

Pacioli Experiment (Logical Import Format)

Information from Excel files can be imported into Pacioli which will turn the Excel based logical information into XBRL, the report is uploaded to a repository, and then enable the user to verify the report located in the repository using Pacioli per the full constraints of the Seattle Method¹. To do this:

Go to the **Pacioli Report Importer** page:

<https://pacioli.auditchain.finance/reportImporter2>

Upload a Report (no_session)

Please provide files with names ending in BaseInformation.csv (mandatory), Terms.csv, Labels.csv, Structures.csv, Associations.csv, Rules.csv, Contexts.csv, Units.csv and Facts.csv... or a zip file.












Drop files here to upload, or click to open a file upload dialog

I am a human:

Import!

Either create the Excel files you desire to import or you can use this set of examples files which can be downloaded here:

<http://accounting.auditchain.finance/library/proof-import.zip>

Name	Type	Compressed size	Password ...	Size	Ratio	Date modified
 reportX-01-baseinfo.xlsx	Microsoft Excel Worksheet	7 KB	No	10 KB	30%	11/20/2021 4:15 PM
 reportX-02-terms.xlsx	Microsoft Excel Worksheet	9 KB	No	12 KB	23%	11/20/2021 7:41 AM
 reportX-03-labels.xlsx	Microsoft Excel Worksheet	8 KB	No	11 KB	26%	11/20/2021 7:28 AM
 reportX-05-structures.xlsx	Microsoft Excel Worksheet	7 KB	No	10 KB	26%	11/20/2021 7:33 AM
 reportX-06-associations.xlsx	Microsoft Excel Worksheet	11 KB	No	13 KB	20%	11/20/2021 12:33 PM
 reportX-07-rules-consistency.xlsx	Microsoft Excel Worksheet	8 KB	No	11 KB	30%	11/20/2021 7:37 AM
 reportX-08-rules-rollforward.xlsx	Microsoft Excel Worksheet	8 KB	No	11 KB	30%	11/20/2021 7:38 AM
 reportX-09-rules-memberagg.xlsx	Microsoft Excel Worksheet	8 KB	No	10 KB	30%	11/21/2021 7:35 AM
 reportX-10-facts.xlsx	Microsoft Excel Worksheet	9 KB	No	12 KB	27%	11/20/2021 4:16 PM
 reportX-11-facts-dimensions.xlsx	Microsoft Excel Worksheet	8 KB	No	10 KB	30%	11/20/2021 7:46 AM
 reportX-12-facts-parenthetical.xlsx	Microsoft Excel Worksheet	8 KB	No	10 KB	27%	11/20/2021 7:47 AM

Unzip the file. Drag and drop each file individually, all the files at once, or you can even simply upload the single ZIP file, that will work also.

¹ Seattle Method, <http://xbrlsite.com/seattlemethod/>

PROOF (Slightly pruned down version)

After the files have been uploaded, check the “I am a human” checkbox and then press the Import button:

Upload a SBRM Report in logic format (no_session)

Please provide an Excel workbook with sheets named exactly: BaseInformation, Terms, Labels, References, Structures, Associations, Rules-Consistency, Rules-Nonstandard, Rules-RollForward, Rules-Variance, Rules-Adjustment, Rules-MemberAggregation, Facts, Facts-Parentetical, Facts-Dimensions



87.4 KB
proof-import....

I am a human:

Importing...

Once the processing is completed, a Pacioli validation results page will be generated (see the example below).

<https://pacioli.auditchain.finance/reportAnalysis/8edee77b408fbf14f29f4f49bf0300acaf8457ec.report/index.html>

On the main page of the validation results, a link to an XBRL instance will be shown. That XBRL instance is the report and is linked to the report model for the report which has been placed on the Pacioli web site. You can click on the link or copy the link:



Generated by Pacioli version 0.1.0 (updated 9 days ago). Analysis of 2021-12-15 12:33:12+0000 for no_email_yet. This page will expire at <https://pacioli.auditchain.finance/reportAnalysis/8edee77b408fbf14f29f4f49bf0300acaf8457ec.report/index.html> for about 90 days.

Report

Submitted: **generatedFromSBRM_logic_2021-12-15T22:33:02+0000** 0r3dd96e061b1505773d7078dd29a48d9ee69577f689a66586d6b14ab13d1443ea(includes local files)

Generated XBRL instance: <https://pacioli.auditchain.finance/reportAnalysis/8edee77b408fbf14f29f4f49bf0300acaf8457ec.report/instance.xml>

This result took about 2.2 seconds and is temporarily online at <https://pacioli.auditchain.finance/reportAnalysis/8edee77b408fbf14f29f4f49bf0300acaf8457ec.report/index.html>

You can also download it as a ZIP file at <https://pacioli.auditchain.finance/reportAnalysis/8edee77b408fbf14f29f4f49bf0300acaf8457ec.report.zip>; after expanding the zip archive, open its index.html file

Abridged JSON trace [here](#), more JSON data [maybe here](#).

Four files are created per the import: instance.xml, reports.xsd, linbases.xml, formulas.xml

<https://pacioli.auditchain.finance/reportAnalysis/8edee77b408fbf14f29f4f49bf0300acaf8457ec.report/instance.xml>

<https://pacioli.auditchain.finance/reportAnalysis/8edee77b408fbf14f29f4f49bf0300acaf8457ec.report/reports.xsd>

<https://pacioli.auditchain.finance/reportAnalysis/8edee77b408fbf14f29f4f49bf0300acaf8457ec.report/linbases.xml>

<https://pacioli.auditchain.finance/reportAnalysis/8edee77b408fbf14f29f4f49bf0300acaf8457ec.report/formulas.xml>

PROOF (Slightly pruned down version)

Use the link for the XBRL instance which was generated above in the Pacioli Power User Tool and you can now verify that XBRL-based report is consistent with the rules specified for the report including:

1. XBRL technical syntax rules.
2. Model structure rules (XBRL presentation relations logic which is not verified by XBRL syntax rules).
3. Fundamental accounting concept relations (accounting relations not verified by XBRL syntax rules).
4. Disclosure mechanics rules (logical relations not verified by XBRL syntax rules).
5. Reporting checklist rules (logical reportability rules not verified by XBRL syntax rules).
6. Type-subtype rules (logically permitted type-subtype or also known as wider-narrower rules or general-special relations rules).
7. Manual verification of logic not enforced by machine-readable rules or for which machine-readable rules have not been made available.

These rules can be verified individually or together as a set. All rules are made available in the XBRL technical syntax. All XBRL-based rules can be found here:

<http://www.xbrlsite.com/seattlemethod/proof/documentation/index.html>

The screenshot shows a web browser window displaying the 'INDEX' page of the PROOF Knowledge Graph. The browser's address bar shows the URL 'www.xbrlsite.com/seattlemethod/proof/documentation/index.html'. The page has a dark green navigation bar with 'PROOF' highlighted in yellow, followed by 'Home', 'Terms', 'Structures', 'Topics', 'Disclosures', 'Fundamental Concepts', 'Reporting Styles', 'Type/Subtypes', 'Consistency Rules', 'Derivation Rules', 'Templates', 'Exemplars', and 'Properties'. The main content area is white and contains the following text:

INDEX

Welcome to the human-readable and machine-readable knowledge graph for PROOF. This free open source resource enables software engineers to understand how to create supercharged software applications related to PROOF or other financial reporting schemes represented using XBRL. It is based on a proven, best-practices, global standard method.

PROOF Knowledge Graph

This XBRL-based machine-readable information essentially forms a *knowledge graph*. The PROOF Knowledge Graph is a set of terms, structures, associations, and rules that are used to build models and report facts per those models.

The following is a quick reference to information provided within this human-readable and machine-readable knowledge graph.

- **XBRL Syntax Rules:** (Human | Machine)
- **Model Structure Rules:** (Human | Machine)
- **Fundamental Accounting Concept Rules:** (Human | Machine)
- **Disclosure Mechanics Rules:** (Human | Machine)
- **Reporting Checklist Rules:** (Human | Machine)
- **Type/Subtype Rules:** (Human | Machine)
- **Disclosures:** (Human | Machine) The financial reporting scheme requires specific disclosures.
- **Topics:** (Human | Machine) Those disclosures can be organized within specific topics.
- **Templates:** (Human | Machine) Templates provide examples of those disclosures.
- **Exemplars:** (Human | Machine) Examples (exemplars) exist in the form of how other economic entities reported these same disclosures.
- **Terms:** (Human | Machine) Terms are used to represent disclosures in a machine-readable XBRL taxonomy.
- **Structures:** (Human | Machine) Reported disclosures are represented using XBRL networks, XBRL hypercubes, and logical blocks which form a model.
- **Fundamental Concepts:** (Human | Machine) High-level fundamental accounting concepts exist within the conceptual framework for PROOF.
- **Reporting Styles:** (Human | Machine) Reporting styles are models of relations between fundamental accounting concepts that form an approach to creating a report.
- **Consistency Rules:** (Human | Machine) Consistency rules explain the relations between fundamental accounting concepts.
- **Derivation Rules:** (Human | Machine) When a fundamental accounting concept is not explicitly reported, derivation (a.k.a. impute) rules are used to use logical deduction to derive the value of the unreported high-level financial concept.
- **Facts:** (Human | Machine) Facts must be consistent with the permitted terms, structures, associations, and rules. When the statements and facts are consistent then the logical system is functioning properly (consistent.com)

PROOF (Slightly pruned down version)

Get to the **Pacioli Power User Tool** here:

<https://pacioli.auditchain.finance/tools/PowerUserTool.swinb>

Copy and then past the script below into the Pacioli Power User Tool:

```
% Proof: (Seattle Method) Everything, Load Dynamically OK %
checkReport3("https://pacioli.auditchain.finance/reportAnalysis/8edee77b408fbf14f29f4f49bf0300acaf8457ec.report/instance.xml",
['http://www.xbrlsite.com/seattlemethod/proof/fac/ReportingStyles/PROOF-BSC-IS01-CF1_schema.xsd',
'http://www.xbrlsite.com/seattlemethod/proof/type-subtype/type-subtype2.xsd',
'http://www.xbrlsite.com/seattlemethod/proof/disclosure-mechanics/disclosure-mechanics2.xsd',
'http://www.xbrlsite.com/seattlemethod/proof/reporting-checklist/reporting-checklist2-rules-def.xml',
'http://www.xbrlsite.com/seattlemethod/proof/model-structure/ModelStructure-rules-strict-def.xml'],
[newRulesFormat, cacheValidity(0)], Result).
```

You should see something that looks like the following:



```
☰ ?- % Proof: (Seattle Method) Everything, Load Dynamically OK %
checkReport3("https://pacioli.auditchain.finance/reportAnalysis/8edee77b408fbf14f29f4f49bf0300acaf8457ec.report/instance.xml",
['http://www.xbrlsite.com/seattlemethod/proof/fac/ReportingStyles/PROOF-BSC-IS01-CF1_schema.xsd',
'http://www.xbrlsite.com/seattlemethod/proof/type-subtype/type-subtype2.xsd',
'http://www.xbrlsite.com/seattlemethod/proof/disclosure-mechanics/disclosure-mechanics2.xsd',
'http://www.xbrlsite.com/seattlemethod/proof/reporting-checklist/reporting-checklist2-rules-def.xml',
'http://www.xbrlsite.com/seattlemethod/proof/model-structure/ModelStructure-rules-strict-def.xml'], [newRulesFormat, cacheValidity(0)], Result).
```

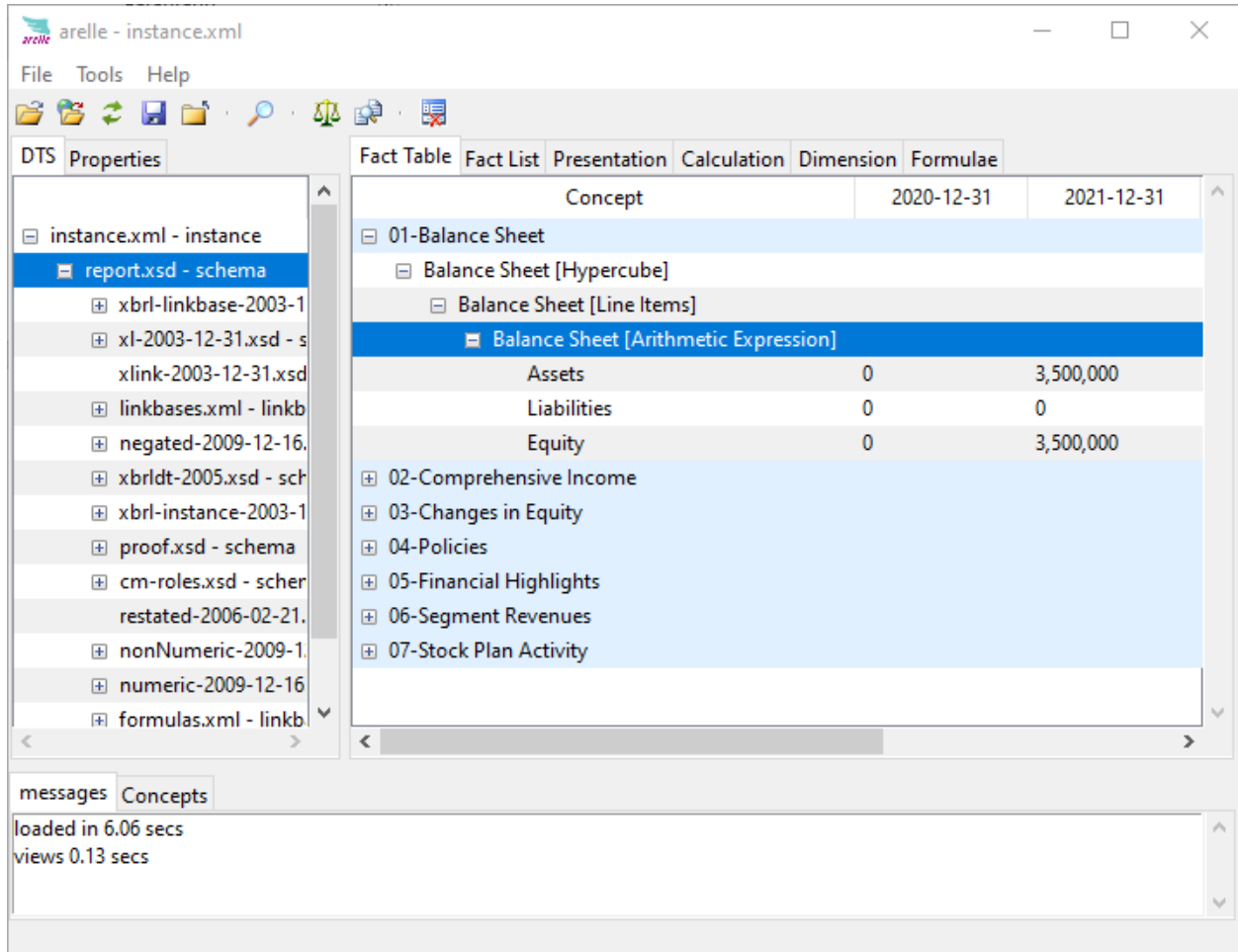
Press the blue run button next to where you pasted in the script to validate the XBRL-based report and a verification results page will be generated:

<https://pacioli.auditchain.finance/reportAnalysis/1fa11991d8f30495119a5a8afcb0dc49ff7d8e7d.report/index.html>

Note that the errors reported are, in fact, actual inconsistencies between the imported report and the expected report. Both issues related to the balance sheet.

PROOF (Slightly pruned down version)

<https://pacioli.auditchain.finance/reportAnalysis/8edee77b408fbf14f29f4f49bf0300acaf8457ec.report/instance.xml>



Note that Arelle does not support processing of Seattle Method rules but can read all of those XBRL-based rules.

PROOF (Slightly pruned down version)

The XBRL instance can be opened using Pesseract: (Pesseract can be downloaded and used for noncommercial use for free, <http://pesseract.azurewebsites.net/>)

<https://pacioli.auditchain.finance/reportAnalysis/8edee77b408fbf14f29f4f49bf0300acaf8457ec.report/instance.xml>

Comprehensive Income [Roll Up]		2021-01-01/2021-12-31
Revenues		7,000,000
(Expenses)		(3,000,000)
Gains		1,005,000
(Losses)		(2,005,000)
Comprehensive Income		3,000,000

Prefix	Label	Name	Element Type	Data Type	Balance	Period Type
proof	Revenues	Revenues	Element	Monetary	credit	duration
link	[roleRef]	roleRef	Element			
link	[roleRef]	roleRef	Element			
proof	Scenario [Axis]	ScenarioAxis	Abstract	String		duration

Note that Pesseract can also process Seattle Method logical rules and read them.

PROOF (Slightly pruned down version)

Report can be validated using XBRL Cloud XRun: (XRun is no longer a product of XBRL Cloud, alternative cloud-based solutions can be acquired from XBRL Cloud, see <https://www.xbrlcloud.com/>)

Report generated using software from Coyote Reporting, LLC at 2021-12-15T03:25:01.585-0800

XBRL Validation Report

Severity	Count
Error	0
Warning	0
Inconsistency	0
Best Practice	0
Information	0
Total	0

No Errors!

XBRL Cloud performs XBRL technical syntax validation and the Seattle Method for US GAAP. However, XBRL Cloud currently does not have the flexibility to report any reporting scheme that is created that uses the Seattle Method, ONLY US GAAP is supported.

PROOF (Slightly pruned down version)

Report can be validated using UBmatrix XPE 4.0: (A free open-source version of XPE 2.5 version can be downloaded, <https://sourceforge.net/projects/ubmatrix-xbrl/files/UBmatrix%20Processing%20Engine%202.5/2.500/>)

Business rules:

Business Rules Results

Wed Dec 15 15:37:37 PST 2021

XBRL Processor Version:4.0.0.2125

Report name: Detailed Output

Summary

Formulas Compiled	Formula Fired	Assertions Compiled	Assertions Fired	Assertions Satisfied	Assertions Not Satisfied
0	0	4	5	5	0

Assertion Report

Value Assertions

id	satisfied	message
BS01 (evaluation 1)	satisfied	\$Assets=0 = \$Liabilities=0 + \$Equity=0
BS01 (evaluation 2)	satisfied	\$Assets=3500000 = \$Liabilities=0 + \$Equity=3500000
IS01 (evaluation 1)	satisfied	\$ComprehensiveIncome=3000000 = \$Revenues=7000000 - \$Expenses=3000000 + \$Gains=1005000 - \$Losses=2005000
SHE01 (evaluation 1)	satisfied	\$Equity_BalanceStart=0 + \$ComprehensiveIncome=3000000 + \$InvestmentsByOwners=2000000 - \$DistributionsToOwners=1500000 = \$Equity_BalanceEnd=3500000
MA1 (evaluation 1)	satisfied	\$Total=7000000 eq sum(\$Each=[3000000 2000000 2000000])

XBRL Calculations:

UBmatrix Calculation Trace Report

Line	Concept	Weight	Balance	Decimals	Precision	Reported	Calculated	Source	Message
1	Extended Link [http://www.xbrlsite.com/somerepository/report4/role/ComprehensiveIncome]								
2	Context context2 [2021-01-01 - 2021-12-31]								
	c-equal								
3	Unit iso4217_USD								
	u-equal								
	Comprehensive Income		credit	INF	INF	3000000	3,000,000	Instance	OK
	Revenues	1.0	credit	INF		7000000	7,000,000	Instance	
	Expenses	-1.0	debit	INF		3000000	3,000,000	Instance	
	Gains	1.0	credit	INF		1005000	1,005,000	Instance	
	Losses	-1.0	debit	INF		2005000	2,005,000	Instance	

Copyright (c) UBmatrix, Inc. 2009

* * *

Alternatively, could us Luca to manually input information to create report:

<http://luca.yaxbri.com/>

Alternatively, could us Luca API to feed information into Luca to create report:

<http://luca.yaxbri.com/>

Alternatively, could us Luca to import information from Excel to create report:

<http://luca.yaxbri.com/>

<http://accounting.auditchain.finance/library/proof-import.zip>

Note that this version uses the FULL disclosure checklist and disclosure mechanics rules:

```
% Proof: (Seattle Method) Everything, Load Dynamically OK %
checkReport3("https://pacioli.auditchain.finance/reportAnalysis/8edee77b408fbf14f29f4f49bf0300acaf
8457ec.report/instance.xml",
['http://www.xbrlsite.com/seattlemethod/proof/fac/ReportingStyles/PROOF-BSC-IS01-
CF1_schema.xsd',
'http://www.xbrlsite.com/seattlemethod/proof/type-subtype/type-subtype.xsd',
'http://www.xbrlsite.com/seattlemethod/proof/disclosure-mechanics/disclosure-mechanics.xsd',
'http://www.xbrlsite.com/seattlemethod/proof/reporting-checklist/reporting-checklist-rules-def.xml',
'http://www.xbrlsite.com/seattlemethod/proof/model-structure/ModelStructure-rules-strict-def.xml'],
[newRulesFormat, cacheValidity(0)], Result).
```