OpcAnalogItemNode Class

Namespace: Opc.UaFx
Assemblies: Opc.UaFx.Advanced.dll

Defines an analog item node.

C#

```
public class OpcAnalogItemNode : OpcDataItemNode, IOpcNode, IOpcNodeInfo
```

Inheritance Object › OpcNode › OpcInstanceNode › OpcVariableNode › OpcDataVariableNode › OpcDataItemNode › OpcAnalogItemNode

Derived

- OpcAnalogItemNode`1

Implements IOpcNode, IOpcNodeInfo

Remarks

The analog item node is a specialization of the OpcDataItemNode there its reference type is HasComponent and its type definition is AnalogItem.

Constructors

Name	Description
OpcAnalogItemNode(IOpcNode, OpcName)	Initializes a new instance of the OpcAnalogItemNode class accessible by the `name` specified as a child node of the `parent` node given.
OpcAnalogItemNode(IOpcNode, OpcName, Object)	Initializes a new instance of the OpcAnalogItemNode class accessible by the `name` specified with the initial value defined by `value` as a child node of the `parent` node given.
OpcAnalogItemNode(IOpcNode, OpcName, OpcNodeId)	Initializes a new instance of the OpcAnalogItemNode class accessible by the `name` and `id` specified as a child node of the `parent` node given.
OpcAnalogItemNode(IOpcNode, OpcName, OpcNodeId, Object)	Initializes a new instance of the OpcAnalogItemNode class accessible by the `name` and `id` specified with the initial value defined by `value` as a child node of the `parent` node given.
OpcAnalogItemNode(OpcName)	Initializes a new instance of the OpcAnalogItemNode class accessible by the `name` specified.
OpcAnalogItemNode(OpcName, Object)	Initializes a new instance of the OpcAnalogItemNode class accessible by the `name` specified with the initial value given by `value`.
OpcAnalogItemNode(OpcName, OpcNodeId)	Initializes a new instance of the OpcAnalogItemNode class accessible by the `name` and `id` specified.

Name	Description
OpcAnalogItemNode(OpcName, OpcNodeId, Object)	Initializes a new instance of the OpcAnalogItemNode class accessible by the `name` and `id` specified with the initial value given by `value`.

Events

Name	Description
AfterApplyChanges	Occurs after one or more changes on the node has been notified. (Inherited from OpcNode)
BeforeApplyChanges	Occurs before one or more changes on the node are notified. (Inherited from OpcNode)

Properties

Name	Description
AccessLevel	Gets or sets a value which indicates in which ways the Value attribute of the variable node can be accessed (read/write) and if it provides current and/or historic data. (Inherited from OpcVariableNode)
ArrayDimensions	Gets the number/lengths of dimensions for an array Value with one or more fixed dimensions. (Inherited from OpcVariableNode)
Category	Gets the NodeCategoryOpcAttribute which identifies the kind of node and is therefore used to classify the node regarding its use and purpose. (Inherited from OpcNode)
DataType	Gets or sets a value which defines a pre-defined used DataTypeId as one of the members defined by the OpcDataType enumeration to simplify querying standard data types. (Inherited from OpcVariableNode)
DataTypeId	Gets or stets the identifier which identifies the node that defines the type of data represented by the variable node. (Inherited from OpcVariableNode)
DefaultReferenceTypeId	Gets the default identifier which identifies the type that defines the underlying node reference within this OpcInstanceNode is referenced by its parent node. (Inherited from OpcInstanceNode)
DefaultReferenceTypeId	Gets the default identifier which identifies the type that defines the underlying node reference within this OpcInstanceNode is referenced by its parent node. (Inherited from OpcVariableNode)
DefaultTypeDefinitionId	Gets the default identifier which identifies the node that defines the underlying node type from that this OpcInstanceNode has been created.
DefaultTypeDefinitionId	Gets the default identifier which identifies the node that defines the underlying node type from that this OpcInstanceNode has been created. (Inherited from OpcInstanceNode)
DefaultTypeDefinitionId	Gets the default identifier which identifies the node that defines the underlying node type from that this OpcInstanceNode has been created. (Inherited from OpcVariableNode)
DefaultTypeDefinitionId	Gets the default identifier which identifies the node that defines the underlying node type from that this OpcInstanceNode has been created. (Inherited from OpcDataVariableNode)

Name	Description
DefaultTypeDefinitionId	Gets the default identifier which identifies the node that defines the underlying node type from that this OpcInstanceNode has been created. (Inherited from OpcDataItemNode)
Definition	Gets or sets a vendor-specific, human readable string that specifies how the value of this data item is calculated. (Inherited from OpcDataItemNode)
DefinitionNode	Gets the OpcPropertyNode´1 of the Definition property. (Inherited from OpcDataItemNode)
Description	Gets or sets the value of the optional DescriptionOpcAttribute which shall explain the meaning of the node. (Inherited from OpcNode)
Descriptions	Gets the OpcNodeGlobalization instance used to control the localization and other globalization related tasks for the Description attribute of the current node. (Inherited from OpcNode)
DisplayName	Gets or sets the value of the DisplayNameOpcAttribute which defines the localizable name of the node. (Inherited from OpcNode)
DisplayNames	Gets the OpcNodeGlobalization instance used to control the localization and other globalization related tasks for the DisplayName attribute of the current node. (Inherited from OpcNode)
EngineeringUnit	Gets or sets the engineering unit information which specifies the unit of the value attribute of the OpcAnalogItemNode.
EngineeringUnitNode	Gets the OpcEngineeringUnitInfoPropertyNode of the EngineeringUnit property.
EngineeringUnitRange	Gets or sets the range information which applies to normal operation.
EngineeringUnitRangeNode	Gets the OpcValueRangePropertyNode of the EngineeringUnitRange property.
HasPendingChanges	Gets a value indiciating whether there exists any pending change on the node. (Inherited from OpcNode)
HistoryConfiguration	(Inherited from OpcVariableNode)
Id	Gets the value of the NodeIdOpcAttribute which unambiguously identifies the node. (Inherited from OpcNode)
InstrumentRange	Gets or sets the range information which applies to the instrumental values returned by the instrument.
InstrumentRangeNode	Gets the OpcValueRangePropertyNode of the InstrumentRange property.
IsArray	Gets a value indicating whether the Value of the OpcVariableNode represented is an array. (Inherited from OpcVariableNode)
IsHistorizing	(Inherited from OpcVariableNode)
ModellingRuleId	Gets or sets the identifier which defines how the OpcInstanceNode is used for instantiation. (Inherited from OpcInstanceNode)
Name	Gets or sets the value of the BrowseNameOpcAttribute which defines the non-localizable human-readable name used when browsing the address space. (Inherited from OpcNode)
Namespace	(Inherited from OpcNode)
Parent	Gets the parent node of the node. (Inherited from OpcNode)

Name	Description
Parent	Gets the parent node of the node. (Inherited from OpcInstanceNode)
PendingChanges	Gets a value indicating the most recent changes performed on the node since their last notification. (Inherited from OpcNode)
QueryEventsCallback	Gets or sets a callback used to query any event information which belongs to the node. (Inherited from OpcNode)
ReadAccessLevelCallback	(Inherited from OpcVariableNode)
ReadArrayDimensionsCallback	(Inherited from OpcVariableNode)
ReadDataTypeCallback	(Inherited from OpcVariableNode)
ReadDescriptionCallback	(Inherited from OpcNode)
ReadDisplayNameCallback	(Inherited from OpcNode)
ReadIsHistorizingCallback	(Inherited from OpcVariableNode)
ReadUserAccessLevelCallback	(Inherited from OpcVariableNode)
ReadUserWriteAccessCallback	(Inherited from OpcNode)
ReadValueRankCallback	(Inherited from OpcVariableNode)
ReadVariableValueCallback	Gets or sets a callback used to read the variable value. (Inherited from OpcVariableNode)
ReadWriteAccessCallback	(Inherited from OpcNode)
ReferenceType	Gets a value which defines a pre-defined used ReferenceTypeId as one of the members defined by the OpcReferenceType enumeration to simplify querying standard reference types. (Inherited from OpcInstanceNode)
ReferenceTypeId	Gets or sets the identifier which identifies the node that defines the semantic of the reference between a source and a target node and generally reflects an operation between the two, such as “A contains B”. (Inherited from OpcInstanceNode)
Status	(Inherited from OpcVariableNode)
SymbolicName	(Inherited from OpcNode)
Tag	Gets or sets the object that contains additional user data about the node. (Inherited from OpcNode)
Timestamp	(Inherited from OpcVariableNode)
TypeDefinitionId	Gets or sets the identifier which identifies the node that defines the underlying node type from that this OpcInstanceNode has been created. (Inherited from OpcInstanceNode)
UserAccessLevel	Gets or sets a value which indicates in which ways the Value attribute of the variable node can be accessed (read/write) and if it provides current and/or historic data taking user access rights into account. (Inherited from OpcVariableNode)
UserWriteAccess	Gets or sets the value of the optional UserWriteAccessOpcAttribute which exposes the possibilities of a client to write the attributes of the node taking user access rights into account. (Inherited from OpcNode)
Value	Gets or sets the value of the variable node which may be simple or complex. (Inherited from OpcVariableNode)
ValuePrecision	Gets or sets a value which specifies the maximum precision that the server can maintain for the item based on restrictions in the target environment. (Inherited from OpcDataItemNode)

Name	Description
ValuePrecisionNode	Gets the OpcPropertyNode´1 of the ValuePrecision property. (Inherited from OpcDataItemNode)
ValueRank	(Inherited from OpcVariableNode)
WriteAccess	Gets or sets the value of the optional WriteAccessOpcAttribute which exposes the posibilities of a client to write the attributes of the node. (Inherited from OpcNode)
WriteAccessLevelCallback	(Inherited from OpcVariableNode)
WriteArrayDimensionsCallback	(Inherited from OpcVariableNode)
WriteDataTypeCallback	(Inherited from OpcVariableNode)
WriteDescriptionCallback	(Inherited from OpcNode)
WriteDisplayNameCallback	(Inherited from OpcNode)
WriteIsHistorizingCallback	(Inherited from OpcVariableNode)
WriteUserAccessLevelCallback	(Inherited from OpcVariableNode)
WriteUserWriteAccessCallback	(Inherited from OpcNode)
WriteValueRankCallback	(Inherited from OpcVariableNode)
WriteVariableValueCallback	Gets or sets a callback used to write the variable value. (Inherited from OpcVariableNode)
WriteWriteAccessCallback	(Inherited from OpcNode)

Methods

Name	Description
AddChild(OpcContext, OpcInstanceNode)	(Inherited from OpcInstanceNode)
AddNotifier(OpcContext, IOpcNode)	(Inherited from OpcNode)
ApplyChanges(OpcContext)	Notifies about changes performed on the node since the last notification and resets the pending changes to None. (Inherited from OpcNode)
ApplyChanges(OpcContext, Boolean)	Notifies about changes performed on the node (and optionally on its children) since the last notification and resets the pending changes to None. (Inherited from OpcNode)
AttributeValue(OpcAttribute)	Retrieves the value of the `attribute` specified. (Inherited from OpcNode)
AttributeValue``1(OpcAttribute)	Retrieves the value of the `attribute` specified. (Inherited from OpcNode)
Child(OpcContext, OpcName)	Retrieves the child node its Name property matches exactly the `name` specified. (Inherited from OpcNode)
Children(OpcContext)	Retrieves a sequence of all nodes organized as children of this node. (Inherited from OpcNode)

Name	Description
InitializeDefaults	Initializes the default values used by the node implementation represented / required. (Inherited from OpcNode)
InitializeDefaults	Initializes the default values used by the OpcInstanceNode. (Inherited from OpcInstanceNode)
InitializeDefaults	Initializes the default values used by the OpcVariableNode. (Inherited from OpcVariableNode)
InitializeDefaults	Initializes the default values used by the OpcDataItemNode. (Inherited from OpcDataItemNode)
IsChangePending(OpcNodeChanges)	(Inherited from OpcNode)
OnAfterApplyChanges(OpcNodeChangesEventArgs)	Raises the AfterApplyChanges event using the event data specified. (Inherited from OpcNode)
OnBeforeApplyChanges(OpcNodeChangesEventArgs)	Raises the BeforeApplyChanges event using the event data specified. (Inherited from OpcNode)
QueryEventsCore(OpcNodeContext, OpcEventCollection)	(Inherited from OpcNode)
ReadAttributeValueCore``1(OpcReadAttributeValueContext, OpcAttributeValue)	(Inherited from OpcNode)
ReadAttributeValueCore``1(OpcReadAttributeValueContext, OpcAttributeValue)	(Inherited from OpcVariableNode)
ReadValue(OpcReadVariableValueContext)	Reads the variable node value using the `context` specified. (Inherited from OpcVariableNode)
ReadVariableValue(OpcReadVariableValueContext)	(Inherited from OpcVariableNode)
ReadVariableValueCore(OpcReadVariableValueContext, OpcVariableValue)	Reads the value of the variable node using the `context` and `value` information specified. (Inherited from OpcVariableNode)
RemoveChild(OpcContext, OpcInstanceNode)	(Inherited from OpcInstanceNode)
RemoveNotifier(OpcContext, IOpcNode)	(Inherited from OpcNode)
RemoveNotifier(OpcContext, IOpcNode)	(Inherited from OpcInstanceNode)
ReportEvent(OpcContext, OpcEvent)	(Inherited from OpcNode)
UpdateChanges(OpcContext, OpcNodeChanges)	Notifies about the `changes` on behalf of the node and removes pending changes which intersect with the `changes` specified. (Inherited from OpcNode)
UpdateChanges(OpcContext, OpcNodeChanges, Boolean)	Notifies about the `changes` on behalf of the node (and optionally on its children) and removes pending changes which intersect with the `changes` specified. (Inherited from OpcNode)
WriteAttributeValueCore``1(OpcWriteAttributeValueContext, OpcAttributeValue)	(Inherited from OpcNode)

Name	Description
WriteAttributeValueCore``1(OpcWriteAttributeValueContext, OpcAttributeValue)	(Inherited from OpcVariableNode)
WriteValue(OpcWriteVariableValueContext, Object)	Writes the `value` to the variable node value using the `context` specified. (Inherited from OpcVariableNode)
WriteVariableValue(OpcWriteVariableValueContext, OpcVariableValue)	(Inherited from OpcVariableNode)
WriteVariableValueCore(OpcWriteVariableValueContext, OpcVariableValue)	Writes the value of the variable node using the `context` and `value` information specified. (Inherited from OpcVariableNode)

Table of Contents

Remarks 1
Constructors 1
Events 2
Properties 2
Methods 5