Reposit 1.10

Roadmap

Eric Ehlers
Reposit Ltd
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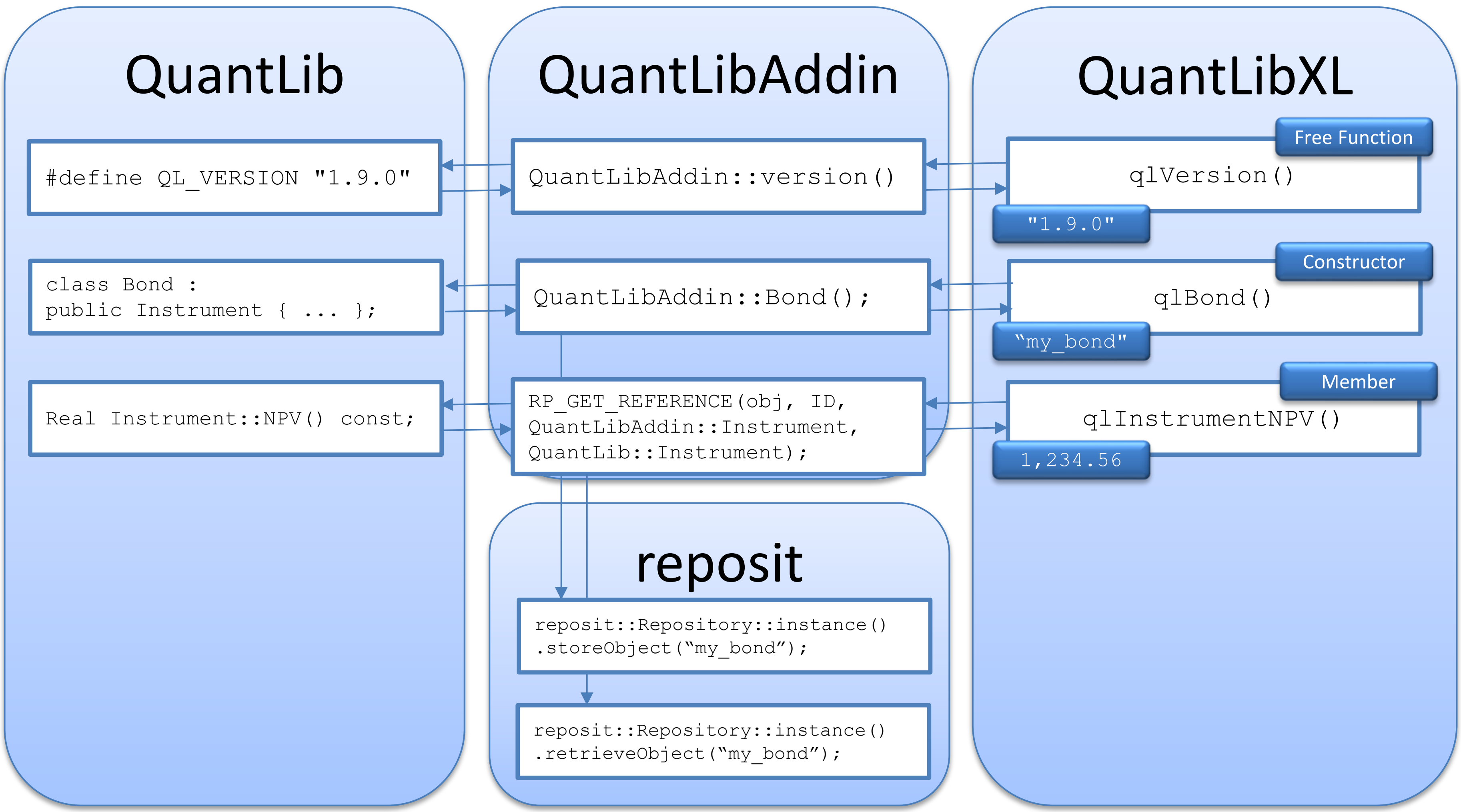
Table of Contents

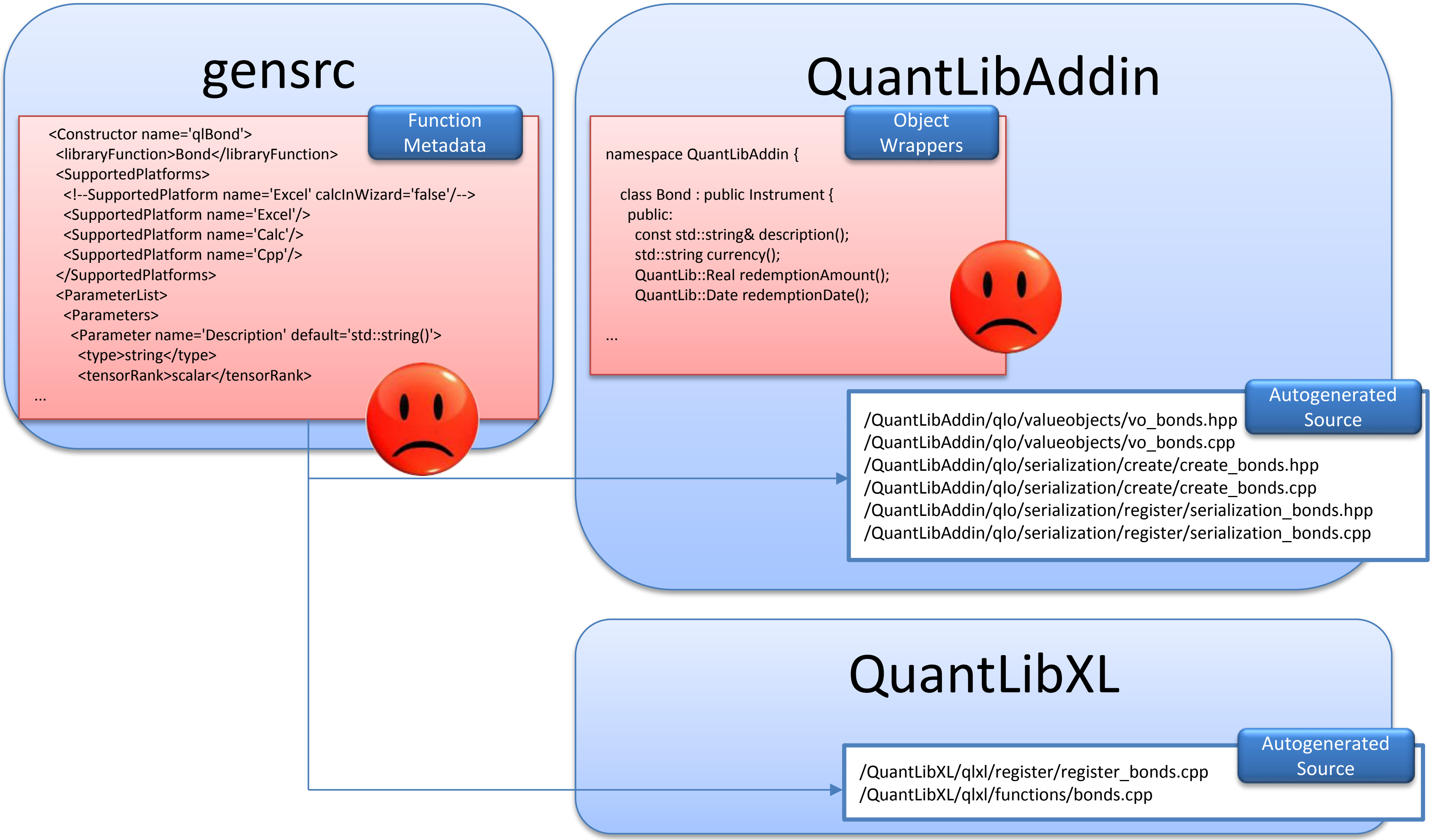
Reposit Platform



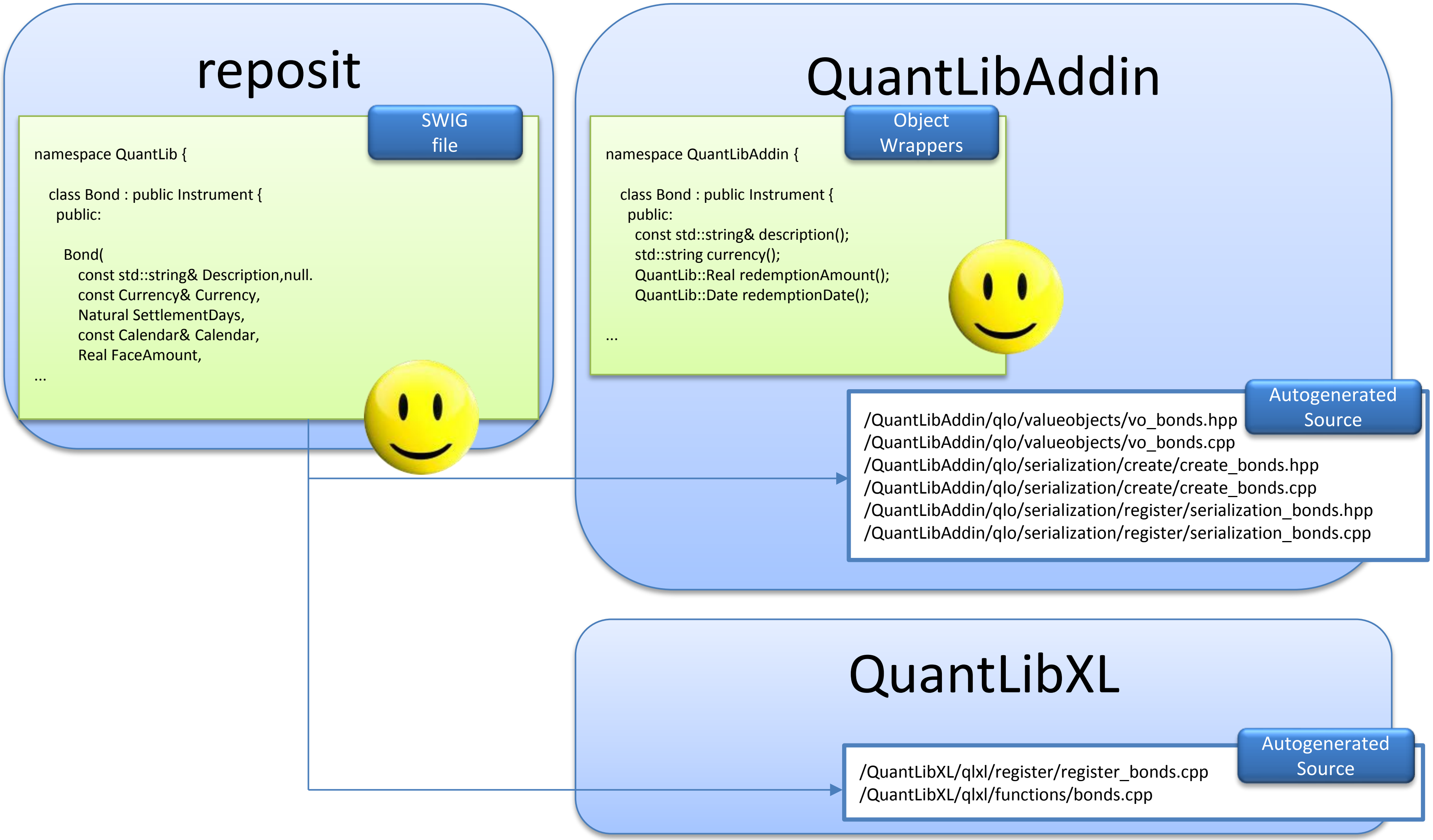
Supported Features

Feature	Description
Inheritance	Inheritance relationships in your C++ library are preserved in the object oriented interface that is exported to Excel.
Serialization	Objects in the repository may be serialized, enabling you to save and load the state of your spreadsheet.
Conversions	The library supports a wide variety of conversions between C++ and Excel data types.
Coercions	You can configure coercions which allow the user to enter data of different types which are automatically converted into the target data type.
Enumerations	Enumerations allow the user to enter strings which are mapped to C++ enumerated types or template classes.

Autogeneration of Addin Source Code



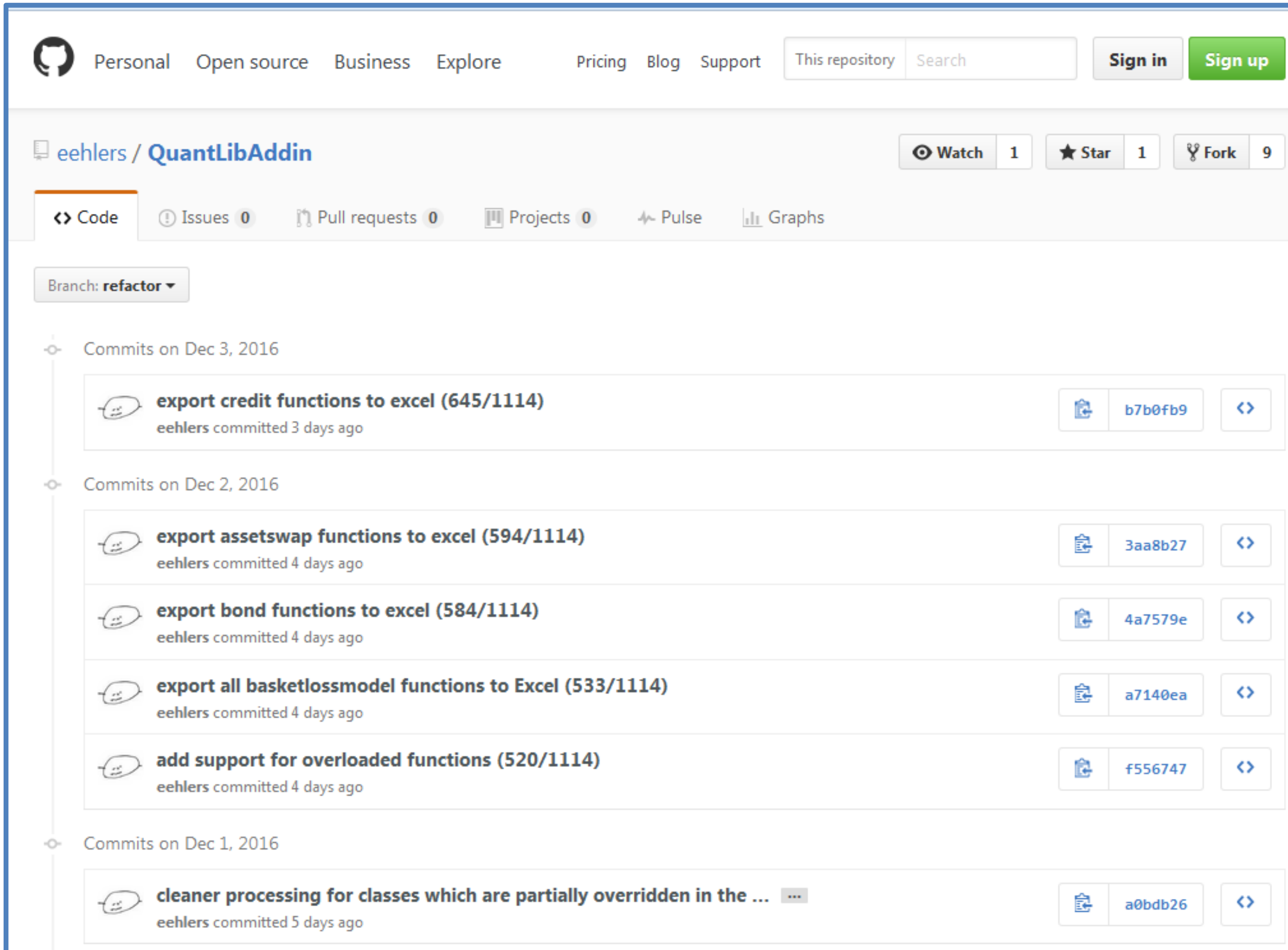
Autogeneration of Addin Source Code



Development Status

Feature	Old Build	New Build
Number of Addin Functions Supported:	1,114	645
Support for Rate Curve Framework:	✓	(✓)
Code Autogeneration:		
Object Wrappers	X	✓
Addin Functions	✓	✓
Enumerations	✓	X
Platforms Supported:		
C++	✓	(✓)
Excel	✓	✓
LibreOffice Calc	(✓)	X

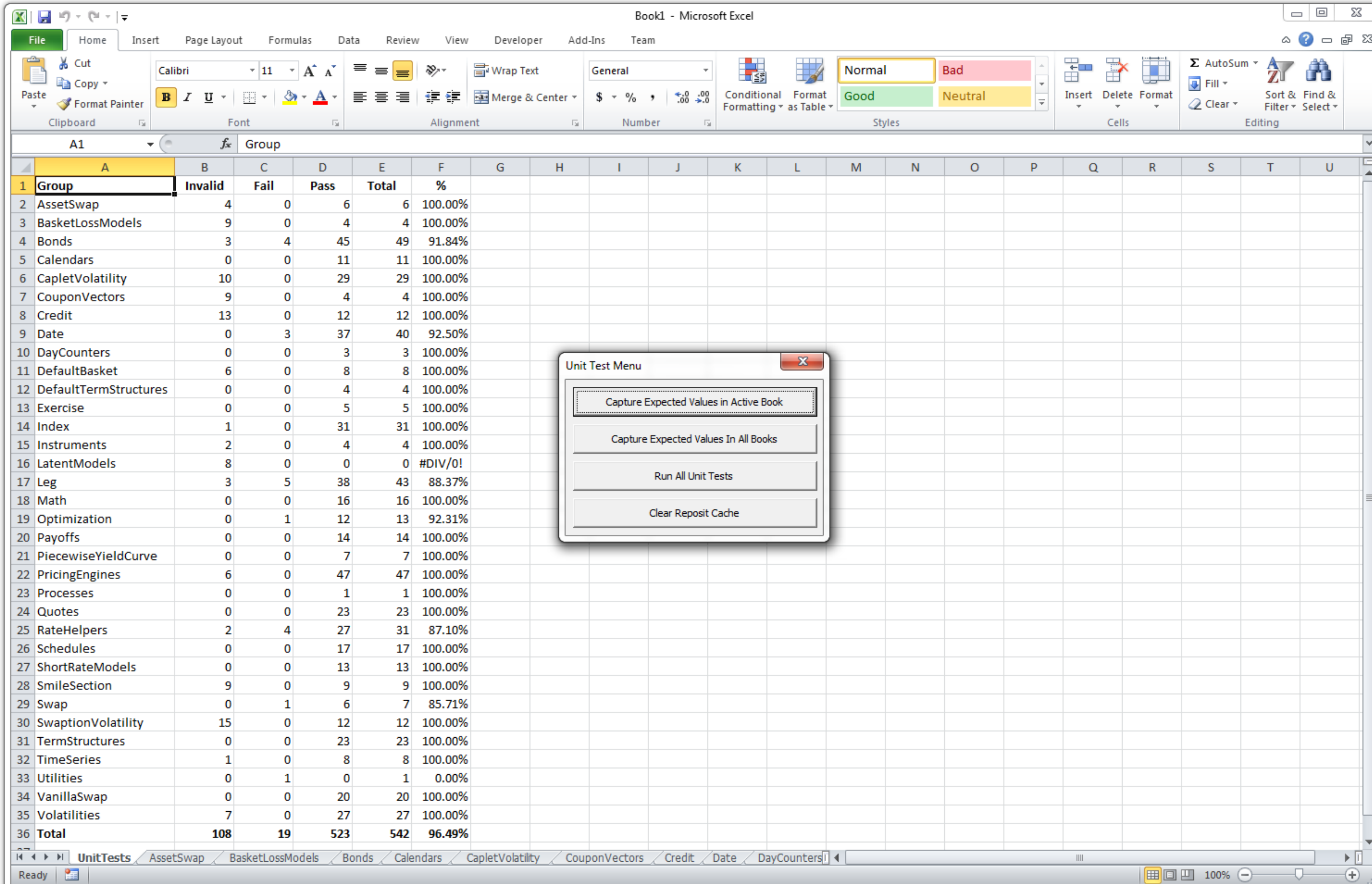
Latest Commits



Reposit 1.10 Roadmap

Task:	Release?	Visible To QuantLibXL XLL End User	Visible To QuantLibXL Framework End User	Visible To QuantLibXL Maintainer	Visible To Others
Implement remaining 469 functions	1.9?	✓			
Default values not last	1.9?	✓			
Dynamic build	1.10?	(✓)			
Example values	1.10?		✓		
Framework Function Wizard	1.10?		✓		
Support for VC 10, 11, 12, 14	1.10?			✓	
Technical documentation	1.10?			✓	
Calc addin	1.11?				✓

QuantLibXL Unit Tests



Group	Invalid	Fail	Pass	Total	%
AssetSwap	4	0	6	6	100.00%
BasketLossModels	9	0	4	4	100.00%
Bonds	3	4	45	49	91.84%
Calendars	0	0	11	11	100.00%
CapletVolatility	10	0	29	29	100.00%
CouponVectors	9	0	4	4	100.00%
Credit	13	0	12	12	100.00%
Date	0	3	37	40	92.50%
DayCounters	0	0	3	3	100.00%
DefaultBasket	6	0	8	8	100.00%
DefaultTermStructures	0	0	4	4	100.00%
Exercise	0	0	5	5	100.00%
Index	1	0	31	31	100.00%
Instruments	2	0	4	4	100.00%
LatentModels	8	0	0	0	#DIV/0!
Leg	3	5	38	43	88.37%
Math	0	0	16	16	100.00%
Optimization	0	1	12	13	92.31%
Payoffs	0	0	14	14	100.00%
PiecewiseYieldCurve	0	0	7	7	100.00%
PricingEngines	6	0	47	47	100.00%
Processes	0	0	1	1	100.00%
Quotes	0	0	23	23	100.00%
RateHelpers	2	4	27	31	87.10%
Schedules	0	0	17	17	100.00%
ShortRateModels	0	0	13	13	100.00%
SmileSection	9	0	9	9	100.00%
Swap	0	1	6	7	85.71%
SwaptionVolatility	15	0	12	12	100.00%
TermStructures	0	0	23	23	100.00%
TimeSeries	1	0	8	8	100.00%
Utilities	0	1	0	1	0.00%
VanillaSwap	0	0	20	20	100.00%
Volatilities	7	0	27	27	100.00%
Total	108	19	523	542	96.49%

The Future of Spreadsheet Addins

QuantLibXL

- **Mature & stable** since 2005
- **Defining features**: UDFs, Cache, Macros

Cloud-Enabled Spreadsheet Platforms

- **Office 365**: Software-as-a-service
- **Office Online**: Web app. Does not yet support UDFs.
- **Office Add-Ins**: JavaScript/HTML
- **SharePoint**: Enterprise content management platform
- **Power BI**: Business analytics
- **Google Drive**: Cloud storage
- **Libre Office Online (LOOL)**: Web app

QuantLibAddin as a Service

- **Excel 2016** (desktop) continues to support QuantLibXL's defining features
- **Excel Online** seems to be the most promising target platform for cloud-enabled QuantLibXL – as soon as it implements support for UDFs