



OVERVIEW

ODA Map SDK is a vertical extension based on Drawings SDK. It provides the ability to work with Autodesk® Map 3D® files from any application.

- Using our SDK you can visualize and modify GIS data for next GIS-providers (provider is a specific implementation of the FDO (Feature Data Object) API that provides access to data stored in a particular data source technology): SDF, SQLite, SHP, PostgreSQL, MySQL and WFS. We are using FDO (Feature Data Object) third party libraries to work with GIS-data, therefore any provider that supports FDO interface is potentially supported by us
- As GIS layers of file are represented via MapGuide third party library all MapGuide styles are correctly applied via MapGuide Renderer interfaces
- Also, we provide ability to import GIS data to simple drawing objects (lines, polygons, etc) with attributes (except simple drawing attributes also can be represented by specific Clrd* map classes)

WHAT'S NEW 2022

- OdMapOD* interfaces were supported. OdMapOD* classes are arx-like wrappers to simplify work with Clrd* classes. Clrd* classes are specific map classes that are used to write additional table-like attributes to OdDbEntity.
- Added ability to create/read/modify OdMapQuery objects. OdMapQuery represents a query that can be used as a filter to select some specific db-entities from some entities set using specific conditions, e.g. such as entities properties, geometry positioning, etc.

- Query preview (circle data is not shown) example:

Location: CROSSING CIRCLE AND (Property: COLOR = "255,0,0" OR Property: THICKNESS >= 5.4000")

- OdDbEntity's evaluation (needed for OdMapQuery execution and OdMapDMStyle's applying):
 - OdMapLocationCondition evaluation was implemented for all boundaries (9/10 items) except OdMapBufferFenceBoundary (OdDbHatch boundary evaluation is not supported yet)
 - OdMapPropertyCondition evaluation implemented for 14 of 15 properties (e.g: area, blockname, color, elevation, etc.)
 - OdDbEntity 37 of 42 property value extraction was supported. (e.g, ".CENTROID", ".DWGNAME", ".ELEVATION", etc.)
 - 32 of 42 expression arguments were supported. (e.g.: "+", "-", "/", "=", "COS", "L"SUBSTR", "NOT", "<>", etc.)

- OdMapDM* classes support, all function were implemented for next classes:
 - OdMapDMCurrentDwgQueryElement
 - OdMapDMAttachedDwgsQueryElement
 - OdMapDmEeStylizedDataCache
 - OdMapDMDefaultStyle
 - OdMapDMEntityStyle
 - OdMapDMRasterStyle
 - OdMapDMStylizationEntityStyle
 - OdMapDMThematicTable (+ all OdMapDMThematicTableItem classes were reviewed, 11 items).
 - OdMapDMThematicStyle
 - OdMapSEAnnotationStyle
 - OdMapSEHatchStyle
 - OdMapSETextStyle