

# Blocks (Advanced)

By Charles Hoffman, CPA

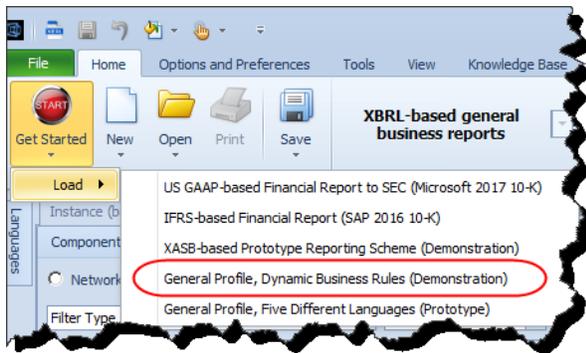
This document provides an advanced discussion related to the notion of Blocks. This example helps solidify the notion of a Block and helps you see how Blocks are used within the Reporting Checklist and the Disclosure Mechanics validation checks.

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

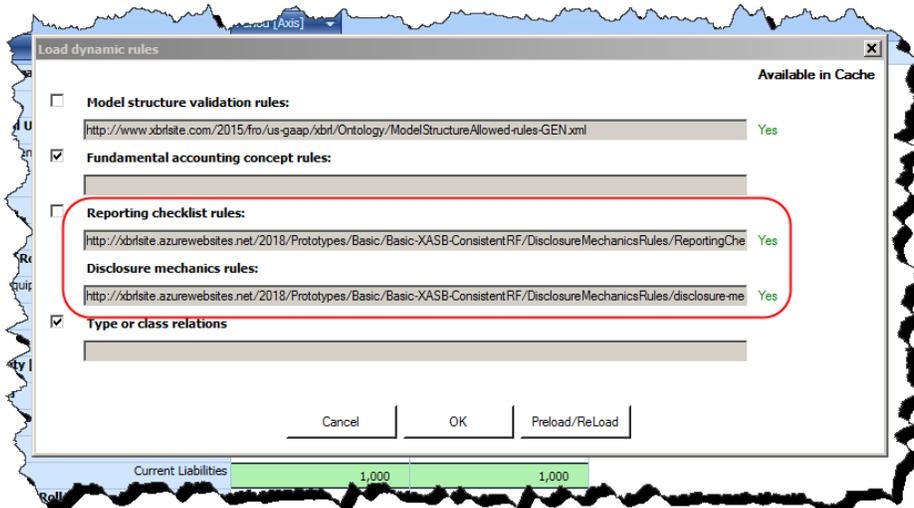
Open the Pesseract application and the main form is displayed and the “Home” tab of the menu ribbon is displayed. Press the “Open” icon and then “Open XBRL instance”. Press the browse button (with the three dots) and open the file:

`\\DynamicRules\\basic-SampleInstance-EmbeddedModelStructureReportingChecklistDisclosureMechanics.xml`

(Alternatively, use the example from the Get Started icon if you don’t have these files):



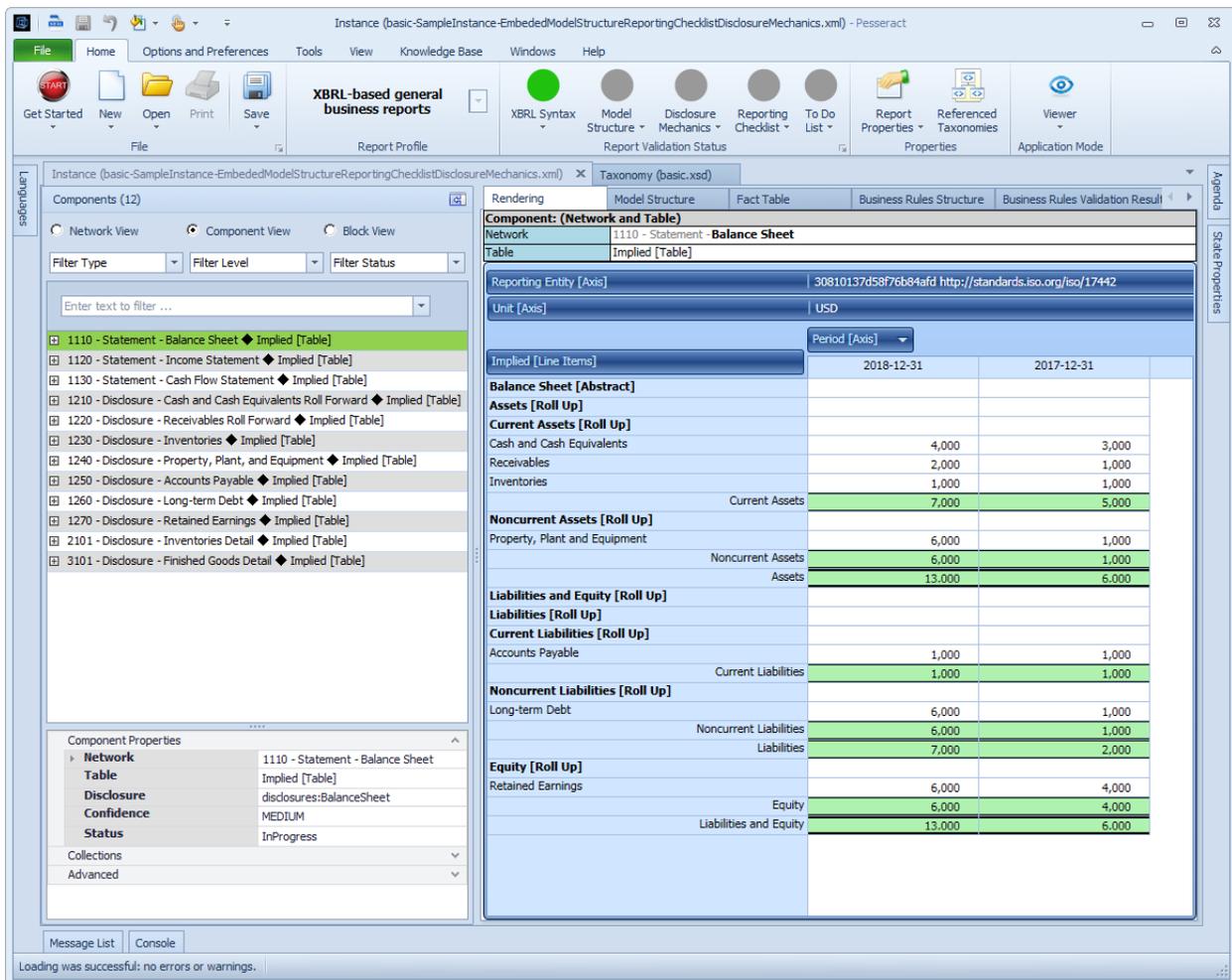
As the document is loading you will be notified that the following dynamic rules are being loaded:



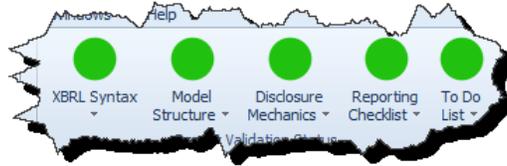
If you have loaded this document before you will see a green “Yes” under the heading “Available in Cache”. If the rules are not available, then “Preload/Reload” the rules. Otherwise, simply click “OK” to complete loading the XBRL instance.

Once the document is loaded your application should look similar to the screen shot below. Notice the “Report Validation Status”. The XBRL Syntax has been validated as the document was loaded and no issues were found and so that icon was turned GREEN. The other icons are GRAY indicating that validation has not yet been performed.

In the lower left side of the “Report Validation Status” menu group there is an icon. Click that icon and the “Run Selected Validations” form is opened. Leave all the options as they are set and press the “Run” button.



After the validation has been completed (this should take a matter of seconds) the icons all turn GREEN:



This indicates that no inconsistencies were discovered in the document. In addition to the icons turning GREEN, several new documents become visible in the application.

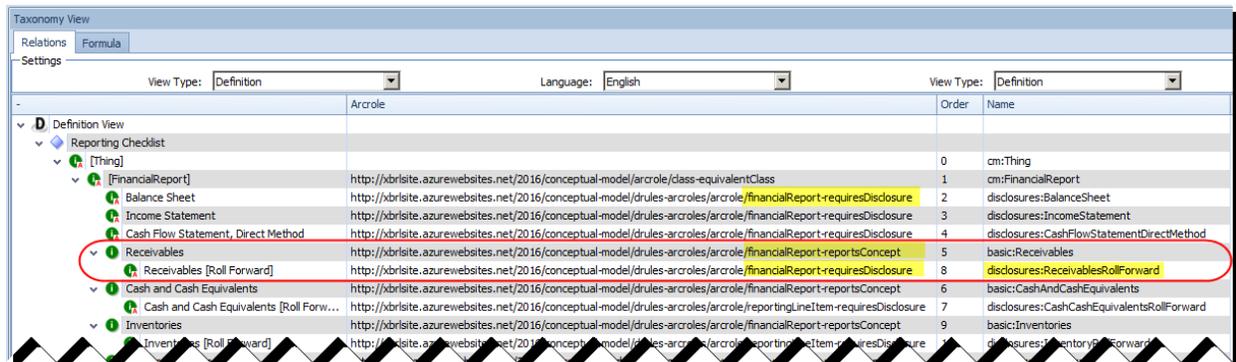
## STEP 2: Reporting checklist validation.

Click on the new window named “Reporting Checklist Validation Result”:

#	Disclosure	Checklist Category	Reason Disclosure Must Exist	Discovered	Expectation Met	Link to Disclosure Mechanics
0	Reporting Checklist					
1	Balance Sheet	Required disclosure	Disclosure always required, satisfied by Assets [Roll Up] and Liabilities and Equity [Roll Up] disclosures	True	CONSISTENT	Balance Sheet
2	Assets [Roll Up]	Part of disclosure	Satisfies Balance Sheet disclosure	True	CONSISTENT	Assets [Roll Up]
3	Liabilities and Equity [Roll Up]	Part of disclosure	Satisfies Balance Sheet disclosure	True	CONSISTENT	Liabilities and Equity [Roll Up]
4	Income Statement	Required disclosure	Disclosure always required	True	CONSISTENT	Income Statement
5	Cash Flow Statement, Direct Method	Required disclosure	Disclosure always required	True	CONSISTENT	Cash Flow Statement, Direct Method
6	Receivables [Roll Forward]	Line item exists, then disclosure required	Required because line item basic:Receivables was reported	True	CONSISTENT	Receivables [Roll Forward]
7	Cash and Cash Equivalents [Roll Forward]	Line item exists, then disclosure required	Required because line item basic:CashAndCashEquivalents was reported	True	CONSISTENT	Cash and Cash Equivalents [Roll Forward]
8	Inventories [Roll Forward]	Line item exists, then disclosure required	Required because line item basic:Inventories was reported	True	CONSISTENT	Inventories [Roll Forward]
9	Accounts Payable [Roll Forward]	Line item exists, then disclosure required	Required because line item basic:AccountsPayable was reported	True	CONSISTENT	Accounts Payable [Roll Forward]
10	Property, Plant, and Equipment Roll Forward	Line item exists, then disclosure required	Required because line item basic:PropertyPlantAndEquipment was reported	True	CONSISTENT	Property, Plant, and Equipment Roll Forward
11	Long-Term Debt [Roll Forward]	Line item exists, then disclosure required	Required because line item basic:LongTermDebt was reported	True	CONSISTENT	Long-Term Debt [Roll Forward]
12	Retained Earnings [Roll Forward]	Line item exists, then disclosure required	Required because line item basic:RetainedEarnings was reported	True	CONSISTENT	Retained Earnings [Roll Forward]

Notice that all the items in the reporting checklist have the value for “Discovered” which is “True”. Further, the “Expectation Met” is “CONSISTENT” for every item in the reporting checklist.

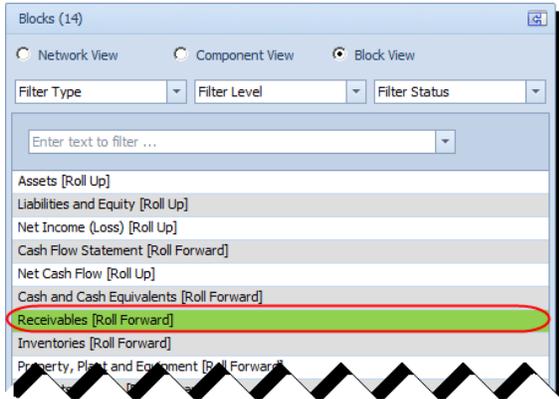
Click on the “Reporting Checklist Taxonomy”. This is where the reporting checklist rules are specified. You will have to rearrange your view a little to make it look like the screenshot below:



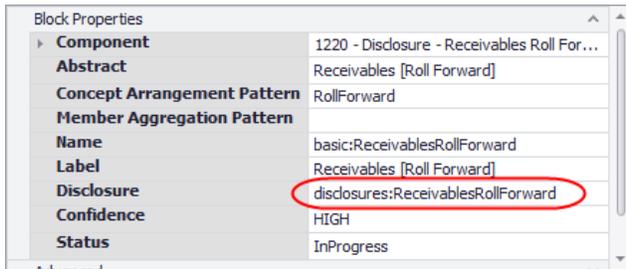
The rules specified in the reporting checklist taxonomy are used to check the report to make sure the report is consistent with the expectations established in the rules. The information is easier to read in the “Reporting Checklist Validation Result” than in the “Reporting Checklist Taxonomy”. There are two types of checks I want to point out. First, required disclosures; notice that the rules say that the balance sheet, income statement, and cash flow statement are required. Second, if a line item is reported then a

disclosure is required; so for example if the line item “Receivables” is reported, then the disclosure “Receivables [Roll Forward]” is required.

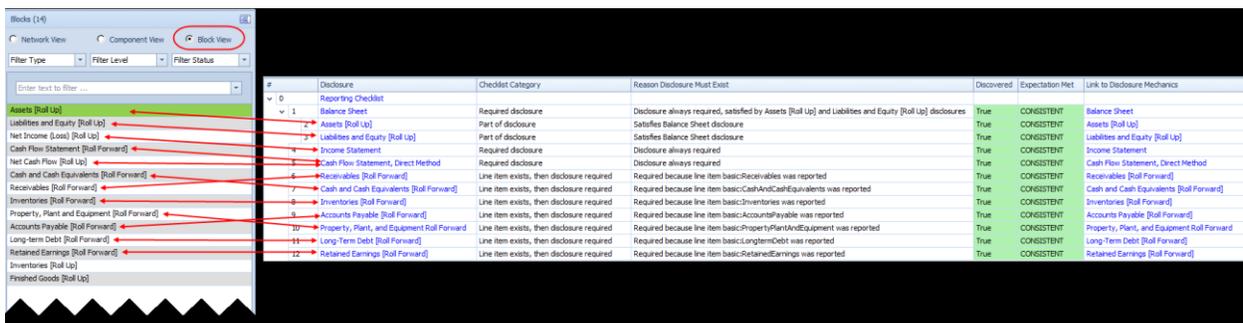
Go to the document “Instance” in the application. Then select the “Blocks” view. You see a list of Blocks that exist in the report:



If you click on a block you can see that the Disclosure property is set to a disclosure from the reporting checklist in most cases:



If you map the Blocks in the report to the reporting checklist you can see that the report has all the disclosures the reporting checklist is looking for:



Note the last two Blocks: Inventory [Roll Up] and Finished Goods [Roll Up]. Those two disclosures are reported but they are not required by the reporting checklist. If you look at the Disclosure property of those two Blocks, you will note that the value is not assigned. This is because the reporting checklist has no knowledge of those disclosures.

This report is consistent with the reporting checklist but has provided two additional disclosures that were not required by the checklist.

### STEP 3: Disclosure mechanics.

Now click on the document window “Disclosure Mechanics Validation Results”:

Show more information									
Primary Information									
#	Disclosure	Category	Level	Pattern	Disclosure Found	Disclosure Consistent	Applicable	Representation Concept [TEXT BLOCK]	Representation Concept DETAIL
1	Accounts Payable [Roll Forward]	Unknown	Level4Detail	RollForward	True	CONSISTENT	True	NOT-EXPECTED	Accounts Payable
2	Assets [Roll Up]	Unknown	Level4Detail	RollUp	True	CONSISTENT	True	NOT-EXPECTED	Assets
3	Balance Sheet	Statement	UNKNOWN	Component	True	CONSISTENT	True	-	-
4	Cash and Cash Equivalents [Roll Forward]	Unknown	Level4Detail	RollForward	True	CONSISTENT	True	NOT-EXPECTED	NOT-FOUND
5	Cash Flow Statement, Direct Method	Unknown	Level4Detail	RollUp	True	CONSISTENT	True	NOT-EXPECTED	Net Cash Flow
6	Income Statement	Unknown	Level4Detail	RollUp	True	CONSISTENT	True	NOT-EXPECTED	Net Income (Loss)
7	Inventories [Roll Forward]	Unknown	Level4Detail	RollForward	True	CONSISTENT	True	NOT-EXPECTED	Inventories
8	Liabilities and Equity [Roll Up]	Unknown	Level4Detail	RollUp	True	CONSISTENT	True	NOT-EXPECTED	Liabilities and Equity
9	Long-Term Debt [Roll Forward]	Unknown	Level4Detail	RollForward	True	CONSISTENT	True	NOT-EXPECTED	Long-term Debt
10	Property, Plant, and Equipment Roll Forward	Unknown	Level4Detail	RollForward	True	CONSISTENT	True	NOT-EXPECTED	Property, Plant and Equipment
11	Receivables [Roll Forward]	Unknown	Level4Detail	RollForward	True	CONSISTENT	True	NOT-EXPECTED	Receivables
<b>Rules</b> Line of Reasoning This disclosure: disclosures:ReceivablesRollForward MUST be represented as a <b>Level 4 Disclosure Detail</b> with the concept arrangement pattern: cm:RollForward cm:RollForward REQUIRES beginning/ending balance: basic:Receivables									
12	Retained Earnings [Roll Forward]	Unknown	Level4Detail	RollForward	True	CONSISTENT	True	NOT-EXPECTED	Retained Earnings

[CSH: Note that line #4 related to the cash and cash equivalents roll forward which says NOT-FOUND is a bug in the application. This bug is being fixed.]

The disclosure mechanics validation checks to make sure that disclosures are created consistently with mechanical, logical, mathematical, and structural rules. Click on line #11 to open that rule information. Notice that the disclosure Receivables [Roll Forward] is required to be a roll forward and it is required to have the concept “basic:Receivables” as the beginning and ending balance of that roll forward.

If you look at the report fragment or Block you see:

The screenshot displays a financial reporting application with a 'Receivables [Roll Forward]' table and its 'Report Element Properties' dialog. The table shows a beginning balance of 1,000, sales of 4,000, and an ending balance of 2,000. The properties dialog shows the concept 'basic:Receivables' and a balance type of 'Debit'.

Receivables [Roll Forward]	2018-01-01/2018-12-31
Receivables [Roll Forward]	
Receivables Beginning Balance	1,000
Sales 2	4,000
Collection of Receivables 2	(3,000)
Additions to Allowance for Bad Debts	0
Bad Debts Written Off	0
Receivables Ending Balance	2,000

**Report Element Properties**

Report Standard Label: Receivables  
Base Standard Label: Receivables

Documentation: No definition provided.

Properties

- Class: [Concept] Monetary
- Prefix: basic
- Name: basic:Receivables

Other

- Balance Type: Debit
- Period Type: As Of (instant)
- Data Type: Monetary (xbrli:monetaryItemType)
- ID: basic\_Receivables

Reviewing that Block you see:

- That the receivables roll forward does, in fact, exist in the report.
- That it is, in fact, a roll forward as was expected (note the beginning and ending balance).
- That the concept “basic:Receivables” is the concept for the fact of that beginning/ending balance.
- That the roll forward mathematically rolls forward as expected which is indicated by the GREEN coloring of the ending balance.

The disclosure mechanics rules can be seen if you go to the “Disclosure Mechanics Taxonomy” document:

Arccrole	Order	Name
disclosures:ReceivablesRollForward	0	disclosures:ReceivablesRollForward
cm:RollForward	1	cm:RollForward
basic:Receivables	2	basic:Receivables

## STEP 4: *More complex documents.*

This example is fairly basic and used to communicate the ideas to someone trying to understand the basics of Blocks, Reporting Checklists, and Disclosure Mechanics. To get an even better sense of this after you understand the basics try these two documents provided in the “Get Started” icon in the application:

