Accounting Equation Tutorial¹

Before starting this tutorial, be sure to clear out any other information in the application by selecting "File", then "New", and then "Model" from the menu ribbon. Confirm that you want to delete the model information which will also delete all report information in the Luca application.

We are trying to keep this tutorial as simple as possible. We encourage you to follow each step exactly in order to get the most out of this tutorial. We will build on this foundation in further tutorials that increase incomplexity.

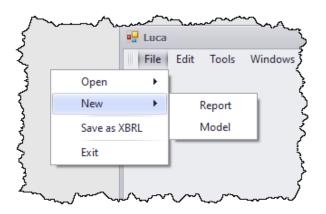
Step 1: Starting the applcation.

Open Luca. You should see the following.

•	Luca					
		Edit	Tools	Windows	Help	- • ×

From the menu ribbon select "File", then "New", and then "Model".

¹ Accounting Equation Representation, <u>http://xbrlsite.azurewebsites.net/2020/master/ae/index.html</u>



A dialog box will appear and ask you to confirm that you want to delete any existing model which would also delete any reports that you have created. Select "Yes" to clear out what is stored in the application.

New Model	×
Do you wish to permanently delete MODEL information? (Note that deleting MODEL information will also delete REPORT which is based on the MODEL.)	
Yes No Cancel	

Step 1: Enter base information.

Select "Edit" and then "Base Information". The Base Information form will appear. Enter the base information that will be used by the XBRL taxonomy:

NamespaceIdentifier	http://www.xbrlsite.com/ae
NamespacePrefix	ae
TaxonomyDescription	Accounting Equation
TaxonomyFileNameBase	ae
UseXBRLDimensions	YES

Your information should look exactly as what appears above.

Step 2: Enter term information.

Select "Edit" and then "Terms". The Terms form will appear. Enter term information. When you begin, your form will look like this:

abel Prefix Name Data Type Balance Type Period Type

After you have finished entering your terms for the accounting equation XBRL taxonomy, your term information for the accounting equation XBRL taxonomy should look like this:

T	Terms						×
Dr	ag a column	header here to group b	y that colu	umn			
	Category	Standard Label	Prefix	Name	Data Type	Balance Type	Period Type
	Concept	Assets	ae	Assets	Monetary	Debit	Instant
	Concept	Liabilities	ae	Liabilities	Monetary	Credit	Instant
	Concept	Equity	ae	Equity	Monetary	Credit	Instant
I	Abstract	Balance Sheet [Set]	ae	BalanceSheetSet			

Close the terms form by pressing the "x" in the upper right hand corner.

Step 2: Enter label information.

Select "Edit" and then "Labels" from the menu ribbon. The Labels form will appear. We already entered the labels we need when we entered the terms above, note the "Standard Label" which is always required. So, we will skip entering any additional labels and move on.

Labels				x
Drag a column heade	er here to group by that			
Term	Language	Label Role	Label	
•	-			

Close the labels form.

Step 3: Enter structure information.

Select "Edit" and then "Structures" from the menu ribbon. The Structures form will appear. When you begin, your form will look like this:

Stru	uctures			х	
Drag	a column header here to group by that colu	umn			
Ic	dentifier	Title	Sequence	2	
*					

After you have finished entering your structures for the accounting equation XBRL taxonomy, your structure information for your accounting equation XBRL taxonomy should look like this:

Structures		х
Drag a column header here to group by that col	umn	-//
Identifier	Title	Sequence
BalanceSheet	01 - Balance Sheet	1
•		

Close the structures form.

Step 4: Enter associations information.

Select "Edit" and then "Associations" from the menu ribbon. The Associations form will appear. When you begin, your form will look like this:

A	ssociations							х
	ag a column header	here to group by that (
	Structure Type	Network Identifier	Association From Name	Association Role	Association To Name	Calculation Polarity	Preferred Label Role	Sequence
*								

After you have finished entering your associations for the accounting equation XBRL taxonomy, your associations information for your accounting equation XBRL taxonomy should look like this:

ag a column heade	r here to group by that c						
Structure Type	Network Identifier	Association From N	Association Role	Association To Name	Calculation Polarity	Preferred Label Role	Sequence
Presentation	BalanceSheet	ae:BalanceSheetSet	Parent-Child	ae:Assets			
Presentation	BalanceSheet	ae:BalanceSheetSet	Parent-Child	ae:Liabilities			
Presentation	BalanceSheet	ae:BalanceSheetSet	Parent-Child	ae:Equity			
	•						

Close the associations form.

Step 4: Enter rules information.

Select "Edit" and then "Rules" and then "Consistency" from the menu ribbon. The Rules form will appear. When you begin, your form will look like this:

Γ	Rules						х	
Drag a column header here to group by that column								
	Rule Type	Rule Code	Rule	Network	Concept	Sequence	Commentary	
*								
L								

After you have finished entering your rules for the accounting equation XBRL taxonomy, your rules information for your accounting equation XBRL taxonomy should look like this:

R	tules									х
Dr	ag a o	olun	nn header	here to group by	that column					
	Rule 1	Тур	e	Rule Code	Rule	Network	Concept	Sequence	Commentary	
×	🗆 Co	onsis	stency 🔻	BS1	\$Assets = \$Liabilities + \$Equity	BalanceSheet	ae:Assets	1		*
Variable Name										
		а	e:Assets							
		a	e:Liabilitie:	5						
) a	e:Equity							•
	3	*								-

IMPORTANT NOTE!!! If you copy/paste the rule into the Luca application from the Excel spreadsheet, you will need to enter the three variables.

Close the rules form.

Step 4: Generate your XBRL taxonomy schema and label linkbase.

Select "File" and then "Save as XBRL" then a standard Windows form will appear that will allow you to save your XBRL taxonomy files. Enter "ae.xsd" into the File name field:

💀 Save an XBRL Sch	ema File		×
$\leftrightarrow \rightarrow \cdot \uparrow$	« Projects » Luca »	じ ~	Q
Organize 🔻 Ne	w folder		== • ?
💻 ThisPC 🧊 3D Objects 🛄 Desktop	▲ Name	Date modified	Туре
🖆 Documents	✓ <		>
File name:	ae.xsd		~
Save as type:	XBRL Schema (*.xsd)		~
∧ Hide Folders		Save	Cancel .::

Several XBRL files will be generated that contain the information that you entered into the Luca application.

Step 4: Entering facts

Select "Edit" and then "Facts" from the menu ribbon. The Facts form will appear. When you begin, your form will look like this:

F	Facts										
				Save							
	Reporting Entity Aspect	Calendar Period Aspect	ConceptAspect	Fact Value	Units	Rounding	Sequence				
*											

After you have finished entering your facts for the accounting equation report, your facts information in your accounting equation REPORT should look like this:

		Save				
Reporting Entity Aspect	Calendar Period Aspect	ConceptAspect	Fact Value	Units	Rounding	Sequence
GH259400TOMPUOLS65II http://standards.iso.org/iso/17442	2020-12-31	ae:Assets	1000	iso4217:USD	-3	
GH259400TOMPUOLS65II http://standards.iso.org/iso/17442	2020-12-31	ae:Liabilities	500	iso4217:USD	-3	
GH259400TOMPUOLS65II http://standards.iso.org/iso/17442	2020-12-31	ae:Equity	500	iso4217:USD	-3	
GH259400TOMPUOLS65II http://standards.iso.org/iso/17442	2021-12-31	ae:Assets	10000	iso4217:USD	-3	
GH259400TOMPUOLS65II http://standards.iso.org/iso/17442	2021-12-31	ae:Liabilities	5000	iso4217:USD	-3	
GH259400TOMPUOLS65II http://standards.iso.org/iso/17442	2021-12-31	ae:Equity	5000	iso4217:USD	-3	

IMPORTANT NOTE!!! Notice the "Save" button above the facts that where entered. Be sure to press that "Save" button or the facts will not be saved by the application.

Step 5: Verify your XBRL files.

Finally, we will want to verify that the XBRL taxonomy that we created was consistent with the XBRL technical specification. Luca does not perform XBRL validation. You can use any off-the-shelf XBRL processor to verify that your XBRL is correct. Below you see the validation results provided by XBRL Cloud:

Report generated u	ng software from Coyote Reporting, LLC at 2020-10-16T03:49:20.858-0700	
XBRL Va	lidation Report	
Severity	Count	
Error	0	
Warning	0	
Inconsistency	0	
Best Practice	0	
Information	0	
Total	0	
No Errors!		

Arelle is a free, open source, but rather technical XBRL processor. Below you can see what your XBRL taxonomy looks like in a technical oriented tool.

arelle - ae.xsd				—		×
File Tools Help						
🚰 🎏 🎜 🔚 🖬 · 🔎 · 🥼 😭	×					
DTS Properties		Presentation				
	\uparrow		Presentation Relationships	Pref. Label	Туре	
📕 ae.xsd - schema		😑 01 - Baland	ce Sheet			
★ xbrl-linkbase-2003-12-31.xsd - sch	21	🔲 🖬 Balanc	e Sheet [Set]		String	
xlink-2003-12-31.xsd - schema		Ass	sets		Monetary	
🗄 ae-lab.xml - linkbase		Lia	bilities		Monetary	
★ xbrl-instance-2003-12-31.xsd - sch	e	Equ	uity		Monetary	
🗄 ae-pre.xml - linkbase						
ae-cal.xml - linkbase						
🗄 ae-def.xml - linkbase						
★ xbrldt-2005.xsd - schema						
🗄 nonnumeric-2009-12-16.xsd - sche	n					
🗄 numeric-2009-12-16.xsd - schema	~					
<	-	<			>	Ē.,

Another tool for working with XBRL-based reports is Pesseract². Below you see the technical perspective of the XBRL taxonomy that you created for the accounting equation:

) 🚈 - 💩 - 📼					Taxonomy (ae.xsd) - Pesse	ract						- 6
Home	Options and Preferences Too	ıls View Knowl	edge Base D	ebugging V	Nindows	Help							
Started New Fil	w Open Save busines	sed general ss reports				Report Referenced operties * Taxonomies Properties Ap	Viewer plication Mode						
Taxonomy (a	ae.xsd) 🗙												
Taxonomy Vie	ew								무	Element			
Relations	Formula									Properties			~
Settings										Name			
	View Type: Presentation ~	/ Langu	age: English	~		View Type: Presentation	\sim	Language: Engli	sh ~	Type		Assets xbrli:monetaryItem	Type
		Name	Data Type	Period	Balance	Arcrole		Element Type	Order		tion Group	xbrli:item	() pe
v P Preser	entation View									Period T	ype	instant	
	11 - Balance Sheet							Extended Link	(Balance		debit	
	Balance Sheet [Set]	ae:BalanceSheetSet	String	duration	na			Abstract	0	Abstract	t	False	
	Assets	ae:Assets	Monetary	instant	debit	http://www.xbrl.org/2003	/arcrole/parent-child	Element	1	Nillable		True	
	Liabilities	ae:Liabilities	Monetary	instant	credit	http://www.xbrl.org/2003	/arcrole/parent-child	Element	2	Prefix		ae	
4										Labels			^
٩									•	Role	Label	Li	
Enter text	t to filter	*	Clear La						•		Label Assets	Li e	anguage
	t to filter	•	Clear La			Element Type	Data Type	Balance		Role			anguage
Enter text		•				Element Type Element	Data Type Monetary	Balance	~	Role			anguage
Enter text Prefix	Label	•	Name	nguage: Engli					V Period Type	Role			anguage
Enter text Prefix ae	Label Assets	×	Name Assets	nguage: Engli		Element	Monetary		V Period Type Instant	Role			anguage
Enter text Prefix ae ae	Label Assets Balance Sheet [Set]	•	Name Assets BalanceSheetS	nguage: Engli		Element Abstract	Monetary String		Period Type instant duration	Role			anguage
Enter text Prefix ae xbridt	Label Assets Balance Sheet [Set] [dimensionItem]	•	Name Assets BalanceSheetS dimensionItem	nguage: Engli		Element Abstract Abstract	Monetary String String	debit	Period Type Instant duration duration	Role			anguage
Enter text Prefix ae xbridt ae	Label Assets Balance Sheet [Set] [dmensionItem] Equity		Name Assets BalanceSheetS dimensionItem Equity	nguage: Engli		Element Abstract Abstract Element	Monetary String String Monetary	debit	Period Type Instant duration duration instant	Role			anguage
Enter text Prefix ae xbridt ae xbridt	Label Assets Balance Sheet (Set) [dimensionItem] Equity [hypercubeItem]	v	Name Assets BalanceSheetS dimensionItem Equity hypercubeItem	nguage: Engli		Abstract Abstract Abstract Element Abstract	Monetary String String Monetary String	debit credit	Period Type Instant duration duration instant duration	Role			anguage
Enter text Prefix ae xbridt ae xbridt	Label Assets Balance Sheet (Set) [dimensionItem] Equity [hypercubeItem]		Name Assets BalanceSheetS dimensionItem Equity hypercubeItem	nguage: Engli		Abstract Abstract Abstract Element Abstract	Monetary String String Monetary String	debit credit	Period Type Instant duration duration instant duration	Role			anguage
Enter text Prefix ae xbridt ae xbridt	Label Assets Balance Sheet (Set) (dimensionitem) Equity (hypercubettem) Labilities	v	Name Assets BalanceSheetS dimensionItem Equity hypercubeItem	nguage: Engli		Abstract Abstract Abstract Element Abstract	Monetary String String Monetary String	debit credit	Period Type Instant duration duration instant duration	Role	Assets		anguage

This is what your XBRL instance looks like:

3	🚔 🖩 🦘 🕙 - 💩 -	r -			Instance (instance.xml)	- Pesseract					۰	23
F	ile Home Options an	nd Preferences Tools	View	Knowled	ge Base	Debugging	Windows	Help					\diamond
Ge	t Started New Open File	Save Save Report P	orts	-	XBRL Syntax	x Model Structure v		Report Properties Pro	Referenced Taxonomies	Viewer Application Mode	2		
_	Instance (instance.xml) ×	Taxonomy (ae.xsd)										-	>
Languages	Components (1)			letwork		Model Struct k and Table 01 - Unknow) m -Balance		Busine	ss Rules Structure	Business Rules Valida	• •	Agenda Stat
	Filter Type Filter Le		Table Balance Sheet [Hypercube] Reporting Entity [Axis]					GH259400TOM	PUOLS65II http://s	tandards.iso.org/iso/174	42	State Properties	
	The formation of		Period [Axis] Unit [Axis]					USD				is .	
								Drop Column Fields Here					
				Balance Sheet [Line Items]					Fact Value				
					heet [Arith	imetic]							
				Assets Liabilities					5,000				
				Equity						1,000 4,000			
	Component Properties • Network Table	01-Balance Sheet	^							1,000			
	Disclosure	Balance Sheet [Hypercube] disclosures:UncategorizedI MEDIUM											
	Status	InProgress											
	Collections Advanced		* *										
Loa	Message List Console ding was successful: no errors of	or warnings.											

² Pesseract, <u>http://pesseract.azurewebsites.net/</u>