8. Financial Report Model Elements

In this section we describe the financial report model elements which are used to implement a digital financial report. See the appendix, Report Element Properties, which provides a reconciliation between the *Financial Report Semantics and Dynamics Theory* to this model.

This model is based on the model used by the US GAAP Taxonomy Architecture and SEC XBRL financial filings. Rather than reinventing another set of terminology, that terminology was used. Further, while strictly following this model is not required (i.e. there are other allowed approaches); we do strictly follow one explicit, logical, allowed approach. For more information relating to this model and the US GAAP Taxonomy architecture and SEC XBRL financial filing logical model upon which this model is based, please see this wiki for the most detailed and most current information:

http://secxbrlglossary.wikispaces.com/

This is only one of many digital financial report profiles which may ultimately exist. The *SEC XBRL Financial Filing Profile* is documented on the wiki above. This profile is an implementation model for working with XBRL-based digital financial reports.

8.1. Differentiating XBRL technical syntax and model

This section provides a high level overview of XBRL technical syntax terminology and reconciles that terminology to the financial report model. This section is useful to those more familiar with the XBRL technical syntax than with this model.

From a technical point of view, a digital financial report consists of two primary physical components using the XBRL technical syntax: an XBRL instance and an XBRL taxonomy.

An **XBRL instance** is a physical document just like your HTML document or Word document which contains the financial information you report. While the information is the same, the format of the information is different, it is XBRL. An XBRL instance contains things such as:

- The financial and nonfinancial **facts** which you report. An example of a fact is Cash and Cash Equivalents for the current fiscal period of December 31, 2010, reported by the consolidated entity which has the SEC CIK number 0123456789 whose value is $1,000,000 reported in thousands of US Dollars.
- The **values** of those financial and nonfinancial facts. The value $1,000,000 is an example of a value.
- **Characteristics** which describe those facts. The CIK number 0123456789, the consolidated entity, the period December 21, 2010 are examples of characteristics.
- **Other traits** which help you understand values of facts which are numeric in nature. Stating that the value is in US Dollars and expressed in thousands are examples of other attributes.
- Any other **parenthetical explanations or footnotes** which help describe those facts. You may want to provide some kind of notation which appears as a footnote within your report. These are provided using XBRL footnotes.

Not that you would ever need to look at this XBRL instance, it is really meant for computers to understand and process for the user of the information; but if you are curious, this is what XBRL looks like this:

```
<us-gaap:CashAndCashEquivalentsAtCarryingValue contextRef="I-2010" unitRef="U-Monetary" decimals="-
  3">11000000</us-gaap:CashAndCashEquivalentsAtCarryingValue>
<us-gaap:RestrictedCashAndInvestmentsCurrent contextRef="I-2010" unitRef="U-Monetary" decimals="-3">1000000</us-
  gaap:RestrictedCashAndInvestmentsCurrent>
<us-gaap:ShortTermInvestments contextRef="I-2010" unitRef="U-Monetary" decimals="-3">1000000</us-
  gaap:ShortTermInvestments>
```

It may seem odd to express all the details described above, but remember; computers are not very smart. Things that humans can generally figure out by reading a report have to be expressed explicitly so that a computer can understand what to do with them.

The second major piece of a digital financial report is the XBRL taxonomy. An **XBRL taxonomy** can be thought of as a dictionary. The taxonomy provides the definitions of the concepts used in your report, definitions of many of the characteristics which help explain your financial report, relations between the concepts and characteristics, and the business rules which exist between concepts. All this information is used by the XBRL instance.

Some of the concepts, characteristics, relations, and business rules are pre-defined for you by the FASB in the US GAAP Taxonomy. But each SEC filer can also create the concepts, characteristics, relations and business rules that uniquely define their organization.

Part of the art and science of using XBRL is to figure out when you use the predefined concepts and characteristics and when to define your own.

As pointed out previously, many times a logical or conceptual model is created to work with complex technical things. We have all worked with electronic spread sheets. They are easy to use because the software interface which you work with exposes you to familiar terms similar to paper spread sheets. Things like workbooks, spread sheets, rows, columns, and cells are recognizable and organized into a logical model which we understand.

XBRL is a technical syntax. The XBRL technical syntax is implemented by the US GAAP taxonomy using a specific architecture or application profile. This application profile is laid out in the US GAAP Taxonomy Architecture. That architecture exposes a logical model.

An SEC XBRL financial filing can be summarized into a concise set of logical components, a logical model: networks, tables, axis, line items, facts, etc. These terms are easier to work with and understand than the XBRL technical syntax.

The US GAAP Taxonomy which is used for SEC XBRL financial filings is also used for this digital financial reporting model. Further, this same model can be applied to more general digital financial reporting.

8.2. Report elements overview

The following is an overview of the report element categories into which all report elements fit which make up this model. Each of these report element categories will be explained in further detail within this section.

- **Network**: A network is one approach to break a digital financial report into smaller pieces. There are two reasons why you might need to break a

financial filing into pieces: because you want to or because you have to. Specific semantics of networks are undefined.

- **Table**: A table is used to combine facts which go together for some specific reason. Tables are comprised of axis and line items. The line items of a table share the axis defined within a table. There are two types of tables: explicit tables and implicit tables. Implicit tables only have the axis reporting entity and period. An explicit table always has at least one defined [Axis], it could have more than one. An explicit [Table] always has one set of [Line Items]. Specific semantics of tables are undefined.
- **Axis**: An axis is a means of providing information about the characteristics of a fact reported within a financial report.
- **Member**: A member is a possible value of an [Axis]. A [Member] is always part of a domain of an [Axis], thus the term "member" (i.e. of the domain or set; a domain is simply a set of [Member]s which relates to a specific [Axis]). Members of an [Axis] tend to be cohesive and share a certain common nature.
- **Line Items**: [Line items] are a set of concepts which can be reported by an entity, they can contain values. [Line Items] may also contain [Abstract] concepts which can never report values but rather are used to help organize the [Line Items].
- **Concept**: A concept refers to a financial reporting concept or a non-financial concept which can be reported as a fact within an SEC XBRL financial filing. A concept is sometimes referred to as a concrete concept, as compared to an abstract concept. [Line Items] contain concepts organized within a component which have the same information model. Concepts can be concrete (meaning they can be reported) or abstract (meaning that they are never reported; they are only used to organize the concepts contained within a set of line items).
- **Fact**: A fact defines a single, observable, reportable piece of information contained within a financial report, or fact value, contextualized for unambiguous interpretation or analysis by one or more characteristics. Numeric fact values must also provide the additional traits "units" and "rounding" to enable appropriate interpretation of the numeric fact value. Facts may have zero or many parenthetical explanations which provide additional descriptive information related to the fact.

Information expressed by a digital financial report are called **facts**. Facts are expressed within **tables** which connect a set of **axis** which express the characteristics of the facts and a set of **line items** which connect the facts to some financial reporting **concept**. Tables can be organized within **networks**. The characteristics of the fact, expressed as an axis are organized into a domain of **members**. In addition, **footnotes** can be used to elaborate on facts.

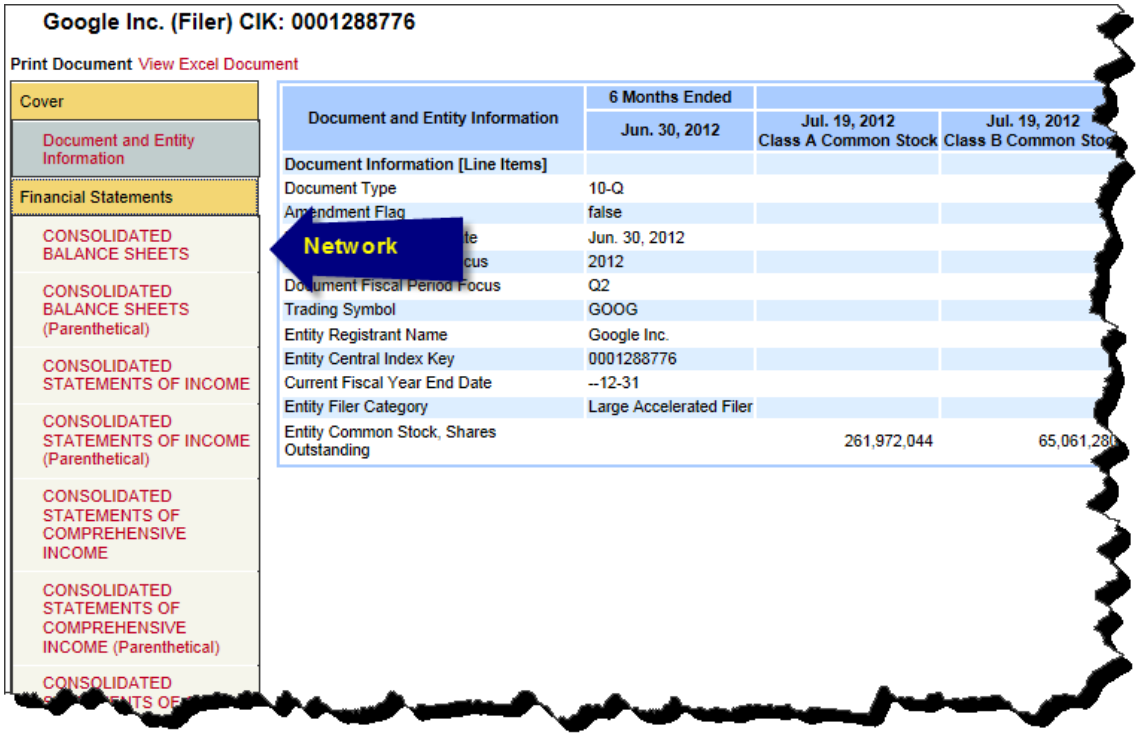
For example, Net Income (Loss) [a concept] of $1000 [the value of a fact] for the period ended December 31, 2010 [a characteristic of the fact] for the consolidated entity [another characteristic of the fact] of the reporting entity with the CIK number 1080224 [yet another characteristic of the fact] may be a fact reported within an SEC XBRL filing.

8.3. Network

A **network** is a one approach to break a digital financial report into smaller pieces. There are two reasons why you might need to break a financial filing into pieces: because you want to or because you have to.

Networks you create have a direct impact on what is seen within a rendering engine such as the SEC XBRL Interactive Data Viewer and other software that produce renderings of SEC XBRL financial filings or other digital financial reports.

Consider the following screen shot of the SEC Interactive Data Viewer:



And now consider this screen shot of the XBRL taxonomy which supports the XBRL instance being viewed within the SEC XBRL Interactive Data Viewer:

- Network (101 - Document - Document and Entity Information)
- Network (103 - Statement - CONDENSED CONSOLIDATED BALANCE SHEETS)
- Network (104 - Statement - CONDENSED CONSOLIDATED BALANCE SHEETS (Parenthetical))
- Network (105 - Statement - CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS)
- Network (106 - Statement - CONDENSED CONSOLIDATED STATEMENTS OF CHANGES IN COMMON STOCKHOLDERS' EQUITY)
- Network (107 - Statement - CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS)
- Network (108 - Disclosure - BASIS OF PRESENTATION)
- Network (109 - Disclosure - REVENUE RECOGNITION)
- Network (110 - Disclosure - INCOME (LOSS) PER SHARE)
- Network (111 - Disclosure - SOFTWARE DEVELOPMENT COSTS)
- Network (112 - Disclosure - LONG-TERM DEBT)
- Network (113 - Disclosure - STOCK-BASED COMPENSATION)
- Network (114 - Disclosure - CONCENTRATION OF RISK AND FAIR VALUE OF FINANCIAL INSTRUMENTS)
- Network (115 - Disclosure - SEVERANCE COSTS)
- Network (116 - Disclosure - REDEEMABLE PREFERRED STOCK)
- Network (117 - Disclosure - RELATED PARTY TRANSACTIONS)
- Network (118 - Disclosure - INCOME TAXES)
- Network (119 - Disclosure - RECENT ACCOUNTING PRONOUNCEMENTS)
- Network (120 - Disclosure - MERGER AGREEMENT AND STOCK SALE AGREEMENT)

Creating a network causes a section to appear within the left hand navigation pane of the SEC XBRL Interactive Data Viewer application. You can create these networks as you desire to organize how this information would appear within a software application.

These networks have three parts: a *number,* a *category,* and a *label*. The number determines the order of the network in the rendering. The category determines which section the network appears in the SEC XBRL Interactive Data Viewer. The categories are: Document, Statement, and Disclosure. The label provides specific information about what the network contains.

The second reason you would create a network is because you have to. Suppose, for example, that you wanted to articulate the breakdown of trade receivables in multiple ways:

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

A network separates things which would otherwise collide. To avoid these three breakdowns of the same concept "Trade and Other Receivables, Net" from colliding; a network must be created for each to separate them. As such, you may need to create networks sometimes when you would prefer not to.

> HINT: The term "network" may seem odd. But this is actually just like how different radio or television frequencies are separated, thus the term network.

8.3.1.Number

A network is assigned a number. The number is used to order or provide a sequence for the networks.

8.3.2. Category

A network has a category. The categories are: Document, Statement, Schedule, and Disclosure. The category impacts which section of the SEC interactive viewer the network shows up.

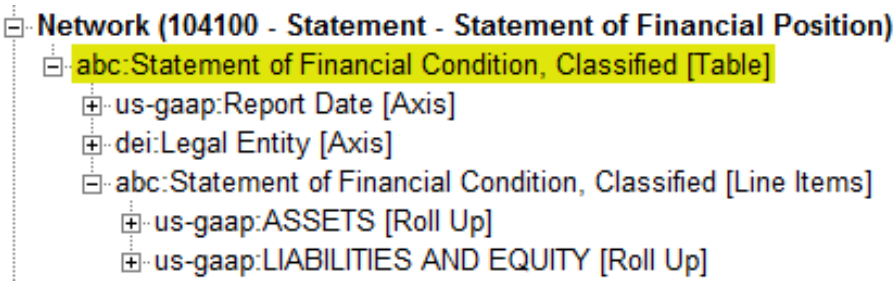
8.3.3. Label

A network has a label. The label describes what the network contains.

8.4. Table

A **table** is used to combine facts which go together for some specific reason. Tables are comprised of axis and line items. The line items of a table share the axis defined within a table.

There are two types of tables: explicit tables and implicit tables. Implicit tables only have the axis reporting entity and period. An explicit table always has at least one explicit axis, it could have more than one. An explicit table always has one set of line items.



Note the table above which has two **axis** "Report Date [Axis]" and "Legal Entity [Axis]" and one set of **line items** "Statement of Financial Condition, Classified [Line Items]".

> HINT: Defining unique, smaller, explicit tables is superior to using the implicit tables, repeating table names, and larger tables. Further, you get better control over the SEC Interactive Data Viewer and other rendering software with smaller explicit tables.

> HINT: Generally today it is better to have a one-to-one correlation between a network and a table. This approach is generally more reliable, more predictable, and therefore safer. However, it is appropriate and acceptable for a network to contain more than one table.

8.4.1. Explicit tables

You can use a table from the US GAAP taxonomy or you can define your own tables. For example, you might create the table "Debt Instruments [Table]" if you needed it but it did not exist within the US GAAP taxonomy.

8.4.2.Implicit tables

There is another way you can create a table which is to use what amounts to a default table. If you define concepts in your taxonomy and you do not explicitly put them into an existing US GAAP taxonomy table or a table which you define, you are putting that concept into an implicit table.

8.5. Axis

An **axis** is a means of providing information about the characteristics of the concepts for the line items within a table regardless of whether that table is explicitly or implicitly defined.

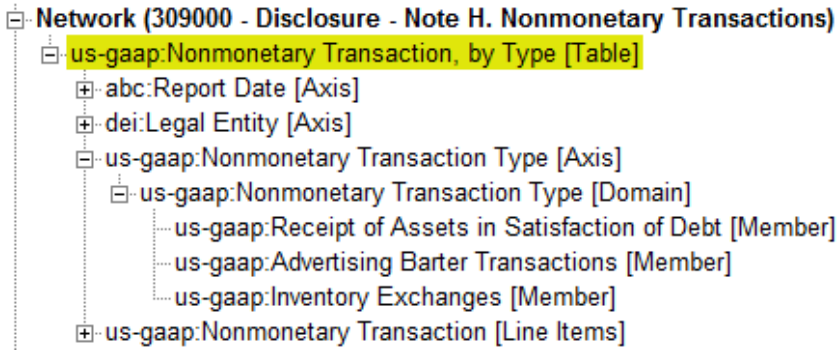
Explicitly defined [Table]s are the only tables to which you can add axes. All tables, be they explicitly defined or implicitly defined, have two axis which will always be there: entity and period.

- **Entity**: The entity, or "Reporting Entity" axis, always exists for an explicit or implicit table and the entity axis is always the SEC filer CIK number.
- **Period**: The period axis, or reporting period, always exists for an explicit or implicit table.

Using axis defined by the US GAAP taxonomy is preferred and would commonly be available; but if an axis which you need does not exist, you can create an axis to articulate the characteristics you need communicated. Other explicit axis which might be defined could include things such as:

- Class of common stock [Axis]
- Subsequent event type [Axis].

Here is an example of a [Table], its three [Axis], and its [Line Items]:



Note the **axis** "Nonmonetary Transaction Type [Axis]" above, its **domain** and its **members**.

8.6. Member

A **member** is a possible value of an axis. A member is always part of a domain of an axis, thus the term "member" (i.e. of the domain or set). Members of an [Axis] tend to be cohesive and share a certain common nature. A member expresses the value of the axis or characteristic being described. For example, the "Consolidated Entity [Member]" might be the value of the characteristic "Legal Entity [Axis]".

Here is an example of an axis, its domain and its members:

- us-gaap:Nonmonetary Transaction Type [Axis]
  - us-gaap:Nonmonetary Transaction Type [Domain]
    - us-gaap:Receipt of Assets in Satisfaction of Debt [Member]
    - us-gaap:Advertising Barter Transactions [Member]
    - us-gaap:Inventory Exchanges [Member]

A domain is a cohesive set of members. The set of members which comprise a domain share a certain common nature. Domains have partitions. A partition is collectively exhaustive and mutually exclusive set of members within a domain. Partitions do not overlap. Given a set X, a partition is a division of X into non-overlapping and non-empty "parts" or "blocks" or "cells" that cover all of X. More formally, these "cells" are both collectively exhaustive and mutually exclusive with respect to the set being partitioned. Domains always have at least one partition and may have many partitions.

A domain could have subdomains.

For example, say you have the axis "Business Segments [Axis]". That axis might have the domain "Business Segments, All [Member]" which represents the total of all business segments, the sum of all the members. That is a usable domain. Whereas, suppose you had the axis "Subsequent Event Types [Axis]". Subsequent events are never aggregated, so you would never use that domain. But you would still need to provide a domain such as "Subsequent Event Types, all types [Member]", even though that domain would never actually be used within a report.

8.7. Member or domain partition aggregation models

The **members** of a **domain** have relations to one another. These relations are referred to as **domain partition aggregation models**. There are two dynamics which impact domain aggregation. The first is whether you have a **partial set** or a **complete set** represented by the domain members. The second dynamic is whether the set aggregates or adds up. An axis which express partial sets and describe the characteristics of non-numeric concepts cannot aggregate.

8.8. Line items

Line items contain a set of concepts which can be reported by an entity, they can contain values.

Line items are what amounts to a special type of axis or characteristic. Because the concepts within a set of line items can report fact values, they have data types such as string, monetary, etc. They may also have a balance type (debit or credit), a period type (as of a point in time, for some period, etc.), and a few other attributes.

8.9. Component

A **component** is a combination of a network and a table. A component is a set of facts which go together for some specific purpose. Because a network and table have undefined semantics, likewise a component must have undefined semantics.

> HINT: Taxonomies such as the US GAAP Taxonomy SHOULD define specific semantics for networks and tables. If such semantics were known, then the semantics of a component would be clear. Each reporting entity can, and generally does, have their scheme or approach to how they create the many

pieces which make up their financial report. That is their scheme. Each scheme could be different. There are exactly three approaches to defining components: use only networks (and make all tables the same), use only tables (and make networks meaningless) or use both networks and tables. If an approach where tables are used, each table should be unique (have a unique name). Having one table have multiple meanings (i.e. polymorphic) causes issues with using financial report information.

8.10. Sub component

A **sub component** is a sub set of line items which have the same information model and go together for some specific purpose. A sub component is an abstract report element in that it is more of an idea for convenience than a necessary report element.

For example, the balance sheet has two sub components: "Assets [Roll Up]" and "Liabilities and Equity [Roll Up]".

HINT: A table always has at least one sub component and may have any number of sub components.

8.11. Concept

A **concept** refers to a financial reporting concept or a non-financial concept which can be reported as a fact within a digital financial report. A concept is sometimes referred to as a concrete concept, as compared to an abstract concept (see next section).

Line items contain concepts organized within a component which have the same information model. Concepts can be concrete (meaning they can be reported) or abstract (meaning that they are never reported; they are only used to organize the concepts contained within a set of line items).

8.12. Abstract

An **abstract** refers to a concept which is used only for organizational purposes and can never be actually reported.

HINT: The term abstract as it is being used here is NOT the same as the XML Schema abstract attribute.

8.13. Concept relation metapatterns

A **concept relation metapattern** (or information model) describes the organization or relation between concepts within a sub component.

Concepts are not interspersed randomly within a table; they have patterns. Said another way, concepts are organized into different information models. A component is a set of concepts which have the same information model pattern or metapattern which are organized and used together for some specific purpose.

The common concept relation metapatterns or information models include: hierarchy, roll up, roll forward, compound fact, adjustment, variance, complex computation, text block, and grid (a pseudo information model).

Here is an example of line items which contain abstract and concrete concepts organized into a concept relation metapattern or information model:

- us-gaap:Nonmonetary Transaction [Line Items]
  - abc:Nonmonetary Transaction [Hierarchy]
    - us-gaap:Nonmonetary Transaction, Basis of Accounting for Assets Transferred
    - us-gaap:Nonmonetary Transaction, Name of Counterparty
    - us-gaap:Nonmonetary Transaction, Gain (Loss) Recognized on Transfer
    - us-gaap:Nonmonetary Transaction, Amount of Barter Transaction

The above screen shot shows the [Line Items] of a nonmonetary transaction. These [Line Items] are organized within the component "Nonmonetary Transaction [Hierarchy]". The component has four concepts. The [Table] and [Axis] are not shown.

8.14. Business rules

A **business rule** is a relation between reported facts. Business rules can be used to validate the values of facts contained within a report.

Taking the notion that concepts are not randomly placed within a set of line items further than just the concept relation model or information model; certain information models have financial integrity. A balance sheet always has "Assets" and "Liabilities and Equity". A balance sheet always balances. The line items of Assets will always foot. The line items of "Liabilities and Equity" will always foot. These characteristics, or the balance sheets financial integrity, are expressed using business rules.

HINT: Financial integrity exists within a table and also between tables.

8.15. Fact

A **fact** defines a single, observable, reportable piece of information contained within a financial report, or fact value, contextualized for unambiguous interpretation or analysis by one or more characteristics. Numeric fact values must also provide the additional traits "units" and "rounding" to enable appropriate interpretation of the numeric fact value. Facts may have zero or many parenthetical explanations which provide additional descriptive information related to the fact. Facts are sometimes referred to as a metric.

A fact could be numeric, non-numeric (i.e. strings), or narrative (i.e. Text Block).

Facts are an intersection of **axis**, **line items** (remember that line items are a special type of axis which express a concepts), and a **value**. The value of a reported fact is referred to as a fact value. A fact value has fact attributes if it is numeric. A fact may also have a **footnote**.

The characteristics of a fact are described by the **axis** collection. The concept is one characteristic of the fact. So, facts have values, they have an axis which describes its characteristics, and they have fact attributes which further describe the value. Numeric facts have an amount and non-numeric facts are made up of textual information. Narratives are basically XHTML (technically narratives are escaped XHTML which is converted by software to HTML).

Facts exist within a **fact table**. A **fact table** is simply a set of one or more facts.

8.15.1. Intersection with line items (concepts)

A **fact** is associated with a concept, they reference a concept within the set of **line items**.

8.15.2. Intersection with axis

Facts are associated with axis which articulate characteristics, they reference a set of axis within an implicit or explicit table.

> HINT: A fact will always have a "Reporting Entity [Axis]" and a "Period [Axis]" as they are required by the XBRL technical syntax. Because of this undesired calculation inconsistencies can exist in an SEC XBRL financial filing. See the appendix on the causes of calculation inconsistencies in the appendix.

8.15.3. Value

Facts have a value which can be numeric or non-numeric. An important non-numeric value type is a narrative or [Text Block] which is a fragment of escaped XHTML.

8.15.4. Fact traits

If the **fact** is numeric, it has two traits which describe additional information needed by numeric facts: **units** and **decimals** (rounding). **Units** provides information about this units of the numeric fact such as monetary, shares, or some other units. The **decimals** (rounding) provides information as to the number of decimal places to which the number is accurate, such as to the thousands, millions, billions, hundredths, etc.

8.16. Footnote (parenthetical explanation)

Facts may also have **footnotes** (parenthetical explanations, don't confuse this with notes to the financial statements) which provide addition information about the fact.

8.17. Integrity models

Relations exist within a [Table], for example a set of concepts can roll up into some total, concept relations models or information models describe these types of relationships within one [Table]. But relations can also exist between [Table]s.

Integrity models express the semantic relations between the components of on [Table] and the components of another [Table].

8.18. Flow models

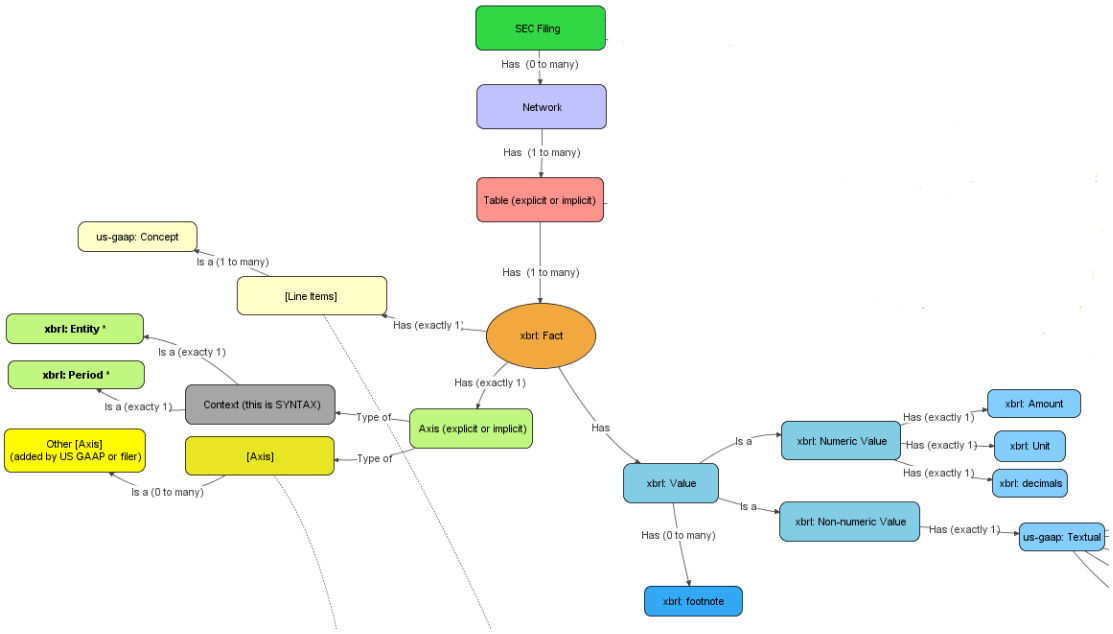
Flow is the notion of relations between components (networks/[Table]s) for the purpose of ordering or sequencing information contained in a digital financial report.

8.19. Semantic models

Semantic models add an additional layer of integrity to an integrity model specific to the domain for which information is expressed.

8.20. Summary visualization of report model

This graphic depicts what we have discussed thus far, showing the report elements for the model we have discussed and also showing the relationships between these report elements expressed as a mind map. Each of these report elements is represented as a box. The lines show the relationships between the report elements. The text on the line provides information about the relationship:



The relations between report elements will be expanded upon in the next section of this document.

You can find a complete version of this mind map of the logical model at this URL:

http://www.xbrlsite.com/2012/Library/TheoryPlusImplementation_v3.pdf

HINT: There are many different ways to depict this information, the most formal being UML (Uniform Modeling Language). UML is a standard way of depicting this information. However, we are using a less formal approach to articulating this information to make it easier for business readers to understand the relations. UML provides additional details, but is harder for business readers to understand.

8.21. Summary narrative of financial report model

A **digital financial report**, such as an SEC XBRL financial filing can be logically broken down into categories of pieces or **report elements**. These report elements can be categorized.

A **fact** defines a single, observable, reportable piece of information contained within a digital financial report, or fact value, contextualized for unambiguous interpretation or analysis by one or more characteristics.

Information, or facts reported, can be grouped. Groups or sets of information reported which go together for some specific purpose are called a **component**. Components can have one or many sub components.

A component is expressed using networks and tables. A table can be organized within a network. **Networks** organize where **tables** show up in software applications which render information such as the SEC Interactive Data viewer application. Networks have numbers, a category, and a label. There are categories of networks: Document, Statement, Schedule, and Disclosure. The numbers within the network names determine the ordering of the networks within rendering software applications.

Tables are groupings of **facts** which appear in a financial report for some specific purpose. Facts within a table have similar characteristics. **Axes** articulate these characteristics. **Line items** are a special type of axis. Line items contain concepts. These **concepts** can describe **fact values** in a digital financial report.

The value of an axis is a **member**. Axis always has one or more domains which is its set of members. A domain may be broken down into one or more partitions. There are two axis which must always exist: reporting entity and period. (Actually, if you count the concept there are three axis which must exist.)

Numeric values have two additional traits: units and decimals (or rounding). **Units** explain the units of a numeric value and **decimals** explain the rounding of a numeric value. Fact values may also have **footnotes** which provide additional descriptive information about a specific value or a set of values. **Traits** play no role in processing axis, they are traits of the fact and not characteristics.

Facts reported do not have random relationships, the relationships between facts have patterns, this is referred to as a **concept relation metapattern** or an information model. A table may contain numeric concepts within **sub components** which have information models such as **roll up**, **roll forward**, **adjustment**, **variance**, **complex computations**, etc. If the numeric information has no relationship or only textual information is reported, the information model is simply a **hierarchy**. The **text block** information model is that of a narrative or prose and is reported as a block of HTML.

Likewise the members which make up the domain do not have random relations, the relations of an axis have patterns referred to as the **member aggregation model** or the domain partition aggregation model. Complete flat sets of members describe the characteristic of numeric concepts which can aggregate. Partial sets or domains whose members describe non-numeric concepts can never aggregate. Complete hierarchical sets are nested complete flat sets. Complex sets are other more complicated axis aggregation models.

Integrity models describe how the components of one table and the components of another table relate. **Semantic models** add domain specific integrity beyond a general integrity model. **Flow models** articulate an ordering or sequencing of the networks/tables within a digital financial report.

8.22. Digital financial report examples

The following are a number of examples which will provide additional explanation of how the report elements work together.

8.22.1. Simple example

Consider this example below which shows the "Document and Entity Information" network which contains the "Document and Entity Information" table, its axis, and its line items within the SEC XBRL Interactive Data viewer:

EDGAR ONLINE INC (Filer) CIK: 0001080224

Print Document View Excel Document

- Cover
- Document and Entity Information
- Financial Statements
- Notes to Financial Statements
- Notes Tables
- Notes Details
- All Reports

Document and Entity Information	9 Months Ended	
	Sep. 30, 2010	Nov. 12, 2010
Document Type	10-Q	
Amendment Flag	false	
Document Period End Date	2010-09-30	
Document Fiscal Year Focus	2010	
Document Fiscal Period Focus	Q3	
Trading Symbol	EDGR	
Entity Registrant Name	EDGAR ONLINE INC	
Entity Central Index Key	0001080224	
Current Fiscal Year End Date	--12-31	
Entity Filer Category	Smaller Reporting Company	
Entity Common Stock, Shares Outstanding		26,984,829

Note the last line of the report screenshot above, the right most column. The fact values "26,984,829" is associated with the concept which has the label "Entity Common Stock, Shares Outstanding" which is part of the line items of the Document and Entity Information [Table] which is contained in the "Document and Entity information" network. The fact is also associated with the axis period which has the value "Sep. 30, 2010" and the axis entity which has the value of 0001080224. The fact value is rounded to the nearest share and has the units of shares.

8.22.2. More complex example

This is another example with more complexity.