## Technical Enhancements to the 2021 US GAAP Taxonomy Update and SEC Reporting Taxonomy Update

## Extensible Enumerations 2.0 (EE 2.0) [Extensible Lists]

- New EE 2.0 and DTR requirements improperly implemented in software will cause XBRL documents to fail with the 2021 Taxonomy Update
- Extensible List elements introduced with 2017 US GAAP Taxonomy
  - Utilized custom datatype
    - Intended to convert to EE 2.0-defined datatype when the specification reached Recommendation Status, which was attained February 12, 2020
  - Implement with 2021 US GAAP and SRT taxonomies
    - Change the 282 elements from the custom type to the EE 2.0-defined type
    - New ones created as EE 2.0-defined datatype
- Specification location:

https://www.xbrl.org/Specification/extensible-enumerations-2.0/REC-2020-02-12/extensible-enumerations-2.0-REC-2020-02-12.html

Schema location:

https://www.xbrl.org/2020/extensible-enumerations-2.0.xsd

• Requirements location:

http://www.xbrl.org/REQ/extensible-enumerations-1.1/REQ-2016-10-12/extensible-enumerations-requirements-1.1-REQ-2016-10-12.html

- Declared with @type equal to enum2:enumerationSetItemType
  - Attributes new to the Taxonomy:
    - enum2:linkrole
    - enum2:domain
- Three primary requirements for the facts reported with extensible list elements to validate the instance document
  - Proper format of value
    - URI-based notation
    - Different format than utilized for custom datatype
  - Element reported as a fact must exist in a schema
    - Generally, not an issue for base taxonomy elements (US GAAP, SRT, SEC taxonomies)
    - Extension member values need to be defined in extension taxonomy
  - Element must be present in the domain-member relationships defined in the US GAAP and SRT taxonomies
    - Relationships for 2021 taxonomies will be published at the following locations: elts/us-gaap-eedm-def-2021-01-31.xml elts/srt-eedm1-def-2021-01-31.xml
    - Software providers will need to build in capability to augment the lists
    - LinkbaseRef included in base US GAAP schema
- Additional validation:
  - Space-separated list of values
  - Listed facts must be unique
  - Lexicographically ordered

## Data Type Registry (DTR)

- Establishes process for identifying datatypes that have broad utility
- Codifies numeric and non-numeric schemas into a single schema
  - Changes location and namespace
    - E.g., nonnum:domainItemType becomes dtr:domainItemType
- Adds new datatypes that have been requested by jurisdictions
- Includes datatypes for certain US GAAP Taxonomy-defined datatypes
  - o Remove datatypes from elts/us-types-2021-01-31.xsd
    - "Change" of datatypes from GAAP Taxonomy-defined datatypes to DTR
      - gYearListItemType
      - flowItemType
- Adds new datatype of noLangTokenItemType, base type for Enumerations 2.0
  - Necessary for implementation
- Registry location:

http://www.xbrl.org/dtr/2020-01-21/dtr.html

• Schema location:

http://www.xbrl.org/dtr/2020-01-21/dtr.html

- Impact to software
  - o Items hard coded in software may be impacted
  - Extension elements could utilize DTR