Interactive Data Public Test Suite

Version 54-200921

1 Goals

The purpose of the public test suite is to assist developers of software that must validate Interactive Data prior to its submission to EDGAR. The test suite consists of many small Interactive Data instances, schemas and linkbases that are categorized as to whether they violate a validation check, and if so, what validation check they violate and whether that would resulting a warning, or in an error that would cause the Interactive Data to be rejected.

Filers that attach Interactive Data Exhibits to EDGAR submissions are responsible for compliance with all validations in Chapter 6 of Volume II of the EDGAR Filer Manual ("the Manual"). Automated validation by preparation software can make it more efficient for filers to verify compliance before sending their filings to EDGAR itself. Nothing in this test suite is intended to create new requirements or change existing requirements for EDGAR submissions; filers should consult the Commission rules and the Manual for submission requirements.

The organization of the test suite follows that of Chapter 6 of the Manual. Chapter 6 consists of subsections that each detail one or more Interactive Data validations, and these individual subsections are grouped into sections according to type of attachment (instance, schema, or linkbase) and whether the validations can be completely automated (called "syntax" sections) or whether they deal with the relationships that may require some manual review or accounting judgment (called "semantic" sections).

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2 Notation

In this document, path names use forward slashes, although the tests work on any operating system.

3 Versions

The major version number "54" refers to a specific version of Manual (draft or otherwise) and the minor version number "200921" is the date of the minor version, formatted as YYMMDD.

4 Installation

The suite is distributed as a zip format archive. Extract the entire contents to any convenient location, preserving folder paths. It contains a top level folder that corresponds to the version of the Manual.

All files are encoded as 8-Bit Universal Transmission Format (UTF-8) or US ASCII. The suffix ".xsd" indicates an XML Schema file, ".xsl" indicates an XML Style Sheet (XSL) and suffix ".xml" indicates any other XML file type.

There are no executables in the zip format archive except for XSL 1.0 files in subfolders "lib" and "conf".

The file index.htm is a file created to facilitate browsing the test files; it highlights testcase files containing remarks that may help developers.

5 Library

The folder "lib" contains reference data and definitions used in multiple locations of the conf folder.

5.1 DTD and ENT files

An XML Document Type Definition (DTD) and three XML Entity Declaration (ENT) files used to validate the un-escaped content of Text Blocks and XBRL Footnotes.

A Text Block is an XML element whose type is “textBlockItemType” in a namespace starting with “http://xbrl.us/us-gaap/”.

An XBRL Footnote is an XML element named “footnote” in namespace “http://www.xbrl.org/2003/linkbase”.

5.2 Schemas and Style sheets

Files test.xsd, testcases.xsl and test.xsl are used to validate and view *-testcase.xml files in a browser, respectively.

The elements are all in the http://edgar/2009/conformance namespace.

5.3 Web Site Files Referenced by the Filer Manual

Section	File	Related files
6.5.43	signwarnings.json	
6.5.44	axiswarnings.json	
6.22	edgartaxonomies.xml	forbidden.xml, erxl.xsd

5.4 Other files

Content	File	Related files
Error messages	errors.xml	xbrlerrors.htm
Warning messages	warnings.xml	xbrlwarnings.htm
External URL's used	externals.txt	
Current Unit Type registry	utr.xml	

6 Test Cases

A testcase file is an XML file used by software developers. The file names sets of files to be processed together and the expected results of that processing. The testcase XML file is typically transformed to produce a shell command script; the resulting command script invokes a validator on one file in each variation and stores the result of that validation. When a validator produces results identical to those expected, it is said to be “conforming”.

All testcases and their test files are in the “conf” folder. The testcases are grouped by section with a sort code scheme that corresponds to the number and title of the section, for example:

- Section 6.4 = Folder 604-filing-semantics
- Section 6.5 = Folder 605-instance-syntax

Within each section folder are subsection folders, following a similar coding scheme, for example:

- Section 6.5.1 = 605-instance-syntax/605-01-identifier-scheme
- Section 6.19.1 = 619-reference-semantics/619-01/619-01-no-standard-references

Within each subsection is one testcase file whose name is prefixed the same as the folder. For example:

- 605-instance-syntax/605-01-entity-identifier-scheme/605-01-entity-identifier-scheme-testcase.xml

Sections 6.24 and 6.25 of the filer manual are nested with an additional level of folders to distinguish "good" from "nogood" samples. For example, the "good" variations of Section 6.24.2 are described here:

- 624-rendering/02-contexts/gd/02-contexts-testcase.xml

It contains references to sample instances each in a different subfolder:

- 624-rendering/02-contexts/gd/000gd/r02000gd-20081231.xml
- 624-rendering/02-contexts/gd/001gd/r02001gd-20081231.xml

Section 5.2.5 of the filer manual appears in 525-ix-syntax with an additional level of folders to distinguish tests that are Inline XBRL syntax tests that are "Not EDGAR Dependent" ("ned") versus those that are relevant to the EDGAR Filer Manual ("efm") versus those that cannot be unit tested but are "System Test Only" ("sto"):

- 525-ix-syntax/ned/01-format/i01001gd/i01001gd-20081231.xml
- 525-ix-syntax/efm/00-filing/i0200gd/i0200gd-20081231.xml
- 525-ix-syntax/sto/19-multiio/i19305ng/i19305ng-20181231.xml

The syntax of the testcase is a modification of the syntax typically used by the XBRL International consortium (http://www.xbrl.org) and so it retains some features that are not meaningful for this test suite. The schema at lib/test.xsd is for validating the syntax of each testcase.

Each testcase file is XML that meant to be used for programming test harnesses and similar applications. Each testcase file also has an XML Processing Instruction referring to an XSL 1.0 style sheet lib/test.xsl for viewing it as HTML in a browser.

The numbering of Manual sections is stable. The number and meaning of subsections will not change except to add additional subsections, or to mark subsections as "deleted" "reserved" or equivalent language.

6.1 Required elements <creator>, <name> and <email>

These elements name the party responsible for the testcase, which for this test suite is always the Office of Structured Disclosure (OSD) at the SEC.

6.2 Required element <number>

By convention this is the sort code pattern "6[0-9]{2}-[0-9]{2}", the sort code for a section as described above. "605-22" means section 6.5.22.

An additional numbering convention used within 525-ix-syntax to ensure that no two leaf level test variations have the same name even if they are in different branches. For example, test cases in ned/12-references/ will match i12<u>0</u>00gd or i12<u>1</u>00ng, while test cases in efm/12-references will match i12<u>3</u>00gd or i12<u>4</u>00ng. This way, users may easily merge the folders and disregard the efm vs. ned distinction.

6.3 Required element <name>

The schema restricts this to contain a specific string that provides a human-readable reference back to the Manual:

- EDGAR Filer Manual v{version} 6.{section}.{subsection} page 6-{page}

6.4 Required element <description>

This element has the text of the corresponding section of the Manual, but only for reference; EDGAR Filer Manual Volume II v53 is normative.

This element also sometimes contains parenthetical additions such as (REMARK …) that indicates some implementation detail or related commentary, or a (TODO …) that indicates a known coverage gap or other deficiency in a draft version.

6.5 Optional repeating element <reference>

There can be any number of reference elements but each must have attribute @specification containing any useful string.

7 The <variation> element

Each test case contains one or more variations. Each variation exposes just one aspect of the validation to be performed: either a "no good" variation that is meant to trigger exactly one validation error, or sometimes a "good" variation that is meant to illustrate either the base case or an edge case.

All child elements of <variation> that denote filenames must have distinct contents within a single variation. For example, file "this.txt" cannot appear as both <primary> and as <exhibit>.

7.1 Required attribute @id of <variation>

By convention, this is in the format "_[0-9]{3}((gd)|(ng)|(gw))" in which "gd" always indicates a good (valid) variation, "ng" indicates a no good (invalid or triggering an error) variation and "gw" indicates that this variation is good with warning. A "gw" variation is intended as an example of a submission, which will be accepted with warnings, where a "ng" type submission with be suspended (not accepted).

Concatenating the character "e", the testcase number, and the portion of the @id occurring after the underscore, results in the base name of the files unique to that variation. For example, if the test number is 604-05 and there is a variation named "_003gd" then there will be data files with base name e60405003gd.

The three digit number [0-9]{3} is often a zero based sequence, but may have gaps or some other iteration pattern.

The numbering and meaning of individual variations within a testcase may change from release to release, although this is expected to be rare.

7.2 Required element <name> of <variation>

This contains free form plain text although by convention it begins with the section number and ends with either the token GOOD or NOGOOD. For example, these are the names of variations in 605-01-entity-identifier-scheme:

- 6.5.1, Scheme in instance is http://www.sec.gov/CIK, GOOD
- 6.5.1, Scheme in instance is http://www.sec.gov, NOGOOD

7.3 Required element <description> of <variation>

This contains free form plain text; again by convention it often duplicates the name element contents without the numeric prefix, and is always brief.

7.4 Optional repeating element <reference> of <variation>

There can be any number of reference elements but each must have attribute @specification containing any useful string.

7.5 Required element <data> of <variation>

The data element groups the Interactive Data files in the variation. This has instances, linkbases, and schemas. Although in principle the set of local files in the Discoverable Taxonomy Set (DTS) of the instance is discoverable from the instance, the testcase files also serve as a kind of manifest to ensure a set of files is complete without extraneous content.

The DTS is described in detail along with other XBRL constructs in the XBRL 2.1 Specification at:

http://www.xbrl.org/Specification/XBRL-2.1/REC-2003-12-31/XBRL-2.1-REC-2003-12-31+corrected-errata-2013-02-20.html

7.5.1 Optional repeating element <parameter> of <data>

Sometimes, validation requires an external input. For example, EDGAR uses the Central Index Key (CIK) number to identify filers.

For example, variations in testcase 605-02-entity-identifier-match-cik requires that the CIK of the submission be provided as a parameter to the validation of an instance.

7.5.2 Required attribute @name of <parameter>

A QName that is the name of the parameter. In this test suite the QName content must have the empty namespace.

7.5.3 Required attribute @datatype of <parameter>

A QName that is the datatype of the parameter, usually xs:string.

7.5.4 Required attribute @value <parameter>

A string that is cast to the datatype specified and passed to the validator.

7.5.5 Parameter names, types and values currently in use

@name	@datatype	Sample value
submissionType	xs:string	8-K
cikList	xs:string	9876543210
cikNameList	xs:string	9876543210,3333333333
forceUtrValidation	xs:boolean	false
ELOParams	xs:string (JSON object)	{"submissionType" : "S-1", "exTransitionPeriodFlag" : true, "emergingGrowthCompanyFlag" : true, "smallBusinessFlag" : false}

Testcase e60524 uses parallel lists of CIK and entity names. The delimiter for cikList is the comma character "," and the delimiter for cikNameList is the seven character sequence "|Edgar|". Thus the following elements declare that the first CIK has

company name “ABC & DEF LLC” and the second has company name “THI!S\$TR@NGE N#ME=:;.”

```
<conf:parameter name="ELOparams" value="{&quot;periodOfReport&quot;:
&quot;12-31-2008&quot;, &quot;submissionType&quot;: &quot;8-K&quot;,
&quot;cikList&quot;:&quot;9876543210,3333333333&quot;,
&quot;cikNameList&quot;:&quot;ABC &amp; DEF LLC|Edgar|THI!S $TR@NGE
N#ME=:;.&quot;}"
xmlns=""
xmlns:conf="http://edgar/2009/conformance" />
```

Testcase e60535 uses the parameter forceUtrValidation set to true, so that each instance will be validation with Unit Type Registry validation enabled no matter whether the instance DTS contains element “UTR” in a standard namespace.

Majority of the test cases use the parameter ELOParams (EDGARLink Online Parameters), whose value is a JSON dictionary with the paired submission header element names and their values. The double-quote character must be represented in the xml file as ".

```
<conf:parameter xmlns="" xmlns:xs="http://www.w3.org/2001/XMLSchema"
   name="ELOparams" datatype="xs:string"
   value="{&quot;submissionType&quot; : &quot;S-1&quot; ,
   &quot;exTransitionPeriodFlag&quot; : true,
   &quot;emergingGrowthCompanyFlag&quot; : true,
   &quot;smallBusinessFlag&quot; : false}"/>
```

7.6 Optional repeating element <primary>

The file name of a non-image file type unrelated to XBRL. Its file name may be any EDGAR compliant file name ending in .txt, .htm, or .pdf, and it is meant to indicate that the file is the primary document of an EDGAR submission.

7.6.1 Optional attribute @docType of <primary>

The document type (in the EDGAR submission sense) of the document, for example, "10-K", "485BPOS".

7.7 Required element <instance>

The local file name of the instance must be an EDGAR compliant file name (less than 24 characters, etc). By convention the name is formatted as:

e6{section}{section}[0-9]{3}((gd)|(ng))-200(8|9)1231.xml

For example e60501001ng refers to a no good instance violating Manual section 6.5.1.

By convention, instances that have the date part 20081231 use the 1.0 DEI taxonomy and those with date part 20091231 use the 2009 DEI taxonomy.

The attribute @readMeFirst must be “true”. This attribute indicates to a test script that it is the instance file that is first opened by the validator being tested.

7.8 Optional attribute @exhibitType of <instance>

The exhibitType is a normalized string that defaults to and must be one of the exhibit types that names an XBRL instance, including:

EX-100	(This is an obsolete value)

EX-101	(This is the default value)
EX-99.K SDR	
EX-99.L SDR	

7.9 Optional repeating element <linkbase>

Every variation has linkbases named using the same naming convention as the instance.

Many testcase variations have a set of common linkbases named edgar-20081231_*.* or edgar-20091231_*.*. Identically named "edgar-" linkbase files differ from folder to folder.

7.10 Required repeating element <schema>

Every variation has at least one schema with its own set of linkbases named using the same naming convention as the instance.

Usually a variation has exactly one schema. Rarely, in section 608-schema-syntax or elsewhere, the nature of the testcase may necessitate more than one schema.

Many testcase variations have a set of common schemas named edgar-20081231.xsd, edgar-20091231.xsd or edgar-20111231.xsd. Identically named "edgar-" files may differ from folder to folder.

7.11 Optional repeating element <exhibit>

The file name of a non-image file type unrelated to XBRL. Its file name may be any EDGAR compliant file name ending in .txt, .htm, or .pdf, and it is meant to indicate that the file is a non-primary document of an EDGAR submission.

7.11.1 Optional attribute @docType of <exhibit>

The document type (in the EDGAR submission sense) of the document, for example, "10-K", "485BPOS".

7.12 Required element <result>

For a "no good" variation the result element contains at least one <assert> element.

For a "good" variation the result element may contain an <instance> element.

The element is otherwise empty.

7.12.1 Optional attribute @expected of <result>

When the expected result is to be valid with no warnings or other messages, the @expected attribute may have the value "value".

7.13 Optional repeating element <assert>

The assert element contains information used to group information about the error or warning message expected upon validation.

8 The <assert> element

The assert element declares the severity, associated EFM section and mnemonic error code to be generated. The element allows any other attributes to appear that the author of the variation may deem useful[1].

8.1 Required attribute @severity of <assert>

There are two values, the most common one being "err" and the other "wrn" meaning a warning. In the EDGAR system, a warning does not cause the XBRL files to be stripped from a submission; an error does.

8.2 Required attribute @num of <assert>

The syntax is the same as the <number> element content without the dash. It is not identical because in rare cases the @num may differ from the testcase file where it appears, as for example when one error could not occur without triggering another.

8.3 Required attribute @name of <assert>

A mnemonic code with dash-separated proper case tokens such as "No-Presentation-Order". Tokens are strictly proper case, for example, "No-Xml-Base-Allowed" even for the error concerning attribute "xml:base", or "Illegal-Html" for errors concerning HTML.

8.4 Optional attribute @frd of <assert>

A two-letter code for a related group of assertions; this appears in error codes as reported by EDGAR, such as "60515-cp-No-Xml-Base-Allowed".

8.5 Optional attribute @countSatisfied of <assert>

Defaulting to 0, this indicates the number of satisfied assertions in the variation.

8.6 Optional attribute @countNotSatisfied of <assert>

Defaulting to 1, this indicates the number of assertion violations in the variation.

9 Notes on the folder structure and file details

There are a few exceptions to the mapping from Manual subsections to the test suite. There are no test cases for sections of the manual marked "Reserved".

At this time, there is incomplete coverage of these syntax sections of the Manual:

- 603-filing-syntax (some subsections require information such as the attachment type (EX-100, EX-101) that is not available from the content of the XBRL files themselves. Some of these test variations are contained in directory sto – meaning these are for EDGAR system test only, and these cannot be validated using offline testing).
- There are no separate tests for 605-06, 605-18, 605-26, 607-02, 607-05, 607-06, 609-02, 609-08, 610-07, or 612-04 because these sections do not have their own unique error codes.

[1] The syntax of <assert> is syntactically convertible to that used by the XBRL International Formula 1.0 Specification (http://www.xbrl.org/SpecRecommendations/).

Two files in folder 603-04-no-html-character-entities are not well-formed XML; this is intentional (e60304001ng, e60304002ng-20081231_lab.xml).

There is no coverage of these semantic sections because they do not at this time result in EDGAR warning or error messages:

- 606-instance-semantics
- 608-schema-semantics
- 611-label-semantics
- 613-presentation-semantics
- 615-calculation-semantics
- 617-definition-semantics
- 619-reference-semantics

There are no such subsections 6.22.1 through 6.22.4 in the Manual; these correspond, respectively, to the three issues covered by section 6.22 and the current contents of the http://www.sec.gov/info/edgar/edgartaxonomies.xml file.

Form SDR appears in the EDGAR Filer Manual in Chapter 9. Form SDR differs from other forms because it allows for multiple XBRL instances, requires different exhibit names (EX-99.K SDR.INS, for example, instead of EX-101.INS), and several other .txt and .xml attachments. Test variations specific to Form SDR are in a separate folder and have names that point back to the main test case file in Chapter 6. For example, the test variations specific to Form SDR that are a continuation of 6.3.2 are in this file:

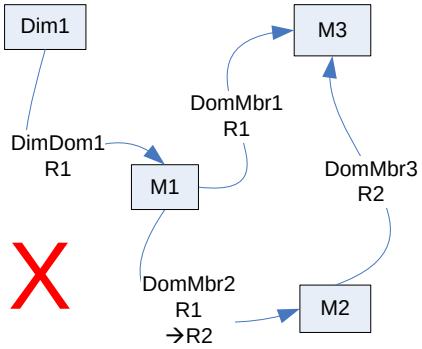
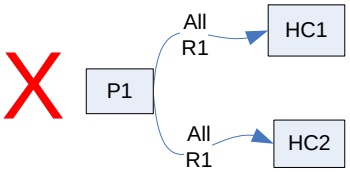
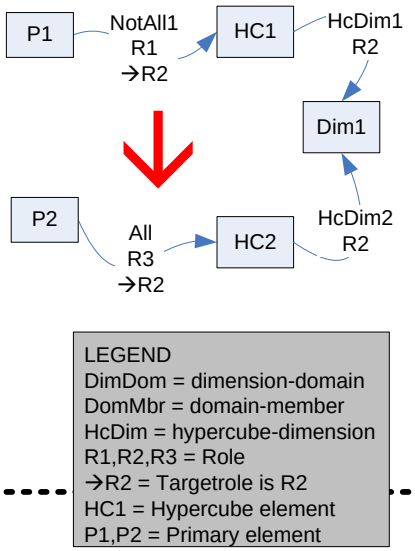
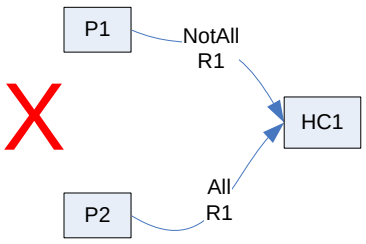
- 902-sdr/60302-sdr-doctype/902-sdr-60302-sdr-doctype-testcase.xml

The child elements of <data> point to separate subfolders for each variation, for example:

```
<variation id="_002gd">
 <name>The minimal valid SDR filing.</name>
  <description>An SDR devoid of content with one K SDR and no L SDR (Exhibit L marked as "not
applicable" in Submission Header).</description>
  <data>
   <conf:parameter xmlns="" value="SDR" name="submissionType" datatype="xs:string"/>
   <instance readMeFirst="true" exhibitType="EX-99.K SDR">002gd/k60302002gd-20151231.xml</instance>
```

10 Notes on 6.16 Definition Syntax Subsections

Subsections 6.16.4, 6.16.6, 6.16.7, and 6.16.8 can be difficult to interpret without further technical explanation. Their test cases are illustrated and explained in the figure below.

	Section text	X Disallowed → Required	Remarks
6.16.4	6.16.4 The xlink:arcrole attribute 'http://xbrl.org/int/dim/arcrole/domain-member' and 'http://xbrl.org/int/dim/arcrole/dimension-domain' must have no undirected cycles in any Directed Relationship Set as defined in XBRL Dimensions 1.0.		This is called "no tangled domains". It applies to every DRS starting from a DimDom relationship. DimDom relationships in different base sets can never be the source of a violation of this rule.
6.16.5	6.16.5 The DTS of an instance must contain in each base set, for each source element, at most one effective relationship with an xlink:arcrole attribute equal to 'http://xbrl.org/int/dim/arcrole/all'.		This was intended to prevent unioning of hypercubes so as to simplify other constraints. Because of primary item inheritance, this rule only rules out the simplest violations.
6.16.7	6.16.7 An axis of a negative table must appear in a positive table in a definitionLink having an equal value of xlink:role. An Axis cannot appear as an Axis of a negative hypercube (that is, axis excluded from a table) unless there are members of that Axis in a positive table. Formally, an axis element that is the target of an effective relationship with arcrole equal to 'http://xbrl.org/int/dim/arcrole/hypercube-dimension' that is consecutive from a relationship with arcrole 'http://xbrl.org/int/dim/arcrole/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 xlink:arcrole attribute equal to 'http://xbrl.org/int/dim/arcrole/all'.		This rule is intended to ensure that the notAll relationship does not forbid members of a dimension that is not even relevant to a hypercube. DomMbr relationships between P1 and P2 are not relevant, since neither all nor notAll are ever consecutive from DomMbr. Note that the rule assumes, but does not require, that the target roles on HcDim1 and HcDim2 are different, so that the members of Dim1 are different in HC1 and HC2.
6.16.8	6.16.8 The target of an effective relationship with an xlink:arcrole attribute equal to 'http://xbrl.org/int/dim/arcrole/notAll' must not be the target of an effective arc with an xlink:arcrole attribute equal to 'http://xbrl.org/int/dim/arcrole/all' in link:definitionLink elements having equal values of xlink:role. This rule ensures that a Table (hypercube) is not both positive and negative.		This rule complements 6.16.7 by ensuring that HC1 and HC2 are distinct. The combination of this constraint, 6.16.4, and XBRL Dimensions 1.0 constraint's prohibition of undirected cycles in HcDim relationships prevents using @targetRole to give the same HC element different members of the same axis.

11 Contacts

Developers with questions, bug reports, or suggestions for additional variations to improve coverage should contact StructuredData (at) sec.gov.

The SEC cannot guarantee a response to every communication. Before sending a bug report, check for the latest version and check the Interactive Data FAQ (https://www.sec.gov/structureddata/FAQs).

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13 Change Log

Version	Changes
13-090917	-
13-091021	Change of namespace to http://edgar/2009/conformance. Addition of index.htm, testcases.xml, and errors.xml. Improved alignment of error codes listed in xbrlerrors.htm and the error codes in the testcase files. Change of @num on e60502000ng to agree with others in the same file. edbody.dtd: attribute 'cite' is no longer allowed on element 'blockquote'. Remark added to e61404 due to discrepancy between wording in the manual and results of variation 007gd. Remark added to e61006 to clarify the 'normalized string' requirement. Three new variations in e60516 to exercise validation of HTML text block bodies against the DTD. These test variations were corrected so that they are more likely to produce only the error being tested: e60306101ng e60306103ng e60502001ng e60502003ng e60523001ng e60523002ng e60903016gd e60904000gd

Version	Changes
	e60904001ng e60907001ng e61003002ng e61003003ng e61004001gd e61004003ng e61403000gd e61404003gd e61602000gd e61603001ng e61604001ng e61604006gd e61604009gd e61608001gd e61609000gd e62202033ng
13-091128	testcases.xml: removed references to nonexistent folders. e61403000gd: removed as unnecessary. e603061**: removed because redundant with e622***** variations. e603064**: removed because redundant with e622***** variations. e603115**: removed because redundant with e622***** variations. e60403004ng: corrected redundant labels. e60502001ng, e60502002ng: corrected irrelevant facts in instance. e61006002ng: corrected redundant labels. e61609000gd: corrected so as not to have ineffectual arcs. edbody.dtd: corrected to disallow attributes cite, char, and charoff for consistency with EFM 5.2.2.2. e60516013ng, e60516014ng: corrected redundant labels. 605-16-html-limited-testcase.xml: Corrected namespace and corrected e60516015ng and e60516016gd for consistency with edbody.dtd e60709: added variation e60709000gd to cover mark characters and variation e60709002ng to cover case-sensitivity.
13-091201	e60403005ng and e60403006ng added to catch XBRL 2.1 validity.
13-100104	Removed spurious <err> element from variation e60709000gd.
13-100303	Removed e61602 because it is redundant with Dimensions 1.0.
14-100405	Moved dei:EntityCommonSharesOutstanding tests from e60521 to e60526; warning conditions changed but code name unchanged. Renumbered e60520, e60521 variations and removed their dependence on the us-gaap 2008 element schema. Removed e60531 which required an order attribute on footnoteArc and removed error du-0531-Footnote-Relationship-Order from xbrlerrors.htm. Updated e6220{1,2,3,4} to test for taxonomy RR 2010. Changed all dei:DocumentType contents to 8-K except in e605** test cases where dei:DocumentType is relevant to the rule. Tests e60511 corrected to remove unused unit declarations and added facts to use all declared units. *-testcase.xml: Updated to have XHTML-formatted equivalent of EFM v14 DRAFT contents. Added lib/descriptions.htm consolidating the

Version	Changes
	HTML version of all rules in the suite.
14-100406	e60704007ng: content corrected to use invalid ISO date "2009-9-12". e60403007gd: added Dimensions 1.0 common domain test.
14-100409	e60521***: Removed stray N-1A document type occurrences. /lib folder: From http://www.sec.gov/info/edgar/ folder, added edgartaxonomies.xml and erxl.xsd.
14-100630	e60515005gd: DocumentType set to 8-K to avoid 6.5.26 violation. e60530000ng: DocumentType set to 8-K to avoid 6.5.26 violation. e60703: added missing <assert> elements to variations. e60703006ng: added 'xbrl.sec.gov' to reserved authority names. e60903017gd: Changed URI to not violate a 'should' condition in 6.7.9. e6100600*: DocumentType set to 8-K to avoid 6.5.26 violation. e6100800*: DocumentType set to 8-K to avoid 6.5.26 violation. e61603: Added remark regarding the need to evaluate with respect to primary items, not just presence of dimensions. e62202033ng, e62202054ng: Corrected Schema and XBRL 2.1 errors. e62203024ng, e62203034ng: Cases covering RR 2010 taxonomy.
16-110210	For all variations in all test cases, removed unnecessary units, facts, and unnecessary dependencies on us-gaap taxonomy schemas. edgartaxonomies.xml: add XBRL International recommended roles, arc roles and types e60403: add variation 011ng formerly e60901001ng e60510: add variation clarifying that an instance has to be 24 hours and 1 second or more after the start of any duration e60510: correct testcase file which had incorrect files included e60515: new variations covering nonnum:textBlockItemType e60516: add variation for when an xmlns attribute appears e60523: add variation 004ng to test parameter – cik mismatch e60535: new test case and variations for new section e60713: add variation for fact-explanatoryFact e60714: remove variation 000gd e60728: new variations covering nonnum:domainItemType e60728: update to match edgartaxonomies.xml namespace authorities e60722: removed e60703: reflect changes in edgartaxonomies.xml e60704: reflect changes in edartaxonomies.xml e60901: move variation 001ng to e60403 as an xlink-level validation e60903: remove files not needed in variations 000, 004, 011 – 016 e60904: remove 000gd and files not needed e61005: remove redundant variations for namesepace authorities e61604: add variations 014 – 018, removing 010 for clarification e61604: remove 'good' variations 006, 007, 008, 009 e61604: add 'nogood' variations 010, 011, 012, 013 e61605: use rr 2008 in preference to ici 2006 lib/error.xml: add error codes Many schemas: add elementDefaultForm='qualified' Many instances: change units for better alignment with forthcoming XBRL International Unit Type Registry Many files: change to encoding="US-ASCII"
16-110225	Added detail in the 'Library Files' section of this document about the edgartaxonomies.xml file and others.

Version	Changes
	Corrected EntityRegistrantName to match variation name in some 30 instance files. e60703, e60716, e62201: clarify that these tests use local copy of edgartaxonomies.xml. e60311: correct variation 512ng to use a smaller set of linkbases. e60403: correct instance to match variation 009gd's intent. e60510: correct period date to avoid warning message. e60515, e60530, e61405: indicate where EFM has not yet been corrected to reflect validation intent. e60520: split variations into those which use 2008 dei taxonomy and those which use 2011 dei in which DocumentType is enumerated. e60521: remove EntityCommonSharesOutstanding variations. e60530: add remark confirming that EFM 16 has incorrect text. e60725: correct 001ng which had a schema validation error. e60728001ng: change context end date to avoid warnings. e60901: remove testcase entirely, it is now covered by e60403. e61203: correct variation 009 description. e62202, forbidden.xml: correct bad invest-doc linkbase reference.
18-111004	e60302, e60521: Make the order of attribute values in assert elements of test case files consistent, to facilitate comparisons. e60302001ng: correct bad namespace prefix declaration. e60305: add a variation 003gd containing all allowed EDGAR characters and a variation 004ng containing the disallowed no-break space character. e60306: edit explanatory text for change made in EFM v17. e60403: add variation 012gd for prefix 'dei' assigned to a namespace other than a dei namespace, variation 016ng to catch empty xlink:href attribute, and variations 013, 014, 015 to test handling of default and fixed attributes on fact values and decimals attributes. e60507001ng: remove dei:DocumentReportType which was deprecated e60512: remove facts of deprecated dei:DocumentReportType e60513: remove facts of deprecated dei:DocumentReportType e60514: change variations 001gd and 002gd to use en-US, add new variations 004ng and 005ng with the same instances, because those are now ng. Remove dei:DocumentReportType facts. e60515: add three variations 013gd, 014ng in which there is an xml comment in the middle of a text block. e60516: add variation 024ng in which xml comment interferes with testing of prohibited EDGAR content. Remove dei:DocumentReportType facts. e60519: in remarks, add 10-KT and 10-QT e60526: add variations covering 10-KT and 10-QT. e60530: remove remark that only applied to EFM v16. Change variation filenames to be like all other testcases. e60536: add new testcase for newly added rule EFM 6.5.36. e60704: remove redundant variation and renumber removing 008ng. e60717: add variation to ensure that id for x:y is not x_y27. e60721: use element type xbrli:decimalItemType to avoid redundancy with syntax detail embedded in semantic rule 6.8.17. e60727: change testcase description text to match EFM text. e60729: add testcase for new syntax rule 6.7.29. e60730: add testcase for new syntax rule 6.7.30.

Version	Changes
	e60903: correct typo in rule text. e61001: Add two new variations to test the heretofore untested case of a used fact (and member) with only an "en" language label. e61004: Change xml:lang of "fr" to "en" in variations to reinforce that the rule applies only to "en-US" labels. Remove empty definition linkbase from variation e61004001gd. e61405: add variation 012gd to make explicit "any other element". Remove remark regarding addition of the word "role" in the rule. e61603: correct capitalization in text of rule. e61604: add variation 019ng for tangled domain in primary items. Change phrase "Domain (or Member)" to "domain members". Remove empty presentation linkbase from variation 002gd. e62203: add text to description of testcase to clarify testcase intent. asserts.xml: add new file consisting of all variation assertions. descriptions.htm: updated with descriptions to match EFM v18. errors.xml: comment out error for e60722 and correct typo in 6.22.0 testcases.xml, testcases.htm: update with 6.5.36, 6.7.29, and 6.7.30 test.xsd: relax restriction in EDGAR file names to allow URI's ending in EDGAR file names. Allow additional elements "info" "result" and open content model to the "variation" element.
18-111021	e60403: edited text of rule to correspond with EFM text. Removed variation 009gd until such time the UTR validation trigger condition can be included correctly; see 6.5.35. e60515: added variations 014, 015, and 016 with additional comment placements in text blocks, and removed definition linkbases. e60516: added variations 025, 026, and 027 with additional comment placement in text blocks, and removed definition linkbases. e60729: removed definition linkbases as irrelevant to the testcase. e60730: removed variations in which targetNamespace contained two-byte characters. Removed definition linkbase as irrelevant to the test case. Edited remarks. e60526: added variations in which there are no definition links. e60534: added variations 5 and 6 in which quoted but disallowed HTML appears harmlessly as strings; removed definition links. e60535: added variation 999gd to make explicit that 6.5.35 is relevant only when element "DTS" appears in a standard namespace. Added remark that this means validators will not be able to distinguish the good from nogood variations until they are revised with a DTS element in a standard namespace. Removed all definition linkbases as irrelevant to the testcase.
18-111122	60305: Add variation 005ng with disallowed EDGAR circumflex (x5E). 60403: Add variations 017gd and 018gd in which measures without namespaces are okay, and 019ng to test for gYear not 4 digits. 60515: Use CDATA instead of ampersand quoting in text block. 60516: Correct problem of missing text block text in 023ng. Use CDATA instead of ampersand quoting in text block. 60520: Add 10-QT, 10-KT, POS AM to remarks 60521: Add 10-QT, 10-KT to remarks and to variations 60535: Add parameter forceUtrValidation to all variations but 999gd. Add documentation of forceUtrValidation to section 7.5.5 above. 60536: Change variations using multibyte Unicode characters so as to use only 2-byte Unicode characters. Correct text to match final EFM

Version	Changes
	text. Correct variation 025ng description. 61202: Remove dependence of 000gd on edgar-20081231.xsd file. 62202: Correct missing imports.
18-120102	62201: Add us-gaap and sec 2012 taxonomies to edgartaxonomies.xml 62202: Change forbidden.xml list to include some 2012 entries 62203: Add cases of incompatibilities using 2012 namespaces.
18-120228	61006: Add variation 005ng for consecutive whitespace. 60509: Correct namespace binding for empty prefix on <parameter> 60510: Correct namespace binding for empty prefix on <parameter> 60520: Correct namespace binding for empty prefix on <parameter> 60521: Correct namespace binding for empty prefix on <parameter> 60523: Correct namespace binding for empty prefix on <parameter> 60524: Correct namespace binding for empty prefix on <parameter> 60535: Correct namespace binding for empty prefix on <parameter> 60904: remove unnecessary <parameter> element
22-130110	lib/test.xsd: Allow an <image> input to a variation and allow uppercase characters and repetitions of underscore and dashes in file names, as EDGAR now allows. e60303: New test case covering valid file names e60306: Remove dependence on dei 2009 linkbases. e60403019ng: Change variation file names to 2012 e60403020ng: New variation tests for missing preferred label. e60403: Update all dei-2011 to dei-2012. e60509, e60510: Simplify linkbase files used e60509, e60510: replace document type 'Other' with '497' e60509008gd: New variation making 24h duration valid. e60510001ng: change CIK e60510002ng: change CIK e60515000gd: Add a legal right bracket character. e60515004gd, e60515005gd, e60515006gd: Delete e60515007gd to e60515011gd: Update from dei 2009 to 2012 e60515008ng: New variation tests for DOCTYPE in text block body. e60515: Update variations from dei 2011 to 2012 e60516011gd: Provide the jpg image referenced in the text block. e60516015ng: Removed irrelevant nested table e60516016gd: Add a gif and jpg image to the text block. e60516018ng through 21ng: Update variations from dei 2009 to 2012. e60516028ng: New variation checks for undefined entity. e60516030ng: New variation with nested table e60516: Change .gif and .jpg file names to match instances. e60516: Clarify that nested tables are not detected by DTD e60516: Update variations from dei 2011 to dei 2012. e60519: Remove dependence on dei 2009. Edit to Remarks. e60520002ng: Change from dei 2008 to dei 2011 e60520010ng-014ng: Remove variations and edgar-20081231 files. e60520: Many new variations covering additional submission types. e60520: Simplify linkbase files used e60520: Update the submission-to-document type table for dei 2012. e60521: Change document type ‘NCSR’ to correct value ‘N-CSR’ e60521: Simplify linkbase files used e60524: change variation names where case-insensitivity is important. e60525: Remove dependence on dei 2009.

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	e60526: Change document type 'NCSR' to correct value 'N-CSR' e60526: Simplify linkbase files used e60534000gd: add a gif to the text block. e60534007ng: New variation testing absent image file e60534008ng: New variation testing invalid image file e60535998gd: New variation testing energy item type e60535999gd: Correct description so it refers to EEK currency. e60535: Edit remarks regarding UTR element triggering validation. e60704008ng: New variation tests for missing authority in namespace with only a date. e60707003ng: New variation tests for missing namespace prefix. e60727: Remove dependence on dei 2009 linkbases. e60728: Remove dependence on dei 2009 linkbases. e60903018ng: New variation tests for ineffectual calculations. e60903: Remove unused namespace prefix declarations. e60903: Variations 000gd, 004ng, 017gd change dei 2008 to 2009. e60909000gd: Remove dependence on dei 2009. e60909: Change use of rr-ent to rr-def e61001: change element labels to avoid spurious LC3 warnings. e61604000gd: Change dependence on rr 2008 to rr 2012. e61604: Change use of rr-ent to rr-def e61605000gd: Change dependence on rr 2008 to dei 2009 schema only e61605000gd: Variation removed, applied only to rr 2008. e61605001ng: Update from dei 2011 to dei 2012 e61605031ng: New variation testing absent image file e61605032ng: New variation testing invalid image file e61607003ng: Change dependence on rr 2008 to dei 2009 schema only e61607003ng: Variation removed, applied only to dei 2009. e62201: Remove files from US GAAP 1.0, SOI 2008, RR 2008. e62202: Add files in US GAAP 1.0, SOI 2008, RR 2008. e62203: Remove variations involving US GAAP 1.0, SOI 2008, RR 2008
22-130206	e60306304ng: Correct xpointer reference. e60311: Corrections to testcase file. Remove variations that would be invalid because the XBRL linkbase schema does not allow xml:base attributes to appear. e604030004ng, e60504000gd, e60504002ng, e60507001ng, e60509001gd, e60509002gd, e60509003gd, e60509005ng, e60510007gd, e60519002gd, e60519003gd, e60527000ng, e60527001ng, e60527002ng, e60527003ng, e60527004ng, e60532000ng, e60701000ng, e60535*: align the document period end date with the required context end date. e60504,e60505: Add schemalocation attribute to linkbases. e60534000gd: Change gif image filename. e60903: Add remarks in testcase file concerning 018ng. e60903018ng: Correct typo in testcase file. e60903019ng: Add variation in which arc priorities are equal. e60903020ng: Add variation in which standard arc has lower priority.

Version	Changes
23-130412	Throughout: Update to the dei-2013 schema in any variation that does not depend on some earlier dei version, and remove dei elements EntityInformationCurrentLegalOrRegisteredName and DocumentReportType that were deprecated in 2012. lib/edgartaxonomies.xml: Remove us-gaap Family 2011 version, replace with us-gaap Family 2013 version. e60403021gd: New variation in which a namespace has two schemas. e60403024ng: New variation in which the date 31 November appears. e60403025ng: New variation in which a schema import is missing. e60403026ng: New variation in which xsi:nil is absent from empty fact. e60535000gd: Add units MWh, etc. Add a decimalItemType case. e60535001gd: Add units MWh, etc. Add a decimalItemType case. e60709000gd: Change URI because /role/ and LC3 are unimportant. e60710: Clarify remark to indicate which schema is being referred to. e62201, e62202, e62203, e62204: Retire Family us-gaap 2011.
23-130426	e6040327ng: New variation testing a data type error. e6040328ng: New variation testing a unitRef attribute error. e6040329ng: New variation testing a missing namespace error. e6040330ng: New variation testing a bad footnote xlink:role value. e60528002gd: Correct bad footnote xlink:role value. e60907001ng: Correct reference to us-gaap 2011 element. e62202026ng: Remove conflict between dei-2011 and dei-2013 e62202027ng: Remove conflict between dei-2011 and dei-2013
24-130611	e603: Correct typo in assertion elements. e61801, e61802: Remove @xlink:role from reference locators. e62201007gd: New variation testing RXD family files. e623: New cases e62301 through e62309 and e62311 to e62344.
24-130710	e62201003gd: Remove negated-2008-03-31.xsd import e62202: Add negated-2008-03-31.xsd to sample forbidden list e62202: Reduce the number of variations from 54 to 20. e62201007gd: Remove variation. e623: Remove all test cases.
25-131024	errors.xml, errors.htm: Update the error code list for the web site. e60305001ng: Correct build problem resulting in an empty instance. e60905000gd: Update negated-2008 reference to negated-2009. e62202007ng: Remove unnecessary import. e62202011ng: Correct missing namespace attribute on import. e62202013ng: Correct missing namespace attribute on import.

Version	Changes
27-140205	Throughout: Update to the dei-2014 schema in any variation that does not depend on some earlier dei version, update to EFM v27. edgartaxonomies.xml, erxl.xsd: add required "version" attribute to indicate the EFM version, initially 27. edgartaxonomies.xml, externals.txt: Remove 2012 US-GAAP Family version, replace with 2014 US-GAAP Family version. errors.xml, errors.htm: Update with new error codes. e60403011ng: New variation testing context validity. e60504: Correct instances that would otherwise trigger 6.7.31. e60509: Edited all variations to relax the restrictions on contexts of one day and affirm that dimensions in contexts and document type have no impact on this rule. e60510: Removed rule and test cases. e60537: Test new error code for nonzero digit truncation. e60538: Test new error code for contexts using the forever period. e60731: Test new error code for custom fraction item types. e60905000gd: Correct minor typo in testcase file. e61009: Test new error code for numeric label roles. e609*,e610*,e612*,e614*,e616*: Correct usage of a nonnumeric abstract element with a numeric label role. e60507*,e60509*,e60516*,e60712*,e60725*,e60727*, e60905*, e61604*, e61609*: Correct EntityRegistrantName value.
27-140220	doc/chapter6.htm: A subset of file conf/descriptions.htm that contains the draft text chapter 6 for the EFM version. e60520007ng: Correct missing contextRef attribute. e6052202*: Add remark regarding error cascades. e60516*,e60536*, e60703*, e60716*, e62201*, e62202*: remove relative anchor hrefs from the testcase files. e60511*: Remove obsolete remark from testcase. lib/utr.xml, lib/utr.xsd, lib/render.xsl: add UTR files. e60535*: Add new variations to cover units added to UTR 2013-05-17 since UTR 2012-11-30.
27-140327	e60732*: New testcase. lib/errors.xml, lib/xbrlerrors.htm: Correct typos and add error du-0732.
27-140514	e60718000gd: New variation covering the case of a non-xbrl element. e60732021gd: New variation covering the case of a non-xbrl element.

Version	Changes
29-141217	e60306609ng: Remove spurious xlink:role on reference locator. e60311, e60403, e60727, e60903: Remove unnecessary namespace prefix bindings. e60403032ng, e60403033ng, e6040334ng, 6040335gd: New variations to distinguish between floats (can have NaN, INF) and decimal types. e60503002ng: Remove unnecessary variation. e60509007gd: Correct the testcase text so as not to suggest that the result is in some way dependent on the document type. e60509012ng: New variation which seems similar to e60509004ng but receives a different result on some validators. e60526: update us-gaap version from 2013 to 2015. 607-testcases.xml and others: Correct to list testcase 607-32. e60731002gd: New variation to confirm that type declaration equivalence is allowed; use of the specific type xbrli:fractionItemType is not. e62201: Update to include us-gaap and exch 2015 schemas. e62202: Update to exclude us-gaap and exch 2013 schemas. e62203: Remove unnecessary variations referencing dei-2012. errors.xml, warnings.xml: Update files to correspond to currently emitted errors and warnings.
31-150505	e62203007gd: Add variation making explicit that dei-2014 can be used with rr-2012. e62201, externals.txt: Update to indicate that country-2012, currency-2012, invest-2012 will continue to be allowed.
31-150529	e60537005ng: Add variation with positive values of the decimals attribute. e62201002gd: Remove erroneous references to 2013 and 2014 schemas.
35-151113	e60306309ng, e60306609ng: remove, because invalid href to reference linkbases cause other EFM errors. e60308: add `exhibitType` attribute to allow multi-instance testing e60308001ng: New variation to distinguish multiple instance cases. e60310: New test case for EFM section 6.3.10. e60403021gd, e6043035gd: Remove unnecessary axes from presentation linkbase. e60512004ng, e60512006ng: remove, because these variations no longer violate section 6.5.12. e60512009gd, e60512010gd, e60512011gd: add variations illustrating cases where redundant facts are allowed (duplicates having the same values). e60513001ng: Change the C-equal facts so that they are not V-equal. e60516033ng: Add variation clarifying that images on the SEC web site cannot be referenced, only local images, as per EFM page 5-12. e60520: Remove unnecessary axes from presentation linkbases. e60523: Remove variations referencing ratings-2009 files. e607: Correct all element declarations to have capitalized names. e60706000gd: Remove unnecessary axes from presentation linkbases. e60729: Remove unnecessary axes from presentation linkbases. e60903017gd: Remove unnecessary axes from presentation linkbase. e61206: New test case for warning about multiple presentation roots. e61207: New test case for warning about mismatched preferred label

Version	Changes
	roles. e61208: New test case for warning about axis without a domain child. e61209: New test case for warning about incomplete unit ordering. e61405012gd: Correct warning about multiple presentation roots. e62203: Remove unnecessary axes from presentation linkbases. e62601: New test case for warning about all facts being filtered. e62602: New test case for warning about incomplete instant - duration -instant fact patterns. e62603: New test case for warning about incomplete statements of changes in equity. e62604: New test case for errors in embedding command syntax. e62605: New test case for errors in missing rows or columns of embedding commands. e62606: New test case for warning about incomplete ordering of rows and column axes in an embedding command. e62607: New test case for warning about empty bar chart commands. e62608: New test case for warning about too many bar chart facts. e62609: New test case for warning about {Elements} token and primary axis on rows. e902: Test cases with variations specific to Form SDR in subfolders 60302, 60308, and 60524.
35-151218	errors.xml: Update with error codes for multiple SDR attachments. e60305006ng: Add variation testing for XML BOM. e605...e626: Correct -testcase.xml files to match page and section numbers, and edit to match latest EFM v35. e60524: Correct file names in variations 004 and 005. e61207: Remove spurious edgar-* linkbases from testcase. 624-rendering, 624-rr-rendering: Add new samples that exercise each rendering feature described in EFM sections 6.24 and 6.25. 626-rendering-syntax: Add new test cases to exercise rendering syntax errors and warnings. 902-sdr/60302: correct CIK and doc types on the first and second L SDR attachments so as not to raise errors unrelated to 6.3.2. 902-sdr/60524: New test case and variations for detecting inconsistent CIK and registrant names in multiple L SDR attachments. 902-sdr/62421: New test case specific to multiple SDR attachments. 902-sdr: remove txt and xml files not needed for validation.
35-160213	e62604007gd: New variation checking for tildes with nothing between. 622: Update references to 2016 taxonomies. 624: Update references to 2016 taxonomies. 605-07: Update references to 2016 taxonomies. 605-26: Update references to 2016 taxonomies. 607-16: Update references to 2016 taxonomies. 607-27: Update references to 2016 taxonomies. 612-09: Update references to 2016 taxonomies. 902-sdr/60302, 60308, 60524, 62421): Update references to 2016. 625-rr/01: Update references to 2016 taxonomies.

Version	Changes
37-160614	525-ix-syntax: New section covering Inline XBRL. e60515: Correct typo in testcase description. e62201: Remove us-gaap 2014, exch 2014, currency 2012, country 2012 from standard taxonomies. e62202: Reduce the number of variations to focus on forbidden schemas and the -doc- and -ref- linkbases of recent schemas. e62205: New subsection of e622 using Inline XBRL instances. 624: Add variation 10-heading/003gd to check column headings. 625-rr/01 variations r01000gd, r01001gd, r02000gd: change DocumentPeriodEndDate to reflect that RR filings do not require the end date to match the required context end date. 62602: Renamed from Duration-Without-Matching-Instant to Instant-Without-Matching-Duration. 62603: Update us-gaap taxonomy references from 2014 to 2016. e62602004gd: New variation with non-abutting instants. 902-sdr/60302/019ng and 020ng: two new variations testing attachment type consistency on EX-99.K SDR and EX-99.L SDR.
37-160623	i00301ng: replace header with <!DOCTYPE html> i02200gd: Add example of mixed duration tagging. 525-ix-syntax/efm/21-duplicates: new test case. 603-08-sdr-instances-testcases: correct error code expected in 001ng. r09002gd: replace deprecated elements in us-gaap 2015. r13000gd: replace deprecated elements in us-gaap 2015. r15001gd: replace deprecated elements in us-gaap 2015.
39-161110	<result>: document its optional children @expected and <instance> Throughout: use CIK=9876543210 and OID TEST CO #1 in variations 525-syntax: throughout, remove unused namespace prefixes and unreferenced ix:hidden facts eligible for transformation according to EFM 5.2.5.14. i00203gd: new variation to check escaped character extraction. i00210gd,i00211gd: new variations to check xml:lang treatment. i00379ng-i00382ng: new variations to check namespace prefix usage. i02200gd: add edge case of 22.5 duration units. i02201gd-i02306ng: Add variations for new ixt-sec transforms for numbers and durations expressed in English words. i04202gd: Add variation with nonnumeric inside a text block. i09204gd-i09206gd: new variations to check footnote extraction. i09001gd,i09203gd: correct footnote role for EFM compliance. efm/11-hidden: new testcases for EFM 5.2.5.14 hidden facts and the style property -sec-ix-hidden. 60505: Remove EFM rule forbidding all typed dimensions. 60516: Update variations to allow <thead><tfoot><tbody>. 60539: New rule covering use of standard typed dimensions. e62202015ng: correct namespace on schema import. errors.xml: Removed Segment-Child-Not-Dimension; added Segment-Child-Not-Dimension, Typed-Dimension-Not-Standard, Hidden-Fact-Not-Found, Standard-Namespace-Prefix. warnings.xml: Added Hidden-Fact-Multiple-References. edbody.dtd: added span, tbody, thead, tfoot. edgartaxonomies-draft.xml, edgartaxonomies.xml: added us-gaap draft-2017-01-31.xsd locations and extensible-enumerations.xsd to facilitate testing.

Version	Changes
39-161212	Throughout: change p0 namespace prefix in _def.xml files to xbrldt i07001gd, i07111ng, i07112ng, i07113ng, i08001gd, i08002gd, i09101ng, i11001gd, i11100ng, i11101ng, i11102ng, i11103ng: correct schemas and linkbases to avoid warnings not relevant to the test. i09101ng: update manifest with <image>. e6060304ng: add a _def.xml linkbase with default members. e61405010gd, e61405012gd: clean up calculation inconsistency. r62409001gd, r62415000gd, r62422000gd, and r62502000gd: update manifest with _def.xml references. r62410000gd: update manifest with _cal.xml reference. lib/asserts.xml: update with new error and warning codes lib/errors.xml: update with error codes hidden-fact-not-found and standard-namespace-prefix. lib/warnings.xml: update with warning codes hidden-fact-multiple-references and hidden-fact-eligible-for-transform.
41-170301	lib/edgartaxonomies-17-1.xml, lib/edgartaxonomies.xml: Update with 2017 taxonomy schemas and us-gaap 2017 template linkbases. Throughout: Update uses of us-gaap, country, currency, exch, and naics schemas to their 2017 versions. lib/asserts.xml, lib/errors.xml: New err Document-Type-Namespace-Inconsistency i02004gd: New variation referencing IFRS 2016 schema. i04001gd: Remove escaping from the registrant name content. i02200gd: Cosmetic change to inline instance table HTML. e60521: Update the testcase manifest to match EFM text. e60539100ng: Correct error code to 0539. e60703004ng: New variation for authority ifrs.org. e60727: Remove us-gaap 2009 variations 000gd and 004ng. e62201: Add IFRS taxonomy variation. e62203075ng: New variation testing 10-K using IFRS 2016. r07002gd, r07003gd, r07004gd: New variations 624/07 to test typed dimension rendering. 902-sdr: remove dei:EntityFilerCategory from variation instances because it is no longer required on EX-99.K, L and M SDR exhibits.

Version	Changes
43-170913	edgartaxonomies-17-3-1.xml: new file forbidden.xml: added four example ifrs related files. asserts.xml, externals.txt: updated to current test suite version. 701-sdr-inline: remove this testcase because Form SDR is not currently allowing Inline attachments. e60311212ng: correct missing label linkbase. e60520: remove variations for F-9 submission types because the F-9 was rescinded in 2011. e60707004ng: new variation signals error if different prefixes are bound to the same namespace. e60909, e61206, e61207, e61208, e626: in all variations that use the rr 2012 taxonomy, correct the form type from 8-K to 485BPOS. e61003006gd: new variation that references an IFRS taxonomy to ensure that IFRS references using xml:lang="en" do not error. e62201: remove us-gaap 2015 and add IFRS 2017, and change the document type of each instance to be consistent with the namespaces in the DTS. e62202020ng, e62202021ng: new variations with IFRS linkbases. e62203: correct variations to use 485BPOS as the document type for RR tests. e62203076ng: new variation checking IFRS/2016 vs IFRS/2017. e62415: new variations 002gd, 003gd, and 004g containing an IFRS statement of changes in equity, with IFRS 2016 and 2017 and with and without a restatements axis. e62602: Update the us-gaap reference from 2015 to 2017 and currency reference from 2016 to 2017. e62609: Correct filenames that had 008ng instead of 009ng. i00200gd: add to the variation instance a comprehensive list of all allowed HTML elements and element-attribute combinations, from EFM vol.2 v.41 section 5.2.2.5. i00200gd: correct the registrant name and central index key. i02200gd: remove the 0's from the duration transform outputs and correct minor HTML warning on a table having too few columns. o0220gd,i02210gd, i01211gd: add missing _htm.xml output files. i10301ng (ned/10-header): correct the error code from 8.1.3 to 8.1.2. i11104ng (ned/11-transform): new variation testing for disallowed text in ix:hidden. i15001gd, i16001gd: add missing _htm.xml output files. i21200gd (ned/02-transform): add duplicate facts in which one has xsi:nil='true'. i21200gd: remove the zero vs. null comparison test. i21201gd: new variation testing ways of expressing zero. i21301ng: add a zero vs. null comparison variation. Throughout: update references from IFRS 2016 to IFRS 2017 where it is not essential to the purpose of the test. Throughout: ensure all -testcases.xml files have a @name attribute.

Version	Changes
45-180412	lib/edgartaxonomies-18-1.xml, lib/edgartaxonomies.xml: Update with 2017 taxonomy schemas and us-gaap 2018 template linkbases. Throughout: Update uses of us-gaap, country, currency, exch, and naics schemas to their 2018 versions. lib/asserts.xml, lib/errors.xml: New err Document-Type-Namespace-Inconsistency i02004gd: New variation referencing IFRS 2018 schema. e62202022ng: new variations with IFRS linkbases. edgartaxonomies-draft.xml, edgartaxonomies.xml: added us-gaap draft-2018-01-31.xsd locations and extensible-enumerations.xsd to facilitate testing. e62203: correct variations to use 485BPOS as the document type for RR tests. e62203076ng: new variation checking IFRS/2017 vs IFRS/2018. e62602: Update the us-gaap reference from 2017 to 2018 and currency reference from 2017 to 2018. e62201009gd, e62201010gd, e62201011gd, e62201012gd
46-180610	lib/edgartaxonomies-18-2.xml, lib/edgartaxonomies.xml: Update with 2018 IFRS taxonomy schemas; remove dei 2009, dei 2013, rr 2010, us-gaap 2016, and exch 2016. lib/asserts.xml, lib/errors.xml: New error codes Incompatible-Taxonomy-Document-Type and Incompatible-Inline-Document-Type. Throughout: update uses of us-gaap, ifrs, rr, dei, and exch taxonomies to their 2018 versions. 525/ned/i02002gd: correct typo in the _htm.xml result file. e60535: Removing e60535998 and e60535999. e60526: introduce the Share Classes Axis as an alternative to the us-gaap Axis for the common shares outstanding facts. e60703007ng: remove xbrl.us as a standard namespace authority. e60727007ng, e60727008ng: remove spurious import of 2009 us types e60728001ng, e60728004ng: remove variations using 2009 us types e62202: simplify by using only dei-2014 and dei-2018 base taxonomies. e6220306ng, e62203072ng, e62203074ng, e62203077ng: remove variations involving taxonomy versions being removed. e62203009ng, e62203075ng, e6220380ng: add consistency checks involving IFRS 2018, and correct expected validation error codes. i22201gd, i22301ng, i22302ng: New test cases for certain combinations of form type and inline format. 902-sdr e60302 test case manifest: correct error codes and remove extraneous label linkbase reference.

Version	Changes
46-180910	Section 5: Expanded explanation of the content of the /lib folder lib/axiswarnings.json: new, for 6.5.43 lib/signwarnings.json: new, for 6.5.44 525-efm-testcases.xml: add missing case i00382ng. e60543010gw, e60543011gd: New variations <parameter>: explain ELOParams syntax. lib/edgartaxonomies-18-3.xml, lib/edgartaxonomies.xml: remove IFRS 2016 taxonomy reference. i00304ng: correct and replace with i00304gw indicating warning, not suspension. e60512: New variations 012 through 020 to exercise numeric comparisons and duplicate removal of "consistent" values. e60712: New variations to signal new warning. e60520: remove submission types N-1A, N-1A/A, POS462B, S-20, S-B, and S-BMEF variations since these are not allowed to have XBRL attachments. Add case e60520475ng for disallowed POS462C. e60540, e60541, e60542, e60543, e60544: New test cases corresponding to new EFM sections 6.5.40 through 6.5.44. e622: Update variations relating to ifrs/2016 usage. Throughout: Update schemas, linkbases, and instances so as to use dei-2018 elements and avoid warnings from rules 6.5.40 through 6.5.44. Replace old US-GAAP and IFRS elements with us-gaap/2018 and ifrs/2018 elements.
48-181001	525-efm-testcases.xml: add missing entry for 04-nonnumeric tests. e60507002ng: New variation with typed dimension. e60520: Remove facts or set facts to nil so as to avoid producing 6.5.40 warnings. e60522: Correct problem with missing facts producing warnings. e60541: New variations testing for nil facts. Renumber gw variations to the conventional sequence. e60543010gw, e60543011gd: New variations for sign exceptions. e60543044: New variation for nil facts deprecated. All *-testcase.xml: Set "ELOparams" to better support offline testing. All instances: Set period end dates and effective dates to agree. Change generic EntityRegistrantName to "OSD TEST CO". Set elements such as EntitySmallBusiness to their default values.

Version	Changes
49-181214	902-sdr, 525-efm: create subfolder 'sto' for tests that are 'system test only', that is, not testable standalone outside of EDGAR. 902-sdr/schemas: Update non-XBRL exhibit schemas, remove text referring to EX-100. 902-sdr: new variation 60302/010ng signaling exhibit type error. e60302: Remove test case; EX-100 is no longer a valid exhibit type. e60308100ng: remove variation because EX-100 is no longer valid. e60310, e60721, e60723, e60724: edit test case remarks to remove the EX-100 references. e60516, e60534: add <primary>,<exhibit> to image variations e60520201gd through e60520206gd: remove N-CSR and N-Q submission type variations. e60521: remove all N-CSR and N-Q submission type variations. e60520470ng: remove variation, no longer needed. e60526: remove all N-CSR and N-Q submission type variations. e60540: new variations 255 through 260 to improve coverage. e62419003gd, e62419004gd, e62419005gd: add variations with QName-valued facts having labels on member values. 625-rendering/01-embedding-commands: correct the testcase file efm/02-transform/202gd: add datequarterend transformations. efm/02-transform/307ng: add datequarterend transformation. efm/11-hidden: add variations for xs:lang and xs:token data types. efm/19-multiio: remove ng cases, add gd cases to reflect that EDGAR will accept Inline XBRL document sets. efm/22-forms : remove ng cases for Risk/Return RR filings. efm/23-rr : new folder of tests specific to Inline XBRL documents that are Risk/Return (RR) filings. Remove elements deprecated in 2018. lib/asserts.xml: new entries resulting from improved error coverage. lib/test.xsd: add new variation elements <primary> and <exhibit>.

Version	Changes
50-190213	lib/edgartaxonomies.xml: add us-gaap/2019, srt/2019, currency/2019 and exch/2019 to permitted taxonomy versions. lib/signwarnings.json: expand the set of exclusion axes and members. 525-ix-syntax/efm/02-transform: in the numwordsen and durwordsen transformation examples, expand allowed whitespace to include no-break spaces and dash characters to the same as ixt:zerodash. 525-ix-syntax/efm/23-rr: add variations appropriate for testing risk/return summary inline viewer features in addition to validation. 525-ix-syntax/ned/00-filing: new test case for warning about self-closing tags. e60520: Change each variation in which the submission type equals the document type so that it is an Inline XBRL (.htm) file. e60520: Expand the submission types covered to include 485APOS, 485BXT, N-1A and N-1A/A. e60521: Correct variations using submission type S-11 to have the emerging growth company flag; add variations for N-CSR forms; correct assertion error names Current-Reporting-Status, Fiscal-Period-Focus and Fiscal-Year-Focus. e60526: Correct variations that were missing series IDs; add variations for N-CSR forms. e60542: Update variations to use elements appearing in 2019 taxonomy deprecations. e62201, e62202, e62203: All variations are now Inline XBRL instances. Throughout: Update references to currency/2017 and exch/2018 to currency/2019 and exch/2019 respectively; remove occurrences of self-closing tags.
50-190311	edgartaxonomies.xml: simplify by removing US GAAP IM family. 525-ix-syntax/efm/23-rr: change sample instances to be more representative of Inline XBRL risk/return summary tagging. 525-ix-syntax/efm/22-forms, 525-ix-syntax/efm/23-rr, e60903, e60519, e60520, e60521, e60522: add elements to instances so as to avoid spurious 6.5.41 warnings. e60520, e60521: Add variations for submission types 485APOS, 485BXT, N-1A, and N-1A/A. Several –testcase.xml files: correct typos in data parameter ELOparams key "emergingGrowthCompanyFlag".
51-190523	Added new test variations corresponding to updated sections of EFM Vol2 Ch6, mainly sections 6.5.20, 6.5.21, 6.5.24, 6.5.26, 6.5.40, 6.5.45 – 6.5.53. In some sections some of the variations are created manually which other generated by generator scripts. Suffixes man (manual) and gen (generated) are used to distinguish these. Added variations are combination of inline XBRL and traditional XBRL. New SEC inline transform (ref EFM v51 draft) examples are included in newly added manual test variations.

Version	Changes
51a-190729	The EFM Conformance Test Suite has been updated to reflect current implementation of EDGAR system going in production on July 29, 2019. As result of this, new variations have been added and existing ones have been cleaned up and/or corrected. Specifically: 1. Updated description of sections 605-20, 21, 24, 40, and 46. 2. Clean up of 605-21, 26, 40, 47-53. 3. New test variations in 605-24, 605-40, 605-46 4. Minor corrections as applicable.
52d-190830	The EFM Conformance Test Suite has been updated corresponding to EFM V.52-draft. Mainly it includes: 1) New test variations in 605-20, 605-21, 605-40 2) Variation updates to reflect: • Deprecation of ifrs-2017 and dei-2014 taxonomies. • Deprecation of all elements of invest-2012 and invest-2013
52-190330	1. 525-ix-syntax\efm\22-forms\22-forms-efm-testcase.xml: Added new inline XBRL form types. 2. 605-instance-syntax\605-21-required-entity-elts\605-21-man\605-21-man-testcase.xml: Added test cases which 8-K with 5.03 item submission header 3. 605-instance-syntax\605-20-required-document-elts\605-20-man\605-20-man-testcase.xml: Added dei:DocumentPeriodEndDate variations. 4. 605-instance-syntax\605-40-submission-header\605-40-man1\605-40-man-testcase.xml: Added submission header tag test variations.
53d-191227	The Interactive Data Conformance Test Suite is being updated as per EFM V.52-draft. Mainly it includes: 1. 605-instance-syntax\605-20-required-document-elts\605-20-man\605-20-man-testcase.xml: Added test cases for dei:DocumentPeriodEndDate. 2. 605-instance-syntax\605-21-required-entity-elts\605-21-man\605-21-man-testcase.xml: Added test cases for dei:EntityWellKnownSeasonedIssuer, dei: CurrentFiscalYearEndDate, dei:EntityVoluntaryFilers, and dei:EntityFilerCategory. 3. 605-instance-syntax\605-40-submission-header\605-40-man1\605-40-man-testcase.xml: Added test cases for dei: EntitySmallBusiness. dei:EntityShellCompany, and dei: EntityEmergingGrowthCompany.
53d-200102	Fixed some of the gd testcases which were producing unintended warnings.
53-200127	Updated as per EFM Vol. II Version 53 final version. Specifically updated the tests for section 6.5.40 where validation rules have been modified for EntityEmergingGrowthCompany and EntityExTransitionPeriod.

Version	Changes
53.1d-200210	lib/edgartaxonomies.xml: Add us-gaap/2020, srt/2020, currency/2020, country/2020, sic/2020 and exch/2020, and remove all versions of INVEST from permitted taxonomy versions. lib/signwarnings.json: Rebuilt signwarnings from fasb DQCRT 2020. e60542: Update variations to use elements appearing in 2020 taxonomy deprecations. e62201, e62202, e62203: Update references to us-gaap/2020, srt/2020, currency/2020, country/2020, sic/2020 and exch/2020, and remove all invest year respectively.
53.1-200309	Finalize the draft version of conformance test suite and update 622-02 and 622-03. Specifically: 1. Correct efm section reference in 622-03-consistent-locations-testcase.xml for e62203078ng and e62203085ng 2. Fix html:syntaxError - srt xml namespace location e62203078ng 3. Corrections to 622-03 testcase to remove cases that were referencing disallowed taxonomy files, and correct various imports and namespaces 4. Remove variation 017ng from 622-02 testcase, it was incorrectly added
53.2d-200515	1. lib/edgartaxonomies.xml – Add 2020 version of IFRS and DEI. Remove SRT 2018, US GAAP 2018, COUNTRY 2016, CURRENCY 2017 and EXCH 2018. 2. Updated xbrlerrors.xml to correct the 6.22.03 error messages. 3. Update section 622 test cases to add tests for all currently allowed taxonomies and negative tests for disallowed taxonomies. 4. Update all tests where disallowed versions of taxonomies were used by updating imports to corresponding currently accepted versions.
53.2-200629	1. Update the version from 53.2d to 53.2. No new test cases were added or updated. 2. Correct the version of edgartaxonomies.xml from Version 54 -> version 53.2, to align with the published version of the conformance test suite.
54d-200824	1. lib/edgartaxonomies.xml – remove disallowed versions of taxonomies: IFRS 2018, DEI 2018 and Risk Return 2018 linkbases (presentation, calculation and definition links) 2. Update all the conformance tests that used the disallowed versions of taxonomies by using the corresponding 2019 versions. 3. EDGAR now allows redlining in inline XBRL documents. (Refer to EFM Vol 2 draft for details.) Added new tests for redlining at - \525-ix-syntax\efm\16-redlining
54-200921	1. Added ng (not good) test variations in 622-02 for DEI-2018 and RR Linkbases 2. Version update from 54d (draft) to 54.