# **Version 1 - Version 1.1 Changelog**

## **Utility Network Properties**

- Network Attributes
  - C:UsageType
    - Added
  - C:ConnectionType
    - Removed
  - o C:Connector Use
    - Removed
- Categories
  - o C:Cable Termination
    - Added
  - o C:Port
    - Added
  - C:Splice
    - Added
- Terminal Configurations
  - Communications Hub
    - Removed
- Diagram Templates
  - Basic
    - Added
  - Cable Diagram
    - Added
  - CollapseContainers
    - Added
  - Duct Diagram
    - Added
  - ExpandContainers
    - Added
  - o Splice Diagram
    - Added
  - o Communications Downstream
    - Removed
  - Communications Upstream 1
    - Removed
  - Communications Upstream 2
    - Removed

### **Attribute Rules**

• Attribute rules have been updated to 2.7

#### **Classes**

- Communications Edge Object
  - o Fields
    - aisle
      - Field added
    - assetid
      - Field added
    - bay
- Field added
- building
  - Field added
- floor
  - Field added
- networksite
  - Field added
- room
  - Field added
- Communications Device
  - o Fields
    - aisle
      - Field added
    - assetid
      - Field added
    - bay
      - Field added
    - building
      - Field added
    - floor
      - Field added
    - room
      - Field added
    - insertaction
      - Field removed
- Communications Junction
  - o Fields
    - aisle

- Field added
- assetid
  - Field added
- bay
- Field added
- building
  - Field added
- floor
  - Field added
- networksite
  - Field added
- room
  - Field added
- insertaction
  - Field removed
- Communications Line
  - Fields
    - aisle
      - Field added
    - assetid
      - Field added
    - bay
      - Field added
    - building
      - Field added
    - floor
      - Field added
    - networksite
      - Field added
    - room
      - Field added
    - insertaction
      - Field removed
- Structure Junction
  - o Fields
    - depth\_metric
      - Field added
    - designtype
      - Field added
    - diameter\_metric
      - Field added
    - foundationtype

- Field added
- height\_metric
  - Field added
- Structure Line
  - o Fields
    - diameterwidth metric
      - Field added
- Structure Edge Object
  - Fields
    - ductdiameter
      - Field renamed to diameter

## **Asset Groups, Asset Types and assignments**

- Communication Device
  - Asset Groups
    - Access Cable Components
      - Asset Types
        - Amplifier Enclosure
          - Added with code 7
    - Distribution Cable Components
      - Asset Types
        - Amplifier Enclosure
          - Added with code 7
        - Network Interface Unit
          - Added with code 6
          - Categories
            - C:Cable Termination added
        - Wall Plate
          - Added with code 201
    - Drop Cable Components
      - Asset Types
        - Amplifier Enclosure
          - Added with code 7
        - Hub Terminator
          - Categories
          - C:Cable Termination added
        - Network Interface Unit
          - Categories
            - C:Cable Termination added
    - Indoor Cable Components
      - Asset Types

- Amplifier Enclosure
  - Added with code 7
- National Cable Components
  - Asset Types
    - Amplifier Enclosure
      - Added with code 7
- Regional Cable Components
  - Asset Types
    - Amplifier Enclosure
      - Added with code 7
    - Hub Terminator
      - Categories
      - Subnetwork Controller added
- Submarine Cable Components
  - Asset Types
    - Amplifier Enclosure
      - Added with code 7
- Wireless Components
  - Asset Types
    - Combined Antenna Site
      - Removed
    - Microwave Antenna Site
      - Removed
    - Cell Antenna Site
      - Renamed to Wireless Site
- Communication Edge Object
  - Network Attribute Assignments
    - lifecyclestatus Lifecycle Status assigned
  - Asset Groups
    - Link
      - Asset Types
        - Jumper Cable
        - Added with code 143
    - Connector
      - Asset Types
        - Equipment
        - Removed Code 127
    - Equipment
      - Asset Types
        - Strand Device
        - Removed Code 121
        - Switch

- Removed Code 125
- Amplifier
  - Added with code 21
- Demultiplexer
- Added with code 22
- Multiplexer
- Added with code 23
- Splitter
  - Added with code 25
- Switch
  - Added with code 26
- Baseband Unit
  - Added with code 30
- Medium Conversion
  - Removed
- Wireless Equipment
  - Removed
- Communication Junction Object
  - o Network Attribute Assignments
    - usagetype C:UsageType assigned
    - lifecyclestatus Lifecycle Status assigned
    - servicetype C:Service Type removed
    - connectorusage C:ConnectionType removed
  - Asset Groups
    - Antenna
      - Added with code 11
      - Asset Types
        - Microwave Antenna
          - Added with code 203
          - Categories
            - C:Wireless added
          - Terminal Configurations
            - Communications Port
        - Cell Antenna
          - Added with code 204
          - Categories
            - C:Wireless added
          - Terminal Configurations
            - Communications Port
    - Connector Group
      - Added with code 1

- Asset Types
  - Coax
    - Added with code 122
  - Copper
    - Added with code 123
  - Fiber
    - Added with code 124
- Chassis
  - Added with code 5
  - Asset Types
    - Amplifier
      - Added with code 21
    - Demultiplexer:
      - Added with code 22
    - Multiplexer:
      - Added with code 23
    - Splice:
      - Added with code 24
    - Splitter:
      - Added with code 25
    - Switch:
      - Added with code 26
    - Patch Panel:
      - Added with code 27
    - Baseband Unit:
      - Added with code 30
    - Remote Radio Unit:
      - Added with code 31
    - Microwave Antenna:
      - Added with code 203
    - Cell Antenna:
      - Added with code 204
- Port
  - Added with code 7
  - Asset Types
  - Switch Port:
    - Added with code 121
    - Categories:
      - C:Port
  - Splitter Port: added
    - Added with code 125
    - Categories:

- C:Port added
- Amplifier Port:
  - Added with code 127
  - Categories:
    - C:Port added
  - Terminal Configuration:
    - Communications Equipment
- Patch Panel Port:
  - Added with code 128
  - Categories:
    - C:Port added
  - Terminal Configuration:
    - Communications Equipment
- Demultiplexer Port:
  - Added with code 129
  - Categories:
    - C:Port added
- Multiplexer Port:
- Added with code 130
- Categories:
  - C:Port added
- Terminal Configuration:
  - Communications Equipment
- Baseband Port:
  - Added with code 131
  - Categories:
    - C:Wireless added
- Remote Radio Unit Port:
  - Added with code 132
  - Categories:
    - C:Port added
  - Terminal Configuration:
    - Communications Equipment
- Cell Antenna Port:
  - Added with code 133
  - Categories:
    - C:Port added
  - Terminal Configuration:
    - Communications Equipment
- Microwave Antenna Port:
  - Added with code 134

- Categories:
  - C:Port added
- Terminal Configuration:
  - Communications Equipment
- Equipment
  - Code changed from 5 to 8
  - Asset Types
    - Amplifier
      - Added with code 21
      - Categories:
        - Subnetowrk Controller added
      - Terminal Configuration:
        - Communications Equipment
    - Demultiplexer:
      - Added with code 22
      - Categories:
        - Subnetowrk Controller added
      - Terminal Configuration:
        - Communications Equipment
    - Multiplexer:
      - Added with code 23
      - Categories:
        - Subnetowrk Controller added
      - Terminal Configuration:
        - Communications Equipment
    - Splitter:
      - Added with code 25
      - Categories:
        - Subnetowrk Controller added
      - Terminal Configuration:
        - Communications Equipment
    - Switch:
      - Added with code 26
      - Categories:
        - Subnetowrk Controller added
      - Terminal Configuration:
        - Communications Equipment
    - Baseband Unit:
      - Added with code 30
      - Terminal Configuration:
        - Communications Equipment
- Medium Converter

- Removed
- Port Group
  - Added with code 9
  - Asset Types
    - Input:
      - Added with code 161
    - Output:
      - Added with code 162
    - Tray:
      - Added with code 163
    - Slot:
      - Added with code 164
- Splice
  - Added with code 12
  - Asset Types
    - Splice Point
      - Added with code 261
    - Categories
      - C:Splice added
- Splice Group
  - Added with code 13
  - Asset Types
    - Tray
      - Added with code 163
    - Connector
      - Added with code 241
    - Coupler
      - Added with code 242
- CommunicationLine
  - Asset Groups
    - Indoor Cable
      - Asset Types
        - Coax
          - Categories
            - C:Cable added
        - Copper
          - Categories
            - C:Cable added
        - Fiber
          - Categories
            - C:Cable added

• Structure Boundary

- Asset Groups
  - Wire Vault Boundary
    - Asset Types
      - Duct Port
        - Removed Code 2
- Structure Junction
  - Asset Groups
    - Marker
      - Asset Types
        - Submerged Cable
          - Added with code 464
    - Wire Handhole
      - Asset Types
        - Handhole
          - Assocation role changed from Container to Structure
          - Categories
            - Duct Bank removed
    - Wire Junction Box
      - Asset Types
        - Junction Box
          - Assocation role changed from Container to Structure
    - Wire Vault Access Point
      - Asset Types
        - Manhole
          - Assocation role changed from Container to Structure
          - Categories
            - Ducts added
    - Wire Pedestal
      - Asset Types
        - Pedestal
          - Assocation role changed from Container to Structure
    - Wire Vault
      - Asset Types
        - Vault
          - Assocation role changed from Container to Structure
          - Categories
            - Duct Bank removed
    - Communication Tower
      - Asset Types
        - Microwave Tower
          - Assocation role changed from Container to Structure
        - Wireless Tower
          - Assocation role changed from Container to Structure

- Combined Tower
  - Assocation role changed from Container to Structure
- Stealth Cell Tower
  - Assocation role changed from Container to Structure
- Wire Vault Knockouts
  - Asset Types
    - Knockout
      - Assocation role changed from Container to Structure
      - Categories
        - Duct Bank removed
    - Knockout Ports
      - Assocation role changed from Container to Structure
      - Categories
        - Duct Bank removed
- Structure Junction Object
  - Asset Groups
    - Wire Vault Knockouts
      - Asset Types
        - Knockout
          - Added with code 371

- Structure Line
  - Asset Groups
    - Communication Conduit
      - Asset Types
        - Conduit
          - Code changed from 121 to 111
    - Connector Line
      - Asset Types
        - Handhole Duct
          - Categories
            - Ducts added
        - Vault Duct
          - Categories
            - Duct Bank removed

- Structure Edge Object
  - Network Attribute Assignments
    - diameter Duct Diameter assigned

### **Tiers and Subnetworks**

- All tiers have the following parameters set to false except where noted.
  - o update\_structure\_features
  - update\_container\_features

- manage\_subnetwork\_isdirty Enabled on Cable
- o include\_containers
- include\_content
- o include\_structures
- validate\_locatability
- Fiber
  - Tier removed
- Copper
  - Tier removed
- Coax
- Tier removed
- Cable
  - Tier added to Cables Tier Group
- Communications Circuit
  - Tier added to Strand Tier Group

### **Domains**

- Changes to the asset type domains are listed in the Utility Network section
- Communications\_Cable\_OD\_in
  - o Inch replaced in all descriptions with "
- Communications\_Conduit\_Type
  - Code 1: Abandoned Electric Conduit changed to Code 101: Abandoned Electric Conduit
  - Code 2: Abandoned Gas Pipe changed to Code 102: Abandoned Gas Pipe
  - o Code 3: Abandoned Water Main changed to Code 103: Abandoned Water Main
  - Code 4: Sewer pipe changed to Code 104: Sewer pipe
  - Code 5: Storm Pipe changed to Code 105: Storm Pipe
  - o Code 106: Abandoned Communication Conduit added
- Communications\_Connector\_Type
  - o Domain removed
- Communications\_Device\_Drop\_Type
  - o Code 1: SFU changed to Code 101
  - Code 2: Duplex changed to Code 102
  - Code 3: Triplex changed to Code 103
  - Code 4: Quadraplex changed to Code 104
  - Code 8: Small Cell Site changed to Code 108
  - Code 96: Marco Site changed to Code 110
- Communications\_Port\_Usage\_Type

- o Code 0: add with description 'Unknown'
- Code 21: add with description 'Amplifier'
- Code 22: add with description 'Demultiplexer'
- Code 23: add with description 'Multiplexer'
- Code 24: add with description 'Splice'
- Code 25: add with description 'Splitter'
- Code 26: add with description 'Switch'
- Code 27: add with description 'Patch Panel'
- Code 30: add with description 'Baseband Unit'
- Code 31: add with description 'Remote Radio Unit'
- Code 51: add with description 'In'
- Code 52: add with description 'Out'
- Code 203: add with description 'Microwave Antenna'
- Code 204: add with description 'Cell Antenna'
- Communications\_Service\_Type
  - Code 1: Commercial changed to Code 4
  - Code 2: Critical removed
  - Code 3: Residential changed to Code 2
  - Code 4: None removed
- Communications\_Strand\_Counts\_Distribution
  - Code 2: add with description '2'
  - Code 4: add with description '4'
  - Code 6: add with description '6'
  - Code 8: add with description '8'
  - Code 12: add with description '12'
  - Code 16: add with description '16'
  - Code 18: add with description '18'
  - Code 24: add with description '24'
  - Code 36: add with description '36'

  - Code 48: add with description '48'
  - Code 60: add with description '60'
  - Code 576: add with description '576'
  - Code 668: add with description '668'
  - o Code 720: add with description '720'
  - Code 864: add with description '864'
  - Code 1728: add with description '1728'
- Wire Duct Diameter
  - Inch replaced in all descriptions with "

- Wire\_Duct\_Diameter\_mm
  - All existing codes removed and replaced with values below
  - Code 20 add with description 20 mm
  - Code 25 add with description 25 mm
  - Code 32 add with description 32 mm
  - Code 38 add with description 38 mm
  - Code 40 add with description 40 mm
  - Code 50 add with description 50 mm
  - Code 63 add with description 63 mm
  - Code 75 add with description 75 mm
  - Code 90 add with description 90 mm
  - Code 94 add with description 94 mm
  - Code 100 add with description 100 mm
  - Code 105 add with description 105 mm
  - Code 117 add with description 117 mm
  - Code 125 add with description 125 mm
  - Code 137 add with description 137 mm
  - Code 150 add with description 150 mm
  - o Code 160 add with description 160 mm
  - Code 225 add with description 225 mm
- Wire\_Structure\_Cabinet\_Design\_Type
  - Code 0 add with description Unknown
  - Code 51 add with description Indoor
  - Code 52 add with description Water Proof
  - Code 53 add with description Water Tight
- Wire\_Structure\_Junction\_Anchor\_Guy\_Type
  - Code 0 add with description Unknown
  - Code 41 add with description Single Helix
  - Code 42 add with description Double Helix
  - Code 43 add with description Triple Helix
  - Code 44 add with description Manta Ray
  - Code 45 add with description Square
  - Code 46 add with description Disk
  - Code 47 add with description Rock
- Wire\_Structure\_Junction\_Cabinet\_Material
  - Code 0 add with description Unknown
  - Code 1 add with description Stainless Steel
  - Code 4 add with description Fiberglass
  - Code 6 add with description Steel

- Code 10 add with description Plastic
- Code 15 add with description Nickel
- Code 16 add with description Brushed Nickel
- Code 17 add with description Brushed Stainless Steel
- Code 18 add with description Coated Steel
- Code 20 add with description Other
- Wire\_Structure\_Junction\_Cabinet\_Size
  - Code 0 add with description Unknown
- Wire\_Structure\_Junction\_Foundation
  - Code 0 add with description Unknown
  - Code 1 add with description Other
  - o Code 2 add with description Set Extra Deep In Earth
  - Code 3 add with description Set Normal With Concrete Backfill
  - Code 4 add with description Set Normally In Earth
  - Code 5 add with description Set On Concrete Foundation
- Wire\_Structure\_Junction\_Support\_Pole\_Class
  - Code 0 add with description Unknown
  - Code 1 add with description Class 1
  - Code 2 add with description Class 2
  - Code 3 add with description Class 3
  - Code 4 add with description Class 4
  - Code 5 add with description Class 5
  - Code 6 add with description Class 6
  - Code 7 add with description Class 7
  - o Code 8 add with description Class 8
  - o Code 9 add with description Class 9
  - Code 10 add with description Class 10
  - Code 101 add with description Class H1
- Wire\_Structure\_Junction\_Support\_Pole\_Height
  - Code 0 add with description Unknown
  - Code 35 add with description 35 Feet
  - Code 40 add with description 40 Feet
  - Code 45 add with description 45 Feet
  - Code 50 add with description 50 Feet
  - Code 55 add with description 55 Feet
  - Code 60 add with description 60 Feet
  - Code 65 add with description 65 Feet
  - Code 70 add with description 70 Feet
  - Code 75 add with description 75 Feet

- Code 80 add with description 80 Feet
- Code 85 add with description 85 Feet
- Code 90 add with description 90 Feet
- Code 95 add with description 95 Feet
- Wire\_Structure\_Line\_Aerial\_Support\_Material
  - o Code 0 add with description Unknown
  - Code 4 add with description Fiberglass
  - Code 6 add with description Steel
  - Code 20 add with description Other
- Wire\_Structure\_Line\_Duct\_Bank\_Material
  - Code 0 add with description Unknown
  - Code 3 add with description Composite
  - Code 4 add with description Fiberglass
  - Code 8 add with description Poured Concrete
  - o Code 9 add with description Precast Concrete
  - Code 10 add with description Plastic
  - Code 20 add with description Other
- Wire\_Structure\_Line\_Trench\_Material
  - Code 0 add with description Unknown
  - Code 11 add with description Open
  - Code 12 add with description Earth Covered
  - o Code 20 add with description Other
- Wire\_Structure\_Junction\_Manhole\_Type
  - Code 1: Deep changed to 61: Deep
  - Code 2: Normal changed to 62: Normal
  - Code 3: Shallow changed to 63: Shallow
- Wire\_Structure\_Junction\_Pole\_Class\_Combined
  - Code 201: Class H1 changed to 101: Class H1
  - Code 202: Class H2 changed to 102: Class H2
  - Code 203: Class H3 changed to 103: Class H3
  - Code 204: Class H4 changed to 104: Class H4
  - Code 205: Class H5 changed to 105: Class H5
- Wire\_Structure\_Line\_Duct\_Material
  - Code 9: Precast Concrete changed to 8: Poured Concrete
  - o Code 8: Poured Concrete changed to 9: Precast Concrete