

National Underground Asset Register (NUAR)

NUAR Data Model Publication

MUDDI UK Excavation Profile - Logical Model - Feature Catalogue

Publication History

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Purpose of this document

This document includes the Feature Catalogue for the logical UK: Excavation profile of the MUDDI Conceptual Model.

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1 MUDDI - UK Excavation Profile - Logical

Package «ApplicationSchema» in package 'MUDDI-UKExcavation'

MUDDI - UK Excavation Profile - Logical Version 2.1.3 Published Created on 06/10/2023. Last modified 08/03/2025

1.1 MUDDI - UK Excavation Profile - Logical diagram

GML diagram in package 'MUDDI - UK Excavation Profile - Logical'

MUDDI - UK Excavation Profile - Logical Version 2.1.3

Created on 06/10/2023. Last modified 09/03/2025

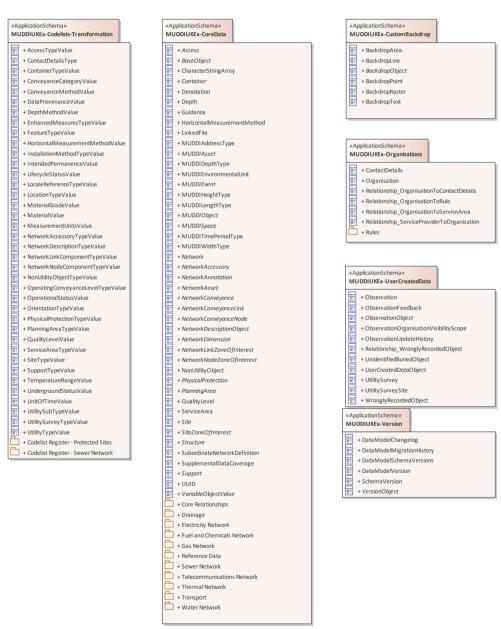


Figure 1: MUDDI - UK Excavation Profile - Logical

1.2 MUDDIUKEx-Codelists-Transformation

Package «ApplicationSchema» in package 'MUDDI - UK Excavation Profile - Logical'

MUDDIUKEx-Codelists-Transformation Version 2.1.3 Published Created on 03/02/2023. Last modified 09/03/2025

1.2.1 MUDDI - UK Excavation Profile - Logical - Codelists-Transformation diagram

GML diagram in package 'MUDDIUKEx-Codelists-Transformation'

MUDDI - UK Excavation Profile - Logical - Codelists-Transformation Version 2.1.3 Created on 09/06/2023. Last modified 09/03/2025

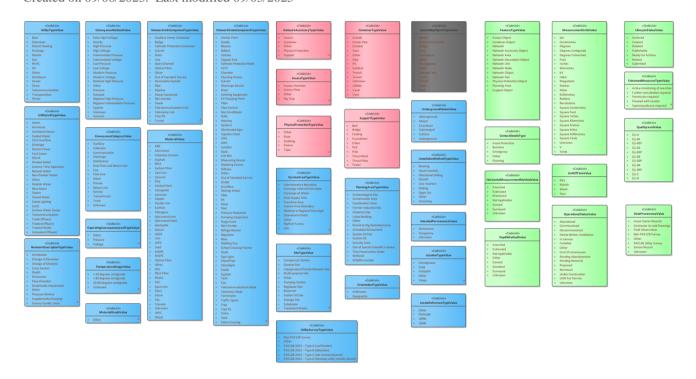


Figure 2: MUDDI - UK Excavation Profile - Logical - Codelists-Transformation

1.2.2 Codelist Register - Protected Sites

Package in package 'MUDDIUKEx-Codelists-Transformation'

Codelist Register - Protected Sites Version 2.1.3 Published Created on 21/08/2021. Last modified 09/03/2025

1.2.2.1 Codelist Register - Protected Sites diagram

GML diagram in package 'Codelist Register - Protected Sites'

Codelist Register - Protected Sites

Version 2.1.3 Created on 21/08/2021. Last modified 09/03/2025

Conservation Area

+ Conservation Area

+ Mossland

+ Protecting And Enhancing Biodiversity And Habitats

+ Wildlife Enhancement Corridors

Figure 3: Codelist Register - Protected Sites

1.2.2.2 DesignationPurposeValue

Class «CodeList» in package 'Codelist Register - Protected Sites'

Designation Purpose Codelist

A list of conservation area designation purposes.

Created on 02/10/2021. Last modified 04/08/2024

ATTRIBUTES			
Conservation Area: Public	[Is static True. Containment is Not Specified.]		
Mossland: Public	[Is static True. Containment is Not Specified.]		
Protecting And Enhancing Biodiversity And Habitats: Public	[Is static True. Containment is Not Specified.]		
Wildlife Enhancement Corridors: Public	[Is static True. Containment is Not Specified.]		

1.2.3 Codelist Register - Sewer Network

Package in package 'MUDDIUKEx-Codelists-Transformation'

Codelist Register - Sewer Network Version 2.1.3 Published Created on 21/08/2021. Last modified 09/03/2025

1.2.3.1 Codelist Register - Sewer Network diagram

GML diagram in package 'Codelist Register - Sewer Network'

Codelist Register - Sewer Network Version 2.1.3 Created on 21/08/2021. Last modified 09/03/2025

«CodeList» SewerDepthTypeValue

- + Downstream Invert Depth
- + Unknown
- + Upstream Invert Depth

Figure 4: Codelist Register - Sewer Network

1.2.3.2 SewerDepthTypeValue

Class «CodeList» in package 'Codelist Register - Sewer Network'

Sewer Depth Type Codelist

A list of sewer depth types.

Created on 21/08/2021. Last modified 04/08/2024

ATTRIBUTES				
Downstream Invert Depth: Public	[Is static True. Containment is Not Specified.]			
	[Is static True. Containment is Not Specified.]			
Upstream Invert Depth: Public	[Is static True. Containment is Not Specified.]			

1.2.4 AccessTypeValue

Class «CodeList» in package 'MUDDIUKEx-Codelists-Transformation'

Access Type Codelist

A list of access types.

ATTRIBUTES	
Access Chamber: Public	[Is static True. Containment is Not Specified.]
Access Plate : Public	[Is static True. Containment is Not Specified.]
Other: Public	[Is static True. Containment is Not Specified.]
Pig Trap: Public	[Is static True. Containment is Not Specified.]

1.2.5 ContactDetailsType

Class «CodeList» in package 'MUDDIUKEx-Codelists-Transformation'

Contact Details Type Codelist

A list of contact detail types.

Created on 11/05/2022. Last modified 04/08/2024

ATTRIBUTES		
Asset Protection: Public	[Is static True. Containment is Not Specified.]	
Business: Public	[Is static True. Containment is Not Specified.]	
Emergency: Public	[Is static True. Containment is Not Specified.]	
Other: Public	[Is static True. Containment is Not Specified.]	
Planning: Public	[Is static True. Containment is Not Specified.]	

1.2.6 ContainerTypeValue

 ${\it Class~`CodeList"} in~package~'MUDDIUKEx-Codelists-Transformation'$

Container Type Codelist

A list of container types.

ATTRIBUTES	
Arcade: Public	[Is static True. Containment is Not Specified.]
Carrier Pipe: Public	[Is static True. Containment is Not Specified.]
	[Is static True. Containment is Not Specified.]
Duct: Public	[Is static True. Containment is Not Specified.]
Other: Public	[Is static True. Containment is Not Specified.]
Pipe: Public	[Is static True. Containment is Not Specified.]

ATTRIBUTES	
Pit: Public	[Is static True. Containment is Not Specified.]
Subduct: Public	[Is static True. Containment is Not Specified.]
Trench: Public	[Is static True. Containment is Not Specified.]
Tunnel: Public	[Is static True. Containment is Not Specified.]
Unknown: Public	[Is static True. Containment is Not Specified.]
Utilidor: Public	[Is static True. Containment is Not Specified.]
Vault: Public	[Is static True. Containment is Not Specified.]
Vent: Public	[Is static True. Containment is Not Specified.]

1.2.7 ConveyanceCategoryValue

Class «CodeList» in package 'MUDDIUKEx-Codelists-Transformation'

Conveyance Category Codelist

A list of roles that particular network segments play in overall network conveyance, e.g. Trunk vs Distribution.

ATTRIBUTES	
Auxiliary: Public	[Is static True. Containment is Not Specified.]
Collection: Public	[Is static True. Containment is Not Specified.]
Communication: Public	[Is static True. Containment is Not Specified.]
Discharge: Public	[Is static True. Containment is Not Specified.]
Distribution: Public	[Is static True. Containment is Not Specified.]

ATTRIBUTES	
Dual Flow and Return Line: Public	[Is static True. Containment is Not Specified.]
Fire: Public	[Is static True. Containment is Not Specified.]
Flow Line: Public	[Is static True. Containment is Not Specified.]
Other: Public	[Is static True. Containment is Not Specified.]
Private: Public	[Is static True. Containment is Not Specified.]
Return Line: Public	[Is static True. Containment is Not Specified.]
Service: Public	[Is static True. Containment is Not Specified.]
Transmission: Public	[Is static True. Containment is Not Specified.]
Trunk: Public	[Is static True. Containment is Not Specified.]
	[Is static True. Containment is Not Specified.]

1.2.8 ConveyanceMethodValue

 $Class\ {\it ``CodeList"}\ in\ package\ 'MUDDIUKEx-Codelists-Transformation'$

Conveyance Method Codelist

A list of methods by which utility commodities are conveyed through a network asset, e.g. gravity vs pumped.

ATTRIBUTES	
Extra High Voltage: Public	[Is static True. Containment is Not Specified.]
Gravity: Public	[Is static True. Containment is Not Specified.]
	[Is static True. Containment is Not Specified.]

ATTRIBUTES	
	[Is static True. Containment is Not Specified.]
Intermediate Pressure : Public	[Is static True. Containment is Not Specified.]
Intermediate Voltage: Public	[Is static True. Containment is Not Specified.]
Low Pressure : Public	[Is static True. Containment is Not Specified.]
Low Voltage: Public	[Is static True. Containment is Not Specified.]
Medium Pressure : Public	[Is static True. Containment is Not Specified.]
Medium Voltage: Public	[Is static True. Containment is Not Specified.]
National High Pressure: Public	[Is static True. Containment is Not Specified.]
Other: Public	[Is static True. Containment is Not Specified.]
Pressure: Public	[Is static True. Containment is Not Specified.]
Pumped: Public	[Is static True. Containment is Not Specified.]
Regional High Pressure : Public	[Is static True. Containment is Not Specified.]
Regional Intermediate Pressure : Public	[Is static True. Containment is Not Specified.]
Syphon: Public	[Is static True. Containment is Not Specified.]
	[Is static True. Containment is Not Specified.]
Vacuum: Public	[Is static True. Containment is Not Specified.]

1.2.9 DataProvenanceValue

Class «CodeList» in package 'MUDDIUKEx-Codelists-Transformation'

Data Provenance Codelist

A list of the potential sources from which data may have been derived.

Created on 10/01/2025. Last modified 08/03/2025

ATTRIBUTES	
Asset Owner Records: Public	[Is static True. Containment is Not Specified.]
Contractor As-laid Drawings: Public	[Is static True. Containment is Not Specified.]
Field Observation: Public	[Is static True. Containment is Not Specified.]
Non-PAS128 Survey: Public	[Is static True. Containment is Not Specified.]
Other: Public	[Is static True. Containment is Not Specified.]
PAS128 Utility Survey: Public	[Is static True. Containment is Not Specified.]
Sensor Record: Public	[Is static True. Containment is Not Specified.]
♦ Unknown: Public	[Is static True. Containment is Not Specified.]

1.2.10 DepthMethodValue

Class «CodeList» in package 'MUDDIUKEx-Codelists-Transformation'

Depth Method Codelist

A list of methods by which the stated depth of a utility asset has been determined.

ATTRIBUTES	
Assumed: Public	[Is static True. Containment is Not Specified.]
Estimated: Public	[Is static True. Containment is Not Specified.]
Not Applicable: Public	[Is static True. Containment is Not Specified.]
Other: Public	

ATTRIBUTES	
	[Is static True. Containment is Not Specified.]
Sensed: Public	[Is static True. Containment is Not Specified.]
Standard: Public	[Is static True. Containment is Not Specified.]
Surveyed: Public	[Is static True. Containment is Not Specified.]
Unknown: Public	[Is static True. Containment is Not Specified.]

1.2.11 EnhancedMeasuresTypeValue

Class «CodeList» in package 'MUDDIUKEx-Codelists-Transformation'

Enhanced Measures Type Codelist

A list of values representing enhanced measures to be undertaken when using data stored in the platform, due to hazards or sensitivities associated with a feature or type of feature.

Created on 18/08/2021. Last modified 04/08/2024

ATTRIBUTES	
Active monitoring of searches: Public	[Is static True. Containment is Not Specified.]
Further consultation required: Public	[Is static True. Containment is Not Specified.]
Permission required: Public	[Is static True. Containment is Not Specified.]
Proceed with caution: Public	[Is static True. Containment is Not Specified.]
Special guidance required: Public	[Is static True. Containment is Not Specified.]

1.2.12 FeatureTypeValue

Class «CodeList» in package 'MUDDIUKEx-Codelists-Transformation'

Feature Type Codelist

A list of feature types for MUDDIObjects. This may be redundant with the name of a derived feature, but allows generic utility information to be typed and also allows new feature types to be added without changing the model.

Created on 19/08/2021. Last modified 04/08/2024

ATTRIBUTES

ATT	RIBUTES	
•	Access Object : Public	[Is static True. Containment is Not Specified.]
•	Container Object : Public Alias: ContainintStructure	[Is static True. Containment is Not Specified.]
•	Network: Public	[Is static True. Containment is Not Specified.]
•	Network Accessory Object : Public	[Is static True. Containment is Not Specified.]
•	Network Area: Public Alias: Secured Area	[Is static True. Containment is Not Specified.]
•	Network Description Object: Public	[Is static True. Containment is Not Specified.]
•	Network Link : Public Alias: Segment	[Is static True. Containment is Not Specified.]
•	Network Node: Public Alias: Device / AccessPoint	[Is static True. Containment is Not Specified.]
ø	Network Object: Public	[Is static True. Containment is Not Specified.]
ø	Network Site: Public	[Is static True. Containment is Not Specified.]
•	Physical Protection Object : Public	[Is static True. Containment is Not Specified.]
•	Planning Area: Public	[Is static True. Containment is Not Specified.]
•	Support Object : Public Alias: Support Structure	[Is static True. Containment is Not Specified.]

1.2.13 HorizontalMeasurementMethodValue

Class «CodeList» in package 'MUDDIUKEx-Codelists-Transformation'

Horizontal Measurement Method Codelist

A list of values for methods of horizontal measurement used while surveying the asset.

Created on 19/08/2021. Last modified 04/08/2024

ATTRIBUTES	
Assumed: Public	[Is static True. Containment is Not Specified.]
Estimated: Public	[Is static True. Containment is Not Specified.]
Measured: Public	[Is static True. Containment is Not Specified.]
Not Applicable: Public	[Is static True. Containment is Not Specified.]
Sensed: Public	[Is static True. Containment is Not Specified.]
Surveyed: Public	[Is static True. Containment is Not Specified.]
Unknown: Public	[Is static True. Containment is Not Specified.]

1.2.14 InstallationMethodTypeValue

Class «CodeList» in package 'MUDDIUKEx-Codelists-Transformation'

Installation Method Codelist

A list of values representing ways in which buried assets may have been installed.

ATTRIBUTES	
Bursting: Public	[Is static True. Containment is Not Specified.]
Dead Insertion: Public	[Is static True. Containment is Not Specified.]
Directional Drilling: Public	[Is static True. Containment is Not Specified.]
Ducted: Public	[Is static True. Containment is Not Specified.]
Live Insertion: Public	[Is static True. Containment is Not Specified.]
Moling: Public	[Is static True. Containment is Not Specified.]

ATTRIBUTES	
Open Cut: Public	[Is static True. Containment is Not Specified.]
Other: Public	[Is static True. Containment is Not Specified.]
Trenching: Public	[Is static True. Containment is Not Specified.]

1.2.15 IntendedPermanenceValue

Class «CodeList» in package 'MUDDIUKEx-Codelists-Transformation'

Intended Permanence Codelist

A list of values for intended permanence.

Created on 19/08/2021. Last modified 04/08/2024

ATTRIBUTES	
Permanent: Public	[Is static True. Containment is Not Specified.]
Temporary: Public	[Is static True. Containment is Not Specified.]
✓ Unknown: Public	[Is static True. Containment is Not Specified.]

1.2.16 LifecycleStatusValue

 $Class\ {\it ``CodeList"}\ in\ package\ 'MUDDIUKEx-Codelists-Transformation'$

Lifecycle Status Codelist

A list of values representing the stage of the feature lifecycle an individual feature is in at a given time.

ATTRIBUTES	
Archived:	[Is static True. Containment is Not Specified.]
Created: Public	[Is static True. Containment is Not Specified.]
Deleted:	[Is static True. Containment is Not Specified.]
Publishable :	[Is static True. Containment is Not Specified.]

ATTRIBUTES	
	[Is static True. Containment is Not Specified.]
Retired:	[Is static True. Containment is Not Specified.]
Submitted:	[Is static True. Containment is Not Specified.]

1.2.17 LocaleReferenceTypeValue

Class «CodeList» in package 'MUDDIUKEx-Codelists-Transformation'

Locale Reference Type Value

A list of types of locale reference, for example USRN, UPRN, Grid Reference.

Created on 28/10/2021. Last modified 04/08/2024

ATTRIBUTES	
♦ Other: Public	[Is static True. Containment is Not Specified.]
Postcode: Public	[Is static True. Containment is Not Specified.]
	[Is static True. Containment is Not Specified.]
♦ USRN: Public	[Is static True. Containment is Not Specified.]

1.2.18 LocationTypeValue

Class «CodeList» in package 'MUDDIUKEx-Codelists-Transformation'

Location Type Codelist

A list of location types.

ATTRIBUTES	
Carriageway: Public	[Is static True. Containment is Not Specified.]
Field: Public	[Is static True. Containment is Not Specified.]
Footpath: Public	[Is static True. Containment is Not Specified.]

ATTRIBUTES	
A ou Div	
Other: Public	[Is static True. Containment is Not Specified.]
	[Is static True. Containment is Not Specified.]

1.2.19 MaterialGradeValue

Class «CodeList» in package 'MUDDIUKEx-Codelists-Transformation'

Material Grade Codelist

A list of grades of materials used in assets (particularly pipelines).

Created on 03/10/2021. Last modified 04/08/2024

ATTRIBUTES	
Other: Public	[Is static True. Containment is Not Specified.]

1.2.20 MaterialValue

 ${\it Class~`CodeList"} in~package~'MUDDIUKEx-Codelists-Transformation'$

Material Codelist

A list of utility asset constituent materials.

ATTRIBUTES	
ABS: Public	[Is static True. Containment is Not Specified.]
Aluminium: Public	[Is static True. Containment is Not Specified.]
Asbestos Cement : Public	[Is static True. Containment is Not Specified.]
Asphalt: Public	[Is static True. Containment is Not Specified.]
	[Is static True. Containment is Not Specified.]
Carbon Fibre: Public	[Is static True. Containment is Not Specified.]
Cast Iron: Public	[Is static True. Containment is Not Specified.]

ATTRIBUTES	
Ceramic: Public	[Is static True. Containment is Not Specified.]
Clay: Public	[Is static True. Containment is Not Specified.]
Coated Steel: Public	[Is static True. Containment is Not Specified.]
Composite: Public	[Is static True. Containment is Not Specified.]
Concrete: Public	[Is static True. Containment is Not Specified.]
Opper: Public	[Is static True. Containment is Not Specified.]
Ductile Iron: Public	[Is static True. Containment is Not Specified.]
Earthen: Public	[Is static True. Containment is Not Specified.]
Fiberglass: Public	[Is static True. Containment is Not Specified.]
Galvanised Iron: Public	[Is static True. Containment is Not Specified.]
Galvanised Steel: Public	[Is static True. Containment is Not Specified.]
Geotextile: Public	[Is static True. Containment is Not Specified.]
Gravel: Public	[Is static True. Containment is Not Specified.]
HDPE: Public	[Is static True. Containment is Not Specified.]
✓ Iron: Public	[Is static True. Containment is Not Specified.]
LDPE: Public	[Is static True. Containment is Not Specified.]

ATTRIBUTES	
	[Is static True. Containment is Not Specified.]
	[Is static True. Containment is Not Specified.]
MOPC: Public	[Is static True. Containment is Not Specified.]
Optical Fibre: Public	[Is static True. Containment is Not Specified.]
Other: Public	[Is static True. Containment is Not Specified.]
PEX: Public	[Is static True. Containment is Not Specified.]
Pitch Fibre: Public	[Is static True. Containment is Not Specified.]
Plastic: Public	[Is static True. Containment is Not Specified.]
PVC: Public	[Is static True. Containment is Not Specified.]
Spun Iron: Public	[Is static True. Containment is Not Specified.]
Steel: Public	[Is static True. Containment is Not Specified.]
Stone: Public	[Is static True. Containment is Not Specified.]
▼ Tile: Public	[Is static True. Containment is Not Specified.]
Transite: Public	[Is static True. Containment is Not Specified.]
	[Is static True. Containment is Not Specified.]
	[Is static True. Containment is Not Specified.]
	[Is static True. Containment is Not Specified.]

1.2.21 MeasurementUnitsValue

Class «CodeList» in package 'MUDDIUKEx-Codelists-Transformation'

Measurement Units Codelist

A list of attribute value measurement units.

ATTRIBUTES	
◆ bar : Public	[Is static True. Containment is Not Specified.]
Centimetres: Public	[Is static True. Containment is Not Specified.]
Degrees: Public	[Is static True. Containment is Not Specified.]
Degrees Centigrade: Public	[Is static True. Containment is Not Specified.]
Degrees Fahrenheit: Public	[Is static True. Containment is Not Specified.]
Feet: Public	[Is static True. Containment is Not Specified.]
✓ Inches: Public	[Is static True. Containment is Not Specified.]
Kilometres: Public	[Is static True. Containment is Not Specified.]
	[Is static True. Containment is Not Specified.]
	[Is static True. Containment is Not Specified.]
Megahertz: Public	[Is static True. Containment is Not Specified.]
Metres: Public	[Is static True. Containment is Not Specified.]
Miles: Public	[Is static True. Containment is Not Specified.]
Millimetres: Public	[Is static True. Containment is Not Specified.]

ATTRIBUTES	·
ATTRIBUTES	
Radians: Public	[Is static True. Containment is Not Specified.]
	[Is static True. Containment is Not Specified.]
Square Centimetres: Public	[Is static True. Containment is Not Specified.]
Square Feet: Public	[Is static True. Containment is Not Specified.]
	[Is static True. Containment is Not Specified.]
	[Is static True. Containment is Not Specified.]
Square Metres: Public	[Is static True. Containment is Not Specified.]
Square Miles: Public	[Is static True. Containment is Not Specified.]
Square Millimetres : Public	[Is static True. Containment is Not Specified.]
Square Yards : Public	[Is static True. Containment is Not Specified.]
↓ Unknown: Public	[Is static True. Containment is Not Specified.]
V: Public	[Is static True. Containment is Not Specified.]
	[Is static True. Containment is Not Specified.]

1.2.22 NetworkAccessoryTypeValue

Class «CodeList» in package 'MUDDIUKEx-Codelists-Transformation'

Network Accessory Type Codelist

A list of specific types of Network Accessory objects.

Created on 19/08/2021. Last modified 04/08/2024

ATTRIBUTES

ATTRIBUTES	
Access: Public	[Is static True. Containment is Not Specified.]
Container: Public	[Is static True. Containment is Not Specified.]
Other: Public	[Is static True. Containment is Not Specified.]
Physical Protection: Public	[Is static True. Containment is Not Specified.]
Support: Public	[Is static True. Containment is Not Specified.]

1.2.23 NetworkDescriptionTypeValue

Class «CodeList» in package 'MUDDIUKEx-Codelists-Transformation'

Network Description Type Codelist

A list of Network Description types, such as annotations, cross-section markers etc.

ATTRIBUTES	
Annotation : Public	[Is static True. Containment is Not Specified.]
Change of Diameter: Public	[Is static True. Containment is Not Specified.]
Change of Material: Public	[Is static True. Containment is Not Specified.]
Cross Section: Public	[Is static True. Containment is Not Specified.]
Depth: Public	[Is static True. Containment is Not Specified.]
Dimension: Public	[Is static True. Containment is Not Specified.]
Flow Direction: Public	[Is static True. Containment is Not Specified.]
Multimedia Attachment : Public	[Is static True. Containment is Not Specified.]
Other: Public	

ATTRIBUTES	
	[Is static True. Containment is Not Specified.]
Pressure Marker: Public	
Tressure Marker. Tublic	[Is static True. Containment is Not Specified.]
Supplemental Drawing: Public	[Is static True. Containment is Not Specified.]
Survey Quality Level: Public	
Survey Quanty Level. Tubile	[Is static True. Containment is Not Specified.]

1.2.24 NetworkLinkComponentTypeValue

Class «CodeList» in package 'MUDDIUKEx-Codelists-Transformation'

Network Link Component Type Codelist

A list of specific types of NetworkLinks. These may be redundant with derived network link feature types and supplemented by more specific component type codelists. It allows new Network Link feature types to be added without changing the model.

ATTRIBUTES	
Auxiliary Power Conductor : Public	[Is static True. Containment is Not Specified.]
Bridge: Public	[Is static True. Containment is Not Specified.]
Cathodic Protection Conductor: Public	[Is static True. Containment is Not Specified.]
Culvert: Public	[Is static True. Containment is Not Specified.]
Drain: Public	[Is static True. Containment is Not Specified.]
Line: Public	[Is static True. Containment is Not Specified.]
Open Channel: Public	[Is static True. Containment is Not Specified.]
Optical Fibre: Public	[Is static True. Containment is Not Specified.]
Other: Public	[Is static True. Containment is Not Specified.]

TRIBUTES		
Out of Stand	dard Service: Public	[Is static True. Containment is Not Specified.
Permeable A	Asphalt : Public	[Is static True. Containment is Not Specified.
Pipe: Publ	ic	[Is static True. Containment is Not Specified.
Pipeline: I	Public	[Is static True. Containment is Not Specified.
Power Cond	luctor: Public	[Is static True. Containment is Not Specified.
Rain Garder	n: Public	[Is static True. Containment is Not Specified.
🗪 Swale : Pu	blic	[Is static True. Containment is Not Specified.
Telecommu	nications Link: Public	[Is static True. Containment is Not Specified.
Telemetry L	ink: Public	[Is static True. Containment is Not Specified.
Tree Pit: I	Public	[Is static True. Containment is Not Specified.
Tunnel: P	ublic	[Is static True. Containment is Not Specified.

1.2.25 NetworkNodeComponentTypeValue

Class «CodeList» in package 'MUDDIUKEx-Codelists-Transformation'

Network Node Component Type Codelist

A list of specific types of NetworkNodes. These may be redundant with derived network node feature types and supplemented by more specific component type codelists. It allows new NetworkNode feature types to be added without changing the model.

ATTRIBUTES	
Anchor Point: Public	[Is static True. Containment is Not Specified.]
	[is static True. Containment is Not Specified.]
Anode: Public	
Properties:	

TTRIBUTES FeatureType = NetworkNode	
reature rype – networkinoue	[Is static True. Containment is Not Specified.]
Public Beacon: Public	[Is static True. Containment is Not Specified.]
Bollard: Public	[Is static True. Containment is Not Specified.]
Cabinet: Public	[Is static True. Containment is Not Specified.]
Capped End: Public	[Is static True. Containment is Not Specified.]
Cathodic Protection Node: Public	[Is static True. Containment is Not Specified.]
CCTV: Public	[Is static True. Containment is Not Specified.]
Chamber: Public	[Is static True. Containment is Not Specified.]
Cleaning Device: Public	[Is static True. Containment is Not Specified.]
Culvert: Public	[Is static True. Containment is Not Specified.]
Discharge Device: Public	[Is static True. Containment is Not Specified.]
Drain: Public	[Is static True. Containment is Not Specified.]
Earthing Equipment: Public	[Is static True. Containment is Not Specified.]
EV Charging Point: Public	[Is static True. Containment is Not Specified.]
Filter: Public	[Is static True. Containment is Not Specified.]
Flow Control: Public	[Is static True. Containment is Not Specified.]
Gas Conditioner: Public	[Is static True. Containment is Not Specified.]

ATTRIBUTES	
Gully: Public	[Is static True. Containment is Not Specified.]
Housing: Public	[Is static True. Containment is Not Specified.]
Hydrant: Public	[Is static True. Containment is Not Specified.]
	[Is static True. Containment is Not Specified.]
	[Is static True. Containment is Not Specified.]
	[Is static True. Containment is Not Specified.]
Joint: Public	[Is static True. Containment is Not Specified.]
Junction: Public	[Is static True. Containment is Not Specified.]
Kiosk: Public	[Is static True. Containment is Not Specified.]
Link Box: Public	[Is static True. Containment is Not Specified.]
Measuring Device : Public	[Is static True. Containment is Not Specified.]
Metering Device : Public	[Is static True. Containment is Not Specified.]
Offtake: Public	[Is static True. Containment is Not Specified.]
Other: Public	[Is static True. Containment is Not Specified.]
Out of Standard Service : Public	[Is static True. Containment is Not Specified.]
Outlet: Public	[Is static True. Containment is Not Specified.]
Overflow: Public	[Is static True. Containment is Not Specified.]

[Is static True. Containment is Not Specified.]
[Is static True. Containment is Not Specified.]
[Is static True. Containment is Not Specified.]
[Is static True. Containment is Not Specified.]
[Is static True. Containment is Not Specified.]
[Is static True. Containment is Not Specified.]
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[Is static True. Containment is Not Specified.]
[Is static True. Containment is Not Specified.]
[Is static True. Containment is Not Specified.]
[Is static True. Containment is Not Specified.]
[Is static True. Containment is Not Specified.]

ATTRIBUTES	
	[Is static True. Containment is Not Specified.]
Streetlight: Public	[Is static True. Containment is Not Specified.]
Swale: Public	[Is static True. Containment is Not Specified.]
Syphon: Public	[Is static True. Containment is Not Specified.]
Tank: Public	[Is static True. Containment is Not Specified.]
Tee: Public	[Is static True. Containment is Not Specified.]
Telecommunications Node: Public	[Is static True. Containment is Not Specified.]
Telemetry Node: Public	[Is static True. Containment is Not Specified.]
Terminator: Public	[Is static True. Containment is Not Specified.]
Traffic Signal: Public	[Is static True. Containment is Not Specified.]
▼ Trap : Public	[Is static True. Containment is Not Specified.]
Tree Pit: Public	[Is static True. Containment is Not Specified.]
	[Is static True. Containment is Not Specified.]
Vent: Public	[Is static True. Containment is Not Specified.]
	[Is static True. Containment is Not Specified.]

1.2.26 NonUtilityObjectTypeValue

Class «CodeList» in package 'MUDDIUKEx-Codelists-Transformation'

Non-Utility Object Type Value Codelist

A list of Non-Utility object types.

Created on 21/08/2021. Last modified 04/08/2024

ATTRIBUTES	
Barrier: Public	[Is static True. Containment is Not Specified.]
Basement or Cellar: Public	[Is static True. Containment is Not Specified.]
Bridge: Public	[Is static True. Containment is Not Specified.]
Duct: Public	[Is static True. Containment is Not Specified.]
Foundation: Public	[Is static True. Containment is Not Specified.]
Other: Public	[Is static True. Containment is Not Specified.]
Passageway: Public	[Is static True. Containment is Not Specified.]
Shaft: Public	[Is static True. Containment is Not Specified.]
Storage Tank: Public	[Is static True. Containment is Not Specified.]
Tracks: Public	[Is static True. Containment is Not Specified.]
▼ Tunnel: Public	[Is static True. Containment is Not Specified.]
	[Is static True. Containment is Not Specified.]
	[Is static True. Containment is Not Specified.]

1.2.27 OperatingConveyanceLevelTypeValue

 $Class\ {\it ``CodeList"}\ in\ package\ 'MUDDIUKEx-Codelists-Transformation'$

Operating Conveyance Level Codelist

A list of levels quantifying the methods by which utility commodities are conveyed through a network asset, e.g. pressure or voltage.

ATTRIBUTES	
Other: Public	[Is static True. Containment is Not Specified.]
Pressure: Public	[Is static True. Containment is Not Specified.]
♦ Voltage: Public	[Is static True. Containment is Not Specified.]

1.2.28 OperationalStatusValue

Class «CodeList» in package 'MUDDIUKEx-Codelists-Transformation'

Operational Status Codelist

 \bar{A} list of operational status values for MUDDIObjects.

ATTRIBUTES	
Abandoned: Public	[Is static True. Containment is Not Specified.]
Commissioned : Public	[Is static True. Containment is Not Specified.]
Decommissioned: Public	[Is static True. Containment is Not Specified.]
Delete Before Installation : Public	[Is static True. Containment is Not Specified.]
✓ In Service : Public	[Is static True. Containment is Not Specified.]
✓ Installed : Public	[Is static True. Containment is Not Specified.]
Other: Public	[Is static True. Containment is Not Specified.]
Out Of Commission: Public	[Is static True. Containment is Not Specified.]
Pending Abandonment: Public	[Is static True. Containment is Not Specified.]
Pending Removal: Public	[Is static True. Containment is Not Specified.]

ATTRIBUTES	
Proposed: Public	[Is static True. Containment is Not Specified.]
Removed: Public	[Is static True. Containment is Not Specified.]
	[Is static True. Containment is Not Specified.]
♦ Unfit For Service : Public	[Is static True. Containment is Not Specified.]
✓ Unknown: Public	[Is static True. Containment is Not Specified.]

1.2.29 OrientationTypeValue

Class «CodeList» in package 'MUDDIUKEx-Codelists-Transformation'

Orientation Type Value

A list of orientation types for text and symbol angles.

Created on 03/02/2025. Last modified 08/03/2025

ATTRIBUTES	
Arithmetic: Public	[Is static True. Containment is Not Specified.]
Geographic: Public	[Is static True. Containment is Not Specified.]

1.2.30 PhysicalProtectionTypeValue

Class «CodeList» in package 'MUDDIUKEx-Codelists-Transformation'

Physical Protection Type Codelist

A list of types of physical protection used for assets.

ATTRIBUTES	
Other: Public	[Is static True. Containment is Not Specified.]
Plate: Public	[Is static True. Containment is Not Specified.]
Slabbing: Public	[Is static True. Containment is Not Specified.]

ATTRIBUTES	
	[Is static True. Containment is Not Specified.]
Tape: Public	[Is static True. Containment is Not Specified.]

1.2.31 PlanningAreaTypeValue

Class «CodeList» in package 'MUDDIUKEx-Codelists-Transformation'

Planning Area Codelist

A list of planning area types. Redundant with derived planning region feature types but allows new region types to be defined without changing the model.

ATTRIBUTES	
Archaeological Site: Public	[Is static True. Containment is Not Specified.]
Conservation Area: Public	[Is static True. Containment is Not Specified.]
Coordination Zone: Public	[Is static True. Containment is Not Specified.]
Former Industrial Site: Public	[Is static True. Containment is Not Specified.]
Historical Site: Public	[Is static True. Containment is Not Specified.]
Listed Building: Public	[Is static True. Containment is Not Specified.]
Other: Public	[Is static True. Containment is Not Specified.]
Permit to Dig Restricted Area: Public	[Is static True. Containment is Not Specified.]
Scheduled Monument : Public	[Is static True. Containment is Not Specified.]
Section 50 Site: Public	[Is static True. Containment is Not Specified.]
Section 58: Public	[Is static True. Containment is Not Specified.]

ATTRIBUTES	
Security Zone : Public	[Is static True. Containment is Not Specified.]
Site of Special Scientific Interest: Public	[Is static True. Containment is Not Specified.]
Tree Preservation Order: Public	[Is static True. Containment is Not Specified.]
Wetland: Public	[Is static True. Containment is Not Specified.]
	[Is static True. Containment is Not Specified.]

1.2.32 QualityLevelValue

Class «CodeList» in package 'MUDDIUKEx-Codelists-Transformation'

Quality Level Codelist

A list of Utility Survey quality levels from PAS128:2022.

ATTRIBUTES	
♥ QL-A: Public	[Is static True. Containment is Not Specified.]
QL-B1: Public	[Is static True. Containment is Not Specified.]
QL-B1P: Public	[Is static True. Containment is Not Specified.]
♦ QL-B2: Public	[Is static True. Containment is Not Specified.]
♥ QL-B2P: Public	[Is static True. Containment is Not Specified.]
♦ QL-B3 : Public	[Is static True. Containment is Not Specified.]
QL-B3P: Public	[Is static True. Containment is Not Specified.]
♥ QL-B4: Public	[Is static True. Containment is Not Specified.]

ATTRIBUTES	
QL-B4P: Public	[Is static True. Containment is Not Specified.]
♦ QL-C: Public	[Is static True. Containment is Not Specified.]
♦ QL-D: Public	[Is static True. Containment is Not Specified.]

1.2.33 ServiceAreaTypeValue

 $Class\ {\it ``CodeList"}\ in\ package\ 'MUDDIUKEx-Codelists-Transformation'$

Service Area Type Codelist

A list of specific types of Network Areas. Areas may relate to full coverage for a given network, more granular operational patches, individual sites or indications of rights of access.

ATTRIBUTES	
Administrative Boundary: Public	[Is static True. Containment is Not Specified.]
Coverage inferred from data: Public	[Is static True. Containment is Not Specified.]
Coverage of Works: Public	[Is static True. Containment is Not Specified.]
Data Supply Area: Public	[Is static True. Containment is Not Specified.]
Franchise Area: Public	[Is static True. Containment is Not Specified.]
Licence Area Boundary: Public	[Is static True. Containment is Not Specified.]
National or Regional Coverage: Public	[Is static True. Containment is Not Specified.]
Operational Patch: Public	[Is static True. Containment is Not Specified.]
Other: Public	[Is static True. Containment is Not Specified.]
Right of Access: Public	[Is static True. Containment is Not Specified.]

ATTRIBUTES	
Site: Public	[Is static True. Containment is Not Specified.]

SiteTypeValue 1.2.34

Class «CodeList» in package 'MUDDIUKEx-Codelists-Transformation'

Site Type Codelist
A list of specific types of Sites.

ATTRIBUTES	
Compressor Station: Public	[Is static True. Containment is Not Specified.]
General Site: Public	[Is static True. Containment is Not Specified.]
Independent/Private Network Site: Public	[Is static True. Containment is Not Specified.]
Multi-purpose Site: Public	[Is static True. Containment is Not Specified.]
Other: Public	[Is static True. Containment is Not Specified.]
Pumping Station: Public	[Is static True. Containment is Not Specified.]
Regulator Site: Public	[Is static True. Containment is Not Specified.]
Reservoir: Public	[Is static True. Containment is Not Specified.]
Section 50 Site: Public	[Is static True. Containment is Not Specified.]
Storage Site: Public	[Is static True. Containment is Not Specified.]
Substation: Public	[Is static True. Containment is Not Specified.]
Treatment Works: Public	[Is static True. Containment is Not Specified.]

1.2.35 SupportTypeValue

Class «CodeList» in package 'MUDDIUKEx-Codelists-Transformation'

Support Type Codelist

A list of types of utility asset supports, e.g. Footing vs Tower.

Created on 19/08/2021. Last modified 04/08/2024

ATTRIBUTES	
	[Is static True. Containment is Not Specified.]
	[Is static True. Containment is Not Specified.]
Footing: Public	[Is static True. Containment is Not Specified.]
Foundation: Public	[Is static True. Containment is Not Specified.]
Other: Public	[Is static True. Containment is Not Specified.]
Pad: Public	[Is static True. Containment is Not Specified.]
Pole: Public	[Is static True. Containment is Not Specified.]
	[Is static True. Containment is Not Specified.]
	[Is static True. Containment is Not Specified.]
Tower: Public	[Is static True. Containment is Not Specified.]

1.2.36 TemperatureRangeValue

Class «CodeList» in package 'MUDDIUKEx-Codelists-Transformation'

Temperature Range Codelist

A list of temperature ranges.



ATTRIBUTES	
> 80 degrees centigrade : Public	[Is static True. Containment is Not Specified.]
♦ 50-80 degrees centigrade : Public	[Is static True. Containment is Not Specified.]
♦ Unheated: Public	[Is static True. Containment is Not Specified.]

1.2.37 UndergroundStatusValue

Class «CodeList» in package 'MUDDIUKEx-Codelists-Transformation'

Underground Status Codelist

A list of underground status, e.g. Underground vs. Surface, Utility assets which are not fully buried may still be represented in this model so as to provide important information and constraints on underground utility infrastructure.

Created on 19/08/2021. Last modified 04/08/2024

ATTRIBUTES	
Aboveground: Public	[Is static True. Containment is Not Specified.]
Mixed: Public	[Is static True. Containment is Not Specified.]
Overhead: Public	[Is static True. Containment is Not Specified.]
Submerged: Public	[Is static True. Containment is Not Specified.]
Surface: Public	[Is static True. Containment is Not Specified.]
	[Is static True. Containment is Not Specified.]

1.2.38 UnitOfTimeValue

 $Class\ {\it ``CodeList"} in\ package\ 'MUDDIUKEx-Codelists-Transformation'$

Unit Of Time Codelist

A list of values for units of time.

ATTRIBUTES	
Day: Public	[Is static True. Containment is Not Specified.]

ATTRIBUTES	
Month: Public	[Is static True. Containment is Not Specified.]
	[Is static True. Containment is Not Specified.]
	[Is static True. Containment is Not Specified.]

1.2.39 UtilitySubTypeValue

 $Class\ {\it ``CodeList"}\ in\ package\ 'MUDDIUKEx-Codelists-Transformation'$

Utility Subtype Codelist

A list of utility subtypes that classify utilities at a secondary level, such as surface water vs combined sewer.

ATTRIBUTES	
Alarm: Public	[Is static True. Containment is Not Specified.]
Ammonia: Public	[Is static True. Containment is Not Specified.]
Combined Sewer: Public	[Is static True. Containment is Not Specified.]
Cooled Water: Public	[Is static True. Containment is Not Specified.]
CSO Overflow: Public	[Is static True. Containment is Not Specified.]
Drainage: Public	[Is static True. Containment is Not Specified.]
Electric Power: Public	[Is static True. Containment is Not Specified.]
Foul Sewer: Public	[Is static True. Containment is Not Specified.]
Glycol: Public	[Is static True. Containment is Not Specified.]
Heated Water: Public	[Is static True. Containment is Not Specified.]

ATTRIBUTES	
Journey Time Apparatus : Public	[Is static True. Containment is Not Specified.]
Natural Water: Public	[Is static True. Containment is Not Specified.]
Non-Potable Water: Public	[Is static True. Containment is Not Specified.]
Other: Public	[Is static True. Containment is Not Specified.]
Potable Water: Public	[Is static True. Containment is Not Specified.]
Raw Water: Public	[Is static True. Containment is Not Specified.]
Steam: Public	[Is static True. Containment is Not Specified.]
Stored Water: Public	[Is static True. Containment is Not Specified.]
Street Lighting: Public	[Is static True. Containment is Not Specified.]
SuDS: Public	[Is static True. Containment is Not Specified.]
Surface Water Sewer: Public	[Is static True. Containment is Not Specified.]
Telecommunication: Public	[Is static True. Containment is Not Specified.]
Trade Effluent: Public	[Is static True. Containment is Not Specified.]
Treated Effluent: Public	[Is static True. Containment is Not Specified.]
Treated Water: Public	[Is static True. Containment is Not Specified.]
♥ Untreated Effluent : Public	[Is static True. Containment is Not Specified.]

1.2.40 UtilitySurveyTypeValue

Class «CodeList» in package 'MUDDIUKEx-Codelists-Transformation'

Utility Survey Type Codelist

A list of Utility Survey Types, primarily derived from PAS128:2022.

Created on 10/01/2025. Last modified 08/03/2025

ATTRIBUTES	
Non-PAS128 Survey: Public	[Is static True. Containment is Not Specified.]
Other: Public	[Is static True. Containment is Not Specified.]
PAS128:2022 – Type A (verification): Public	[Is static True. Containment is Not Specified.]
PAS128:2022 – Type B (detection) : Public	[Is static True. Containment is Not Specified.]
PAS128:2022 – Type C (site reconnaissance): Public	[Is static True. Containment is Not Specified.]
PAS128:2022 – Type D (desktop utility records search): Public	[Is static True. Containment is Not Specified.]

1.2.41 UtilityTypeValue

Class «CodeList» in package 'MUDDIUKEx-Codelists-Transformation'

Utility Type Codelist

A list of utility types for MUDDIObjects. Redundant with utility-specific derived feature types, but allows generic or hybrid asset information to be represented, or new utility types to be added without changing the model.

[Is static True. Containment is Not Specified.]
[Is static True. Containment is Not Specified.]
[Is static True. Containment is Not Specified.]
[Is static True. Containment is Not Specified.]

ATTRIBUTES	
	[Is static True. Containment is Not Specified.]
V Gust Fuelle	[Is static True. Containment is Not Specified.]
	[Is static True. Containment is Not Specified.]
Ø Oil : Public	
	[Is static True. Containment is Not Specified.]
♦ Other: Public	
	[Is static True. Containment is Not Specified.]
Petroleum: Public	
	[Is static True. Containment is Not Specified.]
Sewer: Public	
Alias: Wasterwater / Stormwater	[Is static True. Containment is Not Specified.]
Slurry: Public	
V Sharry . I done	[Is static True. Containment is Not Specified.]
▼ Telecommunication : Public	
7 2000	[Is static True. Containment is Not Specified.]
Transportation: Public	
	[Is static True. Containment is Not Specified.]
	[Is static True. Containment is Not Specified.]

1.3 MUDDIUKEx-CoreData

Package «ApplicationSchema» in package 'MUDDI - UK Excavation Profile - Logical'

This package contains the core principles from MUDDI.

MUDDIUKEx-CoreData Version 2.1.3 Published Created on 17/08/2021. Last modified 09/03/2025

1.3.1 MUDDI - UK Excavation Profile - Logical - Core Data diagram

GML diagram in package 'MUDDIUKEx-CoreData'

MUDDI - UK Excavation Profile - Logical - Core Data Version 2.1.3 Created on 17/08/2021. Last modified 09/03/2025

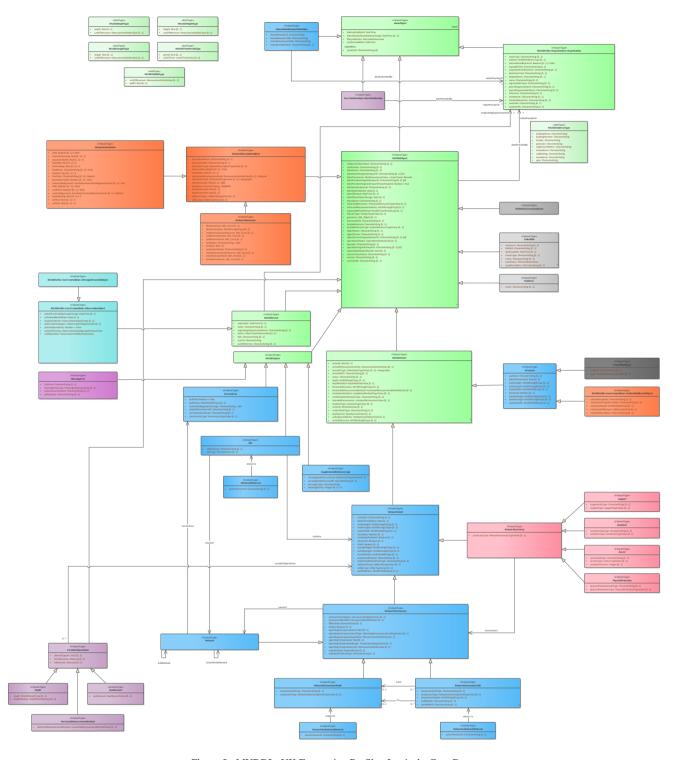


Figure 5: MUDDI - UK Excavation Profile - Logical - Core Data

1.3.2 Core Relationships

Package in package 'MUDDIUKEx-CoreData'

This package contains feature classes that will hold relationships between various other instantiated feature classes.

Created on 16/11/2021. Last modified 09/03/2025

Core Relationships diagram 1.3.2.1

Class diagram in package 'Core Relationships'

Core Relationships Version 2.1.3 Created on 16/11/2021. Last modified 09/03/2025

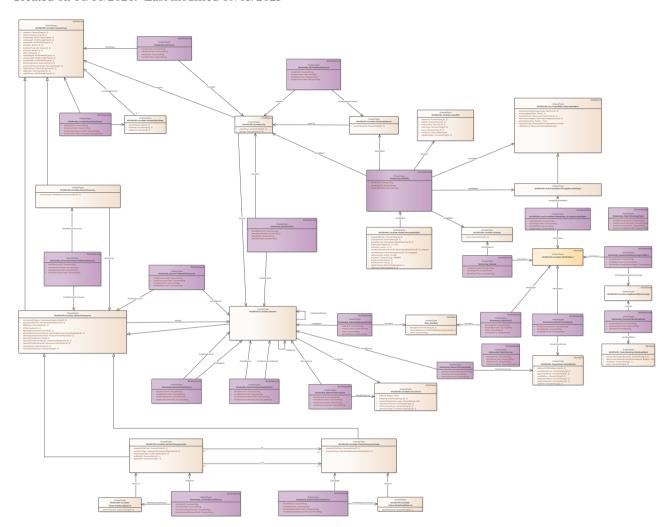


Figure 6: Core Relationships

ABSTRACT

1.3.2.2 BaseRelationship

Class «FeatureType» in package 'Core Relationships'

Parent feature type for Relationship lookup tables. Hold the foreign key relationships with NUARActor and NUSRSubmissionEvent.

Created on 11/07/2022. Last modified 18/05/2024

ASSOCIATIONS

Association (direction: Source -> Destination) dataProvidedBy

ASSOCIATIONS	
Source: Public (Class) BaseRelationship «FeatureType»	Target: Public dataProviderID (Class) Organisation «FeatureType» Cardinality: [1]

1.3.2.3 Relationship_CoverageToBackdropObject

Class «FeatureType» in package 'Core Relationships'

Created on 11/07/2022. Last modified 11/07/2022

ATTRIBUTES	
▶ backdropObjectID : CharacterString Public	[Is static True. Containment is Not Specified.]
▶ backdropObjectTable : CharacterString Public	[Is static True. Containment is Not Specified.]
	[Is static True. Containment is Not Specified.]

ASSOCIATIONS	
Association (direction: Source -> Destination) backdropObject	
Source: Public (Class) Relationship_CoverageToBackdropObject	Target: Public (Class) BackdropObject «FeatureType»
Association (direction: Source -> Destination) coverage	
Source: Public (Class) Relationship_CoverageToBackdropObject «FeatureType»	Target: Public (Class) SupplementalDataCoverage «FeatureType»

1.3.2.4 Relationship_Guidance

Class «FeatureType» in package 'Core Relationships'

Relationship_Guidance

<<FeatureType>>

Table of relationships between Objects and Guidances. These relationships are not enforced in the physical schema, but will be set up at the ingestion/transformation phase.

Created on 17/11/2021. Last modified 10/01/2025

ATTRIBUTES	
	[Is static True. Containment is Not Specified.]
	[Is static True. Containment is Not Specified.]

ATTRIBUTES

[Is static True. Containment is Not Specified.]

ASSOCIATIONS

Association (direction: Source -> Destination) linkedObject

Source: Public (Class) Relationship_Guidance «FeatureType» Target: Public (Class) MUDDIObject

«FeatureType»

Association (direction: Source -> Destination) linkedGuidance

Source: Public (Class) Relationship_Guidance «FeatureType» Target: Public (Class) Guidance «FeatureType»

1.3.2.5 Relationship_LinkedFile

Class «FeatureType» in package 'Core Relationships'

$Relationship_LinkedFile$

<<FeatureType>>

Table of relationships between linked files and objects. These relationships are not enforced in the physical schema, but will be set up at the ingestion/transformation phase.

Created on 16/11/2021. Last modified 10/01/2025

ATTRIBUTES

linkedFileID : CharacterString Public

linkedFileID:

<<Attribute>>

System ID of the file being referenced.

[Is static True. Containment is Not Specified.]

linkedObjectID : CharacterString Public

linkedObjectID:

<<Attribute>>

System ID of the object being referenced.

[Is static True. Containment is Not Specified.]

linkedObjectTable : CharacterString Public

linkedObjectTable:

<<Attribute>>

Database table in which the object being referenced is stored.

[Is static True. Containment is Not Specified.]

ASSOCIATIONS

Association (direction: Source -> Destination) linkedObject

Source: Public (Class) Relationship_LinkedFile «FeatureType» Target: Public (Class) NetworkAnnotation «FeatureType»

ASSOCIATIONS	
Association (direction: Source -> Destination) linkedObject	
Source: Public (Class) Relationship_LinkedFile «FeatureType»	Target: Public (Class) WronglyRecordedObject «FeatureType»
Association (direction: Source -> Destination) linkedFile	
Source: Public (Class) Relationship_LinkedFile «FeatureType»	Target: Public (Class) LinkedFile «FeatureType»
Association (direction: Source -> Destination) linkedObject	
Source: Public (Class) Relationship_LinkedFile «FeatureType»	Target: Public (Class) SiteZoneOfInterest «FeatureType»
Association (direction: Source -> Destination) linkedObject	
Source: Public (Class) Relationship_LinkedFile «FeatureType»	Target: Public (Class) Site «FeatureType»
Association (direction: Source -> Destination) linkedObject	
Source: Public (Class) Relationship_LinkedFile «FeatureType»	Target: Public (Class) ObservationObject «FeatureType»
Association (direction: Source -> Destination) linkedObject	
Source: Public (Class) Relationship_LinkedFile «FeatureType»	Target: Public (Class) NetworkDimension «FeatureType»
Association (direction: Source -> Destination) linkedObject	
Source: Public (Class) Relationship_LinkedFile «FeatureType»	Target: Public (Class) Guidance «FeatureType»
Association (direction: Source -> Destination) linkedObject	
Source: Public (Class) NetworkDescriptionObject «FeatureType»	Target: Public (Class) Relationship_LinkedFile «FeatureType»

1.3.2.6 Relationship_LinkToLinkZoneOfInterest

Class «FeatureType» in package 'Core Relationships'

$Relationship_LinkToLinkZoneOfInterest$

<<FeatureType>>

Table of relationships between Links and Link Zones of Interest. These relationships are not enforced in the physical schema, but will be set up at the ingestion/transformation phase.

Created on 18/11/2021. Last modified 10/01/2025

ATTRIBUTES	
	[Is static True. Containment is Not Specified.]
A L'ALM'AZ OGLA MAID CLAMA GA'A DAL'A	
linkedLinkZoneOfInterestID : CharacterString Public	[Is static True. Containment is Not Specified.]
linkedLinkZoneOfInterestTable : CharacterString Public	
	[Is static True. Containment is Not Specified.]

ASSOCIATIONS	
Association (direction: Source -> Destination) linkedLinkZoneOfInterest	
Source: Public (Class) Relationship_LinkToLinkZoneOfInterest «FeatureType»	Target: Public (Class) NetworkLinkZoneOfInterest «FeatureType»
Association (direction: Source -> Destination) linkedLink	
Source: Public (Class) Relationship_LinkToLinkZoneOfInterest	Target: Public (Class) NetworkConveyanceLink «FeatureType»

1.3.2.7 Relationship_NetworkConveyanceToNetworkAccessory

Class «FeatureType» in package 'Core Relationships'

$Relationship_Network Conveyance To Network Accessory$

<<FeatureType>>

Table of relationships between Network Conveyances and Network Accessories. These relationships are not enforced in the physical schema, but will be set up at the ingestion/transformation phase.

Created on 18/11/2021. Last modified 10/01/2025

ATTRIBUTES	
	[Is static True. Containment is Not Specified.]
	[Is static True. Containment is Not Specified.]
	[Is static True. Containment is Not Specified.]
	[Is static True. Containment is Not Specified.]

Association (direction: Source -> Destination) linkedNetworkAccessory Source: Public (Class) Relationship_NetworkConveyanceToNetworkAccessory «FeatureType» Target: Public (Class) NetworkAccessory «FeatureType»

ASSOCIATIONS

Association (direction: Source -> Destination) linkedNetworkConveyance

Source: Public (Class)

Target: Public (Class) NetworkConveyance

«FeatureType»

Relationship_NetworkConveyanceToNetworkAccessory

«FeatureType»

Relationship_NetworkToContactDetails 1.3.2.8

Class «FeatureType» in package 'Core Relationships'

Relationship_NetworkToContactDetails

<<FeatureType>>

Table of relationships between Networks and Contact Details.

Created on 07/03/2025. Last modified 08/03/2025

ATTRIBUTES	
♦ linkedContactDetailsID : CharacterString Public	[Is static True. Containment is Not Specified.]
	[Is static True. Containment is Not Specified.]
	[Is static True. Containment is Not Specified.]

ASSOCIATIONS	
Association (direction: Source -> Destination) linkedContactDeta	ails
Source: Public (Class) Relationship_NetworkToContactDetails «FeatureType»	Target: Public (Class) ContactDetails «FeatureType»
Association (direction: Source -> Destination) linkedNetwork	
Source: Public (Class) Relationship_NetworkToContactDetails	Target: Public (Class) Network «FeatureType»

1.3.2.9 Relationship_NetworkToNetworkConveyance

Class «FeatureType» in package 'Core Relationships'

$Relationship_NetworkToNetworkConveyance$

<<FeatureType>>

Table of relationships between Networks and Network Conveyance Assets. These relationships are not enforced in the physical schema, but will be set up at the ingestion/transformation phase.

Created on 17/11/2021. Last modified 10/01/2025

ATTRIBUTES

ATTRIBUTES	
	[Is static True. Containment is Not Specified.]
	[Is static True. Containment is Not Specified.]
	[Is static True. Containment is Not Specified.]
	[Is static True. Containment is Not Specified.]

ASSOCIATIONS	
Association (direction: Source -> Destination) linkedNetwork	
Source: Public (Class) Relationship_NetworkToNetworkConveyance «FeatureType»	Target: Public (Class) Network «FeatureType»
Association (direction: Source -> Destination) linkedConveyance	
Source: Public (Class) Relationship_NetworkToNetworkConveyance «FeatureType»	Target: Public (Class) NetworkConveyance «FeatureType»

1.3.2.10 Relationship_NetworkToServiceArea

Class «FeatureType» in package 'Core Relationships'

$Relationship_NetworkToServiceArea$

<<FeatureType>>

Table of relationships between Networks and Service Areas. These relationships are not enforced in the physical schema, but will be set up at the ingestion/transformation phase.

Created on 18/11/2021. Last modified 10/01/2025

ATTRIBUTES	
	[Is static True. Containment is Not Specified.]
linkedNetworkTable : CharacterString Public	[Is static True. Containment is Not Specified.]
linkedServiceAreaID: CharacterString Public	[Is static True. Containment is Not Specified.]
	[Is static True. Containment is Not Specified.]

ASSOCIATIONS Association (direction: Source -> Destination) linkedServiceArea

ASSOCIATIONS	
Source: Public (Class) Relationship_NetworkToServiceArea «FeatureType»	Target: Public (Class) ServiceArea «FeatureType»
Association (direction: Source -> Destination) linkedNetwork	
Source: Public (Class) Relationship_NetworkToServiceArea «FeatureType»	Target: Public (Class) Network «FeatureType»

1.3.2.11 Relationship_NetworkToSite

Class «FeatureType» in package 'Core Relationships'

$Relationship_NetworkToSite$

<<FeatureType>>

Table of relationships between Networks and Sites. These relationships are not enforced in the physical schema, but will be set up at the ingestion/transformation phase.

Created on 17/11/2021. Last modified 10/01/2025

ATTRIBUTES	
linkedNetworkID: CharacterString Public	[Is static True. Containment is Not Specified.]
	[Is static True. Containment is Not Specified.]
	[Is static True. Containment is Not Specified.]
	[Is static True. Containment is Not Specified.]

ASSOCIATIONS	
Association (direction: Source -> Destination) linkedSite	
Source: Public (Class) Relationship_NetworkToSite «FeatureType»	Target: Public (Class) Site «FeatureType»
Association (direction: Source -> Destination) linkedNetwork	
Source: Public (Class) Relationship_NetworkToSite «FeatureType»	Target: Public (Class) Network «FeatureType»

1.3.2.12 Relationship_NetworkToSubNetwork

Class «FeatureType» in package 'Core Relationships'

$Relationship_NetworkToSubNetwork$

<<FeatureType>>

Table of relationships between Networks and Sub Networks. These relationships are not enforced in the physical schema, but will be set up at the ingestion/transformation phase.

Created on 17/11/2021. Last modified 10/01/2025

ATTRIBUTES	
♦ linkedNetworkID : CharacterString Public	[Is static True. Containment is Not Specified.]
♦ linkedNetworkTable : CharacterString Public	[Is static True. Containment is Not Specified.]
	[Is static True. Containment is Not Specified.]
	[Is static True. Containment is Not Specified.]

ASSOCIATIONS	
Association (direction: Source -> Destination) linkedSubNetwork	
Source: Public (Class) Relationship_NetworkToSubNetwork «FeatureType»	Target: Public (Class) Network «FeatureType»
Association (direction: Source -> Destination) linkedNetwork	
Source: Public (Class) Relationship_NetworkToSubNetwork «FeatureType»	Target: Public (Class) Network «FeatureType»

1.3.2.13 Relationship_NetworkToSubordinateNetwork

Class «FeatureType» in package 'Core Relationships'

$Relationship_Network To Subordinate Network$

<<FeatureType>>

Table of relationships between Networks and Subordinate Networks. These relationships are not enforced in the physical schema, but will be set up at the ingestion/transformation phase.

Created on 17/11/2021. Last modified 10/01/2025

ATTRIBUTES	
	[Is static True. Containment is Not Specified.]
linkedNetworkTable : CharacterString Public	[Is static True. Containment is Not Specified.]
linkedSubordinateNetworkID : CharacterString Public	[Is static True. Containment is Not Specified.]
linkedSubordinateNetworkTable : CharacterString Public	

ATTRIBUTES [Is static True. Containment is Not Specified.]

ASSOCIATIONS	
Association (direction: Source -> Destination) linkedNetwork	
Source: Public (Class) Relationship_NetworkToSubordinateNetwork «FeatureType»	Target: Public (Class) Network «FeatureType»
Association (direction: Source -> Destination) linkedSubordinate	Network
Source: Public (Class) Relationship_NetworkToSubordinateNetwork «FeatureType»	Target: Public (Class) Network «FeatureType»

1.3.2.14 Relationship_NodeToNodeZoneOfInterest

Class «FeatureType» in package 'Core Relationships'

$Relationship_NodeToNodeZoneOfInterest$

<<FeatureType>>

Table of relationships between Node and Node Zones of Interest. These relationships are not enforced in the physical schema, but will be set up at the ingestion/transformation phase.

Created on 18/11/2021. Last modified 10/01/2025

ATTRIBUTES	
	[Is static True. Containment is Not Specified.]
	[Is static True. Containment is Not Specified.]
	[Is static True. Containment is Not Specified.]
	[Is static True. Containment is Not Specified.]

ASSOCIATIONS	
Association (direction: Source -> Destination) linkedNode	
Source: Public (Class) Relationship_NodeToNodeZoneOfInterest	Target: Public (Class) NetworkConveyanceNode «FeatureType»
Association (direction: Source -> Destination) linkedNodeZoneO	fInterest
Source: Public (Class) Relationship_NodeToNodeZoneOfInterest	Target: Public (Class) NetworkNodeZoneOfInterest «FeatureType»

1.3.2.15 Relationship_ObjectToContactDetails

Class «FeatureType» in package 'Core Relationships'

$Relationship_ObjectToContactDetails$

<<FeatureType>>

Table of relationships between Objects and Contact Details. This will be used to link assets with contact details that should be shown in preference to the Data Provider's contact details.

These relationships are not enforced in the physical schema, but will be set up at the ingestion/transformation phase.

Created on 24/05/2022. Last modified 10/01/2025

ATTRIBUTES	
	[Is static True. Containment is Not Specified.]
	[Is static True. Containment is Not Specified.]
	[Is static True. Containment is Not Specified.]

ASSOCIATIONS	
Association (direction: Source -> Destination) linkedContactDe	etails
Source: Public (Class) Relationship_ObjectToContactDetails «FeatureType»	Target: Public (Class) ContactDetails «FeatureType»
Association (direction: Source -> Destination) linkedObject	
Source: Public (Class) Relationship_ObjectToContactDetails «FeatureType»	Target: Public (Class) MUDDIObject «FeatureType»

1.3.2.16 Relationship_ObjectToEnclosingObject

Class «FeatureType» in package 'Core Relationships'

Relationship_ObjectToEnclosingObject

<<FeatureType>>

Table of relationships between objects which respectively enclose and are enclosed by each other.

Created on 05/12/2024. Last modified 08/03/2025

ATTRIBUTES inkedEnclosedObjectID: CharacterString Public linkedEnclosedObjectID: Mandatory The dataProviderAssignedUniqueID of the object which is enclosed. [Is static True. Containment is Not Specified.] inkedEnclosedObjectTable: CharacterString Public linkedEnclosedObjectTable: Mandatory

ATTRIBUTES

The name of the FeatureType (or table in a physical implementation) containing the enclosed object.

[Is static True. Containment is Not Specified.]

linkedEnclosingObjectID : CharacterString Public

linkedEnclosingObjectID:

Mandatory

The dataProviderAssignedUniqueID of the object which is enclosing another object.

[Is static True. Containment is Not Specified.]

linkedEnclosingObjectTable : CharacterString Public

linkedEnclosingObjectTable:

Mandatory

The name of the FeatureType (or table in a physical implementation) containing the enclosing object.

[Is static True. Containment is Not Specified.]

1.3.2.17 Relationship ObjectToRule

Class «FeatureType» in package 'Core Relationships'

Created on 06/02/2024. Last modified 06/02/2024

ATTRIBUTES

linkedObjectID

Mandatory

dataproviderassigneduniqueid in the specified table of the object related to a rule.

[Is static True. Containment is Not Specified.]

linkedObjectTable

Mandatory

The name of the table - qualified by a schema name - containing the object.

[Is static True. Containment is Not Specified.]

vuleID: CharacterString Public

ruleID

Mandatory

systemid in the specified table of the rule to which the object is related.

[Is static True. Containment is Not Specified.]

ruleTableName : CharacterString Public

ruleTableName

Mandatory

ATTRIBUTES

The name of the table - qualified by a schema name - containing the related rule.

[Is static True. Containment is Not Specified.]

ASSOCIATIONS	
Association (direction: Source -> Destination) linkedRule	
Source: Public (Class) Relationship_ObjectToRule «FeatureType»	Target: Public (Class) BaseRule «FeatureType»
Association (direction: Source -> Destination) linkedObject	
Source: Public (Class) Relationship_ObjectToRule «FeatureType»	Target: Public (Class) MUDDIObject «FeatureType»

1.3.2.18 Relationship_ObjectToSurvey

Class «FeatureType» in package 'Core Relationships'

Created on 24/01/2025. Last modified 24/01/2025

ATTRIBUTES	
linkedObjectID : CharacterString Public	[Is static True. Containment is Not Specified.]
	[Is static True. Containment is Not Specified.]
	[Is static True. Containment is Not Specified.]
utilitySurveySiteID: CharacterString Public Multiplicity: ([01], Allow duplicates: 0, Is ordered: False)	[Is static True. Containment is Not Specified.]

1.3.2.19 Relationship_SiteToAsset

Class «FeatureType» in package 'Core Relationships'

$Relationship_SiteToAsset$

<<FeatureType>>

Table of relationships between Sites and Assets. These relationships are not enforced in the physical schema, but will be set up at the ingestion/transformation phase.

Created on 17/11/2021. Last modified 10/01/2025

ATTRIBUTES	
	[Is static True. Containment is Not Specified.]
	[Is static True. Containment is Not Specified.]
	[Is static True. Containment is Not Specified.]

ASSOCIATIONS	
Association (direction: Source -> Destination) linkedSite	
Source: Public (Class) Relationship_SiteToAsset «FeatureType»	Target: Public (Class) Site «FeatureType»
Association (direction: Source -> Destination) linkedAsset	
Source: Public (Class) Relationship_SiteToAsset «FeatureType»	Target: Public (Class) NetworkAsset «FeatureType»

1.3.2.20 Relationship_SiteToSiteZoneOfInterest

Class «FeatureType» in package 'Core Relationships'

$Relationship_SiteToSiteZoneOfInterest$

<<FeatureType>>

Table of relationships between Sites and Site Zones of Interest. These relationships are not enforced in the physical schema, but will be set up at the ingestion/transformation phase.

Created on 17/11/2021. Last modified 10/01/2025

ATTRIBUTES	
	[Is static True. Containment is Not Specified.]
	[Is static True. Containment is Not Specified.]
	[Is static True. Containment is Not Specified.]
linkedSiteZoneTable: CharacterString Public	[Is static True. Containment is Not Specified.]

ASSOCIATIONS Association (direction: Source -> Destination) linkedSiteZoneOfInterest Source: Public (Class) Relationship_SiteToSiteZoneOfInterest «FeatureType» Target: Public (Class) SiteZoneOfInterest «FeatureType»

ASSOCIATIONS	
Association (direction: Source -> Destination) linkedSite	
Source: Public (Class) Relationship_SiteToSiteZoneOfInterest	Target: Public (Class) Site «FeatureType»

1.3.2.21 Relationship_SubordinateNetworkToRule

Class «FeatureType» in package 'Core Relationships'

$Relationship_SubordinateNetworkToRule$

<<FeatureType>>

Table of relationships between Subordinate Networks and proximity rules.

Created on 14/10/2022. Last modified 08/03/2025

ATTRIBUTES	
networkID: CharacterString Public	[Is static True. Containment is Not Specified.]
networkTableID: CharacterString Public	[Is static True. Containment is Not Specified.]
	[Is static True. Containment is Not Specified.]
	[Is static True. Containment is Not Specified.]

ASSOCIATIONS	
Association (direction: Source -> Destination) linkedRule Source: Public (Class) Relationship_SubordinateNetworkToRule «FeatureType»	Target: Public (Class) BaseRule «FeatureType»
Association (direction: Source -> Destination) ruleAppliesIn Source: Public (Class) Relationship_SubordinateNetworkToRule «FeatureType»	Target: Public (Class) Network «FeatureType»

1.3.2.22 Relationship_SupplementalDataCoverageToObject

Class «FeatureType» in package 'Core Relationships'

Created on 13/10/2022. Last modified 13/10/2022

ATTRIBUTES	

ATTRIBUTES	
	[Is static True. Containment is Not Specified.]
	[Is static True. Containment is Not Specified.]
	[Is static True. Containment is Not Specified.]

ASSOCIATIONS	
Association (direction: Source -> Destination) linkedSupplementalDataCoverage	
Source: Public (Class) Relationship_SupplementalDataCoverageToObject «FeatureType»	Target: Public (Class) SupplementalDataCoverage «FeatureType»
Association (direction: Source -> Destination) linkedObject	
Source: Public (Class) Relationship_SupplementalDataCoverageToObject «FeatureType»	Target: Public (Class) MUDDIObject «FeatureType»

1.3.2.23 Relationship_VariableObjectValueToAsset

Class «FeatureType» in package 'Core Relationships'

$Relationship_VariableObjectValueToAsset$

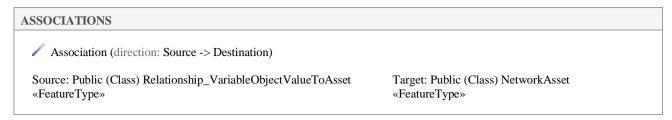
<<FeatureType>>

Table of relationships between Variable Object Values and Assets. These relationships are not enforced in the physical schema, but will be set up at the ingestion/transformation phase.

Created on 18/11/2021. Last modified 10/01/2025

ATTRIBUTES	
	[Is static True. Containment is Not Specified.]
	[Is static True. Containment is Not Specified.]
	[Is static True. Containment is Not Specified.]
	[Is static True. Containment is Not Specified.]

ASSOCIATIONS Association (direction: Source -> Destination) Source: Public (Class) Relationship_VariableObjectValueToAsset «FeatureType» Target: Public (Class) VariableObjectValue «FeatureType»



1.3.3 Drainage

Package in package 'MUDDIUKEx-CoreData'

The Drainage package comprises logical data model entities representing drainage assets above and below ground. This logical data model is intended for generating physical data models

Drainage Version 2.1.3 Published Created on 15/10/2020. Last modified 09/03/2025

1.3.3.1 Drainage diagram

Class diagram in package 'Drainage'

Drainage Version 2.1.3 Created on 15/10/2020. Last modified 09/03/2025

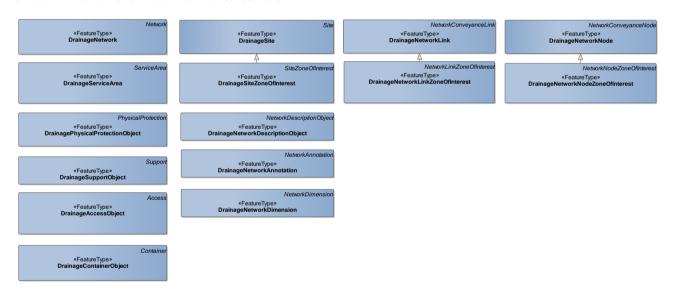


Figure 7: Drainage

1.3.3.2 DrainageNetwork

Class «FeatureType» in package 'Drainage'

DrainageNetwork

A network in the Drainage domain.

Created on 25/10/2021. Last modified 10/01/2025

1.3.3.3 DrainageNetworkAnnotation

Class «FeatureType» in package 'Drainage'

DrainageNetworkAnnotation:

<<FeatureType>>

A textual description of an element of a drainage network.

Created on 21/01/2022. Last modified 10/01/2025

1.3.3.4 DrainageNetworkDescriptionObject

Class «FeatureType» in package 'Drainage'

DrainageNetworkDescriptionObject:

<<FeatureType>>

An artefact that describes an element of a drainage network.

Created on 21/01/2022. Last modified 10/01/2025

1.3.3.5 DrainageNetworkDimension

Class «FeatureType» in package 'Drainage'

DrainageNetworkDimension:

<<FeatureType>>

A descriptive element that describes a measurement of a drainage network, or its position relative to another feature.

Created on 21/01/2022. Last modified 10/01/2025

1.3.3.6 DrainageNetworkLinkZoneOfInterest

Class «FeatureType» in package 'Drainage'

DrainageNetworkLinkZoneOfInterest

A Zone of Interest for a drainage conveyance link.

Created on 25/10/2021. Last modified 10/01/2025

1.3.3.7 DrainageNetworkNodeZoneOfInterest

Class «FeatureType» in package 'Drainage'

Drainage Network Node Zone Of Interest

A Zone of Interest for a drainage conveyance node.

Created on 25/10/2021. Last modified 10/01/2025

1.3.3.8 DrainagePhysicalProtectionObject

Class «FeatureType» in package 'Drainage'

${\bf Drainage Physical Protection Object}$

A Physical Protection object accessorising a Drainage network feature.

Created on 25/10/2021. Last modified 10/01/2025

1.3.3.9 DrainageServiceArea

Class «FeatureType» in package 'Drainage'

DrainageServiceArea

A Service Area for a Drainage network.

Created on 25/10/2021. Last modified 10/01/2025

1.3.3.10 DrainageSiteZoneOfInterest

Class «FeatureType» in package 'Drainage'

DrainageSiteZoneOfInterest

A Zone of Interest for a drainage site.

Created on 25/10/2021. Last modified 10/01/2025

1.3.3.11 DrainageSupportObject

Class «FeatureType» in package 'Drainage'

DrainageSupportObject

A Support object accessorising a Drainage network feature.

Created on 25/10/2021. Last modified 10/01/2025

1.3.3.12 DrainageAccessObject

Class «FeatureType» in package 'Drainage'

DrainageAccessObject

An Access object accessorising a Drainage network feature.

Created on 25/10/2021. Last modified 10/01/2025

1.3.3.13 DrainageContainerObject

Class «FeatureType» in package 'Drainage'

DrainageContainerObject

A Container object containing a Drainage network feature.

Created on 25/10/2021. Last modified 23/11/2021

1.3.3.14 DrainageNetworkLink

Class «FeatureType» in package 'Drainage'

DrainageNetworkLink:

<<FeatureType>>

A conveyance link in a drainage network

Created on 06/08/2019. Last modified 10/01/2025

1.3.3.15 DrainageNetworkNode

Class «FeatureType» in package 'Drainage'

DrainageNetworkNode:

<<FeatureType>>

A conveyance node in a drainage network

Created on 06/08/2019. Last modified 10/01/2025

1.3.3.16 DrainageSite

Class «FeatureType» in package 'Drainage'

DrainageSite:

<<FeatureType>>

A site in a drainage network.

Created on 02/10/2021. Last modified 10/01/2025

1.3.4 Electricity Network

Package in package 'MUDDIUKEx-CoreData'

The Electricity Network package comprises logical data model entities representing electrical power utility infrastructure assets above and below ground. This logical data model is intended for generating physical data models

Electricity Network Version 2.1.3 Published Created on 06/08/2019. Last modified 09/03/2025

1.3.4.1 Electricity Network diagram

Class diagram in package 'Electricity Network'

Electricity Network Version 2.1.3 Created on 06/08/2019. Last modified 09/03/2025

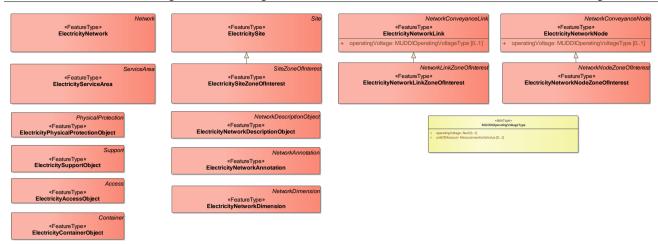


Figure 8: Electricity Network

1.3.4.2 ElectricityAccessObject

Class «FeatureType» in package 'Electricity Network'

ElectricityAccessObject

An Access object accessorising an Electricity network feature.

Created on 22/10/2021. Last modified 10/01/2025

1.3.4.3 ElectricityContainerObject

Class «FeatureType» in package 'Electricity Network'

ElectricityContainerObject

A Container object containing an Electricity network feature.

Created on 22/10/2021. Last modified 10/01/2025

1.3.4.4 ElectricityLinkTypeValue

Class «CodeList» in package 'Electricity Network'

Created on 22/10/2021. Last modified 22/10/2021



1.3.4.5 ElectricityNetwork

Class «FeatureType» in package 'Electricity Network'

ElectricityNetwork

A network in the Electricity domain.

Created on 22/10/2021. Last modified 10/01/2025

1.3.4.6 ElectricityNetworkAnnotation

Class «FeatureType» in package 'Electricity Network'

ElectricityNetworkAnnotation:

<<FeatureType>>

A textual description of an element of an electricity network.

Created on 21/01/2022. Last modified 10/01/2025

1.3.4.7 ElectricityNetworkDescriptionObject

Class «FeatureType» in package 'Electricity Network'

ElectricityNetworkDescriptionObject:

<<FeatureType>>

An artefact that describes an element of an electricity network.

Created on 21/01/2022. Last modified 10/01/2025

1.3.4.8 ElectricityNetworkDimension

Class «FeatureType» in package 'Electricity Network'

ElectricityNetworkDimension:

<<FeatureType>>

A descriptive element that describes a measurement of an electricity network, or its position relative to another feature.

Created on 21/01/2022. Last modified 10/01/2025

1.3.4.9 ElectricityNetworkLinkZoneOfInterest

Class «FeatureType» in package 'Electricity Network'

${\bf Electricity Network Link Zone Of Interest}$

A Zone of Interest for an electricity conveyance link.

Created on 22/10/2021. Last modified 10/01/2025

1.3.4.10 ElectricityNetworkNodeZoneOfInterest

Class «FeatureType» in package 'Electricity Network'

${\bf Electricity Network Node Zone Of Interest}$

A Zone of Interest for an electricity conveyance node.

Created on 22/10/2021. Last modified 23/11/2021

1.3.4.11 ElectricityPhysicalProtectionObject

Class «FeatureType» in package 'Electricity Network'

ElectricityPhysicalProtectionObject

A Physical Protection object accessorising an Electricity network feature.

Created on 22/10/2021. Last modified 10/01/2025

1.3.4.12 **ElectricityServiceArea**

Class «FeatureType» in package 'Electricity Network'

ElectricityServiceArea

A Service Area for an Electricity network.

Created on 22/10/2021. Last modified 10/01/2025

1.3.4.13 ElectricitySiteZoneOfInterest

Class «FeatureType» in package 'Electricity Network'

${\bf Electricity Site Zone Of Interest}$

A Zone of Interest for an electricity site.

Created on 22/10/2021. Last modified 10/01/2025

ElectricitySupportObject 1.3.4.14

Class «FeatureType» in package 'Electricity Network'

ElectricitySupportObject

A Support object accessorising an Electricity network feature.

Created on 22/10/2021. Last modified 10/01/2025

MUDDIOperatingVoltageType 1.3.4.15

Class «dataType» in package 'Electricity Network'

Created on 20/10/2021. Last modified 07/03/2025

ATTRIBUTES

operatingVoltage : Real Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

[Is static True. Containment is Not Specified.]

unitOfMeasure: MeasurementUnitsValue Public Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

ATTRIBUTES

[Is static True. Containment is Not Specified.]

1.3.4.16 **ElectricitySite**

Class «FeatureType» in package 'Electricity Network'

ElectricitySite:

<<FeatureType>>

Type of Site that contains and may restrict access to electrical utility assets.

Created on 06/08/2019. Last modified 10/01/2025

1.3.4.17 ElectricityNetworkNode

Class «FeatureType» in package 'Electricity Network'

ElectricityNetworkNode:

<<FeatureType>>

Type of network node that conveys electrical power.

Created on 06/08/2019. Last modified 10/01/2025

ATTRIBUTES



operatingVoltage: MUDDIOperatingVoltageType Public Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

operatingVoltage:

Optional

Standard voltage measure conveyed by this electrical utility asset

[Is static True. Containment is Not Specified.]

1.3.4.18 ElectricityNetworkLink

Class «FeatureType» in package 'Electricity Network'

ElectricityNetworkLink:

<<FeatureType>>

Type of Network Link that conveys electrical power.

Created on 06/08/2019. Last modified 10/01/2025

ATTRIBUTES



operatingVoltage: MUDDIOperatingVoltageType Public Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

operatingVoltage:

Optional

Standard voltage measure conveyed by this electrical utility asset

[Is static True. Containment is Not Specified.]

1.3.5 Fuel and Chemicals Network

Package in package 'MUDDIUKEx-CoreData'

The Fuel and Chemicals Network package comprises logical data model entities representing fuel and chemical pipeline networks. This logical data model is intended for generating physical data models

Fuel and Chemicals Network Version 2.1.3 Published Created on 06/08/2019. Last modified 09/03/2025

1.3.5.1 Fuel and Chemicals Network diagram

Class diagram in package 'Fuel and Chemicals Network'

Fuel and Chemicals Network Version 2.1.3 Created on 06/08/2019. Last modified 09/03/2025

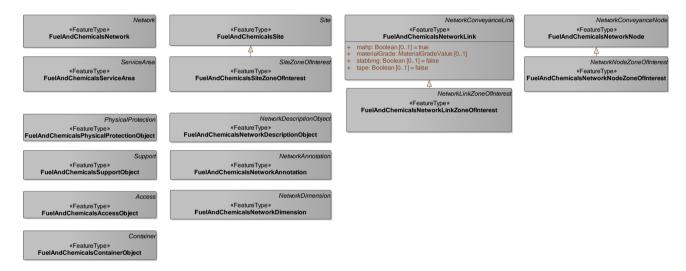


Figure 9: Fuel and Chemicals Network

1.3.5.2 FuelAndChemicalsAccessObject

Class «FeatureType» in package 'Fuel and Chemicals Network'

FuelAndChemicalsAccessObject

An Access object accessorising a Fuel or Chemical network feature.

Created on 22/10/2021. Last modified 10/01/2025

1.3.5.3 FuelAndChemicalsContainerObject

Class «FeatureType» in package 'Fuel and Chemicals Network'

FuelAndChemicalsContainerObject

A Container object containing a Fuel or Chemical network feature.

Created on 22/10/2021. Last modified 10/01/2025

1.3.5.4 FuelAndChemicalsNetwork

Class «FeatureType» in package 'Fuel and Chemicals Network'

FuelAndChemicalsNetwork

A network in the Fuel and Chemicals domain.

Created on 22/10/2021. Last modified 10/01/2025

1.3.5.5 FuelAndChemicalsNetworkAnnotation

Class «FeatureType» in package 'Fuel and Chemicals Network'

FuelAndChemicalsNetworkAnnotation:

<<FeatureType>>

A textual description of an element of a fuel or chemical network.

Created on 21/01/2022. Last modified 10/01/2025

1.3.5.6 FuelAndChemicalsNetworkDescriptionObject

Class «FeatureType» in package 'Fuel and Chemicals Network'

FuelAndChemicalsNetworkDescriptionObject:

<<FeatureType>>

An artefact that describes an element of a fuel or chemical network.

Created on 21/01/2022. Last modified 10/01/2025

1.3.5.7 FuelAndChemicalsNetworkDimension

Class «FeatureType» in package 'Fuel and Chemicals Network'

FuelAndChemicalsNetworkDimension:

<<FeatureType>>

A descriptive element that describes a measurement of a fuel or chemical network, or its position relative to another feature

Created on 21/01/2022. Last modified 10/01/2025

1.3.5.8 FuelAndChemicalsNetworkLinkZoneOfInterest

Class «FeatureType» in package 'Fuel and Chemicals Network'

FuelAndChemicalsNetworkLinkZoneOfInterest

A Zone of Interest for a Fuel or Chemical conveyance link.

Created on 22/10/2021. Last modified 10/01/2025

1.3.5.9 FuelAndChemicalsNetworkNodeZoneOfInterest

Class «FeatureType» in package 'Fuel and Chemicals Network'

FuelAndChemicalsNetworkNodeZoneOfInterest

A Zone of Interest for a Fuel or Chemical conveyance node.

Created on 22/10/2021. Last modified 10/01/2025

1.3.5.10 FuelAndChemicalsPhysicalProtectionObject

Class «FeatureType» in package 'Fuel and Chemicals Network'

FuelAndChemicalsPhysicalProtectionObject

A Physical Protection object accessorising a Fuel or Chemical network feature.

Created on 22/10/2021. Last modified 10/01/2025

1.3.5.11 FuelAndChemicalsServiceArea

Class «FeatureType» in package 'Fuel and Chemicals Network'

FuelAndChemicalsServiceArea

A Service Area for a Fuel or Chemical network.

Created on 22/10/2021. Last modified 10/01/2025

1.3.5.12 FuelAndChemicalsSiteZoneOfInterest

Class «FeatureType» in package 'Fuel and Chemicals Network'

FuelAndChemicalsSiteZoneOfInterest

A Zone of Interest for a Fuel or Chemical site.

Created on 22/10/2021. Last modified 10/01/2025

1.3.5.13 FuelAndChemicalsSupportObject

Class «FeatureType» in package 'Fuel and Chemicals Network'

Fuel And Chemicals Support Object

A Support object accessorising a Fuel or Chemical network feature.

Created on 22/10/2021. Last modified 10/01/2025

1.3.5.14 FuelAndChemicalsSite

Class «FeatureType» in package 'Fuel and Chemicals Network'

FuelAndChemicalsSite:

<<FeatureType>>

Fuel and Chemicals pipeline network facility containing other network assets that may be secured

Created on 03/10/2021. Last modified 10/01/2025

1.3.5.15 FuelAndChemicalsNetworkNode

Class «FeatureType» in package 'Fuel and Chemicals Network'

FuelAndChemicalsNetworkNode:

<<FeatureType>>

Fuel and Chemicals Pipeline network node asset connecting pipeline sections and/or performing another network function

Created on 03/10/2021. Last modified 10/01/2025

1.3.5.16 FuelAndChemicalsNetworkLink

Class «FeatureType» in package 'Fuel and Chemicals Network'

FuelAndChemicalsNetworkLink:

<<FeatureType>>

Pipeline network link for the conveyance of fuel or chemicals.

Created on 03/10/2021. Last modified 10/01/2025

ATTRIBUTES

.

mahp: Boolean Public = true

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

mahp:

Optional

Is this asset classified as a Major Accident Hazard Pipeline?

[Is static True. Containment is Not Specified.]

materialGrade: MaterialGradeValue Public Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

materialGrade:

Optional

What is the material grade for this asset?

Values for this attribute are defined in the < Material Grade Value > codelist.

[Is static True. Containment is Not Specified.]

slabbing:

Optional

Is this asset protected by slabbing?

[Is static True. Containment is Not Specified.]

tape: Boolean Public = false Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

tape:

Optional

Is tape present above this asset?

[Is static True. Containment is Not Specified.]

1.3.6 Gas Network

Package in package 'MUDDIUKEx-CoreData'

The Gas Network package comprises logical data model entities representing gas utility infrastructure assets above and below ground. This logical data model is intended for generating physical data models

Gas Network Version 2.1.3 Published Created on 06/08/2019. Last modified 09/03/2025

1.3.6.1 Gas Network diagram

Class diagram in package 'Gas Network'

Gas Network Version 2.1.3 Created on 06/08/2019. Last modified 09/03/2025

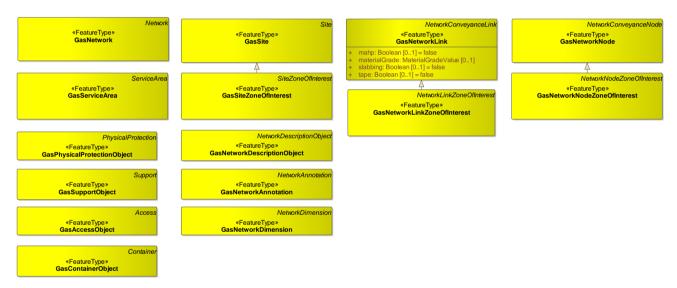


Figure 10: Gas Network

1.3.6.2 GasAccessObject

Class «FeatureType» in package 'Gas Network'

GasAccessObject

An Access object accessorising a Gas network feature.

Created on 22/10/2021. Last modified 10/01/2025

1.3.6.3 GasContainerObject

Class «FeatureType» in package 'Gas Network'

GasContainerObject

A Container object containing a Gas network feature.

Created on 22/10/2021. Last modified 10/01/2025

1.3.6.4 GasNetwork

Class «FeatureType» in package 'Gas Network'

GasNetwork

A network in the Gas domain.

Created on 20/10/2021. Last modified 10/01/2025

1.3.6.5 GasNetworkAnnotation

Class «FeatureType» in package 'Gas Network'

GasNetworkAnnotation:

<<FeatureType>>

A textual description of an element of a gas network.

Created on 21/01/2022. Last modified 10/01/2025

1.3.6.6 GasNetworkDescriptionObject

Class «FeatureType» in package 'Gas Network'

GasNetworkDescriptionObject:

<<FeatureType>>

An artefact that describes an element of a gas network.

Created on 21/01/2022. Last modified 10/01/2025

1.3.6.7 GasNetworkDimension

Class «FeatureType» in package 'Gas Network'

GasNetworkDimension:

<<FeatureType>>

A descriptive element that describes a measurement of a gas network, or its position relative to another feature.

Created on 21/01/2022. Last modified 10/01/2025

1.3.6.8 GasNetworkLinkZoneOfInterest

Class «FeatureType» in package 'Gas Network'

Gas Network Link Zone Of Interest

A Zone of Interest for a gas conveyance link.

Created on 22/10/2021. Last modified 10/01/2025

1.3.6.9 GasNetworkNodeZoneOfInterest

Class «FeatureType» in package 'Gas Network'

Gas Network Node Zone Of Interest

A Zone of Interest for a gas conveyance node.

Created on 22/10/2021. Last modified 10/01/2025

1.3.6.10 GasPhysicalProtectionObject

Class «FeatureType» in package 'Gas Network'

GasPhysicalProtectionObject

A Physical Protection object accessorising a Gas network feature.

Created on 22/10/2021. Last modified 10/01/2025

1.3.6.11 GasServiceArea

Class «FeatureType» in package 'Gas Network'

GasServiceArea

A Service Area for a Gas network.

Created on 22/10/2021. Last modified 10/01/2025

1.3.6.12 GasSiteZoneOfInterest

Class «FeatureType» in package 'Gas Network'

GasSiteZoneOfInterest

A Zone of Interest for a gas site.

Created on 22/10/2021. Last modified 10/01/2025

1.3.6.13 GasSupportObject

Class «FeatureType» in package 'Gas Network'

GasSupportObject

A Support object accessorising a Gas network feature.

Created on 22/10/2021. Last modified 10/01/2025

1.3.6.14 GasSite

Class «FeatureType» in package 'Gas Network'

GasSite:

<<FeatureType>>

Gas network facility containing other network assets that may be secured

Created on 06/08/2019. Last modified 10/01/2025

1.3.6.15 GasNetworkNode

Class «FeatureType» in package 'Gas Network'

GasNetworkNode:

<<FeatureType>>

Gas network node asset connecting GasPipes and/or performing another network function

Created on 06/08/2019. Last modified 10/01/2025

1.3.6.16 GasNetworkLink

Class «FeatureType» in package 'Gas Network'

GasNetworkLink:

<<FeatureType>>

Gas network link that may consist of a liner "conveying" pipe running within an older, now "carrier" pipe. The network asset dimensions pertain to whichever pipe directly conveys gas.

Created on 06/08/2019. Last modified 10/01/2025

ATTRIBUTES

mahp: Boolean Public = false

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

mahp:

Optional

Is this asset classified as a Major Accident Hazard Pipeline?

[Is static True. Containment is Not Specified.]

materialGrade : MaterialGradeValue Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

materialGrade:

Optional

What is the material grade for this asset?

Values for this attribute are defined in the < Material Grade Value > codelist.

[Is static True. Containment is Not Specified.]

slabbing: Boolean Public = false

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

slabbing:

Optional

Is this asset protected by slabbing?

[Is static True. Containment is Not Specified.]

tape : Boolean Public = false

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

tape:

Optional

Is tape present above this asset?

[Is static True. Containment is Not Specified.]

1.3.7 Reference Data

Package in package 'MUDDIUKEx-CoreData'

The Reference Data package comprises sub-packages containing logical data model entities representing reference data which may be useful for the planning and execution of excavations. This logical data model is intended for generating physical data models

Reference Data Version 2.1.3 Published Created on 16/10/2020. Last modified 09/03/2025

1.3.7.1 Planning Areas

Package in package 'Reference Data'

Planning Areas Version 2.1.3 Published Created on 30/03/2022. Last modified 09/03/2025

1.3.7.1.1 Planning Areas diagram

GML diagram in package 'Planning Areas'

Planning Areas Version 2.1.3 Created on 30/03/2022. Last modified 09/03/2025

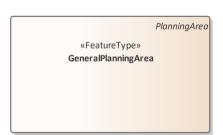




Figure 11: Planning Areas

1.3.7.1.2 Historical Land Use

Package in package 'Planning Areas'

The Historical Land Use package comprises logical data model entities representing reference datasets that indicate areas whose historical use may have repercussions for safe digging. This logical data model is intended for generating physical data models through ShapeChange and Enterprise Architect as GML schema and ArcGIS XML.

1.3.7.1.2.1 Historical Land Use diagram

Class diagram in package 'Historical Land Use'

Historical Land Use Version 2.1.3 Created on 15/10/2020. Last modified 09/03/2025



Figure 12: Historical Land Use

1.3.7.1.2.2 SiteOfPreviousIndustrialUse

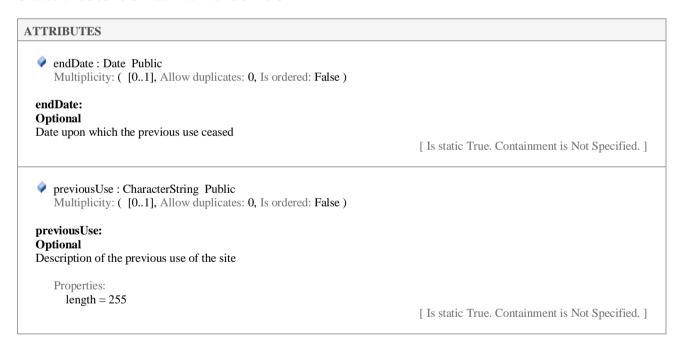
Class «FeatureType» in package 'Historical Land Use'

Site Of Previous Industrial Use:

<<FeatureType>>

Planning Area with a history and possible artefacts or effects of industrial use

Created on 06/08/2019. Last modified 10/01/2025



1.3.7.1.3 Protected Sites

Package in package 'Planning Areas'

The Protected Sites package comprises logical data model entities representing designated administrative regions requiring special treatment or enforcing certain policies with regard to safe digging planning and execution. This logical data model is intended for generating physical data models through ShapeChange and Enterprise Architect as GML schema and ArcGIS XML

Version 2.1.3 Published Created on 15/10/2020. Last modified 09/03/2025

1.3.7.1.3.1 Protected Sites diagram

Class diagram in package 'Protected Sites'

Protected Sites

Version 2.1.3

Created on 15/10/2020. Last modified 09/03/2025



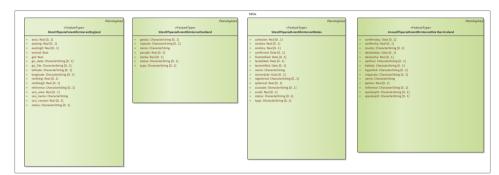


Figure 13: Protected Sites

1.3.7.1.3.2 ArchaeologicalSite

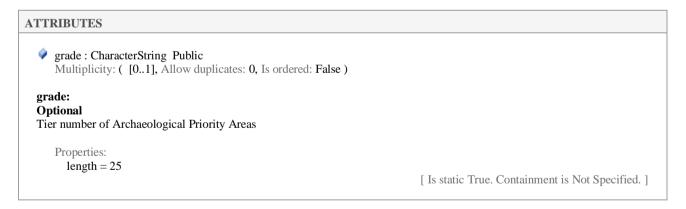
Class «FeatureType» in package 'Protected Sites'

Archaeological Site:

<<FeatureType>>

Planning Area with defined archaeological value or sensitivity

Created on 06/08/2019. Last modified 10/01/2025



1.3.7.1.3.3 ConservationArea

Class «FeatureType» in package 'Protected Sites'

ConservationArea:

<<FeatureType>>

Planning Area with a designated conservation purpose and sensitivity

Created on 06/08/2019. Last modified 10/01/2025

ATTRIBUTES

ATTRIBUTES

🇼 d

designationPurpose: DesignationPurposeValue Public Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

designationPurpose:

Optional

Purpose of the designation.

Values for this attribute are defined in the < DesignationPurposeValue> codelist

[Is static True. Containment is Not Specified.]

1.3.7.1.3.4 AreasOfSpecialScientificInterestNorthernIreland

Class «FeatureType» in package 'Protected Sites'

AreasOfSpecialScientificInterestNorthernIreland:

<<FeatureType>>

A Planning Area formally designated as of special scientific interest in Northern Ireland

Created on 15/10/2020. Last modified 10/01/2025

ATTRIBUTES confirmday: Date Public Alias: CONFIRMDAY Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False) [Is static True. Containment is Not Specified.] confirmha: Real Public Alias: CONMFIRM_HA Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False) [Is static True. Containment is Not Specified.] county: CharacterString Public Alias: COUNTY Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False) Properties: length = 70[Is static True. Containment is Not Specified.] declareday : Date Public Alias: DECLAREDAY Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False) [Is static True. Containment is Not Specified.] declareha: Real Public Alias: DECLARE HA Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False) [Is static True. Containment is Not Specified.] earthsci: CharacterString Public Alias: EARTH_SCI Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False) Properties: length = 254[Is static True. Containment is Not Specified.]

ATTRIBUTES habitat: CharacterString Public Alias: HABITAT Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False) Properties: length = 254[Is static True. Containment is Not Specified.] hyperlink : CharacterString Public Alias: Hyperlink Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False) Properties: length = 150[Is static True. Containment is Not Specified.] mapscale: CharacterString Public Alias: MAP_SCALE Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False) Properties: length = 40[Is static True. Containment is Not Specified.] name: CharacterString Public Alias: NAME Properties: length = 60[Is static True. Containment is Not Specified.] parties: Real Public Alias: PARTIES Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False) [Is static True. Containment is Not Specified.] reference : CharacterString Public Alias: REFERENCE Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False) Properties: length = 10[Is static True. Containment is Not Specified.] speciespt1: CharacterString Public Alias: SPECIESPT1 Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False) Properties: length = 254[Is static True. Containment is Not Specified.] speciespt2: CharacterString Public Alias: SPECIESPT2 Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False) Properties: length = 254[Is static True. Containment is Not Specified.]

1.3.7.1.3.5 SitesOfSpecialScientificInterestEngland

Class «FeatureType» in package 'Protected Sites'

Sites Of Special Scientific Interest England:

<<FeatureType>>

A Planning Area formally designated as of special scientific interest in England

Created on 06/08/2019. Last modified 10/01/2025

ATTRIBUTES	
ATTRIBUTES	
area : Real Public	
Alias: AREA Multiplicity: ([01], Allow duplicates: 0, Is ordered: False)	
inadeprotey. ([one], this is depresent of its state of a mode)	[Is static True. Containment is Not Specified.]
easting: Real Public	
Alias: EASTING	
Multiplicity: ([01], Allow duplicates: 0, Is ordered: False)	[Is static True. Containment is Not Specified.]
	[]
easting0: Real Public	
Alias: EASTING0	
Multiplicity: ([01], Allow duplicates: 0, Is ordered: False)	Flore Continue Continue Continue
	[Is static True. Containment is Not Specified.]
A	
ensisid : Real Public Alias: ENSISID	
Mids. Eligibil	[Is static True. Containment is Not Specified.]
Alias: GID	
	[Is static True. Containment is Not Specified.]
gis_date : CharacterString Public Alias: GIS_DATE	
Multiplicity: ([01], Allow duplicates: 0, Is ordered: False)	
Donat's	
Properties: length = 8	
	[Is static True. Containment is Not Specified.]
gis_file : CharacterString Public	
Alias: GIS_FILE Multiplicity: ([01], Allow duplicates: 0, Is ordered: False)	
Multiplicity. ([01], Allow duplicates. 0, is ordered. Paise)	
Properties:	
length = 1	[Is static True. Containment is Not Specified.]
↓ latitude : CharacterString Public	
Alias: LATITUDE	
Multiplicity: ([01], Allow duplicates: 0, Is ordered: False)	
Properties:	
length = 9	La static Time Containing to No. 12
	[Is static True. Containment is Not Specified.]

ATTRIBUTES longitude : CharacterString Public Alias: LONGITUDE Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False) Properties: length = 9[Is static True. Containment is Not Specified.] northing : Real Public Alias: NORTHING Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False) [Is static True. Containment is Not Specified.] northing0: Real Public Alias: NORTHING0 Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False) [Is static True. Containment is Not Specified.] reference: CharacterString Public Alias: REFERENCE Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False) Properties: length = 8[Is static True. Containment is Not Specified.] sssi_area: Real Public Alias: SSSI_AREA Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False) [Is static True. Containment is Not Specified.] sssi_name: CharacterString Public Alias: SSSI_NAME Properties: length = 60[Is static True. Containment is Not Specified.] sssi_version : Real Public Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False) [Is static True. Containment is Not Specified.] status: CharacterString Public Alias: STATUS Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False) Properties: length = 8[Is static True. Containment is Not Specified.]

1.3.7.1.3.6 SitesOfSpecialScientificInterestScotland

Class «FeatureType» in package 'Protected Sites'

SitesOfSpecialScientificInterestScotland:

<<FeatureType>>

A Planning Area formally designated as of special scientific interest in Scotland

Created on 15/10/2020. Last modified 10/01/2025

ATTRIBUTES geoloc: CharacterString Public Alias: GEO_LOC Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False) Properties: length = 15[Is static True. Containment is Not Specified.] mpanet : CharacterString Public Alias: MPA_NET Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False) Properties: length = 1[Is static True. Containment is Not Specified.] name: CharacterString Public Alias: NAME Properties: length = 255[Is static True. Containment is Not Specified.] pacode : Real Public Alias: PA_CODE Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False) [Is static True. Containment is Not Specified.] siteha: Real Public Alias: SITE_HA Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False) [Is static True. Containment is Not Specified.] status : CharacterString Public Alias: STATUS Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False) Properties: length = 200[Is static True. Containment is Not Specified.] type: CharacterString Public Alias: TYPE Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False) Properties: length = 45[Is static True. Containment is Not Specified.]

1.3.7.1.3.7 SitesOfSpecialScientificInterestWales

Class «FeatureType» in package 'Protected Sites'

Sites Of Special Scientific Interest Wales:

<<FeatureType>>

A Planning Area formally designated as of special scientific interest in Wales

Created on 15/10/2020. Last modified 10/01/2025

ATTRIBUTES	
ATTRIBUTED	
 cartesian: Real Public Alias: Cartesian_ Multiplicity: ([01], Allow duplicates: 0, Is ordered: False) 	[Is static True. Containment is Not Specified.]
centrex: Real Public Alias: Centre_X Multiplicity: ([01], Allow duplicates: 0, Is ordered: False)	[Is static True. Containment is Not Specified.]
	[Is static True. Containment is Not Specified.]
 confirmed: Date Public Alias: Confirmed Multiplicity: ([01], Allow duplicates: 0, Is ordered: False) 	[Is static True. Containment is Not Specified.]
	[Is static True. Containment is Not Specified.]
	[Is static True. Containment is Not Specified.]
	[Is static True. Containment is Not Specified.]
name: CharacterString Public Alias: SSSI_NAME	
Properties: length = 120	[Is static True. Containment is Not Specified.]
osmmdate: Date Public Alias: OSMM_Date Multiplicity: ([01], Allow duplicates: 0, Is ordered: False)	[Is static True. Containment is Not Specified.]
registered: CharacterString Public Alias: Registered Multiplicity: ([01], Allow duplicates: 0, Is ordered: False)	
Properties: length = 10	[Is static True. Containment is Not Specified.]

ATTRIBUTES spherical: Real Public Alias: Spherical_ Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False) [Is static True. Containment is Not Specified.] sssicode : CharacterString Public Alias: SSSI_Code Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False) Properties: length = 10[Is static True. Containment is Not Specified.] sssiid: Real Public Alias: SSSI_ID Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False) [Is static True. Containment is Not Specified.] status : CharacterString Public Alias: Status Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False) Properties: length = 20[Is static True. Containment is Not Specified.] type: CharacterString Public Alias: Type Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False) Properties: length = 12[Is static True. Containment is Not Specified.]

1.3.7.1.3.8 TreeLocation

Class «FeatureType» in package 'Protected Sites'

TreeLocation:

<<FeatureType>>

Planning Area designated to indicate the presence of a tree that would be of interest for the planning of excavation works.

Created on 06/08/2019. Last modified 13/10/2022

ATTRIBUTES

-

treePreservationOrder : Boolean Public = true

treePreservationOrder:

Mandatory

Default=TRUE

A flag indicating whether this feature represents a Tree Preservation Order.

[Is static True. Containment is Not Specified.]

1.3.7.1.4 Restricted Sites

Package in package 'Planning Areas'

Restricted Sites
Version 2.1.3 Published
Created on 30/03/2022. Last modified 09/03/2025

1.3.7.1.4.1 Restricted Sites diagram

GML diagram in package 'Restricted Sites'

Restricted Sites Version 2.1.3 Created on 30/03/2022. Last modified 09/03/2025



Figure 14: Restricted Sites

1.3.7.1.4.2 RestrictedPlanningArea

Class «FeatureType» in package 'Restricted Sites'

RestrictedPlanningArea:

<<FeatureType>>

Representation of an area of zone within which various levels of restriction may be applied to proposed works for reasons of security, disruption etc.

Created on 11/03/2022. Last modified 10/01/2025

1.3.7.1.5 GeneralPlanningArea

Class «FeatureType» in package 'Planning Areas'

GeneralPlanningArea:

<<FeatureType>>

Defined area with characteristics relevant to excavation planning

Created on 11/03/2022. Last modified 10/01/2025

1.3.7.1.6 PlanningAreaNetwork

Class «FeatureType» in package 'Planning Areas'

PlanningAreaNetwork

<<FeatureType>>

A network relating to Planning Areas.

Created on 06/02/2024. Last modified 10/01/2025

1.3.8 Sewer Network

Package in package 'MUDDIUKEx-CoreData'

The Sewer Network package comprises logical data model entities representing sewer utility infrastructure assets above and below ground. This logical data model is intended for generating physical data models

Sewer Network Version 2.1.3 Published Created on 06/08/2019. Last modified 09/03/2025

1.3.8.1 Sewer Network diagram

GML diagram in package 'Sewer Network'

Sewer Network Version 2.1.3 Created on 06/08/2019. Last modified 09/03/2025

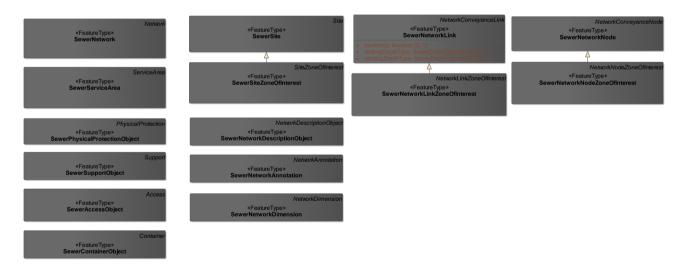


Figure 15: Sewer Network

1.3.8.2 SewerContainerObject

Class «FeatureType» in package 'Sewer Network'

SewerContainerObject

A Container object containing a Sewer network feature.

Created on 22/10/2021. Last modified 10/01/2025

1.3.8.3 SewerNetwork

Class «FeatureType» in package 'Sewer Network'

SewerNetwork

A network in the Sewer domain.

Created on 22/10/2021. Last modified 10/01/2025

1.3.8.4 SewerNetworkAnnotation

Class «FeatureType» in package 'Sewer Network'

SewerNetworkAnnotation:

<<FeatureType>>

A textual description of an element of a sewer network.

Created on 21/01/2022. Last modified 10/01/2025

1.3.8.5 SewerNetworkDescriptionObject

Class «FeatureType» in package 'Sewer Network'

SewerNetworkDescriptionObject:

<<FeatureType>>

An artefact that describes an element of a sewer network.

Created on 21/01/2022. Last modified 10/01/2025

1.3.8.6 SewerNetworkDimension

Class «FeatureType» in package 'Sewer Network'

SewerNetworkDimension:

<<FeatureType>>

A descriptive element that describes a measurement of a sewer network, or its position relative to another feature.

Created on 21/01/2022. Last modified 10/01/2025

1.3.8.7 SewerNetworkLinkZoneOfInterest

Class «FeatureType» in package 'Sewer Network'

SewerNetwork Link Zone Of Interest

A Zone of Interest for a sewer conveyance link.

Created on 22/10/2021. Last modified 10/01/2025

1.3.8.8 SewerNetworkNodeZoneOfInterest

Class «FeatureType» in package 'Sewer Network'

SewerNetworkNodeZoneOfInterest

A Zone of Interest for a sewer conveyance node.

Created on 22/10/2021. Last modified 10/01/2025

1.3.8.9 SewerPhysicalProtectionObject

Class «FeatureType» in package 'Sewer Network'

SewerPhysicalProtectionObject

A Physical Protection object accessorising a Sewer network feature.

Created on 22/10/2021. Last modified 10/01/2025

1.3.8.10 SewerServiceArea

Class «FeatureType» in package 'Sewer Network'

SewerServiceArea

A Service Area for a Sewer network.

Created on 22/10/2021. Last modified 10/01/2025

1.3.8.11 SewerSiteZoneOfInterest

Class «FeatureType» in package 'Sewer Network'

SewerSiteZoneOfInterest

A Zone of Interest for a sewer site.

Created on 22/10/2021. Last modified 10/01/2025

1.3.8.12 SewerSupportObject

Class «FeatureType» in package 'Sewer Network'

SewerSupportObject

A Support object accessorising a Sewer network feature.

Created on 22/10/2021. Last modified 10/01/2025

1.3.8.13 SewerAccessObject

Class «FeatureType» in package 'Sewer Network'

SewerAccessObject

An Access object accessorising a Sewer network feature.

Created on 21/08/2021. Last modified 21/01/2022

1.3.8.14 **SewerSite**

Class «FeatureType» in package 'Sewer Network'

SewerSite:

<<FeatureType>>

Sewer network facility containing other network assets that may be secured. Sewer sites may contain assets of both the Sewer and Water networks.

Created on 06/08/2019. Last modified 10/01/2025

1.3.8.15 SewerNetworkNode

Class «FeatureType» in package 'Sewer Network'

SewerNetworkNode:

<<FeatureType>>

Sewer network nodes that connect sewer conveyance links and/or perform other functions in the network.

Created on 06/08/2019. Last modified 10/01/2025

1.3.8.16 SewerNetworkLink

Class «FeatureType» in package 'Sewer Network'

SewerNetworkLink:

<<FeatureType>>

Sewer network links conveying sewage between nodes.

Created on 06/08/2019. Last modified 10/01/2025

ATTRIBUTES

backdrop : Boolean Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

backdrop:

Optional

Indicates whether the start of the pipe is lower than the end.

[Is static True. Containment is Not Specified.]

endingDepthType : SewerDepthTypeValue Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

endingDepthType:

Optional

Indicates whether the ending pipe depth refers to the invert rather than the top-of-asset depth.

[Is static True. Containment is Not Specified.]

startingDepthType: SewerDepthTypeValue Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

startingDepthType:

Optional

Indicates whether the starting pipe depth refers to the invert rather than the top-of-asset depth.

[Is static True. Containment is Not Specified.]

1.3.9 Telecommunications Network

Package in package 'MUDDIUKEx-CoreData'

The Telecommunications Network package comprises logical data model entities representing telecommunications utility infrastructure assets above and below ground. This logical data model is intended for generating physical data models

Telecommunications Network Version 2.1.3 Published Created on 06/08/2019. Last modified 09/03/2025

1.3.9.1 Telecommunications Network diagram

GML diagram in package 'Telecommunications Network'

Telecommunications Network Version 2.1.3 Created on 06/08/2019. Last modified 09/03/2025

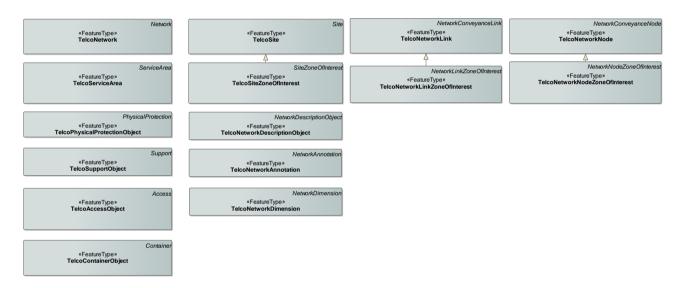


Figure 16: Telecommunications Network

1.3.9.2 TelcoNetwork

Class «FeatureType» in package 'Telecommunications Network'

TelcoNetwork

A network in the telecoms domain.

Created on 25/10/2021. Last modified 10/01/2025

1.3.9.3 TelcoNetworkAnnotation

Class «FeatureType» in package 'Telecommunications Network'

TelcoNetworkAnnotation:

<<FeatureType>>

A textual description of an element of a telecoms network.

Created on 21/01/2022. Last modified 10/01/2025

1.3.9.4 TelcoNetworkDescriptionObject

Class «FeatureType» in package 'Telecommunications Network'

TelcoNetworkDescriptionObject:

<<FeatureType>>

An artefact that describes an element of a telecoms network.

Created on 21/01/2022. Last modified 10/01/2025

1.3.9.5 TelcoNetworkDimension

Class «FeatureType» in package 'Telecommunications Network'

TelcoNetworkDimension:

<<FeatureType>>

A descriptive element that describes a measurement of a telecoms network, or its position relative to another feature.

Created on 21/01/2022. Last modified 10/01/2025

1.3.9.6 TelcoNetworkLinkZoneOfInterest

Class «FeatureType» in package 'Telecommunications Network'

TelcoNetworkLinkZoneOfInterest

A Zone of Interest for a telecoms conveyance link.

Created on 25/10/2021. Last modified 10/01/2025

1.3.9.7 TelcoNetworkNodeZoneOfInterest

Class «FeatureType» in package 'Telecommunications Network'

TelcoNetworkNodeZoneOfInterest

A Zone of Interest for a telecoms conveyance node.

Created on 25/10/2021. Last modified 10/01/2025

1.3.9.8 TelcoPhysicalProtectionObject

Class «FeatureType» in package 'Telecommunications Network'

TelcoPhysicalProtectionObject

A Physical Protection object accessorising a telecom network feature.

Created on 25/10/2021. Last modified 10/01/2025

1.3.9.9 TelcoServiceArea

Class «FeatureType» in package 'Telecommunications Network'

TelcoServiceArea

A Service Area for a telecom network.

Created on 25/10/2021. Last modified 10/01/2025

1.3.9.10 TelcoSiteZoneOfInterest

Class «FeatureType» in package 'Telecommunications Network'

TelcoSiteZoneOfInterest

A Zone of Interest for a telecoms site.

Created on 25/10/2021. Last modified 10/01/2025

1.3.9.11 TelcoSupportObject

Class «FeatureType» in package 'Telecommunications Network'

TelcoSupportObject

A Support object accessorising a telecoms network feature.

Created on 25/10/2021. Last modified 10/01/2025

1.3.9.12 TelcoAccessObject

Class «FeatureType» in package 'Telecommunications Network'

TelcoAccessObject

An Access object accessorising a telecoms network feature.

Created on 25/10/2021. Last modified 10/01/2025

1.3.9.13 TelcoSite

Class «FeatureType» in package 'Telecommunications Network'

TelcoSite:

<<FeatureType>>

Telecommunications network facility containing other telco network assets which may be secured

Created on 23/10/2019. Last modified 10/01/2025

1.3.9.14 TelcoNetworkNode

Class «FeatureType» in package 'Telecommunications Network'

TelcoNetworkNode:

<<FeatureType>>

Telecommunications network node connecting telco cables and/or providing additional network functions / connections.

Created on 06/08/2019. Last modified 10/01/2025

1.3.9.15 TelcoNetworkLink

Class «FeatureType» in package 'Telecommunications Network'

TelcoNetworkLink:

<<FeatureType>>

Telecommunications network link conveying voice and or data communications between telco structures.

Created on 06/08/2019. Last modified 10/01/2025

1.3.9.16 TelcoContainerObject

Class «FeatureType» in package 'Telecommunications Network'

TelcoContainerObject:

<<FeatureType>>

Telecommunications network container assets through which one or more teleo cables run and which may be nested as ducts and subducts.

Created on 22/08/2019. Last modified 10/01/2025

1.3.10 Thermal Network

Package in package 'MUDDIUKEx-CoreData'

The Thermal Network package comprises logical data model entities representing thermal network infrastructure assets for heating and cooling systems above and below ground. This logical data model is intended for generating physical data models

Thermal Network Version 2.1.3 Published Created on 06/08/2019. Last modified 09/03/2025

1.3.10.1 Thermal Network diagram

Class diagram in package 'Thermal Network'

Thermal Network Version 2.1.3 Created on 06/08/2019. Last modified 09/03/2025

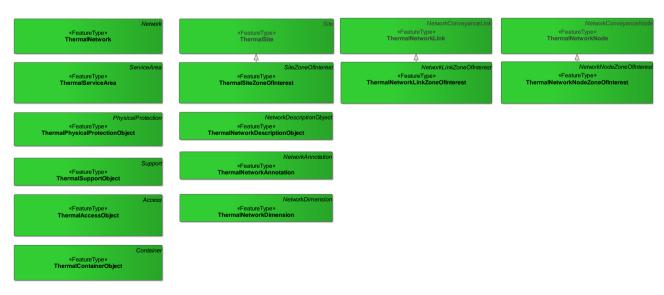


Figure 17: Thermal Network

1.3.10.2 ThermalNetwork

Class «FeatureType» in package 'Thermal Network'

ThermalNetwork

A thermal network, such as a district heating scheme.

Created on 25/10/2021. Last modified 10/01/2025

1.3.10.3 ThermalNetworkAnnotation

Class «FeatureType» in package 'Thermal Network'

ThermalNetworkAnnotation:

<<FeatureType>>

A textual description of an element of a thermal network.

Created on 21/01/2022. Last modified 10/01/2025

1.3.10.4 ThermalNetworkDescriptionObject

Class «FeatureType» in package 'Thermal Network'

ThermalNetworkDescriptionObject:

<<FeatureType>>

An artefact that describes an element of a thermal network.

Created on 21/01/2022. Last modified 10/01/2025

1.3.10.5 ThermalNetworkDimension

Class «FeatureType» in package 'Thermal Network'

ThermalNetworkDimension:

<<FeatureType>>

A descriptive element that describes a measurement of a thermal network, or its position relative to another feature.

Created on 21/01/2022. Last modified 10/01/2025

1.3.10.6 ThermalNetworkLinkZoneOfInterest

Class «FeatureType» in package 'Thermal Network'

ThermalNetworkLinkZoneOfInterest

A Zone of Interest for a thermal conveyance link.

Created on 25/10/2021. Last modified 10/01/2025

1.3.10.7 ThermalNetworkNodeZoneOfInterest

Class «FeatureType» in package 'Thermal Network'

Thermal Network Node Zone Of Interest

A Zone of Interest for a thermal conveyance node.

Created on 25/10/2021. Last modified 10/01/2025

1.3.10.8 ThermalPhysicalProtectionObject

Class «FeatureType» in package 'Thermal Network'

ThermalPhysicalProtectionObject

A Physical Protection object accessorising a Thermal network feature.

Created on 25/10/2021. Last modified 10/01/2025

1.3.10.9 ThermalServiceArea

Class «FeatureType» in package 'Thermal Network'

ThermalServiceArea

A Service Area for a Thermal network.

Created on 25/10/2021. Last modified 10/01/2025

1.3.10.10 ThermalSiteZoneOfInterest

Class «FeatureType» in package 'Thermal Network'

ThermalSiteZoneOfInterest

A Zone of Interest for a thermal site.

Created on 25/10/2021. Last modified 10/01/2025

1.3.10.11 ThermalSupportObject

Class «FeatureType» in package 'Thermal Network'

ThermalSupportObject

A Support object accessorising a Thermal network feature.

Created on 25/10/2021. Last modified 23/11/2021

1.3.10.12 ThermalAccessObject

Class «FeatureType» in package 'Thermal Network'

ThermalAccessObject

An Access object accessorising a Thermal network feature.

Created on 25/10/2021. Last modified 10/01/2025

1.3.10.13 ThermalSite

Class «FeatureType» in package 'Thermal Network'

ThermalSite:

<<FeatureType>>

A site in a thermal network

Created on 03/10/2021. Last modified 10/01/2025

1.3.10.14 ThermalNetworkNode

Class «FeatureType» in package 'Thermal Network'

ThermalNetworkNode:

<<FeatureType>>

A node in a thermal network

Created on 03/10/2021. Last modified 10/01/2025

1.3.10.15 ThermalNetworkLink

Class «FeatureType» in package 'Thermal Network'

ThermalNetworkLink:

<<FeatureType>>

A link in a thermal network

Created on 03/10/2021. Last modified 10/01/2025

1.3.10.16 ThermalContainerObject

Class «FeatureType» in package 'Thermal Network'

ThermalContainerObject

A Container object containing a Thermal network feature.

Created on 25/10/2021. Last modified 23/11/2021

1.3.11 Transport

Package in package 'MUDDIUKEx-CoreData'

The Transport Network package comprises logical data model entities representing transport infrastructure assets above and below ground. This logical data model is intended for generating physical data models

Transport Version 2.1.3 Published Created on 06/08/2019. Last modified 09/03/2025

1.3.11.1 Transport diagram

Class diagram in package 'Transport'

Transport Version 2.1.3 Created on 06/08/2019. Last modified 09/03/2025

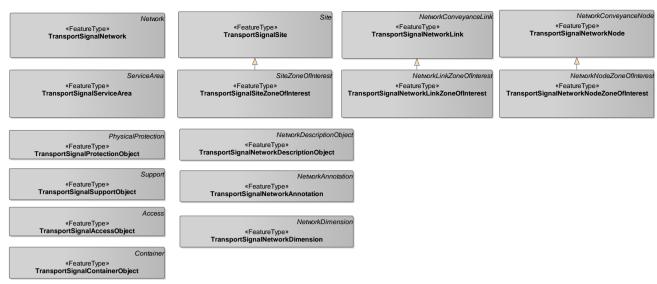


Figure 18: Transport

1.3.11.2 TransportSignalAccessObject

Class «FeatureType» in package 'Transport'

TransportSignalAccessObject

An Access object accessorising a Transport Signalling network feature.

Created on 25/10/2021. Last modified 10/01/2025

1.3.11.3 TransportSignalContainerObject

Class «FeatureType» in package 'Transport'

Transport Signal Container Object

A Container object containing a Transport Signalling network feature.

Created on 25/10/2021. Last modified 10/01/2025

1.3.11.4 TransportSignalNetwork

Class «FeatureType» in package 'Transport'

Transport Signal Network

A signalling network in the Transport domain.

Created on 25/10/2021. Last modified 10/01/2025

1.3.11.5 TransportSignalNetworkAnnotation

Class «FeatureType» in package 'Transport'

TransportSignalNetworkAnnotation:

<<FeatureType>>

A textual description of an element of a transport signalling network.

Created on 21/01/2022. Last modified 10/01/2025

1.3.11.6 TransportSignalNetworkDescriptionObject

Class «FeatureType» in package 'Transport'

TransportSignalNetworkDescriptionObject:

<<FeatureType>>

An artefact that describes an element of a transport signalling network.

Created on 21/01/2022. Last modified 10/01/2025

1.3.11.7 TransportSignalNetworkDimension

Class «FeatureType» in package 'Transport'

TransportSignalNetworkDimension:

<<FeatureType>>

A descriptive element that describes a measurement of a transport signalling network, or its position relative to another feature.

Created on 21/01/2022. Last modified 10/01/2025

1.3.11.8 TransportSignalNetworkLinkZoneOfInterest

Class «FeatureType» in package 'Transport'

Transport Signal Network Link Zone Of Interest

A Zone of Interest for a Transport Signalling conveyance link.

Created on 25/10/2021. Last modified 10/01/2025

1.3.11.9 TransportSignalNetworkNodeZoneOfInterest

Class «FeatureType» in package 'Transport'

Transport Signal Network Node Zone Of Interest

A Zone of Interest for a Transport Signalling conveyance node.

Created on 25/10/2021. Last modified 10/01/2025

1.3.11.10 TransportSignalProtectionObject

Class «FeatureType» in package 'Transport'

TransportSignalProtectionObject

A Physical Protection object accessorising a Transport Signalling network feature.

Created on 25/10/2021. Last modified 10/01/2025

1.3.11.11 TransportSignalServiceArea

Class «FeatureType» in package 'Transport'

TransportSignalServiceArea

A Service Area for a transport signalling network.

Created on 25/10/2021. Last modified 10/01/2025

1.3.11.12 TransportSignalSiteZoneOfInterest

Class «FeatureType» in package 'Transport'

TransportSignalSiteZoneOfInterest

A Zone of Interest for a Transport Signalling site.

Created on 25/10/2021. Last modified 10/01/2025

1.3.11.13 TransportSignalSupportObject

Class «FeatureType» in package 'Transport'

TransportSignalSupportObject

A Support object accessorising a Transport Signalling network feature.

Created on 25/10/2021. Last modified 10/01/2025

1.3.11.14 TransportSignalSite

Class «FeatureType» in package 'Transport'

TransportSignalSite:

<<FeatureType>>

Transport signalling network facility that comprises other network assets and may be secured

Created on 06/08/2019. Last modified 10/01/2025

1.3.11.15 TransportSignalNetworkNode

Class «FeatureType» in package 'Transport'

Transport Signal Network Node:

<<FeatureType>>

Signalling network node asset that conveys signals for a transport network.

Created on 06/08/2019. Last modified 10/01/2025

1.3.11.16 TransportSignalNetworkLink

Class «FeatureType» in package 'Transport'

TransportSignalNetworkLink:

<<FeatureType>>

Signalling network link asset that conveys signals for a transport network

Created on 06/08/2019. Last modified 10/01/2025

1.3.12 Water Network

Package in package 'MUDDIUKEx-CoreData'

The Water Network package comprises logical data model entities representing water utility infrastructure assets above and below ground. This logical data model is intended for generating physical data models

 $Water \ Network \\ Version \ 2.1.3 \ Published \\ Created on \ 06/08/2019. \ Last \ modified \ 09/03/2025$

1.3.12.1 Water Network diagram

Class diagram in package 'Water Network'

Water Network Version 2.1.3 Created on 06/08/2019. Last modified 09/03/2025

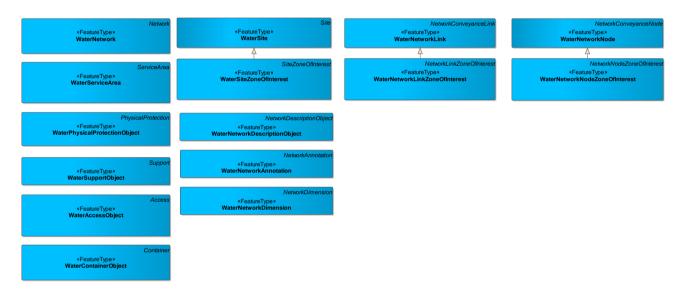


Figure 19: Water Network

1.3.12.2 WaterNetwork

Class «FeatureType» in package 'Water Network'

WaterNetwork

A network in the Water domain.

Created on 25/10/2021. Last modified 10/01/2025

1.3.12.3 WaterNetworkAnnotation

Class «FeatureType» in package 'Water Network'

WaterNetworkAnnotation:

<<FeatureType>>

A textual description of an element of a water network.

Created on 21/01/2022. Last modified 10/01/2025

1.3.12.4 WaterNetworkDescriptionObject

Class «FeatureType» in package 'Water Network'

WaterNetworkDescriptionObject:

<<FeatureType>>

An artefact that describes an element of a water network.

Created on 21/01/2022. Last modified 10/01/2025

1.3.12.5 WaterNetworkDimension

Class «FeatureType» in package 'Water Network'

WaterNetworkDimension:

<<FeatureType>>

A descriptive element that describes a measurement of a water network, or its position relative to another feature.

Created on 21/01/2022. Last modified 10/01/2025

1.3.12.6 WaterNetworkLinkZoneOfInterest

Class «FeatureType» in package 'Water Network'

WaterNetworkLinkZoneOfInterest

A Zone of Interest for a water conveyance link.

Created on 25/10/2021. Last modified 10/01/2025

1.3.12.7 WaterNetworkNodeZoneOfInterest

Class «FeatureType» in package 'Water Network'

WaterNetworkNodeZoneOfInterest

A Zone of Interest for a water conveyance node.

Created on 25/10/2021. Last modified 10/01/2025

1.3.12.8 WaterPhysicalProtectionObject

Class «FeatureType» in package 'Water Network'

WaterPhysicalProtectionObject

A Physical Protection object accessorising a Water network feature.

Created on 25/10/2021. Last modified 10/01/2025

1.3.12.9 WaterServiceArea

Class «FeatureType» in package 'Water Network'

WaterServiceArea

A Service Area for a Water network.

Created on 25/10/2021. Last modified 10/01/2025

1.3.12.10 WaterSiteZoneOfInterest

Class «FeatureType» in package 'Water Network'

WaterSiteZoneOfInterest

A Zone of Interest for a water site.

Created on 25/10/2021. Last modified 10/01/2025

1.3.12.11 WaterSupportObject

Class «FeatureType» in package 'Water Network'

WaterSupportObject

A Support object accessorising a Water network feature.

Created on 25/10/2021. Last modified 10/01/2025

1.3.12.12 WaterAccessObject

Class «FeatureType» in package 'Water Network'

WaterAccessObject

An Access object accessorising a Water network feature.

Created on 25/10/2021. Last modified 10/01/2025

1.3.12.13 WaterSite

Class «FeatureType» in package 'Water Network'

WaterSite:

<<FeatureType>>

Network facility on a Water Network that comprises other network assets and may be a secured area.

Created on 23/10/2019. Last modified 10/01/2025

1.3.12.14 WaterNetworkNode

Class «FeatureType» in package 'Water Network'

WaterNetworkNode:

<<FeatureType>>

Network node asset on the Water Network that links Water Network Links together and/or performs an action on the network e.g. valve, measuring device.

Created on 22/08/2019. Last modified 10/01/2025

1.3.12.15 WaterNetworkLink

Class «FeatureType» in package 'Water Network'

WaterNetworkLink:

<<FeatureType>>

Network link asset on the Water Network that conveys water between nodes.

Created on 06/08/2019. Last modified 10/01/2025

1.3.12.16 WaterContainerObject

Class «FeatureType» in package 'Water Network'

WaterContainerObject

A Container object containing a Water network feature.

Created on 25/10/2021. Last modified 10/01/2025

ABSTRACT

1.3.13 Access

Class «FeatureType» in package 'MUDDIUKEx-CoreData'

Access:

<<FeatureType>>

Object that has a role in providing access to an asset in a utility network

Created on 19/08/2021. Last modified 10/01/2025

ATTRIBUTES

accessSubType : CharacterString Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

accessSubType:

Optional

A free-text equivalent of the **accessType** attribute value which may be used to reflect a source data value which is not precisely represented in the **AccessTypeValue** codelist

[Is static True. Containment is Not Specified.]

with

accessType: AccessTypeValue Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

accessType:

Mandatory (by convention)

The type of the access object.

The values for this attribute are defined in the <AccessTypeValue> codelist.

[Is static True. Containment is Not Specified.]

٥

numberOfCovers: Integer Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

numberOfCovers:

Optional

The number of covers exposed by the access object

[Is static True. Containment is Not Specified.]

ABSTRACT

1.3.14 BaseObject

Class «FeatureType» in package 'MUDDIUKEx-CoreData'

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NUARObject:

<<FeatureType>>

Parent Feature Type for all entities in an implementation of the UK Excavation profile of MUDDI. Establishes the key metadata attributes required for data inserts, updates and deletions.

Created on 27/10/2021. Last modified 23/05/2024

ATTRIBUTES



dateLastUpdated : DateTime Public

datelastUpdated:

Mandatory

The date upon which this data item was last updated at source. This may be specified at the feature level in some datasets (e.g. a LastModifiedDate field), otherwise this should reflect the date upon which this data item was last supplied to the NUAR submission process (i.e. it should have the same value as the dateOfSubmission for the submission event during which this data item was supplied).

dateLastUpdated will be updated to the current date and time for an individual feature in the event that it is explicitly identified as being unchanged since the last update.

[Is static True. Containment is Not Specified.]

dateOfLastLifecycleStatusChange: DateTime Public Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

dateOfLastLifecvcleStatusChange:

Optional

The date upon which the current lifecycleStatus value was set

[Is static True. Containment is Not Specified.]

lifecycleStatus : LifecycleStatusValue Public

lifecycleStatus:

Mandatory

Default = 'Submitted'

A description of a feature's stage in the general feature lifecycle, through submission, publication, retirement, archive and

Currently used mainly at the Submission level to dictate which data submissions are ready for publication to the live view.

[Is static True. Containment is Not Specified.]



systemID : CharacterString Public

systemID:

Mandatory

A mandatory, auto-generated identifier which is globally unique within the NUAR platform, and persistent for the lifespan of a data record representing a Feature Version (i.e. an instance of a feature distinguished from other instances of the same feature by distinct values of the System ID attribute and metadata values representing the date and time when the instance was created for use in the NUAR platform. A Feature Version is represented by a single Data Record.

Properties:

size = 38

[Stereotype is «identifier». Is static True. Containment is Not Specified.]



systemLoadDate : DateTime Public

systemLoadDate:

Date at which the data record for this entity was last loaded into the datastore system. In the case of NUAR, this is the database which is the target of the Data Transformation and Ingestion process, populated after transformation to the target NUAR Data Model is completed.

1.3.15 **CharacterStringArray**

Class «type» in package 'MUDDIUKEx-CoreData'

Placeholder type to force ShapeChange to output attributes as arrays.

Created on 25/11/2021. Last modified 10/01/2025

ABSTRACT

1.3.16 Container

Class «FeatureType» in package 'MUDDIUKEx-CoreData'

Container:

<<FeatureType>>

Object that serves primarily as a container for other assets in a network. E.g. a duct, conduit or vault.

Created on 19/08/2021. Last modified 10/01/2025

ATTRIBUTES



containerSubType : CharacterString Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

containerSubType:

Optional

A free-text equivalent of the container Type attribute value which may be used to reflect a source data value which is not precisely represented in the < Container Type Value > codelist

[Is static True. Containment is Not Specified.]



containerType: ContainerTypeValue Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

containerType:

Mandatory (by convention)

The type of the container object.

The values for this attribute are defined in the **ContainerTypeValue>** codelist.

[Is static True. Containment is Not Specified.]

1.3.17 **Denotation**

Class «FeatureType» in package 'MUDDIUKEx-CoreData'

Created on 03/10/2021. Last modified 03/10/2021

1.3.18 Depth

Class «FeatureType» in package 'MUDDIUKEx-CoreData'

Depth:

<<FeatureType>>

An indication of the depth and the method of measuring it for a point or segment of a linear feature.

Created on 21/08/2021. Last modified 10/01/2025

ATTRIBUTES

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ATTRIBUTES

depth : MUDDIDepthType Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

Optional

Numerical value in **measurementUnits** of the depth from grade at time of survey to the top of the associated linear feature as measured for this point or segment.

[Is static True. Containment is Not Specified.]

depthMethod : DepthMethodValue Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

depthMethod:

Optional

The method by which the value for depth was determined for this point or segment.

Values for this attribute are defined in the **<DepthMethodValue>** codelist

[Is static True. Containment is Not Specified.]

1.3.19 Guidance

Class «FeatureType» in package 'MUDDIUKEx-CoreData'

NUARGuidance:

<<FeatureType>>

A representation of a guidance or process document, which may have a file associated with it.

Created on 16/11/2021. Last modified 10/01/2025

ATTRIBUTES



name : CharacterString Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

name:

Optional

A name for the guidance which may be displayed to users.

[Is static True. Containment is Not Specified.]

ASSOCIATIONS



Association (direction: Source -> Destination) linkedGuidance

Source: Public (Class) Relationship Guidance «FeatureType»

Target: Public (Class) Guidance «FeatureType»

Association (direction: Source -> Destination) linkedObject

Source: Public (Class) Relationship_LinkedFile «FeatureType»

Target: Public (Class) Guidance «FeatureType»

1.3.20 HorizontalMeasurementMethod

Class «FeatureType» in package 'MUDDIUKEx-CoreData'

HorizontalMeasurementMethod:

<<FeatureType>>

An indication of the method of measuring the horizontal position of a point or segment of a linear feature.

Created on 21/08/2021. Last modified 10/01/2025

horizontalMeasurementMethod: HorizontalMeasurementMethodValue Public Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

horizontalMeasurementMethod:

Optional

The method by which the horizontal position of the point or segment was captured.

Values for this attribute are defined in the < Horizontal Measurement Method Value > codelist.

[Is static True. Containment is Not Specified.]

LinkedFile 1.3.21

Class «FeatureType» in package 'MUDDIUKEx-CoreData'

LinkedFile:

<<FeatureType>>

Representation of a file linked to another entity in the database.

Features contain links to files held externally to the database (although possibly within the environment more broadly).

Created on 16/11/2021. Last modified 23/05/2024

ATTRIBUTES



checksum : CharacterString Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

checksum

Optional

Checksum for the file to allow data integrity to be maintained across environments.

[Is static True. Containment is Not Specified.]



fullPath : CharacterString Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

fullPath:

Optional

The URI of the file, qualified sufficiently to allow it to be accessed.

For external resources, a full path will be required.

For internal resources a partial path may be sufficient, with further qualification provided in platform configuration (for example).

[Is static True. Containment is Not Specified.]



lastScanDate : DateTime Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

lastScanDate

Optional

The date and time at which the last malware scan was carried out on the file associated with the record.

[Is static True. Containment is Not Specified.]



mimeType : CharacterString Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

mimeType:

Optional

The type of the file according to the MIME standard used for various communication protocols (e.g. "application/pdf")

[Is static True. Containment is Not Specified.]



name : CharacterString Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

name:

Optional

A name for the file which may be displayed to users.

[Is static True. Containment is Not Specified.]

scanStatus : FileScanStatusValue Public

scanStatus:

Mandatory

Default='Pending'

The current status of the file associated with the record with regards to malware scanning.

Values for this attribute are defined in the <FileScanStatusValue> codelist.

[Is static True. Containment is Not Specified.]

typeDescription : CharacterString Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

typeDescription:

Optional

A meaningful description of the file type (e.g. "PDF")

[Is static True. Containment is Not Specified.]

ASSOCIATIONS

Association (direction: Source -> Destination) linkedFile

Source: Public (Class) Relationship_LinkedFile «FeatureType»

Target: Public (Class) LinkedFile «FeatureType»

1.3.22 MUDDIAddressType

Class «dataType» in package 'MUDDIUKEx-CoreData'

AddressType:

<<DataType>>

A Data Type allowing addresses to be represented in the database

Created on 05/05/2022. Last modified 07/03/2025

ATTRIBUTES



buildingName : CharacterString Public

buildingName:

A description applied to a single building or group of buildings (e.g. "Highfield House")

[Is static True. Containment is Not Specified.]

buildingNumber : CharacterString Public

buildingNumber:

A number given to a single building or group of buildings (e.g. "44")

[Is static True. Containment is Not Specified.]

locality : CharacterString Public

ATTRIBUTES locality: **Optional** An area or geographical identifier within a town, village or hamlet [Is static True. Containment is Not Specified.] postcode : CharacterString Public postcode: Optional The postcode of the address [Is static True. Containment is Not Specified.] singleLineAddress : CharacterString Public singleLineAddress: **Optional** All elements of the address combined in a single human-readable string [Is static True. Containment is Not Specified.] streetName : CharacterString Public streetName: **Optional** The street name of the address [Is static True. Containment is Not Specified.] subBuilding : CharacterString Public subBuilding: **Optional** An identifier for a subdivision of a property (e.g. "Flat 3") [Is static True. Containment is Not Specified.] townName : CharacterString Public townName: **Optional** The name of the town the address is within [Is static True. Containment is Not Specified.] uprn : CharacterString Public **Optional** The Unique Property Reference Number associated with the address [Is static True. Containment is Not Specified.]

ABSTRACT

1.3.23 MUDDIAsset

Class «FeatureType» in package 'MUDDIUKEx-CoreData'

MUDDIAsset:

<<FeatureType>>

Representation of a physical object

Created on 21/08/2021. Last modified 10/01/2025

azimuth: Real Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

azimuth:

Optional

Horizontal angle (measured clockwise) of the length dimension of a feature with respect to a north base line.

[Is static True. Containment is Not Specified.]

azimuthMeasurementUnits: MeasurementUnitsValue Public Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

azimuthMeasurementUnits:

Optional

The unit of measure for the value in the azimuth attribute.

Values for this attribute are defined in the <MeasurementUnitsValue> codelist (typically Degrees or Radians)

[Is static True. Containment is Not Specified.]

 azimuthType: OrientationTypeValue Public = Geographic Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

azimuthType:

Optional

Default = 'Geographic'

Defines the correct interpretation of the angle specified in **azimuth**.

Geographic means that the angle is the rotation from north in a clockwise direction.

Arithmetic means that the angle is the rotation from east in a counter-clockwise direction.

Values for this attribute are defined in the **<OrientationTypeValue>** codelist (**Arithmetic** or **Geographic**).

[Is static True. Containment is Not Specified.]

centroidXYZ: CharacterString Public
 Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

centroidXYZ:

Optional

X-Y-Z coordinates representing the centre of the feature for data exchange purposes. For non-linear structures, XYZ represents an anchor point used for 3D representations, which may or not coincide with the feature's centroid. In many cases, XYZ coincides with the observed location in the field (e.g., centre of manhole lid). For proper orientation in a 3D space, the **azimuth** attribute is also necessary.

Properties: length = 255

[Is static True. Containment is Not Specified.]

colour : CharacterString Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

colour:

Optional

A description of the colour of the object as supplied by the Data Provider

[Is static True. Containment is Not Specified.]

depth: MUDDIDepthType Public Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

depth:

Optional

Numerical value in **measurementUnits** of the depth from grade at time of survey to the top of the asset. This attribute should be used for a single approximation of asset depth according to **depthMethod**.

Absolute vertical positioning information should be represented in the geometry attribute.

Represented by the **<DepthType>** Data Type.

depthMethod : DepthMethodValue Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

depthMethod:

Optional

The method by which the value for depth was determined.

Values for this attribute are defined in the < DepthMethodValue> codelist

[Is static True, Containment is Not Specified,]

horizontal Accuracy : MUDDILength Type Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

horizontal Accuracy:

Optional

If the last survey of the feature was carried out according to PAS128, this field should represent the horizontal 'Location accuracy' associated with the Quality Level assigned to this feature, expressed as a **LengthType**.

If the last survey was not carried out according to PAS128, this field should represent the worst-case 'margin of error' reported by the surveying equipment used at the time, expressed as a LengthType. This field should only be populated if objective data about horizontal accuracy is available.

[Is static True. Containment is Not Specified.]

horizontalMeasurementMethod: HorizontalMeasurementMethodValue Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

horizontalMeasurementMethod:

Optional

The method by which the horizontal position of the feature was captured.

Values for this attribute are defined in the < Horizontal Measurement Method Value > codelist.

[Is static True. Containment is Not Specified.]

installationMethod: InstallationMethodTypeValue Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

installationMethod:

Optional

The method used to install the asset, knowledge of which can be useful for reducing risk in some scenarios.

Values for this attribute are defined in the <InstallationMethodTypeValue> codelist.

[Is static True. Containment is Not Specified.]

installationMethodSubType: CharacterString Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

installationMethodSubType:

Text string allowing data providers to add more detail than can be captured in installationMethod.

[Is static True. Containment is Not Specified.]

intendedPermanence : IntendedPermanenceValue Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

intendedPermanence:

Optional

Intended longevity of the object represented by the feature.

Values for this attribute are defined in the <IntendedPermanenceValue> codelist.

[Is static True. Containment is Not Specified.]

locationType : LocationTypeValue Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

locationType:

Optional

An indication of the location of the object (e.g. carriageway, verge etc).

Values for this attribute are defined in the **LocationTypeValue**> codelist.

[Is static True. Containment is Not Specified.]

material: Material Value Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

material:

Optional

Predominant or conveying material of which the object is constructed. For features that transmit a signal or electrical power, material refers to the conductor material.

Values for this attribute are defined in the < Material Type Value > codelist.

[Is static True. Containment is Not Specified.]

materialSubType : CharacterString Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

materialSubType:

Optional

A free-text equivalent of the material attribute value which may be used to reflect a source data value which is not precisely represented in the < Material Type Value > codelist

[Is static True. Containment is Not Specified.]

qualityLevel : QualityLevelValue Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

qualityLevel:

Optional

Quality level in accordance with PAS128:2022. This field should only be populated if the MUDDIObject:dateDataCollected attribute is populated with the date of a PAS128-compliant utility survey, and qualityLevel should reflect the Quality Level assigned during that survey.

Values for this attribute are defined in the < QualityLevelValue> codelist.

[Is static True. Containment is Not Specified.]

undergroundStatus: UndergroundStatusValue Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

undergroundStatus:

Optional

Indicator of whether the feature is partially or completely underground.

The values for this attribute are defined in the **<UndergroundStatusValue>** codelist.

[Is static True. Containment is Not Specified.]

verticalAccuracy: MUDDILengthType Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

verticalAccuracy:

Optional

If the last survey of the feature was carried out according to PAS128, this field should represent the vertical 'Location accuracy' associated with the Quality Level assigned to this feature, expressed as a **LengthType**.

If the last survey was not carried out according to PAS128, this field should represent the worst-case 'margin of error' reported by the surveying equipment used at the time, expressed as a LengthType. This field should only be populated if objective data about vertical accuracy is available.

[Is static True. Containment is Not Specified.]

1.3.24 MUDDIDepthType

Class «dataType» in package 'MUDDIUKEx-CoreData'

DepthType:

<<DataType>>

A complex type for representing Depth

Created on 21/01/2022. Last modified 07/03/2025

ATTRIBUTES



depth: Real Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

Optional

The depth value

[Is static True. Containment is Not Specified.]



unitOfMeasure : MeasurementUnitsValue Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

unitOfMeasure:

Optional

The unit of measure for the **depth** value.

Values for this attribute are defined in the < Measurement Units Value > codelist.

[Is static True. Containment is Not Specified.]

1.3.25 **MUDDIEnvironmentalUnit**

Class «FeatureType» in package 'MUDDIUKEx-CoreData'

Created on 27/09/2021. Last modified 28/10/2021

ABSTRACT

1.3.26 **MUDDIEvent**

Class «FeatureType» in package 'MUDDIUKEx-CoreData'

Created on 27/09/2021. Last modified 28/10/2021

ATTRIBUTES



expiryDate : DateTime Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

expiryDate:

Optional

A date beyond which the observation should no longer be displayed. E.g. for reporting temporary conditions.

[Is static True. Containment is Not Specified.]



notes : CharacterString Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

notes:

Optional

Any additional notes or commentary pertaining to the Observation. May include links to external files and resources as required.

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ATTRIBUTES

originatingOrganisationName : CharacterString Public Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

originatingOrganisationName:

Optional

The name of the organisation the raising user is directly associated with.

[Is static True. Containment is Not Specified.]

status : ObservationStatusValue Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

status:

Optional

The current status of the Observation.

The values for this attribute are defined in the **ObservationStatusValue**> codelist.

[Is static True. Containment is Not Specified.]

title: CharacterString Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

Optional

The Title of the Observation.

[Is static True. Containment is Not Specified.]

userID : CharacterString Public

userID:

Mandatory

The identifier of the user that created the Observation.

[Is static True. Containment is Not Specified.]

userReference: CharacterString Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

userReference:

Optional

A reference for the Observation, e.g. a scheme or job name.

[Is static True. Containment is Not Specified.]

ASSOCIATIONS



Association (direction: Source -> Destination)

originatingOrganisationID:

Mandatory

The systemID in <NUARActor> of the organisation the raising user is directly associated with. The Foreign Key to the <NUARActor> table doesn't work for supply chain organisations as these are only represented in the platform database not

Source: Public (Class) MUDDIEvent «FeatureType»

Target: Public originatingOrganisationID (Class) Organisation «FeatureType»

Cardinality: [1]

1.3.27 **MUDDIHeightType**

Class «dataType» in package 'MUDDIUKEx-CoreData'

HeightType:

<<DataType>>

A complex type for representing Height

Created on 16/11/2021. Last modified 07/03/2025

ATTRIBUTES

height : Real Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

Optional

The height value

[Is static True. Containment is Not Specified.]

unitOfMeasure : MeasurementUnitsValue Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

unitOfMeasure:

Optional

The unit of measure for the height value.

Values for this attribute are defined in the < Measurement Units Value > codelist.

[Is static True. Containment is Not Specified.]

1.3.28 **MUDDILengthType**

Class «dataType» in package 'MUDDIUKEx-CoreData'

LengthType:

<<DataType>>

A complex type for representing Length

Created on 16/11/2021. Last modified 07/03/2025

ATTRIBUTES



length : Real Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

length:

Optional

The length value

[Is static True. Containment is Not Specified.]



unitOfMeasure: MeasurementUnitsValue Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

unitOfMeasure:

Optional

The unit of measure for the length value.

Values for this attribute are defined in the < Measurement Units Value > codelist.

[Is static True. Containment is Not Specified.]

ABSTRACT

MUDDIObject 1.3.29

Class «FeatureType» in package 'MUDDIUKEx-CoreData'

MUDDIObject:

<<FeatureType>>

Parent Feature Type for all entities in the MUDDI model.

Its attributes are inherited by all more specialised classes in the MUDDI model and derived profiles. Mandatory attributes (by convention):

dataProviderAssignedUniqueID

- dataProviderAssignedUniqueIDAutoAssigned
- geometry
- horizontalCRS
- sourceFeatureClass

Created on 17/08/2021. Last modified 26/07/2022

ATTRIBUTES



additionalInformation : CharacterString Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

additionalInformation:

Optional

Any additional information associated with the object.

[Is static True. Containment is Not Specified.]

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certification: CharacterString Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

certification:

Optional

Name and credentials of the party (if any) that certified the data as meeting positional accuracy and attribute data requirements as agreed for data exchange purposes.

Properties:

length = 255

[Is static True. Containment is Not Specified.]

dataOwner: CharacterString Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

dataOwner:

Optional

Name of the data owner.

Should match a **name** value of a record with **actorType = Data Owner** in **<Organisation>**.

This should only be specified if the Data Owner is different from the Asset (Object) Owner.

[Is static True. Containment is Not Specified.]

dataOwnerAssignedUniqueID : CharacterString Public Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

dataOwnerAssignedUniqueID:

Optional

An identifier assigned by the owner of a data record relating to an asset or object, as represented by a feature in the database. If this is certified by the data owner as unique and persistent for a single asset or object within a source dataset, this can be used to form part of the composite Data Provider Assigned Unique ID and provide persistence for the lifetime of the asset or object representation within the database. If this is not possible, this ID will be used simply as an attribute to be presented to end users.

This should only be assigned if the ownership of data is different from the ownership of the physical asset or object (e.g. in the case of a Local Authority effectively being the data "custodian" for NRSWA Section 50, without ownership of the installed assets, and may have their own ID strategy distinct from the asset owner).

[Is static True. Containment is Not Specified.]



dataProvenance : DataProvenanceValue Public = Asset Owner Records

dataProvenance:

Mandatory

Default = "Asset Owner Records"

An indication of where the data for this item originated.

Values for this attribute are defined in the **DataProvenanceValue** codelist.

[Is static True. Containment is Not Specified.]

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dataProviderAssignedUniqueID: CharacterString Public Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

dataProviderAssignedUniqueID:

Mandatory (by convention)

A mandatory identifier for a feature which is persistent over the managed lifecycle of that feature.

The Data Provider Assigned Unique ID may be assigned by the provider of that feature to the platform. It is the Data Providers's responsibility to manage the feature lifecycle.

If the data provider is able to supply comprehensive, unique and persistent IDs within the scope of a source dataset, in the database Data Provider Assigned Unique ID will consist of a composite ID with the following elements:

- Organisation:systemID the ID of the organisation responsible for feature lifecycle management (typically the asset owner, but may be a third party service provider or a data custodian)
- The unique, persistent ID value as supplied
- MUDDIObiect:sourceFeatureClass the name of the source dataset

Each element of the composite ID will be separated by a ":" character.

This composite ID will be globally unique within the database and will persist for the lifetime of the feature within the database. This composite ID may persist for the lifetime of the associated asset/object depending on the ID policy of the data provider.

[Is static True. Containment is Not Specified.]

dataProviderAssignedUniqueIDAutoAssigned : Boolean Public = true

dataProviderAssignedUniqueIDAutoAssigned:

Mandatory (by convention)

Default = TRUE

Boolean flag that will be set to "True" if the dataProviderAssignedUniqueID is automatically assigned by the platform on ingestion. If the Data Provider supplies a unique ID, this flag will be set to "False".

[Is static True. Containment is Not Specified.]

dataSensitivityLevel: CharacterString Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

dataSensitivityLevel:

Optional

Indicator of the sensitivity level of the data recorded for a feature.

Properties:

length = 255

[Is static True. Containment is Not Specified.]

dateDataCollected: Date Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

dateDataCollected:

Optional

Date when a network asset was last surveyed in the field. If this survey was carried out according to the PAS128 standard, the Quality Level assigned to the feature should be recorded in the MUDDIAsset:qualityLevel field. If the survey on this date was not carried out according to PAS128, the MUDDIAsset:qualityLevel field must be left unpopulated.

[Is static True. Containment is Not Specified.]

dateOfExtract : DateTime Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

dateOfExtract

Optional

The value for **dateOfExtract** should be derived, where available, from the extract date for the dataset, i.e. features belonging to a given dataset should have the same date of extract as that dataset as included in the relevant submission. In the absence of this information it should default to the same value as datelastupdated (representing the date of submission

to the database).

dateOfLastStatusChange: Date Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

dateOfLastStatusChange:

Optional

The data upon which the operational status of the feature was last changed. E.g. if a "Date Abandoned" attribute is provided for an abandoned asset, this value should be assigned.

[Is static True. Containment is Not Specified.]

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description : CharacterString Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

description:

Optional

Descriptive text for the feature.

[Is static True. Containment is Not Specified.]

enhancedMeasures: EnhancedMeasuresTypeValue Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

enhancedMeasures:

Optional

Indicates any additional or enhanced measures a third party should undertake before commencing works in order that they should be carried out safely.

Values for this attribute are defined in the < EnhancedMeasures Type Value > codelist.

[Is static True. Containment is Not Specified.]

enhancedMeasuresProximity: MUDDILengthType Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

enhancedMeasuresProximity:

Optional

The proximity to the feature, in unitofMeasure, at which any enhanced measure specified in the enhancedMeasures attribute is activated.

[Is static True. Containment is Not Specified.]

expectedRefreshPeriod: MUDDITimePeriodType Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

expectedRefreshPeriod:

The time period within which a refresh of the feature data would be expected.

Represented by the **<TimePeriodType>** Data Type.

[Is static True. Containment is Not Specified.]

featureType : FeatureTypeValue Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

featureType:

Optional

Category of feature based on feature function and configuration.

Values for this attribute are defined in the **FeatureTypeValue**> codelist.

[Is static True. Containment is Not Specified.]

geometry: GM_Object Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

geometry:

Mandatory (by convention)

The geometry of the feature

[Is static True. Containment is Not Specified.]

horizontalCRS : CharacterString Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

horizontalCRS:

Mandatory (by convention)

Coordinate system, datum, and epoch date (if applicable) associated with the X and Y coordinates (e.g. "EPSG:27700" for British National Grid)

Properties:

length = 10

[Is static True. Containment is Not Specified.]

localeReference: CharacterString Public Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

localeReference:

Optional

An identifier for the general locale of the object. E.g. a street reference such as a USRN, or a land parcel id.

[Is static True. Containment is Not Specified.]

localeReferenceType: LocaleReferenceTypeValue Public Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

localeReferenceType:

Optional

The type of the reference specified in the localeReference attribute.

Values for this attribute are defined in the <LocaleReferenceTypeValue> codelist.

[Is static True. Containment is Not Specified.]

objectName: CharacterString Public
 Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

objectName:

Optional

Any name assigned to the object by the asset owner

[Is static True. Containment is Not Specified.]

objectOwner: CharacterString Public
 Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

objectOwner:

Optional

Name of the owner of the physical object.

Should match a **name** value of a record with **actorType = Object Owner** in **<Organisation>**.

[Is static True. Containment is Not Specified.]

 objectOwnerAssignedUniqueID : CharacterString Public Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

objectOwnerAssignedUniqueID:

Optional

An identifier assigned by the owner of an asset or object, as represented by a feature in the database.

If this is certified by the object owner as unique and persistent for a single asset or object within a source dataset, this can be used to form part of the composite Data Provider Assigned Unique ID and provide persistence for the lifetime of the asset or object representation within the database. If this is not possible, this ID will be used simply as an attribute to be presented to end users.

[Is static True. Containment is Not Specified.]

operationalStatus: OperationalStatusValue Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

operationalStatus:

Optional

Operational status of the object or asset represented by the feature.

Values for this attribute are defined in the **<OperationalStatusValue>** codelist.

[Is static True. Containment is Not Specified.]

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operator : CharacterString Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

operator:

Optional

Name of the object or asset operator.

Should match a **name** value of a record with **actorType = Object Operator** in **<Organisation>**.

This should only be specified if the Operator is different from the Asset (Object) Owner.

[Is static True. Containment is Not Specified.]

operatorAssignedUniqueID: CharacterString Public Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

operatorAssignedUniqueID:

Optional

An identifier assigned by the operator of an asset or object to a feature in the database.

If this is certified by the operator as unique and persistent for a single asset or object within a source dataset, this can be used to form part of the composite Data Provider Assigned Unique ID and provide persistence for the lifetime of the asset or object representation within the database. If this is not possible, this ID will be used simply as an attribute to be presented to end users.

This should only be assigned if the operation of a physical asset or object is different from the ownership of that asset or object.

[Is static True. Containment is Not Specified.]

originalDateDataCollected : Date Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

originalDateDataCollected:

Optional

The date upon which this feature was originally captured in the source asset owner system

[Is static True. Containment is Not Specified.]

sourceFeatureClass: CharacterString Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

sourceFeatureClass:

Mandatory (by convention)

The name of the source Feature Class or dataset containing this feature as supplied by the Data Provider

[Is static True. Containment is Not Specified.]

version : CharacterString Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

version:

Optional

The version specifier for the present data record as defined by the Data Provider

Properties:

length = 255

[Is static True. Containment is Not Specified.]

verticalCRS : CharacterString Public Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

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ATTRIBUTES

verticalCRS:

Optional

Coordinate system, datum, and epoch date (if applicable) for the Z coordinate. This is the absolute Z coordinate, not the depth from grade. E.g. "EPSG:5101" for Ordnance Datum Newlyn.

Properties:

length = 10

[Is static True. Containment is Not Specified.]

ASSOCIATIONS	
Association (direction: Source -> Destination) dataProvidedBy	
Source: Public (Class) MUDDIObject «FeatureType»	Target: Public dataProviderID (Class) Organisation «FeatureType» Cardinality: [1]
Association (direction: Source -> Destination) linkedObject	
Source: Public (Class) Relationship_ObjectToContactDetails «FeatureType»	Target: Public (Class) MUDDIObject «FeatureType»
Association (direction: Source -> Destination) linkedObject	
Source: Public (Class) Relationship_WronglyRecordedObject «FeatureType»	Target: Public (Class) MUDDIObject «FeatureType»
Association (direction: Source -> Destination) linkedObject	
Source: Public (Class) Relationship_Guidance «FeatureType»	Target: Public (Class) MUDDIObject «FeatureType»
Association (direction: Source -> Destination) linkedObject	
Source: Public (Class) Relationship_ObjectToRule «FeatureType»	Target: Public (Class) MUDDIObject «FeatureType»
Association (direction: Source -> Destination) linkedObject	
Source: Public (Class) Relationship_SupplementalDataCoverageToObject «FeatureType»	Target: Public (Class) MUDDIObject «FeatureType»

ABSTRACT

1.3.30 **MUDDISpace**

Class «FeatureType» in package 'MUDDIUKEx-CoreData'

Created on 26/09/2021. Last modified 28/10/2021

MUDDITimePeriodType 1.3.31

Class «dataType» in package 'MUDDIUKEx-CoreData'

TimePeriodType:

<<DataType>>

A complex type for representing a Time Period

Created on 23/11/2021. Last modified 07/03/2025

ATTRIBUTES



period: Real Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

period:

Optional

The time period value

[Is static True. Containment is Not Specified.]

unitOfTime : UnitOfTimeValue Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

unitOfTime:

Optional

The unit of time for the **period** value.

Values for this attribute are defined in the **<UnitOfTimeValue>** codelist.

[Is static True. Containment is Not Specified.]

1.3.32 **MUDDIWidthType**

Class «dataType» in package 'MUDDIUKEx-CoreData'

WidthType:

<<DataType>>

A complex type for representing Width

Created on 16/11/2021. Last modified 07/03/2025

ATTRIBUTES



unitOfMeasure: MeasurementUnitsValue Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

unitOfMeasure:

Optional

The unit of measure for the width value.

Values for this attribute are defined in the < Measurement Units Value > codelist.

[Is static True. Containment is Not Specified.]



width: Real Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

width:

Optional

The width value

[Is static True. Containment is Not Specified.]

ABSTRACT

1.3.33 Network

Class «FeatureType» in package 'MUDDIUKEx-CoreData'

Network:

<<FeatureType>>

Representation of an infrastructure network.

This may be a conceptual (non-spatial) representation of a full network or a network "tier" containing entities linked by common attribution and not primarily spatially (a "Subordinate Network").

A Network feature may also represent a geographical subnetwork of the main network.

The "parent" network for a given asset owner is related to Service Areas, Subnetworks and Subordinate Networks via relationship tables.

Created on 17/08/2021. Last modified 10/01/2025

Association (direction: Source -> Destination) serviceArea	
Source: Public (Class) Network «FeatureType»	Target: Public (Class) ServiceArea «FeatureType»
Association (direction: Source -> Destination) SubNetwork	
Source: Public (Class) Network «FeatureType»	Target: Public (Class) Network «FeatureType»
Association (direction: Source -> Destination) SubordinateNetwork	
Source: Public (Class) Network «FeatureType»	Target: Public (Class) Network «FeatureType»
Association (direction: Source -> Destination) linkedNetwork	
Source: Public (Class) Relationship_NetworkToSubordinateNetwork «FeatureType»	Target: Public (Class) Network «FeatureType»
Association (direction: Source -> Destination) linkedNetwork	
Source: Public (Class) Relationship_NetworkToNetworkConveyance «FeatureType»	Target: Public (Class) Network «FeatureType»
Association (direction: Source -> Destination) linkedNetwork	
Source: Public (Class) Relationship_NetworkToServiceArea «FeatureType»	Target: Public (Class) Network «FeatureType»
Association (direction: Source -> Destination) linkedNetwork	
Source: Public (Class) Relationship_NetworkToSite «FeatureType»	Target: Public (Class) Network «FeatureType»
Association (direction: Source -> Destination) SubNetwork	
Source: Public (Class) Network «FeatureType»	Target: Public (Class) Network «FeatureType»
Association (direction: Source -> Destination) isPartOf	
Source: Public (Class) NetworkConveyance «FeatureType»	Target: Public (Class) Network «FeatureType»

ASSOCIATIONS	
Source: Public (Class) Relationship_NetworkToSubNetwork «FeatureType»	Target: Public (Class) Network «FeatureType»
Association (direction: Source -> Destination) linkedNetwork Source: Public (Class) Relationship_NetworkToSubNetwork	Target: Public (Class) Network «FeatureType»
«FeatureType»	ranget. I ubite (Class) I vetwork «I candle Type»
Association (direction: Source -> Destination) SubordinateNetwork	
Source: Public (Class) Network «FeatureType»	Target: Public (Class) Network «FeatureType»
Association (direction: Source -> Destination) linkedNetwork	
Source: Public (Class) Relationship_NetworkToContactDetails «FeatureType»	Target: Public (Class) Network «FeatureType»
Association (direction: Source -> Destination) isPartOf	
Source: Public (Class) Site «FeatureType»	Target: Public (Class) Network «FeatureType»
Association (direction: Source -> Destination) linkedSubordinateNet	twork
Source: Public (Class) Relationship_NetworkToSubordinateNetwork «FeatureType»	Target: Public (Class) Network «Feature Type»
Association (direction: Source -> Destination) ruleAppliesIn	
Source: Public (Class) Relationship_SubordinateNetworkToRule «FeatureType»	Target: Public (Class) Network «FeatureType»

ABSTRACT

1.3.34 NetworkAccessory

Class «FeatureType» in package 'MUDDIUKEx-CoreData'

NetworkAccessory:

<<FeatureType>>

Asset that has a role in the support, containment, access or physical protection of a conveyance object in a utility network

Created on 19/08/2021. Last modified 10/01/2025

ATTRIBUTES

accessoryType: NetworkAccessoryTypeValue Public Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

${\bf accessory Type}$

Mandatory (by convention)

The type of the Network Accessory.

The values for this attribute are defined in the <NetworkAccessoryTypeValue> codelist.

[Is static True. Containment is Not Specified.]

ASSOCIATIONS

ASSOCIATIONS

Association (direction: Source -> Destination) Accessorises

Source: Public (Class) NetworkAccessory «FeatureType» Target: Public (Class) NetworkConveyance

«FeatureType»

Association (direction: Source -> Destination) linkedNetworkAccessory

Source: Public (Class)

Relationship_NetworkConveyanceToNetworkAccessory

«FeatureType»

Target: Public (Class) NetworkAccessory

«FeatureType»

ABSTRACT

1.3.35 **NetworkAnnotation**

Class «FeatureType» in package 'MUDDIUKEx-CoreData'

NetworkAnnotation:

<<FeatureType>>

A textual description of an element of a network

Created on 20/08/2021. Last modified 10/01/2025

ATTRIBUTES



bold : Boolean Public = false

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

bold:

Optional

Default=FALSE

Is the text bold?

[Is static True. Containment is Not Specified.]

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

characterSpacing:

Optional

Default=0

The additional space that is added to each character beyond what is defined by its character box in its font. Character spacing is a percentage of the original character's length.

[Is static True. Containment is Not Specified.]

characterWidth : Real Public = 0

characterSpacing : Real Public = 0

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

characterWidth:

Optional

Default=0

The width that is added to each character beyond what is defined by its character box in its font. Character width is a percentage of the original character.

[Is static True. Containment is Not Specified.]

flipAngle : Real Public = 0

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

flipAngle:

Optional

Default=0

The angle (in orientationMeasurementUnits from the vertical) at which point rotated text is flipped (mirrored) in place.

[Is static True. Containment is Not Specified.]

fontLeading: Real Public = 0 Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

fontLeading:

Optional

Default=0

The adjustment to regular spacing between lines. 0 units means no adjustment to regular line spacing. Generally equal to or greater than the text size.

[Is static True. Containment is Not Specified.]

fontName: CharacterString Public = Arial Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

fontName:

Optional

Default='Arial'

The name of the font, e.g. "Arial"

[Is static True. Containment is Not Specified.]

fontSize: Real Public = 8 Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

fontSize:

Optional

Default=8

The size of the font in points (approximately 1/72 inch)

[Is static True. Containment is Not Specified.]

fontStyle: CharacterString Public = Regular Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

fontStyle:

Optional

Default='Regular'

The name of the font style, e.g. "Regular"

[Is static True. Containment is Not Specified.]

geometryVisible: Boolean Public = false Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

geometry Visible:

Optional

Default=FALSE

Should the geometry associated with the annotation object be visualised?

[Is static True. Containment is Not Specified.]

horizontalAlignment : AnnotationHorizontalAlignmentValue Public = Left Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

horizontalAlignment:

Optional

Default='Left'

The horizontal alignment that will be applied to text that contains multiple lines.

 $The \ values \ for \ this \ attribute \ are \ defined \ in \ the \ {\it <} Annotation Horizontal Alignment Value {\it >} \ code \ list.$

[Is static True. Containment is Not Specified.]

italic: Boolean Public = false
 Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

italic:

Optional

Default=FALSE

Is the text italic?

[Is static True. Containment is Not Specified.]

underline : Boolean Public = false

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

underline:

Optional

Default=FALSE

Is the text underlined?

[Is static True. Containment is Not Specified.]

verticalAlignment: AnnotationVerticalAlignmentValue Public = Bottom

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

verticalAlignment:

Optional

Default='Bottom'

Defines how text is vertically aligned.

The values for this attribute are defined in the <AnnotationVerticalAlignmentValue> codelist.

[Is static True. Containment is Not Specified.]

wordSpacing : Real Public = 0

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

wordSpacing:

Optional

Default=0

The additional space that is added between words of the text string. Word spacing is a percentage of the original.

[Is static True. Containment is Not Specified.]

xOffset : Real Public = 0

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

xOffset:

Optional

Default=0

Shifts the text position right or left

[Is static True. Containment is Not Specified.]

yOffset : Real Public = 0

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

yOffset: Optional

Default=0

Shifts the text position up or down

[Is static True. Containment is Not Specified.]

ASSOCIATIONS

Association (direction: Source -> Destination) linkedObject

Source: Public (Class) Relationship_LinkedFile «FeatureType»

Target: Public (Class) NetworkAnnotation «FeatureType»

ABSTRACT

1.3.36 **NetworkAsset**

Class «FeatureType» in package 'MUDDIUKEx-CoreData'

NetworkAsset

<<FeatureType>>

Asset that has a role in a utility network.

Created on 21/08/2021. Last modified 10/01/2025

ATTRIBUTES



container : CharacterString Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

container:

Optional

The dataProviderAssignedUniqueID of any container object that directly encloses this Network Asset

[Is static True. Containment is Not Specified.]

Page: 134 of 189

dateOfInstallation: Date Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

dateOfInstallation:

Optional

The date upon which the asset was installed, as specified by the Data Provider

[Is static True. Containment is Not Specified.]

insideHeight : MUDDIHeightType Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

insideHeight:

Optional

For circular shaped segments, not applicable.

For non-circular shaped segments, the maximum inside height of the cross-sectional shape.

For features other than segments, the maximum inside height of the feature.

Units are always defined by unitOfMeasure.

[Is static True. Containment is Not Specified.]



insideLength: MUDDILengthType Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

insideLength:

Optional

For segments, not applicable.

For features other than segments, the maximum inside length of the feature (measured in the horizontal plane, perpendicular to

Units are always defined by unitOfMeasure.

[Is static True. Containment is Not Specified.]



insideWidth: MUDDIWidthType Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

insideWidth:

Optional

For circular shaped segments, if the Data Provider supplies a single diameter value, this value should be stored in insideWidth. If an inside and outside diameter are supplied, this attribute should represent the inside diameter.

For non-circular shaped segments, the maximum inside width of the cross-sectional shape.

For features other than segments, the maximum inside width of the feature.

Units are always defined by unitOfMeasure.

isAuxiliary: Boolean Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

isAuxiliary:

Optional

An indication that this asset is part of an auxiliary network providing supporting services for the main network

[Is static True. Containment is Not Specified.]

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isCathodicProtected : Boolean Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

isCathodicProtected:

Optional

Indicator of the presence of cathodic protection on the asset

[Is static True. Containment is Not Specified.]

isEncased : Boolean Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

isEncased:

Optional

Indicator of the presence of encasement to insulate or protect the asset.

Where the conveyance asset is contained within a "carrier" asset (e.g. as a result of replacement of metal with plastic pipes), and there is a requirement to represent the diameter of the carrier asset (see outsideDiameter below) this may be set to "True".

[Is static True. Containment is Not Specified.]

isNPS : Boolean Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

isNPS:

Optional

Indicator that the provided outside Width is a "Nominal Pipe Size" rather than a true measure. This may correspond to known inside and outside dimensions for well-known types of pipes or other network elements.

If isNPS is true and both outside and inside width are set to the same value, then it is not known to what dimension the value applies.

Properties:

length = 40

[Is static True. Containment is Not Specified.]

outsideHeight: MUDDIHeightType Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

outsideHeight:

Optional

For circular shaped segments, not applicable.

For non-circular shaped segments, the maximum outside height of the cross-sectional shape.

For features other than segments, the maximum outside height of the feature.

Units are always defined by unitOfMeasure.

[Is static True. Containment is Not Specified.]

outsideLength: MUDDILengthType Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

outsideLength:

Optional

For segments, not applicable.

For features other than segments, the maximum outside length of the feature (measured in the horizontal plane, perpendicular to the width).

Units are always defined by unitOfMeasure.

outsideWidth : MUDDIWidthType Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

outsideWidth:

Optional

For circular shaped segments, if the Data Provider supplies an explicit outside diameter value, this value should be stored in **outsideWidth**. If a single diameter value is supplied, **insidewidth** should be used (see above).

Where the conveyance asset is contained within a "carrier" asset (e.g. as a result of replacement of metal with plastic pipes), and there is a requirement to represent the diameter of the carrier asset, **outsideDiameter** should represent the supplied diameter of the carrier asset and **isEncased** be set to "True".

For non-circular shaped segments, the maximum outside width of the cross-sectional shape.

For features other than segments, the maximum outside width of the feature.

Units are always defined by unitOfMeasure.

[Is static True. Containment is Not Specified.]

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protectiveMaterial: MaterialValue Public Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

protectiveMaterial:

Optional

Material from which protective layers or elements of the object are constructed.

Values for this attribute are defined in the < Material Value > codelist.

Properties: length = 255

[Is static True. Containment is Not Specified.]

protectiveMaterialSubType : CharacterString Public Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

protective Material SubType:

Optional

A free-text equivalent of the **protectiveMaterial** attribute value which may be useful to reflect a source data value which is not precisely represented in the **<MaterialValue>** codelist.

[Is static True. Containment is Not Specified.]

utilitySubType: UtilitySubTypeValue Public Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

utilitySubType:

Mandatory (by convention)

Type of utility service at a finer level of classification than **utilityType**.

Values for this attribute are defined in the <UtilitySubTypeValue> codelist.

[Is static True. Containment is Not Specified.]

utilityType: UtilityTypeValue Public Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

utilityType: Optional

Type of utility service that a utility feature carries.

The values for this attribute are defined in the **<UtilityTypeValue>** codelist.

[Is static True. Containment is Not Specified.]

wallThickness: MUDDIWidthType Public Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

wallThickness:

Optional

Maximum wall thickness.

Units are always defined by unitOfMeasure.

ASSOCIATIONS Association (direction: Source -> Destination) linkedAsset Source: Public (Class) Relationship_SiteToAsset «FeatureType» Target: Public (Class) NetworkAsset «FeatureType» Association (direction: Source -> Destination) variableObjectValue Source: Public (Class) VariableObjectValue «FeatureType» Target: Public (Class) NetworkAsset Cardinality: [0..*] «FeatureType» Cardinality: [1] Association (direction: Source -> Destination) Source: Public (Class) Relationship_VariableObjectValueToAsset Target: Public (Class) NetworkAsset «FeatureType» «FeatureType» Association (direction: Source -> Destination) contains Source: Public (Class) Site «FeatureType» Target: Public (Class) NetworkAsset «FeatureType»

ABSTRACT

1.3.37 NetworkConveyance

Class «FeatureType» in package 'MUDDIUKEx-CoreData'

NetworkConveyance:

<<FeatureType>>

Asset that has a role in the conveyance of a commodity in a utility network.

Created on 17/08/2021. Last modified 10/01/2025

ATTRIBUTES

 conveyanceCategory : ConveyanceCategoryValue Public Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

conveyanceCategory:

Optional

Primary category or purpose of service of the asset. Included in each category is the supporting infrastructure, such as alarm and ventilation, needed to provide the corresponding utility service.

Values for this attribute are defined in the **ConveyanceCategoryValue**> codelist.

[Is static True. Containment is Not Specified.]

conveyanceMethod: ConveyanceMethodValue Public Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

conveyanceMethod:

Optional

Method to move or convey matter (the utility commodity) through the asset (e.g. Pressure, Voltage, Gravity). Values for this attribute are defined in the **<ConveyanceMethodValue>** codelist.

[Is static True. Containment is Not Specified.]

fillMaterial:

Optional

Material used to fill the space between a utility feature and its encasement or an out-of-service "carrier" feature. Values for this attribute are defined in the **MaterialTypeValue>** codelist.

Properties:

length = 255

[Is static True. Containment is Not Specified.]

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isFilled: Boolean Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

isFilled:

Optional

Indicator of the presence of interstitial material being used to fill the space between a utility feature and its encasement or an out-of-service "carrier" feature.

[Is static True. Containment is Not Specified.]

operatingConveyanceLevel : Real Public Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

operating Conveyance Level:

Optional

A specific value supplied by the Data Provider that represents the "level" at which the commodity is conveyed in this network object (e.g. if a specific voltage level is supplied for an electricity cable above and beyond the **conveyanceMethod**).

[Is static True. Containment is Not Specified.]

 operatingConveyanceLevelType : OperatingConveyanceLevelTypeValue Public Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

operatingConveyanceLevelType:

Optional

The type of the conveyance level for this network object (e.g. pressure, voltage level).

 $Values \ for \ this \ attribute \ are \ defined \ in \ the \ \verb|-OperatingConveyanceLevelTypeValue>| \ codelist.$

[Is static True. Containment is Not Specified.]

operatingConveyanceLevelUnits : MeasurementUnitsValue Public Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

operatingConveyanceLevelUnits:

Optional

The units associated with the operating conveyance level value.

Values for this attribute are defined in the < Measurement Units Value > codelist.

[Is static True. Containment is Not Specified.]

operatingTemperature : Real Public Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

operatingTemperature:

Optional

A specific value supplied by the Data Provider that represents the temperature of the commodity conveyed by this network object

[Is static True. Containment is Not Specified.]

 operatingTemperatureRange: TemperatureRangeValue Public Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

operating Temperature Range:

Optional

An indication of the range of temperatures of the commodity conveyed by this network object if supplied by the Data Provider. Values for this attribute are defined in the **TemperatureRangeValue** codelist.

operatingTemperatureUnits: MeasurementUnitsValue Public Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

operatingTemperatureUnits:

Optional

The units associated with the operating temperature value.

Values for this attribute are defined in the < Measurement Units Value > codelist.

[Is static True. Containment is Not Specified.]

outerMaterial : MaterialValue Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

outerMaterial:

Optional

Material from which the outer covering, carrier pipe, insulation, etc. is constructed. Values for this attribute are defined in the <MaterialTypeValue> codelist.

Properties:

length = 255

[Is static True. Containment is Not Specified.]

outerMaterialSubType : CharacterString Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

outerMaterialSubType:

Optional

A free-text equivalent of the outerMaterial attribute value which may be useful to reflect a source data value which is not precisely represented in the < Material Value > codelist.

[Is static True. Containment is Not Specified.]

ASSOCIATIONS



Association (direction: Source -> Destination) isPartOf

Source: Public (Class) NetworkConveyance «FeatureType»

Target: Public (Class) Network «FeatureType»

Association (direction: Source -> Destination) linkedNetworkConveyance

Source: Public (Class)

Relationship_NetworkConveyanceToNetworkAccessory

«FeatureType»

Target: Public (Class) NetworkConveyance

«FeatureType»

Association (direction: Source -> Destination) Accessorises

Source: Public (Class) NetworkAccessory «FeatureType»

Target: Public (Class) NetworkConveyance

«FeatureType»

Association (direction: Source -> Destination) linkedConveyance

Source: Public (Class)

Relationship_NetworkToNetworkConveyance «FeatureType»

Target: Public (Class) NetworkConveyance

«FeatureType»

ABSTRACT

1.3.38 NetworkConveyanceLink

Class «FeatureType» in package 'MUDDIUKEx-CoreData'

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NetworkConveyanceLink:

<<FeatureType>>

Linear utility feature that serves as a link or edge in a network graph

Created on 17/08/2021. Last modified 10/01/2025

ATTRIBUTES



componentSubType: CharacterString Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

componentSubType:

Optional

A free-text equivalent of the componentType attribute value which may be used to reflect a source data value which is not precisely represented in the <NetworkLinkComponentValue> codelist

[Is static True. Containment is Not Specified.]

componentType : NetworkLinkComponentTypeValue Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

componentType:

Mandatory (by convention)

A component is an element of a system which corresponds to the lowest level of detail or feature disaggregation for data exchange purposes.

Values for this attribute are defined in the <NetworkLinkComponentValue> codelist.

[Is static True. Containment is Not Specified.]

downstreamDepth: MUDDIDepthType Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

downstreamDepth:

Optional

Numerical value in **measurementUnits** of the depth from grade at time of survey or other determination method to the top of the downstream end of the asset.

If this attribute is provided for a NetworkLink feature, then the **depth** attribute should be understood as upstreamDepth.

This attribute should be used for a single approximation of asset depth according to **depthMethod**.

Absolute vertical positioning information should be represented in the **geometry** attribute.

[Is static True. Containment is Not Specified.]

endNodeID : CharacterString Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

endNodeID:

Optional

Holds the dataProviderAssignedUniqueID of the end node of the link, allowing representation of a topological network

Properties:

size = 38

[Is static True. Containment is Not Specified.]

startNodeID: CharacterString Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

startNodeID:

Optional

Holds the dataProviderAssignedUniqueID of the start node of the link, allowing representation of a topological network

Properties:

size = 38

[Is static True. Containment is Not Specified.]

ASSOCIATIONS

ASSOCIATIONS	
Association (direction: Source -> Destination) To	
Source: Public (Class) NetworkConveyanceLink «FeatureType» Cardinality: [0*]	Target: Public (Class) NetworkConveyanceNode «FeatureType» Cardinality: [01]
Association (direction: Source -> Destination) From	
Source: Public (Class) NetworkConveyanceLink «FeatureType» Cardinality: [0*]	Target: Public (Class) NetworkConveyanceNode «FeatureType» Cardinality: [01]
Association (direction: Source -> Destination) linkedLink	
Source: Public (Class) Relationship_LinkToLinkZoneOfInterest	Target: Public (Class) NetworkConveyanceLink «FeatureType»
Association (direction: Source -> Destination) relates To	
Source: Public (Class) NetworkLinkZoneOfInterest «FeatureType»	Target: Public (Class) NetworkConveyanceLink «FeatureType»

ABSTRACT

1.3.39 NetworkConveyanceNode

Class «FeatureType» in package 'MUDDIUKEx-CoreData'

NetworkConveyanceNode:

<<FeatureType>>

Discrete utility feature that is directly involved with the conveyance, control, or distribution of a particular utility service and serves as a node in a network graph

Created on 17/08/2021. Last modified 10/01/2025

ATTRIBUTES

componentSubType : CharacterString Public Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

componentSubType:

Optional

A free-text equivalent of the **componentType** attribute value which may be used to reflect a source data value which is not precisely represented in the **<NetworkNodeComponentValue>** codelist

[Is static True. Containment is Not Specified.]

componentType: NetworkNodeComponentTypeValue Public Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

componentType:

Mandatory (by convention)

A component is an element of a system which corresponds to the lowest level of detail or feature disaggregation for data exchange purposes.

Values for this attribute are defined in the <NetworkNodeComponentValue> codelist.

[Is static True. Containment is Not Specified.]

ASSOCIATIONS

Association (direction: Source -> Destination) To

SSOCIATIONS	
Source: Public (Class) NetworkConveyanceLink «FeatureType» Cardinality: [0*]	Target: Public (Class) NetworkConveyanceNode «FeatureType» Cardinality: [01]
Association (direction: Source -> Destination) From	
Source: Public (Class) NetworkConveyanceLink «FeatureType» Cardinality: [0*]	Target: Public (Class) NetworkConveyanceNode «FeatureType» Cardinality: [01]
Association (direction: Source -> Destination) relatesTo	
Source: Public (Class) NetworkNodeZoneOfInterest «FeatureType»	Target: Public (Class) NetworkConveyanceNode «FeatureType»
Association (direction: Source -> Destination) linkedNode	
Source: Public (Class) Relationship_NodeToNodeZoneOfInterest «FeatureType»	Target: Public (Class) NetworkConveyanceNode «FeatureType»

ABSTRACT

1.3.40 NetworkDescriptionObject

Class «FeatureType» in package 'MUDDIUKEx-CoreData'

NetworkDescriptionObject:

<<FeatureType>>

An artefact that describes an element of a network and may be visualised as a descriptive element on a map

Created on 19/08/2021. Last modified 10/01/2025

ATTRIBUTES

associal
 Multipl

associatedAssets : CharacterString Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

associatedAssets:

Optional

dataProviderAssignedUniqueID values of any assets with which this description object is associated

[Is static True. Containment is Not Specified.]

Multiplicity

associatedText: CharacterString Public Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

associated Text:

Optional

Any text associated with the description object. E.g. the depth value associated with a depth marker, the text of an annotation element or the reference number associated with a cross-section drawing.

[Is static True. Containment is Not Specified.]

descriptionType: NetworkDescriptionTypeValue Public Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

descriptionType:

Optional

The type of the description object.

The values for this attribute are defined in the <NetworkDescriptionTypeValue> codelist.

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ATTRIBUTES

isOuervable: Boolean Public = false

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

isOuervable:

Optional

Default=FALSE

Indication of whether the element is queryable on the map. E.g. a cross-section marker would be queryable, whereas an annotation element is unlikely to be.

[Is static True. Containment is Not Specified.]

orientation : Real Public = 0

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

orientation:

Optional

Default=0

The rotation angle for the display of the symbol associated with description object

[Is static True. Containment is Not Specified.]

orientationMeasurementUnits: MeasurementUnitsValue Public = Degrees

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

orientationMeasurementUnits:

Optional

Default='Degrees'

The unit of measure for the value in the **orientation** attribute.

Values for this attribute are defined in the <MeasurementUnitsValue> codelist (typically Degrees or Radians)

[Is static True. Containment is Not Specified.]

orientationType : OrientationTypeValue Public = Geographic

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

orientationType:

Optional

Default = 'Geographic'

Defines the correct interpretation of the angle specified in **orientation**.

Geographic means that the angle is the rotation from north in a clockwise direction.

Arithmetic means that the angle is the rotation from east in a counter-clockwise direction.

Values for this attribute are defined in the **<OrientationTypeValue>** codelist (**Arithmetic** or **Geographic**).

[Is static True. Containment is Not Specified.]

referenceScale : Real Public = 800

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

referenceScale:

Optional

Default=800

The scale in which an annotation appears on screen at its symbol size. At smaller scales it will be smaller than the onscreen symbol size, at larger scales it will be larger

[Is static True. Containment is Not Specified.]

textColour : CharacterString Public = #000000

textColour:

Mandatory

Default=#000000 (Black)

A hex colour code giving the colour of the description text if displayed on a map.

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ATTRIBUTES

textPlacementX : Real Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

textPlacementX:

Optional

The x-coordinate of the anchor point indicating the text placement.

[Is static True. Containment is Not Specified.]

textPlacementY : Real Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

textPlacementY:

Optional

The y-coordinate of the anchor point indicating the text placement.

[Is static True. Containment is Not Specified.]

utilitySubType : UtilitySubTypeValue Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

utilitySubType:

Optional

Type of utility service at a finer level of classification than **utilityType**.

Values for this attribute are defined in the **<UtilitySubTypeValue>** codelist.

[Is static True. Containment is Not Specified.]

utilityType: UtilityTypeValue Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

utilityType:

Mandatory (by convention)

Type of utility service that a utility feature carries.

The values for this attribute are defined in the <UtilityTypeValue> codelist.

[Is static True. Containment is Not Specified.]

ASSOCIATIONS



Association (direction: Source -> Destination) linkedObject

Source: Public (Class) NetworkDescriptionObject «FeatureType»

Target: Public (Class) Relationship_LinkedFile «FeatureType»

ABSTRACT

NetworkDimension 1.3.41

Class «FeatureType» in package 'MUDDIUKEx-CoreData'

NetworkDimension:

<<FeatureType>>

A descriptive element that describes a measurement of a network, or its position relative to another feature. For information on Dimension elements, see ISO 129-1:2018.

Created on 20/08/2021. Last modified 10/01/2025

ATTRIBUTES



dimensionLine: GM_Curve Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

dimensionLine:

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ATTRIBUTES

Optional

Straight or curved line with terminators at each end or origin and terminator at each end, indicating the size of a feature or the extent of a feature or between two features, or between a feature and an extension line, or between two extension lines

[Is static True. Containment is Not Specified.]

dimensionValue : MUDDILengthType Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

dimensionValue:

Optional

Nominal numerical value expressed in a specific unit relevant to a linear or angular dimension

[Is static True. Containment is Not Specified.]

endDimensionLineExtension : GM_Curve Public Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

endDimensionLineExtension:

Optional

Dimension line extension at the end dimension point.

Where space is limited, dimension lines may be extended past the extension lines and the arrowheads placed outside of the extension lines and reversed

[Is static True. Containment is Not Specified.]

• endDimensionPoint : GM_Point Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

endDimensionPoint:

Optional

Last point of the dimension line

[Is static True. Containment is Not Specified.]

endExtensionLine: GM_Curve Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

endExtensionLine:

Optional

Extension line at the end dimension point

[Is static True. Containment is Not Specified.]

fontName : CharacterString Public = Arial

fontName:

Mandatory

Default='Arial'

The name of the font to be used for displaying the text element of the dimension.

[Is static True. Containment is Not Specified.]

fontSize : Real Public = 8

fontSize:

Mandatory

Default=8

The font point size to be used for displaying the text element of the dimension.

[Is static True. Containment is Not Specified.]

propertyIndicator : CharacterString Public Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

propertyIndicator:

Optional

Symbol or character used to define the shape of a feature or property of an entity composed of several features. Prepended to

the dimension Value.

[Is static True. Containment is Not Specified.]

startDimensionLineExtension: GM_Curve Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

startDimensionLineExtention:

Optional

Dimension line extension at the start dimension point.

Where space is limited, dimension lines may be extended past the extension lines and the arrowheads placed outside of the extension lines and reversed.

[Is static True. Containment is Not Specified.]

startDimensionPoint : GM_Point Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

startDimensionPoint:

Optional

First point of the dimension line

[Is static True. Containment is Not Specified.]

startExtensionLine : GM Curve Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

startExtensionLine:

Optional

Extension line at the start dimension point

[Is static True. Containment is Not Specified.]

ASSOCIATIONS



Association (direction: Source -> Destination) linkedObject

Source: Public (Class) Relationship_LinkedFile «FeatureType»

Target: Public (Class) NetworkDimension «FeatureType»

ABSTRACT

NetworkLinkZoneOfInterest 1.3.42

Class «FeatureType» in package 'MUDDIUKEx-CoreData'

NetworkLinkZoneOfInterest:

<<FeatureType>>

A zone of interest which emanates from a Network Link

Created on 20/08/2021. Last modified 23/05/2024

ATTRIBUTES



parentFeatureID: CharacterString Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

parentFeatureID:

Optional

The dataProviderAssignedUniqueID value of the feature from which the Zone of Interest polygon is derived

[Is static True. Containment is Not Specified.]

ASSOCIATIONS

Association (direction: Source -> Destination) relates To

Source: Public (Class) NetworkLinkZoneOfInterest «FeatureType»

Target: Public (Class) NetworkConveyanceLink

«FeatureType»

Association (direction: Source -> Destination) linkedLinkZoneOfInterest

Source: Public (Class) Relationship LinkToLinkZoneOfInterest

«FeatureType»

Target: Public (Class) NetworkLinkZoneOfInterest

«FeatureType»

ABSTRACT

NetworkNodeZoneOfInterest 1.3.43

Class «FeatureType» in package 'MUDDIUKEx-CoreData'

NetworkNodeZoneOfInterest:

<<FeatureType>>

A zone of interest which emanates from a Network Node.

Created on 18/08/2021. Last modified 23/05/2024

ATTRIBUTES



parentFeatureID: CharacterString Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

parentFeatureID:

Optional

The dataProviderAssignedUniqueID value of the feature from which the Zone of Interest polygon is derived

[Is static True. Containment is Not Specified.]

ASSOCIATIONS



Association (direction: Source -> Destination) relatesTo

Source: Public (Class) NetworkNodeZoneOfInterest «FeatureType»

Target: Public (Class) NetworkConveyanceNode «FeatureType»



Association (direction: Source -> Destination) linkedNodeZoneOfInterest

Source: Public (Class) Relationship_NodeToNodeZoneOfInterest «FeatureType»

Target: Public (Class) NetworkNodeZoneOfInterest «FeatureType»

NonUtilityObject 1.3.44

Class «FeatureType» in package 'MUDDIUKEx-CoreData'

NonUtilityObject:

<<FeatureType>>

An underground object which is not part of a utility network, but which may have an impact on planning or excavation activities.

Created on 21/08/2021. Last modified 10/01/2025

ATTRIBUTES

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ATTRIBUTES

subtype : CharacterString Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

subType:

Optional

A free-text equivalent of the type attribute value which may be useful to reflect a source data value which is not precisely represented in the <NonUtilityObjectTypeValue> codelist.

[Is static True. Containment is Not Specified.]

type : NonUtilityObjectTypeValue Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

type:

Optional

The type of the non-utility object.

The values for this attribute are defined in the <NonUtilityObjectTypeValue> codelist.

[Is static True. Containment is Not Specified.]

ABSTRACT

PhysicalProtection 1.3.45

Class «FeatureType» in package 'MUDDIUKEx-CoreData'

PhysicalProtection:

<<FeatureType>>

Object that has a role in the physical protection of an asset in a utility network.

Created on 19/08/2021. Last modified 10/01/2025

ATTRIBUTES



physicalProtectionSubType : CharacterString Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

physicalProtectionSubType:

Optional

A free-text equivalent of the **physicalProtectionType** attribute value which may be used to reflect a source data value which is not precisely represented in the < Physical Protection Type Value > codelist

[Is static True. Containment is Not Specified.]

physicalProtectionType: PhysicalProtectionTypeValue Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

physicalProtectionType:

Mandatory (by convention)

The type of the protection object.

The values for this attribute are defined in the **PhysicalProtectionTypeValue**> codelist.

[Is static True. Containment is Not Specified.]

ABSTRACT

PlanningArea 1.3.46

Class «FeatureType» in package 'MUDDIUKEx-CoreData'

PlanningArea

<<FeatureType>>

Defined area with characteristics or constraints relevant to excavation planning

Created on 19/08/2021. Last modified 10/01/2025

ATTRIBUTES

directive: CharacterString Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

directive:

Optional

The name of the Directive or Legislation which defines the status of the Planning Area

[Is static True. Containment is Not Specified.]

planningAreaType : PlanningAreaTypeValue Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

planningAreaType:

Optional

The type of the Planning Area.

The values for this attribute are defined in the <**PlanningAreaTypeValue>** codelist.

[Is static True. Containment is Not Specified.]

policyDocumentation: CharacterString Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

policyDocumentation:

Optional

A link to a file or website, or a copy of the text, which provides details of the policy documentation or guidance relating to this Planning Area

[Is static True. Containment is Not Specified.]

policyName: CharacterString Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

policyName:

Optional

The name of the policy with which this Planning Area is associated, e.g. "Wildlife and Countryside Act 1981"

Properties:

length = 255

[Is static True. Containment is Not Specified.]

1.3.47 QualityLevel

Class «FeatureType» in package 'MUDDIUKEx-CoreData'

QualityLevel:

<<FeatureType>>

An indication of the Quality Level recorded for a point or segment of a linear feature.

Created on 21/08/2021. Last modified 10/01/2025

ATTRIBUTES



qualityLevel: QualityLevelValue Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

qualityLevel:

Optional

Quality level recorded for the point or segment in accordance with PAS128:2022. This field should only be populated if the dateOfCapture attribute is populated with the date of a PAS128-compliant utility survey, and qualityLevel should reflect the Quality Level assigned to the point or segment during that survey.

Values for this attribute are defined in the < QualityLevelValue> codelist.

[Is static True. Containment is Not Specified.]

1.3.48 **ServiceArea**

Class «FeatureType» in package 'MUDDIUKEx-CoreData'

ServiceArea:

<<FeatureType>>

Representation of the geographical coverage of a whole or partial infrastructure network

Created on 17/08/2021. Last modified 10/01/2025

ATTRIBUTES

buffered : Boolean Public = false

buffered:

Optional

Default=FALSE

Indication of whether this service area geometry has been generated by buffering a source geometry

[Is static True. Containment is Not Specified.]

bufferSize: MUDDIWidthType Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

bufferSize:

Optional

If **buffered = TRUE**, a value indicating the size of the buffer applied (with units)

[Is static True. Containment is Not Specified.]

nationalOrRegionalCoverage : CharacterString Public = N/A

nationalOrRegionalCoverage:

Mandatory

Default = "N/A"

If the geometry of this service area is represented by one of the standard regional or national boundary geometries, this field contains the name of this boundary (whose geometry is stored in the StandardServiceArea Feature Type).

The values for this attribute are defined in the <NationalOrRegionalCoverageValue> codelist.

[Is static True. Containment is Not Specified.]



originalServiceAreaID : CharacterString Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

originalServiceAreaID:

Optional

For a Service Area whose geometry or extent has been derived from another Service Area geometry (e.g. via buffering), this attribute represents the dataProviderAssignedUniqueID of the original Service Area feature.

[Is static True. Containment is Not Specified.]



serviceAreaSubType: CharacterString Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

serviceAreaSubType:

Optional

A free-text equivalent of the serviceAreaType attribute value which may be used to reflect a source data value which is not precisely represented in the <ServiceAreaTypeValue> codelist

[Is static True. Containment is Not Specified.]



serviceAreaType : ServiceAreaTypeValue Public

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ATTRIBUTES

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

serviceAreaType:

Mandatory (by convention)

The type of the Service Area.

The values for this attribute are defined in the **ServiceAreaTypeValue** codelist.

[Is static True. Containment is Not Specified.]

ASSOCIATIONS

Association (direction: Source -> Destination) linkedServiceArea

Source: Public (Class) Relationship_NetworkToServiceArea «FeatureType»

Target: Public (Class) ServiceArea «FeatureType»

Association (direction: Source -> Destination) serviceArea

Source: Public (Class) Network «FeatureType»

Target: Public (Class) ServiceArea «FeatureType»

Association (direction: Source -> Destination) serviceArea

Source: Public (Class) Relationship_OrganisationToServiceArea «FeatureType»

Target: Public (Class) ServiceArea «FeatureType»

ABSTRACT

1.3.49 Site

Class «FeatureType» in package 'MUDDIUKEx-CoreData'

Site:

<<FeatureType>>

Representation of a specific site within a utility network

Created on 19/08/2021. Last modified 10/01/2025

ATTRIBUTES

siteSubType: CharacterString Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

siteSubType:

Optional

A free-text equivalent of the **siteType** attribute value which may be used to reflect a source data value which is not precisely represented in the <SiteTypeValue> codelist

[Is static True. Containment is Not Specified.]

siteType : SiteTypeValue Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

SiteType:

Optional

The type of the Site.

Page: 152 of 189

ATTRIBUTES

The values for this attribute are defined in the **<SiteTypeValue>** codelist.

[Is static True. Containment is Not Specified.]

ASSOCIATIONS	
Association (direction: Source -> Destination) contains	
Source: Public (Class) Site «FeatureType»	Target: Public (Class) NetworkAsset «FeatureType»
Association (direction: Source -> Destination) isPartOf	
Source: Public (Class) Site «FeatureType»	Target: Public (Class) Network «FeatureType»
Association (direction: Source -> Destination) linkedSite	
Source: Public (Class) Relationship_NetworkToSite «FeatureType»	Target: Public (Class) Site «FeatureType»
Association (direction: Source -> Destination) linkedObject	
Source: Public (Class) Relationship_LinkedFile «FeatureType»	Target: Public (Class) Site «FeatureType»
Association (direction: Source -> Destination) linkedSite	
Source: Public (Class) Relationship_SiteToAsset «FeatureType»	Target: Public (Class) Site «FeatureType»
Association (direction: Source -> Destination) relatesTo	
Source: Public (Class) SiteZoneOfInterest «FeatureType»	Target: Public (Class) Site «FeatureType»
Association (direction: Source -> Destination) linkedSite	
Source: Public (Class) Relationship_SiteToSiteZoneOfInterest	Target: Public (Class) Site «FeatureType»

ABSTRACT

SiteZoneOfInterest 1.3.50

Class «FeatureType» in package 'MUDDIUKEx-CoreData'

SiteZoneOfInterest:

<<FeatureType>>

A zone of interest which emanates from a Site.

Created on 20/08/2021. Last modified 23/05/2024

ATTRIBUTES

parentFeatureID : CharacterString Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

parentFeatureID:

Optional

The dataProviderAssignedUniqueID value of the feature from which the Zone of Interest polygon is derived

[Is static True. Containment is Not Specified.]

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ASSOCIATIONS

✓ Association (direction: Source -> Destination) relatesTo

Source: Public (Class) SiteZoneOfInterest «FeatureType» Target: Public (Class) Site «FeatureType»

Association (direction: Source -> Destination) linkedObject

Source: Public (Class) Relationship_LinkedFile «FeatureType» Target: Public (Class) SiteZoneOfInterest

«FeatureType»

Association (direction: Source -> Destination) linkedSiteZoneOfInterest

Source: Public (Class) Relationship_SiteToSiteZoneOfInterest Target

«FeatureType»

Target: Public (Class) SiteZoneOfInterest

«FeatureType»

ABSTRACT

1.3.51 Structure

Class «FeatureType» in package 'MUDDIUKEx-CoreData'

Structure:

<<FeatureType>>

Representation of a structure that has a role in a utility network.

Created on 27/09/2021. Last modified 10/01/2025

ATTRIBUTES

container : CharacterString Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

container:

Optional

The dataProviderAssignedUniqueID of any container object that directly encloses this Network Asset

[Is static True. Containment is Not Specified.]

dateOfInstallation : Date Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

dateOfInstallation:

Optional

The date upon which the asset was installed, as specified by the Data Provider

[Is static True. Containment is Not Specified.]

insideHeight: MUDDIHeightType Public Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

insideHeight:

Optional

For circular shaped segments, not applicable.

For non-circular shaped segments, the maximum inside height of the cross-sectional shape.

For features other than segments, the maximum inside height of the feature.

Units are always defined by unitOfMeasure.

[Is static True. Containment is Not Specified.]

insideLength: MUDDILengthType Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

insideLength:

Optional

ATTRIBUTES

For segments, not applicable.

For features other than segments, the maximum inside length of the feature (measured in the horizontal plane, perpendicular to

Units are always defined by unitOfMeasure.

[Is static True. Containment is Not Specified.]

Page: 154 of 189

insideWidth: MUDDIWidthType Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

insideWidth:

Optional

For circular shaped segments, if the Data Provider supplies a single diameter value, this value should be stored in insideWidth. If an inside and outside diameter are supplied, this attribute should represent the inside diameter.

For non-circular shaped segments, the maximum inside width of the cross-sectional shape.

For features other than segments, the maximum inside width of the feature.

Units are always defined by unitOfMeasure.

[Is static True. Containment is Not Specified.]

isEncased: Boolean Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

isEncased:

Optional

Indicator of the presence of encasement to insulate or protect the asset.

Where the conveyance asset is contained within a "carrier" asset (e.g. as a result of replacement of metal with plastic pipes), and there is a requirement to represent the diameter of the carrier asset (see outsideDiameter below) this may be set to "True".

[Is static True. Containment is Not Specified.]

outsideHeight : MUDDIHeightType Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

outsideHeight:

Optional

For circular shaped segments, not applicable.

For non-circular shaped segments, the maximum outside height of the cross-sectional shape.

For features other than segments, the maximum outside height of the feature.

Units are always defined by unitOfMeasure.

[Is static True. Containment is Not Specified.]

outsideLength: MUDDILengthType Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

outsideLength:

Optional

For segments, not applicable.

For features other than segments, the maximum outside length of the feature (measured in the horizontal plane, perpendicular to the width).

Units are always defined by unitOfMeasure.

[Is static True. Containment is Not Specified.]

outsideWidth: MUDDIWidthType Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

outsideWidth:

Optional

For circular shaped segments, if the Data Provider supplies an explicit outside diameter value, this value should be stored in

outsideWidth. If a single diameter value is supplied, insidewidth should be used (see above).

Where the conveyance asset is contained within a "carrier" asset (e.g. as a result of replacement of metal with plastic pipes), and there is a requirement to represent the diameter of the carrier asset, outsideDiameter should represent the supplied diameter of the carrier asset and isEncased be set to "True".

For non-circular shaped segments, the maximum outside width of the cross-sectional shape.

For features other than segments, the maximum outside width of the feature.

Units are always defined by unitOfMeasure.

[Is static True. Containment is Not Specified.]

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1.3.52 SubordinateNetworkDefinition

Class «FeatureType» in package 'MUDDIUKEx-CoreData'

SubordinateNetworkDefinition:

<<FeatureType>>

Defined area with characteristics or constraints relevant to excavation planning

Created on 06/02/2024. Last modified 23/05/2024

ATTRIBUTES



linkedNetworkID : CharacterString Public

linkedNetworkID:

Mandatory

dataproviderassigneduniqueid in the specified network table of the record representing the subordinate network,

[Is static True. Containment is Not Specified.]

linkedNetworkTable : CharacterString Public

linkedNetworkTable:

Mandatory

The name of the table - qualified by a schema name - containing the subordinate network record.

[Is static True. Containment is Not Specified.]



memberFeaturesTable : CharacterString Public

memberFeaturesTable:

Mandatory

The name of the table - qualified by a schema name - containing features which may be members of the subordinate network, depending on the membership criteria.

[Is static True. Containment is Not Specified.]



membershipCriteria: CharacterString Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

membershipCriteria:

Optional

The criteria which dictate which records in the specified table are members of the subordinate network. The string should equate to a SQL WHERE clause (not including the WHERE command) that causes features that belong to the subordinate network to be returned by a suitable SELECT query.

[Is static True. Containment is Not Specified.]

ASSOCIATIONS



Association (direction: Source -> Destination) dataSubmittedBy

ASSOCIATIONS

Source: Public (Class) SubordinateNetworkDefinition Target: Public dataProviderID (Class) Organisation

«FeatureType» «FeatureType» Cardinality: [1]

1.3.53 **SupplementalDataCoverage**

Class «FeatureType» in package 'MUDDIUKEx-CoreData'

SupplementalDataCoverage:

<<FeatureType>>

Representation of the geographical coverage of information linked to an area which is not defined by a Service Area or a Site. E.g. the coverage of custom backdrop data or supplemental information such as area-linked enlargement maps.

Created on 11/07/2022. Last modified 10/01/2025

ATTRIBUTES

coverageDataServiceType : DataServiceTypeValue Public Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

coverageDataServiceType:

Optional

If a data service is associated with this coverage, this value specifies the type of the service.

The values for this attribute are defined in the **DataServiceTypeValue** codelist.

[Is static True. Containment is Not Specified.]

coverageDataServiceURI: CharacterString Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

coverageDataServiceURI:

If a data service is associated with this coverage, this value specifies the URI used to access the service.

[Is static True. Containment is Not Specified.]



coverageType : CharacterString Public

coverageType:

Optional

The type of the coverage.

The values for this attribute are defined in the < Coverage Type Value > codelist.

[Is static True. Containment is Not Specified.]



drawingPriority : Integer Public = 0

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

drawingPriority:

Optional

Default=0

An indication of the z-order used to display coverage geometries.

[Is static True. Containment is Not Specified.]

ASSOCIATIONS

Association (direction: Source -> Destination) linkedSupplementalDataCoverage

Source: Public (Class)

Target: Public (Class) SupplementalDataCoverage

«FeatureType»

Relationship_SupplementalDataCoverageToObject «FeatureType»

ASSOCIATIONS

Association (direction: Source -> Destination) coverage

Target: Public (Class) SupplementalDataCoverage «FeatureType»

ABSTRACT

1.3.54 Support

Class «FeatureType» in package 'MUDDIUKEx-CoreData'

SupportObject:

<<FeatureType>>

Structure serving primarily as a support, platform or foundation for another infrastructure component

Created on 19/08/2021. Last modified 10/01/2025

ATTRIBUTES



supportSubType: CharacterString Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

supportSubType:

Optional

A free-text equivalent of the **supportType** attribute value which may be used to reflect a source data value which is not precisely represented in the **SupportTypeValue**> codelist

[Is static True. Containment is Not Specified.]



supportType: SupportTypeValue Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

supportType:

Mandatory (by convention)

The type of the support object.

The values for this attribute are defined in the **SupportTypeValue**> codelist.

[Is static True. Containment is Not Specified.]

1.3.55 UUID

Class «type» in package 'MUDDIUKEx-CoreData'

Placeholder type to force ShapeChange to output attributes as UUIDs.

Created on 02/12/2021. Last modified 10/01/2025

ABSTRACT

1.3.56 VariableObjectValue

Class «FeatureType» in package 'MUDDIUKEx-CoreData'

VariableObjectValue:

<<FeatureType>>

A means of specifying a point or segment on a linear feature for which a distinct value may be specified

Created on 21/08/2021. Last modified 10/01/2025

ATTRIBUTES

dateOfCapture : Date Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

Optional

Date upon which the value was observed or captured

[Is static True. Containment is Not Specified.]

fromMeasure : Measure Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

fromMeasure:

Optional

A value specifying a point on the related linear feature in terms of a measure from the start of that feature.

If this feature represents a segment, this value represents the "from" point of the segment.

If this feature represents a point, this value represents that point.

[Is static True. Containment is Not Specified.]

toMeasure : Measure Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

toMeasure:

Optional

A value specifying a point on the related linear feature in terms of a measure from the start of that feature.

If this feature represents a segment, this value represents the "to" point of the segment.

If this feature represents a point, this value should be NULL.

[Is static True. Containment is Not Specified.]

ASSOCIATIONS

Association (direction: Source -> Destination) variableObjectValue

Source: Public (Class) VariableObjectValue «FeatureType»

Cardinality: [0..*]

Target: Public (Class) NetworkAsset

«FeatureType»

Cardinality: [1]

Association (direction: Source -> Destination)

Source: Public (Class) Relationship_VariableObjectValueToAsset

«FeatureType»

Target: Public (Class) VariableObjectValue

«FeatureType»

MUDDIUKEx-CustomBackdrop

Package «ApplicationSchema» in package 'MUDDI - UK Excavation Profile - Logical'

MUDDIUKEx-CustomBackdrop Version 2.1.3 Published Created on 11/07/2022. Last modified 09/03/2025

1.4.1 MUDDI - UK Excavation Profile - Logical - CustomBackdrop diagram

Class diagram in package 'MUDDIUKEx-CustomBackdrop'

MUDDI - UK Excavation Profile - Logical - CustomBackdrop Version 2.1.3

Created on 11/07/2022. Last modified 09/03/2025

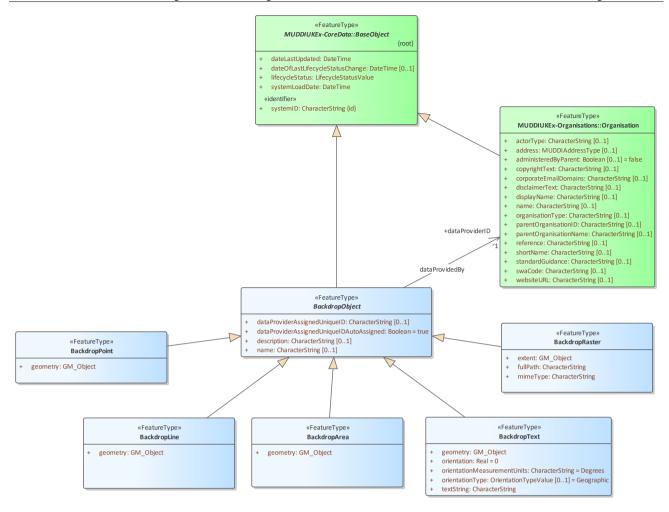


Figure 20: MUDDI - UK Excavation Profile - Logical - CustomBackdrop

1.4.2 BackdropArea

Class «FeatureType» in package 'MUDDIUKEx-CustomBackdrop'

NUARBackdropArea

<<FeatureType>>

Representation of area (polygon) custom backdrop features.

Created on 11/07/2022. Last modified 18/05/2024



1.4.3 BackdropLine

Class «FeatureType» in package 'MUDDIUKEx-CustomBackdrop'

NUARBackdropLine:

<<FeatureType>>

Representation of line custom backdrop features.

Created on 11/07/2022. Last modified 18/05/2024



geometry : GM_Object Public

[Is static True. Containment is Not Specified.]

ABSTRACT

1.4.4 BackdropObject

Class «FeatureType» in package 'MUDDIUKEx-CustomBackdrop'

NUARBackdropObject:

<<FeatureType>>

Parent Feature Type for all tables in the **NUARCustomBackdrop**> schema.

Created on 11/07/2022. Last modified 18/05/2024

ATTRIBUTES



dataProviderAssignedUniqueID: CharacterString Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

dataProviderAssignedUniqueID:

Mandatory (by convention)

A mandatory identifier for a feature which is persistent over the managed lifecycle of that feature.

The Data Provider Assigned Unique ID may be assigned by the provider of that feature to the platform. It is the Data Providers's responsibility to manage the feature lifecycle.

If the data provider is able to supply comprehensive, unique and persistent IDs within the scope of a source dataset, in the database Data Provider Assigned Unique ID will consist of a composite ID with the following elements:

- Organisation:systemID the ID of the organisation responsible for feature lifecycle management (typically the asset owner, but may be a third party service provider or a data custodian)
- The unique, persistent ID value as supplied
- MUDDIObject:sourceFeatureClass the name of the source dataset

Each element of the composite ID will be separated by a ":" character.

This composite ID will be globally unique within the database and will persist for the lifetime of the feature within the database. This composite ID may persist for the lifetime of the associated asset/object depending on the ID policy of the data provider.

[Is static True. Containment is Not Specified.]



dataProviderAssignedUniqueIDAutoAssigned : Boolean Public = true

dataProviderAssignedUniqueIDAutoAssigned:

Mandatory (by convention)

Default = TRUE

Boolean flag that will be set to "True" if the dataProviderAssignedUniqueID is automatically assigned by the platform on ingestion. If the Data Provider supplies a unique ID, this flag will be set to "False".

[Is static True. Containment is Not Specified.]



description: CharacterString Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

description:

Optional

Description of the feature.

[Is static True. Containment is Not Specified.]



name : CharacterString Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

name:

Optional

Name of the feature.

[Is static True. Containment is Not Specified.]

ASSOCIATIONS

Association (direction: Source -> Destination) dataProvidedBy

Source: Public (Class) BackdropObject «FeatureType»

Target: Public dataProviderID (Class) Organisation

«FeatureType» Cardinality: [1]

Association (direction: Source -> Destination) backdropObject

Source: Public (Class) Relationship_CoverageToBackdropObject «FeatureType»

Target: Public (Class) BackdropObject «FeatureType»

1.4.5 BackdropPoint

Class «FeatureType» in package 'MUDDIUKEx-CustomBackdrop'

NUARBackdropPoint:

<<FeatureType>>

Representation of point custom backdrop features.

Created on 11/07/2022. Last modified 18/05/2024

ATTRIBUTES



geometry : GM_Object Public

[Is static True. Containment is Not Specified.]

1.4.6 BackdropRaster

Class «FeatureType» in package 'MUDDIUKEx-CustomBackdrop'

NUARBackdropRaster:

<<FeatureType>>

Representation of raster custom backdrop features.

Created on 11/07/2022. Last modified 18/05/2024

ATTRIBUTES



extent : GM_Object Public

extent:

Mandatory

The real-world extent of the raster.

[Is static True. Containment is Not Specified.]

fullPath : CharacterString Public

fullPath:

Mandatory

The full path to the raster file.

[Is static True. Containment is Not Specified.]

mimeType : CharacterString Public

mimeType:

Mandatory

The MIME Type of the raster file.

[Is static True. Containment is Not Specified.]

1.4.7 BackdropText

Class «FeatureType» in package 'MUDDIUKEx-CustomBackdrop'

NUARBackdropText:

<<FeatureType>>

Representation of text/annotation custom backdrop features.

Created on 11/07/2022. Last modified 18/05/2024

ATTRIBUTES

geometry : GM_Object Public

[Is static True. Containment is Not Specified.]

orientation : Real Public = 0

orientation:

Mandatory

Default=0

The rotation angle for the display of the text.

[Is static True. Containment is Not Specified.]

orientationMeasurementUnits : CharacterString Public = Degrees

orientationMeasurementUnits:

Mandatory

Default='Degrees'

The unit of measure for the value in the **orientation** attribute.

Values for this attribute are defined in the <MeasurementUnitsValue> codelist (typically Degrees or Radians).

[Is static True. Containment is Not Specified.]

orientationType : OrientationTypeValue Public = Geographic Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

orientationType:

Optional

Default = 'Geographic'

Defines the correct interpretation of the angle specified in **orientation**.

Geographic means that the angle is the rotation from north in a clockwise direction.

Arithmetic means that the angle is the rotation from east in a counter-clockwise direction.

Values for this attribute are defined in the **<OrientationTypeValue>** codelist (**Arithmetic** or **Geographic**).

[Is static True. Containment is Not Specified.]

textString : CharacterString Public

textString:

Mandatory

The text to be displayed.

[Is static True. Containment is Not Specified.]

1.5 MUDDIUKEx-Organisations

Package «ApplicationSchema» in package 'MUDDI - UK Excavation Profile - Logical'

MUDDIUKEx-Organisations Version 2.1.3 Published Created on 30/01/2023. Last modified 09/03/2025

1.5.1 MUDDI - UK Excavation Profile - Logical - Organisations diagram

GML diagram in package 'MUDDIUKEx-Organisations'

MUDDI - UK Excavation Profile - Logical - Organisations Version 2.1.3 Created on 30/01/2023. Last modified 09/03/2025

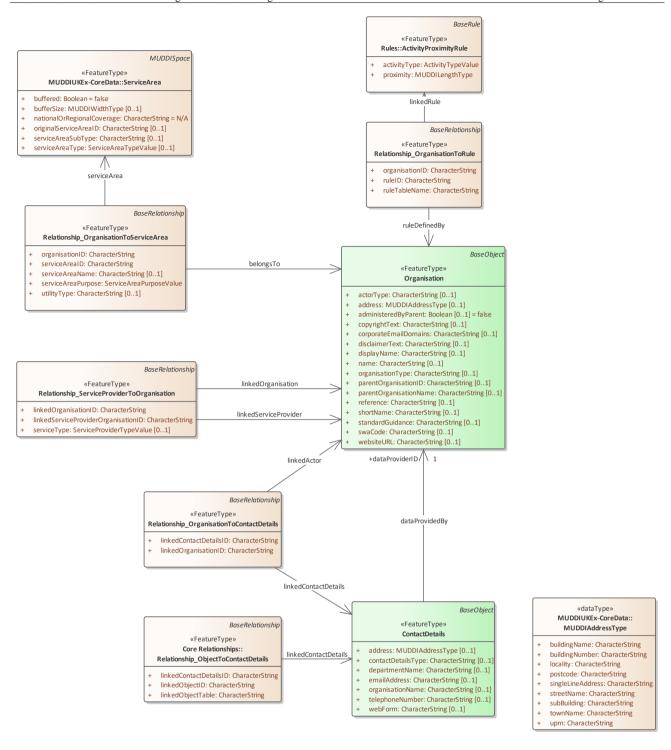


Figure 21: MUDDI - UK Excavation Profile - Logical - Organisations

1.5.2 Rules

Package in package 'MUDDIUKEx-Organisations'

1.5.2.1 MUDDI - UK Excavation Profile - Logical - Organisations - Rules diagram

GML diagram in package 'Rules'

MUDDI - UK Excavation Profile - Logical - Organisations - Rules

Version 2.1.3

Created on 18/08/2021. Last modified 09/03/2025

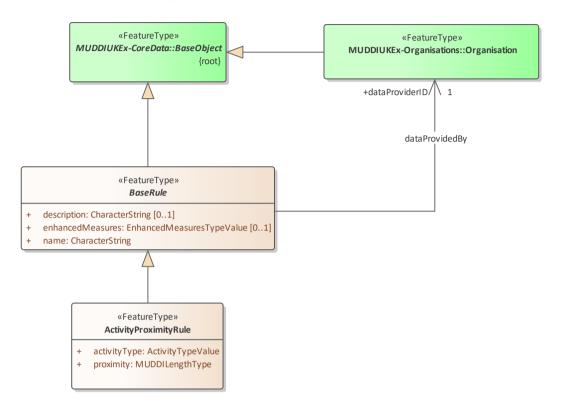


Figure 22: MUDDI - UK Excavation Profile - Logical - Organisations - Rules

1.5.2.2 ActivityProximityRule

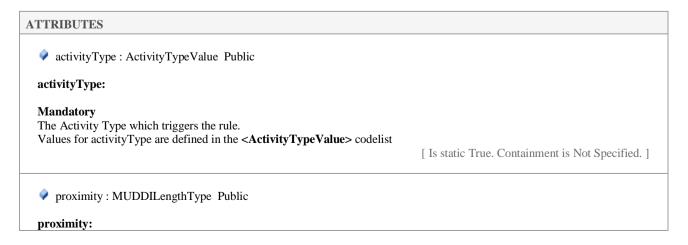
Class «FeatureType» in package 'Rules'

NUARActivityProximityRule:

<<FeatureType>>

A Feature Type allowing a rule to be specified which will be triggered by a given Activity Type being carried out in a given proximity to an asset or type of asset.

Created on 14/10/2022. Last modified 28/07/2024



Mandatory

The proximity to an asset or type of asset for the Activity Type to trigger the rule.

[Is static True. Containment is Not Specified.]

ASSOCIATIONS

Association (direction: Source -> Destination) linkedRule

Source: Public (Class) Relationship_OrganisationToRule «FeatureType»

Target: Public (Class) ActivityProximityRule «FeatureType»

ABSTRACT

1.5.2.3 **BaseRule**

Class «FeatureType» in package 'Rules'

Created on 14/10/2022. Last modified 18/05/2024

ATTRIBUTES description : CharacterString Public Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False) [Is static True. Containment is Not Specified.] enhancedMeasures : EnhancedMeasuresTypeValue Public Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False) [Is static True. Containment is Not Specified.] name : CharacterString Public [Is static True. Containment is Not Specified.]

SSOCIATIONS		
Association (direction: Source -> Destination) dataProvidedBy		
Source: Public (Class) BaseRule «FeatureType»	Target: Public dataProviderID (Class) Organisation «FeatureType» Cardinality: [1]	
Association (direction: Source -> Destination) linkedRule		
Source: Public (Class) Relationship_ObjectToRule «FeatureType»	Target: Public (Class) BaseRule «FeatureType»	
Association (direction: Source -> Destination) linkedRule		
Source: Public (Class) Relationship_SubordinateNetworkToRule «FeatureType»	Target: Public (Class) BaseRule «FeatureType»	

1.5.3 ContactDetails

Class «FeatureType» in package 'MUDDIUKEx-Organisations'

ContactDetails:

<<FeatureType>>

Feature Type representing contact details which may be associated with organisations or features in the database

Created on 05/05/2022. Last modified 23/05/2024

ATTRIBUTES



address: MUDDIAddressType Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

address:

Optional

The physical Address element of the contact details

[Is static True. Containment is Not Specified.]

contactDetailsType : CharacterString Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

contactDetailsType:

Optional

The type of Contact Details represented.

Values for contactDetailsType are defined in the <ContactDetailsTypeValue> codelist

[Is static True. Containment is Not Specified.]

departmentName : CharacterString Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

departmentName:

Optional

The Department Name element of the contact details

[Is static True. Containment is Not Specified.]

emailAddress: CharacterString Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

emailAddress:

Optional

The Email Address element of the contact details

[Is static True. Containment is Not Specified.]

organisationName: CharacterString Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

organisationName:

Optional

The name of the organisation for which the Contact Details apply. Should match a name value in <Organisation>.

[Is static True. Containment is Not Specified.]

telephoneNumber: CharacterString Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

telephoneNumber:

Optional

The Telephone Number element of the contact details

[Is static True. Containment is Not Specified.]



webForm : CharacterString Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

webForm:

Optional

A link to a web form which can be used as a means of contact.

[Is static True. Containment is Not Specified.]

ASSOCIATIONS Association (direction: Source -> Destination) dataProvidedBy Source: Public (Class) ContactDetails «FeatureType» Target: Public dataProviderID (Class) Organisation «FeatureType» Cardinality: [1] Association (direction: Source -> Destination) linkedContactDetails Source: Public (Class) Relationship_ObjectToContactDetails Target: Public (Class) ContactDetails «FeatureType» «FeatureType» Association (direction: Source -> Destination) linkedContactDetails Source: Public (Class) Target: Public (Class) ContactDetails Relationship_OrganisationToContactDetails «FeatureType» «FeatureType» Association (direction: Source -> Destination) linkedContactDetails Source: Public (Class) Relationship_NetworkToContactDetails Target: Public (Class) ContactDetails «FeatureType» «FeatureType»

1.5.4 Organisation

Class «FeatureType» in package 'MUDDIUKEx-Organisations'

Organisation:

<<FeatureType>>

Feature Type representing the organisations or actors who interact with the data. This includes data providers, data owners and asset (object) owners and operators.

All entities in the database should have a Foreign Key identifying a record in < Organisation> which represents the Data Provider for that entity.

Created on 27/10/2021. Last modified 23/05/2024

ATTRIBUTES

actorType : CharacterString Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

actorType:

Optional

The type of organisation represented in terms of its relationship to the data held in the database.

Values for actorType are defined in the **<ActorTypeValue>** codelist.

[Is static True. Containment is Not Specified.]

address: MUDDIAddressType Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

address:

Optional

The address (e.g. head office or registered address of the legal entity) of the organisation.

Represented by the **<AddressType>** Data Type.

[Is static True. Containment is Not Specified.]

administeredBvParent : Boolean Public = false

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

administeredBvParent:

Optional

Default=FALSE

A flag indicating whether an organisation is administered from a parent organisation.

[Is static True. Containment is Not Specified.]

copyrightText : CharacterString Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

copyrightText:

Optional

Any copyright or legal text that applies to all data provided by this organisation, and which should be made available alongside that data

[Is static True. Containment is Not Specified.]

corporateEmailDomains : CharacterString Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

corporateEmailDomains:

Optional

Semi-colon delimited string of email domains associated with this organisation (e.g. "nuar.co.uk;nuar.com;nuar.uk").

[Is static True. Containment is Not Specified.]

disclaimerText: CharacterString Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

disclaimerText:

Optional

Any disclaimer text that applies to all data provided by this organisation, and which should be made available alongside that data

[Is static True. Containment is Not Specified.]

displayName : CharacterString Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

displayName:

Optional

The name that should be displayed for this organisation when presented to end users.

Multiple subsidiary organisations may have the same display name if this is the name that has most meaning to end users.

[Is static True. Containment is Not Specified.]

name: CharacterString Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

Optional

The full unique name of the legal entity represented by this record.

[Is static True. Containment is Not Specified.]



organisationType: CharacterString Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

organisationType:

Optional

The role that this organisation fulfils in the database.

Values for organisationType are defined in the < OrganisationTypeValue> codelist.

[Is static True. Containment is Not Specified.]

parentOrganisationID : CharacterString Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

parentOrganisationID:

Optional

The systemID of any parent organisation for this subsidiary organisation.

[Is static True. Containment is Not Specified.]

parentOrganisationName : CharacterString Public Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

parentOrganisationName:

Optional

The name of any parent organisation for this subsidiary organisation. Should match a **name** value in **< Organisation>**.

[Is static True. Containment is Not Specified.]

reference: CharacterString Public
Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

reference:

Optional

Representation of any reference assigned when the organisation is first included in an artefact tracking the organisation onboarding journey.

[Is static True. Containment is Not Specified.]

shortName: CharacterString Public Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

shortName:

Optional

A short or abbreviated name for the organisation which may be used for internal functions that, for example, do not allow spaces

[Is static True. Containment is Not Specified.]

standardGuidance: CharacterString Public Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

standardGuidance:

Optional

Some organisations may supply general safety guidance information to be displayed alongside organisation-level information, such as disclaimers and copyright information.

Properties: size = 255

[Is static True. Containment is Not Specified.]

swaCode : CharacterString Public Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

swaCode:

Optional

The value in the Street Works Act (SWA) Code list associated with this organisation.

See:

https://www.geoplace.co.uk/local-authority-resources/street-works-managers/view-swa-codes

[Is static True. Containment is Not Specified.]

websiteURL : CharacterString Public Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

websiteURL: Optional

The URL for this organisation's corporate website

[Is static True. Containment is Not Specified.]

ASSOCIATIONS

Association (direction: Source -> Destination) linkedServiceProvider

Source: Public (Class)

Relationship_ServiceProviderToOrganisation «FeatureType»

Target: Public (Class) Organisation «Feature Type»

Association (direction: Source -> Destination) linkedOrganisation

Source: Public (Class)
Relationship_ServiceProviderToOrganisation «FeatureType»

Target: Public (Class) Organisation «Feature Type»

Association (direction: Source -> Destination) dataProvidedBy

Source: Public (Class) ContactDetails «FeatureType» Target: Public dataProviderID (Class) Organisation

«FeatureType»
Cardinality: [1]

Association (direction: Source -> Destination)

originatingOrganisationID:

Mandatory

The systemID in **<NUARActor>** of the organisation the raising user is directly associated with. The Foreign Key to the **<NUARActor>** table doesn't work for supply chain organisations as these are only represented in the platform database not the asset database.

Source: Public (Class) MUDDIEvent «FeatureType» Target: Public originatingOrganisationID (Class)

Organisation «FeatureType»

Cardinality: [1]

Association (direction: Source -> Destination) dataProvidedBy

Source: Public (Class) BaseRelationship «FeatureType»

Target: Public dataProviderID (Class) Organisation

«FeatureType»
Cardinality: [1]

Association (direction: Source -> Destination) dataProvidedBy

Source: Public (Class) BackdropObject «FeatureType» Target: Public dataProviderID (Class) Organisation

«FeatureType»
Cardinality: [1]

Association (direction: Source -> Destination)

${\bf originating Organisation ID:}$

Mandatory

The systemID in **<NUARActor>** of the organisation the raising user is acting on behalf of. For non-supply chain organisations this will be the same as **originatingOrganisationID**.

Source: Public (Class) ObservationObject «FeatureType» Target: Public onBehalfOfOrganisationID (Class)

Organisation «FeatureType» Cardinality: [0..1]

Association (direction: Source -> Destination)

Target: Public (Class) Organisation «FeatureType»

1.5.5 Relationship OrganisationToContactDetails

Class «FeatureType» in package 'MUDDIUKEx-Organisations'

Association (direction: Source -> Destination) ruleDefinedBy

Source: Public (Class) Relationship_OrganisationToRule

Relationship OrganisationToContactDetails:

<<FeatureType>>

«FeatureType»

Representation of the relationship between an organisation and contact details for the organisation.

Created on 11/07/2022. Last modified 07/03/2025

ATTRIBUTES

linkedContactDetailsID : CharacterString Public

linkedContactDetailsID:

Mandatory

The systemID of the <NUARContactDetails> record in the relationship

ASSOCIATIONS Association (direction: Source -> Destination) linkedContactDetails		
Association (direction: Source -> Destination) linkedActor		
Source: Public (Class) Relationship_OrganisationToContactDetails «FeatureType»	Target: Public (Class) Organisation «FeatureType»	

1.5.6 Relationship_OrganisationToRule

Class «FeatureType» in package 'MUDDIUKEx-Organisations'

Created on 14/10/2022. Last modified 07/03/2025

ATTRIBUTES	
organisationID: CharacterString Public	[Is static True. Containment is Not Specified.]
	[Is static True. Containment is Not Specified.]
	[Is static True. Containment is Not Specified.]

SSOCIATIONS	
Association (direction: Source -> Destination) linkedRule	
Source: Public (Class) Relationship_OrganisationToRule «FeatureType»	Target: Public (Class) ActivityProximityRule «FeatureType»
Association (direction: Source -> Destination) ruleDefinedBy	
Source: Public (Class) Relationship_OrganisationToRule «FeatureType»	Target: Public (Class) Organisation «FeatureType»

1.5.7 Relationship OrganisationToServiceArea

Class «FeatureType» in package 'MUDDIUKEx-Organisations'

Relationship OrganisationToServiceArea:

<<FeatureType>>

Representation of the relationship between an organisation and a Service Area, and the purpose that the Service Area serves for that organisation

Created on 14/10/2022. Last modified 07/03/2025

ATTRIBUTES



organisationID : CharacterString Public

organisationID:

Mandatory

The systemID of the <Organisation> record in the relationship

[Is static True. Containment is Not Specified.]

serviceAreaID : CharacterString Public

serviceAreaID:

Mandatory

The dataProviderAssignedUniqueID of the **ServiceArea**> record in the relationship

[Is static True. Containment is Not Specified.]

serviceAreaName: CharacterString Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

serviceAreaName:

Optional

The name of the Service Area in the as used by the related organisation

[Is static True. Containment is Not Specified.]

serviceAreaPurpose : ServiceAreaPurposeValue Public

serviceAreaPurpose:

Mandatory

The purpose for which this service area is used by the related organisation.

The values for this attribute are defined in the **ServiceAreaPurposeValue**> codelist.

[Is static True. Containment is Not Specified.]

utilityType: CharacterString Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

utilityType:

Optional

Type of utility service associated with the related Service Area.

[Is static True. Containment is Not Specified.]

ASSOCIATIONS



Association (direction: Source -> Destination) serviceArea

Source: Public (Class) Relationship_OrganisationToServiceArea «FeatureType»

Target: Public (Class) ServiceArea «FeatureType»

Association (direction: Source -> Destination) belongsTo

Source: Public (Class) Relationship_OrganisationToServiceArea

Target: Public (Class) Organisation «Feature Type»

«FeatureType»

1.5.8 Relationship ServiceProviderToOrganisation

Class «FeatureType» in package 'MUDDIUKEx-Organisations'

$Relationship_Service Provider To Organisation:$

<<FeatureType>>

Representation of the relationship between a Service Provider organisation and an organisation to which those services are provided (e.g. a provider of data transformation services being related to an Asset Owner organisation whose data it transforms).

Created on 06/02/2024. Last modified 23/03/2024

ATTRIBUTES

linkedOrganisationID : CharacterString Public

linkedOrganisationID:

Mandatory

The systemID of the <NUARActor> record for the Organisation on whose behalf the service is being provided.

[Is static True. Containment is Not Specified.]

Page: 175 of 189

linkedServiceProviderOrganisationID : CharacterString Public

linkedServiceProviderOrganisationID:

Mandatory

The systemID of the **<NUARActor>** record for the Service Provider organisation.

[Is static True. Containment is Not Specified.]

serviceType : ServiceProviderTypeValue Public Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

serviceType:

Optional

The type of service provided by the Service Provider to the Organisation.

The values for this attribute are defined in the <ServiceProviderTypeValue> codelist.

[Is static True. Containment is Not Specified.]

ASSOCIATIONS



Association (direction: Source -> Destination) linkedServiceProvider

Source: Public (Class) Relationship_ServiceProviderToOrganisation «FeatureType» Target: Public (Class) Organisation «FeatureType»

Association (direction: Source -> Destination) linkedOrganisation

Source: Public (Class)

Target: Public (Class) Organisation «FeatureType»

Relationship_ServiceProviderToOrganisation «FeatureType»

MUDDIUKEx-UserCreatedData

Package «ApplicationSchema» in package 'MUDDI - UK Excavation Profile - Logical'

MUDDIUKEx-UserCreatedData Version 2.1.3 Published Created on 31/01/2023. Last modified 09/03/2025

1.6.1 MUDDI - UK Excavation Profile - Logical - UserCreatedData diagram

GML diagram in package 'MUDDIUKEx-UserCreatedData'

MUDDI - UK Excavation Profile - Logical - UserCreatedData Version 2.1.3

Created on 31/01/2023. Last modified 09/03/2025

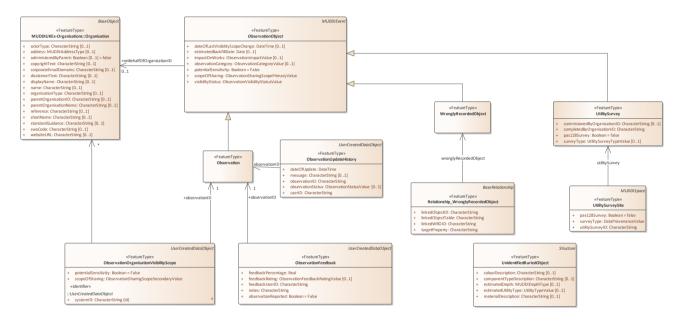


Figure 23: MUDDI - UK Excavation Profile - Logical - UserCreatedData

1.6.2 Observation

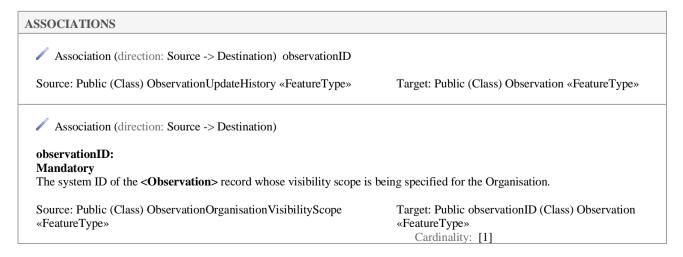
Class «FeatureType» in package 'MUDDIUKEx-UserCreatedData'

Observation:

<<FeatureType>>

An Observation recorded by a NUAR user related to the data, or more generally to the location at which they are located

Created on 23/02/2024. Last modified 23/02/2024



ASSOCIATIONS

Association (direction: Source -> Destination)

observationID:

Mandatory

The system ID of the Observation for which feedback is being provided.

Source: Public (Class) ObservationFeedback «FeatureType»

Target: Public observationID (Class) Observation

«FeatureType» Cardinality: [1]

1.6.3 ObservationFeedback

Class «FeatureType» in package 'MUDDIUKEx-UserCreatedData'

ObservationFeedback:

<<FeatureType>>

Feedback provided by users on the nature or usefulness of an Observation.

Created on 13/06/2023. Last modified 23/03/2024

ATTRIBUTES



feedbackPercentage : Real Public

feedbackPercentage:

Mandatory

An indication of the usefulness of the Observation as a percentage.

[Is static True. Containment is Not Specified.]

feedbackRating : ObservationFeedbackRatingValue Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

feedbackrating:

Optional

A general rating for the Observation.

The values for this attribute are defined in the <ObservationFeedbackRatingValue> codelist.

[Is static True. Containment is Not Specified.]



feedbackUserID : CharacterString Public

feedbackUserID:

Mandatory

The User ID of the user leaving the feedback.

[Is static True. Containment is Not Specified.]



notes : CharacterString Public

notes:

Mandatory

Free text feedback on the Observation.

Properties:

size = 200

[Is static True. Containment is Not Specified.]

observationReported : Boolean Public = False

observationReported:

Mandatory

Default=FALSE

An indication as to whether the Observation has been reported for inappropriate content.

[Is static True. Containment is Not Specified.]

Page: 178 of 189

ASSOCIATIONS



Association (direction: Source -> Destination)

observationID:

Mandatory

The system ID of the Observation for which feedback is being provided.

Source: Public (Class) ObservationFeedback «FeatureType»

Target: Public observationID (Class) Observation

«FeatureType» Cardinality: [1]

ABSTRACT

1.6.4 ObservationObject

Class «FeatureType» in package 'MUDDIUKEx-UserCreatedData'

ObservationObject:

<<FeatureType>>

Abstract class holding common attribution for Observation & WronglyRecordedObject.

Created on 23/08/2021. Last modified 23/02/2024

ATTRIBUTES



dateOfLastVisibilityScopeChange : DateTime Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

dateOfLastVisibilityScopeChange:

Optional

The date upon which the visibility scope of the Observation was last changed

[Is static True. Containment is Not Specified.]



estimatedBackfillDate: Date Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

estimatedBackfillDate:

Optional

If available, an estimate of the date upon which any excavation exposing assets to which the Observation relates will be backfilled

[Is static True. Containment is Not Specified.]



impactOnWorks: ObservationImpactValue Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

impactOnWorks:

Optional

An indication of the impact of the conditions observed upon the works being undertaken.

The values for this attribute are defined in the **ObservationImpactValue** codelist.

[Is static True. Containment is Not Specified.]



observationCategory : ObservationCategoryValue Public Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

observationCategory:

Optional

The category to which the Observation belongs.

The values for this attribute are defined in the < Observation Category Value > codelist.

[Is static True. Containment is Not Specified.]

Page: 179 of 189

potentialSensitivity : Boolean Public = False

potentialSensitivity:

Mandatory

Default=FALSE

A flag indicating that an Observation may have some sensitivity attached to it based on its location or proximity to a sensitive site or asset.

[Is static True. Containment is Not Specified.]



scopeOfSharing: ObservationSharingScopePrimaryValue Public

scopeOfSharing:

Mandatory

Defines the extent to which an Observation is shared (visible) across the user base and organisation hierarchies.

The values for this attribute are defined in the <ObservationSharingScopePrimaryValue> codelist.

[Is static True. Containment is Not Specified.]

visibilityStatus: ObservationVisibilityStatusValue Public

visibilityStatus:

Mandatory

Defines the overall state of visibility of the Observation, independently of the sharing scope.

The values for this attribute are defined in the **ObservationVisibilityStatusValue** codelist.

[Is static True. Containment is Not Specified.]

ASSOCIATIONS



Association (direction: Source -> Destination)

originatingOrganisationID:

Mandatory

The systemID in <NUARActor> of the organisation the raising user is acting on behalf of. For non-supply chain organisations this will be the same as originatingOrganisationID.

Source: Public (Class) ObservationObject «FeatureType»

Target: Public onBehalfOfOrganisationID (Class)

Organisation «FeatureType» Cardinality: [0..1]



Association (direction: Source -> Destination) linkedObject

Source: Public (Class) Relationship_LinkedFile «FeatureType»

Target: Public (Class) ObservationObject

«FeatureType»

1.6.5 ObservationOrganisationVisibilityScope

Class «FeatureType» in package 'MUDDIUKEx-UserCreatedData'

ObservationFeedback:

<<FeatureType>>

Representation of the Visibility Scope of an Observation for a specified Organisation.

Created on 13/06/2023. Last modified 23/03/2024

potentialSensitivity : Boolean Public = False

potentialSensitivity:

Mandatory

Default=FALSE

[Is static True. Containment is Not Specified.]

scopeOfSharing: ObservationSharingScopeSecondaryValue Public

scopeOfSharing:

Mandatory

Defines the extent to which an Observation is shared (visible) for the Organisation in question.

The values for this attribute are defined in the **ObservationSharingScopeSecondaryValue>** codelist.

[Is static True. Containment is Not Specified.]

ASSOCIATIONS

Association (direction: Source -> Destination)

nuarActorID:

Mandatory

The system ID of the **NUARActor** record for the organisation whose visibility scope is being specified for the Observation.

Source: Public (Class) ObservationOrganisationVisibilityScope

Target: Public (Class) Organisation «FeatureType» Cardinality: [*]

«FeatureType»

Association (direction: Source -> Destination)

observationID:

Mandatory

The system ID of the **Observation**> record whose visibility scope is being specified for the Organisation.

Source: Public (Class) ObservationOrganisationVisibilityScope

«FeatureType»

Target: Public observationID (Class) Observation

«FeatureType»

Cardinality: [1]

1.6.6 ObservationUpdateHistory

Class «FeatureType» in package 'MUDDIUKEx-UserCreatedData'

Created on 06/02/2024. Last modified 06/02/2024

ATTRIBUTES

dateOfUpdate : DateTime Public

[Is static True. Containment is Not Specified.]

message : CharacterString Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

[Is static True. Containment is Not Specified.]

observationID : CharacterString Public

[Is static True. Containment is Not Specified.]

ASSOCIATIONS Association (direction: Source -> Destination) observationID Source: Public (Class) ObservationUpdateHistory «FeatureType» Target: Public (Class) Observation «FeatureType»

1.6.7 Relationship_WronglyRecordedObject

Class «FeatureType» in package 'MUDDIUKEx-UserCreatedData'

$Relationship_WronglyRecordedObject$

<<FeatureType>>

Table of relationships between wrongly recorded object records and their associated objects. These relationships are not enforced in the physical schema, but will be set up at the ingestion/transformation phase.

Created on 21/02/2022. Last modified 31/01/2023



ASSOCIATIONS

ASSOCIATIONS

Association (direction: Source -> Destination) linkedObject

Source: Public (Class) Relationship_WronglyRecordedObject «FeatureType»

Target: Public (Class) MUDDIObject

«FeatureType»

Association (direction: Source -> Destination) wronglyRecordedObject

Source: Public (Class) Relationship_WronglyRecordedObject «FeatureType»

Target: Public (Class) WronglyRecordedObject

«FeatureType»

1.6.8 UnidentifiedBuriedObject

Class «FeatureType» in package 'MUDDIUKEx-UserCreatedData'

UnidentifiedBuriedObject:

<<FeatureType>>

From PAS256:2017:

"[A] buried asset at a given location, which is not recorded on any plans supplied by undertaker, local highway or roads authority or any other asset owner".

A discovered object whose function, nature and/or ownership is unknown at the time of discovery.

Created on 23/08/2021. Last modified 31/01/2023

ATTRIBUTES



colourDescription : CharacterString Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

colourDescription:

Optional

A description of the colour of, and any markings on, the object

[Is static True. Containment is Not Specified.]



componentTypeDescription : CharacterString Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

componentTypeDescription:

Optional

A description of the discovered object.

[Is static True. Containment is Not Specified.]



estimatedDepth: MUDDIDepthType Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

estimatedDepth:

Optional

An estimate of the depth below the surface of the discovered object in measurement Units.

[Is static True. Containment is Not Specified.]



estimatedUtilityType : UtilityTypeValue Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

estimatedUtilityType:

An estimate of the utility type of the discovered object if applicable.

The values for this attribute are defined in the **<UtilityTypeValue>** codelist.

[Is static True. Containment is Not Specified.]

materialDescription : CharacterString Public Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

materialDescription:

Optional

A description of the material of which the discovered object is primarily constructed.

[Is static True. Containment is Not Specified.]

ABSTRACT

1.6.9 UserCreatedDataObject

Class «FeatureType» in package 'MUDDIUKEx-UserCreatedData'

Created on 13/06/2023. Last modified 18/05/2024

ATTRIBUTES



systemID : CharacterString Public

Properties: size = 38

[Stereotype is «identifier». Is static True. Containment is Not Specified.]

UtilitySurvey 1.6.10

Class «FeatureType» in package 'MUDDIUKEx-UserCreatedData'

Created on 24/01/2025. Last modified 24/01/2025

ATTRIBUTES commisionedByOrganisationID : CharacterString Public Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False) [Is static True. Containment is Not Specified.] completedByOrganisationID : CharacterString Public [Is static True. Containment is Not Specified.] pas128Survey : Boolean Public = false [Is static True. Containment is Not Specified.] surveyType : UtilitySurveyTypeValue Public Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False) [Is static True. Containment is Not Specified.]

ASSOCIATIONS



Association (direction: Source -> Destination) utilitySurvey

Source: Public (Class) UtilitySurveySite «FeatureType»

Target: Public (Class) UtilitySurvey «FeatureType»

ASSOCIATIONS

1.6.11 UtilitySurveySite

Class «FeatureType» in package 'MUDDIUKEx-UserCreatedData'

Created on 24/01/2025. Last modified 24/01/2025

ATTRIBUTES	
pas128Survey : Boolean Public = false	[Is static True. Containment is Not Specified.]
	[Is static True. Containment is Not Specified.]
✓ utilitySurveyID : CharacterString Public	[Is static True. Containment is Not Specified.]

ASSOCIATIONS Association (direction: Source -> Destination) utilitySurvey Source: Public (Class) UtilitySurveySite «FeatureType» Target: Public (Class) UtilitySurvey «FeatureType»

1.6.12 WronglyRecordedObject

Class «FeatureType» in package 'MUDDIUKEx-UserCreatedData'

UnidentifiedBuriedObject:

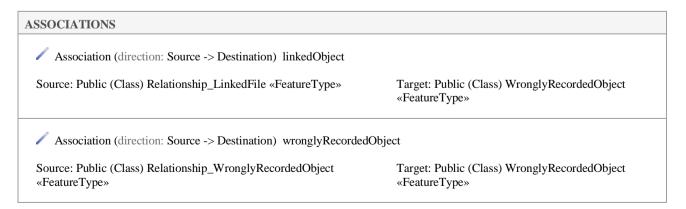
<<FeatureType>>

From PAS256:2017:

"[A] buried asset at a given location, which is not recorded on any plans supplied by undertaker, local highway or roads authority or any other asset owner".

A discovered object whose function, nature and/or ownership is unknown at the time of discovery.

Created on 23/08/2021. Last modified 23/05/2024



1.7 MUDDIUKEx-Version

Package «ApplicationSchema» in package 'MUDDI - UK Excavation Profile - Logical'

MUDDIUKEx-Version Version 2.1.3 Published Created on 11/03/2022. Last modified 09/03/2025

1.7.1 MUDDI - UK Excavation Profile - Logical - Version diagram

GML diagram in package 'MUDDIUKEx-Version'

MUDDI - UK Excavation Profile - Logical - Version Version 2.1.3

Created on 11/03/2022. Last modified 09/03/2025

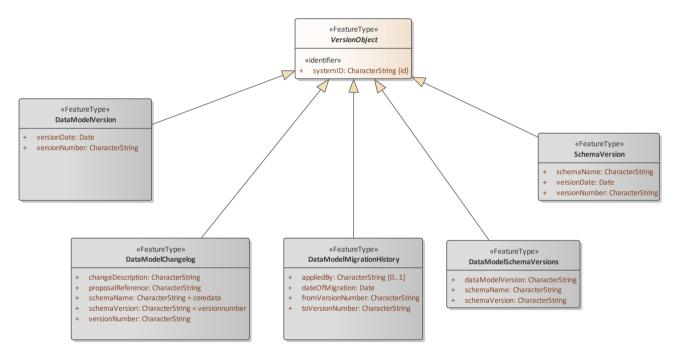


Figure 24: MUDDI - UK Excavation Profile - Logical - Version

1.7.2 DataModelChangelog

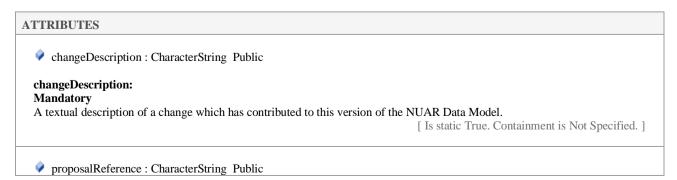
Class «FeatureType» in package 'MUDDIUKEx-Version'

NUARDataModelChangelog:

<<FeatureType>>

A record of changes that are part of the specified NUAR Data Model version

Created on 11/03/2022. Last modified 18/05/2024



proposalReference:

Mandatory

The reference of the Data Model Proposal which describes the change.

[Is static True. Containment is Not Specified.]

schemaName : CharacterString Public = coredata

schemaName:

Mandatory

Default='nuardata'

The name of the schema in the NUAR Data Model to which the change applies.

[Is static True. Containment is Not Specified.]

schemaVersion : CharacterString Public = versionnumber

schemaVersion:

Mandatory

The version of the schema in the NUAR Data Model to which the change applies.

[Is static True. Containment is Not Specified.]

versionNumber : CharacterString Public

versionNumber:

Mandatory

The version number of the NUAR Data Model version.

[Is static True. Containment is Not Specified.]

1.7.3 DataModelMigrationHistory

Class «FeatureType» in package 'MUDDIUKEx-Version'

NUARDataModelMigrationHistory:

<<FeatureType>>

A record of migrations of a given encoding of the NUAR Data Model from one version to another.

Created on 11/03/2022. Last modified 18/05/2024

ATTRIBUTES



appliedBy: CharacterString Public

Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False)

appliedBy:

Optional

Name of the person who performed the migration.

[Is static True. Containment is Not Specified.]

dateOfMigration : Date Public

dateOfMigration:

Mandatory

The date and time at which the migration was completed.

[Is static True. Containment is Not Specified.]

fromVersionNumber : CharacterString Public

from Version Number:

Mandatory

The version number of the NUAR Data Model which was migrated from.

[Is static True. Containment is Not Specified.]

toVersionNumber : CharacterString Public

toVersionNumber:

Mandatory

The version number of the NUAR Data Model which was migrated to.

[Is static True. Containment is Not Specified.]

1.7.4 DataModelSchemaVersions

Class «FeatureType» in package 'MUDDIUKEx-Version'

NUARDataModelSchemaVersions:

<<FeatureType>>

Relationship between individual schema versions and the version of the overall NUAR Data Model.

Created on 31/01/2023. Last modified 18/05/2024

ATTRIBUTES

dataModelVersion : CharacterString Public

dataModelVersion:

Mandatory

The version number of the overall NUAR Data Model version.

[Is static True. Containment is Not Specified.]

schemaName : CharacterString Public

schemaName:

Mandatory

The name of the schema in the NUAR Data Model.

[Is static True. Containment is Not Specified.]



schemaVersion : CharacterString Public

schemaVersion:

Mandatory

The version number of the schema version.

[Is static True. Containment is Not Specified.]

1.7.5 DataModelVersion

Class «FeatureType» in package 'MUDDIUKEx-Version'

NUARDataModelVersion:

<<FeatureType>>

Version information about the overall NUAR Data Model.

Created on 11/03/2022. Last modified 18/05/2024

ATTRIBUTES



versionDate : Date Public

ATTRIBUTES versionDate: Mandatory

The date of the NUAR Data Model version.

[Is static True. Containment is Not Specified.]

versionNumber : CharacterString Public

versionNumber:

Mandatory

The version number of the NUAR Data Model version.

Properties:

length = 10

[Is static True. Containment is Not Specified.]

1.7.6 SchemaVersion

Class «FeatureType» in package 'MUDDIUKEx-Version'

NUARSchemaVersion:

<<FeatureType>>

Version information about a specific schema in the NUAR Data Model.

Created on 31/01/2023. Last modified 18/05/2024



ABSTRACT

1.7.7 VersionObject

Class «FeatureType» in package 'MUDDIUKEx-Version'

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ATTRIBUTES

systemID : CharacterString Public

Properties: size = 38

[Stereotype is «identifier». Is static True. Containment is Not Specified.]