Pacioli Experiment (Logical Import Format)

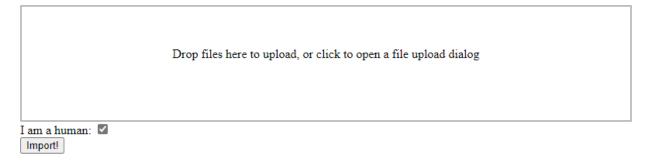
Information from Excel files can be imported into Pacioli which will turn the Excel based logical information into XBRL, the report is uploaded to a repository, and then enable the user to verify the report located in the repository using Pacioli per the full constraints of the Seattle Method¹. To do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

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

https://pacioli.auditchain.finance/reportImporter2

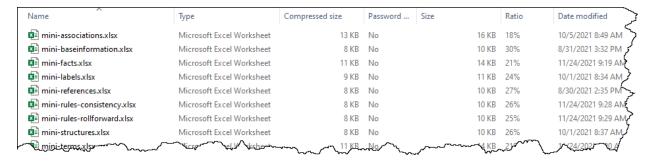
Upload a Report (no_session)

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.



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

http://xbrlsite.azurewebsites.net/2021/luca/mini-import.zip



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/

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-Parenthetical, Facts-Dimensions



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

https://pacioli.auditchain.finance/reportAnalysis/ea39fa98a4bb3a8a0a1c5cfab9fa194f0dd6a346.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:



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

https://pacioli.auditchain.finance/reportAnalysis/ea39fa98a4bb3a8a0a1c5cfab9fa194f0dd6a346.report/instance.xml

https://pacioli.auditchain.finance/reportAnalysis/ea39fa98a4bb3a8a0a1c5cfab9fa194f0dd6a346.report/report.xsd

https://pacioli.auditchain.finance/reportAnalysis/ea39fa98a4bb3a8a0a1c5cfab9fa194f0dd6a346.report/linkbases.xml

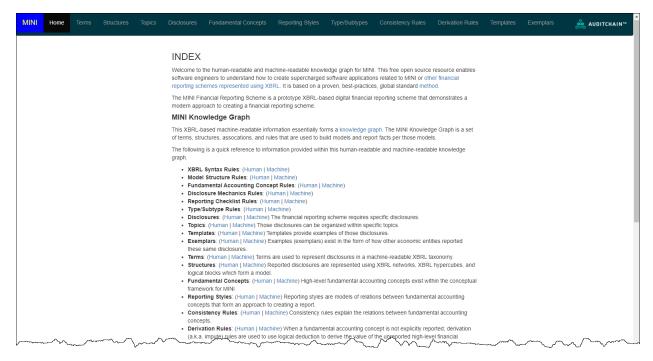
https://pacioli.auditchain.finance/reportAnalysis/ea39fa98a4bb3a8a0a1c5cfab9fa194f0dd6a346.report/formulas.xml

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 in 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://accounting.auditchain.finance/reporting-scheme/mini/documentation/Index.html



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:

% MINI Financial Reporting Scheme %

checkReport3("https://pacioli.auditchain.finance/reportAnalysis/ea39fa98a4bb3a8a0a1c5cfab9fa194f0dd6a346.report/instance.xml",

['http://accounting.auditchain.finance/reporting-scheme/mini/fac/ReportingStyles/MINI-BSC-IS01-CF1_schema.xsd', 'http://accounting.auditchain.finance/reporting-scheme/mini/disclosure-mechanics2/disclosure-mechanics.xsd', 'http://accounting.auditchain.finance/reporting-scheme/mini/reporting-checklist/reporting-checklist2-rules-

def.xml', 'http://accounting.auditchain.finance/reporting-scheme/mini/type-subtype/type-subtype.xsd', 'http://accounting.auditchain.finance/reporting-scheme/mini/model-structure/ModelStructure-rules-strict-def.xml'], [valueAssertionsCanDerive, cacheValidity(0)], Result).

You should see something that looks like the following:

```
= ?- % MINI Financial Reporting Scheme %

[checkReport3]("https://pacioli.auditchain.finance/reportAnalysis/ea39fa98a4bb3a8a0a1c5cfab9fa194f0dd6a346.report/instance.xml",
['http://accounting.auditchain.finance/reporting-scheme/mini/fac/ReportingStyles/MINI-BSC-IS01-CF1_schema.xsd',
'http://accounting.auditchain.finance/reporting-scheme/mini/disclosure-mechanics2/disclosure-mechanics.xsd',
'http://accounting.auditchain.finance/reporting-scheme/mini/reporting-checklist/reporting-checklist2-rules-def.xml',
'http://accounting.auditchain.finance/reporting-scheme/mini/type-subtype/type-subtype.xsd',
'http://accounting.auditchain.finance/reporting-scheme/mini/model-structure/ModelStructure-rules-strict-def.xml'], [valueAssertionsCanDerive,
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/204b62cb9168eff16fb1dccc4f3bc421e459133c.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. This is a known issue and is included in this form in order to help understand report verification.



Report

Submitted: https://paciok.auditchain.finance/reportAnalysis/ea39fa98a4bb1e8e0a1c5cfab9fa194f0dd6a346.report/instance.xml 0x1b6004k-4c8d0X0bcd13iccfs19705/f05d1edbc2bcf
This result took about 205 seconds and is temporarily online at https://paciok.auditchain.finance/reportAnalysis/204b62cb9168ef10bt1dccc4f3bc421e499133c.report/index.html
You can also download it as a 2IP file at https://paciok.auditchain.finance/reportAnalysis/204b62cb9188ef16fbtdccc4f3bc421e499133c.report.zip; after expanding the zip archive, open its ind
Abridged ISON trace here, more ISON data morple here.

For more information: http://eccounting.auditchen.finance/index.html
DISCLAIMER: this analysis is provided by software still under development, and likely incomplete or even erroreous; do NOI use it other than for experimental, incomequential purposes

User Alterations

Additional linkbases and schemas:

http://accounting.auditchein.finance/reporting-scherre/mini/fac/Ne-portingStyles/MINI-BSC-IS01CI1_schema.xxd_http://accounting.auditchein.finance/reporting-scherre/mini/disclosure-mechanics2/discl

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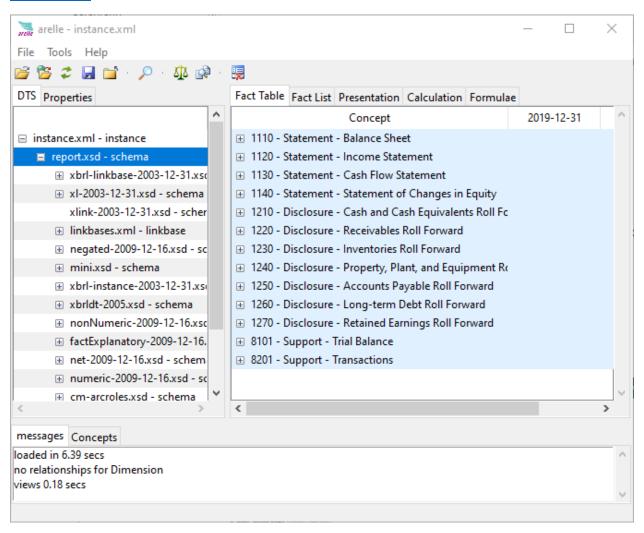
Г		TERMS			
\vdash		Mappings			
\vdash		All FACTS (technical listing)			
\vdash					
\vdash		Type-subtype graph			
H		Type-subtype table			
Н		Model Structure Validation			
1	1110 - Statement - Balance Sheet	Structures	Facts.	Proots	
2	1110 - Statement - Balance Sheet	Structures	Facts	Private	
3	1120 - Statement - Income Statement	Structures	Facts	Pivots	
4	1130 - Statement - Cash Flow Statement	Structures	Facts	Private	
5	1140 - Statement - Statement of Changes in Equity	Structures	facts	Proots	
6	1210 - Disclosure - Cash and Cash Equivalents Roll Forward	Structures	Facts	Pivots	
7	1220 - Disclosure - Receivables Roll Forward	Structures	Facts	Proots	
8	1230 - Disclosure - Inventories Roll Forward	Structures	Facts	Proots	
9	1240 - Disclosure - Property, Plant, and Equipment Roll Forward	Structures	Facts	Proots	
10	1250 - Disclosure - Accounts Payable Roll Forward	Structures	Facts	Pivots	
11	1260 - Disclosure - Long-term Debt Roll Forward	Structures	Facts	Proofs	
12	1270 - Disclosure - Retained Earnings Roll Forward	Structures	Facts	Proots	
13	8101 - Support - Irial Balance	Structures	Facts	Pivots	
14	8201 - Support - Transactions	Structures	Facts	Private	
15	IAC-001-General Information	Structures	Facts	Private	
16	FAC-101-Balance Sheet, Classified (BSC)	Structures	Facts	Private	
17	FAC-202-Income Statement, Multi Step, (ISM)	Structures	Facts	Private	
18	FAC-401-Cash Flow Statement (CF1)	Structures	Facts	Private	
19	FAC-701-Validation Results	Structures	Facts	Pivots	
		Graph of re	axoning		
	Blocks Graph				
	Colorbicos Calculations (All Nature)		doc		
			Calculations		
		Disclosure Mechanics rules			
L		Report Charliffet Rules			
L		Messages			

Messages

4	Туре	Stage	Message
1	error	arriendPresentations	Network http://www.abriste.com/report/role/BelenceSheet has two presentation roots: mini-AssetsRollUp and ministabilities-AndiquityRollUp
2	inconsistency	require [disclosures:BalanceSheetClassified]	Require disclosures: BalanceSheetClassified

You can open the XBRL instance using Arelle: (Arelle is free open source and can be downloaded from, https://arelle.org/arelle/)

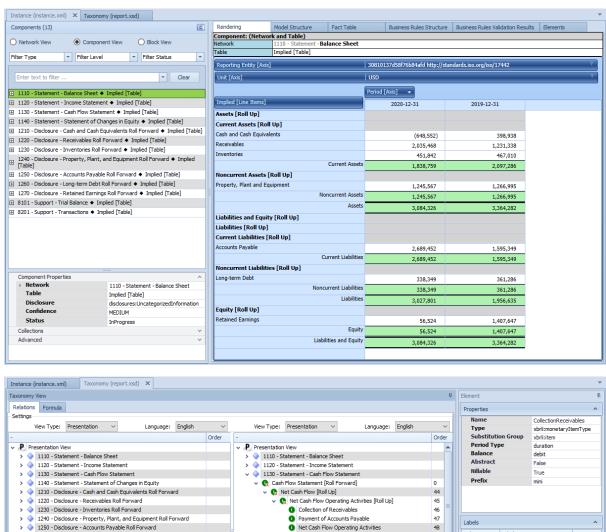
https://pacioli.auditchain.finance/reportAnalysis/ea39fa98a4bb3a8a0a1c5cfab9fa194f0dd6a346.report/instance.xml



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

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/ea39fa98a4bb3a8a0a1c5cfab9fa194f0dd6a346.report/instance.xml



 Net Cash Flow Operating Activities
 Net Cash Flow Financing Activities [Roll Up] 1260 - Disclosure - Long-term Debt Roll Forward Role Label Language Collection of Receivables > 🔷 1270 - Disclosure - Retained Earnings Roll Forward Additional Long-term Borrowings 50 negatedLabel Collection of Receivables > 8101 - Support - Trial Balance Repayment of Long term Borrowings 51 > 🔷 8201 - Support - Transactions Net Cash Flow Financing Activities 52 Ret Cash Flow Investing Activities [Roll Up] 53 Capital Additions of Property, Plant and Ed 54 Net Cash Flow Investing Activities 55 Net Cash Flow Cash and Cash Equivalents, Beginning Balance 57 Cash and Cash Equivalents, Ending Balance 58 Þ References ▼ Clear Language: English Element Type Data Type Period Type Collection of Receivables 2 CollectionReceivables2 formula [concept] concept Element Element conceptBalance conceptBalance [conceptBalance] Element

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

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 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 15:46:00 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	15	18	18	0

Assertion Report

Value Assertions

id	satisfied	message
BS01 (evaluation 1)	satisfied	\$Assets=3364281.75 = \$Liabilities=1956635.11 + \$Equity=1407646.64
BS01 (evaluation 2)	satisfied	\$Assets=3084325.68 = \$Liabilities=3027801.36 + \$Equity=56524.32
IS01 (evaluation 1)	satisfied	\$GrossProfitLoss=1718007.18 = \$Sales=2604048.36 - \$CostsOf5ales=886041.18
BS02 (evaluation 1)	satisfied	\$Assets=3364281.75 = \$CurrentAssets=2097286.43 + \$NoncurrentAssets=1266995.32
BS02 (evaluation 2)	satisfied	\$Assets=3084325.68 = \$CurrentAssets=1838758.52 + \$NoncurrentAssets=1245567.16
BS03 (evaluation 1)	satisfied	\$Liabilities=1956635.11 = \$CurrentLiabilities=1595349.42 + \$NoncurrentLiabilities=361285.69
BS03 (evaluation 2)	satisfied	\$Liabilities=3027801.36 = \$CurrentLiabilities=2689452.31 + \$NoncurrentLiabilities=338349.05
CF01 (evaluation 1)	satisfied	\$NetCashFlow=-1047489.7 = \$NetCashFlowOperatingActivities=-1024553.06 + \$NetCashFlowFinancingActivities=-22936.64 + \$NetCashFlowInvestingActivities=0.0
IS02 (evaluation 1)	satisfied	\$OperatingIncomeLoss=-1353288.25 = \$GrossProfitLoss=1718007.18 - \$OperatingExpenses=3071295.43
RF1 (evaluation 1)	satisfied	\$CashAndCashEquivalents_BalanceStart=398937.76 + \$NetCashFlow=-1047489.7 = \$CashAndCashEquivalents_BalanceEnd=-648551.94
RF2 (evaluation 1)	satisfied	\$Equity_BalanceStart=1407646.64 + \$NetIncomeLoss=-1351122.32 = \$Equity_BalanceEnd=56524.32
RF3 (evaluation 1)	satisfied	\$CashAndCashEquivalents_BalanceStart=398937.76 + \$CollectionReceivables=2072035.32 - \$PaymentOfAccountsPayable=3096588.38 + \$AdditionalLongtermBorrowings2=10554.36 - \$RepaymentLongtermBorrowings2=33491.0 - \$CapitalAdditionsPropertyPlantAndEquipment2=0.0 = \$CashAndCashEquivalents_BalanceEnd=-648551.94
RF4 (evaluation 1)	satisfied	\$Receivables_BalanceStart=1231338.47 + \$Sales2=2604048.36 - \$CollectionReceivables2=1799918.56 = \$Receivables_BalanceEnd=2035468.27
RF5 (evaluation 1)	satisfied	\$Inventories_BalanceStart=467010.2 + \$PurchasesOfInventoryForSale=870873.17 - \$CostsOfSales2=886041.18 = \$Inventories_BalanceEnd=451842.19
RF6 (evaluation 1)	satisfied	\$PropertyPlantAndEquipment_BalanceStart=1266995.32 + \$CapitalAdditionsPropertyPlantAndEquipment=0.0 - \$DepreciationAndAmortization=21428.16 = \$PropertyPlantAndEquipment_BalanceEnd=1245567.16
RF7 (evaluation 1)	satisfied	\$AccountsPayable_BalanceStart=1595349.42 + \$PurchasesOfInventoryForSale2=2983739.7 - \$PaymentOfAccountsPayable2=1889636.81 = \$AccountsPayable_BalanceEnd=2689452.31
RF8 (evaluation 1)	satisfied	\$LongtermDebt_BalanceStart=361285.69 + \$AdditionalLongtermBorrowings=10554.36 - \$RepaymentLongtermBorrowings=33491.0 = \$LongtermDebt_BalanceEnd=338349.05
RF9 (evaluation 1)	satisfied	\$RetainedEarnings_BalanceStart=1407646.64 + \$NetIncomeLoss=-1351122.32 = \$RetainedEarnings_BalanceEnd=36524.32

XBRL Calculations:

MINI



Alternatively, could us Luca to <u>manually input information to create</u> report:

http://luca.yaxbrl.com/

Alternatively, could us Luca API to <u>feed information into Luca to</u> create report:

http://luca.yaxbrl.com/

Alternatively, could us Luca to <u>import information from Excel to</u> create report:

http://luca.yaxbrl.com/

http://xbrlsite.azurewebsites.net/2021/luca/mini-import.zip

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

% MINI Financial Reporting Scheme %

checkReport3("https://pacioli.auditchain.finance/reportAnalysis/ea39fa98a4bb3a8a0a1c5cfab9fa194f0dd6a346.report/instance.xml",

['http://accounting.auditchain.finance/reporting-scheme/mini/fac/ReportingStyles/MINI-BSC-IS01-CF1_schema.xsd', 'http://accounting.auditchain.finance/reporting-scheme/mini/disclosure-mechanics.xsd', 'http://accounting.auditchain.finance/reporting-scheme/mini/reporting-checklist/reporting-checklist-rules-

def.xml', 'http://accounting.auditchain.finance/reporting-scheme/mini/type-subtype/type-subtype.xsd', 'http://accounting.auditchain.finance/reporting-scheme/mini/model-structure/ModelStructure-rules-strict-def.xml'], [valueAssertionsCanDerive, cacheValidity(0)], Result).