EDGAR XBRL Guide

Prepared by SEC Staff

March 2024

Disclaimer

The Securities and Exchange Commission ("SEC" or "Commission") staff is making available to the public this EDGAR Extensible Business Reporting Language ("XBRL") Guide to assist filers with preparing submissions on EDGAR using XBRL. This guide should not be relied upon for any other purpose.

Filers may consult the separate EDGAR XBRL Guide (Filing Fee Extract) for references in connection with preparing fee-related submissions on EDGAR using XBRL.

The SEC has not approved, may approve or disapprove, and may revise any of the content of this EDGAR XBRL Guide. SEC staff's provision of this guide does not indicate Commission approval or disapproval of any changes relating to the EDGAR system or the rules and regulations related to EDGAR, including but not limited to the EDGAR Filer Manual. Filers are reminded that they must comply with the requirements of the EDGAR Filer Manual.

Contents

Introduction

This EDGAR XBRL Guide provides detailed technical specifications of XBRL formatting and validation for use in connection with making submissions on EDGAR.

For all submissions, filers should refer to and must comply with the requirements in the EDGAR Filer Manual (“EFM”).

Chapter 6, Volume II of the EFM, Interactive Data, contains requirements for Interactive Data submissions in EDGAR using XBRL. That chapter also explains the use of taxonomies and instances that comprise the XBRL model. Chapter 3, Volume II of the EFM, Index to Forms, contains a discussion of different XBRL formatted documents associated with relevant EDGAR form and submission types.

1 Fundamentals

Interactive Data submissions in EDGAR use the Extensible Business Reporting Language (XBRL) information model. To understand the preparation and processing of Interactive Data in EDGAR it is important to be familiar with XBRL's key ideas and terminology, as well how XBRL differs from other formats.

Facts and Concepts. XBRL defines computer-readable *facts* for business reporting. A *fact* represents a single numeric item, or an arbitrarily sized section of text (a *non-numeric* fact). In EDGAR, a fact that appears in a submission is an assertion being made by a filer to satisfy an SEC disclosure requirement. Each fact is characterized by a set of core standard *dimensions:*

- the *period* for which the fact is asserted,
- the business *entity* that it is about,
- the human *language* in which the text is written (US English, in EDGAR),
- for numeric facts, the *unit* of measure and number of *decimal* places that are not significant.

Each fact is an occurrence of a *concept* that makes it comparable to other facts. For example, "Public Float" could be an SEC-defined concept for which a fact "10 billion US dollars, with nine digits (zeroes) not shown" has the same meaning whether it is a fact about entity ABC as of February 14, 2030, or a fact about entity XYZ as of January 12, 2025. Concepts have a *data type* and *validations* that constrain their possible values. Continuing the example, facts of the Public Float concept value should not be negative and must be expressed in US Dollars.

Instances and Formats. A set of XBRL facts is called an XBRL *instance*. An instance is computer-readable data that may be stored or transmitted written out in its original XML-based file format ("xBRL-XML") or embedded into HTML documents ("Inline XBRL"). In XBRL formats currently used in EDGAR, the location of facts within a file has no impact on their meaning. Also, an instance is not necessarily one EDGAR file attachment; Inline XBRL allows instances to be distributed across, and embedded into, more than one file attachment within a submission. XBRL defines the facts of an instance – its *information model*, not just file formats – and this is a unique defining characteristic of XBRL specifically intended to support technology changes.

Taxonomies and Dimensions. Another defining characteristic of XBRL is how concepts are defined via XBRL taxonomies. A *taxonomy* consists of concepts, along with *relationships* among concepts and with other computer-readable data. Relationships can be thought of as arcs in a graph, each with a *source* (or *parent*) concept and *target* (or *child*). The type of relationship is called *role* of the arc, i.e., its *arc role.* Some of these relationships describe the various *dimensions* along which a fact may be characterized. A fact may have any number of *taxonomy-defined dimensions*, conventionally called *axes*, each of which has a *domain* of possible values. As a mnemonic for axes and dimensions, it may be helpful to visualize a physical object such as a book. It has three *axes:* height, width, and depth. The *dimensions* of the book might be seven inches high, five inches wide, and one inch deep. Each of the book's axes has the same *domain*: positive numbers.

Domains may be infinite, like the number of inches, or may have a set of *explicit* members. For example, a taxonomy might define a "Country" axis, whose *explicit* members are countries. In this way, the facts "ABC Inc's Bermuda 2025 Revenue is $10m" and "ABC Inc's Bonaire 2025 revenue is $10m" are distinct. Their "dimensions" are "country Bermuda" and "country Bonaire", respectively. For a fact that does not specify an explicit member of an axis, there may be an unstated *default* member that represents all members of that axis collectively. The fact "ABC Inc's 2025 Revenue is $20m" therefore refers to its global revenue. A taxonomy specifies for every concept what dimensions are required, permitted, or forbidden for facts of every concept. EDGAR *validates* each XBRL instance against the relevant taxonomies to ensure that every fact has all the required dimensions and none of those dimensions are forbidden.

Modularity and Documentation. EDGAR taxonomies that support specific SEC rule releases are accompanied by technical documents called *taxonomy guides* that detail the concepts and other aspects of how the taxonomy is used. Since their introduction in 2009, new EDGAR taxonomies have been introduced and have evolved, resulting in differences in naming conventions, organization of files, and other matters. All EDGAR taxonomies are currently updated at least annually, for the most part via an EDGAR release occurring in the first quarter of each calendar year and removed from use after two years. All taxonomies used in an instance must be from the same calendar year but are otherwise technically independent and can be mixed and matched to suit the regulatory disclosures present in a submission. This organization of taxonomies is a different approach than EDGAR's technical guides for online forms.

Meta data. Taxonomies contain several computer-readable relationships other than the dimension-defining relationships outlined above. A concept in a taxonomy will be annotated with text *labels*, authoritative *references*, *data quality* validations, simple arithmetic *calculations*, and ordering and nesting relationships among concepts that that detail how software should create a tabular *presentation* of facts extracted from an instance. These relationships are ideally independent of which SEC Form, EDGAR Submission Type, or Exhibit the concepts will be used for.

For example, the concept "Entity Filer Category" has an authoritative reference to the Exchange Act 240.12b-2 which contains definitions of the terms. The Entity Filer Category concept also appears in a presentation *link* that provides a conventional order of presentation with respect to related concepts such as "Entity Voluntary Filers" and "Entity Well Known Seasoned Issuers" that may appear on the cover page of several different Forms in the same relative positions. In XBRL taxonomies, these relationships are stored in *linkbases* and may be embedded in XML *Schemas*; informally, these additional relationships and annotations are *taxonomy metadata.* They are often first created, reviewed, and used in various tabular styles, leaving the details of the technical syntax to software. Many submission types and exhibits require a filer-constructed *custom taxonomy* as part of the submission.

Validation. An EDGAR submission with XBRL attachments proceeds through multiple validation steps prior to acceptance. The validations are defined at several levels:

(a) file format syntax, be that defined by the syntax of XML, XML Schema, XHTML, or XBRL specifications;

(b) syntax restrictions that are specific to EDGAR – for example, limitation on the XHTML tags that may appear in Inline XBRL;

(c) semantic consistency of the instance – for example, ABC Inc's Bonaire 2025 cannot be $10m one location in an instance and $11m in another;

(d) semantic consistency of the facts and the meta data – for example, if country Barbados is not a dimension, there can be no fact "ABC Inc's Barbados Inventory", and if it is present, Inventory should not be a negative number; and

(e) submission-, form- and exhibit-specific checks – for example, instance type QF.US should have a reporting period consistent with the 1st, 2nd or 3rd quarter of the company's fiscal year.

All levels contribute to *data quality* although the term is mainly associated with levels (c), (d) and (e). Generally, the consequences of failed validations are either XBRL Errors, which may cause suspension, or XBRL Warnings, which do not cause suspension.

XBRL Submissions. Disclosure requirements that detail which entities are required to make what disclosures at what times and under what circumstances are ultimately to be found in the SEC rules and/or Form instructions. This document covers the steps for making those disclosures, and it details the relevant validations. In that way this document supplements the EDGAR Filer Manual and XBRL specifications, while providing a background for each individual Taxonomy Guide. The high-level steps for an EDGAR submission with XBRL attachments are listed below:

1. Identify the correct Form type, submission type, and exhibits; this determines the instance type [§ 6.1].
2. The relevant taxonomy entry points for that instance type [§ 6.3].
3. Identify the permitted formats for the instance attachments [§ 6.4]; choose valid mnemonic file names.
4. Identify the facts that are expected; their absence could result in EDGAR suspending the submission.
5. Identify the facts required for the disclosure, especially those with EDGAR validation warnings.
6. Determine where there will be concepts reported for more than one event, asset class, business segment or any disaggregation represented in the taxonomy and required in the disclosure.
7. Determine any non-standard ("custom") concepts needed and their supporting properties.
8. Create the custom taxonomy (if needed) and files for the instance.
9. Validate the instance, interpret errors and warnings, and correct them.
10. Preview the submission as it will be rendered on the SEC.gov web site.
11. Validate the entire submission and all its attachments, usually as a TEST submission.
12. Resolve the errors and warnings, repeat 11 as needed, then submit as a LIVE submission.

2 XBRL Specifications

XBRL International Inc. (XII) defines and updates the technical specifications, primers, test cases, and other resources for XBRL syntax, via committees and working groups whose draft publications are open to the public. EDGAR processes XBRL formatted files in submissions to create instances and validates that they conform to specifications.

New versions of specifications are published at https://specifications.xbrl.org from time to time. EDGAR does not use all parts nor the latest of all XII specifications. New specifications are not permitted in EDGAR submissions until finalized. New specifications are permitted only through the periodic EDGAR release and the filer manual update processes. The specifications currently governing the technical syntax of all EDGAR instances are:

- XBRL version 2.1
- XBRL Calculations version 1.1
- XBRL Dimensions version 1.1
- XBRL Extensible Enumerations version 1.0
- XBRL Extensible Enumerations version 2.0
- XBRL Open Information Model (OIM) 1.0 Common
- xBRL-XML Mapping for OIM 1.0

Additionally, the current XII specification governing the Inline XBRL format of instances is:

- Inline XBRL version 1.1

XII publishes widely shared enhancements that do not require new specifications via *registries*. EDGAR currently permits use of entries in these registries:

- XBRL Data Types Registry (DTR), versions 2020-01-21 and 2022-03-31 – all entries
- XBRL Unit Types Registry (UTR), versions 2022-07-20 – all entries
- Transformation Registries (TR) versions 2015-02-26, 2020-02-12, and 2022 – all entries

- XBRL Link Role Registry (LRR) version 2022-09-28 – only those URIs starting **`http://www.xbrl.org/lrr/`**

XII also creates and publishes taxonomies. Currently none of the XII taxonomies are EDGAR standard taxonomies.

3 Instance Content

The content of an instance is illustrated here using Form 6-K.

EFM § 3 shows that Form 6-K may be submitted either as submission type 6-K or, if an amendment of a prior 6-K, submission type 6-K/A. The tables in EFM v68 § 6 (duplicated in this document in section 11 below), show that:

- Submission types 6-K and 6-K/A are in submission set 6K [§ 6.1.1];
- Submission set 6K is paired only with entity set FPI and maps to instance type 6K.A [§ 6.1.3];
- Instance type 6K.A requires entry point **`dei`** and may use **`us-gaap`** or **`ifrs`** and any of the other entry points on the row labeled ALL [§ 6.3];
- Instance type 6K.A is *not* one of the exceptions to the general requirement that the format be Inline XBRL, so it is an Inline XBRL attachment. [§ 6.4].

The first few lines of the file shown below have a root **`html`** element and a namespace prefix **`ix`** that establish it is an Inline XBRL file; see [§ 5.2.5] for more detail. The **`link:schemaRef`** attribute **`xlink:href`** means that it uses the **`dei-sub`** entry point that contains labels, presentation, and definition links of the 2024 version of the **`dei`** taxonomy:

```
<html xmlns="http://www.w3.org/1999/xhtml"
xmlns:xlink="http://www.w3.org/1999/xlink"
xmlns:ix="http://www.xbrl.org/2013/inlineXBRL"
xmlns:link="http://www.xbrl.org/2003/linkbase"
xmlns:dei="http://xbrl.sec.gov/dei/2024">

<head><title></title><meta http-equiv="Content-Type" content="text/html"/>
<body style="width: 7in"><div style="display: none">
<ix:header>
 <ix:references>
  <link:schemaRef xlink:type="simple"
    xlink:href="https://xbrl.sec.gov/dei/2024/dei-sub-2024.xsd" />
  </ix:references>
…
```

Regarding the Inline XBRL markup, the preparer of a 6K.A instance needs to know the following data points:

- The form type, as distinct from the submission type;
- The company CIK and its EDGAR conformed name;
- The month and day of the current fiscal year end;
- For current reports in submission sets 8K and 6K, the date of the earliest event reported;
- In an amending submission (a submission type in submission set AM), whether the content of any XBRL facts have changed; and
- If the content of any XBRL facts changed, how.

Each of these data points is represented in an instance as a fact in the same context.

3.1 Expected Facts in the Required Context

Every instance type has some facts that are expected to be present and have specific values in the instance. Each such fact has a concept from a *standard taxonomy* as defined in EFM v68 § 6.2.2. The context of the fact will have:

1. an entity identifier matching the filing CIK, and
2. either
    a. no taxonomy-defined dimensions, or
    b. a dimension from a standard taxonomy, and
3. either a period whose end date matches the reporting period end, which may be
    a. an instant, or
    b. a duration matching the quarter or year of the submission reporting period, or
    c. a duration of one day.

Conditions 1, 2.a, and either 3b or 3c jointly define *the* required context. There may be more than one context that matches all four conditions, in which case 3.c takes precedence over 3.b.

Every instance type has expected facts in a required context. For example, every instance must have a fact in the required context having concept **`dei:EntityCentralIndexKey`** whose value is the 10-digit CIK matching the CIK described in condition 1. One CIK must be chosen even when there are multiple co-registrants in the submission.

Other contexts meeting conditions 1.b, 2, and 3 are defined below in relation to certain expected facts. For example, some expected facts for multi-series filers expect a context with an explicit member of **`dei:LegalEntityAxis`** and otherwise identical to the Required Context.

Expected facts may also be subject to additional conditions:

4. The fact may be required to be either present or absent (attribute **`xsi:nil = true`** is normally the same as being absent).
5. The fact value may be expected to have a value that is consistent with
    a. EDGAR's existing data for a company, or
    b. data from the EDGAR submission header, or
    c. other facts in the same instance.
6. The fact may be expected outside of element **`ix:header`** of an Inline XBRL file [§ 5.2.5.14]. Inline XBRL permits the same concept to appear more than once in the same context, possibly inside and outside of **`ix:header`**; in that case the condition of one occurrence appearing outside **`ix:header`** is sufficient.

Symmetrically, there are also validations for unexpected facts. Facts that are expected for one instance type may be unexpected (resulting in an XBRL warning or error) or optional (no warning or error is produced) or for other instance types. These conditions vary by instance type.

3.1.1 Notation and Terminology

This guide describes each fragment of expected content in two tables, a Concepts table and a Validations table.

The Concepts table shows:

- The concept with its standard namespace prefix (sometimes, an EDGAR header field);
- A concept # in the style {1}, {2} etc. to be referenced in the Validations table;
- An XML or XBRL data type, or a POSIX regular expression (regex) of possible string values;

- A short indication of the concept meaning, which is often apparent from the concept name, along with any detail notes such as related Inline XBRL transformations (in some tables the cell is blank because the concept has been defined in a previous Concepts table).

An example Concepts table is shown below.

Concept	#	Type or regex	Meaning
dei:EntityCentralIndexKey	{1}	\d{10}	EDGAR CIK

The Validations table shows:

- Included submission sets (prefixed by "s: ") and included instance types (prefixed by "i: ")
- Excluded submission sets (prefixed by "s: ") and excluded instance types (prefixed by "i: ")
- c - a code indicating the contexts to which it applies (r: required; a: all; *etc.*)
- Check - the condition to be tested
- f - a footnote indication for special cases, exceptions, or additional detail notes,
- On failure – the condition raised when the check fails,
- s - the severity of the violation (E: Error, W: Warning),
- and (in this version of the guide) a reference to version 68 of the EDGAR Filer Manual (for example, "§ 6.5.21 X" refers to the code X appearing in the table of section 6.5.21; "§ 6.5.46 []" refers to a blank cell in the table of section 6.5.46).

An example validations table is shown below.

Incl	Excl	c	Check	f	On failure	s	EFM v68 Ref
i: ALL		r	A {1} fact is present.		{1} Missing	E	§ 6.5.21 X*

The consequences of an XBRL Error may vary depending on the instance type, as discussed in [§ 6.6]. However, an XML syntax error (such as a five-digit number where a ten-digit number is required or an unknown country code) always results in an XBRL Error. Failed validations of expected facts may be Errors or Warnings.

XBRL Warnings indicate that facts found in the instance are in some way incomplete, inconsistent with each other, misleading, ambiguous, or unreliable and this will have undesirable downstream consequences for users of the data. Filers should avoid XBRL warnings by correcting the data prior to live submission.

Within the validations table, a fact is *visible* in an Inline XBRL file if it is not located within the **ix:hidden** element. If the fact has duplicates, at least one must be located outside of **ix:hidden**. A fact is *present* in a context if it has a non-nil value; a fact is deemed to be *absent* if it either does not exist or exists only with a nil value.

Each validations table is followed by notes or special cases from the footnote column.

3.1.2 Required Context validation

There is a check for the existence of a required context applying to all instances:

Concept	#	Type or regex	Meaning
The CIK of any one company in the submission header	{1}	\d{1,10}	EDGAR CIK
The period of the submission header	{2}	\d{1,2}-\d{1,2}-\d{4}	Reporting period if present

The filing date of the submission	{3}	\d{1,2}-\d{1,2}-\d{4}	Filing date, which may be the same or later than the acceptance date.

Validations:

Incl	Excl	c	Check	f	On failure	s	EFM v68 Ref
i:ALL			All contexts have an **identifier** element value equal to {1}.		**Non Matching Cik**		§ 6.5.3
i:ALL			There is a context having **endDate** value matching either {2} or {3}, and no segment element.		**Required Context**	E	§ 6.5.19

Notes and special cases: none.

3.1.3 Central Index Key

Concept	#	Type or regex	Meaning
dei:EntityCentralIndexKey	{1}	\d{10}	EDGAR CIK

Validations:

Incl	Excl	c	Assertion	f	On failure	s	EFM v68 Ref
i: ALL		r	A {1} fact is present.		**{1} Missing**	E	§ 6.5.21 X*
i: K.SDR, L.SDR		r	A {1} fact with value a full ten-digit CIK from among the co-registrants in the submission header or equal to 0000000000.		**{1} Value**	E	§ 6.5.23
i: ALL	i: K.SDR, L.SDR	r	A {1} fact with value a full ten-digit CIK other than 0000000000 from among the co-registrants in the submission header.	1	**{1} Value**	E	§ 6.5.23

Notes and special cases:

1. Instance types K.SDR and L.SDR permit a CIK value of 0000000000 that could not appear in the submission header. 00000000000 represents an entity that is not an EDGAR registrant.

3.1.4 Registrant Name

Concept	#	Type or regex	Meaning
dei:EntityRegistrantName	{1}	**xs:normalizedString**	EDGAR registrant conformed name, with some differences permitted

Validations:

Incl	Excl	c	Check	f	On failure	s	EFM v68 Ref
i: ALL		r	A `{1}` fact is present.		`{1} Missing`	E	§ 6.5.21 X, X*
i: ALL		r	A value of `{1}` matches the EDGAR conformed name of the company whose CIK is.	1, 2	`{1} Submission Value`	E	§ 6.5.24 X
s: FAST		r	If `{1}` facts are present, then at least one is visible.		`{1} in Facts Not Visible`	W	§ 6.5.21 X*, 6.5.45 X
i: AF.CA, AF.FPI, R33.FPI, R34.FPI		r	If no `{1}` fact with `xml:lang` value `en-US` matches, then a matching `{1}` fact with a language not starting with `en-` is present.	3	-	E	§ 6.5.24
i:ALL	i: AF.CA, AF.FPI, R33.FPI, R34.FPI	r	The matching `{1}` fact has `xml:lang` value `en-US`.		`{1} Submission Value`	E	§ 6.5.24 X

Notes and special cases:

1. The conformed name must be a case-insensitive prefix of the fact value. For example, conformed name "SMITH" would match fact text "Smith, John". These differences are ignored:

   a. Differences in whitespace or punctuation; hyphen characters (-, -) may either match whitespace or nothing. For example, "ABC Real-time" will match both "A.B.C. RealTime" and "ABC, Real Time".

   b. Single-character words are ignored; "A. B. SMITH" will match "SMITH A".

   c. Text entered between "//", such as "ABC CO /DE/", matches "ABC CO".

   d. Matching abbreviations that EDGAR imposes, such as truncating CORPORATION to CORP, shortening "and" to ampersand "&", and dropping the word "The" at the beginning. For example, "The Smith and Jones Corporation" matches "SMITH & JONES CORP".

2. When the required context CIK is 00000000000, the name match is waived.

3. The cover pages of certain forms distinguish the "Exact name of Registrant as specified in its charter" from the "Translation of Registrant's name into English". If either differs from the conformed name, then an additional `dei:EntityRegistrantName` fact with an `xml:lang` attribute value not starting with `en` is expected.

3.1.5 Form or Exhibit Type

Concept	#	Type or regex	Meaning
`dei:DocumentType`	`{1}`	`[A-Z0-9]+([/A-Z0-9 \.\-]*[A-Z0-9])?|Other` (Up to 20 characters)	Form or Exhibit Type (often differs from the submission type).

Validations:

Incl	Excl	c	Check	f	On failure	s	EFM v68 Ref
i:ALL	FE	r	A `{1}` fact is present.		`{1} Missing`	E	§ 6.5.20 X*
i:ALL	FE	r	The `{1}` fact value is among the Form types permitted for the submission type as shown in EFM § 3.	1, 2, 3	`{1} Value`	E	§ 6.5.20
i:FE		r	A `{1}` fact is absent.		`{1} Unexpected`	W	§ 6.5.20 []

Notes and special cases:

1. For compatibility with earlier EDGAR releases, **`dei:DocumentType`** may match the submission type without a warning, but this usage is discouraged and may soon be deprecated and result in a warning or error.

2. In some cases, there may be an inferred entity set and inferred submission set based on the combination of submission type, the value of **`DocumentType`**, and the value of submission header field **`investment-CompanyType`**, with or without a warning (previously § 6.5.56).

Submission types	Value of **`dei:DocumentType`**	Value of **`investment-CompanyType`**	Inferred entity sets	Inferred submission sets	Severity
485APOS, 485BPOS	N-3		V3	[§ 6.1]	W
485APOS, 485BPOS	N-4		V4	[§ 6.1]	W
485APOS, 485BPOS	N-6		V6	[§ 6.1]	W
485APOS, 485BPOS, 485BXT	Not N-3, not N-4 and not N-6		OEF	[§ 6.1]	W
POS AM, POS EX	Matches POS.*	S-1 or S-3	US	RD	W
POS AM, POS EX	Matches POS.*	N-1A	OEF	RD	W
POS AM, POS EX	Matches POS.*	N-2	CEF	RD	W
POS AM, POS EX	Matches POS.*	N-3	V3	RD	W
POS AM, POS EX	Matches POS.*	N-4	V4	RD	W
POS AM, POS EX	Matches POS.*	N-6	V6	RD	W
POS AM, POS EX	Matches POS.*	(absent)	US	R33	W
All other cases				[§ 6.1]	

3. Note that the entity and/or submission set, when inferred from **`dei:DocumentType`**, may not be what the filer intended; this can lead to other warnings or errors; therefore, using the value of the underlying form type (without /A) for **`dei:DocumentType`** is always preferred.

3.1.6 Amendment Flag and Description

Concept	#	Type or regex	Meaning
`dei:AmendmentFlag`	`{1}`	**`xs:boolean`**	Value is **`true`** if the content of an instance changed from a previous submission that this amends, and **`false`** otherwise. This is not the same as the "/A" indicator on an EDGAR submission type; it is possible for an "/A" submission to amend only material that was not XBRL tagged content.
`dei:Amendment-Description`	`{2}`	**`xs:string`**	A description of the changes in the amendment.

Validations:

Incl	Excl	c	Check	f	On failure	s	EFM v68 Ref
i: ALL	i: FE.A	r	A `{1}` fact is present.		`{1} Missing`	W	§ 6.5.20 R*
i: FE.A		r	A `{1}` fact is absent.		`{1} Unexpected`	W	§ 6.5.20 []
i: ALL		r	If a `{1}` fact with value `true` is present, then a `{2}` fact is present.		`{1} {2} Value Dependency`	W	§ 6.5.20 A
i: ALL		r	If a `{1}` fact with value `false` is present, then a `{2}` fact is absent.		`{1} {2} Value Dependency`	W	§ 6.5.20 A
i: ALL	i: FE.A, OA.RXP, OA.SDR	r	If `{2}` is present, it is visible.		`{2} in Facts Not Visible`	W	§ 6.5.20 A

Notes and special cases: none.

3.1.7 Document Period End Date

Concept	#	Type or regex	Meaning
`dei:Document-PeriodEndDate`	`{1}`	`xs:date`	Many EDGAR submission types have a header field `periodOfReport`. For most of these, it represents the end date of a reporting or transition period. For current reports (8K, 6K submission types) it represents the date of the earliest event reported.

Validations:

Incl	Excl	c	Check	f	On failure	s	EFM v68 Ref
s: 8K		r	A `{1}` fact is present.	1	`{1} Missing`	W	§ 6.5.20 R
s: FAST, AF.OEF, HF.OEF	s: 8K	r	A `{1}` fact is present.	2	`{1} Missing`	W	§ 6.5.20 R
s: FAST, AF.OEF, HF.OEF		r	If `{1}` facts are present, then at least one is visible.		`{1} in Facts Not Visible`	W	§ 6.5.45 R
s: 6K, i: OA.SDR		r	A `{1}` fact is present.	3	`{1} Missing`	W	§ 6.5.20 R*
s: RD, R33, R34, R40			A `{1}` fact is present.	4, 5	`{1} Missing`	W	§ 6.5.20 R*, O*

Incl	Excl	c	Check	f	On failure	s	EFM v68 Ref
s: FAST, AF.OEF, HF.OEF, 6K, R33, R34, R40, 6K, RD, R33, R34, R40, i: OA.SDR		r	If the submission header field **periodOfReport** is present, then its date matches the value of **{1}**.		**{1} Value**	W	§ 6.5.40 Case (2)
s: ALL	s: FAST, AF.OEF, HF.OEF, 6K, R33, R34, R40, 6K, RD, R33, R34, R40, i: OA.SDR	r	A **{1}** fact is absent.	5	**{1} Unexpected**	W	§ 6.5.20 [], O*

Notes and special cases:

1. Use the date of earliest event reported.
2. Use the end of the reporting or transition period.
3. Use the end of the period reported.
4. Use the filing date.
5. Check is waived when the submission type matches POS*

3.1.8 Document Fiscal Year and Period Focus

Concept	#	Type or regex	Meaning
dei:DocumentFiscalYearFocus	**{1}**	**xs:gYear** (matches YYYY)	Filer's fiscal year.
dei:DocumentFiscalPeriodFocus	**{2}**	**Q1|Q2|Q3|FY**	Fiscal period of the report.

Validations:

Incl	Excl	c	Check	f	On failure	s	EFM v68 Ref
s: AF	i: AF.OEF	r	A **{1}** fact is present.		**{1} Missing**	W	§ 6.5.20 R*
s: ALL		r	Neither or both **{1}** and **{2}** are present.	1	**{1} {2} Mutual Dependency**	W	§ 6.5.20 Op*
s: ALL	s: FAST, R33, R34	r	A **{1}** fact is absent.	1	**{1} Unexpected**	W	§ 6.5.20 [], Op*
s: AF	i: AF.OEF	r	A **{2} fact** is present.		**{2} Missing**	W	§ 6.5.20 R*
s: ALL	s: FAST, R33, R34	r	A **{2} fact** is absent.	1	**{2} Unexpected**	W	§ 6.5.20 [], Op*

Notes and special cases:

1. Waived for submission types matching **POS.***.

3.1.9 Current Reporting Status and Interactive Data Current

Both **dei:EntityCurrentReportingStatus** and **dei:EntityInteractiveDataCurrent** facts in the required context are expected for most financial statements and optional for certain FPI instances.

Concept	#	Type or regex	Meaning
dei:Entity-Current-ReportingStatus	**{1}**	**Yes|No**	Registrant has (1) filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that registrants were required to file such reports), and (2) have been subject to such filing requirements for the past 90 days.
dei:Entity-Interactive-DataCurrent	**{2}**	**Yes|No**	The registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit such files).

Validations:

Incl	Excl	c	Check	f	On failure	s	EFM v68 Ref
s: AF	i: AF.OEF	r	A **{1}** fact is present.		**{1} Missing**	W	§ 6.5.21 R
s: AF	i: AF.OEF	r	If **{1}** facts are present, then at least one is visible.		**{1} in Facts Not Visible**	W	§ 6.5.21 R
s: ALL	i: R34.CA, R34.FPI	r	A **{1}** fact is absent.		**{1} Unexpected**	W	§ 6.5.21 [], O*
s: AF	i: AF.OEF	r	A **{2}** fact is present.		**{2} Missing**	W	§ 6.5.21 R
s: AF	i: AF.OEF	r	If **{2}** facts are present, then at least one is visible.		**{2} in Facts Not Visible**	W	§ 6.5.21 R
s: ALL	i: R34.CA, R34.FPI	r	A **{2}** fact is absent.		**{2} Unexpected**	W	§ 6.5.21 [], O*

Notes and special cases: none

3.1.10 Voluntary Filers, Shell Companies, and Well-known Seasoned Issuers

Concept	#	Type or regex	Meaning
dei:EntityVoluntaryFilers	**{1}**	**Yes|No**	Registrant is “not required to file”.
dei:EntityWellKnownSeasonedIssuer	**{2}**	**Yes|No**	Registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act
dei:EntityShellCompany	**{3}**	**xs:boolean**	Registrant is a shell company as defined in Rule 12b-2 of the Exchange Act

Validations:

Incl	Excl	c	Check	f	On failure	s	EFM v68 Ref
i: AF.US, AF.BDC, AF.FPI		r	A `{1}` fact is present.		`{1} Missing`	W	§ 6.5.21 R
i: AF.US, AF.FPI		r	If `{1}` facts are present, then at least one is visible.		`{1} in Facts Not Visible`	W	§ 6.5.45 R
i: AF.US, AF.BDC, AF.FPI		r	If header element `voluntaryFilerFlag` has a value, then it is equivalent to the `{1}` fact value.		`{1} Value`	W	§ 6.5.40 Item 3
s: ALL	i: AF.US, AF.BDC, AF.FPI	r	A `{1}` fact is absent.		`{1} Unexpected`	W	§ 6.5.21 []
i: AF.US, AF.BDC, AF.FPI		r	A `{2}` fact is present.		`{2} Missing`	W	§ 6.5.21 R
i: AF.US, AF.BDC, AF.FPI		r	If `{2}` facts are present, then at least one is visible.		`{2} in Facts Not Visible`	W	§ 6.5.45 R
i: AF.US, AF.BDC, AF.FPI		r	If header element `wellKnown-SeasonedIssuerFlag` has a value, then it is equivalent to the `{2}` fact value.		`{2} Value`	W	§ 6.5.40 Item 4
s: ALL	i: AF.US, AF.BDC, AF.FPI	r	A `{2}` fact is absent.		`{2} Unexpected`	W	§ 6.5.21 []
i: AF.US, AF.BDC, AF.FPI		r	A `{3}` fact is present.		`{3} Missing`	W	§ 6.5.21 R
i: AF.US, AF.BDC, AF.FPI		r	If `{3}` facts are present, then at least one is visible.		`{3} in Facts Not Visible`	W	§ 6.5.45 R
i: AF.US, AF.BDC, AF.FPI		r	If header element `shellCompanyFlag` has a value, then it is equivalent to the `{3}` fact value.		`{3} Value`	W	§ 6.5.40 Item 5
s: ALL	i: AF.US, AF.BDC, AF.FPI	r	A `{3}` fact is absent.		`{3} Unexpected`	W	§ 6.5.21 []
s: ALL		a	At most one of `{1}` and `{2}` has the value `Yes` or `true`.		`{1} {2} Exclusive Value`	W	§ 6.5.21 WV
s: ALL		a	At most one of `{2}` and `{3}` has the value `Yes` or `true`.		`{2} {3} Exclusive Value`	W	§ 6.5.21 WS

Notes and special cases: none.

3.1.11 Small Business, Emerging Growth Company

Concept	#	Type or regex	Meaning
dei:EntitySmall-Business	**{1}**	**xs:boolean**	Indicates that the company is a Smaller Reporting Company (SRC).
dei:Entity-EmergingGrowth-Company	**{2}**	**xs:boolean**	Indicates a registrant that meets the emerging growth company criteria.
dei:Entity-ExTransitionPeriod	**{3}**	**xs:boolean**	Indicates an emerging growth company has elected not to use the extended transition period for complying with any new or revised financial accounting standards.

Validations:

Incl	Excl	c	Check	f	On failure	s	EFM v68 Ref
i: AF.US, AF.BDC, AF.OEF, QF.US, R33.US, R34.US		r	A **{1}** fact is present.	1	**{1} Missing**	W	§ 6.5.40 R, R*
i: AF.BDC		r	A **{1}** fact with value **true** is absent.		**{1} Value**	W	§ 6.5.40 SB
i: AF.US, AF.BDC, AF.OEF, QF.US, R33.US, R34.US		r	If header element **smallBusinessFlag** for the filer with the CIK of the required context, then a **{1}** fact is present with that fact value.	1	**{1} Value**	W	§ 6.5.40 Item 9
i: AF.US, AF.BDC, QF.US		r	If **{1}** facts are present, then at least one is visible.		**{1} in Facts Not Visible**	W	§ 6.5.40 R § 6.5.45
s: ALL	i: AF.US, AF.BDC, AF.OEF, QF.US, R33.US, R34.US	r	A **{1}** fact is absent.	1	**{1} Unexpected**	W	§ 6.5.40 []
s: FAST, i: R33.US, R33.FPI, R34		r	A **{2}** fact is present.	1	**{2} Missing**	W	§ 6.5.40 R, R*
s: ALL		r	If there is a value for **emergingGrowthCompany-Flag** in the header for the filer with the CIK of the required context, then a **{2}** fact is present with that value.	1	**{2} Submission Value**	W	§ 6.5.40 Item 6

Incl	Excl	c	Check	f	On failure	s	EFM v68 Ref
s: FAST		r	If `{2}` facts are present, then at least one is visible.		`{1} in Facts Not Visible`	W	§ 6.5.40 R
s: ALL	s: FAST, R34, i: R33.US, R33.FPI,	r	A `{2}` fact is absent.	1	`{2} Unexpected`	W	§ 6.5.40 []
s: FAST, i: R33.US, R33.FPI, R34		a	If a `{2}` fact valued `true` is present, then a `{3}` fact is present.	1, 2	`{2} {3} Value Dependency`	E	§ 6.5.40 ET
s: FAST, i: R33.US, R33.FPI, R34		a	If a `{2}` fact does not have value true, then a `{3}` fact is absent.	1, 2	`{2} {3} Value Dependency`	W	§ 6.5.40 ET, ET*
s: FAST		r	If `{3}` facts are present, then at least one is visible.		`{3} Unexpected`	W	§ 6.5.40 ET, § 6.5.45
s: ALL	s: FAST, R34, i: R33.US, R33.FPI	r	A `{3}` fact is absent.	1	`{3} Unexpected`	W	§ 6.5.40 []
s: ALL		r	If there is a value for `exTransitionPeriodFlag` in the header for the filer with the CIK of the required context, then a `{3}` fact is present with that value.	1	`{3} Submission Value`	W	§ 6.5.40 Item 7

Notes and special cases:

1. Check is waived when the submission type matches POS.*.
2. Check does not apply to instance type RD.CEF; see 3.1.24.7 below.

3.1.12 Current Fiscal Year End Date

Concept	#	Type or regex	Meaning
`dei:CurrentFiscalYear-EndDate`	`{1}`	`xs:gMonthDay` (matches `--MM-DD`)	Month and day marking the end of the company's fiscal year; it normally does not change from year to year.

Validations:

Incl	Excl	c	Check	f	On failure	s	EFM v68 Ref
s: AF, QF, 6K, i: K.SDR, L.SDR	i: AF.OEF, AF.CEF	r	A `{1}` fact is present.	1	`{1} Missing`	W	§ 6.5.21 R, R*
s: AF	i: AF.OEF, AF.CEF	r	If `{1}` facts are present, then at least one is visible.		`{1} in Facts Not Visible`	W	§ 6.5.21 R § 6.5.45

Incl	Excl	c	Check	f	On failure	s	EFM v68 Ref
s: 8K, AF, QF, 6K, i: K.SDR, L.SDR		r	If `{1}` is present, and there is a value for `fiscalYearEnd` in the header for the filer with the CIK of the required context, then the `{1}` fact is present with that value.	2, 3	`{1} Submission Value`	W	§ 6.5.21 [], O*, § 6.5.40 Item 1
s: ALL	s: AF, QF, 6K, i: R34.FPI, R34.CA, K.SDR, L.SDR	r	A `{1}` fact is absent.		`{1} Unexpected`	W	§ 6.5.21 [], O*
s: 8K		r	If Item 5.03 is indicated in the header, then `{1}` is present.	1, 2	`{1} Submission Value`	W	§ 6.5.21 E503
s: 8K		r	If Item 5.03 is not indicated in the header, then `{1}` is absent.		`{1} Unexpected`	W	§ 6.5.21 E503

Notes and special cases:

1. Co-registrants in the header may have different fiscal year ends; only one is relevant to value tests.
2. The header field `fiscalYearEnd` is in format `MM/DD`, and in XBRL data type `gMonthDay` as --MM-DD.
3. L.SDR instances with CIK of `0000000000` are exempt from the fiscal year end date value check.

3.1.13 Filer Category (Accelerated / Non-Accelerated)

Concept	#	Type or regex	Meaning
`dei:EntityFiler-Category`	`{1}`	`(Large Accelerated|Accelerated|Non-accelerated) Filer`	Accelerated Filer Status. Note that the possible values are case-sensitive, have spaces and a dash.

Validations:

Incl	Excl	c	Check	f	On failure	s	EFM v68 Ref
i: AF.US, AF.BDC, QF.US, AF.FPI, R33.US, R34.US		r	A `{1}` fact is present.	`1`	`{1} Missing`	W	§ 6.5.21 R, R*
i: AF.US, AF.BDC, QF.US, AF.FPI		r	If `{1}` facts are present, then at least one is visible.		`{1} in Facts Not Visible`	W	§ 6.5.21 R § 6.5.45

Incl	Excl	c	Check	f	On failure	s	EFM v68 Ref
s: ALL	i: AF.US, AF.BDC, QF.US, AF.FPI, R33.US, R34.US	r	An `{1}` fact is absent.	1	`{1} Unexpected`	W	§ 6.5.21 []
i: AF.US, AF.BDC, QF.US, AF.FPI, R33.US, R34.US		r	If the value of `acceleratedFilerStatus` in the header for the filer with the CIK of the required context is `Large Accelerated Filer`, then a `{1}` fact value starting with `Large Accelerated Filer` is present.	1	`{1} Submission Value`	W	§ 6.5.40 Item 10
i: AF.US, AF.BDC, QF.US, AF.FPI, R33.US, R34.US		r	If the value of `acceleratedFilerStatus` in the header for the filer with the CIK of the required context is `Accelerated Filer`, then a `{1}` fact value starting with `Accelerated Filer` is present.	1	`{1} Submission Value`	W	§ 6.5.40 Item 11
i: AF.US, AF.BDC, QF.US, AF.FPI, R33.US, R34.US		r	If the value of `acceleratedFilerStatus` in the header for the filer with the CIK of the required context is neither `Large Accelerated Filer` nor `Accelerated Filer`, then a `{1}` fact is present in the required context with a value that starts with neither `Large Accelerated Filer` nor `Accelerated Filer`.	1	`{1} Submission Value`	W	§ 6.5.40 Item 12
i: AF.US, AF.BDC, QF.US, AF.FPI, R33.US, R34.US		r	If there is no `acceleratedFilerStatus` in the header for the filer with the CIK of the required context, then a `{1}` fact is absent.	1	`{1} Unexpected`	W	§ 6.5.40 Item 13

Notes and special cases:

1. Checks waived when the submission type matches POS.*.

3.1.14 ICFR Auditor Attestation Flag

A `dei:IcfrAuditorAttestationFlag` fact is expected for US and FPI financial statements of accelerated and large accelerated filers, but optional for Canadian and Non-accelerated filers.

Concept	#	Type or regex	Meaning
`dei:EntityFilerCategory`	`{1}`	`(Large Accelerated|Accelerated|Non-accelerated) Filer`	Note that the possible values have spaces and a dash.

dei:IcfrAuditorAttestationFlag	**{2}**	**xs:boolean**	

Validations:

Incl	Excl	c	Check	f	On failure	s	EFM v68 Ref
i: AF.US, AF.BDC, AF.FPI		r	If the value of **{1}** is "**Large Accelerated Filer**" or "**Accelerated Filer**", then a **{2}** fact is present.		**{2} Missing**	W	§ 6.5.21 Ra
i: AF.US, AF.BDC, AF.FPI, AF.CA		r	If **{2}** facts are present in the required context, then at least one is visible.		**{2} in Facts Not Visible**	W	§ 6.5.45 Ra
s: ALL	i: AF.US, AF.BDC, AF.FPI, AF.CA	a	A **{2}** fact is absent.		**{2} Unexpected**	W	§ 6.5.21 [], O

Notes and special cases: none.

3.1.15 Public Float

A **dei:EntityPublicFloat** fact is expected for certain instance types in an instant (not duration) context.

Concept	#	Type or regex	Meaning
dei:EntityPublic-Float	**{1}**	**xs:decimal**	A filer having no common shares outstanding will have a $0 public float fact, not nil; debt and other tiers of equity are not measured in the public float.

A context that has period type instant, no taxonomy-defined dimensions, and a date equal to or after the end date of the period of the required context is called a Subsequent Event (se) context.

Validations:

Incl	Excl	c	Assertion	f	On failure	s	EFM v68 Ref
i: AF.US, AF.BDC		se	A **{1}** fact is present.		**{1} Missing**	W	§ 6.5.21 R
i: AF.US, AF.BDC		se	If **{1}** facts are present, then at least one is visible.		**{1} in Facts Not Visible**	W	§ 6.5.21 R § 6.5.45
s: ALL	i: AF.US, AF.BDC	se	A **{1}** fact is absent.		**{1} Unexpected**	W	§ 6.5.21 []

Notes and special cases: none.

3.1.16 Auditor Name, Location, and Firm ID

Three facts must appear together for annual financial statements for periods ending after 12/31/2020.

Concept	#	Type or regex	Meaning
dei:AuditorName	**{1}**	**[\p{L}\p{N}].*** up to 150 characters; **\p{L}** matches a single letter and **\p{N}** matches any kind of numeric character in any language.	The plain text (not logo nor signature) name of the auditor

dei:AuditorLocation	**{2}**	**[\p{L}\p{N}].*** up to 150 characters.	City along with either or both of country, US state, or Canadian province
dei:AuditorFirmId	**{3}**	**[1-9]\d*** an integer with no leading sign or zeroes.	The auditor's Firm ID as assigned by the US PCAOB.

Validations:

Incl	Excl	c	Check	f	On failure	s	EFM v68 Ref
i: AF.US, AF.BDC, AF.FPI, AF.CA	s: AM	r	A **{1}** fact is present.	1	**{1} Missing**	E	§ 6.5.21 H § 6.5.54
i: AF.US, AF.BDC, AF.FPI, AF.CA		r	If **{1}** facts are present in the required context, then at least one is visible.	2	**{1} in Facts Not Visible**	W	§ 6.5.21 H § 6.5.54
s: ALL	i: AF.US, AF.BDC, AF.FPI, AF.CA	r	A **{1}** fact is absent.	1	**{1} Unexpected**	E	§ 6.5.21 []
i: AF.US, AF.BDC, AF.FPI, AF.CA	s: AM	r	A **{2}** fact is present.	1	**{2} Missing**	E	§ 6.5.21 H § 6.5.54
i: AF.US, AF.BDC, AF.FPI, AF.CA		r	If **{2}** facts are present in the required context, then at least one is visible.	2	**{2} in Facts Not Visible**	W	§ 6.5.21 H § 6.5.54
s: ALL	i: AF.US, AF.BDC, AF.FPI, AF.CA	r	A **{2}** fact is absent.	1	**{2} Unexpected**	E	§ 6.5.21 []
i: AF.US, AF.BDC, AF.FPI, AF.CA	s: AM	r	A **{3}** fact is present.	1	**{3} Missing**	E	§ 6.5.21 H § 6.5.54
i: AF.US, AF.BDC, AF.FPI, AF.CA		r	If **{3}** facts are present in the required context, then at least one is visible.	2	**{3} in Facts Not Visible**	W	§ 6.5.21 H § 6.5.54

Incl	Excl	c	Check	f	On failure	s	EFM v68 Ref
s: ALL	i: AF.US, AF.BDC, AF.FPI, AF.CA	r	A `{3}` fact is absent.	1	`{3} Unexpected`	E	§ 6.5.21 []
s: ALL		a	If any of `{1}, {2}, or {3}`, are present, then all three are present.	1, 3	`{1} {2} {3} Mutual Dependency`	E	§ 6.5.54

Notes and special cases:

1. Absence (or unexpected presence) has severity Error, not Warning as it is for most expected facts.
2. The code `{_} in Facts Not Visible` does not mean that auditor information must literally appear on a cover page. These facts should appear in an Inline XBRL file where they normally appear, adjacent to the auditors' opinions.
3. In addition to the primary auditor in the required context, additional auditor names, locations and firm IDs should be tagged in other contexts distinguished by the relevant reporting period of that audit opinion, and/or a distinct member of one of the following axes in a standard namespace:
    a. `ConsolidatedEntitiesAxis` for subsidiaries,
    b. `ScheduleOfEquityMethodInvestmentEquityMethodInvesteeNameAxis` for investments,
    c. `LegalEntityAxis` for branches,
    d. `OwnershipAxis` for components,
    e. `CounterpartyNameAxis` for all others.

3.1.17 Investment Company Type

Concept	#	Type or regex	Meaning
`dei:EntityInvCompanyType`	`{1}`	`N-1A|N-1|N-2|N-3|N-4|N-6|S-1 or S-3|S-6`	Investment Company Type. Note that one of the possible values is the literal token `S-1 or S-3`, these are not alternative values.

Validations:

Incl	Excl	c	Check	f	On failure	s	EFM v68 Ref
s: RD		r	A `{1}` fact is present.	1	`{1} Missing`	W	§ 6.5.40 R*
s: ALL	s: RD	r	A `{1}` fact is absent.	1	`{1} Value`	W	§ 6.5.40 []
s: RD		r	If header element `invCompanyType` for the filer with the CIK of the required context, then a `{1}` fact is present with that fact value.	1	`{1} Value`	W	§ 6.5.40 Item 8

Notes and special cases:

1. Checks waived for submission types matching POS.*.

3.1.18 File Number (Securities Act File Number)

Concept	#	Type or regex	Meaning
dei:EntityFile-Number	{1}	\d{1,3}-\d{1,8}(-.{1,4})?	Securities ("33") Act file number.

Validations:

Incl	Excl	c	Assertion	f	On failure	s	EFM v68 Ref
s: FAST		r	A {1} fact is present.		**{1} Missing**	W	§ 6.5.47 Ri
s: ALL	s: FAST, 6K, i: R34.FPI, R34.CA	r	A {1} fact is absent.		**{1} Unexpected**	W	§ 6.5.47 [], O* § 6.5.55 n2sn

Notes and special cases: none.

3.1.19 Incorporation State / Country Code

Concept	#	Type or regex	Meaning
dei:Entity-Incorporation-StateCountryCode	{1}	[A-Z][A-Z0-9]	Two-character EDGAR code. US States and Canadian provinces are represented by their postal code (*e.g.*, **WA**, **BC**); other countries by a code matching **[A-Z]\d.** Transformation **ixt-sec:edgarprovcountry** (EFM § 5.2.5.12) transforms the full names of countries and Canadian provinces to their EDGAR codes.

Validations:

Incl	Excl	c	Check	f	On failure	s	EFM v68 Ref
s: FAST		r	A {1} fact is present.		**{1} Missing**	W	§ 6.5.47 Ri
s: FAST		r	If {1} facts are present, then at least one is visible.		**{1} in Facts Not Visible**	W	§ 6.5.47 Ri
s: ALL	s: FAST, R33, R34	r	A {1} fact is absent.		**{1} Unexpected**	W	§ 6.5.47 [], O*

Notes and special cases: none.

3.1.20 Tax Identification Number

Concept	#	Type or regex	Meaning
dei:EntityTaxIdentification-Number	{1}	\d{2}-\d{7}	Shown on forms as "IRS Employer ID".

Validations:

Types	Excl	c	Assertion	f	On failure	s	EFM v68 Ref
s: FAST	i: AF.CA	r	A {1} fact is present.		**{1} Missing**	W	§ 6.5.47 Ri, O
s: FAST		r	If {1} facts are present, then at least one is visible.		**{1} in Facts Not Visible**	W	§ 6.5.47 Ri, O
s: ALL	s: FAST, R34, i: AF.CA	r	A {1} fact is absent.		**{1} Unexpected**	W	§ 6.5.47 [], O*

Notes and special cases: none.

3.1.21 Primary SIC (Standard Industrial Code) Number

Concept	#	Type or regex	Meaning
dei:EntityPrimarySicNumber	**{1}**	**\d{4}**	SEC-assigned Standard Industrial Code

Validations:

Incl	Excl	c	Assertion	f	On failure	s	EFM v68 Ref
AF.CA		r	If **{1}** are present, then at least one is visible.		**{1} in Facts Not Visible**	W	§ 6.5.47 O
s: ALL	s: R34, i: AF.CA	r	A **{1}** fact is absent.		**{1} Unexpected**	W	§ 6.5.47 [], O*

Notes and special cases: none

3.1.22 Principal Office Address

The facts expected for the principal office address vary across instance types.

3.1.22.1 Street, City and Zip

Concept	#	Type or regex	Meaning
dei:EntityAddressAddressLine1	**{1}**	**xs:normalizedString**	
dei:EntityAddressCityOrTown	**{2}**	**xs:normalizedString**	
dei:EntityAddressPostalZipCode	**{3}**	**xs:normalizedString**	

The first line of the address, the city or town, and postal or zip code, share identical checks.

Validations:

Incl	Excl	c	Check	f	On failure	s	EFM v68 Ref
s: FAST		r	A **{1}** fact is present.		**{1} Missing**	W	§ 6.5.48 Ri
s: FAST		r	If **{1}** facts are present in the required context, then at least one is visible.		**{1} in Facts Not Visible**	W	§ 6.5.48 Ri
s: ALL	s: FAST, 6K, R34, R33	r	A **{1}** fact is absent.		**{1} Unexpected**	W	§ 6.5.48 [], O*
s: FAST		r	A **{2}** fact is present.		**{2} Missing**	W	§ 6.5.48 Ri
s: FAST		r	If **{2}** facts are present in the required context, then at least one is visible.		**{2} in Facts Not Visible**	W	§ 6.5.48 Ri
s: ALL	s: FAST, 6K, R34, R33	r	A **{2}** fact is absent.		**{2} Unexpected**	W	§ 6.5.48 [], O*
s: FAST		r	A **{3}** fact is present.		**{3} Missing**	W	§ 6.5.48 Ri
s: FAST		r	If **{3}** facts are present in the required context, then at least one is visible.		**{3} in Facts Not Visible**	W	§ 6.5.48 Ri
s: ALL	s: FAST, 6K, R34, R33	r	A **{3}** fact is absent.		**{3} Unexpected**	W	§ 6.5.48 [], O*

Notes and special cases: none.

3.1.22.2 Street Address Lines 2 and 3

Concept	#	Type or regex	Meaning
dei:EntityAddressAddressLine1	**{1}**	**xs:normalizedString**	

Concept	#	Type or regex	Meaning
dei:EntityAddressAddressLine2	{2}	**xs:normalizedString**	
dei:EntityAddressAddressLine3	{3}	**xs:normalizedString**	

Address line 2 should only appear if the first line does, likewise, address line 3 only if address line 2 does. This should hold in any context.

Validations:

Incl	**Excl**	**c**	**Check**	**f**	**On failure**	s	EFM v68 Ref
s: ALL		a	If a {2} fact is present, then a {1} fact is also present.	1	**{1} {2} Dependency**	W	§ 6.5.48 OL1* § 6.5.51 OL1*
s: FAST, i: RD.CEF		r	If {2} facts are present, then at least one is visible.		**{2} in Facts Not Visible**	W	§ 6.5.48 O
s: ALL	s: FAST, 6K, R34, i: RD.CEF, R33.US, R33.FPI	r	A {2} fact is absent.		**{2} Unexpected**	W	§ 6.5.48 []
s: ALL		a	If a {3} fact is present, then a {2} fact is also present.		**{2} {3} Dependency**		§ 6.5.48 OL2, OL2* § 6.5.51 OL2, OL2*
s: FAST, i: RD.CEF		r	If {3} facts are present, then at least one is visible.		**{3} in Facts Not Visible**	W	§ 6.5.48 OL2
s: ALL	s: FAST, 6K, R34, i: RD.CEF, R33.US, R33.FPI	r	A {3} fact is absent.		**{3} Unexpected**	W	§ 6.5.48 [], OL2*

Notes and special cases:

1. Condition OL1 is satisfied if address line 2 is present; address line 1 is already required.

3.1.22.3 State or Province and Country

Concept	#	Type or regex	Meaning
dei:Entity-AddressState-OrProvince	{1}	[A-Z][A-Z]	**Postal state or province.** Inline XBRL transformations that convert state and province names to postal codes (e.g., TX, ON) shown in EFM § 5.2.5.12.
dei:Entity-AddressCountry	{2}	[A-Z][A-Z]	ISO 3166-1 alpha 2 (IANA) country code. Inline XBRL transformations convert country names to IANA () codes (e.g., US, JP) are shown in EFM § 5.2.5.12.

Validations:

Incl	Excl	c	Check	f	Codes	s	EFM v68 Ref
s: FAST, i: RD.CEF	i: AF.FPI	r	One or both {1} and {2} facts are present.	1	**{1} {2} Inclusive**	W	§ 6.5.48 O2
s: FAST, i: RD.CEF		r	If {1} facts are present, then at least one is visible.		**{1} in Facts Not Visible**	W	§ 6.5.48 O, O2

Incl	Excl	c	Check	f	Codes	s	EFM v68 Ref
i: AF.FPI		r	A `{2}` fact is present.		`{2} Missing`	W	§ 6.5.48 Ri
s: FAST, i: RD.CEF		r	If `{2}` facts are present, then at least one is visible.		`{2} in Facts Not Visible`	W	§ 6.5.48 O2, Ri
s: ALL	s: FAST, R34, R33, i: RD.CEF	r	A `{1}` fact is absent.		`{1} Unexpected`	W	§ 6.5.48 [], O*
s: ALL	s: FAST, 6K, R34, i: R33.US, R33.FPI	r	A `{2}` fact is absent.		`{2} Unexpected`	W	§ 6.5.48 [], O*

Notes and special cases: none.

3.1.22.4 Phone

Concept	#	Type or regex	Meaning
`dei:CityAreaCode`	`{1}`	`xs:normalizedString`	
`dei:LocalPhoneNumber`	`{2}`	`xs:normalizedString`	

Validations:

Types	Excl	c	Check	f	On failure	s	EFM v68 Ref
i: R34.US, R34.CA, R33.US, R33.FPI, AF.FPI, RD.CEF		a	Neither or both of a `{1}` fact and a `{2}` fact is present.	1, 2	`{1} {2} Dependency`	W	§ 6.5.48 Oph*, § 6.5.51 Oph, Oph*
s: 8K, QF, i: AF.US, AF.BDC, RD.CEF, AF.CA		r	A `{1}` fact is present.		`{1} Missing`	W	§ 6.5.48 Ri
s: 8K, QF, i: AF.US, AF.BDC, RD.CEF, AF.CA		r	If `{1}` facts are present, then at least one is visible.		`{1} in Facts Not Visible`	W	§ 6.5.48 Ri
s: ALL	s: 8K, QF, i: AF.US, AF.BDC, RD.CEF, AF.CA, R34.US, R34.CA, R33.US, R33.FPI	r	A `{1}` fact is absent.		`{1} Unexpected`	W	§ 6.5.48 [], Oph*
s: 8K, QF, i: AF.US, AF.BDC, RD.CEF, AF.CA		r	A `{2}` fact is present.		`{2} Missing`	W	§ 6.5.48 Ri
s: 8K, QF, i: AF.US, AF.BDC, RD.CEF, AF.CA		r	If `{2}` facts are present, then at least one is visible.		`{2} in Facts Not Visible`	W	§ 6.5.48 Ri

Types	Excl	c	Check	f	On failure	s	EFM v68 Ref
s: ALL	s: 8K, QF, i: AF.US, AF.BDC, RD.CEF, AF.CA, R34.US, R34.CA, R33.US, R33.FPI	r	A `{2}` fact is absent.		`{2} Unexpected`	W	§ 6.5.48 [], O*

Notes and special cases:

1. Check is waived when the submission type matches POS*
2. Check applies in all contexts, and appears in both 6.5.48 and 6.5.51 (business address)

3.1.23 Submission Flags

Submission flags are grouped below when they have mutually dependent or exclusive values.

3.1.23.1 Annual Report, Transition Report, Quarterly Report

Concept	#	Type or regex	Meaning
`dei:DocumentAnnualReport`	`{1}`	`xs:boolean`	
`dei:DocumentTransitionReport`	`{2}`	`xs:boolean`	
`dei:DocumentShellCompanyReport`	`{3}`	`xs:boolean`	
`dei:DocumentShellCompanyEventDate`	`{4}`	`xs:date`	
`dei:DocumentQuarterlyReport`	`{5}`	`xs:boolean`	

When certain of the above concepts are expected, only one can have the value `true`.

Validations:

Incl	Excl	c	Check	f	On failure	s	EFM v68 Ref
i: AF.US, AF.BDC, AF.CA	s: TF	r	A `{1}` fact **valued** `true` **is present**.		`{1} Value Missing`	W	§ 6.5.49 Y
s: TF, R34.FPI, R34.CA	s: QF, EBP	r	A `{1}` fact **valued** `false` **is present**.		`{1} Value Missing`	W	§ 6.5.49 N, N*
i: AF.FPI		r	If a `{1}` fact valued `true` is present, then a `{2}` fact **valued** `false` is present.		`{1} {2} Value Dependency`	W	§ 6.5.49 TF3
i: AF.FPI		r	If a `{1}` fact valued `true` is present, then a `{3}` fact **valued** `false` is present.		`{1} {3} Value Dependency`	W	§ 6.5.49 TF3
i: AF.FPI		r	If a `{2}` fact valued `true` is present, then a `{1}` fact **valued** `false` is present.		`{2} {3} Value Dependency`	W	§ 6.5.49 TF3
i: AF.FPI		r	If a `{2}` fact valued `true` is present, then a `{3}` fact **valued** `false` is present.		`{2} {3} Value Dependency`	W	§ 6.5.49 TF3

Incl	Excl	c	Check	f	On failure	s	EFM v68 Ref
i: AF.FPI		r	If a `{3}` fact valued `true` is present, then a `{1}` fact **valued** `false` is present.		`{3} {2} Value Dependency`	W	§ 6.5.49 TF3
i: AF.FPI		r	If a `{3}` fact valued `true` is present, then a `{2}` fact **valued** `false` is present.		`{3} {2} Value Dependency`	W	§ 6.5.49 TF3
i: AF.US, AF.BDC, AF.CA		r	If `{1}` facts are present, then at least one is visible.		`{1} in Facts Not Visible`	W	§ 6.5.49 Y, N, TF3
s: QF, i: AF.US, AF.BDC, AF.CA		r	If `{2}` facts are present, then at least one is visible.		`{2} in Facts Not Visible`	W	§ 6.5.49 Y, N, TF3
i: AF.FPI		r	If `{3}` facts are present, then at least one is visible.		`{3} in Facts Not Visible`	W	§ 6.5.49 TF3
R34.CA		r	A `{1}` fact **valued** `false` **is present**.		`{2} Value Unexpected`	W	§ 6.5.49 N*
s: ALL	s: QF, i: AF.US, AF.BDC, AF.CA, AF.FPI, R34.CA	r	A `{1}` fact is absent.		`{1} Unexpected`	W	§ 6.5.49 []
s: ALL	s: QF, i: AF.US, AF.BDC, AF.CA, AF.FPI	r	A `{2}` fact is absent		`{2} Unexpected`	W	§ 6.5.49 []
i: AF.FPI		r	If `{3}` valued `true` is present, then `{4}` is present.		`{4} Value Dependency`		§ 6.5.49 SR
i: AF.FPI		r	If `{3}` valued `false` is present, then `{4}` is absent.		`{4} Value Dependency`		§ 6.5.49 SR
i: AF.FPI		r	If `{4}` facts are present, then at least one is visible.		`{4} in Facts Not Visible`	W	§ 6.5.49 SR
s: ALL	i: AF.FPI	r	A `{4}` fact is absent.		`{4} Unexpected`	W	§ 6.5.49 []
s: QF	s: TF	r	A `{5}` fact **valued** `false` **is presen**t.		`{5} Value Missing`	W	§ 6.5.49 N
s: TF	s: AF, EBP	r	A `{5}` fact **valued** `true` **is presen**t.		`{5} Value Missing`	W	§ 6.5.49 Y
s: QF		r	If `{5}` facts are present, then at least one is visible.		`{5} in Facts Not Visible`	W	§ 6.5.49 Y, N
s: ALL	s: QF	r	A `{5}` fact is absent.		`{5} Unexpected`	W	§ 6.5.49 []

Notes and special cases: none.

3.1.23.2 Financial Statement Error Correction, Recovery Analysis

Concept	#	Type or regex	Meaning
dei:DocumentFinStmtError-CorrectionFlag	**{1}**	**xs:boolean**	Annual reports expect a flag indicating error correction.
dei:DocumentFinStmt-RestatementRecovery-AnalysisFlag	**{2}**	**xs:boolean**	If error correction is true, then a flag indicating whether the restatement resulted in an analysis of compensation recovery.

Validations:

Incl	Excl	c	Check	f	On failure	s	EFM v68 Ref
AF.US, AF.BDC, AF.FPI, AF.CA		r	A **{1} fact** is present.		**{1} Missing**	W	§ 6.5.49 R
AF.US, AF.BDC, AF.FPI, AF.CA		r	If **{1}** facts are present, then at least one is visible.		**{1} in Facts Not Visible**	W	§ 6.5.49 R
s: ALL	AF.US, AF.BDC, AF.FPI, AF.CA	r	A **{1}** fact is absent.		**{1} Unexpected**	W	§ 6.5.49 []
AF.US, AF.BDC, AF.FPI, AF.CA		a	If a **{1}** fact valued **true** is present, then **{2}** is present.		**{1} {2} Value Dependency**	W	§ 6.5.49 RT
AF.US, AF.BDC, AF.FPI, AF.CA		a	If a **{1}** fact valued **false** is present, then **{2}** is absent.		**{1} {2} Value Dependency**	W	§ 6.5.49 RT
AF.US, AF.BDC, AF.FPI, AF.CA		r	If **{2}** facts are present, then at least one is visible.		**{2} in Facts Not Visible**	W	§ 6.5.49 RT
s: ALL	AF.US, AF.BDC, AF.FPI, AF.CA	r	A **{2} fact** is absent.		**{2} Unexpected**	W	§ 6.5.49 []

Notes and special cases: none.

3.1.23.3 Non-US Filer Flags

Miscellaneous flags applying only to non-US filers.

Concept	#	Type or regex	Meaning
AnnualInformationForm	**{1}**	**xs:boolean**	
AuditedAnnualFinancial-Statements	**{2}**	**xs:boolean**	
DocumentAccounting-Standard	**{3}**	**U.S. GAAP|International Financial Reporting Standards|Other**	Note that the values are case sensitive and contain spaces.
OtherReportingStandard-ItemNumber	**{4}**	**Item (17|18)**	Note that the values are case sensitive and contain spaces.
DocumentRegistration-Statement	**{5}**	**xs:boolean**	

Validations:

Incl	Excl	c	Check	f	On failure	s	EFM v68 Ref
s: AF.CA		r	A `{1}` fact is present.		`{1} Missing`	W	§ 6.5.49 Ri
s: AF.CA		r	If `{1}` facts are present, then at least one is visible.		`{1} in Facts Not Visible`	W	§ 6.5.49 Ri
s: ALL	s: AF.CA	r	A `{1} fact` is absent.		`{1} Unexpected`	W	§ 6.5.49 []
s: AF.CA		r	A `{2}` fact is present.		`{2} Missing`	W	§ 6.5.49 Ri
s: AF.CA		r	If `{2}` facts are present, then at least one is visible.		`{2} in Facts Not Visible`	W	§ 6.5.49 Ri
s: ALL	s: AF.CA	r	A `{2} fact` is absent.		`{2} Unexpected`	W	§ 6.5.49 []
i: AF.FPI			A `{3}` fact is present.		`{3} Missing`	W	§ 6.5.50 Ri
i: AF.FPI			If `{3}` facts are present, then at least one is visible.		`{3} in Facts Not Visible`		§ 6.5.50 Ri
s: ALL	i: AF.FPI, R34.FPI		A `{3}` fact is absent.		`{3} Unexpected`	W	§ 6.5.50 [], O*
i: AF.FPI, R34.FP			If a `{3}` fact valued `Other` is present, then `{4}` is present.		`{3} {4} Value Dependency`	W	§ 6.5.50 Oth, Oth*
i: AF.FPI, R34.FP			If a `{3}` fact valued `Other` is absent, then `{4}` is absent.		`{3} {4} Value Dependency`	W	§ 6.5.50 Oth, Oth*
i: AF.FPI			If `{4}` facts are present, then at least one is visible.		`{4} in Facts Not Visible`	W	§ 6.5.50 Oth
s: ALL	i: AF.FPI, R34.FPI		A `{4}` fact is absent.		`{4} Unexpected`	W	§ 6.5.50 []
i: AF.FPI, AF.CA			If a `{5}` fact is present, it is valued `false`.		`{5} Value Missing`	W	§ 6.5.49 N
i: AF.FPI, AF.CA			If `{5}` facts are present, then at least one is visible.		`{5} in Facts Not Visible`	W	§ 6.5.49 N
i: R34.CA, R34.FPI			If a `{5}` fact is present, it is valued `true`.		`{5} Value Missing`	W	§ 6.5.49 Y*
s: ALL	i: AF.FPI, AF.CA. R34.FPI, R34.CA		A `{5}` fact is absent.		`{5} Unexpected`	W	§ 6.5.49 []

Notes and special cases: none.

3.1.23.4 Period Start Date

Concept	#	Type or regex	Meaning
`DocumentTransitionReport`	`{1}`	`xs:boolean`	
`DocumentPeriodStartDate`	`{2}`	`xs:date`	

The period start date fact is required only for transition reports. In the case of Form 20-F, a transition report cannot always be determined from the submission type alone.

Validations:

Incl	Excl	c	Check	f	On failure	s	EFM v68 Ref
i: AF.FPI		r	If a {1} fact valued true is present, then a {2} fact is present.		`{1} {2} Value Dependency`	W	§ 6.5.49 TR
s: TF		r	A `{2}` fact is present.		`{2} Missing`	W	§ 6.5.49 Ri
s: TF, i: AF.FPI		r	If `{2}` facts are present, then at least one is visible.		`{1} in Facts Not Visible`	W	§ 6.5.49 Ri, TR
s: ALL	s: TF, i: AF.FPI	r	A `{2} fact` is absent.		`{2} Unexpected`	W	§ 6.5.49 []

Notes and special cases: none.

3.1.23.5 Bankruptcy Proceedings Flag

Concept	#	Type or regex	Meaning
`EntityBankruptcyProceedingsCurrent`	`{1}`	`xs:boolean`	

Validations:

Incl	Excl	c	Check	f	On failure	s	EFM v68 Ref
s: QF, i: AF.US, AF.BDC, AF.FPI		r	If `{1}` facts are present, then at least one is visible.		`{1} in Facts Not Visible`	W	§ 6.5.49 O
s: ALL	s: QF, i: AF.US, AF.BDC, AF.FPI, R33.FPI	r	A `{1} fact` is absent.		`{1} Unexpected`	W	§ 6.5.49 [], O*

Notes and special cases: none.

3.1.23.6 Documents Incorporated by Reference

Form 10-K text describing documents incorporated by reference should appear in a text block fact.

Concept	#	Type or regex	Meaning
`DocumentsIncorporatedByReferenceTextBlock`	`{1}`	**Text block (see 8.1.1 below)**	

Validations:

Incl	Excl	c	Check	f	On failure	s	EFM v68 Ref
i: AF.US, AF.BDC		r	If `{1}` facts are present, then at least one is visible.		`{1} in Facts Not Visible`	W	§ 6.5.49 O
s: ALL	i: AF.US, AF.BDC	r	A `{1} fact` is absent.		`{1} Unexpected`	W	§ 6.5.49 []

Notes and special cases: none.

3.1.23.7 Current Report

Concept	#	Type or regex	Meaning
`WrittenCommunications`	`{1}`	`xs:boolean`	
`SolicitingMaterial`	`{2}`	`xs:boolean`	
`PreCommencementTenderOffer`	`{3}`	`xs:boolean`	

Concept	#	Type or regex	Meaning
PreCommencementIssuerTenderOffer	{4}	xs:boolean	
EntityInformationFormerLegalOr-RegisteredName	{5}	xs:normalizedString (*e.g.*, "OLDCO Inc.")	

Validations:

Incl	Excl	c	Check	f	On failure	s	EFM v68 Ref
s: 8K		r	A {1} fact is present.		{1} Missing	W	§ 6.5.52 Ri
s: 8K		r	If {1} facts are present, then at least one is visible.		{1} in Facts Not Visible	W	§ 6.5.52 Ri
s: ALL	s: 8K	r	A {1} fact is absent.		{1} Unexpected	W	§ 6.5.52 []
s: 8K		r	A {2} fact is present.		{2} Missing	W	§ 6.5.52 Ri
s: 8K		r	If {2} facts are present, then at least one is visible.		{2} in Facts Not Visible	W	§ 6.5.52 Ri
s: ALL	s: 8K	r	A {2} fact is absent.		{2} Unexpected	W	§ 6.5.52 []
s: 8K		r	A {3} fact is present.		{3} Missing	W	§ 6.5.52 Ri
s: 8K		r	If {3} facts are present, then at least one is visible.		{3} in Facts Not Visible	W	§ 6.5.52 Ri
s: ALL	s: 8K	r	A {3} fact is absent.		{3} Unexpected	W	§ 6.5.52 []
s: 8K		r	A {4} fact is present.		{4} Missing	W	§ 6.5.52 Ri
s: 8K		r	If {4} facts are present, then at least one is visible.		{4} in Facts Not Visible	W	§ 6.5.52 Ri
s: ALL	s: 8K	r	A {4} fact is absent.		{4} Unexpected	W	§ 6.5.52 []
s: 8K, QF		r	If {5} facts are present, then at least one is visible.		{5} in Facts Not Visible	W	§ 6.5.52 O
s: ALL	s: 8K, QF	r	A {5} fact is absent.		{5} Unexpected	W	§ 6.5.52 []

Notes and special cases: none

3.1.24 Closed-end fund registration

The cover page of Form N-2 has over 30 check box, date, amendment, and file number facts, many of which have interdependent values or are mutually exclusive. The subsections below break these facts into related groups.

Note that unlike other Checks involving facts in the required context, violation of these is more likely to raise an error, not a warning.

Most concepts related to these Checks are in the **dei** namespace; a few are specific to closed-end funds and thus appear in the **cef** taxonomy.

3.1.24.1 N-2 Registration file numbers

Concept	#	Type or regex	Meaning
Submission type from EDGAR header	{1}		
dei:DocumentRegistrationStatement	{2}	xs:boolean	
dei:InvestmentCompanyActRegistration	{3}	xs:boolean	
dei:EntityFileNumber	{4}	\d{1,3}-\d{1,8}(-.{1,4})?	
dei:InvestmentCompanyActFileNumber	{5}	\d{1,3}-\d{1,8}(-.{1,4})?	
cef:BdcFileNumber	{6}	\d{1,3}-\d{1,8}(-.{1,4})?	

Form N-2, when submitted to EDGAR as submission type N-2, represents an initial filing in which no SEC file number has yet been assigned. All subsequent submissions will have one or more file numbers appearing on the cover page.

Validations:

Incl	Excl	c	Check	f	On failure	s	EFM v68 Ref
i: RD.CEF		r	If `{1}` is `N-2`, then a `{4}` fact is absent.	1	`{4} Unexpected`	W	§ 6.5.55 []
i: RD.CEF		r	If `{1}` is `N-2`, then a `{5}` fact is absent.	1	`{5} Unexpected`	W	§ 6.5.55 []
i: RD.CEF		r	If `{1}` is `N-2`, then a `{6}` fact is absent.	1	`{6} Unexpected`	W	§ 6.5.55 []
i: RD.CEF		a	Either or both a `{2}` fact valued `true` or a `{3}` fact valued `true` must be present.		`{3} {4} Inclusive`	E	§ 6.5.55 n2c
i: RD.CEF		a	Neither or both a `{2}` fact valued `true` and a `{4}` fact exist.		`{2} {4} Value Dependency`	E	§ 6.5.55 n2sn
i: RD.CEF		r	If `{2}` facts are present, then at least one is visible.		`{2} in Facts Not Visible`	E	§ 6.5.55 n2sn
i: RD.CEF		r	If `{4}` facts are present, then at least one is visible.		`{2} in Facts Not Visible`	E	§ 6.5.55 n2sn
i: RD.CEF		a	Neither or both a `{3}` fact valued `true` and a `{5}` fact exist.		`{3} {5} Value Dependency`	E	§ 6.5.55 n2in
i: RD.CEF		r	If `{3}` facts are present, then at least one is visible.		`{3} in Facts Not Visible`	E	§ 6.5.55 n2in
i: RD.CEF		r	If `{5}` facts are present, then at least one is visible.		`{5} in Facts Not Visible`	E	§ 6.5.55 n2in
i: RD.CEF		a	At most one of `{5}` or `{6}` are present.		`{5} {6} Exclusive`	E	§ 6.5.55 n2bn
i: RD.CEF		r	If `{5}` facts are present, then at least one is visible.		`{5} in Facts Not Visible`	E	§ 6.5.55 n2bn
i: RD.CEF		r	If `{6}` facts are present, then at least one is visible.		`{6} in Facts Not Visible`	E	§ 6.5.55 n2bn
i: RD.CEF		a	If `{6}` facts are present, their value must begin with `814-`		`{6} Value`	E	§ 6.5.55 n2bn

Notes and special cases:

1. In general, the first form N-2 submission is not an amendment and will have no file numbers.

3.1.24.2 N-2 Registration Amendment Numbers

Subsequent submissions after the first Form N-2 will have amendment numbers that are different depending on whether the registration is under the Securities Act or the Investment Company Act and whether they occur before or after the registration becomes effective.

Concept	#	Type or regex	Meaning
Submission type from EDGAR header	`{1}`		
`dei:DocumentRegistrationStatement`	`{2}`	`xs:boolean`	
`dei:PreEffectiveAmendment`	`{3}`	`xs:boolean`	
`dei:PreEffectiveAmendmentNumber`	`{4}`	`xs:positiveInteger`	
`dei:PostEffectiveAmendment`	`{5}`	`xs:boolean`	

Concept	#	Type or regex	Meaning
dei:PostEffectiveAmendmentNumber	**{6}**	**xs: positiveInteger**	
dei:InvestmentCompanyActRegistration	**{7}**	**xs:boolean**	
dei:InvestmentCompanyRegistrationAmendment	**{8}**	**xs:boolean**	
dei:InvestmentCompanyRegistrationAmendmentNumber	**{9}**	**xs:positiveInteger**	

Note that these tend to be errors, not warnings.

Validations:

Incl	Excl	c	Check	f	On failure	s	EFM v68 Ref
i: RD.CEF		r	If **{1}** is **N-2**, then a **{3}** fact is absent.		**{3} Unexpected**	W	§ 6.5.55 []
i: RD.CEF		r	If **{1}** is **N-2**, then a **{5}** fact is absent.		**{5} Unexpected**	W	§ 6.5.55 []
i: RD.CEF		a	If a **{3}** fact value is **true**, then there is a **{2}** fact valued **true.**		**{3} {2} Value Dependency**	E	§ 6.5.55 n2d
i: RD.CEF		a	If a **{5}** fact value is **true**, then there is a **{2}** fact valued **true.**		**{5} {2} Value Dependency**	E	§ 6.5.55 n2f
i: RD.CEF		a	If a **{8}** fact value is true, then there is a **{7}** fact valued true.		**{8} {7} Value Dependency**	E	§ 6.5.55, n2h
i: RD.CEF		r	Neither or both **{3}** fact has the value true and a **{4}** fact exists.		**{3} {4} Value Dependency**	E	§ 6.5.55, n2e
i: RD.CEF		r	Neither or both **{5}** fact has the value true and a **{6}** fact exists.		**{5} {6} Value Dependency**	E	§ 6.5.55, n2g
i: RD.CEF		r	Neither or both **{8}** fact has the value true and a **{9}** fact exists.		**{8} {9} Value Dependency**	E	§ 6.5.55, n2i
i: RD.CEF		r	If **{2}** facts valued **true** are present, then at least one is visible.	1	**{2} in Facts Not Visible**	E	§ 6.5.55 n2d
i: RD.CEF		r	If **{3}** facts valued **true** are present, then at least one is visible.	1	**{3} in Facts Not Visible**	E	§ 6.5.55 n2d
i: RD.CEF		r	If **{4}** facts are present, then at least one is visible.	1	**{4} in Facts Not Visible**	E	§ 6.5.55 n2e
i: RD.CEF		r	If **{5}** facts valued **true** are present, then at least one is visible.	1	**{5} in Facts Not Visible**	E	§ 6.5.55 n2f
i: RD.CEF		r	If **{6}** facts are present, then at least one is visible.	1	**{6} in Facts Not Visible**	E	§ 6.5.55 n2g
i: RD.CEF		r	If **{7}** facts valued **true** are present, then at least one is visible.	1	**{7} in Facts Not Visible**	E	§ 6.5.55 n2h
i: RD.CEF		r	If **{8}** facts valued **true** are present, then at least one is visible.	1	**{8} in Facts Not Visible**	E	§ 6.5.55 n2h
i: RD.CEF		r	If **{9}** facts are present, then at least one is visible.	1	**{9} in Facts Not Visible**	E	§ 6.5.55 n2i

Notes and special cases:

1. There are no checks for the absence of these facts in instance types other than RD.CEF.

3.1.24.3 N-2 Commencement of Sales

Concept	#	Type or regex	Meaning
dei:ApproximateDateOf-CommencementOf-ProposedSaleToThe-Public	**{1}**	**(As soon as practicable|From time to time) after the effective date of this Registration Statement\.?)|(20\d\d-(0[1-9]|1[0-2])-(3[01]|[012]\d))**	Note that the text values contain spaces.

Validations:

Incl	Excl	c	Check	f	On failure	s	Ref
i: RD.CEF		r	A **{1}** fact is present.	1	**{1} Missing**	W	§ 6.5.55 Ri

Notes and special cases:

1. There is no check for the absence of this fact in instance types other than RD.CEF.

3.1.24.4 N-2 Rule Flags

Concept	#	Type or regex	Meaning
dei:DividendOrInterestReinvestmentPlanOnly	**{1}**	**xs:boolean**	
dei:DelayedOrContinuousOffering	**{2}**	**xs:boolean**	
cef:PrimaryShelfFlag	**{3}**	**xs:boolean**	
dei:EffectiveUponFiling462e	**{4}**	**xs:boolean**	
dei:AdditionalSecuritiesEffective413b	**{5}**	**xs:boolean**	

Validations:

Incl	Excl	c	Check	f	On failure	s	EFM v68 Ref
i: RD.CEF		r	If **{1}** facts valued **true** are present, then at least one is visible.	1	**{1} in Facts Not Visible**	E	§ 6.5.55 B
i: RD.CEF		r	If **{2}** facts valued **true** are present, then at least one is visible.	1	**{2} in Facts Not Visible**	E	§ 6.5.55 B
i: RD.CEF		r	If **{3}** facts valued **true** are present, then at least one is visible.	1	**{3} in Facts Not Visible**	E	§ 6.5.55 B
i: RD.CEF		r	If **{4}** facts valued **true** are present, then at least one is visible.	1	**{4} in Facts Not Visible**	E	§ 6.5.55 B
i: RD.CEF		r	If **{5}** facts valued **true** are present, then at least one is visible.	1	**{5} in Facts Not Visible**	E	§ 6.5.55 B

Notes and special cases:

1. There is no check for the absence of this fact in instance types other than RD.CEF.

3.1.24.5 N-2 Effectiveness Dates

Concept	#	Type or regex	Meaning
dei:EffectiveWhenDeclaredSection8c	**{1}**	**xs:boolean**	
dei:EffectiveUponFiling486b	**{2}**	**xs:boolean**	

Concept	#	Type or regex	Meaning
dei:EffectiveOnSetDate486b	{3}	xs:boolean	
dei:EffectiveOnDate486b	{4}	xs:date	
dei:EffectiveAfter60Days486a	{5}	xs:boolean	
dei:EffectiveOnSetDate486a	{6}	xs:boolean	
dei:EffectiveOnDate486a	{7}	xs:date	

Validations:

Incl	Excl	c	Check	f	On failure	s	EFM v68 Ref
i: RD.CEF		r	If {1} facts valued true are present, then at least one is visible.	1	{1} in Facts Not Visible	E	§ 6.5.55 B
i: RD.CEF		r	If {2} facts valued true are present, then at least one is visible.	1	{2} in Facts Not Visible	E	§ 6.5.55 B
i: RD.CEF		r	If {3} facts valued true are present, then at least one is visible.	1	{3} in Facts Not Visible	E	§ 6.5.55 B
i: RD.CEF		a	Neither or both {3} fact has the value true and a {4} fact exists.		{3} {4} Value Dependency	E	§ 6.5.55 n2j
i: RD.CEF		r	If {4} facts are present, then at least one is visible.	1	{4} in Facts Not Visible	E	§ 6.5.55 n2j
i: RD.CEF		r	If {5} facts valued true are present, then at least one is visible.	1	{5} in Facts Not Visible	E	§ 6.5.55 B
i: RD.CEF		r	If {6} facts valued true are present, then at least one is visible.	1	{6} in Facts Not Visible	E	§ 6.5.55 B
i: RD.CEF		a	Neither or both {6} fact has the value true and a {7} fact exists.		{6} {7} Value Dependency	E	§ 6.5.55 n2k
i: RD.CEF		r	If {7} facts are present, then at least one is visible.	1	{7} in Facts Not Visible	E	§ 6.5.55 n2k

Notes and special cases:

1. There is no check for the absence of this fact in instance types other than RD.CEF.

3.1.24.6 N-2 Other Flags

Concept	#	Type or regex	Meaning
dei:NewEffectiveDateForPreviousFiling	{1}	xs:date	
dei:AdditionalSecurities462b	{2}	xs:boolean	
dei:AdditionalSecurities462bFileNumber	{3}	\d{1,3}-\d{1,8}(-.{1,4})?	
dei:NoSubstantiveChanges462c	{4}	xs:boolean	
dei:NoSubstantiveChanges462cFileNumber	{5}	\d{1,3}-\d{1,8}(-.{1,4})?	
dei:ExhibitsOnly462d	{6}	xs:boolean	
dei:ExhibitOnly462dFileNumber	{7}	\d{1,3}-\d{1,8}(-.{1,4})?	

Validations:

Incl	Excl	c	Check	f	On failure	s	EFM v68 Ref
i: RD.CEF		r	If `{1}` facts are present, then at least one is visible.	1	`{1} in Facts Not Visible`	E	§ 6.5.55 B
i: RD.CEF		r	If `{2}` facts valued `true` are present, then at least one is visible.	1	`{2} in Facts Not Visible`	E	§ 6.5.55 B
i: RD.CEF		a	Neither or both `{2}` fact has the value true and a `{3}` fact exists.		`{2} {3} Value Dependency`	E	§ 6.5.55 n2l
i: RD.CEF		r	If `{3}` facts are present, then at least one is visible.	1	`{3} in Facts Not Visible`	E	§ 6.5.55 n2l
i: RD.CEF		r	If `{4}` facts valued `true` are present, then at least one is visible.	1	`{4} in Facts Not Visible`	E	§ 6.5.55 B
i: RD.CEF		a	Neither or both `{4}` fact has the value true and a `{5}` fact exists.		`{4} {5} Value Dependency`	E	§ 6.5.55 n2m
i: RD.CEF		r	If `{5}` facts are present, then at least one is visible.	1	`{5} in Facts Not Visible`	E	§ 6.5.55 n2m
i: RD.CEF		r	If `{6}` facts valued `true` are present, then at least one is visible.	1	`{6} in Facts Not Visible`	E	§ 6.5.55 B
i: RD.CEF		a	Neither or both `{6}` fact has the value true and a `{7}` fact exists.		`{6} {7} Value Dependency`	E	§ 6.5.55 n2o
i: RD.CEF		r	If `{7}` facts are present, then at least one is visible.	1	`{7} in Facts Not Visible`	E	§ 6.5.55 n2o

Notes and special cases:

1. There is no check for the absence of this fact in instance types other than RD.CEF.

3.1.24.7 N-2 Registrant Type Flags

Concept	#	Type or regex	Meaning
`cef:RegisteredClosedEndFundFlag`	`{1}`	`xs:boolean`	
`cef:BusinessDevelopmentCompanyFlag`	`{2}`	`xs:boolean`	
`cef:IntervalFundFlag`	`{3}`	`xs:boolean`	
`cef:PrimaryShelfQualifiedFlag`	`{4}`	`xs:boolean`	
`dei:EntityWellKnownSeasonedIssuer`	`{5}`	`Yes|No`	
`dei:EntityEmergingGrowthCompany`	`{6}`	`xs:boolean`	
`dei:EntityExTransitionPeriod`	`{7}`	`xs:boolean`	
`cef:NewCefOrBdcRegistrantFlag`	`{8}`	`xs:boolean`	

Validations:

Incl	Excl	c	Check	f	On failure	s	EFM v68 Ref
i: RD.CEF		r	If `{1}` facts valued `true` are present, then at least one is visible.	1	`{1}` in Facts Not Visible	E	§ 6.5.55 n2p
i: RD.CEF		r	At most one of `{1}` and `{2}` has the value `true`.	1	`{1} {2}` Exclusive Values	E	§ 6.5.55 n2p
i: RD.CEF		r	If `{2}` facts valued `true` are present, then at least one is visible.	1	`{2}` in Facts Not Visible	E	§ 6.5.55 B
i: RD.CEF		r	If `{3}` facts valued `true` are present, then at least one is visible.	1	`{3}` in Facts Not Visible	E	§ 6.5.55 B

Incl	Excl	c	Check	f	On failure	s	EFM v68 Ref
i: RD.CEF		r	If `{4}` facts valued `true` are present, then at least one is visible.	1	`{4}` in Facts Not Visible	E	§ 6.5.55 B
i: RD.CEF		r	If `{5}` facts valued `true` are present, then at least one is visible.		`{5}` in Facts Not Visible	E	§ 6.5.55 B
i: RD.CEF		r	If `{6}` facts valued `true` are present, then at least one is visible.		`{6}` in Facts Not Visible	E	§ 6.5.55 B
i: RD.CEF		r	If `{7}` facts valued `true` are present, then at least one is visible.	2	`{7}` in Facts Not Visible	E	§ 6.5.55 B
i: RD.CEF		r	If `{8}` facts valued `true` are present, then at least one is visible.		`{8}` in Facts Not Visible	E	§ 6.5.55 B

Notes and special cases:

1. Some concepts in this section are drawn from the `cef` namespace, not `dei`.
2. See 3.1.11 above for checks related to this fact value for other instance types.

3.2 Expected Facts with Dimensions

Taxonomy-defined dimensions, as introduced in section 1 above, are used to define XBRL *hypercubes*. In this document as in all SEC standard taxonomies a taxonomy-defined dimension is called an *Axis*. Members of an axis may be its *default* member, a *standard* member, or a *custom* member defined by the filer. In addition to indicators such as names and indentations within tables, concept types used in this document are additionally color-coded as shown in Figure 1.

Figure 1. Dimension figures color-coding legend

Concept or value type	**Color**
Concept core dimension and concepts	Green
Other core dimensions and their members	Gray
Fact values	None
Taxonomy-defined dimension (Axis)	Orange
Standard members	Medium Blue
Custom members	Purple
Abstract placeholder concepts not appearing in instances, such as hypercubes, line items, domain defaults, and non-usable domain members.	Light Blue

A hypercube of only a single taxonomy-defined dimension can be visualized as a table presented in a disclosure as illustrated in Figure 2. Note that if not specified as region 1 or 2, the value is the sum across the two regions.

Figure 2. Example showing nine facts with a single taxonomy-defined dimension

entity: Example01 period: FY30 units: USD		Concepts Dimension		
		Product Revenue	Service Revenue	Combined Revenue
Region Axis	Region 1	23	12	35
	Region 2	17	8	25
		40	20	60

Layout and formatting for presentation of the data to a human reader does not change the meaning, and therefore does not change the characterization of each of the nine facts. Figure 3 shows the same facts, with the concept dimension presented as rows, and the class dimension as columns.

Figure 3. Example showing different presentation of the same nine facts

entity: Example01 period: FY30 units: USD		Region Axis		
		Region 1	Region 2	
Concepts Dimension	Product Revenue	23	17	40
	Service Revenue	12	8	20
	Combined Revenue	35	25	60

Data in in instances is organized into hypercubes having zero or more axes; as the previous two figures show, they are usually thought of – and referred to as – *Tables*. Some axes have a set of members fixed by a taxonomy, others are empty in the taxonomy and are populated only by custom members. Although filers may define facts that use additional axes beyond those in the table, some taxonomy tables are *closed* and restrict the facts to use only certain axes.

The representation of individual facts in Figure 2 and Figure 3 can be understood as a table whose columns represent each dimension and the value of the fact, and each row representing a separate fact. Where a taxonomy defined dimension (in this case, Region) is blank, that indicates it is the default of that dimension.

Figure 4. Example showing the nine individual facts

Entity	Period	Unit	Concept	Region	Value
Example01	FY30	USD	Product Revenue	Region 1	23
Example01	FY30	USD	Service Revenue	Region 1	12
Example01	FY30	USD	Combined Revenue	Region 1	35
Example01	FY30	USD	Product Revenue	Region 2	17
Example01	FY30	USD	Service Revenue	Region 2	8
Example01	FY30	USD	Combined Revenue	Region 2	25
Example01	FY30	USD	Product Revenue		40
Example01	FY30	USD	Service Revenue		20
Example01	FY30	USD	Combined Revenue		60

The appearance of a concept and a set of facts with or without members of a given dimension may be interpreted in various ways. The first common case is as detailed above: a numeric fact without a dimension equaling the sum of other facts having members of that dimension. The axis represents a disaggregation of a total.

The second common case, less common for numeric facts, but prevalent for non-numeric facts such as text and dates, is that a fact can be inferred from the relationship between the Axis default (representing the whole) and the *absence* of a member on the axis:

Entity	Period	Concept	Region	Value
Example01	FY30	Best Seller		Product A
Example01	FY30	Best Seller	Region 2	Product B

This case implies that product A is the company's best seller overall and in region 1, but region 2 is an exception where product B is the best seller; although different, it is not contradictory.

A third case is the appearance of non-numeric facts, each with a different member of the axis, but no default:

Entity	Period	Concept	Region	Value
Example01	FY30	Sponsored Team	Region 1	Red Sox
Example01	FY30	Sponsored Team	Region 2	White Sox

It would be meaningless to sum, merge, average or concatenate text values for this non-numeric concept to come up with a sponsored team for the whole company. A software program might expect a sponsored team for the whole company, *or* for each of its individual regions, but signal a problem if it receives values for *both* the whole and the parts. In this case, the use of the axis default, and the use of individual members, are mutually exclusive.

The interpretation of a given combination of concept and axis always impacts the expected and unexpected facts in an instance; this is particularly true for the mostly non-numeric expected facts.

3.2.1 Business contact

When a business contact is expected, the facts are present in the business contact (bc) context defined as the required context plus a single dimension **`dei:EntityAddressesAddressTypeAxis`** with standard member **`dei:BusinessContactMember`**.

3.2.1.1 Contact Person

Concept	#	Type or regex	Meaning
`dei:ContactPersonnelName`	**`{1}`**	**`xs:normalizedString`**	
`dei:LocalPhoneNumber`	**`{2}`**	**`xs:normalizedString`**	
`dei:ContactPersonnelFax`	**`{3}`**	**`xs:normalizedString`**	
`dei:ContactPersonnelEmailAddress`	**`{4}`**	**`xs:normalizedString`**	

Validations:

Incl	Excl	c	Check	f	On failure	s	EFM v68 Ref
i: AF.FPI, RD.CEF, AF.CA		bc	A **`{1}`** fact is present.		**`{1} Missing`**	W	§ 6.5.51 Ri
i: AF.FPI, RD.CEF, AF.CA		bc	If **`{1}`** facts are present, then at least one is visible.		**`{1} in Facts Not Visible`**	W	§ 6.5.51 Ri
s: ALL	i: R34.FPI, R34.CA, R33.FPI, R33.US	bc	A **`{1}`** fact is absent.		**`{1} Unexpected`**	W	§ 6.5.51 [], O*
i: AF.FPI, RD.CEF		bc	One, two, or all three **`{2}`**, **`{3}`** or **`{4}`** **facts are** present.		**`{2} {3} {4} Missing`**	W	§ 6.5.51 O3
i: AF.CA		bc	A **`{2}`** fact is present.		**`{2} Missing`**	W	§ 6.5.51 Ri
i: AF.CA		bc	If **`{2}`** facts are present, then at least one is visible.		**`{2} in Facts Not Visible`**	W	§ 6.5.51 O3

Incl	Excl	c	Check	f	On failure	s	EFM v68 Ref
s: ALL	i: AF.FPI, RD.CEF, AF.CA, R34.FPI, R34.CA, R33.FPI, R33.US	bc	A `{2}` fact is absent.		`{2} Unexpected`	W	§ 6.5.51 [], O*
i: AF.FPI, RD.CEF		bc	If `{3}` facts are present, then at least one is visible.		`{3} in Facts Not Visible`	W	§ 6.5.51 O3
s: ALL	i: AF.FPI, RD.CEF, R34.FPI, R34.CA	bc	A `{3}` fact is absent.		`{3} Unexpected`	W	§ 6.5.51 [], O*
i: AF.FPI, RD.CEF		bc	If `{4}` facts are present, then at least one is visible.		`{4} in Facts Not Visible`	W	§ 6.5.51 O3
s: ALL	i: AF.FPI, RD.CEF, R34.FPI, R34.CA	bc	A `{4}` fact is absent.		`{4} Unexpected`	W	§ 6.5.51 [], O*

Notes and special cases: none.

3.2.1.2 Street, City and Zip

A business contact will have similar facts to the principal address.

Concept	#	Type or regex	Meaning
`dei:EntityAddressAddressLine1`	`{1}`	`xs:normalizedString`	
`dei:EntityAddressCityOrTown`	`{2}`	`xs:normalizedString`	
`dei:EntityAddressPostalZipCode`	`{3}`	`xs:normalizedString`	

The first line of the address, the city or town, and postal or zip code, share similar validations:

Incl	Excl	c	Check	f	On failure	s	EFM v68 Ref
i: AF.FPI, RD.CEF, AF.CA		bc	A `{1}` fact is present.		`{1} Missing`	W	§ 6.5.51 Ri
i: AF.FPI, RD.CEF, AF.CA		bc	If `{1}` facts are present, then at least one is visible.		`{1} in Facts Not Visible`	W	§ 6.5.51 Ri
s: ALL	i: AF.FPI, RD.CEF, AF.CA, R34.FPI, R34.CA R33.FPI R33.US	bc	A `{1}` fact is absent.		`{1} Unexpected`	W	§ 6.5.51 [], O*
i: AF.FPI, RD.CEF, AF.CA		bc	A `{2}` fact is present.		`{2} Missing`	W	§ 6.5.51 Ri
i: AF.FPI, RD.CEF, AF.CA		bc	If `{2}` facts are present, then at least one is visible.		`{2} in Facts Not Visible`	W	§ 6.5.51 Ri
s: ALL	i: AF.FPI, RD.CEF, AF.CA, R34.FPI, R34.CA R33.FPI R33.US	bc	A `{2}` fact is absent.		`{2} Unexpected`	W	§ 6.5.51 []

Incl	Excl	c	Check	f	On failure	s	EFM v68 Ref
i: AF.FPI, RD.CEF, AF.CA		bc	A `{3}` fact is present.		`{3} Missing`	W	§ 6.5.51 Ri
i: AF.FPI, RD.CEF, AF.CA		bc	If `{3}` facts are present in the required context, then at least one is visible.		`{3} in Facts Not Visible`	W	§ 6.5.51 Ri
s: ALL	i: AF.FPI, RD.CEF, AF.CA, R34.FPI, R34.CA R33.FPI R33.US	bc	A `{3}` fact is absent.		`{3} Unexpected`	W	§ 6.5.51 [], O*

Notes and special cases: none.

3.2.1.3 State or Province and Country

Concept	#	Type or regex	Meaning
`dei:EntityAddress-StateOrProvince`	`{1}`	Postal state or province	XBRL transformations that convert state and province names to postal codes (e.g., TX, ON) are shown in EFM § 5.2.5.12.
`dei:EntityAddress-Country`	`{2}`	Valid IANA country code	XBRL transformations that country names to ISO 3166-1 alpha 2 (IANA) codes (e.g., US, JP) are shown in EFM 5.2.5.12.

Validations:

Incl	Excl	c	Check	f	Codes	s	EFM v68 Ref
i: AF.FPI, RD.CEF		bc	One or both `{1}` and `{2}` facts are present.		`{1} {2} Inclusive`	W	§ 6.5.51 O2
i: AF.CA		bc	A `{1}` fact representing a US state is present.		`{1} Value`	W	§ 6.5.51 Ru
i: AF.FPI, RD.CEF, AF.CA		bc	If `{1}` facts are present, then at least one is visible.		`{1} in Facts Not Visible`	W	§ 6.5.51 O2, Ru
i: R34.CA		bc	A `{1}` fact representing a Canadian province is present.		`{1} Value`	W	§ 6.5.51 Ou*
s: ALL	i: AF.FPI, RD.CEF, AF.CA, R34.CA, R33.US	bc	A `{1}` fact is absent.		`{1} Unexpected`	W	§ 6.5.51 [], O*
i: AF.FPI, RD.CEF		bc	If `{2}` facts are present, then at least one is visible.		`{2} in Facts Not Visible`	W	§ 6.5.51 O2
s: ALL	i: R33.FPI, R34.FPI	bc	A `{2}` fact is absent.		`{2} Unexpected`	W	§ 6.5.51 []

Notes and special cases: none.

3.2.1.4 Phone

Concept	#	Type or regex	Meaning
dei:CityAreaCode	**{1}**	**xs:normalizedString**	
dei:LocalPhoneNumber	**{2}**	**xs:normalizedString**	

Validations:

Incl	Excl	c	Check	f	On failure	s	EFM v68 Ref
i: AF.CA		bc	A **{1}** fact is present.		**{1} Missing**	W	§ 6.5.51 Ri
i: AF.CA, AF.FPI, RD.CEF		bc	If **{1}** facts are present, then at least one is visible.	**1**	**{1} in Facts Not Visible**	W	§ 6.5.51 Oph
s: ALL	i: AF.CA, AF.FPI, RD.CEF, R34.FPI, R34.CA, R33.FPI, R33.US	bc	A **{1}** fact is absent.	**1**	**{1} Unexpected**	W	§ 6.5.51 [], Oph*
i: AF.CA		bc	A **{2}** fact is present.		**{2} Missing**	W	§ 6.5.51 Ri
i: AF.CA, AF.FPI, RD.CEF		bc	If **{2}** facts are present, then at least one is visible.		**{2} in Facts Not Visible**	W	§ 6.5. 51 O3, Ri
s: ALL	i: AF.CA, AF.FPI, RD.CEF, R34.FPI, R34.CA, R33.FPI, R33.US	bc	A **{2}** fact is absent.		**{2} Unexpected**	W	§ 6.5. 51 [], O*

Notes and special cases:

1. Neither or both **CityAreaCode** and **LocalPhoneNumber** should be present in any context, not just the business contact context; see 3.1.22.4 above.

3.2.2 Former address

To report a former address, the facts are present in the Former Address (fa) context defined as the required context plus a single dimension **dei:EntityAddressesAddressTypeAxis** with member **dei:Former-AddressMember**.

3.2.2.1 Former Street, City and Zip

Concept	#	Type or regex	Meaning
dei:EntityAddressAddressLine1	**{1}**	**xs:normalizedString**	
dei:EntityAddressAddressLine2	**{2}**	**xs:normalizedString**	
dei:EntityAddressAddressLine3	**{3}**	**xs:normalizedString**	
dei:EntityAddressCityOrTown	**{4}**	**xs:normalizedString**	
dei:EntityAddressPostalZipCode	**{5}**	**xs:normalizedString**	

The first line of the address, the city or town, and postal or zip code, share similar validations.

Validations:

Incl	Excl	c	Check	f	On failure	s	EFM v68 Ref
s: 8K, QF		fa	If {1} facts are present, then at least one is visible.		{1} in Facts Not Visible	W	§ 6.5.53 O
s: ALL	s: 8K, QF	fa	A {1} fact is absent.		{1} Unexpected	W	§ 6.5.53 [], O
s: 8K, QF		fa	If {2} facts are present, then at least one is visible.		{2} in Facts Not Visible	W	§ 6.5.53 OL1
s: 8K, QF		fa	If a {2} fact is present, then a {1} fact is present.		{1} {2} Dependency	W	§ 6.5.53 OL1
s: ALL	s: 8K, QF	fa	A {2} fact is absent.		{2} Unexpected	W	§ 6.5.53 []
s: 8K, QF		fa	If a {3} fact is present, then a {2} fact is present.		{2} {3} Dependency	W	§ 6.5.53 OL2
s: 8K, QF		fa	If {3} facts are present, then at least one is visible.		{3} in Facts Not Visible	W	§ 6.5.53 OL2
s: ALL	s: 8K, QF	fa	A {3} fact is absent.		{3} Unexpected	W	§ 6.5.53 [], OL2
s: 8K, QF		fa	One or both {4} and {5} facts are present		{4} {5} Inclusive	W	§ 6.5.53 F2
s: 8K, QF		fa	If {4} facts are present, then at least one is visible.		{4} in Facts Not Visible	W	§ 6.5.53 F2
s: ALL	s: 8K, QF	fa	A {4} fact is absent.		{4} Unexpected	W	§ 6.5.53 []
s: 8K, QF		fa	If {5} facts are present, then at least one is visible.		{5} in Facts Not Visible	W	§ 6.5.53 F2
s: ALL	s: 8K, QF	fa	A {5} fact is absent.		{5} Unexpected	W	§ 6.5.53 []

Notes and special cases: none.

3.2.2.2 Former State or Province and Country

Concept	#	Type or regex	Meaning
dei:EntityAddressAddressLine1	{1}	xs:normalizedString	
dei:EntityAddressStateOrProvince	{2}	Postal state or province	XBRL transformations that convert state and province names to postal codes (e.g., TX, ON) are shown in EFM § 5.2.5.12.
dei:EntityAddressCountry	{3}	Valid IANA country code	XBRL transformations that country names to ISO 3166-1 alpha 2 (IANA) codes (e.g., US, JP) are shown in EFM 5.2.5.12.

Validations:

Incl	Excl	c	Check	f	On failure	s	EFM v68 Ref
s: 8K, QF		fa	If a {1} is present, then one or both of {2} and {3} facts are present.		{1} {2} {3} Inclusive Dependency	W	§ 6.5.53 F2
s: 8K, QF		fa	If a {2} fact is absent, then {1} is absent.		{2} {1} Inclusive Dependency	W	§ 6.5.53 F2

Incl	Excl	c	Check	f	On failure	s	EFM v68 Ref
s: 8K, QF		fa	If a `{3}` fact is absent, then `{1}` is absent.		`{3} {1} Inclusive Dependency`	W	§ 6.5.53 F2
s: 8K, QF		fa	If `{2}` facts are present, then at least one is visible.		`{2} in Facts Not Visible`	W	§ 6.5.53 F2
s: ALL	s: 8K, QF	fa	A `{2}` fact is absent.		`{2} Unexpected`	W	§ 6.5.53 []
s: 8K, QF		fa	If `{3}` facts are present, then at least one is visible.		`{3} in Facts Not Visible`	W	§ 6.5.53 F2
s: ALL	s: 8K, QF	fa	A `{3}` fact is absent.		`{3} Unexpected`	W	§ 6.5.53 []

Notes and special cases: none.

3.2.3 Common Stock Shares Outstanding

Common stock shares, like public float, appears in a context that is an instant period, not a duration.

Concept	#	Type or regex	Meaning
`dei:EntityCommonStockSharesOutstanding`	`{1}`	`decimal`	

Depending on whether the entity represented in the required context has zero, one, or more than one, class of common shares or ownership units outstanding, the instance will have exactly one of the following permitted sets of facts:

Case	Axis in any standard namespace	Members in distinct contexts	Period
1	No dimensions	N/A	An instant on or after the end of the required context
2	`StatementClassOfStockAxis`	At least two	An instant on or after the end of the required context
3	`ClassesOfShareCapitalAxis`	At least two	An instant on or after the end of the required context

The cases are mutually exclusive. Cases 2 and 3 require that the instance be accompanied by a custom taxonomy as covered below in section 4. The validations apply to a subsequent event (se) context as defined above in 3.1.15, “Public Float”.

Validations:

Incl	Excl	c	Check	f	On failure	s	EFM v68 Ref
s: FAST	i: AF.CA	se	A `{1}` fact is present in each context of exactly one of the cases 1, 2 or 3.		`{1} Missing`	W	§ 6.5.26
s: FAST		se	If `{1}` facts are present in a context, at least one is visible.		`{1} in Facts Not Visible`	W	§ 6.5.45
s: ALL	s: FAST, i: R33.FPI	se	A `{1}` fact is not present in any context.		`{1} Unexpected`	W	§ 6.5.26

Notes and special cases:

1. A filer having no common stock will have 0 common stock shares outstanding under case 1, not nil.

3.2.4 Registered Securities

Depending on whether the entity represented in the required context has zero, one, or more than one type or class of registered securities (not limited to common shares as in the previous section), an instance may have one of the following mutually exclusive cases of permitted sets of facts about those securities:

Case	Axis in any standard namespace	Distinct members in contexts	Period
1	No dimensions (the required context)	N/A (there is only one class)	Required context
2	`StatementClassOfStockAxis`	At least two	Required context
3	`ClassesOfShareCapitalAxis`	At least two	Required context

Notes:

1. No instance type requires either `dei:Security12bTitle` or `dei:Security12gTitle`. The Checks concern only whether they are consistent with each other and other facts if they are present.
2. Members on `StatementClassOfStockAxis` and `ClassesOfShareCapitalAxis` are expected only when there is need to distinguish different securities. An American Depositary Receipt (ADR) is an exception: it may be the only registered security, yet still requires a dimension to indicate this.
3. The presence of members on axes other than `StatementClassOfStockAxis` or `ClassesOfShare-CapitalAxis` does not change which of the three cases is being represented in an instance.

3.2.4.1 Security Title

The presence of facts for either of two concepts determines which of the three cases apply:

Concept	#	Type or regex	Meaning
`dei:Security12bTitle`	`{1}`	`xs:normalizedString` up to 150 characters	
`dei:Security12gTitle`	`{2}`	`xs:normalizedString` up to 150 characters	

Validations:

Incl	Excl	c	Check	f	On failure	s	EFM v68 Ref
s: FAST, R34		r	A `{1}` fact value is present in at most one of the cases 1-3.		`{1} Security Axes`	W	§ 6.5.46 Ot1, Ot1*
s: FAST, R34		r	A `{2}` fact value is present in at most one of the cases 1-3.		`{2} Security Axes`	W	§ 6.5.46 Ot1, Ot1*
s: FAST, R34		a	At most one `{1}` or {2} fact is present.		`{1} {2} Exclusive`	W	§ 6.5.46 Ot1, Ot1*
s: FAST		r	If `{1}` facts are present in a context, at least one is visible.		`{1} in Facts Not Visible`	W	§ 6.5.45 § 6.5.46 Ot1
s: FAST		r	If `{2}` fact values are present in a context, at least one is visible.		`{2} in Facts Not Visible`	W	§ 6.5.45 § 6.5.46 Ot1
s: ALL	s: FAST, R34	r	A `{1}` fact is absent from all contexts.		`{1} Unexpected`	W	§ 6.5.46 []
s: ALL	s: FAST, R34	r	A `{2}` fact is absent from all contexts.		`{2} Unexpected`	W	§ 6.5.46 []

Notes and special cases: none.

3.2.4.2 Exchanges Axis

A security may be traded on more than one exchange. Much like the exclusivity of cases 1, 2, and 3, **EntityListingsExchangeAxis** permits only one listing for the security and the listings axis does not appear, or there are multiple listings, and more than one member of the axis appears.

Concept	#	Type or regex	Meaning
dei:Security12bTitle	**{1}**	**xs:normalizedString** up to 150 characters	
dei:Security12gTitle	**{2}**	**xs:normalizedString** up to 150 characters	

.

Sub Case	Axes in a standard namespace	Members in distinct contexts	Period
a	No axes	N/A	Required context
b	**EntityListingsExchangeAxis**	At least two	Required context

Validations:

Incl	Excl	c	Check	f	On failure	s	EFM v68 Ref
s: FAST, R34		r	If a {1} fact is present in a context with no member of **EntityListingExchange-Axis**, then there are no **{1}** facts in contexts the same except for also having a member of **EntityListingExchange-Axis.**		**{1} Security Axes**	W	§ 6.5.46
s: FAST, R34		r	If a **{1}** fact is present in a context with a member of **EntityListingExchange-Axis**, then there are no **{1}** facts in contexts the same except without a member of **EntityListingExchange-Axis.**		**{1} Security Axes**	W	§ 6.5.46
s: FAST, R34		r	If a **{2}** fact is present in a context with no member of **EntityListingExchange-Axis**, then there are no **{2}** facts in contexts the same except for also having a member of **EntityListingExchange-Axis.**		**{2} Security Axes**	W	§ 6.5.46
s: FAST, R34		r	If a **{2}** fact is present in a context with a member of **EntityListingExchange-Axis**, then there are no **{2}** facts in contexts the same except without a member of **EntityListingExchange-Axis.**		**{2} Security Axes**	W	§ 6.5.46

Notes and special cases: none.

3.2.4.3 Security Exchange Name

One security of a company could be traded on no national exchanges, another security on one national exchange, and a third on several exchanges. Regardless, the presence of a **dei:Security12bTitle** fact is paired with the name of the Exchange in the same context, and only that same context.

Concept	#	Type or regex	Meaning
dei:Security-12bTitle	**{1}**	**xs:normalizedString** up to 150 characters	
dei:Security-ExchangeName	**{3}**	**NYSE|NASDAQ|CHX|BOX|BX|MIAX|MRX|NYSEAMER|NYSEArca|NYSENAT|PEARL|Phlx|AF**	National Exchanges. Other than National Exchanges are not tagged.

Validations:

Incl	Excl	c	Check	f	On failure	s	EFM v68 Ref
s: FAST, R34		a	If a **{1}** fact is present in a case 1 context, then a **{3}** fact value is present in the same context.	1, 2	**{1} {3} Dependency**	W	§ 6.5.46 Te
s: FAST, R34		a	If a **{1}** fact is present in a case 2 or 3 context and **dei:AdrMember** is not a member of either axis, then a **{3}** fact value is present in the same context.	1, 2, 3	**{1} {3} Dependency**	W	§ 6.5.46 Te
s: FAST		a	If **{3}** facts are present in a case 1 context, then they are visible.		**{3} in Facts Not Visible**	W	§ 6.5.46 Te
s: FAST		a	If **{3}** facts are present in a case 2 or 3 context, then they are visible.		**{3} in Facts Not Visible**	W	§ 6.5.46 Te
All	s: FAST, R34, i: AF.CEF	a	A **{3}** fact is absent from a context.	2	**{3} Unexpected**	W	§ 6.5.46 []

Notes and special cases:

1. An exchange name is relevant only to 12b securities; 12g securities are not traded on national exchanges.
2. The values of **dei:SecurityExchangeName** are EDGAR-defined acronyms. Inline XBRL transformation **ixt-sec:exchnameen** described in EFM section 5.2.5.12 transforms commonly displayed textual names of exchanges to these values.
3. The exchange name is neither expected nor unexpected for an ADR member on the **StatementClass-OfStockAxis** or **ClassesOfShareCapitalAxis**.

3.2.4.4 Trading Symbol / No Trading Symbol

Whether a security has a trading symbol is represented in two mutually exclusive concepts:

Concept	#	Type or regex	Meaning
dei:NoTradingSymbolFlag	**{1}**	Fixed value **true**	
dei:TradingSymbol	**{2}**	**xs:normalizedString** up to 25 characters.	

Validations:

Incl	Excl	c	Check	f	On failure	s	EFM v68 Ref
s: FAST, R34, i: AF.CEF		a	At most one **{1}** or **{2}** fact exists.	1	**{1} {2} Exclusive**	W	§ 6.5.46 T1, T1* § 6.5.57

Incl	Excl	c	Check	f	On failure	s	EFM v68 Ref
s: ALL	s: FAST, R34, RD, i: AF.CEF	r	A `{1}` fact is absent.	2	`{1} Unexpected`	W	§ 6.5.46 [], O*
s: ALL	s: FAST, R34, RD, i: AF.CEF	r	A `{2}` fact is absent.	2	`{2} Unexpected`	W	§ 6.5.46 [], O*

Notes and special cases:

1. Concepts `dei:NoTradingSymbol` and `dei:TradingSymbol` may be present in AF.CEF instances but only in class contexts.
2. Concept `dei:TradingSymbol` is neither expected nor unexpected in RD submissions.

3.2.4.5 Security Reporting Obligation

Concept	#	Type or regex	Meaning
`dei:SecurityReportingObligation`	`{1}`	Fixed value `15(d)`	

Validations:

Incl	Excl	c	Check	f	On failure	s	EFM v68 Ref
i: AF.FPI, AF.CA		r	If `{1}` facts are present, at least one is visible.		`{1} in Facts Not Visible`	W	§ 6.5.45 O
s: ALL	i: AF.FPI, AF.CA, R34.FPI, R34.CA	r	A `{1}` fact is absent.		`{1} Unexpected`	W	§ 6.5.46 [], O*

Notes and special cases: none.

3.2.5 Open-end Fund Series

Open-end Funds (N-1A funds) and Separate Accounts Registered as Open End Funds (N-3 registrants) contain facts for distinct series. The set of series identifiers in the scope of a submission is determined by the content of the EDGAR Submission header element `seriesClasses`:

- Each `seriesId` results in one series;
- Each `rptIncludeAllSeriesFlag` results in a series for every active series.

For each series, there should be at least one additional Series Context (sc) for each Series ID reported in the submission. Each such context will have an explicit member of the dimension with local name `LegalEntityAxis` in a standard namespace. That axis should have a custom member for every series ID, such as S000000987, named `S000000987Member` (EFM v68 § 6.5.41).

3.2.6 Open-end Fund Shareholder Reports

Form N-CSR contains one shareholder report per class. The set of class identifiers in the scope of a submission is determined by the content of the EDGAR submission header element `seriesClasses`:

- Each `rptClassId` results in one class;
- Each `rptIncludeAllClassesFlag` results in a class for every active class in that series; and
- Each `rptIncludeAllSeriesFlag` results in a class for every active class in all series of the filer CIK.

For each shareholder report per class, there should be at least one additional Class Context (cc) for each Class ID reported in the submission. Each such context will have an explicit member of the dimension with local name `ClassAxis` in a standard namespace. That axis should have a custom member for every class ID, such as C000000123, named `C000000123Member`.

Concept	#	Type or regex	Meaning
oef:Shareholder-Report-AnnualOrSemi-Annual	**{1}**	**([Ss]emi[^A-Za-z0-9]+)?[Aa]nnual\s+[Ss]hareholder\s+[Rr]eport**	
oef:FundName	**{2}**	**xs:normalizedString**	
oef:ClassName	**{3}**	**xs:normalizedString**	
dei:NoTrading-SymbolFlag	**{4}**	**xs:boolean**	
dei:TradingSymbol	**{5}**	**xs:normalizedString** up to 25 characters.	
dei:Security-ExchangeName	**{6}**	**NONE | BOX | BX | C2 | CBOE | CHX | Cboe(BYX|BZX|EDGA|EDGX) | GEMX | IEX | ISE | MIAX | MRX | NASDAQ | NYSE(AMER|Arca|NAT)? | PEARL | Phlx**	EDGAR National Exchange Code

Validations:

Incl	Excl	c	Check	f	On failure	s	EFM v68 Ref
i: AF.CEF, HF		r	A **{1}** fact is present.		**{1} Missing**	W	§ 6.5.57 R
i: AF.CEF, HF		r	If **{1}** facts are present, then at least one is visible.		**{1} in Facts Not Visible**	W	§ 6.5.57 R
s: ALL	i: AF.CEF, HF	r	A **{1}** fact is absent.		**{1} Unexpected**	W	§ 6.5.57 []
i: AF.CEF, HF		cc	A **{2}** fact is present.		**{2} Missing**	W	§ 6.5.57 R
i: AF.CEF, HF		cc	If **{2}** facts are present, then at least one is visible.		**{2} in Facts Not Visible**	W	§ 6.5.57 R
s: ALL	i: AF.CEF, HF	cc	A **{2}** fact is absent.		**{2} Unexpected**	W	§ 6.5.57 []
i: AF.CEF, HF		cc	A **{3}** fact is present.		**{3} Missing**	W	§ 6.5.57 R
i: AF.CEF, HF		cc	If **{3}** facts are present, then at least one is visible.		**{3} in Facts Not Visible**	W	§ 6.5.57 R
s: ALL	i: AF.CEF, HF	cc	A **{3}** fact is absent.		**{3} Unexpected**	W	§ 6.5.57 []
i: AF.CEF, HF		cc	If a **{1}** fact is present, then either **{4}** or a **{5}** fact exist but not both.	1	**{1} {2} {3} Exclusive Dependency**	E	§ 6.5.57 T2*, T2
i: AF.CEF, HF		cc	If **{4}** facts are present, then at least one is visible.		**{4} in Facts Not Visible**	W	§ 6.5.57 T2
i: AF.CEF, HF		cc	If **{5}** facts are present, then at least one is visible.		**{5} in Facts Not Visible**	W	§ 6.5.57 T2
i: AF.CEF, HF		cc	Neither or both of **{5}** and **{6}** facts are present.		**{5} {6} Mutual Dependency**	W	§ 6.5.57 T3

Notes and special cases:

1. See also 3.2.4.4 above that requires **dei:NoTradingSymbolFlag** and **dei:TradingSymbol** to be mutually exclusive in all contexts.

3.3 Resource Extraction Payments Disclosure

Exhibit 2.01 of Form SD consists of exactly two attachment types: EX-2.01.INS, an XBRL Instance, and EX-2.01.SCH, an XBRL Schema, with custom elements and embedded linkbases. Exhibit 2.01.INS is not an Inline XBRL document.

3.3.1 Currency and Total Payments

Concept	#	Type or regex	Meaning
dei:EntityReportingCurrencyISOCode	**{1}**	**[A-Z]{3}**	ISO 4217 currency code
rxp:TotalPayments	**{2}**	**Monetary**	

Validations:

Incl	Excl	c	Check	f	On failure	s	EFM v68 Ref
i: RXP.US, RXP.FPI		r	A **{1}** fact is present.		**{1} Missing**	W	6.5.58 R*
s: ALL	i: RXP.US, RXP.FPI	r	A **{1}** fact is absent.		**{1} Unexpected**	W	6.5.58 []
i: RXP.US, RXP.FPI		r	A **{2}** fact is present.		**{2} TotalPayments Missing**	W	6.5.58 R*
s: ALL	i: RXP.US, RXP.FPI	r	A **{2}** fact is absent.		**{2} TotalPayments Unexpected**	W	6.5.58 []

Notes and special cases: none.

3.3.2 Payments Axis

A Payment Context (pc) is a context having a typed dimension member of **rxp:PmtAxis**, an integer value of the **rxp:pmt** element and a period matching the required context. There is one payment context for each payment reported in the disclosure.

3.3.3 Boolean, Numeric and String Valued Facts

The table below lists concepts in the RXP taxonomy that characterizes a single payment or group of similar payments. These are restricted to basic data types and may only appear in payment contexts.

Concept	#	Type or regex	Meaning
rxp:A	**{1}**	Monetary	Amount
rxp:M	**{2}**	**Well|Open Pit|Underground Mining**	Method of Extraction. Note that there are three distinct values of **M**, two of them containing spaces.
rxp:Cm	**{3}**	**xs:normalizedString**	Currency Conversion Method
rxp:K	**{4}**	**true**	In-kind Payment flag
rxp:Km	**{5}**	**xs:normalizedString**	In-kind calculation method

Validations:

Incl	Excl	c	Check	f	On failure	s	EFM v68 Ref
i: RXP.US, RXP.FPI		pc	If a {1} fact is present, then a {2} fact is present.	1	**{1} {2} Value Dependency**	W	§ 6.5.58 Item 3
i: RXP.US, RXP.FPI		pc	If a {2} fact is present, then a {1} fact is present.	1	**{2} {1} Value Dependency**	W	§ 6.5.58 Item 3

Incl	Excl	c	Check	f	On failure	s	EFM v68 Ref
i: RXP.US, RXP.FPI		pc	If a {3} fact is present, then a {1} fact is present.	1	`{3} {1} Value Dependency`	W	§ 6.5.58 Item 3
i: RXP.US, RXP.FPI		pc	If a {4} fact is present, then a {1} fact is present.	1	`{4} {1} Value Dependency`	W	§ 6.5.58 Item 3
i: RXP.US, RXP.FPI		pc	If a {4} fact present, then a {5} fact is present.	1	`{4} {5} Value Dependency`	W	§ 6.5.58 Item 3
i: RXP.US, RXP.FPI		pc	If a {5} fact present, then a {4} fact is present.	1	`{5} {4} Value Dependency`	W	§ 6.5.58 Item 3
i: RXP.US, RXP.FPI		pc	If a {1} fact is present with `unitRef` matching the value of `EntityReportingCurrency-ISOCode` in the required context, then a {3} fact should not be present.		`{3} Unexpected`	W	§ 6.5.58 Item 4
i: RXP.US, RXP.FPI		pc	At least one `{1}` fact is present in the instance with period matching the 12-month reporting period and `unit` matching the value of `EntityReportingCurrency-ISOCode` in the required context.	2	`Amount for Required 12 Months Period`	W	§ 6.5.58 Item 5

Notes and special cases:

1. There are no checks for absence of these facts in other submission types or contexts.
2. Only one such fact is needed; the check does not apply to every individual payment context.

3.3.4 Member-valued Facts

The table below lists concepts in the RXP taxonomy restricted by the taxonomy to have values that are declared custom members (see 5.7 below) of one of the standard domains:

Concept	#	Type or regex	Meaning
`rxp:A`	`{1}`	Monetary	Amount
`rxp:E`	`{2}`	Custom member of `dei:EntityDomain`	Entity
`rxp:Co`	`{3}`	Standard member of `country:AllCountriesDomain`	Country
`rxp:Sn`	`{4}`	Standard member of `snj:AllSubnational-JurisdictionsDomain`	Subnational Jurisdiction
`rxp:Gv`	`{5}`	Custom member of `rxp:AllGovernmentsMember`	Government
`rxp:Pr`	`{6}`	Custom member of `rxp:AllProjectsMember`	Project
`rxp:P`	`{7}`	Custom member of `rxp:AllPaymentTypesMember`	Payment Type
`rxp:R`	`{8}`	Custom member of `rxp:AllResourcesMember`	Resource
`rxp:Sg`	`{9}`	Custom member of `rxp:AllSegmentsMember`	Segment

Validations:

Incl	Excl	c	Check	f	On failure	s	EFM v68 Ref
i: RXP.US, RXP.FPI		pc	If a `{1}` fact is present, then a {5} fact is present.	1	`{1} {5} Value Dependency`	W	§ 6.5.58 Item 3
i: RXP.US, RXP.FPI		pc	If a {1} fact is present, then a {3} fact is present.	1	`{1} {3} Value Dependency`	W	§ 6.5.58 Item 3
i: RXP.US, RXP.FPI		pc	If a {1} fact is present, then a {8} fact is present.	1	`{1} {8} Value Dependency`	W	§ 6.5.58 Item 3

Incl	Excl	c	Check	f	On failure	s	EFM v68 Ref
i: RXP.US, RXP.FPI		pc	If a {2} fact present, then a {1} fact is present.	1	`{2} {1} Value Dependency`	W	§ 6.5.58 Item 3
i: RXP.US, RXP.FPI		pc	If a {3} fact present, then a {1} fact is present.	1	`{3} {1} Value Dependency`	W	§ 6.5.58 Item 3
i: RXP.US, RXP.FPI		pc	If a {4} fact is present, then a {3} fact is present.	1	`{4} {3} Value Dependency`	W	§ 6.5.58 Item 3
i: RXP.US, RXP.FPI		pc	If a {5} fact is present, then a {3} fact is present.	1	`{5} {3} Value Dependency`	W	§ 6.5.58 Item 3
i: RXP.US, RXP.FPI		pc	If a {6} fact present, then a {5} fact is present.	1	`{6} {5} Value Dependency`	W	§ 6.5.58 Item 3
i: RXP.US, RXP.FPI		pc	If a {7} fact present, then a {1} fact is present.	1	`{7} {1} Value Dependency`	W	§ 6.5.58 Item 3
i: RXP.US, RXP.FPI		pc	If a {8} fact present, then a {1} fact is present.	1	`{8} {1} Value Dependency`	W	§ 6.5.58 Item 3
i: RXP.US, RXP.FPI		pc	If a {9} fact present, then a {1} fact is present.	1	`{9} {1} Value Dependency`	W	§ 6.5.58 Item 3

Notes and special cases:

1. There are no checks for absence of these facts in other submission sets, instance types, or contexts.

3.3.5 Payment Contexts

An RXP.US or RXP.FPI instance is likely to have more than one payment, and therefore more than one payment context. The existence of even a single payment context fact requires that there exist facts to represent the aggregated sum of individual payments by project, by government, and in total.

A set of concepts in the RXP taxonomy characterizes aggregate payments of nine types. In each case, the existence of a non-null fact value for that aggregate concept in any context should be accompanied by at least one Payment fact in some context with the matching member as value.

Concept	#	Type or regex	Meaning
`rxp:P`	`{1}`	Custom member of `rxp:AllPayment-TypesMember`	Payment Type
`rxp:Taxes`	`{2}`	`Monetary`	Taxes
`rxp:Royalties`	`{3}`	`Monetary`	Royalties
`rxp:Fees`	`{4}`	`Monetary`	Fees
`rxp:Production-Entitlements`	`{5}`	`Monetary`	Production Entitlements
`rxp:Bonuses`	`{6}`	`Monetary`	Bonuses
`rxp:Dividends`	`{7}`	`Monetary`	Dividends
`rxp:Infrastructure-Improvements`	`{8}`	`Monetary`	Infrastructure Improvements
`rxp:CommunityAnd-Social`	`{9}`	`Monetary`	Community and Social
`rxp:OtherPayments`	`{10}`	`Monetary`	Other Payments

Validations:

Incl	Excl	c	Check	f	On failure	s	EFM v68 Ref
i: RXP.US, RXP.FPI		pc, r	If a `{1}` fact valued `rxp:Taxes` is present, then at least one {2} fact is present in the required context.	1	`{1} {2} Value Dependency`	W	§ 6.5.58 Item 7

Incl	Excl	c	Check	f	On failure	s	EFM v68 Ref
i: RXP.US, RXP.FPI		r, pc	If a `{2}` fact is present, then a `{1}` fact valued **`rxp:Taxes`** is present in at least one payment context.	1	**`{2} {1} Value Dependency`**	W	§ 6.5.58 Item 6
i: RXP.US, RXP.FPI		pc, r	If a `{1}` fact valued **`rxp:Royalties`** is present, then at least one {3} fact is present in the required context.	1	**`{1} {3} Value Dependency`**	W	§ 6.5.58 Item 7
i: RXP.US, RXP.FPI		r, pc	If a `{3}` fact is present, then a `{1}` fact valued **`rxp:Royalties`** is present in at least one payment context.	1	**`{3} {1} Value Dependency`**	W	§ 6.5.58 Item 6
i: RXP.US, RXP.FPI		pc, r	If a `{1}` fact valued **`rxp:Fees`** is present, then at least one {4} fact is present in the required context.	1	**`{1} {4} Value Dependency`**	W	§ 6.5.58 Item 7
i: RXP.US, RXP.FPI		r, pc	If a `{4}` fact is present, then a `{1}` fact valued **`rxp:Fees`** is present in at least one payment context.	1	**`{4} {1} Value Dependency`**	W	§ 6.5.58 Item 6
i: RXP.US, RXP.FPI		pc, r	If a `{1}` fact valued **`rxp:ProductionEntitlements`** is present, then at least one {5} fact is present in the required context.	1	**`{1} {5} Value Dependency`**	W	§ 6.5.58 Item 7
i: RXP.US, RXP.FPI		r, pc	If a `{5}` fact is present, then a `{1}` fact valued **`rxp:ProductionEntitlements`** is present in at least one payment context.	1	**`{5} {1} Value Dependency`**	W	§ 6.5.58 Item 6
i: RXP.US, RXP.FPI		pc, r	If a `{1}` fact valued **`rxp:Bonuses`** is present, then at least one {6} fact is present in the required context.	1	**`{1} {6} Value Dependency`**	W	§ 6.5.58 Item 7
i: RXP.US, RXP.FPI		r, pc	If a `{6}` fact is present, then a `{1}` fact valued **`rxp:Bonuses`** is present in at least one payment context.	1	**`{6} {1} Value Dependency`**	W	§ 6.5.58 Item 6
i: RXP.US, RXP.FPI		pc, r	If a `{1}` fact valued **`rxp:Dividends`** is present, then at least one {7} fact is present in the required context.	1	**`{1} {7} Value Dependency`**	W	§ 6.5.58 Item 7
i: RXP.US, RXP.FPI		r, pc	If a `{7}` fact is present, then a `{1}` fact valued **`rxp:Dividends`** is present in at least one payment context.	1	**`{7} {1} Value Dependency`**	W	§ 6.5.58 Item 6

Incl	Excl	c	Check	f	On failure	s	EFM v68 Ref
i: RXP.US, RXP.FPI		pc, r	If a `{1}` fact valued `rxp:InfrastructureImprovements` is present, then at least one {8} fact is present in the required context.	1	`{1} {8} Value Dependency`	W	§ 6.5.58 Item 7
i: RXP.US, RXP.FPI		r, pc	If a `{8}` fact is present, then a `{1}` fact valued `rxp:InfrastructureImprovements` is present in at least one payment context.	1	`{8} {1} Value Dependency`	W	§ 6.5.58 Item 6
i: RXP.US, RXP.FPI		pc, r	If a `{1}` fact valued `rxp:CommunityAndSocial` is present, then at least one {9} fact is present in the required context.	1	`{1} {9} Value Dependency`	W	§ 6.5.58 Item 7
i: RXP.US, RXP.FPI		r, pc	If a `{9}` fact is present, then a `{1}` fact valued `rxp:CommunityAndSocial` is present in at least one payment context.	1	`{9} {1} Value Dependency`	W	§ 6.5.58 Item 6
i: RXP.US, RXP.FPI		pc, r	If a `{1}` fact valued `rxp:Other-Payments` is present, then at least one {10} fact is present in the required context.	1	`{1} {10} Value Dependency`	W	§ 6.5.58 Item 7
i: RXP.US, RXP.FPI		r, pc	If a `{10}` fact is present, then a `{1}` fact valued `rxp:Other-Payments` is present in at least one payment context.	1	`{10} {1} Value Dependency`	W	§ 6.5.58 Item 6

Notes and special cases:

1. The contexts of the monetary and the member-valued facts are distinct. The values of Amount `rxp:A` facts may be reasonably expected to arithmetically sum by payment type to the aggregate fact in the required context, but the validation process requires only that the corresponding aggregate facts exist.

3.3.6 Government Aggregate Contexts

A Government Aggregate Context (gac) is a context having a custom member of `rxp:GovernmentAxis`.

Concept	#	Type or regex	Meaning
`rxp:Gv`	`{1}`	Custom member of `rxp:AllGovernmentsMember`	Government

Validations:

Incl	Excl	c	Check	f	On failure	s	EFM v68 Ref
i: RXP.US, RXP.FPI		gac, pc	If a government aggregate context (gac) exists, then at least one payment context (pc) exists with a `{1}` fact having that member value.	1	`{1} {2} Value Dependency`	W	§ 6.5.58 Item 8

Notes and special cases:

1. The contexts of the monetary and the member-valued facts are distinct. The values of Amount **rxp:A** facts may be reasonably expected to arithmetically sum across all members of the government axis, but the validation process requires only that the corresponding aggregate facts exist.

3.3.7 Project Aggregate Contexts

A Project Aggregate Context (pac) is a context having a custom member of **rxp:GovernmentAxis**.

Concept	#	Type or regex	Meaning
rxp:Pr	{1}	Custom member of **rxp:AllProjectsMember**	Project

Validations:

Incl	Excl	c	Check	f	On failure	s	EFM v68 Ref
i: RXP.US, RXP.FPI		pac, pc	If a project aggregate context (pac) exists, then at least one payment context (pc) exists with a {1} fact having that member value.	1	**{1} {2} Value Dependency**	W	§ 6.5.58 Item 8

Notes and special cases:

1. The contexts of the monetary and the member-valued facts are distinct. The values of Amount **rxp:A** facts may be reasonably expected to arithmetically sum across all members of the project axis, but the validation process requires only that the corresponding aggregate facts exist.

---

4 Filing Fee Exhibits

4.1 Filing Fee Inline XBRL Attachments

An Inline XBRL Filing Fee exhibit may be prepared using EDGAR's Fee Exhibit Preparation Tool (FEPT) as part of EDGAR Link Online (ELO) or by a third-party Inline XBRL document preparation tool.

The Inline XBRL Filing Fee exhibit is identified as the "EX-FILING FEES" attachment document type. (The Inline XBRL Filing Fee exhibit (EX-Filing Fees) is a separate XBRL instance identified as "EX-FILING FEES.") EX-Filing Fees is independent of any primary document attachments comprising an Inline XBRL Document Set (such as for a 10-K exhibit) or any other Inline XBRL instance. The EX-Filing Fee taxonomy, facts, units, and their supporting contexts, should not be comingled with any other Inline XBRL instances. Selecting a different document type will result in the submission being suspended.

The exhibit is viewed and prepared as tables (specified by the link roles of the FFD taxonomy dimensions hypercubes). These tables may have more than one line use per a line number typed dimension to identify which facts are logically grouped on that line. (The line number is an integer with no constraints, it could be sequential or anything else meaningful to the author.)

The Tables are:

Table (link role name)	**Table has lines (`lineNo` dimension members)**
Submission Table	No
Fees Summary Table	No
Fees, by Offering	Yes
Fees, by Offset	Yes

Fees, by Combined Prospectus	Yes
Securities, 424I	Yes

The words “must” or “must not” mean that if the validation fails, an error will be raised, and the submission will be suspended.

The words “should” or “should not” mean that if the validation fails, the exhibit will be accepted, and a warning message will be issued.

The words “may” or “may not” mean that there is no validation that would result in a warning or error.

4.1.1 Security Types Based on Rule

The following table shows the security types applicable to each rule:

	Rules						
Security Type	457(a)	457(o)	457(f)	457(u)	457(r)	457(s)	Other
Asset-Backed Securities	Yes	Yes	Yes	No	No	Yes	Yes
Debt	Yes	Yes	Yes	No	Yes	No	Yes
Debt Convertible into Equity	Yes	Yes	Yes	No	Yes	No	Yes
Equity	Yes	Yes	Yes	No	Yes	No	Yes
Exchange-Traded Vehicle Securities	Yes	Yes	Yes	Yes	Yes	No	Yes
Face Amount Certificates	No	No	No	No	No	No	Yes
Limited Partnership Interests	Yes	Yes	Yes	No	Yes	No	Yes
Mortgage-Backed Securities	Yes	Yes	Yes	No	No	Yes	Yes
Non-Convertible Debt	Yes	Yes	Yes	No	Yes	No	Yes
Other	Yes	Yes	Yes	No	Yes	No	Yes
Unallocated (Universal) Shelf	No	Yes	No	No	No	No	No

4.1.2 Offering & Transaction Valuation Rules Applicable for Submission Types

	Rules						
Submission Types	**457(a) 457(o) Other**	**415(a)(6)**	**457(f)**	**457(u)**	**457(r)**	**457(s)**	**0-11****
424I	No	No	No	Yes*	No	No	No
F-1	Yes	Yes	Yes	Yes	No	No	No
F-3	Yes	Yes	No	Yes	No	No	No
F-3ASR	Yes	Yes	No	No	Yes	No	No
F-3D	Yes	Yes	No	Yes	No	No	No
N-2	Yes	Yes	No	No	No	No	No
N-2ASR	Yes	Yes	No	No	Yes	No	No
S-1	Yes	Yes	Yes	Yes	No	No	No
S-3	Yes	Yes	No	Yes	No	No	No
S-3D	Yes	Yes	No	Yes	No	No	No
S-3ASR	Yes	Yes	No	No	Yes	No	No
S-11	Yes	Yes	Yes	No	No	No	No
SF-1	Yes	No	No	No	No	No	No
SF-3	Yes	Yes	No	No	No	Yes	No
F-1/A	Yes	Yes	Yes	Yes	No	No	No

	Rules						
Submission Types	**457(a) 457(o) Other**	**415(a)(6)**	**457(f)**	**457(u)**	**457(r)**	**457(s)**	**0-11****
F-3/A	Yes	Yes	No	Yes	No	No	No
N-2/A	Yes	Yes	No	No	No	No	No
N-2 POSASR	Yes	Yes	No	No	Yes	No	No
POSASR	Yes	Yes	No	No	Yes	No	No
POS AM	Yes	Yes	Yes	No	No	No	No
S-1/A	Yes	Yes	Yes	Yes	No	No	No
S-3/A	Yes	Yes	No	Yes	No	No	No
S-11/A	Yes	Yes	Yes	No	No	No	No
SF-1/A	Yes	No	No	No	No	No	No
SF-3/A	Yes	Yes	No	No	No	Yes	No
F-4	Yes	Yes	Yes	No	No	No	No
F-10	Yes	No	No	No	No	No	No
F-10EF	Yes	No	No	No	No	No	No
N-14 8C	Yes	No	Yes	No	No	No	No
S-4	Yes	Yes	Yes	No	No	No	No
S-4EF	Yes	Yes	Yes	No	No	No	No
F-4/A	Yes	Yes	Yes	No	No	No	No
F-10/A	Yes	No	No	No	No	No	No
N-14 8C/A	Yes	No	Yes	No	No	No	No
S-4/A	Yes	Yes	Yes	No	No	No	No
PREM14A	No	No	No	No	No	No	Yes
PREM14C	No	No	No	No	No	No	Yes
SC 13E1	No	No	No	No	No	No	Yes
SC 13E3	No	No	No	No	No	No	Yes
SC TO-I	No	No	No	No	No	No	Yes
SC TO-T	No	No	No	No	No	No	Yes
SC13E4F	No	No	No	No	No	No	Yes
SC14D1F	No	No	No	No	No	No	Yes
PRER14A	No	No	No	No	No	No	Yes
PRER14C	No	No	No	No	No	No	Yes
SC 13E1/A	No	No	No	No	No	No	Yes
SC 13E3/A	No	No	No	No	No	No	Yes
SC13E4F/A	No	No	No	No	No	No	Yes
SC14D1F/A	No	No	No	No	No	No	Yes
SC TO-I/A	No	No	No	No	No	No	Yes
SC TO-T/A	No	No	No	No	No	No	Yes
F-3MEF	Yes	Yes	No	No	No	No	No
N-2MEF	Yes	Yes	No	No	No	No	No

	Rules						
Submission Types	**457(a) 457(o) Other**	**415(a)(6)**	**457(f)**	**457(u)**	**457(r)**	**457(s)**	**0-11****
S-3MEF	Yes	Yes	No	No	No	No	No
SF-1MEF	Yes	No	No	No	No	No	No
SF-3MEF	Yes	Yes	No	No	No	No	No
F-1MEF	Yes	Yes	Yes	No	No	No	No
F-4MEF	Yes	Yes	Yes	No	No	No	No
S-4MEF	Yes	Yes	Yes	No	No	No	No
N-14MEF	Yes	No	Yes	No	No	No	No
S-1MEF	Yes	Yes	Yes	No	No	No	No
S-11MEF	Yes	Yes	Yes	No	No	No	No
424B1	Yes	Yes	Yes	No	Yes	Yes	No
424B2	Yes	Yes	Yes	No	Yes	Yes	No
424B3	Yes	Yes	Yes	No	Yes	Yes	No
424B4	Yes	Yes	Yes	No	Yes	Yes	No
424B5	Yes	Yes	Yes	No	Yes	Yes	No
424B7	Yes	Yes	Yes	No	Yes	Yes	No
424B8	Yes	Yes	Yes	No	Yes	Yes	No
424H	Yes	Yes	No	No	No	Yes	No
424H/A	Yes	Yes	No	No	No	Yes	No
S-8	Yes	No	No	No	No	No	No

*Rule 457(u) is inferred on 424I submissions.

** Rule 0-11 is inferred for applicable submission types as described in section 4.5.

4.1.3 Offset Table & Combined Prospectus Rules Applicable for Submission Types

	Rules			
Submission Types	**457(b)**	**0-11(a)(2)**	**457(p)**	**429**
424I	No	No	Yes**	No
F-1	Yes	Yes	Yes	Yes
F-3	Yes	Yes	Yes	Yes
F-3ASR	Yes	Yes	Yes	Yes
F-3D	Yes	No	Yes	Yes
N-2	Yes	Yes	Yes	Yes
N-2ASR	Yes	Yes	Yes	Yes
S-1	Yes	Yes	Yes	Yes
S-3	Yes	Yes	Yes	Yes
S-3D	Yes	No	Yes	Yes
S-3ASR	Yes	Yes	Yes	Yes
S-11	Yes	Yes	Yes	Yes

	Rules			
Submission Types	**457(b)**	**0-11(a)(2)**	**457(p)**	**429**
SF-1	Yes	No	Yes	Yes
SF-3	Yes	No	Yes	Yes
F-1/A	Yes	Yes	Yes	Yes
F-3/A	Yes	Yes	Yes	Yes
N-2/A	Yes	Yes	Yes	Yes
N-2 POSASR	Yes	Yes	Yes	Yes
POSASR	Yes	Yes	Yes	Yes
POS AM	Yes	Yes	Yes	Yes
S-1/A	Yes	Yes	Yes	Yes
S-3/A	Yes	Yes	Yes	Yes
S-11/A	Yes	Yes	Yes	Yes
SF-1/A	Yes	No	Yes	Yes
SF-3/A	Yes	No	Yes	Yes
F-4	Yes	Yes	Yes	Yes
F-10	Yes	Yes	Yes	Yes
F-10EF	Yes	Yes	Yes	Yes
N-14 8C	Yes	Yes	Yes	Yes
S-4	Yes	Yes	Yes	Yes
S-4EF	Yes	Yes	Yes	Yes
F-4/A	Yes	Yes	Yes	Yes
F-10/A	Yes	Yes	Yes	Yes
N-14 8C/A	Yes	Yes	Yes	Yes
S-4/A	Yes	Yes	Yes	Yes
PREM14A	No	Yes	No	No
PREM14C	No	Yes	No	No
SC 13E1	No	Yes	No	No
SC 13E3	No	Yes	No	No
SC TO-I	No	Yes	No	No
SC TO-T	No	Yes	No	No
SC13E4F	No	Yes	No	No
SC14D1F	No	Yes	No	No
PRER14A	No	Yes	No	No
PRER14C	No	Yes	No	No
SC 13E1/A	No	Yes	No	No
SC 13E3/A	No	Yes	No	No
SC13E4F/A	No	Yes	No	No
SC14D1F/A	No	Yes	No	No
SC TO-I/A	No	Yes	No	No
SC TO-T/A	No	Yes	No	No
F-3MEF	Yes	Yes	Yes	Yes

	Rules			
Submission Types	**457(b)**	**0-11(a)(2)**	**457(p)**	**429**
N-2MEF	Yes	Yes	Yes	Yes
S-3MEF	Yes	Yes	Yes	Yes
SF-1MEF	Yes	No	Yes	Yes
SF-3MEF	Yes	No	Yes	Yes
F-1MEF	Yes	Yes	Yes	Yes
F-4MEF	Yes	Yes	Yes	Yes
S-4MEF	Yes	Yes	Yes	Yes
N-14MEF	Yes	Yes	Yes	Yes
S-1MEF	Yes	Yes	Yes	Yes
S-11MEF	Yes	Yes	Yes	Yes
424B1	Yes	Yes	Yes	Yes
424B2	Yes	Yes	Yes	Yes
424B3	Yes	Yes	Yes	Yes
424B4	Yes	Yes	Yes	Yes
424B5	Yes	Yes	Yes	Yes
424B7	Yes	Yes	Yes	Yes
424B8	Yes	Yes	Yes	Yes
424H	Yes	No	Yes	Yes
424H/A	Yes	No	Yes	Yes
S-8	No	No	Yes	No

** Offset sources are not required for 424I submission type.

4.2 Submission Table

The following submission table facts are currently specified by EFM version 68, § 6.5.21 as follows:

Exhibit Type / **DEI Element**	**EX-FILING FEE**
`EntityRegistrantName`	X*
`EntityCentralIndexKey`	X*

In the required context:

- X* – A non-null fact must exist.

The remainder of this section specifies table facts specific to Filing Fee attachments:

Submission Type / **FFD Element**	**424I**	**Others***
`RegnFileNb`	`W`	`WA`
`FormTp`	`XS`	
`SubmissnTp`	`X*`	

Submission Type / FFD Element	424I	Others*
FeeExhibitTp	XF	
IssrNm	W, T	
IssrBizAdrStrt1	W	
IssrBizAdrStrt2	W2	
IssrBizAdrCity	W	
IssrBizAdrStatOrCtryCd	W2	
IssrBizAdrZipCd	W	
CeasedOprsDt	O, o	
RptgFsclYrEndDt	WD, DB, Future	

In the required context:

- X* – A non-null fact should exist.
- W – A non-null fact should exist (warning).
- WA – For Amendment/MEF Filings, non-null fact should exist (submission types S-1/A, S-3/A, S-11/A, N-2/A, F-1/A, F-3/A, SF-1/A, SF-3/A, N-2 POSASR, POS AM, POSASR, S-4/A, N-14 8C/A, F-4/A, F-10/A, SF-1MEF, SF-3MEF, N-2MEF, S-3MEF, F-3MEF, F-1MEF, F-4MEF, N-14MEF, S-1MEF, S-4MEF, S-11MEF, 424B1, 424B2, 424B3, 424B4, 424B5, 424B7, 424B8, 424H, 424H/A) (warning).
- W2 – Only when IssrBizAdrStrt1 is provided.
- O – A non-null fact may or may not exist.
- XS – **FormTp** must match an allowed form type for the submission type (*e.g.*, F-4 for F-4/A or F-4MEF Submission Types).
- XF – **FeeExhibitTp** has the value EX-FILING FEES.
- D – EDGAR date field validations, expected Value between 1980-01-01 and 2050-12-31 (warning).
- T – EDGAR text field validations, regex:

`[0-9A-Za-z`~!@#$%&*(). [\]{}|\\:;"'<>,_?/=\t\n\r\f+-]{1,150}` (warning).

- WD – Required if **CeasedOprsDt** is not provided (warning).
- DB – When provided, must match Database record of filer registration.
- Future – Must not be a future date.
- Blank – A non-null fact should not exist.
- Others* – All submission types specified in section 4.1.2 excluding 424I.

4.3 Fees Summary Table

This table has no dimensions. This table shows the validations.

Submission Type / FFD Element	424I	SC*	Others*
TtlOfferingAmt			TtlOfferingAmt = Sum of MaxAggtOfferingPric [1]
TtlPrevslyPdAmt		NR*, TtlPrevslyPdAmt not greater than TtlFeeAmt [3]	
TtlFeeAmt	NR*, Sum of FeeAmt [2]	NR*, Sum of FeeAmt [1]	
TtlTxValtn		Sum of TxValtn [1]	
FeeIntrstAmt	TtlFeeAmt × intrstRate × yrs late		
TtlOffsetAmt	NR*, TtlFeeAmt + FeeIntrstAmt		NR*, TtlOffsetAmt not greater than TtlFeeAmt - TtlPrevslyPdAmt
NetFeeAmt	NR*, TtlFeeAmt - TtlOffsetAmt + FeeIntrstAmt	NR*, TtlFeeAmt – TtlOffsetAmt - TtlPrevslyPdAmt	
TtlFeeAndIntrstAmt	TtlFeeAmt + FeeIntrstAmt		

- SC* – SC 13E1, SC 13E3, SC13E4F, PREM14A, PREM14C, SC TO-I, SC TO-T, SC14D1F, SC 13E1/A, SC 13E3/A, SC 13E4F/A, PRER14A, PRER14C, SC14D1F/A, SC TO-T/A, SC TO-I/A.
- Others* - All submission types specified in section 4.1.2 excluding 424I and SC*.
- NR* - Must be a number ranging from 0 to 99,999,999,999,999.99 inclusive.
- [1] – From the Offerings table.
- [2]– From the 424I table.
- [3] – Regardless of whether the filer is claiming an offset or not.

Submission Type / FFD Element	POS*	424B*	Validation
NrrtvDsclsr	ND, HTML	ND	Either ND or NP
NrrtvMaxAggtOfferingPric	NP, NR	NP, NR	
NrrtvMaxAggtAmt			
FnlPrspctsFlg		O	

In the required context:

- POS* – POS AM, POSASR, N-2 POSASR.

- 424B* – 424B1, 424B2, 424B3, 424B4, 424B5, 424B7, 424B8
- HTML – XHTML encoded text block (^ and non-ASCII characters must be &#-encoded).
- NR – Number ranging from 0 to 99,999,999,999,999.99 inclusive.
- ND – Narrative disclosure.
- NP – Narrative price.

4.4 Offering Table

Offering table facts are grouped by **lineNo** integer values of the Offerings Axis into lines. Validations are performed by line (on the facts of the table which have the same **lineNo** member). Missing **lineNo** members results in an XBRL Dimensional syntax error.

Offering table lines are grouped into two Offering Types: Fees to be Paid and Fees Previously Paid. A Fees to be Paid line has a value of false for the **PrevslyPdFlg** element. A Fees Previously Paid line has a value of true for the **PrevslyPdFlg** element.

4.5 Offering Table Rule Flags

The rule flags identify the rule applicable to a line, one of **Rule457aFlg**, **Rule457oFlg**, **Rule457uFlg**, **Rule457rFlg**, **Rule457sFlg**, **Rule011Flg**, **FeesOthrRuleFlg**, or **Rule415a6Flg** may be specified for a line, except when **Rule011Flg** can be deemed to be defaulted. **Rule011Flg** is deemed to have the value true when none of the other flags are true in submission types applicable to Rule 0-11 as specified in section 4.1.2 above.

4.5.1 Rule 457(a) Lines

The following validations are provided for lines specifying **Rule457aFlg**, for applicable submission types as specified in section 4.1.2 above.

Offering Type / FFD Element	Fees to be paid	Fees previously paid	Validation*
PrevslyPdFlg	**W, FA**		
OfferingSctyTp [1]	**W**		Should be a valid EDGAR Security Type for this rule as specified in the "Security Types Based on Rule" section 4.1.1
OfferingSctyTitl [1]	**W, T**		
AmtSctiesRegd [1]	**W, NR3**		
MaxOfferingPricPerScty [1]	**W, NR1**		
MaxAggtOfferingPric [1]	**W, NR**	**DB**	**AmtSctiesRegd × MaxOfferingPricPerScty**
FeeRate [1]	**W, FD**	**UO**	
FeeAmt [1]	**W, NR2**		**MaxAggtOfferingPric × FeeRate**
OfferingNote	**HTML**		

In a context with **lineNo** dimensions:

- [1] – Not applicable when Rule 457(f) is specified for the same context (see 4.5.9 Rule 457(f)).
- W – Required, including any additional validation in adjacent column (warning).
- T – EDGAR text field validations, regex:

`[0-9A-Za-z`~!@#$%&*(). [\]{}|\\:;"'<>,_?/=\t\n\r\f+-]{1,150}` (warning).

- HTML – XHTML encoded text block (^ and non-ASCII must also be &#-encoded)
- FA – Should be false for non-amendment submission types (S-1, S-3, S-3ASR, S-3D, S-11, N-2, N-2ASR, F-1, F-3, F-3ASR, F-3D, SF-1, SF-3, S-4, S-4EF, N-14 8C, F-4, F-10, F-10EF, SF-1MEF, SF-3MEF, N-2MEF, S-3MEF, F-3MEF, F-1MEF, F-4MEF, N-14MEF, S-1MEF, S-4MEF, S-11MEF, S-8)
- FD – Should match the fee rate of the day submitted.
- NR – Number ranging from 0 to 99,999,999,999,999.99 inclusive.
- NR1 – Number ranging from 0 to 999,999,999,999.9999 inclusive.
- NR2 – Number ranging from 0 to 999,999,999,999.99 inclusive.
- NR3 – Number ranging from 0 to 999,999,999,999 inclusive.
- DB – Maximum Aggregate Offering Price (MAOP) amount provided should match the prior filing using the Security Type and Security Class Title combination for the file number specified on the filing.
- UO – Unexpected, may be omitted.
- Validation* – Excluding and unexpected for submission types not specified in section 4.1.2.

4.5.2 Rule 457(o) Lines

The following validations are provided for lines specifying **`Rule457oFlg`**, for applicable submission types as specified in section 4.1.2.

Offering Type / FFD Element	Fees to be paid	Fees previously paid	Validation*
`PrevslyPdFlg`	`W, FA`		
`OfferingSctyTp [1]`	`W`		Should be a valid EDGAR Security Type for this rule as specified in the "Security Types Based on Rule" section 4.1.1
`OfferingSctyTitl [1]`	`W, T`		
`AmtSctiesRegd [1]`	`NR3, UO`		
`MaxOfferingPricPerScty [1]`	`NR1, UO`		
`MaxAggtOfferingPric [1]`	`W, NR`		
`FeeRate [1]`	`W, FD`	`UO`	
`FeeAmt [1]`	`W, NR2`		
`OfferingNote`	`HTML`		

In a context with `lineNo` dimensions:

- [1] – Not applicable when Rule457fFlg is specified for the same context (see 4.5.9 Rule 457(f))
- W – Required, including any additional validation in adjacent column (warning).
- T – EDGAR text field validations, regex:

`[0-9A-Za-z`~!@#$%&*(). [\]{}|\\:;"'<>,_?/=\t\n\r\f+-]{1,150}` (warning).

- HTML – XHTML encoded text block (^ and non-ASCII must also be &#-encoded).
- FA – Should be false for non-amendment submission types (S-1, S-3, S-3ASR, S-3D, S-11, N-2, N-2ASR, F-1, F-3, F-3ASR, F-3D, SF-1, SF-3, S-4, S-4EF, N-14 8C, F-4, F-10, F-10EF, SF-1MEF, SF-3MEF, N-2MEF, S-3MEF, F-3MEF, F-1MEF, F-4MEF, N-14MEF, S-1MEF, S-4MEF, S-11MEF, S-8).
- FD – Should match the fee rate of the day submitted.
- NR – Number ranging from 0 to 99,999,999,999,999.99 inclusive.
- NR1 – Number ranging from 0 to 999,999,999,999.9999.
- NR2 – Number ranging from 0 to 999,999,999,999.99 inclusive.
- NR3 – Number ranging from 0 to 999,999,999,999 inclusive.
- UO – Unexpected, may be omitted.
- Validation* – Excluding and unexpected for submission types not specified in section 4.1.2.

4.5.3 Rule 457(r) Lines

The following validations are provided for lines specifying Rule457rFlg, for applicable submission types as specified in section 4.1.2.

Offering Type / FFD Element	Fees to be paid	Fees previously paid	Validation*
`PrevslyPdFlg`	`W, FA`		
`OfferingSctyTp`	`W`		Should be a valid EDGAR Security Type for this rule as specified in section 4.1.1
`OfferingSctyTitl`	`W, T`		
`AmtSctiesRegd`	`NR3, UO`		
`MaxOfferingPricPerScty`	`NR1, UO`		
`MaxAggtOfferingPric`	`NR, UO`		
`FeeRate`	`O, FD`	`UO`	
`FeeAmt`	`O, NR2`		

Offering Type / FFD Element	Fees to be paid	Fees previously paid	Validation*
`OfferingNote`	`W, HTML`		

In a context with `lineNo` dimensions:

- W – Required, including any additional validation in adjacent column (warning).
- O – Optional.
- T – EDGAR text field validations, regex:

`[0-9A-Za-z`~!@#$%&*(). [\]{}|\\:;"'<>,_?/=\t\n\r\f+-]{1,150}` (warning).

- HTML – XHTML encoded text block (^ and non-ASCII must also be &#-encoded).
- FA – Should be false for non-amendment submission types (S-1, S-3, S-3ASR, S-3D, S-11, N-2, N-2ASR, F-1, F-3, F-3ASR, F-3D, SF-1, SF-3, S-4, S-4EF, N-14 8C, F-4, F-10, F-10EF, SF-1MEF, SF-3MEF, N-2MEF, S-3MEF, F-3MEF, F-1MEF, F-4MEF, N-14MEF, S-1MEF, S-4MEF, S-11MEF, S-8).
- FD – Should match the fee rate of the day submitted.
- NR – Number ranging from 0 to 99,999,999,999,999.99 inclusive.
- NR1 – Number ranging from 0 to 999,999,999,999.9999.
- NR2 – Number ranging from 0 to 999,999,999,999.99 inclusive.
- NR3 – Number ranging from 0 to 999,999,999,999 inclusive.
- UO – Unexpected, may be omitted.
- Validation* – Excluding and unexpected for submission types not specified in section 4.1.2.

4.5.4 Rule 457(s) Lines

The following validations are provided for lines specifying `Rule457sFlg`, for applicable submission types as specified in section 4.1.2.

Offering Type / FFD Element	Fees to be paid	Fees previously paid	Validation*
`PrevslyPdFlg`	`W, FA`		
`OfferingSctyTp`	`W`		Should be a valid EDGAR Security Type for this rule as specified in section 4.1.1
`OfferingSctyTitl`	`W, T`		
`AmtSctiesRegd`	`NR3, UO`		
`MaxOfferingPricPerScty`	`NR1, UO`		
`MaxAggtOfferingPric`	`NR, UO`		`AmtSctiesRegd × MaxOfferingPricPerScty; 0` is allowed.
`FeeRate`	`O, FD`	`UO`	

Offering Type / FFD Element	Fees to be paid	Fees previously paid	Validation*
FeeAmt	O, NR2		
OfferingNote	W, HTML		

In a context with lineNo dimensions:

- W – Required, including any additional validation in adjacent column (warning).
- O – Optional.
- T – EDGAR text field validations, regex:

[0-9A-Za-z`~!@#$%&*(). [\]{}|\\:;"'<>,_?/=\t\n\r\f+-]{1,150} (warning).

- HTML – XHTML encoded text block (^ and non-ASCII must also be &#-encoded).
- FA – Should be false for non-amendment submission types (SF-3).
- FD – Should match the fee rate of the day submitted.
- NR – Number ranging from 0 to 99,999,999,999,999.99 inclusive.
- NR1 – Number ranging from 0 to 999,999,999,999.9999.
- NR2 – Number ranging from 0 to 999,999,999,999.99 inclusive.
- NR3 – Number ranging from 0 to 999,999,999,999 inclusive.
- UO – Unexpected, may be omitted.
- Validation* – Excluding and unexpected for submission types not specified in section 4.1.2.

4.5.5 Rule 457(u) Lines

The following validations are provided for lines specifying Rule457uFlg, for applicable submission types as specified in section 4.1.2.

Offering Type / FFD Element	Fees to be paid	Fees previously paid	Validation*
PrevslyPdFlg	W, FA		
OfferingSctyTp	W		Should be a valid EDGAR Security Type for this rule as specified in section 4.1.1
OfferingSctyTitl	W, T		
AmtSctiesRegd	UW		
MaxOfferingPricPerScty	UW		
MaxAggtOfferingPric	UW		
FeeRate	UW		
FeeAmt	UW		
OfferingNote	W, HTML		

In a context with lineNo dimensions:

- W – Required, including any additional validation in adjacent column (warning).
- O – Optional.
- T – EDGAR text field validations, regex:

`[0-9A-Za-z`~!@#$%&*(). [\]{}|\\:;"'<>,_?/=\t\n\r\f+-]{1,150}` (warning).

- HTML – XHTML encoded text block (^ and non-ASCII must also be &#-encoded).
- FA – Should be false for non-amendment submission types (S-1, S-3, S-3D, F-1, F-3, F-3D).
- UW – Unexpected, should be omitted.
- Validation* – Excluding and unexpected for submission types not specified in section 4.1.2.

4.5.6 Rule "Other" Lines

The following validations are provided for lines specifying **`FeesOthrRuleFlg`**, for applicable submission types as specified in section 4.1.2.

Offering Type / FFD Element	Fees to be paid	Fees previously paid	Validation*
`PrevslyPdFlg`	`W, FA`		
`OfferingSctyTp [1]`	`W`		Should be a valid EDGAR Security Type for this rule as specified in the "Security Types Based on Rule" section 4.1.1
`OfferingSctyTitl [1]`	`W, T`		
`AmtSctiesRegd [1]`	`O, NR3`		
`MaxOfferingPricPerScty [1]`	`O, NR1`		
`MaxAggtOfferingPric [1]`	`O, NR`	`DB`	`AmtSctiesRegd × MaxOfferingPricPerScty`
`FeeRate [1]`	`O, FD`	`UO`	
`FeeAmt [1]`	`W, NR2`		`MaxAggtOfferingPric × FeeRate` When `MaxAggtOfferingPric` is absent `FeeAmt` should equal `0`.
`OfferingNote [1]`	`W, HTML`		

In a context with `lineNo` dimensions:

- [1] – Not applicable when Rule 457(f) is specified for the same context (see 4.5.9).
- W – Required, including any additional validation in adjacent column (warning).
- O – Optional.
- T – EDGAR text field validations, regex:

`[0-9A-Za-z`~!@#$%&*(). [\]{}|\\:;"'<>,_?/=\t\n\r\f+-]{1,150}` (warning).

- HTML – XHTML encoded text block (^ and non-ASCII must also be &#-encoded).
- FA – Should be false for non-amendment submission types (S-1, S-3, S-3ASR, S-3D, S-11, N-2, N-2ASR, F-1, F-3, F-3ASR, F-3D, SF-1, SF-3, S-4, S-4EF, N-14 8C, F-4, F-10, F-10EF, SF-

1MEF, SF-3MEF, N-2MEF, S-3MEF, F-3MEF, F-1MEF, F-4MEF, N-14MEF, S-1MEF, S-4MEF, S-11MEF, S-8).

- FD – Should match the fee rate of the day submitted.
- NR – Number ranging from 0 to 99,999,999,999,999.99 inclusive.
- NR1 – Number ranging from 0 to 999,999,999,999.9999.
- NR2 – Number ranging from 0 to 999,999,999,999.99 inclusive.
- NR3 – Number ranging from 0 to 999,999,999,999 inclusive.
- DB – Maximum Aggregate Offering Price (MAOP) amount provided should match the prior filing using the Security Type and Security Class Title combination for the file number specified on the filing.
- UO – Unexpected, may be omitted.
- Validation* – Excluding and unexpected for submission types not specified in section 4.1.2.

4.5.7 Rule 415(a)(6) Lines

The following validations are provided for lines specifying Rule415a6Flg, for applicable submission types as specified in section 4.1.2.

Offering Type / FFD Element	Fees to be paid	Fees previously paid	Validation*
PrevslyPdFlg	UW		
OfferingSctyTp	W		Should be a valid EDGAR Security Type for this rule as specified in the "Security Types Based on Rule" section 4.1.1
OfferingSctyTitl	W, T		
AmtSctiesRegd	DB, NR3		
MaxOfferingPricPerScty	O, NR1		
MaxAggtOfferingPric	W, DB, NR		
FeeRate	UW		
FeeAmt	UW		
CfwdFormTp	W		Should be a valid EDGAR Form Type
CfwdPrrFileNb	W		Validate that it has the following (Securities Act) File Number prefixes: 333, 033, 002
CfwdPrrFctvDt	D, DB		
CfwdPrevslyPdFee	W, NR2		
OfferingNote	O, HTML		

In a context with `lineNo` dimensions:

- W – Required, including any additional validation in adjacent column (warning).
- O – Optional.

- D – EDGAR date field validations, expected Value between 1980-01-01 and 2050-12-31 (warning).
- T – EDGAR text field validations, regex:

`[0-9A-Za-z`~!@#$%&*(). [\]{}|\\:;"'<>,_?/=\t\n\r\f+-]{1,150}` (warning).

- HTML – XHTML encoded text block (^ and non-ASCII must also be &#-encoded).
- FD – Should match the fee rate of the day submitted.
- NR – Number ranging from 0 to 99,999,999,999,999.99 inclusive.
- NR1 – Number ranging from 0 to 999,999,999,999.9999.
- NR2 – Number ranging from 0 to 999,999,999,999.99 inclusive.
- NR3 – Number ranging from 0 to 999,999,999,999 inclusive.
- DB – Validate with EDGAR Database.
- UW – Unexpected, should not be provided.
- Validation* – Excluding and unexpected for submission types not specified in section 4.1.2.

4.5.8 Rule 0-11 Lines

The following validations are provided for lines specifying **`Rule011Flg`** or having it deemed **`true`** as noted in section 5, for applicable submission types as specified in section 4.1.2.

Offering Type / FFD Element	Fees to be paid	Fees previously paid	Validation*
`PrevslyPdFlg`	`W, FA`		
`TxValtn [1]`	`W, NR`		
`FeeRate`	`W, FD`	`UO`	
`FeeAmt [1]`	`W, NR2, CEF`		`MaxAggtOfferingPrice × FeeRate`
`OfferingNote`	`W, HTML`		

In a context with **`lineNo`** dimensions:

- [1] – For amendment filings, this field may be blank for “Fees To be Paid” lines.
- W – Required, including any additional validation in adjacent column (warning).
- T – EDGAR text field validations, regex:

`[0-9A-Za-z`~!@#$%&*(). [\]{}|\\:;"'<>,_?/=\t\n\r\f+-]{1,150}` (warning).

- HTML – XHTML encoded text block (^ and non-ASCII must also be &#-encoded).
- FA – Should be false for non-amendment submission types (SC 13E1, SC 13E3, SC13E4F, PREM14A, PREM14C, SC TO-I, SC TO-T, SC14D1F).
- FD – Should match the fee rate of the day submitted.
- NR – Number ranging from 0 to 99,999,999,999,999.99 inclusive.
- NR2 – Number ranging from 0 to 999,999,999,999.99 inclusive.
- CEF – Closed End Funds (parameter) warning if overridden with 0.

- UO – Unexpected, may be omitted. Warning if specified.
- Validation* – Excluding and unexpected for submission types not specified in section 4.1.2.

4.5.9 Rule 457(f) Lines

The following validations are provided for lines specifying **`Rule457fFlg`**, which must be used on a line (i.e., the flag facts having same **`lineNo`** dimension) with **`Rule457aFlg`**, **`Rule457oFlg`**, or **`FeesOthrRuleFlg`** for applicable submission types as specified in section 4.1.2.

Offering Type / FFD Element	Fees to be paid	Fees previously paid	Validation*
`OfferingSctyTp`	`W`		Should be a valid EDGAR Security Type for this rule as specified in section 4.1.1
`OfferingSctyTitl`	`W, T`		
`AmtSctiesRegd 457(a)`	`W, NR3`		
`AmtSctiesRegd 457(o), Other`	`O, NR3`		
`MaxOfferingPricPerScty`	`UO, NR1`		
`MaxAggtOfferingPric`	`W, NR`		`AmtSctiesRegd × MaxOfferingPricPerScty`
`FeeRate`	`W, FD`	`UO`	
`FeeAmt`	`W, NR2`	`DB`	`MaxAggtOfferingPric × FeeRate`
The following are fee note facts, usually displayed in a footnote style below table containing 457(f) facts above			
`AmtSctiesRcvd`	`W, NR3`		
`ValSctiesRcvdPerShr`	`W, NR1`		
`ValSctiesRcvd`	`W, NR`		`AmtSctiesRcvd x ValSctiesRcvdPerShr`
`CshRcvdByRegistrantInTx`	`O, NR`		
`CshPdByRegistrantInTx`	`O, NR`		
`FeeNoteMaxAggtOfferingPric`	`I, NR`		`ValSctiesRcvd + CshRcvdByRegistrantInTx - CshPdByRegistrantInTx`
`OfferingNote`	`W, HTML`		

In a context with **`lineNo`** dimensions:

- W – Required, including any additional validation in adjacent column (warning).
- O – Optional.
- T – EDGAR text field validations, regex:

`[0-9A-Za-z`~!@#$%&*(). [\]{}|\\:;"'<>,_?/=\t\n\r\f+-]{1,150}` (warning).

- HTML – XHTML encoded text block (^ and non-ASCII must also be &#-encoded).
- FD – Should match the fee rate of the day submitted.
- NR – Number ranging from 0 to 99,999,999,999,999.99 inclusive.
- NR1 – Number ranging from 0 to 999,999,999,999.9999 inclusive.
- NR2 – Number ranging from 0 to 999,999,999,999.99 inclusive.

- NR3 – Number ranging from 0 to 999,999,999,999 inclusive.
- DB – Amount of Registration Fee provided should match the prior filing using the Security Type and Security Class Title combination for the file number specified on the filing.
- UO – Unexpected, may be omitted.
- I – Info msg if negative, will be processed as zero.
- Validation* – Excluding and unexpected for submission types not specified in section 4.1.2.

4.5.10 General Instructions II.H (Exchange Offers) and II.I (Business Combinations)

The validations in section 4.5.9 are also applicable for lines specifying **`GnlInstrIIhiFlg`**, which must be used on a line (i.e., the flag facts having same **`lineNo`** dimension) with **`Rule457aFlg`**, **`Rule457oFlg`**, or **`FeesOthrRuleFlg`** for applicable submission types F-10, F-10/A, and F-10EF.

4.6 Offset Table

Offset table facts are grouped by **`lineNo`** dimension into lines. Validations are performed by line (on the facts of the table which have the same **`lineNo`** dimension member). Dimensional errors (missing **`lineNo`** dimension) are according to applicable XBRL standard.

Offset table lines are grouped into two Offset Types: Offset Claim and Offset Source. An Offset Claim line has a value of true for the **`OffsetClmdInd`** element. An Offset Source line has a value of **`false`** for the **`OffsetClmdInd`** element.

4.6.1 Offset Table Rule Flags

The rule flags identify the rule applicable to a line, one of **`Rule457bOffsetFlg`**, **`Rule011a2OffsetFlg`**, or Rule457pOffsetFlg may be specified for a line.

4.6.2 Rule 457(b) or 0-11(a)(2)) Lines

The following validations are provided for lines specifying **`Rule457bOffsetFlg`** or **`Rule011a2OffsetFlg`**, for applicable submission types as specified in section 4.1.3.

Offset Type / FFD Element	Offset Claim	Offset Source	Validation*
`OffsetClmdInd`	`W`		A fee offset claim line requires at least one fee offset source line
`OffsetPrrFilerNm`	`UW`	`W, T, DB`	
`OffsetPrrFormTp`	`W, DB`		Should be a valid EDGAR Form Type
`OffsetPrrFileNb`	`W, DB`		Validate it includes the following (Securities Act/Exchange Act) File Number prefixes: 333, 033, 002, 001, 811, 814, 005, 000
`OffsetClmInitlFilgDt`	`W, D, Future`	`UW`	
`OffsetSrcFilgDt`	`UW`	`W, D, Future`	
`OffsetClmdAmt`	`W, NR`	`UW`	
`OffsetPrrFeeAmt`	`UW`	`W, NR, DB`	

Offset Type / FFD Element	Offset Claim	Offset Source	Validation*
OffsetExpltnForClmdAmt	WSA, HTML	U	
OffsetNote	O, HTML		

In a context with `lineNo` dimensions:

- W – Required, including any additional validation in adjacent column (warning).
- O – Optional
- WSA – Required when claiming from a Securities Act filing (file number prefixes 333, 033, 002 file number). Optional when claiming from the Exchange Act filings (file number prefixes 811, 814, 005, 001,000.
- D – EDGAR date field validations, expected Value between 1980-01-01 and 2050-12-31 (warning).
- T – EDGAR text field validations, regex:

`[0-9A-Za-z`~!@#$%&*(). [\]{}|\\:;"'<>,_?/=\t\n\r\f+-]{1,150}` (warning).

- HTML – XHTML encoded text block (^ and non-ASCII must also be &#-encoded).
- NR – Number ranging from 0 to 99,999,999,999,999.99 inclusive.
- DB – Validate prior filing.
- UW – Unexpected, warning.
- U – Unexpected.
- Future – Should not be a future date.
- Validation* – Excluding and unexpected for submission types not specified in section 4.1.3 above.

4.6.3 Rule 457(p) Lines

The following validations are provided for lines specifying Rule457pOffsetFlg, for applicable submission types as specified in section 4.1.3.

Offset Type / FFD Element	Offset Claim	Offset Source	Validation*
OffsetClmdInd	W		A fee offset claim line requires at least one fee offset source line
OffsetPrrFilerNm	W, T, DB		
OffsetPrrFormTp	W, DB		Should be a valid EDGAR Form Type
OffsetPrrFileNb	W, DB		Validate it includes the following (Securities Act) File Number prefixes: 333, 033, 002
OffsetClmInitlFilgDt	W, D Future	UW	
OffsetSrcFilgDt	UW	W, D, Future	
OffsetClmdAmt	W, NR	UW	

Offset Type / FFD Element	Offset Claim	Offset Source	Validation*
OffsetPrrSctyTp	W	UW	Should be a valid EDGAR Security Type
OffsetPrrSctyTitl	W, T	UW	
OffsetPrrNbOfUnsoldScties	W, NR3	UW	
OffsetPrrFeeAmt	UW	W, NR, DB	
OffsetNote	O, HTML		
TermntnCmpltnWdrwl	W, HTML	U	

In a context with `lineNo` dimensions:

- W – Required, including any additional validation in adjacent column (warning).
- O – Optional
- D – EDGAR date field validations, expected Value between 1980-01-01 and 2050-12-31 (warning).
- T – EDGAR text field validations, regex:

`[0-9A-Za-z`~!@#$%&*(). [\]{}|\\:;"'<>,_?/=\t\n\r\f+-]{1,150}` (warning).

- HTML – XHTML encoded text block (^ and non-ASCII must also be &#-encoded).
- NR – Number ranging from 0 to 99,999,999,999,999.99 inclusive.
- NR3 – Number ranging from 0 to 999,999,999,999 inclusive.
- DB – Validate prior filing.
- UW – Unexpected, warning.
- U – Unexpected.
- Future – Should not be a future date.
- Validation* – Excluding and unexpected for submission types not specified in section 4.1.3.

4.7 Combined Prospectus Table

Combined Prospectus table facts are grouped by `lineNo` dimension into lines. Validations are performed by line (on the facts of the table which have the same `lineNo` dimension member). Dimensional errors (missing `lineNo` dimension) are according to applicable XBRL standard.

4.7.1 Combined Prospectus Table Rule Flags

The rule flags identify the rule applicable to a line, Rule429CmbndPrspctsFlg should be specified for each line.

4.7.2 Combined Prospectus Lines Specifying Rule 429

The following validations are provided for lines specifying Rule429CmbndPrspctsFlg, for applicable submission types as specified in section 4.1.3.

FFD Element	Combined Prospectus	Validation*
Rule429SctyTp	W	Should be a valid EDGAR Security Type
Rule429SctyTitl	W, T	
Rule429NbOfUnsoldScties	NR3, DB	
Rule429AggtOfferingAmt	NR, DB	
Rule429EarlierFormTp	W	Should be a valid EDGAR Form Type
Rule429EarlierFileNb	W, DB	Validation includes the following (Securities Act) File Number prefixes: 333, 033, or 002, and that it is not the same file number for offset claims in the Offset Table (section 4) lines.
Rule429InitlFctvDt	W, D, Future	
Rule429PrspctsNote	O, HTML	

In a context with `lineNo` dimensions:

- W – Required, including any additional validation in adjacent column (warning).
- T – EDGAR text field validations, regex:

`[0-9A-Za-z`~!@#$%&*(). [\]{}|\\:;"'<>,_?/=\t\n\r\f+-]{1,150}` (warning).

- HTML – XHTML encoded text block (^ and non-ASCII must also be &#-encoded).
- D – EDGAR date field validations, expected Value between 1980-01-01 and 2050-12-31 (warning).
- NR – Number ranging from 0 to 99,999,999,999,999.99 inclusive.
- NR3 – Number ranging from 0 to 999,999,999,999 inclusive.
- DB – Validate with EDGAR Database.
- Future – Should not be a future date.
- O – Optional
- Validation* – Excluding and unexpected for submission types not specified in section 4.1.3.

4.8 Securities, 424I

4.8.1 Securities, 424I Table Rule Flags

424I table facts are grouped by `lineNo` dimension into lines. Validations are performed by line (on the facts of the table which have the same `lineNo` dimension member). Dimensional errors (missing `lineNo` dimension) are according to applicable XBRL standard.

- **Note:** There are no rule flags for the 424I table.

4.8.2 Submission Type 424I Table Lines

The following validations are provided for lines of submission type 424I.

FFD Element	Securities, 424I	Validation*
OfferingSctyTitl	W, T	

FFD Element	Securities, 424I	Validation*
AggtSalesPricFsclYr	W, NR	
AggtRedRpPricFsclYr	W, NR	
AggtRedRpPricPrrFsclYr	W, NR	
NetSalesAmt	W, NR	Required when AggtSalesPricFsclYr greater than AggtRedRpPricFsclYr + AggtRedRpPricPrrFsclYr, then NetSalesAmt = AggtSalesPricFsclYr - AggtRedRpPricFsclYr - AggtRedRpPricPrrFsclYr
AmtRedCdts	W, NR4	When AggtSalesPricFsclYr less than AggtRedRpPricFsclYr + AggtRedRpPricPrrFsclYr then AmtRedCdts = AggtSalesPricFsclYr - AggtRedRpPricFsclYr - AggtRedRpPricPrrFsclYr
FeeRate	W, FD	
FeeAmt	W, NR	
FeeNote	O, HTML	

In a context with lineNo dimensions:

- W – Required, including any additional validation in adjacent column (warning).
- T – EDGAR text field validations, regex:

`[0-9A-Za-z`~!@#$%&*(). [\]{}|\\:;"'<>,_?/=\t\n\r\f+-]{1,150}` (warning).

- HTML – XHTML encoded text block (^ and non-ASCII must also be &#-encoded).
- D – EDGAR date field validations, expected Value between 1980-01-01 and 2050-12-31 (warning).
- NR – Number ranging from 0 to 99,999,999,999,999.99 inclusive.
- NR4 – Number ranging from -9,999,999,999,999.99 to 0 inclusive.
- FD – Should match the fee rate of the day submitted.
- O – Optional
- Validation* – Excluding and unexpected for submission types not specified in section 4.1.3.

4.8.3 Submission Type 424I Entries in the Submission Table

Certain 424I FFD elements apply to the Submission Table (instead of the breakdown lines of the 424I Table of this section). Those elements are shown above in section 4.2, “Submission Table”.

5 Custom Taxonomies

In addition to attachments containing the instance, most instance types need at least one other attachment that contains declarations of meta data: concepts and relationships unique to the filer or to the specific submission. This collection of attachments is the *custom taxonomy* for the instance. The instance type largely determines the degree to which customization is required or permitted.

5.1 Custom presentation and label relationships for standard concepts

Custom taxonomies are entirely optional when there is a taxonomy entry point providing all the necessary label, definition, and presentation relationships. For example, if company UVW were an FPI submitting a 6K.A instance type, there is no need for a custom taxonomy: the instance could reference entry point **`https://xbrl.sec.gov/dei/2025/dei-sub-2025.xsd`** (**`dei-sub`**) that contains all relationships needed for the expected and expected facts in the **`dei`** namespace. However, if company UVW could choose to use entry point **`https://xbrl.sec.gov/dei/2025/dei-2025.xsd`** (**`dei`**) instead, a custom taxonomy is needed.

5.2 File attachments for custom relationships

EFM v69 § 6.4 explained that the naming convention for EDGAR XBRL files consists of a mnemonic code chosen by the filer, such as a trading symbol, followed by other distinguishing text of the filer's choice, followed by a dash, followed by a date in the format YYYYMMDD, and a dot with a three-character suffix. For example, a 6-K submission for the earliest date reported of October 15, 2025, of a company with trading symbol UVW might have file name **`uvw6k-20251015.htm`**.

- An XBRL schema file.
  - Its file name is like the instance, but with suffix **`.xsd`**, *e.g.*, **`uvw6k-20251015.xsd`**;
  - A **`targetNamespace`** attribute with a fixed pattern of authority and path components, reflecting the company mnemonic and the period, *e.g.*, target namespace **`http://uvw.net/20251015`** declared with authority **`uvw.net`** and path **`20251015`** with prefix **`uvw`**.
  - An **`import`** element for entry point **`https://xbrl.sec.gov/dei/2025/dei-2025.xsd`**.
  - A custom **`roleType`** declaration for a role URI such as **`http://uvw/role/Cover`**, with a **`definition`** text such as "**`010000 - Document - Cover`**" to be potentially used on calculation, definition, and presentation links.
- A label linkbase embedded in the schema (or in a separate file **`uvw6k-20251015_lab.xml`** referenced by the schema).
  - The label linkbase contains links for the standard concepts used in facts, such as **`dei:DocumentType`** and **`dei:AmendmentFlag`**.
- A presentation linkbase embedded in the schema (or in a separate file **`uvw6k-20251015_pre.xml`** linked to by the schema). It will contain relationships in each presentation base set where the filer wants facts rendered, in this case presumably the custom Cover role.
  - A root element such as **`dei:CoverAbstract`** with six parent-child relationships, one to each concept that could appear in facts.
  - Presentation relationships may also use the **`preferredLabel`** attribute to specify which label role to use during the rendering process.

5.3 Custom presentation and label relationships

There is no need, in this example, for definition linkbase relationships, in the absence of any axes, members, or table structure. This is illustrated in Figure 5. Concepts are color coded and indented as in Figure 1 above; column "o" the value of the order attribute on the parent-child arc, "p" the preferred label role, if any; column "t" indicates a relationship that exists in a standard taxonomy and cannot be overridden; the concept labels are shown with the same indentation as the concept names.

For the purposes of the example, terse labels illustrate that label text need not precisely match the concept name, nor its standard label in the taxonomy.

Also, for the purposes of this example, the final column shows fact values.

Concept **dei:AmendmentDescription** has no fact value because **dei:AmendmentFlag** is **false**, and because there is no fact to display, it also needs no label.

Figure 1 above showed a coloring convention for highlighting concept types; in the figures below, the same convention is used to illustrate linkbase relationships. The concept is shown indented with respect to its parent element, with a column indicating its data type.

Figure 5. Custom presentation and label relationships, no dimensions

Role URI: http://uvw/role/Cover					
Description: 010000 - Document - Cover					
Concept	**p**	**t**	**o**	**Label**	**Value in Required Context**
dei:CoverAbstract				Cover [Abstract]	
dei:DocumentType	terse		1	Form	**6-K**
dei:AmendmentFlag	terse		2	Amended	**false**
dei:AmendmentDescription			3		
dei:EntityCentralIndexKey	terse		4	CIK	**0000012345**
dei:EntityRegistrantName	terse		5	Conformed Name	**WXY Ltd.**
dei:DocumentPeriodEndDate	terse		6	Reporting Date	**2025-11-05**

A *presentation group* is a presentation base set; that is, relationships that all have the same role (in this example, **http://uvw/role/Cover**). The role may be a standard role from a standard taxonomy, or it could be a custom role as shown in this example. Even for a standard role, the set of relationships might be a mix of standard relationships from a standard taxonomy, or custom relationships. This means that any given presentation group might be assembled from parts in several different files. An XBRL processor handles prohibitions (relationships that cancel each other out) and many validations to produce a presentation group of *effective* relationships.

5.4 Custom relationships for standard concepts, with dimensions

When only standard concepts, axes and standard members of those axes appear in an instance, its custom taxonomy can usually be limited to providing only linkbases, with no custom element declarations. This should be evident from the validations in section 3.1, “Expected Facts in the Required Context”.

Most of the validations in section 3.2 “Expected Facts with Dimensions” require valid relationships in an accompanying custom taxonomy. For example, in section 3.2.3, several instance types in the submission set FAST are expected to have a value for **dei:EntityCommonStockSharesOutstanding**; in case 2 a fact is expected for each member of the **us-gaap:StatementClassOfStockAxis**. Moreover, almost all instance types in submission set FA have expected facts that share a common concept but are distinguished from each other by representing a disaggregation of a total by geography, line of business, asset class, or any one or more possible distinctions. Sometimes there is no disaggregation *per se,* just a common concept applied to several different things. See sections 3.1.24 through 3.3 above for specific examples. In this section, instance type 8K.A for US company WXY will be used for an example.

5.4.1 File attachments for custom members

The 8K.A instance may still reference the **dei-sub** entry point. But, if it has classes A and B of common shares, then its custom taxonomy for that instance needs at least additional content, as described below, to satisfy the validations of section 3.2.3:

- An XBRL schema file.

- Its file name is like the instance, but with suffix **.xsd**, *e.g.*, **wxy8k-20251015.xsd**;
- A target namespace with a fixed pattern of authority and path components, reflecting the company mnemonic and the period, *e.g.*, target namespace **http://wxy.net/20251015** declared with authority **wxy.net** and path **20251015** with prefix **wxy**.
- An import of entry point **https://xbrl.sec.gov/dei/2025/dei-sub-2025.xsd**.

- A definition linkbase, embedded in the schema (or in a separate file **wxy8k-20251015_def.xml** linked to by the schema), containing these dimensional relationships:
  - Axis **us-gaap:StatementClassOfStockAxis** has a domain default member **us-gaap:ClassOfStockDomain**;
  - Domain **us-gaap:ClassOfStockDomain** has two members **us-gaap:CommonClassAMember and us-gaap:CommonClassBMember.**
- A label linkbase embedded in the schema (or in a separate file **wxy8k-20251015_lab.xml** referenced by the schema).
  - The label linkbase contains links from the standard concept **us-gaap:CommonClassAMember** to at least a standard label such as "Common Class A [Member]".
  - The label linkbase might include other labels for the concept, such as a label "Class A" with role **terseLabel** or a long label such as "Class A common shares of WXY Inc." with role **documentation**.
  - Likewise, **us-gaap:CommonClassBMember** will have one or more labels.
- A presentation linkbase embedded in the schema (or in a separate file **wxy8k-20251015_pre.xml** referenced by the schema). It will contain presentation relationships in each presentation group where the filer wants facts with the dimension members rendered:
  - Axis **us-gaap:StatementClassOfStockAxis** has two parent-child relationships, one to each of the two class members. In this example, the **dei-sub** entry point contains presentation links in the **http://xbrl.sec.gov/dei/role/document/Cover** role.
  - Presentation relationships may also use the **preferredLabel** attribute to specify which label role to use during the rendering process.

5.4.2 Dimensional relationships

Figure 6 below illustrates the definition linkbase relationships in the custom taxonomy of the WXY 8K.A instance type. An Arc column indicates the arc role, with an exclamation point (!) in column "t" indicating the relationship is already in an imported entry point of a standard taxonomy and need not be customized. If a **targetRole** attribute is present on the arc, there is a column Target with an abbreviation for the target role.

Figure 6. Dimensional relationships example 1

Role: http://xbrl.sec.gov/dei/role/document/Entity-InformationEntityListingsTable					
Description: 995405 - Document - Entity Information, Entity Listings [Table]					
Concept	**Type**	**Arc**	**o**	**t**	**Target**
dei:EntityListingsLineItems	Abstract				
dei:EntityListingsTable	Hypercube	all (closed)	1	!	
us-gaap:StatementClassOfStockAxis	Axis	hypercube-dimension	1		
us-gaap:ClassOfStockDomain	Member	dimension-domain	1		
us-gaap:CommonClassAMember	Member	domain-member	1		
us-gaap:CommonClassBMember	Member	domain-member	2		
dei:CommonStockSharesOutstanding	Shares	domain-member	2	!	

A different, more modular organization of the definition links, places the domain members in a separate role. This organization, as illustrated in Figure 7, has the advantage of allowing any number of different tables to share the identical members of a shared axis:

Figure 7. Dimensional relationships example 2

Role: http://xbrl.sec.gov/dei/role/document/Entity-InformationEntityListingsTable					
Description: 995405 - Document - Entity Information, Entity Listings [Table]					
Concept	**Type**	**Arc**	**o**	**t**	**Target**
dei:EntityInformationLineItems	Abstract				
dei:EntitiesTable	Hypercube	all (closed)	1	!	
us-gaap:StatementClassOfStockAxis	Axis	hypercube-dimension	1		Classes
dei:CommonStockSharesOutstanding	Shares	domain-member	2	!	

A custom target role `Classes` contains only standard domain members:

Role URI: http://wxy/role/Classes					
Description: 001 - Document - Classes					
Concept	**Type**	**Arc**	**o**	**t**	**Target**
us-gaap:ClassOfStockDomain	Domain Member	dimension-domain			
us-gaap:CommonClassAMember	Member	domain-member	1		
us-gaap:CommonClassBMember	Member	domain-member	2		

In either arrangement, the relationship between an axis and its default member only needs to be represented once in a taxonomy, and can be a single arc in a separate definition link role:

Role URI: http://xbrl.sec.gov/dei/role/document/Defaults					
Description: 995411 - Document - Document and Entity Information, Defaults					
Concept	**Type**	**Arc**	**o**	**t**	**Target**
us-gaap:StatementClassOfStockAxis	Axis				
us-gaap:ClassOfStockDomain	Domain Member	dimension-default	1		

Most SEC taxonomies have separate roles for each domain, and one role containing all dimension-default relationships, but this is not mandated for custom taxonomies.

In general, a custom taxonomy may contain any definition relationship having any arc role permitted by the XBRL base specification, dimensional specification, and certain specified arc roles in the Link Role Registry (LRR; see section 2 above). EDGAR places additional constraints on definition relationships and the way that they are permitted to be grouped within a single link:

- All definition relationships having the same source (or parent) must have distinct values of the `order` attribute.

- Only a concept (custom or standard) of type **`domainItemType`** may be the target of the dimensional relationship from an axis to a domain.
- A concept of type **`domainItemType`** may not be the source of relationships to concepts that are not **`domainItemType`** concepts.
- Any concept may appear in any number of tables, but each table needs to be in a different definition link role. This facilitates the detection of logical inconsistencies both in the taxonomy and the instance.
- Tables may be defined using relationships that cross from one link to another, but such relationships cannot "dangle". For example, the relationship from a table to an axis can only continue into a link if that link that has a domain for that axis.
- Dimensional relationships cannot have paths from a concept back to itself.

In practice, most if not all relationships in definition links are used to arrange table, axis, and domain member concepts into multidimensional structures, and so in EDGAR the terms *definition* links and *dimensional* links are frequently synonymous.

5.4.3 Presentation and label relationships

Custom taxonomies may also need custom presentation, label, and calculation relationships even when limited to standard concepts and their labels. Continuing the WXY 8K.A instance example, a custom taxonomy could include the presentation and label relationships in Figure 8 below. Note that the order and nesting of the definition and presentation links may have minor differences.

Figure 8. Presentation example

Role URI: http://xbrl.sec.gov/dei/role/document/Cover				
Description: 995100 - Document - Cover				
Concept	**p**	**t**	**o**	**Label**
dei:EntitiesTable				Entities [Table]
us-gaap:StatementClassOfStockAxis			1	Statement Class of Stock [Axis]
us-gaap:ClassOfStockDomain			1	Class of Stock [Domain]
us-gaap:CommonClassAMember			1	Common Class A [Member]
us-gaap:CommonClassBMember			2	Common Class B [Member]
dei:EntityInformationLineItems		!	2	Entity Information [Line Items]
dei:CommonStockSharesOutstanding		!	1	**Common** Stock Shares Outstanding

Presentation linkbases have no equivalent of the definition link **`targetRole`** feature, so that all concepts, axes, and members that the filer wishes to appear rendered together must be in the same link role. Section 6 below, "Instance Rendering", provides more detail on how to take advantage of this to arrange custom presentation links and labels to have some control over the layout, formatting, and facts displayed.

5.5 Validation of custom relationships

EDGAR checks the custom taxonomy to ensure that its structure is valid with respect to XBRL specifications – for example, that the relationship between a source concept and its target label is directed correctly from a concept to a label, or that certain relationships do not define loops.

EDGAR performs additional validations of custom taxonomies; violations are reported as either Errors or Warnings.

5.5.1 Validations resulting in Errors

Among the EDGAR validations that may yield XBRL Errors:

- The custom namespace must exist, match a specific pattern, and not conflict with a standard namespace;
- Each custom namespace must have a distinct prefix;
- All concepts have id attributes that are consistent with the namespace prefix;
- All concepts may have null values
- Concept types (axis, domain member) must be correct for the relationships among them;
- A concept may have at most one label for each role (standard, terse, *etc*.) and language combination;
- Label texts are limited in length and contain no extra whitespace;
- Restrictions on label roles for certain concepts (for example, there must be no custom `documentation` labels for concepts in standard taxonomies);
- Relationships must not be redundant;
- Relationships within custom taxonomies do not override relationships in a standard taxonomy;
- Definition and presentation relationships do not have an ambiguous ordering in a list of concepts;
- No unexpected definition or presentation links on certain standard taxonomy concepts. For example, members of the Country Axis as used in an RXP instance type must be members from the standard country taxonomy.
- No XBRL reference linkbases. EDGAR has built-in reference linkbases for all standard taxonomies that cannot be altered or augmented.
- No custom declarations of resource roles or arc roles.
- Standard taxonomy schemas and entry points may only be referenced at their official location;

5.5.2 Validations resulting in Warnings

EDGAR validations on taxonomies may also yield XBRL warnings. Some of these concern data quality and interoperability, others help filers avoid problems with custom rendering, such as:

- Presentation groups that have more than one root concept, resulting in unexpected layouts;
- An axis appears in a presentation link role, but it has no domain concept among its children, so that nothing will be rendered in that presentation role.
- Numeric concepts with period type "duration" have labels for the "start" and "end" instants.
- Custom presentation and definition link roles have constraints on their contents.

5.6 Custom Concept Declarations in General

A custom taxonomy is not normally limited to links among standard members of standard axes. For many instance types, filers are free to define custom concepts. EDGAR imposes limits on those custom concepts. In addition, the following general principles reduce unnecessary variability both across filers and for a single filer over time.

5.6.1 Do not duplicate pre-existing concept declarations

(Formerly EFM v68 § 6.8.4) In preference to declaring a new concept in a custom taxonomy, filers should normally assign an appropriate label for a concept already defined in a standard taxonomy. If the disclosure intended by the filer is effectively a synonym for a disclosure represented by a standard

taxonomy's authoritative references and documentation label, filers should assign a label to the standard concept, in preference to defining a custom concept.

Defining a filer-specific concept should be done only under specific circumstances relevant to each type of concept as discussed in separate sections below.

5.6.2 Avoid changes in declarations from period to period

(Formerly EFM v68 § 6.8.1) A custom taxonomy that changes any concept declaration from an earlier version of itself in such a way as to be incompatible with earlier instances should use the date portion of its target namespace to identify the new version. For example, the next 10-Q for company WXY after its 2025 10-K would define a schema with updated namespace **`http://wxy/20260331`**, without changing the prefix **`wxy`** and preserving consistent concept names as much as possible. From submission to submission, custom taxonomies do change, for example, to accommodate changes in concept labels. But custom concepts should be re-used as much as possible and changes in declarations should be avoided.

5.6.3 Custom concept naming

(Formerly EFM v68 § 6.8.6) Use company- and period-specific names only for domain members. Do not include company-specific or period-specific information in any custom concept other than a domain member. Concepts with other item types, including (but not limited to) monetary, percent, integer, shares, per share, string, or text block item types, should not include company-specific or period-specific information in the concept name. Represent period-specific facts by the built in XBRL **`period`** dimension, not through the concept name.

Domain members may, by contrast, include company-specific or period-specific information in the concept name. For example, a custom taxonomy should not declare a custom monetary concept with the name **`CostOfAcquisitionOfLargeCo`** or **`FourthQuarterAdjustment`**. A company-specific custom domain member such as **`LargeCoMember`** to be used in a fact for the **`CostOfAcquisition`** standard concept is preferable.

5.6.4 Custom concept declarations

Every custom concept must have a period type of either **`instant`** or **`duration`**. Numeric concepts must be declared with period type **`instant`** if and only if it represents a value that is only meaningful as of a point in time, typically a beginning or end of period balance. All other concepts are **`duration`** period types.

An easy check for whether a reporting concept has period type **`instant`** is to consider whether its reported value would be the same regardless of whether it was meant to represent the end of a year, or just the end of the fourth quarter. If those values could be different, then it is a **`duration`** period type.

(Formerly EFM v68 § 6.8.12) Do not define separate concepts to represent the instants at the beginning and the end of a period. The same **`instant`** represents the end of one period, and the beginning of the next.

(Formerly EFM v68 § 6.8.13) A numeric concept that represents an adjustment of an **`instant`** concept, by convention, have a period type **`duration`**. Facts of that concept will be in a period prior to the end-of-period balance that it applies to.

5.7 Custom Domain Member Declarations

A custom taxonomy may define a custom member concept and use it in linkbases and contexts. EDGAR validation of a custom taxonomy checks for XBRL errors in the declaration of such members:

- A custom concept must not have the same name as a concept in an imported taxonomy. For example, WXY company must not define a concept **wxy:DocumentType** because that conflicts with the **dei** concept.
- A custom member must be declared with a name that ends in the word **Member** or **Domain** (EFM v68 § 6.7.27), with type **domainItemType** as it is defined in the XII DTR, and with the period type **duration** (EFM v68 § 6.7.28). The type has empty content and elements are usually abstract; they cannot be used as facts (EFM v68 § 6.5.25).

Valid custom members may be linked in custom relationships in much the same way as the standard members illustrated in section 5.1 above.

For example, suppose company WXY has a share class it calls "Uncommon" that is distinct from any of the standard share class concepts in the **us-gaap** taxonomy. Its custom taxonomy must have relationships to **wxy:UncommonClassMember** instead of (or in addition to) relationships for the standard members such as **us-gaap:CommonClassAMember** and **us-gaap:CommonClassBMember**. This is illustrated in Figure 9.

Figure 9. Definition relationships with a custom member

Role URI: http://xbrl.sec.gov/dei/role/document/Entity-InformationEntityListingsTable					
Description: 995405 - Document - Entity Information, Entity Listings [Table]					
Concept	**Type**	**Arc**	**o**	**t**	**Target**
dei:EntityInformationLineItems	Abstract				
dei:EntitiesTable	Hypercube	all (closed)	1	!	
us-gaap:StatementClassOfStockAxis	Axis	hypercube-dimension	1		
us-gaap:ClassOfStockDomain	Member	dimension-domain	1		
wxy:UncommonClassMember	Member	domain-member	1		
dei:CommonStockSharesOutstanding	Shares	domain-member	2	!	

(Formerly EFM v68 § 6.8.18) Declare a custom member for a domain only if the taxonomy defining the domain does not have members specific enough to distinguish between facts needing distinct values. Most standard taxonomies declare a default domain member for every explicit axis, and often several more non-default members. Define necessary domain members using mnemonic name attribute values.

Figure 10. Examples of custom domain members

Standard Axis	Standard Default domain member	Intended Meaning	Custom Domain Members
dei:LegalEntityAxis	dei:EntityDomain	Separately reporting subsidiaries	DefCoMember, GhiCoMember
dei:LegalEntityAxis	dei:EntityDomain	EDGAR Series Identifiers	S000000111Member, S000000222Member
srt:Consolidated-EntitiesAxis	srt:Consolidated-EntitiesDomain	Consolidated subsidiaries	SubCo1Member, SubCo2Member
srt:SegmentGeographicalAxis	srt:SegmentGeographical-Domain	Regions	UsEastMember, CaribbeanMember
us-gaap:StatementClass-OfStockAxis	us-gaap:Class-OfStockDomain	EDGAR Class/Contract Identifiers	C000001111, C0000011111

(Formerly EFM v68 § 6.8.19) Do not declare "Total" domain members. The domain default member of an explicit axis serves that purpose, as illustrated in Figure 2 and Figure 3. In the WXY example, if there were a fact that represented (say) the total market capitalization of common classes A and B combined for the reporting period, that fact would be in the Required Context, with no Class of Stock member at all.

5.8 Custom Presentation and Label Relationships

A custom taxonomy influences the rendering of facts in an instance by defining custom roles, defining presentation relationships within those roles, and assigning labels to concepts. Section 6 below details the general operation of the EDGAR Renderer and some of its instance type- and taxonomy-specific special cases.

5.8.1 Instance type 8K.A example – custom members

Likewise, the WXY 8K example assumes the use of the **dei-sub** entry point that provides presentation and label relationships. Therefore, in addition to the custom definition links shown earlier, its custom taxonomy needs a parent-child relationship from the class of stock domain to **wxy:UncommonClassMember**, and a label for the custom member.

Figure 11. Custom presentation and label relationships with a custom member

Role URI: http://xbrl.sec.gov/dei/role/document/Cover				
Description: 995100 - Document - Cover				
Concept	**p**	**t**	**o**	**Label**
dei:EntitiesTable				Entities [Table]
us-gaap:StatementClassOfStockAxis			1	Statement Class of Stock [Axis]
us-gaap:ClassOfStockDomain			1	Class of Stock [Domain]
wxy:UncommonClassMember			1	Uncommon Class [Member]
dei:EntityInformationLineItems	!		2	Entity Information [Line Items]
dei:CommonStockSharesOutstanding	!		1	Common Stock Shares Outstanding

If the base **dei** entry point had been used instead of **dei-sub**, then the WXY 8K custom taxonomy would need to provide all the presentation and label links for all its expected facts.

Either a standard taxonomy entry point or the custom taxonomy must ensure that the presentation is complete. This is part of EDGAR validation and XBRL errors will occur for each concept appearing in a fact, as an axis, or as a member in an instance to ensure that:

- Is the source or target of at least one presentation relationship; and
- It has a standard label; or
- Is the target of a relationship that has a preferred label role, but the concept has no such label.

Validation will also ensure that for the **link:roleType** declaration:

- The custom role URI has the same first two parts as the custom namespace (**http://uvw/** in this case) followed by **/role/** and additional text;
- The **description** text matches the format expected by the renderer to sort outputs (see section 5).
- All, and only, **usedOn** elements for presentation, definition, and calculation relationships are present.

5.9 Custom Calculation Relationships for Standard Concepts

Calculation relationships indicate that concepts are logically and arithmetically related, *i.e.,* that a concept is meant as the arithmetic sum of other concepts, and whether that summation involves additions or subtractions. Although they do not appear in either the 6K.A nor 8K.A instance type examples shown earlier, custom calculation relationships among standard concepts do appear in other instance types. Of particular importance are financial statements represent in instance types of submission sets AF, HF, and QF. The content of financial statements is governed by both SEC regulations as well as reporting

standards, primarily US Generally Accepted Accounting Principles (GAAP) or International Financial Reporting Standards (IFRS). Within the limits of those standards, filers exercise judgment in choosing the line items appearing in their financial statements. The meaning of each numeric line item is represented in XBRL concepts via its:

- XBRL numeric data type (for example, **`monetary`** or **`share`**);
- If monetary, whether it represents an accounting **`credit`**, **`debit`**, or neither, with respect to balance sheet and/or income statement conventions;
- Period type (measured at an **`instant`** or measured over a **`duration`** with a start and end date);
- Authoritative references (for example, a concept that is defined in an SEC regulation);
- If present, a label with role **`documentation`** as provided by the taxonomy authors.

These meta data properties are usually sufficient for a concept considered in isolation. Consider the concept **`us-gaap:LimitedPartnersOfferingCosts`**. It has **`monetary`** data type, **`debit`** balance, and **`instant`** period. It has a standard label text "Limited Partners' Offering Costs," reference link pointing to a specific subparagraph of FASB Accounting Standards Codification 505.10.5 complete with a URL of the full text, and its **`documentation`** label has the text "The cumulative amount of offering costs allocated to the limited partners."

Calculation relationships are an important complement to that concept-specific meta data. Figure 12 shows a fragment of the us-gaap taxonomy with four calculation relationships. Partners' capital is the sum of two items, and the limited partners' account is the net of their contributed capital minus their offering costs. The columns of the figure have the same meaning as in previous figures; "w" indicates the numeric weight relating the parent concept to the child.

Figure 12. Standard calculation relationships example

Role URI: `http://fasb.org/us-gaap/role/statement/StatementOfFinancialPositionClassified`				
Description: `104050 - Statement - Statement of Financial Position, Classified`				
Concept	**w**	**t**	**o**	**Label**
`us-gaap:PartnersCapital`				Partners' Capital
`us-gaap:GeneralPartnersCapitalAccount`	+1	!	1	General Partners' Capital Account
`us-gaap:LimitedPartnersCapitalAccount`	+1	!	2	Limited Partners' Capital Account
`us-gaap:LimitedPartnersContributedCapital`	+1	!	1	Limited Partners' Contributed Capital
`us-gaap:LimitedPartnersOfferingCosts`	−1	!	2	Limited Partners' Offering Costs

For the most part, standard calculation relationships are not in the entry points listed in EFM v68 § 6.5. Instead, custom taxonomies for financial statement instance types should contain custom XBRL calculation relationships to define how their use of each concept relates to the others.

For example, suppose a FA.US instance balance sheet shows facts for only four of the five concepts in Figure 12, leaving out the intermediate value **`us-gaap:LimitedPartnersCapitalAccount`**. Figure 13 shows the calculation relationships that would appear in its custom taxonomy instead; one of them is a copy of the standard taxonomy relationship, and the other two are new.

Figure 13. Custom calculation relationships with standard concepts.

Concept	w	t	o	Label
us-gaap:PartnersCapital				Partners' Capital
us-gaap:GeneralPartnersCapitalAccount	+1		1	General Partners' Capital Account
us-gaap:LimitedPartnersContributedCapital	+1		2	Limited Partners' Contributed Capital
us-gaap:LimitedPartnersOfferingCosts	−1		3	Limited Partners' Offering Costs

The concept `us-gaap:PartnersCapital` is now the sum of two items minus the third.

5.9.1 When calculation relationships are required

(Formerly EFM v68 § 6.15.2) If a financial statement shows two or more items along with their net or total, during or at the end of the Required Context period, and the instance contains corresponding numeric facts, then the custom taxonomy must have a calculation relationship from the total concept to each of the contributing items. Examples:

- A balance sheet shows assets as the sum of current and non-current assets, as of the date falling at the end of the period of the Required Context. Two relationships are required.
- An income statement shows only earnings per share and diluted earnings per share, but no reconciling per-share amount. Calculation relationships are *not* required.
- An income statement shows earnings per share before and after an adjustment for change in accounting principles, along with the adjusting amount. Two calculation relationships are required, from the net earnings per share, to its two contributing amounts.
- A company's cash flow from investments for the most recent quarter is shown as the sum of two lines: Payments for plant and equipment, plus Payments for marketable securities. Two calculation relationships are required.
- An income statement shows the line items "Revenues", "Cost of Goods Sold" and "Gross margin" as the net of the two values during the current quarter. Two calculation relationships are required. In this case, the relationship subtracting Cost of Goods Sold will have a weight attribute of -1.
- A balance sheet shows Net Receivables with a parenthetical value for Allowances. Only two values are shown, so no calculation relationship is required.
- A footnote for ABC contains a table in which the Revenue of its separately reporting subsidiaries DEF, GHI and JKL are totaled. But each of the four facts is in a different context, having a different member on `dei:LegalEntityAxis`. This does not require any calculation relationships.

5.9.2 Avoid calculation relationship redundancy

(Formerly EFM v68 § 6.5.14) Ensure that each pair of source concept (summation) and target concept (item) appears in at most one calculation relationship. Note that this refers to the calculation relationship, not the concepts; any concept might occur in any number of financial statements or footnotes. Legitimate exceptions to this rule occur when a concept is shown in different parts of the financial statement as a sum of different, but overlapping, sets of other concepts. Examples:

- An income statement contains amounts pre-tax income, tax, and post-tax income. There are two lines and their net; therefore, the balance sheet requires two calculation relationships. In the tax footnote there is another occurrence of pre-tax income, tax, and post-tax income. The tax footnote does not need two calculation relationships, because the same relationship already exists on the income statement.

- A balance sheet shows Net Current Receivables with a parenthetical value for Allowances. Only two values are shown, so no calculation relationship is required. A footnote also includes an analysis of (the same) Net Current Receivables including, among other details, amounts for Gross and Allowances. The footnote has those two items and their net and therefore a need for two calculation relationships. Whether any of these facts also appear elsewhere is relevant only if it would result in duplicated relationships.

5.9.3 A single concept may have alternate calculations

(Formerly EFM v68 § 6.15.3) If different parts of a financial statement contain alternate line items that sum to the same total amount, there must be calculation relationships for the original and the alternate line items in distinct roles. For example:

- A tax liability is shown in a tax disclosure as the sum of current and deferred tax liabilities, and elsewhere in the same instance as the sum of domestic and foreign tax liabilities. These are two separate calculations, appearing in two separate calculation links, each link containing two calculation relationships.

5.10 Custom Numeric Concepts

For many instance types, the custom taxonomy that accompanies it may declare concepts and use those concepts in taxonomy relationships and in instance facts. A common use for such concepts is to define the "line items" of financial statements – income statements, balance sheets, cash flows, *etc*. In a typical financial statement, line items that will appear that are broader or narrower than the available standard concepts and assigning a different text label is inappropriate. As in the guidance for defining custom domain members, following the principles below reduce unnecessary variability both across filers and for a single filer over time.

5.10.1 Do not duplicate numeric concepts

For example, a standard taxonomy may have the concept **`GrossProfit`** and one of its entry points assigns the label as "Gross Profit". The standard taxonomy does not have a concept **`GrossMargin`** because it is defined the same as gross profit: both are used to mean "excess of revenues over the cost of revenues." A filer disclosing their "gross margin" in a submission should not define a custom **`GrossMargin`** concept, but rather, use the **`GrossProfit`** concept and link it to a custom label "Gross margin".

(Formerly EFM v68 § 6.8.10) Do not declare different elements for different values of the same underlying line item. A line item such as "Net Income" is the same as the line item for "Net Loss", since the concept may appear in facts with different values, positive, negative, or zero in different periods.

Even a line item that appears to be shown with different values in the same period is still only a single concept. For example, a cash flow statement may have a line item "Reclassification of proceeds from Operations to Investments"; it appears in "Cash flow from Operations" as (10) and under "Cash flow from Investments" as 10, but it is the same concept and the same fact for the same period.

(Formerly EFM v68 § 6.11.1) In an Inline XBRL document, if the concept appears as a fact in a table or list, the custom label should be as close as possible to the text in the original document that serves as a heading or legend for that fact (formerly [6.11.1]).

5.10.2 Monetary concepts

(Formerly EFM v68 § 6.8.9) Declare a concept having the XBRL data type **`monetaryItemType`** if the standard taxonomy contains only monetary type concepts that, in the judgment of the filer, may be similar but are too broadly defined for a given line item.

For example, a financial statement may have a line item that encompasses a significant portion, but not all, of a nearby line item, such as this example:

Accounts payable	$	7,324
Securities lending payable		1,274
Other liabilities, current		2,362
Liabilities, current	$	11,410

Assume the standard taxonomy has concepts **`AccountsPayable`**, **`OtherLiabilitiesCurrent`** and **`LiabilitiesCurrent`**. All three have the same XBRL attribute values: data type **`monetaryItemType`**, period (**`instant`**) and balance (**`credit`**). Assume the standard taxonomy does not have any concept whose meaning is narrow enough to encompass only "Securities Lending Payable".

Meeting the accounting disclosure requirements justifies defining a custom concept named **`SecuritiesLendingPayable`** with the same properties as the more general Accounts Payable concept, i.e., data type (monetary), period type (instant), and balance (credit).

The requirement for calculation relationships applies in this example. Calculation relationships provide important information to the consumer of the data with custom concepts. In this financial statement, **`LiabilitiesCurrent`** is the sum of **`AccountsPayable`**, custom **`SecuritiesLendingPayable`**, and **`OtherLiabilities`**. Finally, because the custom item appears in the financial statement, EDGAR validations that either has a credit or debit balance or has a custom documentation label.

Custom monetary concepts may also be needed when a line item combines different concepts defined in the standard taxonomy, for example:

Prepaid pension and postretirement benefits	$	8,731
Other assets, noncurrent		872
Assets, noncurrent	$	9,603

Assume the standard taxonomy has two concepts **`PrepaidPostretirementBenefits`** and **`PrepaidPensionCosts`**, but the filer judges both to be too narrow. Meeting the accounting disclosure requirements justifies defining a custom concept named **`PrepaidPensionAndPostretirementBenefits`**.

Here, calculation relationships would be required to indicate that **`AssetsNoncurrent`** is the sum of **`PrepaidPensionAndPostretirementBenefits`** and **`OtherAssetsNoncurrent`**.

Whether an additional pair of relationships to indicate that the custom concept **`PrepaidPensionAndPostretirementBenefits`** is the sum of **`PrepaidPostretirementBenefits`** and **`PrepaidPensionCosts`** depends on whether those concepts appear elsewhere separately in the statement. If they are not used in any facts, then they need not participate in calculation relationships.

5.10.3 Share (unit of ownership) type concepts

The built-in XBRL data type **`shareItemType`** represents units of ownership. Facts of this type must have a **`unit`** dimension equal to the built-in value **`share`**. Despite its name, this type is not intended to be limited to literal "shares" of stock.

Custom concepts of this type solely to make distinctions between different units of ownership are not necessary. Better to make this distinction by using members on a standard axis such as **`us-gaap:StatementClassOfStockAxis`** in section 5.7 above.

5.10.4 Per-share type concepts

The distinction between a monetary amount and a monetary amount per unit of ownership (*e.g.,* per share) is sufficiently important that standard taxonomy concepts such as "Earnings per Share" almost always have type **`perShareItemType`**, not **`monetaryItemType`**.

Custom concepts representing monetary measures per unit of ownership should do the same.

5.10.5 Pure number type concepts

The built in XBRL type **`pureItemType`** represents numbers that are defined as a ratio between measures of the same kind: for example, miles per kilometer (distance over distance). In mathematics this is called a "pure number" and a fact of such a concept must have the XBRL unit dimension **`pure`**.

(Formerly 6.8.15) A custom concept representing a ratio of values for which its facts would have a currency in the numerator and a different currency in the denominator must be declared as a **`pureItemType`**. For example, "Exchange Rate" is a "pure number", being a ratio of two monetary values having different currencies.

5.10.6 Percent type concepts

(Formerly 6.8.14) A percentage is a special case of a pure number in which the ratio is between identical measures. An interest rate, for example, is a ratio of two values of the same currency; it would be declared as a **`percentItemType`**. XBRL fact values of a **`percentItemType`** concept are not scaled by 100. A concept such as "Change in Revenues" is conventionally rendered scaled by 100 and followed by the "%" symbol. A fact of this concept must have a **`unit`** dimension that is equal to the XBRL built in value **`pure`**, and a value such as ".20" to represent "20%".

Only if both the numerator and denominator would have a period type **`instant`** may the custom concept also have period type **`instant`**; otherwise, the period type is **`duration`**.

Use a name that expresses the meaning of the ratio, using the word "Over". For example, the concept name "Change in Revenues Over Revenues of the Period One Year Earlier" is verbose, but it is explicit and applicable to both quarterly and annual periods.

5.11 Custom Non-Numeric Concepts

Custom taxonomies may define custom *non*-numeric concepts. Guidelines for avoiding unnecessary variability apply just as they do for numeric concepts, but non-numeric concepts cannot be related to other concepts via calculation.

5.11.1 Custom Non-member Abstract concepts

(Formerly EFM v68 § 6.8.8) It is often desirable to arrange presentation or definition relationships into hierarchies. *Custom non-member abstract* concepts fill this need. These are custom concepts whose only purpose is to provide a root concept or an intermediate concept in a multi-level hierarchy.

There are few restrictions on declaring abstract non-member concepts, other than that the concept names must end with **`Abstract`** or **`LineItems`**, and vice versa (EFM § 6.7.26) and that its **`periodType`** be **`duration`** (EFM v68 § 6.7.32).

5.11.2 Custom text block type concepts

The *text block* is an important XBRL data type defined in the XII DTR (see 2 above) and used in nearly every standard taxonomy. The content of a text block fact is a character string to be interpreted as XHTML, and in EDGAR, the elements and attributes are restricted as detailed in EFM § 5.2.2.

A text block may represent anything from a sentence fragment to several pages of formatted narratives, images, and narratives; in Inline XBRL documents, text blocks are frequently intended to enclose other numeric and non-numeric facts – even other text blocks. The term originates from regulation S-T 405 that requires "block-text" tagging of Notes to Financial Statements.

Text block concepts in taxonomies other than **us-gaap** and **ifrs** for financial statements are often tied to a specific Form instruction or disclosure requirement that is neither too broad, nor too narrow, in the same way that standard numeric line items on a financial statement might be. For example, a disclosure satisfying Exchange Act Rule 17AD-27(b)(1) is represented in its entirety by one standard text block concept **sro:CmspStpPlcyPrcdrSmryTextBlock** having the label "CMSP STP Policies and Procedures Summary [Text block]" regardless of how little or how much narrative, tables, or images the fact may contain; there is no need to subdivide the text into different custom concepts, nor to create a custom concept that merges the topic with some other standard text block. The same cannot always be said of text blocks for financial statement notes, which are often related to multiple requirements, and may have substantial overlap with other text blocks.

(Formerly EFM v68 § 6.8.23) Define a custom concept of type **textBlockItemType** with name ending **TextBlock** when, in the judgment of the registrant, the standard concepts available are too narrowly defined disclosure being tagged, or the formatted text is commingled, and it would be misleading to include the same commingled formatted content in two or more standard text blocks. Define a custom text block concept with name ending **TableTextBlock** when the formatted text is composed entirely of a formatted table and its caption, if any.

(Formerly EFM v68 § 6.7.32) A custom concept of type **textBlockItemType** must have period type **duration**.

5.11.3 Custom dimensional concepts

Four types of non-numeric concepts are specifically for use in dimensional relationships: domain members, typed dimensions, explicit dimensions, and hypercubes.

Custom domain members are discussed in 5.7 above.

EDGAR does not permit custom typed dimensions in any custom taxonomy (EFM v68 § 6.5.39, EFM v68 § 6.7.20).

In some instance types, custom domain members, explicit dimensions and hypercubes are of no use because there are EDGAR validations preventing their participation in any dimensional relationships.

(Formerly 6.8.20) Declare a custom explicit dimension with a name ending in **Axis** only if the axes of no existing standard table are sufficient to capture a complex disclosure and no standard axis (typed or explicit) having the same meaning. For example, suppose there is a table for "Assets held for sale, by Asset Type" with only a standard axis for Asset Type. To disaggregate an asset type (property, for example) further according to its degree of distress, if there is no other standard dimension related to distress, define a custom dimension such as **DegreeOfDistressAxis**.

(Formerly 6.7.23) Custom explicit dimension concepts must have names ending in **Axis** and vice versa.

(Formerly 6.8.21) Declare a custom hypercube concept with a name ending in **Table** and only if no available standard taxonomy contains an appropriate combination of axes and concepts. Note that the hypercube concept itself is only a structural placeholder for dimensional validation and it does not appear in the instance at all.

(Formerly 6.7.24) Custom hypercube concepts must have names ending in **Table** and vice versa.

5.11.4 Other custom non-numeric types

Note that custom non-numeric types other than text blocks and domain members are rarely required in any instance type. Although any built-in or derived date type may be used in a custom taxonomy, in practice, dates and plain text strings are more than sufficient to comply with custom tagging requirements.

(Formerly 6.8.16) Declare a concept with the XBRL built in type **`dateItemType`** only if facts in an instance are dates, but no concept in a standard taxonomy is appropriate. For example, a disclosure contains a table of contracts with values and maturity dates. If there is no appropriate element in an available standard taxonomy schema for the date, so declare a date concept such as **`ContractMaturityDate`**.

(Formerly 6.8.17) Declare a concept with the XBRL built in type **`stringItemType`** only if facts in an instance are plain text without XHTML markup, but no concept in a standard taxonomy is appropriate. For example, a disclosure contains a table of contracts with the name of the project and its terms. If there is no appropriate concept in an available standard taxonomy for the name, declare a string concept such as **`ProjectNameText`**.

5.12 Other custom taxonomy components

Custom taxonomies must not contain:

- Custom **`arcroleType`** declarations
- Custom roles for **`label`**, **`footnote`**, or **`reference`** linkbase resource elements
- Custom **`fractionItemType`** concepts
- Custom **`tuple`** concepts.

6 Instance Rendering

Instances in all XBRL file formats (xBRL-XML or Inline) consists of a set of facts supported by meta data: concept declarations, labels, calculation, definition, reference, and presentation relationships.

The EDGAR renderer transforms XBRL facts and meta data into human readable output in the form of individual HTML files called “reports” or “R-files” and other supporting output such as a Filing Summary. Each R-file has a table layout with rows, row headings, columns, column headings and footnotes.

XBRL parent-child relationships in the presentation groups of a filing are generally the most important determinant of the overall layout of each R-file. Facts in contexts, footnotes in the instance, roles and data types declared in schemas, text in label linkbases, and the axis default members defined in definition linkbases, all further contribute to producing the output.

6.1 Motivation for Standardized Rendering

Human readers have expectations about the display of a data set such as an instance. Facts that represent the value of the same concept at different times might be arranged into a row, with columns representing dates or periods. Or, the facts might be arranged in a column, with each row representing the date. A table might include all such facts, or there may be a list of tables, each with a specified subset. Some facts, such as blocks of narrative text, are best shown in a sequence or list. Facts might be combined with other comparable data collected in some other way or at a different time or shown with additional meta data.

Even though an Inline XBRL document likely represents the preparer’s effort to present information clearly and compactly for human consumption, it is reasonable to for a user to expect an arrangement of similar data from different documents from different filers to be presentable in a somewhat uniform layout. Uniformity benefits not only the end user of the information viewing the data, but also for the preparer, who will want to ensure that fact values, concepts and other meta data is consistent with the intent of the plain, untagged document.

6.2 Presentation groups

(Formerly EFM v68 § 6.24.1) The relationships in a presentation group form a directed graph with one root concept having child concepts in a fixed order, child concepts of those concepts each in a fixed order, and so on.

Each presentation group has a single role, and therefore a single role URI and role definition text.

The overall order of presentation groups in the set of reports for a single instance is determined by lexicographic sorting of the definition texts, which is facilitated by conforming to a pattern that starts with a numeric sort code.

For example, the first presentation group in EDGAR's Document and Entity Information (DEI) taxonomy entry point **`dei-pre`** has the definition text 995100 - Document - Cover suggesting that it contains concepts typically appearing on the cover page of an SEC filing. Presentation groups that the filer wishes to appear after the facts on the cover page could start its role definition text with any number that will sort after 995100, such as 995101 or any number with seven or more digits starting with 995100.

The simplest report layout is one in which the presentation group contains no Axis or Domain Member elements. All the facts in the instance whose elements appear as sources or targets of relationships in the presentation group in contexts having no dimensions are displayed in the R-file. The facts are arranged into columns, one for each context. The presentation group, when traversed top down and in order, determines the order that the elements appear in the rows.

6.3 Fact selection

(Formerly EFM v68 § 6.24.5) A first step in rendering is to determine for each presentation group which facts it will show. The core dimensions of a fact that determine whether it will be rendered within in a presentation group layout are its *concept*, its *period,* the *entity*, the *language* of non-numeric facts and the *unit* of measure for numeric facts. An EDGAR instance concerns only one entity, and facts in languages other than US English are not rendered. The taxonomy-defined dimensions of a fact also influence whether it is selected for display. The renderer selects a fact for rendering in a presentation group when:

Custom taxonomies can limit to some degree the facts shown on a particular report by including or not including certain axes, with or without their default and other members.

For example, suppose a presentation group is meant to filter out facts having any member of axis X. The presentation group has just one concept A, and one axis X along with only its default member B.

- Fact A1 with concept A and no axes.
    - This will be selected. It satisfies condition 1, it satisfies condition 2 because there are no such axes in the presentation group, and it satisfies condition 3 trivially.
- Fact A2 with member C of axis X.
    - This will not be selected. It fails condition 2, because member C is not in the presentation group.
- Fact A3 with one axis Y and one member D.
    - This would be selected. It satisfies condition 1; there are no such axes for condition 2, and it satisfies 3 (case b) because the group does not mention axis Y.

As noted in section 8.10 below, duplicate facts are consolidated into a single fact for rendering purposes. Inline XBRL formatted documents often contain the same fact reported in multiple locations of the document. The renderer selects just one of them for rendering. A common example is a company's net income, reported both on an Income Statement and in a Statement of Cash Flows. The value is tagged in two different places, resulting in an instance with duplicate facts. Inconsistent numeric values, or non-

numeric values that are not identical, result in XBRL errors. So long as the numeric values are consistent, there is no error or warning; the duplicated numeric fact having the most significant digits will be selected for rendering.

The values of **`xsi:nil`** and **`decimals`** attributes have no effect on selection whether present or not.

Non-numeric facts with values of **`xml:lang`** other than **`us-EN`** are filtered.

If the presentation group has axes but lacks descendants that would allow any facts to be selected, then a warning is raised (EFM v68 § 6.26.1).

6.3.1 Period Selection

(Formerly EFM v68 § 6.24.8) The set of periods appearing in a presented set of facts constitute the layout "period axis". The period axis cannot be filtered.

6.3.2 Unit Selection

(Formerly EFM v68 § 6.24.3) All units are selected for display in a presentation group by default and constitute the layout "unit axis". The unit axis may be filtered using concepts having the same name as the **`unitRef`** attribute value.

6.3.3 The Primary Axis

(Formerly EFM v68 § 6.24.4) Members of the concept dimension that do not have same name as a **`unitRef`** attribute value, are collectively called members of the layout "primary axis".

6.4 Basic Layout using Core and Taxonomy-Defined Dimensions

(Formerly EFM v68 § 6.24.8) Rendering places each of the dimensions on rows or columns of a table, and to determine how dimensions are to be nested when more than one dimension is on the rows or on the columns. In general, the concept dimension appears on the rows, and the period dimension on the columns.

Period Dimension →	12 mo. ended Dec 31, 2033	Dec 31, 2032
Concept Dimension ↓		
Line Items:		
Revenue:		
Assets:		

If the same concept (on a row) appears with more than one unit of measure (multiple currencies, for example) then each column representing a period may split into separate columns for each unit. The unit dimension is said to be *nested inside* the period dimension.

Period Dimension →	12 mo. ended Dec 31, 2033		Dec 31, 2032	
Unit Dimension →	$	€	$	€
Concept Dimension ↓				
Line Items:				
Revenue:				
Assets:				

If there are facts with members on an additional axis, then the concept dimension is nested inside. For example, if there were a geographic region axis, with some facts having no member (i.e., the default), and others having the members Bermuda and Bonaire:

Period Dimension →		12 mo. ended Dec 31, 2033		Dec 31, 2032	
Unit Dimension →		$	€	$	€
Region Dimension ↓	Concept Dimension ↓				
(default)	Line Items:				
	Revenue:				
	Assets:				
Bermuda	Concept Dimension ↓				
	Line Items:				
	Revenue:				
	Assets:				
Bonaire	Concept Dimension ↓				
	Line Items:				
	Revenue:				
	Assets:				

The custom taxonomy could have arranged for the region dimension to be nested inside the concept dimension. The renderer does this by using the order in which the "Line Items" and the different axes appear as children of the Table concept.

Period Dimension →		12 mo. ended Dec 31, 2033		Dec 31, 2032	
Unit Dimension →		$	€	$	€
Concept Dimension ↓	Region Dimension ↓				
Line Items:	(default)				
	Bermuda				
	Bonaire				
Revenue	Region Dimension ↓				
	(default)				
	Bermuda				
	Bonaire				
Assets	Region Dimension ↓				
	(default)				
	Bermuda				
	Bonaire				

All the axes expected to appear in facts in a table must be ordered in the presentation group, because any axes that appear in facts *not* given an explicit nesting will appear with all the other axes nested inside.

6.5 Ordering members along a dimension

(Formerly EFM v68 § 6.24.7) For the most part, the presentation group also determines the ordering of items along an axis. Members of the concept dimension and any taxonomy-defined explicit dimensions are arranged into a list reflecting their ordering in the presentation group.

Typed dimension members follow their ascending natural order, typically numeric or lexical.

The period axis is different; it always follows the convention common to financial statements, in which the dates are descending (2033 before 2032) and durations ascending (quarters before years).

6.6 Merged columns

(Formerly EFM v68 § 6.24.8) If every column in the default layout represented a different combination of period and unit, then the display would often have significant empty space. In the examples below, the Revenue element is a duration-type element, and the Assets element is an instant-type element, so that the figures would appear this way:

Period Dimension →	3 mo. ended Dec 31, 2033	9 mo. ended Dec 31, 2033	Dec 31, 2033
Concept Dimension ↓			
Line Items:			
Revenue:	xxx,xxx	yyy,yyy	
Assets:			zzz,zzz

Instead, columns representing an instant period are shown merged with the columns representing durations that end on that date; the same fact is shown more than once, but overall, the layout is more compact:

Period Dimension →	3 mo. ended Dec 31, 2033	9 mo. ended Dec 31, 2033
Concept Dimension ↓		
Line Items:		
Revenue:	xxx,xxx	yyy,yyy
Assets:	zzz,zzz	zzz,zzz

A set of facts with different units all on distinct elements may be merged into a single column as well. When facts whose unit is a currency, facts with unit "shares", and facts whose unit is that same currency "per share" have compatible periods, they are merged into the same columns.

6.7 Period Start labels

(Formerly EFM v68 § 6.24.9) An instant-type element of the primary axis that has a period start preferred label results in a special kind of layout and column merge called a movement analysis. In a movement analysis, duration-type facts are matched to instant-type facts whose date-times are the same as its start and end dates. The same fact may thus appear as the ending value of one column, and the starting value of another. In the example below, the fact shown as yyy,yyy at Dec 31, 2032, is at the end of one period and the start of the next:

USD	12 mo. ended Dec 31, 2033	12 mo. ended Dec 31, 2032
Line Items:		
Balance, start of period:	yyy,yyy	xxx,xxx
Changes:	---	---
Balance, end of period:	zzz,zzz	yyy,yyy

In general, the starting and ending balance facts should be matched with at least one fact representing the duration between them; otherwise, a warning may be issued. Note that the order of elements along the primary axis is preserved and does not affect whether the layout is considered a movement analysis; the following example is equally valid, resembling a statement of cash flows:

USD	12 mo. ended Dec 31, 2033	12 mo. ended Dec 31, 2032
Line Items:		
Changes:	---	---
Balance, start of period:	yyy,yyy	xxx,xxx
Balance, end of period:	zzz,zzz	yyy,yyy

6.8 Column Headings and Promotion

(Formerly EFM v68 § 6.24.10) If all column headings share the same units or period, then those axes are “promoted” into the upper left corner of the layout to avoid redundancy.

Columns representing an instant in time are shown as (for example) "Oct. 19, 2008" or "May 07, 2009". Columns representing durations are shown as (for example) "6 months ended Oct 19, 2008" rounded to the nearest number of months. For example, the duration from Jul. 1 to Sep. 19 rounds to 3 months, but the period from Jul. 10 to Sep. 19 rounds to 2 months. Periods of more than one year are nevertheless shown in months, for example, two years starting Jan. 1, 2008, would be shown as "24 months ended Dec. 31, 2009".

6.9 Row Headings and Promotion

(Formerly EFM v68 § 6.24.11) The text shown in each row heading on the primary axis is the text of preferred label on that element position on the primary axis (see 6.11.4).

The text shown for non-primary axis members is a concatenation of the outermost member name’s preferred label (defaulting to the standard label), followed by a vertical bar “|”, followed by the next outermost member label, and so on.

If the default member of an axis is the first number shown in order on that axis, its label is considered blank.

Any member that is not the only member shown for a given axis in that report is promoted into the upper left corner of the layout.

6.10 Footnotes and Merging

(Formerly EFM v68 § 6.24.12) Footnotes of a report are displayed at the bottom of a report, sequentially numbered, and the footnote marks are numbers that appear as a superscript to the right of each fact to which they refer.

Every report's footnote numbering is local to that report, so that if a fact with a footnote is displayed in two different reports, it will be displayed with the same footnote text at the bottom of the report, but a different superscript number.

If all the facts on a row have the same footnote mark, then that footnote mark is removed from the facts and “merged” to a position just to the right of the row labels and removed from the cells.

If all the facts on a column have the same footnote mark, then that footnote mark is “merged” into the heading of the column and removed from the cells.

6.11 Flow Through Suppression on Statements

(Formerly EFM v68 § 6.24.13) "Flow through" occurs when a fact is selected for display in more than one presentation group. One of the most common examples is that "Net Income" appears on both an income statement and a statement of cash flows.

Only presentation groups for which the "Type" token as described in 9.2 below has the value "Statement" are subject to "flow through" suppression.

When a statement contains a column of facts that are all rendered in a column of some other presentation group, the column that is a subset of the other is removed (suppressed).

If columns in two statements have identical facts, then the column in the statement that appears first according to SortCode (section 9.2 below) is retained.

6.12 Cash Flow Statements

(Formerly EFM v68 § 6.24.14) Presentation base sets for which the "Type" token as described in section 9.2 has the value "Statement" and the "Title" text contains the word "cash" followed by "flow", then the only columns shown are those with the longest duration and those which have at least one-fourth the number of rows containing values as the columns with longest duration.

This is a special case of flow through suppression; without it, a typical cash flow statement for a 3rd quarter financial statement might display unwanted columns.

6.13 Statements of Changes in Shareholder Equity

(Formerly EFM v68 § 6.24.15) Presentation base sets for which the "Type" token has the value "Statement", that present facts with period start and period end labels, and the "Title" text does not contain "parenthetical" but does contain the case insensitive pattern:

a. "stockholder", "shareholder", or "changes" in addition to either "equity" or "deficit", or

b. "partners" or "accounts" in addition to "capital", or

c. "statement" and "equity"

are considered "Statement of Changes in Equity" statements. These have a special movement analysis layout. These axes (if present) are shown on the rows, in this nesting order:

a. Period

b. Scenario **`(StatementScenarioAxis)`**

c. Primary

d. Creation Date **`(CreationDateAxis)`**

e. New Accounting Pronouncements
`(AdjustmentsForNewAccountingPronouncementsAxis)`

f. Adjustments for Change in Accounting Principle
`(AdjustmentsForChangeInAccountingPrincipleAxis)`

g. Error corrections and Prior Period Adjustment (ErrorCorrectionsAndPriorPeriodAdjustments-RestatementByRestatementPeriodAndAmountAxis)

These axes (if present) are shown on the columns, in this nesting order:

a. Legal Entity **(LegalEntityAxis)**

b. Equity Components **(StatementEquityComponentsAxis)**

c. Partner Capital Components **(PartnerCapitalComponentsAxis)**

d. Class of Stock **(StatementClassOfStockAxis)**

e. (All other axes present)

f. Unit

Also, if the Scenario Axis is present then its member ordering is fixed in this order:

a. Previously Reported **(ScenarioPreviouslyReportedMember)**

b. Restatement Adjustment **(RestatementAdjustmentMember)**

c. Change In Accounting Principle **(ChangeInAccountingPrincipleMember)**

d. Unspecified (the default)

If the set of facts presented does not contain instant-type facts and duration-type facts in the expected alternating arrangement, a warning may be raised.

6.14 Layout Qualifiers

(Formerly EFM v68 § 6.24.16) In addition to general layout and formatting rules there are additional ways of altering a layout by modifying the role definition text. When the tokens "Unlabeled", "Elements", or "Transposed" (case sensitive) appear in the definition text between curly braces "{…}", then one of three transformations apply:

1. When the definition text contains the token "{Unlabeled}", then the elements' labels do not appear in the leftmost column.
2. When the definition text contains the token "{Elements}", then the display has an additional column to the right of the labels, showing the element id. The {Elements} display can be useful for reviewing all the detailed content of an Interactive Data instance. {Elements} cannot be used with the period axis on the rows.
3. When the text contains the token "{Transposed}", then the entire display, after any other layout has been applied, is transposed (rows on the columns and vice versa).

If more than one layout qualifier is present in a definition text, all are ignored.

6.15 Uncategorized Facts

(Formerly EFM v68 § 6.24.17) Facts (and their duplicates) that are not selected for display by at least one presentation base set are shown in an "Uncategorized Facts" report. The report number for the Uncategorized facts is 9999 and it is shown as if it had the "Elements" layout qualifier.

6.16 Numeric Formatting

(Formerly EFM v68 § 6.24.18) Numeric facts are scaled for presentation to reduce the appearance of redundant sequences of "000" groups. Each set of distinct units of facts selected for a report is scaled independently to preserve their significant digits. Note that this is performed only with respect to the fact values; the value of the decimals attribute of a fact does not directly affect this determination. For example, if there are three facts with unit USD:

- Revenues 1,000,000 USD, decimals=-6,
- Assets 100,000 USD, decimals=-3,
- Income 1,000 USD, decimals=0,

then all three facts would be shown scaled by thousands. Other facts in the same report with units such as "Ratio", "Shares", or "USD per Share" would not be affected by the scaling of USD. Cells in the layout have unit symbols assigned as follows:

1. Each numeric cell has a unit (USD, GBP, Shares, etc.). A nonzero number will be displayed with a prefix consisting of the unit.
2. If all the cells in a column have the same unit, then the symbol is copied to the column heading and removed from the cells.
3. For the non-zero cells in each column, remove a symbol from the cell if it has the same unit as the immediately prior nonzero cell, unless it is in the last row.
4. For the non-zero cells, in each row, remove a symbol from a cell if it has the same unit as the immediately prior nonzero cell, unless it is in the last column.
5. If there is a unique symbol for the unit ($, £, ¥, €, etc.) use that symbol as a prefix instead of the unit's name as a suffix.

6.17 Non-numeric Formatting

(Formerly EFM v68 § 6.24.19) Fact values may be non-numeric; the following rules apply when displaying non-numeric values of an element:

1. A date item type is displayed with format "mmm d, yyyy";
2. A time item type is displayed with format "hh:mm:ss";
3. A datetime item type where the time part is not 00:00:00 is displayed with format "mmm d, yyyy hh:mm:ss";
4. A duration item type (the value looks like "P..Y..M..D..H..M..S") is formatted as ".. years, .. months, .. days, .. hours, .. minutes and .. seconds", omitting any zero values.
5. A fact value that matches the regex for an XML QName `[_A Za z][A Za z]*:[_A Za z][A Za z0-9]*` is displayed as follows:

a. If the QName is being displayed with preferred label p and it has preferred label p in this DTS, then display that label value;
b. If the QName as a standard label in this DTS, then display that standard label value;
c. Otherwise display the QName unchanged.

6. A string that matches the regex `[^~]*~\s+{URI}\s+[^~]*~.*` is interpreted as an embedding command;
7. A string that contains the < character followed by a QName and whitespace, "/>" or ">" is interpreted as escaped XHTML and is rendered as XHTML.
8. Otherwise, the string is copied to the output unchanged.

6.18 The Filing Summary

(Formerly EFM v68 § 6.24.20) In addition to individual R-files, the renderer produces a Filing Summary file that contains data about the input files, each R-file output, warnings, and error messages logged during processing, and other information.

In particular, the Filing Summary contains for each report a computed "menu category" for each report to assist in organizing a hierarchical menu for all reports. The renderer computes the menu category by analyzing the report's role definition text as follows:

SortCode determines the order of appearance (9.2 below).

Type distinguishes between statements and non-statements.

Title is text to be displayed in the menu augmented with the following patterns: "(Policies", "(Tables", "(Details", layout qualifier tokens (6.14 above), and text that indicates cash flows (6.12 above) and statements of changes in equity (6.13 above).

The order of appearance and patterns in the Title for a single Interactive Data instance are processed as follows:

Category	Condition
Cover	Appears in first position and Type is not Statement
Statements	Type is Statement
Notes	Appears after Statements and is not Policies, Tables or Details
Policies	None of the above, and Title contains "(Policies"
Tables	None of the above, and Title contains "(Table"
Details	None of the above, and Title contains "(Details"
Other	None of the above
Uncategorized	Always appears as the last report

Note that the reports are categorized in order of appearance, and their category may depend on what report categories have already appeared.

An Uncategorized Facts report, if present, would always be in the last position by virtue of being report number 9999.

6.19 Multiple Instances

(Formerly EFM v68 § 6.24.21) EDGAR submissions may have multiple Interactive Data instance document attachments. The renderer processes them all together in the same order that the instances appeared as EDGAR attachments. There is a single Filing Summary file output, and all the reports are numbered sequentially starting at 1. Each instance has a separate set of menu categories. When assigning a Menu Category as described in 9.2 below, any report whose SortCode is less than the SortCode of the previous report marks the beginning of a new set of menu categories.

If there are multiple instances each with uncategorized facts, they are numbered in descending order 9999, 9998, etc.

6.20 Workbook Output

(Formerly EFM v68 § 6.24.22) The filing summary and reports are processed to produce a spreadsheet workbook. Each report is shown as a separate sheet, with a name derived from the first 32 characters of the presentation base set title. Each fact is presented in a spreadsheet cell. Formatting of individual numeric and non-numeric facts is simplified as compared to the report HTML format.

6.21 Resource Extraction Payment Rendering

(Formerly EFM v68 § 6.24.23) Instances with document type 2.01 SD are "RXP instances"; for certain presentation groups the rows and columns are adjusted for improved layout. In presentation groups with RXP roles, the columns are nested as:

- Primary
- Unit

In presentation groups with role URI **`http://xbrl.sec.gov/rxp/role/Detail`**, the rows are nested in the following order:

- Period
- Legal Entity (if present)
- Typed dimension **`rxp:PmtAxis`** in numeric ascending order

In presentation groups with role URI **`http://xbrl.sec.gov/rxp/role/ByProject`**, the rows are nested as:

- Period
- Legal Entity (if Present)
- Project

In presentation group **`http://xbrl.sec.gov/rxp/role/ByGovernment`**, the rows are nested as:

- Period
- Legal Entity (if Present)
- Government

6.22 Rendering of Mutual Fund Risk/Return Summary Interactive Data

An Interactive Data instance containing any fact whose element namespace contains the subtext **`/xbrl.sec.gov/rr/`** is a Mutual Fund Risk/Return Summary (RR) instance. These filings are rendered with some differences as compared to other instances:

- The numeric value 0 is formatted as "none".
- If any instance in a filing is an RR instance, then the menu category of each report is empty, and all reports are shown together in a single menu called "Risk/Return Reports".
- There is no workbook output.

RR instances are also allowed to use the additional features below.

6.22.1 Embedding Commands

(Formerly EFM v68 § 6.25.1) Conventional rendering of Interactive Data consists only of one report per presentation base set. These are called the "top level" reports. Embedding commands allow additional reports that are not at top level. A text block fact may contain an embedding command, which is a section of XHTML that looks like the following, anywhere in the text block:

```
~ http://xbrl.sec.gov/rr/role/ShareholderFeesData
column period compact *
row dei_LegalEntityAxis compact eg_S000005977Member
row dei_ProspectusShareClassAxis compact *
~ Comments can go here
```

The purpose of an embedding command is to identify a presentation base set, select a subset of the contexts to display, and display the resulting report in place of where the content of the text block would have been shown. An embedding command consists of:

- One Role URI, which identifies the presentation base set to use for the layout;
- A list of "iterators", each of which:
  - Places one of the axes (primary, period, unit, as described in 6.24.4 and 6.24.5) on either the rows or columns.
  - identify the style of that axis display (compact);
  - indicates which members of the axis may appear in the selected contexts (6.24.2).

A "compact" display means that each axis member is shown on a separate row (or column) with its label. Embedding layouts do not support the use of period start and period end preferred label roles.

Embedding command syntax, and the possible warning messages that may result from processing the command, are detailed below.

6.22.2 Bar Charts

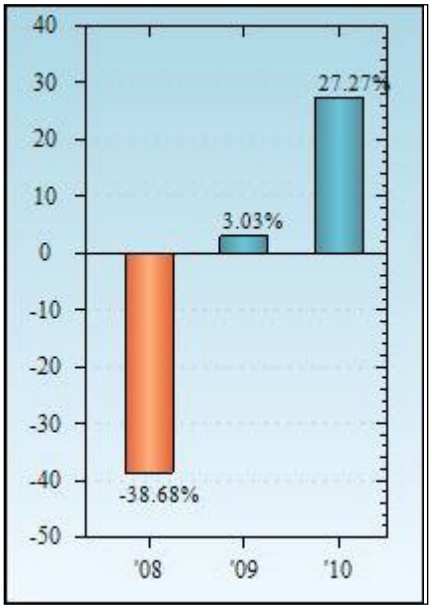
(Formerly EFM v68 § 6.25.2) When an embedded command has a role URI that contains the case-insensitive text **`barchart`** and the primary elements are drawn from the set

`rr_AnnualReturn2008`, `rr_AnnualReturn2009`, and so forth, then the renderer produces a graphic instead of a conventional table. The text block would have a command like this:

```
~ http://xbrl.sec.gov/rr/role/BarChartData
column period compact *
column dei_LegalEntityAxis compact S00000123Member
column rr_ProspectusShareClassAxis compact *
row primary compact * ~
```

Up to 20 facts may be shown. The bar chart has a fixed height and auto-scales vertically; it has fixed width horizontal bars. For example, three facts are displayed in the graphic shown below:

Element	Value
rr_AnnualReturn2008	-0.3868
rr_AnnualReturn2009	0.0303
rr_AnnualReturn2010	0.2727



Although it is not necessary, the horizontal width of the graphic can be adjusted by adding 'nil' valued facts. Footnotes on the facts are ignored.

7 Validation Details on All XBRL attachments

EDGAR does not permit attachments to use certain technical features of the XBRL information model, no matter the file format. Note that standard taxonomy files are not attachments, so these validations do not apply to them.

7.1 File names and character encodings

All attachments are subject to the same validations applied by the EDGAR system.

Check	f	On failure	s	EFM v68 Ref
The file name matches the regex `[a-z0-9][a-z0-9\._-]*\.(htm,xml,xsd)`		`File Name`	E	§ 6.5.1
The file name length is 32 characters or fewer.		`File Name Length`	E	§ 6.5.1
The file does not contain character ^ (circumflex).		`File Character`	E	§ 6.5.2
The file does not contain HTML entity codes.	1	`File Entity Code`	E	§ 6.5.2

Notes and special cases:

3. HTML entities such as ` ` are not permitted, but their equivalent XML encodings such as ` ` are.

7.2 Standard namespace prefixes

If the following namespaces appear in file attachments, then they must appear only with the following prefixes; where there is an alternate, the prefix or alternate must be used consistently.

In this document, the shorter prefixes `i:` and `xs:` are used rather than `xbrli:` and `xsd:` respectively.

Namespace URI	Prefix	Alternate
`http://www.sec.gov/inlineXBRL/transformation/2015-08-31`	`ixt-sec`	
`http://www.w3.org/1999/xhtml`	`xhtml`	(empty)
`http://www.w3.org/1999/xlink`	`xlink`	
`http://www.w3.org/2001/XMLSchema`	`xs`	`xsd`
`http://www.w3.org/2001/XMLSchema-instance`	`xsi`	
`http://www.w3.org/XML/1998/namespace`	`xml`	
`http://www.xbrl.org/2003/instance`	`xbrli`	`i`
`http://www.xbrl.org/2003/iso4217`	`iso4217`	
`http://www.xbrl.org/2003/linkbase`	`link`	
`http://www.xbrl.org/2003/XLink`	`xl`	
`http://www.xbrl.org/2006/ref`	`ref`	
`http://www.xbrl.org/2009/dtr`	`dtr`	
`http://www.xbrl.org/2013/InlineXBRL`	`ix`	
`http://www.xbrl.org/dtr/type/2020-01-21`	`dtr-types`	
`http://www.xbrl.org/dtr/type/2022-03-31`	`dtr-types`	
`http://www.xbrl.org/inlineXBRL/transformation/2015-02-26`	`ixt`	
`http://www.xbrl.org/inlineXBRL/transformation/2020-02-12`	`ixt`	
`http://www.xbrl.org/inlineXBRL/transformation/2022-02-16`	`ixt`	
`http://xbrl.org/2005/xbrldt`	`xbrldt`	
`http://xbrl.org/2006/xbrldi`	`xbrldi`	
`http://xbrl.org/2014/extensible-enumerations`	`enum`	
`http://xbrl.org/2020/extensible-enumerations-2.0`	`enum2`	

Validations:

Check	f	On failure	s	EFM v68 Ref
If a namespace is used in the XML QName of an element name, attribute name, or text node, then it has one of the recommended prefixes.	1, 2	`Standard Namespace Prefix`	E	§ 6.5.2
The prefix used for a namespace must be the same in all attachments of a submission.	1	`Standard Namespace Prefix`	E	§ 6.5.2

Notes and special cases:

1. Only one binding for prefix **ixt** or **dtr-types** is permitted in each instance of a submission.
2. A consequence of other EDGAR validations is that the namespace that is prefixed **xl** need never appear in a submission.

7.3 Standard locations

The data file edgartaxonomies.xml defined in EFM v68 § 6.2.2 contains all the non-local taxonomy URLs for namespaces that a submission may use, and vice versa. It may be updated with each EDGAR release.

Check	f	On failure	s	EFM v68 Ref
Attributes **xlink:href**, **schemaLocation** and **xsi:schemaLocation** values are either a relative URL resolving to a file within the submission, or an absolute URL appearing in the **edgartaxonomies** data file.		**Prohibited Href Or Schema Location**	E	§ 6.22
A standard namespace must only be defined at the URL defined in the **edgartaxonomies** data file.	1			

Notes and special cases:

1. This is implied by the combination of other validations and SEC taxonomy conventions but is not reported as a separate error.

7.4 Compatible Taxonomies

Processing an instance requires constructing the Discoverable Taxonomy Set (DTS) as defined in the XBRL specification.

As implied by EFM v68 § 6.3, certain pairs of taxonomies are incompatible when they appear together in a DTS.

Generally, each standard taxonomy has a four-digit year embedded in their namespace URIs. The namespace URI syntax varies somewhat depending on its authority component:

Regex locating the four-digit year in standard taxonomy namespaces
https?://xbrl.sec.gov/[a-z0-9-]+/(yyyy)(q[234])?
https?://(xbrl.)?fasb.org/[a-z-]+/(yyyy)(q[234])?
https?://ifrs.org/taxonomy/(yyyy)-..-../.*

Taxonomies of different years cannot be used together. Namespace URIs for **w3.org** and **xbrl.org** and custom namespaces are ignored for this check.

XBRL validation does not permit **link:roleType** to define the same **roleURI** attribute to be defined at different URLs; since the role URI is often stable from one taxonomy version to the next, some schemas with different years may be incompatible for that reason. A few specific entry points may be incompatible as well and are listed below.

Validations:

Check	f	On failure	s	EFM v68 Ref
All standard taxonomy namespaces in a DTS have the same four-digit year component.		**Incompatible Schemas**	E	6.22.3
If an **xs:schema** attribute **targetNamespace** value matches **sec.gov/rr/** then no other target namespace matching **sec.gov/oef-rr**, **fasb.org**, or **ifrs.org** appear in the same DTS.	1, 2	**Incompatible Schemas**	E	6.22.3

Notes and special cases:

1. For this check, the **targetNamespace** attribute of a schema must be tested even if it contains no **xs:element** declarations.
2. The **rr** taxonomy was deprecated as of 2023.

7.5 Elements

Validations:

Check	f	On failure	s	EFM v68 Ref
Element is not **i:forever**		**Context Has Period Forever**	E	§ 6.5.38
Element is not **i:scenario**		**No Scenario**	E	§ 6.5.4
Element is not **xs:include**		**Schema Include Present**	E	§ 6.7.1
Element is not **ix:fraction**	1, 2	**Fraction Item Type**	E	§ 6.7.31
Element is not **link:arcroleType**	1, 2	**Custom Arcrole Referenced**	E	§ 6.9.6
Element is not **link:referenceLink**	1, 3	**Element Has Reference**	E	§ 18

Notes and special cases:

1. Previously, this was only implied by the combination of other validations in EFM v68.
2. EDGAR standard taxonomies do not define fraction item types nor custom arc roles.
3. Most standard taxonomies have reference linkbases, either embedded or in separate files.

7.6 Element attributes

Validations:

Check	f	On failure	s	EFM v68 Ref
Element does not have attribute **xml:base**	1	**XML Base Used**	E	§ 6.3.11
Element does not have attribute **precision**	2	**Decimals Not Precision**	E	§ 6.5.17
Element **xs:element** does not have attribute **enum2:domain**		**Typed Domain Ref Disallowed**	E	§ 6.7.2
Element **xs:element** does not have attribute **enum:domain**		**Typed Domain Ref Disallowed**	E	§ 6.7.2
Element **link:presentationArc** has attribute **order**		**Presentation Order Missing**	E	§ 6.12.1
Element **link:calculationArc** has attribute **order**		**Calculation Relationship Order Missing**	E	§ 6.14.1
Element **link:definitionArc** has attribute **order**		**Definition Relationship Order Missing**	E	§ 6.16.1

Notes and special cases:

1. XML processors interpret this attribute differently, so it must not be used anywhere.
2. This applies to elements in substitution group **i:item** and elements **ix:nonNumeric** and **ix:nonFraction**.

7.7 Element attribute values

Validations:

Check	f	On failure	s	EFM v68 Ref
Element `i:identifier` attribute `scheme` value is `http://www.sec.gov/CIK`		`Entity Identifier Scheme`	E	§ 6.5.1
`xs:element` has attribute `nillable` value `true`		`Nillable Not True`	E	§ 6.7.18
If `xs:element` with attribute `abstract` value `true`, then it has `i:periodType` value `duration`		`Abstract Is Instant`	E	§ 6.7.21
Element `xs:element` attribute `type` value is not `i:fractionItemType`		`Fraction Item Type`	E	§ 6.7.31
If element with `xlink:type` value of `arc` has attribute `priority`, **then the** value less than 10.		`Relationship Priority Not Less Than Ten`	E	§ 6.9.9
Element `link:calculationArc` attribute `weight` value is either -1 or 1.		`Calculation Relationship Weight Not Unitary`	E	§ 6.14.2

Notes and special cases: none.

7.8 Attribute value lengths

The content of certain XML attributes and text nodes in UTF-8 must not exceed 200 bytes in length. This length restriction applies to bytes in UTF-8 encoding, not characters. For example, an element name of 101 repetitions of character "Ā" (Unicode x0100) violates this criterion because its UTF-8 encoding has 202 bytes. The six-byte encoding of that same character, "Ā" when read and stored as an XML text node in UTF-8 encoding, would also be two bytes. Therefore, up to 100 repetitions of that sequence would be allowed. Other length limits are applied similarly.

Validations:

Check	f	On failure	s	EFM v68 Ref
Text of element `i:measure` is 200 bytes or fewer.		`Name Length Limit`	E	§ 6.5.36
Element `xs:element` attribute `name` value is 200 bytes or fewer.		`Name Length Limit`	E	§ 6.7.29
Element `link:roleType` Attribute `roleURI` value is 200 bytes or fewer.		`URI Length Limit`	E	§ 6.7.30
Element `xs:schema` attribute `targetNamespace` value is 200 bytes or fewer.		`URI Length Limit`	E	§ 6.7.30

Notes and special cases: none.

8 Validation Details on XBRL instances

EDGAR does not permit instances to use the following features of the XBRL information model, regardless of file format:

1. XHTML elements and attributes disallowed by EDGAR HTML,
2. XBRL footnotes that are not local or use custom relationships,
3. Use of a "`decimals`" attribute value to truncate non-zero digits on a numeric fact,
4. Facts having periods that overlap by less than 24 hours,
5. Facts with a non-US English language code without a corresponding English fact,

Other features are disallowed only in some instance formats:

6. In xBRL-XML and Inline XBRL, **context** elements that duplicate the same entity, period, and taxonomy-defined dimensions,
7. In Inline XBRL, the **target** and **xsi:schemaLocation** attributes on any elements,
8. EDGAR restrictions and enhancements of Inline XBRL found in § 5.2.2 and 5.2.5.

8.1 XHTML Validations

HTML as accepted by EDGAR is detailed in § 5.2.2 and is based on HTML 3.2 elements and entities, with extensions (such as allowing a **style** attribute) and restrictions (such as disallowing the **textarea** element). HTML elements **span**, **tbody**, **thead**, **tfoot**, and the un-prefixed **lang** attribute may also be used in Inline XBRL. The HTML must satisfy a content model derived from the BODY tag as defined in § 5.2.2. The content model detailed in § 5.2.2 restricts Inline XBRL, to XBRL footnotes, and to certain non-numeric facts.

Validations:

Check	f	On failure	s	EFM v68 Ref
Attribute **href** is either a local relative URL or an absolute URL starting with **https://www.sec.gov/Archives/edgar/data/**	1	**External Reference In href Note Accepted**	E	§ 6.5.16
Attribute **src** is either a local relative URL or an absolute URL starting with **https://www.sec.gov/Archives/edgar/data/**	1	**External Reference In src Not Accepted**	E	§ 6.5.16
Attribute **href** does not use scheme **javascript:**	1	**JavaScript In href**	E	§ 6.5.16
The attribute **src** of the **img** element is a reference to a graphics file with name either .gif or .jpg and a valid format.	1	**Graphics File Has Invalid Format**	E	§ 6.5.16
The attribute **src** of the **img** element is a reference to a graphics file that is not openable.	1	**Graphics File Not Openable**		§ 6.5.16
A table element has no ancestor **<table>** elements.	1	**Nested Table Elements**	E	§ 6.5.16

Notes and special cases: none.

1. Applies to the content of text block facts and to the XHTML content of **link:footnote** elements.

8.1.1 HTML restrictions on Text Block facts

The XII Data Type Registry (DTR) type **textBlockItemType** specializes **xmlNodesItemType**. The unescaped text content of such facts must have mixed content containing a simple string, a fragment of XHTML, or a mixture of both. Facts of **textBlockItemType** whose unescaped content contains XML elements must satisfy the restricted content model of § 5.2.2. In the table below, unless otherwise stated the checks apply to the unquoted text of a fact with a concept of type **textBlockItemType**.

Check	f	On failure	s	EFM v68 Ref
The text does not contain unbalanced tags. For example, ** ** must be followed by **</br>**; values of attributes such as **align** must be quoted, as in **align="center"**.	1	**Text-Block-Not-Well-Formed-XML**	E	§ 6.5.15

Notes and special cases:

1. The content of an XBRL footnote must be valid XHTML; therefore, there is no need for an EDGAR validation for unbalanced tags.

8.1.2 HTML restrictions on XBRL footnotes

Validations:

Check	f	On failure	s	EFM v68 Ref
The content of **link:footnote** has content satisfying the EDGAR restricted **BODY** content model.		**Prohibited HTML Footnote Body**	E	§ 6.5.34

Notes and special cases: none.

8.1.3 HTML restrictions on Inline XBRL

Inline XBRL has additional restrictions defined in § 5.2.5.

Validations:

Check	f	On failure	s	EFM v68 Ref
The XHTML elements of an Inline XBRL file has content satisfying the EDGAR restricted BODY content model.		**Prohibited HTML**	E	§ 5.2.5

Notes and special cases: none.

8.2 Labels

A concept that appears in an instance in facts or contexts must have at least one label defined in either a standard taxonomy file or in a custom taxonomy.

Validations:

Check	f	On failure	s	EFM v68 Ref
The element of a fact has a standard label.		**Element Used Standard Label**	E	§ 6.10.1
An element **i:explicitMember** attribute **dimension** value has a standard label with **xml:lang** value **en-US**.		**Element Used Standard Label**	E	§ 6.10.1
An element **i:typedMember** attribute **dimension** value has a standard label with **xml:lang** value **en-US**.		**Element Used Standard Label**	E	§ 6.10.1
The QName content of an **i:explicitMember** element has a standard label with **xml:lang** value **en-US**.		**Element Used Standard Label**	E	§ 6.10.1

Notes and special cases: none.

8.3 Presentation

A concept that appears in an instance in facts or contexts must participate in at least one effective presentation relationship in the DTS of that instance. An element "participates in a presentation relationship" in a DTS if it is a source or target of a presentation relationship in that DTS.

An element is "a source (or target) of a presentation relationship" in a DTS if there is an effective relationship with the defining **xs:element** source (or target) and an **xlink:arcrole** attribute equal to **http://www.xbrl.org/2003/role/parent-child** in a document of that DTS.

8.4 Footnote Links

EDGAR restricts use of the **link:footnoteLink** element in a variety of ways in addition to restrictions on its XHTML content.

Validations:

Check	f	On failure	s	EFM v68 Ref
Element **link:footnoteLink** must have no child elements other than **link:footnote**, **link:footnoteArc**, and **link:loc**		**Footnote Substitution Group**	E	§ 6.5.27
Attribute **xlink:role** of elements **link:footnoteLink** and **link:footnote** must be present.		**Footnote Role Missing**	E	§ 6.5.28
Attribute **xlink:role** of elements **link:footnoteLink** and **link:footnote** must have a role defined in XBRL 2.1 or in a standard taxonomy schema.		**Footnote Custom Footnote Role**	E	§ 6.5.29
Attribute **xlink:role** of element **link:loc** must have a role defined in XBRL 2.1 or in a standard taxonomy schema.		**Footnote Custom Loc Role**		§ 6.5.30
The **href** attribute value of a locator is local, that is, it must begin with the character #.		**Footnote Locator Portable**	E	§ 6.5.32
A **link:footnote** element is the target of at least one footnote arc.		**Dangling Footnote**	E	§ 6.5.33

Notes and special cases: none.

8.5 Decimals

If the **decimals** attribute of a numeric fact is not **INF**, then the value is interpreted as if certain digits were zero. An instance must not contain usage that cause non-zero digits to be interpreted as zero. The examples below illustrate correct and incorrect use:

Fact text	**decimals** value	Interpreted fact value	Result
-2345.67	INF	-2,345.67	
-2345.67	2	-2,345.67	
-2345.67	0	-2,345.00	Error
-2345.67	-2	-2,300.00	Error
-2345.67	-3	-2000.00	Error
-2345.67	-6	0000.00	Error

Validations:

Check	f	On failure	s	EFM v68 Ref
A non-nil numeric fact value is not truncated by the **decimals** attribute.	1	**Nonzero Digits Truncated**	E	§ 6.5.37

Notes and special cases:

1. The check is not symmetric; a value such as 1,000,000 may have a **decimals** attribute with any value greater than -6, such as -5, -4, *etc*.

8.6 Contexts

An instance must not contain redundant **i:context** elements. For testing redundancy, the equivalence of contexts is defined with respect to the equivalence tests defined in XBRL 2.1 Specification section 4.10.

Also, an instance must not contain any **i:context** elements whose **id** attribute value does not appear as the value of at least one **contextRef** attribute.

Validations:

Check	f	On failure	s	EFM v68 Ref
There is no pair of contexts with structurally equal (S-equal) `i:identifier` elements, S-equal `i:period` elements, and Set-equal `i:segment` children.		`Duplicate Contexts`	E	§ 6.5.7
The `id` value of a context appears as the value of at least one `contextRef` attribute.		`Unused Context`	E	§ 6.5.8

Notes and special cases: none.

8.7 Periods

The set of periods (instants and durations) used in the facts of an instance must be checked for certain disallowed overlaps. A date in `i:startDate` is "midnight at the beginning of" that day. A date in `i:instant` or `i:endDate` means "midnight at the end of" that day.

There must be no pair of periods that overlaps by 24 hours or less; that is, if the duration of a period is more than 24 hours, then its end datetime value must be greater than the start datetime of any other period by 24 hours or less.

For example, a company reporting at fiscal year end of May 31st, 2029, will have data in two fiscal years that abut at midnight at the end of May 31st, 2028. This means there will be periods with end datetimes of midnight 2028-05-31 (the prior fiscal year) as well as periods whose start datetimes are midnight at the beginning of 2028-06-01 (the current fiscal year). Both describe the same midnight. However, it must not have periods with start datetime of midnight at the beginning of 2028-05-31, and no contexts with end datetime of midnight at the end of 2028-06-01.

Validations:

Check	f	On failure	s	EFM v68 Ref
Each end datetime value must be greater than the start datetime of any duration period by 24 hours or less.	1	`Start And End Dates Not Distinct Inconsistent With Document Type`	E	§ 6.5.9
Each instant datetime value must be greater than the start datetime of any duration period by 24 hours or less.		`Start And Instant Dates Not Distinct Inconsistent With Document Type`	E	§ 6.5.9

Notes and special cases:

1. At one time, certain instance types were unlikely to have contexts with periods of more than 24 hours, but in practice, the validation applies to all instance types.

8.8 Units

Validations:

Check	f	On failure	s	EFM v68 Ref
There are no equivalent `i:unit` elements.	1	`Duplicate Units`	E	§ 6.5.11
The concept type and unit of a fact must be consistent as defined by the XII Unit Type Registry (UTR)		`Incompatible Numeric Type And Unit`		§ 6.5.35

Notes and special cases:

1. Units are equivalent if they have equivalent measures or equivalent numerator and denominator. Measures are equivalent if their contents are equivalent QNames. Numerators and Denominators are equivalent if they have a set of equivalent measures.

8.9 Non-US English Facts

The default value of the **xml:lang** attribute on non-numeric facts and on element **link:footnote** in EDGAR is **en-US** (EFM v68 § 6.5.13). There are a small number of instance types, such as **AF.FPI**, in which a few text fragments may be expressed in a language other than English. An instance having a fact with non-nil content and the **xml:lang** attribute not equal to **en-US** must also contain a fact using the same element and all other attributes with an **xml:lang** attribute that is effectively **en-US**. For example, the US English fact below may appear in an instance without the French fact, but the French fact must not appear without the US English fact.

```
<eg:answer contextRef="x">YES</eg:answer>
<eg:answer contextRef="x" xml:lang="fr">OUI</eg:answer>
```

Validations:

Check	f	On failure	s	EFM v68 Ref
If a non-numeric fact exists with an **xml:lang** attribute value not starting with **en**, then there must be a corresponding fact in the same context with no **xml:lang** attribute or **xml:lang** value **en-US**.	1	**English Text Missing**	E	§ 6.5.14
If a **link:footnote** exists with an **xml:lang** attribute value not starting with **en**, then there must be a footnote having the same **xlink:label** value with no **xml:lang** attribute or **xml:lang** value **en-US**.	1	**English Text Missing**	E	§ 6.5.14

Notes and special cases:

1. The appearance of attribute **xml:lang** or **lang** on XHTML elements is not checked.

8.10 Duplicate facts

An instance must not have more than one fact having S-Equal element names, equal **contextRef** attributes, and if they are present V-Equal **unitRef** attributes and **xml:lang** attributes effective values, respectively, unless their values are consistent, as described below, in which case the distinct facts are consolidated into a single fact for all other validations.

For numeric facts, all such values must be consistent with having been rounded from a single value. Where the **decimals** attribute of such of facts is the same, the values MUST be numerically equal. Where the **decimals** attribute is different, consistency is determined by considering a closed interval centered on each fact value, and of size 10 to the n^{th} power where n is the value of the **decimals** attribute and checking for overlap of all such intervals. For example, a value of 500 with a **decimals** attribute of -2 would result in an interval of 450 to 550, inclusive. A value of 550 with **decimals** attribute of -1 results in an interval of 545 to 555. These values are considered consistent as the intervals overlap; they are both consistent with having been rounded from a value in the range 545 to 550. The use of a closed interval means that intervals are inclusive of the end values.

Consistent numeric facts are consolidated into a single fact having the value of the fact with the maximum specified decimals value for purposes of validation and rendering.

For non-numeric facts, the values are consistent only if they are V-Equal.

The **xml:lang** attribute effective value is relevant only for types derived from **i:normalizedStringItemType** or **i:stringItemType**. A fact is an occurrence in an instance of an element with a **contextRef** attribute. The values of the **id** attributes are not relevant to detection of duplicate facts. Other rules forbidding equivalent **i:context** and **i:unit** elements ensure that duplicate values of the **contextRef** and **unitRef** attributes can be detected without dereferencing.

The predicate V-Equal is defined in XBRL 2.1 section 1.4 and specifies that non-numeric values are compared after whitespace normalization.

Calculation inconsistencies have no impact on the validity of EDGAR submissions, and therefore the effect of numeric fact duplication in XBRL 2.1 section 5.2.5.2 is moot.

Validations:

Check	f	On failure	s	EFM v68 Ref
All numeric facts having the same concept, context, and unit must have values that are consistent with having been rounded from a single value.	1	**Duplicate Facts**	E	§ 6.5.12
All non-numeric facts having the same concept, context, and unit must have equal values.	1	**Duplicate Facts**	E	§ 6.5.12

Notes and special cases: none.

9 Validation Details on Custom Taxonomies

Section 5.5 above provided an informal list of validations that apply to all custom taxonomies.

9.1 Custom namespace and role URIs

For the purposes of this guide, the *effective authority* of a URI consists of the last part of the URI between the **//** and the first **/** and containing at most one dot.

Regex locating the effective authority in a URI
https?://[^/]*(([a-z]+\.)?[a-z]+)/.*

For example, the effective authority of URI **http://xbrl.sec.gov/dei/2025** is **sec.gov** and the effective authority of URI **http://uvw/20251031** is **uvw**. The path is any part after the authority.

Validations:

Check	f	On failure	s	EFM v68 Ref
The attribute **targetNamespace** value starts with **http://**		**Taxonomy Valid Target Namespace**	E	§ 6.7.3
The authority part of the attribute **targetNamespace** value does not have the same authority as any standard namespace URI.	1	**Taxonomy Valid Target Namespace**	E	§ 6.7.4
The path part of the attribute **targetNamespace** value is a date in the pattern **/yyyymmdd**.		**Taxonomy Valid Target Namespace**	E	§ 6.7.6
Element **xs:schema** binds a recommended namespace prefix for the **targetNamespace** attribute value that does not contain the underscore character.	2	**Taxonomy Valid Target Namespace**	E	§ 6.7.7
Within an **xs:schema** element, the effective authority of element **link:roleType** attribute **roleURI** value is the		**Role Namespace Mismatch**	E	§ 6.7.9

Check	f	On failure	s	EFM v68 Ref
same as the effective authority part of the **`targetNamespace`** URI.				

Notes and special cases:

1. The effective authority is a domain name controlled by the registrant, a domain name controlled by the publisher of the schema, or if neither exists, then a mnemonic name for the registrant such as its trading symbol or CIK (EFM v68 § 6.7.5).
2. A mnemonic such as a trading symbol of the company in lowercase is suitable.

9.2 Roles

A custom taxonomy **`link:roleType`** declaration is important for associating the role with the custom taxonomy namespace, providing a name for a group of relationships, and ordering the appearance of calculation, definition, and presentation groups to a user of the taxonomy. Custom roles used with presentation relationships also communicate the order, the level of fact detail, and a human readable title for a group of relationships and facts. The **`link:definition`** element text contains a Sort Code, a Type, and a Title:

`SortCode - Type - Title`

The Type is used only to arrange presentation groups in a hierarchical menu during the rendering process. The Title communicates the meaning of the presentation group. The SortCode is used only to sort base sets for display. The sort code is sorted alphanumerically, not numerically, so sort code "10" would appear before "2".

For instances in the financial statement submission sets AF, QF, and HF (only) as governed by the text of 17 CFR 232.405-407 (i.e., regulation S-T rules 405 through 407), filers must choose a scheme for their sort code and declare separate role types to achieve the different levels of tagging that the rule implies:

Level	Content
0	Cover page and other material preceding financial statements;
1	Detail tagging of amounts in financial statements, and block-tagged notes to the financial statements;
2	Each significant accounting policy, block-tagged;
3	Each table, block-tagged;
4	Detail tagging of amounts in the notes to financial statements.

Presentation group ordering:

1. Level 0: any cover page detail tags or block tagged content from sections of the Form appearing before the statements.
    a. Use Type "Document" for these roles.
2. Level 1: Each statement (income, balance sheet, *etc*.) in at least one presentation group, in the order the statement appeared in the Inline XBRL (or original HTML/ASCII) document.
    a. Use the Type "Statement" for these roles.
    b. If a lengthy statement is split across more than one role, the SortCode must preserve the original ordering.
    c. A statement that contains parenthetical disclosures on one or more rows must have a presentation group immediately following that of the Statement, where all facts in its parenthetical disclosures appear in relationships.

3. Level 1: All presentation group containing the content of notes to the financial statements;
    a. Use the Type “Disclosure” for these and all subsequent roles.
    b. A text block fact containing each note appearing as the target of one presentation relationship in a base set.
4. Level 2: All presentation groups containing accounting policies, each as a separate text block.
    a. End the Title of these roles with the text “ **(Policy)**” or “ **(Policies)**”.
5. Level 3: All presentation groups containing each table that appeared in the notes, each as a separate table text block.
    a. End the Title of these roles with the text “ **(Table)**” or “ **(Tables)**”.
6. Level 4: All presentation groups containing sets of detail tagged amounts from the text and tables of the notes.
    a. End the Title of these roles with the text “ **(Detail)**” or “ **(Details)**”.

Validations:

Check	f	On failure	s	EFM v68 Ref
The path part of the attribute **roleURI** value matches regex **(/.+)?/role/[^/]+**		**Role Ending Mismatch**	W	§ 6.7.9
The DTS does not contain more than one **link:roleType** having the same **roleURI** attribute value.		**Role Type Duplicates**	E	§ 6.7.10
The text of element **link:usedOn** must match regex **link:(calculation|definition|presentation)Link**		**Role Type Declaration Incomplete**	E	§ 6.7.11
Element **link:roleType** must have three distinct occurrences of **link:usedOn**.		**Role Type Declaration Incomplete**	E	§ 6.7.11
The text of element **link:definition** must match regex **\d+\ -\ (Document|Statement|Disclosure|Schedule)\ - .+** with no leading or trailing whitespace.	1, 2, 3	**Role Definition Mismatch**	E	§ 6.7.12
Level 1 presentation groups precede level 2 presentation groups, level 2 precedes level 3, and level 3 precede level 4.		**Presentation Base Set Order**	W	§ 6.7.12

Notes and special cases:

1. If an instance type is not in submission sets AF, QF, or HF but nevertheless has facts presented in roles with Type **Statement**, it will be rendered as if it were conforming to the four-level tagging scheme above.
2. For instances of instance types without financial statements, it is conventional but not mandatory for roles that contain presentation relationships to have **Disclosure** as their Type, while roles that are used in a custom taxonomy only for definition or calculation relationships have **Document** as their Type.
3. The Type **Schedule** has been replaced in practice by **Disclosure** and will soon be deprecated.

9.3 Concepts

When constructing a custom concept **name**, a common convention is to capitalize the first letter, then use mainly lowercase characters, omitting punctuation and using capitalization only to indicate a natural word break, for example **LongTermDebt** or **YtdReturn**. If the name is originally based on a label that changes

in a subsequent version of the schema, that label changes, the **name** attribute must not be changed merely to maintain agreement.

Validations:

Check	f	On failure	s	EFM v68 Ref
The element **xs:element** attribute **name** value does not equal any **xs:element** attribute **name** value in a standard taxonomy in the same DTS.	1	**Element Name Same As Base**	E	§ 6.7.16
The element **xs:element** attribute **name** value does not start with the underscore character.		**Element Id**	E	§ 6.7.17
The **xs:element** attribute **id** must consist of the recommended namespace prefix of its namespace, followed by one underscore, followed only by its **name** attribute.		**Element Id**	E	§ 6.7.17
The **xs:element** attribute **substitutionGroup** must not be a member of a substitution group with head **i:tuple**.		**No Tuple Element**	E	§ 6.7.19

Notes and special cases:

1. It is not necessary to compare the **name** attribute to all element declarations in all standard taxonomy schemas. Only those schemas that are present in the DTS of a specific instance being validated are relevant.

9.4 Relationships

Arcs in custom taxonomies, whether they import standard taxonomy relationships or not, may form patterns of relationships that have ambiguous or contradictory semantics; these validations test for such patterns among relationships.

Abbreviation	Relationship arc role URIs
all	**http://xbrl.org/int/dim/arcrole/all**
dimension-domain	**http://xbrl.org/int/dim/arcrole/dimension-domain**
dimension-default	**http://xbrl.org/int/dim/arcrole/dimension-default**
domain-member	**http://xbrl.org/int/dim/arcrole/domain-member**
hypercube-dimension	**http://xbrl.org/int/dim/arcrole/hypercube-dimension**
notAll	**http://xbrl.org/int/dim/arcrole/notAll**
summation-item	Either **http://www.xbrl.org/2003/role/summation-item** or **http://xbrl.org/2023/role/summation-item**

Validations:

Check	f	On failure	s	EFM v68 Ref
An arc is not ineffectual.	1	**Relationship Ineffectual**	E	§ 6.9.3
All effective presentation relationships in the same base set with the same source element have distinct values of the **order** attribute.		**Presentation Order Duplicates**	E	§ 6.12.2
There are no effective presentation relationships in the same base set having the same source concept, target concept, and **preferredLabel** value.		**Preferred Label Duplicates**	E	§ 6.12.5
A presentation group has only one concept (the “root”) that is not the target of any arc in that set.		**Multiple Root Nodes**	W	§ 6.12.6
There are no directed cycles in effective **summation-item** relationships.		**Circular Calculation**	E	§ 6.14.4

Check	f	On failure	s	EFM v68 Ref
The target of a **dimension-domain** or **dimension-default** relationship has type **domainItemType**.		**Dimension Domain Target Mismatch**		§ 6.16.3
There are no undirected cycles in any effective **domain-member** and **dimension-domain** directed relationship set.	2, 3	**Domain Is Tangled**	E	§ 6.16.4
A concept is the source of at most one **all** relationship in each base set.		**Primary Element Has Redundant Tables**	E	§ 6.16.5
A **notAll** relationship has attribute **closed** value of **false**.		**Not All Relationship Is Closed**	E	§ 6.16.6
If an arc has attribute **targetRole**, then it has a consecutive relationship.	3	**Target Role With No Consecutive Relationships**	E	§ 6.16.9
An axis element that is the target of an effective relationship with arc role **hypercube-dimension** that is consecutive from a relationship with arc role **notAll** must also be the target of an effective relationship in a **link:definitionLink** having the same value of **xlink:role** and which itself is consecutive from an effective relationship with arc role **all**.	4	**Axis Excluded Not In Table**	E	§ 6.16.7
An arc with arc role **notAll** is not the target of an effective arc with an **xlink:arcrole** attribute equal to **all** in **link:definitionLink** elements having equal values of **xlink:role**.	4	**Table Excludes Itself**	E	§ 6.16.8
A base set having one effective presentation relationship whose target has the same local name as the **unitRef** attribute value of a fact of a source or target element in the same base set should provide an ordering for all such **unitRef** attribute values.	5	**Presented Units Incomplete Order**	W	§ 6.12.9

Notes and special cases:

1. Arcs are *ineffectual* when there is an equivalent relationship with the same or higher value of the **priority** attribute or when it overrides an unprohibited arc. An arc with **use="prohibited"** takes precedence over arcs with **use="optional"** when their priorities are the same. Checks apply only to relationships in custom taxonomies; a custom relationship may override a prohibited standard taxonomy relationship of a lower priority; it must not override another custom relationship.
2. This also impacts financial statement line items, so that the balance at the start and end of a roll forward cannot appear twice under a single axis. The same rendering effect is achieved by including only the ending balance in the domain-member relationships, so that the beginning balance will appear simply as the ending balance of the previous period.
3. The terms *consecutive relationship* and *directed relationship set* are related to **targetRole** attributes and are defined in detail in the XBRL Dimensions specification.
4. The **notAll** arc role does not appear in any standard taxonomies and will soon be deprecated in custom taxonomies.
5. The renderer displays sets of facts having multiple units of measure that cannot be merged into columns (or rows) in one of two ways. Either the units are ordered by the order they are declared in the instance, or by using the built-in unit axis ordered by relationships in a presentation group.

The presentation group should either order all the units used, or none of them, so that the ordering is not mixed.

9.5 Concept types and relationships

The validity of relationships may depend on the concepts that are their sources and targets.

Validations:

Check	f	On failure	s	EFM v68 Ref
An axis concept that is a target in an effective presentation group is the source of at least one presentation relationship that is a domain member.		`Axis Requires Domain Child`	W	§ 6.12.8
The source and target concepts of a `summation-item` arc have the same attribute `i:periodType` value.		`Calculation Relationship Has Different Period Types`	E	§ 6.14.3

Notes and special cases: none.

9.6 Concept labels and roles

Label roles fall into a few related categories that impact their use on different concept types.

Label category	Label role URI
`standard`	`http://www.xbrl.org/2003/role/label`
`documentation`	`http://www.xbrl.org/2003/role/documentation`

`instant`	`http://xbrl.us/us-gaap/role/label/periodStart`
	`http://xbrl.us/us-gaap/role/label/periodEnd`
	`http://xbrl.us/us-gaap/role/label/negatedPeriodStart`
	`http://xbrl.us/us-gaap/role/label/negatedPeriodEnd`

`numeric`	`http://www.xbrl.org/2003/role/positiveLabel`
	`http://www.xbrl.org/2003/role/positiveTerseLabel`
	`http://www.xbrl.org/2003/role/positiveVerboseLabel`
	`http://www.xbrl.org/2003/role/negativeLabel`
	`http://www.xbrl.org/2003/role/negativeTerseLabel`
	`http://www.xbrl.org/2003/role/negativeVerboseLabel`
	`http://www.xbrl.org/2003/role/zeroLabel`
	`http://www.xbrl.org/2003/role/zeroTerseLabel`
	`http://www.xbrl.org/2003/role/zeroVerboseLabel`
	`http://www.xbrl.org/2003/role/totalLabel`
	`http://www.xbrl.org/2009/role/negatedLabel`
	`http://www.xbrl.org/2009/role/negatedPeriodEndLabel`
	`http://www.xbrl.org/2009/role/negatedPeriodStartLabel`
	`http://www.xbrl.org/2009/role/negatedTotalLabel`
	`http://www.xbrl.org/2009/role/negatedNetLabel`
	`http://www.xbrl.org/2009/role/negatedTerseLabel`
	`http://xbrl.us/us-gaap/role/label/negated`
	`http://xbrl.us/us-gaap/role/label/negatedTotal`
	`http://xbrl.us/us-gaap/role/label/negatedPeriodStart`
	`http://xbrl.us/us-gaap/role/label/negatedPeriodEnd`

Validations:

Check	f	On failure	s	EFM v68 Ref
If the **xlink:role** of element **link:label** is not **documentation**, then its text is whitespace normalized, contains no **<** characters, and is fewer than 511 characters.	1	**Label Disallowed**	E	§ 6.10.6
The text of element **link:label** has no leading or trailing white space.		**Label Not Trimmed**	E	§ 6.10.8
A concept has at most one label for any combination of **xlink:role** and **xml:lang** values.		**Element Used Has Duplicate Label**		§ 6.10.2
If a concept is used in an instance as a fact, dimension, or domain member, then it has a standard label with **xml:lang** attribute **en-US**.		**Element Used Standard English Label**	E	§ 6.10.3
More than one concept has the same **standard** label with **xml:lang** value **en-US**.		**English Standard Labels Duplicated**	E	§ 6.10.4
A concept in a standard namespace does not have a custom **documentation** label.		**Custom Documentation Standard Element**	E	§ 6.10.5
A non-numeric concept does not have any label with a **numeric** role.		**Numeric Label Role**	E	§ 6.10.9
The target of an effective presentation relationship with a **preferredLabel** value that is an **instant** role does not have period type **duration**.		**Period Type Preferred Label Mismatch**	W	§ 6.12.7

Notes and special cases:

1. All labels may contain the XML whitespace characters ASCII 9, 10, 13 and 32 anywhere except at their start or end. Documentation labels may contain sequences of extra whitespace; all other labels must be normalized.

9.7 Rendering validations

Because the rendering process involves both facts in the instance and the content of the taxonomy, it has validations that involve both.

9.7.1 Each axis that is presented requires at least one child element.

If the default member of an Axis does not appear in an effective presentation relationship base set, then the only facts that can be displayed by that presentation base set are facts in contexts having a non-defaulted member on that Axis.

Check	f	On failure	s	EFM v68 Ref
If an effective presentation relationship base set has an explicit Axis element without its default member as a descendant, then there is at least one fact displayed having a non-defaulted member on that axis.		**All Facts Filtered**	E	§ 6.26.1

Notes and special cases:

1. If every fact in the group is defaulted on such an axis, then all facts would be filtered out. If the instance contains no non-default member facts, then the base set will never display anything.

9.7.2 Matching instant and duration facts

Facts presented in an effective presentation relationship base set using period start or period end preferred labels should contain alternating instant and duration facts. The renderer lays out a set of facts with at least one column for each period, ordering the columns by increasing duration and descending date.

An effective presentation group in which facts are presented with the period start and period end roles as described in 6.7 above is considered a movement analysis. When the renderer presents a movement analysis of a set of facts consisting of beginning and ending values and changes that occurred during the period, it orders the periods by alternating the instants and durations, in decreasing duration and increasing end date order.

Check	f	On failure	s	EFM v68 Ref
For each date-time of instant facts displayed with a period start or period end label, there is at least one duration fact in the same movement analysis presentation group with a matching start or end date-time.	1	`Instant Without Matching Duration`	W	§ 6.26.2

Notes and special cases: none

9.7.3 Changes in Equity presentation instant and duration type facts.

An effective presentation relationship base set that is recognized as representing a statement of changes is a table with sets of rows having instant and duration-type elements on alternate lines.

Validations:

Check	f	On failure	s	EFM v68 Ref
For each date-time of instant facts in a statement of changes in equity, there is at least one duration fact with a matching start or end date-time.	1	`No Matching Durations`	W	§ 6.26.3

Notes and special cases:

2. A nil-valued duration fact will satisfy this check.

9.7.4 Text blocks containing embedding commands.

Facts of type “text block” having text content containing an embedding command must have valid embedding command syntax. A text block fact may contain an Embedding Command. The following text is an example of an embedding command:

```
~ http://xbrl.sec.gov/rr/role/ShareholderFeesData
column period compact *
row dei_LegalEntityAxis compact (eg_AaaMember, eg_BbbMember)
row rr_ProspectusShareClassAxis compact *
~
```

The beginning and ending “~” (tilde, ASCII hex 7E) indicate that the content of the enclosing element is an embedding command. Any text appearing before the first or after the second tilde is ignored.

An embedding command consists of one role URI followed by zero or more iterators. Each iterator consists of case-sensitive tokens separated by whitespace.

Any token with “_” (underscore, ASCII hex 5F) must denote an element. The text before the first underscore is the element preferred namespace prefix as defined in 7.2 above. The string after the first underscore must be nonempty and must be the element local name.

Validations:

Check	f	On failure	s	EFM v68 Ref
The first token of an iterator must be **row** or **column**.		**Embedding Command Malformed Direction Token**	E	§ 6.26.4
The second token of an iterator is one of **period**, **unit**, **primary**, or a token with an underscore that denotes an Axis as defined in 6.4 above.		**Embedding Command Malformed Axis**	E	§ 6.26.4
The third token is the word **compact**.		**Embedding Command Malformed Style Token**	E	§ 6.26.4
The fourth token is either * meaning all, a token with an underscore that denotes a domain member, or a parenthesized list of domain members.		**Embedding Command Malformed Member**	E	§ 6.26.4
The domain members are presentation descendants of the axis, in the presentation relationships of the role URI used to display the facts.	1	**Embedding Command Invalid Member**	E	§ 6.26.4

Notes and special cases:

1. A role URI having no presentation relationships would signal this error.

9.7.5 Rows and columns both required.

An embedding command must have at least one **row** iterator and one **column** iterator, either explicit or defaulted. Embedding results in a different layout than the default layout of non-embedded reports. In an embedding command, the primary axis is on the rows by default and all other axes are the default columns (prior to transposition, which reverses rows and columns).

Validations:

Check	f	On failure	s	EFM v68 Ref
The embedding command contains both row and column iterators.	1	**Embedding Command Missing Iterator**	W	§ 6.26.5
The embedding command contains both row and column iterators after applying the **{Transpose}** token.	1	**Embedding Command Missing Iterator After Transposition**	W	§ 6.26.5

Notes and special cases:

2. The warning message should indicate whether the missing iterator is **column** or **row**.

9.7.6 Completeness of axes in an embedding command.

An embedding command and the effective presentation relationship base set designated by its role URI should together provide an ordering of row axes and column axes for all facts it displays. The order of axes displayed on rows and the axes displayed on columns first considers the order of iterators in the embedding command. Then, for axes not named in the embedding command but used in the contexts of facts to be displayed, axis ordering is determined by the effective presentation relationship base set whose role URI is that of the embedding command.

Validations:

Check	f	On failure	s	EFM v68 Ref
If an axis is used in the context of facts that are selected from an embedding command, then the axis appears in the presentation group named by the command role URI.	1	**`Axis Has No Order`**	W	§ 6.26.6

Notes and special cases:

3. The axes will be sorted by their labels.

9.7.7 Bar Chart selected Annual Return facts

Embedding commands for bar charts are limited to **`AnnualReturn`** facts (6.22.2 above).

Validations:

Check	f	On failure	s	EFM v68 Ref
If the role URI of an embedding command contains the case-insensitive substring **`BarChart`**, then it contains at least one **`AnnualReturn`** fact.	1	**`Bar Chart Has No Facts`**	W	§ 6.26.7
If the role URI of an embedding command contains the case-insensitive substring **`BarChart`**, then it contains no more than twenty **`AnnualReturn`** facts that are not duplicates.	1	**`Too Many Annual Return Facts`**	E	§ 6.26.8

Notes and special cases:

4. The row and column iterators define a set of Annual Return facts.

9.7.8 The {Elements} token implies "column primary" embedding.

The layout qualifier **`{Elements}`** forces the primary axis to be displayed as rows.

Validations:

Check	f	On failure	s	EFM v68 Ref
An embedding command does not have both the token **`{Elements}`** in the definition text of its URI, and an iterator with direction token **`column`** and axis token **`primary`**.		**`Primary Axis On Rows`**	W	§ 6.26.9

Notes and special cases: none.

9.8 Namespace-specific Customizations

In general, concepts having a namespace starting with **`http://xbrl.sec.gov/xyz/`** may be termed "XYZ concepts" and may impose various restrictions on custom arcs involving them, including:

- Only overrides: Custom arcs with XYZ elements as source and target must have the same role, arc role, source, and target as an arc in the standard taxonomy, subject to all other validations. In effect such custom arcs must appear in pairs that together prohibit and override existing relationships having priority less than 10, thereby altering only values of arc attributes such as **`order`**.
- Only new domain members: If an arc has a specific role and/or arc role and the target concept is a domain member, then the source element must be one of a few specific XYZ elements or a descendant thereof with the same role and arc role.
- No XYZ sources or targets: XYZ concepts must not appear as the source or target of any custom arc, except as an override of an existing arc or addition of a new domain member.

9.8.1 CEF Customization

(Formerly EFM v68 § 6.12.10) Concepts having a namespace starting with **`http://xbrl.sec.gov/cef/`** are "CEF concepts".

Custom **`parent-child`** arcs with CEF Concepts as both source and target may only appear in role **`http://xbrl.sec.gov/cef/role/N2`** and must be valid overrides.

Custom **`parent-child`** arcs in role **`http://xbrl.sec.gov/cef/role/N2`** with a target that is not a CEF concept must have a domain member as target and have a source that is one of the Concepts in a standard namespace: **`AllCoregistrantsMember`**, **`AllSecuritiesMember`**, **`AllRisksMember`**, **`ClassOfStockDomain`**, **`DebtInstrumentNameDomain`**, or a **`parent-child`** descendant thereof.

In instance type RD.CEF (only) no other custom **`parent-child`** arcs with a CEF concept as source or target are permitted in any role.

(Formerly EFM v68 § 6.14.6) No custom **`summation-item`** arc in any role may have a CEF concept as either source or target.

(Formerly EFM v68 § 6.16.10) Custom **`domain-member`** arcs with CEF Concepts as both source and target may only appear in role **`http://xbrl.sec.gov/cef/role/N2`** and must be overrides.

Custom **`domain-member`** arcs with a CEF Concept as source must have link role **`http://xbrl.sec.gov/cef/role/CorregistrantOnly`**, **`http://xbrl.sec.gov/cef/role/SecurityOnly`**, or **`http://xbrl.sec.gov/cef/role/RiskOnly`**. The target may be a domain member in any namespace.

No other custom arcs having arc roles starting with **`http://xbrl.org/int/dim/arcrole`** and any CEF Concepts as source or target are permitted.

9.8.2 ECD Customization

(Formerly EFM v68 § 6.14.8) Concepts having a namespace starting with **`http://xbrl.sec.gov/ecd/`** are "ECD concepts".

(Formerly EFM v68 § 6.14.9) No custom **`summation-item`** arc in any role may have an ECD concept as either source or target.

(Formerly EFM v68 § 6.16.12) Custom **`domain-member`** arcs with ECD Concepts as both source and target may only appear in roles with URI starting **`http://xbrl.sec.gov/ecd/role/`** and ending with **`Only`**. Such arcs must be overrides.

Custom **`domain-member`** arcs with ECD Concepts as source may only appear in roles with URI starting **`http://xbrl.sec.gov/ecd/role/`** and ending in **`Only`**. The target may be a domain member in any namespace.

No other custom arcs having arc roles starting with **`http://xbrl.org/int/dim/arcrole/`** and any ECD Concept as source or target are permitted in any role.

9.8.3 FFD Customization

Customization of EX-FILING FEES is not permitted.

9.8.4 OEF Customization

(Formerly EFM v68 § 6.16.13) Concepts having a namespace starting with **`http://xbrl.sec.gov/oef/`** are "OEF concepts".

Other than instance type RD.OEF, no custom summation-item arc in any role may have an OEF concept as either source or target.

Custom domain-member arcs with OEF Concepts as both source and target may only appear in roles with URI starting **`http://xbrl.sec.gov/rr/role/`** or **`http://xbrl.sec.gov/oef/role/`** and ending with **`Only`**. Such arcs must be overrides.

Custom domain-member arcs with OEF Concepts as source may only appear in roles with URI starting **`http://xbrl.sec.gov/rr/role/`** or **`http://xbrl.sec.gov/oef/role/`** and ending in **`Only`**. The target may be a domain member in any namespace.

No other custom arcs having arc roles starting with **`http://xbrl.org/int/dim/arcrole/`** and any OEF Concept as source or target are permitted in any role.

9.8.5 RXP Customization

(Formerly EFM v68 § 6.14.10) Concepts in a namespace starting with **`http://xbrl.sec.gov/rxp/`** are "RXP concepts".

A custom **`summation-item`** arc must not have a source or target RXP Concept in any role.

(Formerly EFM § 6.16.14) Custom **`domain-member`** arcs are restricted both with respect to RXP Concepts and definition links with "RXP roles" (defined as role URIs starting with **`http://xbrl.sec.gov/rxp/`**).

The following RXP roles permit custom **`domain-member`** arcs with no **`targetRole`** attribute, the indicated source concept (only), and target concept in a custom namespace.

Definition link role URI	Permitted source concept
`http://xbrl.sec.gov/rxp/role/ProjectsOnly`	**`rxp:AllProjectsMember`**
`http://xbrl.sec.gov/rxp/role/GovernmentsOnly`	**`rxp:AllGovernmentsMember`**
`http://xbrl.sec.gov/rxp/role/SegmentsOnly`	**`rxp:AllSegmentsMember`**
`http://xbrl.sec.gov/rxp/role/EntitiesOnly`	**`dei:EntityDomain`**
`http://xbrl.sec.gov/rxp/role/ResourcesOnly`	**`rxp:AllResourcesMember`**

Custom definition arcs must not appear in any other RXP role.

Custom definition arcs with arc roles starting **`http://xbrl.org/int/dim/arcrole/`** in any role must not have an RXP Concept as either source or target.

A member concept must not be the target of a **`domain-member`** arc in more than one RXP role.

9.8.6 VIP Customization

(Formerly EFM v68 § 6.12.11) Concepts having a namespace starting with **`http://xbrl.sec.gov/vip/`** are "VIP concepts".

Custom parent-child arcs with VIP Concepts as both source and target may only appear in roles matching regex **`http://xbrl.sec.gov/vip/role/N[346]`** and must be valid overrides.

Custom parent-child arcs in roles matching regex **`http://xbrl.sec.gov/vip/role/N[346]`**, with a target that is not a VIP Concept, must have a domain member as target or a parent-child descendant thereof.

No other custom **`parent-child`** arcs with a VIP concept as source or target are permitted in any role.

(Formerly EFM v68 § 6.14.7) No custom **`summation-item`** arc in any link role may have a VIP concept as either source or target.

(Formerly EFM v68 § 6.16.11) Custom **domain-member** arcs with VIP concepts as both source and target may only appear in roles with URI starting **http://xbrl.sec.gov/vip/role/** and ending with **Only**. Such arcs must be overrides.

Custom **domain-member** arcs with VIP Concepts as source may only appear in roles with URI starting **http://xbrl.sec.gov/vip/role/** and ending in **Only**. The target may be a domain member in any namespace.

No other custom arcs having arc roles starting with **http://xbrl.org/int/dim/arcrole/** and any VIP Concept as source or target are permitted in any role.

9.8.7 SRO Customization

Concepts having a namespace URI matching **.*sec.gov/sro/.*** are "SRO concepts".

Custom **domain-member** arcs with SRO concepts as source may only appear in roles with a URI matching **.*sec.gov/sro/([^/]*/)*role/[^/]*Only**, and only as descendants of the default member of an SRO concept explicit axis.

No other custom arcs having arc roles starting with **http://xbrl.org/int/dim/arcrole/** and any SRO Concept as source or target are permitted in any role.

10 Inline XBRL Restrictions

Refer to EFM § 5.2.5, "Inline XBRL", for restrictions specific to Inline XBRL attachments.

11 Tables from Filer Manual volume II Chapter 6

The tables are copied here for ease of reference and differ in no way from those in Edgar Filer Manual version 69, volume II chapter 6.

Table 6-1. Submission Sets

Code	Definition	Submission Types
6K	Report of FPI	6-K, 6-K/A
8K	Current Report	8-K, 8-K/A, 8-K12B, 8-K12B/A, 8-K12G3, 8-K12G3/A, 8-K15D5, 8-K15D5/A
AF	Annual Financial	10-K, 10-K/A, 10-KT, 10-KT/A, 20-F, 20-F/A, 40-F, 40-F/A, N-CSR, N-CSR/A, SP 15D2, SP 15D2/A
AM	Amending	6-K/A, 8-K/A, 8-K12B/A, 8-K12G3/A, 8-K15D5/A, 10-K/A, 10-KT/A, 11-K/A, 11-KT/A, 20-F/A, 40-F/A, N-CSR/A, SP 15D2/A, N-CSRS/A, 17AD-27/A, SD/A#201, 424H/A, 10-Q/A, 10-QT/A, F-1/A, F-10/A, F-3/A, F-4/A, N-14 8C/A, S-1/A, S-11/A, S-3/A, S-4/A, S-6/A, SF-1/A, SF-3/A, 10-12B/A, 10-12G/A, 40FR12B/A, 40FR12G/A, SC 13E1/A, SC 13E3/A, SC TO-I/A, SC TO-T/A, SC13E4F/A, SC14D1F/A, N-8B 2/A, N-1A/A, N-2/A, N-3/A, N-4/A, N-6/A, SDR/A%KL
EBP	Employee Benefit Plan Annual	11-K, 11-K/A, 11-KT, 11-KT/A

Code	Definition	Submission Types
FAST	FAST Act covered	8-K, 8-K/A, 8-K12B, 8-K12B/A, 8-K12G3, 8-K12G3/A, 8-K15D5, 8-K15D5/A, 10-K, 10-K/A, 10-KT, 10-KT/A, 20-F, 20-F/A, 40-F, 40-F/A, 10-Q, 10-Q/A, 10-QT, 10-QT/A
FE	Fee Exhibit	POS AM, F-1, F-1/A, F-10, F-10/A, F-10EF, F-1MEF, F-3, F-3/A, F-3ASR, F-3D, F-3MEF, F-4, F-4/A, F-4MEF, N-14 8C, N-14 8C/A, N-14MEF, N-2, N-2 POSASR, N-2/A, N-2ASR, N-2MEF, POSASR, S-1, S-1/A, S-11, S-11/A, S-11MEF, S-1MEF, S-3, S-3/A, S-3ASR, S-3D, S-3MEF, S-4, S-4/A, S-4EF, S-4MEF, S-8, SF-1, SF-1/A, SF-1MEF, SF-3, SF-3/A, SF-3MEF, PREM14A, PREM14C, PRER14A, PRER14C, 424B1, 424B2, 424B3, 424B4, 424B5, 424B7, 424B8, 424H, 424H/A, 424I, SC 13E1, SC 13E1/A, SC 13E3, SC 13E3/A, SC TO-I, SC TO-I/A, SC TO-T, SC TO-T/A, SC13E4F, SC13E4F/A, SC14D1F, SC14D1F/A
HF	Semi-annual (half year) Financial	N-CSRS, N-CSRS/A
OA	Other Annual	17AD-27, 17AD-27/A, SD%201, SD/A%201, SD#KL, SD/A#KL
PRO	Prospectus	424A, 424B1, 424B2, 424B3, 424B4, 424B5, 424B7, 424B8, 424H, 424I, 425
PX	Proxy	DEF 14A, DEF 14C, DEFA14A, DEFA14C, DEFC14A, DEFC14C, DEFM14A, DEFM14C, DEFR14A, DEFR14C, PRE 14A, PRE 14C, PREC14A, PREC14C, PREM14A, PREM14C, PRER14A, PRER14C
QF	Quarterly Financial	10-Q, 10-Q/A, 10-QT, 10-QT/A
R33	33 Act Registration Only	F-1, F-1/A, F-10, F-10/A, F-10EF, F-1MEF, F-3, F-3/A, F-3ASR, F-3D, F-3MEF, F-4, F-4/A, F-4MEF, N-14 8C, N-14 8C/A, N-14MEF, POS AM#S1, POS AM#S3, POS462B#S1, POS462B#S1, POS462C#S1, POS462C#S3, POSASR#F3, POSASR#S3, S-1, S-1/A, S-11, S-11/A, S-11MEF, S-1MEF, S-3, S-3/A, S-3ASR, S-3D, S-3MEF, S-4, S-4/A, S-4EF, S-4MEF, S-6, S-6/A, S-8, SF-1, SF-1/A, SF-1MEF, SF-3, SF-3/A, SF-3MEF
R34	34 Act Registration Only	10-12B, 10-12B/A, 10-12G, 10-12G/A, 40FR12B, 40FR12B/A, 40FR12G, 40FR12G/A, SC 13E1, SC 13E1/A, SC 13E3, SC 13E3/A, SC TO-I, SC TO-I/A, SC TO-T, SC TO-T/A, SC13E4F, SC13E4F/A, SC14D1F, SC14D1F/A
R40	40 Act Registration Only	N-8B-2, N-8B-2/A

Code	Definition	Submission Types
RD	33 and/or 40 Act (dual) registration	485APOS#N1, 485APOS#N3, 485APOS#N4, 485APOS#N6, 485BPOS#N1, 485BPOS#N3, 485BPOS#N4, 485BPOS#N6, 485BXT#N1, 485BXT#N3, 485BXT#N4, 485BXT#N6, 486APOS#N2, 486BPOS#N2, 486BXT#N2, 497#N1, 497#N3, 497#N4, 497#N6, N-1A, N-1A/A, N-2, N-2 POSASR, N-2/A, N-2ASR, N-2MEF, N-3, N-3/A, N-4, N-4/A, N-6, N-6/A, POS 8C#N1, POS 8C#N2, POS 8C#N3, POS 8C#N4, POS 8C#N6, POS AMI#N1, POS AMI#N2, POS AMI#N3, POS AMI#N4, POS AMI#N6
TF	Transitional Financial	10-KT, 10-KT/A, 10-QT, 10-QT/A, 11-KT, 11-KT/A

Table 6-2. Submission Set Suffixes

Suffix	Meaning
#N1	The form is an N-1A.
#N2	The form is an N-2.
#N3	The form is an N-3.
#N4	The form is an N-4.
#N6	The form is an N-6.
#S1	The form is an S-1.
#S3	The form is an S-3.
#F1	The form is an F-1.
#F3	The form is an F-3.
%201	There is an Exhibit 2.01 in the submission.
%KL	There is an exhibit K SDR or L SDR in the submission.

Table 6-3. Entity Sets

On failure	Description
ALL	Any registrant
BDC	Business Development Company
CA	Canadian Issuer
FPI	Foreign Private Issuer
OEF	Open-end Fund
CEF	Closed-end Fund
V3	Separate Account Registered as Open-end Fund
V4	Variable Annuity UIT Separate Account
V6	Variable Life UIT Separate Account
RT	Real Estate Investment Trust
SBS	Security-based Swap Execution Facility
SDR	Security-based Swap Data Repository
SF	Structured Finance Company
SRO	Self-regulatory Organization
UIT	Unit Investment Trust
US	US Operating Company

Table 6-4. Instance Types

Submission Set	Included Entity Set	Excluded Entity Sets	Exhibit Type	Instance Type
6K	FPI			6K.FPI
8K	ALL			8K.A
AF	BDC			AF.BDC
AF	CA			AF.CA
AF	CEF			AF.CEF
AF	FPI			AF.FPI
AF	OEF			AF.OEF
AF	US			AF.US
EBP	ALL			EBP.A
FE	ALL		EX-FILING FEES	FE.A
HF	OEF			HF.OEF
OA	FPI		EX-2.01	RXP.FPI
OA	SDR		EX-99.L SDR	L.SDR
OA	SRO			OA.SRO
OA	US		EX-2.01	RXP.US
OA	SDR		EX-99.K SDR	K.SDR
PRO	ALL	CEF		PRO.ANC
PRO	CEF			PRO.CEF
PX	ALL			PX.A
QF	BDC			QF.BDC
QF	US			QF.US
R33	FPI			R33.FPI
R33	RT			R33.RT
R33	UIT			R33.UIT
R33	US			R33.US
R34	CA			R34.CA
R34	FPI			R34.FPI
R34	US			R34.US
R40	UIT			R40.UIT
RD	CEF			RD.CEF
RD	OEF			RD.OEF
RD	V3			RD.V3
RD	V4			RD.V4
RD	V6			RD.V6

Table 6-5. Standard Taxonomies on xbrl.sec.gov

Abbreviation	Taxonomies on xbrl.sec.gov	Guide
cef	Closed-end Fund	yes
country	Country (ISO 3166-1)	
currency	Currency (ISO 4217)	
dei	Document and Entity Information	
ecd	Executive Compensation Disclosure	yes

Abbreviation	Taxonomies on xbrl.sec.gov	Guide
exch	Exchanges (ISO 10383 MIC)	
ffd	Filing Fee Disclosures	yes
fnd	Funds	yes
naics	North American Industry Classification System	
oef	Open-end Fund	yes
rr	Risk/Return (Deprecated as of 2023)	yes
rxp	Resource Extraction Payments	yes
sic	Standardized Industrial Codes	
snj	Subnational Jurisdiction (ISO 3166-2)	yes (in rxp guide)
sro	Self-regulating Organizations	yes
stpr	States and Provinces	
vip	Variable Insurance Products	yes

Table 6-6. Standard Taxonomies not on xbrl.sec.gov

Abbreviation	Taxonomies located elsewhere	Guide
ifrs	International Financial Reporting Standards	yes
ebp (or us-gaap-ebp)	Employee Benefit Plan Financial Reporting	yes
srt	SEC Reporting	yes
us-gaap	US GAAP Financial Reporting	yes

Table 6-7. Instance Types Mapped to Entry Points

Instance Type Included	Instance Types Excluded	Entry Point Required (Exactly one of)		Entry Points Permitted (Any or all)
ALL	FE.A	dei	1	dei-sub, dei-lab, dei-def, dei-pre, cef, cef-pre, country, country-def, currency, exch, naics, sic, snj, sro, srt, stpr
6K.FPI		dei	2	us-gaap, ifrs
8K.A		dei		us-gaap
AF.BDC		us-gaap		cef
AF.CA		us-gaap, ifrs	2	us-gaap, ifrs, ecd
AF.FPI		us-gaap, ifrs	2	us-gaap, ifrs, ecd
AF.CEF		us-gaap	2	cef, ifrs
AF.OEF		oef-sr		
AF.US		us-gaap		ifrs, ecd
EBP.A		ebp		
FE.A		ffd	3	
HF.OEF		oef-sr		
K.SDR		us-gaap		
L.SDR		us-gaap		
PRO.A		dei	2	us-gaap, ifrs, ecd
PRO.CEF		dei		cef, us-gaap, ecd
PXY.A		dei		us-gaap, ifrs, ecd
QF.BDC		us-gaap	2	cef, ecd
QF.US		us-gaap		ecd, ifrs

Instance Type Included	Instance Types Excluded	Entry Point Required (Exactly one of)		Entry Points Permitted (Any or all)
R33.FPI		dei		us-gaap, ifrs
R33.UIT		fnd-uit		
R33.US		us-gaap		
R34.CA		dei	2	us-gaap, ifrs
R34.FPI		dei	2	us-gaap, ifrs
R34.US		us-gaap		ifrs
R40.UIT		fnd-uit		
RD.CEF		cef, fnd-cef		
RD.OEF		fnd-oef, oef-rr, rr	4	
RD.V3		vip-n3		
RD.V4		vip-n4		
RD.V6		vip-n6		
RXP.FPI		rxp	3	
RXP.US		rxp	3	

Table 6-8. Instance Type – Attachment Types and Acceptable Formats

Included Instance Types	Excluded Instance Types	Suffix	Inline XBRL attachment	Processed as IXDS	xBRL-XML attachment
FE.A		.htm	EX-FILING FEES	No	-
US.RXP, FPI.RXP		.xml	-	-	EX-2.01.INS
K.SDR		.xml	-	-	EX-99.K SDR.INS
L.SDR		.xml	-	-	EX-99.L SDR.INS
ALL	FE.A, K.SDR, L.SDR, RXP.US, RXP.FPI	.htm	The primary document and exhibits other than EX-FILING FEES	Yes	-

Table 6-9. Instance Type – Consequences of XBRL Errors

Included Instance Types	Excluded Instance Types	Consequences of XBRL Errors in the Instance
FE.A		See EFM v68 § 7.1.
K.SDR, L.SDR		Suspend.
RXP.US, RXP.FPI		Remove EX-2.01.INS and EX-2.01.SCH file attachments. If there are no other exhibits in the submission, then suspend.
ALL	FE.A, K.SDR, L.SDR, RXP.US, RXP.FPI	Remove all attachments in the Inline XBRL Document Set. If that included the primary document, then suspend.