also

UseProcSyntax
TRS

IdentifierQuoteChar

Description

Specifies the single quote character you want InfoMaker to use to delimit the names of identifiers (tables, columns, indexes, and constraints) when it generates SQL statements. InfoMaker uses the quote character you specify instead of the default quote character returned by your driver or data provider.

DelimitIdentifier must be set to Yes
In order for IdentifierQuoteChar to take effect, the DelimitIdentifier parameter must be set to Yes. Otherwise, InfoMaker's default behavior is *not* to delimit identifiers in SQL statements and to ignore any value specified for IdentifierQuoteChar.

Applies to

JDB JDBC
ODBC (if driver and back-end DBMS support this feature)
OLE DB

Syntax

IdentifierQuoteChar = '*quote_character*'

Parameter	Description
quote_character	The single character you want InfoMaker to use instead of your driver's or data provider's default quote character to delimit the names of identifiers in SQL statements.

Default value

None

InfoMaker searches the following in this order to determine the IdentifierQuoteChar value:

1 The section for your database profile in the InfoMaker initialization file

2 The section for your ODBC driver in the PBODB105 initialization file or the section for your JDBC driver in the registry

If InfoMaker does not find an IdentifierQuoteChar value in these locations, it makes a SQLGetInfo call to your driver to return the default SQL_IDENTIFIER_QUOTE_CHAR value.

When using the OLE DB interface
If no value is specified for the IdentifierQuoteChar parameter, InfoMaker does not use a quote character.

Usage

By default, some drivers return quote characters that do not work with InfoMaker's parsing routines, such as the backquote character (`). As a result, delimiting is turned off for these drivers in InfoMaker.

However, if you paint SQL statements containing identifiers that require delimiters, syntax errors can occur if you are using a driver for which delimiting is turned off. To avoid such errors, set IdentifierQuoteChar to override the driver's default quote character.

Examples

To specify *c* as the quote character you want InfoMaker to use to delimit identifiers in SQL statements, type c in the Identifier Quote Character box on the Syntax tab in the Database Profile Setup dialog box.

See also

DelimitIdentifier

ImpersonationLevel

Description

Specifies the level of impersonation that the data server is allowed to use when impersonating its OLE DB data provider and InfoMaker. This parameter applies only to network connections other than Remote Procedure Call (RPC) connections.

When to specify ImpersonationLevel
You must specify the ImpersonationLevel parameter *before* connecting to the database.

Applies to

OLE DB

Syntax

ImpersonationLevel = '*value*'

Parameter	Description
value	Specifies the level of impersonation. Values are: • **Not set** No level of impersonation is selected. • **Anonymous** The client is anonymous to the server and the server process cannot obtain identification information about the client and cannot impersonate the client. • **Delegate** The process can impersonate the client's security context while acting on behalf of the client. The server process can also make outgoing calls to other servers while acting on behalf of the client. • **Identify** The server can obtain the client's identity. The server can impersonate the client for ACL checking but cannot access system objects as the client. • **Impersonate** The server process can impersonate the client's security context while acting on behalf of the client. This information is obtained when the connection is established, not on every call.

Default value

ImpersonationLevel = 'Not set'

Examples

To set a level of impersonation to anonymous, on the Security tab in the Database Profile Setup dialog box, select Anonymous from the Impersonation Level drop-down list.

See also

DataLink

INET_DBPATH

Description

Specifies the Informix DBPATH setting. The DBPATH environment variable identifies a list of directories that contain Informix databases. INET_DBPATH typically specifies the location of Informix databases if this is *other* than in a directory on the database server.

Applies to

IN9 Informix

Syntax

INET_DBPATH = '*server_db_path*'

Parameter	Description
server_db_path	The name of the directory containing Informix databases

Default value

By default, InfoMaker uses the value specified for DBPATH in the Informix.INI configuration file.

Examples

Example 1 To specify that the directory /HOME/Informix contains Informix databases, type `/home/Informix` in the Database Path box on the Network tab in the Database Profile Setup dialog box.

Example 2 You can specify values for INET_DBPATH, INET_PROTOCOL, and INET_SERVICE together. To specify that the directory /Informix contains Informix databases and that you want to connect using the SE9 service and the TCP/IP network protocol, type /Informix in the Database Path box, SE9 in the Service Name box, and tcp-ip in the Protocol Type box on the Network tab in the Database Profile Setup dialog box.

See also

INET_PROTOCOL
INET_SERVICE

INET_PROTOCOL

Description

Specifies the network protocol that the Informix client software uses to communicate with a remote Informix version 9.x database server.

Applies to

IN9 Informix

Syntax

INET_PROTOCOL = '*network_protocol* '

Parameter	Description
network_protocol	A string that specifies the name of the network protocol used by the Informix client software. For information about the correct network protocol for your site, see your Informix system administrator.

Default value

By default, InfoMaker uses the network protocol specified in the Informix.INI configuration file.

Examples

Example 1 To specify that Informix client software uses the Novell IPX/SPX network protocol, type `ipx` in the Protocol Type box on the Network tab in the Database Profile Setup dialog box.

Example 2 You can specify values for INET_DBPATH, INET_PROTOCOL, and INET_SERVICE together. To specify that the directory /Informix contains Informix databases, and that you want to connect using the SE9 service and the TCP/IP network protocol, type /Informix in the Database Path box, SE9 in the Service Name box, and tcp-ip in the Protocol Type box on the Network tab in the Database Profile Setup dialog box.

See also

INET_DBPATH
INET_SERVICE

INET_SERVICE

Description

Specifies the name of the service that a remote Informix database server uses to listen to all incoming requests from client applications.

Applies to

IN9 Informix

Syntax

INET_SERVICE = '*service_name*'

Parameter	Description
service_name	A string that specifies the name of the service that a remote Informix database server uses to listen to incoming requests For information about the correct service name for your site, see your Informix system administrator.

Default value

By default, InfoMaker uses the service name specified in the Informix.INI configuration file.

Examples

Example 1 To specify that your Informix database server uses the sqlexec service name, type `sqlexec` in the Service Name box on the Network tab in the Database Profile Setup dialog box.

Example 2 You can specify values for INET_DBPATH, INET_PROTOCOL, and INET_SERVICE together. To specify that the directory /Informix contains Informix databases, and that you want to connect using the SE9 service and the TCP/IP network protocol:, type /Informix in the Database Path box, SE9 in the Service Name box, and tcp-ip in the Protocol Type box on the Network tab in the Database Profile Setup dialog box.

See also

INET_DBPATH
INET_PROTOCOL

Init_Prompt

Description

Specifies whether you want to be prompted during initialization.

When to specify Init_Prompt
You must specify the Init_Prompt parameter *before* connecting to the database.

Applies to

OLE DB

Syntax

Prompt = '*value*'

Parameter	Description
value	Specifies whether you want to be prompted during initialization. Values are: • **Not set** Do not prompt. • **Always** Always prompt for initialization information. • **If needed** Prompt only if more information is needed. • **If needed (required)** Prompt only if more information is needed. Do not allow the user to enter optional information. • **Never** Do not prompt.

Default value

Init_Prompt = 'Not set'

Examples

To specify that you want always to be prompted during initialization, select Always from the Prompt drop-down list on the System tab in the Database Profile Setup dialog box.

See also

DataLink

InsertBlock

Description

Specifies the number of rows that you want the Data Pipeline in InfoMaker to insert at one time into a table in the destination database.

For instructions on using the Data Pipeline, see the *User's Guide*.

Applies to

ODBC (only in Data Pipeline if driver and back-end DBMS support this feature)

Syntax

InsertBlock = *insert_blocking_factor*

Parameter	Description
insert_blocking_factor	The number of rows that you want the Data Pipeline to insert at one time into a table in the destination database, up to a maximum of 100 rows (Default = 100 rows). To turn off block inserting for an ODBC data source in the Data Pipeline, set InsertBlock to 1 or DisableBind to 1 in the database profile of the destination database.

Default value

InsertBlock = 100

Usage

Requirements for using InsertBlock To use the InsertBlock parameter, *all* of the following must be true:

- You are using an ODBC driver to access the destination database in the Data Pipeline.
- The destination database supports the use of bind variables. (For more about bind variables, see DisableBind.)
- The DisableBind parameter is not set to 1 (the default is 0) in the database profile of the destination database. This enables the default binding of input parameters to a compiled SQL statement in InfoMaker.
- Maximum Errors is set to 1 in the Data Pipeline.

The Adaptive Server Anywhere ODBC driver and most PB DataDirect ODBC drivers meet the first two requirements.

To determine whether your ODBC driver meets these requirements, see the documentation that comes with your driver.

Determining the InsertBlock value InfoMaker searches the following in this sequence to determine the value for InsertBlock:

1 The section for your database profile in the InfoMaker initialization file

2 The section for your ODBC driver in the PBODB105 initialization file

If InfoMaker does not find an InsertBlock value in these locations, it defaults to an insert blocking factor of 100 rows.

What happens When InfoMaker finds a value for InsertBlock, the Data Pipeline batches the specified number of rows and inserts them with a single call to the ODBC driver you are using to access the destination database.

If you specify an InsertBlock value or Data Pipeline commit factor of fewer than 100 rows, the Data Pipeline batches and inserts the specified number of rows into the destination database. If you specify more than 100 rows, the Data Pipeline batches and inserts at most only 100 rows at one time.

The insert blocking factor that the Data Pipeline actually uses depends on the size of the data in each column inserted in the destination database. In addition, the Data Pipeline does not exceed 64K of data in the buffer for any one column.

Turning off block inserting To turn off block inserting for an ODBC data source in the Data Pipeline, you can do any of the following in the database profile of the destination database:

- Set the InsertBlock parameter to 1
- Set the DisableBind parameter to 1 (to disable default binding of input parameters to a compiled SQL statement)
- In the Data Pipeline, set Maximum Errors to a value other than 1

Examples

To set the insert blocking factor in the Data Pipeline to 50 rows, type 50 in the Insert Blocking Factor box on the Transaction tab in the Database Profile Setup dialog box.

See also

DisableBind

IntegratedSecurity

Description

Specifies the name of the authentication service used by the data server to identify the user.

If this parameter is specified, none of the other OLE DB authentication parameters (CacheAuthentication, EncryptPassword, MaskPassword, PersistEncrypted, and PersistSecurityInfo) are needed and are ignored if specified.

When to specify IntegratedSecurity
You must specify the IntegratedSecurity parameter *before* connecting to the database.

Applies to

OLE DB

Syntax

IntegratedSecurity = '*value*'

Parameter	Description
value	A string specifying the name of the authentication service. If NULL, the default authentication service is used.

Default value

None

Examples

To use an authentication service such as the Security Support Provider Interface (SSPI) for Windows NT, type the name of the authentication service in the Integrated Security box on the Security tab in the Database Profile Setup dialog box.

JavaVM

Description

Specifies the version of the Java VM you want the JDBC database interface to use.

When to specify JavaVM
You must specify the JavaVM parameter *before* connecting to the database.

Applies to

JDB JDBC

Syntax

JavaVM = '*value*'

Parameter	Description
value	Specifies the name of the Java VM. Values are: • **Sun JRE 1.2** • **Sun JRE 1.3** • **Sun JRE 1.4**

Default value

JavaVM='Sun1.4'

Usage

For consistent behavior, the same version of the Java VM used during development should be used at runtime.

Examples

To set the JavaVM parameter to Sun JRE 1.3, select Sun JRE 1.3 from the Java drop-down list on the Options tab in the Database Profile Setup dialog box.

KeepAlive

Description

Determines whether packets are sent to the database to ensure that the connection is still active.

When to specify KeepAlive
You must specify the KeepAlive parameter *before* connecting to the database.

Applies to

SYC Sybase Adaptive Server Enterprise

Syntax

KeepAlive = *value*

Parameter	Description
value	Specifies whether the Open Client/Server CS_CON_KEEPALIVE property is set for your connection. Values are: • **1** (Default) CS_CON_KEEPALIVE property is set. • **0** CS_CON_KEEPALIVE property is not set.

Default value

KeepAlive=1

Usage

KeepAlive sets the value of the Sybase CT-Lib connection property CS_CON_KEEPALIVE to true or false. The default setting ensures that your connection is alive by sending packets to the database when the connection is idle. Set the value of this property to false for mobile clients that do not maintain constant connections.

Examples

To set the KeepAlive value to 0 when you do not want to maintain a connection, clear the Keep Connection Alive check box on the Network tab page.

Language

Description

For those interfaces that support it, specifies the language you want to use when connecting to your target database.

When to specify Language
You must specify the Language parameter *before* connecting to the database. The Language setting takes effect when you connect to the database.

Applies to

DIR Sybase DirectConnect
SYC Sybase Adaptive Server Enterprise

Syntax **Language** = '*language_name*'

Default value None

Usage When you specify a value for Language, InfoMaker:

- Allocates a CS_LOCALE structure for this connection
- Sets the CS_SYB_LANG value to the language you specify
- Sets the SQL Server CS_LOC_PROP connection property with the new locale information

If you have previously set a value for the Locale parameter, which includes settings for the language and character set you want the Open Client software to use, you can override the language value by specifying a new value for the Language parameter and reconnecting to the database.

Unicode data access InfoMaker can access Unicode data in an Adaptive Server Enterprise (ASE) 12.5 or higher Unicode database or in Unicode columns in ASE 12.5 or higher. InfoMaker converts between double-byte character set (DBCS) data and Unicode automatically, provided that the Language and CharSet parameters are set with DBCS values (or the Locale parameter is set with DBCS values).

For example:

```
Language = 'tchinese'
CharSet = 'big5'
```

Examples To set the Language parameter to French, type French in the Language box on the Connection tab or Regional Settings tab in the Database Profile Setup dialog box.

See also CharSet
Locale

LCID

Description Specifies the locale identifier that you want the OLE DB data provider to use.

When to specify LCID
You must specify the LCID parameter *before* connecting to the database.

Applies to OLE DB

Syntax **LCID** = '*lcid_name*'

Default value None

Usage You specify the locale identifier at initialization. This provides a way for the data server to determine InfoMaker's preferred locale language and character set. However, setting this parameter does not guarantee that all text returned to InfoMaker is translated according to the locale ID.

Examples To set the locale to US English:

- **Database profile** Type the following in the LCID box on the System tab in the Database Profile Setup dialog box:

```
1033
```

See also CharSet
Language

Locale

Description Specifies the locale name that you want the Sybase Open Client software to use when connecting to a Sybase Adaptive Server Enterprise database or a database accessed through DirectConnect in InfoMaker.

When to specify Locale
You must specify the Locale parameter *before* connecting to the database.

Applies to DIR Sybase DirectConnect
SYC Sybase Adaptive Server Enterprise

Syntax **Locale** = '*locale_name*'

Default value The default locale defined in your LOCALES.DAT file

Usage *Locales* Locales are stored as entries in a file named LOCALES.DAT. The LOCALES.DAT file contains information about the languages and character sets you are using with the Sybase Open Client software. The Sybase Open Client installation places the LOCALES.DAT file in the $SYBASE\LOCALES directory.

An entry in the LOCALES.DAT file has the following format:

locale = *locale_name*, *language_name*, *character_set_name*

For example:

```
locale = default, us_english, cp850
locale = enu, us_english, cp850
locale = fra, french, cp850
```

Why set Locale parameter Setting a value for the Locale parameter lets you use a locale *other than the default locale* when accessing an Adaptive Server Enterprise or DirectConnect database. If you do not set a value for Locale, Sybase Open Client uses the default locale defined in your LOCALES.DAT file.

What happens When you specify a value for the Locale parameter, InfoMaker:

- Allocates a CS_LOCALE structure for this connection
- Sets the CS_LC_ALL value to the locale name you specify
- Sets the SQL Server CS_LOC_PROP connection property with the new locale information

Overriding Locale parameter If you have previously set a value for the Locale parameter that includes settings for the language and character set you want to use, you can override the language or character set values by specifying new values for the Language or CharSet parameter and reconnecting to the database.

Unicode data access InfoMaker can access Unicode data in an ASE 12.5 Unicode database or in Unicode columns in ASE 12.5. InfoMaker converts between double-byte character set (DBCS) data and Unicode automatically, provided that the Locale parameter is set with DBCS values. For example, the Locale parameter should be set to chs or cht.

Examples

To set the locale to *fra*:

- **Database profile** Type the following in the Locale box on the Regional Settings tab in the Database Profile Setup dialog box:

```
fra
```

What happens Setting the Locale parameter to *fra* has the same effect as individually setting both the Language and CharSet parameters as follows:

```
Language='French'
CharSet='cp850'
```

See also

CharSet
Language

Location

Description

Specifies the location of the data source to which you want your OLE DB data provider to connect. Typically the location is the database server name.

When to specify Location
You must specify the Location parameter *before* connecting to the database.

Applies to

OLE DB

Syntax

Location = '*location_name*'

Default value

None

Usage

Implementation of the Location parameter varies depending on the OLE DB data provider you are using. For specific information, see the data provider documentation provided by the OLE DB vendor.

Log

Description

Specifies whether the database server should log updates of text and image data in the transaction log. By default, the database server logs updates of text and image data in the transaction log.

Applies to

SYC and SYJ Sybase Adaptive Server Enterprise

Syntax

Log = *value*

Parameter	Description
value	A value that specifies whether the database server should log updates of text and image data in the transaction log. Values are: • **0** Do not log text and image updates in the transaction log. Specify this value only if your database server allows you to disable logging. • **1** (Default) Log text and image updates in the transaction log.

Default value

Log = 1

Usage

You should set the Log parameter to 0 only if your database server allows you to disable logging.

Examples

To specify that InfoMaker should *not* log text and image updates in the transaction log:

- **Database profile** Clear the Log Text and Image Updates check box on the System tab or Transaction tab in the Database Profile Setup dialog box.

LoginTimeOut

Description: Specifies the number of seconds the JDBC or ODBC driver should wait for a login request to a JDBC database or an ODBC data source.

Applies to: ODBC (if driver and back-end DBMS support this feature)

Syntax: **LoginTimeOut** = *value*

Parameter	Description
value	The number of seconds you want the driver to wait for a login request

Default value: ODBC: LoginTimeOut = 15; JDBC: LoginTimeOut = 0

Usage: If you set LoginTimeOut to 0, InfoMaker does not call the JDBC or ODBC driver to set the LoginTimeOut value and instead waits the number of seconds specified by the JDBC or ODBC driver's client software. If you set LoginTimeOut to a value greater than 0, InfoMaker does call the JDBC or ODBC driver to set the LoginTimeOut value.

Examples: To set the LoginTimeOut value to wait 60 seconds for a login request:

- **Database profile** Type 60 in the Login Timeout box on the Network tab in the Database Profile Setup dialog box.

LowerCaseIdent

Description: Specifies whether InfoMaker displays identifier names in lowercase.

Applies to: DIR Sybase DirectConnect (applies only to DB2/MVS)

Syntax: **LowerCaseIdent** = '*value*'

Parameter	Description
value	Specifies whether you want InfoMaker to display identifier names in lowercase. Values are: • **Yes** Display identifier names in lowercase • **No** (Default) Do not display identifier names in lowercase

Default value: LowerCaseIdent = 'No'

Usage

InfoMaker displays identifier names in uppercase (the way they are stored in the database). The LowerCaseIdent parameter can be set only if the DelimitIdentifier parameter is set to No, indicating that InfoMaker should not enclose table and column names in double quotes. If you try to enclose a table and column names in double quotes with identifier names in lowercase, the LowerCaseIdent parameter value is reset to the default value, and you receive a warning message.

Migrating PBMDI and PBNET applications to PBDIR
If you are migrating an application that previously used the InformationConnect DB2 Gateway or Net-Gateway for DB2 interface to the DirectConnect for DB2/MVS database interface, you should set the LowerCaseIdent parameter value to Yes. This enables you to continue to use the Select painter to edit DataWindows.

Examples

To have InfoMaker display identifier names in lowercase:

- **Database profile** Select the Display Identifiers In Lower Case check box on the Syntax tab in the Database Profile Setup dialog box.

MaskPassword

Description

Specifies whether you want InfoMaker to mask your password automatically when connecting to an OLE DB data provider.

When to specify MaskPassword
You must specify the MaskPassword parameter *before* connecting to the database.

Applies to

OLE DB

Syntax

MaskPassword = '*value*'

Parameter	Description
value	Specifies whether you want InfoMaker to mask your password. Values are: • **True** Tells InfoMaker to mask the password • **False** (Default) Tells InfoMaker not to mask the password

Default value

MaskPassword = 'False'

Examples

To tell InfoMaker to mask your password when connecting to an OLE DB data provider:

- **Database profile** Select the Mask Password check box on the Security tab in the Database Profile Setup dialog box.

See also

DataLink
EncryptPassword
IntegratedSecurity
PersistEncrypted

MaxConnect

Description

Sets the maximum number of simultaneous connections you want to make when accessing a database.

The default is 25 simultaneous connections. You can override this default by setting MaxConnect up to the maximum number of simultaneous connections configured on the database server.

When to specify MaxConnect
You must specify a value for the MaxConnect parameter *before* connecting to the database.

Applies to

DIR Sybase DirectConnect
SYC Sybase Adaptive Server Enterprise

Syntax

MaxConnect = *value*

Parameter	Description
value	The maximum number of simultaneous connections you want to make when accessing a database

Default value

MaxConnect = 25

Usage

DirectConnect and SYC MaxConnect sets the Sybase CT-Lib connection property CS_MAX_CONNECT to the number of simultaneous database connections you specify for a single CT-Lib context.

Examples

To set the MaxConnect value to a maximum of 50 simultaneous database connections, type 50 in the Maximum Client Library Connections box (when using the SYC interface) or the Maximum Connections For This Context box (when using the DIR interface). This check box is on the Network tab.

MixedCase

Description

Specifies whether you want connections to an Oracle database to be case sensitive or case insensitive.

By default, MixedCase is set to 0. This setting specifies a case-insensitive connection and assumes that all identifiers are uppercase. To make the Oracle connection case sensitive, set the MixedCase parameter to 1.

Applies to

O84 Oracle 8.x and Oracle8*i*
O90 Oracle9*i*
O10 Oracle 10*g*

Syntax

MixedCase = *value*

Parameter	Description
value	Specifies whether an Oracle database connection is case sensitive or case insensitive. Values are: • **0** (Default) The Oracle database connection is case insensitive. It assumes that all identifiers are uppercase. • **1** The Oracle database connection is case sensitive. It supports mixed case, uppercase, and lowercase identifiers.

Default value

MixedCase = 0

Usage

When you set the MixedCase parameter to 1 and define a primary key for a table in an Oracle database, all of the following must contain only uppercase letters:

- The name of the primary key
- The name of the table containing the primary key
- The names of any foreign keys that reference the primary key

Examples

To make an Oracle database connection case sensitive:

- **Database profile** Select the Case Sensitive check box on the Connection tab in the Database Profile Setup dialog box.

Mode

Description

Specifies access permission to the OLE DB data provider.

When to specify Mode
You must specify the Mode parameter *before* connecting to the database.

Applies to

OLE DB

Syntax

Mode = '*value*'

Parameter	Description
value	Specifies access permission to the OLE DB data provider. Values are: • **Deny read share** Prevents other users from opening in read mode. • **Deny write share** Prevents other users from opening in write mode. • **Exclusive share** Prevents other users from opening in read/write mode. • **No share deny** Neither read nor write access can be denied to other users. • **Read/Write** Allows read/write access. • **Read-only** Allows read access. • **Write-only** Allows write access.

Default value

None

Examples

To allow other users read/write access to the OLE DB data provider, on the Transaction tab in the Database Profile Setup dialog box, select Read/Write from the Mode list box.

See also

DataLink

MsgTerse

Description

Specifies whether InfoMaker should display terse error messages for JDBC or ODBC drivers. A terse error message is one without the SQLSTATE = *nnnn* prefix, where *nnnn* is the number of the error message.

By default, InfoMaker displays JDBC and ODBC error messages with the SQLSTATE prefix. To display error messages without the SQLSTATE prefix, set MsgTerse to `'Yes'`.

Applies to

JDB JDBC
ODBC

Syntax

MsgTerse = '*value*'

Parameter	Description
value	Specifies whether InfoMaker should display error messages without the SQLSTATE prefix. Values are: • **Yes** Display error messages *without* the SQLSTATE prefix • **No** (Default) Display error messages *with* the SQLSTATE prefix

Default value

MsgTerse = 'No'

Usage

You can set the MsgTerse parameter to 'Yes' to display shorter JDBC or ODBC error messages in InfoMaker. This might be useful if space on your screen is limited.

For example, suppose you are using the Data Pipeline in InfoMaker to pipe data to an Adaptive Server Anywhere ODBC database, and errors occur while you are executing the pipeline. If MsgTerse is set to 'No' (the default value), pipeline errors display in an Error dialog box *with* the SQLSTATE prefix (for example, SQLSTATE = 23000).

If you specify MsgTerse = 'Yes' in the database profile of the Adaptive Server Anywhere destination database, the Data Pipeline displays terse ODBC error messages *without* the SQLSTATE prefix.

For instructions on using the Data Pipeline, see the InfoMaker *User's Guide*.

Examples

To specify that InfoMaker should display terse error messages without the SQLSTATE prefix:

- **Database profile** Select the Display Terse Error Messages check box on the System tab in the Database Profile Setup dialog box.

NCharBind

Description

Specifies whether InfoMaker binds string variables in a program to an internal variable with the Oracle Char or Oracle NChar datatype.

Applies to

ADO.NET (Oracle.DataAccess.Client only)
O90 Oracle9*i*
O10 Oracle 10*g*

Syntax

NCharBind = *value*

Parameter	Description
value	Specifies whether InfoMaker binds string variables in a program to an internal variable with the Char or NChar datatype. Values are: • **0** (Default) InfoMaker binds string data as a Char datatype. • **1** InfoMaker binds string data as an NChar datatype.

Default value

NCharBind=0

Usage

With NCharBind=1, the Oracle drivers bind all string parameters to internal variables with the NChar datatype. If the string parameters are a mix of Char and NChar or NVarChar2 datatypes, set NcharBind=1 to ensure that the NChar data is bound correctly. If all string parameters have a Char datatype, set NcharBind=0 (the default), because binding a Char variable as an NChar datatype substantially downgrades the Oracle database driver's performance.

Examples

To specify that string arguments should be bound as the NChar datatype:

- **Database profile** Select the NChar Bind box on the Transaction tab in the Database Profile Setup dialog box.

NumbersInternal

Description

Specifies that numbers should be retrieved from the database using Oracle's internal 21-byte binary NUMBER datatype format instead of using OCI strings. The NumbersInternal parameter is relevant *only* when you are accessing an Oracle database configured with an EBCDIC character set or other non-ASCII character set.

When to specify NumbersInternal
You must specify the NumbersInternal parameter *before* connecting to the database.

Applies to

O84 Oracle 8.x and Oracle8*i*
O90 Oracle9*i*
O10 Oracle 10*g*

Syntax

NumbersInternal = *value*

Parameter	Description
value	Specifies that numbers should be retrieved using Oracle's internal 21-byte binary NUMBER datatype format. Values are: • **0** (Default) Do not retrieve numbers in internal format. • **1** Retrieve numbers in internal format.

Default value

NumbersInternal = 0

Usage

In addition to specifying that numbers be retrieved from the database using Oracle's internal 21-byte binary NUMBER datatype format, the NumbersInternal parameter also provides an internal algorithm for deciphering the result.

Examples

To specify that you want numbers to be retrieved using Oracle's internal format:

- **Database profile** Select the Retrieve Numbers in Internal Format check box on the Syntax tab in the Database Profile Setup dialog box.

NumericFormat

Description

If supported by the DBMS or back-end database, setting NumericFormat tells the driver to do special formatting of numeric strings in SQL syntax. This formatting affects how InfoMaker generates numeric values in the SQL syntax it internally builds in reports and sends to your database.

Applies to

JDB JDBC
ODBC

Syntax

The syntax you use depends on the back-end DBMS you are accessing and how you want to format the numeric string.

The following are typical syntax examples for Oracle databases that format a numeric string with a comma as the decimal separator. (See the Examples section for information about how InfoMaker generates numeric values in the SQL syntax it builds and sends to the database.)

In the InfoMaker development environment, the Database Profile Setup dialog box inserts special characters (quotes) where needed, so you can specify just the NumericFormat value (%s in this example).

IBM DB2 syntax If you are accessing an IBM DB2 database through the ODBC interface, use the following syntax for NumericFormat. Note the use of *one single quote* at the beginning and end of the string:

```
NumericFormat='%s,%s'
```

Oracle JDBC or ODBC syntax If you are accessing an Oracle database through the JDBC or ODBC interface, use the following syntax for NumericFormat. Note the use of *three single quotes* at the beginning and end of the string:

```
NumericFormat = '''%s,%s'''
```

Parameter	Description
'	**IBM DB2 syntax** Type a single open quote. InfoMaker returns no open quote in the SQL syntax it builds and sends to the database, as required by IBM DB2 databases.
'''	**Oracle, JDBC, or ODBC syntax** Type three single open quotes. InfoMaker parses the second and third quotes as one single open quote in the SQL syntax it builds and sends to the database.
%s	Represents one or more digits to the *left of the decimal* in the numeric string. InfoMaker substitutes this value with the digits to the left of the decimal when it builds the SQL syntax.
,	Represents the decimal separator character (in this case a comma).
%s	Represents one or more digits to the *right of the decimal* in the numeric string. InfoMaker substitutes this value with the digits to the right of the decimal when it builds the SQL syntax.
'	**IBM DB2 syntax** Type one single closed quote. InfoMaker returns no closed quote in the SQL syntax it builds and sends to the database, as required by IBM DB2 databases.
'''	**Oracle, JDBC, or ODBC syntax** Type three single closed quotes. InfoMaker parses the first and second quotes as one single closed quote in the SQL syntax it builds and sends to the database.

Default value None

Usage

When to set NumericFormat In general, you should *not* need to set the NumericFormat parameter. Most back-end DBMSs do not require that the driver do special formatting of numeric strings in SQL syntax. However, some databases might require special formatting, such as an IBM DB2/MVS database server configured to use a comma as the decimal separator.

In these cases, setting NumericFormat allows you to generate numeric values with special formatting in the SQL syntax that InfoMaker builds in reports and sends to your database. For example, if the decimal separator for your DBMS is a comma, you might want to set NumericFormat as shown in the Examples section below to use a comma as the decimal delimiter in the SQL syntax sent to your database.

Examples

Example 1 (IBM DB2 syntax) This example shows how to specify that you want InfoMaker to generate two numeric values in the format *125,50* and *4,0*. InfoMaker uses the comma as a decimal separator in the SQL syntax it builds in reports and sends to an IBM DB2 database.

- **Database profile** Type the following in the Numeric Format box on the Syntax tab in the Database Profile Setup dialog box:

```
%s,%s
```

What happens InfoMaker internally builds the following SQL INSERT statement in the report and sends the syntax to your database. InfoMaker returns no quotes in the SQL syntax.

```
INSERT INTO MYTABLE (a, b)
VALUES (125,50, 4,0)
```

Example 2 (Oracle JDBC or ODBC syntax) This example shows how to specify that you want InfoMaker to generate two numeric values in the format *'125,50'* and *'4,0'*. InfoMaker uses the comma as a decimal separator in the SQL syntax it builds in reports and sends to an Oracle database.

- **Database profile** Type the following in the Numeric Format box on the Syntax tab in the Database Profile Setup dialog box:

```
%s,%s
```

What happens InfoMaker internally builds the following SQL INSERT statement in the report and sends the syntax to your database. InfoMaker returns single quotes in the SQL syntax.

```
INSERT INTO MYTABLE (a, b)
VALUES ('125,50', '4,0')
```

See also

DecimalSeparator

ObjectMode

Description

Allows InfoMaker to turn off the Oracle Call Interface (OCI) object mode. By default, InfoMaker sets the mode parameter of OCIInitialize(), the first OCI call in any OCI application, to OCI_OBJECT. When object mode is on, your application can define and use new database object types. However, if your application uses an Oracle 8.1.7 database, it cannot perform external OCI activity in a child OCI environment, such as calling an external DLL to execute queries in an Oracle 8.1.7 database, when object mode is on.

Applies to

O84 Oracle 8.x and Oracle8*i*
O90 Oracle9*i*
O10 Oracle 10*g*

Syntax

ObjectMode = *value*

Parameter	Description
value	Specifies whether object mode is enabled or not. Values are: • **Yes** (Default) Use object mode. • **No** Do not use object mode.

Default value

Yes

Usage

To turn ObjectMode off, clear the ObjectMode check box on the Connection tab of the Database Profile Setup dialog box, or set ObjectMode to "No" in a script.

Examples

To specify that you want ObjectMode disabled:

- **Database profile** Deselect the ObjectMode check box on the Connection tab of the Database Profile Setup dialog box.

OJSyntax

Description

Specifies how InfoMaker formats the SQL syntax for outer joins for the database back end you are accessing.

Applies to

Informix 9
JDB JDBC
ODBC
OLE DB
O90 Oracle9*i*
O10 Oracle 10*g*
SYC Sybase Adaptive Server Enterprise

Syntax

OJSyntax = *value*

Parameter	Description
value	Specifies how you want SQL syntax to be formatted. Values are: • **ANSI_Escape** Apply ANSI standards and enclose the outer joins in escape notation { oj ... } that is parsed by the driver and replaced with DBMS-specific grammar. • **ANSI** Apply ANSI standards. • **PB** Maintain rules that applied to PowerBuilder 7.

Default value

OJSyntax = ANSI for IN9 and SYC, OJSyntax = ANSI_ESCAPE for JDBC, ODBC, and OLE DB, OJSyntax = PB for O90 and O10.

Usage

All InfoMaker database interfaces provide support for ANSI SQL-92 outer join SQL syntax generation. InfoMaker supports both left and right outer joins in graphics mode and full outer and inner joins in syntax mode.

You must set the OJSyntax parameter to indicate the version of outer join SQL syntax you want InfoMaker to generate. For JDBC, ODBC, and OLE DB, the default is ANSI_Escape and can be reset to ANSI or PB (native). For IN9 and SYC, the default is ANSI and can be reset to PB. For O90 and O10, the default is PB, which means use Oracle native outer join syntax, and can be reset to ANSI.

Define outer joins in the SQL painter for portability When you define an outer join SELECT statement graphically in the SQL painter, the DataWindow object stores the SQL in pseudocode. At runtime, the outer join syntax is generated based on the current OJSyntax parameter setting. This provides some degree of portability for reports among multiple DMBSs.

When you define an outer join SELECT statement in syntax mode, the DataWindow object stores the SQL as syntax. This syntax is used without modification at runtime. The OJSyntax parameter setting does *not* affect the SQL.

Using native outer join syntax The option PB generates native outer join syntax. It is available for ODBC and OLE DB only if PBOuterJoin and PBOuterJoinOperator syntax entries are set in the appropriate SYNTAX section for your DBMS in the *Sybase\Shared\PowerBuilder\pbodb105.ini* file.

The PB option is available for JDBC only if PBOuterJoin and PBOuterJoinOperator syntax entries are set in the Windows registry in the appropriate key for your DBMS in the *HKEY_CURRENT_USER\Software\Sybase\PowerBuilder\10.5\pbjdbc* key. This key is not installed by default. See the *egreg.txt* file in *Sybase\Shared\PowerBuilder* for an example of a registry file you could execute to add or change PowerBuilder JDBC settings for your DBMS.

When you migrate applications from InfoMaker 7 and earlier versions of InfoMaker, using ANSI outer join syntax might produce errors, depending on how the joins were defined in the painter. If a table is joined to multiple other tables with right outer joins, a valid ANSI outer join statement cannot be generated.

For more information about outer joins, see the section on using ANSI outer joins in the InfoMaker *User's Guide*.

OJSyntax does not apply to DIR For one database interface, DIR, the database connection always uses ANSI outer join SQL syntax.

Examples

To set the value of OJSyntax:

- **Database profile** Select the appropriate value from the Outer Join Syntax drop-down list on the Syntax tab in the Database Profile Setup dialog box.

PackageProcs

Description

Specifies that the stored procedures and functions encapsulated in an Oracle database package should be appended to the lists of Oracle standalone stored procedures and functions displayed in the DataWindow and Database painters.

When to specify PackageProcs
You must specify the PackageProcs parameter *before* connecting to the database.

Applies to

O84 Oracle 8.x and Oracle8*i*
O90 Oracle9*i*
O10 Oracle 10*g*

Syntax

PackageProcs = *value*

Parameter	Description
value	Specifies that package-stored procedures and functions should be appended to the lists of stored procedures and functions. Values are: • **0** (Default) Do not append package-stored procedures and functions. • **1** Append package-stored procedures and functions.

Default value

PackageProcs = 0

Usage

A package is an encapsulated collection of related program objects (such as procedures, functions, variables, and cursors) stored together in an Oracle database. Listing the objects contained in a package might impose a performance penalty on your Oracle database connection. When displayed in the DataWindow painter, only those objects that contain a REF CURSOR or SELECT statement parameter are listed. When displayed in the Database painter, all objects are listed. The text source displayed is that of the entire package.

Examples

To specify that you want Oracle package objects appended to the lists of stored procedures and functions:

- **Database profile** Select the List Package Subprograms check box on the System tab in the Database Profile Setup dialog box.

PacketSize (ODBC)

Description

Specifies the network packet size in bytes when you access an ODBC data source in InfoMaker.

Many back-end DBMSs either do not support the PacketSize option or can return only the current network packet size. For information about whether the DBMS you are accessing supports PacketSize, see your DBMS documentation.

When to specify PacketSize
If your back-end DBMS supports it, you must specify the PacketSize parameter *before* connecting to the database.

Applies to

ODBC (if ODBC 2.0 or higher driver and back-end DBMS support this feature)

Syntax

PacketSize = *value*

Parameter	Description
value	A 32-bit integer value that specifies the network packet size in bytes

Default value

The default value for PacketSize is the default for your back-end DBMS.

Usage

If the PacketSize value you specify is larger than the maximum network packet size or smaller than the minimum network packet size, your ODBC driver substitutes the maximum or minimum value for the value you specified.

Examples

To set the network packet size for an ODBC data source to 2048 bytes:

- **Database profile** Type the following in the Packet Size box on the Network tab in the Database Profile Setup dialog box:

```
2048
```

PacketSize (DIR, SYC)

Description

When connecting to a database, specifies the packet size in bytes that you want the server to set for transferring data to and from your InfoMaker application. A **packet** is a fixed-size chunk of data for sending information over a network.

If the server has space limitations, it sets the packet size to less than the specified PacketSize value. Otherwise, it sets the size equal to the PacketSize value. The default value is 512 bytes.

When to specify PacketSize
You must specify the PacketSize parameter *before* connecting to the database.

Applies to

DIR Sybase DirectConnect
SYC Sybase Adaptive Server Enterprise

Syntax

PacketSize = *value*

Parameter	Description
value	A value specifying the packet size in bytes that a database server sets for transferring data to and from your application. The value must be a multiple of 512 bytes (default = 512 bytes).

Default value

PacketSize = 512

Usage

When to set If your InfoMaker application sends or receives large amounts of text or image data from the server, setting the PacketSize value larger than the default 512 bytes might speed performance by causing fewer network read and write operations.

Adaptive Server Enterprise and DirectConnect Before setting PacketSize for use with an Adaptive Server Enterprise or DirectConnect database, you or your system administrator must set the following configuration variables on the server for PacketSize to take effect:

- **Additional netmem** Sets the maximum size of additional memory that can be used for network packets larger than the default size.
- **Maximum network packet size** Sets the maximum network packet size for all database users.

For instructions on setting these configuration variables, see your database documentation.

Examples

To specify that the database server should set the packet size equal to or less than 2048 bytes:

- **Database profile** Type the following in the Packet Size box on the Network tab in the Database Profile Setup dialog box:

```
2048
```

PBCatalogOwner

Description

Specifies a nondefault owner for the extended attribute system tables. These five tables contain default extended attribute information for your database.

When you specify a PBCatalogOwner name that is different from the default owner for your DBMS, InfoMaker creates a new set of tables with the owner name you specify.

When to specify PBCatalogOwner
You must specify the PBCatalogOwner parameter *before* connecting to the database.

Applies to

DIR Sybase DirectConnect
JDB JDBC
ODBC
OLE DB
O84 Oracle 8.x and Oracle8*i*

O90 Oracle9*i*
O10 Oracle 10*g*
SYC and SYJ Sybase Adaptive Server Enterprise

Syntax

PBCatalogOwner = '*owner_name*'

Parameter	Description
owner_name	Specifies the owner of the extended attribute system tables. **For DB2 databases** If you use the DB2SYSPB.SQL script to create the extended attribute system tables in a DB2 database and replace all instances of PBOwner in the script with the name of a nondefault table owner, *owner_name* must be the same as the owner specified in the DB2SYSPB.SQL script.

Default value

The default value for PBCatalogOwner depends on the DBMS you are accessing, as follows:

DBMS	PBCatalogOwner default value
JDBC	If a value for PBCatalogOwner is not specified in the database profile or in the registry, the default value is the user ID specified in the database profile.
ODBC	If a value for PBCatalogOwner is not specified in the database profile or in the PBODB*n*0 initialization file, the default value is the user ID specified in the database profile.
OLE DB	If a value for PBCatalogOwner is not specified in the database profile or in the registry, the default value is the user ID specified in the database profile.
Oracle	`PBCatalogOwner = 'SYSTEM'`
Sybase Adaptive Server Enterprise	`PBCatalogOwner = 'dbo'`
Sybase DirectConnect	`PBCatalogOwner = 'sqlca.logid'`

Usage

When to set When you specify a nondefault owner for the extended attribute system tables, you are in effect creating alternative tables. This is useful if you want to test new validation rules or display formats without overwriting the extended attributes currently in the default tables.

JDBC databases When you connect to a JDBC database and a value for PBCatalogOwner is set in both the database profile and the registry, the setting in the profile overrides the setting in the registry.

ODBC data sources When you connect to an ODBC data source and a value for PBCatalogOwner is set in both the database profile and the PBODB105 initialization file, the setting in the profile overrides the setting in the PBODB105 initialization file.

DB2 databases When you connect to a DB2 database, you can use the DB2SYSPB.SQL script to create the extended attribute system tables. If you use the DB2SYSPB.SQL script, keep the following in mind:

- You can edit the script to change all instances of PBOwner to another name, or leave the table owner as PBOwner in the script (the default).

  Specifying SYSIBM is prohibited
  DB2 prohibits you from specifying SYSIBM as the table owner.

- You can set the PBCatalogOwner parameter to the owner you specified in this script or to PBOwner if you did not edit the script.

This parameter cannot be set dynamically. The value set when the connection is made remains in effect until it is disconnected.

Examples

This example shows how to create a new set of extended attribute system tables with the owner TEST. The names of the new tables have the prefix TEST, such as TEST.pbcatcol, TEST.pbcatedt, and so on.

- **Database profile** Type the following in the PB Catalog Table Owner box on the System tab in the Database Profile Setup dialog box:

  ```
  TEST
  ```

PBMaxBlobSize

Description

Specifies the maximum blob size that InfoMaker can read into memory.

When to specify PBMaxBlobSize
You must specify a value for the PBMaxBlobSize parameter *before* connecting to the database.

Applies to

OLE DB

Syntax

PBMaxBlobSize = *value*

Default value

PBMaxBlobSize=1024000 (OLE DB), PBMaxBlobSize=32767 (other interfaces)

Usage

InfoMaker does not restrict the maximum blob size. Instead, the maximum blob size is determined by the machine on which the application is running. If the blob size exceeds the available memory on the machine on which the application is running, InfoMaker reads the blob in chunks if the data provider supports the ISequentialStream interface. If the blob size exceeds the default value and the data provider does not support the ISequentialStream interface, InfoMaker truncates it and reports an out-of-memory error. Use the PBMaxBlobSize parameter to specify larger maximum blob sizes.

Examples

To set the PBMaxBlobSize value to 200000:

- **Database profile** Type the following in the Maximum In-Memory Blob Size box on the Transaction tab in the Database Profile Setup dialog box:

```
200000
```

PBNewSPInvocation

Description

Uses an alternative method to invoke a stored procedure.

Applies to

ODBC

Syntax

PBNewSPInvocation = *'value*'

Parameter	Description
value	Specifies whether the standard method or an alternative method is used to invoke a stored procedure. Values are: • **No** (Default) Use the standard method to invoke a stored procedure. • **Yes** Use the alternative method to invoke a stored procedure.

Default value

PBNewSPInvocation = 'No'

Usage

Output parameters might not be returned when you use an embedded SQL command to call a stored procedure. You can set PBNewSPInvocation to ‘Yes' to use an alternative method to invoke a stored procedure. The behavior of the InfoMaker ODBC driver when this parameter is set is consistent with the default behavior of the OLE DB and JDBC drivers.

If PBNewSPInvocation is set to ‘Yes', the alternative method is used when you retrieve data into a DataWindow object that uses a stored procedure. This parameter has no effect when you use RPC to invoke a stored procedure.

When PBNewSPInvocation is set to ‘Yes', the values of the PBUseProcOwner and CallEscape parameters are ignored.

Examples

To set the parameter for all connections, add the following line to every relevant section (such as `;IBM DB2/NT 2.1 DB2CLI` for a DB2 connection on Windows) in your *pbodb105.ini* file:

```
PBNewSPInvocation='Yes'
```

For more information about editing *pbodb105.ini*, see the Appendix in *Connecting to Your Database*.

To obtain the value of the stored procedure's output parameter, use the OUTPUT or OUT keyword. For example:

```
DECLARE sp_test PROCEDURE FOR SP1 VAR0=:ARGIN,
VAR1=:ARGOUT OUTPUT USING SQLCA;
```

If the stored procedure contains result sets, you must fetch the result sets first. If the stored procedure has a return value and you want to obtain it, use the format `RC=SP1`:

```
DECLARE sp_test PROCEDURE FOR RC=SP1 VAR0=:ARGIN,
VAR1=:ARGOUT OUTPUT USING SQLCA;
```

See also

DefaultProcOwner

PBTrimCharColumns

Description

Specifies whether InfoMaker should trim trailing spaces from data values retrieved from the following datatypes: Char, Char for Bit Data, VarChar, and VarChar for Bit Data.

Applies to

ODBC
OLE DB

Syntax

PBTrimCharColumns = *value*

Parameter	Description
value	Specifies whether InfoMaker should trim trailing spaces from data of type Char, Char for Bit Data, and VarChar for Bit Data. Values are: • **NO** (Default) Do not trim trailing spaces. • **YES** Trim trailing spaces.

Default value

'NO'

Usage

This parameter can only be set in the *pbodb105.ini* file. For ODBC, you can set the TrimSpaces parameter in the Database Profile Setup dialog box to perform the same function.

By default, InfoMaker trims spaces from the following datatypes: Char, Char for Bit Data, VarChar, and VarChar for Bit Data.

If your DBMS makes a distinction between Char data with trailing spaces and Char data without trailing spaces when evaluating a WHERE clause expression, you might receive the message `Row changed between retrieve and update` when your DataWindow update properties are set to "Key and updateable columns." To prevent this, change your DataWindow update properties. In embedded SQL, you can check Sqlca.Sqlnrows after each update to determine if the update took place. Avoid using Char data columns in the WHERE clause of an UPDATE or DELETE statement when PBTrimCharColumns='YES'.

Examples

To specify that InfoMaker should trim trailing spaces, add the following line to the section for the database you are accessing:

```
PBTrimCharColumns='YES'
```

See also

TrimSpaces

PBUseProcOwner

Description

When you access a database through the ODBC interface and define a report that uses a stored procedure as its data source, PBUseProcOwner specifies whether InfoMaker should qualify the stored procedure with the owner name in the SQL EXECUTE statement passed to the driver.

InfoMaker qualifies the stored procedure with an owner only if the owner associated with the stored procedure is different from the ID of the current user (the developer building the report or the user running the application containing the report).

Applies to

ODBC

Syntax

PBUseProcOwner = '*value*'

Parameter	Description

value	Specifies whether InfoMaker should qualify the stored procedure with its owner name in the SQL EXECUTE statement built by the report and passed to the driver. Values are:
	• **Yes** If the owner associated with the stored procedure is different from the current user ID, InfoMaker qualifies the stored procedure with its owner name in the SQL EXECUTE statement and passes this information to the driver. This allows users to execute stored procedures they do not own. For example:
	`EXECUTE FRAN.MYPROCEDURE`
	• **No** (Default) InfoMaker does not qualify the stored procedure with its owner name in the SQL EXECUTE statement passed to the driver. For example:
	`EXECUTE MYPROCEDURE`

Default value

PBUseProcOwner = 'No'

Usage

Determining the PBUseProcOwner value InfoMaker searches the following in this order to determine the PBUseProcOwner value:

1 The section for your database profile in the InfoMaker initialization file.

2 The section for your ODBC driver in the *PBODB105* initialization file.

If InfoMaker does not find a PBUseProcOwner value in these locations, it defaults to a value of 'No'.

If DBA owns the Adaptive Server Anywhere stored procedure DBA (database administrator) is a reserved word in Adaptive Server Anywhere syntax.

If you define a report with an Adaptive Server Anywhere stored procedure as its data source and DBA owns the stored procedure, the painter passes the following SQL EXECUTE statement to the ODBC driver if PBUseProcOwner is set to Yes:

```
EXECUTE DBA.MYPROCEDURE
```

This statement generates a syntax error because it includes the DBA reserved word.

If DBA owns the Adaptive Server Anywhere stored procedure you are using, you can avoid this syntax error by setting PBUseProcOwner to No so that InfoMaker does not qualify the stored procedure with DBA.

In some situations, however, you *must* qualify the stored procedure with the DBA owner. For example, the DBA might want to grant execute permission to another user ID. In this case, you can avoid errors by editing the SQL EXECUTE syntax to enclose DBA in quotes, like this:

```
EXECUTE "DBA".MYPROCEDURE
```

Examples

To specify that InfoMaker should qualify the stored procedure with its owner name in the SQL EXECUTE statement:

- **Database profile** Select the Qualify Stored Procedures With Owner Name check box on the Transaction tab in the Database Profile Setup dialog box.

PersistEncrypted

Description

Specifies whether the data source you are accessing through the OLE DB interface is allowed to save your encrypted password.

When to specify PersistEncrypted
You must specify the PersistEncrypted parameter *before* connecting to the database.

Applies to

OLE DB

Syntax

PersistEncrypted = '*value*'

Parameter	Description
value	Specifies whether the data source can save your encrypted password. Values are: • **True** Tells the data source it can save your password. • **False** (Default) Tells the data source it cannot save your password.

Default value

PersistEncrypted = 'False'

Examples

To tell the data source you are accessing through OLE DB that it can save your password:

- **Database profile** Select the Persist Encrypted check box on the Security tab in the Database Profile Setup dialog box.

See also

DataLink
MaskPassword
EncryptPassword
PersistSensitive

PersistSensitive

Description

Specifies whether the data source you are accessing through the OLE DB interface is allowed to save sensitive authentication information, such as a password, along with other authentication information.

When to specify PersistSensitive
You must specify the PersistSensitive parameter *before* connecting to the database.

Applies to

OLE DB

Syntax

PersistSensitive = '*value*'

Parameter	Description
value	Specifies whether the data source can save your authentication information. Values are: • **True** Tells the data source it can save your authentication information. • **False** (Default) Tells the data source it cannot save your authentication information.

Default value

PersistSensitive = 'False'

Examples

To tell the data source you are accessing through OLE DB that it can save your authentication information:

- **Database profile** Select the Persist Security Info check box on the Security tab in the Database Profile Setup dialog box.

See also

MaskPassword
EncryptPassword
PersistEncrypted

Properties

Description

Sets properties specific to the particular JDBC driver you are using to connect to the database.

Applies to

JDB JDBC

Syntax

Properties = '*property_value*'

Default value

None

Usage

The Driver-Specific Properties box allows you to set properties specific to a particular driver.

For information about the properties supported by your JDBC driver, see the vendor's documentation.

Define User ID and Password
If properties are defined, you *must* also define the user ID and password in the properties box.

Examples

To set a property for the Sybase jConnect driver:

- **Database profile** Type the following in the Driver-Specify Properties box on the Connection tab in the Database Profile Setup dialog box:

```
SQLINITSTRING=set TextSize 32000;
user=sa;password=manager
```

See also

Driver
URL

ProtectionLevel

Description

Specifies the level of protection applied to data sent between InfoMaker and the data server through the OLE DB data provider. This parameter applies only to network connections other than Remote Procedure Call (RPC) connections. Similar levels of protection can be specified for authenticated RPC connections.

When to specify ProtectionLevel
You must specify the ProtectionLevel parameter *before* connecting to the database.

Applies to

OLE DB

Syntax **ProtectionLevel** = '*value*'

Parameter	Description
value	Specifies the level of protection applied to data sent between InfoMaker and the data server. Values are: • **Not set** No level of protection is selected. • **Call** Authenticates the source of the data at the beginning of each request from the client to the server. • **Connect** Authenticates only when the client establishes the connection with the server. • **None** Performs no authentication of data. • **Packet** Authenticates that all data received is from the client. • **Packet (Integrity)** Authenticates that all data received is from the client and that it has not been changed in transit. • **Packet (Privacy)** Authenticates that all data received is from the client, that it has not been changed in transit, and that it protects the privacy of the data by encrypting it.

Default value Not set

Examples To set a level of protection for the data sent between InfoMaker and the data server:

- **Database profile** On the Security tab in the Database Profile Setup dialog box, select Connect from the Protection Level drop-down list.

See also DataLink

Provider

Description Identifies the data provider you want to use to connect to your data source.

When to specify Provider
You must specify the Provider parameter *before* connecting to the database.

Applies to OLE DB

Syntax **Provider** = '*provider_name*'

Default value None

Usage

Select a data provider from the list of installed data providers displayed in the Provider drop-down list. For example, if you are using Microsoft's OLE DB Provider for ODBC, select MSDASQL as the Provider value. If you are using Microsoft's OLE DB Provider for SQL Server, select SQLOLEDB as the Provider value.

For more information, see the documentation provided by your OLE DB data provider.

Examples

Example 1 To use the Microsoft OLE DB Provider for ODBC to connect to the EAS Demo DB:

- **Database profile** Select MSDASQL from the Provider drop-down list on the Connection tab in the Database Profile Setup dialog box for OLE DB.

Example 2 To use the Microsoft OLE DB Provider for Oracle to connect to an Oracle 8 database:

- **Database profile** Select MSDAORA from the Provider drop-down list on the Connection tab in the Database Profile Setup dialog box.

See also

DataLink
DataSource

ProviderString

Description

When connecting to a Microsoft SQL Server database, identifies the specific database on the server to which you want to connect.

When to specify ProviderString
You must specify the ProviderString parameter *before* connecting to the database.

Applies to

OLE DB

Syntax

ProviderString = '*value*'

Default value

None

Usage

Since Microsoft SQL Server supports multiple instances of a database on a single server, you must identify the specific database to which you want to connect by entering the database name.

For more information, see the documentation for Microsoft SQL Server.

Examples

To identify a specific Microsoft SQL Server database:

- **Database profile** Enter the following in the Extended Properties box on the Connection tab in the Database Profile Setup dialog box for OLE DB:

```
Database = demodb1
```

See also

URL

PWDialog

Description

Controls whether a Password Expired dialog box displays in an application at runtime if a user's password has expired. This parameter has no effect in InfoMaker.

When PWDialog is set to 1, the Password Expired dialog box prompts users to change their passwords if they attempt to log in to the database with an expired password. By default, PWDialog is set to 0 to specify that the Password Expired dialog box does not display in your application at runtime.

The setting of PWDialog affects applications only at runtime. It has no effect in the development environment because, regardless of the PWDialog setting, the Change Password dialog box displays in the development environment to prompt users to change an expired password.

When to specify PWDialog
You must specify a value for PWDialog *before* connecting to the database.

Applies to

O84 Oracle 8.x and Oracle8*i*
O90 Oracle9*i*
O10 Oracle 10*g*
SYC Sybase Adaptive Server Enterprise

Syntax

PWDialog = *value*

Parameter	Description
value	Specifies whether the Password Expired dialog box displays in an application at execution time to prompt the user to change an expired login password. Values are: • **0** (Default) Do not display the Password Expired dialog box at execution time. • **1** Display the Password Expired dialog box at execution time to prompt the user to change an expired password.

Default value

PWDialog = 0

Usage

When to use Setting PWDialog to 1 to display the Password Expired dialog box in your application provides a convenient way for you to notify your users that a password has expired and allow them to change it.

What happens When the Password Expired dialog box displays in your application at runtime, it notifies users that the password for their login ID has expired and prompts them to supply a new password. For example, for Adaptive Server Enterprise, the sp_password system stored procedure runs to set the new password. Once the password has been changed, the database connection succeeds.

If the user clicks Cancel to close the Password Expired dialog box without changing the password, the database connection fails and a message displays indicating that the password has expired.

Examples

To display the Password Expired dialog box when needed in your application:

- **Database profile** Although the setting of PWDialog has no effect in the development environment, you might want to set it in your database profile to generate connection syntax on the Preview tab that you can copy into your code. Select the Display Runtime Dialog When Password Expires check box (for SYC connections) or the Password Expiration Dialog check box (for Oracle connections) on the Connection tab in the Database Profile Setup dialog box.

PWEncrypt

Description

PWEncrypt specifies whether you want Open Client to automatically encrypt your password when connecting to a Sybase Adaptive Server Enterprise database in InfoMaker.

When to specify PWEncrypt
You must specify the PWEncrypt parameter *before* connecting to the database.

Applies to

SYC Sybase Adaptive Server Enterprise

Syntax

PWEncrypt = '*value*'

Parameter	Description
value	Specifies whether you want the Open Client software to encrypt your password. Values are: • **Yes** (Default) Tells Open Client to encrypt the password by setting the CS_SEC_ENCRYPTION connection property to CS_TRUE. • **No** Tells Open Client not to encrypt the password by setting the CS_SEC_ENCRYPTION connection property to CS_FALSE.

Default value

PWEncrypt = 'Yes'

Examples

To tell Open Client not to encrypt your password when connecting to a Sybase Adaptive Server Enterprise database in InfoMaker:

- **Database profile** Clear the Encrypt Password check box on the Network tab in the Database Profile Setup dialog box.

QualifyPublic

Description

Specifies that the PUBLIC qualifier prepended to Oracle synonyms belonging to the public schema or user group is retained in the SQL Select table list.

When to specify QualifyPublic
You must specify the QualifyPublic parameter *before* connecting to the database.

Applies to

O84 Oracle 8.x and Oracle8*i*
O90 Oracle9*i*
O10 Oracle 10*g*

Syntax

QualifyPublic = *value*

Parameter	Description
value	Specifies that the PUBLIC qualifier should be retained in the SQL Select table list. Values are: • **0** (Default) Do not retain the PUBLIC qualifier. • **1** Do retain the PUBLIC qualifier.

Default value

QualifyPublic = 0

Usage

InfoMaker's default behavior has been to discard the PUBLIC qualifier so that the object reference is generalized in the generated SQL statement, facilitating the deployment of an application from a development database instance to a production database. However, in certain reports, the absence of the PUBLIC qualifier breaks the association of the synonym with its extended attributes, preventing these attributes from being used. The QualifyPublic parameter allows you to specify whether the PUBLIC qualifier should be retained.

Examples

To specify that you want the PUBLIC qualifier to be retained in the SQL Select table list:

- **Database profile** Select the Qualify Public Synonyms check box on the System tab in the Database Profile Setup dialog box.

Release

Description

Specifies what version of Sybase Open Client Client-Library (CT-Lib) software is in use on the client workstation.

When to specify Release
You must specify a value for Release *before* connecting to the database.

Applies to

SYC Sybase Adaptive Server Enterprise

Syntax

Release = '*value*'

Parameter	Description
value	Specifies the version of Open Client Client-Library your application uses. The value corresponds to the value of the CS_VERSION property that is used to allocate a context structure for the client. Multiple values that specify the same client context are provided for backwards compatibility. Values are: • **10.x** CS_VERSION_100 • **11** CS_VERSION_110 • **11.5** CS_VERSION_110 • **12** CS_VERSION_110 • **12.5** CS_VERSION_125 • **12.5.1** CS_VERSION_125 • **15** CS_VERSION_15

Default value

Release='11'

Usage

The Release parameter must correspond to the version of Open Client software installed on the client workstation. For example, do not specify 12.5 or 12.5.1 if your Open Client version is 12.0, even if your Adaptive Server version is 12.5 or 12.5.1.

To use Adaptive Server 15, you must install Open Client version 15 on the client computer and set the Release parameter to 15 to establish an Open Client 15 client context.

The Open Client context is allocated by the first *PBSYC105.DLL* database connection. This context acts as the parent context for all subsequent *PBSYC105.DLL* connections. Therefore, you must specify the same value for the Release parameter for all your connections.

The SYC driver links to the appropriate version of the client libraries dynamically and the Open Client context is released when all connections are closed. If you open multiple connections, the first Open Client context established is used for all of them. If you need to establish a new Open Client context in the development environment, close all open connections and establish a new connection with the Release parameter set to the context you require.

During each database login, *PBSYC105.DLL* automatically determines the version of Adaptive Server being accessed. It customizes its behavior to optimize performance and features for the combination of the Adaptive Server version and the Open Client context specified in the Release parameter. Specifying a value for Release that does not correspond to the Open Client software on the client can cause unpredictable results.

The values 12.5 and 12.5.1 both open an Open Client 12.5 context. However, you should always specify Release='12.5' if you are using Open Client 12.5 and Release='12.5.1' if you are using Open Client 12.5.1. This ensures that *PBSYC105.DLL* correctly handles the following scenarios that require Open Client 12.5.1 and Adaptive Server 12.5.1:

- Use the Date and Time datatypes introduced in Adaptive Server 12.5.1 in RPC calls that explicitly call for these datatypes in the stored procedure argument list.
- Use the Date and Time datatypes in `Update where current of` and `Delete where current of` statements.

DataWindow retrieval, insert, update, and delete processing work correctly against Date and Time datatypes using any Open Client software and Adaptive Server 12.5.1. In the Database painter, the Date and Time datatypes display in the list of metadata types when you are connected to an Adaptive Server 12.5.1 server in any Open Client context.

Certain other features are supported only when you access a specified version of a SQL Server 10/11 or Adaptive Server Enterprise database using its associated Open Client software. For example, you must:

- Set the Release parameter to 11 or higher and use Open Client 11.x or higher and Adaptive Server 11.x or higher to take advantage of network-based security and directory services in your application.
- Set Release to 12.5 and use Open Client 12.5 or higher and Adaptive Server 12.5 or higher to access Char and VarChar columns with more than 255 characters.
- Set Release to 15 and use Open Client 15 or higher and Adaptive Server 15 or higher to access the UniText and 64-bit integer (BigInt) SQL datatypes added in version 15 of Adaptive Server.

Examples

To specify that your InfoMaker application accesses an Adaptive Server Enterprise 15 database using an Open Client Client-Library 15 context:

- **Database profile** Select 15 from the Release drop-down list on the Connection tab in the Database Profile Setup dialog box.

Request

Description

Specifies whether to allocate new transaction resources each time the client application sends a request and then release those resources after each request.

Applies to

DIR Sybase DirectConnect (applies only to Access Service for DB2/MVS)

Syntax

Request = *value*

Parameter	Description
value	Specifies whether you want to release transaction resources after each request. Values are: • **0** (Default) Maintain resources for the duration of the database connection. • **1** Release resources after each request.

Default value

Request = 0

Usage

Requirements for using the Request parameter Setting the Request parameter to 1 to release resources has an effect only when you do both of the following:

- Set the AutoCommit database preference to True to specify that InfoMaker should issue SQL statements outside the scope of a transaction. (See the description of AutoCommit.)
- Specify the value for Request *before* connecting to a database.

What happens When you set the Request parameter to 1, transaction resources are allocated for each request and released when the request finishes. This might slow the performance of your application, but it allows more simultaneous users of the system.

Examples

To specify that you want to release resources after each request:

- **Database profile** Select the Release Transaction Resources After Each Request check box on the Transaction tab in the Database Profile Setup dialog box.

See also

AutoCommit

RPCRebind

Description

Specifies whether you want InfoMaker to rebind Remote Procedure Call (RPC) parameters.

When to specify RPCRebind
If your back-end DBMS supports it, you must specify the RPCRebind parameter *before* connecting to the database.

Applies to

ODBC

Syntax

RPCRebind = *value*

Parameter	Description
value	Specifies whether you want InfoMaker to rebind RPC parameters. Values are: • **0** (Default) Use the bound variable to determine all required binding information. • **1** Rebind the parameters and use the parameter information returned from the database to bind the parameter.

Default value

RPCRebind = 0

Usage

For those DBMSs that support RPC calls, InfoMaker binds the parameters for the call based on the size of the variables bound to the parameters.

Some drivers require rebinding of the parameters so the parameter size (as returned from the back-end database) is used instead of the variable size. Failure to do this might result in an error or truncation for string parameters. However, some drivers always expect the binding to reflect the variable size. The RPCRebind parameter allows you to specify whether you want to rebind the parameters when RPCs are executed.

Examples

To specify that InfoMaker should rebind RPC parameters:

- **Database profile** Select the RPC Rebind check box on the Transaction tab in the Database Profile Setup dialog box.

Scroll

Description

Specifies whether you want to use a scroll cursor when connecting to an Informix database in InfoMaker. When you fetch rows in an Informix table, using a scroll cursor enables you to fetch the next row, previous row, first row, or last row.

By default, InfoMaker does not use scroll cursors in an Informix database connection.

Applies to

IN9 Informix

Syntax

Scroll = *value*

Parameter	Description
value	Specifies whether you want to use a scroll cursor when connecting to an Informix database in InfoMaker. Values are: • **0** (Default) Do not use a scroll cursor. • **1** Use a scroll cursor.

Default value

Scroll = 0

Examples

To specify that you want to use a scroll cursor when connecting to an Informix database in InfoMaker:

- **Database profile** Select the Use A Scroll Cursor check box on the Transaction tab in the Database Profile Setup dialog box.

Sec_Channel_Bind

Description

When you access a Sybase Adaptive Server Enterprise database in InfoMaker through Open Client, Sec_Channel_Bind is one of several parameters that support login authentication for network-based security services. (For other login authentication parameters, see the See Also section.)

Sec_Channel_Bind controls whether your connection's security mechanism performs channel binding. When Sec_Channel_Bind is set to 1, both Sybase Open Client Client-Library (CT-Lib) and the server provide a network channel identifier to the security mechanism before connecting. The channel identifier contains the network addresses of the client and server.

When Sec_Channel_Bind is set to 0 (the default), no channel binding is performed.

You must specify a value for Sec_Channel_Bind *before* connecting to the database.

Using third-party security mechanisms
For information about the third-party security mechanisms and operating system platforms that Sybase has tested with Open Client security services, see the Open Client documentation.

Applies to

SYC Sybase Adaptive Server Enterprise

Syntax

Sec_Channel_Bind = *value*

Parameter	Description
value	Specifies whether your connection's security mechanism performs channel binding. Values are: • **0** (Default) Do *not* perform channel binding. You can also specify `'No'` or `'False'` to set this value. • **1** Perform channel binding. Both CT-Lib and the server provide a channel identifier to the connection's security mechanism. You can also specify `'Yes'` or `'True'` to set this value.

Default value

Sec_Channel_Bind = 0

Usage

Not supported with CyberSafe Kerberos Sec_Channel_Bind is *not supported* if your security mechanism is CyberSafe Kerberos.

Set Release parameter For this parameter to take effect, you *must* also set the Release parameter to 11or higher to specify that your application should use the appropriate version of Sybase Open Client Client-Library (CT-Lib) behavior. See the description of the Release parameter for more information.

Requirements for use To use Sec_Channel_Bind or any other parameter supporting Open Client, you must meet certain requirements for using security services in your InfoMaker application. For details, see "Requirements for using Open Client security services" in *Connecting to Your Database*.

Corresponding CT-Lib connection property Specifying a value for Sec_Channel_Bind sets the corresponding Sybase CT-Lib connection property named CS_SEC_CHANBIND.

Examples

To specify that your connection's security mechanism performs channel binding, select the Enable Channel Binding check box on the Security tab in the Database Profile Setup dialog box.

See also

Release
Sec_Cred_Timeout
Sec_Delegation
Sec_Keytab_File
Sec_Mechanism
Sec_Mutual_Auth
Sec_Network_Auth
Sec_Server_Principal
Sec_Sess_Timeout

Sec_Confidential

Description

When you access a Sybase Adaptive Server Enterprise database in InfoMaker through Open Client, Sec_Confidential is one of several parameters that support per-packet security for network-based security services. (For other per-packet security parameters, see the See Also section.)

Sec_Confidential controls whether transmitted data is encrypted. When Sec_Confidential is set to 1, all requests sent to the server and all results returned by the server are encrypted.

When Sec_Confidential is set to 0 (the default), transmitted data is not encrypted.

You must specify a value for Sec_Confidential *before* connecting to the database in InfoMaker.

Using third-party security mechanisms
For information about the third-party security mechanisms and operating system platforms that Sybase has tested with Open Client security services, see the Open Client documentation.

Applies to

SYC Sybase Adaptive Server Enterprise

Syntax

Sec_Confidential = *value*

Parameter	Description
value	Specifies whether transmitted data is encrypted. Values are: • **0** (Default) Do *not* encrypt transmitted data. You can also specify `'No'` or `'False'` to set this value. • **1** Encrypt transmitted data. Requests sent to the server and results returned by the server are encrypted. You can also specify `'Yes'` or `'True'` to set this value.

Default value

Sec_Confidential = 0

Usage

When to use Encryption can protect your data if you are sending it over a public network to a nonsecure server. In a networked environment, you might want to set Sec_Confidential to 1 to ensure that all requests sent to the server and all results returned by the server are encrypted.

Set Release parameter For this parameter to take effect, you *must* also set the Release parameter to 11or higher to specify that your application should use the appropriate version of Sybase Open Client Client-Library (CT-Lib) behavior. See the description of the Release parameter for more information.

Requirements for use To use Sec_Confidential or any other parameter supporting Open Client security services, you must meet certain requirements for using security services in your InfoMaker application. For details, see "Requirements for using Open Client security services" in *Connecting to Your Database*.

Corresponding CT-Lib connection property Specifying a value for Sec_Confidential sets the corresponding Sybase CT-Lib connection property named CS_SEC_CONFIDENTIALITY.

Examples

To specify that transmitted data is encrypted, select the Encrypt All Results check box on the Security tab in the Database Profile Setup dialog box.

See also

Release
Sec_Data_Integrity
Sec_Data_Origin
Sec_Replay_Detection
Sec_Seq_Detection

Sec_Cred_Timeout

Description

When you access a Sybase Adaptive Server Enterprise database in InfoMaker through Open Client, Sec_Cred_Timeout is one of several parameters that support login authentication for network-based security services. (For other login authentication parameters, see the See Also section.)

Some security mechanisms allow applications to set credential timeout values for connections that use network-based login authentication. Sec_Cred_Timeout specifies the number of seconds remaining before a user's network credentials expire and become invalid. Users obtain network credentials when they log in to the network.

By default, Sec_Cred_Timeout specifies that there is no credential timeout limit—the credentials do not expire.

You must specify a value for Sec_Cred_Timeout *before* connecting to the database in InfoMaker.

Using third-party security mechanisms
For information about the third-party security mechanisms and operating system platforms that Sybase has tested with Open Client security services, see the Open Client documentation.

Applies to

SYC Sybase Adaptive Server Enterprise

Syntax

Sec_Cred_Timeout = *value*

Parameter	Description
value	Specifies the number of seconds remaining before a user's network credentials expire and become invalid. You can also specify `'no_limit'` (the default) to specify that the credentials not expire. A credential timeout value set by the security system's administrator supersedes any value you specify for Sec_Cred_Timeout.

Default value

Sec_Cred_Timeout = 'no_limit'

Usage

CyberSafe Kerberos If your security mechanism is CyberSafe Kerberos, Sec_Cred_Timeout cannot override the installation default value set for credential timeout.

Set Release parameter For this parameter to take effect, you *must* also set the Release parameter to 11or higher to specify that your application should use the appropriate version of Sybase Open Client Client-Library (CT-Lib) behavior. See the description of the Release parameter for more information.

Requirements for use To use Sec_Cred_Timeout or any other parameter supporting Open Client security services, you must meet certain requirements for using security services in your InfoMaker application. For details, see "Requirements for using Open Client security services" in *Connecting to Your Database*.

Corresponding CT-Lib connection property Specifying a value for Sec_Cred_Timeout sets the corresponding Sybase CT-Lib connection property named CS_SEC_CREDTIMEOUT.

Examples

To specify 120 seconds (2 minutes) remaining before a user's network credentials expire, type 120 in the Credential Timeout box on the Security tab in the Database Profile Setup dialog box.

See also

Release
Sec_Channel_Bind
Sec_Delegation
Sec_Keytab_File
Sec_Mechanism
Sec_Mutual_Auth
Sec_Network_Auth
Sec_Server_Principal
Sec_Sess_Timeout

Sec_Data_Integrity

Description

When you access a Sybase Adaptive Server Enterprise database in InfoMaker through Open Client, Sec_Data_Integrity is one of several parameters that support per-packet security for network-based security services. (For other per-packet security parameters, see the See Also section.)

Sec_Data_Integrity controls whether your connection's security mechanism checks the integrity of data transmitted to and from the server. When Sec_Data_Integrity is set to 1, the security mechanism analyzes all packets to ensure that their content was not modified during transmission.

When Sec_Data_Integrity is set to 0 (the default), no integrity checking is performed.

You must specify a value for Sec_Data_Integrity *before* connecting to the database in InfoMaker.

Using third-party security mechanisms
For information about the third-party security mechanisms and operating system platforms that Sybase has tested with Open Client security services, see the Open Client documentation.

Applies to

SYC Sybase Adaptive Server Enterprise

Syntax

Sec_Data_Integrity = *value*

Parameter	Description
value	Specifies whether your connection's security mechanism performs integrity checking on data transmitted to and from the server. Values are: • **0** (Default) Do *not* check data integrity. You can also specify `'No'` or `'False'` to set this value. • **1** Check data integrity by analyzing all packets to ensure that their content was not modified during transmission. You can also specify `'Yes'` or `'True'` to set this value.

Default value

Sec_Data_Integrity = 0

Usage

When to use Your connection's security mechanism can check data integrity only when your connection is also using network-based login authentication. For information, see your Sybase Open Client/Server documentation.

Set Release parameter For this parameter to take effect, you *must* also set the Release parameter to 11or higher to specify that your application should use the appropriate version of Sybase Open Client Client-Library (CT-Lib) behavior. See the description of the Release parameter for more information.

Requirements for use To use Sec_Data_Integrity or any other parameter supporting Open Client security services, you must meet certain requirements for using security services in your InfoMaker application. For details, see "Requirements for using Open Client security services" in *Connecting to Your Database*.

Corresponding CT-Lib connection property Specifying a value for Sec_Data_Integrity sets the corresponding Sybase CT-Lib connection property named CS_SEC_INTEGRITY.

Examples

To specify that your connection's security mechanism checks data integrity, select the Ensure Data Integrity check box on the Security tab in the Database Profile Setup dialog box.

See also

Release
Sec_Confidential
Sec_Data_Origin
Sec_Replay_Detection
Sec_Seq_Detection

Sec_Data_Origin

Description

When you access a Sybase Adaptive Server Enterprise database in InfoMaker through Open Client, Sec_Data_Origin is one of several parameters that support per-packet security for network-based security services. (For other per-packet security parameters, see the See Also section.)

Sec_Data_Origin controls whether your connection's security mechanism performs data origin stamping. When Sec_Data_Origin is set to 1, the security mechanism attaches a digital signature to each packet that verifies the packet's origin and contents.

When Sec_Data_Origin is set to 0 (the default), no data origin stamping is performed.

You must specify a value for Sec_Data_Origin *before* connecting to the database in InfoMaker.

Using third-party security mechanisms
For information about the third-party security mechanisms and operating system platforms that Sybase has tested with Open Client security services, see the Open Client documentation.

Applies to

SYC Sybase Adaptive Server Enterprise

Syntax

Sec_Data_Origin = *value*

Parameter	Description
value	Specifies whether your connection's security mechanism performs data origin stamping. Values are: • **0** (Default) Do *not* perform data origin stamping. You can also specify `'No'` or `'False'` to set this value. • **1** Perform data origin stamping by attaching a digital signature to each packet that verifies the packet's origin and contents. You can also specify `'Yes'` or `'True'` to set this value.

Default value

Sec_Data_Origin = 0

Usage

Not supported with CyberSafe Kerberos Sec_Data_Origin is *not supported* if your security mechanism is CyberSafe Kerberos.

Set Release parameter For this parameter to take effect, you *must* also set the Release parameter to 11or higher to specify that your application should use the appropriate version of Sybase Open Client Client-Library (CT-Lib) behavior. See the description of the Release parameter for more information.

Requirements for use To use Sec_Data_Origin or any other parameter supporting Open Client security services, you must meet certain requirements for using security services in your InfoMaker application. For details, see "Requirements for using Open Client security services" in *Connecting to Your Database*.

Corresponding CT-Lib connection property Specifying a value for Sec_Data_Origin sets the corresponding Sybase CT-Lib connection property named CS_SEC_DATAORIGIN.

Examples

To specify that your connection's security mechanism performs data origin stamping, select the Verify Packet Origin check box on the Security tab in the Database Profile Setup dialog box.

See also

Release
Sec_Confidential
Sec_Data_Integrity
Sec_Replay_Detection
Sec_Seq_Detection

Sec_Delegation

Description

When you access a Sybase Adaptive Server Enterprise database in InfoMaker through Open Client, Sec_Delegation is one of several parameters that support login authentication for network-based security services. (For other login authentication parameters, see the See Also section.)

For applications that are using network-based login authentication to connect to a Sybase Open Server gateway, Sec_Delegation controls whether the gateway server is allowed to connect to a remote SQL Server using delegated credentials. When Sec_Delegation is set to 1, the gateway can connect to a remote server using the client's delegated credentials. The remote server must also be using network-based authentication and an identical security mechanism.

When Sec_Delegation is set to 0 (the default), the gateway server cannot connect to a remote server using delegated credentials.

You must specify a value for Sec_Delegation *before* connecting to the database in InfoMaker.

Using third-party security mechanisms
For information about the third-party security mechanisms and operating system platforms that Sybase has tested with Open Client security services, see the Open Client documentation.

Applies to

SYC Sybase Adaptive Server Enterprise

Syntax

Sec_Delegation = *value*

Parameter	Description
value	Specifies whether the Sybase Open Server gateway is allowed to connect to a remote SQL Server using the client's delegated credentials. Values are: • **0** (Default) Prohibit the gateway from connecting to a remote server using delegated credentials. You can also specify `'No'` or `'False'` to set this value. • **1** Allow the gateway to connect to a remote server using delegated credentials. You can also specify `'Yes'` or `'True'` to set this value.

Default value

Sec_Delegation = 0

Usage

Not supported with CyberSafe Kerberos Sec_Delegation is *not supported* if your security mechanism is CyberSafe Kerberos.

Set Release parameter For this parameter to take effect, you *must* also set the Release parameter to 11or higher to specify that your application should use the appropriate version of Sybase Open Client Client-Library (CT-Lib) behavior. See the description of the Release parameter for more information.

Requirements for use To use Sec_Delegation or any other parameter supporting Open Client security services, you must meet certain requirements for using security services in your InfoMaker application. For details, see "Requirements for using Open Client security services" in *Connecting to Your Database*.

Corresponding CT-Lib connection property Specifying a value for Sec_Delegation sets the corresponding Sybase CT-Lib connection property named CS_SEC_DELEGATION.

Examples

To allow the Open Server gateway to connect to a remote server using delegated credentials, select the Use Delegated Credentials check box on the Security tab in the Database Profile Setup dialog box.

See also

Release
Sec_Channel_Bind
Sec_Cred_Timeout
Sec_Keytab_File
Sec_Mechanism
Sec_Mutual_Auth
Sec_Network_Auth
Sec_Server_Principal
Sec_Sess_Timeout

Sec_Keytab_File

Description

When you access a Sybase Adaptive Server Enterprise database in InfoMaker through Open Client, Sec_Keytab_File is one of several parameters that support login authentication for network-based security services. (For other login authentication parameters, see the See Also section.)

Sec_Keytab_File applies only to connections using Distributed Computing Environment (DCE) Kerberos as their security mechanism and requesting network-based login authentication. For those connections, Sec_Keytab_File specifies the name of the keytab file containing the security key for the DCE user.

You *must* set Sec_Keytab_File if the login ID specified in the database profile or Application is *different* from the user name of the DCE user currently running the application.

You must specify a value for Sec_Keytab_File *before* connecting to the database in InfoMaker.

Using third-party security mechanisms
For information about the third-party security mechanisms and operating system platforms that Sybase has tested with Open Client security services, see the Open Client documentation.

Applies to

SYC Sybase Adaptive Server Enterprise

Syntax

Sec_Keytab_File = '*keytab_filename*'

Parameter	Description
keytab_filename	The name of the keytab file containing the security key for the DCE user

Default value

None

InfoMaker does not set Sec_Keytab_File or the corresponding Sybase Open Client Client-Library (CT-Lib) connection parameter CS_SEC_KEYTAB if you do not specify a value.

Usage

Supported only with Distributed Computing Environment Only Distributed Computing Environment (DCE) security servers and clients support the use of keytab files. Therefore, Sec_Keytab_File is supported only when your security mechanism is DCE Kerberos.

When to use If you want your application to be able to connect to a server with a different user name (login ID) than the DCE user currently running the application, set Sec_Keytab_File to specify the name of the keytab file containing the security key for the appropriate user. For details, see "Requirements for using Open Client security services" in *Connecting to Your Database*.

Set Release parameter For this parameter to take effect, you *must* also set the Release parameter to 11or higher to specify that your application should use the appropriate version of Sybase Open Client Client-Library (CT-Lib) behavior. See the description of the Release parameter for more information.

Requirements for use To use Sec_Keytab_File or any other parameter supporting Open Client security services, you must meet certain requirements for using security services in your InfoMaker application. For details, see "Requirements for using Open Client security services" in *Connecting to Your Database*.

Corresponding CT-Lib connection property Specifying a value for Sec_Keytab_File sets the corresponding Sybase CT-Lib connection property named CS_SEC_KEYTAB.

Examples

To specify *C:\DCE_KEY* as the name of the DCE keytab file, type the following in the Keytab File box on the Security tab in the Database Profile Setup dialog box:

```
C:\DCE_KEY
```

See also

Release
Sec_Channel_Bind
Sec_Cred_Timeout
Sec_Delegation
Sec_Mechanism
Sec_Mutual_Auth
Sec_Network_Auth
Sec_Server_Principal
Sec_Sess_Timeout

Sec_Mechanism

Description

When you access a Sybase Adaptive Server Enterprise database in InfoMaker through Open Client, Sec_Mechanism is one of several parameters that support login authentication for network-based security services. (For other login authentication parameters, see the See Also section.)

When you use Open Client security services, you must specify the name of the security mechanism you want to use in the Open Client/Open Server Configuration utility so that the required drivers can be loaded. The default security mechanism is the one currently specified as active in the Configuration utility.

Sec_Mechanism lets you specify a security mechanism name listed in the Open Client/Open Server Configuration utility *other than* the default (active) mechanism.

You must specify a value for Sec_Mechanism *before* connecting to the database in InfoMaker.

Using third-party security mechanisms
For information about the third-party security mechanisms and operating system platforms that Sybase has tested with Open Client security services, see the Open Client documentation.

Applies to

SYC Sybase Adaptive Server Enterprise

Syntax

Sec_Mechanism = '*mechanism_name*'

Parameter	Description
mechanism_name	The security mechanism name you want to use to establish a connection. The security mechanism name is case sensitive. You must specify it *exactly as it appears* in the Open Client/Open Server Configuration utility.

Default value

The default value for Sec_Mechanism is the security mechanism name currently specified as active in the Open Client/Open Server Configuration utility. If there is no security mechanism specified, no security service is used to establish the connection.

Usage

When to use Set Sec_Mechanism to use a security mechanism specified in the Open Client/Open Server Configuration utility *other than* the default (active) security mechanism. For instructions on using the Open Client/Open Server Configuration utility, see your Sybase Open Client/Server configuration guide.

Set Release parameter For this parameter to take effect, you *must* also set the Release parameter to 11or higher to specify that your application should use the appropriate version of Sybase Open Client Client-Library (CT-Lib) behavior. See the description of the Release parameter for more information.

Requirements for use To use Sec_Mechanism or any other parameter supporting Open Client security services, you must meet certain requirements for using security services in your InfoMaker application. For details, see "Requirements for using Open Client security services" in *Connecting to Your Database*.

Corresponding CT-Lib connection property Specifying a value for Sec_Mechanism sets the corresponding Sybase CT-Lib connection property named CS_SEC_MECHANISM.

Examples

To specify KERBEROS as your security mechanism name, type KERBEROS in the Security Mechanism box on the Security tab in the Database Profile Setup dialog box.

See also

Release
Sec_Channel_Bind
Sec_Cred_Timeout
Sec_Delegation
Sec_Keytab_File
Sec_Mutual_Auth
Sec_Network_Auth
Sec_Server_Principal
Sec_Sess_Timeout

Sec_Mutual_Auth

Description

When you access a Sybase Adaptive Server Enterprise database in InfoMaker through Open Client, Sec_Mutual_Auth is one of several parameters that support login authentication for network-based security services. (For other login authentication parameters, see the See Also section.)

Sec_Mutual_Auth controls whether your connection's security mechanism performs mutual authentication. When Sec_Mutual_Auth is set to 1, the server must prove its identity to the client before connecting by sending a credential token containing the server's principal name and proof that this name is authentic.

When Sec_Mutual_Auth is set to 0 (the default), no mutual authentication is performed.

You must specify a value for Sec_Mutual_Auth *before* connecting to the database in InfoMaker.

Using third-party security mechanisms
For information about the third-party security mechanisms and operating system platforms that Sybase has tested with Open Client security services, see the Open Client documentation.

Applies to

SYC Sybase Adaptive Server Enterprise

Syntax

Sec_Mutual_Auth = *value*

Parameter	Description
value	Specifies whether your connection's security mechanism performs mutual authentication. Values are: • **0** (Default) Does *not* perform mutual authentication. You can also specify `'No'` or `'False'` to set this value. • **1** Performs mutual authentication. The server must prove its identity to the client before connecting by sending a credential token containing the server's principal name and proof that this name is authentic. You can also specify `'Yes'` or `'True'` to set this value.

Default value

Sec_Mutual_Auth = 0

Usage

Set Release parameter For this parameter to take effect, you *must* also set the Release parameter to 11or higher to specify that your application should use the appropriate version of Sybase Open Client Client-Library (CT-Lib) behavior. See the description of the Release parameter for more information.

Requirements for use To use Sec_Mutual_Auth or any other parameter supporting Open Client security services, you must meet certain requirements for using security services in your InfoMaker application. For details, see "Requirements for using Open Client security services" in *Connecting to Your Database*.

Corresponding CT-Lib connection property Specifying a value for Sec_Mutual_Auth sets the corresponding Sybase CT-Lib connection property named CS_SEC_MUTUALAUTH.

Examples

To specify that your connection's security mechanism performs mutual authentication, select the Mutual Authentication check box on the Security tab in the Database Profiles dialog box.

See also

Release
Sec_Channel_Bind
Sec_Cred_Timeout
Sec_Delegation
Sec_Keytab_File
Sec_Mechanism
Sec_Network_Auth
Sec_Server_Principal
Sec_Sess_Timeout

Sec_Network_Auth

Description

When you access a Sybase Adaptive Server Enterprise database in InfoMaker through Open Client, Sec_Network_Auth is one of several parameters that support login authentication for network-based security services. (For other login authentication parameters, see the See Also section.)

Sec_Network_Auth controls whether your connection uses network-based login authentication. When Sec_Network_Auth is set to 1, your connection uses network-based authentication when connecting to a secure SQL Server. **Network-based authentication** means that the security mechanism—not the application—confirms that the specified user name represents the authenticated user running the application.

Since the security mechanism rather than the application authenticates your user name (login ID), you need *not* supply a login password for authentication purposes in the database profile or Application if Sec_Network_Auth is set to 1.

When Sec_Network_Auth is set to 0 (the default), your connection does not use network-based login authentication to connect to the server. You must specify a value for Sec_Network_Auth *before* connecting to the database in InfoMaker.

Using third-party security mechanisms
For information about the third-party security mechanisms and operating system platforms that Sybase has tested with Open Client security services, see the Open Client documentation.

Applies to

SYC Sybase Adaptive Server Enterprise

Syntax

Sec_Network_Auth = *value*

Parameter	Description
value	Specifies whether your connection uses network-based login authentication when connecting to a secure SQL Server. Values are: • **0** (Default) Does *not* use network-based login authentication when connecting to the server. You can also specify `'No'` or `'False'` to set this value. • **1** Uses network-based login authentication when connecting to the server. Since the security mechanism rather than the application authenticates your user name (login ID), you need *not* supply a login password for authentication purposes in the database profile. You can also specify `'Yes'` or `'True'` to set this value.

Default value

Sec_Network_Auth = 0

Usage

When to use Setting Sec_Network_Auth to 1 to enable network-based login authentication provides three important benefits for InfoMaker users, because you do not have to specify a login password in the database profile or Application to authenticate the login ID when Sec_Network_Auth is set to 1:

- **Password not stored in registry file** Since you do not specify a login password, no login password is stored in the Windows registry.
- **Password not transmitted across network** Since you do not specify a login password, no login password is transmitted across the network to Adaptive Server.
- **Same user ID and password for different servers** You can use the same network user ID and password to connect to many different Adaptive Server database servers. You can change your password for the network security mechanism and have this change apply on all servers to which your application connects.

Set Release parameter For this parameter to take effect, you *must* also set the Release parameter to 11or higher to specify that your application should use the appropriate version of Sybase Open Client Client-Library (CT-Lib) behavior. See the description of the Release parameter for more information.

Requirements for use To use Sec_Network_Auth or any other parameter supporting Open Client security services, you must meet certain requirements for using security services in your InfoMaker application. For details, see "Requirements for using Open Client security services" in *Connecting to Your Database*.

Corresponding CT-Lib connection property Specifying a value for Sec_Network_Auth sets the corresponding Sybase CT-Lib connection property named CS_SEC_NETWORKAUTH.

Examples

To specify that your connection uses network-based login authentication when connecting to the server, select the Network Based Authentication check box on the Security tab in the Database Profile Setup dialog box.

See also

Release
Sec_Channel_Bind
Sec_Cred_Timeout
Sec_Delegation
Sec_Keytab_File
Sec_Mechanism
Sec_Mutual_Auth
Sec_Server_Principal
Sec_Sess_Timeout

Sec_Replay_Detection

Description

When you access a Sybase Adaptive Server Enterprise database in InfoMaker through Open Client, Sec_Replay_Detection is one of several parameters that support per-packet security for network-based security services. (For other per-packet security parameters, see the See Also section.)

Sec_Replay_Detection controls whether your connection's security mechanism can detect and reject unauthorized attempts to capture and replay transmitted data. When Sec_Replay_Detection is set to 1, the security mechanism detects and subsequently rejects any unauthorized attempts by third parties to capture packets sent to the server and repeat (replay) the commands in the packets at a later time.

When Sec_Replay_Detection is set to 0 (the default), the security mechanism cannot detect unauthorized attempts to capture and replay data.

You must specify a value for Sec_Replay_Detection *before* connecting to the database in InfoMaker.

Using third-party security mechanisms
For information about the third-party security mechanisms and operating system platforms that Sybase has tested with Open Client security services, see the Open Client documentation.

Applies to

SYC Sybase Adaptive Server Enterprise

Syntax

Sec_Replay_Detection = *value*

Parameter	Description
value	Specifies whether your connection's security mechanism can detect and reject unauthorized attempts to capture and replay transmitted data. Values are: • **0** (Default) Prohibits your security mechanism from detecting unauthorized attempts to capture and replay transmitted data. You can also specify `'No'` or `'False'` to set this value. • **1** Allows your security mechanism to detect and reject unauthorized attempts to capture and replay transmitted data. You can also specify `'Yes'` or `'True'` to set this value.

Default value

Sec_Replay_Detection = 0

Usage

When to use In a nonsecure network, unauthorized third parties might capture the commands sent to a server in order to repeat (replay) these commands at a later date. For example, if packets are sent from the client to the server in the order P1, P2, P3 and the server receives the packets in the order P1, P3, P2, this is considered an attempt to replay the data. Setting Sec_Replay_Detection to 1 ensures that your security mechanism can detect and subsequently reject all such unauthorized attempts to capture and replay data transmitted over the network.

Set Release parameter For this parameter to take effect, you *must* also set the Release parameter to 11or higher to specify that your application should use the appropriate version of Sybase Open Client Client-Library (CT-Lib) behavior. See the description of the Release parameter for more information.

Requirements for use To use Sec_Replay_Detection or any other parameter supporting Open Client security services, you must meet certain requirements for using security services in your InfoMaker application. For details, see "Requirements for using Open Client security services" in *Connecting to Your Database*.

Corresponding CT-Lib connection property Specifying a value for Sec_Replay_Detection sets the corresponding Sybase CT-Lib connection property named CS_SEC_DETECTREPLAY.

Examples

To allow your security mechanism to detect and reject unauthorized attempts to capture and replay transmitted data, select the Detect Replayed Commands check box on the Security tab in the Database Profile Setup dialog box.

See also

Release
Sec_Confidential
Sec_Data_Integrity
Sec_Data_Origin
Sec_Seq_Detection

Sec_Seq_Detection

Description

When you access a Sybase Adaptive Server Enterprise database in InfoMaker through Open Client, Sec_Seq_Detection is one of several parameters that support per-packet security for network-based security services. (For other per-packet security parameters, see the See Also section.)

Sec_Seq_Detection controls whether your connection's security mechanism can detect and reject transmitted packets that arrive at the server in a different order than was originally sent from the client. When Sec_Seq_Detection is set to 1, the security mechanism detects and rejects packets that arrive at the server out of sequence.

When Sec_Seq_Detection is set to 0 (the default), the security mechanism cannot detect packets that arrive at the server out of sequence.

You must specify a value for Sec_Seq_Detection *before* connecting to the database in InfoMaker.

Using third-party security mechanisms
For information about the third-party security mechanisms and operating system platforms that Sybase has tested with Open Client security services, see the Open Client documentation.

Applies to

SYC Sybase Adaptive Server Enterprise

Syntax

Sec_Seq_Detection = *value*

Parameter	Description
value	Specifies whether your connection's security mechanism can detect and reject packets that arrive at the server in a different order than the one in which they were sent from the client. Values are: • **0** (Default) Prohibit your security mechanism from detecting packets that arrive at the server out of sequence. You can also specify `'No'` or `'False'` to set this value. • **1** Allow your security mechanism to detect and reject packets that arrive at the server out of sequence. You can also specify `'Yes'` or `'True'` to set this value.

Default value

Sec_Seq_Detection = 0

Usage

When to use When transmitting data over a network, commands sent to a server might arrive out of sequence. For example, if packets are sent from the client to the server in the order P1, P2, P3 and the server receives the packets in the order P1, P3, P2, this is considered an out-of-sequence error.

Setting Sec_Seq_Detection to 1 ensures that your security mechanism can detect and subsequently reject packets that arrive at the server out of sequence.

Set Release parameter For this parameter to take effect, you *must* also set the Release parameter to 11or higher to specify that your application should use the appropriate version of Sybase Open Client Client-Library (CT-Lib) behavior. See the description of the Release parameter for more information.

Requirements for use To use Sec_Seq_Detection or any other parameter supporting Open Client security services, you must meet certain requirements for using security services in your InfoMaker application. For details, see "Requirements for using Open Client security services" in *Connecting to Your Database*.

Corresponding CT-Lib connection property Specifying a value for Sec_Seq_Detection sets the corresponding Sybase CT-Lib connection property named CS_SEC_DETECTSEQ.

Examples

To allow your security mechanism to detect and reject packets that arrive at the server out of sequence, select the Detect Sequence Errors check box on the Security tab in the Database Profile Setup dialog box.

See also

Release
Sec_Confidential
Sec_Data_Integrity
Sec_Data_Origin
Sec_Replay_Detection

Sec_Server_Principal

Description

When you access a Sybase Adaptive Server Enterprise database in InfoMaker through Open Client, Sec_Server_Principal is one of several parameters that support login authentication for network-based security services. (For other login authentication parameters, see the See Also section.)

Sec_Server_Principal specifies the principal name of the server that you want to access. The **server principal name** is the name by which your security mechanism identifies each server.

If the server name (specified in the database profile or Application) is *different* from the server principal name for the server you want to access, you *must* set Sec_Server_Principal to the correct server principal name in order to connect.

You must specify a value for Sec_Server_Principal *before* connecting to the database in InfoMaker.

Using third-party security mechanisms
For information about the third-party security mechanisms and operating system platforms that Sybase has tested with Open Client security services, see the Open Client documentation.

Applies to

SYC Sybase Adaptive Server Enterprise

Syntax

Sec_Server_Principal = '*server_principal_name*'

Parameter	Description
server_principal_name	Specifies the principal name of the server you want to access

Default value

None

If you do not specify a value, the security mechanism uses the server's directory entry name, which is the same as the server name specified in the database profile or Application.

Usage

When to use When you use Open Client security services with InfoMaker, the server's directory entry name (which you specify as the server name in the database profile or Application) might differ from the server principal name. In this case, you *must* set Sec_Server_Principal to the correct server principal name so that the security mechanism can identify the server you want to access.

Set Release parameter For this parameter to take effect, you *must* also set the Release parameter to 11or higher to specify that your application should use the appropriate version of Sybase Open Client Client-Library (CT-Lib) behavior. See the description of the Release parameter for more information.

Requirements for use To use Sec_Server_Principal or any other parameter supporting Open Client security services, you must meet certain requirements for using security services in your InfoMaker application. For details, see "Requirements for using Open Client security services" in *Connecting to Your Database*.

Corresponding CT-Lib connection property Specifying a value for Sec_Server_Principal sets the corresponding Sybase CT-Lib connection property named CS_SEC_SERVERPRINCIPAL.

Examples

To specify SYS12NT as the principal name of the server you want to access, type SYS12NT in the Server Principal Name box on the Security tab in the Database Profile Setup dialog box.

See also

Release
Sec_Channel_Bind
Sec_Cred_Timeout
Sec_Delegation
Sec_Keytab_File
Sec_Mechanism
Sec_Mutual_Auth
Sec_Network_Auth
Sec_Sess_Timeout

Sec_Sess_Timeout

Description

When you access a Sybase Adaptive Server Enterprise database in InfoMaker through Open Client, Sec_Sess_Timeout is one of several parameters that support login authentication for network-based security services. (For other login authentication parameters, see the See Also section.)

Some security mechanisms allow applications to set session timeout values for connections using network-based login authentication. For these connections, Sec_Sess_Timeout specifies the number of seconds remaining before a session expires. The session timeout period begins when the connection is opened.

By default, Sec_Sess_Timeout specifies that there is no session timeout limit; the session does not expire. You must specify a value for Sec_Sess_Timeout *before* connecting to the database in InfoMaker.

Using third-party security mechanisms
For information about the third-party security mechanisms and operating system platforms that Sybase has tested with Open Client security services, see the Open Client documentation.

Applies to

SYC Sybase Adaptive Server Enterprise

Syntax

Sec_Sess_Timeout = *value*

Parameter	Description
value	Specifies the number of seconds remaining before a session expires. You can also specify `'no_limit'` (the default) to indicate that the session does not expire. A session timeout value set by the security system's administrator supersedes any value you specify for Sec_Sess_Timeout.

Default value

Sec_Sess_Timeout = 'no_limit'

Usage

CyberSafe Kerberos If your security mechanism is CyberSafe Kerberos, Sec_Sess_Timeout cannot override the installation default value set for session timeout.

Set Release parameter For this parameter to take effect, you *must* also set the Release parameter to 11or higher to specify that your application should use the appropriate version of Sybase Open Client Client-Library (CT-Lib) behavior. See the description of the Release parameter for more information.

Requirements for use To use Sec_Sess_Timeout or any other parameter supporting Open Client security services, you must meet certain requirements for using security services in your InfoMaker application. For details, see "Requirements for using Open Client security services" in *Connecting to Your Database*.

Corresponding CT-Lib connection property Specifying a value for Sec_Sess_Timeout sets the corresponding Sybase CT-Lib connection property named CS_SEC_SESSTIMEOUT.

Examples

To specify 14,400 seconds (4 hours) remaining before a session expires, type 14400 in the Session Timeout box on the Security tab in the Database Profile Setup dialog box.

See also

Release
Sec_Channel_Bind
Sec_Cred_Timeout
Sec_Delegation
Sec_Keytab_File
Sec_Mechanism
Sec_Mutual_Auth
Sec_Network_Auth
Sec_Server_Principal

ServiceComponents

Description

Specifies the global services the OLE DB interface can use.

When to specify ServiceComponents
You must specify the ServiceComponents parameter *before* connecting to the database.

Applies to

OLE DB

Syntax

ServiceComponents = '*servicecomponent_name*'

Default value

None

Examples

To enable the resource pooling service component, select Resource Pooling from the Service Component Support box on the System tab in the Database Profile Setup dialog box.

ShowWarnings

Description

Specifies whether warning message text can be concatenated to existing error messages.

Applies to

DIR Sybase DirectConnect

Syntax

ShowWarnings = *value*

Parameter	Description
value	Specifies whether warning message text can be concatenated to existing error messages. Values are: • **0** (Default) Does not allow the concatenation of warning message text to existing error messages. • **1** Allows the concatenation of warning message text to existing error messages.

Default value

ShowWarnings = 0

Usage

The ShowWarnings parameter allows the DirectConnect interface to use warning and error processing similar to that formerly available in the InformationConnect DB2 Gateway (MDI) interface. For example, if a single warning message appears on the DIR error queue, the default behavior is to discard warnings. If ShowMessages is set, `sqlca.sqlcode = -1` and `sqlca.sqlerrtext = "`*text_of_warning_message*`"` are returned to the application.

`sqlca.sqlerrtext` cannot exceed 254 characters. Consequently, if multiple warning messages are returned together, message text might be truncated.

For Access Service connections, must be issued before connecting to ensure its correct operation.

Examples

To specify that you want to show warning messages as errors, select the Show Warning Messages as Errors check box on the Syntax tab in the Database Profile Setup dialog box.

SQLCache

Description

Specifies the number of SQL statements that InfoMaker should cache. The default is 0, specifying an empty SQL cache.

InfoMaker caches SQL statements generated by a report or form.

Applies to

ODBC

Syntax

SQLCache = *value*

Parameter	Description
value	The number of cursors you want to open in a script, plus the number of report-generated SELECT statements with retrieval arguments (default = 0).

Default value

SQLCache = 0

Usage

Note The SQLCache parameter is present in the Database Profile Setup dialog box for Oracle connections. However, for Oracle 8.x and later, Oracle OCI handles caching and setting SQLCache is not recommended.

Maintaining statements in the cache Statements in the SQL cache are maintained on a least-recently-used (**LRU**) basis. In other words, if a statement must be removed from the cache to make room for another statement, InfoMaker removes the statement that was least recently executed.

SQLCache and bind variables Caching SQL statements that you execute frequently improves their performance. Statements with bind variables are often the most frequently used. In fact, if your DBMS does not support bind variables, caching statements is of limited value.

Setting DisableBind to use cached statements In order to use cached statements, make sure the DisableBind parameter is set to 0 (the default). This enables the binding of input variables to SQL statements.

For more about using bind variables, see DisableBind.

What happens The first time you execute a SQL statement containing bind variables, InfoMaker does the following in this sequence:

1 Parses the statement.

2 For SQL SELECT statements, calls the appropriate database function to get a description of the result set.

3 Allocates memory buffers for the bind variables.

4 Binds the allocated memory buffers to the parsed statement.

When you cache this SQL statement, InfoMaker stores the parsed statement, result set description, and memory buffer allocation and binding in the SQL cache. The next time you execute this statement, InfoMaker finds it in the cache and avoids the overhead of repeating these steps.

If InfoMaker finds an exact match for this statement in the SQL cache, it simply copies the new values supplied for the bind variables to the preallocated memory buffers and executes the statement. This is much faster than having to process the statement from scratch.

Examples

To set the SQL cache size to 25 statements, type 25 in the Number Of SQL Statements Cached box on the Transaction tab in the Database Profile Setup dialog box.

See also

DisableBind

SQLQualifiers

Description

Sets the level of qualification for identifiers (table and column names) in SQL statements when you connect to a database. This affects behavior in forms and reports.

When InfoMaker **qualifies** a table or column name, it prefixes it with the name of the owner. For example, if a user named Fran owns a table named Sales, the qualified table name is Fran.Sales.

Applies to

DIR Sybase DirectConnect

Syntax

SQLQualifiers = *value*

Parameter	Description
value	Sets the level of qualification for identifiers in SQL statements when you connect to a database. Values are: • **0** (Default) Do not qualify identifiers with owner names in SQL statements. • **1** Qualify identifiers with owner names in SQL statements.

Default value

SQLQualifiers = 0

Usage

When InfoMaker qualifies identifiers If the name of the table owner is the same as the name of the user logged in to the database, InfoMaker does not qualify identifiers with owner names in the SQL statements it generates. If you set the SQLQualifiers parameter to 1, InfoMaker qualifies identifiers with an owner name in SQL statements.

Examples

To specify that you want InfoMaker to qualify identifiers with owner names in SQL statements, select the Qualify Identifiers With Owner Names check box on the Syntax tab in the Database Profile Setup dialog box.

StaticBind

Description

When you retrieve data from a database into a form or report, InfoMaker does not get a result set description to validate the SELECT statement against the database server before retrieving the data. This means the retrieval should be faster, especially when you are accessing the database over a network. (This feature is called **describeless retrieval**.)

If you want to override the default behavior and have InfoMaker get a description of the result set before retrieving data, set the StaticBind parameter to 0 or No.

Applies to

DIR Sybase DirectConnect
JDB JDBC
ODBC
OLE DB
O84 Oracle 8.x and Oracle8*i*
O90 Oracle9*i*
O10 Oracle 10*g*
SYC and SYJ Sybase Adaptive Server Enterprise

Syntax

StaticBind = *value*

Parameter	Description
value	Specifies whether you want InfoMaker to get a result set description before retrieving data from a database into a form or report. Values are: • **0** Get a result set description before retrieving data. You can also specify `'No'` to set this value. • **1** (Default) Skip getting a result set description before retrieving data. You can also specify `'Yes'` to set this value.

Default value

StaticBind = 1

Usage

Validation When StaticBind is set to 1 (the default), InfoMaker does not validate the SELECT statement against the database server before retrieving data. It assumes that the result set matches the column format of the form or report into which it is being retrieved. If a mismatch occurs, InfoMaker displays an error.

Troubleshooting tips Problems can occur in your application if the result set description obtained by the form or report is different from the current database description of the result set. This can occur for the following reasons:

- The database definition changes after you build the form or report.
- You build the form or report while connected to one DBMS and then run it against a different DBMS.

To fix problems caused by conflicting result set descriptions, you can correct your form or report definition by doing either of the following:

- Export and edit your column definitions
- Force a recompile of the SQL statement in the Database painter's Interactive SQL (ISQL) view (see the *User's Guide* for instructions)

If your form or report and DBMS result set descriptions do not match and you want to avoid errors, set StaticBind to 0 or No to specify that InfoMaker should *always* get a result set description before retrieving data into a form or report.

Examples

To specify that you want InfoMaker to get a result set description before retrieving data into a form or report, clear the Static Bind check box on the Transaction tab (or System tab, in the case of the OLE DB interface) in the Database Profile Setup dialog box.

StripParmNames

Description

Specifies that explicitly named parameters should not be passed to the ODBC driver.

Applies to

ODBC

Syntax

StripParmNames='*value*'

Parameter	Description
value	Specifies that explicitly named parameters should not be passed to the ODBC driver. Values are: • **Yes** Remove all parameter names from the generated call escape syntax. • **No** (Default) Keep parameter names that are explicitly specified and include them in the generated call escape syntax.

Default value

StripParmNames='No'

Usage

By default, InfoMaker retains parameter names if explicitly specified in the execution of a stored procedure. As a result, syntax such as the following might be generated and sent to the ODBC driver:

```
{call proc(a=?,b=?)}
```

Some database vendors do not allow parameter names to be specified in the generated call escape syntax. To prevent the passing of explicitly named parameters to the ODBC driver, set StripParmNames to Yes. This means that the parameters are passed in the order specified.

Examples

To strip explicitly stated parameter names from a stored procedure, select the Strip Parameter Names check box on the Syntax tab in the Database Profile Setup dialog box.

SvrFailover

Description

Specifies whether you want InfoMaker to recognize and participate in failover to a designated backup database server if the current database server goes down.

When to specify SvrFailover
You must specify the SvrFailover parameter *before* connecting to the database.

Applies to

O84 Oracle 8.x and Oracle8*i* (8.1.5 and higher database connections only)
O90 Oracle9*i*
O10 Oracle 10*g*
SYC Sybase Adaptive Server Enterprise (12.0 and higher database connections only)

Syntax

SvrFailover='*value*'

Parameter	Description
value	Specifies whether you want InfoMaker to recognize and participate in failover to a designated backup database server if the current database server goes down. Values are: • **No** (Default) InfoMaker should not recognize or participate in failover. • **Yes** InfoMaker should recognize and participate in failover.

Default value

SvrFailover = 'No'

Usage

Both Oracle and Sybase support database server failover in Oracle Version 8.1.5 or later and Adaptive Server 12 or later. For information about how to configure failover for these database servers, see your Oracle or Adaptive Server documentation. To avoid losing your InfoMaker database connection (as the result of a timeout) when a failover takes place, set the SvrFailover parameter so that InfoMaker recognizes and participates in the database server failover.

Oracle also allows you some control over the failover process. Three additional parameters allow you to specify the number of times you want the database server to which you are connected to attempt a failover, how long to wait between failover attempts, and whether InfoMaker should display a runtime dialog box indicating when a failover occurs.

This parameter cannot be set dynamically. The value set when the connection is made remains in effect until it is disconnected.

Examples

To tell InfoMaker to recognize and participate in failover, select the Allow Server Failover check box on the Network tab in the Database Profile Setup dialog box.

See also

FoDelay
FoDialog
FoRetryCount

SystemOwner

Description

Specifies the owner of the IBM DB2 system tables that you want InfoMaker to use. InfoMaker accesses the DB2 system tables to get information about the tables and columns in your database.

Applies to

DIR Sybase DirectConnect

Syntax

SystemOwner = '*owner_name*'

Parameter	Description
owner_name	Specifies the owner of the DB2 system tables that you want InfoMaker to use (default = SYSIBM)

Default value

SystemOwner = 'SYSIBM'

Usage

When you use the SystemOwner parameter to specify a nondefault system owner, InfoMaker uses the set of system tables belonging to this owner instead of the default system tables owned by SYSIBM.

If your site has a large DB2 system catalog, it might be useful to create local copies of the catalog tables and populate them with a subset of the information in the default system catalog. These local copies are sometimes called **shadow catalogs**.

You can then set the value of SystemOwner to the owner of the shadow catalogs. This tells InfoMaker to access the smaller shadow catalogs instead of the larger default system tables, resulting in faster performance. However, you must make sure to keep the shadow catalogs synchronized with the default system catalog owned by SYSIBM.

For more about creating shadow catalogs, see your DB2 system administrator or check whether there is a technical document that describes how to do it. Updated information about connectivity issues is available from the Sybase Customer Service and Support Web site at www.sybase.com.

Examples

To specify MYAPP as the owner of the system tables that you want InfoMaker to use, type MYAPP in the CSP Catalog Qualifier box on the System tab in the Database Profile Setup dialog box.

SystemProcs

Description

Specifies whether you want InfoMaker to display both system-stored procedures and user-defined stored procedures in the connected database when you request a list of stored procedures.

By default, InfoMaker displays both system and user-defined stored procedures in the connected database. If you set SystemProcs to 0 or No, only user-defined stored procedures are displayed.

Applies to

SYC Sybase Adaptive Server Enterprise

Syntax

SystemProcs = *value*

Parameter	Description
value	Specifies whether you want InfoMaker to display both system-stored procedures and user-defined stored procedures in the connected database when you request a list of stored procedures. Values are: • **0** Display only user-defined stored procedures. You can also specify `'No'` to set this value. • **1** (Default) Display both system-stored procedures and user-defined stored procedures. You can also specify `'Yes'` to set this value.

Default value

SystemProcs = 1

Usage

Setting SystemProcs to 0 or No speeds response time if you want to work only with user-defined stored procedures.

Examples

To specify that you want InfoMaker to display only user-defined stored procedures in the connected database when you request a list of stored procedures, clear the Display System Stored Procedures check box on the System tab in the Database Profile Setup dialog box.

TableCriteria

Description

Lets you specify search conditions to limit the list of tables and views that displays in the Installed Database Interfaces Tables list in InfoMaker. Setting this parameter can be useful if you are working with a very large database in the InfoMaker development environment.

When to specify TableCriteria
You must specify the TableCriteria parameter *before* connecting to the database.

Applies to

DIR Sybase DirectConnect
JDB JDBC
ODBC
O84 Oracle 8.x and Oracle8*i*
O90 Oracle9*i*
O10 Oracle 10*g*
SYC Sybase Adaptive Server Enterprise

Syntax

You specify the TableCriteria search conditions on the System tab in the Database Profile Setup dialog box.

Default value

None. If you do not specify any values, the TableCriteria parameter is not used.

Oracle If you do not specify a value for TableCriteria, all Oracle tables, views, and synonyms that you have permission to access display in the Installed Database Interfaces Tables list by default.

Usage

To specify the TableCriteria search conditions, enter information in the following boxes:

Field	Description
Table Name	Specifies the names of tables to display in the current database. You can use wildcard characters. **Default for DirectConnect interface** If you omit this value when connected through the DirectConnect interface, InfoMaker displays all tables that you have permission to access in the current database, as defined in the DirectConnect server configuration file. **Default for Adaptive Server Enterprise interface** If you omit this value when connected through the Adaptive Server Enterprise interface, InfoMaker displays all tables in the current database.

Field	Description
Table Owner	Displays only those tables belonging to the specified table owner. You can use wildcard characters. If you omit this value, InfoMaker displays all tables matching the table name that you have permission to access.
Include Tables	Specifies that tables should be displayed.
Include Views	Specifies that views should be displayed.
Include System Tables	Specifies that system tables should be displayed.
Include Aliases	Specifies that alias tables should be displayed.
Include Synonyms	Specifies that synonym tables should be displayed.

Adaptive Server Enterprise and DirectConnect These Sybase database interfaces use stored procedures to create the table list:

- **DirectConnect interface** Uses the sp_tables stored procedure.
- **Adaptive Server Enterprise interface** Uses the version of the sp_pb105table stored procedure installed by you or your database administrator.

  For information about which version of sp_pb105table to install when connecting to an Adaptive Server Enterprise database, see "Installing InfoMaker stored procedures in Adaptive Server Enterprise databases" in *Connecting to Your Database*.

InfoMaker uses the TableCriteria parameter to supply the arguments to sp_tables or sp_pb105table and build the table list based on your search criteria.

Examples

Type `QADB%` in the Table Name box and `DWMC31` in the Table Owner box on the System tab in the Database Profile Setup dialog box to set the Table Criteria property to:

```
TableCriteria='QADB%,DWMC31'
```

ThreadSafe

Description

Specifies whether your connection should take advantage of the database server threadsafe client libraries.

By default, ThreadSafe is set to No to specify that your connection does not use the threadsafe client libraries. If you set ThreadSafe to Yes, your connection takes advantage of the threadsafe client libraries.

When to specify ThreadSafe
You must specify a value for ThreadSafe *before* connecting to the database.

Applies to

IN9 INFORMIX
O84 Oracle 8.x and Oracle8*i*
O90 Oracle9*i*
O10 Oracle 10*g*

Syntax

ThreadSafe='*value*'

Parameter	Description
value	Specifies whether a connection uses the database server threadsafe client libraries. Values are: • **Yes** Your connection uses the threadsafe client libraries. Use this setting when building distributed applications that require a multi-threaded environment. • **No** (Default) Your connection does not use the threadsafe client libraries. Use this setting when building nondistributed applications that require a single-threaded environment.

Default value

ThreadSafe = 'No'

Usage

When to use Oracle and Informix provide support for thread safety in their client libraries. When you are using the Oracle or Informix database interface to build multi-threaded applications in InfoMaker, set the ThreadSafe parameter to Yes to use threadsafe client libraries. This prevents possible side effects among multiple threads of execution making calls to the database server. Your application might incur a performance penalty when you use the threadsafe client libraries.

By default, the client software (and, thus, InfoMaker) assumes that you are building an application in a single-threaded environment that does not need the threadsafe client libraries. This default ensures that single-threaded applications do not incur the performance penalty associated with using threadsafe libraries. Therefore, if you are building single-threaded applications, you can leave the ThreadSafe parameter set to No (the default).

This parameter cannot be set dynamically. The value set when the connection is made remains in effect until it is disconnected.

Examples

To specify that your connection uses the threadsafe client libraries, select the Thread Safe check box on the Connection tab in the Database Profile Setup dialog box.

Time

Description

When you update data in the Form painter, InfoMaker builds a SQL UPDATE statement in the background. The Time parameter determines how InfoMaker specifies a time datatype when it builds the SQL UPDATE statement.

Applies to

JDB JDBC
ODBC
O84 Oracle 8.x and Oracle8*i*
O90 Oracle9*i*
O10 Oracle 10*g*

Syntax

The syntax you use to specify the Time parameter differs slightly depending on the database.

The Database Profile Setup dialog box inserts special characters (quotes and backslashes) where needed, so you can specify just the time format.

JDBC and ODBC syntax InfoMaker parses the backslash followed by two single quotes (\") as a single quote when it builds the SQL UPDATE statement:

Time = ' \"*time_format*\" '

Oracle syntax InfoMaker parses each set of four consecutive single quotes ("") as a single quote when it builds the SQL UPDATE statement:

Time = ' ""*time_format*"" '

Parameter	Description
' \''	**JDBC and ODBC syntax** Type a single quote, followed by one space, followed by a backslash, followed by two single quotes. There is no space between the two single quotes and the beginning of the time format.
' ''''	**Oracle syntax** Type a single quote, followed by one space, followed by four single quotes. There is no space between the four single quotes and the beginning of the time format.
time_format	The time format you want InfoMaker to use when it builds a SQL UPDATE statement to update a data source in the Form painter. For more on display formats, see the *User's Guide*.
\'' '	**JDBC and ODBC syntax** Type a backslash, followed by two single quotes, followed by one space, followed by a single quote. There is no space between the end of the time format and the backslash.
'''' '	**Oracle syntax** Type four single quotes, followed by one space, followed by a single quote. There is no space between the end of the time format and the four single quotes.

Default value

The default value for Time depends on the DBMS you are accessing:

DBMS	Date default value
JDBC	If no value is specified for the Time parameter, InfoMaker looks for a time format in the section for your JDBC driver in the registry. If no time format is found in the registry, InfoMaker uses the JDBC time format escape sequence.
ODBC	If no value is specified for the Time parameter, InfoMaker looks for a time format in the section for your ODBC driver in the PBODB105 initialization file. If no time format is found in the PBODB105 initialization file, InfoMaker uses the ODBC time format escape sequence.
Oracle	The default Oracle date format. For information, see your Oracle documentation.

Examples

About these examples Assume you are updating a table named Workhours by setting the Start column to 08:30. This time is represented by the following InfoMaker time format:

```
hh:mm
```

Example 1 (JDBC and ODBC syntax) To specify that InfoMaker should use this format for the time datatype when it builds the SQL UPDATE statement, type `hh:mm` in the Time Format box on the Syntax tab in the Database Profile Setup dialog box.

What happens InfoMaker builds the following SQL UPDATE statement to update the table:

```
UPDATE WORKHOURS
SET START = '08:30'
```

Example 2 (Oracle syntax) To specify that InfoMaker should use this format for the time datatype when it builds the SQL UPDATE statement, type `hh:mm` in the Time Format box on the Syntax tab in the Database Profile Setup dialog box.

What happens InfoMaker builds the following SQL UPDATE statement to update the table:

```
UPDATE WORKHOURS
SET START = '08:30'
```

See also

Date
DateTime

TimeFormat

Description

When you update data in the Form painter, InfoMaker builds a SQL UPDATE statement in the background. The Time parameter determines how InfoMaker specifies a time datatype when it builds the SQL UPDATE statement.

Applies to

OLE DB

Syntax

TimeFormat ='time_format'

Parameter	Description
time_format	The time format you want InfoMaker to use when it builds a SQL UPDATE statement to update a data source in the Form painter. For more on display formats, see the *User's Guide*.

Default value

If no value is specified for the TimeFormat parameter, InfoMaker does not use a time datatype.

Usage

When you call stored procedures, the database server might not accept the time format built by InfoMaker. If this occurs, you can try to use another format. For example, for Microsoft SQL Server, try this format:

```
TimeFormat='\''hh:mm:ss\'''
```

Examples

Assume you are updating a table named Workhours by setting the Start column to 08:30. This time is represented by the following InfoMaker time format:

```
hh:mm
```

To specify that InfoMaker should use this format for the time datatype when it builds the SQL UPDATE statement, type `hh:mm` in the Time Format box on the Syntax tab in the Database Profile Setup dialog box.

What happens InfoMaker builds the following SQL UPDATE statement to update the table:

```
UPDATE WORKHOURS
SET START = '08:30'
```

See also

DateFormat
DateTimeFormat

Timeout

Description

Specifies the number of seconds the interface should wait for a connection to the data provider to complete.

When to specify TimeOut
You must specify a value for TimeOut *before* connecting to the database.

Applies to

OLE DB

Syntax

TimeOut = *value*

Parameter	Description
value	The number of seconds the interface waits for a connection to complete.

Default value

None

Usage

The default value for the TimeOut parameter is driver-specific.

Examples

To set the TimeOut value to wait 10 seconds for a connection to complete, type 10 in the Timeout box on the System tab in the Database Profile Setup dialog box.

TimeStamp

Description

Specifies whether InfoMaker should map DateTime and Time datatypes to the Oracle TimeStamp datatype.

Applies to

O90 Oracle9*i*
O10 Oracle 10*g*

Syntax

TimeStamp = *value*

Parameter	Description
value	Specifies whether InfoMaker should map DateTime and Time datatypes to the Oracle TimeStamp datatype. Values are: • **0** Map DateTime and Time datatypes to the Oracle Date datatype. • **1** (Default) Map DateTime and Time datatypes to the Oracle TimeStamp datatype.

Default value

TimeStamp=1

Usage

Oracle9*i* and later databases and the O90 and O10 interfaces support the Oracle timestamp datatype. This datatype includes the date and the time including milliseconds. The existing Oracle Date datatype does not include millisecond information. In a report, both the Oracle Timestamp and Date datatypes are mapped to the InfoMaker DateTime datatype, which supports millisecond information.

If you use the O90 or O10 interface with an Oracle9*i* or higher server, DateTime and Time datatypes are mapped to the Oracle TimeStamp datatype by default. If you want DateTime and Time to be mapped to the Oracle Date datatype, set the TimeStamp database parameter to 0.

The TimeStamp database parameter does not apply to the O84 database interface. When you use the O84 interface, the DateTime and Time datatypes are always mapped to the Oracle Date datatype.

In InfoMaker 8 and earlier, millisecond information was truncated when used with the Oracle Date datatype. In InfoMaker 9.0 and later, millisecond information is not truncated. As a result, when performing multiple updates to a DateTime field that maps to a Date column, the first update succeeds, but subsequent updates fail with a “row changed between retrieve and update error.”

If you are using the O90or O10 interface with a database that uses only the TimeStamp datatype, InfoMaker handles DataWindow updates correctly. If you are using the O90 or O10 interface with a database that uses only the Oracle Date datatype, set the DBParm TimeStamp to 0 to truncate millisecond information.

Examples

To set the TimeStamp value to treat DateTime and Time DataWindow datatypes as Oracle Date datatypes, clear the Map DateTime/Time to Oracle Timestamp check box on the Syntax page in the Database Profile Setup dialog box.

TraceFile

Description

Specifies that the JDBC Driver Manager Trace tool should trace a connection to the database you access through the InfoMaker JDBC interface.

Applies to

JDB JDBC

Syntax

TraceFile = '*tracefile_name*'

Default value

None

Usage

The JDBC Driver Manager Trace logs errors and informational messages originating from the Driver object currently loaded (such as the Sybase jConnect JDBC driver) when InfoMaker connects to a database through the JDBC interface. It writes this information to a log file (default is JDBC.LOG) or to a file you specify. The amount of trace output varies depending on the JDBC driver being used.

You can start and stop the JDBC Driver Manager Trace in the InfoMaker development environment by editing the database profile for the connection you want to trace.

For more information about using the JDBC Driver Manager Trace tool, see *Connecting to Your Database*.

Examples

To start the JDBC Driver Manager Trace and specify a log file, select the Trace JDBC Calls check box and type the following in the Trace File box on the Options tab in the Database Profile Setup dialog box:

```
c:\temp\jdbctrce.log
```

TrimSpaces

Description

Specifies whether InfoMaker should trim trailing spaces from data values retrieved from the following datatypes: Char, Char for Bit Data, VarChar, and VarChar for Bit Data.

Applies to

DIR Sybase DirectConnect
JDB JDBC
ODBC
SYC and SYJ Sybase Adaptive Server Enterprise

Syntax

TrimSpaces = *value*

Parameter	Description
value	Specifies whether InfoMaker should trim trailing spaces from data of type Char, Char for Bit Data, and VarChar for Bit Data. Values are: • **0** Do not trim trailing spaces. • **1** (Default) Trim trailing spaces.

Default value

TrimSpaces=1

Usage

By default, InfoMaker trims spaces from the following datatypes: Char, Char for Bit Data, VarChar, and VarChar for Bit Data.

ODBC database interface
Some ODBC drivers, such as ASA, trim trailing spaces before the data reaches the fetch buffer—even when TrimSpaces is set to 0.

If your DBMS makes a distinction between Char data with trailing spaces and Char data without trailing spaces when evaluating a WHERE clause expression, you might receive the message `Row changed between retrieve and update` when your DataWindow update properties are set to "Key and updateable columns." To prevent this, change your DataWindow update properties. In embedded SQL, you can check Sqlca.Sqlnrows after each update to determine if the update took place. Avoid using Char data columns in the WHERE clause of an UPDATE or DELETE statement when TrimSpaces=1.

Examples

To specify that InfoMaker should not trim trailing spaces, clear the Trim Trailing Spaces In CHAR Data check box on the Syntax tab in the Database Profile Setup dialog box.

TRS

Description

Specifies whether you want your application to connect to a database through the DirectConnect server using:

DirectConnect Access Service for DB2/MVS
DirectConnect TRS
Gatewayless connection using OpenServerConnect

Applies to

DIR Sybase DirectConnect

Syntax

TRS = *value*

Parameter	Description
value	Specifies how your application should connect to a database through the DirectConnect server. Values are: • **0** (Default) Use an Access Service connection. • **1** Use a TRS connection. • **2** Use a gatewayless or OpenServerConnect connection.

Default value

TRS = 0

Usage

If you have chosen to make a gatewayless database connection, you can then set the UseProcSyntax parameter to specify whether InfoMaker should convert the syntax for invoking a Remote Stored Procedure (RSP) or host-resident request before executing that procedure.

Examples

To specify that you want to connect to a database using OpenServerConnect, select Gatewayless from the Choose Gateway drop-down list on the Connection tab in the Database Profile Setup dialog box.

See also

UseProcSyntax
HostReqOwner

URL

Description

The location of the database to which you want to connect using the JDBC interface.

When to specify URL
You must specify the URL parameter *before* connecting to the database.

Applies to

JDB JDBC

Syntax

URL = '*URL_address*'

Default value

None

Usage

The database URL is obtained from the database JDBC driver documentation. A list of registered Driver classes, with their URLs, is maintained by the driver's JDBC DriverManager class. When a connection request is made, the DriverManager attempts to locate a suitable driver from those listed.

The URL uses this general format:

jdbc:*vendor*:*driverprotocol*:*servername*:*port/database*

Argument	Description
jdbc	Driver
vendor	Database vendor (such as Sybase or Oracle)
driverprotocol	Database communications protocol
servername	DNS machine name or database host name
port	TCP/IP port number configured for accessing the database server
database	(optional) Name of a specific database

The database URL can also include the user ID and password as follows:

jdbc:vendor:*driverprotocol*:*userid*/*password@servername*:*port*:*database*

Examples

Example 1 To set the URL to a database accessed through jConnect, type the following in the URL box on the Connection tab in the Database Profile Setup dialog box:

```
jdbc:sybase:Tds:199.93.178.151:5007/tsdata
```

Example 2 To set the URL to a database accessed through the Oracle JDBC driver, type the following in the URL box on the Connection tab in the Database Profile Setup dialog box:

```
jdbc:oracle:thin:@ora80nt:1521:orcl
```

Example 3 To set the URL, which includes the user ID and password, to a database accessed through the Oracle JDBC driver, type the following in the URL box on the Connection tab in the Database Profile Setup dialog box:

```
jdbc:oracle:thin:system/manager@ora80nt:1521:orcl
```

See also

Driver

UseProcSyntax

Description

Specifies whether InfoMaker should convert the syntax for invoking a Remote Stored Procedure (RSP) or host-resident request before executing that procedure.

Applies to

DIR Sybase DirectConnect (applies only to Open ServerConnect)

Syntax

UseProcSyntax = *value*

Parameter	Description
value	Specifies whether InfoMaker should convert RSP or host-resident request syntax. Values are: • **0** (Default) Do not convert syntax. • **1** Convert syntax to USE PROCEDURE.

Default value

UseProcSyntax = 0

Usage

UseProcSyntax applies *only* if you are using Open ServerConnect to make a gatewayless database connection to a DB2/MVS database. To indicate that you want to use Open ServerConnect, select Gatewayless from the Choose Gateway drop-down list on the Connection tab. If you select Gatewayless, and set the UseProcSyntax parameter to 1, InfoMaker converts the EXECUTE procedure syntax it normally uses to the USE PROCEDURE syntax required to invoke RSP and host-resident requests.

Examples

To specify that InfoMaker should convert RSP or host-resident syntax, select the Use Procedure Syntax for RSPs check box on the Syntax tab in the Database Profile Setup dialog box.

See also

TRS
HostReqOwner

UTF8

Description

The UTF8 database parameter specifies whether the database server you are accessing will handle conversion between the character sets on the client and server when they are different.

When to specify UTF8
You must specify a value for UTF8 *before* connecting to the database in InfoMaker.

Applies to

DIR Sybase DirectConnect
SYC and SYJ Sybase Adaptive Server Enterprise

Syntax

UTF8 = *value*

Parameter	Description
value	Specifies whether the database server you are accessing will perform conversion between the character sets used on the client and server. Values are: **0** (Default) The InfoMaker database interface performs the conversion. Multiple languages are not supported. **1** Your database server performs the conversion. Multiple languages are supported.

Default value

UTF8 = 0

Usage

If UTF8 is set to 1, InfoMaker always uses UTF-8 as the client character set when connecting to an Adaptive Server database. When UTF8 is set to 0, if the client and database server character sets are different, the database interface converts Transact-SQL, identifiers, parameters, and Char and VarChar data to and from the character set used on the server. Multiple languages are not supported with this setting.

To enable multilanguage support, you must set the UTF8 database parameter to 1 and the database server must have the UTF-8 character set installed, or, for Adaptive Server, it must be configured to support Unicode conversions. To do so, the database administrator must run the following command on the server:

```
sp_configure "enable Unicode conversion", 2
```

This enables the server to perform the conversion to and from Unicode.

Examples

To specify that the database server you are accessing with InfoMaker uses UTF-8 as its default character set:

- **Database profile** Select the UTF8 Character Set Installed or Unicode Conversion Enabled check box on the Regional Settings tab in the Database Profile Setup dialog box.

CHAPTER 2

Database Preferences

About this chapter

This chapter describes the syntax and use of each connection-related database preference that you can set in InfoMaker.

Contents

The database preferences are listed in alphabetical order.

Database preferences and supported database interfaces

The following table lists each supported database interface and the connection-related database preferences you can use with that interface in InfoMaker. The preferences listed in the table pertain to the database connection, and not to the behavior of the Database painter itself.

Database interface	Database preferences
DIR Sybase DirectConnect	AutoCommit Connect DB at Startup Connect to Default Profile Keep Connection Open Lock Read Only Shared Database Profiles SQL Terminator Character Use Extended Attributes
IN9 Informix	AutoCommit Connect DB at Startup Connect to Default Profile Keep Connection Open Lock Read Only Shared Database Profiles SQL Terminator Character Use Extended Attributes

Database interface	Database preferences
JDB JDBC	AutoCommit Connect DB at Startup Connect to Default Profile Keep Connection Open Lock Read Only Shared Database Profiles SQL Terminator Character Use Extended Attributes
ODBC **Using AutoCommit and Lock with ODBC** The AutoCommit and Lock database preferences are supported by the ODBC interface only if *both* the ODBC driver you are using and the back-end DBMS support the feature	AutoCommit Connect DB at Startup Connect to Default Profile Keep Connection Open Lock Read Only Shared Database Profiles SQL Terminator Character Use Extended Attributes
OLE DB	AutoCommit Connect DB at Startup Connect to Default Profile Keep Connection Open Lock Read Only Shared Database Profiles SQL Terminator Character Use Extended Attributes
O84 Oracle 8.x.and Oracle8*i* O90 Oracle9*i* O10 Oracle 10*g*	Connect DB at Startup Keep Connection Open Connect to Default Profile Read Only Shared Database Profiles SQL Terminator Character Use Extended Attributes
SYC Sybase Adaptive Server Enterprise	AutoCommit Connect DB at Startup Connect to Default Profile Keep Connection Open Lock Read Only Shared Database Profiles SQL Terminator Character Use Extended Attributes

AutoCommit

Description

For those DBMSs and database interfaces that support it, AutoCommit controls whether InfoMaker issues SQL statements outside or inside the scope of a transaction.

When AutoCommit is set to False (the default), InfoMaker issues SQL statements *inside* the scope of a transaction. When AutoCommit is set to True, InfoMaker issues SQL statements *outside* the scope of a transaction.

When to specify AutoCommit
In the development environment, you must set AutoCommit before connecting to the database. AutoCommit takes effect only when the database connection occurs. Changes to AutoCommit after the connection occurs have no effect on the current connection.

Applies to

ADO.NET
DIR Sybase DirectConnect
IN9 Informix
JDB JDBC
ODBC (if driver and back-end DBMS support this feature)
OLE DB
SYC and SYJ Sybase Adaptive Server Enterprise

In the development environment

Select or clear the AutoCommit Mode check box on the Connection tab in the Database Profile Setup dialog box, as follows:

- **Select the check box** Sets AutoCommit to true for this connection.
- **Clear the check box** (Default) Sets AutoCommit to false for this connection.

For instructions, see "Setting Additional Connection Parameters" in *Connecting to Your Database*.

Default value

AutoCommit = False

Usage

Transactions A **transaction** is one or more SQL statements that form a **logical unit of work** (**LUW**). Within a transaction, all SQL statements must succeed or fail as one logical entity. Changes are made to the database only if all statements in the transaction succeed and a COMMIT is issued. If one or more statements fail, you must issue a ROLLBACK to undo the changes. This ensures the integrity and security of data in your database.

Executing SQL DDL statements Some DBMSs require you to execute certain SQL statements outside the scope of a transaction. For example, when connected to a SQL Server database, you must execute SQL Data Definition Language (DDL) statements such as CREATE TABLE and DROP TABLE outside a transaction. There are two reasons for this:

- It ensures that the structure of your database cannot change during a transaction.
- It improves database performance, because DDL statements are costly operations to recover.

Therefore, to execute DDL statements or stored procedures containing DDL statements in a SQL Server database, you must set AutoCommit to true to issue the DDL statements outside the scope of a transaction. You should, however, set AutoCommit back to false immediately after executing the DDL statements.

When you change the value of AutoCommit from false to true, InfoMaker issues a COMMIT statement by default.

Caution
When you set AutoCommit to true, you cannot roll back database changes. Therefore, use care when changing the setting of AutoCommit.

DirectConnect interface As part of the Connect process, the DIR interface automatically issues TransactionMode = short to override the access service default configuration. It then issues begin transaction at connect time and after every Commit and Rollback whenever AutoCommit = False. Most developers should start their connections with AutoCommit = True, switch to False only when the application demands transaction processing, and then switch back to AutoCommit = True after the transaction is committed or rolled back.

Examples

To set AutoCommit to True and issue SQL statements outside the scope of a transaction:

- **Development environment** Select the AutoCommit Mode check box on the Connection tab in the Database Profile Setup dialog box.

Connect DB at Startup

Description

When you are working in the InfoMaker development environment, Connect DB at Startup controls whether InfoMaker connects to the database when you open a painter requiring a connection (the default) or automatically when you start InfoMaker.

InfoMaker only
The Connect DB at Startup preference is available in the Database Preferences property sheet only in InfoMaker. It has no effect in InfoMaker applications at execution time or in PowerBuilder.

Applies to

All database interfaces

In the development environment

In the Database painter, select or clear the Connect DB at Startup check box in the Database Preferences property sheet as follows:

- **Select the check box** The next time you start InfoMaker, it automatically connects to the database at startup and stays connected throughout the session until you exit.
- **Clear the check box** (Default) The next time you start InfoMaker, it connects to the database only when you open one of the following painters requiring a connection: Database, Report, Form, Query, or Data Pipeline. It does *not* connect to the database automatically at startup.

Default value

The Connect DB at Startup check box in the Database Preferences property sheet is cleared by default.

Usage

Clearing the Connect DB at Startup check box (the default) in InfoMaker to connect to the database only when a painter requires it can save you money if you are accessing a database that charges for connect time.

Connect to Default Profile

Description

Connect to Default Profile controls whether the Database painter establishes a connection to a database using a default profile when the painter is invoked. If not selected, the Database painter opens without establishing a connection to a database.

Applies to

All database interfaces

In the development environment

In the Database painter, select or clear the Connect to Default Profile check box in the Database Preferences property sheet as follows:

- **Select the check box** (Default) The next time you invoke the Database painter, it automatically connects to the default database profile.
- **Clear the check box** The next time you invoke the Database painter, it does *not* automatically connect to the default database profile.

Default value

The Connect to Default Profile check box in the Database Preferences property sheet is selected by default.

Usage

Connect to Default Profile allows you to open the Database painter *without* establishing a connection to a database. Consequently, you can perform all database-related tasks, including defining a database profile and connecting to a database, in the Database painter. However, you might want to continue to define profiles and/or connect to a database using the Database Profile since opening the Database painter uses more system resources.

Keep Connection Open

Description

This preference takes effect in the PowerBuilder development environment. The setting of Keep Connection Open has no effect in InfoMaker because the Connect DB at Startup preference controls when InfoMaker connects to the database. (For information, see Connect DB at Startup on page 167.)

Applies to

All database interfaces

Default value

The Keep Connection Open check box in the Database Preferences property sheet is selected by default.

Lock

Description

For those DBMSs and database interfaces that support the use of lock values and isolation levels, the Lock preference sets the isolation level to use when connecting to the database.

In multiuser databases, transactions initiated by different users can overlap. If these transactions access common data in the database, they can overwrite each other or collide.

To prevent concurrent transactions from interfering with each other and compromising the integrity of your database, certain DBMSs allow you to set the isolation level when you connect to the database. **Isolation levels** are defined by your DBMS, and specify the degree to which operations in one transaction are visible to operations in a concurrent transaction. Isolation levels determine how your DBMS isolates or **locks** data from other processes while it is being accessed.

InfoMaker uses the Lock preference to allow you to set various database lock options. Each lock value corresponds to an isolation level defined by your DBMS.

When to specify the Lock value
You must set the Lock value *before* you connect to the database. The Lock value takes effect only when the database connection occurs. Changes to the Lock value after the connection occurs have no effect on the current connection.

Applies to

DIR Sybase DirectConnect
IN9 Informix (OnLine databases)
JDB JDBC
ODBC (if driver and back-end DBMS support this feature)
OLE DB
SYC and SYJ Sybase Adaptive Server Enterprise

Lock values

The following table lists the lock values and corresponding isolation levels for each database interface that supports locking. You set the lock value in code, and the isolation level in a database profile.

For more about the isolation levels that your DBMS supports, see your DBMS documentation.

Database interface	Lock values	Isolation levels
IN9 Informix (for OnLine databases only)	Dirty Read	Dirty Read
	Committed Read	Committed Read
	Cursor Stability	Cursor Stability
	Repeatable Read	Repeatable Read
JDB JDBC	RU	Read Uncommitted
	RC	Read Committed
	RR	Repeatable Read
	TS	Serializable Transactions
	TN	Transaction None

Database interface	Lock values	Isolation levels
ODBC	RU	Read Uncommitted
	RC	Read Committed
	RR	Repeatable Read
	TS	Serializable Transactions
	TV	Transaction Versioning
OLE DB	RU	Read Uncommitted
	RC	Read Committed
	RR	Repeatable Read
	TS	Serializable Transactions (default)
	TC	Chaos
Sybase Adaptive Server Enterprise	0	Read Uncommitted
	1	Read Committed (default)
	3	Serializable Transactions
Sybase DirectConnect	0	Read Uncommitted
	1	Read Committed (default)
	2	Repeatable Read
	3	Serializable Transactions

In the development environment

Select the isolation level you want from the Isolation Level drop-down list on the Connection tab in the Database Profile Setup dialog box.

For instructions, see "Setting Additional Connection Parameters" in *Connecting to Your Database*.

Default value

The default lock value depends on how your database is configured. For information, see your DBMS documentation.

Usage

ODBC The TV (Transaction Versioning) setting does *not* apply to Adaptive Server Anywhere databases.

OLE DB Support for the MSS native driver for Microsoft SQL Server was discontinued in InfoMaker because Microsoft discontinued support for the underlying DBLib interface in Microsoft SQL Server 2000. Microsoft recommended the use of OLE DB instead. The default value for Lock in the MSS interface was Read Committed, but for OLE DB the default is Serializable Transactions. You can override the default value by specifying a value for Lock in the *PBODB105.INI* file. For example:

```
[Microsoft SQL Server]
...
LOCK='RC'
...
```

The value in the PBODB105.INI file is used if you do not change the default in the database profile or set the Lock parameter of the Transaction object in code.

Sybase Adaptive Server Enterprise Sybase Adaptive Server Enterprise supports the following lock values, which correspond to SQL Server isolation levels:

- **0—Read Uncommitted (dirty reads)** Isolation level 0 prevents other transactions from changing data that an uncommitted transaction has already modified (through SQL statements such as UPDATE).

  Other transactions cannot modify the data until the transaction commits, but they can still read the uncommitted data (perform dirty reads). Isolation level 0 prohibits retrieval locks on tables or pages.

  Isolation level 0 is valid only for Sybase System 10 or higher databases.

- **1—Read Committed** (Default) Isolation level 1 prevents dirty reads by issuing shared locks on tables or pages.

  A **dirty read** occurs when one transaction modifies a table row and a second transaction reads that row before the first transaction commits the change. If the first transaction rolls back the change, the information read by the second transaction becomes invalid.

- **3—Serializable Transactions (HOLDLOCK behavior)** Isolation level 3 prevents dirty reads, nonrepeatable reads, and phantoms for the duration of a transaction.

  A **nonrepeatable read** occurs when one transaction reads a row and then a second transaction modifies that row. If the second transaction commits the change, subsequent reads by the first transaction produce different results than the original read.

  A **phantom** occurs when one transaction reads a set of rows that satisfy a search condition, and then a second transaction modifies that data through a SQL INSERT, UPDATE, or DELETE statement. Subsequent reads by the first transaction using the same search conditions produce a different set of rows than the original read.

Examples

Example 1 To set the Lock value to RC (Read Committed) for an Adaptive Server Anywhere database:

- **Development environment** Select Read Committed from the Isolation Level drop-down list in the Database Profile Setup dialog box.

Example 2 To set the Lock value to 3 (Serializable Transactions) for a Sybase Adaptive Server Enterprise database:

- **Development environment** Select Serializable Transactions from the Isolation Level drop-down list in the Database Profile Setup dialog box.

Read Only

Description

Read Only specifies whether InfoMaker should update the extended attribute system tables and any other tables in your database. The extended attribute system tables (also known as the extended catalog) consist of five tables that contain default extended attribute information for your database.

The Read Only setting determines whether you can modify (update) the tables in your database. By default, the Read Only check box is cleared in the Database Preferences property sheet. This means that InfoMaker updates the extended attribute system tables and other tables in your database when you make changes.

If you select the Read Only check box, InfoMaker *does not update* the extended attribute system tables or any other tables in your database. You *cannot* modify (update) information in the extended attribute system tables or any other database tables from the Form or Report painters when the Read Only check box is selected.

Applies to

All database interfaces

In the development environment

In the Database painter, select or clear the Read Only check box in the Database Preferences property sheet as follows:

- **Select the check box** InfoMaker does not update the extended attribute system tables or any other tables in your database. You *cannot* modify (update) information in the extended attribute system tables or any other database tables from the Form or Report painters when the Read Only check box is selected.
- **Clear the check box** (Default) InfoMaker updates the extended attribute system tables and any other tables in your database when you modify them.

Default value

The Read Only check box in the Database Preferences property sheet is cleared by default.

Usage	If you select the Read Only check box in the Database Preferences property sheet, you cannot modify information in *any* tables from the Form or Report painters. Therefore, you can use only SELECT and Retrieve statements in the Form or Report painters.
See also	Use Extended Attributes

Shared Database Profiles

Description	Specifies the path name of the InfoMaker initialization file containing the database profiles you want to share. For instructions on sharing database profiles in the InfoMaker development environment, see "Managing Database Connections" in *Connecting to Your Database*.
Applies to	All database interfaces
In the development environment	In the Database painter, supply the path name of the InfoMaker initialization file containing shared profiles in the Shared Database Profiles box in the Database Preferences property sheet. You can type the path name or click the Browse button to display it. For instructions, see "Setting Additional Connection Parameters" in *Connecting to Your Database*.
Default value	The Shared Database Profiles box in the Database Preferences property sheet is blank (unspecified) by default.
Examples	To share database profiles contained in the file *I:\SHARE*IM.*INI* on the Windows platform, type or browse to the following in the Shared Database Profiles box in the Database Preferences property sheet: `I:\SHARE\IM.INI`

SQL Terminator Character

Description

Specifies the SQL statement terminator character used by the Database painter's Interactive SQL (ISQL) view.

The default terminator character for the ISQL view is a semicolon (;). If a semicolon conflicts with the terminator character used by your DBMS syntax, you can change the painter's terminator character by specifying a different character in the SQL Terminator Character box in the Database Preferences property sheet. A good choice for a terminator character is the backquote (`) character.

Changing the terminator character is recommended when you are using the ISQL view to create or execute stored procedures, triggers, and SQL scripts.

Applies to

All database interfaces

In the development environment

In the Database Preferences property sheet in the Database painter, type the terminator character you want to use in the SQL Terminator Character box. For instructions, see "Setting Additional Connection Parameters" in *Connecting to Your Database*.

Default value

The default SQL Terminator Character value in the Database Preferences property sheet is a semicolon (;).

Usage

The following are typical situations that might require you to change the default SQL Terminator Character value:

- **Creating stored procedures and triggers** If you are creating stored procedures and triggers in the ISQL view, change the painter's terminator character to one that you do not expect to use in the stored procedure or trigger syntax for your DBMS, such as the backquote (`) character.

  After you finish using the stored procedure, you can change the terminator character back to a semicolon (;). If you prefer, you can continue to use the new terminator character as long as it does not conflict with any stored procedure or trigger syntax you plan to use.

- **Executing SQL scripts** If you plan to execute any SQL scripts in the ISQL view, make sure the terminator character used in the script agrees with the terminator character currently set in the view.

Examples

To change the SQL statement terminator character in the ISQL view to a backquote (`), type a backquote in the SQL Terminator Character box in the Database Preferences property sheet.

Use Extended Attributes

Description

Controls access to the extended attribute system tables by specifying whether you want InfoMaker to create these tables. The extended attribute system tables (also known as the extended catalog) consist of five tables that contain default extended attribute information for your database.

By default, the Use Extended Attributes check box is selected in the Database Preferences property sheet. This setting creates the extended attribute system tables the first time you connect to a database using InfoMaker.

Applies to

All database interfaces

In the development environment

In the Database painter, select or clear the Use Extended Attributes check box in the Database Preferences property sheet as follows:

- **Select the check box** (Default) Creates the extended attribute system tables when connecting to the database for the first time.
- **Clear the check box** Does *not* create the extended attribute system tables if they do not exist. Instead, the Form and Report painters use the appropriate default values for extended attributes (such as headers, labels, and text color). If the extended attribute system tables already exist, InfoMaker does not use them when you create a new report or form.

Default value

The Use Extended Attributes check box in the Database Preferences property sheet is selected by default.

Usage

If you clear the Use Extended Attributes check box in the Database Preferences property sheet, InfoMaker *does not do* any of the following:

- Create the extended attribute system tables
- Insert, update, or delete rows in the extended attribute system tables
- Select information (such as header names) from the extended attribute system tables
- Execute statements that reference the extended attribute system tables

See also

Read Only

Index

A

B

C

D

E

F

H

I

J

K

L

M

N

O

P

Q

R

S

T

U