IOpcNodeInfo Members

Namespace: Opc.UaFx
Assemblies: Opc.UaFx.Advanced.dll, Opc.UaFx.Advanced.dll
The IOpcNodeInfo interface defines the following members.

Properties

Category

Gets the NodeCategoryOpcAttribute which identifies the kind of node and is therefore used to classify the node regarding its use and purpose.

C#

```
OpcNodeCategory Category { get; }
```

Property Value

OpcNodeCategory

One of the members defined by the OpcNodeCategory enumeration.

Description

Gets the value of the optional DescriptionOpcAttribute which shall explain the meaning of the node.

C#

```
OpcText Description { get; }
```

Property Value

OpcText

A localizable instance of the OpcText class which optionally explains the meaning of the node or a null reference (Nothing in Visual Basic) if there is no description associated with the node.

Remarks

The menaning of the node defines the usage, the context and the purpose of the node.

DisplayName

Gets the value of the DisplayNameOpcAttribute which defines the localizable name of the node.

C#

```
OpcText DisplayName { get; }
```

Property Value

OpcText

An instance of the OpcText class which defines the localizable name of the node.

Remarks

Client application should use this attribute if they want to display the name of the node to the user. The String part of the DisplayName is restricted to 512 characters.

Id

Gets the value of the NodeIdOpcAttribute which unambiguously identifies the node.

C#

```
OpcNodeId Id { get; }
```

Property Value

OpcNodeId

An instance of the OpcNodeId class representing the unambiguously identifier of the node.

Remarks

Some servers may accept alternative node identifiers in addition to the canonical node identifier represented by this attribute.

A server shall persist the node identifier of a node, that is, it shall not generate new node identifiers when rebooting.

Name

Gets the value of the BrowseNameOpcAttribute which defines the non-localizable human-readable name used when browsing the address space.

C#

```
OpcName Name { get; }
```

Property Value

OpcName

Remarks

The Name should never be used to display the name of the a node. Use the DisplayName instead for this purpose.

Unlike node identifiers the Name cannot be used to unambiguously identify the node. Different nodes may have the same browse name. The namespace is provided to make the browse name unique in some cases in the context of a node (e.g. properties of a node) although not unique in the context of the server. If different organizations define browse names for properties, the namespace of the Name provided by the organization makes the Name unique, although different organizations may use the same string having a slightly different meaning. Servers may often choose to use the same namespace for the node identifier and the browse name. However, if they want to provide a standard property, its browse name shall have the namespace of the standards body although the namespace of the node identifier reflects something else, for example the local server.

It is recommended that standard bodies defining standard type definitions use their namespace for the node identifier of the type definition node as well as for the browse name of the type definition node.

The String-part of the browse name is case sensitive. That is, clients shall consider them case sensitive. Server are allowed to handle browse names passed in service requests as case insensitive.

Use the value of this property to construct browse paths (see OpcNamePath).

Parent

C#

```
IOpcNodeInfo Parent { get; }
```

Property Value

IOpcNodeInfo

SymbolicName

C#

```
string SymbolicName { get; }
```

Property Value

String

Methods

AttributeValue(OpcAttribute)

Retrieves the value of the `attribute` specified.

C#

```
object AttributeValue(OpcAttribute attribute)
```

Parameters

`attribute` OpcAttribute

One of the members defined by the OpcAttribute enumeration which identifies the attribute its value is queried.

Returns

Object

The value of the `attribute` specified or a null reference (Nothing in Visual Basic) in case there the value of the attribute is a null reference or it is not supported by the current IOpcNodeInfo.

AttributeValue<T>(OpcAttribute)

Retrieves the value of the `attribute` specified.

C#

```
T AttributeValue<T>(OpcAttribute attribute)
```

Parameters

`attribute` OpcAttribute

One of the members defined by the OpcAttribute enumeration which identifies the attribute its value is queried.

Returns

T

The value of the `attribute` as the type `T` specified or the default value of the type `T` in case there the value of the attribute is a null reference (Nothing in Visual Basic) or it is not supported by the current IOpcNodeInfo.

Child(OpcName)

Retrieves the immutable child node its Name matches exactly the `name` specified.

C#

```
IOpcNodeInfo Child(OpcName name)
```

Parameters

`name` OpcName

The full qualified OpcName of the node to lookup.

Returns

IOpcNodeInfo

An instance implementing the IOpcNodeInfo interface its Name exactly matches the `name` specified, if such a node is a known child of this node. Otherwise a null reference (Nothing in Visual Basic).

Exceptions

ArgumentNullException

The `name` is a null reference (Nothing in Visual Basic).

Children()

Retrieves a sequence of immutable nodes organized as children of this node.

C#

```
IEnumerable<IOpcNodeInfo> Children()
```

Returns

IEnumerable<IOpcNodeInfo>

A sequence of instances implementing the IOpcNodeInfo interface which representing the nodes organized as child nodes of this node.

Table of Contents

Properties 1
Category 1
Description 1
DisplayName 1
Id 2
Name 2
Parent 3
SymbolicName 3
Methods 4
AttributeValue(OpcAttribute) 4
AttributeValue<T>(OpcAttribute) 4
Child(OpcName) 5
Children() 5