

INatAutoProgram

This chapter covers the following topics:

- Purpose
 - Properties
 - Methods
-

Purpose

A development object currently open in a program editor window. This comprises the following development object types: program, subprogram, subroutine, function, helproutine, copycode, text and class. The types are identified by a numeric ID. The IDs of predefined types are described in the section *Predefined Node Types*.

Properties

The following properties are available:

- Parent
- Studio
- Source
- Visible
- Type
- LineCount

Parent

Used to navigate to the parent interface of this interface.

Natural Data Format	Variant Type	Remark
HANDLE OF OBJECT	VT_DISPATCH (INatAutoPrograms)	Get only

Studio

Used to navigate to the root interface.

Natural Data Format	Variant Type	Remark
HANDLE OF OBJECT	VT_DISPATCH (INatAutoStudio)	Get only

Source

The source code of the development object.

Natural Data Format	Variant Type	Remark
A	VT_BSTR	

Visible

Shows or hides the editor window.

Natural Data Format	Variant Type	Remark
L	VT_BOOL	

Type

The development object type. The type is identified by a numeric ID. The IDs of predefined types are described in the section *Predefined Node Types*.

Natural Data Format	Variant Type	Remark
I4	VT_I4	

LineCount

The number of lines in the source code.

Natural Data Format	Variant Type	Remark
I4	VT_I4	Get only

Methods

The following methods are available:

- Catalog
- Check
- Clear
- Close
- Execute
- Format

- Mode
- Renumber
- Search
- Replace
- Run
- Save
- Stow
- Title
- GetInfo
- DeleteLines
- GetLines
- InsertLines
- ReplaceLines

Catalog

Catalogs the object. Applicable to program, subprogram, subroutine, function, helproutine and class.

Parameters

Name	Natural Data Format	Variant Type	Remark
Quiet	L	VT_BOOL	Optional

Quiet

If set to TRUE, the method is performed without user interaction. The default is FALSE.

Check

Checks the object. Applicable to program, subprogram, subroutine, function, helproutine and class.

Parameters

Name	Natural Data Format	Variant Type	Remark
Quiet	L	VT_BOOL	Optional

Quiet

If set to TRUE, the method is performed without user interaction. The default is FALSE.

Clear

Clears the editor contents.

Parameters

Name	Natural Data Format	Variant Type	Remark
Quiet	L	VT_BOOL	Optional

Quiet

If set to TRUE, the method is performed without user interaction. The default is FALSE.

Close

Closes the editor and removes the object from the collection.

Parameters

Name	Natural Data Format	Variant Type	Remark
Quiet	L	VT_BOOL	Optional

Quiet

If set to TRUE, the method is performed without user interaction. The default is FALSE.

Execute

Executes the object. Applicable to program.

Format

Formats the source code.

Mode

Sets several modes of the object.

Parameters

Name	Natural Data Format	Variant Type	Remark
Structured	L	VT_BOOL	Optional
Uppercase	L	VT_BOOL	Optional
IgnoreTextConstants	L	VT_BOOL	Optional

Structured

Sets structured mode. The default is determined by the Natural parameter settings.

Uppercase

Sets uppercase mode. The source code will then be converted to upper case during Save. The default is FALSE.

IgnoreTextConstants

Makes sure that text constants are left untouched during upper case conversion. The default is FALSE.

Renumber

Renumbers the source code.

Search

Searches for the first occurrence of a given string.

Parameters

Name	Natural Data Format	Variant Type	Remark
Return value	BOOL	VT_BOOL	
SearchString	A	VT_BSTR	
Line	I4	VT_I4	By reference
Column	I4	VT_I4	By reference
CaseSensitive	L	VT_BOOL	Optional
WholeWords	L	VT_BOOL	Optional
Up	L	VT_BOOL	Optional

Return value

TRUE if a match was found.

SearchString

The string to search for.

Line

Contains the start line for the search on input. Contains the line of the first match on return.

Column

Contains the start column for the search on input. Contains the column of the first match on return.

CaseSensitive

Searches case sensitively. The default is FALSE.

WholeWords

Searches only for whole words that match the search string. The default is FALSE.

Up

Searches in upward direction. The default is FALSE.

Replace

Replaces the first occurrence of a given string with another one.

Parameters

Name	Natural Data Format	Variant Type	Remark
Return value	BOOL	VT_BOOL	
SearchString	A	VT_BSTR	
ReplaceString	A	VT_BSTR	
Line	I4	VT_I4	By reference
Column	I4	VT_I4	By reference
CaseSensitive	L	VT_BOOL	Optional
WholeWords	L	VT_BOOL	Optional
Up	L	VT_BOOL	Optional

Return value

TRUE if a match was found.

SearchString

The string to search for.

ReplaceString

The string which replaces the search string.

Line

Contains the start line for the search on input. Contains the line of the first match on return.

Column

Contains the start column for the search on input. Contains the column of the first match on return.

CaseSensitive

Searches case sensitively. The default is FALSE.

WholeWords

Searches only for whole words that match the search string. The default is FALSE.

Up

Searches in upward direction. The default is FALSE.

Run

Runs the object. Applicable to program.

Parameters

Name	Natural Data Format	Variant Type	Remark
Quiet	L	VT_BOOL	Optional

Quiet

If set to TRUE, the method is performed without user interaction. The default is FALSE.

Save

Saves the object.

Parameters

Name	Natural Data Format	Variant Type	Remark
Name	A	VT_BSTR	Optional
Library	A	VT_BSTR	Optional
Type	I4	VT_I4	Optional
Quiet	L	VT_BOOL	Optional

Name

Saves the object under the given name.

Library

Saves the object in the given library.

Type

Saves the object under the given type.

Quiet

If set to TRUE, the method is performed without user interaction. The default is FALSE.

Stow

Stows the object. Applicable to program, subprogram, subroutine, function, helprountine and class.

Parameters

Name	Natural Data Format	Variant Type	Remark
Name	A	VT_BSTR	Optional
Library	A	VT_BSTR	Optional
Type	I4	VT_I4	Optional
Quiet	L	VT_BOOL	Optional

Name

Stows the object under the given name.

Library

Stows the object in the given library.

Type

Stows the object under the given type.

Quiet

If set to TRUE, the method is performed without user interaction. The default is FALSE.

Title

Titles an untitled object.

Parameters

Name	Natural Data Format	Variant Type	Remark
Name	A	VT_BSTR	Optional
Library	A	VT_BSTR	Optional

Name

Assigns a name to the object.

Library

Assigns a library to the object.

GetInfo

Returns information about an open object.

Parameters

Name	Natural Data Format	Variant Type	Remark
Type	I4	VT_I4	By reference
Name	A	VT_BSTR	By reference
Library	A	VT_BSTR	By reference
Fnr	I4	VT_I4	By reference
DBnr	I4	VT_I4	By reference

Type

The type of the object.

Name

The name of the object.

Library

The library of the object.

Fnr

The system file file number of the object.

DBnr

The system file database number of the object.

DeleteLines

Deletes a block of lines from the source code.

Parameters

Name	Natural Data Format	Variant Type	Remark
StartLine	I4	VT_I4	
LineCount	I4	VT_I4	Optional

StartLine

The start line of the block to delete.

LineCount

The number of lines to delete. The default is 1.

GetLines

Retrieves a block of lines from the source code.

Parameters

Name	Natural Data Format	Variant Type	Remark
Return value	A	VT_BSTR	
StartLine	I4	VT_I4	
LineCount	I4	VT_I4	Optional

Return value

A block of source code lines. The lines are separated by carriage return / line feed characters.

StartLine

The start line of the block to return.

LineCount

The number of lines to return. The default is 1.

InsertLines

Inserts a block of lines from the source code.

Parameters

Name	Natural Data Format	Variant Type	Remark
Return value	I4	VT_I4	
Code	A	VT_BSTR	
InsertAfterLine	I4	VT_I4	Optional

Return value

The line number passed in InsertAfterLine increased by the number of inserted lines.

Code

A block of source code lines to insert. The lines must be separated by carriage return / line feed characters.

InsertAfterLine

Line after which the code shall be inserted. The default is 0.

ReplaceLines

Replaces a block of lines from the source code.

Parameters

Name	Natural Data Format	Variant Type	Remark
Return value	I4	VT_I4	
Code	A	VT_BSTR	
ReplaceLine	I4	VT_I4	Optional
LineCount	I4	VT_I4	Optional

Return value

The line number passed in ReplaceLine increased by the number of inserted lines.

Code

A block of source code lines to replace the block that is defined by ReplaceLine and LineCount. The lines must be separated by carriage return / line feed characters.

ReplaceLine

The start line of the block to be replaced. The default is 1.

LineCount

The number of lines to be replaced by the given block. The default is 1.