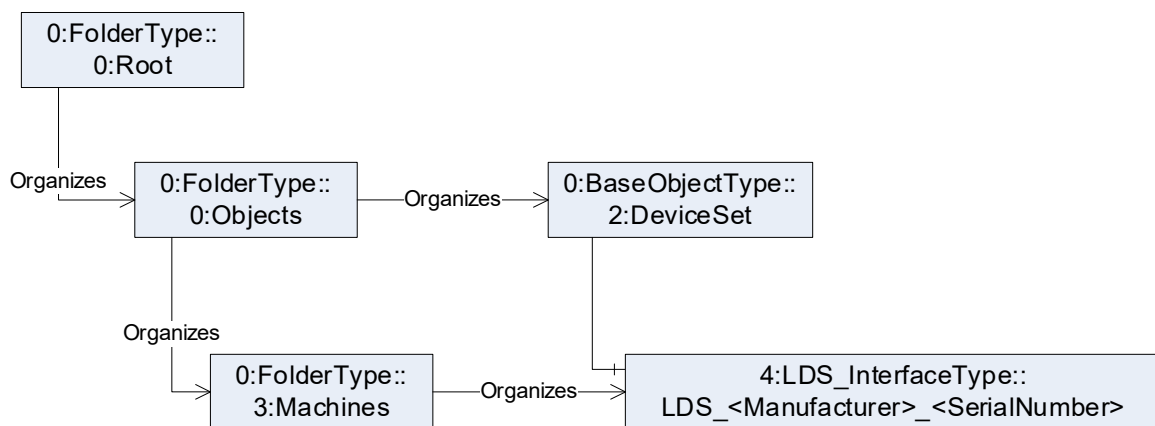


## OPC 40082-3 Instance for umati Demonstrator

The namespace for the instances is manufacturer specific, e.g.  
[http://samplemanufacturer.org/umati\\_opc40082-3\\_sample\\_instance/](http://samplemanufacturer.org/umati_opc40082-3_sample_instance/)

Table 2 shows the complete structure of the instance needed for the umati demonstrator. The demonstrator requires, that all mandatory elements of the *LDS\_InterfaceType* are existent, even if there are not displayed in the dashboard. If the value of a variable a not displayed, is can be filled with a static dummy value (e.g. empty string). All displayed values are highlighted in light-blue.

Important: In OPC 40082-3 it is defined, that the instance of the *LDS\_InterfaceType* is located under the Object *DeviceSet*. For umati it is necessary to add it under the Machines folder defined by OPC UA for machinery. In practice it is not necessary to create a new instance. It is sufficient to have an *Organizes Reference* from the *Machines* folder to the instance located under *DeviceSet*.



In addition, OPC 40082-3 uses the *MachineInformationType* defined in OPC 40083. For participation in the umati demonstrator it is necessary to create in parallel an instance of the *MachineIdentificationType* defined in OPC UA for Machinery.

Table 1 – Namespaces used in this document

NamespaceURI	Namespace Index	Example
<a href="http://opcfoundation.org/UA/">http://opcfoundation.org/UA/</a>	0	0:NodeVersion
<a href="http://opcfoundation.org/UA/PlasticsRubber/LDS/">http://opcfoundation.org/UA/PlasticsRubber/LDS/</a>	1	Default namespace of OPC 40082-3 → no prefix used, e.g. LDS_InterfaceType
<a href="http://opcfoundation.org/UA/DI/">http://opcfoundation.org/UA/DI/</a>	2	2:DeviceClass
<a href="http://opcfoundation.org/UA/PlasticsRubber/GeneralTypes/">http://opcfoundation.org/UA/PlasticsRubber/GeneralTypes/</a>	3	3:MachineInformationType
<a href="http://opcfoundation.org/UA/Machinery">http://opcfoundation.org/UA/Machinery</a>	4	4:MachineIdentificationType

Table 2 – Sample instance of LDS\_InterfaceType

BrowseName	Type	Example Value	Remarks
Objects			
↳ Machines			
↳ LDS_ <Manufacturer>_<SerialNumber>	LDS_InterfaceType		
↳ 2:Identification	4:MachineIdentificationType		1)
– 2:ProductInstanceUri		"http://samplemanufacturer.com/LDS1234"	2)
– 2:Manufacturer	0:LocalizedText	"Sample Manufacturer"	
– 2:Model	0:LocalizedText	"LDS 3000"	3)
– 2:SerialNumber	0:String	"1234"	
– 2:DeviceClass	0:String	"LSR Dosing System"	
– 4:Location	0:String	"K 14 F42/N 51.260407 E 6.744588"	3), 4)
↳ Identification	3:IdentificationType		2)
– 2:DeviceClass	0:String	"LSR Dosing System"	2)
– 2:Manufacturer	0:LocalizedText	"Sample Manufacturer"	2)
– 2:Model	0:LocalizedText	"LDS 3000"	2)
– 2:SerialNumber	0:String	"1234"	2)
↳ MachineConfiguration	3:MachineConfigurationType		2)
– 3:UserMachineName	0:String	"My LDS"	2)
– 3:LocationName	0:String	"K 14 F42/N 51.260407 E 6.744588"	2)
– 3:TimeZoneOffset	0:TimeZoneDataType	offset: 0 daylightSavingInOffset: true	2)
↳ Operation	OperationType		
– ActivateRemoteControl	0:MultiStateValueDiscreteType	1 (= SEPARATE_INTERFACE)	2)
– ActiveErrors	3:ClassifiedActiveErrorDataType	empty array / NULL	2)
↳ DeliveryPressure	3:ControlledParameterType		
– ActualValue	0:AnalogItem → 0:Double	2.4	
– EURange	0:Range	Low: 0 High: 40	
– EngineeringUnits	0:EUIInformation	namespaceUri: "http://www.opcfoundation.org/UA/ units/un/cefact" unitId: 4342098 displayName: "bar" description: "bar [unit of pressure]"	
– DeliveryType	0:MultiStateValueDiscreteType	0 (= PRESSURE)	2)
– DeviceMappingNumber	0:UInt32	1	2)
– HighestAlarmSeverity	0:UInt16	0	2)
– MaterialBalanceSystemType	MaterialBalanceSystemType Enumeration	0 (= NOT_AVAILABLE)	2)
– RemoteControlActivated	0:MultiStateValueDiscreteType	1 (= SEPARATE_INTERFACE)	2)
↳ Component_A	ComponentType		
– Status	ComponentStatusEnumeration	0 (= GOOD)	
↳ Component_B	ComponentType		
– Status	ComponentStatusEnumeration	0 (= GOOD)	

- 1) Not included in OPC 40084-3 LDS\_InterfaceType. To be added in the instance
- 2) This variable is mandatory in the model but will not be displayed in the demonstrator
- 3) Not mandatory in OPC UA for Machinery but for this model and will be displayed in the demonstrator
- 4) See <https://showcase.umatl.org/Dashboard.html#location-of-fair-machine-and-software-icons-on-the-dashboard> for rules for filling the location.