

Alessandro Iannacci presents:

ZARCHIVE FRAMEWORK

By Techedge Labs

This framework is based on two new features available on SAP NetWeaver Application Server since release 6.10:

- 1) Persistence Services
- 2) Ability to include string and binary string fields in the transparent tables

Persistence Services introduction

The first feature, Persistence Service, allow developers to abstract from OpenSQL instructions, allowing to create, wizard based, an object oriented layer that represents all Dictionary tables. This layer interacts with these tables using classic OpenSQL commands, grouping all changes in update tasks, increasing consistency and load balancing on the SAP NetWeaver Application Server.

For more informations please follow this link:

http://help.sap.com/saphelp_nw2004s/helpdata/en/ab/9d0a3ad259cd58e10000000a11402f/fra_meset.htm

String and XString in transparent tables

The second feature replace the old method of using fields LCHR and LRAW (preceded by an INT2 field), making it possible to store strings of any size in the underlying database.

What I've created

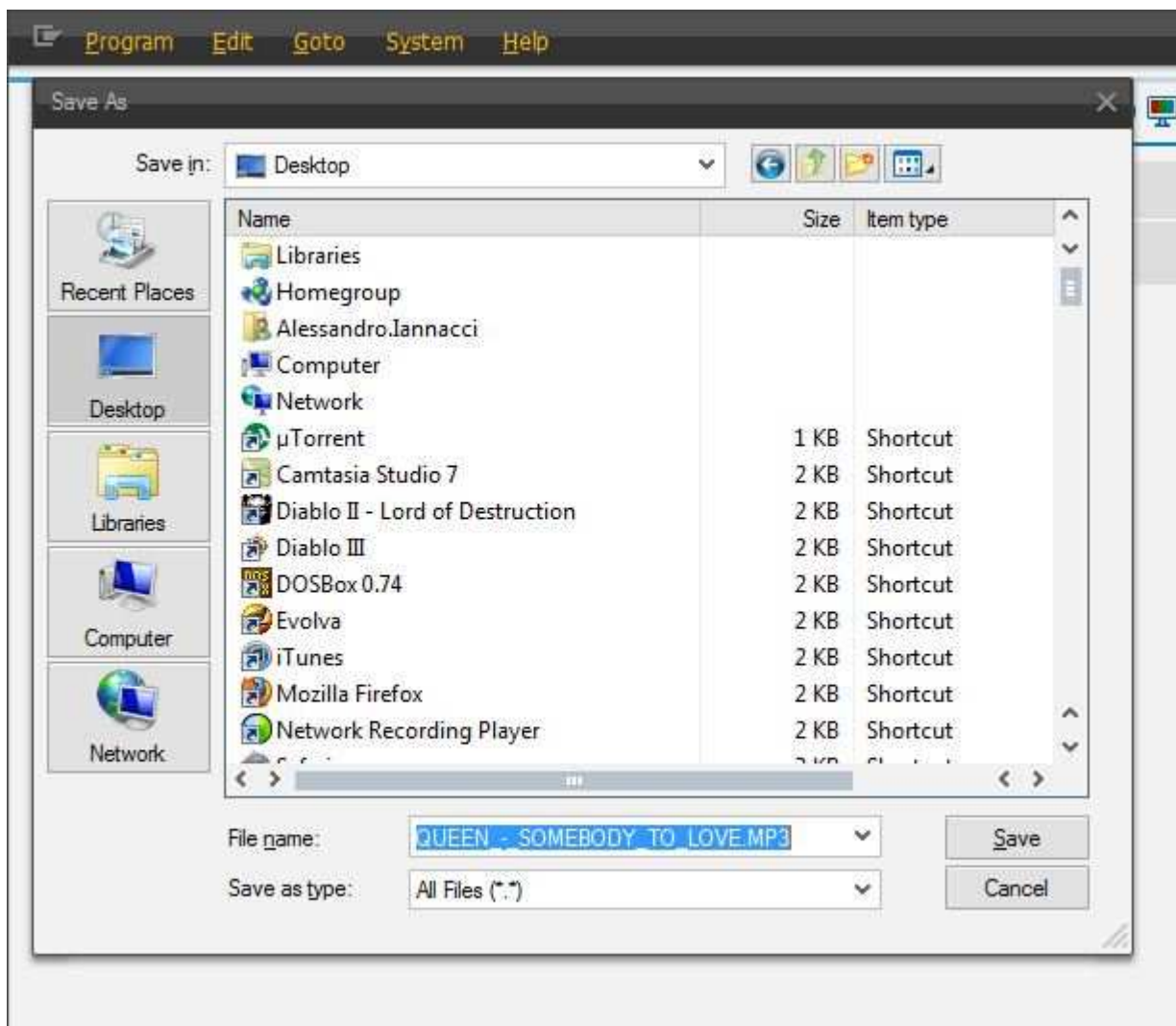
Leveraging these two technologies, I've created a small framework, that allow our Techedge developers to quickly and simply save all file types without the need to use "ArchiveLink" (that need always the business object to link it with the stored file, and that need a storage system), and without the need to save the file on the Application Server filesystem.

The file is stored in one custom table called ZARCHIVE_CENTRAL, together with some informations regarding the file.

Some examples

For example you want to save an mp3 file on the SAP NetWeaver Application Server.

Simply you run the report ZARCHIVE_INS_TEST, select the file and enter an unique ID (in your programs you can generate this ID with the best logic needed).



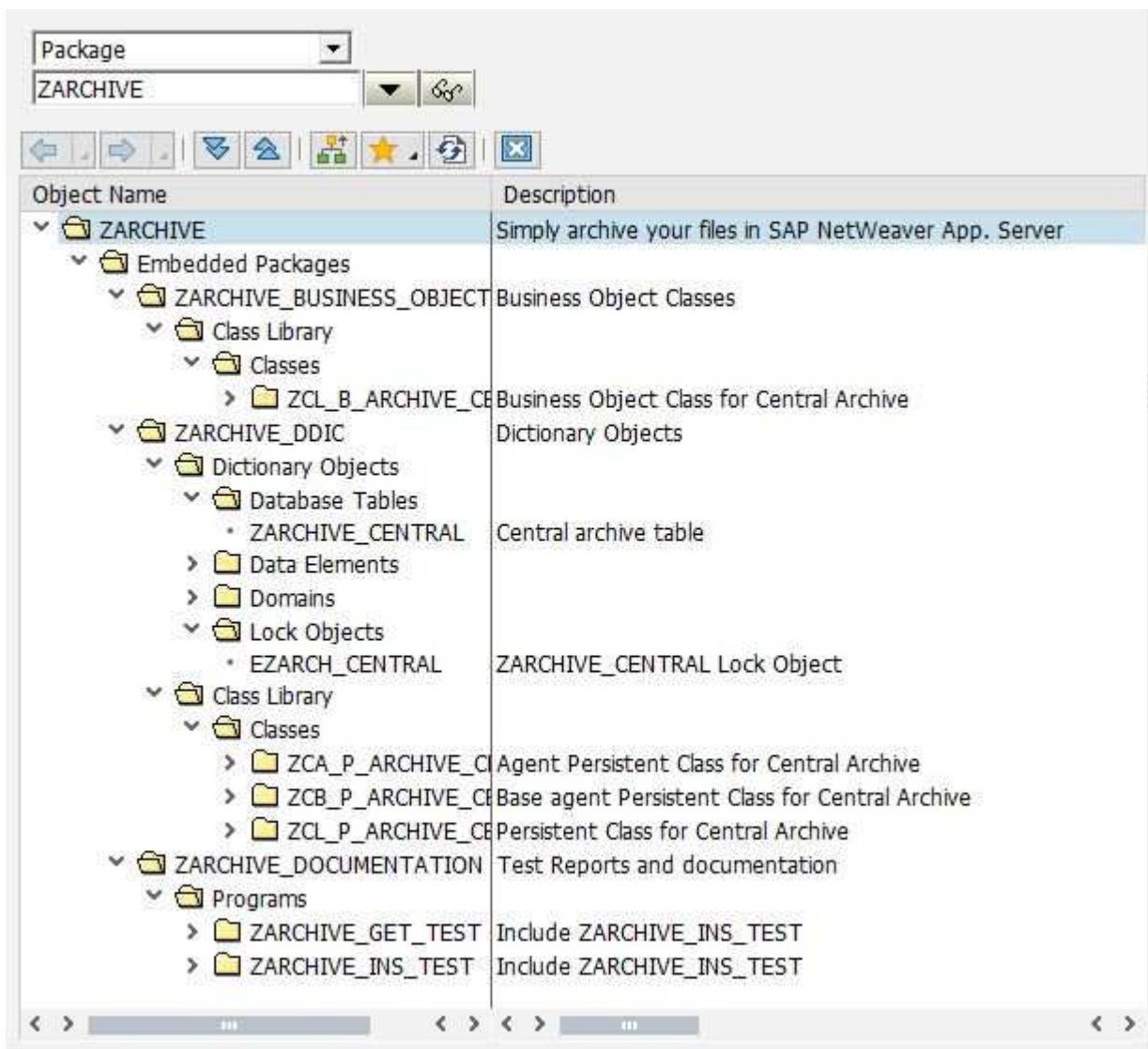
And now you can listen your favorite music! ☺

How to use

First you import the nugget attached to this document using SAPLink. Following there are all objects involved with this development:

Download results					
Exception	Object/Plugin	Object/Plugin	Object name	Plugin	Status Message
	CLAS	Class (ABAP Objects)	ZCL_B_ARCHIVE_CENTRAL	X	Added to nugget
	CLAS	Class (ABAP Objects)	ZCA_P_ARCHIVE_CENTRAL	X	Added to nugget
	CLAS	Class (ABAP Objects)	ZCB_P_ARCHIVE_CENTRAL	X	Added to nugget
	CLAS	Class (ABAP Objects)	ZCL_P_ARCHIVE_CENTRAL	X	Added to nugget
	DEVC	Package	ZARCHIVE	X	Added to nugget
	DEVC	Package	ZARCHIVE_DDIC	X	Added to nugget
	DEVC	Package	ZARCHIVE_BUSINESS_OBJECTS	X	Added to nugget
	DEVC	Package	ZARCHIVE_DOCUMENTATION	X	Added to nugget
	DOMA	Domain	ZARCHIVE_DOCCREATIONTIME	X	Added to nugget
	DOMA	Domain	ZARCHIVE_DOCCREATIONDATE	X	Added to nugget
	DOMA	Domain	ZARCHIVE_DOCUSER	X	Added to nugget
	DOMA	Domain	ZARCHIVE_DOCSIZE	X	Added to nugget
	DOMA	Domain	ZARCHIVE_DOCCONTENT	X	Added to nugget
	DOMA	Domain	ZARCHIVE_DOCFILENAME	X	Added to nugget
	DOMA	Domain	ZARCHIVE_DOCID	X	Added to nugget
	DTEL	Data Element	ZARCHIVE_DOCSIZE	X	Added to nugget
	DTEL	Data Element	ZARCHIVE_DOCCONTENT	X	Added to nugget
	DTEL	Data Element	ZARCHIVE_DOCUSER	X	Added to nugget
	DTEL	Data Element	ZARCHIVE_DOCFILENAME	X	Added to nugget
	DTEL	Data Element	ZARCHIVE_DOCCREATIONDATE	X	Added to nugget
	DTEL	Data Element	ZARCHIVE_DOCCREATIONTIME	X	Added to nugget
	DTEL	Data Element	ZARCHIVE_DOCID	X	Added to nugget
	ENQU	Lock Object	EZARCH_CENTRAL	X	Added to nugget
	PROG	Program	ZARCHIVE_INS_TEST	X	Added to nugget
	PROG	Program	ZARCHIVE_GET_TEST	X	Added to nugget
	TABL	Table	ZARCHIVE_CENTRAL	X	Added to nugget

Then, it is recommended to reorganize the imported repository objects as shown below:



Finally, simply follow the guide lines of the two test reports on how to use the framework.

NOTE: all methods are exposed by the business object class ZCL_B_ARCHIVE_CENTRAL. You shouldn't touch anything in the persistence classes (this layer is auto-generated).

ZCL_B_ARCHIVE_CENTRAL give you the most used CRUD operations to make all changes you may need, performing all necessary consistency checks (unique IDs, existence of a record, etc.) and also a lock object is available in order to avoid user conflicts.

This is only the first version...

Soon I'll come back with new features for this simply but useful framework.

Hope this help any Tectedge developer.

Best regards

Alessandro Iannacci