OpcAlarmConditionNode Class

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

Defines an acknowledgeable condition node which introduces additional states to define active, suppressed and shelving alarm conditions.

C#

```
[OpcEventType(typeof(OpcAlarmCondition))]
public class OpcAlarmConditionNode : OpcAcknowledgeableConditionNode, IOpcNode, IOpcNodeInfo
```

Inheritance Object › OpcNode › OpcInstanceNode › OpcObjectNode › OpcEventNode › OpcConditionNode › OpcAcknowledgeableConditionNode › OpcAlarmConditionNode

Derived

- OpcDiscreteAlarmNode
- OpcLimitAlarmNode

Attributes OpcEventTypeAttribute

Implements IOpcNode, IOpcNodeInfo

Constructors

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

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
AcknowledgeCallback	Gets or sets a callback used to acknowledge the state of the condition node. (Inherited from OpcAcknowledgeableConditionNode)
AcknowledgeNode	Gets the OpcAddCommentMethodNode used to handle 'Acknowledge' method calls to acknowledge the state of the condition node. (Inherited from OpcAcknowledgeableConditionNode)
AddCommentCallback	Gets or sets a callback used to add a comment to the condition node. (Inherited from OpcConditionNode)
AddCommentNode	Gets the OpcAddCommentMethodNode used to handle 'AddComment' method calls to add a comment to the condition node. (Inherited from OpcConditionNode)
AutoReportChanges	Gets or sets a value indicating whether the OpcConditionNode will automatically report an event when a change method call completes. (Inherited from OpcConditionNode)
BranchId	Gets or sets an identifier which identifies the branch to that the event does belong. (Inherited from OpcConditionNode)
BranchIdNode	Gets the OpcNodeIdPropertyNode of the BranchId property. (Inherited from OpcConditionNode)
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)
ClientUserId	Gets or sets an identifier that is related to the Comment and contains the identity of the user who inserted the most recent Comment. (Inherited from OpcConditionNode)
ClientUserIdNode	Gets the OpcPropertyNode´1 of the ClientUserId property. (Inherited from OpcConditionNode)
Comment	Gets or sets the last comment provided for a certain state (condition branch). (Inherited from OpcConditionNode)
CommentNode	Gets the OpcTextConditionVariableNode of the Comment property. (Inherited from OpcConditionNode)
ConditionClassId	Gets or sets a value which specifies in which domain this condition is used. It is the OpcNodeId of the corresponding condition class type. (Inherited from OpcConditionNode)
ConditionClassIdNode	Gets the OpcNodeIdPropertyNode of the ConditionClassId property. (Inherited from OpcConditionNode)
ConditionClassName	Gets or sets a value that matches the display name of the condition class type. (Inherited from OpcConditionNode)
ConditionClassNameNode	Gets the OpcTextPropertyNode of the ConditionClassName property. (Inherited from OpcConditionNode)
ConditionName	Gets or sets a value which identifies the condition instance that the event originated from. (Inherited from OpcConditionNode)
ConditionNameNode	Gets the OpcPropertyNode´1 of the ConditionName property. (Inherited from OpcConditionNode)
ConfirmCallback	Gets or sets a callback used to confirm the state of the condition node. (Inherited from OpcAcknowledgeableConditionNode)

Name	Description
ConfirmNode	Gets the OpcAddCommentMethodNode used to handle 'Confirm' method calls to confirm the state of the condition node. (Inherited from OpcAcknowledgeableConditionNode)
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 OpcObjectNode)
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 OpcObjectNode)
DefaultTypeDefinitionId	Gets the default identifier which identifies the node that defines the underlying node type from that this OpcInstanceNode has been created. (Inherited from OpcEventNode)
DefaultTypeDefinitionId	Gets the default identifier which identifies the node that defines the underlying node type from that this OpcInstanceNode has been created. (Inherited from OpcConditionNode)
DefaultTypeDefinitionId	Gets the default identifier which identifies the node that defines the underlying node type from that this OpcInstanceNode has been created. (Inherited from OpcAcknowledgeableConditionNode)
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)
DisableCallback	Gets or sets a callback used to disable the condition node. (Inherited from OpcConditionNode)
DisableNode	Gets the OpcActionMethodNode used to handle 'Disable' method calls to disable the condition. (Inherited from OpcConditionNode)
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)
EnableCallback	Gets or sets a callback used to enable the condition node. (Inherited from OpcConditionNode)
EnableNode	Gets the OpcActionMethodNode used to handle 'Enable' method calls to enable the condition. (Inherited from OpcConditionNode)

Name	Description
EventId	Gets or sets a value generated by the server to uniquely identify a particular event notification. (Inherited from OpcEventNode)
EventIdNode	Gets the OpcPropertyNode´1 of the EventId property. (Inherited from OpcEventNode)
EventTypeId	Gets or sets the node identifier which describes the specific type of event. (Inherited from OpcEventNode)
EventTypeIdNode	Gets the OpcNodeIdPropertyNode of the EventTypeId property. (Inherited from OpcEventNode)
HasPendingChanges	Gets a value indiciating whether there exists any pending change on the node. (Inherited from OpcNode)
Id	Gets the value of the NodeIdOpcAttribute which unambiguously identifies the node. (Inherited from OpcNode)
InputNodeId	Gets or sets an identifier which represents the node identifier of the variable the value of which is used as primary input in the calculation of the alarm state.
InputNodeIdNode	Gets the OpcNodeIdPropertyNode of the InputNodeId property.
IsAcked	Gets a value indicating whether the condition requires acknowledgement for the reported condition state. (Inherited from OpcAcknowledgeableConditionNode)
IsAckedNode	Gets the OpcTwoStateVariableNode of the IsAcked property. (Inherited from OpcAcknowledgeableConditionNode)
IsActive	Gets a value indicating whether the alarm situation represented currently exists.
IsActiveNode	Gets the OpcTwoStateVariableNode of the IsActive property.
IsConfirmed	Gets a value indicating whether the condition requires confirmation for the reported condition state. (Inherited from OpcAcknowledgeableConditionNode)
IsConfirmedNode	Gets the OpcTwoStateVariableNode of the IsConfirmed property. (Inherited from OpcAcknowledgeableConditionNode)
IsEnabled	Gets a value indicating whether the condition is enabled. (Inherited from OpcConditionNode)
IsEnabledNode	Gets the OpcTwoStateVariableNode of the IsEnabled property. (Inherited from OpcConditionNode)
IsRetained	Gets or sets a value indicating whether the condition is in a state that is interesting for a client wishing to synchronize its state with the server's state. (Inherited from OpcConditionNode)
IsRetainedNode	Gets the OpcPropertyNode´1 of the IsRetained property. (Inherited from OpcConditionNode)
IsSuppressed	Gets a value indicating whether the alarm is suppressed due to system specific reasons.
IsSuppressedNode	Gets the OpcTwoStateVariableNode of the IsSuppressed property.
IsSuppressedOrShelved	Gets a value indicating whether the alarm is either in the IsSuppressed or Shelving.
IsSuppressedOrShelvedNode	Gets the OpcPropertyNode´1 of the IsSuppressedOrShelved property.
LastSeverity	Gets or sets a value which provides the previous severity of the condition branch. (Inherited from OpcConditionNode)

Name	Description
LastSeverityNode	Gets the OpcConditionVariableNode´1 of the LastSeverity property. (Inherited from OpcConditionNode)
MaxTimeShelved	Gets or sets the maximum time that the alarm condition may be shelved.
MaxTimeShelvedNode	Gets the OpcPropertyNode´1 of the MaxTimeShelved property.
Message	Gets or sets a value which defines a human-readable and localizable text description of the event. (Inherited from OpcEventNode)
MessageNode	Gets the OpcTextPropertyNode of the Message property. (Inherited from OpcEventNode)
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)
OneShotShelveCallback	Gets or sets a callback used to shelve the condition node once.
Parent	Gets the parent node of the node. (Inherited from OpcNode)
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)
Quality	Gets or sets a value which reveals the status of process values or other resources that this condition is based upon. (Inherited from OpcConditionNode)
QualityNode	Gets the OpcStatusConditionVariableNode of the Quality property. (Inherited from OpcConditionNode)
QueryEventsCallback	Gets or sets a callback used to query any event information which belongs to the node. (Inherited from OpcNode)
ReadDescriptionCallback	(Inherited from OpcNode)
ReadDisplayNameCallback	(Inherited from OpcNode)
ReadUserWriteAccessCallback	(Inherited from OpcNode)
ReadWriteAccessCallback	(Inherited from OpcNode)
ReceiveTime	Gets or sets the time the OPC UA server received the event from the underlying device of another server. (Inherited from OpcEventNode)
ReceiveTimeNode	Gets the OpcPropertyNode´1 of the ReceiveTime property. (Inherited from OpcEventNode)
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)
Severity	Gets or sets an indication of the urgency of the event. (Inherited from OpcEventNode)

Name	Description
SeverityNode	Gets the OpcPropertyNode´1 of the Severity property. (Inherited from OpcEventNode)
Shelving	Gets a node which is used to suggest whether an alarm shall (temporarily) be prevented from being displayed to the user. It is quite often used to block nuisance alarms.
SourceName	Gets or sets a description of the source of the event. (Inherited from OpcEventNode)
SourceNameNode	Gets the OpcPropertyNode´1 of the SourceName property. (Inherited from OpcEventNode)
SourceNodeId	Gets or sets the node identifier which identifies the node that the event originated from. (Inherited from OpcEventNode)
SourceNodeIdNode	Gets the OpcNodeIdPropertyNode of the SourceNodeId property. (Inherited from OpcEventNode)
SymbolicName	(Inherited from OpcNode)
Tag	Gets or sets the object that contains additional user data about the node. (Inherited from OpcNode)
Time	Gets or sets the time the event occurred. (Inherited from OpcEventNode)
TimedShelveCallback	Gets or sets a callback used to shelve the condition node for a specific amount of time.
TimedUnshelveCallback	Gets or sets a callback used to unshelve the condition node after a specific amount of time being shelved.
TimeNode	Gets the OpcPropertyNode´1 of the Time property. (Inherited from OpcEventNode)
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)
UnshelveCallback	Gets or sets a callback used to unshelve the condition node.
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)
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)
WriteDescriptionCallback	(Inherited from OpcNode)
WriteDisplayNameCallback	(Inherited from OpcNode)
WriteUserWriteAccessCallback	(Inherited from OpcNode)
WriteWriteAccessCallback	(Inherited from OpcNode)

Methods

Name	Description
Acknowledge(OpcContext)	Acknowledges the state reported by an event notification which can be identified by the EventId using the specified `context`. (Inherited from OpcAcknowledgeableConditionNode)

Name	Description
Acknowledge(OpcContext, Byte, OpcText)	Acknowledges the state reported by an event notification which can be identified by the `eventId` using the specified `context`. (Inherited from OpcAcknowledgeableConditionNode)
Acknowledge(OpcContext, OpcText)	Acknowledges the state reported by an event notification which can be identified by the EventId using the specified `context`. (Inherited from OpcAcknowledgeableConditionNode)
AcknowledgeCore(OpcNodeContext, Byte, OpcText)	Acknowledges the state of the condition node. (Inherited from OpcAcknowledgeableConditionNode)
AddChild(OpcContext, OpcInstanceNode)	(Inherited from OpcInstanceNode)
AddComment(OpcContext, Byte, OpcText)	Applies a comment to the state reported by an event notification which can be identified by the `eventId` using the specified `context`. (Inherited from OpcConditionNode)
AddComment(OpcContext, OpcText)	Applies a comment to the state reported by an event notification which can be identified by the EventId using the specified `context`. (Inherited from OpcConditionNode)
AddCommentCore(OpcNodeContext, Byte, OpcText)	Applies the `comment` to the state of the condition node. (Inherited from OpcConditionNode)
AddNotifier(OpcContext, IOpcNode)	(Inherited from OpcNode)
AddNotifier(OpcContext, IOpcNode)	(Inherited from OpcObjectNode)
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
Confirm(OpcContext)	Confirms the state reported by an event notification which can be identified by the EventId using the specified `context`. (Inherited from OpcAcknowledgeableConditionNode)
Confirm(OpcContext, Byte, OpcText)	Confirms the state reported by an event notification which can be identified by the `eventId` using the specified `context`. (Inherited from OpcAcknowledgeableConditionNode)
Confirm(OpcContext, OpcText)	Confirms the state reported by an event notification which can be identified by the EventId using the specified `context`. (Inherited from OpcAcknowledgeableConditionNode)
ConfirmCore(OpcNodeContext, Byte, OpcText)	Confirms the state of the condition node. (Inherited from OpcAcknowledgeableConditionNode)
CreateBranch(OpcContext)	Creates a new instance of the OpcConditionNode class which can be used to maintain branched event information. (Inherited from OpcConditionNode)
CreateBranch(OpcContext, OpcNodeId)	Creates a new instance of the OpcConditionNode class using the `branchId` specified to maintain branched event information. (Inherited from OpcConditionNode)
CreateBranchCore	Creates a new instance of the OpcAlarmConditionNode using the same Id and Name as this node.
CreateBranchCore	Creates a new instance of the OpcConditionNode using the same Id and Name as this node. (Inherited from OpcConditionNode)
CreateBranchCore	Creates a new instance of the OpcAcknowledgeableConditionNode using the same Id and Name as this node. (Inherited from OpcAcknowledgeableConditionNode)
CreateEvent(OpcContext)	Creates a new instance of the OpcEvent class which represents a snapshot of this OpcEventNode. (Inherited from OpcEventNode)
CreateEventCore(OpcContext, OpcEventNodeSnapshot)	Creates a new instance of the OpcEvent class representing the specified `snapshot` of this OpcEventNode. (Inherited from OpcEventNode)
Disable(OpcContext)	Changes the condition state to 'Disabled' using the specified `context`. (Inherited from OpcConditionNode)
DisableCore(OpcNodeContext)	Disables the condition node. (Inherited from OpcConditionNode)

Name	Description
Enable(OpcContext)	Changes the condition state to 'Enabled' using the specified `context`. (Inherited from OpcConditionNode)
EnableCore(OpcNodeContext)	Enables the condition node. (Inherited from OpcConditionNode)
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 OpcEventNode. (Inherited from OpcEventNode)
InitializeDefaults	Initializes the default values used by the OpcConditionNode. (Inherited from OpcConditionNode)
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)
OneShotShelveCore(OpcNodeContext)	Shelves a condition node once using the `context` specified.
QueryEventsCore(OpcNodeContext, OpcEventCollection)	(Inherited from OpcNode)
ReadAttributeValueCore``1(OpcReadAttributeValueContext, OpcAttributeValue)	(Inherited from OpcNode)
RemoveChild(OpcContext, OpcInstanceNode)	(Inherited from OpcInstanceNode)
RemoveNotifier(OpcContext, IOpcNode)	(Inherited from OpcNode)
RemoveNotifier(OpcContext, IOpcNode)	(Inherited from OpcInstanceNode)
RemoveNotifier(OpcContext, IOpcNode)	(Inherited from OpcObjectNode)
ReportEvent(OpcContext)	Produces an event using the data represented by this OpcEventNode. (Inherited from OpcEventNode)
ReportEvent(OpcContext, OpcEvent)	(Inherited from OpcNode)
ReportEventFrom(OpcContext, IOpcNode)	Produces an event using the data represented by this OpcEventNode using the `source` as initiator of the event reported. (Inherited from OpcEventNode)
TimedShelveCore(OpcNodeContext, TimeSpan)	Shelves a condition node using the `context` and `duration` information specified.
TimedUnshelveCore(OpcNodeContext)	Unshelves a condition node using the `context` specified after being shelved for a specific amount of time.
UnshelveCore(OpcNodeContext)	Unshelves a condition node using the `context` specified.

Name	Description
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)

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