

OpcServer Members

Namespace: Opc.UaFx.Server

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

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

Constructors

OpcServer()

C#

```
public OpcServer()
```

OpcServer(Action<OpcAddressSpace>)

C#

```
public OpcServer(Action<OpcAddressSpace> createNodes)
```

Parameters

createNodes [Action<OpcAddressSpace>](#)

Exceptions

[ArgumentNullException](#)

OpcServer(IEnumerable<IOpcNode>)

C#

```
public OpcServer(IEnumerable<IOpcNode> nodes)
```

Parameters

nodes [IEnumerable<IOpcNode>](#)

Exceptions

[ArgumentNullException](#)

OpcServer(IEnumerable<OpcNodeManager>)

C#

```
public OpcServer(IEnumerable<OpcNodeManager> nodeManagers)
```

Parameters

nodeManagers [IEnumerable<OpcNodeManager>](#)

Exceptions

[ArgumentNullException](#)

OpcServer(IOpcNode[])

C#

```
public OpcServer(params IOpcNode[] nodes)
```

Parameters

nodes [IOpcNode\[\]](#)

Exceptions

[ArgumentNullException](#)

OpcServer(OpcNodeManager[])

C#

```
public OpcServer(params OpcNodeManager[] nodeManagers)
```

Parameters

nodeManagers [OpcNodeManager\[\]](#)

Exceptions

[ArgumentNullException](#)

OpcServer(String)

C#

```
public OpcServer(string address)
```

Parameters

address String

Exceptions

ArgumentException

ArgumentNullException

UriFormatException

OpcServer(String, Action<OpcAddressSpace>)

C#

```
public OpcServer(string address, Action<OpcAddressSpace> createNodes)
```

Parameters

address String

createNodes Action<OpcAddressSpace>

Exceptions

ArgumentException

ArgumentNullException

[UriFormatException](#)

OpcServer(String, IEnumerable<IOpcNode>)

C#

```
public OpcServer(string address, IEnumerable<IOpcNode> nodes)
```

Parameters

address [String](#)

nodes [IEnumerable<IOpcNode>](#)

Exceptions

[ArgumentException](#)

[ArgumentNullException](#)

[UriFormatException](#)

OpcServer(String, IEnumerable<OpcNodeManager>)

C#

```
public OpcServer(string address, IEnumerable<OpcNodeManager> nodeManagers)
```

Parameters

address [String](#)

nodeManagers [IEnumerable<OpcNodeManager>](#)

Exceptions

[ArgumentException](#)

[ArgumentNullException](#)

[UriFormatException](#)

OpcServer(String, IOpcNode[])

C#

```
public OpcServer(string address, params IOpcNode[] nodes)
```

Parameters

address [String](#)

nodes [IOpcNode\[\]](#)

Exceptions

[ArgumentException](#)

[ArgumentNullException](#)

[UriFormatException](#)

OpcServer(String, OpcNodeManager[])

C#

```
public OpcServer(string address, params OpcNodeManager[] nodeManagers)
```

Parameters

address [String](#)

nodeManagers [OpcNodeManager\[\]](#)

Exceptions

[ArgumentException](#)

[ArgumentNullException](#)

[UriFormatException](#)

OpcServer(Uri)

C#

```
public OpcServer(Uri address)
```

Parameters

address Uri

Exceptions

[ArgumentNullException](#)

OpcServer(Uri, Action<OpcAddressSpace>)

C#

```
public OpcServer(Uri address, Action<OpcAddressSpace> createNodes)
```

Parameters

address Uri

createNodes Action<OpcAddressSpace>

Exceptions

[ArgumentNullException](#)

OpcServer(Uri, IEnumerable<IOpcNode>)

C#

```
public OpcServer(Uri address, IEnumerable<IOpcNode> nodes)
```

Parameters

address Uri

nodes IEnumerable<IOpcNode>

Exceptions

ArgumentNullException

OpcServer(Uri, IEnumerable<OpcNodeManager>)

C#

```
public OpcServer(Uri address, IEnumerable<OpcNodeManager> nodeManagers)
```

Parameters

address Uri

nodeManagers IEnumerable<OpcNodeManager>

Exceptions

ArgumentNullException

OpcServer(Uri, IOpcNode[])

C#

```
public OpcServer(Uri address, params IOpcNode[] nodes)
```

Parameters

address Uri

nodes IOpcNode[]

Exceptions

ArgumentNullException

OpcServer(Uri, OpcNodeManager[])

C#

```
public OpcServer(Uri address, params OpcNodeManager[] nodeManagers)
```

Parameters

address Uri

nodeManagers OpcNodeManager[]

Exceptions

ArgumentNullException

Fields

DefaultAddress

C#

```
public static readonly Uri DefaultAddress
```

Field Value

Uri

Events

RequestProcessed

C#

```
public event OpcRequestProcessedEventHandler RequestProcessed
```

RequestProcessing

C#

```
public event OpcRequestProcessingEventHandler RequestProcessing
```

RequestValidated

C#

```
public event OpcRequestValidatedEventHandler RequestValidated
```

RequestValidating

C#

```
public event OpcRequestValidatingEventHandler RequestValidating
```

SessionActivated

C#

```
public event OpcSessionEventHandler SessionActivated
```

SessionActivating

C#

```
public event EventHandler SessionActivating
```

SessionClosed

C#

```
public event EventHandler SessionClosed
```

SessionClosing

C#

```
public event OpcSessionEventHandler SessionClosing
```

SessionCreated

C#

```
public event OpcSessionEventHandler SessionCreated
```

SessionCreating

C#

```
public event EventHandler SessionCreating
```

SubscriptionCreated

Occurs when a new subscription is created through a [OpcSession](#).

C#

```
public event OpcSubscriptionEventHandler SubscriptionCreated
```

SubscriptionDeleted

Occurs when an existing subscription of a [OpcSession](#) has been deleted.

C#

```
public event OpcSubscriptionEventHandler SubscriptionDeleted
```

Properties

DefaultNodeManager

C#

```
public OpcNodeManager DefaultNodeManager { get; }
```

Property Value

[OpcNodeManager](#)

Diagnostics

C#

```
public OpcServerDiagnostics Diagnostics { get; }
```

Property Value

[OpcServerDiagnostics](#)

Globalization

Gets the [OpcServerGlobalization](#) instance used to control the localization and other globalization related tasks.

C#

```
public OpcServerGlobalization Globalization { get; }
```

Property Value

[OpcServerGlobalization](#)

An instance of the [OpcServerGlobalization](#) class used by the current [OpcServer](#) to perform localization tasks.

NodeManagers

C#

```
public OpcNodeManagerCollection NodeManagers { get; }
```

Property Value

[OpcNodeManagerCollection](#)

SystemContext

Gets the [OpcContext](#) which is used to store the context sensitive data and configuration used by the current [OpcServer](#) instance.

C#

```
public override OpcContext SystemContext { get; }
```

Property Value

[OpcContext](#)

An instance of the [OpcContext](#) class which might be at least [Empty](#).

Methods

CreateConfiguration()

C#

```
[CLSCompliant(false)]
protected override OpcApplicationConfiguration CreateConfiguration()
```

Returns

[OpcApplicationConfiguration](#)

GetEndpoints()

C#

```
public IEnumerable<OpcEndpointDescription> GetEndpoints()
```

Returns

[IEnumerable<OpcEndpointDescription>](#)

Exceptions

[InvalidOperationException](#)

[OpcException](#)

[ObjectDisposedException](#)

GetSession(OpcNodeId)

Retrieves the [OpcSession](#) associated with the `sessionId` specified.

C#

```
public OpcSession GetSession(OpcNodeId sessionId)
```

Parameters

`sessionId` [OpcNodeId](#)

The [OpcNodeId](#) which uniquely identifies the session requested within the created sessions on the current [OpcServer](#).

Returns

[OpcSession](#)

Exceptions

[ArgumentNullException](#)

The [sessionId](#) is a null reference (Nothing in Visual Basic).

[InvalidOperationException](#)

The server has not yet been started.

[ObjectDisposedException](#)

The object has been disposed of.

GetSessions()

Retrieves all currently known sessions created on the current [OpcServer](#).

C#

```
public IEnumerable<OpcSession> GetSessions()
```

Returns

[IEnumerable<OpcSession>](#)

A sequence of [OpcSession](#) instances.

Exceptions

[InvalidOperationException](#)

The server has not yet been started.

[ObjectDisposedException](#)

The object has been disposed of.

GetSubscription()

C#

```
public IEnumerable<OpcSubscription> GetSubscription()
```

Returns

[IEnumerable<OpcSubscription>](#)

Exceptions

[InvalidOperationException](#)

[OpcException](#)

[ObjectDisposedException](#)

OnRequestProcessed(OpcRequestProcessedEventArgs)

C#

```
protected virtual void OnRequestProcessed(OpcRequestProcessedEventArgs e)
```

Parameters

e [OpcRequestProcessedEventArgs](#)

OnRequestProcessing(OpcRequestProcessingEventArgs)

C#

```
protected virtual void OnRequestProcessing(OpcRequestProcessingEventArgs e)
```

Parameters

e [OpcRequestProcessingEventArgs](#)

OnRequestValidated(OpcRequestValidatedEventArgs)

C#

```
protected virtual void OnRequestValidated(OpcRequestValidatedEventArgs e)
```

Parameters

e [OpcRequestValidatedEventArgs](#)

OnRequestValidating(OpcRequestValidatingEventArgs)

C#

```
protected virtual void OnRequestValidating(OpcRequestValidatingEventArgs e)
```

Parameters

e [OpcRequestValidatingEventArgs](#)

OnSessionActivated(OpcSessionEventArgs)

C#

```
protected virtual void OnSessionActivated(OpcSessionEventArgs e)
```

Parameters

e [OpcSessionEventArgs](#)

OnSessionActivating(EventArgs)

C#

```
protected virtual void OnSessionActivating(EventArgs e)
```

Parameters

e [EventArgs](#)

OnSessionClosed(EventArgs)

C#

```
protected virtual void OnSessionClosed(EventArgs e)
```

Parameters

e [EventArgs](#)

OnSessionClosing(OpcSessionEventArgs)

C#

```
protected virtual void OnSessionClosing(OpcSessionEventArgs e)
```

Parameters

e [OpcSessionEventArgs](#)

OnSessionCreated(OpcSessionEventArgs)

C#

```
protected virtual void OnSessionCreated(OpcSessionEventArgs e)
```

Parameters

e [OpcSessionEventArgs](#)

OnSessionCreating(EventArgs)

C#

```
protected virtual void OnSessionCreating(EventArgs e)
```

Parameters

e [EventArgs](#)

OnSubscriptionCreated(OpcSubscriptionEventArgs)

Raises the [SubscriptionCreated](#) event of the [OpcServer](#).

C#

```
protected virtual void OnSubscriptionCreated(OpcSubscriptionEventArgs e)
```

Parameters

e [OpcSubscriptionEventArgs](#)

The event data.

OnSubscriptionDeleted(OpcSubscriptionEventArgs)

Raises the [SubscriptionDeleted](#) event of the [OpcServer](#).

C#

```
protected virtual void OnSubscriptionDeleted(OpcSubscriptionEventArgs e)
```

Parameters

e [OpcSubscriptionEventArgs](#)

The event data.

ReportEvent(IOpcNode, OpcEventSeverity, OpcText)

Produces a global event using the event data specified.

C#

```
public void ReportEvent(IOpcNode source, OpcEventSeverity severity, OpcText message)
```

Parameters

source [IOpcNode](#)

The [IOpcNode](#) instance its [Id](#) is used for the [SourceNodeId](#) property and its [SymbolicName](#) is used for the [SourceName](#) property to define the origin of the event produced.

severity [OpcEventSeverity](#)

An indication of the urgency of the event.

message [OpcText](#)

A human-readable and localizable text description of the event.

Exceptions

[ArgumentNullException](#)

The **source** or **message** is a null reference (Nothing in Visual Basic).

[InvalidOperationException](#)

The [State](#) is not equals [Started](#).

[ObjectDisposedException](#)

The object has been disposed of.

[OpcException](#)

The operation failed (see exception details for more information).

ReportEvent(IOpcNode, OpcEventSeverity, OpcText, Object[])

Produces a global event using the event data specified.

C#

```
public void ReportEvent(IOpcNode source, OpcEventSeverity severity, OpcText message, params object[] arguments)
```

Parameters

source [IOpcNode](#)

The [IOpcNode](#) instance its [Id](#) is used for the [SourceNodeId](#) property and its [SymbolicName](#) is used for the [SourceName](#) property to define the origin of the event produced.

severity [OpcEventSeverity](#)

An indication of the urgency of the event.

message [OpcText](#)

A human-readable and localizable text description of the event with format placeholders which where replaced with the [arguments](#) specified.

arguments [Object\[\]](#)

The values to place into the [message](#) using its format placeholders.

Exceptions

[ArgumentNullException](#)

The [source](#) or [message](#) is a null reference (Nothing in Visual Basic).

[InvalidOperationException](#)

The [State](#) is not equals [Started](#).

[ObjectDisposedException](#)

The object has been disposed of.

[OpcException](#)

The operation failed (see exception details for more information).

ReportEvent(OpcEventNode)

Produces a global event using the [eventNode](#) specified.

C#

```
public void ReportEvent(OpcEventNode eventNode)
```

Parameters

eventNode [OpcEventNode](#)

The [OpcEventNode](#) its event information is to be reported as a global event.

Exceptions

[ArgumentNullException](#)

The **eventNode** is a null reference (Nothing in Visual Basic).

[InvalidOperationException](#)

The [State](#) is not equals [Started](#).

[ObjectDisposedException](#)

The object has been disposed of.

[OpcException](#)

The operation failed (see exception details for more information).

ReportEvent(OpcEventSeverity, OpcText)

Produces a global event using the event data specified.

C#

```
public void ReportEvent(OpcEventSeverity severity, OpcText message)
```

Parameters

severity [OpcEventSeverity](#)

An indication of the urgency of the event.

message [OpcText](#)

A human-readable and localizable text description of the event.

Exceptions

[ArgumentNullException](#)

The **message** is a null reference (Nothing in Visual Basic).

[InvalidOperationException](#)

The [State](#) is not equals [Started](#).

[ObjectDisposedException](#)

The object has been disposed of.

OpException

The operation failed (see exception details for more information).

ReportEvent(OpcEventSeverity, OpText, Object[])

Produces a global event using the event data specified.

C#

```
public void ReportEvent(OpcEventSeverity severity, OpText message, params object[] arguments)
```

Parameters

severity [OpcEventSeverity](#)

An indication of the urgency of the event.

message [OpText](#)

A human-readable and localizable text description of the event with format placeholders which where replaced with the **arguments** specified.

arguments [Object\[\]](#)

The values to place into the **message** using its format placeholders.

Exceptions

[ArgumentNullException](#)

The **message** is a null reference (Nothing in Visual Basic).

[InvalidOperationException](#)

The **State** is not equals [Started](#).

[ObjectDisposedException](#)

The object has been disposed of.

[OpException](#)

The operation failed (see exception details for more information).

ReportEvent(OpcNodeId, String, OpEventSeverity, OpText)

Produces a global event using the event data specified.

C#

```
public void ReportEvent(OpcNodeId sourceNodeId, string sourceName, OpcEventSeverity severity, OpcText message)
```

Parameters

sourceNodeId [OpcNodeId](#)

The [OpcNodeId](#) which is to be used for the [SourceNodeId](#) property to define the origin of the event produced.

sourceName [String](#)

The [String](#) which is to be used for the [SourceName](#).

severity [OpcEventSeverity](#)

An indication of the urgency of the event.

message [OpcText](#)

A human-readable and localizable text description of the event.

Exceptions

[ArgumentNullException](#)

The **message** is a null reference (Nothing in Visual Basic).

[InvalidOperationException](#)

The [State](#) is not equals [Started](#).

[ObjectDisposedException](#)

The object has been disposed of.

[OpcException](#)

The operation failed (see exception details for more information).

ReportEvent(OpcNodeId, String, OpcEventSeverity, OpcText, Object[])

Produces a global event using the event data specified.

C#

```
public void ReportEvent(OpcNodeId sourceNodeId, string sourceName, OpcEventSeverity severity, OpcText message, params object[] arguments)
```

Parameters

sourceNodeId [OpcNodeId](#)

The [OpcNodeId](#) which is to be used for the [SourceNodeId](#) property to define the origin of the event

produced.

sourceName String

The String which is to be used for the SourceName.

severity OpcEventSeverity

An indication of the urgency of the event.

message OpcText

A human-readable and localizable text description of the event with format placeholders which where replaced with the arguments specified.

arguments Object[]

The values to place into the message using its format placeholders.

Exceptions

[ArgumentNullException](#)

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

[InvalidOperationException](#)

The State is not equals Started.

[ObjectDisposedException](#)

The object has been disposed of.

[OpcException](#)

The operation failed (see exception details for more information).

ResumeCore()

C#

```
protected override void ResumeCore()
```

StartCore(OpcApplicationConfiguration)

C#

```
[CLSCompliant(false)]
protected override void StartCore(OpcApplicationConfiguration configuration)
```

Parameters

configuration OpcApplicationConfiguration

StopCore()

C#

```
protected override void StopCore()
```

SuspendCore()

C#

```
protected override void SuspendCore()
```


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