1. Member Arrangement Pattern Examples

This section provides examples for specific member arrangement patterns[1].
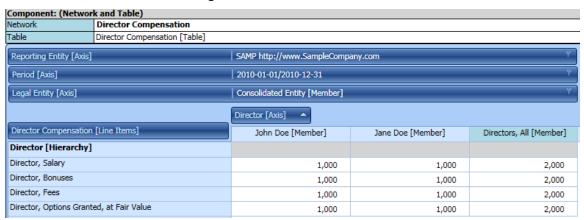
1.1. Whole-part

A *whole-part* member arrangement pattern is equivalent in terms of meaning to a roll up. However, rather than being represented using a set of Concepts within a [Line Items], a whole-part member arrangement pattern is represented using the a set of [Member]s of an [Axis].

A whole-part represents something composed exactly of their parts and nothing else; the sum of the parts is equal to the whole. Essentially, a whole-part relation is equivalent to a [Roll Up].

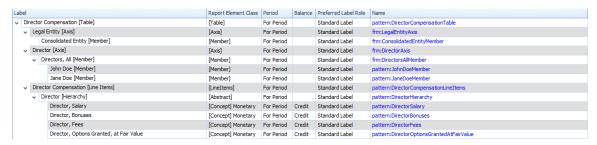### 1.1.1. Visual Example

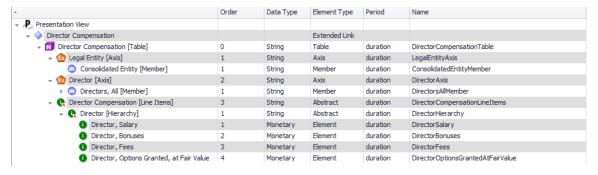### 1.1.2. Basic Automated Rendering

1.1.3. Report Elements and Model Structure

Example 1

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[1] Member arrangement patterns,
http://www.xbrlsite.com/DigitalFinancialReporting/MemberArrangementPatterns/2013-05-15/

Label	Report Element Class	Period	Balance	Preferred Label Role	Name
Director Compensation [Table]	[Table]	For Period		Standard Label	pattern:DirectorCompensationTable
Legal Entity [Axis]	[Axis]	For Period		Standard Label	frm:LegalEntityAxis
Consolidated Entity [Member]	[Member]	For Period		Standard Label	frm:ConsolidatedEntityMember
Director [Axis]	[Axis]	For Period		Standard Label	frm:DirectorAxis
Directors, All [Member]	[Member]	For Period		Standard Label	frm:DirectorsAllMember
John Doe [Member]	[Member]	For Period		Standard Label	pattern:JohnDoeMember
Jane Doe [Member]	[Member]	For Period		Standard Label	pattern:JaneDoeMember
Director Compensation [Line Items]	[LineItems]	For Period		Standard Label	pattern:DirectorCompensationLineItems
Director [Hierarchy]	[Abstract]	For Period		Standard Label	pattern:DirectorHierarchy
Director, Salary	[Concept] Monetary	For Period	Credit	Standard Label	pattern:DirectorSalary
Director, Bonuses	[Concept] Monetary	For Period	Credit	Standard Label	pattern:DirectorBonuses
Director, Fees	[Concept] Monetary	For Period	Credit	Standard Label	pattern:DirectorFees
Director, Options Granted, at Fair Value	[Concept] Monetary	For Period	Credit	Standard Label	pattern:DirectorOptionsGrantedAtFairValue

Example 2

-	Order	Data Type	Element Type	Period	Name
Presentation View					
Director Compensation			Extended Link		
Director Compensation [Table]	0	String	Table	duration	DirectorCompensationTable
Legal Entity [Axis]	1	String	Axis	duration	LegalEntityAxis
Consolidated Entity [Member]	1	String	Member	duration	ConsolidatedEntityMember
Director [Axis]	2	String	Axis	duration	DirectorAxis
Directors, All [Member]	1	String	Member	duration	DirectorsAllMember
Director Compensation [Line Items]	3	String	Abstract	duration	DirectorCompensationLineItems
Director [Hierarchy]	1	String	Abstract	duration	DirectorHierarchy
Director, Salary	1	Monetary	Element	duration	DirectorSalary
Director, Bonuses	2	Monetary	Element	duration	DirectorBonuses
Director, Fees	3	Monetary	Element	duration	DirectorFees
Director, Options Granted, at Fair Value	4	Monetary	Element	duration	DirectorOptionsGrantedAtFairValue

1.1.4. Business Rules

Roll up total = sum of the facts for each [Member] or part of the whole which is also represented using a [Member], generally with [Domain].

1.1.5. Description

The example shows a *Hierarchy* of information about directors which differentiates each director using the Director [Axis]. See the [Hierarchy] concept arrangement pattern for more information.

1.1.6. Extension Points

The following are the logical extension points for a *Hierarchy* metapattern:

- Add new [Axis]
- Add new [Member] to [Axis]
- Add new concepts to [Line Items] of *Hierarchy*

1.2. Is-a

An *Is-a* member arrangement pattern is descriptive and differentiates one type or class of thing from some different type or class of thing; but the things do not add up to a whole.

1.2.1. Visual Example

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.

1.2.2. Basic Automated Rendering

Component: (Network and Table)	
Network	**Subsequent Events**
Table	Subsequent Events [Table]

Reporting Entity [Axis]	SAMP http://www.SampleCompany.com	
Legal Entity [Axis]	Consolidated Entity [Member]	
Period [Axis]	2010-01-01/2010-12-31	
	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.
Subsequent Event, Date	2011-01-16	2011-02-01

1.2.3. Report Elements and Model Structure

Example 1:

Label	Report Element Class	Period	Balance	Preferred Label Role	Name
Subsequent Events [Table]	[Table]	For Period		Standard Label	pattern:SubsequentEventsTable
Legal Entity [Axis]	[Axis]	For Period		Standard Label	frm:LegalEntityAxis
Consolidated Entity [Member]	[Member]	For Period		Standard Label	frm:ConsolidatedEntityMember
Subsequent Event [Axis]	[Axis]	For Period		Standard Label	pattern:SubsequentEventAxis
Uncollected Receivable [Member]	[Member]	For Period		Standard Label	pattern:UncollectedReceivableMember
Purchase of Business [Member]	[Member]	For Period		Standard Label	pattern:PurchaseBusinessMember
Subsequent Event [Line Items]	[LineItems]	For Period		Standard Label	pattern:SubsequentEventLineItems
Subsequent Event [Hierarchy]	[Abstract]	For Period		Standard Label	pattern:SubsequentEventHierarchy
Subsequent Event, Description	[Concept] Text/String	For Period		Standard Label	pattern:SubsequentEventDescription
Subsequent Event, Date	[Concept] Date	For Period		Standard Label	pattern:SubsequentEventDate

Example 2:

-	Element Type	Data Type	Period	Balance	Order	Name
P. Presentation View						
◇ Subsequent Events	Extended Link					
▦ Subsequent Events [Table]	Table	String	duration	na	0	SubsequentEventsTable
⬠ Legal Entity [Axis]	Axis	String	duration	na	1	LegalEntityAxis
ⓜ Consolidated Entity [Member]	Member	String	duration	na	1	ConsolidatedEntityMember
⬠ Subsequent Event [Axis]	Axis	String	duration	na	2	SubsequentEventAxis
ⓘ Uncollected Receivable [Member]	Element	String	duration	na	1	UncollectedReceivableMember
ⓘ Purchase of Business [Member]	Element	String	duration	na	2	PurchaseBusinessMember
ⓒ Subsequent Event [Line Items]	Abstract	String	duration	na	3	SubsequentEventLineItems
ⓒ Subsequent Event [Hierarchy]	Abstract	String	duration	na	1	SubsequentEventHierarchy
ⓘ Subsequent Event, Description	Element	String	duration	na	1	SubsequentEventDescription
ⓘ Subsequent Event, Date	Element	Date	duration	na	2	SubsequentEventDate

1.2.4.Business Rules

None.

1.2.5.Description

The *Is-a* relation in the example above differentiates two different subsequent events that are disclosed. The two subsequent events are identified by the [Member] of the [Axis] "Subsequent Event [Axis]".   The first event is "Uncollected Receivable [Member]", the second is "Purchase of Business [Member]". Each even provides two pieces of information, the "Subsequent Event, Description" and the "Subsequent Event, Date".

A *Roll Up* can always be identified by a software application by its set of XBRL calculations within the XBRL taxonomy.
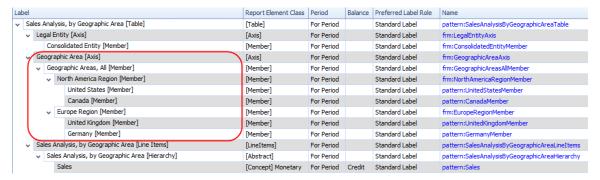
1.2.6.Extension Points

The following are extension points for a *Is-a* member arrangement pattern:

- Add new [Axis]

- Add new [Member] to [Axis]

- Add new concepts to the set of [Line Items] which provide information about the facts being differentiated by the [Member]s, for example in this case perhaps an "Amount" might be added

1.3. Nested whole-part relations

Nested:

Label	Report Element Class	Period	Balance	Preferred Label Role	Name
Sales Analysis, by Geographic Area [Table]	[Table]	For Period		Standard Label	pattern:SalesAnalysisByGeographicAreaTable
Legal Entity [Axis]	[Axis]	For Period		Standard Label	frm:LegalEntityAxis
Consolidated Entity [Member]	[Member]	For Period		Standard Label	frm:ConsolidatedEntityMember
Geographic Area [Axis]	[Axis]	For Period		Standard Label	frm:GeographicAreaAxis
Geographic Areas, All [Member]	[Member]	For Period		Standard Label	frm:GeographicAreasAllMember
North America Region [Member]	[Member]	For Period		Standard Label	frm:NorthAmericaRegionMember
United States [Member]	[Member]	For Period		Standard Label	pattern:UnitedStatesMember
Canada [Member]	[Member]	For Period		Standard Label	pattern:CanadaMember
Europe Region [Member]	[Member]	For Period		Standard Label	frm:EuropeRegionMember
United Kingdom [Member]	[Member]	For Period		Standard Label	pattern:UnitedKingdomMember
Germany [Member]	[Member]	For Period		Standard Label	pattern:GermanyMember
Sales Analysis, by Geographic Area [Line Items]	[LineItems]	For Period		Standard Label	pattern:SalesAnalysisByGeographicAreaLineItems
Sales Analysis, by Geographic Area [Hierarchy]	[Abstract]	For Period		Standard Label	pattern:SalesAnalysisByGeographicAreaHierarchy
Sales	[Concept] Monetary	For Period	Credit	Standard Label	pattern:Sales

Two separate [Axis]:

Label	Report Element Class	Period	Balance	Preferred L…	Name
Sales Analysis, by Geographic Area [Table]	[Table]	For Period		Standard L…	pattern:SalesAnalysisByGeographicAreaTable
Legal Entity [Axis]	[Axis]	For Period		Standard L…	frm:LegalEntityAxis
Consolidated Entity [Member]	[Member]	For Period		Standard L…	frm:ConsolidatedEntityMember
Geographic Area [Axis]	[Axis]	For Period		Standard L…	frm:GeographicAreaAxis
Geographic Areas, All [Member]	[Member]	For Period		Standard L…	frm:GeographicAreasAllMember
North America Region [Member]	[Member]	For Period		Standard L…	frm:NorthAmericaRegionMember
Europe Region [Member]	[Member]	For Period		Standard L…	frm:EuropeRegionMember
Country [Axis]	[Axis]	For Period		Standard L…	pattern:CountryAxis
Countries, All [Member]	[Member]	For Period		Standard L…	pattern:CountriesAllMember
United States [Member]	[Member]	For Period		Standard L…	pattern:UnitedStatesMember
Canada [Member]	[Member]	For Period		Standard L…	pattern:CanadaMember
United Kingdom [Member]	[Member]	For Period		Standard L…	pattern:UnitedKingdomMember
Germany [Member]	[Member]	For Period		Standard L…	pattern:GermanyMember
Sales Analysis, by Geographic Area [Line Items]	[LineItems]	For Period		Standard L…	pattern:SalesAnalysisByGeographicAreaLineItems
Sales Analysis, by Geographic Area [Hierarchy]	[Abstract]	For Period		Standard L…	pattern:SalesAnalysisByGeographicAreaHierarchy
Sales	[Concept] Monetary	For Period	Credit	Standard L…	pattern:Sales