



What's new  
in 4.20

## Table of Contents

Improvements for Report CSV Export .....	- 3 -
New CSV export settings in the CSV export dialog .....	- 3 -
New dynamic label accessors .....	- 3 -
New CSV Report Template Examples .....	- 3 -
Suggested file name format.....	- 3 -
Duct Colour in Jetter Plan Report .....	- 5 -
Dynamic Labels in Splice/Patch Report Header Data .....	- 5 -
Label Objects now can Synchronize Line Objects on Both Sides.....	- 6 -
Hierarchy Filter in Client NIS .....	- 7 -
Hierarchy-Filter .....	- 7 -
Requirements.....	- 9 -
Entering A Value Filter in NIS .....	- 9 -
Unique Links Between Locations in NIS.....	- 10 -
Update of the Outgoing Signal in an ONT After a Library has been Changed.....	- 11 -
More Properties for Dynamic Labels .....	- 12 -
History.....	- 12 -
Introduction .....	- 12 -
Usage.....	- 13 -
List of Properties .....	- 13 -
WebAccess Pre-release.....	- 41 -

## Improvements for Report CSV Export

### New CSV export settings in the CSV export dialog

"Use CSV Schema": Newer reports have "Use CSV Schema" automatically enabled. Older reports had it disabled by default.

Now there is an explicit setting for it: When enabled, each horizontal/x position of the report fields creates a separate column.

To align the columns (e.g. header and values in a CSV column) the Report Designer displays the position of the fields in the bottom status bar.

"Suggest filename": if checked, the next time a report is created a filename is built from Report, DA, Project, Selection and Date. Note that the filename is generated when the report is created, not when it is exported because only when the report is created is the data is known which is needed for the name suggestion (selected object, ..).

The suggested filename is also used for PDF export. Suggested filename format see below.

### New dynamic label accessors

Until now, there were only 1TH (and 1OF etc.), 2TH, 3TH, ... 9TH for accessing the installation number on all levels, but now there are also R2TH, R3TH, ... M2TH, M3TH, ... T2TH, T3TH, ... which are the same as level 1 values RTH, MTH, TTH, but higher in the location hierarchy.

Previously, these values were only accessible as part of the location hierarchy path.

For CSV export, these values are now accessible separately from the location hierarchy path.

### New CSV Report Template Examples

Some new standard report template \*CSV.rep examples have been added. These should be used with the report option Group header disabled to output flat (table) data.

If required, the project header can also be removed: the suggested name can now include this information as well, so that the table data can be used immediately elsewhere without the need to remove the header.

### Suggested file name format

The suggested filename can be customized by an administrator via registry values.

Only an administrator can modify the system registry, and only experienced users can modify the registry manually (no warranty for any damage caused).

Please contact your administrator if you need to change the suggested filename.

In standalone versions, the DA value is empty, and the project filename is the base name.

In server versions, DA contains the DA names (if not available: DA IDs) and the base name is the dot hierarchy name.

The parts of the filename are separated by delimiters.

The default server filename is

```
<template>{_DA(<das>)}{_<base name>}{_C(<selectionCity>)}{_A(<selectionAddress>)}
{_L(<selectionLocation>)}{_<date>}.csv
```

Server example:

```
SpliceListCSV_DA(DA 100)_Bayern_München_FTTXDemo_C(81673 München)_A(Berg-am-Laim-Str.
99)_L(S10334_ATM3997501_C13)_20241004.csv
```

The customization registry values are listed below.

The Format value specifies the order of the arguments, for example,

```
Format="{0}{1}{2}{3}{4}{5}{6}"
```

The numbers, e.g. "FormatBase"="2", are just for information and are ignored by AND, but they are helpful when experimenting with the format with RegEdit, because Regedit sorts the values alphabetically and not in the order specified in the registry file.

The existing values for Semicolon/Comma/Line Strip and the two new values are stored in the HKCU user registry.

If corresponding values provided by an administrator exist in the HKLM system registry, they override the user values, providing a means to enforce default export settings.

```
Windows Registry Editor Version 5.00
[HKEY_LOCAL_MACHINE\SOFTWARE\CDS\AND\4.0\AND\Report]
"PrintDirect"=dword:00000000
"UseComma"="0"
"RemoveLineFeed"="1"
"UseCsvSchema"="1"
"SuggestFileName"="1"
"Format"="{0}{1}{2}{3}{4}{5}{6}"
"FormatTemplate"="0"
"FormatTemplateSeparPre"=""
"FormatTemplateSeparPost"=""
"FormatDaIds"="1"
"FormatDaIdsSeparPre"="_DA("
"FormatDaIdsSeparPost=")"
"FormatBase"="2"
"FormatBaseSeparPre"="_"
"FormatBaseSeparPost"=""
"FormatSelCity"="3"
"FormatSelCitySeparPre"="_C("
"FormatSelCitySeparPost=")"
"FormatSelAdr"="4"
"FormatSelAdrSeparPre"="_A("
"FormatSelAdrSeparPost=")"
"FormatSelLoc"="5"
"FormatSelLocSeparPre"="_L("
"FormatSelLocSeparPost=")"
"FormatDate"="6"
"FormatDateSeparPre"="_"
"FormatDateSeparPost"=""
"FormatTime"="7"
"FormatTimeSeparPre"="_"
"FormatTimeSeparPost"=""
```

## Duct Colour in Jetter Plan Report

In versions of AND prior to AND 4.20 only the group line is displayed, duct data could not be displayed (was only available for segments).

Duct data colour variables have now been added to the group line.

They show the from/to channel data of the first/last segment.

New Variables:

- ~\_GroupJetMicroductIdFirstFrom
- ~\_GroupJetMicroductIdLastTo
- ~\_GroupJetMicroductNameFirstFrom
- ~\_GroupJetMicroductNameLastTo
- ~\_GroupJetMicroductColorFirstFrom
- ~\_GroupJetMicroductColorLastTo
  
- ~\_GroupJetDuctPackageNameFirstFrom
- ~\_GroupJetDuctPackageNameLastTo
- ~\_GroupJetDuctPackageTypeFirstFrom
- ~\_GroupJetDuctPackageTypeLastTo
- ~\_GroupJetDuctFirstFrom
- ~\_GroupJetDuctLastTo

For a list of all Jetter Plan report variables, see chapter "Jetter Plan" in the AND client manual WhatsNew AND 4.15.

## Dynamic Labels in Splice/Patch Report Header Data

As of V420, the ~DynLabel() report function can also be used for the report's selection object (if there is only one).

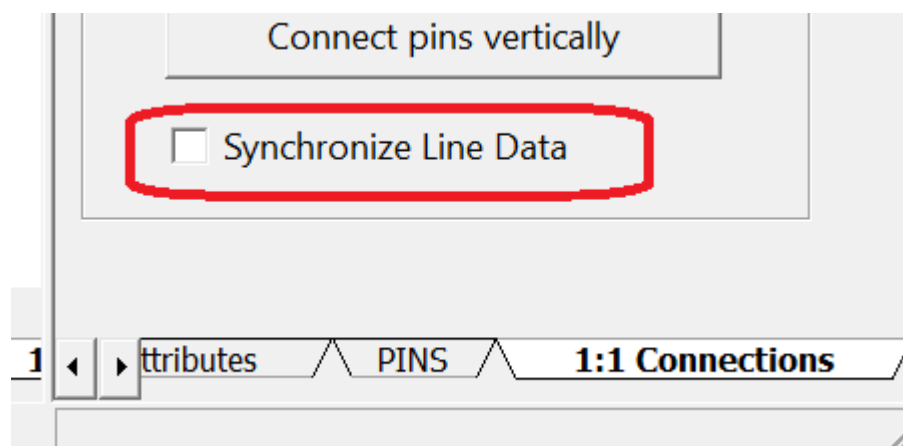
Examples:

- ~DynLabel(%L[%{Location.Address.FieldPartNumber}TH])
- ~DynLabel(%L[%{Location.InstNo}TH])

See also chapter "More Properties for Dynlabels"

## Label Objects now can Synchronize Line Objects on Both Sides

Label objects have a new option in the library since AND 4.20:



With this checkbox the behaviour in AND is controlled. When "Synchronize Line Data" is on, a pair of lines connected by the Label object in AND will automatically be synchronized.

If you change an attribute for a line which is a cable, a duct-package or a trench-line in AND, the changes (installation number, owner, task, ...) will automatically be propagated to the line on the opposite side of the label object.

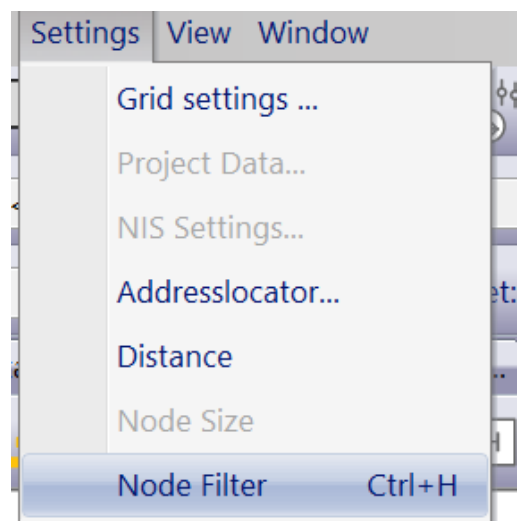
If a such a label object is already used in existing AND projects and you turn on the Sync option in the library then the automatic data propagation is enabled in AND projects, but the existing line pairs will not be synchronized automatically because AND cannot know which is the leading one.

## Hierarchy Filter in Client NIS

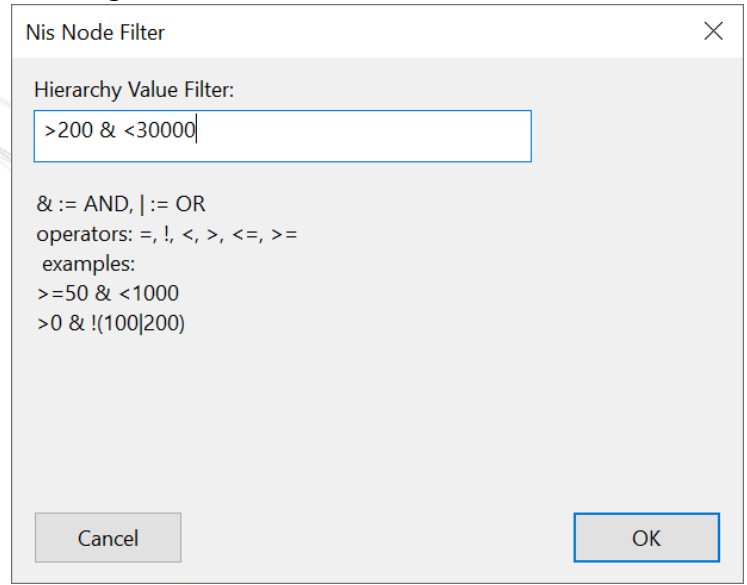
### Hierarchy-Filter

A NisNode holds a hierarchy value that is a copy of the hierarchy value of the corresponding AND object. The hierarchy value is an integer and is displayed in the tooltip of a NisNode. Since AND 4.20 it is possible to filter the displayed NisNodes, so that only nodes are shown, which satisfy the user entered condition for the hierarchy value.

The filter can be edited via the menu or via the shortcut (CTRL+H).



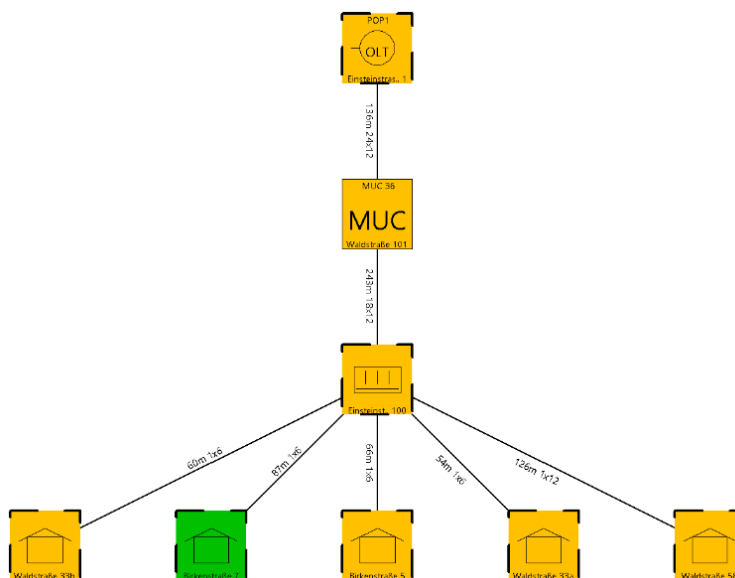
In dialogue then:



For details see chapter "Entering A Value Filter"

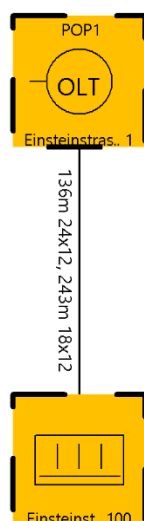
If a non-empty filter is specified, only NisNodes with matching hierarchy values are displayed. The links between the nodes are reordered. If the wire structure of partial links is the same, the sum length is displayed.

**Example:**



The houses have hv(hierarchyValue) = 850, the intermediate MUC has hv = 0, and the two others have hv > 1000.

If you enter as filter ">850" you see:



If the cable type to and from the MUC would be the same, the length would be summed up. If the text of a link is too large, you can increase the distance between nodes using the Settings/Distance menu.



## Requirements

The hierarchy values must be entered in the AND objects. If merging of location rectangles is enabled, this must be done at least for the location rectangles. It is recommended to do this in the templates before creating many objects from the template.

## Entering A Value Filter in NIS

The filter can be set by entering a condition of the form "Comparator + Number", e.g. ">50" or "=20".

Allowed comparators:

Comparator	Meaning
=	equal
!	not, not equal
>	larger
>=	larger or equal
<	smaller
<=	smaller or equal

If no comparator is entered, it is interpreted as '='. E.g. entering "20" is equivalent to "=20"

As number you can enter anything which can be interpreted as floating point number. E.g. "1", "-2.4", ".3", "2e-3".

Separators for thousands are not supported. Three thousand = 3000.

'.' is interpreted as floating point separator equivalent to '.'

Blanks are ignored. E.g. ">50.2" is equivalent to "> 50.2 "

Conditions can be combined with a logical AND using '&'.  
 Conditions can be combined with a logical OR using '|'.  
 Round Brackets are supported.

Round Brackets are supported.

Round Brackets are supported.

In case of 3 or more operands it is recommended to use brackets for avoiding confusion.

Examples:

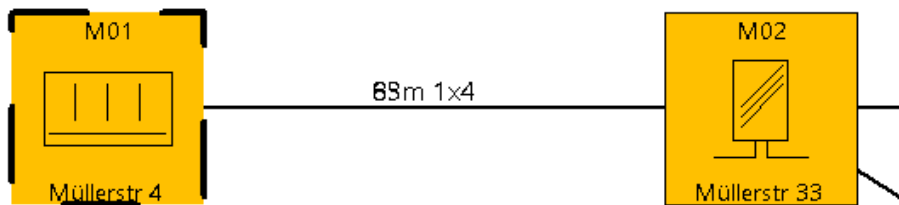
"< 0 | ( >=3 & <6 )" is true for all negative values and for values out of [3;6[

"<= 0 & !(5|6)" is true for any positive value except 5 and 6

## Unique Links Between Locations in NIS

If a NisNode represents a location (e.g. because locationRect-Congregation is enabled in the settings), there can be several parallel links to this NisNode.

The links are drawn on top of each other and as a consequence the crosslinks were often unreadable:



This has been corrected in AND 4.20. Only one link is drawn between two NisNodes. The cross text shows the combined length range. If the line structures are different, they are separated by commas. E.g. "110-112m 4x12, 8x12".

If a NisNode represents a location, the reserve length within this location is not counted when displaying the length.

If a link connects two locations, only the real length between these locations is displayed. In AND 4.19 and lower, the reserve length has been added to the total length, resulting in ambiguous lengths when there were multiple parallel lines.

**Note:** If a NisNode represents a single component within a location, the link still considers the reserve length.

## Update of the Outgoing Signal in an ONT After a Library has been Changed

A change in the wavelength or output power of an ONT is recognized as a major change that triggers recreation in AND.

The signal of an ONT is replaced by the new one from lib if it hasn't already been modified by the user.

Whether a signal has been modified by the user is determined now by comparing the signal from the old lib-object's properties with the signal in the given ONT.

This will be checked now within these processes:

OnLoad(), loading a net file. In client and server.

OnReloadLib(), the timestamp of a lib has changed and it is reloaded. Occurs in client only.

OnUnlink(), user manually pressed "unlink" for a linked lib in the edit libraries dialog. Occurs in client only.

## More Properties for Dynamic Labels

### History

In version 4.17, we introduced some "properties", i.e. named data for (local) access by dynamic labels (see chapter "Dynamic Labels: Update 4.16->4.17" in manual DynamicLabels).

In version 4.18, we introduced Dots as properties and the possibility to configure the transfer of selected properties via EEP (see chapter "Dynamic Labels: Update 4.17->4.18" in manual DynamicLabels).

For version 4.20, many more properties have been added, as well as some equivalent calculated properties which correspond to some crosstext placeholders, such that these values can also be included in library symbols.

### Introduction

The dynamic label syntax for properties is

```
%L[%(<property>)TH] or %L[%(<property>)ON], ..
```

where <property> is a DOT separated property path e.g. Location.SerialNo followed an optional map key, e.g. Dot:DOTVARIABLE , Triplet:TRIPLETNAME , LibObj.Attribute:ATTRIBUTENAME .

The property path defines the referenced sub-object names up to the (last) basic property name.

The optional key specifies the selected key from a set of attributes (Dot, Triplet, Attribute).

Maps are marked as "PROPERTYMAP" in the list of available properties below.

There is no possibility for accessing array data yet (e.g. Library Datapaks), but some properties like Pin, Pin.Connection, WireData access available pin and wire information to choose which pin or wire or connection to use. For calculation nodes, the main node is accessible.

For technical reasons, some calculated properties are available for all objects, but non empty only for some objects (e.g. LibObj.\*).

## Usage

It is suggested to use the project settings #define mechanism and/or the DynamicLabelDefinitions.xml mechanism to hide the complexity of the labels from end-users and present them with a finite list of choices in the text dialog. See 'Additional Data' in document 'AND Doc Dynlabels.docx' on how to do this: Global Program Settings (@Key) and Project Settings (#define).

As a help for editing, when editing crosstext dynlabels, a special mode displays bad properties, e.g. Location.<WhileTypingErrorsIsShownByBrackets> such that the user is aware of typos.

If an object results, <complex\_object> is shown, also when not in editing mode: only atomic value properties can be shown (the size of objects would be too big).

## List of Properties

There are more properties than in the list. If required, please ask our support.

The list is alphabetical.

The list is "compressed", i.e. if properties repeat (in various objects or sub-objects), the repetition is omitted and a reference is emitted, e.g. "LibRef.LibObj.\* (-> LibObj)": LibRef links to LibObj, look up properties t LibObj in the list)

Property path (or * ->reference to first occurrence)	Description	Which objects have the property
Name	Descr	*.Ref/Objects
AND_KEY	Key of AND object (<ProjectId>:<ObjHandle>)	all Objects
Attenuation	.	all Objects
Attics	.	LocationRect
AutoLength	.	Cable, ConduitSeg, DimObj, DimensionLine, DuctPackage, HybridCable, Microduct, MigratedTrench, TraceCrossSection, TracePointFrame, TraceSeg, TrenchConnector, TrenchLine
BepData.Depth	.	BepSheet
BepData.PlannedMDU	.	BepSheet
BepData.Shape	.	BepSheet
BepData.TargetDuctCount	.	BepSheet
BepData.Thickness	.	BepSheet
BepData.Weight	.	BepSheet

Cellars	.	LocationRect
CoverMarker	.	TrenchSheet
Description	.	TrenchSheet
Dot.MapValue	PROPERTYMAP dummy. Use map syntax, e.g. Dot:ABC, Triplet:ABC, Attribute:ABC	all Objects
DotId	.	all Objects
FixedLength	If ready made	Cable, HybridCable, Microduct
HasLayingType	.	Cable, DimObj, DimensionLine, DuctPackage, HybridCable, Microduct, MigratedTrench, TraceCrossSection, TracePointFrame, TrenchConnector, TrenchLine
Height	.	Bitmap, BlockText, CassetteRect, ExportFrame, GisInsertionPoint, LocationRect, SheetLegend
Housing.CarryingCapacity.Display	.	TrenchSheet
Housing.CarryingCapacity.EnumClass	.	TrenchSheet
Housing.CarryingCapacity.EnumValue	.	TrenchSheet
Housing.Cover.Display	.	TrenchSheet
Housing.Cover.EnumClass	.	TrenchSheet
Housing.Cover.EnumValue	.	TrenchSheet
Housing.CoverThickness	.	TrenchSheet
Housing.Height	.	TrenchSheet
Housing.HousingPermit.Display	.	TrenchSheet
Housing.HousingPermit.EnumClass	.	TrenchSheet
Housing.HousingPermit.EnumValue	.	TrenchSheet
Housing.HousingType.Display	.	TrenchSheet
Housing.HousingType.EnumClass	.	TrenchSheet
Housing.HousingType.EnumValue	.	TrenchSheet
Housing.Inhouse	.	TrenchSheet
Housing.Length	.	TrenchSheet

Housing.Monitoring.Display	.	TrenchSheet
Housing.Monitoring.EnumClass	.	TrenchSheet
Housing.Monitoring.EnumValue	.	TrenchSheet
Housing.ProtectionType.Display	.	TrenchSheet
Housing.ProtectionType.EnumClass	.	TrenchSheet
Housing.ProtectionType.EnumValue	.	TrenchSheet
Housing.SymbolShape	.	TrenchSheet
Housing.SymbolType	.	TrenchSheet
Housing.Thickness	.	TrenchSheet
Housing.TrueScale	.	TrenchSheet
Housing.WaterProofClass.Display	.	TrenchSheet
Housing.WaterProofClass.EnumClass	.	TrenchSheet
Housing.WaterProofClass.EnumValue	.	TrenchSheet
Housing.Weight	.	TrenchSheet
Housing.Width	.	TrenchSheet
IsManualPowerConsumption	.	HybridExpander, MUC, MdExpander, Symbol, TpSymbol, TracePoint, TrenchDivider, TwistedPairExpander
Layer.LayerDescription	.	all Objects
Layer.LayerName	.	all Objects
LibObj.Amplification	.	all Objects / LibSymObj
LibObj.AssemblyUnitLevel	.	all Objects / LibSymObj
LibObj.Attribute.MapValue	PROPERTYMAP dummy. Use map syntax, e.g. Dot:ABC, Triplet:ABC, Attribute:ABC	all Objects / all LibObjs
LibObj.BaseData.ArtNo	Article Number	all Objects / all LibObjs
LibObj.BaseData.Availability	Availability of component	all Objects / all LibObjs
LibObj.BaseData.LongText	Long description text	all Objects / all LibObjs
LibObj.BaseData.Name	Name of library component	all Objects / all LibObjs
LibObj.BaseData.OrderNo	Order Number	all Objects / all LibObjs

LibObj.BaseData.ShortDescription	Short description	all Objects / all LibObjs
LibObj.BundleCnt	Number of bundles	all Objects / LibFiberObj
LibObj.CreateTime	Creation Time	all Objects / all LibObjs
LibObj.CreateUser	User which created component	all Objects / all LibObjs
LibObj.CutoffLambda	Cutoff waverlength	all Objects / LibFiberObj
LibObj.Description	Type description	all Objects / all LibObjs
LibObj.Diameter	.	all Objects / LibCabObj, LibFiberObj, LibHybridCable, LibTPCable, LibTrenchLine
LibObj.FixedLength	If ready made cable	all Objects / LibCabObj, LibFiberObj, LibHybridCable, LibTPCable
LibObj.HasTransponderNo	.	all Objects / LibSymObj
LibObj.HelixFactor	.	all Objects / LibFiberObj
LibObj.InnerDiameter	in cm	all Objects / LibDuctPackage
LibObj.IsAssemblyUnit	.	all Objects / LibSymObj
LibObj.LengthCalcObj.File	File name	all Objects / LibDuctPackage
LibObj.LengthCalcObj.Id	Id of component	all Objects / LibDuctPackage
LibObj.LengthCalcObj.Name	Component name	all Objects / LibDuctPackage
LibObj.LengthCalcObj.TypeId	Type of component	all Objects / LibDuctPackage
LibObj.ModifyUser	Last modifying user	all Objects / all LibObjs
LibObj.Name	Name of library component	all Objects / all LibObjs
LibObj.NetworkHierarchy.SpecifierCustom	.	all Objects / all LibObjs
LibObj.NetworkHierarchy.SpecifierKey	.	all Objects / all LibObjs
LibObj.NetworkHierarchy.Value	.	all Objects / all LibObjs
LibObj.OuterDiameter	in cm	all Objects / LibDuctPackage
LibObj.RemotePoweringFlag	.	all Objects / LibSymObj
LibObj.Resistance	Far supply resistance in Ohm/1000m	all Objects / LibCabObj



LibObj.ReverseShielding	dB	all Objects / LibCabObj, LibConnectorObj, LibFiberObj, LibSymObj
LibObj.Shielding	dB	all Objects / LibCabObj, LibConnectorObj, LibFiberObj, LibSymObj
LibObj.ShowInMultilineMode	.	all Objects / LibCabObj, LibDuctPackage, LibFiberObj, LibHybridCable, LibTPCable, LibTrenchLine
LibObj.Temperature	Temperature for attenuation values	all Objects / LibCabObj
LibObj.TrenchDuct.DUIId	.	all Objects / LibDuctPackage, LibHybridCable, LibTrenchLine
LibObj.TrenchDuct.Defect	.	all Objects / LibDuctPackage, LibHybridCable, LibTrenchLine
LibObj.TrenchDuct.Diameter	Diameter of duct	all Objects / LibDuctPackage, LibHybridCable, LibTrenchLine
LibObj.TrenchDuct.DuctName	.	all Objects / LibDuctPackage, LibHybridCable, LibTrenchLine
LibObj.TrenchDuct.Height	Height of duct (use Diameter)	all Objects / LibDuctPackage, LibHybridCable, LibTrenchLine
LibObj.TrenchDuct.InstanceTypeId	.	all Objects / LibDuctPackage, LibHybridCable, LibTrenchLine
LibObj.TrenchDuct.IsVirtualDuct	.	all Objects / LibDuctPackage, LibHybridCable, LibTrenchLine
LibObj.TrenchDuct.LibRef.* (-> LibObj.LengthCalcObj)	.	all Objects / LibDuctPackage, LibHybridCable, LibTrenchLine
LibObj.TrenchDuct.Marker	.	all Objects / LibDuctPackage, LibHybridCable, LibTrenchLine
LibObj.TrenchDuct.OwnerType.Display	.	all Objects / LibDuctPackage,

		LibHybridCable, LibTrenchLine
LibObj.TrenchDuct.OwnerType.EnumClass	.	all Objects / LibDuctPackage, LibHybridCable, LibTrenchLine
LibObj.TrenchDuct.OwnerType.EnumValue	.	all Objects / LibDuctPackage, LibHybridCable, LibTrenchLine
LibObj.TrenchDuct.REF_ID	.	all Objects / LibDuctPackage, LibHybridCable, LibTrenchLine
LibObj.TrenchDuct.RentalCosts	.	all Objects / LibDuctPackage, LibHybridCable, LibTrenchLine
LibObj.TrenchDuct.RentalType.Display	.	all Objects / LibDuctPackage, LibHybridCable, LibTrenchLine
LibObj.TrenchDuct.RentalType.EnumClass	.	all Objects / LibDuctPackage, LibHybridCable, LibTrenchLine
LibObj.TrenchDuct.RentalType.EnumValue	.	all Objects / LibDuctPackage, LibHybridCable, LibTrenchLine
LibObj.TrenchDuct.ReservedFor	.	all Objects / LibDuctPackage, LibHybridCable, LibTrenchLine
LibObj.TrenchDuct.Shape	.	all Objects / LibDuctPackage, LibHybridCable, LibTrenchLine
LibObj.TrenchDuct.State	.	all Objects / LibDuctPackage, LibHybridCable, LibTrenchLine
LibObj.TrenchDuct.Task	.	all Objects / LibDuctPackage, LibHybridCable, LibTrenchLine
LibObj.TrenchDuct.Thickness	.	all Objects / LibDuctPackage, LibHybridCable, LibTrenchLine
LibObj.TrenchDuct.TradeType.Display	.	all Objects / LibDuctPackage,

		LibHybridCable, LibTrenchLine
LibObj.TrenchDuct.TradeType.EnumClass	.	all Objects / LibDuctPackage, LibHybridCable, LibTrenchLine
LibObj.TrenchDuct.TradeType.EnumValue	.	all Objects / LibDuctPackage, LibHybridCable, LibTrenchLine
LibObj.TrenchDuct.Type	.	all Objects / LibDuctPackage, LibHybridCable, LibTrenchLine
LibObj.TrenchDuct.TypeId	.	all Objects / LibDuctPackage, LibHybridCable, LibTrenchLine
LibObj.TrenchDuct.Width	Width of duct (use Diameter)	all Objects / LibDuctPackage, LibHybridCable, LibTrenchLine
LibObj.TrenchLineData.Accuracy.Display	.	all Objects / LibTrenchLine
LibObj.TrenchLineData.Accuracy.EnumClass	.	all Objects / LibTrenchLine
LibObj.TrenchLineData.Accuracy.EnumValue	.	all Objects / LibTrenchLine
LibObj.TrenchLineData.ConstructionMethod.Display	.	all Objects / LibTrenchLine
LibObj.TrenchLineData.ConstructionMethod.EnumClass	.	all Objects / LibTrenchLine
LibObj.TrenchLineData.ConstructionMethod.EnumValue	.	all Objects / LibTrenchLine
LibObj.TrenchLineData.Depth	.	all Objects / LibTrenchLine
LibObj.TrenchLineData.LayingType.Display	.	all Objects / LibTrenchLine
LibObj.TrenchLineData.LayingType.EnumClass	.	all Objects / LibTrenchLine
LibObj.TrenchLineData.LayingType.EnumValue	.	all Objects / LibTrenchLine
LibObj.TrenchLineData.MountingCostsPerMeter	.	all Objects / LibTrenchLine
LibObj.TrenchLineData.MountingTimePerMeter	.	all Objects / LibTrenchLine

LibObj.TrenchLineData.SurfaceType.Display	.	all Objects / LibTrenchLine
LibObj.TrenchLineData.SurfaceType.EnumClass	.	all Objects / LibTrenchLine
LibObj.TrenchLineData.SurfaceType.EnumValue	.	all Objects / LibTrenchLine
LibObj.TrenchLineData.TrenchPermit.Display	.	all Objects / LibTrenchLine
LibObj.TrenchLineData.TrenchPermit.EnumClass	.	all Objects / LibTrenchLine
LibObj.TrenchLineData.TrenchPermit.EnumValue	.	all Objects / LibTrenchLine
LibObj.TrenchLineData.WarnTape	.	all Objects / LibTrenchLine
LibObj.TrenchLineData.Width	.	all Objects / LibTrenchLine
LibObj.WiresCnt	Wires per bundle	all Objects / LibFiberObj
LibObj.ZeroDispLambda	in nm	all Objects / LibFiberObj
LibRef.LibObj.Amplification	.	all Objects / LibSymObj
LibRef.LibObj.* (-> LibObj)	.	all Objects
LibRef.ObjId	Id of component in library	all Objects
Location.Address.AddressDeleted	.	BepSheet, Cable, CassetteRect, ConduitShaft, DuctPackage, EMV, HybridCable, HybridExpander, LocationRect, MUC, MdExpander, Microduct, Sheet, Symbol, TpSymbol, TracePoint, TracePointFrame, TraceSeg, TrenchConnector, TrenchDivider, TrenchLine, TrenchSheet, TwistedPairExpander
Location.Address.City	.	BepSheet, Cable, CassetteRect, ConduitShaft, DuctPackage, EMV, HybridCable, HybridExpander, LocationRect, MUC, MdExpander, Microduct, Sheet, Symbol, TpSymbol, TracePoint, TracePointFrame, TraceSeg, TrenchConnector, TrenchDivider, TrenchLine, TrenchSheet, TwistedPairExpander
Location.Address.CityDistrict	.	BepSheet, Cable, CassetteRect, ConduitShaft,

		DuctPackage, EMV, HybridCable, HybridExpander, LocationRect, MUC, MdExpander, Microduct, Sheet, Symbol, TpSymbol, TracePoint, TracePointFrame, TraceSeg, TrenchConnector, TrenchDivider, TrenchLine, TrenchSheet, TwistedPairExpander
Location.Address.Country	.	BepSheet, Cable, CassetteRect, ConduitShaft, DuctPackage, EMV, HybridCable, HybridExpander, LocationRect, MUC, MdExpander, Microduct, Sheet, Symbol, TpSymbol, TracePoint, TracePointFrame, TraceSeg, TrenchConnector, TrenchDivider, TrenchLine, TrenchSheet, TwistedPairExpander
Location.Address.Description	Information	BepSheet, Cable, CassetteRect, ConduitShaft, DuctPackage, EMV, HybridCable, HybridExpander, LocationRect, MUC, MdExpander, Microduct, Sheet, Symbol, TpSymbol, TracePoint, TracePointFrame, TraceSeg, TrenchConnector, TrenchDivider, TrenchLine, TrenchSheet, TwistedPairExpander
Location.Address.Door	.	BepSheet, Cable, CassetteRect, ConduitShaft, DuctPackage, EMV, HybridCable, HybridExpander, LocationRect, MUC, MdExpander, Microduct, Sheet, Symbol, TpSymbol, TracePoint, TracePointFrame, TraceSeg, TrenchConnector, TrenchDivider, TrenchLine, TrenchSheet, TwistedPairExpander
Location.Address.FieldPartNumber	.	BepSheet, Cable, CassetteRect, ConduitShaft, DuctPackage, EMV, HybridCable, HybridExpander, LocationRect, MUC, MdExpander, Microduct, Sheet, Symbol, TpSymbol, TracePoint,

		TracePointFrame, TraceSeg, TrenchConnector, TrenchDivider, TrenchLine, TrenchSheet, TwistedPairExpander
Location.Address.Floor	.	BepSheet, Cable, CassetteRect, ConduitShaft, DuctPackage, EMV, HybridCable, HybridExpander, LocationRect, MUC, MdExpander, Microduct, Sheet, Symbol, TpSymbol, TracePoint, TracePointFrame, TraceSeg, TrenchConnector, TrenchDivider, TrenchLine, TrenchSheet, TwistedPairExpander
Location.Address.GisX	.	BepSheet, Cable, CassetteRect, ConduitShaft, DuctPackage, EMV, HybridCable, HybridExpander, LocationRect, MUC, MdExpander, Microduct, Sheet, Symbol, TpSymbol, TracePoint, TracePointFrame, TraceSeg, TrenchConnector, TrenchDivider, TrenchLine, TrenchSheet, TwistedPairExpander
Location.Address.GisY	.	BepSheet, Cable, CassetteRect, ConduitShaft, DuctPackage, EMV, HybridCable, HybridExpander, LocationRect, MUC, MdExpander, Microduct, Sheet, Symbol, TpSymbol, TracePoint, TracePointFrame, TraceSeg, TrenchConnector, TrenchDivider, TrenchLine, TrenchSheet, TwistedPairExpander
Location.Address.HouseNum	.	BepSheet, Cable, CassetteRect, ConduitShaft, DuctPackage, EMV, HybridCable, HybridExpander, LocationRect, MUC, MdExpander, Microduct, Sheet, Symbol, TpSymbol, TracePoint, TracePointFrame, TraceSeg, TrenchConnector, TrenchDivider, TrenchLine, TrenchSheet, TwistedPairExpander

Location.Address.HouseNumAppendix	.	BepSheet, Cable, CassetteRect, ConduitShaft, DuctPackage, EMV, HybridCable, HybridExpander, LocationRect, MUC, MdExpander, Microduct, Sheet, Symbol, TpSymbol, TracePoint, TracePointFrame, TraceSeg, TrenchConnector, TrenchDivider, TrenchLine, TrenchSheet, TwistedPairExpander
Location.Address.HouseNumAppendixTo	.	BepSheet, Cable, CassetteRect, ConduitShaft, DuctPackage, EMV, HybridCable, HybridExpander, LocationRect, MUC, MdExpander, Microduct, Sheet, Symbol, TpSymbol, TracePoint, TracePointFrame, TraceSeg, TrenchConnector, TrenchDivider, TrenchLine, TrenchSheet, TwistedPairExpander
Location.Address.HouseNumTo	.	BepSheet, Cable, CassetteRect, ConduitShaft, DuctPackage, EMV, HybridCable, HybridExpander, LocationRect, MUC, MdExpander, Microduct, Sheet, Symbol, TpSymbol, TracePoint, TracePointFrame, TraceSeg, TrenchConnector, TrenchDivider, TrenchLine, TrenchSheet, TwistedPairExpander
Location.Address.IsChecked	.	BepSheet, Cable, CassetteRect, ConduitShaft, DuctPackage, EMV, HybridCable, HybridExpander, LocationRect, MUC, MdExpander, Microduct, Sheet, Symbol, TpSymbol, TracePoint, TracePointFrame, TraceSeg, TrenchConnector, TrenchDivider, TrenchLine, TrenchSheet, TwistedPairExpander
Location.Address.MunicipalityCode	.	BepSheet, Cable, CassetteRect, ConduitShaft, DuctPackage, EMV, HybridCable, HybridExpander, LocationRect, MUC, MdExpander, Microduct,

		Sheet, Symbol, TpSymbol, TracePoint, TracePointFrame, TraceSeg, TrenchConnector, TrenchDivider, TrenchLine, TrenchSheet, TwistedPairExpander
Location.Address.RefId	.	BepSheet, Cable, CassetteRect, ConduitShaft, DuctPackage, EMV, HybridCable, HybridExpander, LocationRect, MUC, MdExpander, Microduct, Sheet, Symbol, TpSymbol, TracePoint, TracePointFrame, TraceSeg, TrenchConnector, TrenchDivider, TrenchLine, TrenchSheet, TwistedPairExpander
Location.Address.Street	.	BepSheet, Cable, CassetteRect, ConduitShaft, DuctPackage, EMV, HybridCable, HybridExpander, LocationRect, MUC, MdExpander, Microduct, Sheet, Symbol, TpSymbol, TracePoint, TracePointFrame, TraceSeg, TrenchConnector, TrenchDivider, TrenchLine, TrenchSheet, TwistedPairExpander
Location.Address.StreetCode	.	BepSheet, Cable, CassetteRect, ConduitShaft, DuctPackage, EMV, HybridCable, HybridExpander, LocationRect, MUC, MdExpander, Microduct, Sheet, Symbol, TpSymbol, TracePoint, TracePointFrame, TraceSeg, TrenchConnector, TrenchDivider, TrenchLine, TrenchSheet, TwistedPairExpander
Location.Address.ZipCode	.	BepSheet, Cable, CassetteRect, ConduitShaft, DuctPackage, EMV, HybridCable, HybridExpander, LocationRect, MUC, MdExpander, Microduct, Sheet, Symbol, TpSymbol, TracePoint, TracePointFrame, TraceSeg, TrenchConnector, TrenchDivider, TrenchLine, TrenchSheet, TwistedPairExpander



Location.CachedDisplayInstNo	.	BepSheet, Cable, CassetteRect, ConduitShaft, DuctPackage, EMV, HybridCable, HybridExpander, LocationRect, MUC, MdExpander, Microduct, Sheet, Symbol, TpSymbol, TracePoint, TracePointFrame, TraceSeg, TrenchConnector, TrenchDivider, TrenchLine, TrenchSheet, TwistedPairExpander
Location.DrumNumber	.	BepSheet, Cable, CassetteRect, ConduitShaft, DuctPackage, EMV, HybridCable, HybridExpander, LocationRect, MUC, MdExpander, Microduct, Sheet, Symbol, TpSymbol, TracePoint, TracePointFrame, TraceSeg, TrenchConnector, TrenchDivider, TrenchLine, TrenchSheet, TwistedPairExpander
Location.ExternalCounter	.	BepSheet, Cable, CassetteRect, ConduitShaft, DuctPackage, EMV, HybridCable, HybridExpander, LocationRect, MUC, MdExpander, Microduct, Sheet, Symbol, TpSymbol, TracePoint, TracePointFrame, TraceSeg, TrenchConnector, TrenchDivider, TrenchLine, TrenchSheet, TwistedPairExpander
Location.InstNo	Installation Number	BepSheet, Cable, CassetteRect, ConduitShaft, DuctPackage, EMV, HybridCable, HybridExpander, LocationRect, MUC, MdExpander, Microduct, Sheet, Symbol, TpSymbol, TracePoint, TracePointFrame, TraceSeg, TrenchConnector, TrenchDivider, TrenchLine, TrenchSheet, TwistedPairExpander
Location.InstNoTimestamp	.	BepSheet, Cable, CassetteRect, ConduitShaft, DuctPackage, EMV, HybridCable, HybridExpander, LocationRect, MUC, MdExpander, Microduct,

		Sheet, Symbol, TpSymbol, TracePoint, TracePointFrame, TraceSeg, TrenchConnector, TrenchDivider, TrenchLine, TrenchSheet, TwistedPairExpander
Location.InstallationCompany	.	BepSheet, Cable, CassetteRect, ConduitShaft, DuctPackage, EMV, HybridCable, HybridExpander, LocationRect, MUC, MdExpander, Microduct, Sheet, Symbol, TpSymbol, TracePoint, TracePointFrame, TraceSeg, TrenchConnector, TrenchDivider, TrenchLine, TrenchSheet, TwistedPairExpander
Location.InstallationTechnician	.	BepSheet, Cable, CassetteRect, ConduitShaft, DuctPackage, EMV, HybridCable, HybridExpander, LocationRect, MUC, MdExpander, Microduct, Sheet, Symbol, TpSymbol, TracePoint, TracePointFrame, TraceSeg, TrenchConnector, TrenchDivider, TrenchLine, TrenchSheet, TwistedPairExpander
Location.InstallationType	.	BepSheet, Cable, CassetteRect, ConduitShaft, DuctPackage, EMV, HybridCable, HybridExpander, LocationRect, MUC, MdExpander, Microduct, Sheet, Symbol, TpSymbol, TracePoint, TracePointFrame, TraceSeg, TrenchConnector, TrenchDivider, TrenchLine, TrenchSheet, TwistedPairExpander
Location.InstallationYear	.	BepSheet, Cable, CassetteRect, ConduitShaft, DuctPackage, EMV, HybridCable, HybridExpander, LocationRect, MUC, MdExpander, Microduct, Sheet, Symbol, TpSymbol, TracePoint, TracePointFrame, TraceSeg, TrenchConnector, TrenchDivider, TrenchLine, TrenchSheet, TwistedPairExpander

Location.LastRevision	.	BepSheet, Cable, CassetteRect, ConduitShaft, DuctPackage, EMV, HybridCable, HybridExpander, LocationRect, MUC, MdExpander, Microduct, Sheet, Symbol, TpSymbol, TracePoint, TracePointFrame, TraceSeg, TrenchConnector, TrenchDivider, TrenchLine, TrenchSheet, TwistedPairExpander
Location.OrderNum	Order Number	BepSheet, Cable, CassetteRect, ConduitShaft, DuctPackage, EMV, HybridCable, HybridExpander, LocationRect, MUC, MdExpander, Microduct, Sheet, Symbol, TpSymbol, TracePoint, TracePointFrame, TraceSeg, TrenchConnector, TrenchDivider, TrenchLine, TrenchSheet, TwistedPairExpander
Location.Owner	.	BepSheet, Cable, CassetteRect, ConduitShaft, DuctPackage, EMV, HybridCable, HybridExpander, LocationRect, MUC, MdExpander, Microduct, Sheet, Symbol, TpSymbol, TracePoint, TracePointFrame, TraceSeg, TrenchConnector, TrenchDivider, TrenchLine, TrenchSheet, TwistedPairExpander
Location.PlanningType	.	BepSheet, Cable, CassetteRect, ConduitShaft, DuctPackage, EMV, HybridCable, HybridExpander, LocationRect, MUC, MdExpander, Microduct, Sheet, Symbol, TpSymbol, TracePoint, TracePointFrame, TraceSeg, TrenchConnector, TrenchDivider, TrenchLine, TrenchSheet, TwistedPairExpander
Location.ProductionYear	.	BepSheet, Cable, CassetteRect, ConduitShaft, DuctPackage, EMV, HybridCable, HybridExpander, LocationRect, MUC, MdExpander, Microduct,

		Sheet, Symbol, TpSymbol, TracePoint, TracePointFrame, TraceSeg, TrenchConnector, TrenchDivider, TrenchLine, TrenchSheet, TwistedPairExpander
Location.RevisionPeriod	.	BepSheet, Cable, CassetteRect, ConduitShaft, DuctPackage, EMV, HybridCable, HybridExpander, LocationRect, MUC, MdExpander, Microduct, Sheet, Symbol, TpSymbol, TracePoint, TracePointFrame, TraceSeg, TrenchConnector, TrenchDivider, TrenchLine, TrenchSheet, TwistedPairExpander
Location.SerialNo	Serial Number	BepSheet, Cable, CassetteRect, ConduitShaft, DuctPackage, EMV, HybridCable, HybridExpander, LocationRect, MUC, MdExpander, Microduct, Sheet, Symbol, TpSymbol, TracePoint, TracePointFrame, TraceSeg, TrenchConnector, TrenchDivider, TrenchLine, TrenchSheet, TwistedPairExpander
Location.State	.	BepSheet, Cable, CassetteRect, ConduitShaft, DuctPackage, EMV, HybridCable, HybridExpander, LocationRect, MUC, MdExpander, Microduct, Sheet, Symbol, TpSymbol, TracePoint, TracePointFrame, TraceSeg, TrenchConnector, TrenchDivider, TrenchLine, TrenchSheet, TwistedPairExpander
Location.TimeState	.	BepSheet, Cable, CassetteRect, ConduitShaft, DuctPackage, EMV, HybridCable, HybridExpander, LocationRect, MUC, MdExpander, Microduct, Sheet, Symbol, TpSymbol, TracePoint, TracePointFrame, TraceSeg, TrenchConnector, TrenchDivider, TrenchLine, TrenchSheet, TwistedPairExpander

Location.TypeNum	Type Number	BepSheet, Cable, CassetteRect, ConduitShaft, DuctPackage, EMV, HybridCable, HybridExpander, LocationRect, MUC, MdExpander, Microduct, Sheet, Symbol, TpSymbol, TracePoint, TracePointFrame, TraceSeg, TrenchConnector, TrenchDivider, TrenchLine, TrenchSheet, TwistedPairExpander
MDUAddresses	.	HybridExpander, MUC, MdExpander, Symbol, TpSymbol, TracePoint, TrenchDivider, TwistedPairExpander
MDUAddressesCompressed	.	HybridExpander, MUC, MdExpander, Symbol, TpSymbol, TracePoint, TrenchDivider, TwistedPairExpander
MDUCount	.	all Objects
MDUCountD	.	all Objects
MDUCountPlanned	BEP	all Objects
MDUCountPlannedD	BEP	all Objects
ManualPowerConsumption	.	HybridExpander, MUC, MdExpander, Symbol, TpSymbol, TracePoint, TrenchDivider, TwistedPairExpander
NH_Key	NH_Key	all Objects
NH_Value	NH_Value	all Objects
NH_ValuePosition	NH_ValuePosition	all Objects
NOM	Number of flats that this structure contains	LocationRect
Node.Amplification	.	all Objects / NodeAmplifier, NodeConverter
Node.AttenData.Adjustable	.	all Objects / NodeOptAtten
Node.AttenData.Attenuation	.	all Objects / NodeOptAtten
Node.AttenData.MaxAtten	.	all Objects / NodeOptAtten
Node.AttenData.MinAtten	.	all Objects / NodeOptAtten
Node.AttenEquData.AttenAdjustable	.	all Objects / NodeAmplifier,

		NodeEqualizer, NodeOptReceiver
Node.AttenEquData.Attenuation	.	all Objects / NodeAmplifier, NodeEqualizer, NodeOptReceiver
Node.AttenEquData.EquAdjustable	.	all Objects / NodeAmplifier, NodeEqualizer, NodeOptReceiver
Node.AttenEquData.EquFixed	.	all Objects / NodeAmplifier, NodeEqualizer, NodeOptReceiver
Node.AttenEquData.EquFrqMax	.	all Objects / NodeAmplifier, NodeEqualizer, NodeOptReceiver
Node.AttenEquData.EquFrqMin	.	all Objects / NodeAmplifier, NodeEqualizer, NodeOptReceiver
Node.AttenEquData.EquLibObj.* (-> LibRef)	.	all Objects / NodeAmplifier, NodeEqualizer, NodeOptReceiver
Node.AttenEquData.Equalization	.	all Objects / NodeAmplifier, NodeEqualizer, NodeOptReceiver
Node.AttenEquData.MaxAtten	.	all Objects / NodeAmplifier, NodeEqualizer, NodeOptReceiver
Node.AttenEquData.MaxEqu	.	all Objects / NodeAmplifier, NodeEqualizer, NodeOptReceiver
Node.AttenEquData.MinAtten	.	all Objects / NodeAmplifier, NodeEqualizer, NodeOptReceiver
Node.AttenEquData.MinEqu	.	all Objects / NodeAmplifier, NodeEqualizer, NodeOptReceiver
Node.AttenEquData.PadFixed	.	all Objects / NodeAmplifier, NodeEqualizer, NodeOptReceiver
Node.AttenEquData.PadLibObj.* (-> LibRef)	.	all Objects / NodeAmplifier,

		NodeEqualizer, NodeOptReceiver
Node.AttenEquData.PlugEq.Adjustable	.	all Objects / NodeAmplifier, NodeEqualizer, NodeOptReceiver
Node.AttenEquData.PlugEq.EquFreqMax	.	all Objects / NodeAmplifier, NodeEqualizer, NodeOptReceiver
Node.AttenEquData.PlugEq.EquFreqMin	.	all Objects / NodeAmplifier, NodeEqualizer, NodeOptReceiver
Node.AttenEquData.PlugEq.Equalization	.	all Objects / NodeAmplifier, NodeEqualizer, NodeOptReceiver
Node.AttenEquData.PlugEq.GroundAtten	.	all Objects / NodeAmplifier, NodeEqualizer, NodeOptReceiver
Node.AttenEquData.PlugEq.MaxEqu	.	all Objects / NodeAmplifier, NodeEqualizer, NodeOptReceiver
Node.AttenEquData.PlugEq.UpperTurnPt	.	all Objects / NodeAmplifier, NodeEqualizer, NodeOptReceiver
Node.AttenEquData.PlugPad.* (-> Node.AttenData)	.	all Objects / NodeAmplifier, NodeEqualizer, NodeOptReceiver
Node.AttenEquData.SysEqLibObj.* (-> LibRef)	.	all Objects / NodeAmplifier, NodeEqualizer, NodeOptReceiver
Node.AttenEquData.TargetEq	.	all Objects / NodeAmplifier, NodeEqualizer, NodeOptReceiver
Node.AttenEquData.TargetLevel	.	all Objects / NodeAmplifier, NodeEqualizer, NodeOptReceiver
Node.AttenEquData.UpperTurnPt	.	all Objects / NodeAmplifier, NodeEqualizer, NodeOptReceiver
Node.AttenEquData.UseTargetLevel	.	all Objects / NodeAmplifier,

		NodeEqualizer, NodeOptReceiver
Node.AttenEquData.UseTargetPreEmphasis	.	all Objects / NodeAmplifier, NodeEqualizer, NodeOptReceiver
Node.BackBone	.	all Objects / NodeCableCoax, NodeHybridCab, NodeTwistedPairCab
Node.BepData.* (-> BepData)	.	all Objects / NodeBep
Node.EntryPoint.Description	.	all Objects / NodeOptUep
Node.EntryPoint.EEPIId	.	all Objects / NodeOptUep
Node.EntryPoint.ExitPtData.AmpMax	.	all Objects / NodeOptUep
Node.EntryPoint.ExitPtData.AmpMaxRounded	.	all Objects / NodeOptUep
Node.EntryPoint.ExitPtData.AmpMin	.	all Objects / NodeOptUep
Node.EntryPoint.ExitPtData.AmpMinRounded	.	all Objects / NodeOptUep
Node.EntryPoint.ExitPtData.AttnMax	.	all Objects / NodeOptUep
Node.EntryPoint.ExitPtData.AttnMaxRounded	.	all Objects / NodeOptUep
Node.EntryPoint.ExitPtData.AttnMin	.	all Objects / NodeOptUep
Node.EntryPoint.ExitPtData.AttnMinRounded	.	all Objects / NodeOptUep
Node.EntryPoint.ExitPtData.CurAmp	.	all Objects / NodeOptUep
Node.EntryPoint.ExitPtData.CurAmpRounded	.	all Objects / NodeOptUep
Node.EntryPoint.ExitPtData.FlatCnt	.	all Objects / NodeOptUep
Node.EntryPoint.ExitPtData.FlatCntModeId	.	all Objects / NodeOptUep
Node.EntryPoint.ExitPtData.Ingress	.	all Objects / NodeOptUep
Node.EntryPoint.ExitPtData.LevelDiff	.	all Objects / NodeOptUep
Node.EntryPoint.ExitPtData.LevelDiffRounded	.	all Objects / NodeOptUep



Node.EntryPoint.ExitPtData.MaxLevel	.	all Objects / NodeOptUep
Node.EntryPoint.ExitPtData.MaxLevelRounded	.	all Objects / NodeOptUep
Node.EntryPoint.ExitPtData.MinLevel	.	all Objects / NodeOptUep
Node.EntryPoint.ExitPtData.MinLevelRounded	.	all Objects / NodeOptUep
Node.EntryPoint.ExitPtData.Noise	.	all Objects / NodeOptUep
Node.EntryPoint.ExitPtData.NoiseIngressFixed	.	all Objects / NodeOptUep
Node.EntryPoint.ExitPtData.RevFragId	.	all Objects / NodeOptUep
Node.EntryPoint.ExitPtData.RevLevel	.	all Objects / NodeOptUep
Node.EntryPoint.ExitPtData.UseUserDataLimits	.	all Objects / NodeOptUep
Node.EntryPoint.PartnerDesc	.	all Objects / NodeOptUep
Node.EntryPoint.PartnerEEPID	.	all Objects / NodeOptUep
Node.ExitName	.	all Objects / NodeOptUep
Node.FixLibOutputLevel	.	all Objects / NodeOptReceiver
Node.FrequencyIn	.	all Objects / NodeConverter
Node.FrequencyOut	.	all Objects / NodeConverter
Node.IndividualCable.Length	.	all Objects / NodeLink
Node.IndividualCable.LibRef.* (-> LibRef)	.	all Objects / NodeLink
Node.LengthConduit	(%I) Length of current + partner over conduits	all Objects / NodeCableCoax, NodeDuctPackage, NodeHybridCab, NodeMicroduct, NodeTrenchConnector, NodeTrenchLine, NodeTwistedPairCab
Node.LengthOwn	(%M) Length of current	all Objects / NodeCableCoax, NodeDuctPackage, NodeHybridCab, NodeMicroduct, NodeTrenchConnector, NodeTrenchLine, NodeTwistedPairCab

Node.LengthTotal	(%m) Length of current + partner of current sheet	all Objects / NodeCableCoax, NodeDuctPackage, NodeHybridCab, NodeMicroduct, NodeTrenchConnector, NodeTrenchLine, NodeTwistedPairCab
Node.Low	.	all Objects / NodeOptReceiver
Node.MUC.RootContainer.EnumSubEnd	.	all Objects / NodeMUC / all MucContainers
Node.MUC.RootContainer.EnumSubNamePlaceholder	.	all Objects / NodeMUC / all MucContainers
Node.MUC.RootContainer.EnumSubSplicesPerContainer	.	all Objects / NodeMUC / all MucContainers
Node.MUC.RootContainer.EnumSubStart	.	all Objects / NodeMUC / all MucContainers
Node.MUC.RootContainer.HasEnumSubContainers	.	all Objects / NodeMUC / all MucContainers
Node.MUC.RootContainer.HierarchySpecifier	.	all Objects / NodeMUC / all MucContainers
Node.MUC.RootContainer.HierarchyValue	.	all Objects / NodeMUC / all MucContainers
Node.MUC.RootContainer.LibReference.* (-> LibObj.LengthCalcObj)	.	all Objects / NodeMUC / all MucContainers
Node.MUC.RootContainer.Name	.	all Objects / NodeMUC / all MucContainers
Node.MUC.RootContainer.Path	.	all Objects / NodeMUC / all MucContainers
Node.MUC.RootContainer.SiteType	.	all Objects / NodeMUC / all MucContainers
Node.MUC.RootContainer.StateTask.CurState	.	all Objects / NodeMUC / all MucContainers
Node.MUC.RootContainer.StateTask.CurStateId	.	all Objects / NodeMUC / all MucContainers
Node.MUC.RootContainer.StateTask.DeadLine	.	all Objects / NodeMUC / all MucContainers
Node.MUC.RootContainer.StateTask.DeadLineInt	.	all Objects / NodeMUC / all MucContainers
Node.MUC.RootContainer.StateTask.TargetState	.	all Objects / NodeMUC / all MucContainers
Node.MUC.RootContainer.StateTask.TargetStateId	.	all Objects / NodeMUC / all MucContainers

Node.MUC.RootContainer.StateTask.Task	.	all Objects / NodeMUC / all MucContainers
Node.MaxInputLevel	.	all Objects / NodeAmplifier
Node.MinInputLevel	.	all Objects / NodeAmplifier
Node.ModulationRatio	.	all Objects / NodeOptLaser
Node.OutputPower	.	all Objects / NodeOptLaser
Node.PilotControl.AttenEquData.* (-> Node.AttenEquData)	.	all Objects / NodeAmplifier
Node.PilotControl.PilotFrq1	.	all Objects / NodeAmplifier
Node.PilotControl.PilotFrq2	.	all Objects / NodeAmplifier
Node.PilotLibObj.* (-> LibRef)	.	all Objects / NodeAmplifier, NodeOptReceiver
Node.PowerType	.	all Objects / NodeOptUep
Node.RevTargetLevel	.	all Objects / NodeOptUep, NodeReturnReceiver
Node.ReverseAmp.Amplification	.	all Objects / NodeAmplifier
Node.ReverseAmp.AttenEquData.* (-> Node.AttenEquData)	.	all Objects / NodeAmplifier
Node.ReverseAmp.IsActive	.	all Objects / NodeAmplifier
Node.ReverseAmp.Noise	.	all Objects / NodeAmplifier
Node.ReverseAmp.TargetLevelMax	.	all Objects / NodeAmplifier
Node.ReverseAmp.TargetLevelMin	.	all Objects / NodeAmplifier
Node.ReverseAmpLibObj.* (-> LibRef)	.	all Objects / NodeAmplifier
Node.SpliceType	.	all Objects / NodeMicroduct
Node.TargetInputLevel	.	all Objects / NodeOptLaser
Node.TargetLevel	.	all Objects / NodeConverter
Node.TargetPowerMax	.	all Objects / NodeOptReceiver
Node.TargetPowerMin	.	all Objects / NodeOptReceiver
Node.TdData.Customer	.	all Objects / NodeOptLaser, NodeOptReceiver, NodeOptTD
Node.TdData.PurposeOfUse	.	all Objects / NodeOptLaser, NodeOptReceiver, NodeOptTD

Node.TdData.Service	.	all Objects / NodeOptLaser, NodeOptReceiver, NodeOptTD
Node.TdData.ServiceState	.	all Objects / NodeOptLaser, NodeOptReceiver, NodeOptTD
Node.Voltage	.	all Objects / NodeOptUep
Node.WantedModulationRatio	.	all Objects / NodeOptLaser
Node.WireLength	.	all Objects / NodeCableCoax, NodeHybridCab, NodeTwistedPairCab
ObjHandle	.	all Objects
ObjType	.	all Objects
OwnSheetId	.	BepSheet, Sheet, TrenchSheet
OwnerInfo.Owner	.	all Objects
Pin.CableEndInfo.MetricMarkerDuct	.	all Objects
Pin.CableEndInfo.MetricMarkerFibreEnd	.	all Objects
Pin.CableEndInfo.MetricMarkerSpare	.	all Objects
Pin.CableEndInfo.PullProtocolPath	.	all Objects
Pin.Connection.ConnectionData.Comment	.	all Objects / all MucConnDatass
Pin.Connection.ConnectionData.ConnectionName	.	all Objects / all MucConnDatass
Pin.Connection.ConnectionData.ConnectionType	.	all Objects / all MucConnDatass
Pin.Connection.ConnectionData.ContainerEndNum	.	all Objects / all MucConnDatass
Pin.Connection.ConnectionData.ContainerStartNum	.	all Objects / all MucConnDatass
Pin.Connection.ConnectionData.StateTask.* (-> Node.MUC.RootContainer.StateTask)	.	all Objects / all MucConnDatass
Pin.Connection.FromPt.Length.Marker	.	all Objects
Pin.Connection.FromPt.Length.Reserve	.	all Objects
Pin.Connection.FromPt.LibPinId	.	all Objects

Pin.Connection.FromPt.Stack	.	all Objects
Pin.Connection.IsSplitter	.	all Objects
Pin.Connection.ToPt.* (-> Pin.Connection.FromPt)	.	all Objects
Pin.Container.* (-> Node.MUC.RootContainer)	.	all Objects
Project.AdministrationLocation.* (-> Location.Address)	.	all Objects
Project.Description	.	all Objects
Project.FrequencyRange	.	all Objects
Project.HouseCount	.	all Objects
Project.Installer	.	all Objects
Project.InstallerNumber	.	all Objects
Project.NameOfController	.	all Objects
Project.NameOfFirstTimeDrawer	.	all Objects
Project.NameOfLastChanger	.	all Objects
Project.NameOfManager	.	all Objects
Project.NameOfSalesman	.	all Objects
Project.NetListFileName	.	all Objects
Project.OperatorCompanyName	.	all Objects
Project.OperatorCompanyPhone	.	all Objects
Project.OperatorLocation.* (-> Location.Address)	.	all Objects
Project.OperatorManagerName	.	all Objects
Project.OrderDate	.	all Objects
Project.OrderDeadLine	.	all Objects
Project.OrderNum	.	all Objects
Project.PlannerCompany	.	all Objects
Project.PlannerLocation.* (-> Location.Address)	.	all Objects
Project.PlannerManager	.	all Objects
Project.PlannerPhone	.	all Objects
Project.ProjectNumber	.	all Objects

Project.SubscriberCount	.	all Objects
Project.SuesCount	.	all Objects
Project.SystemAdministrationPhone	.	all Objects
Project.SystemAdministrationService	.	all Objects
Project.SystemFacilityManager	.	all Objects
Project.SystemLocation.* (-> Location.Address)	.	all Objects
Project.SystemSignalProvider	.	all Objects
Project.TimeOfControl	.	all Objects
Project.TimeOfFirstDraw	.	all Objects
Project.TimeOfInstallation	.	all Objects
Project.TimeOfLastChange	.	all Objects
Project.VersionOfDrawing	.	all Objects
REF_ID	.	all Objects
Sheet.Dot.* (-> Dot)	.	all Objects
Sheet.ObjectNumber	.	all Objects
Sheet.SheetName	.	all Objects
SiteType	.	all Objects
SocketsPerTrunk	.	LocationRect
Subscriber.Billing	.	HybridExpander, MUC, MdExpander, Symbol, TpSymbol, TracePoint, TrenchDivider, TwistedPairExpander
Subscriber.Country	.	HybridExpander, MUC, MdExpander, Symbol, TpSymbol, TracePoint, TrenchDivider, TwistedPairExpander
Subscriber.DecoderNumber	.	HybridExpander, MUC, MdExpander, Symbol, TpSymbol, TracePoint, TrenchDivider, TwistedPairExpander
Subscriber.FirstName	.	HybridExpander, MUC, MdExpander, Symbol, TpSymbol, TracePoint, TrenchDivider, TwistedPairExpander

Subscriber.FlatNum	.	HybridExpander, MUC, MdExpander, Symbol, TpSymbol, TracePoint, TrenchDivider, TwistedPairExpander
Subscriber.HouseNumber	.	HybridExpander, MUC, MdExpander, Symbol, TpSymbol, TracePoint, TrenchDivider, TwistedPairExpander
Subscriber.LastName	.	HybridExpander, MUC, MdExpander, Symbol, TpSymbol, TracePoint, TrenchDivider, TwistedPairExpander
Subscriber.PackInfo	.	HybridExpander, MUC, MdExpander, Symbol, TpSymbol, TracePoint, TrenchDivider, TwistedPairExpander
Subscriber.State	.	HybridExpander, MUC, MdExpander, Symbol, TpSymbol, TracePoint, TrenchDivider, TwistedPairExpander
Subscriber.SubObjectIdStr	.	HybridExpander, MUC, MdExpander, Symbol, TpSymbol, TracePoint, TrenchDivider, TwistedPairExpander
Subscriber.SubscriberName	.	HybridExpander, MUC, MdExpander, Symbol, TpSymbol, TracePoint, TrenchDivider, TwistedPairExpander
Subscriber.SubscriberNr	.	HybridExpander, MUC, MdExpander, Symbol, TpSymbol, TracePoint, TrenchDivider, TwistedPairExpander
Subscriber.SubscriberStreet	.	HybridExpander, MUC, MdExpander, Symbol, TpSymbol, TracePoint, TrenchDivider, TwistedPairExpander
Subscriber.SubscriberSubNr	.	HybridExpander, MUC, MdExpander, Symbol, TpSymbol, TracePoint, TrenchDivider, TwistedPairExpander
Subscriber.Town	.	HybridExpander, MUC, MdExpander, Symbol, TpSymbol, TracePoint, TrenchDivider, TwistedPairExpander

Subscriber.Zip	.	HybridExpander, MUC, MdExpander, Symbol, TpSymbol, TracePoint, TrenchDivider, TwistedPairExpander
Supplier	.	all Objects
Task	.	all Objects
TransponderNo	.	HybridExpander, MUC, MdExpander, Symbol, TpSymbol, TracePoint, TrenchDivider, TwistedPairExpander
TrenchDuct.* (-> LibObj.TrenchDuct)	.	TrenchExpander, TrenchLine
TrenchLineData.* (-> LibObj.TrenchLineData)	.	DuctPackage, TrenchLine
TrenchSheetData.CoverMarker	.	BepSheet, Sheet, TrenchSheet
TrenchSheetData.Description	.	BepSheet, Sheet, TrenchSheet
TrenchSheetData.TrenchSymbolPak.* (-> Housing)	.	BepSheet, Sheet, TrenchSheet
Triplet.MapValue	PROPERTYMAP dummy. Use map syntax, e.g. Dot:ABC, Triplet:ABC, Attribute:ABC	all Objects
Trunks	.	LocationRect
Url	.	all Objects
Width	.	Bitmap, BlockText, CassetteRect, ExportFrame, LocationRect, SheetLegend, TraceSeg
WireData.BasicState	.	Cable, HybridCable, Microduct
WireData.ConnectionId	.	Cable, HybridCable, Microduct
WireData.CurrentWireState	.	Cable, HybridCable, Microduct
WireData.Customer	.	Cable, HybridCable, Microduct
WireData.DeadLine	.	Cable, HybridCable, Microduct
WireData.Owner	.	Cable, HybridCable, Microduct



<code>WireData.Prio</code>	.	Cable, HybridCable, Microduct
<code>WireData.TargetWireState</code>	.	Cable, HybridCable, Microduct
<code>WireData.Task</code>	.	Cable, HybridCable, Microduct

## WebAccess Pre-release

With AND 4.20 a new WebAccess is delivered as a pre-release version.