Exploring Model Structure and Fact Tables

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This document walks you through filtering networks and searching for report elements and other information that is used within the report.

STEP 1: *Start Pesseract, Open XBRL instance.*

Open the Pesseract application and the main form is displayed and the "Home" tab of the menu ribbon is displayed. Press the "Open" icon and then "Open XBRL instance". Press the browse button (with the three dots) and open the file:

\Basic\basic-SampleInstance.xml

The XBRL instance is loaded:

There is nothing particularly unique about this XBRL instance. Note that in the right side panel of the application you are on the RENDERING tab.

STEP 2: *Model structure view.*

Click on the MODEL STRUCTURE tab.

What you see now is the model structure (on the right) of the selected network (indicated in green on the left. Now, click on the report element named "basic:CurrentAssets". You see the report element properties form appear.
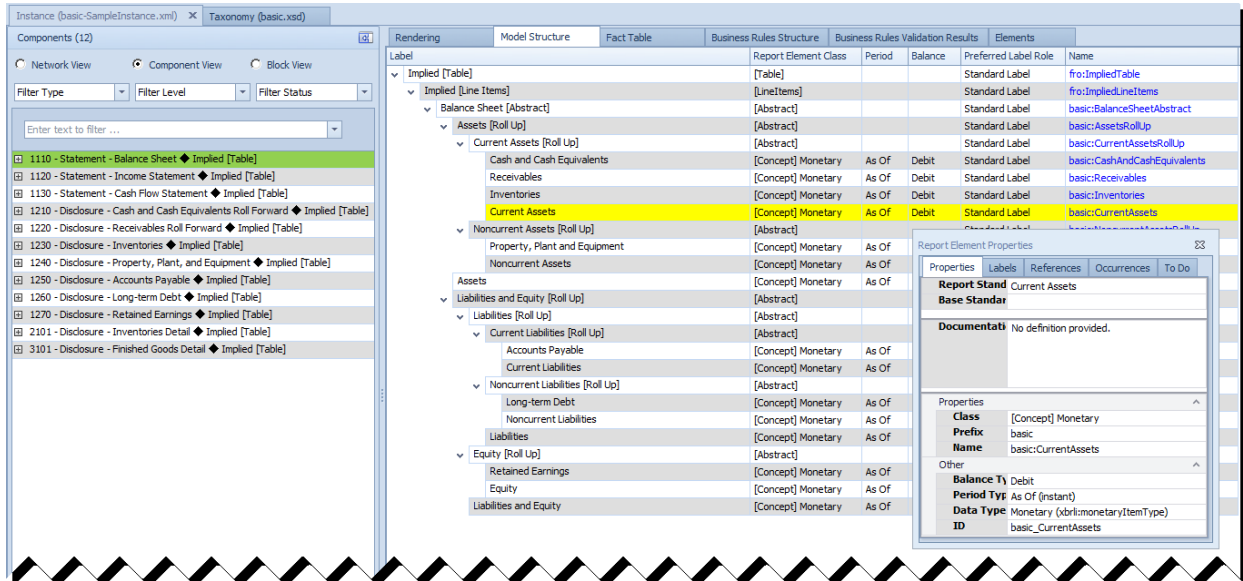
STEP 3: *Fact table view.*

Now click the FACT TABLE tab. Note that you can now see the facts that are related to the selected network. Click on any concept, note that they are highlighted in blue, and the report element properties will be shown. Or, click on any Fact Value to show the fact properties form.
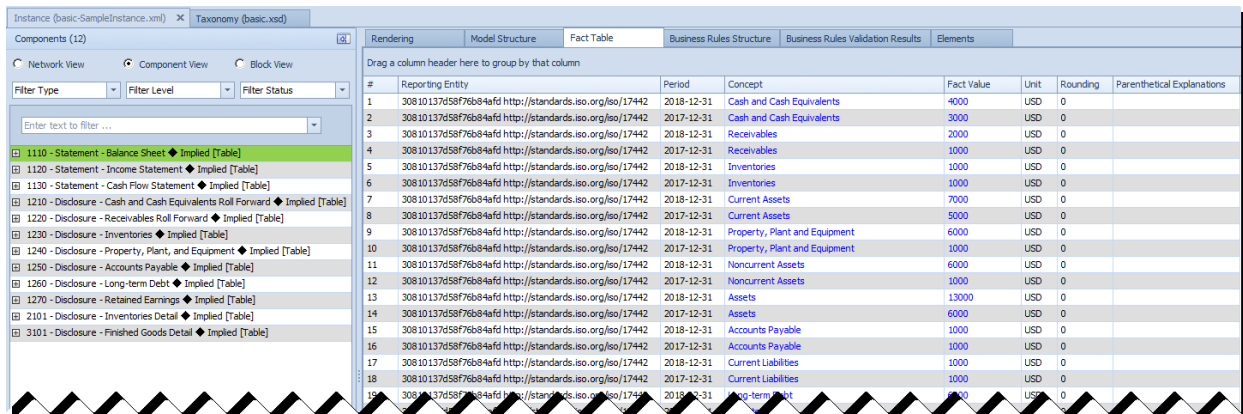
Notice just above the list of facts where you see the label "Drag a column header here to group by that column". Drag the "Period" heading to that position in the form. What you see is the following:

#	Reporting Entity	Concept	Fact Value	Unit	Rounding	Parenthetical Explanations
∨ **Period : 2017-12-31**						
2	30810137d58f76b84afd http://standards.iso.org/iso/17442	Cash and Cash Equivalents	3000	USD	0	
4	30810137d58f76b84afd http://standards.iso.org/iso/17442	Receivables	1000	USD	0	
6	30810137d58f76b84afd http://standards.iso.org/iso/17442	Inventories	1000	USD	0	
8	30810137d58f76b84afd http://standards.iso.org/iso/17442	Current Assets	5000	USD	0	
10	30810137d58f76b84afd http://standards.iso.org/iso/17442	Property, Plant and Equipment	1000	USD	0	
12	30810137d58f76b84afd http://standards.iso.org/iso/17442	Noncurrent Assets	1000	USD	0	
14	30810137d58f76b84afd http://standards.iso.org/iso/17442	Assets	6000	USD	0	
16	30810137d58f76b84afd http://standards.iso.org/iso/17442	Accounts Payable	1000	USD	0	
18	30810137d58f76b84afd http://standards.iso.org/iso/17442	Current Liabilities	1000	USD	0	
20	30810137d58f76b84afd http://standards.iso.org/iso/17442	Long-term Debt	1000	USD	0	
22	30810137d58f76b84afd http://standards.iso.org/iso/17442	Noncurrent Liabilities	1000	USD	0	
24	30810137d58f76b84afd http://standards.iso.org/iso/17442	Liabilities	2000	USD	0	
26	30810137d58f76b84afd http://standards.iso.org/iso/17442	Retained Earnings	4000	USD	0	
28	30810137d58f76b84afd http://standards.iso.org/iso/17442	Equity	4000	USD	0	
30	30810137d58f76b84afd http://standards.iso.org/iso/17442	Liabilities and Equity	6000	USD	0	
∨ **Period : 2018-12-31**						
1	30810137d58f76b84afd http://standards.iso.org/iso/17442	Cash and Cash Equivalents	4000	USD	0	
3	30810137d58f76b84afd http://standards.iso.org/iso/17442	Receivables	2000	USD	0	
5	30810137d58f76b84afd http://standards.iso.org/iso/17442	Inventories	1000	USD	0	
7	30810137d58f76b84afd http://standards.iso.org/iso/17442	Current Assets	7000	USD	0	
9	30810137d58f76b84afd http://standards.iso.org/iso/17442	Property, Plant and Equipment	6000	USD	0	
11	30810137d58f76b84afd http://standards.iso.org/iso/17442	Noncurrent Assets	6000	USD	0	
13	30810137d58f76b84afd http://standards.iso.org/iso/17442	Assets	13000	USD	0	
15	30810137d58f76b84afd http://standards.iso.org/iso/17442	Accounts Payable	1000	USD	0	
17	30810137d58f76b84afd http://standards.iso.org/iso/17442	Current Liabilities	1000	USD	0	
19	30810137d58f76b84afd http://standards.iso.org/iso/17442	Long-term Debt	6000	USD	0	
21	30810137d58f76b84afd http://standards.iso.org/iso/17442	Noncurrent Liabilities	6000	USD	0	
23	30810137d58f76b84afd http://standards.iso.org/iso/17442	Liabilities	7000	USD	0	
25	30810137d58f76b84afd http://standards.iso.org/iso/17442	Retained Earnings	6000	USD	0	
27	30810137d58f76b84afd http://standards.iso.org/iso/17442	Equity	6000	USD	0	
29	30810137d58f76b84afd http://standards.iso.org/iso/17442	Liabilities and Equity	13000	USD	0	

The facts are grouped by the PERIOD now. Note that you can nest groupings, sort, filter, and make other useful adjustments to how you look at the list of facts. Right click over a heading to bring up the menu which allows you to make modifications to your view of facts.

STEP 4: *Business rules structure view.*

Now click on the BUSINESS RULES STRUCTURE view. This view shows the XBRL calculation relations of the concepts within the selected network. Again, you can click on any report element name to see the properties of the selected report element.

Rendering	Model Structure	Fact Table	**Business Rules Structure**	Business Rules Validation Results	Elements

Roll UPs

Label	Report Element Class	Balance	Weight	Name
Implied [Table]	[Table]		0	fro:ImpliedTable
Assets	[Concept] Monetary	Debit	0	basic:Assets
Current Assets	[Concept] Monetary	Debit	1	basic:CurrentAssets
Cash and Cash Equivalents	[Concept] Monetary	Debit	1	basic:CashAndCashEquivalents
Receivables	[Concept] Monetary	Debit	1	basic:Receivables
Inventories	[Concept] Monetary	Debit	1	basic:Inventories
Noncurrent Assets	[Concept] Monetary	Debit	1	basic:NoncurrentAssets
Property, Plant and Equipment	[Concept] Monetary	Debit	1	basic:PropertyPlantAndEquipment
Liabilities and Equity	[Concept] Monetary	Credit	0	basic:LiabilitiesAndEquity
Liabilities	[Concept] Monetary	Credit	1	basic:Liabilities
Current Liabilities	[Concept] Monetary	Credit	1	basic:CurrentLiabilities
Accounts Payable	[Concept] Monetary	Credit	1	basic:AccountsPayable
Noncurrent Liabilities	[Concept] Monetary	Credit	1	basic:NoncurrentLiabilities
Long-term Debt	[Concept] Monetary	Credit	1	basic:LongtermDebt
Equity	[Concept] Monetary	Credit	1	basic:Equity
Retained Earnings	[Concept] Monetary	Credit	1	basic:RetainedEarnings

STEP 5: *Business rules view*

Now click on the BUSINESS RULES VALIDATION RESULT view. This shows you the results of validating the report using the Business Rules Structure information from the prior tab.

Rendering	Model Structure	Fact Table	Business Rules Structure	**Business Rules Validation Results**	Elements

Roll UPs

Entity: 30810137d58f76b84afd
Unit: USD
Period: 2017-12-31

Reporting Entity	30810137d58f76b84afd http://standards.iso.org/iso/17442
Period	2017-12-31
Unit	USD

Label	Rendered Value	Op	Reported Value	Calculated Value	Balance	Result	Name
Implied [Line Items]							fro:ImpliedLineItems
Balance Sheet [Abstract]							basic:BalanceSheetAbstract
Assets [Roll Up]							basic:AssetsRollUp
Current Assets [Roll Up]							basic:CurrentAssetsRollUp
Cash and Cash Equivalents	3,000	+	3,000		Debit		basic:CashAndCashEquivalents
Receivables	1,000	+	1,000		Debit		basic:Receivables
Inventories	1,000	+	1,000		Debit		basic:Inventories
Current Assets	5,000	+	5,000	5,000	Debit	Verified	basic:CurrentAssets
Noncurrent Assets [Roll Up]							basic:NoncurrentAssetsRollUp
Property, Plant and Equipment	1,000	+	1,000		Debit		basic:PropertyPlantAndEquipment
Noncurrent Assets	1,000	+	1,000	1,000	Debit	Verified	basic:NoncurrentAssets
Assets	6,000		6,000	6,000	Debit	Verified	basic:Assets
Liabilities and Equity [Roll Up]							basic:LiabilitiesAndEquityRollUp
Liabilities [Roll Up]							basic:LiabilitiesRollUp
Current Liabilities [Roll Up]							basic:CurrentLiabilitiesRollUp
Accounts Payable	1,000	+	1,000		Credit		basic:AccountsPayable
Current Liabilities	1,000	+	1,000	1,000	Credit	Verified	basic:CurrentLiabilities
Noncurrent Liabilities [Roll Up]							basic:NoncurrentLiabilitiesRollUp
Long-term Debt	1,000	+	1,000		Credit		basic:LongtermDebt
Noncurrent Liabilities	1,000	+	1,000	1,000	Credit	Verified	basic:NoncurrentLiabilities
Liabilities	2,000	+	2,000	2,000	Credit	Verified	basic:Liabilities
Equity [Roll Up]							basic:EquityRollUp
Retained Earnings	4,000	+	4,000		Credit		basic:RetainedEarnings
Equity	4,000	+	4,000	4,000	Credit	Verified	basic:Equity
Liabilities and Equity	6,000		6,000	6,000	Credit	Verified	basic:LiabilitiesAndEquity

STEP 6: *Report Elements*

Now click on the ELEMENTS view. This shows you the report elements that are related to the selected network. Notice the line just below the tabs, where you see "All". That combo box lets you select the category of report elements you wish to view. Note that you can sort or filter the list by any item in the heading. Further note that you can change the order of the head items.

| Rendering | Model Structure | Fact Table | Business Rules Structure | Business Rules Validation Results | Elements | |

All ▼

Label ▲	Report Element Class	Period	Balance	Name
Accounts Payable	[Concept] Monetary	As Of	Credit	basic:AccountsPayable
Assets	[Concept] Monetary	As Of	Debit	basic:Assets
Assets [Roll Up]	[Abstract]			basic:AssetsRollUp
Balance Sheet [Abstract]	[Abstract]			basic:BalanceSheetAbstract
Cash and Cash Equivalents	[Concept] Monetary	As Of	Debit	basic:CashAndCashEquivalents
Current Assets	[Concept] Monetary	As Of	Debit	basic:CurrentAssets
Current Assets [Roll Up]	[Abstract]			basic:CurrentAssetsRollUp
Current Liabilities	[Concept] Monetary	As Of	Credit	basic:CurrentLiabilities
Current Liabilities [Roll Up]	[Abstract]			basic:CurrentLiabilitiesRollUp
Equity	[Concept] Monetary	As Of	Credit	basic:Equity
Equity [Roll Up]	[Abstract]			basic:EquityRollUp
Implied [Line Items]	[LineItems]			fro:ImpliedLineItems
Implied [Table]	[Table]			fro:ImpliedTable
Inventories	[Concept] Monetary	As Of	Debit	basic:Inventories
Liabilities	[Concept] Monetary	As Of	Credit	basic:Liabilities
Liabilities [Roll Up]	[Abstract]			basic:LiabilitiesRollUp
Liabilities and Equity	[Concept] Monetary	As Of	Credit	basic:LiabilitiesAndEquity
Liabilities and Equity [Roll Up]	[Abstract]			basic:LiabilitiesAndEquityRollUp
Long-term Debt	[Concept] Monetary	As Of	Credit	basic:LongtermDebt
Noncurrent Assets	[Concept] Monetary	As Of	Debit	basic:NoncurrentAssets
Noncurrent Assets [Roll Up]	[Abstract]			basic:NoncurrentAssetsRollUp
Noncurrent Liabilities	[Concept] Monetary	As Of	Credit	basic:NoncurrentLiabilities
Noncurrent Liabilities [Roll Up]	[Abstract]			basic:NoncurrentLiabilitiesRollUp
Property, Plant and Equipment	[Concept] Monetary	As Of	Debit	basic:PropertyPlantAndEquipment
Receivables	[Concept] Monetary	As Of	Debit	basic:Receivables
Retained Earnings	[Concept] Monetary	As Of	Credit	basic:RetainedEarnings