

SuperMap 北京超图

SuperMap Software Co., Ltd.

SuperMap iObjects .NET Spatial Data Management (1)

SuperMap Software Co., Ltd.



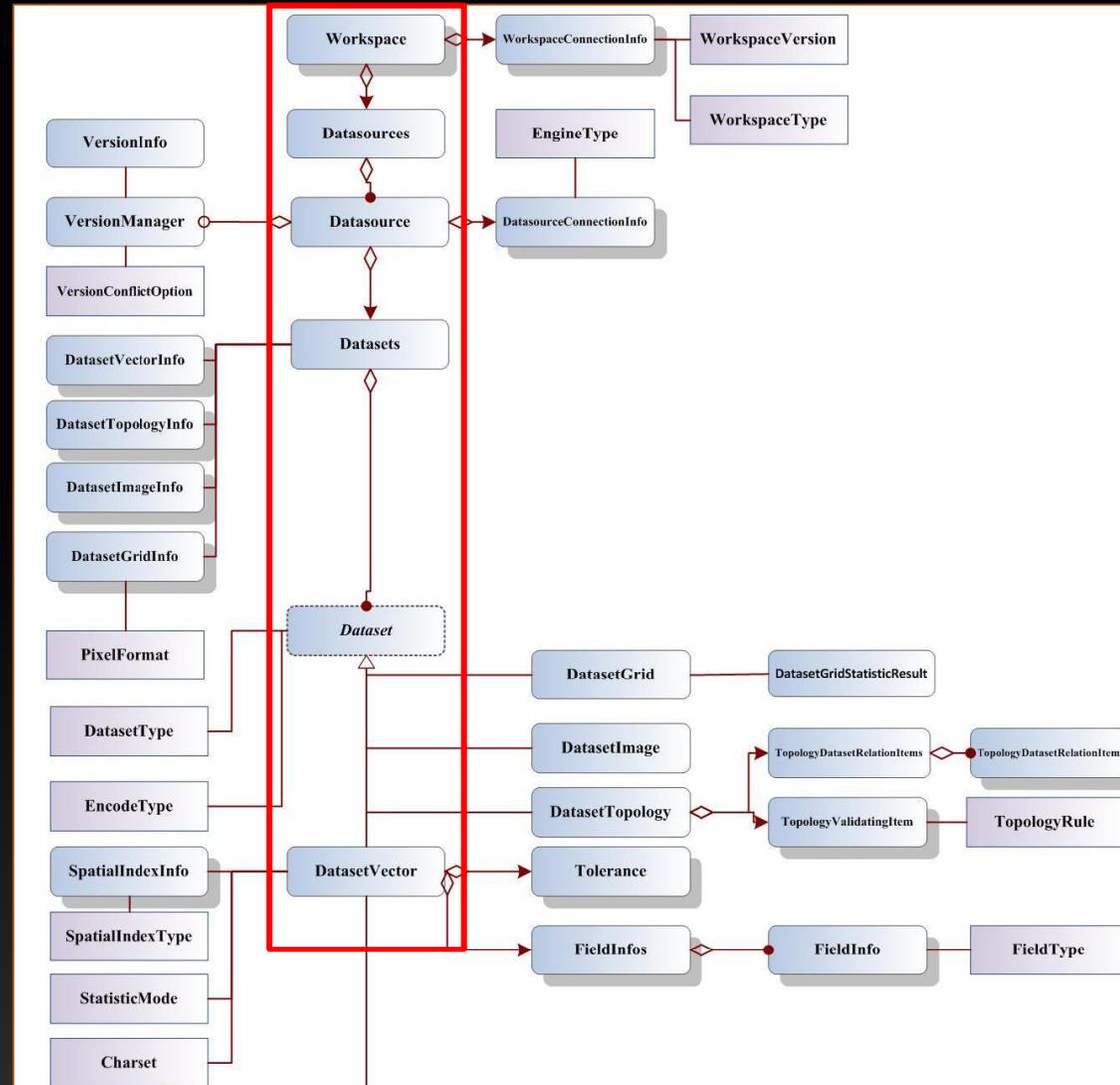
Course Objectives

- Understand the main purposes of the workspace, datasource, dataset objects, and relationships of them in the Data module
- Master the creation, opening and saving of workspaces
- Sample Data: SuperMap iObjects .NET 9D Installation
Directory\SampleData\World\World.smwu, World.udb,udd

Main Contents

- Structure Diagram of Main Objects
- Application of Workspace

Object Structure Diagram of Data Module



Application of Workspace

- Review of the Concept of Workspace
- Main Objects of Workspace
- Use of Workspace
- Code Samples

Review of the Concept of Workspace

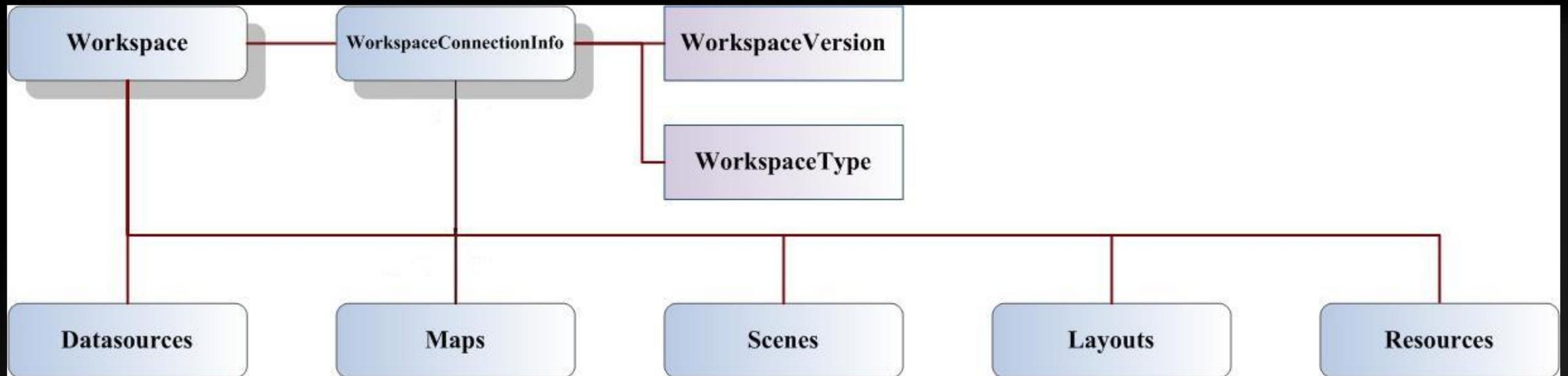
- A workspace is used to save the work environment of the user, including: the currently opened datasources (location, alias, and opening mode), maps, layouts, 3D scenes, resource libraries (marker symbol library, line symbol library, fill symbol library) etc.

Review of the Concept of Workspace

Workspace type	Detailed description
SXW	SXW workspace (i.e. SuperMap XML Workspace), an XML format workspace that can be opened with a text editor, such as EditPlus, etc.
SMW	SMW workspace, that is, file type workspace.
SXWU	SXWU workspace. Only workspaces of version UGC6.0 can be saved as workspace files of the SXWU type. While saving as version UGC 6.0 workspace, a file workspace can only be saved as SXWU or SMWU.
SMWU	SMWU workspace. Only workspaces of version UGC6.0 can be saved as workspace files of the SMWU type. While saving as version UGC 6.0 workspace, a file workspace can only be saved as SXWU or SMWU.
SQL	SQL Server workspace. The workspace is saved in the SQL Server database.
Oracle	Oracle workspace. The workspace is saved in the Oracle database.
DM	DM workspace. The workspace saves in the DM database.
MySQL	MySQL workspace. The workspace saves in the MySQL database.

Main Objects of Workspace

Structure Diagram of Main Objects of Workspace



Use of Workspace

- Get the corresponding data, including data sources, maps, layouts, etc.

	Name	Description
	AutoBackupPreFile	Whether to auto backup the previous workspace in case of the damage of the workspace when you save it.
	Caption	Gets or sets the displayed name of this Workspace object, so that the user can identify this Workspace, and the caption of a Workspace can be modified.
	ConnectionInfo	Gets the connection information of the workspace.
	Datasources	Returns the Datasources object. The Datasources object stores the logic information of the datasources in this Workspace, such as the connection information of datasource data, storage location of datasources, but it does not store the real data of datasources. The data of datasources are stored in relational databases or UDB files. The Datasources object in a Workspace is mainly used to manage the datasource in this Workspace, including opening, creating, closing operation etc.
	Description	Gets or sets the description about this Workspace object that added by the user.
	IsModified	Returns a value indicates whether if this Workspace is modified.
	Layouts	Gets the Layout collection in the workspace.
	Maps	Returns the Maps object of this Workspace object.
	Resources	Gets the Resources object in the workspace. The Resources object is used to manage the resources such as the line style library, the fill style library and the symbol library.
	Scenes	Gets the Scene collection in the workspace.
	Type	Returns the type of current Workspace object.
	Version	Returns the version of the Workspace.

Use of Workspace

- The basic operation of the workspace, including opening, saving, deleting, closing the workspace, etc.

	Name	Description
⇒	AboutBox	Pops up the About dialog box of the workspace.
⇒	ChangePassword	Modify the password of the opened workspace.
⇒	Close	Closes the workspace.
⇒	Create	Creates a new workspace with the specified workspaceConnectionInfo.
⇒ S	DeleteWorkspace	Deletes the workspace with the specified WorkspaceConnectionInfo object.
⇒	Dispose	Releases all resources used by the Workspace.
⇒	GetLastUpdateTime	Used to return the time of last update of the workspace.
⇒ S	GetWorkspaceName	Gets the name of workspace with the specified WorkspaceConnectionInfo object.
⇒	Open	Used to open a existing workspace.
⇒	Save	This method is used to save this Workspace with its original name. If successful, returns True; otherwise False.
⇒	SaveAs	Saves the specified workspace as a new workspace with the specified workspaceCOnnectionInfo.

Code Samples for Workspace



Open Workspace

Save Workspace

Open Workspace

- Main interfaces
 - `Workspace.Open(WorkspaceConnectionInfo)`
 - `WorkspaceConnectionInfo`

WorkspaceConnectionInfo class members

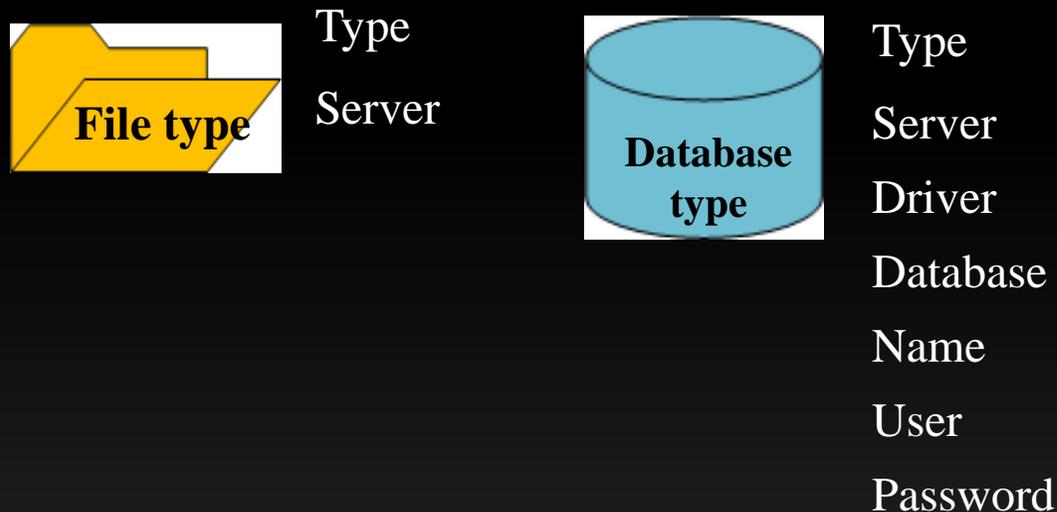
	Name	Description
	Database	Gets or sets the name of the database that the workspace will connect to. Only applies to the database workspace.
	Driver	Gets or sets the name of the ODBC driver of the database. So far, among the database workspace that supported, only SQL Server database can use the ODBC driver, and the driver name for SQL Server database workspace can be string such as SQL Server or SQL Native Client.
	Name	Gets or sets the name of the workspace in the database. For the file database, the name is set to empty.
	Password	Gets or sets the password when logging on the database or connecting to the file.
	Server	Gets or sets the path name of the database server or file.
	Type	Gets or sets the type of the workspace.
	User	Gets or sets the user name when logging on the database. Only applies to the database workspace.
	Version	Gets or sets the version of the workspace. For more information, refer to WorkspaceVersionType enumeration.

Open Workspace

- Implement ideas and steps

Step1: Construct WorkspaceConnectionInfo class

Step2: Set properties of the WorkspaceConnectionInfo class



Step3: Workspace.Open(WorkspaceConnectionInfo)

Save Workspace

- Main interfaces
 - Workspace. Save()
 - Workspace. SaveAs(WorkspaceConnectionInfo)
 - WorkspaceConnectionInfo

WorkspaceConnectionInfo类成员

	Name	Description
	Database	Gets or sets the name of the database that the workspace will connect to. Only applies to the database workspace.
	Driver	Gets or sets the name of the ODBC driver of the database. So far, among the database workspace that supported, only SQL Server database can use the ODBC driver, and the driver name for SQL Server database workspace can be string such as SQL Server or SQL Native Client.
	Name	Gets or sets the name of the workspace in the database. For the file database, the name is set to empty.
	Password	Gets or sets the password when logging on the database or connecting to the file.
	Server	Gets or sets the path name of the database server or file.
	Type	Gets or sets the type of the workspace.
	User	Gets or sets the user name when logging on the database. Only applies to the database workspace.
	Version	Gets or sets the version of the workspace. For more information, refer to WorkspaceVersionType enumeration.

Save Workspace

- Implement ideas and steps

Step1: Construct WorkspaceConnectionInfo class

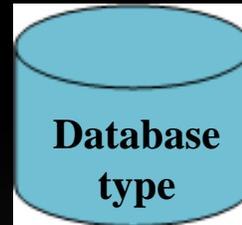
Step2: Set properties of the WorkspaceConnectionInfo class



File type

Type

Server



Type

Server

Driver

Database

Name

User

Password

Step3: Call Workspace.SaveAs(WorkspaceConnectionInfo)

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Thanks!

