

Version 3.4 – Version 4 Change Log

Information About Previous Releases

[Water Distribution Utility Network Foundation Release Notes](#)

Utility Network Properties

- Network Attribute
 - Device Asset Type
 - Added
 - Line Asset Type
 - Added
 - Measured Length
 - Added

Class

- All classes
 - Fields
 - supportedsubnetworkname
 - Field added
 - Alias set to Supported subnetwork name
- Nonspatial tables added with attachments and edit tracking enabled
 - StructureEdgeObject
 - StructureJunctionObject
 - WaterEdgeObject
 - WaterJunctionObject
- Device_ControllableValve_To_Inspection
 - Changed to Device_ServiceSystemValve_To_Inspection
- StructureBoundary
 - Fields
 - assetid
 - Alias changed to Asset ID
 - inservicedate
 - Alias changed to In-Service Date
 - installdate
 - Alias changed to Install Date
 - lifecyclestatus

- Alias changed to Lifecycle Status
 - name
 - Alias changed to Name
 - notes
 - Alias changed to Notes
 - retireddate
 - Alias changed to Retired Date
 - spatialconfidence
 - Alias changed to Spatial Confidence
 - spatialsource
 - Alias changed to Spatial Source
- StructureJunction
 - Fields
 - assetid
 - Alias changed to Asset ID
 - depth
 - Alias changed to Depth
 - dimension
 - Alias changed to Dimension
 - inservicedate
 - Alias changed to In-Service Date
 - installdate
 - Alias changed to Install Date
 - lifecyclestatus
 - Alias changed to Lifecycle Status
 - Default set to 8
 - maintby
 - Field added
 - Alias set to Maintained By
 - name
 - Alias changed to Name
 - notes
 - Alias changed to Notes
 - ownedby
 - Field added
 - Alias set to Owned By
 - retireddate
 - Alias changed to Retired Date
 - spatialconfidence
 - Alias changed to Spatial Confidence
 - spatialsource

- Alias changed to Spatial Source
 - symbolrotation
 - Alias changed to Symbol Rotation
 - StructureLine
 - Fields
 - assetid
 - Alias changed to Asset ID
 - diameter
 - Alias changed to Diameter
 - filltype
 - Field added
 - Alias set to Fill Type
 - globalid
 - Alias changed to Global ID
 - inservicedate
 - Alias changed to In-Service Date
 - installdate
 - Alias changed to Install Date
 - lifecyclestatus
 - Alias changed to Lifecycle Status
 - Default set to 8
 - measuredlength
 - Alias changed to Measured Length
 - retireddate
 - Alias changed to Retired Date
 - spatialconfidence
 - Alias changed to Spatial Confidence
 - spatialsource
 - Alias changed to Spatial Source
 - WaterAssembly
 - Fields
 - assetid
 - Alias changed to Asset ID
 - creationdate
 - Alias changed to Creation date
 - globalid
 - Alias changed to Global ID
 - inservicedate
 - Alias changed to In-Service Date
 - installdate
 - Alias changed to Install Date
 - cpsubnetworkname

- Field removed
 - dmasubnetworkname
 - Field removed
 - isolationsubnetworkname
 - Field removed
 - pressuresubnetworkname
 - Field removed
- WaterDevice
 - Fields
 - accountid
 - Alias changed to Account ID
 - assetid
 - Alias changed to Asset ID
 - bondedinsulated
 - Alias changed to Bonded/Insulated
 - cpooverride
 - Alias changed to Cathodic Protection Override
 - cpsubnetworkname
 - Alias changed to CP Subnetwork Name
 - cptraceability
 - Alias changed to Cathodic Protection Traceability
 - designinfo
 - Alias changed to designinfo: Anode Depth, Rated Flow, Turns to Close, Voltage
 - designtype
 - Alias changed to designtype: Anode Count, Design Type, Manufacturer, Pump Type, Test Wire Count, Valve Type, Wire Count
 - dmasubnetworkname
 - Alias changed to DMA Subnetwork Name
 - inservicedate
 - Alias changed to In-Service Date
 - installdate
 - Alias changed to Install Date
 - isolationsubnetworkname
 - Alias changed to Isolation Subnetwork Name
 - lastmaint
 - Alias changed to Last Maintenance
 - lifecyclestatus
 - Alias changed to Lifecycle Status
 - maintby
 - Alias changed to Maintained By
 - manufacturer

- Field added
 - Alias set to Manufacturer
 - name
 - Alias set to Name
 - normalstatus
 - Alias changed to Normal Status
 - notes
 - Alias changed to Notes
 - operable
 - Alias changed to Operable
 - operator
 - Field added
 - Alias set to Postindicator Valve
 - ownedby
 - Alias changed to Owned By
 - presentstatus
 - Alias changed to Present Status
 - pressuresubnetworkname
 - Alias changed to Pressure Subnetwork Name
 - retireddate
 - Alias changed to Retired Date
 - spatialconfidence
 - Alias changed to Spatial Confidence
 - spatialsource
 - Alias changed to Spatial Source
 - symbolrotation
 - Alias changed to Symbol Rotation
 - terminalconfiguration
 - Alias changed to Terminal path
 - tiername
 - Alias changed to Tier name
- WaterJunction
 - Fields
 - assetid
 - Alias changed to Asset ID
 - bondedinsulated
 - Alias changed to Bonded/Insulated
 - cpooverride
 - Alias changed to Cathodic Protection Override
 - cpsubnetworkname
 - Alias changed to CP Subnetwork Name

- cptraceability
 - Alias changed to Cathodic Protection Traceability
- diameter
 - Alias changed to Diameter
- dmasubnetworkname
 - Alias changed to DMA Subnetwork Name
- inservicedate
 - Alias changed to In-Service Date
- installdate
 - Alias changed to Install Date
- isolationsubnetworkname
 - Alias changed to Isolation Subnetwork Name
- lifecyclestatus
 - Alias changed to Lifecycle Status
- maintby
 - Alias changed to Maintained By
- notes
 - Alias changed to Notes
- ownedby
 - Alias changed to Owned By
- pressuresubnetworkname
 - Alias changed to Pressure Subnetwork Name
- retireddate
 - Alias changed to Retired Date
- spatialconfidence
 - Alias changed to Spatial Confidence
- spatialsource
 - Alias changed to Spatial Source
- symbolrotation
 - Alias changed to Symbol Rotation
- systemsubnetworkname
 - Alias changed to System Subnetwork Name
- WaterLine
 - Fields
 - assetid
 - Alias changed to Asset ID
 - bondedinsulated
 - Alias changed to Bonded/Insulated
 - cpooverride
 - Alias changed to Cathodic Protection Override
 - cpsubnetworkname
 - Alias changed to CP Subnetwork Name

- cptraceability
 - Alias changed to Cathodic Protection Traceability
- designtype
 - Alias changed to Water Type
- dmasubnetworkname
 - Alias changed to DMA Subnetwork Name
- inservicedate
 - Alias changed to In-Service Date
- installdate
 - Alias changed to Install Date
- isolationsubnetworkname
 - Alias changed to Isolation Subnetwork Name
- lifecyclestatus
 - Alias changed to Lifecycle Status
- maintby
 - Alias changed to Maintained By
- material
 - Alias changed to Material
- measuredlength
 - Alias changed to Measured Length
- notes
 - Alias changed to Notes
- ownedby
 - Alias changed to Owned By
- pressuresubnetworkname
 - Alias changed to Pressure Subnetwork Name
- retireddate
 - Alias changed to Retired Date
- spatialconfidence
 - Alias changed to Spatial Confidence
- spatialsource
 - Alias changed to Spatial Source
- systemsubnetworkname
 - Alias changed to System Subnetwork Name
- WaterSubnetLine
 - Alias changed to Water Network
 - Fields
 - isdirty
 - Default value set to 1

Asset Groups, Asset Types and Assignments

- StructureBoundary
 - Asset Groups
 - Water Vault Boundary
 - Removed
 - Water Valve Box Boundary
 - Removed
 - Pipe Vault
 - Added with code 2
- StructureJunction
 - Asset Groups
 - Water Access Point
 - Removed
 - Pipe Anchor
 - Added with code 2
 - Asset Type
 - Unknown
 - Added with code 0
 - Anchor
 - Added with code 41
 - Pipe Support
 - Added with code 3
 - Asset Type
 - Unknown
 - Added with code 0
 - Pipe Stand
 - Added with code 81
 - Roller
 - Added with code 82
 - Pipe Hanger
 - Added with code 4
 - Asset Type
 - Unknown
 - Added with code 0
 - Constant Spring
 - Added with code 121
 - Rigid
 - Added with code 122
 - Variable Spring
 - Added with code 123
 - Pipe Vault
 - Added with code 6
 - Asset Type

- Unknown
 - Added with code 0
 - Vault
 - Added with code 201
 - Air Release
 - Added with code 202
 - Manhole
 - Added with code 203
 - Pipe Box
 - Added with code 7
 - Asset Type
 - Unknown
 - Added with code 0
 - Curb Box
 - Added with code 61
 - Curb Box with Stationary Rod
 - Added with code 62
 - Roadway
 - Added with code 63
 - Valve Box
 - Added with code 64
 - Meter Box
 - Added with code 65
 - Blow Off
 - Added with code 67
 - Pipe Access Point
 - Added with code 10
 - Asset Type
 - Unknown
 - Added with code 0
 - Manhole Cover
 - Added with code 231
 - Door
 - Added with code 232
 - Grate
 - Added with code 233
 - Hand Hole
 - Added with code 234
 - Lid
 - Added with code 235
- StructureLine
 - Asset Groups

- Water Casing
 - Removed
 - Pipe Casing
 - Added with code 1
- WaterAssembly
 - All Containment View Scale
 - Changed to 10
- WaterDevice
 - Network Attributes
 - assettype
 - Assigned Device Asset Type
 - Asset Groups
 - Controllable Valve
 - Removed, replaced by System Valve and Service Valve
 - System Valve
 - Added with code 2
 - Asset Type
 - Unknown
 - Added with code 0
 - Bypass
 - Added with code 173
 - Categories added
 - Isolating
 - Isolation Zone
 - Added with code 167
 - Categories added
 - Subnetwork Controller
 - Isolating
 - Pressure Zone
 - Added with code 172
 - Categories added
 - Isolating
 - Supply
 - Added with code 169
 - Categories added
 - Isolating
 - System
 - Added with code 170
 - Categories added
 - Isolating
 - Interconnect
 - Added with code 175

- Service Valve
 - Added with code 6
 - Asset Type
 - Unknown
 - Added with code 0
 - Blow Off
 - Added with code 161
 - Hydrant
 - Added with code 164
 - Categories added
 - Disconnecting
 - Sampling
 - Added with code 171
 - Purge
 - Added with code 174
 - Service
 - Added with code 176
 - Categories added
 - Disconnecting
 - Flap
 - Added with code 177
- Controller
 - Asset Type
 - Post Indicator Valve
 - Added with code 123
- Meter
 - Removed, replaced by System Meter and Service Meter
- System Meter
 - Added with code 13
 - Asset Type
 - Unknown
 - Added with code 0
 - Bulk
 - Added with code 41
 - Categories added
 - Subnetwork Controller
 - DMA
 - Added with code 43
 - Categories added
 - Subnetwork Controller
 - Emergency Connection
 - Added with code 44

- assettype
 - Assigned Line Asset Type
 - measuredlength
 - Assigned Measured Length
 - Asset Group
 - Water Main
 - Asset Type
 - Drain
 - Added with code 4
 - Overflow
 - Added with code 5
- WaterSubnetLine

Tiers and Subnetworks

- Cathodic Protection
 - Added to devices
 - Controller / Post Indicator Valve
 - Groundbed / Unknown
 - Groundbed / Anode Bed
 - Pressure Valve / Surge
 - Service Meter / Commercial
 - Service Meter / Fire
 - Service Meter / Industrial
 - Service Meter / Irrigation
 - Service Meter / Residential
 - Service Meter / Unknown
 - Service Valve / Blow Off
 - Service Valve / Flap
 - Service Valve / Hydrant
 - Service Valve / Purge
 - Service Valve / Sampling
 - Service Valve / Service
 - Service Valve / Unknown
 - Station / Pump Station
 - System Meter / Bulk
 - System Meter / DMA
 - System Meter / Emergency Connection
 - System Meter / Pump Station

- System Meter / Unknown
 - System Valve / Bypass
 - System Valve / Interconnect
 - System Valve / Isolation Zone
 - System Valve / Pressure Zone
 - System Valve / Supply
 - System Valve / System
 - System Valve / Unknown
 - Added to junctions
 - Fitting / Clamp
 - Fitting / Tapping Sleeve
 - Added to lines
 - Water Main / Drain
 - Water Main / Overflow
- District Metered Areas (DMAs)
 - Function Summaries
 - Added
 - ADD,Measured
Length,subnetworklength,NETWORK_ATTRIBUTE,Device Asset Group,IS_EQUAL_TO,True,1
 - ADD,Measured
Length,transsubnetworklength,NETWORK_ATTRIBUTE,Line Asset Type,IS_EQUAL_TO,True,1
 - ADD,Measured
Length,distsubnetworklength,NETWORK_ATTRIBUTE,Line Asset Type,IS_EQUAL_TO,True,2
 - Added to devices
 - Service Meter / Commercial
 - Service Meter / Industrial
 - Service Meter / Residential
 - Service Valve / Blow Off
 - Service Valve / Hydrant
 - Service Valve / Purge
 - Service Valve / Sampling
 - Service Valve / Service
 - System Meter / Bulk
 - System Meter / DMA
 - System Meter / Emergency Connection
 - System Meter / Pump Station
 - System Valve / Bypass

- System Valve / Interconnect
 - System Valve / Isolation Zone
 - System Valve / Pressure Zone
 - System Valve / Supply
 - System Valve / System
 - Added to junctions
 - Fitting / Clamp
 - Fitting / Tapping Sleeve
- Isolation
 - Function Summaries
 - Added
 - ADD,Measured Length,subnetworklength,NETWORK_ATTRIBUTE,Device Asset Group,IS_EQUAL_TO,True,1
 - ADD,Measured Length,transsubnetworklength,NETWORK_ATTRIBUTE,Line Asset Type,IS_EQUAL_TO,True,1
 - ADD,Measured Length,distsubnetworklength,NETWORK_ATTRIBUTE,Line Asset Type,IS_EQUAL_TO,True,2
 - Added to devices
 - Controller / Post Indicator Valve
 - Flushing and Blow Off / Blow Off
 - Groundbed / Anode Bed
 - Groundbed / Unknown
 - Injection Facility / Chlorination
 - Injection Facility / Fluoridation
 - Injection Facility / Unknown
 - Monitoring / Unknown
 - Pressure Valve / Surge
 - Pump / Chemical
 - Service Connection / Unknown
 - Service Meter / Commercial
 - Service Meter / Fire
 - Service Meter / Industrial
 - Service Meter / Irrigation
 - Service Meter / Residential
 - Service Meter / Unknown
 - Service Valve / Blow Off
 - Service Valve / Flap

- Service Valve / Hydrant
 - Service Valve / Purge
 - Service Valve / Sampling
 - Service Valve / Service
 - Service Valve / Unknown
 - Station / Pump Station
 - Storage / Reservoir
 - Storage / Standpipe
 - Storage / Storage Tank
 - Storage / Tower
 - Storage / Unknown
 - Supply / Interconnect
 - Supply / Treatment Plant
 - Supply / Unknown
 - Supply / Well
 - System Meter / Bulk
 - System Meter / DMA
 - System Meter / Emergency Connection
 - System Meter / Pump Station
 - System Meter / Unknown
 - System Valve / Bypass
 - System Valve / Interconnect
 - System Valve / Isolation Zone
 - System Valve / Pressure Zone
 - System Valve / Supply
 - System Valve / System
 - System Valve / Unknown
- Added to junctions
 - Fitting / Clamp
 - Fitting / Tapping Sleeve
- Pressure
 - Function Summaries
 - Added
 - ADD,Measured
Length,subnetworklength,NETWORK_ATTRIBUTE,Device Asset Group,IS_EQUAL_TO,True,1
 - ADD,Measured
Length,transsubnetworklength,NETWORK_ATTRIBUTE,Line Asset Type,IS_EQUAL_TO,True,1

- ADD,Measured
Length,distsubnetworklength,NETWORK_ATTRIBUTE,Line Asset
Type,IS_EQUAL_TO,True,2
 - Added to devices
 - Controller / Post Indicator Valve
 - Flushing and Blow Off / Blow Off
 - Groundbed / Anode Bed
 - Groundbed / Unknown
 - Injection Facility / Chlorination
 - Injection Facility / Fluoridation
 - Injection Facility / Unknown
 - Monitoring / Unknown
 - Pressure Valve / Surge
 - Pump / Chemical
 - Service Connection / Unknown
 - Service Meter / Commercial
 - Service Meter / Fire
 - Service Meter / Industrial
 - Service Meter / Irrigation
 - Service Meter / Residential
 - Service Meter / Unknown
 - Service Valve / Blow Off
 - Service Valve / Flap
 - Service Valve / Hydrant
 - Service Valve / Purge
 - Service Valve / Sampling
 - Service Valve / Service
 - Service Valve / Unknown
 - Station / Pump Station
 - Storage / Reservoir
 - Supply / Well
 - System Meter / Bulk
 - System Meter / DMA
 - System Meter / Emergency Connection
 - System Meter / Pump Station
 - System Meter / Unknown
 - System Valve / Bypass
 - System Valve / Interconnect

- System Valve / Isolation Zone
 - System Valve / Pressure Zone
 - System Valve / Supply
 - System Valve / System
 - System Valve / Unknown
 - Added to junctions
 - Fitting / Clamp
 - Fitting / Tapping Sleeve
- Water System
 - Function Summaries
 - Added
 - ADD,Measured
Length,subnetworklength,NETWORK_ATTRIBUTE,Device Asset Group,IS_EQUAL_TO,True,1
 - ADD,Measured
Length,transsubnetworklength,NETWORK_ATTRIBUTE,Line Asset Type,IS_EQUAL_TO,True,1
 - ADD,Measured
Length,distsubnetworklength,NETWORK_ATTRIBUTE,Line Asset Type,IS_EQUAL_TO,True,2
 - Added to devices
 - Controller / Post Indicator Valve
 - Flushing and Blow Off / Blow Off
 - Groundbed / Anode Bed
 - Groundbed / Unknown
 - Injection Facility / Chlorination
 - Injection Facility / Fluoridation
 - Injection Facility / Unknown
 - Monitoring / Unknown
 - Pressure Valve / Surge
 - Pump / Chemical
 - Service Connection / Unknown
 - Service Meter / Commercial
 - Service Meter / Fire
 - Service Meter / Industrial
 - Service Meter / Irrigation
 - Service Meter / Residential
 - Service Meter / Unknown
 - Service Valve / Blow Off
 - Service Valve / Flap

- Service Valve / Hydrant
- Service Valve / Purge
- Service Valve / Sampling
- Service Valve / Service
- Service Valve / Unknown
- Station / Pump Station
- Storage / Reservoir
- Supply / Well
- System Meter / Bulk
- System Meter / DMA
- System Meter / Emergency Connection
- System Meter / Pump Station
- System Meter / Unknown
- System Valve / Bypass
- System Valve / Interconnect
- System Valve / Isolation Zone
- System Valve / Pressure Zone
- System Valve / Supply
- System Valve / System
- System Valve / Unknown
- Added to junctions
 - Fitting / Clamp
 - Fitting / Tapping Sleeve
- Added to lines
 - Water Main / Drain
 - Water Main / Overflow

Domains

- Changes to the asset type domains are listed in the Utility Network section
- Removed
 - Asset_Type_Structure_Boundary_Water_Valve_Box_Boundary
 - Asset_Type_Structure_Boundary_Water_Vault_Boundary
 - Asset_Type_Structure_Junction_Water_Access_Point
 - Asset_Type_Structure_Line_Water_Casing
 - Asset_Type_Water_Device_Controllable_Valve
 - Asset_Type_Water_Device_Meter
 - Pipeline_Device_Status

- Pipeline_Device_Status_Combined
- Water_Access_Point_Depth
- Water_Access_Point_Size
- Water_Casing_Diameters
- Changed
 - CP_Anode_Material changed to CP_Anode_Material_short
 - CP_Rectifier_Manufacturer changed to CP_Rectifier_Manufacturer_int
 - Water_Type
 - Intermediate
 - Added with code 5
 - Finished
 - Added with code 6
 - Anode Weight
 - 1.5
 - Description changed to 1 1/2 lb

Attribute Rules

- StructureBoundary
 - Generate IDs
 - Individual rules replaced by Generate IDs for StructureBoundary
- StructureJunction
 - Generate IDs
 - Individual rules replaced by Generate IDs for StructureJunction
- StructureLine
 - Generate IDs
 - Individual rules replaced by Generate IDs for StructureLine
- WaterDevice
 - CP Traceability
 - Individual rules replaced by Water Device _ Cathodic Protection Traceability
 - Diameter from Line
 - Individual rules replaced by Water Device _ Diameter From Intersection
 - Generate IDs
 - Individual rules replaced by Generate IDs for WaterDevice
 - Device Lifecycle Status From Line
 - Changed to Water Device _ Lifecycle Status From Intersection
 - Device Symbol Rotation
 - Changed to Water Device _ Set Rotation From Line Angle
 - HydrantValveValidation
 - Changed to Water Device _ Hydrant Valve Size
 - Device Owned By From Line

- Changed to Water Device _ Owned By From Intersection
 - BypassValveValidation
 - Changed to Water Device _ Restrict Bypass Valve
 - Device Lifecycle Status From Line
 - Changed to Water Device _ Lifecycle Status From Intersection
 - Device Maintain By From Line
 - Changed to Water Device _ Maintained By From Intersection
 - Device Owned By From Line
 - Changed to Water Device _ Owned By From Intersection
- WaterJunction
 - CP Traceability
 - Individual rules replaced by Water Junction _ Cathodic Protection Traceability
 - Diameter from Line
 - Individual rules replaced by Water Junction _ Diameter From Intersection
 - Generate IDs
 - Individual rules replaced by Generate IDs for WaterJunction
 - Junction Lifecycle Status From Line
 - Changed to Water Junction _ Lifecycle Status From Intersection
 - Junction Maintain By From Line
 - Changed to Water Junction _ Maintained By From Intersection
 - Junction Owned By From Line
 - Changed to Water Junction _ Owned By From Intersection
 - Junction Symbol Rotation
 - Changed to Water Junction _ Set Rotation From Line Angle
- WaterLine
 - CP Traceability
 - Individual rules replaced by Water Line _ Cathodic Protection Traceability
 - Generate IDs
 - Individual rules replaced by Generate IDs for WaterLine
- Water Main greater than or equal to 18_ is a Transmission Main
 - Removed
- Water Line _ MeasuredLength From Shape
 - Added