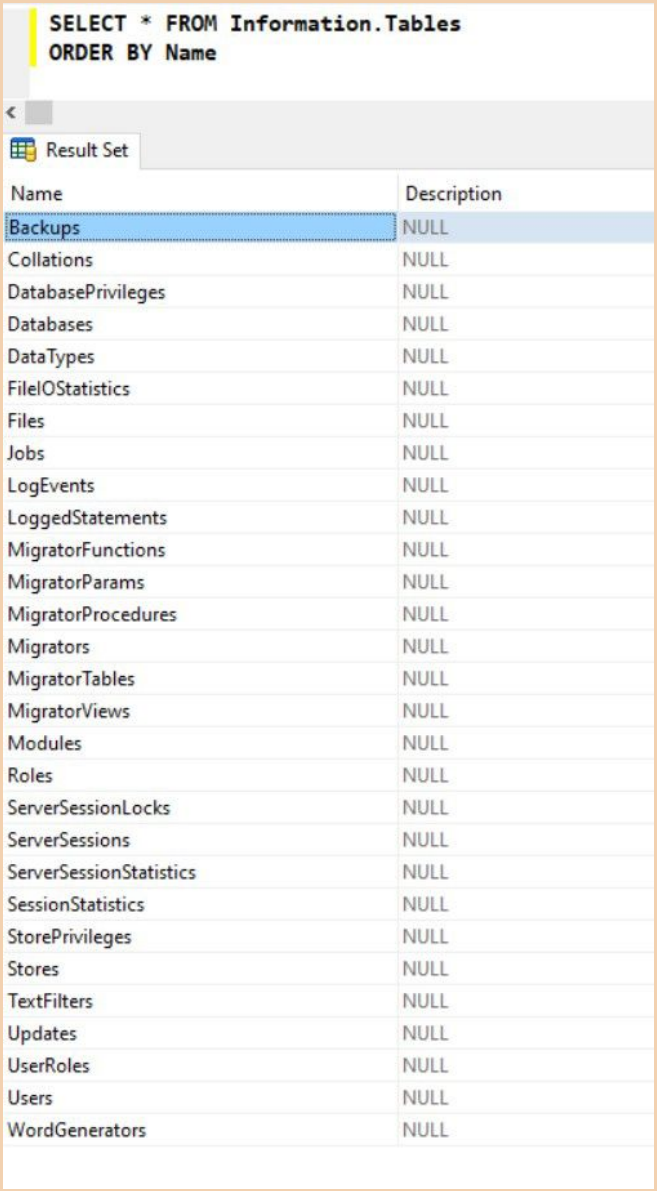
Configuration Tables in the database and the Database Catalog

Orixa contains a set of mechanisms to allow the Developer to refer to its database schema structures. This is useful as it allows Orixa Systems to be self-describing.
It is important to emphasize that the contents of the Configuration and Catalog data-tables are highly critical to the operation of any Orixa App, and SQL targetting these tables should be written with care. It is NOT possible to update or change any of these system tables, but it is possible to use them to DELETE, DROP and ALTER parts of your App, so SQL statements should be drafted with due care.

The Configuration Database



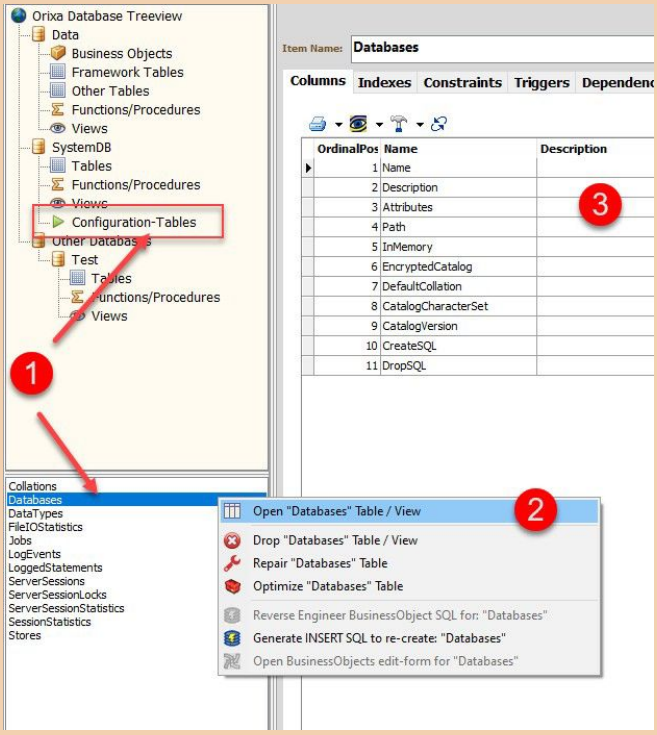
Configuration Database

Each Configuration table contains data relating to your individual App's systems. A full list of the Configuration tables is:
DataTypes
Collations
Modules
TextFilters
WordGenerators
Migrators
MigratorParams
MigratorTables
MigratorViews
MigratorFunctions
MigratorProcedures
FileIOStatistics
SessionStatistics
LogEvents
LoggedStatements
Backups
ServerSessions
ServerSessionLocks
ServerSessionStatistics
Updates
Users
Roles
UserRoles
Databases
DatabasePrivileges
Jobs
Stores
Files
StorePrivileges

Only a few of these are of regular use for a developer. For example the "Users" configuration table can be queried to return a list of names of the Computers currently connected to the App.

A few of the configuration data-tables are made easily available via the Database Management Utility in your App.

1. Click on the "Configuration-Tables" item in the Database Treeview, and a list of tables will appear.
2. Select one table from the list and right-click to open a context menu from which you can Open the table to view it's records.



Viewing some of the Configuration data-tables

3. Once any configuration data-table is selected all its details will display, including Columns, Indexes and Definition. Review the contents of these Columns to understand what the data-table is for and how you can use it.

The Database Catalog Schema

As well as the Configuration database, Your database also contains a set of Catalog meta-data tables.

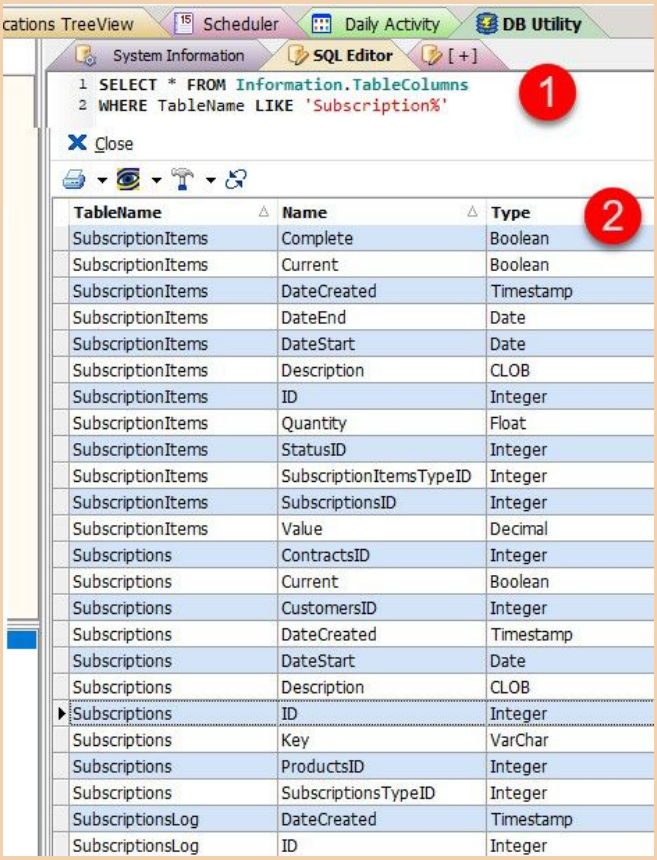
Tables
TablePrivileges
TableColumns
TemporaryTables
Constraints
ConstraintColumns
Indexes
IndexColumns
Triggers
TriggerColumns
Views
ViewPrivileges
ViewColumns
TemporaryViews
Procedures
ProcedurePrivileges
ProcedureParams
Functions
FunctionPrivileges
FunctionParams
Dependencies
SchemaObjects
SchemaDifference

All of these tables can be accessed with SQL in the form:

```
SELECT * FROM Information.[catalog-tablename]
```

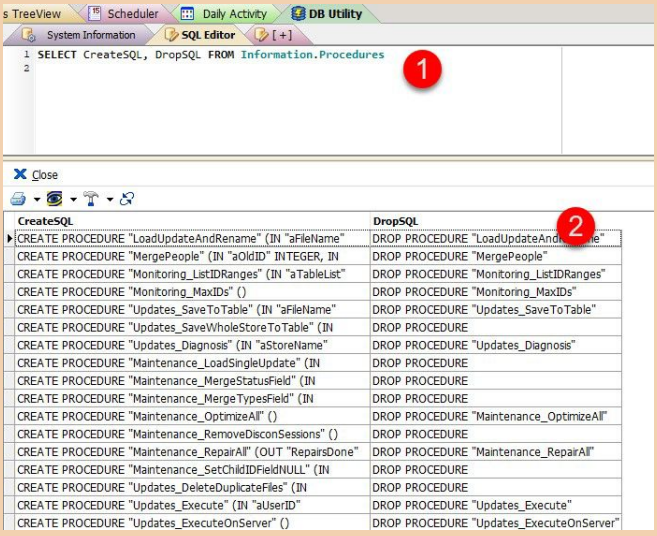
If you know the names of columns in these tables you can use these in the SELECT statement just like any ordinary SQL Statement.

Examples of Catalog meta-data SQL Queries



SELECT * FROM Information.TableColumns

1. A SQL Statement has been written using the Syntax Information.TableColumns. Note that a WHERE clause has also been added.
2. Data is returned that matches the criteria of the WHERE statement.



Information.Procedures catalog-table

1. A SQL Statement querying the Procedures catalog meta-data table,
2. The data that has been returned contains the SQL needed to either CREATE or DROP each Procedure.