

QualiWare Repository Import / Export Data

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February 7th, 2017

CloseReach

Quick Introduction

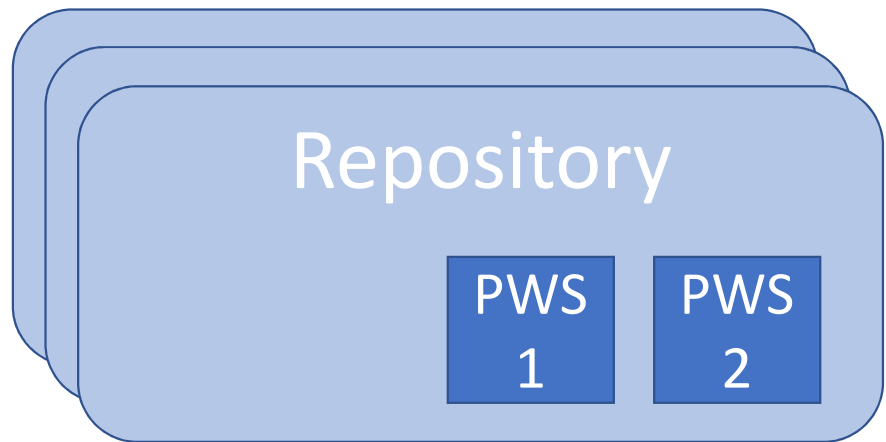
- Bob Boisvert, in IT world since 1972
- Instructor throughout most of career
- QualiWare experience since 2011

- This is a technical presentation about Export and Import of architecture components in QualiWare
- Considerations for 5.3 and 6.X QLM environments

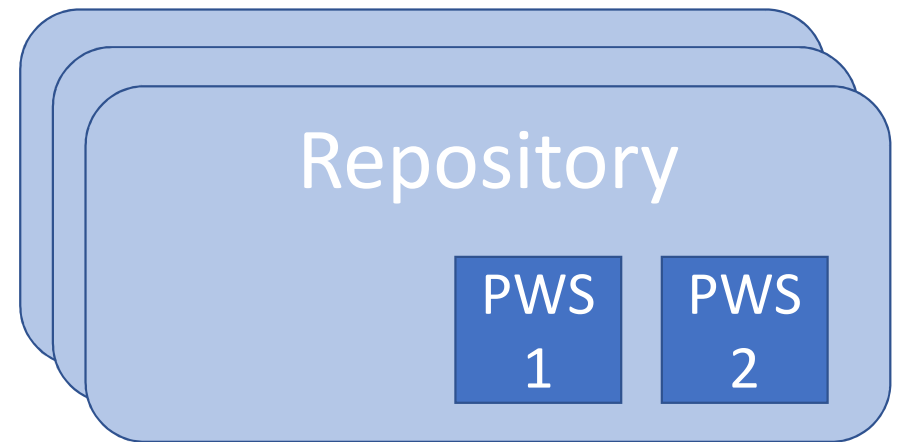
QLM Environment



QLM Environment

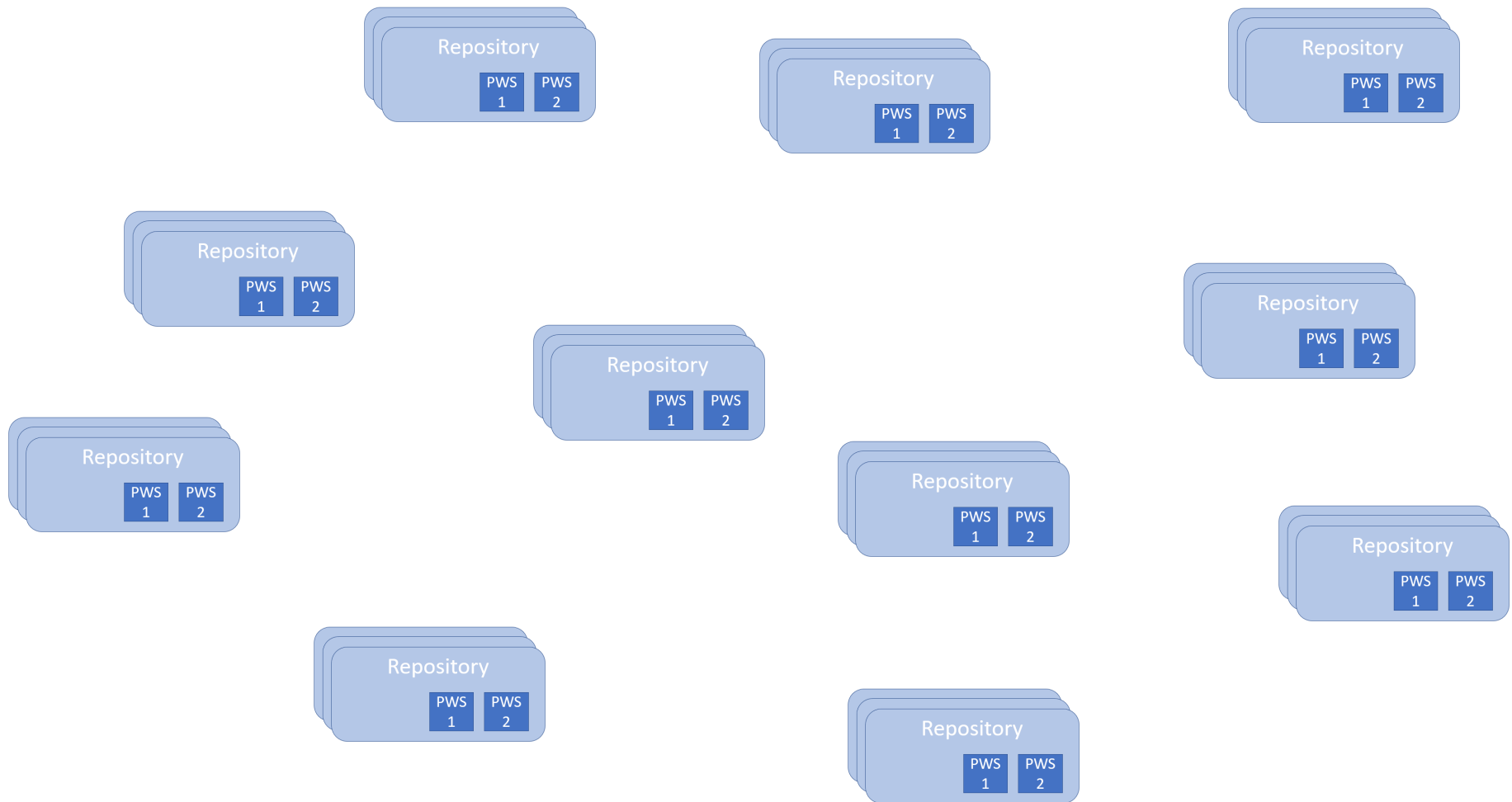


Development



Production

QLM Environment



We have a need here:

Must be able to move
architectural objects between
all of these “places”

Compare utility

Diagrams to compare can be any two **diagrams**:

- different revisions of same diagram
- in different PWS
- in different configurations
- in different repositories
- that are totally different objects (copy)

Compare utility

Properties of two **non-diagram objects**:

- different revisions
- in different PWS
- in different configurations
- in different repositories
- that are totally different objects (copy)

NOTE: Compare different objects

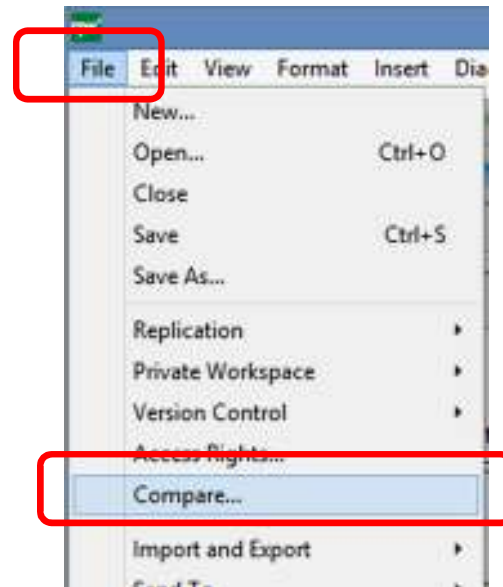
In RepositoryExplorer:

- you can Copy an object (or diagram)
- paste the object (or diagram)

This creates an object (diagram) with a different ObjID, but same contents. Useful for variants, As-Is/To-Be.

How to initiate Compare

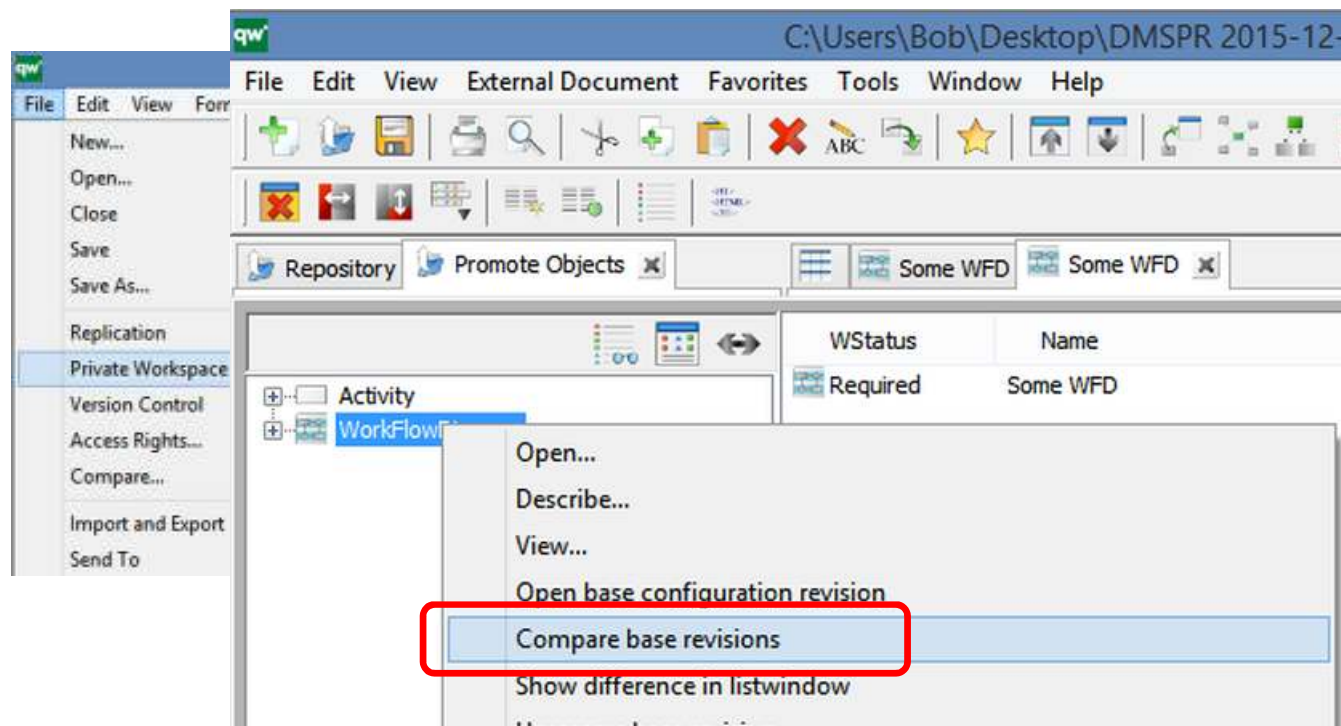
From any
diagram:



How to initiate Compare

From a diagram in a PWS:

File → Private WorkSpace → Promote



Compare Dialog:

NOTE: Is a hidden template!

The screenshot shows the 'Compare' dialog box with the following elements:

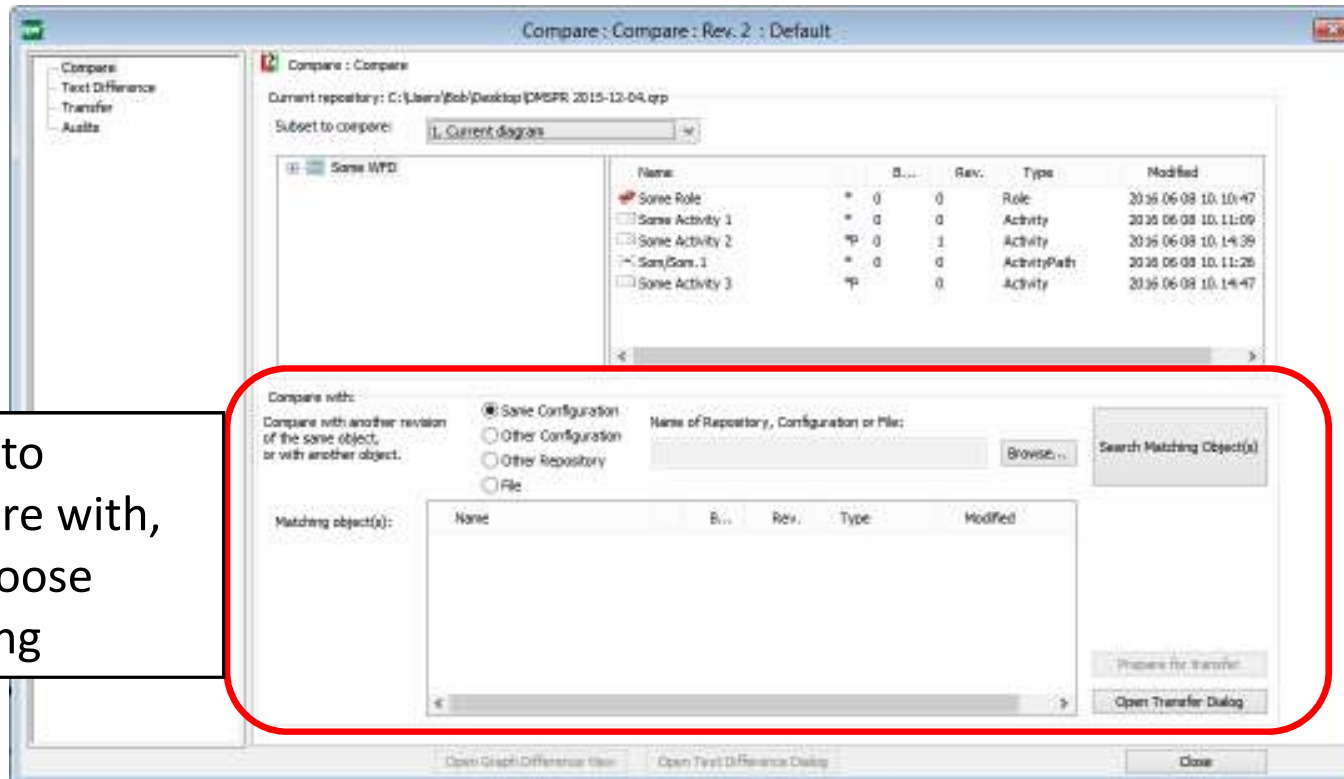
- Current repository:** C:\Users\Bob\Desktop\DMSPR 2015-12-04
- Subject to compare:** A dropdown menu showing '1. Current diagram'.
- Object list:** A table with columns: Name, B..., Rev., Type, Modified.
- Compare with:** Radio buttons for 'Some Configuration', 'Other Configuration', 'Other Repository', and 'File'. 'Some Configuration' is selected.
- Name of Repository, Configuration or File:** A text field with a 'Browse...' button.
- Matching object(s):** A table with columns: Name, B..., Rev., Type, Modified.
- Buttons:** 'Open Graph Difference View', 'Open Text Difference Dialog', 'Close', 'Prepare for Transfer', and 'Open Transfer Dialog'.

Annotations include:

- A red arrow pointing to the 'Compare' menu in the top-left corner.
- A blue arrow pointing to the 'Subject to compare' dropdown menu.
- A red box around the object list table.
- A blue box containing a list of options for the 'Subject to compare' dropdown: 1. Current diagram, 2. Current selection, 3. Diagram templates, 4. All templates.

WHAT to compare, can choose anything

Compare Dialog:



WHAT to compare with, can choose anything

Comparing:

Same Configuration
 Other Configuration
 Other Repository
 File

Name of Repository, Configuration or File:

Same configuration

Basically revisions

Either same config or PWS

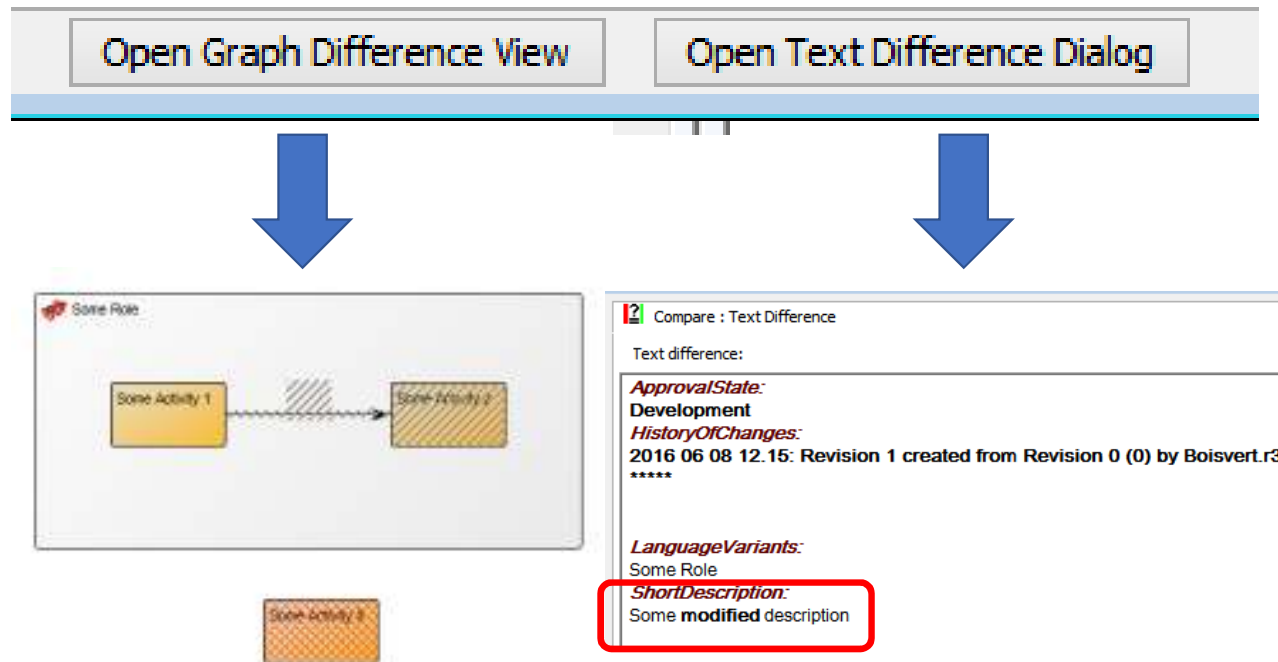
Other Configuration

Select one

Other Repository

Must be connected

Results:

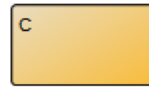


Direction matters: (e.g. 1 vs 0)

Subset to
compare:
(rev 1)



Compare
with:
(rev 0)



Unchanged

Moved

Added

Deleted

Other way (0 vs 1)

Subset to
compare:
(rev 0)



Compare
with:
(rev 1)



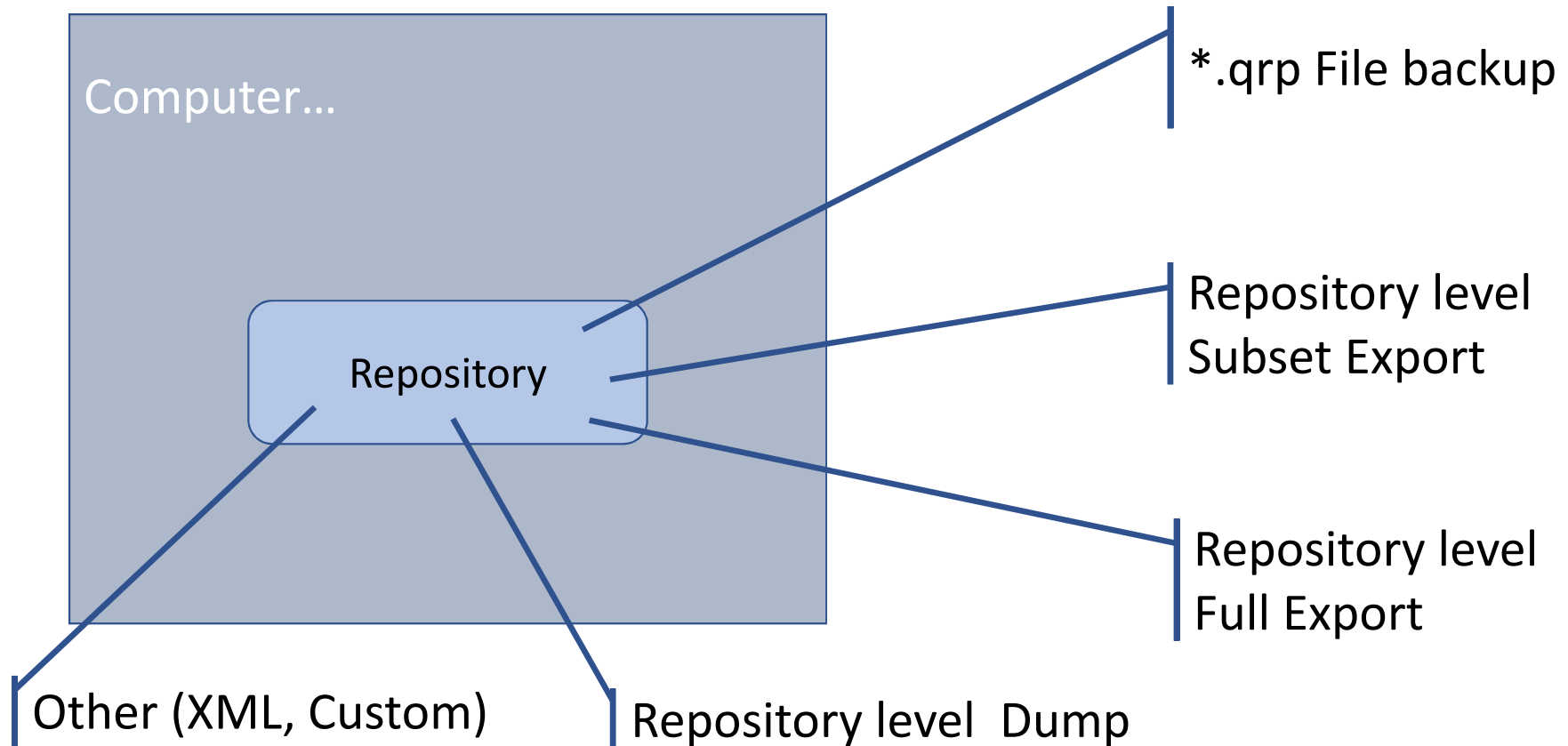
Unchanged

Moved

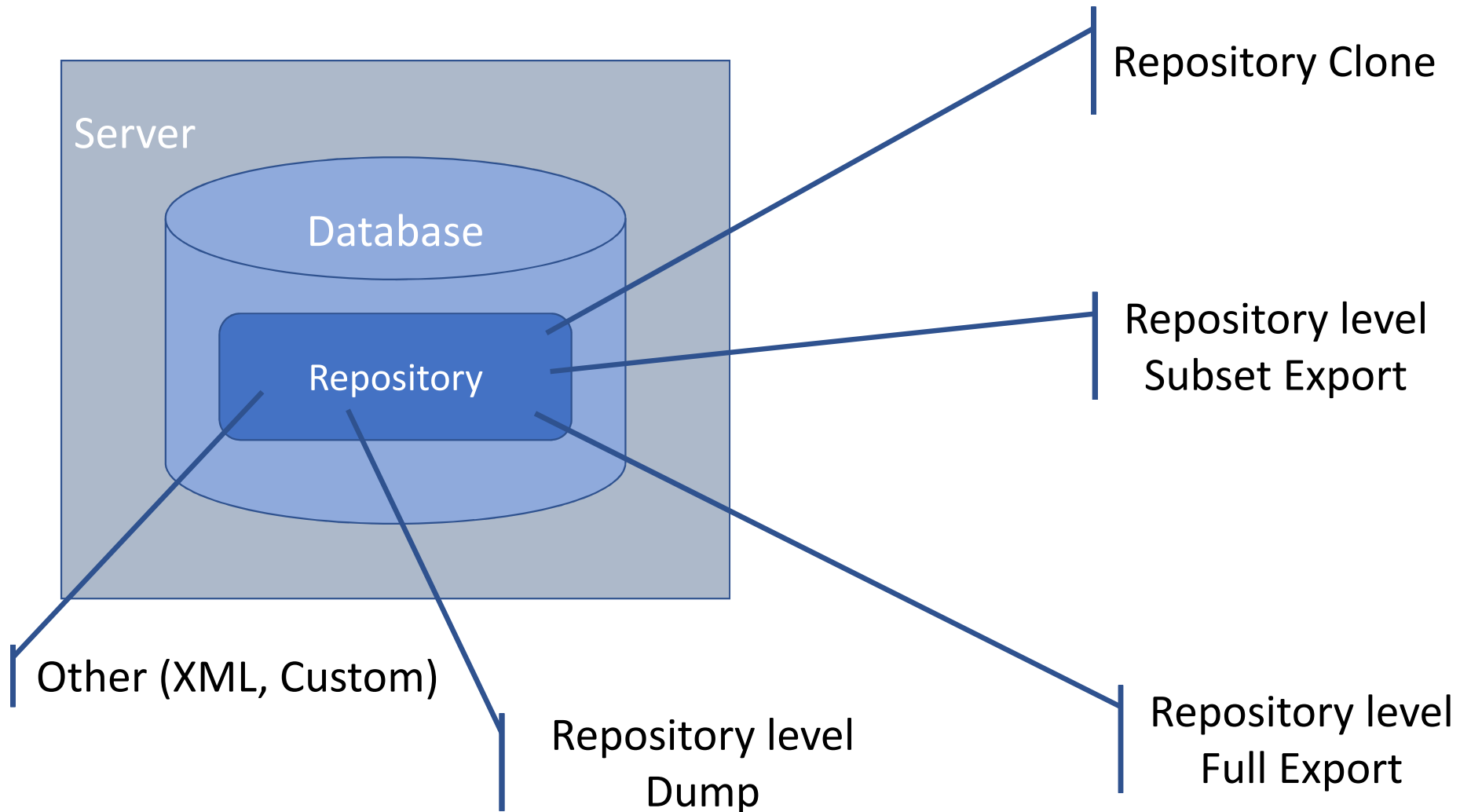
Deleted

Added

Sharing/moving data strategies – File based repository



Sharing, moving data strategies – Database repository

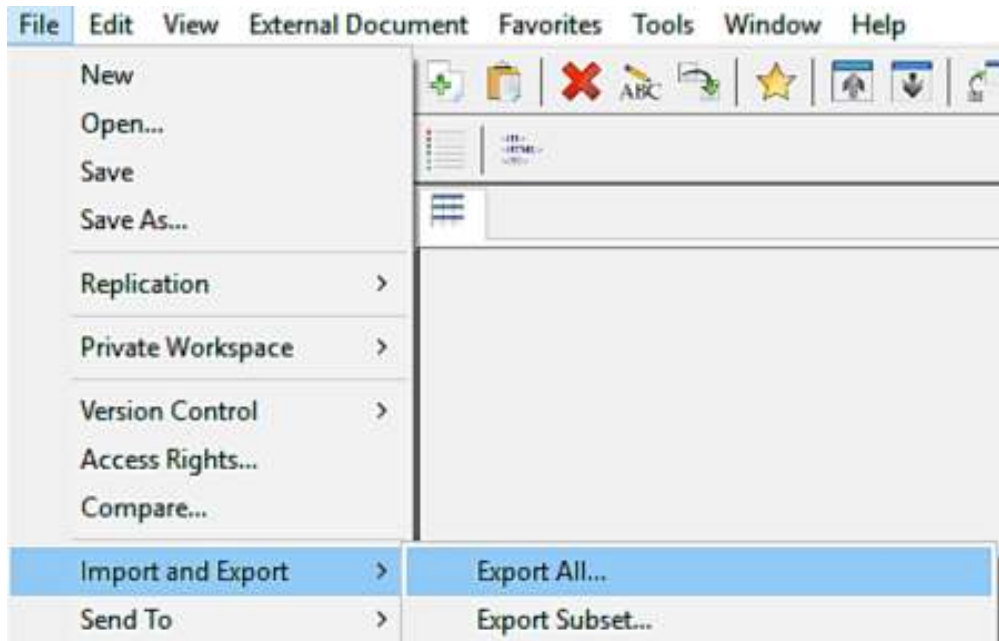


Export/Import

- Organizations often have Development, Testing and Production environments; need to move data around
 - Need to share with other organizations
 - Need to take work home on laptop, return it
 - Share work across servers
 - Checking work out/back in

Export

- From File menu:



Note choices:

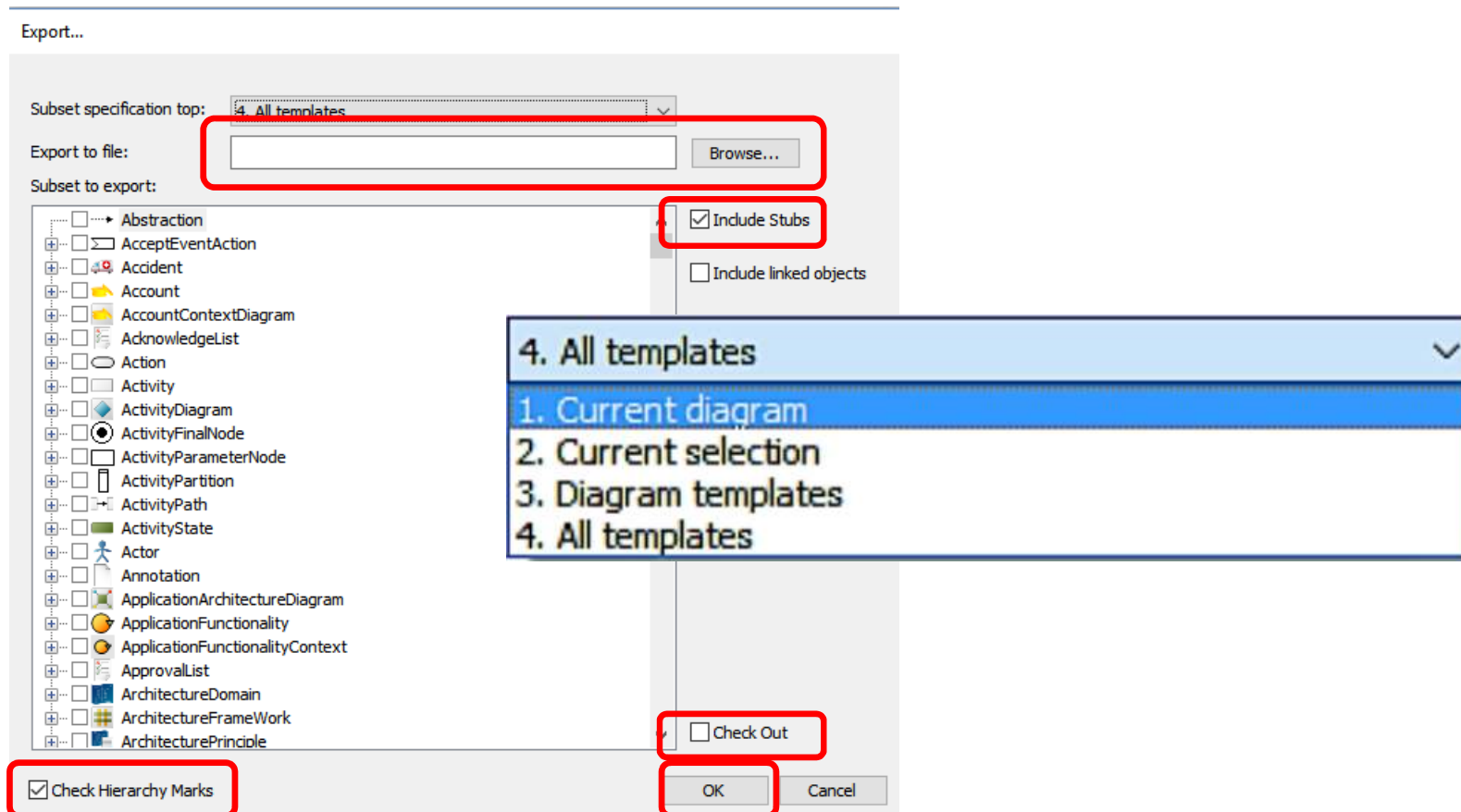
Export All...

Everything in the Repository
(caveat)

Export Subset...

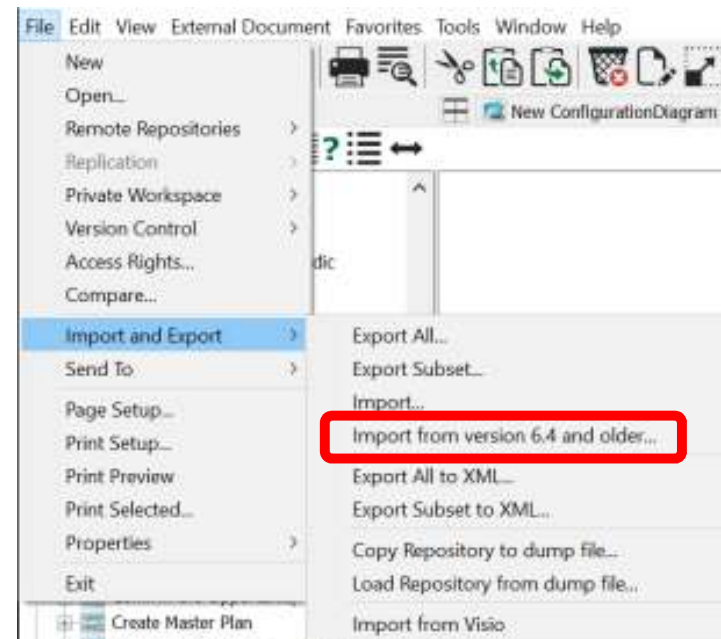
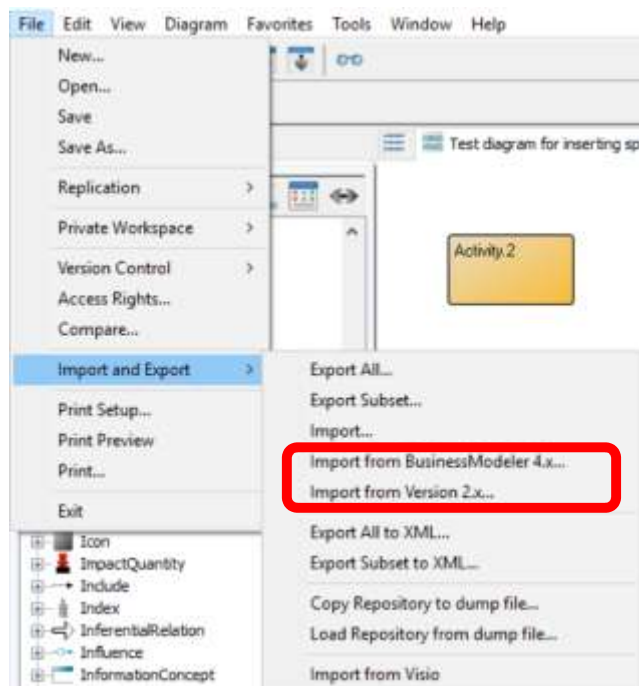
You choose what is needed

Export Subset



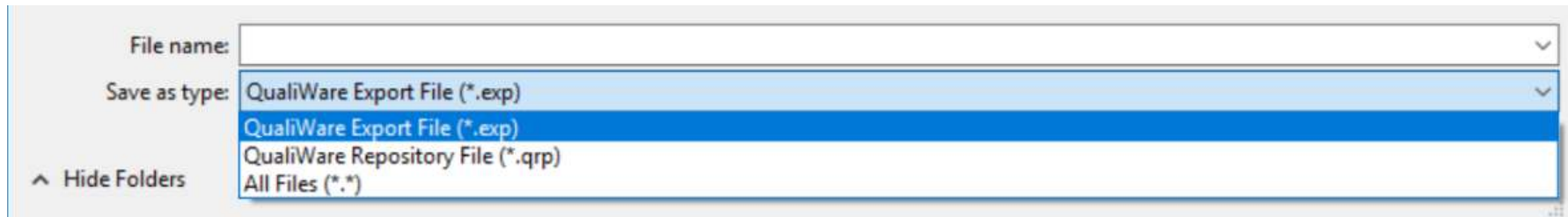
QLM Export file formats

- QLM before 6.5 had *.exp (partial) and *.dmp(full export formats
- QLM 6.5 primarily uses *.qrx export format

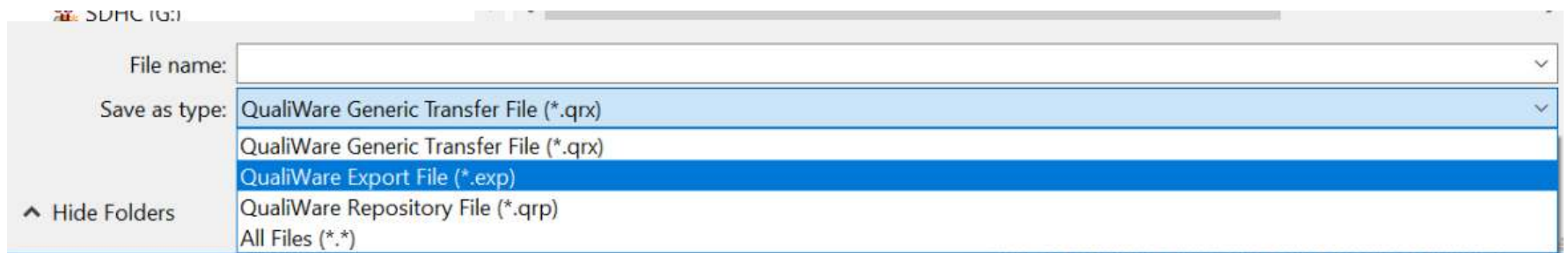


When choosing export file...

5.X



6.X



Export types

Export Subset

- Everything that is selected (Diagram, selected, Templates, other) :
 - Exports objects, diagrams, symbols ...
 - Current Revision only of every object
 - Base language only, if run from default language
 - Base + other language, if run from "other" language
 - ... in this configuration
 - ... in this PWS
 - ... does not export deleted objects (big red X)

Export types

Full Export

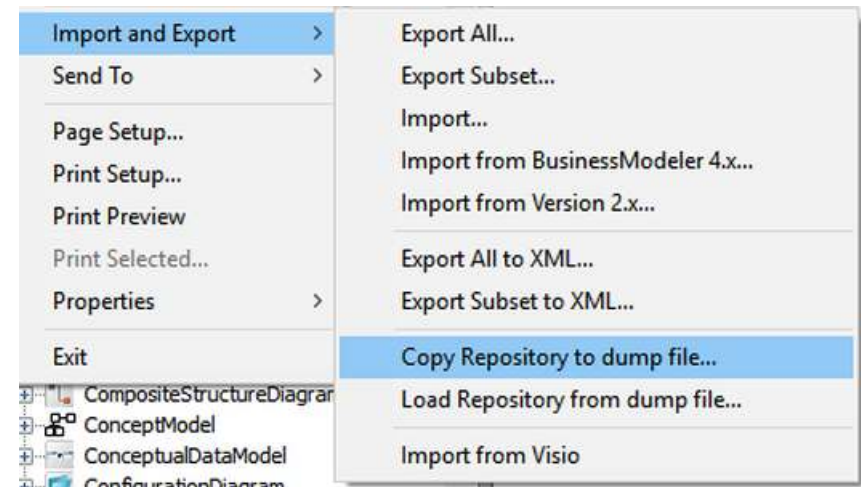
- Everything in repository:
 - Exports all objects, diagrams, symbols ...
 - Current Revision only of every object
 - Base language only, if run from default language
 - Base + other language, if run from "other" language
 - ... in this configuration
 - ... in this PWS
 - ... does not export deleted objects (big red X)

Export types

Dump

- Everything:
 - All objects, diagrams, symbols, ...
 - All Revisions
 - All Language Variants
 - All Configurations
 - ... including all Private WorkSpaces
 - All hidden templates
 - All deleted objects still sitting in background

Same as: Copy of the *.qrp repository (if file-based),
or cloning

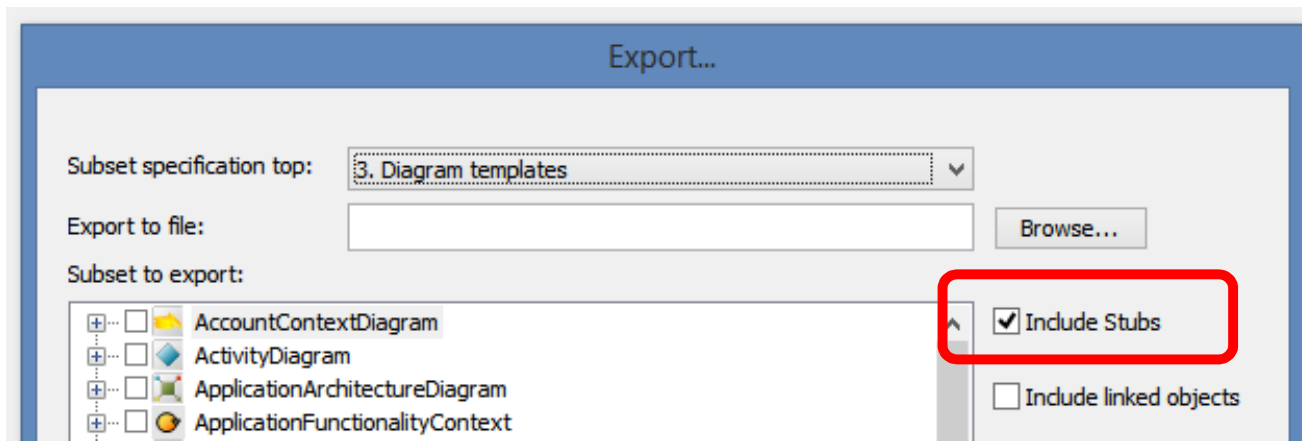


Feature summary

	Export (All or Subset) From default language	Export (All or Subset) From other language	Dump
Objects	selection	selection	All
Revisions	Default only	Default only	All
Language Variants	Default language	Default+Other	All
Configurations	Current	Current	All
Private Workspaces	Current	Current	All
Deleted Objects	No	No	Yes
Export file size	smallest	small	largest
Time to export	Least	More time	Most time

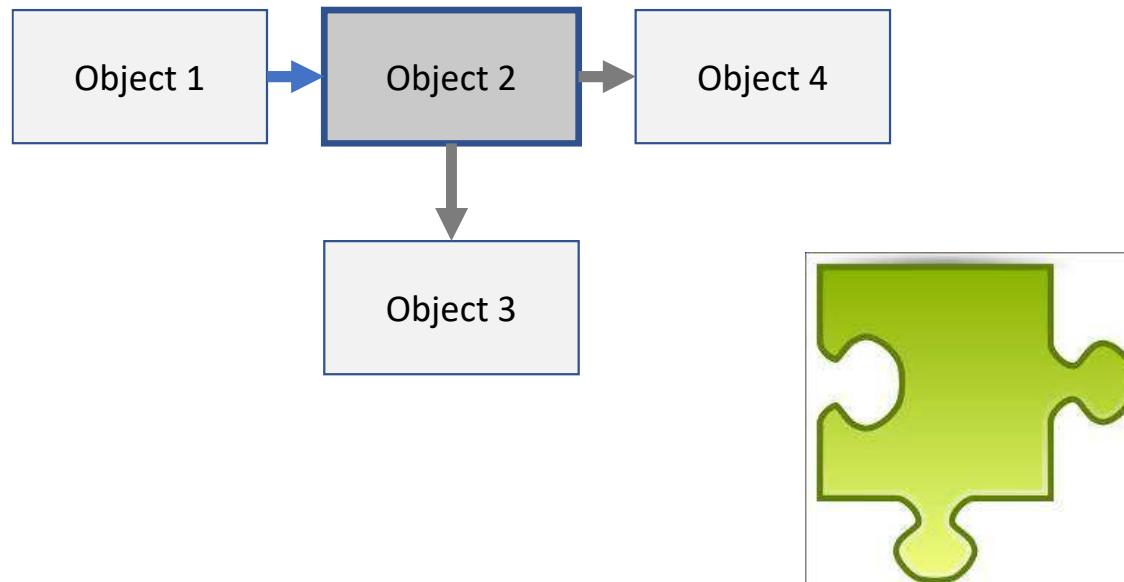
Stubs when exporting

What are stubs ?



Stubs

QualiWare Objects are like puzzle pieces:



Example

Repository 1:

Activity 1 → Activity 2
Some Guy

Activity: Activity 2: Rev. 0: Default

Activity: Activity

Short Description:

Breaks Down To:

Name	Type
------	------

Responsible: **Some Guy (Person)**

Owner:

Resources:

Name	Type	# o...	%...	Cost (300% ...
------	------	--------	------	----------------

OK Cancel Apply

Export..

Subset specification top: 1. Current diagram

Export to file: C:\Users\Bob\Desktop\Test 1 data, no stubs.exp

Subset to export:

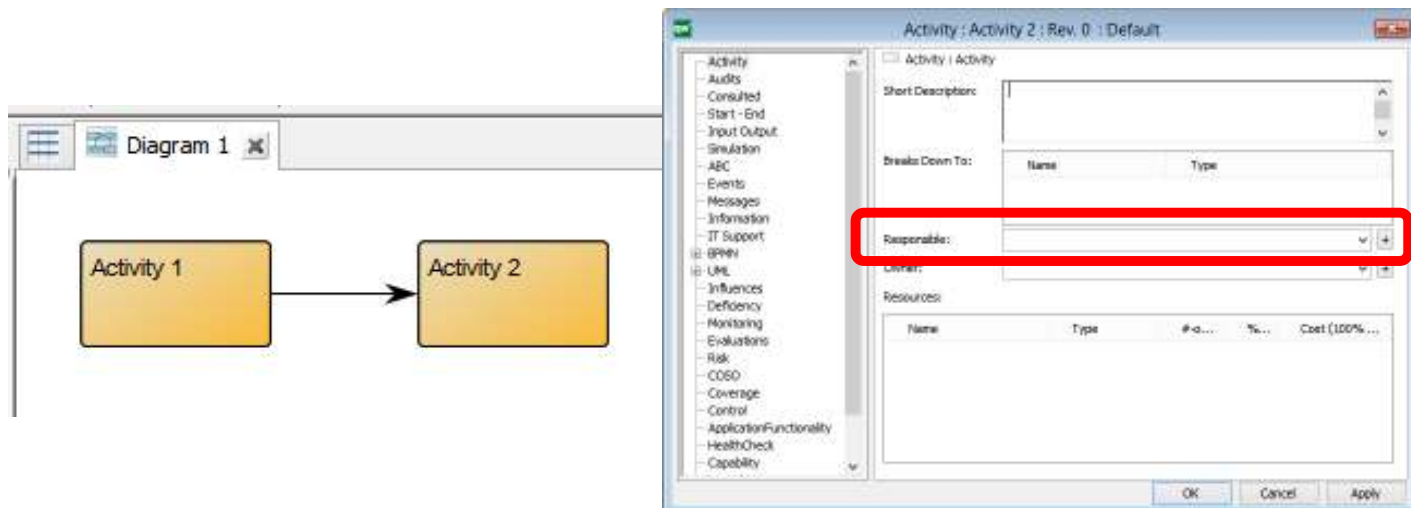
- Diagram 1
 - Activity 1 [Activity]
 - Activity 2 [Activity]
 - Some Guy [Person]**
 - Act/Act [ActivityPath]

Include Stubs

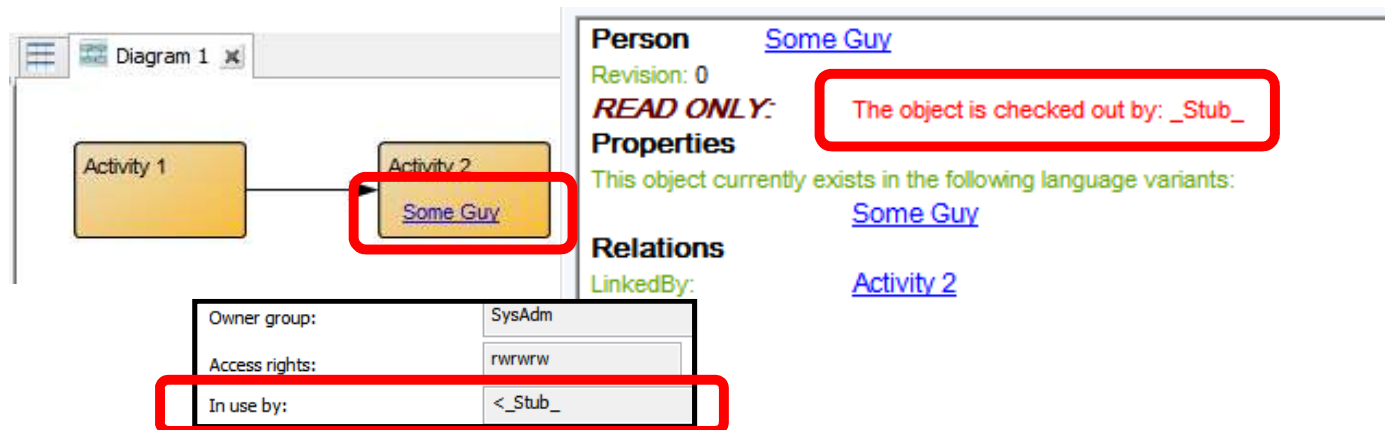
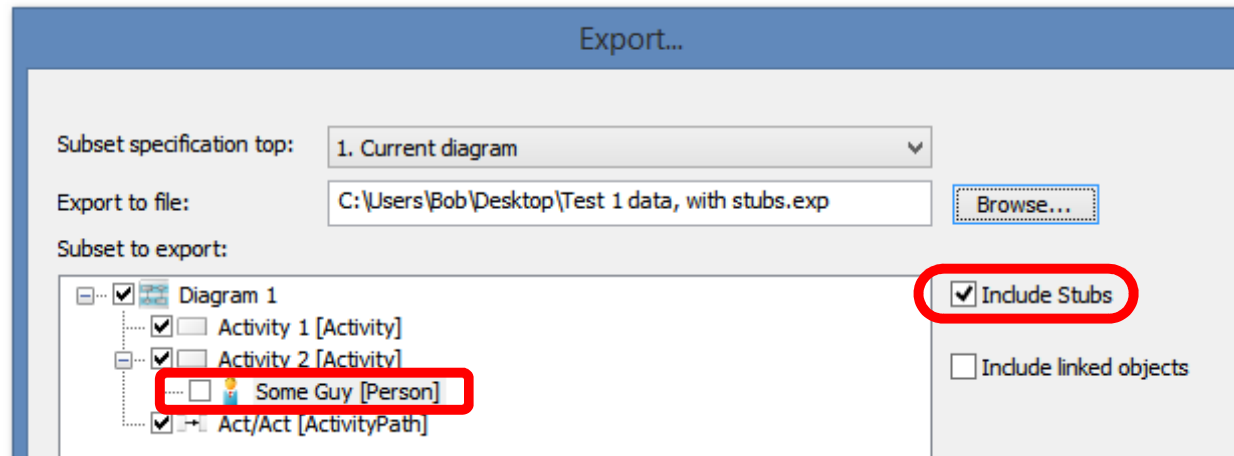
Include linked objects

Example

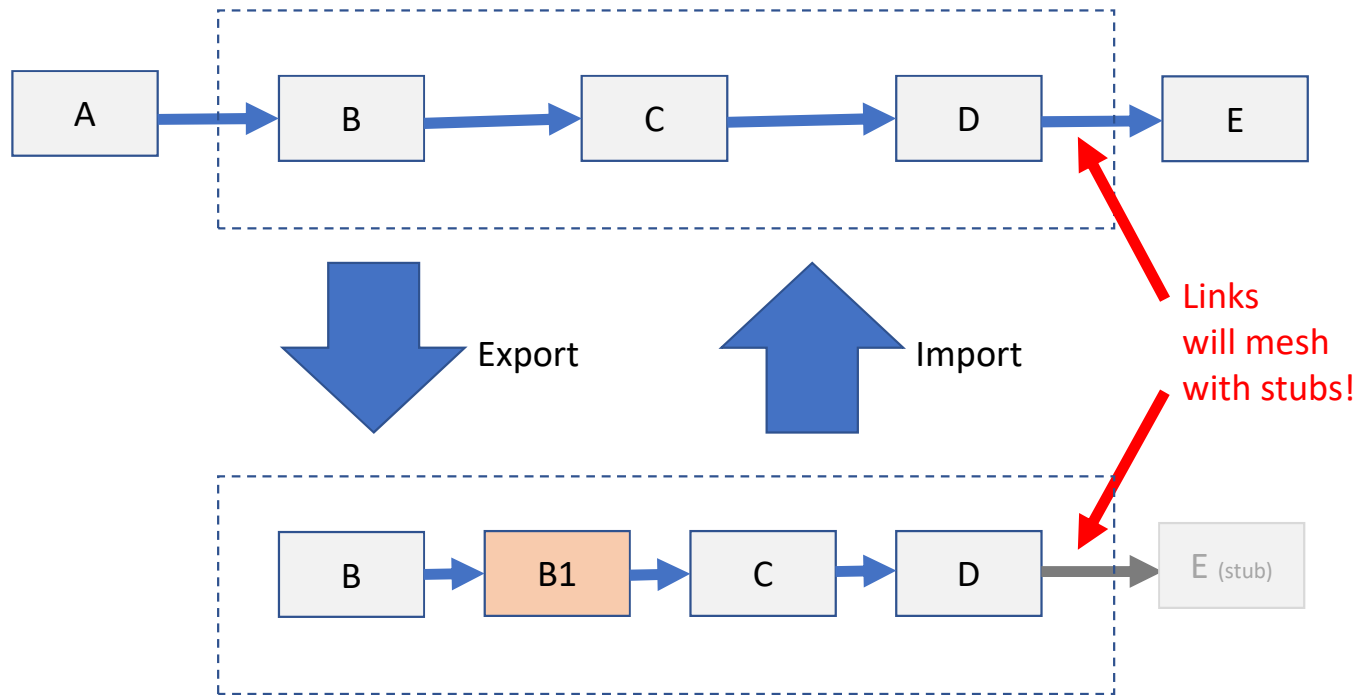
- create a new repository
- Import (without stubs)



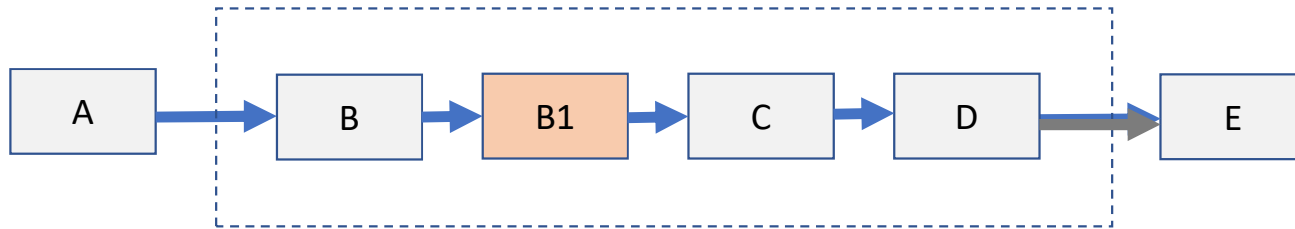
But, if we export/import with stubs:



Stubs designed for...



Stubs designed for...



After import:

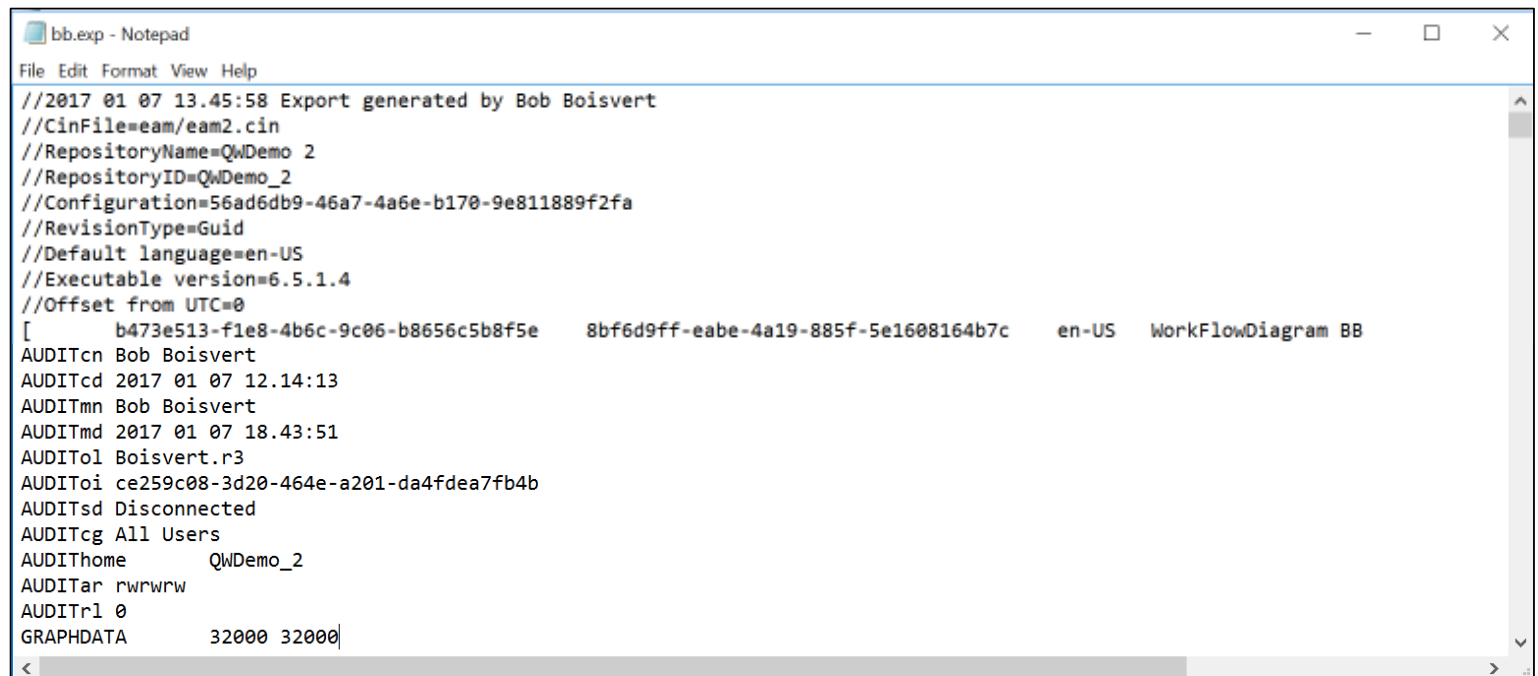
Results in proper integration of imported objects, IF stubs are included !

Export file types

In QLM 5.3

These file types:

- *.exp
- *.qrb
- *.qrp
- *.dmp



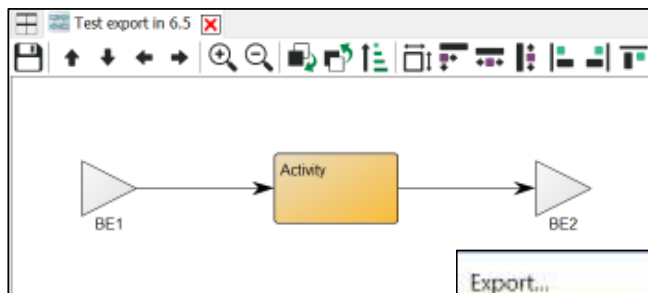
```
bb.exp - Notepad
File Edit Format View Help
//2017 01 07 13.45:58 Export generated by Bob Boisvert
//CinFile=eam/eam2.cin
//RepositoryName=QWDemo_2
//RepositoryID=QWDemo_2
//Configuration=56ad6db9-46a7-4a6e-b170-9e811889f2fa
//RevisionType=Guid
//Default language=en-US
//Executable version=6.5.1.4
//Offset from UTC=0
[      b473e513-f1e8-4b6c-9c06-b8656c5b8f5e      8bf6d9ff-eabe-4a19-885f-5e1608164b7c      en-US      WorkflowDiagram BB
AUDITcn Bob Boisvert
AUDITcd 2017 01 07 12.14:13
AUDITmn Bob Boisvert
AUDITmd 2017 01 07 18.43:51
AUDITol Boisvert.r3
AUDIToi ce259c08-3d20-464e-a201-da4fdea7fb4b
AUDITsd Disconnected
AUDITcg All Users
AUDIThme      QWDemo_2
AUDITar rwrwrw
AUDITr1 0
GRAPHDATA      32000 32000
```

Have the exact same file format!

In QLM 6.5+ – Export format

- Will now be in XML format instead of previous file format
- Import/Export performance has been significantly improved
- File is a *.qrx extension; can be un-zipped
- Contains many folders and files
- Dump is also a *.qrx file
- For backward compatibility, still have an option to export/import in *.exp format

Export in 6.X



Export...

Subset specification: 1. Current diagram

Print to file: C:\Users\Bob Boisvert\Desktop\test export.qrx [Browse...](#)

Subset to export:

- Test export in 6.5
 - BE1
 - BE2
 - Activity
 - BE1/Act
 - Act/BE2

Include Stubs

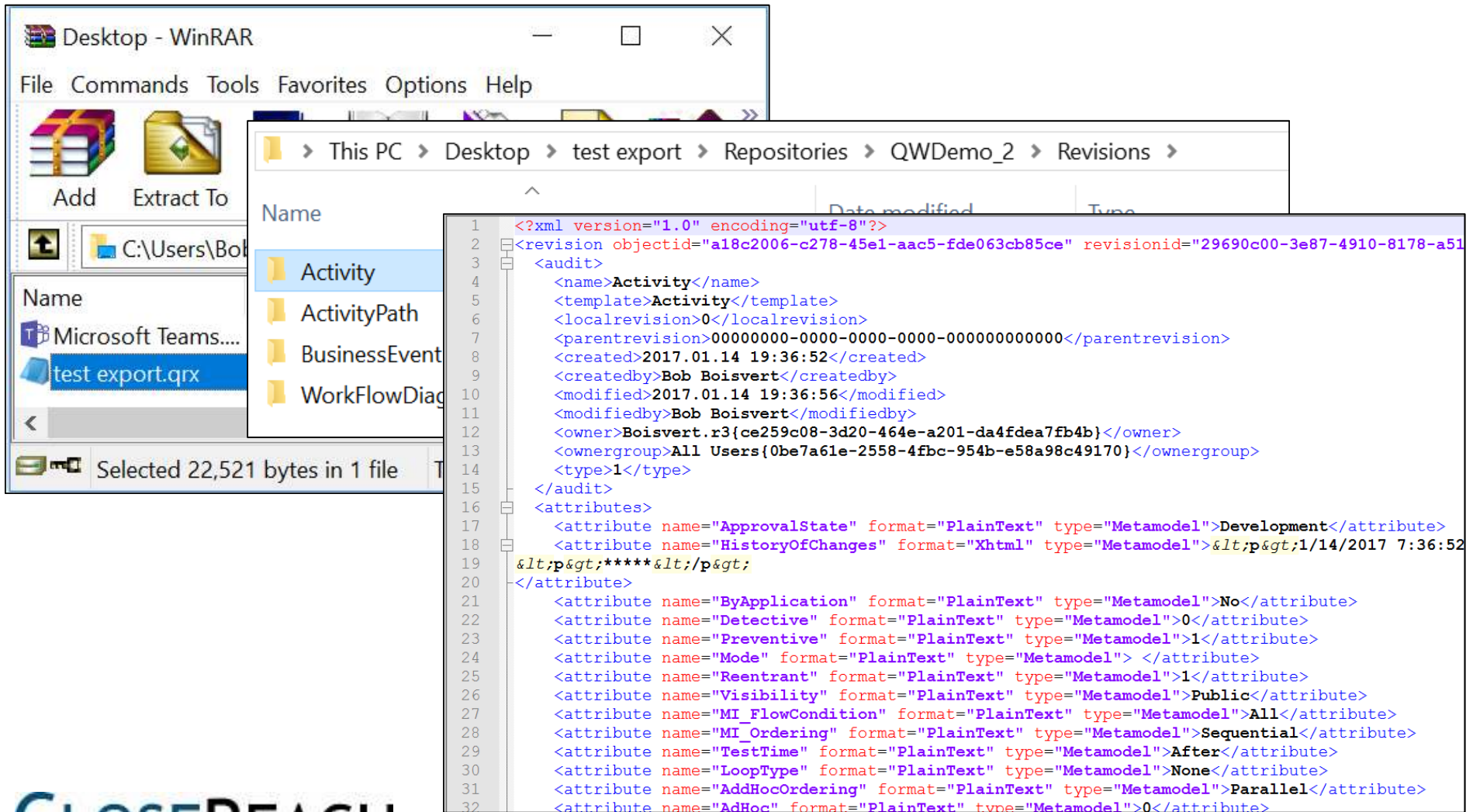
Include linked objects

Check Hierarchy Marks

This PC > Desktop >

Name
test export.qrx

*.qrx is a zipped file



The image shows a WinRAR window titled "Desktop - WinRAR" with a menu bar (File, Commands, Tools, Favorites, Options, Help) and a toolbar (Add, Extract To). The file list shows a folder named "test export.qrx" selected. A context menu is open over it, listing "Activity", "ActivityPath", "BusinessEvent", and "WorkFlowDiagram". Below the file list, it says "Selected 22,521 bytes in 1 file".

Overlaid on the WinRAR window is a text editor showing the XML content of the zip file. The XML is as follows:

```
1 <?xml version="1.0" encoding="utf-8"?>
2 <revision objectid="a18c2006-c278-45e1-aac5-fde063cb85ce" revisionid="29690c00-3e87-4910-8178-a51
3 <audit>
4   <name>Activity</name>
5   <template>Activity</template>
6   <localrevision>0</localrevision>
7   <parentrevision>00000000-0000-0000-0000-000000000000</parentrevision>
8   <created>2017.01.14 19:36:52</created>
9   <createdby>Bob Boisvert</createdby>
10  <modified>2017.01.14 19:36:56</modified>
11  <modifiedby>Bob Boisvert</modifiedby>
12  <owner>Boisvert.r3{ce259c08-3d20-464e-a201-da4fdea7fb4b}</owner>
13  <ownergroup>All Users{0be7a61e-2558-4fbc-954b-e58a98c49170}</ownergroup>
14  <type>1</type>
15 </audit>
16 <attributes>
17   <attribute name="ApprovalState" format="PlainText" type="Metamodel">Development</attribute>
18   <attribute name="HistoryOfChanges" format="Xhtml" type="Metamodel"><p>1/14/2017 7:36:52
19   <p>*****</p>
20 </attribute>
21   <attribute name="ByApplication" format="PlainText" type="Metamodel">No</attribute>
22   <attribute name="Detective" format="PlainText" type="Metamodel">0</attribute>
23   <attribute name="Preventive" format="PlainText" type="Metamodel">1</attribute>
24   <attribute name="Mode" format="PlainText" type="Metamodel"> </attribute>
25   <attribute name="Reentrant" format="PlainText" type="Metamodel">1</attribute>
26   <attribute name="Visibility" format="PlainText" type="Metamodel">Public</attribute>
27   <attribute name="MI_FlowCondition" format="PlainText" type="Metamodel">All</attribute>
28   <attribute name="MI_Ordering" format="PlainText" type="Metamodel">Sequential</attribute>
29   <attribute name="TestTime" format="PlainText" type="Metamodel">After</attribute>
30   <attribute name="LoopType" format="PlainText" type="Metamodel">None</attribute>
31   <attribute name="AddHocOrdering" format="PlainText" type="Metamodel">Parallel</attribute>
32   <attribute name="AdHoc" format="PlainText" type="Metamodel">0</attribute>
```

Timing test –

full dump 20,437 objects

QLM 6.5 – QRP format

Created file name:C:\Users\Bob Boisvert\Desktop\test full dump qrp.qrp
Writing configuration BaseConfiguration[20437 revisions] is finished..
Writing configurations finished. Time used 7s
Start writing repository objects to dump file...

All repository objects are written to dump file in
Time used: **5 minutes**

QLM 6.5 – QRX format

Export to file: C:\Users\Bob Boisvert\Desktop\test export.qrx
Created file name:C:\Users\Bob Boisvert\Desktop\full dump test.qrx
During QIS dump file creation please refer to QEF log for warnings and errors.

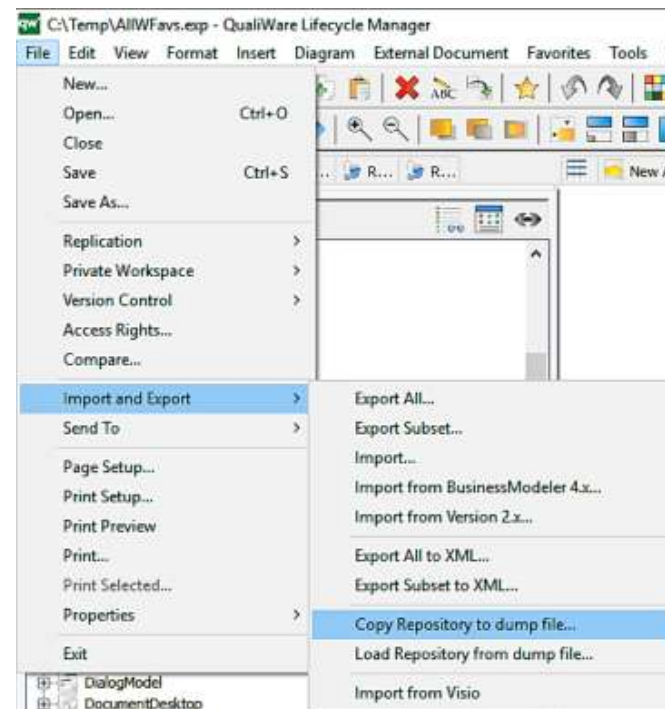
Time used:**1 minute**

Notes about Dump

Different from Export, Dump exports everything

- All objects
- All Revisions
- All Language Variants
- All Configurations

Entire repository!



Dump – careful when loading!

NOTE:

It is NOT a good idea to load from a Dump file into an existing repository.

**It will clobber all data changes after
dump was created!**

Uses for a Dump file

- Most complete way to backup one repository
- Transfer a complete Repository to another server
- Same as Clone operation (RA does this)

Import/Export note for QLM 6.X

- In 6.x, should no longer use Import/Export from QLM for large imports/exports/dumps
- Instead, use standalone executable:

QLMDumpLoad.exe

- A streamlined version of QLM
- You can try to import from QLM, but can hangup!
- Must run in exclusive mode

Suggestions before import tests

- Backup your data 1st
- Test Export/Import procedure in PWS or sandbox repository
- Can easily move PWS data to base configuration with Export (simpler)

DEMO

Thank you!

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