

# OpcHistoryConfigurationNode

## Members

**Namespace:** Opc.UaFx

**Assemblies:** Opc.UaFx.Advanced.dll, Opc.UaFx.Advanced.dll

The [OpcHistoryConfigurationNode](#) type exposes the following members.

## Constructors

### OpcHistoryConfigurationNode()

Initializes a new instance of the [OpcHistoryConfigurationNode](#) class.

**C#**

```
public OpcHistoryConfigurationNode()
```

### OpcHistoryConfigurationNode(IOpcNode)

Initializes a new instance of the [OpcHistoryConfigurationNode](#) class as a child node of the [parent](#) node given.

**C#**

```
public OpcHistoryConfigurationNode(IOpcNode parent)
```

#### Parameters

[parent](#) [IOpcNode](#)

The [IOpcNode](#) used as the parent node or a null reference (Nothing in Visual Basic) in the case there is no parent node available.

### OpcHistoryConfigurationNode(IOpcNode, OpcName)

Initializes a new instance of the [OpcHistoryConfigurationNode](#) class accessible by the [name](#) specified as a child node of the [parent](#) node given.

**C#**

```
public OpcHistoryConfigurationNode(IOpcNode parent, OpcName name)
```

#### Parameters

[parent](#) [IOpcNode](#)

The [IOpcNode](#) used as the parent node or a null reference (Nothing in Visual Basic) in the case there is no

parent node available.

**name** `OpcName`

The `OpcName` through that the new history configuration node can be accessed.

## OpcHistoryConfigurationNode(IOpcNode, OpcName, OpcNodeId)

Initializes a new instance of the `OpcHistoryConfigurationNode` class accessible by the `name` and `id` specified as a child node of the `parent` node given.

**C#**

```
public OpcHistoryConfigurationNode(IOpcNode parent, OpcName name, OpcNodeId id)
```

### Parameters

**parent** `IOpcNode`

The `IOpcNode` used as the parent node or a null reference (Nothing in Visual Basic) in the case there is no parent node available.

**name** `OpcName`

The `OpcName` through that the new history configuration node can be accessed.

**id** `OpcNodeId`

The `OpcNodeId` through that the new history configuration node can be identified and accessed.

## OpcHistoryConfigurationNode(OpcName)

Initializes a new instance of the `OpcHistoryConfigurationNode` class accessible by the `name` specified.

**C#**

```
public OpcHistoryConfigurationNode(OpcName name)
```

### Parameters

**name** `OpcName`

The `OpcName` through that the new history configuration node can be accessed.

## OpcHistoryConfigurationNode(OpcName, OpcNodeId)

Initializes a new instance of the `OpcHistoryConfigurationNode` class accessible by the `name` and `id` specified.

**C#**

```
public OpcHistoryConfigurationNode(OpcName name, OpcNodeId id)
```

## Parameters

**name** [OpcName](#)

The [OpcName](#) through that the new history configuration node can be accessed.

**id** [OpcNodeid](#)

The [OpcNodeid](#) through that the new history configuration node can be identified and accessed.

# Properties

## AggregateConfiguration

Gets the node used as the browse entry point for information on how the server treats aggregate specific functionality such as handling uncertain data.

### C#

```
public OpcAggregateConfigurationNode AggregateConfiguration { get; }
```

### Property Value

[OpcAggregateConfigurationNode](#)

An instance of the [OpcAggregateConfigurationNode](#) for information on how the server treats aggregate specific functionality.

## AggregateFunctions

Gets the node used as an entry point to browse to all aggregate capabilities supported by the server for historical access.

### C#

```
public OpcFolderNode AggregateFunctions { get; }
```

### Property Value

[OpcFolderNode](#)

An instance of the [OpcFolderNode](#) with all history aggregates supported by the server. If the server does not support aggregates then the folder is left empty.

## DefaultTypeDefinitionId

Gets the default identifier which identifies the node that defines the underlying node type from that this [OpcInstanceNode](#) has been created.

### C#

```
protected override OpcNodeId DefaultTypeDefinitionId { get; }
```

## Property Value

### OpcNodeId

The [OpcNodeId](#) of the type node from that this [OpcInstanceNode](#) has been created from. These type node defines the typical structure of an instance node of its type definition. If there exists no specific type definition node a null reference (Nothing in Visual Basic).

## Definition

Gets or sets is a vendor-specific, human readable string that specifies how the value of this historical data node is calculated.

### C#

```
public string Definition { get; set; }
```

## Property Value

### String

A non-localized value which will often contain an equation that can be parsed by certain client.

## DefinitionNode

Gets the [OpcPropertyNode`1](#) of the [Definition](#) property.

### C#

```
public OpcPropertyNode<string> DefinitionNode { get; }
```

## Property Value

### OpcPropertyNode<String>

An instance of the [OpcPropertyNode`1](#) class.

## ExceptionDeviation

Gets or sets a value which specifies the minimum amount that the data for the historical data node must change in order for the change to be reported to the history database.

### C#

```
public double ExceptionDeviation { get; set; }
```

## Property Value

## Double

The minimum amount that the data node must change in order for the change to be reported to the history database.

# ExceptionDeviationFormat

Gets or sets the format how the [ExceptionDeviation](#) is determined.

## C#

```
public OpcExceptionDeviationFormat ExceptionDeviationFormat { get; set; }
```

## Property Value

[OpcExceptionDeviationFormat](#)

One of the members defined by the [OpcExceptionDeviationFormat](#) enumeration.

# ExceptionDeviationFormatNode

Gets the [OpcPropertyNode`1](#) of the [ExceptionDeviationFormat](#) property.

## C#

```
public OpcPropertyNode<ExceptionDeviationFormat> ExceptionDeviationFormatNode { get; }
```

## Property Value

[OpcPropertyNode<ExceptionDeviationFormat>](#)

An instance of the [OpcPropertyNode`1](#) class.

# ExceptionDeviationNode

Gets the [OpcPropertyNode`1](#) of the [ExceptionDeviation](#) property.

## C#

```
public OpcPropertyNode<double> ExceptionDeviationNode { get; }
```

## Property Value

[OpcPropertyNode<Double>](#)

An instance of the [OpcPropertyNode`1](#) class.

# MaxTimeInterval

Gets or sets which specifies the maximum interval between data points in the history repository regardless of their value change.

**C#**

```
public double MaxTimeInterval { get; set; }
```

**Property Value**[Double](#)

The maximum interval between data points.

## MaxTimeIntervalNode

Gets the [OpcPropertyNode`1](#) of the [MaxTimeInterval](#) property.

**C#**

```
public OpcPropertyNode<double> MaxTimeIntervalNode { get; }
```

**Property Value**[OpcPropertyNode<Double>](#)

An instance of the [OpcPropertyNode`1](#) class.

## MinTimeInterval

Gets or sets which specifies the minimum interval between data points in the history repository regardless of their value change.

**C#**

```
public double MinTimeInterval { get; set; }
```

**Property Value**[Double](#)

The minimum interval between data points.

## MinTimeIntervalNode

Gets the [OpcPropertyNode`1](#) of the [MinTimeInterval](#) property.

**C#**

```
public OpcPropertyNode<double> MinTimeIntervalNode { get; }
```

**Property Value**[OpcPropertyNode<Double>](#)

An instance of the [OpcPropertyNode`1](#) class.

## StartOfArchive

Gets or sets a value which specifies the date before which there is no data in the archive either online or offline.

**C#**

```
public DateTime StartOfArchive { get; set; }
```

### Property Value

[DateTime](#)

The [DateTime](#) before which there is no data in the archive either online or offline.

## StartOfArchiveNode

Gets the [OpcPropertyNode`1](#) of the [StartOfArchive](#) property.

**C#**

```
public OpcPropertyNode<DateTime> StartOfArchiveNode { get; }
```

### Property Value

[OpcPropertyNode<DateTime>](#)

An instance of the [OpcPropertyNode`1](#) class.

## StartOfOnlineArchive

Gets or sets a value which specifies the date of the earliest data in the online archive.

**C#**

```
public DateTime StartOfOnlineArchive { get; set; }
```

### Property Value

[DateTime](#)

The [DateTime](#) of the date of the earliest data in the online archive.

## StartOfOnlineArchiveNode

Gets the [OpcPropertyNode`1](#) of the [StartOfOnlineArchive](#) property.

**C#**

```
public OpcPropertyNode<DateTime> StartOfOnlineArchiveNode { get; }
```

### Property Value

[OpcPropertyNode<DateTime>](#)

An instance of the [OpcPropertyNode`1](#) class.

## Stepped

Gets or sets a value indicating whether the historical data was collected in such a manner that it should be displayed as sloped interpolation (sloped line between points) or as stepped interpolation (vertically-connected horizontal lines between points) when raw data is examined.

### C#

```
public bool Stepped { get; set; }
```

### Property Value

[Boolean](#)

A value of true indicates stepped interpolation mode. A value equals false indicates sloped interpolated mode. The default value is false.

### Remarks

This property also effects how some aggregates are calculated.

## SteppedNode

Gets the [OpcPropertyNode`1](#) of the [Stepped](#) property.

### C#

```
public OpcPropertyNode<bool> SteppedNode { get; }
```

### Property Value

[OpcPropertyNode<Boolean>](#)

An instance of the [OpcPropertyNode`1](#) class.

## Methods



# InitializeDefaults()

Initializes the default values used by the [OpcHistoryConfigurationNode](#).

## C#

```
protected override void InitializeDefaults()
```

## Remarks

This method is used to ensure the availability of appropriate node specific default values. For more information like when this method is to be overwritten see [InitializeDefaults](#).



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