

rdf:langString
@value : xsd:string
@language : xsd:string(e.g. "de")

ApplicationIdentifierComponent
optional : xsd:boolean
type : xsd:string ("N", "X", "Y")
fixedLength : xsd:boolean
length : xsd:int
checkDigit : xsd:boolean
checkCharacters : xsd:boolean
key : xsd:boolean

ApplicationIdentifiers (main table)
applicationIdentifier : xsd:string
formatString : xsd:string
label : xsd:string
description : rdf:langString
regex : xsd:string
note : rdf:langString
separatorRequired : xsd:boolean
components : array of ApplicationIdentifierComponent
gs1DigitalLinkPrimaryKey : xsd:boolean
gs1DigitalLinkQualifiers : array of arrays of numeric string (e.g. [["22","10","21"] , ["235"]])
excludes : array of numeric string and/or range objects (e.g. ["01","02","415","8006","8020","8026"], [{"start":"3100", "end":"3109"}])
requires : array of numeric string (e.g. ["01", "02"])
<i>equivalentPropertyPath</i> : xsd:string denoting a property path of one or more properties (e.g. "gs1:gtin" for (01), "gs1:shipToAddress/ gs1:streetAddressLine2" for (4303)) note that means 'followed by' - not 'OR' . Note also that AI (7007) with a 12-digit value expresses simultaneously two properties: https://www.gs1.org/voc/harvestDateStart and https://www.gs1.org/voc/harvestDateEnd
<i>inferredDomain</i> : array of string denoting the class(es) of objects that can be inferred if expressing this AI (e.g. gs1:Product for AI (01), gs1:LogisticUnit for AI (00), gs1:Place for AI (414), gs1:Organization for AI (417)
<i>interpretation of AI value</i> (e.g. date, dateTime, date range for AI (7007), etc.)
<i>valueMayIncludePercentEncoding</i> : xsd:boolean (already the case for how AIs (4300)-(4306), (4310)-(4316), (4320) use percent-encoding even in the element string to express non-Latin characters and space (within the constraints of the GS1 encodable AI character set 82)
+ TDStableF_components
+ GS1DigitalLinkTableF_components
+ GS1DigitalLink_TableS1

TDStableF_Component
format : xsd string (e.g. "6-digit date YYMMDD")
specSection : xsd:string (ref to TDS spec section)
fixedLengthChrs : xsd:int (e.g. 6)
fixedLengthBits : xsd:int (e.g. 16)
encodingIndicatorBits : xsd:int (e.g. 3 for AI (21))
lengthIndicatorBits : xsd:int (e.g. 5 for AI (21))
maxCharacters : xsd:int (e.g. 20 for AI (21))

Used extensively in TDS 2.0 for binary encoding of AI data within new EPC schemes and also for AIDC data encoded after the EPC in the EPC/UII memory bank

GS1DigitalLinkTableF_Component
format ('E') : xsd string (e.g. "N" or "X")
fixedLengthChrs ('L') : xsd:int (e.g. 6)
maxCharacters ('M') : xsd:int (e.g. 20 for AI (21))

Similar to TDS Table F but less explicit about binary encoding

GS1DigitalLink_TableS1
requires : array of string (e.g. ["21" , "235"])
minLength : int (e.g. 15 for AI (8003))

Table S1 expresses the conditions for which the AI is considered to be an instance identifier - either via a compound key or a minimum length (optional serial component is present)