14. Business Use Case Examples

This section explores each of the business use cases summarized in the previous section. Please be sure to become familiar with the previous section and the additional background material pointed to in that section.

Keep the following thought in the back of your mind as you work through this material: Mathematics is used in accounting, engineering, medicine, architecture, science, and other domains. Yet mathematics is exactly the same in each domain, it is only applied solving different domain problems. This is likewise the case for the business use cases covered by this section; they are applicable to many types of financial or non-financial business reporting.

14.1. Overview of business use cases

The following provides an overview of the business use cases. This overview is intended to help the reader compare and contrast the different business use cases provided. The business use cases provided are hard to dispute. There are likely other business use cases which are not shown. Each business use case listed is provided for one or more specific reasons to highlight one or more unique characteristics which it possess.

The business use cases tend to be financial reporting related. This is true for two reasons. First, that is where the primary use of XBRL is right now and I am a CPA trying to show other CPAs how to work with XBRL within the domain of financial reporting. Second, most business users understand financial reporting enough to understand these examples. It should be quite easy for a business user to take the principles articulated in these financial reporting related business use cases and apply those principles to the practice of modelling other areas of financial reporting.

Here is a summary of the business use cases.

#	Title	Description
BUC01	Flat Hierarchy	Metapattern. One level flat hierarchy. No computations.
BUC02	Nested Hierarchy	Variation of hierarchy. Multi-level nested hierarchy. No computations.
BUC03	Simple Roll Up	Metapattern. Simple hierarchy of numeric facts with a roll up type of computation. Computation where $A + B + n = Total$.
BUC04	Nested Roll Up	Variation of roll up. Nesting one roll up inside another roll up.
BUC05	Inverted Roll Up	Variation of roll up. Multi-level nested roll up. Multiple levels of nested roll ups.
BUC06	Multiple Roll Ups	Variation of roll up. One total rolled up in more than one way forcing roll ups to be expressed within separate networks.
BUC07	Simple Roll Forward	Metapattern. Simple roll forward of one balance. Also known as movement analysis. Reconciles the changes between two balances, beginning balance + changes = ending balance.
BUC08	Complex Roll Forward	Variation of Roll Forward. Roll forward of multiple balances which roll up.
BUC09	Simple Compound Fact	Metapattern. Set of facts which go together to form a compound fact. Facts are held together by an axis.



#	Title	Description
BUC10	Repeating Fact	Variation of Compound Fact. Similar to simple
		compound fact, points out that fact can repeat.
BUC11	Multiple Periods	Variation of Compound Fact. Simple compound fact
	Compound Fact	which has more than one period disclosed within the
		compound fact.
BUC12	Roll Forward in	Variation of Roll Forward. Roll forward within a
	Compound Fact	compound fact.
BUC13	Nested Compound Fact	Variation of Compound Fact. Compound fact nested
		within another compound fact.
BUC14	Reconciliation of Balance	Variation of Roll Up. Reconciliation of a balance with another balance. (Note that this is not a roll forward.)
BUC15	Adjustment	Metapattern. Reconciles an originally stated balance to
DOCIS	Aujustinent	a restated balance, the adjustment being the total
		change, between two different report dates such as a
		prior period adjustment.
BUC16	Variance	Metapattern. Reconciles some reporting scenario with
DOCIO	Variance	another reporting scenario, the variance between
		reporting scenarios being the variance or changes such
		as the variance between actual and budget.
BUC17	Complex Computation	Metapattern. A complex computation information model
20017	Complex Compacation	can be thought of as a hierarchy plus a set of
		commutations between different concepts within that
		hierarchy which are challenging to model as the
		parent/child relations.
BUC24	Text Block	Metapattern. Modelling of what could be modelled as
		some other information model as one fact. By definition
		a text block is one fact.
BUC25	Prose	Variation of text block. Information which contains
		multiple paragraphs, schedules, lists etc. which should
		appear in a particular order or sequence to be
		meaningful.
BUC26	Escaped XHTML	Variation of text block. Same as prose or text block.
		Points out how escaped XHTML can be used to report a
		fact or set of facts.
BUC27	Using JSON	Variation of text block. Same information contained in
		the simple compound fact expressed using the JSON
		syntax.
BUC28	General Comment	A comment or footnote which expands on or provided
		additional information for some reported fact.
BUC30	Classes	Shows how concepts can be related to other concepts
		and points out the differences between modelling
D11004		something as a concept and as the member of an axis.
BUC31	Class Properties	Shows how concepts related to other concepts can be
DUCCC	Cuid	expressed making the use of an [Axis].
BUC32	Grid	A grid information model is a pseudo metapattern
		which uses the presentation characteristics of the
		columns and rows of a table to model information. (Not
BUC34	Pivot Table	recommended) A set of facts comprised of a single concept which is
DUC34	FIVUL TADIE	A set of facts comprised of a single concept which is
		characterized by one or more axis. Information set is similar to a pivot table.
BUC35	Grouped Penert	
מטטם	Grouped Report	Variation of Compound Fact. Table which contains multiple axis which are used to provide information for
		a complex information set.
	1	a complex illiornation set.



#	Title	Description
BUC36	Flow	Shows the notion of flow or ordering/sequencing of different tables within a financial report and how the ordering or sequencing is important and can be achieved.
BUC41	Restatement	Financial reporting use case of a restatement of income resulting from prior period error or change in accounting policy.
BUC42	Reissue Report	Financial reporting use case of the reissuance of a report which has already been issued.
BUC43	Reclassification	Financial reporting use case of the reclassification of prior period line items of a report to conform to current period classifications.
BUC44	Reason Not Reported	A specific type of comment or footnote which explains why a fact has not been reported. Points out that footnotes can be differentiated using roles.
BUC99	Non-Financial Information	Shows that there is no difference between expressing financial and non-financial information.

14.1.1. Business Use Case Documentation

The following is an overview of what is provided for each business use case in the next section which covers each use case in detail.

- **Visual Example**: The visual example provides a common rendering of the information articulated by the use case. This is a rendering is what the business use case might look like on paper.
- **Basic Automated Semantic Rendering**: The automated semantic rendering is a human-readable rendering or presentation of the information provided for this business use case. This automated rendering should be as close to and as readable as the visual example.
- **Report Elements and Model Structure**: The model structure provides an overview visualization of the report elements and the relations between the report elements of the business use case.
- **Description**: The description provides a brief, concise narrative of the business use case and key points which we would like to bring to your attention.
- Important distinguishing aspects and dynamics: The important characteristics section provides a summary of the important characteristics and dynamics which you should be focused on when looking at the specific business use case. This section focuses on and points out subtle, intimate details of the business use case and how it is different from other use cases.

The documentation in this section is not intended to provide all the details of each business use case. For the details one must rely on the actual XBRL instance, XBRL taxonomy, and other supporting files. The information above is intended to provide the key information which is helpful in grasping the essential understanding from the documentation which will help you dig into the details within the actual files.

14.1.2. Business Use Case Files and Reports

All the additional details are provided in physical files which can be read in place on the web or downloaded and used locally. The following URL provides a summary of



all business use cases in a number of forms including a readable HTML page, an RSS feed for creating an automated process for reading the files and a ZIP archive for downloading all business use cases. This information can be found here:

http://www.xbrlsite.com/DigitalFinancialReporting/BusinessUseCases/2012-09-30/Index.html

This is an explanation of the information for each business use case which can be found by clicking on each use case and following it to the index file for that use case which looks like the following (this shows the *Simple Roll Up* business use case as an example of each use case):

Business	use	Case:	Simple	Koli	Up

#	Item	Description		
Α.	Use Case Name	SimpleRollUp		
В.	Description	Metapattern. Simple hierarchy of numeric facts with a roll up type of computation. Computation where $A+B$ $n=Total$.		vhere A + B +
c.	Visual example	Sample Company December 31, (thousands of dollars)		
		_	2010	2009
		ASSETS		
		Property, Plant, and Equipment, Net Land Buildings, Net Furniture and Fixtures, Net Computer Equipment, Net Other Property, Plant, and Equipment, Net	5,347 244,508 34,457 4,169 6,702	1,147 366,375 34,457 5,313 6,149
		Property, Plant and Equipment, Net, Total	295,183	413,441
D.	Visual example file	PDF JPEG		
E.	Report elements	HTML XML Infoset		
F.	Report element relations	XSD Relations (HTML) Relations Infoset (XML)		
G.	Report	XBRL Fact Tables (HTML) Fact Table Infoset (XML) Fact Table Rendering (H	TML)	
H.	Business rules	XBRL Formulas XBRL Formulas Valiation Results Business rules (HTML) XE	RL Calculation vali	dation results
I.	XBRL technical syntax validation (double check)	HTML (UBmatrix) HTML (XBRL Cloud)		
J.	Recap/Examination prototype tool/viewer	HTML		
K.	ZIP Archieve with All Files	ZIP		



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This is an explanation of each item on the index page:

- A. **Use Case Name**: Provides the unique name of the business use case.
- B. **Description**: Provides a concise description of the business use case. Also indicates if the use case is a metapattern, a variation of a metapattern, or other useful information.
- C. **Visual example**: Provides a JPEG image for the business use case.
- D. **Visual example file**: Provides links to PDF and JPEG versions of the visual example of the business use case.
- E. **Report elements**: Provides a human readable HTML version and an computer readable XML version of the report elements of the business use case.
- F. **Report element relations**: Provides a link to the taxonomy schema file (XSD) of the XBRL taxonomy. Note that all other files are linked to that taxonomy schema and will be read by loading that file. Also provided are an

HTML rendering of the relations between the report elements and a computer readable XML version of those relations.

- G. **Report**: Provides a link to the XBRL instance file, a human readable HTML version of the fact tables within that business use case, a computer readable XML version of the fact table, and a prototype HTML version of the rendering of that fact table.
- H. **Business Rules**: Provides business rules for use case including XBRL Formula file, XBRL Formula validation results (HTML), business rules in human readable form (HTML), and XBRL calculation validation results (HTML).
- I. **XBRL technical syntax validation results**: Provides XBRL technical syntax validation results (XBRL instance, XBRL taxonomy, XBRL Dimensions, XBRL calculations) from two software vendors; UBmatrix and XBRL Cloud (as a double-check).
- J. **Recap/Examination prototype tool/viewer**: Provides a battery of reports which organize the information above into an easier to read format.
- K. **ZIP Archive with all files**: Provides a ZIP archive of all the files above for easy download.

14.1.3. Background Understanding Required

Trying to work with these business use cases without the proper background material would be like trying to learn about algebra or geometry without understanding the notion of what a number is, not understanding how to count, and not understanding the basics of mathematics. There are steps in the learning process and you cannot skip any steps. Another way to say this is that there are no short cuts.

To get the most out of these business use cases it is important to work through certain information as necessary background and foundational material. The following sections are important:

- *Understanding Important Key Terms* as it defines the terminology used throughout the use cases.
- Overview of Logical Model as it establishes the logical model used by each business use case.
- *Understanding the Multidimensional Model* as it establishes terminology used by the logical model and logical model report elements.
- Information Model Metapatterns is not necessarily required, however this section provides an understanding of the fundamental metapatterns which make up each business use case.
- Domain Partition Aggregation Models as this helps understand the relations between the members of a domain of an axis.

Lastly, it is important that the reader understand that there are two important pieces which are not covered by the business use cases. First, each business use case is a small example, consciously created as a standalone unit to make understanding of the use case as easy as possible. However, the different sections of a financial report can be related. These relations are covered in the Comprehensive Example section of this document. Second, there are some special or specific modelling



considerations which are not addressed within the business use cases. These are all covered in the section *Special or Specific Modelling Considerations*, rather than complicating the business use cases with these ideas.



14.2. Flat hierarchy

The *Flat Hierarchy* business use case shows how to model information which has no computation type relations but does have some sort of relationship. In this case the hierarchy has only one level, it is flat. The metapattern of this business use case is the **hierarchy**.

14.2.1. Visual Example

Sample Company For Period Ending December 31, (thousands of dollars, except number of employees)

	2010	2009	2008	2007	2006
Sales, Net	1,500	1,400	1,300	1,200	1,100
Income (Loss) from Continuing Operations	500	400	300	200	100
Net Income (Loss)	51	41	31	21	11
Cash Flow Provided by (used in) Operating Activities, Net	5,000	4,000	3,000	2,000	1,000
Capital Additions	1,000	650	550	450	350
Average Number of Employees	300	290	280	270	260

14.2.2. Basic Automated Semantic Rendering

Component: (Network and Table)		
	Financial Highlights (http://www.xbrlsite.com/DigitalFinancialReporting/BusinessUseCases/FlatHierarchy/FinancialHighlights)	
Table	Financial Highlights [Table]	

Slicers (applies to each fact value in each table cell)

Reporting Entity [Axis]

SAMP (http://www.SampleCompany.com)

Legal Entity [Axis]

Consolidated Entity [Member]

	Period [Axis]				
Financial Highlights [Line Items]	2010-01-01 - 2010-12-31	2009-01-01 - 2009-12-31	2008-01-01 - 2008-12-31	2007-01-01 - 2007-12-31	2006-01-01 - 2006-12-31
Financial Highlights [Hierarchy]					
Sales, Net	1,500,000	1,400,000	1,300,000	1,200,000	1,100,000
Income (Loss) from Continuing Operations	500,000	400,000	300,000	200,000	100,000
Net Income (Loss)	51,000	41,000	31,000	21,000	11,000
Cash Flow Provided by (Used in) Operating Activities, Net	5,000,000	4,000,000	3,000,000	2,000,000	1,000,000
Capital Additions	1,000,000	650,000	550,000	450,000	350,000
Average Number of Employees	300	290	280	270	260

14.2.3. Report Elements and Model Structure

Component: (Network and Table)		
	Financial Highlights (http://www.xbrlsite.com/DigitalFinancialReporting/BusinessUseCases/FlatHierarchy/FinancialHighlights)	
Table	Financial Highlights [Table]	

#	Label	Report Element Class	Period Type	Balance
1	Financial Highlights [Table]	[Table]		
2	Legal Entity [Axis]	[Axis]		
3	Consolidated Entity [Member]	[Member]		
4	Financial Highlights [Line Items]	[Line Items]		
5	Financial Highlights [Hierarchy]	[Abstract]		
6	Sales, Net	[Concept] Monetary	For Period	Credit
7	Income (Loss) from Continuing Operations	[Concept] Monetary	For Period	Credit
8	Net Income (Loss)	[Concept] Monetary	For Period	Credit
9	Cash Flow Provided by (Used in) Operating Activities, Net	[Concept] Monetary	For Period	Debit
10	Capital Additions	[Concept] Monetary	For Period	Debit
11	Average Number of Employees	[Concept] Decimal	For Period	

14.2.4. Description

Financial highlights reported by an organization are a good example of a flat hierarchy. The key idea here is to show that pieces of information have relationships, but those relationships can be quite basic in nature. In this case some set of numbers is articulated as a flat list of facts which make up the financial highlights an entity desires to disclose.

14.2.5. Important distinguishing aspects and dynamics

- This use case reports six facts for five periods, a total of 30 pieces of information or facts.
- This use case shows all numeric information, although there are two types of numeric information: monetary and pure values.
- The concepts are for the most part unrelated, coming from different parts of a financial statement. By unrelated we mean no numeric relationship or computation and no deeper hierarchy, the information is simply one flat list of facts which are reported.
- The facts reported all relate to the consolidated entity, this is made explicit by the "Legal Entity [Axis]" which has a value of "Consolidated Entity [Member]" for each fact reported.
- The "Financial Highlights [Table]" pulls the one [Axis] and the six concepts which make up the [Line Items] together.
- Note that while not present on the [Table], the "Reporting Entity [Axis]" (i.e. Sample Company) and "Period [Axis]" (the five years shown) do in fact exist; they are required by the XBRL technical syntax.



14.3. Nested hierarchy

The *Nested Hierarchy* business use case is a variation of a hierarchy. It adds to the flat hierarchy in that it adds an additional layer of nesting or another level to the hierarchy. As you look at the visual example, think about how it looks similar to the outline view of a Microsoft Word document. The metapattern of this business use case is the **hierarchy**.

14.3.1. Visual Example

Sample Company December 31, 2010

Accounting Policies

The financial statements have been prepared on the historical cost basis, except for the revaluation of land and buildings and certain financial instruments. The principal accounting policies adopted are set out below.

Inventories

Inventories are stated at the lower of cost and net realisable value. Cost comprises direct materials and, where applicable, direct labour costs and those overheads that have been incurred in bringing the inventories to their present location and condition. Cost is calculated using the weighted average method. Net realisable value represents the estimated selling price less all estimated costs to completion and costs to be incurred in marketing, selling and distribution. Inventories are comprised of raw materials and work in progress.

Financial Instruments

Financial assets and liabilities are recognised on the Group's balance sheet when the Group has become a party to the contractual provisions of the investment.

Trade receivables

Trade receivables are stated at their nominal value as reduced by appropriate allowances for estimated irrecoverable amounts.

Investments in securities

Investments in securities are recognised on a trade-date basis and are initially measured at cost.

Bank borrowings

Interest-bearing bank loans and overdrafts are recorded at the proceeds received, net of direct issue costs. Finance charges, including premiums payable on settlement or redemption, are accounted for on an accrual basis and are added to the carrying amount of the instrument to the extent that they are not settled in the period in which they arise.

Provisions

Provisions are recognised when the Group has a present obligation as a result of a past event which it is probable will result in an outflow of economic benefits that can be reasonably estimated.



14.3.2. Basic Automated Semantic Rendering

Legal Entity [Axis]

Component: (Network and Table)				
Network	Accounting Policies (http://www.xbrlsite.com/DigitalFinancialReportin	Accounting Policies (http://www.xbrlsite.com/DigitalFinancialReporting/BusinessUseCase/NestedHierarchy/AccountingPolicies)		
Table	Accounting Policies [Table]	Accounting Policies [Table]		
Slicers (applies to each fact value in each table cell)				
Reporting Entity [Axis] SAMP (http://www.SampleCompany.com)		SAMP (http://www.SampleCompany.com)		

Consolidated Entity [Member]

	Period [Axis]
Accounting Policies [Line Items]	2010-01-01 - 2010-12-31
Accounting Policies [Hierarchy]	
Basis of Presentation [Text Block]	The financial statements have been prepared on the historical cost basis, except for the revaluation of land and buildings and certain financial instruments. The principal accounting policies adopted are set out below.
Basis of Presentation	Historical Cost
Inventory Policy [Text Block]	Inventories are stated at the lower of cost and net realisable value. Cost comprises direct materials and, where applicable, direct labour costs and those overheads that have been incurred in bringing the inventories to their present location and condition. Cost is calculated using the weighted average method. Net realisable value represents the estimated selling price less all estimated costs to completion and costs to be incurred in marketing, selling and distribution. Inventories are comprised of raw materials and work in progress.
Inventory Valuation Method	Cost
Description of Inventory Components	weighted average method
Inventory Cost Method	FIFO
Description of Net Realizable Value	This is the description of the net realizable value.
Financial Instruments Policy [Text Block]	Financial assets and liabilities are recognised on the Group's balance sheet when the Group has become a party to the contractual provisions of the investment.
Trade Receivables Policy	Trade receivables are stated at their nominal value as reduced by appropriate allowances for estimated irrecoverable amounts.
Investments in Securities Policy	Investments in securities are recognised on a trade- date basis and are initially measured at cost.
Bank Borrowings Policy	Interest-bearing bank loans and overdrafts are recorded at the proceeds received, net of direct issue costs. Finance charges, including premiums payable on settlement or redemption, are accounted for on an accrual basis and are added to the carrying amount of the instrument to the extent that they are not settled in the period in which they arise.
Provisions Policy	Provisions are recognised when the Group has a present obligation as a result of a past event which it is probable will result in an outflow of economic benefits that can be reasonably estimated.



14.3.3. Report Elements and Model Structure

Component: (Network and Table)		
Network	Accounting Policies (http://www.xbrlsite.com/DigitalFinancialReporting/BusinessUseCase/NestedHierarchy/AccountingPolicies)	
Table	Accounting Policies [Table]	

#	Label	Report Element Class	Period Type	Balance
1	Accounting Policies [Table]	[Table]		
2	Legal Entity [Axis]	[Axis]		
3	Consolidated Entity [Member]	[Member]		
4	Accounting Policies [Line Items]	[Line Items]		
5	Accounting Policies [Hierarchy]	[Abstract]		
6	Basis of Presentation [Text Block]	[Concept] String	For Period	
7	Basis of Presentation	[Concept] String	For Period	
8	Inventory Policy [Text Block]	[Concept] String	For Period	
9	Inventory Valuation Method	[Concept] String	For Period	
10	Description of Inventory Components	[Concept] String	For Period	
11	Inventory Cost Method	[Concept] String	For Period	
12	Description of Net Realizable Value	[Concept] String	For Period	
13	Financial Instruments Policy [Text Block]	[Concept] String	For Period	
14	Trade Receivables Policy	[Concept] String	For Period	
15	Investments in Securities Policy	[Concept] String	For Period	
16	Bank Borrowings Policy	[Concept] String	For Period	
17	Provisions Policy	[Concept] String	For Period	

14.3.4. Description

The *Nested Hierarchy* builds on the *Flat Hierarchy* business use case, introducing the notion that a hierarchy can have one or more sub-hierarchies. There is no way to differentiate the sub-hierarchies into any sort of category or meaning. Another way to say this is that the nesting really has no formal meaning. Many times meaning of the nesting is erroneously implied by model creators or model users.

14.3.5. Important distinguishing aspects and dynamics

- The Flat Hierarchy shows a flat hierarchy which contains all numbers. In contrast, Nested Hierarchy business use case shows a nested hierarchy of text. There is really very little difference between these two use cases other than the number of nesting levels.
- A hierarchy can be created to any depth, having any number of levels. There are pros and cons to adding or not adding levels.
- When modelling a hierarchy, ask yourself "Why am I making this a child of this concept rather than a sibling?" Some reason to make a concept a child or a sibling of another concept should exist.



14.4. Simple roll up

The Simple Roll Up business use case shows how to model what is commonly referred to as a roll up. A roll up is simply two or more concepts which add up to a third concept: Concept A + Concept B + "n concept" = Total concept. The metapattern of this business use case is the**roll up**.

14.4.1. Visual Example

Sample Company December 31, (thousands of dollars)

y-	2010	2009
ASSETS		
Property, Plant, and Equipment, Net		
Land	5.347	1.147
Buildings, Net	244,508	366,375
Furniture and Fixtures, Net	34,457	34,457
Computer Equipment, Net	4,169	5,313
Other Property, Plant, and Equipment, Net	6,702	6,149
Property, Plant and Equipment, Net, Total	295,183	413,441

14.4.2. Basic Automated Semantic Rendering

Component: (Network and Table)			
Network	Property, Plant, and Equipment, by Component (http://www.xbrlsite.com/DigitalFinancialReporting/BusinessUseCase/SimpleRollUp/PropertyPlantAndEquipmentByComponent)		
Table	Property, Plant and Equipment, by Component [Table]		
Slicers (applies to	each fact value in each table cell)		
Reporting Entity	Reporting Entity [Axis] SAMP (http://www.SampleCompany.com)		
Legal Entity [Axis]		Consolidated Entity [Member]	

	Period [Axis]	
Property, Plant and Equipment, by Component [Line Items]	2010-12-31	2009-12-31
Property, Plant and Equipment, Net [Roll Up]		
Land	5,347,000	1,147,000
Buildings, Net	244,508,000	366,375,000
Furniture and Fixtures, Net	34,457,000	34,457,000
Computer Equipment, Net	4,169,000	5,313,000
Other Property, Plant and Equipment, Net	6,702,000	6,149,000
Property, Plant and Equipment, Net, Total	295,183,000	413,441,000



14.4.3. Report Elements and Model Structure

Component: (Network and Table)			
	Property, Plant, and Equipment, by Component (http://www.xbrlsite.com/DigitalFinancialReporting/BusinessUseCase/SimpleRollUp/PropertyPlantAndEquipmentByCom		
Table	Property, Plant and Equipment, by Component [Table]		

#	Label	Report Element Class	Period Type	Balance
1	Property, Plant and Equipment, by Component [Table]	[Table]		
2	Legal Entity [Axis]	[Axis]		
3	Consolidated Entity [Member]	[Member]		
4	Property, Plant and Equipment, by Component [Line Items]	[Line Items]		
5	Property, Plant and Equipment, Net [Roll Up]	[Abstract]		
6	Land	[Concept] Monetary	As Of	Debit
7	Buildings, Net	[Concept] Monetary	As Of	Debit
8	Furniture and Fixtures, Net	[Concept] Monetary	As Of	Debit
9	Computer Equipment, Net	[Concept] Monetary	As Of	Debit
10	Other Property, Plant and Equipment, Net	[Concept] Monetary	As Of	Debit
11	Property, Plant and Equipment, Net, Total	[Concept] Monetary	As Of	Debit

14.4.4. Description

The *Roll Up* business use case introduces the notion of numeric relations between concepts. In the case of a *Roll Up* computation, several concepts add up to some total concept. Basically, a *Roll Up* builds on a *Hierarchy* in that it adds the business rules of the computation to the hierarchy of concepts. Roll ups can be expressed using XBRL calculations.

14.4.5. Important distinguishing aspects and dynamics

- A Roll Up articulates the relations: A + B + n = Total, where n means any number of concepts.
- A Roll Up may have only one total concept.
- The relation may be + or (plus or minus).
- Notice that all of the concepts in this *Roll Up* business use case have a balance type of DEBIT.
- The business rules for a roll up can also be expressed using XBRL formula.
 One advantage of using XBRL formula is that a tolerance can be added to the computation.

14.5. Nested roll up

The *Nested Roll Up* business use case is a variation of the *Roll Up* business use case where one or more additional roll ups are contained within another roll up, effectively nesting roll ups. The metapattern of this business use case is the **roll up**.

14.5.1. Visual Example

Sample Company December 31, (thousands of dollars)

		As of December 31,		
		2010	2009	
CURRENT Foreign Domestic	_	200 50	250 250	
	Current	250	500	
DEFERRED Foreign Domestic		200 50	250 250	
	Deferred	250	500	
	Income Tax Expense (Benefit)	500	1,000	

14.5.2. Basic Automated Semantic Rendering

Component: (Network and Table)					
Network	Income Tax Expense (Benefit) (http://www.xbrlsite.com/DigitalFinancialReporting/BusinessUseCase/NestedRollUp/IncomeTaxExpenseBenefit)				
Table	Income Tax Expense (Benefit), by Component [Table]				
Slicers (applies to	Slicers (applies to each fact value in each table cell)				
, , , ,	Reporting Entity [Axis] SAMP (http://www.SampleCompany.com)				
Legal Entity [Axis] Consolidated Entity [Member]		Consolidated Entity [Member]			

	Period [Axis]	
Income Tax Expense (Benefit) [Line Items]	2010-01-01 - 2010-12-31	2009-01-01 - 2009-12-31
Income Tax Expense (Benefit) [Roll Up]		
Income Tax Expense (Benefit), Current [Roll Up]		
Income Tax Expense (Benefit), Current, Foreign	200,000	250,000
Income Tax Expense (Benefit), Current, Domestic	50,000	250,000
Income Tax Expense (Benefit), Current	250,000	500,000
Income Tax Expense (Benefit), Deferred [Roll Up]		
Income Tax Expense (Benefit), Deferred, Foreign	200,000	250,000
Income Tax Expense (Benefit), Deferred, Domestic	50,000	250,000
Income Tax Expense (Benefit), Deferred	250,000	500,000
Income Tax Expense (Benefit), Total	500,000	1,000,000



14.5.3. Report Elements and Model Structure

Component: (Network and Table)		
Network	Income Tax Expense (Benefit) (http://www.xbrlsite.com/DigitalFinancialReporting/BusinessUseCase/NestedRollUp/IncomeTaxExpenseBenefit)	
Table	Income Tax Expense (Benefit), by Component [Table]	

#	Label	Report Element Class	Period Type	Balance
1	Income Tax Expense (Benefit), by Component [Table]	[Table]		
2	Legal Entity [Axis]	[Axis]		
3	Consolidated Entity [Member]	[Member]		
4	Income Tax Expense (Benefit) [Line Items]	[Line Items]		
5	Income Tax Expense (Benefit) [Roll Up]	[Abstract]		
6	Income Tax Expense (Benefit), Current [Roll Up]	[Abstract]		
7	Income Tax Expense (Benefit), Current, Foreign	[Concept] Monetary	For Period	Debit
8	Income Tax Expense (Benefit), Current, Domestic	[Concept] Monetary	For Period	Debit
9	Income Tax Expense (Benefit), Current	[Concept] Monetary	For Period	Debit
10	Income Tax Expense (Benefit), Deferred [Roll Up]	[Abstract]		
11	Income Tax Expense (Benefit), Deferred, Foreign	[Concept] Monetary	For Period	Debit
12	Income Tax Expense (Benefit), Deferred, Domestic	[Concept] Monetary	For Period	Debit
13	Income Tax Expense (Benefit), Deferred	[Concept] Monetary	For Period	Debit
14	Income Tax Expense (Benefit), Total	[Concept] Monetary	For Period	Debit

14.5.4. Description

A Nested Roll Up builds on the Roll Up showing that a Roll Up may contain other Roll Ups. Nested roll ups can be looked at as basically sub totals. In this example, the grand total Income Tax Expense (Benefit) is broken down by the sub totals Current and Deferred. Each of those sub totals is broken down by its Foreign and Domestic components.

Alternatively, the sub totals could have been Foreign and Domestic with those sub totals then broken down by their Current and Deferred components. Or, both of these breakdowns could have been provided, see the *Multiple Roll Ups* use case.

14.5.5. Important distinguishing aspects and dynamics

- A Roll Up can have another Roll Up nested within it.
- Any depth of nesting is allowed.
- Alternatively, the subtotal could have been foreign/domestic and the breakdown current/deferred; however, a choice was made here to provide only this subtotalling. Another alternative would be to provide both approaches to totalling the information.



14.6. Inverted roll up

The *Inverted Roll Up* business use case points out that roll ups can appear to be inverted. This business use case is really no different than a Roll Up other than it has a number of nested roll ups creating what amounts to a very deep nesting. The metapattern of this business use case is the **roll up**.

14.6.1. Visual Example

Sample Company December 31, (thousands of dollars)

	For Year Ended	or Year Ended December 31,	
	2010	2009	
Revenues, Gross Returns and Allowances	1,000 -1,000	2,000 -2,000	
Cost of Sales	t 0 -1,000	0 -2,000	
Gross Profit (Loss	-1,000	-2,000	
Other Operating Expenses Other Operating Income	-1,000 1,000	-2,000 2,000	
Operating Income (Loss Nonoperating Expenses (Income)	-1,000 1,000	-2,000 2,000	
Income (Loss) from Continuing Operations Before Income Taxes	0	0	
Income Tax Expense (Benefit)	1,000	2,000	
Net Income (Loss	-1,000	-2,000	

14.6.2. Basic Automated Semantic Rendering

Component: (Network and Table)			
Network	Income Statement (http://www.xbrlsite.com/DigitalFinancialReporting/BusinessUseCase/InvertedRollUp/IncomeStatement)		
Table	Income Statement [Table]		
Slicers (applies t	to each fact value in each table cell)		
Reporting Entity [Axis] SAMP (http://www.SampleCompany.com)		SAMP (http://www.SampleCompany.com)	
Legal Entity [Axis]		Consolidated Entity [Member]	

	Period	[Axis]
Income Statement [Line Items]	2010-01-01 - 2010-12-31	2009-01-01 - 2009-12-31
Net Income (Loss) [Roll Up]		
Income (Loss) from Continuing Operations Before Income Taxes [Roll Up]		
Operating Income (Loss) [Roll Up]		
Gross Profit (Loss) [Roll Up]		
Revenues, Net [Roll Up]		
Revenues, Gross	1,000,000	2,000,000
Returns and Allowances	(1,000,000)	(2,000,000)
Revenues, Net	0	
Cost of Sales	1,000,000	2,000,000
Gross Profit (Loss)	(1,000,000)	(2,000,000)
Other Operating Income	1,000,000	2,000,000
Other Operating Expenses	(1,000,000)	(2,000,000)
Operating Income (Loss)	(1,000,000)	(2,000,000)
Nonoperating Income (Loss)	1,000,000	2,000,000
Income (Loss) from Continuing Operations Before Income Taxes	0	0
Income Tax Expense (Benefit)	1,000,000	2,000,000
Net Income (Loss)	(1,000,000)	(2,000,000)



14.6.3. Report Elements and Model Structure

Component: (Network and Table)		
	Income Statement (http://www.xbrlsite.com/DigitalFinancialReporting/BusinessUseCase/InvertedRollUp/IncomeStatement)	
Table	Income Statement [Table]	

#	Label	Report Element Class	Period Type	Balance
1	Income Statement [Table]	[Table]		
2	Legal Entity [Axis]	[Axis]		
3	Consolidated Entity [Member]	[Member]		
4	Income Statement [Line Items]	[Line Items]		
5	Net Income (Loss) [Roll Up]	[Abstract]		
6	Income (Loss) from Continuing Operations Before Income Taxes [Roll Up]	[Abstract]		
7	Operating Income (Loss) [Roll Up]	[Abstract]		
8	Gross Profit (Loss) [Roll Up]	[Abstract]		
9	Revenues, Net [Roll Up]	[Abstract]		
10	Revenues, Gross	[Concept] Monetary	For Period	Credit
11	Returns and Allowances	[Concept] Monetary	For Period	Debit
12	Revenues, Net	[Concept] Monetary	For Period	Credit
13	Cost of Sales	[Concept] Monetary	For Period	Debit
14	Gross Profit (Loss)	[Concept] Monetary	For Period	Credit
15	Other Operating Income	[Concept] Monetary	For Period	Credit
16	Other Operating Expenses	[Concept] Monetary	For Period	Debit
17	Operating Income (Loss)	[Concept] Monetary	For Period	Credit
18	Nonoperating Income (Loss)	[Concept] Monetary	For Period	Credit
19	Income (Loss) from Continuing Operations Before Income Taxes	[Concept] Monetary	For Period	Credit
20	Income Tax Expense (Benefit)	[Concept] Monetary	For Period	Debit
21	Net Income (Loss)	[Concept] Monetary	For Period	Credit

14.6.4. Description

An *Inverted Roll Up* again builds on the *Roll Up* and *Nested Roll Up* showing what amounts to a more complex nesting which makes the *Roll Up* look inverted, or upside-down.

The presentation of the information articulated within a Roll Up is dependent on the software application which is generating the presentation. There is nothing in XBRL which says Roll Ups need to be presented up-side-down. However, many software interfaces do work this way.

14.6.5. Important distinguishing aspects and dynamics

- There is no real difference between a *Roll Up*, a *Nested Roll Up*, and an *Inverted Roll Up* other than the number of nesting levels.
- Notice in this use case that the concepts are both debits and credits. The
 weight in the XBRL calculations determines whether the relation is additive or
 subtractive in nature.
- There is a relation between the balance type of a concept and the weight which is used when expressing an XBRL calculation. There is no relation between the balance type and the presentation of the concept as positive or negative. Many business users get confused by this and believe that there is a relation.



- Software interfaces are free to present information as positive or negative. Automated processes need clarity about the polarity of numeric values relative to other numeric values.
- Numeric concepts which do not have a balance type must have the polarity of the concept defined within the concept's documentation to make the polarity clear.
- Creators of a taxonomy can use different preferred label roles to help indicate how a software application should render the information, helping to make the choice to show either a positive or negative value.

14.7. Multiple roll ups

The *Multiple Roll Ups* business use case is a variation of a Roll Up where one concept is the total concept of two or more unique Roll Ups. Basically because the one total concept aggregates in more than one way, then multiple networks must be used to separate the roll ups. The metapattern of this business use case is the **roll up**.

14.7.1. Visual Example

Sample Company December 31, (thousands of dollars)

_	2010	2009
TRADE AND OTHER RECEIVABLES		
Trade and Other Receivables, Net, by Component Trade Receivables, Net Financing Lease Receivables, Net Other Receivables, Net	8,790 2,498 1,305	6,431 1,263 1,096
Trade and Other Receivables, Net_	12,593	8,790
Trade and Other Receivables, Net, by Net/Gross Trade and Other Receivables, Gross Allowance for Doubtfull Accounts	18,280 -5,687	13,472 -4,682
Trade and Other Receivables, Net_	12,593	8,790
Trade and Other Receivables, Net, by Current/Noncurrent Trade Receivables, Net, Current Trade Receivables, Net, Noncurrent	6,340 6,253	5,701 3,089
Trade and Other Receivables, Net	12,593	8,790

14.7.2. Basic Automated Semantic Rendering

Component: (Ne	Component: (Network and Table)		
Network	Trade and Other Receivables, Net, by Current/Noncurrent (http://www.xbrlsite.com/DigitalFinancialReporting/BusinessUseCase/MultipleRollUps/ByCurrentNoncurrent) Trade and Other Receivables, Net, by Current/Noncurrent [Table]		
Table			
Slicers (applies to each fact value in each table cell)			

Reporting Entity [Axis]		SAMP (http://www.SampleCompany.com)	
	Legal Entity [Axis]	Consolidated Entity [Member]	

	Period [Axis]	
Trade and Other Receivables, Net, by Current/Noncurrent [Line Items]	2010-12-31 2009-12-31	
Trade and Other Receivables, Net, by Current/Noncurrent [Roll Up]		
Trade and Other Receivables, Net, Current	6,340,000	5,701,000
Trade and Other Receivables, Net, Noncurrent	6,253,000	3,089,000
Trade and Other Receivables, Net	12,593,000	8,790,000



Component: (Network and Table)		
	(http://www.xbrlsite.com/DigitalFinancialReporting/BusinessUseCase/MultipleRollUps/ByNetGross	
Table		

Slicers (applies to each fact value in each table cell)

Reporting Entity [Axis]	SAMP (http://www.SampleCompany.com)
Legal Entity [Axis]	Consolidated Entity [Member]

	Period [Axis]	
Trade and Other Receivables, Net, by Net/Gross [Line Items]	2010-12-31	2009-12-31
Trade and Other Receivables, Net, by Net/Gross [Roll Up]		
Trade and Other Receivables, Gross	18,280,000	13,472,000
Allowance for Doubtfull Accounts	5,687,000	4,682,000
Trade and Other Receivables, Net	12,593,000	8,790,000

	Component: (Network and Table)	
		Trade and Other Receivables, Net, by Component (http://www.xbrlsite.com/DigitalFinancialReporting/BusinessUseCase/MultipleRollUps/ByComponent)
Table Trade and Other Receivables, Net, by Component [Table]		

Slicers (applies to each fact value in each table cell)

Reporting Entity [Axis]	SAMP (http://www.SampleCompany.com)	
Legal Entity [Axis]	Consolidated Entity [Member]	

	Period [Axis]	
Trade and Other Receivables, Net, by Component [Line Items]	2010-12-31	2009-12-31
Trade and Other Receivables, Net [Roll Up]		
Trade Receivables, Net	8,790,000	6,431,000
Financing Lease Receivables, Net	2,498,000	1,263,000
Other Receivables, Net	1,305,000	1,096,000
Trade and Other Receivables, Net	12,593,000	8,790,000

14.7.3. Report Elements and Model Structure

Component: (Ne	Component: (Network and Table)	
Network	Trade and Other Receivables, Net, by Current/Noncurrent (http://www.xbrlsite.com/DigitalFinancialReporting/BusinessUseCase/MultipleRollUps/ByCurrentNoncurrent)	
Table	Trade and Other Receivables, Net, by Current/Noncurrent [Table]	

#	Label	Report Element Class	Period Type	Balance
1	Trade and Other Receivables, Net, by Current/Noncurrent [Table]	[Table]		
2	Legal Entity [Axis]	[Axis]		
3	Consolidated Entity [Member]	[Member]		
4	Trade and Other Receivables, Net, by Current/Noncurrent [Line Items]	[Line Items]		
5	Trade and Other Receivables, Net, by Current/Noncurrent [Roll Up]	[Abstract]		
6	Trade and Other Receivables, Net, Current	[Concept] Monetary	As Of	Debit
7	Trade and Other Receivables, Net, Noncurrent	[Concept] Monetary	As Of	Debit
8	Trade and Other Receivables, Net	[Concept] Monetary	As Of	Debit



Component: (Ne	Component: (Network and Table)	
	Trade and Other Receivables, Net, by Net/Gross (http://www.xbrlsite.com/DigitalFinancialReporting/BusinessUseCase/MultipleRollUps/ByNetGross)	
Table	Trade and Other Receivables, Net, by Net/Gross [Table]	

#	Label	Report Element Class	Period Type	Balance
1	Trade and Other Receivables, Net, by Net/Gross [Table]	[Table]		
2	Legal Entity [Axis]	[Axis]		
3	Consolidated Entity [Member]	[Member]		
4	Trade and Other Receivables, Net, by Net/Gross [Line Items]	[Line Items]		
5	Trade and Other Receivables, Net, by Net/Gross [Roll Up]	[Abstract]		
6	Trade and Other Receivables, Gross	[Concept] Monetary	As Of	Debit
7	Allowance for Doubtfull Accounts	[Concept] Monetary	As Of	Credit
8	Trade and Other Receivables, Net	[Concept] Monetary	As Of	Debit

Component: (Ne	Component: (Network and Table)	
Network	Trade and Other Receivables, Net, by Component (http://www.xbrlsite.com/DigitalFinancialReporting/BusinessUseCase/MultipleRollUps/ByComponent)	
Table Trade and Other Receivables, Net, by Component [Table]		

#	Label	Report Element Class	Period Type	Balance
1	Trade and Other Receivables, Net, by Component [Table]	[Table]		
2	Legal Entity [Axis]	[Axis]		
3	Consolidated Entity [Member]	[Member]		
4	Trade and Other Receivables, Net, by Component [Line Items]	[Line Items]		
5	Trade and Other Receivables, Net [Roll Up]	[Abstract]		
6	Trade Receivables, Net	[Concept] Monetary	As Of	Debit
7	Financing Lease Receivables, Net	[Concept] Monetary	As Of	Debit
8	Other Receivables, Net	[Concept] Monetary	As Of	Debit
9	Trade and Other Receivables, Net	[Concept] Monetary	As Of	Debit

14.7.4. Description

The *Multiple Roll Ups* business use case points out that a concept might have any number of ways to break down a total concept. To avoid conflicts, these different computations must be separated into different networks.

Networks can be thought of in the same way that broadcast networks send signals using different frequencies in order to separate the different television channels so the signals do not conflict. In this example, Trade and Other Receivables, Net is aggregated in three different ways: by component, by net/gross, and by current/noncurrent.

14.7.5. Important distinguishing aspects and dynamics

- Different aggregations of the same number need to be put into separate and distinct networks in order to avoid modelling conflicts.
- Be sure to keep the presentation, calculation, and definition networks synchronized in order to be clear as to which set of aggregations go with which set of breakdowns (i.e. presentation, calculation, definition for each set should be the same network role).



14.8. Simple roll forward

The Simple Roll Forward business use case shows how to model a very common information model found in financial reporting: the roll forward or sometimes called a movement analysis. A roll forward reconciles an ending balance with a beginning balance via one or more changes in the balance. The business rule equation for a roll forward is: beginning balance + changes to the balance = ending balance. The metapattern of this business use case is the **roll forward** and the **roll up**.

14.8.1. Visual Example

Sample Company December 31, (thousands of dollars)

	2010	2009
Roll Forward of Land		
Land, Beginning Balance Additions Disposals Translation difference	1,147 1,992 -193 2,401	1,147 400 -200 -200
Land, Ending Balance	5,347	1,147

14.8.2. Basic Automated Semantic Rendering

Component: (Network and Table)			
Network	Roll Forward of Land (http://www.xbrlsite.com/DigitalFinancialReporting/BusinessUseCase/SimpleRollForward/RollForwardOfLand)		
Table	Land Changes [Table]		
Slicers (applies to each fact value in each table cell)			
Deporting Entity	[Avie] SAMP (http://www.SampleCompany.com)		

Reporting Entity [Axis]	SAMP (http://www.SampleCompany.com)
Legal Entity [Axis]	Consolidated Entity [Member]

	Period [Axis]	
Land Changes [Line Items]	2010-01-01 - 2010-12-31	2009-01-01 - 2009-12-31
Roll Forward of Land [Roll Forward]		
Land, Beginning Balance	1,147,000	1,147,000
Land, Period Increase (Decrease), Total [Roll Up]		
Land, Additions	1,992,000	400,000
Land, Disposals	(193,000)	(200,000)
Land, Translation Difference	2,401,000	(200,000)
Land, Period Increase (Decrease), Total	4,200,000	0
Land, Ending Balance	5,347,000	1,147,000



14.8.3. Report Elements and Model Structure

Component: (Ne	Component: (Network and Table)	
Network	Roll Forward of Land (http://www.xbrlsite.com/DigitalFinancialReporting/BusinessUseCase/SimpleRollForward/RollForwardOfLand)	
Table	Land Changes [Table]	

#	Label	Report Element Class	Period Type	Balance
1	Land Changes [Table]	[Table]		
2	Legal Entity [Axis]	[Axis]		
3	Consolidated Entity [Member]	[Member]		
4	Land Changes [Line Items]	[Line Items]		
5	Roll Forward of Land [Roll Forward]	[Abstract]		
6	Land, Beginning Balance	[Concept] Monetary	As Of	Debit
7	Land, Period Increase (Decrease), Total [Roll Up]	[Abstract]		
8	Land, Additions	[Concept] Monetary	For Period	Debit
9	Land, Disposals	[Concept] Monetary	For Period	Credit
10	Land, Translation Difference	[Concept] Monetary	For Period	Debit
11	Land, Period Increase (Decrease), Total	[Concept] Monetary	For Period	Debit
12	Land, Ending Balance	[Concept] Monetary	As Of	Debit

14.8.4. Description

The Simple Roll Forward introduces a different type of computation, different from the Roll Up. A Roll Forward is a reconciliation of a balance between two different points in time (i.e. Period [Axis]). The equation of a roll forward is: Beginning balance + Changes = Ending Balance. The beginning and ending balance is always the same concept at two different points in time, period is different for the two balances. The changes relate to the period between the two balances. The data types of all concepts involved in a roll forward are the same.

A roll forward can contain only one change represented by a total concept. That total could be represented by a roll up which breaks down the details of the changes. In this business use case there is one change concept and the details of the changes aggregate to that total using a roll up. The changes is detailed to be Additions, Disposals, and Translation Difference within the roll up of changes. Alternatively, this could have been modelled without the total and Additions, Disposals and Translation Difference would each be changes between the beginning and ending balance. Semantically, the two approaches are equivalent.

14.8.5. Important distinguishing aspects and dynamics

- A *Roll Forward* always reconciles a concept balance between two different points in time. The balance is always an instant, the changes are always durations or for some period of time.
- A *Roll Forward* computation cannot be expressed using XBRL calculations because all XBRL calculations must be within the exact same context. The balance concept is at two different points in time, therefore two different contexts. Further, the changes are in a third context.
- XBRL Formulas can be used to create a business rule to validate a *Roll Forward* computation.
- There are two approaches to showing the polarity of the numbers for the changes of a roll forward. One approach is for the rendering engine to



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leverage the balance attribute value to determine if it should be shown as a positive or negative. A second approach, required if the concepts have no balance attribute, is to use a negated label role to indicate that the sign of a presented change should be flipped.



14.9. Complex roll forward

The *Complex Roll Forward* business use case shows how to model what amounts to several *Roll Forwards* combined into one set of information. The metapattern of this business use case is the **roll forward** and the **roll up**.

14.9.1. Visual Example

Sample Company December 31, (thousands of dollars)

	Land	Buildings, Net	Furniture and Fixtures, Net	Other Property, Plant, and Equipment, Net	Property, Plant, and Equipment, Net
Balance at December 31, 2008	1,000	1,000	1,000	1,000	4,000
Additions Disposals Translation Difference Other Increase (Decrease)	1,000 -1,000 0 0	1,000 -1,000 0 0	1,000 -1,000 0 0	1,000 -1,000 0 0	4,000 -4,000 0
Balance at December 31, 2009	1,000	1,000	1,000	1,000	4,000
Additions Disposals Translation Difference Other Increase (Decrease)	1,000 -1,000 0 0	1,000 -1,000 0 0	1,000 -1,000 0 0	1,000 -1,000 0 0	4,000 -4,000 0
Balance at December 31, 2010	1,000	1,000	1,000	1,000	4,000

14.9.2. Basic Automated Semantic Rendering

Component: (Ne	Component: (Network and Table)		
Network	Property, Plant, and Equipment, Net (http://www.xbrlsite.com/DigitalFinancialReporting/BusinessUseCase/ComplexRollForward/PropertyPlan		
Table	Components of Property, Plant and Equipment, Net [Table]		

Slicers (applies to each fact value in each table cell)

Reporting Entity [Axis]		SAMP (http://www.SampleCompany.com)	
	Legal Entity [Axis]	Consolidated Entity [Member]	

	Period [Axis]		
Components of Property, Plant and Equipment, Net [Line Items]	2010-12-31	2009-12-31	2008-12-31
Property, Plant and Equipment, Net [Roll Up]			
Land	1,000	1,000	1,000
Buildings, Net	1,000	1,000	1,000
Furniture and Fixtures, Net	1,000	1,000	1,000
Other Property, Plant and Equipment, Net	1,000	1,000	1,000
Property, Plant and Equipment, Net	4,000	4,000	4,000



Component: (Network and Table)		
Network	Movement in Property, Plant and Equipment, Net (http://www.xbrlsite.com/DigitalFinancialReporting/BusinessUseCase/ComplexRollForw	
Table	Movement in Property, Plant and Equipment, Net [Table]	

Slicers (applies to each fact value in each table cell)

Reporting Entity [Axis]	SAMP (http://www.SampleCompany.	
Legal Entity [Axis]	Consolidated Entity [Member]	

	1 01100	[Axis]
Movement in Property, Plant and Equipment, Net [Line Items]	2010-01-01 - 2010-12-31	2009-01-01 - 2009-12-31
Movement in Land [Roll Forward]		
Land, Beginning Balance	1,000	1,000
Land, Period Increase (Decrease) [Roll Up]		
Land, Additions	1,000	1,000
Land, Disposals	(1,000)	(1,000)
Land, Translation Difference	0	0
Land, Other Increase (Decrease)	0	0
Land, Period Increase (Decrease)	0	0
Land, Ending Balance	1,000	1,000
Movement in Buildings, Net [Roll Forward]		
Buildings, Net, Beginning Balance	1,000	1,000
Buildings, Net, Period Increase (Decrease) [Roll Up]		
Buildings, Net, Additions	1,000	1,000
Buildings, Net, Disposals	(1,000)	(1,000)
Buildings, Net, Translation Difference	0	0
Buildings, Net, Other Increase (Decrease)	0	0
Buildings, Net, Period Increase (Decrease)	0	0
Buildings, Net, Ending Balance	1,000	1,000

Movement in Furniture and Fixtures, Net [Roll Forward]		
Furniture and Fixtures, Net, Beginning Balance	1,000	1,000
Furniture and Fixtures, Net, Period Increase (Decrease) [Roll Up]		
Furniture and Fixtures, Net, Additions	1,000	1,000
	(1,000)	(1,000)
Furniture and Fixtures, Net, Disposals	(1,000)	(1,000)
Furniture and Fixtures, Net, Translation Difference Furniture and Fixtures, Net, Other Increase (Decrease)	0	0
	_	
Furniture and Fixtures, Net, Period Increase (Decrease)	0	0
Furniture and Fixtures, Net, Ending Balance	1,000	1,000
Movement in Other Property, Plant and Equipment, Net [Roll Forward]		
Other Property, Plant and Equipment, Net, Beginning Balance	1,000	1,000
Other Property, Plant and Equipment, Net, Period Increase (Decrease) [Roll Up]		
Other Property, Plant and Equipment, Net, Additions	1,000	1,000
Other Property, Plant and Equipment, Net, Disposals	(1,000)	(1,000)
Other Property, Plant and Equipment, Net, Translation Difference	0	0
Other Property, Plant and Equipment, Net, Other Increase (Decrease)	0	0
Other Property, Plant and Equipment, Net, Period Increase (Decrease)	0	0
Other Property, Plant and Equipment, Net, Ending Balance	1,000	1,000
Movement in Property, Plant and Equipment, Net [Roll Forward]		
Property, Plant and Equipment, Net, Beginning Balance	4,000	4,000
Property, Plant and Equipment, Net, Period Increase (Decrease) [Roll Up]		
Property, Plant and Equipment, Net, Additions	4,000	4,000
Property, Plant and Equipment, Net, Disposals	(4,000)	(4,000)
Property, Plant and Equipment, Net, Translation Difference	0	0
Property, Plant and Equipment, Net, Other Increase (Decrease)	0	0
Property, Plant and Equipment, Net, Period Increase (Decrease)	0	0
Property, Plant and Equipment, Net, Ending Balance	4,000	4,000

Component: (Network and Table)	
Network	Roll Up of Changes in Property, Plant, and Equipment, Net (http://www.xbrlsite.com/DigitalFinancialReporting/BusinessUseCase/ComplexRollForw
Table	Roll Up of Changes in Property, Plant and Equipment, Net [Table]

Slicers (applies to each fact value in each table cell)

Reporting Entity [Axis]	SAMP (http://www.SampleCompany.
Legal Entity [Axis]	Consolidated Entity [Member]

	Period [Axis]	
Roll Up of Changes in Property, Plant and Equipment, Net [Line Items]	2010-01-01 - 2010-12-31	2009-01-01 - 2009-12-31
Property, Plant and Equipment, Net, Period Increase (Decrease) [Roll Up]		
Property, Plant and Equipment, Net, Additions [Roll Up]		
Land, Additions	1,000	1,000
Buildings, Net, Additions	1,000	1,000
Furniture and Fixtures, Net, Additions	1,000	1,000
Other Property, Plant and Equipment, Net, Additions	1,000	1,000
Property, Plant and Equipment, Net, Additions	4,000	4,000
Property, Plant and Equipment, Net, Displosals [Roll Up]		
Land, Disposals	1,000	1,000
Buildings, Net, Disposals	1,000	1,000
Furniture and Fixtures, Net, Disposals	1,000	1,000
Other Property, Plant and Equipment, Net, Disposals	1,000	1,000
Property, Plant and Equipment, Net, Disposals	4,000	4,000
Property, Plant and Equipment, Net, Translation Difference [Roll Up]		
Land, Translation Difference	0	0
Buildings, Net, Translation Difference	0	0
Furniture and Fixtures, Net, Translation Difference	0	0
Other Property, Plant and Equipment, Net, Translation Difference	0	0
Property, Plant and Equipment, Net, Translation Difference	0	0
Property, Plant and Equipment, Net, Other Increase (Decrease) [Roll Up]		
Land, Other Increase (Decrease)	0	0
Buildings, Net, Other Increase (Decrease)	0	0
Furniture and Fixtures, Net, Other Increase (Decrease)	0	0
Other Property, Plant and Equipment, Net, Other Increase (Decrease)	0	0
Property, Plant and Equipment, Net, Other Increase (Decrease)	0	0
Property, Plant and Equipment, Net, Period Increase (Decrease)	0	0

14.9.3. Report Elements and Model Structure

Component: (Ne	Component: (Network and Table)	
Network	Movement in Property, Plant and Equipment, Net (http://www.xbrlsite.com/DigitalFinancialReporting/BusinessUseCase/ComplexRollForward/MovementInPropertyPlantAi	
Table	Movement in Property, Plant and Equipment, Net [Table]	

#	Label	Report Element Class	Period Type	Balance
1	Movement in Property, Plant and Equipment, Net [Table]	[Table]		
2	Legal Entity [Axis]	[Axis]		
3	Consolidated Entity [Member]	[Member]		
4	Movement in Property, Plant and Equipment, Net [Line Items]	[Line Items]		
5	Movement in Land [Roll Forward]	[Abstract]		
6	Land, Beginning Balance	[Concept] Monetary	As Of	Debit
7	Land, Period Increase (Decrease) [Roll Up]	[Abstract]		
8	Land, Additions	[Concept] Monetary	For Period	Debit
9	Land, Disposals	[Concept] Monetary	For Period	Credit
10	Land, Translation Difference	[Concept] Monetary	For Period	Debit
11	Land, Other Increase (Decrease)	[Concept] Monetary	For Period	Debit
12	Land, Period Increase (Decrease)	[Concept] Monetary	For Period	Debit
13	Land, Ending Balance	[Concept] Monetary	As Of	Debit
14	Movement in Buildings, Net [Roll Forward]	[Abstract]		
15	Buildings, Net, Beginning Balance	[Concept] Monetary	As Of	Debit
16	Buildings, Net, Period Increase (Decrease) [Roll Up]	[Abstract]		
17	Buildings, Net, Additions	[Concept] Monetary	For Period	Debit
18	Buildings, Net, Disposals	[Concept] Monetary	For Period	Credit
19	Buildings, Net, Translation Difference	[Concept] Monetary	For Period	Debit
20	Buildings, Net, Other Increase (Decrease)	[Concept] Monetary	For Period	Debit
21	Buildings, Net, Period Increase (Decrease)	[Concept] Monetary	For Period	Debit
22	Buildings, Net, Ending Balance	[Concept] Monetary	As Of	Debit
23	Movement in Furniture and Fixtures, Net [Roll Forward]	[Abstract]		
24	Furniture and Fixtures, Net, Beginning Balance	[Concept] Monetary	As Of	Debit
25	Furniture and Fixtures, Net, Period Increase (Decrease) [Roll Up]	[Abstract]		
26	Furniture and Fixtures, Net, Additions	[Concept] Monetary	For Period	Debit
27	Furniture and Fixtures, Net, Disposals	[Concept] Monetary	For Period	Credit
28	Furniture and Fixtures, Net, Translation Difference	[Concept] Monetary	For Period	Debit
29	Furniture and Fixtures, Net, Other Increase (Decrease)	[Concept] Monetary	For Period	Debit
30	Furniture and Fixtures, Net, Period Increase (Decrease)	[Concept] Monetary	For Period	Debit
31	Furniture and Fixtures, Net, Ending Balance	[Concept] Monetary	As Of	Debit
32	Movement in Other Property, Plant and Equipment, Net [Roll Forward]	[Abstract]		
33	Other Property, Plant and Equipment, Net, Beginning Balance	[Concept] Monetary	As Of	Debit
34	Other Property, Plant and Equipment, Net, Period Increase (Decrease) [Roll Up]	[Abstract]		
35	Other Property, Plant and Equipment, Net, Additions	[Concept] Monetary	For Period	Debit
36	Other Property, Plant and Equipment, Net, Disposals	[Concept] Monetary	For Period	Credit
37	Other Property, Plant and Equipment, Net, Translation Difference	[Concept] Monetary	For Period	Debit
38	Other Property, Plant and Equipment, Net, Other Increase (Decrease)	[Concept] Monetary	For Period	Debit
39	Other Property, Plant and Equipment, Net, Period Increase (Decrease)	[Concept] Monetary	For Period	Debit
40	Other Property, Plant and Equipment, Net, Ending Balance	[Concept] Monetary	As Of	Debit
41	Movement in Property, Plant and Equipment, Net [Roll Forward]	[Abstract]		
42	Property, Plant and Equipment, Net, Beginning Balance	[Concept] Monetary	As Of	Debit
43	Property, Plant and Equipment, Net, Period Increase (Decrease) [Roll Up]	[Abstract]		
44	Property, Plant and Equipment, Net, Additions	[Concept] Monetary	For Period	Debit
45	Property, Plant and Equipment, Net, Disposals	[Concept] Monetary	For Period	Credit
46	Property, Plant and Equipment, Net, Translation Difference	[Concept] Monetary	For Period	Debit
47	Property, Plant and Equipment, Net, Other Increase (Decrease)	[Concept] Monetary	For Period	Debit
48	Property, Plant and Equipment, Net, Period Increase (Decrease)	[Concept] Monetary	For Period	Debit
49	Property, Plant and Equipment, Net, Ending Balance	[Concept] Monetary	As Of	Debit



Component: (Network and Table)	
	Roll Up of Changes in Property, Plant, and Equipment, Net (http://www.xbrlsite.com/DigitalFinancialReporting/BusinessUseCase/ComplexRollForward/RollUpOfChangesInProperty
Table	Roll Up of Changes in Property, Plant and Equipment, Net [Table]

#	Label	Report Element Class	Period Type	Balance
1	Roll Up of Changes in Property, Plant and Equipment, Net [Table]	[Table]		
2	Legal Entity [Axis]	[Axis]		
3	Consolidated Entity [Member]	[Member]		
4	Roll Up of Changes in Property, Plant and Equipment, Net [Line Items]	[Line Items]		
5	Property, Plant and Equipment, Net, Period Increase (Decrease) [Roll Up]	[Abstract]		
6	Property, Plant and Equipment, Net, Additions [Roll Up]	[Abstract]		
7	Land, Additions	[Concept] Monetary	For Period	Debit
8	Buildings, Net, Additions	[Concept] Monetary	For Period	Debit
9	Furniture and Fixtures, Net, Additions	[Concept] Monetary	For Period	Debit
10	Other Property, Plant and Equipment, Net, Additions	[Concept] Monetary	For Period	Debit
11	Property, Plant and Equipment, Net, Additions	[Concept] Monetary	For Period	Debit
12	Property, Plant and Equipment, Net, Displosals [Roll Up]	[Abstract]		
13	Land, Disposals	[Concept] Monetary	For Period	Credit
14	Buildings, Net, Disposals	[Concept] Monetary	For Period	Credit
15	Furniture and Fixtures, Net, Disposals	[Concept] Monetary	For Period	Credit
16	Other Property, Plant and Equipment, Net, Disposals	[Concept] Monetary	For Period	Credit
17	Property, Plant and Equipment, Net, Disposals	[Concept] Monetary	For Period	Credit
18	Property, Plant and Equipment, Net, Translation Difference [Roll Up]	[Abstract]		
19	Land, Translation Difference	[Concept] Monetary	For Period	Debit
20	Buildings, Net, Translation Difference	[Concept] Monetary	For Period	Debit
21	Furniture and Fixtures, Net, Translation Difference	[Concept] Monetary	For Period	Debit
22	Other Property, Plant and Equipment, Net, Translation Difference	[Concept] Monetary	For Period	Debit
23	Property, Plant and Equipment, Net, Translation Difference	[Concept] Monetary	For Period	Debit
24	Property, Plant and Equipment, Net, Other Increase (Decrease) [Roll Up]	[Abstract]		
25	Land, Other Increase (Decrease)	[Concept] Monetary	For Period	Debit
26	Buildings, Net, Other Increase (Decrease)	[Concept] Monetary	For Period	Debit
27	Furniture and Fixtures, Net, Other Increase (Decrease)	[Concept] Monetary	For Period	Debit
28	Other Property, Plant and Equipment, Net, Other Increase (Decrease)	[Concept] Monetary	For Period	Debit
29	Property, Plant and Equipment, Net, Other Increase (Decrease)	[Concept] Monetary	For Period	Debit
30	Property, Plant and Equipment, Net, Period Increase (Decrease)	[Concept] Monetary	For Period	Debit

Component: (Ne	Component: (Network and Table)	
	Network Property, Plant, and Equipment, Net (http://www.xbrlsite.com/DigitalFinancialReporting/BusinessUseCase/ComplexRollForward/PropertyPlantAndEquipmen	
Table	Components of Property, Plant and Equipment, Net [Table]	

#	Label	Report Element Class	Period Type	Balance
1	Components of Property, Plant and Equipment, Net [Table]	[Table]		
2	Legal Entity [Axis]	[Axis]		
3	Consolidated Entity [Member]	[Member]		
4	Components of Property, Plant and Equipment, Net [Line Items]	[Line Items]		
5	Property, Plant and Equipment, Net [Roll Up]	[Abstract]		
6	Land	[Concept] Monetary	As Of	Debit
7	Buildings, Net	[Concept] Monetary	As Of	Debit
8	Furniture and Fixtures, Net	[Concept] Monetary	As Of	Debit
9	Other Property, Plant and Equipment, Net	[Concept] Monetary	As Of	Debit
10	Property, Plant and Equipment, Net	[Concept] Monetary	As Of	Debit

14.9.4. Description

The Complex Roll Forward builds on the Simple Roll Forward, adding multiple Roll Forwards which then aggregate to a Roll Forward of the total. In the example, Roll



Forwards for Land; Buildings, Net; Furniture and Fixtures, Net; Other Property, Plant and Equipment, Net aggregate to the *Roll Forward* of the total Property, Plant and Equipment.

Essentially, the *Complex Roll Forward* can be decomposed into three distinct components: a roll up of the components of property, plant and equipment; a roll up of all the changes in property, plant and equipment; and finally a roll forward for each component of property, plant and equipment.

Note the roll ups, expressed as XBRL calculations, which tie the individual roll forwards to the total roll forward.

14.9.5. Important distinguishing aspects and dynamics

- The *Roll Ups* for the changes can be expressed and validated using XBRL calculations.
- The Roll Up of each balance concept for individual classes of Property, Plant and Equipment to the total for Property, Plant and Equipment, Net can likewise be expressed using XBRL calculations. For example: Land + Buildings, Net + Furniture and Fixtures, Net + Other Property, Plant and Equipment, Net = Property, Plant and Equipment, Net for 2008, 2009, and 2010.
- The Roll Up of each change can also be expressed. For example, Additions for each class of Property, Plant and Equipment aggregates to the concept for all categories of Property, Plant and Equipment, Net, Additions. This relation can be seen horizontally in the example.
- A business rule expressed using XBRL Formula is used to make sure the roll forward properly reconciles: beginning balance + total changes = ending balance for each class of PPE and for total PPE.
- Note that the classes of Property, Plant and Equipment could have been presented in the rows and the different balances and changes expressed in the columns. Transposing the information in this way does not change the semantics of the information, it is purely the preference of the consumer of the information. Changing the rows and columns would not change how the information is modelled.
- Note that if each class of PPE were modelled as a [Member] the total number of concepts within the model would be significantly reduced.



14.10. Simple compound fact

The Simple Compound Fact business use case shows how to model what amounts set of information which must go together to make any sense. An axis holds the set together, creating in essence a compound fact. The metapattern of this business use case is the **compound fact** and the **hierarchy**.

14.10.1. Visual Example

Sample Company For Period Ending December 31, 2010

_			Gi	Options ranted, at Fair
Director	Salary	Bonus	Director Fee	Value
pattern:JohnDoeMember pattern:JaneDoeMember	1,000 1,000	1,000 1,000	1,000 1,000	1,000 1,000
frm:DirectorsAllMember	2,000	2,000	2,000	2,000

14.10.2. Basic Automated Semantic Rendering

Component:	Component: (Network and Table)		
Network	Network Director Compensation (http://www.xbrlsite.com/DigitalFinancialReporting/BusinessUseCase/SimpleCompoundFact/DirectorCompensation)		
Table	Director Compensation [Table]	Director Compensation [Table]	
Slicers (applies to each fact value in each table cell)			
Reporting Entity [Axis]		SAMP (http://www.SampleCompany.com)	
Period [Avis]		2010-01-01 - 2010-12-31	

Consolidated Entity [Member]

	Director [Axis]		
Director Compensation [Line Items]	John Doe [Member]	Jane Doe [Member]	Directors, All [Member]
Director [Hierarchy]			
Director, Salary	1,000	1,000	2,000
Director, Bonuses	1,000	1,000	2,000
Director, Fees	1,000	1,000	2,000
Director, Options Granted, at Fair Value	1,000	1,000	2,000

Legal Entity [Axis]

14.10.3. Model structure

Component: (Ne	etwork and Table)
Network	Director Compensation (http://www.xbrlsite.com/DigitalFinancialReporting/BusinessUseCase/SimpleCompoundFact/DirectorCompensation)
Table	Director Compensation [Table]

#	Label	Report Element Class	Period Type	Balance
1	Director Compensation [Table]	[Table]		
2	Legal Entity [Axis]	[Axis]		
3	Consolidated Entity [Member]	[Member]		
4	Director [Axis]	[Axis]		
5	Directors, All [Member]	[Member]		
6	John Doe [Member]	[Member]		
7	Jane Doe [Member]	[Member]		
8	Director Compensation [Line Items]	[Line Items]		
9	Director [Hierarchy]	[Abstract]		
10	Director, Salary	[Concept] Monetary	For Period	Credit
11	Director, Bonuses	[Concept] Monetary	For Period	Credit
12	Director, Fees	[Concept] Monetary	For Period	Credit
13	Director, Options Granted, at Fair Value	[Concept] Monetary	For Period	Credit

14.10.4. Description

The Simple Compound Fact business use case shows the notion of a compound fact. A compound fact is a set of facts which must go together to make sense. A compound fact always has an axis which differentiates one set of facts from another. It could be that multiple axis create a composite set of axis which uniquely identifies the compound fact, see the *Grouped Report* business use case.

In this example, the *Director [Axis]* is used to distinguish one director from the other and each director from the total for all directors. The Salary; Bonus; Director Fee; and Options Granted, at Fair Value are provided for each director and for the total for all directors.

14.10.5. Important distinguishing aspects and dynamics

- A compound fact always has at least one explicit axis (beyond the reporting entity and period) which uniquely identifies each set of facts.
- A compound fact is like the row of a data base table. The axis for the compound fact is like the key for the table containing the rows of the compound fact. If more than one axis is provided, that is like a composite key for the table.
- This Simple Compound Fact business use case introduces the notion of a domain partition and a domain partition aggregation model. The computation of the total Salary, as an example, for all directors is NOT a roll up as each director and the total of all directors are different XBRL contexts and therefore XBRL calculations cannot be utilized to express this computation. XBRL Formulas must be used to express the business rule for the aggregation of information across the Director [Axis]. The facts for add directors may, or may not, tie to another table within the financial report. In this case, there are no other tables.

14.11. Repeating fact

The *Repeating Fact* business use case is a variation of the compound fact metapattern which points out that even only one fact can repeat. The metapattern of this business use case is the **compound fact** and the **hierarchy**.

14.11.1. Visual Example

Sample Company For Period Ending December 31, 2010

SUBSEQUENT EVENTS

The following is a summary of events subsequent to the balance sheet date:

Description of subsequent event number 1 which relates to the loss of an uncollectable receivable and occurred on January 16, 2011.

Description of subsequent event number 2 which relates to the purchase of a business and occurred on February 1, 2011.

14.11.2. Basic Automated Semantic Rendering

Component: (Network and Table)				
Network	Subsequent Events (http://www.xbrlsite.com/DigitalFinancialReporting/BusinessUseCase/RepeatingFact/SubsequentEvents)			
Table	Subsequent Events [Table]			

Slicers (applies to each fact value in each table cell)				
Reporting Entity [Axis]	SAMP (http://www.SampleCompany.com)			
Period [Axis]	2010-01-01 - 2010-12-31			
Legal Entity [Axis]	Consolidated Entity [Member]			

	Subsequent Event [Axis]		
Subsequent Event [Line Items]	Uncollected Receivable [Member]	Purchase of Business [Member]	
Subsequent Event [Hierarchy]			
Subsequent Event, Description	Description of subsequent event number 1 which relates to the loss of an uncollectable receivable and occurred on January 16, 2011.	Description of subsequent event number 2 which relates to the purchase of a business and occurred on February 1, 2011.	



14.11.3. Report Elements and Model Structure

Component: (Ne	Component: (Network and Table)				
	Subsequent Events (http://www.xbrlsite.com/DigitalFinancialReporting/BusinessUseCase/RepeatingFact/SubsequentEvents)				
Table	Subsequent Events [Table]				

#	Label	Report Element Class	Period Type	Balance
1	Subsequent Events [Table]	[Table]		
2	Legal Entity [Axis]	[Axis]		
3	Consolidated Entity [Member]	[Member]		
4	Subsequent Event [Axis]	[Axis]		
5	Subsequent Events, All [Member]	[Member]		
6	Uncollected Receivable [Member]	[Member]		
7	Purchase of Business [Member]	[Member]		
8	Subsequent Event [Line Items]	[Line Items]		
9	Subsequent Event [Hierarchy]	[Abstract]		
10	Subsequent Event, Description	[Concept] String	For Period	

14.11.4. Description

The *Repeating Concept* business use case builds on the *Simple Compound Fact* use case, pointing out the notion that one fact can act like a compound fact and repeat.

In this example the subsequent event description repeats. Each subsequent event is uniquely described by the Subsequent Event [Axis] value or Member.

14.11.5. Important distinguishing aspects and dynamics

- Compound facts repeat. You might only have one fact in your financial report, but you might also have any unknown number of such facts, each differentiated by some [Axis].
- In this case, the member of the Subsequent Even [Axis] "Subsequent Event [Member]" would never be used because subsequent events and in particular the description would never be aggregated. However, it is the practice of the US GAAP taxonomy to have such members currently referred to as a [Domain].

14.12. Multiple periods compound fact

The *Multiple Periods Compound Fact* business use case shows how to model what amounts to a *Compound Fact* which is reported for multiple periods within that one *Compound Fact*. The metapattern of this business use case is the **compound fact** and the **hierarchy**.

14.12.1. Visual Example

Sample Company For Period Ending December 31, 2010

The following is a summary of leasehold land and buildings as of December 31, 2010 and 2009:

State	Location	Description	Tenure	Tenure Start Date	Land Area	2010 Value (at Cost)	2009 Value (at Cost)
pattern:WashingtonMember pattern:WashingtonMember	Tacoma, Washington Seattle, Washington	Warehouse Warehouse	Fifteen year lease Twenty year lease	2000-01-01 2000-01-01	1,000 100,000	5,000 50,000	4,000 40,000
				Total	101,000	55,000	44,000

14.12.2. Basic Automated Semantic Rendering

Component: (Ne	Component: (Network and Table)				
Network	Leasehold Land and Buildings (http://www.xbrlsite.com/DigitalFinancialReporting/BusinessUseCase/MultiplePeriodsCompoundFact/LeaseHoldLandAndBuildings)				
Table	Leasehold Land and Buildings [Table]				
Slicers (applies to	Slicers (applies to each fact value in each table cell)				
Reporting Entity [Axis]		SAMP (http://www.SampleCompany.com)			
Legal Entity [Axis]		Consolidated Entity [Member]			
State [Axis]		Washington [Member]			

	Period [Axis]					
	2010-01-01 - 2010-12-31			2009-12-31		
	Leasehold Land and Building, Identifier [Axis]			Leasehold Land and Building, Identifier [Axis]		
Leasehold Land and Building [Line Items]	Tacoma Warehouse Under 15 Year Lease [Member]		Leaseholds, All [Member]	Tacoma Warehouse Under 15 Year Lease [Member]	Seattle Warehouse Under 20 Year Lease [Member]	Leaseholds, All [Member]
Leasehold Land and Building [Hierarchy]						
Leasehold Land and Buildings, Location	Tacoma, Washington	Seattle, Washington				
Leasehold Land and Buildings, Description of Facility	Warehouse	Warehouse				
Leasehold Land and Buildings, Tenure	Fifteen year lease	Twenty year lease				
Leasehold Land and Buildings, Tenure Start Date	2000-01-01	2000-01-01				
Leasehold Land and Buildings, Land Area	1,000	100,000	101,000			
Leasehold Land and Buildings, Value at Cost	5,000	50,000	55,000	4,000	40,000	44,000

14.12.3. Report Elements and Model Structure

Component: (Ne	Component: (Network and Table)			
Network	Leasehold Land and Buildings (http://www.xbrlsite.com/DigitalFinancialReporting/BusinessUseCase/MultiplePeriodsCompoundFact/LeaseHoldLandAnd			
Table	Leasehold Land and Buildings [Table]			

#	Label	Report Element Class	Period Type	Balance
1	Leasehold Land and Buildings [Table]	[Table]		
2	Legal Entity [Axis]	[Axis]		
3	Consolidated Entity [Member]	[Member]		
4	Leasehold Land and Building, Identifier [Axis]	[Axis]		
5	Leaseholds, All [Member]	[Member]		
6	Tacoma Warehouse Under 15 Year Lease [Member]	[Member]		
7	Seattle Warehouse Under 20 Year Lease [Member]	[Member]		
8	State [Axis]	[Axis]		
9	States, All [Member]	[Member]		
10	Washington [Member]	[Member]		
11	Oregon [Member]	[Member]		
12	California [Member]	[Member]		
13	Leasehold Land and Building [Line Items]	[Line Items]		
14	Leasehold Land and Building [Hierarchy]	[Abstract]		
15	Leasehold Land and Buildings, Location	[Concept] String	For Period	
16	Leasehold Land and Buildings, Description of Facility	[Concept] String	For Period	
17	Leasehold Land and Buildings, Tenure	[Concept] String	For Period	
18	Leasehold Land and Buildings, Tenure Start Date	[Concept] Date	For Period	
19	Leasehold Land and Buildings, Land Area	[Concept] Decimal	As Of	
20	Leasehold Land and Buildings, Value at Cost	[Concept] Monetary	As Of	

14.12.4. Description

The *Multiple Periods Compound Fact* business use case shows something quite common in financial reporting which is to provide values for both the current and prior period to describe some fact. In the screen shot, note that one value is reported for land area and two values are reported for value, 2010 and 2009. Note the report elements and relations below for the modelling of the concept Leasehold Land and Buildings, Value at Cost.

14.12.5. Important distinguishing aspects and dynamics

- Notice that the current period and prior period are characteristics provided within the financial report by the Period [Axis] rather than modelling each period within the taxonomy.
- Compare and contrast this use case with the Simple Compound Fact use case.
- Note how the information about which state relates to is presented differently in the presentation rendering (the screen shot above) and the automated rendering (the screen shot below); the business semantics remain equivalent.

14.13. Roll forward in compound fact

The *Roll Forward in Compound Fact* business use case shows how to model a *Roll Forward* which is contained within a Compound Fact. This business use case also introduces the notion of the negated label role and the component. The metapattern of this business use case is the **compound fact**, **roll forward**, and the **hierarchy**.

14.13.1. Visual Example

Sample Company December 31, (thousands of dollars)

SHARE OWNERSHIP PLANS

The following is information relating to share ownership plan: pattern:ShareOwnershipPlan1Member .

These are the description, general conditions, and terms of share ownership plan 1. Nam rhoncus mi. Nunc eu dui non mauris interdum tincidunt. Sed magna felis, accumsan a, fermentum quis, varius sed, ipsum. Nullam leo. Donec eros. Maecenas interdum, lectus eget aliquet tincidunt, tellus dolor ultrices tellus, nec hendrerit nunc lectus eget eros. Duis feugiat velit in eros. Curabitur tincidunt aliquet neque. Nulla ac est quis urna luctus elementum. Aliquam erat volutpat. In tincidunt nunc vehicula risus. Praesent dictum arcu sit amet wisi. Praesent ac odio. Donec vestibulum, sem vel facilisis consectetuer, justo arcu tempor sem, vel ultrices turpis leo quis augue.

Reconciliation of Outstanding Balance:

Туре	Outstanding 2009	Granted	Forfeited	Exercised	Expired	Outstanding 2010
pattern:ShareOwnershipPlan1Member	0	4.000	-1.000	-1.000	-1.000	1.000



14.13.2. Basic Automated Semantic Rendering

Component	Component: (Network and Table)				
Network	Share Ownership Plans (http://www.xbrlsite.com/DigitalFinancialReporting/Bus	sinessUseCase/RollForwardInCompoundFact/ShareOwnershipPlans)			
Table	Share Ownership Plan [Table]	Share Ownership Plan [Table]			
Slicers (applie	es to each fact value in each table cell)				
Reporting En	Reporting Entity [Axis] SAMP (http://www.SampleCompany.com)				
Legal Entity	Legal Entity [Axis] Consolidated Entity [Member]				
Share Ownership Plan, Identifier [Axis] Share Ownership Plan 1 [Member]		Share Ownership Plan 1 [Member]			

	Period [Axis]	
Share Ownership Plan [Line Items]	2010-01-01 - 2010-12-31	
Share Ownership Plan [Hierarchy]		
Share Ownership Plan, Description, General Terms and Conditions	These are the description, general conditions, and terms of share ownership plan 1. Nam rhoncus mi. Nunc eu dui non mauris interdum tincidunt. Sed magn felis, accumsan a, fermentum quis, varius sed, ipsum. Nullam leo. Donec eros. Maecenas interdum, lectus eget aliquet tincidunt, tellus dolor ultrices tellus, nec hendrerit nunc lectus eget eros. Duis feugiat velit in eros. Curabitur tincidunt aliquet neque. Nulla ac est quis urna luctus elementum. Aliquam erat volutpat. In tincidunt nunc vehicula risus. Praesent dictum arcu sit amet wisi. Praesent ac odio. Donec vestibulum, sem vel facilisis consectetuer, justo arcu tempor sem, vel ultrices turpis leo quis auque.	
Share Ownership Plan, Share Options Outstanding [Roll Forward]		
Share Ownership Plan, Share Options Outstanding, Beginning Balance	0	
Share Ownership Plan, Share Options Granted	4,000	
Share Ownership Plan, Share Options Forfeited	(1,000)	
Share Ownership Plan, Share Options Exercised	(1,000)	
Share Ownership Plan, Share Options Expired	(1,000)	
Share Ownership Plan, Share Options Outstanding, Ending Balance	e	

14.13.3. Model structure

Component: (Network and Table)					
Network Share Ownership Plans (http://www.xbrlsite.com/DigitalFinancialReporting/BusinessUseCase/RollForwardInCompoundFact/ShareOwnership					
Table	Share Ownership Plan [Table]				

#	Label	Report Element Class	Period Type	Balance
1	Share Ownership Plan [Table]	[Table]		
2	Legal Entity [Axis]	[Axis]		
3	Consolidated Entity [Member]	[Member]		
4	Share Ownership Plan, Identifier [Axis]	[Axis]		
5	Share Ownership Plan 1 [Member]	[Member]		
6	Share Ownership Plan [Line Items]	[Line Items]		
7	Share Ownership Plan [Hierarchy]	[Abstract]		
8	Share Ownership Plan, Description, General Terms and Conditions	[Concept] String	For Period	
9	Share Ownership Plan, Share Options Outstanding [Roll Forward]	[Abstract]		
10	Share Ownership Plan, Share Options Outstanding, Beginning Balance	[Concept] Shares	As Of	
11	Share Ownership Plan, Share Options Granted	[Concept] Shares	For Period	
12	Share Ownership Plan, Share Options Forfeited	[Concept] Shares	For Period	
13	Share Ownership Plan, Share Options Exercised	[Concept] Shares	For Period	
14	Share Ownership Plan, Share Options Expired	[Concept] Shares	For Period	
15	Share Ownership Plan, Share Options Outstanding, Ending Balance	[Concept] Shares	As Of	



14.13.4. Description

The Roll Forward in Compound Fact shows exactly that, a Roll Forward use case modelled within a Compound Fact use case. In this business use case the Roll Forward is part of the set of information which could repeat, in this case there could be more than one share ownership plan.

Further, the compound fact which could repeat is comprised of two distinct components: a Hierarchy which contains information about the share ownership plan and a Roll Forward which reconciles the beginning and ending balance of the plan.

Finally, within the roll forward are number which do not contain a balance attribute and therefore to polarity of the numbers, in this case shares, is unknown unless that information is somehow made available. In this case a negated label was created and within the relations that preferred label was used. This tells an application rendering the information to reverse the sign of the fact value when rendering.

14.13.5. Important distinguishing aspects and dynamics

- In this use case a *Roll Forward* exists within a *Compound Fact*, in this case share ownership plans.
- The [Line Items] of the [Table] have two distinct sets or components. You can think of components as pieces of [Line Items] which are generally always used together and generally have a different rendering format.
- Negated label roles are used to indicate that reductions in shares outstanding should be rendered as negative values.



14.14. Nested compound fact

The Nested Compound Fact business use case shows how to model what amounts to two sets of information which are interrelated. Another way to look at this is to say that there is a master-detail type of relation between two [Table]s. This business use case also introduces the notion of using custom data type restrictions to control financial report fact values. The metapattern of this business use case is the **compound fact** and the **hierarchy**.

14.14.1. Visual Example

Sample Company December 31, (thousands of dollars)

RELATED PARTY TRANSACTIONS

The following is a summary of related party of the company and transactions with those related parties. (Notice how the Related Party Name [Axis] connects the two tables of information together):

Related Parties:

Name of Related Party	Type of Relationship	Nature of Relationship
pattern:RelatedParty1Member	Parent	This is other descriptive information about the relationship.
pattern:RelatedParty2Member	Joint\/enture	This is other descriptive information about the relationship.

Transactions with Related Parties:

Transaction Description	Pricing Policy	Amount
Transaction 1 description	Cost	1000
Transaction 2 description	Cost	1000
Transaction 1 description	Cost	1000
Transaction 2 description	Cost	1000
	Transaction 1 description Transaction 2 description Transaction 1 description	Transaction 1 description Cost Transaction 2 description Cost Transaction 1 description Cost



14.14.2. Basic Automated Semantic Rendering

Component: (Network and Table)			
Network	Related Parties (http://www.xbrlsite.com/DigitalFinancialReporting/BusinessUseCase/NestedCompoundFact/RelatedParties)		
Table	Related Parties [Table]		

Slicers (applies to each fact value in each table cell)

Reporting Entity [Axis] SAMP (http://www.SampleCompany.com)	
Period [Axis] 2010-01-01 - 2010-12-31	
Legal Entity [Axis] Consolidated Entity [Member]	

	Related Party Name [Axis]		
Related Parties [Line Items]	Related Party 1 [Member]	Related Party 2 [Member]	
Related Party [Hierarchy]			
Related Party, Type of Relationship	Parent	JointVenture	
Related Party, Nature of Relationship	This is other descriptive information about the relationship.	This is other descriptive information about the relationship.	

Component: (Ne	Component: (Network and Table)			
Network	Related Party Transactions (http://www.xbrlsite.com/DigitalFinancialReporting/BusinessUseCase/NestedCompoundFact/RelatedPartyTransactions)			
Table	Related Party Transactions [Table]			
Slicers (applies to	Slicers (applies to each fact value in each table cell)			
Reporting Entity [Axis] SAMP (http://www.SampleCompany.com)		SAMP (http://www.SampleCompany.com)		
Period [Axis]		2010-01-01 - 2010-12-31		

Consolidated Entity [Member]

		Related Party	/ Name [Axis]		
	Related Part	y 1 [Member]	Related Party 2 [Member]		
	Related Party Tran	saction Type [Axis]	Related Party Transaction Type [Axis]		
Related Party Transaction [Line Items]	Purchase or Sale of Goods with Related Party [Member]	Purchase or Sale of Property or Other Assets with Related Party [Member]	Leasing Arrangements with Related Party [Member]	Purchase or Sale of Goods with Related Party [Member]	
Related Party Transaction [Hierarchy]					
Related Party Transaction, Description	Transaction 1 description	Transaction 2 description	Transaction 2 description	Transaction 1 description	
Related Party Transaction, Pricing Policy	Cost	Cost	Cost	Cost	
Rolated Barty Transaction, Amount	1 000	1 000	1,000	1 000	



Legal Entity [Axis]

14.14.3. Report Elements and Model Structure

Component: (Ne	Component: (Network and Table)	
	Related Parties (http://www.xbrlsite.com/DigitalFinancialReporting/BusinessUseCase/NestedCompoundFact/RelatedParties)	
Table	Related Parties [Table]	

#	Label	Report Element Class	Period Type	Balance
1	Related Parties [Table]	[Table]		
2	Legal Entity [Axis]	[Axis]		
3	Consolidated Entity [Member]	[Member]		
4	Related Party Name [Axis]	[Axis]		
5	Related Party 1 [Member]	[Member]		
6	Related Party 2 [Member]	[Member]		
7	Related Parties [Line Items]	[Line Items]		
8	Related Party [Hierarchy]	[Abstract]		
9	Related Party, Type of Relationship	[Concept] String	For Period	
10	Related Party, Nature of Relationship	[Concept] String	For Period	

Component: (Ne	Component: (Network and Table)	
	Related Party Transactions (http://www.xbrlsite.com/DigitalFinancialReporting/BusinessUseCase/NestedCompoundFact/RelatedPartyTransactions)	
Table	Related Party Transactions [Table]	

#	Label	Report Element Class	Period Type	Balance
1	Related Party Transactions [Table]	[Table]		
2	Legal Entity [Axis]	[Axis]		
3	Consolidated Entity [Member]	[Member]		
4	Related Party Name [Axis]	[Axis]		
5	Related Party 1 [Member]	[Member]		
6	Related Party 2 [Member]	[Member]		
7	Related Party Transaction Type [Axis]	[Axis]		
8	Related Party Transaction Type, All [Member]	[Member]		
9	Agency Arrangements with Related Party [Member]	[Member]		
10	Leasing Arrangements with Related Party [Member]	[Member]		
11	Purchase or Sale of Goods with Related Party [Member]	[Member]		
12	Purchase or Sale of Property or Other Assets with Related Party [Member]	[Member]		
13	Related Party Transaction [Line Items]	[Line Items]		
14	Related Party Transaction [Hierarchy]	[Abstract]		
15	Related Party Transaction, Description	[Concept] String	For Period	
16	Related Party Transaction, Pricing Policy	[Concept] String	For Period	
17	Related Party Transaction, Amount	[Concept] Monetary	For Period	Debit

14.14.4. Description

The Nested Compound Concept business use case models a compound fact nested within another compound fact also known as a master-detail type relationship. Consider that an entity can have zero to many related parties and that each of those related parties can have zero or many related party transactions. Those two report relations are modelled in this business use case.

Also, there is a desire to restrict the possible values provided for the types of related party reported. As such, a custom data type is created for the concept RepatedPartyType and an enumerated list of values is provided.



14.14.5. Important distinguishing aspects and dynamics

- Notice that each [Table] have the [Axis] Related Party Name [Axis]. It is this [Axis] which relates to two [Table]s together.
- Note that [Table]s should not be physically nested as XBRL Dimensions does not allow one [Table] to be nested within another [Table].
- The type of relationship here is common referred to as a master-detail relationship, similar to an invoice master table and second table which contains invoice line items.
- Note that the enumerated values provided for Related Party, Type of Relationship cannot be changed as enumerated lists cannot be extended.



14.15. Reconciliation of balance

The *Reconciliation of Balance* business use case shows how to model a reconciliation of one balance to another balance and to tie the detailed reconciling items to the summary. In addition, this business use case introduces the notion of integrity between the summary and detail information sets. The metapattern of this business use case is the **compound fact**, **roll up**, and the **hierarchy**.

14.15.1. Visual Example

Sample Company December 31, (thousands of dollars)

_	2010	2009
Cash and Cash Equivalents, per Balance Sheet	1,000	1,000
Reconciling Item A Reconciling Item B	2,500 -500	500 500
Cash and Cash Equivalents, per Cash Flow Statement	3,000	2,000

14.15.2. Basic Automated Semantic Rendering

Component: (Network and Table)			
Network		Reconcilation of Cash and Cash Equivalents, Summary (http://www.xbrlsite.com/DigitalFinancialReporting/BusinessUseCase/ReconciliationOfBalance/ReconcilationOfCashSummary	
Table	Reconcilation of Cash, Summary [Table]	Reconcilation of Cash, Summary [Table]	
Slicers (applie	es to each fact value in each table cell)		
Reporting Entity [Axis] SAMP (http://www.SampleCompany.com)		SAMP (http://www.SampleCompany.com)	
Legal Entity [Axis]		Consolidated Entity [Member]	

	Period [Axis]		
Reconcilation of Cash, Summary [Line Items]	2010-12-31	2009-12-31	
Reconcilation of Cash, Summary [Roll Up]			
Cash and Cash Equivalents	1,000,000	1,000,000	
Reconciling Item Amount	2,000,000	1,000,000	
Cash and Cash Equivalents, per Cash Flow Statement	3,000,000	2,000,000	

Component: (Ne	omponent: (Network and Table)			
Network	Reconcilation of Cash and Cash Equivalents, Detail (http://www.xbrlsite.com/DigitalFinancialReporting/BusinessUseCase/ReconciliationOfBalance/ReconcilationOfCashDetail)			
Table	Reconcilation of Cash, Detail [Table]			
Slicers (applies to	Slicers (applies to each fact value in each table cell)			
Reporting Entity	rting Entity [Axis] SAMP (http://www.SampleCompany.com)			
Legal Entity [Axis]		Consolidated Entity [Member]		

	Period [Axis]					
	2010-01-01 - 2010-12-31		2009-01-01 - 2009-12-31			
	Recon	ciling Item Type [Axis]		Recon	ciling Item Type [Axis]	
Reconcilation of Cash, Detail [Line Items]	Reconciling Item Type A [Member]	Reconciling Item Type B [Member]	Reconciling Item Types, All Types [Member]	Reconciling Item Type A [Member]	Reconciling Item Type B [Member]	Reconciling Item Types, All Types [Member]
Reconciling Item [Hierarchy]						
Reconciling Item Description	Reconciling Item A for 2010	Reconciling Item B for 2010		Reconciling Item A for 2009	Reconciling Item B for 2009	
Reconciling Item Amount	2,500,000	(500,000)	2,000,000	500,000	500,000	1,000,000



14.15.3. Report Elements and Model Structure

Component: (Ne	Component: (Network and Table)	
	Reconcilation of Cash and Cash Equivalents, Summary (http://www.xbrlsite.com/DigitalFinancialReporting/BusinessUseCase/ReconciliationOfBalance/ReconcilationOfCashSum	
Table	Reconcilation of Cash, Summary [Table]	

#	Label	Report Element Class	Period Type	Balance
1	Reconcilation of Cash, Summary [Table]	[Table]		
2	Legal Entity [Axis]	[Axis]		
3	Consolidated Entity [Member]	[Member]		
4	Reconcilation of Cash, Summary [Line Items]	[Line Items]		
5	Reconcilation of Cash, Summary [Roll Up]	[Abstract]		
6	Cash and Cash Equivalents	[Concept] Monetary	As Of	Debit
7	Reconciling Item Amount	[Concept] Monetary	As Of	Debit
8	Cash and Cash Equivalents, per Cash Flow Statement	[Concept] Monetary	As Of	Debit

Component: (Network and Table)				
	Network Reconcilation of Cash and Cash Equivalents, Detail (http://www.xbrlsite.com/DigitalFinancialReporting/BusinessUseCase/ReconciliationOfBalance/ReconcilationOfCashDeta			
Table	Reconcilation of Cash, Detail [Table]			

#	Label	Report Element Class	Period Type	Balance
1	Reconcilation of Cash, Detail [Table]	[Table]		
2	Legal Entity [Axis]	[Axis]		
3	Consolidated Entity [Member]	[Member]		
4	Reconciling Item Type [Axis]	[Axis]		
5	Reconciling Item Types, All Types [Member]	[Member]		
6	Reconciling Item Type A [Member]	[Member]		
7	Reconciling Item Type B [Member]	[Member]		
8	Reconcilation of Cash, Detail [Line Items]	[Line Items]		
9	Reconciling Item [Hierarchy]	[Abstract]		
10	Reconciling Item Description	[Concept] String	For Period	
11	Reconciling Item Amount	[Concept] Monetary	As Of	Debit

14.15.4. Description

The Reconciliation of Balance business use case reconciles two different concepts at the same point in time. In the example shown, Cash and Cash Equivalents per the balance sheet is reconciled to Cash and Cash Equivalents per the cash flow statement. (The example assumes that the two balances are different as could be the case with IFRS.) In addition, the summary information ties to detailed information about the reconciling items.

14.15.5. Important distinguishing aspects and dynamics

- The summary information is basically a very simple roll up.
- The detailed information is a compound fact.
- The summary [Table] and the detailed [Table] intersect via the "Reconciling Item Amount" concept and the "Reconciling Item Types, All Types [Member]".
- The [Axis] must assign dimension-defaults to the "Reconciling Item Type [Axis]". In this example, the "Legal Entity [Axis]" was also assigned a dimension-default.



• Compare the XBRL instance and the fact tables, note that the [Axis] do not physically exist in the XBRL instance, but do exist within the fact tables.

14.16. Adjustment

An *adjustment* information model reconciles an originally stated balance to a restated balance, the adjustment being the total change, between two different report dates. An adjustment is similar to a roll forward in that it is a reconciliation, however rather than the Period [Axis] changing; it is the *Report Date [Axis]* which changes: originally reported balance + adjustment = restated balance.

The *Adjustment* metapattern shows how to model an adjustment to a prior period financial statement for a change in accounting policy or correction of an error as defined by financial reporting standards. This same approach can be used for making adjustments to other beginning balances not related to financial reporting. The metapattern of this business use case is the **adjustment**.

14.16.1. Visual Example

Sample Company December 31, (thousands of dollars)

	2010	2009
Prior Period Adjustment		
Retained Earnings (Accumulated Losses), Originally Stated 2009	4,000	
Change in Accounting Policy Correction of an Error	3,000 -1,000	
Retained Earnings (Accumulated Losses), Restated 2009 Beginning Balance	6,000	



14.16.2. Basic Automated Semantic Rendering

Component: (Network and Table)				
Network	50000 - Prior Period Adjustments (http://www.xbrlsite.com/DigitalFinancialReporting/BusinessUseCases/Adjustment/PriorPeriodAdjustments			
Table	Prior Period Adjustments [Table]	Prior Period Adjustments [Table]		
Slicers (applies to each fact value in each table cell)				
Reporting Entity [Axis] SAMP (http://www.SampleCompany.com)				
Legal Entity (Avie) Consolidated Entity (Member)				

	Report Date	Period [Axis]
Prior Period Adjustments [Line Items]	[Axis]	2009-12-31
Retained Earnings (Accumulated Losses), Origionally Stated	Reported March 21, 2010 [Member]	4,000
Changes in Accounting Policy	Reported March 18, 2011 [Member]	3,000
Correction of an Error	Reported March 18, 2011 [Member]	(1,000)
Prior Period Adjustments, Period Increase (Decrease), Total	Reported March 18, 2011 [Member]	2,000
Retained Earnings (Accumulated Losses), Restated	Reported March 18, 2011 [Member]	6,000

[CSH: This has numerous rendering errors. [Roll Up] and [Adjustment] abstract concepts are not shown and the Report Date [Axis] column width is too narrow.]

14.16.3. Report Elements and Model Structure

Component: (Network and Table)		
Network	50000 - Prior Period Adjustments (http://www.xbrlsite.com/DigitalFinancialReporting/BusinessUseCases/Adjustment/PriorPeriodAdjustments)	
Table	Prior Period Adjustments [Table]	

#	Label	Report Element Class	Period Type	Balance
1	Prior Period Adjustments [Table]	[Table]		
2	Legal Entity [Axis]	[Axis]		
3	Consolidated Entity [Member]	[Member]		
4	Report Date [Axis]	[Axis]		
5	Reported March 21, 2010 [Member]	[Member]		
6	Reported March 18, 2011 [Member]	[Member]		
7	Prior Period Adjustments [Line Items]	[Line Items]		
8	Prior Period Adjustments to Retained Earnings [Adjustment]	[Abstract]		
9	Retained Earnings (Accumulated Losses), Origionally Stated	[Concept] Monetary	As Of	Credit
10	Prior Period Adjustments, Period Increase (Decrease), Total [Roll Up]	[Abstract]		
11	Changes in Accounting Policy	[Concept] Monetary	As Of	Credit
12	Correction of an Error	[Concept] Monetary	As Of	Credit
13	Prior Period Adjustments, Period Increase (Decrease), Total	[Concept] Monetary	As Of	Credit
14	Retained Earnings (Accumulated Losses), Restated	[Concept] Monetary	As Of	Credit



14.16.4. Description

The example *Adjustment* above reconciles the Retained Earnings (Accumulated Losses), Originally Stated in 2009 to its Restated 2009 Beginning Balance via the Prior Period Adjustments which make up the change. Note that an *Adjustment* looks similar in presentation to a roll forward, however it is different in that a different [Axis] is changing.

An *Adjustment* can be identified by software applications by the business rule which computes the adjustment to verify that it is correctly articulated within the XBRL instance: originally stated + adjustment = restated balance over a changing *Report Date [Axis]*.

14.16.5. Important distinguishing aspects and dynamics

- An Adjustment reconciles two balances at the same point in time, the first balance being the originally stated balance and the second the restated balance.
- A common use for an adjustment is reporting an adjustment to retained earnings for a prior period error or change in accounting policy.
- Note that the concepts relating to the adjustment amount are as of a point in time.
- Note that there are two domain partitions.
- The adjustments could be from a roll forward or individual adjustments, for example: originally stated + adjustment1 + adjustment2 + adjustmentN = restated balance



14.17. Variance

A variance information model reconciles some reporting scenario with another reporting scenario, the variance between reporting scenarios being the variance or changes. For example, a sales analysis which reconciles the concept sales for the reporting scenarios of actual and budgeted is a variance. The equation in this case is: actual – budget = variance. But a variance could take other forms such as a variance from forecast, variance from plan, etc. The metapattern of this business use case is the **variance** and **hierarchy**. Any metapattern could be modelled as variance.

A variance is characterised by a changing Reporting Scenario [Axis] and the information model of a variance could take the form of any information model such as a hierarchy, roll up, roll forward, etc.

14.17.1. Visual Example

Sample Company For Period Ending December 31, 2010

Concept	Actual	Budgeted	Variance
Sales	6,000	5,000	1,000
Cost of Goods Sold	4,000	3,000	1,000
Contribution Margin	1,000	2,000	-1,000
Distribution Costs	1,000	1,000	0

14.17.2. Basic Automated Semantic Rendering

Component: (Network and Table)			
Network	60000 - Variance Analysis (http://www.xbrlsite.com/DigitalFinancialReporting/BusinessUseCases/Variance/VarianceAnalysis)		
Table	Variance Analysis [Table]		

Slicers (applies to each fact value in each table cell)

Reporting Entity [Axis]	SAMP (http://www.SampleCompany.com)	
Period [Axis]	2010-01-01 - 2010-12-31	
Legal Entity [Axis]	Consolidated Entity [Member]	

	Reporting Scenario [Axis]		
Variance Analysis [Line Items]	Actual [Member]		
Variance Analysis [Hierarchy]			
Sales	6,000	5,000	1,000
Cost of Goods Sold	4,000	3,000	1,000
Contribution Margin	1,000	2,000	(1,000)
Distribution Costs	1,000	1,000	0



14.17.3. Report Elements and Model Structure

Component: (Network and Table)					
	60000 - Variance Analysis (http://www.xbrlsite.com/DigitalFinancialReporting/BusinessUseCases/Variance/VarianceAnalysis)				
Table Variance Analysis [Table]					

#	Label	Report Element Class	Period Type	Balance
1	Variance Analysis [Table]	[Table]		
2	Legal Entity [Axis]	[Axis]		
3	Consolidated Entity [Member]	[Member]		
4	Reporting Scenario [Axis]	[Axis]		
5	Reporting Scenarios, All [Member]	[Member]		
6	Actual [Member]	[Member]		
7	Budgeted [Member]	[Member]		
8	Variance Analysis [Line Items]	[Line Items]		
9	Variance Analysis [Hierarchy]	[Abstract]		
10	Sales	[Concept] Monetary	For Period	Credit
11	Cost of Goods Sold	[Concept] Monetary	For Period	Debit
12	Contribution Margin	[Concept] Monetary	For Period	Credit
13	Distribution Costs	[Concept] Monetary	For Period	Debit

14.17.4. Description

A Variance reconciles two different reporting scenarios differentiated using the Reporting Scenarios [Axis], in the case here Actual [Member] and Budgeted [Member], the difference being the variance, or Reporting Scenarios, All [Member].

A *Variance* can be identified by software applications by the business rule which verifies and computes the variance, Actual [Member] + Budgeted [Member] = Reporting Scenarios, All [Member], all within the *Reporting Scenario* [Axis].

14.17.5. Important distinguishing aspects and dynamics

- The *Variance* use case shows how to report facts for different reporting scenarios.
- The *Variance* could be combined with many different types of information models.

14.18. Complex computation

A Complex Computation information model can be thought of as a hierarchy plus a set of commutations between different concepts within that hierarchy which are challenging to model as the parent/child relations of a graph. The type of computations can vary significantly, thus the challenging in modelling. For example, the computation of earnings per share is a complex computation. The metapattern of this business use case is the **complex computation** and **hierarchy**.

14.18.1. Visual Example

Sample Company For Period Ended December 31,

2010	2009
------	------

OTHER INFORMATION

Earnings Per Share Components

Net Income (Loss)
Weighted Average Common Shares
Earnings Per Share

10,000,000	20,000,000
100,000,000	100,000,000
0.10	0.20

14.18.2. Basic Automated Semantic Rendering

Component:	(Network and Table)						
Network	70000 - Earnings Per Share Components (http://www.xbrlsite.com/DigitalFinancialReporting/BusinessUseCases/ComplexComputation/EarningsPerShareComponents)						
Table	Earnings Per Share Components [Table]	Earnings Per Share Components [Table]					
Slicers (applie	Slicers (applies to each fact value in each table cell)						
Reporting En	tity [Axis]	AMP (http://w	www.SampleCompany.com)				
Legal Entity [Legal Entity [Axis]		Consolidated Entity [Member]				
	Period [Axis]						
	Earnings Per Share Components [Line Items]	2010-01-0 2010-12-					

	Period [Axis]	
Earnings Per Share Components [Line Items]	2010-01-01 - 2010-12-31	2009-01-01 - 2009-12-31
Earnings Per Share Components [Hierarchy]		
Net Income (Loss)	10,000,000	20,000,000
Weighted Average Common Shares	100,000,000	100,000,000
Earnings Per Share	.10	.20
Earnings Per Share	.10	.2

14.18.3. Report Elements and Model Structure

Component: (Ne	Component: (Network and Table)					
Network 70000 - Earnings Per Share Components (http://www.xbrlsite.com/DigitalFinancialReporting/BusinessUseCases/ComplexComputation/EarningsPerShare						
Table	Earnings Per Share Components [Table]					

#	Label	Report Element Class	Period Type	Balance
1	Earnings Per Share Components [Table]	[Table]		
2	Legal Entity [Axis]	[Axis]		
3	Consolidated Entity [Member]	[Member]		
4	Earnings Per Share Components [Line Items]	[Line Items]		
5	Earnings Per Share Components [Hierarchy]	[Abstract]		
6	Net Income (Loss)	[Concept] Monetary	For Period	Credit
7	Weighted Average Common Shares	[Concept] Shares	For Period	
8	Earnings Per Share	[Concept] Decimal	For Period	



14.18.4. Description

Any information set can be modelled as a hierarchy metapattern. A hierarchy is nothing more than a set of relations. If you add computations to the hierarchy, indicating that the concepts within that hierarchy have some set of computation type relations, then you get what is shown in this business use case, a *Complex Computation*.

14.18.5. Important distinguishing aspects and dynamics

- A complex computation is a hierarchy of concepts, some of which are numeric and there are computation-type relations between the numeric concepts.
- Many types of computation-type relations can be difficult to express as a parent-child hierarchy, thus the need to use XBRL formula to express these business rules.



14.19. Text block

The *Text Block* business use case shows how one fragment of information or multiple pieces of information can be put reported together within on "block of text", as opposed to modelling the individual pieces of information. Note the *Prose* and *Escaped XHTML* business use cases which expand on this business use case. The metapattern of this business use case is the **text block**.

14.19.1. Visual Example

Sample Company December 31, 2010

Accounting Policies

Duis fermentum

Sed mauris. Nulla facilisi. Fusce tristique posuere ipsum. Nulla facilisi. Aliquam viverra risus vitae ante. Sed rhoncus mi in wisi. Nullam nibh dui, molestie vitae, imperdiet non, ornare at, elit.

- · Suspendisse accumsan, arcu vel ornare interdum, magna tellus porta mauris, in porta mi lacus sodales felis.
- · Phasellus eleifend, diam vitae dapibus pulvinar, erat ligula auctor dui, eget congue justo lorem hendrerit tellus.
- · Fusce gravida, ligula a placerat placerat, leo erat euismod lectus, et lacinia justo libero non pede.

DONEC PULVINAR NONUMMY ERAT

Etiam portitior. Ut venenatis, velit a accumsan interdum, odio metus mollis mauris, non pharetra augue arcu eu felis. Ut eget felis. Mauris leo nulla, sodales et, pharetra quis, fermentum nec, diam.

14.19.2. Basic Automated Semantic Rendering

Component: (N	letwork and Table)				
Network	20000 - Accounting Policies	·			
Table	Accounting Policies [Table]				
Slicers (applies to	o each fact value in each table cell)				
Reporting Entity		SAM	IP (http://www.SampleCompany.com)		
Legal Entity [Axi	is]	Con	solidated Entity [Member]		
			Period [Axis]		
	Accounting Policies [Line Items]		2010-01-01 - 2010-12-31		
Accounting Polic	ies [Text Block]		Duis fermentum Sed mauris. Nulla facilisi. Fusce tristique posuere ipsum. Nulla facilisi. Aliquam viverra risus vitae ante. Sed rhoncus mi in wisi. Nullam nibh dui, molestie vitae, imperdiet non, ornare at, elit. Suspendisse accumsan, arcu vel ornare interdum, magna tellus porta mauris, in porta mi lacus sodalet felis. Phasellus eleifend, diam vitae dapibus pulvinar, erat ligula auctor dui, eget congue justo lorem hendrerit tellus. Fusce gravida, ligula a placerat placerat, leo erat euismod lectus, et lacinia justo libero non pede. Fusce gravida, ligula a placerat placerat, leo erat euismod lectus, et lacinia justo libero non pede. Vivamus ac velit vel magna nonummy pretium. 1. Etiam ut augue 2. Aliquam erat volutpat		

ONEC PULVINAR NONUMMY ERAT

Etiam porttitor. Ut venenatis, velit a accumsan interdum, odio metus mollis mauris, non pharetra augue arcu eu felis. Ut eget felis. Mauris leo nulla, sodales et, pharetra quis, fermentum nec, diam.



14.19.3. Report Elements and Model Structure

Component: (Ne	Component: (Network and Table)				
	twork 20000 - Accounting Policies (http://www.xbrlsite.com/DigitalFinancialReporting/BusinessUseCase/TextBlock/AccountingPolicies)				
Table	Accounting Policies [Table]				

#	Label	Report Element Class	Period Type	Balance
1	Accounting Policies [Table]	[Table]		
2	Legal Entity [Axis]	[Axis]		
3	Consolidated Entity [Member]	[Member]		
4	Accounting Policies [Line Items]	[Line Items]		
5	Accounting Policies [Text Block]	[Concept] String	For Period	

14.19.4. Description

The *Text Block* business use case shows how information can be communicated as a "block of text" rather than reporting individual components. The reason this is referred to as a "text block" is that originally in the US GAAP Taxonomy a text block was to report literally a block of text. This has subsequently changed and instead of text, escaped XHTML is reported. The escaped XHTML is converted into actual XHTML and then the XHTML is rendered. In this example, one concept is used to communicate information about accounting policies.

Because of formatting considerations and little control over text other than tabs, spaces, and line feeds; the escaped XHTML is used rather than plain text.

14.19.5. Important distinguishing aspects and dynamics

The following is a summary of the important characteristics and dynamics of this business case which should be considered:

• When a text block is used, one fact value is used to articulate a "block" of information, rather than breaking the block into individual facts. The up side is that articulating the information is easier as less work is involved. The down side is that the user of the information cannot get to the details of the block of information, they can only use the set as one unit of information.

14.20. Prose

The *Prose* business use case shows how to model prose or information which has sophisticated formatting referred to as prose or as narrative such as tables, lists, paragraphs which should be read in a specific order or sequence. The metapattern of this business use case is the **text block**.

14.20.1. Visual Example

Sample Company For Period Ending December 31, 2010

SOME SET OF BUSINESS INFORMATION

The following is a summary of some set of business information for the period ended December 31, 2010:

Proin elit sem, ornare non, ullamcorper vel, sollicitudin a, lacus. Mauris tincidunt cursus est. Nulla sit amet nibh. Sed elementum feugiat augue. Nam non tortor non leo porta bibendum. Morbi eu pede.

Sed justo: Nibh, placerat

Praesent eleifend	Lorem ip sum dolor	Suspendisse	Maecenas ante	Phasellus sagittis orci quis orci
Vivamus quis nunc	1,000	1,000	1,000	1,000
Proin porta tincidunt nunc	1,000	1,000	1,000	1,000
Pellentesque condimentum	2,000	2,000	2,000	2,000

Duis fermentum

Sed mauris. Nulla facilisi. Fusce tristique posuere ipsum. Nulla facilisi. Aliquam viverra risus vitae ante. Sed rhoncus mi in wisi. Nullam nibh dui, molestie vitae, imperdiet non, ornare at, elit.

- · Suspendisse accumsan, arcu vel ornare interdum, magna tellus porta mauris, in porta mi lacus sodales felis.
- · Phasellus eleifend, diam vitae dapibus pulvinar, erat ligula auctor dui, eget congue justo lorem hendrerit tellus.
- Fusce gravida, ligula a placerat placerat, leo erat euismod lectus, et lacinia justo libero non pede.

Fusce gravida, ligula a placerat placerat, leo erat euismod lectus, et lacinia justo libero non pede. Vivamus ac velit vel magna nonummy pretium.

- 1. Etiam ut augue
- 2. Aliquam erat volutpat

Sed justo: Nibh, placerat

<u>, </u>	20XX	20XX
Sed dapibus dui quis lectus; Donec id sem. Integer sit amet 2% diam ac nibh consequat vestibulum; Sed eget augue malesuada quam adipiscing mattis	23,480	46,080
Sed lobortis, Maecenas scelensque ullamcorper libero, Aliquam porta \$880 leo imperdiet pede	85,000	2.7
Nunc congue. Fusce venenatis. Maecenas tincidunt, ipsum in fringilla hendrent, dolor metus eleifend neque, vel tincidunt mi nunc a purus	-	45,000
Fusce venenatis. Maecenas tincidunt, ipsum in fringilla \$1,200 hendrerit, dolor metus eleifend neque, vel tincidunt mi nunc a purus	33,301	43,782
Pellentesque	141,781	134,862

DONEC PULVINAR NONUMMY ERAT

Etiam portitior. Ut venenatis, velit a accumsan interdum, odio metus mollis mauris, non pharetra augue arcu eu felis. Ut eget felis. Mauris leo nulla, sodales et, pharetra quis, fermentum nec, diam.



14.20.2. Basic Automated Semantic Rendering

Component:	(Network and Table)								
Network	Some Set of Business Information (http://www.xbrlsite.com/DigitalFinancialReporting/BusinessUseCase/Prose/SomeSetOfBusinessInformation)								
Table	Some Set of Business Information [Table]	Information [Table]							
Slicers (applies	s to each fact value in each table cell)								
Reporting Ent	·	SAMP (http://www.Samp	leCompany.com)						
Legal Entity [Axis]	Consolidated Entity [Mem	nber]						
Some Characteristic [Axis]		Some Characteristic [Mer	mber]						
				Period [Axis]					
	Some Set of Business Information [Line Items]		2010	0-01-01 - 2010-12-3	1				
Some Set of E	Business Information [HTML]	Proin elit sem, ornare non, nibh. Sed elementum feugia					sit amet		
		Sed justo: Nibh, placerat							
		Praesent eleifend	Lorem ipsum dolor	Suspendisse	Maecenas ante	Phase sagittis quis	orci		
		Vivamus quis nunc	1,000	1,000	1,000	1,0	000		
		Proin porta tincidunt nunc	1,000	1,000	1,000	1,	000		
		Pellentesque condimentum	2,000	2,000	2,000	2,0	000		
		Duis fermentum	Duis fermentum						
			Sed mauris. Nulla facilisi. Fusce tristique posuere ipsum. Nulla facilisi. Aliquam viverra risus vitae ante. Sed rhoncus mi in wisi. Nullam nibh dui, molestie vitae, imperdiet non, ornare at, elit.						
		felis. • Phasellus eleifend, d hendrerit tellus. • Fusce gravida, ligula	 Phasellus eleifend, diam vitae dapibus pulvinar, erat ligula auctor dui, eget congue justo lorem 						
		velit vel magna nonummy p 1. Etiam ut augue	oretium.	,	,	,			
		2. Aliquam erat volutpo							
		Sed justo: Nibh, placerat							
		Sed dapibus dui quis l	lectus: Dones id	sem Integer sit	amet	20XX	20X		
		2% diam ac nibh cons malesuada quam adip	sequat vestibului			23,480	46,080		
		Sed lobortis, Maecena Aliquam porta \$880 le				85,000			
		Nunc congue. Fusce v fringilla hendrerit, dol mi nunc a purus				-	45,000		
		Fusce venenatis. Maec \$1,200 hendrerit, dolo mi nunc a purus				33,301	43,78		
		Dolloptocque				1/1 701	124 062		

14.20.3. Report Elements and Model Structure

Component: (N	Component: (Network and Table)					
Network	Some Set of Business Information (http://www.xbrlsite.com/DigitalFinancialReporting/BusinessUseCase/Prose/SomeSetOfBusinessInformation)					
Table	Some Set of Business Information [Table]					

DONEC PULVINAR NONUMMY ERAT

Etiam porttitor. Ut venenatis, velit a accumsan interdum, odio metus mollis mauris, non pharetra augue arcu eu felis. Ut eget felis. Mauris leo nulla, sodales et, pharetra quis, fermentum nec, diam.

Pellentesque

#	Label	Report Element Class	Period Type	Balance
1	Some Set of Business Information [Table]	[Table]		
2	Legal Entity [Axis]	[Axis]		
3	Consolidated Entity [Member]	[Member]		
4	Some Characteristic [Axis]	[Axis]		
5	Some Characteristic [Member]	[Member]		
6	Some Set of Business Information [Line Items]	[Line Items]		
7	Some Set of Business Information [HTML]	[Concept] String	For Period	



141,781

134,862

14.20.4. Description

The *Prose* or narrative business use case shows how information can be disclosed if the ordering of the information matters and if rather than disclosing individual pieces of information, an entire set of information can be articulated as one fact value. This use case is similar to the *Escaped XHTML* and *Text Block* use cases.

14.20.5. Important distinguishing aspects and dynamics

- Escaped XHTML is used to disclose such prose (rather than normal XHTML) because XBRL items must not contain mark up. To overcome this constraint, the mark up characters are escaped, thus converting "<" into "&It;" and ">" into ">".
- Conversion from escaped XHTML to normal XHTML is a well understood process, easily done by software applications.
- Other XML formats can be escaped in the same manner, basically allowing for different types of XML data to be imbedded within XBRL.
- Eventually XBRL may be changed to allow specific data types to appear within specific XBRL data type; for example a specific data type "XHTML", not requiring the escaping process to be used.

14.21. Escaped XHTML

The *Escaped XHTML* business use case is a variation of a *Text Block* and models how one can make use of HTML (hypertext mark-up language) to achieve pixel perfect renderings of information which has complex information structures. The metapattern of this business use case is the **text block**.

14.21.1. Visual Example

Sample Company For Period Ending December 31, 2010

DIRECTOR COMPENSATION

The following is a summary of director compensation for the period ended December 31, 2010:

Table 1: Director's compensation

Name of director	Salary	Bonus	Director fees	Fair Value of Options Granted
Jane Doe	1,000	1,000	1,000	1,000
John Doe	1,000	1,000	1,000	1,000
Total	2,000	2,000	2,000	2,000

14.21.2. Metapattern(s) employed

Component: (Network and Table)						
Network	Director Compensation (http://www.xbrisite.com/DigitalFinancialReporting/BusinessUseCase/EscapedXHTML/DirectorCompensation)						
Table	Director Compensation [Table]						
Slicers (applies	to each fact value in each table cell)						
	Reporting Entity [Axis] SAMP (http://www.SampleCompany.com)						
Legal Entity [Axis] Cor			Consolidated Entity [Member]				
				Per	riod [Axis]		
	Director Compensation [Line Items]			2010-01-	01 - 2010-12-3	1	
Director [Hierarchy]							
Director [Hier	rarcityj						
_	ensation [HTML]	N	Name of director	Salary	Bonus	Director fees	Fair Value of Options Granted
_	••		Name of director	Salary 1,000	Bonus 1,000	Director fees	
_	••	J.					Options Granted

14.21.3. Report Elements and Model Structure

Component: (Network and Table)					
Network	Director Compensation (http://www.xbrlsite.com/DigitalFinancialReporting/BusinessUseCase/EscapedXHTML/DirectorCompensation)				
Table	Director Compensation [Table]				

#	Label	Report Element Class	Period Type	Balance
1	Director Compensation [Table]	[Table]		
2	Legal Entity [Axis]	[Axis]		
3	Consolidated Entity [Member]	[Member]		
4	Director Compensation [Line Items]	[Line Items]		
5	Director [Hierarchy]	[Abstract]		
6	Director Compensation [HTML]	[Concept] String	For Period	



14.21.4. Description

The *Escaped XHTML* business use case is basically the same as the *Text Block* and *Prose* business use case. All these business use cases show how information can be modelled if there is formatted structure to the information or if there is a desire to model the information as a set, rather than modelling each detailed fact which may exist in the information set.

14.21.5. Important distinguishing aspects and dynamics

The following is a summary of the important characteristics and dynamics of this business case which should be considered:

• While a business user cannot parse the details of the information set, this type of an approach can be useful in modelling certain detailed information.



14.22. Using JSON

The JSON business use case models how to articulate data primarily for the purpose of exchanging a set of information. JSON (pronounced Jayson) is an approach to formatting data. Other formats such as CSV (comma separated values) could likewise use this approach. The metapattern of this business use case is the **text block**.

14.22.1. Visual Example

```
{"DirectorCompensation":
   Г
          "DirectorName": "Jane Doe",
          "Salary":"1,000",
"Bonus":"1,000",
           "DirectorFees":"1,000",
           "FairValueOfOptionsGranted": "1,000"
       },
           "DirectorName": "John Doe",
          "Salary":"1,000",
"Bonus":"1,000",
"DirectorFees":"1,000",
           "FairValueOfOptionsGranted": "1,000"
       }.
           "DirectorName": "All Directors",
           "Salary":"2,000",
           "Bonus":"2,000",
"DirectorFees":"2,000",
           "FairValueOfOptionsGranted":"2,000"
  1
```

14.22.2. Basic Automated Semantic Rendering

Component: (Network and Table)					
Network	Director Compensation (http://www.xbrlsite.com/DigitalFinancialReporting/BusinessUseCase/UsingJSON/DirectorCompensation)				
Table	Director Compensation [Table]				
Slicers (applies to each fact value in each table cell)					

Slicers (applies to each fact value in each table cell)	
Reporting Entity [Axis]	SAMP (http://www.SampleCompany.com)
Legal Entity [Axis]	Consolidated Entity [Member]

	Period [Axis]
Director Compensation [Line Items]	2010-01-01 - 2010-12-31
Director Compensation [JSON]	{"DirectorCompensation": [{ "DirectorName":"Jane Doe", "Salary":"1,000", "Bonus":"1,000", "DirectorFees":"1,000", "FairValueOfOptionsGranted":"1,000" }, { "DirectorName":"John Doe", "Salary":"1,000", "Bonus":"1,000", "DirectorFees":"1,000", "FairValueOfOptionsGranted":"1,000" }, { "DirectorName":"All Directors", "Salary":"2,000", "Bonus":"2,000", "DirectorFees":"2,000", "BrairValueOfOptionsGranted":"2,000" }] }



14.22.3. Report Elements and Model Structure



14.22.4. Description

JSON (Java Script Object Notation, see http://www.json.org) is a data format which is similar to CSV but more powerful because it can express a hierarchy. JSON can be useful in exchanging information, this is how such information can be modelled using XBRL. CSV or other formats can be used in a similar manner.

14.22.5. Important distinguishing aspects and dynamics

- The *Using JSON* business use case is similar to the *Text Block, Prose, Escaped XHTML* use cases in that a set of information is modelled as one concept and in a financial report, that one Fact holds the complete set of information.
- This is one approach to modelling some formatted set of information. CSV or other data formats could also be used.

14.23. General comment (parenthetical explanation)

The General Comment business use case shows how to include a comment (implemented as an XBRL footnote) within a financial report which includes additional information about a fact which is reported. Any metapattern can use a parenthetical explanation.

14.23.1. Visual Example

Sample Company For Period Ending December 31, (thousands of dollars, except number of employees)

	2010	2009	2008	2007	2006
Sales, Net	1,500	1,400	1,300	1,200	1,100
Income (Loss) from Continuing Operations	500	400	300	200	100
Net Income (Loss) (a) (c)	51	41	31	21	11
Cash Flow Provided by (used in) Operating Activities, Net	5,000	4,000	3,000	2,000	1,000
Capital Additions	1,000	650	550	450	350
Average Number of Employees (b) (c)	300	290	280	270	260

COMMENTS:

- (a). XBRL Footnote: This is an XBRL footnote, there is no 'categorization' as to what this is for. This indicates that the report is trying to tell you something about the Fact 'pattern:NetIncomeLoss' for a specific context.
- (b). XBRL Footnote: This is another XBRL footnote, again, trying to tell you something about the average number of employees. (c). This comment hooks two reported Facts together, average number of employees and net income for 2010.

14.23.2. **Basic Automated Semantic Rendering**

Component: (Ne	Component: (Network and Table)				
Network	Financial Highlights (http://www.xbrlsite.com/DigitalFinancialReporting/BusinessUseCases/GeneralComment/FinancialHighlights)				
Table	Financial Highlights [Table]				

Slicers (applies to each fact value in each table cell) Reporting Entity [Axis] SAMP (http://www.SampleCompany.com) Legal Entity [Axis] Consolidated Entity [Member]

		Period [Axis]			
Financial Highlights [Line Items]	2010-01-01 - 2010-12-31	2009-01-01 - 2009-12-31	2008-01-01 - 2008-12-31	2007-01-01 - 2007-12-31	2006-01-01 - 2006-12-31
Financial Highlights [Hierarchy]					
Sales, Net	1,500,000	1,400,000	1,300,000	1,200,000	1,100,000
Income (Loss) from Continuing Operations	500,000	400,000	300,000	200,000	100,000
Net Income (Loss)	51,000 ^{3,1}	41,000	31,000	21,000	11,000
Cash Flow Provided by (Used in) Operating Activities, Net	5,000,000	4,000,000	3,000,000	2,000,000	1,000,000
Capital Additions	1,000,000	650,000	550,000	450,000	350,000
Average Number of Employees	300 ^{1,2}	290	280	270	260

1: This comment hooks two reported Facts together, average number of employees and net income for 2010.
2: XBRL Footnote: This is another XBRL footnote, again, trying to tell you something about the average number of employees.
3: XBRL Footnote: This is an XBRL footnote, there is no 'categorization' as to what this is for. This indicates that the report is trying to tell you something about the Fact 'pattern: NetIncomeLoss' for a



14.23.3. Report Elements and Model Structure

Component: (Ne	Component: (Network and Table)					
	Financial Highlights (http://www.xbrlsite.com/DigitalFinancialReporting/BusinessUseCases/GeneralComment/FinancialHighlights)					
Table	Financial Highlights [Table]					

#	Label	Report Element Class	Period Type	Balance
1	Financial Highlights [Table]	[Table]		
2	Legal Entity [Axis]	[Axis]		
3	Consolidated Entity [Member]	[Member]		
4	Financial Highlights [Line Items]	[Line Items]		
5	Financial Highlights [Hierarchy]	[Abstract]		
6	Sales, Net	[Concept] Monetary	For Period	Credit
7	Income (Loss) from Continuing Operations	[Concept] Monetary	For Period	Credit
8	Net Income (Loss)	[Concept] Monetary	For Period	Credit
9	Cash Flow Provided by (Used in) Operating Activities, Net	[Concept] Monetary	For Period	Debit
10	Capital Additions	[Concept] Monetary	For Period	Debit
11	Average Number of Employees	[Concept] Decimal	For Period	

14.23.4. Description

The *General Comment* business use case shows how a comment of any sort can be associated with any fact being reported. In addition, facts can be linked together indicating that they are related in some arbitrary way. These comments are implemented as an XBRL footnote.

14.23.5. Important distinguishing aspects and dynamics

- The only difference between the Flat Hierarchy and this business use case is the addition of an XBRL footnote within the financial report.
- A specific role and arcrole can be used to categorize an XBRL footnote which is contained within a financial report.
- See the *Reclassification* and *Reason Not Reported* business use cases which show other categories of XBRL footnotes.
- Note that XBRL footnotes can be used to associate one or more facts to one or more other Facts, effectively expressing a set of related facts.

14.24. Classes

The *Classes* business use case shows how information can be modelled as concepts or as the members of an [Axis]. Please note the *Simple Roll Up* business use case which models the classes of property, plant, and equipment as concepts. This business use cases models classes of property, plant, and equipment as the members of an [Axis]. The metapattern of this business use case is the **hierarchy**.

14.24.1. Visual Example

Sample Company December 31, (thousands of dollars)

_	2010	2009
ASSETS		
Property, Plant, and Equipment, Net		
Land	5,347	1,147
Buildings, Net	244,508	366,375
Furniture and Fixtures, Net	34,457	34,457
Computer Equipment, Net	4,169	5,313
Other Property, Plant, and Equipment, Net	6,702	6,149
Property, Plant and Equipment, Net, Total	295,183	413,441

14.24.2. Basic Automated Semantic Rendering



	Period [Axis]											
		2010-12-31					2009-12-31					
		Class of Property, Plant and Equipment [Axis]					Class	of Property, Plant	t and Equipment	[Axis]		
Property, Plant and Equipment, by Component [Line Items]	Land [Member]	Buildings [Member]	Furniture and Fixtures [Member]	Computer Equipment [Member]	Other Property, Plant and Equipment [Member]	All Classes of Property, Plant and Equipment [Member]	Land [Member]	Buildings [Member]	Furniture and Fixtures [Member]	Computer Equipment [Member]	Other Property, Plant and Equipment [Member]	All Classes of Property, Plant and Equipment [Member]
Property, Plant and Equipment, Net [Hierarchy]												
Property, Plant and Equipment, Net	5,347,000	244,508,000	34,457,000	4,169,000	6,702,000	295,183,000	1,147,000	366,375,000	34,457,000	5,313,000	6,149,000	413,441,000

14.24.3. Report Elements and Model Structure

Component: (Network and Table)						
	Property, Plant, and Equipment, by Component (http://www.xbrlsite.com/DigitalFinancialReporting/BusinessUseCase/Classes/PropertyPlantAndEquipmentByComponent					
Table	Property, Plant and Equipment, by Component [Table]					

#	Label	Report Element Class	Period Type	Balance
1	Property, Plant and Equipment, by Component [Table]	[Table]		
2	Legal Entity [Axis]	[Axis]		
3	Consolidated Entity [Member]	[Member]		
4	Class of Property, Plant and Equipment [Axis]	[Axis]		
5	All Classes of Property, Plant and Equipment [Member]	[Member]		
6	Land [Member]	[Member]		
7	Buildings [Member]	[Member]		
8	Furniture and Fixtures [Member]	[Member]		
9	Computer Equipment [Member]	[Member]		
10	Other Property, Plant and Equipment [Member]	[Member]		
11	Property, Plant and Equipment, by Component [Line Items]	[Line Items]		
12	Property, Plant and Equipment, Net [Hierarchy]	[Abstract]		
13	Property, Plant and Equipment, Net	[Concept] Monetary	As Of	Debit

14.24.4. Description

This business use case shows an alternative approach to modelling the *Simple Roll Up* business use case. Be sure to compare that business use case with this business use case noting the difference. There is no difference in the business semantics between these two use cases.

14.24.5. Important distinguishing aspects and dynamics

- The *Classes* business use cases points out that there are alternative approaches to modelling the same information. Contrast the approach used in this use case with the *Simple Roll Up* use case to see two approaches to adding taxonomy information: as a concept or as a member of an [Axis].
- Choosing whether to model information as a concept or as a member of an [Axis] should be done consistently with some clear strategy being communicated.
- Each approach has various pros and cons. It is these pros and cons which will generally determine the most appropriate option.
- Note that the members of an [Axis] can have what amount to any number of properties associated with a class. By modelling something as a concept this is not possible. See the *Class Properties* business use case.

14.25. Class properties

The Class Properties business use case expands on the Classes business use case showing how concepts can be related to other concepts by an [Axis] is classes are expressed using [Member]s of an [Axis]. By contrast, [Line Items] expressed using concepts where there are no [Axis] in common and when they are expressed in different [Table]s are not related in any way. The metapattern of this business use case is the **hierarchy** and **roll up**.

14.25.1. Visual Example

Sample Company December 31, (thousands of dollars)

Property, Plant and Equipment Policies

Class	Valuation Basis	Depreciation Method	Estimated Useful Life
Land	Mauris tincidunt cursus est	NA	NA
Buildings	Sed dapibus venenatis ipsum	Etiam porttitor	20 years
Furniture and Fixtures	Nunc congue	Maecenas tincidunt	10 years
Computer Equipment	Suspendisse potenti	Maecenas tincidunt	5 years
Other	Phasellus eleifend	Maecenas tincidunt	5 years

Property, Plant, and Equipment, Net, Components

	2010	2009
Land	5,347	1,147
Buildings, Net	244,508	366,375
Furniture and Fixtures, Net	34,457	34,457
Computer Equipment, Net	4,169	5,313
Other Property, Plant, and Equipment, Net	6,702	6,149
Property, Plant and Equipme	ent, Net, Total 295,183	413,441

14.25.2. Basic Automated Semantic Rendering

Component: (Network and Table)								
Network	Property, Plant, and Equipment, Policies (http://www.xbrlsite.com/DigitalFinancialReporting/BusinessUseCase/ClassProperties/PropertyPlantAndEquipmentPolicies)							
Table	Property, Plant and Equipment, Policies [Table]							
Slicers (applies to	Slicers (applies to each fact value in each table cell)							
Reporting Entity [Axis]	SAMP (http://www.SampleCompany.com)						
Period [Axis]		2010-01-01 - 2010-12-31						
Legal Entity [Axis]	Consolidated Entity [Member]						

	Class of Property, Plant and Equipment [Axis]							
Property, Plant and Equipment, Policies [Line Items]	Land [Member]	Buildings [Member]	Furniture and Fixtures [Member]	Computer Equipment [Member]	Other Property, Plant and Equipment [Member]			
Property, Plant and Equipment, Policies [Hierarchy]								
Valuation Basis	Mauris tincidunt cursus est	Sed dapibus venenatis ipsum	Nunc congue	Suspendisse potenti	Phasellus eleifend			
Depreciation Method	NA	Etiam porttitor	Maecenas tincidunt	Maecenas tincidunt	Maecenas tincidunt			
Estimated Useful Life	NA	20 years	10 years	5 years	5 years			

Component: (1	omponent: (Network and Table)				
Network	Property, Plant, and Equipment, by Component (http://www.xbrlsite.com/DigitalFinancialReporting/BusinessUseCase/ClassProperties/PropertyPlantAndEquipmentByComponent)				
Table	Property, Plant and Equipment, by Component [Table]				
Slicers (applies t	o each fact value in each table cell)				
Reporting Entity [Axis]		SAMP (http://www.SampleCompany.com)			
Legal Entity (Axis)		Consolidated Entity [Member]			

I		Period [Axis]											
ı			2010-12-31							2009-	12-31		
ı			Class of Property, Plant and Equipment [Axis]				Class	of Property, Plant	t and Equipmen	t [Axis]			
	Property, Plant and Equipment, by Component [Line Items]	Land [Member]	Buildings [Member]	Furniture and Fixtures [Member]	Computer Equipment [Member]	Other Property, Plant and Equipment [Member]	All Classes of Property, Plant and Equipment [Member]	Land [Member]	Buildings [Member]	Furniture and Fixtures [Member]	Computer Equipment [Member]	Other Property, Plant and Equipment [Member]	All Classes of Property, Plant and Equipment [Member]
Property, Plant and Equipment, Net [Hierarchy]													
ı	Property, Plant and Equipment, Net	5,347,000	244,508,000	34,457,000	4,169,000	6,702,000	295,183,000	1,147,000	366,375,000	34,457,000	5,313,000	6,149,000	413,441,000



14.25.3. Report Elements and Model Structure

Component: (Ne	Component: (Network and Table)					
Network Property, Plant, and Equipment, Policies (http://www.xbrlsite.com/DigitalFinancialReporting/BusinessUseCase/ClassProperties/PropertyPlantAndEquipment (http://www.xbrlsite.com/DigitalFinancialReporting/BusinessUseCase/ClassProperties/PropertyPlantAndEquipment (http://www.xbrlsite.com/DigitalFinancialReporting/BusinessUseCase/ClassProperties/PropertyPlantAndEquipment (http://www.xbrlsite.com/DigitalFinancialReporting/BusinessUseCase/ClassProperties/PropertyPlantAndEquipment (http://www.xbrlsite.com/DigitalFinancialReporting/BusinessUseCase/ClassProperties/PropertyPlantAndEquipment (http://www.xbrlsite.com/DigitalFinancialReporting/BusinessUseCase/ClassProperties/PropertyPlantAndEquipment (http://www.xbrlsite.com/DigitalFinancialReporting/BusinessUseCase/ClassProperties/PropertyPlantAndEquipment (http://www.xbrlsite.com/DigitalFinancialReporting/BusinessUseCase/ClassProperties/PropertyPlantAndEquipment (http://www.xbrlsite.com/DigitalFinancialReporting/BusinessUseCase/ClassPropertyPlantAndEquipment (http://www.xbrlsite.com/DigitalFinancialReportyPlantAndEquipment (http://www.xbrlsite.com/DigitalReportyPlantAndEquipment (http://www.xbrlsite.c						
Table	Property, Plant and Equipment, Policies [Table]					

#	Label	Report Element Class	Period Type	Balance
1	Property, Plant and Equipment, Policies [Table]	[Table]		
2	Legal Entity [Axis]	[Axis]		
3	Consolidated Entity [Member]	[Member]		
4	Class of Property, Plant and Equipment [Axis]	[Axis]		
5	All Classes of Property, Plant and Equipment [Member]	[Member]		
6	Land [Member]	[Member]		
7	Buildings [Member]	[Member]		
8	Furniture and Fixtures [Member]	[Member]		
9	Computer Equipment [Member]	[Member]		
10	Other Property, Plant and Equipment [Member]	[Member]		
11	Property, Plant and Equipment, Policies [Line Items]	[Line Items]		
12	Property, Plant and Equipment, Policies [Hierarchy]	[Abstract]		
13	Valuation Basis	[Concept] String	For Period	
14	Depreciation Method	[Concept] String	For Period	
15	Estimated Useful Life	[Concept] String	For Period	

Component: (Ne	Component: (Network and Table)					
Network	Property, Plant, and Equipment, by Component (http://www.xbrlsite.com/DigitalFinancialReporting/BusinessUseCase/ClassProperties/PropertyPlantAndEquipmentByCo					
Table	Property, Plant and Equipment, by Component [Table]					

#	Label	Report Element Class	Period Type	Balance
1	Property, Plant and Equipment, by Component [Table]	[Table]		
2	Legal Entity [Axis]	[Axis]		
3	Consolidated Entity [Member]	[Member]		
4	Class of Property, Plant and Equipment [Axis]	[Axis]		
5	All Classes of Property, Plant and Equipment [Member]	[Member]		
6	Land [Member]	[Member]		
7	Buildings [Member]	[Member]		
8	Furniture and Fixtures [Member]	[Member]		
9	Computer Equipment [Member]	[Member]		
10	Other Property, Plant and Equipment [Member]	[Member]		
11	Property, Plant and Equipment, by Component [Line Items]	[Line Items]		
12	Property, Plant and Equipment, Net [Hierarchy]	[Abstract]		
13	Property, Plant and Equipment, Net	[Concept] Monetary	As Of	Debit

14.25.4. Description

In this business use case the policies and the components of property, plant, and equipment are modelled in different [Table]s because they are presented in different areas of the report. However, the policies and the components of property, plant, and equipment are related, even though they are expressed for presentation purposes in a different area of a report.

When classes of something are modelled as [Member]s of an [Axis], it is easy to have two different sets of [Line Items] but still keep the relation between those [Line Items]. This allows for the alternative rendering to easily be created, combining these two separate sets of [Line Items].

By contrast, if two [Table]s have [Line Items] which are in fact related but there is nothing, such as an [Axis], a software application has no way of understanding that the two pieces are related.



14.25.5. Important distinguishing aspects and dynamics

- Note that the policies and components [Table]s share the Class of Property, Plant and Equipment [Axis].
- Note that a software application could easily render the two sets of information as one set of [Line Items] should the user of this information prefer this organization.
- If there is nothing physically connecting different [Line Items] of different [Table]s a human reading the information my understand the relation, but a computer software application will not.

14.26. Grid

A *Grid* information model is a pseudo metapattern which uses the presentation characteristics of the columns and rows of a table to model information. Because the grid models presentation information and not business semantics, it cannot be considered a metapattern. However, the grid is included in this list because the US GAAP Taxonomy uses a grid information model to model the statement of changes in equity. A grid is more of a technique for presenting information than a business use case. The metapattern of this business use case is the **grid** (pseudo metapattern).

14.26.1. Visual Example

Sample Company December 31, (thousands of dollars)

	Common Stock	Additional Paid-in Capital	Retained Earnings (Accumulated Deficit)	Equity
Balance at December 31, 2009	150,000	50,000	200,000	400,000
Net Income (Loss) Dividends Common Stock Issued	25,000	25,000	200,000 -100,000	200,000 -100,000 50,000
Balance at December 31, 2010	175,000	75,000	300,000	550,000

14.26.2. Basic Automated Semantic Rendering

Component: (N	Component: (Network and Table)				
Network	90000 - Statement of Changes in Equity (http://www.xbrlsite.com/DigitalFinancialReporting/BusinessUseCase/Grid/StatementOfChangesInEquity)				
Table	Statement of Changes in Equity [Table]				
Slicers (applies to each fact value in each table cell)					
Reporting Entity [Axis] SAMP (http://www.SampleCompany.com)		SAMP (http://www.SampleCompany.com)			

Reporting Entity [Axis]		SAMP (http://www.SampleCompany.com)
	Period [Axis]	2010-01-01 - 2010-12-31
	Legal Entity [Axis]	Consolidated Entity [Member]

Equity Component [Axis]				
Statement of Changes in Equity [Line Items]	Common Stock [Member]	Additional Paid -in Capital [Member]	Retained Earnings (Accumulated Deficit) [Member]	Equity [Member]
Statement of Changes in Equity [Grid]				
Equity, Beginning Balance	150,000	50,000	200,000	400,000
Net Income (Loss)			200,000	200,000
Dividends			(100,000)	(100,000)
Common Stock Issued	25,000	25,000		50,000
Equity, Ending Balance	175,000	75,000	300,000	550,000

14.26.3. Report Elements and Model Structure

Component: (Network and Table)					
Network 90000 - Statement of Changes in Equity (http://www.xbrlsite.com/DigitalFinancialReporting/BusinessUseCase/Grid/StatementOfChangesInEquity)					
Table	Statement of Changes in Equity [Table]				

#	Label	Report Element Class	Period Type	Balance
1	Statement of Changes in Equity [Table]	[Table]		
2	Legal Entity [Axis]	[Axis]		
3	Consolidated Entity [Member]	[Member]		
4	Equity Component [Axis]	[Axis]		
5	Equity [Member]	[Member]		
6	Common Stock [Member]	[Member]		
7	Additional Paid-in Capital [Member]	[Member]		
8	Retained Earnings (Accumulated Deficit) [Member]	[Member]		
9	Statement of Changes in Equity [Line Items]	[Line Items]		
10	Statement of Changes in Equity [Grid]	[Abstract]		
11	Equity, Beginning Balance	[Concept] Monetary	As Of	Credit
12	Net Income (Loss)	[Concept] Monetary	For Period	Credit
13	Dividends	[Concept] Monetary	For Period	Debit
14	Common Stock Issued	[Concept] Monetary	For Period	Credit
15	Equity, Ending Balance	[Concept] Monetary	As Of	Credit

14.26.4. Description

With the *Grid* pseudo metapattern, each of the columns of the presentation identified and articulated as a [Member] of an [Axis]. In this business use case the [Axis] is "Equity Component [Axis]" which has four [Member]s as there are four columns. The [Line Items] indicate the rows of the grid. In this case the rows are actually a roll forward. The cells of the grid represent intersections of the columns [Axis] and the [Line Items].

14.26.5. Important distinguishing aspects and dynamics

While the grid pseudo metapattern makes for easy rendering of information, it has to very significant negative aspects. Clues of these negative aspects become clear by closely examining the fact table of this business use case.

- The Equity Component [Axis] which is generally unique to the [Table] the grid is modelling causes duplication of concepts. For example, the "Net Income (Loss)" which will likely appear in other locations in a report such as a financial statement have either the "Equity [Member]" or "Retained Earnings (Accumulated Deficit) [Member]" characteristics of the "Equity Component [Axis]". This causes these concept to not fit elsewhere in a report.
- A second negative side effect is that the [Line Items] concept which is used is used in every column. For example, the "Net Income (Loss)" concept is used in all columns where "Net Income (Loss)" appears. However, in a financial statement the concepts would actually be different. For example if a report contained a noncontrolling interest the net income concepts would be: Net Income (Loss) Applicable to Parent, Net Income (Loss) Attributable to Noncontrolling Interest, and Net Income (Loss) (i.e. the total including the portion attributable to the parent plus the portion attributable to the noncontrolling interest).
- Note the XBRL Formulas used to verify the computations of the information, in particular the second formula.



The following is a screen shot of the fact table for the information in this report where you can see the impact of the Equity Component [Axis] on the facts:



#	Reporting Entity	Period	Land Falls (Avia)	Equity Component [Axis]	Concept	Value
-			Legal Entity [Axis]			
2	SAMP (http://www.SampleCompany.com)	2010-01-01 - 2010-12-31	Consolidated Entity [Member]	Equity [Member]	<u>Dividends</u>	100000
1	SAMP (http://www.SampleCompany.com)	2010-01-01 - 2010-12-31	Consolidated Entity [Member]	Retained Earnings (Accumulated Deficit) [Member]	<u>Dividends</u>	100000
3	SAMP (http://www.SampleCompany.com)	2010-01-01 - 2010-12-31	Consolidated Entity [Member]	Equity [Member]	Common Stock Issued	50000
5	4 SAMP (http://www.SampleCompany.com)	2010-01-01 - 2010-12-31	Consolidated Entity [Member]	Common Stock [Member]	Common Stock Issued	25000
- 1	SAMP (http://www.SampleCompany.com)	2010-01-01 - 2010-12-31	Consolidated Entity [Member]	Additional Paid-in Capital [Member]	Common Stock Issued	25000
5	SAMP (http://www.SampleCompany.com)	2010-01-01 - 2010-12-31	Consolidated Entity [Member]	Equity [Member]	Net Income (Loss)	200000
2	SAMP (http://www.SampleCompany.com)	2010-01-01 - 2010-12-31	Consolidated Entity [Member]	Retained Earnings (Accumulated Deficit) [Member]	Net Income (Loss)	200000
8	SAMP (http://www.SampleCompany.com)	2009-12-31	Consolidated Entity [Member]	Equity [Member]	Equity	400000
9	SAMP (http://www.SampleCompany.com)	2010-12-31	Consolidated Entity [Member]	Equity [Member]	Equity	550000
10	SAMP (http://www.SampleCompany.com)	2009-12-31	Consolidated Entity [Member]	Common Stock [Member]	Equity	150000
1	SAMP (http://www.SampleCompany.com)	2010-12-31	Consolidated Entity [Member]	Common Stock [Member]	Equity	175000
13	SAMP (http://www.SampleCompany.com)	2009-12-31	Consolidated Entity [Member]	Additional Paid-in Capital [Member]	Equity	50000
13	3 SAMP (http://www.SampleCompany.com)	2010-12-31	Consolidated Entity [Member]	Additional Paid-in Capital [Member]	Equity	75000
14	SAMP (http://www.SampleCompany.com)	2009-12-31	Consolidated Entity [Member]	Retained Earnings (Accumulated Deficit) [Member]	Equity	200000
15	SAMP (http://www.SampleCompany.com)	2010-12-31	Consolidated Entity [Member]	Retained Earnings (Accumulated Deficit) [Member]	Equity	300000



14.27. Pivot table

The *Pivot Table* business use case shows how to model information which might commonly be used within an Excel pivot table. The metapattern of this business use case is the **hierarchy**.

14.27.1. Visual Example

Sample Company
For Period Ending December 31,
(thousands of dollars)

_	2010	2009	2008
Sales, all Business Segments, all Geographic Areas	32,038	35,805	32,465
Breakdown by Business Segment: Pharmaceuticals Generics Consumer Health Other Segments	20,181	18,150	15,275
	2,433	1,973	1,823
	6,675	6,514	5,752
	2,749	9,168	9,615
Breakdown by Geographic Area: North America Europe Asia Other regions	10,214	12,649	10,137
	11,901	10,374	10,396
	5,639	4,371	3,210
	4,284	8,411	8,722

14.27.2. Basic Automated Semantic Rendering

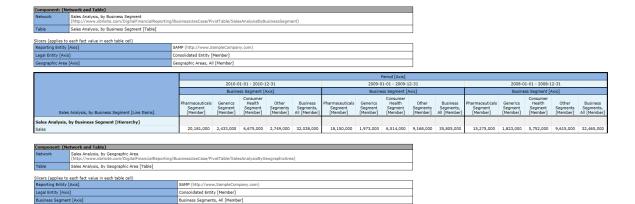
Component: (Ne	Component: (Network and Table)							
	Sales Analysis, Summary (http://www.xbrlsite.com/DigitalFinancialReporting/BusinessUseCase/PivotTable/SalesAnalysisSummary)							
Table	Sales Analysis, Summary [Table]							

Slicers (applies to each fact value in each table cell)

Reporting Entity [Axis]	SAMP (http://www.SampleCompany.com)		
Legal Entity [Axis]	Consolidated Entity [Member]		
Business Segment [Axis]	Business Segments, All [Member]		
Geographic Area [Axis]	Geographic Areas, All [Member]		

	Period [Axis]					
Sales Analysis, Summary [Line Items]	2010-01-01 - 2010-12-31	2009-01-01 - 2009-12-31	2008-01-01 - 2008-12-31			
Sales Analysis, Summary [Hierarchy]						
Sales	32,038,000	35,805,000	32,465,000			





						Period [Axis]									
		2010-01-01 - 2010-12-31					2009-01-01 - 2009-12-31				2008-01-01 - 2008-12-31				
		Geographic Area [Axis]				Geog	raphic Area [A	xis]			Georg	graphic Area (A	xis]		
Sales Analysis, by Geographic Area [Line Items]	North America Region [Member]	Europe Region [Member]	Asia Region [Member]	Other Regions [Member]	Geographic Areas, All [Member]	North America Region [Member]	Europe Region [Member]	Asia Region [Member]	Other Regions [Member]	Geographic Areas, All [Member]	North America Region [Member]	Europe Region [Member]	Asia Region [Member]	Other Regions [Member]	Geographic Areas, All [Member]
Sales Analysis, by Geographic Area [Hierarchy]															
Sales	10,214,000	11,901,000	5,639,000	4,284,000	32,038,000	12,649,000	10,374,000	4,371,000	8,411,000	35,805,000	10,137,000	10,396,000	3,210,000	8,722,000	32,465,000

14.27.3. Report Elements and Model Structure

Component: (Ne	Component: (Network and Table)					
	Sales Analysis, Summary (http://www.xbrlsite.com/DigitalFinancialReporting/BusinessUseCase/PivotTable/SalesAnalysisSummary)					
Table	Sales Analysis, Summary [Table]					

#	Label	Report Element Class	Period Type	Balance
1	Sales Analysis, Summary [Table]	[Table]		
2	Legal Entity [Axis]	[Axis]		
3	Consolidated Entity [Member]	[Member]		
4	Business Segment [Axis]	[Axis]		
5	Business Segments, All [Member]	[Member]		
6	Geographic Area [Axis]	[Axis]		
7	Geographic Areas, All [Member]	[Member]		
8	Sales Analysis, Summary [Line Items]	[Line Items]		
9	Sales Analysis, Summary [Hierarchy]	[Abstract]		
10	Sales	[Concept] Monetary	For Period	Credit

Component: (Ne	etwork and Table)
Network	Sales Analysis, by Business Segment (http://www.xbrlsite.com/DigitalFinancialReporting/BusinessUseCase/PivotTable/SalesAnalysisByBusinessSegment)
Table	Sales Analysis, by Business Segment [Table]

#	Label	Report Element Class	Period Type	Balance
1	Sales Analysis, by Business Segment [Table]	[Table]		
2	Legal Entity [Axis]	[Axis]		
3	Consolidated Entity [Member]	[Member]		
4	Business Segment [Axis]	[Axis]		
5	Business Segments, All [Member]	[Member]		
6	Pharmaceuticals Segment [Member]	[Member]		
7	Generics Segment [Member]	[Member]		
8	Consumer Health Segment [Member]	[Member]		
9	Other Segments [Member]	[Member]		
10	Geographic Area [Axis]	[Axis]		
11	Geographic Areas, All [Member]	[Member]		
12	Sales Analysis, by Business Segment [Line Items]	[Line Items]		
13	Sales Analysis, by Business Segment [Hierarchy]	[Abstract]		
14	Sales	[Concept] Monetary	For Period	Credit



Component: (Ne	Component: (Network and Table)					
	Sales Analysis, by Geographic Area (http://www.xbrlsite.com/DigitalFinancialReporting/BusinessUseCase/PivotTable/SalesAnalysisByGeographicArea)					
Table	Sales Analysis, by Geographic Area [Table]					

#	Label	Report Element Class	Period Type	Balance
1	Sales Analysis, by Geographic Area [Table]	[Table]		
2	Legal Entity [Axis]	[Axis]		
3	Consolidated Entity [Member]	[Member]		
4	Business Segment [Axis]	[Axis]		
5	Business Segments, All [Member]	[Member]		
6	Geographic Area [Axis]	[Axis]		
7	Geographic Areas, All [Member]	[Member]		
8	North America Region [Member]	[Member]		
9	Europe Region [Member]	[Member]		
10	Asia Region [Member]	[Member]		
11	Other Regions [Member]	[Member]		
12	Sales Analysis, by Geographic Area [Line Items]	[Line Items]		
13	Sales Analysis, by Geographic Area [Hierarchy]	[Abstract]		
14	Sales	[Concept] Monetary	For Period	Credit

14.27.4. Description

The *Pivot Table* business use case shows information which might commonly populate an electronic spread sheet pivot table. The one concept is expressed with characteristics which indicate which business segment and which geographic area that sales fact value relates to. This is done using the Business Segment [Axis] and Geographic Area [Axis] to differentiate the facts.

14.27.5. Important distinguishing aspects and dynamics

- In a spread sheet pivot table totals are generally not provided, rather the pivot table computes the totals as needed. However, in this example the totals are provided.
- Alternatively, this information could have been modelled as all concepts, rather than using the [Axis] to express the business segment and geographic area. However doing so would make the pivot table less usable. Note the *Class* business use case as contrast to the *Roll Up* business use case.
- Notice that there are three sections of this report: totals, a business segment breakdown, and a geographic area breakdown. Each of these is articulated in different [Table]s of information. Alternatively, one single [Table] could have been used; however, it would be less clear that two breakdowns were required.
- Notice that the [Table]s are not in the desired order in the relations rendering. This is because the software application is using the alphabetic order of the label of each network to determine the ordering or sequencing of the network. Note the Flow business use case in contrast which shows how to add an ordering of networks and/or [Table]s.

14.28. Grouped report

The *Grouped Report* business use case is a variation of the *Compound Fact* use case which uses a large number of [Axis]. As such, what this use case shows is complexity in the area of [Axis]. It also introduces the notion of groupings or levels within a report which summarizes information. The metapattern of this business use case is the **hierarchy**.

14.28.1. Visual Example

Sample Company For Period Ending December 31, 2010 Investments

	Shares	Description	Moody's Rating	S & P Rating	Value
SHORT-TER	M INVESTME	NTS			
Singapore					
SGD					
	Software				
		Microcom			
	11,500	11500000	A1	A+	12,993,736
	5,000	5000000	Aa3	A-	5,662,500
	Telecoms				
		Cable and Wireless Optus Finance			
	5,800	5800000	A2	A+	6,857,321
				Total Singapore	25,513,557
			Total Sh	nort-Term Investments	25,513,557
				Total Investments	25,513,557

14.28.2. Basic Automated Semantic Rendering

Component:	Component: (Network and Table)		
Network	Portfolio of Investments (http://www.xbrlsite.com/DigitalFinancialReporting/BusinessUseCase/GroupedReport/PortfolioOfInvestments)		
Table	Portfolio of Investments [Table]	Portfolio of Investments [Table]	
Slicers (applie	s to each fact value in each table cell)		
Reporting Ent	Reporting Entity [Axis] SAMP (http://www.SampleCompany.com)		
Period [Axis]		2010-12-31	
Legal Entity [Axis]		Consolidated Entity [Member]	

		Investment Type [Axis]			
		Telecoms [Member]	Software [Member]	All Types	[Member]
		Investment Country [Axis]	Investment Country [Axis]	Investment C	Country [Axis]
		Singapore [Member]	Singapore [Member]	Singapore [Member]	All Countries [Member]
		Investment Entity [Axis]	Investment Entity [Axis]	Investment Entity [Axis]	Investment Entity [Axis]
Investment Term [Axis]	Investments [Line Items]	Cable and Wireless Optus Finance [Member]	Microcom [Member]	All Entities [Member]	All Entities [Member]
Short-Term Investment	Investment [Hierarchy]				
[Member]	Investment Description	3.00% 3/25/09	3.50% 12/7/04		
	Moody Rating	A2	A1		
	Standard and Poor Rating	A+	A+		
	Investment Shares	5,800,000	11,500,000	22,300,000	22,300,000
	Investment Value, at Cost	6,857,321	12,993,736	25,513,557	25,513,557
All Terms [Member]	Investment [Hierarchy]				
[Member]	Investment Description	İ			
	Moody Rating	Ì			
	Standard and Poor Rating				
	Investment Shares	İ			22,300,000
	Investment Value, at Cost				25,513,557

14.28.3. Report Elements and Model Structure

Component: (Network and Table)	
	Portfolio of Investments (http://www.xbrlsite.com/DigitalFinancialReporting/BusinessUseCase/GroupedReport/PortfolioOfInvestments)
Table	Portfolio of Investments [Table]

#	Label	Report Element Class	Period Type	Balance
1	Portfolio of Investments [Table]	[Table]		
2	Legal Entity [Axis]	[Axis]		
3	Consolidated Entity [Member]	[Member]		
4	Investment Term [Axis]	[Axis]		
5	All Terms [Member]	[Member]		
6	Short-Term Investment [Member]	[Member]		
7	Investment Type [Axis]	[Axis]		
8	All Types [Member]	[Member]		
9	Telecoms [Member]	[Member]		
10	Software [Member]	[Member]		
11	Investment Country [Axis]	[Axis]		
12	All Countries [Member]	[Member]		
13	Singapore [Member]	[Member]		
14	Australia [Member]	[Member]		
15	Investment Entity [Axis]	[Axis]		
16	All Entities [Member]	[Member]		
17	EFIC [Member]	[Member]		
18	Cable and Wireless Optus Finance [Member]	[Member]		
19	Microcom [Member]	[Member]		
20	Investments [Line Items]	[Line Items]		
21	Investment [Hierarchy]	[Abstract]		
22	Investment Description	[Concept] String	As Of	
23	Moody Rating	[Concept] String	As Of	
24	Standard and Poor Rating	[Concept] String	As Of	
25	Investment Shares	[Concept] Shares	As Of	
26	Investment Value, at Cost	[Concept] Monetary	As Of	Debit

14.28.4. Description

The *Grouped Report* business use cases shows that additional characteristics can be provided for an information set in the form of one or more [Axis]. In this use case five [Axis] are used to communicate characteristics of the information set. Other characteristics, such as the ratings in this case, are articulated as concepts within the set of [Line Items]. Where these characteristics are modelled does impact how the information can be used.

Also notice the visualization of the example, consider how the information is grouped. While this business use case shows only a few report rows, there could be a long list of items being reported and multiple grouping levels based on the different [Axis] or even the [Line Items].

14.28.5. Important distinguishing aspects and dynamics

- The *Grouped Report* business use case simply shows a [Table] which has a larger number of [Axis].
- Nothing is really complicated about the use case as compared to other use cases other than the large number of [Axis] which are used to characterize the investment information.



- A choice needs to be made in many cases to determine if information should be modelled as an [Axis] or as a concept within the set of [Line Items]. For example, in this case the Moody Rating and Standard and Poor Rating might have been modelled as an [Axis]. Likewise the Investment Description could have been modelled as an [Axis].
- Monetary values such as Investment Shares and Investment Value, at Cost would never be modelled as an [Axis] generally.
- Where things are modelled impacts how they are treated by a rendering application.

14.29. Flow

The *Flow* business use case models how to articulate the sequence or ordering of information within a financial report. Notice that this visual example has three sections: Total Sales, Sales by Business Segment, and Sales by Geographic Area. Flow has to do with putting these three components into the appropriate order or sequence. Any metapattern can have flow. The metapattern of this business use case is the **hierarchy**.

14.29.1. Visual Example

Sample Company For Period Ending December 31, (thousands of dollars)

_	2010	2009	2008
Sales, all Business Segments, all Geographic Areas	32,038	35,805	32,465
Breakdown by Business Segment: Pharmaceuticals Generics	20,181 2.433	18,150 1.973	15,275 1,823
Consumer Health Other Segments	6,675 2,749	6,514 9,168	5,752 9,615
Breakdown by Geographic Area:	10 214	12.640	10 127
North America Europe Asia Other regions	10,214 11,901 5,639 4,284	12,649 10,374 4,371 8,411	10,137 10,396 3,210 8,722

14.29.2. Basic Automated Semantic Rendering

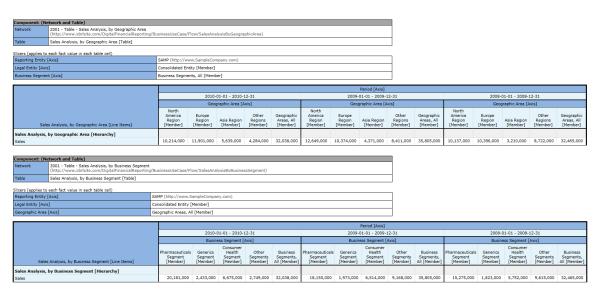
Component: (Ne	Component: (Network and Table)	
Network	1001 - Table - Sales Analysis, Summary (http://www.xbrlsite.com/DigitalFinancialReporting/BusinessUseCase/Flow/SalesAnalysisSummary)	
Table	Sales Analysis, Summary [Table]	

Slicers (applies to each fact value in each table cell)

	Silicers (applies to each ract value in each table cell)		
	Reporting Entity [Axis]	SAMP (http://www.SampleCompany.com)	
Legal Entity [Axis] Consolidated Entity [Member]		Consolidated Entity [Member]	
	Business Segment [Axis]	Business Segments, All [Member]	
	Geographic Area [Axis]	Geographic Areas, All [Member]	

		Period [Axis]	
Sales Analysis, Summary [Line Items]	2010-01-01 - 2010-12-31	2009-01-01 - 2009-12-31	2008-01-01 - 2008-12-31
Sales Analysis, Summary [Hierarchy]			
Sales	32,038,000	35,805,000	32,465,000





14.29.3. Report Elements and Model Structure

Component: (Network and Table)	
Network	1001 - Table - Sales Analysis, Summary (http://www.xbrlsite.com/DigitalFinancialReporting/BusinessUseCase/Flow/SalesAnalysisSummary)
Table	Sales Analysis, Summary [Table]

#	Label	Report Element Class	Period Type	Balance
1	Sales Analysis, Summary [Table]	[Table]		
2	Legal Entity [Axis]	[Axis]		
3	Consolidated Entity [Member]	[Member]		
4	Business Segment [Axis]	[Axis]		
5	Business Segments, All [Member]	[Member]		
6	Geographic Area [Axis]	[Axis]		
7	Geographic Areas, All [Member]	[Member]		
8	Sales Analysis, Summary [Line Items]	[Line Items]		
9	Sales Analysis, Summary [Hierarchy]	[Abstract]		
10	Sales	[Concept] Monetary	For Period	Credit

Component: (Network and Table)		
Network	2001 - Table - Sales Analysis, by Geographic Area (http://www.xbrlsite.com/DigitalFinancialReporting/BusinessUseCase/Flow/SalesAnalysisByGeographicArea)	
Table	Sales Analysis, by Geographic Area [Table]	

#	Label	Report Element Class	Period Type	Balance
1	Sales Analysis, by Geographic Area [Table]	[Table]		
2	Legal Entity [Axis]	[Axis]		
3	Consolidated Entity [Member]	[Member]		
4	Business Segment [Axis]	[Axis]		
5	Business Segments, All [Member]	[Member]		
6	Geographic Area [Axis]	[Axis]		
7	Geographic Areas, All [Member]	[Member]		
8	North America Region [Member]	[Member]		
9	Europe Region [Member]	[Member]		
10	Asia Region [Member]	[Member]		
11	Other Regions [Member]	[Member]		
12	Sales Analysis, by Geographic Area [Line Items]	[Line Items]		
13	Sales Analysis, by Geographic Area [Hierarchy]	[Abstract]		
14	Sales	[Concept] Monetary	For Period	Credit

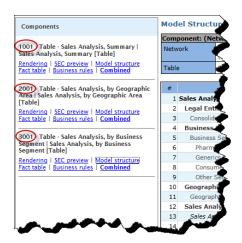


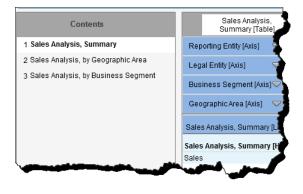


#	Label	Report Element Class	Period Type	Balance
1	Sales Analysis, by Business Segment [Table]	[Table]		
2	Legal Entity [Axis]	[Axis]		
3	Consolidated Entity [Member]	[Member]		
4	Business Segment [Axis]	[Axis]		
5	Business Segments, All [Member]	[Member]		
6	Pharmaceuticals Segment [Member]	[Member]		
7	Generics Segment [Member]	[Member]		
8	Consumer Health Segment [Member]	[Member]		
9	Other Segments [Member]	[Member]		
10	Geographic Area [Axis]	[Axis]		
11	Geographic Areas, All [Member]	[Member]		
12	Sales Analysis, by Business Segment [Line Items]	[Line Items]		
13	Sales Analysis, by Business Segment [Hierarchy]	[Abstract]		
14	Sales	[Concept] Monetary	For Period	Credit

14.29.4. Description

The *Flow* business use case shows that financial reports have an ordering or sequence and how to model that sequence within an XBRL taxonomy by creating what amounts to a hierarchy of [Tables]. Here you see two software applications which order the three networks used within this business use case:





Expressing the hierarchy of [Table]s can be achieved using a number of approaches. Using the diagram below we will explain the approaches.



The first approach is used by the US GAAP Taxonomy and ordering is achieved by adding a "number" and a "category" to the network label. In the screen shot above see the last three items within the presentation view tree. A software application can order the networks using the numbers, the category, or any part of the label.

The second approach, used in this example, shows a hierarchy of [Table]s expressed within the presentation view within a separate network. You can see this above in the "Report Flow" network. In this example the list is flat, but it could be a nested hierarchy.

The screen shot below shows an application which utilizes the network numbers to organize the networks. The selected network and [Table] is selected on the left and displayed in the software application on the right.

14.29.5. Important distinguishing aspects and dynamics

- There is no standard approach to expressing the specific ordering or sequence within a financial report.
- One approach to expressing an ordering or sequence is to add a number and category to a network label. If the application supports that approach, the number and category can be used for ordering/sequencing.
- Another approach is to express a hierarchy of [Table]s within the presentation or definition linkbase. This is not a standard approach, however it can be effective and provide a nested hierarchy. Note that networks cannot be nested.
- Contrast this use case with the *Pivot Table* use case which does not provide the flow information, but all other aspects of the use case are the same.

14.30. Restatement

The *Restatement* business use case shows how to model an accounting restatement due to a change in accounting policy or the correction of an error. It also points out the notion of integrity between [Table]s within a financial report. The metapattern of this business use case is the **roll forward**, **roll up**, and **adjustment**.

14.30.1. Visual Example

Sample Company December 31, (dollars)

_	2010	2009 (Restated)	
Balance Sheet (Fragment)			
Equity			
Common Stock	5,000,000	5,000,000	
Retained Earnings	10,850,000	10,700,000	
	15,850,000	15,700,000	
Total Equity			
_	2010	2009 (Restated)	2009 (Previous)
Income Statement (Fragment)			
Gross Sales	1,500,000	1,000,000	1,000,000
Cost of sales	500,000	200,000	200,000
Net sales	1,000,000	800,000	800,000
Operating expenses (*)	350,000	1,600,000	300,000
50 1455 AND WASHINGTON	650,000	-800,000	500,000
Net income (loss)			
Statement of Changes in Equity (Fragment)	2010	2009	
Prior Period Adjustment			
Retained Earnings (Accumulated Losses), Originally Stated 2009	12,000,000		
Change in Accounting Policy Correction of an Error	0 -1,300,000		
Retained Earnings (Accumulated Losses), Restated			
2009 Beginning Balance	10,700,000		
Changes in Equity			
Retained Earnings (Accumulated Losses), Beginning Balance	10,700,000	12,300,000	
Net Income (Loss)	650,000	-800,000	
Dividends	-500,000	-800,000	
Retained Earnings (Accumulated Losses), Ending Balance	10,850,000	10,700,000	



14.30.2. Basic Automated Semantic Rendering

Component: (Ne	Component: (Network and Table)	
Network	Balance Sheet (Fragnent) (http://www.xbrlsite.com/DigitalFinancialReporting/BusinessUseCase/Restatement/BalanceSheet) Balance Sheet [Table]	
Table		

Slicers (applies to each fact value in each table cell)

Reporting Entity [Axis] SAMP (http://www.SampleCompany.com)

Legal Entity [Axis] Consolidated Entity [Member]

	Report Date	Period [Axis]		
Balance Sheet [Line Items]	[Axis]	2010-12-31	2009-12-31	2008-12-31
Common Stock	Reported March 18, 2011 [Member]	5,000,000	5,000,000	
Retained Earnings (Accumulated Losses)	Reported March 18, 2011 [Member]	10,850,000	10,700,000	12,300,000
Equity	Reported March 18, 2011 [Member]	15,850,000	15,700,000	

Component:	omponent: (Network and Table)				
Network	Income Statement (Fragnent) (http://www.xbrlsite.com/DigitalFinancialReporting/BusinessUseCase/Restatement/IncomeStatement)				
Table	Income Statement [Table]	income Statement [Table]			
Slicers (applies	Slicers (applies to each fact value in each table cell)				
Reporting Ent	Reporting Entity [Axis] SAMP (http://www.SampleCompany.com)				
Legal Entity [Axis]	Consolidated Entity [Member]			

		Period	Period [Axis]		
Income Statement [Line Items]	Report Date [Axis]	2010-01-01 - 2010-12-31	2009-01-01 - 2009-12-31		
Sales, Gross	Reported March 18, 2011 [Member]	1,500,000	1,000,000		
Cost of Sales	Reported March 18, 2011 [Member]	500,000	200,000		
Sales, Net	Reported March 21, 2010 [Member]		800,000		
	Reported March 18, 2011 [Member]	1,000,000	800,000		
Operating Expenses	Reported March 21, 2010 [Member]		300,000		
	Reported March 18, 2011 [Member]	350,000	1,600,000		
Net Income (Loss)	March 21,		500,000		
	2010 [Member]				
	Reported March 18, 2011 [Member]	650,000	(800,000)		



DIGITAL FINANCIAL REPORTING (DRAFT VERSION .8)

Component: (Network and Table)		
	Prior Period Adjustments (http://www.xbrlsite.com/DigitalFinancialReporting/BusinessUseCase/Restatement/PriorPeriodAdjustments)	
Table	Prior Period Adjustments [Table]	

Slicers (applies to each fact value in each table cell)

Reporting Entity [Axis]	SAMP (http://www.SampleCompany.com)
Legal Entity [Axis]	Consolidated Entity [Member]

	Report Date	Period [Axis]			
Prior Period Adjustments [Line Items]	[Axis]	2010-12-31	2009-12-31	2008-12-31	
Retained Earnings (Accumulated Losses), Origionally Stated	Reported March 21, 2010 [Member]		12,000,000		
Changes in Accounting Policy	Reported March 18, 2011 [Member]		0		
Correction of an Error	Reported March 18, 2011 [Member]		(1,300,000)		
Changes in Accounting Policy	Reported March 18, 2011 [Member]		(1,300,000)		
Retained Earnings (Accumulated Losses), Restated	Reported March 18, 2011 [Member]	10,850,000	10,700,000	12,300,000	

Component: (Network and Table)		
Network	twork Changes in Equity (Fragment) (http://www.xbrlsite.com/DigitalFinancialReporting/BusinessUseCase/Restatement/ChangesInEqui	
Table	Changes in Equity [Table]	

Slicers (applies to each fact value in each table cell)

Reporting Entity [Axis]		SAMP (http://www.SampleCompany.com)		
	Legal Entity [Axis]	Consolidated Entity [Member]		

		Period	[Axis]
Changes in Equity [Line Items]	Report Date [Axis]	2010-01-01 - 2010-12-31	2009-01-01 - 2009-12-31
Retained Earnings (Accumulated Losses), Beginning Balance	Reported March 21, 2010 [Member]	12,000,000	
	Reported March 18, 2011 [Member]	10,700,000	12,300,000
Net Income (Loss)	Reported March 21, 2010 [Member]		500,000
	Reported March 18, 2011 [Member]	650,000	(800,000)
Dividends Paid	Reported March 18, 2011 [Member]	500,000	800,000
Retained Earnings (Accumulated Losses), Period Increase (Decrease), Total	Reported March 18, 2011 [Member]	150,000	(1,600,000)
Retained Earnings (Accumulated Losses), Ending Balance	Reported March 21, 2010 [Member]		12,000,000
	Reported March 18, 2011 [Member]	10,850,000	10,700,000



14.30.3. Report Elements and Model Structure

Component: (Network and Table)		
Network	Balance Sheet (Fragnent) (http://www.xbrlsite.com/DigitalFinancialReporting/BusinessUseCase/Restatement/BalanceSheet)	
Table	Balance Sheet [Table]	

#	Label	Report Element Class	Period Type	Balance
1	Balance Sheet [Table]	[Table]		
2	Legal Entity [Axis]	[Axis]		
3	Consolidated Entity [Member]	[Member]		
4	Report Date [Axis]	[Axis]		
5	Report Dates, All [Member]	[Member]		
6	Reported March 18, 2011 [Member]	[Member]		
7	Balance Sheet [Line Items]	[Line Items]		
8	Equity [Roll Up]	[Abstract]		
9	Common Stock	[Concept] Monetary	As Of	Credit
10	Retained Earnings (Accumulated Losses)	[Concept] Monetary	As Of	Credit
11	Equity	[Concept] Monetary	As Of	Credit

Component: (Network and Table)			
	Income Statement (Fragnent) (http://www.xbrlsite.com/DigitalFinancialReporting/BusinessUseCase/Restatement/IncomeStatement)		
Table	Income Statement [Table]		

#	Label	Report Element Class	Period Type	Balance
1	Income Statement [Table]	[Table]		
2	Legal Entity [Axis]	[Axis]		
3	Consolidated Entity [Member]	[Member]		
4	Report Date [Axis]	[Axis]		
5	Report Dates, All [Member]	[Member]		
6	Reported March 21, 2010 [Member]	[Member]		
7	Reported March 18, 2011 [Member]	[Member]		
8	Income Statement [Line Items]	[Line Items]		
9	Net Income (Loss) [Roll Up]	[Abstract]		
10	Sales, Net [Roll Up]	[Abstract]		
11	Sales, Gross	[Concept] Monetary	For Period	Credit
12	Cost of Sales	[Concept] Monetary	For Period	Debit
13	Sales, Net	[Concept] Monetary	For Period	Credit
14	Operating Expenses	[Concept] Monetary	For Period	Debit
15	Net Income (Loss)	[Concept] Monetary	For Period	Credit

Component: (Network and Table)			
	Changes in Equity (Fragment) (http://www.xbrlsite.com/DigitalFinancialReporting/BusinessUseCase/Restatement/ChangesInEquity)		
Table	Changes in Equity [Table]		

#	Label	Report Element Class	Period Type	Balance
1	Changes in Equity [Table]	[Table]		
2	Legal Entity [Axis]	[Axis]		
3	Consolidated Entity [Member]	[Member]		
4	Report Date [Axis]	[Axis]		
5	Report Dates, All [Member]	[Member]		
6	Reported March 21, 2010 [Member]	[Member]		
7	Reported March 18, 2011 [Member]	[Member]		
8	Changes in Equity [Line Items]	[Line Items]		
9	Changes in Retained Earnings [Roll Forward]	[Abstract]		
10	Retained Earnings (Accumulated Losses), Beginning Balance	[Concept] Monetary	As Of	Credit
11	Retained Earnings (Accumulated Losses), Period Increase (Decrease), Total [Roll Up]	[Abstract]		
12	Net Income (Loss)	[Concept] Monetary	For Period	Credit
13	Dividends Paid	[Concept] Monetary	For Period	Debit
14	Retained Earnings (Accumulated Losses), Period Increase (Decrease), Total	[Concept] Monetary	For Period	Credit
15	Retained Earnings (Accumulated Losses), Ending Balance	[Concept] Monetary	As Of	Credit

Component: (Network and Table)		
Network	Prior Period Adjustments (http://www.xbrlsite.com/DigitalFinancialReporting/BusinessUseCase/Restatement/PriorPeriodAdjustments)	
Table	Prior Period Adjustments [Table]	

#	Label	Report Element Class	Period Type	Balance
1	Prior Period Adjustments [Table]	[Table]		
2	Legal Entity [Axis]	[Axis]		
3	Consolidated Entity [Member]	[Member]		
4	Report Date [Axis]	[Axis]		
5	Report Dates, All [Member]	[Member]		
6	Reported March 21, 2010 [Member]	[Member]		
7	Reported March 18, 2011 [Member]	[Member]		
8	Prior Period Adjustments [Line Items]	[Line Items]		
9	Prior Period Adjustments to Retained Earnings [Adjustment]	[Abstract]		
10	Retained Earnings (Accumulated Losses), Origionally Stated	[Concept] Monetary	As Of	Credit
11	Prior Period Adjustments, Period Increase (Decrease), Total [Roll Up]	[Abstract]		
12	Changes in Accounting Policy	[Concept] Monetary	As Of	Credit
13	Correction of an Error	[Concept] Monetary	As Of	Credit
14	Changes in Accounting Policy	[Concept] Monetary	As Of	Credit
15	Retained Earnings (Accumulated Losses), Restated	[Concept] Monetary	As Of	Credit

14.30.4. Description

The *Restatement* business use case shows how to model an accounting restatement due to a prior period adjustment from an accounting error or a change in accounting policy. Also see the *Adjustment* business use case.

Note that the balance sheet is a *Roll Up* as is the income statement. The prior period adjustment is an *Adjustment* metapattern. The changes in equity is a *Roll Forward*.

The different [Table]s need to properly relate to one another just like components of a financial statement need to properly tie together.



14.30.5. Important distinguishing aspects and dynamics

- Note the Roll Up, Roll Forward, and Adjustment business use cases for detailed information about those specific use cases. This use case points out how different components relate to one another.
- Notice how the moving pieces of this use case impact multiple areas of the financial report shown in this use case namely the balance sheet, income statement, and the statement of changes in equity.
- The [Axis] used on each [Table] are logical and the different facts properly relate to one another.
- Facts in the XBRL instance are not duplicated. Net Income (Loss), for example, appears on both the income statement and in the statement of changes in equity. Likewise, Retained Earnings (Accumulated Losses) appears on both the balance sheet and the statement of changes in equity.
- The prior period adjustment and the changes in equity are modelled in separate [Table]s because the renderings have different slicers, columns and rows.

14.31. Reissue report

The *Reissue Report* business use case shows how to model the reissuance of a financial report for, say, a report which has been recalled because of a major problem. The metapattern of this business use case is the **roll up**. However, any metapattern could be reissued.

Additionally, the business rule used with this report models a roll up which makes use of a tolerance. (This has nothing to do with the reissue use case, the business rule simply shows that use case.)

14.31.1. Visual Example

Sample Company December 31, (thousands of dollars)

	2010	2009
ASSETS		
Property, Plant, and Equipment, Net		
Land	5,347	1,147
Buildings, Net	244,508	366,375
Furniture and Fixtures, Net	34,457	34,457
Computer Equipment, Net	4,169	5,313
Other Property, Plant, and Equipment, Net	6,702	6,149
Property, Plant and Equipment, Net, Total	295,183	413,441

COMMENTS:

Component: (Network and Table)

14.31.2. Basic Automated Semantic Rendering

Network	Property, Plant, and Equipment, by Component (http://www.xbrlsite.com/DigitalFinancialReporting/BusinessUseCase/ReissueReport/PropertyPlantAndEquipmentByComponent)		
Table	Property, Plant and Equipment, by Component [Tab	Property, Plant and Equipment, by Component [Table]	
Slicers (applies t	o each fact value in each table cell)		
Reporting Entity	/ [Axis]	SAMP (http://www.SampleCompany.com)	
Legal Entity [Axis]		Consolidated Entity [Member]	
Report Date [Axis]		Report as Of March 2, 2011 [Member]	

	Period [Axis]	
Property, Plant and Equipment, by Component [Line Items]	2010-12-31 2009-12-3	
Property, Plant and Equipment, Net [Roll Up]		
Land	5,347,000 ¹	1,147,000
Buildings, Net	244,508,000 ¹	366,375,000
Furniture and Fixtures, Net	34,457,000	34,457,000
Computer Equipment, Net	4,169,000	5,313,000
Other Property, Plant and Equipment, Net	6,702,000	6,149,000
Property, Plant and Equipment, Net, Total	295,183,000	413,441,000

^{1:} Reissued Report: This report has been reissued on March 2, 2011. The originnal report issued on February 15, 2011 contained a significant mistake.



^{(*).} Reissued Report: This report has been reissued on March 2, 2011. The originnal report issued on February 15, 2011 contained a significant mistake. The amounts for Land and Building were transposed.

14.31.3. Report Elements and Model Structure

Component: (Ne	etwork and Table)
	Property, Plant, and Equipment, by Component (http://www.xbrlsite.com/DigitalFinancialReporting/BusinessUseCase/ReissueReport/PropertyPlantAndEquipmentByCor
Table	Property, Plant and Equipment, by Component [Table]

#	Label	Report Element Class	Period Type	Balance
1	Property, Plant and Equipment, by Component [Table]	[Table]		
2	Legal Entity [Axis]	[Axis]		
3	Consolidated Entity [Member]	[Member]		
4	Report Date [Axis]	[Axis]		
5	Report as Of March 2, 2011 [Member]	[Member]		
6	Property, Plant and Equipment, by Component [Line Items]	[Line Items]		
7	Property, Plant and Equipment, Net [Roll Up]	[Abstract]		
8	Land	[Concept] Monetary	As Of	Debit
9	Buildings, Net	[Concept] Monetary	As Of	Debit
10	Furniture and Fixtures, Net	[Concept] Monetary	As Of	Debit
11	Computer Equipment, Net	[Concept] Monetary	As Of	Debit
12	Other Property, Plant and Equipment, Net	[Concept] Monetary	As Of	Debit
13	Property, Plant and Equipment, Net, Total	[Concept] Monetary	As Of	Debit

14.31.4. Description

The *Reissue Report* business use case shows how the reissuance of a financial statement can be handled. Note that the entire report is reissued, resulting in a different report date. The report date is indicated by the Report Date [Axis]. This fragment is in all other ways the same as the Roll Up business use case.

14.31.5. Important distinguishing aspects and dynamics

- Sometimes major errors are made and reports need to be reissued.
- Different regulators or others using reports could have different mechanisms for determining a report date. One common mechanism is the date of the audit, review, or compilation if a third party public accountant is involved with the report. For the SEC the filing date may be considered the report date.
- If data exists within a system used for analysis and a report is reissued, that system needs to be updated with the new report and could contain both the original report and the reissued report. Those reports need to be differentiated in some way.
- Note the business rule which models the roll up business rule using a tolerance.

14.32. Reclassification

The *Reclassification* business use case shows how to model information which was reported with one classification in a prior period but has been reclassified in a current report to conform to the current classifications of the information. This is a classic accounting reclassification of, say, balance sheet line items. The metapattern of this business use case is the **roll up**. However, any metapattern could be reissued.

14.32.1. Visual Example

Sample Company December 31, (thousands of dollars)

_	2010	2009	Previous 2009
ASSETS			
Property, Plant, and Equipment, Net			
Land	5,347	1,147	1,147
Buildings, Net	244,508	366,375	366,375
Furniture and Fixtures, Net	34,457	34,457	34,457
Computer Equipment, Net	4,169	5,313	
Other Property, Plant, and Equipment, Net	6,702	6,149	11,462
Property, Plant and Equipment, Net, Total	295,183	413,441	413,441

POLICIES:

Prior period classifications have been restated to conform to current period classifications

14.32.2. Basic Automated Semantic Rendering

Component:	(Network and Table)			
Network	Property, Plant, and Equipment, by Component (http://www.xbrlsite.com/DigitalFinancialReportin	Property, Plant, and Equipment, by Component (http://www.xbrlsite.com/DigitalFinancialReporting/BusinessUseCase/Reclassification/PropertyPlantAndl		
Table	Property, Plant and Equipment, by Component [Tal	Property, Plant and Equipment, by Component [Table]		
Slicers (applie	es to each fact value in each table cell)			
Reporting En	Reporting Entity [Axis] SAMP (http://www.SampleCompany.com)			
Legal Entity [Axis] Consolidated Entity [Member]				

	Report Date	Period	[Axis]
Property, Plant and Equipment, by Component [Line Items]	[Axis]	2010-12-31	2009-12-31
Land	Report as of March 2, 2011 [Member]	5,347,000	1,147,000
Buildings, Net	Report as of March 2, 2011 [Member]	244,508,000	366,375,000
Furniture and Fixtures, Net	Report as of March 2, 2011 [Member]	34,457,000	34,457,000
Computer Equipment, Net	Report as of March 2, 2011 [Member]	4,169,000	5,313,000
Other Property, Plant and Equipment, Net	Report as of March 2, 2011 [Member]	6,702,000	6,149,000
	Report as of February 18, 2010 [Member]		11,462,000
Property, Plant and Equipment, Net, Total	Report as of March 2, 2011 [Member]	295,183,000	413,441,000



14.32.3. Report Elements and Model Structure

Component: (Ne	etwork and Table)
	Property, Plant, and Equipment, by Component (http://www.xbrlsite.com/DigitalFinancialReporting/BusinessUseCase/Reclassification/PropertyPlantAndEquipmentByCo
Table	Property, Plant and Equipment, by Component [Table]

#	Label	Report Element Class	Period Type	Balance
1	Property, Plant and Equipment, by Component [Table]	[Table]		
2	Legal Entity [Axis]	[Axis]		
3	Consolidated Entity [Member]	[Member]		
4	Report Date [Axis]	[Axis]		
5	Report as of March 2, 2011 [Member]	[Member]		
6	Report as of February 18, 2010 [Member]	[Member]		
7	Property, Plant and Equipment, by Component [Line Items]	[Line Items]		
8	Property, Plant and Equipment, Net [Roll Up]	[Abstract]		
9	Land	[Concept] Monetary	As Of	Debit
10	Buildings, Net	[Concept] Monetary	As Of	Debit
11	Furniture and Fixtures, Net	[Concept] Monetary	As Of	Debit
12	Computer Equipment, Net	[Concept] Monetary	As Of	Debit
13	Other Property, Plant and Equipment, Net	[Concept] Monetary	As Of	Debit
14	Property, Plant and Equipment, Net, Total	[Concept] Monetary	As Of	Debit

14.32.4. Description

The *Reclassification* business use case shows how to handle an accounting type of reclassification. In this case, Other Property, Plant, and Equipment, Net previously reported as \$11,462 in another report is broken out into its components for the prior period 2009 classification in order to be consistent with the current period 2010 classification. All other aspects of this business use case are the same as the Roll Up business use case.

14.32.5. Important distinguishing aspects and dynamics

- Reported information is sometimes reclassified to match current classifications. These reclassifications must be identifiable in some way.
- A footnote could be used to identify reclassifications.
- The fact that a reclassification has been made to line items of a financial report is generally required, this use case is not attempting to address this requirement. This use case focuses on the dynamics of the facts which have been reported which have been reclassified.
- The amounts of reclassified line items is not required to be disclosed (the lighter grey facts), they are provided here only to help understand the use case.

14.33. Reason not reported

The *Reason Not Reported* business use case show how to model information which is required to be reported, but for some reason the information is not available, unknown, or for some other reason cannot be determined and therefore cannot be reported. The metapattern of this business use case is the **hierarchy**.

14.33.1. Visual Example

Sample Company For Period Ending December 31, (thousands of dollars, except number of employees)

	2010	2009	2008	2007	2006
Sales, Net	1,500	1,400	1,300	1,200	1,100
Income (Loss) from Continuing Operations	500	400	300	200	100
Net Income (Loss)	51	41	31	21	11
Cash Flow Provided by (used in) Operating Activities, Net	5,000	4,000	3,000	2,000	1,000
Capital Additions	1,000	650	550	450	350
Average Number of Employees (*****)	300	290	280	270	****

^{(******).} Reason Not Reported: This information unavailable and therefore has not been reported.

14.33.2. Metapattern(s) employed

Network	Financial Highlights (http://www.xbrlsite.com/DigitalFinancialReporting/BusinessUseCases/ReasonNotReported/FinancialHighlights)
Table	Financial Highlights [Table]

Reporting Entity [Axis]	SAMP (http://www.SampleCompany.com)
Legal Entity [Axis]	Consolidated Entity [Member]

			Period [Axis]		
Financial Highlights [Line Items]	2010-01-01 - 2010-12-31	2009-01-01 - 2009-12-31	2008-01-01 - 2008-12-31	2007-01-01 - 2007-12-31	2006-01-01 - 2006-12-31
Financial Highlights [Hierarchy]					
Sales, Net	1,500,000	1,400,000	1,300,000	1,200,000	1,100,000
Income (Loss) from Continuing Operations	500,000	400,000	300,000	200,000	100,000
Net Income (Loss)	51,000	41,000	31,000	21,000	11,000
Cash Flow Provided by (Used in) Operating Activities, Net	5,000,000	4,000,000	3,000,000	2,000,000	1,000,000
Capital Additions	1,000,000	650,000	550,000	450,000	350,000
Average Number of Employees	300	290	280	270	xsi:nil1

 $^{{\}bf 1: Reason\ Not\ Reported:\ This\ information\ unavailable\ and\ therefore\ has\ not\ been\ reported.}$



14.33.3. Report Elements and Model Structure

Component: (Network and Table)	
	Financial Highlights (http://www.xbrlsite.com/DigitalFinancialReporting/BusinessUseCases/ReasonNotReported/FinancialHighlights)
Table	Financial Highlights [Table]

#	Label	Report Element Class	Period Type	Balance
1	Financial Highlights [Table]	[Table]		
2	Legal Entity [Axis]	[Axis]		
3	Consolidated Entity [Member]	[Member]		
4	Financial Highlights [Line Items]	[Line Items]		
5	Financial Highlights [Hierarchy]	[Abstract]		
6	Sales, Net	[Concept] Monetary	For Period	Credit
7	Income (Loss) from Continuing Operations	[Concept] Monetary	For Period	Credit
8	Net Income (Loss)	[Concept] Monetary	For Period	Credit
9	Cash Flow Provided by (Used in) Operating Activities, Net	[Concept] Monetary	For Period	Debit
10	Capital Additions	[Concept] Monetary	For Period	Debit
11	Average Number of Employees	[Concept] Decimal	For Period	

14.33.4. Description

The Reason Not Reported business use case shows how sometimes information for a fact might not be reportable. This is different than (a) actually reporting a value such as zero or (b) not providing the fact at all. Rather, in this use case a fact is reported but the fact has a NIL attribute value. There could be a variety of reasons as to why a NIL value was reported such as the information is unknown, the information is unavailable, the information is required to be reported by it is not applicable, or some other reason. An XBRL footnote is used to articulate the specific reason a NIL value was reported.

14.33.5. Important distinguishing aspects and dynamics

- Someone counted 14 different reasons why a fact might be reported as NIL.
- A footnote is used to provide details as to why the information was not reported. Standardized categories or reasons could be created to make the footnote more useful.

14.34. Non financial information

The Non-Financial Information business use case is really nothing new, rather it makes the point that the business use cases cover not just financial information, but rather any information: financial or non-financial. This business use case is created using Lorem Ipsum (http://www.lipsum.com/) dummy text.

14.34.1. Visual Example

Lorem Ipsum Dolor Sit Amet December 31, 2010

Fringilla Feugiat Magna	Pellentesque Habitant	MaurisTincidunt	Metus Viverra	Suspendisse
	Morbi Tristique	Cursus	Sollicitudin	Vestibulum Augue
pattern:CurabiturPortaDapibusMember pattern:AeneanConvallisSemMember	1,000	1,000	1,000	1,000
	1,000	1,000	1,000	1,000
pattern:MalesuadaFamesMember	2,000	2,000	2,000	2,000

14.34.2. Basic Automated Semantic Rendering

Component: (Network and Table)					
Network	Risus Convallis Placerat (http://www.xbrlsite.com/DigitalFinancialReporting/BusinessUseCase/NonFinancialInformation/RisusConvallisPlacerat)				
Table	Risus Convallis Placerat [Table]				
Slicers (applies to each fact value in each table cell)					
Reporting Entity [Axis]		SAMP (http://www.SampleCompany.com)			
Period [Axis]		2010-01-01 - 2010-12-31			
Litora Torquent [Axis]		Curabitur Fermentum Mattis [Member]			

	Malesuada Fames [Axis]		
Risus Convallis Placerat [Line Items]	Curabitur Porta Dapibus [Member]	Aenean Convallis Sem [Member]	Malesuada Fames [Member]
Fringilla Feugiat Magna [Hierarchy]			
Pellentesque Habitant Morbi Tristique	1,000	1,000	2,000
MaurisTincidunt Cursus	1,000	1,000	2,000
Metus Viverra Sollicitudin	1,000	1,000	2,000
Suspendisse Vestibulum Augue	1,000	1,000	2,000

14.34.3. Report Elements and Model Structure

Con	Component: (Network and Table)			
Net		Risus Convallis Placerat (http://www.xbrlsite.com/DigitalFinancialReporting/BusinessUseCase/NonFinancialInformation/RisusConvallisPlacerat)		
Tab	le	Risus Convallis Placerat [Table]		

#	Label	Report Element Class	Period Type	Balance
1	Risus Convallis Placerat [Table]	[Table]		
2	Litora Torquent [Axis]	[Axis]		
3	Curabitur Fermentum Mattis [Member]	[Member]		
4	Malesuada Fames [Axis]	[Axis]		
5	Malesuada Fames [Member]	[Member]		
6	Curabitur Porta Dapibus [Member]	[Member]		
7	Aenean Convallis Sem [Member]	[Member]		
8	Risus Convallis Placerat [Line Items]	[Line Items]		
9	Fringilla Feugiat Magna [Hierarchy]	[Abstract]		
10	Pellentesque Habitant Morbi Tristique	[Concept] Monetary	For Period	
11	MaurisTincidunt Cursus	[Concept] Monetary	For Period	
12	Metus Viverra Sollicitudin	[Concept] Monetary	For Period	
13	Suspendisse Vestibulum Augue	[Concept] Monetary	For Period	

14.34.4. Description

The Non-Financial Information business use case is Simple Compound Fact business use case modelled with meaningless dummy placeholder text. The point is to show that there is nothing special necessary to model non-financial information in XBRL. Any non-financial use case can be modelled as the financial reporting examples shown. Information is simply text and numbers; whether it is financial or non-financial is not a consideration really.

14.34.5. Important distinguishing aspects and dynamics

- This use case shows that there is no difference between modelling financial and non-financial information. Both are numbers and text used within a specific business domain.
- You can look at any of these business use cases and ignore the actual text you see and focus on the patterns and semantics of the relations which is more the focus of the business use cases.