

# **Neuron Data Elements Environment**

## **Intelligent Rules Element**

**Version 4.0**

**C++ Reference Summary**

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# NDNxAtom:: Class

Function	Returns	Arguments	Description
GetAtomInfo	NxAtomPtr	(NxAtomPtr <i>atom1</i> , NxAtomGAInfoEnum <i>code</i> , NxAtomPtr <i>atom2</i> , Int32 <i>optInt</i> );	Method to get various atom datatype information about `atom1'.
GetClientData	Long	(void);	Gets the user-defined client data value (stored as a long) associated with atom'.
GetDoubleInfo	Double	(NxAtomPtr <i>atom1</i> , NxAtomGAInfoEnum <i>code</i> , NxAtomPtr <i>atom2</i> , Int32 <i>optInt</i> );	Method to get various double datatype information about `atom1'.
GetIntInfo	Int32	(NxAtomPtr <i>atom1</i> , NxAtomGAInfoEnum <i>code</i> , NxAtomPtr <i>atom2</i> , Int32 <i>optInt</i> );	Method to get various integer datatype information about `atom1'.
GetLongInfo	Long	(NxAtomPtr <i>atom1</i> , NxAtomGAInfoEnum <i>code</i> , NxAtomPtr <i>atom2</i> , Int32 <i>optInt</i> );	Method to get various long datatype information about `atom1'.
GetName	Long	(void);	Returns the string name of `atom'.
GetStrInfo	Str	(NxAtomPtr <i>atom1</i> , NxAtomGAInfoEnum <i>code</i> , NxAtomPtr <i>atom2</i> , Int32 <i>optInt</i> , Int32 <i>len</i> );	Method to get various string datatype information about `atom1'.
GetType	NxAtomTypeEnum	(void);	Returns the atom type of `atom' (Class, Object, Rule, etc)
SetClientData	void	(Long <i>data</i> );	Sets a user-defined client data value (stored as a long) to be associated with `atom'.
SetInfo	Int32	NxAtomPtr <i>atom1</i> , NxAtomSAInfoEnum <i>code</i> , NxAtomPtr <i>atom2</i> , Int32 <i>optInt</i> );	Sets various types of information about this atom.



# NDNxClass:: Tables

Function	Returns	Arguments	Description
CreateObject	NxObjectPtr	(CStr <i>name</i> );	Creates an object named `name' with the specified parent class.
DeleteObject	Int32	(NxObjectPtr <i>object</i> );	Removes the object `object' from the specified parent class. Returns an integer status.
Find7	NxClassPtr	(CStr <i>name</i> );	Returns the IRE Class specified by `name'. Returns NULL if not found.
FindSlot	NxSlotPtr	(CStr <i>name</i> );	Returns the IRE Slot specified with a property name of `name' and a parent class `parent'.
FindSlotByProp	NxSlotPt	(NxPropPtr <i>prop</i> );	Returns the IRE Slot specified with a property of `prop' and a parent class `parent'.
GetChildClassCount	Int32	(void);	Returns the number of child objects attached directly to this class.
GetChildObjectCount	Int32	(void);	Returns the number of child classes attached directly to this class.
GetClientData	Long	(void);	Gets a user-defined client data value associated with this class.
GetCount	Int32	(void);	Returns the number of IRE Classes currently loaded.
GetFirst	NxClassPtr	(void);	Returns the first IRE Class of the currently loaded set.
GetIndexedChildClass	void	(void);	Returns the Nth child class attached directly to this class.
GetIndexedChildObject	NxObjectPtr	(Int32 <i>index</i> );	Returns the Nth child object attached directly to this class.
GetIndexedMethod	NxMethodPtr	(Int32 <i>index</i> );	Returns the Nth method attached directly to this class.
GetIndexedParentClass	NxSlotPtr	(Int32 <i>index</i> );	Returns the number of parent classes attached directly to this class.

Function	Returns	Arguments	Description
GetIndexedSlot	NxSlotPt	(Int32 <i>index</i> );	Returns the Nth slot attached directly to this class.
GetKB	NxKBPtr	(void);	Returns the Knowledge Base associated with this class.
GetLast	void	(void);	Returns the last IRE Class of the currently loaded set.
GetLinkType	NxClassLinkEnum	(NxAtomPtr <i>child</i> );	Returns link information: none, permanent, temporary, etc.
GetMethodCount	Int32	(void);	Returns the number of user-defined methods attached directly to this class.
GetName	Str	(void);	Returns the string name of the specified class.
GetNext	NxClassPtr	void;	Returns the next IRE Class of the currently loaded set.
GetParentClassCount	Int32	(void);	Returns the number of parent classes attached directly to this class.
GetPrevious	NxClassPtr	(void);	Returns the previous IRE Class of the currently loaded set.
GetPrivateMethod	NxMethodPtr	(CStr <i>name</i> );	Returns the method pointer/object of the private method named ' <i>name</i> ' attached directly to the specified class.
GetPublicMethod	NxMethodPt	(void);	Returns the method pointer/object of the public method named ' <i>name</i> ' attached directly to the specified class.
GetSlotCount	Int32	(void);	Returns the number of slots attached directly to this class.
MakeLinkPermanent	Int32	(NxObjectPtr <i>object</i> );	Changes an object's temporary link(s) to permanent link(s).
SetClientData	void	(Long <i>data</i> );	Sets a user-defined client data value to be associated with this class.
SetKB	void	(NxKBCPtr <i>kb</i> );	Changes the Knowledge Base that contains the definition of this class.

# NDNxCtx:: Class

Function	Returns	Arguments	Description
<code>~NDNxCtx</code>	<code>void</code>	<code>(void);</code>	Default destructor
<code>AllocateClientId</code>	<code>NxCtxClientId</code>	<code>(void)</code>	Allocates and returns a client id so that multiple clients can associate multiple pieces of data with the same context block.
<code>GetClientData</code>	<code>ClientPtr</code>	<code>(NxCtxClientId <i>id</i>);</code>	Allows a customer to retrieve the information previously set with <code>NxCtx::SetClientData()</code> .
<code>GetCur</code>	<code>NxCtxClient- Id</code>	<code>(void);</code>	Returns the current context.
<code>IsClientIdValid</code>	<code>BoolEnum</code>	<code>(void);</code>	A debugging tool to ensure that the specified client id is valid.
<code>IsValid</code>	<code>BoolEnum</code>	<code>(void);</code>	A debugging tool to ensure that the specified context is valid.
<code>NDNxCtx</code>	<code>void</code>	<code>(void);</code>	Default constructor
<code>SetClientData</code>	<code>void</code>	<code>(NxCtxClientId <i>id</i>, ClientPtr <i>ptr</i>);</code>	Allows a customer to store information for their purposes along with the context block
<code>SetCur</code>	<code>NxCtxPtr</code>	<code>(void);</code>	Sets the current context.
<code>SetNfyProc</code>	<code>void</code>	<code>((NxCtxNfyProc <i>proc</i>);</code>	Associates a notification procedure with the context mechanism.
<code>UnsetNfyProc</code>	<code>void</code>	<code>(NxCtxNfyProc <i>proc</i>);</code>	This will remove the specified procedure from the list of procedures that will be notified when a context event occurs.



# NDNxEdt:: Class

Function	Returns	Arguments	Description
<code>~NDNxEdt</code>	<code>void</code>	<code>(void);</code>	Destructor
<code>Create</code>	<code>void</code>	<code>(NxAtomPtr <i>oldAtom</i>, NxAtomPtrPtr <i>newAtom</i>);</code>	Creates a new Atom in the Knowledge Base using the specified information. <i>newAtom</i> ' is the newly created Atom.
<code>Delete</code>	<code>Int</code>	<code>(NxAtomPtr <i>atom</i>);</code>	Attempts to delete the specified Atom from the Knowledge Base.
<code>Fill</code>	<code>Int</code>	<code>(NxAtomPtr <i>atom</i>);</code>	Fills the edit structure with the current definition of an existing Atom.
<code>FindIndex</code>	<code>Int</code>	<code>(Int <i>code</i>, CStrPtr <i>value</i>, Int <i>occurrence</i>);</code>	Retrieves the index number in ' <i>occurrence</i> ' of the specified Atom, with a field code of ' <i>code</i> ' and a string value of ' <i>value</i> '.
<code>GetNthStr</code>	<code>Int</code>	<code>(Int <i>code</i>, CStrPtr <i>value</i>, Int <i>occurrence</i>);</code>	Retrieves the string into ' <i>value</i> ' for the specified Atom which matches the ' <i>occurrence</i> '-th instance for the field code ' <i>code</i> '.
<code>GetStr</code>	<code>Int</code>	<code>(Int <i>code</i>, CStrPtr <i>value</i>);</code>	Retrieves into ' <i>value</i> ' the string corresponding to field ' <i>code</i> ' for the atom.
<code>Modify</code>	<code>Int</code>	<code>(NxAtomPtr <i>oldAtom</i>, NxAtomPtrPtr <i>newAtom</i>);</code>	Retrieves the string into ' <i>value</i> ' for the specified Atom which matches the ' <i>occurrence</i> '-th instance for the field code ' <i>code</i> '.
<code>NDNxEdt</code>	<code>void</code>	<code>(void);</code>	Constructor
<code>RemoveNthSt</code>	<code>Int</code>	<code>(Int <i>code</i>);</code>	Removes the ' <i>occurrence</i> '-th instance of the field specified by ' <i>code</i> ' from the edit record of this Atom.
<code>Reset</code>	<code>void</code>	<code>(void);</code>	Resets the fields of the edit record for reuse.

Function	Returns	Arguments	Description
SetAtomType	Int	(Int <i>type</i> );	Sets the AtomType field in the edit record to the type specified by 'type'.
SetNthStr	Int	(Int <i>code</i> , CStr <i>value</i> , Int <i>occurrence</i> );	Sets the 'occurrence'-th instance of the field specified by 'code' to the string passed in 'value'.
SetStr	Int	(Int <i>code</i> , CStr <i>value</i> );	Sets the value of the field specified by 'code' to the string specified in 'value'.

# NDNxEngine:: Class

Function	Returns	Argument	Description
Compile	Int32	(void)::	Compiles a user-supplied string with the TKB parser/compiler into the current KB.
Continue	NxEngineCtrlRetEnum	(void)::	Resume a (temporarily) stopped session.
Control	NxEngineCtrlRetEnum	(NxEngineCtrlEnum <i>code</i> );	Advanced access control of the rule engine.
Exit	NxEngineCtrlRetEnum	(void)::	Terminate the rule engine library.
GetCurrentStrategy	Int32	(NxEngineStrategyEnum <i>code</i> );	Retrieves the current setting for the strategy option specified.
GetDefaultResetStrategy	NxEngineVolStratEnum	(NxEngineStrategyEnum <i>code</i> );	Returns the default strategy to be used when resetting a slot/hypo to UNKNOWN
GetDefaultStrategy	Int32	(NxEngineStrategyEnum <i>code</i> );	Retrieves the current setting for the strategy option specified.
GetDefaultSuggestStrategy	NxEngineSugPrioEnum	(void)::	Returns the default strategy to be used when suggesting a hypo. If unset, the default is NXENGINE_SUGPRIORITY_SUG
GetDefaultVolunteerStrategy	void	(NxEngineVolStratEnum <i>strat</i> );	Returns the default strategy to be used when volunteering data.
GetError	NxEngineErrEnum	(void)::	In the case of an error accessing any API, this will retrieve a more detailed error code. (unless an exception is thrown, instead).

Function	Returns	Argument	Description
GetExecuteHandler	NxpIProc	(CStr <i>name</i> );	Returns any previously installed 3GL execute handler specified by 'name'.
GetExecuteHandler	NxpIProc	(CStr <i>name</i> , LongPtr <i>arg</i> );	Returns any previously installed 3GL execute handler specified by 'name'.
GetHandler	NxpIProc	(NxEngineProcEnum <i>code</i> );	Returns any previously installed 3GL handler specified by 'code'.
GetHandler	NxpIProc	(NxEngineProcEnum <i>code</i> , LongPtr <i>arg</i> );	Returns any previously installed 3GL handler specified by 'code'.
GetState	NxEngineStateEnum	(void)::	Return the current "state" of the rule engine.
Init	NxEngineCtrl- RetEnum	(void)::	Initialize the rule engine library.
Journal	Int32	(NxEngineJrnlEnum <i>mode</i> , CStr <i>filename</i> );	Save the working state of the rule engine to a specified file for later reuse.
Restart	NxEngineCtrl- RetEnum	(void)::	Perform a "restart" operation to reset the values in the rule engine.
SetCurrentStrategy	void	(NxEngineStrategyEnum <i>code</i> , Int32 <i>value</i> );	Sets the strategy option 'code' to the specified value.
SetDefaultResetStrategy	void	(NxEngineVolStratEnum <i>strat</i> );	Sets the default strategy to be used when resetting a slot/hypo to UNKNOWN.
SetDefaultStrategy	void	(NxEngineStrategyEnum <i>code</i> , Int32 <i>value</i> );	Sets the strategy option 'code' to the specified value.
SetDefaultSuggestStrategy	void	(NxEngineSugPrioEnum <i>strat</i> );	Sets the default strategy to be used when suggesting a hypo.

## Class virtual functions

Function	Returns	Argument	Description
SetDefaultVolunteerStrategy	void	(NxEngineVolStratEnum <i>strat</i> );	Sets the default strategy to be used when volunteering data.
SetExecuteHandler	Int32	(CStr <i>name</i> , NxpIProc <i>proc</i> );	Allows a user to establish a 3GL execute handler specified by `name', that should call `proc' when required.
SetExecuteHandler	Int32	(CStr <i>name</i> , NxpIProc <i>proc</i> , Long <i>arg</i> );	Allows a user to establish a 3GL execute handler specified by `name', that should call `proc' when required. `arg' is user-supplied custom information eg: a value or pointer) that will not be interpreted by the rule engine.
SetHandler	Int32	(NxEngineProcEnum <i>code</i> , NxpIProc <i>proc</i> );	Allows a user to establish a 3GL handler specified by `code', that should call `proc' when required.
SetHandler	Int32	(NxEngineProcEnum <i>code</i> , NxpIProc <i>proc</i> , Long <i>arg</i> );	Allows a user to establish a 3GL handler specified by `code', that should call `proc' when required.
Start	NxEngineCtrl- RetEnum	(void)::	Start the rule engine.
Stop	NxEngineCtrl- RetEnum	(void)::	Stop the rule engine.



# NDNxKB:: Class

Function	Returns	Arguments	Description
ClearAll	Int32	(CStr <i>name</i> )	Clears all the Knowledge Bases from memory. Returns an integer status.
Create	NxKBPtr	(void);	Creates a knowledge base specified by `name'.
Find	NxKBPtr	(CStr <i>name</i> )	Given `name', find the corresponding KB object.
GetComments	CStr	(void);	For a given Knowledge Base `kb', returns any user comments associated with it.
GetCount	Int32	(void);	Returns the number of Knowledge Bases currently loaded.
GetCurrent	NxKBPtr	(void);	Retrieves the currently active/set Knowledge Base, or NULL if an error.
GetFirst	NxKBPtr	(void);	Returns the first Knowledge Base of the currently loaded set.
GetLast	NxKBPtr	(void);	Returns the last Knowledge Base of the currently loaded set.
GetName	Str	(void);	For a given Knowledge Base `kb', returns the string name associated with it.
GetNext	NxKBPtr	(void);	Returns the next Knowledge Base of the currently loaded set, based from kb'.
GetPrevious	NxKBPtr	(void);	Returns the previous Knowledge Base of the currently loaded set, based from kb'. This requires a valid KB (eg: from first/next).

Function	Returns	Arguments	Description
Load	NxKBPtr	(void);	Loads the Knowledge Base from the file specified by `name'. Returns the KB object.
MakeLinksPermanent	Int32	(void);	This changes all temporary links of objects/classes of the `kb' to permanent.
Merge	Int32	(NxKBPtr <i>kb1</i> , NxKBPtr <i>kb2</i> );	Merges all components from knowledge base `kb2' into knowledge base `kb1'.
Save	Int32	(void);	Saves the specified Knowledge Base to a file, with `flags' to control saving of comments, compiled, text forms, etc. R
SetCurrent	void	(NxKBCPtr <i>kb</i> );	Sets the currently active Knowledge Base to `kb'.

# NDNxMethod:: Class

Function	Returns	Arguments	Description
GetComments	Str	(void);	Returns the user comments string associated with the method.
GetCount	Int32	(void);	Returns the number of IRE Methods currently loaded.
GetCurrent	NxMethodPtr	(void);	Retrieves the current method, which may be NULL if there is none.
GetElseActionCount	Int32	(void);	Returns the number of Else-Actions found in this method (from the Else or EHS part).
GetFirst	NxMethodPtr	(void);	Returns the first IRE Method of the currently loaded set.
GetIfConditionCount	Int32	(void);	Returns the number of Conditions found in this method (from the If or LHS part).
GetIndexedElseAction	Str	(Int32 <i>index</i> )	Returns the string representation of the Nth EHS of this method.
GetIndexedIfCondition	Str	(void);	Returns the string representation of the Nth LHS of this method.
GetIndexedThenAction	void	(void);	Returns the string representation of the Nth RHS of this method.
GetKB	NxKBPtr	(void);	Returns the Knowledge Base associated with this method.
GetLast	NxMethodPtr	(void);	Returns the last IRE Method of the currently loaded set.
GetName	Str	(void);	Returns the string name of the specified method.
GetNext	NxMethodPtr	(void);	Returns the next IRE Method of the currently loaded set.
GetPrevious	NxMethodPtr	(void);	Returns the previous IRE Method of the currently loaded set.

Function	Returns	Arguments	Description
GetThenActionCount	Int32	(void);	Returns the number of Then-Actions found in this method (from the Then or RHS part).
IsPrivate	Int32	(void);	Returns boolean value indicating if the method is private.
SetKB	void	(NxKBCPtr <i>kb</i> );	Changes the Knowledge Base that contains the definition of this method.

# NDNxObject:: Class

Function	Returns	Arguments	Description
Create	NxObjectPtr	(CStr <i>name</i> );	Creates an object named 'name' with no specific parent. Returns the object, or NULL if an error.
CreateObject	NxObjectPtr	(CStr <i>name</i> );	Creates an object named 'name' with the specified parent object.
Delete	Int32	(void);	Deletes the object named 'object'.
DeleteObject	Int32	(NxObjectPtr <i>childObj</i> );	Removes an object named 'childObj' from the specified parent object.
Find	void	(CStr <i>name</i> );	Returns the IRE Object specified by 'name'. Returns NULL if not found.
FindSlot	NxSlotPtr	(CStr <i>name</i> );	Returns the IRE Slot specified with a property name of 'name' and a parent object 'parent'.
FindSlotByProp	NxSlotPtr	NxPropPtr <i>prop</i> );	Returns the IRE Slot specified with a property of 'prop' and a parent object 'parent'.
GetChildObjectCount	Int32	(void);	Returns the number of child objects attached directly to this object.
GetClientData	Long	(void);	Gets a user-defined client data value associated with this object.
GetCount9	Int32	(void);	Returns the number of IRE Objects currently loaded.
GetFirst9	NxObjectPtr	(void);	Returns the first IRE Object of the currently loaded set.
GetIndexedChildObject	NxObjectPtr	(Int32 <i>index</i> );	Returns the Nth child object attached directly to this object.

Function	Returns	Arguments	Description
GetIndexedMethod	NxMethodPtr	(Int32 <i>index</i> );	Returns the Nth method attached directly to this object.
GetIndexedParentClass	NxClassPtr N	(Int32 <i>index</i> );	Returns the Nth parent class attached directly to this object.
GetIndexedParentObject	NxObjectPtr	(Int32 <i>index</i> );	Returns the Nth child object attached directly to this object.
GetIndexedSlot	NxSlotPtr	(void);	Returns the Nth slot attached directly to this object.
GetKB	NxKBPtr	(void);	Returns the Knowledge Base associated with this object.
GetLast9	NxObjectPtr	(void);	Returns the last IRE Object of the currently loaded set.
GetLinkType	NxObjectLinkEnum	(NxObjectPtr <i>child</i> );	Returns link information: none, permanent, temporary, etc.
GetMethodCount	Int32	(void);	Returns the number of user-defined method attached directly to this object.
GetName	Str	(void);	Returns the string name of the specified object.
GetNext	NxObjectPtr N	(void);	Returns the next IRE Object of the currently loaded set.
GetParentClassCount	Int32	(void);	Returns the number of parent classes attached directly to this object.
GetParentObjectCount	Int32	(void);	Returns the number of parent objects attached directly to this object.
GetPrevious	NxObjectPtr	(void);	Returns the previous IRE Object of the currently loaded set.
GetPrivateMethod	NxMethodPtr	(CStr <i>name</i> );	Returns the method pointer/object of the private method named 'name' attached directly to the specified object.

## Class virtual functions

Function	Returns	Arguments	Description
GetPublicMethod	NxMethodPtr	(CStr <i>name</i> );	Returns the method pointer/object of the public method named 'name' attached directly to the specified object.
GetSlotCount	Int32	(void);	Returns the number of slots attached directly to this object.
MakeLinkPermanent	Int32	(NxAtomPtr <i>atom</i> );	Changes an object's temporary link(s); to permanent link(s);.
SetClientData	void	(Long <i>data</i> );	Sets a user-defined client data value to be associated with this object.
SetKB	void	(NxKBCPtr <i>kb</i> );	Changes the Knowledge Base that contains the definition of this object



# NDNxProp:: Class

Function	Returns	Arguments	Description
Find	NxPropPtr	(CStr <i>name</i> );	Returns the IRE Property specified by 'name'.
GetCount	Int32	(void);	Returns the number of IRE Properties currently loaded.
GetDataType	NxPropDataTypeEnum	(void);	Returns the datatype of the property.
GetFirst	NxPropPtr	(void);	Returns the first IRE Property of the currently loaded set.
GetFormat	Str	(void);	Returns the format string used with the property.
GetIndexedMethod	NxMethodPtr	(Int32 <i>index</i> );	Returns the Nth method attached directly to this property.
GetKB	NxKBPtr	(void);	Returns the Knowledge Base associated with this property.
GetLast	NxPropPtr	(void);	Returns the last IRE Property of the currently loaded set.
GetMethodCount	Int32	(void);	Returns the number of user-defined method attached directly to this property.
GetName	Str	(void);	Returns the string name of the specified property.
GetNext	NxPropPtr	(void);	Returns the next IRE Property of the currently loaded set.
GetPrevious	NxPropPtr	(void);	Returns the previous IRE Property of the currently loaded set.
GetPrivateMethod	NxMethodPtr	(CStr <i>name</i> );	Returns the method pointer/object of the private method named 'name' attached directly to the specified property.
GetPublicMethod	NxMethodPtr	(CStr <i>name</i> );	Returns the method pointer/object of the public method named 'name' attached directly to the specified property.
SetFormat	void	(CStr <i>format</i> );	Sets the format string used with the property.

Function	Returns	Arguments	Description
SetKB	void	(NxKBCPtr <i>kb</i> );	Changes the Knowledge Base that contains the definition of this property.

# NDNxRule:: Class

Function	Returns	Arguments	Description
Find	NxRulePtr	(CStr <i>name</i> );	Returns the IRE Rule specified by `name'. Returns NULL if not found.
GetComments	Str	(void);	Returns the user comments string associated with the rule.
GetCount	Int32	(void);	Returns the number of IRE Rules currently loaded.
GetCurrent	Int32	(void);	Returns the number of IRE Rules currently loaded.
GetElseActionCount	Int32	(void);	Returns the number of Else-Actions found in this rule (from the Else or EHS part).
GetFirst	NxRulePtr	(void);	Returns the first IRE Rule of the currently loaded set.
GetHypo	NxSlotPtr	(void);	Return the hypothesis of this rule.
GetIfConditionCount	Int32	(void);	Return the hypothesis of this rule.
GetIndexedElseAction	Str	(Int32 <i>index</i> );	Returns the string representation of the Nth EHS of this rule.
GetIndexedIfCondition	Str	(Int32 <i>index</i> );	Returns the string representation of the Nth LHS of this rule.
GetIndexedThenAction	Str	(Int32 <i>index</i> );	Returns the string representation of the Nth RHS of this rule.
GetInferencePriority	Int32	(void);	Returns the inference priority number associated with this rule.
GetInferenceSlot	NxSlotPtr	(void);	Returns the inference priority slot associated with this rule.

Function	Returns	Arguments	Description
GetKB	NxKBPtr	(void);	Returns the Knowledge Base associated with this rule.
GetLast	NxRulePtr	(void);	Returns the last IRE Rule of the currently loaded set.
GetName	Str	(void);	Returns the string name of the specified rule.
GetNext	NxRulePtr	(void);	Returns the next IRE Rule of the currently loaded set.
GetPrevious	NxRulePtr N	(void);	Returns the previous IRE Rule of the currently loaded set.
GetThenActionCount	Int32	(void);	Returns the number of Then-Actions found in this rule (from the Then or RHS part).
GetValue	Int32	(void);	Retrieves the boolean value of this rule (true/false/not-known/unknown).
GetWhy	Str	(void);	Returns the Why information associated with this rule.
IsHypoSuggested	Int32	(void);	Return a boolean indicating whether the hypothesis of this rule is to be evaluated by the rule engine.
IsKnown	Int32	(void);	Returns information on whether the rule is KNOWN.
IsNotknown	Int32	(void);	Returns information on whether the rule is NOT-KNOWN.
IsUnknown	Int32	(void);	Returns information on whether the rule is UNKNOWN.
SetKB	void	(NxKBCPtr <i>kb</i> );	Changes the Knowledge Base that contains the definition of this rule.

## Class virtual functions

Function	Returns	Arguments	Description
SuggestHypo	Int32	(void);	Suggest the hypothesis of this rule to be evaluated by the rule engine.
SuggestHypo2	Int32	(NxRuleSugPrioEnum <i>strategy</i> );	Suggest the hypothesis of this rule to be evaluated by the rule engine using the Suggest strategy provided.
UnsuggestHypo	Int32	(void);	Removes the hypothesis of this rule from the agenda of the rule engine.



# NDNxSlot:: Class

Function	Returns	Argument	Description
Find	NxSlotPtr	(void);	Returns the IRE Slot specified by `name'. Returns NULL if not found.
GetChoiceCount	Int32	void);	Returns the number of choices the rule engine will present when asking a slot question, based on possible values found within the loaded Knowledge Bases.
GetClientData	Int32	(void);	Gets a user-defined client data value associated with this slot.
GetContextCount	Int32	(void);	Returns the number of hypotheses that are in the context of this hypothesis.
GetCountData	Int32	(void);	Returns the number of IRE Data Slots currently loaded.
GetCountHypo	Int32	(void);	Returns the number of IRE Hypothesis Slots currently loaded.
GetCurrent	NxSlotPtr	(void);	Retrieves the current slot, which may be NULL if there is none.
GetDataType	NxSlotDataTypeEnum	(void);	Returns the datatype of the slot.
GetFirstData3	NxSlotPtr	(void);	Returns the first IRE Data Slot of the currently loaded set.
GetFirstHypo	NxSlotPtr	(void);	Returns the first IRE Hypothesis Slot of the currently loaded set.
GetFormat	Str	(void);	Returns the format string used with the slot.

Function	Returns	Argument	Description
GetIndexedChoice	Str	(Int32 index);	Returns the Nth choice the rule engine will present when asking a slot question, based on possible values found within the loaded Knowledge Bases.
GetIndexedContext	NxSlotPtr	(Int32 index);	Returns the Nth context hypothesis.
GetIndexedMethod	NxMethodPtr	(Int32 index);	Returns the Nth method attached directly to this slot.
GetIndexedSuggestList	NxSlotPtr	(void);	Returns the Nth slot in the suggest list.
GetIndexedVolunteerList	NxSlotPtr	(void);	Returns the Nth slot in the volunteer list.
GetInferencePriority	Int32	(void);	Returns the inference priority number associated with this slot.
GetInferenceSlot	NxSlotPtr	(void);	Returns the inference priority slot associated with this slot.
GetInheritancePriority	Int32	(void);	Returns the inheritance priority number associated with this slot.
GetInheritanceSlot	NxSlotPtr	(void);	Returns the inheritance priority slot associated with this slot.
GetKB	NxKBPtr	(void);	Returns the Knowledge Base associated with this slot.
GetLastData	NxSlotPtr	(void);	Returns the last IRE Data Slot of the currently loaded set.
GetLastHypo	NxSlotPtr	(void);	Returns the last IRE Hypothesis Slot of the currently loaded set.
GetMethodCount	Int32	(void);	Returns the number of user-defined method attached directly to this slot.
GetName	void	(void);	Returns the string name of the specified slot.

## Class virtual functions

Function	Returns	Argument	Description
GetNextData	NxSlotPtr	(void);	Returns the next IRE Data Slot of the currently loaded set. This requires a valid data slot (eg: from first/next).
GetNextHypo	NxSlotPtr	(void);	Returns the next IRE Hypothesis Slot of the currently loaded set.
GetParent	NxAtomPtr	(void);	Returns the parent (object or class) referenced by the specified slot.
GetPreviousData	NxSlotPtr	(void);	Returns the previous IRE Data Slot of the currently loaded set. This requires a valid data slot (eg: from first/next).
GetPreviousHypo	NxSlotPtr	(void);	Returns the previous IRE Hypo Slot of the currently loaded set. This requires a valid Hypo slot (eg: from first/next).
GetPrivateInitValue	Str	(void);	Returns a string containing the private (not-inheritable) initial value for this slot.
GetPrivateMethod	NxMethodPtr	(CStr <i>name</i> );	Returns the method pointer/object of the private method named ' <i>name</i> ' attached directly to the specified slot.
GetPrompt	Str	(void);	Returns the prompt string to be used when asking a question about this slot.
GetProperty	NxPropPtr	(void);	Returns the property referenced by the specified slot.
GetPublicInitValue	VStr	(void);	Returns a string containing the public (inheritable) initial value for this slot.
GetPublicMethod	NxMethodPtr	(CStr <i>name</i> );	Returns the method pointer/object of the public method named ' <i>name</i> ' attached directly to the specified slot.

Function	Returns	Argument	Description
GetQuestionWindow	Str	(void);	Returns the name of an Open Interface question window to be used when asking a question.
GetStrategy	BoolEnum	NxSlotStratEnum <i>strategy</i> );	Returns a boolean indicating the setting for the specified strategy.
GetStringValue	Str	(void);	Retrieves the value of a slot as a formatted string (using any format specified with this slot).
GetSuggestListCount	Int32	(void);	Returns the number of slots in the suggest list.
GetValidationExecute	Str	(void);	Returns the name of the Execute to be invoked to provide additional user validation for this slot.
GetValidationFunction	Str	(void);	Returns a string representation of a validation function to be evaluated to determine whether this slot represents a valid response.
GetValidationHelp	Str	(void);	Returns the string that will be used to provide additional help when a validation violation is discovered on this slot.
GetValue	VarPtr	(void);	Retrieves the value of this slot, ignoring formats in a variant.
GetVolunteerListCount	Int32	(void);	Returns the number of slots in the volunteer list.
GetWhy	Str	(void);	Returns the Why information associated with this slot.
IsDefaultStrategy	BoolEnum	(NxSlotDefStratEnum <i>strategy</i> );	Returns a boolean indicating whether the specified strategy is the default strategy.
IsHypo	Int32	(void);	Returns a boolean indicating whether the slot is used as the hypothesis of a rule.
IsKnown	Int32	(void);	Returns information on whether the slot is KNOWN.

## Class virtual functions

Function	Returns	Argument	Description
IsNotknown	Int32	(void);	Returns information on whether the slot is NOT-KNOWN.
IsPrivate	Int32	(void);	Returns a boolean indicating whether this slot is private or not.
IsSuggested	Int32	(void);	Returns a boolean indicating whether the slot has been suggested to be evaluated by the rule engine.
IsUnknown	Int32	(void);	Returns information on whether the slot is UNKNOWN.
SetClientData	void	(Long <i>data</i> );	Sets a user-defined client data value to be associated with this slot.
SetFormat	void	(CStr <i>format</i> );	Sets the format string used with the slot.
SetKB	void	(NxKBCPtr <i>kb</i> );	Changes the Knowledge Base that contains the definition of this slot.
SetValue	void	(VarCPtr <i>value</i> );	Volunteers the specified value into this slot, using the Default Volunteer Strategy
Suggest	Int32	(void);	Enters a slot to be evaluated by the rule engine when it starts/resumes.
Suggest2	Int32 N	NxSlotSugPrioE- num <i>strategy</i> );	Enters a slot to be evaluated by the rule engine when it starts/resumes.
Unsuggest	Int32	(void);	Removes a slot from the agenda of the rule engine. Returns an integer status.
Volunteer	Int32	(VarCPtr <i>value</i> );	Volunteers a value to the slot using the default volunteer strategy.
Volunteer2	Int32	(VarCPtr <i>value</i> , NxS- lotVolStratEnum <i>strategy</i> );	Volunteers a value to the slot using the specified volunteer strategy.