MAX Configuration VI Reference

April 2008, 371904D-01

Use the MAX Configuration application programming interface (API) to copy configuration data to or from a system, or to generate reports about those systems.

For more information about this help file, refer to the following topics:

Using Help

Important Information

Technical Support and Professional Services

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Using Help

Conventions

Navigating Help

Searching Help

Printing Help File Topics

Conventions

This help file uses the following formatting and typographical conventions:

The » symbol leads you through nested menu items and dialog box options to a final action. The sequence File»Page Setup»Options directs you to pull down the File menu, select the Page Setup item, and select Options from the last dialog box.

This icon denotes a note, which alerts you to important information.

bold Bold text denotes items that you must select or click in the software, such as menu items and dialog box options. Bold text also denotes parameter names.

green Underlined text in this color denotes a link to a help topic, help file, or Web address.

italic Italic text denotes variables, emphasis, cross-references, or an introduction to a key concept. Italic text also denotes text that is a placeholder for a word or value that you must supply.

monospace Text in this font denotes text or characters that you should enter from the keyboard, sections of code, programming examples, and syntax examples. This font is also used for the proper names of disk drives, paths, directories, programs, subprograms, subroutines, device names, functions, operations, variables, filenames, and extensions.

Navigating Help (Windows Only)

To navigate this help file, use the **Contents**, **Index**, and **Search** tabs to the left of this window or use the following toolbar buttons located above the tabs:

- **Hide**—Hides the navigation pane from view.
- Locate—Locates the currently displayed topic in the Contents tab, allowing you to view related topics.
- **Back**—Displays the previously viewed topic.
- **Forward**—Displays the topic you viewed before clicking the **Back** button.
- **Options**—Displays a list of commands and viewing options for the help file.

Searching Help (Windows Only)

Use the **Search** tab to the left of this window to locate content in this help file. If you want to search for words in a certain order, such as "related documentation," add quotation marks around the search words as shown in the example. Searching for terms on the **Search** tab allows you to quickly locate specific information and information in topics that are not included on the **Contents** tab.

Wildcards

You also can search using asterisk (*) or question mark (?) wildcards. Use the asterisk wildcard to return topics that contain a certain string. For example, a search for "prog*" lists topics that contain the words "program," "programmatically," "progress," and so on.

Use the question mark wildcard as a substitute for a single character in a search term. For example, "?ext" lists topics that contain the words "next," "text," and so on.



Note Wildcard searching will not work on Simplified Chinese, Traditional Chinese, Japanese, and Korean systems.

Nested Expressions

Use nested expressions to combine searches to further refine a search. You can use Boolean expressions and wildcards in a nested expression. For example, "example AND (program OR VI)" lists topics that contain "example program" or "example VI." You cannot nest expressions more than five levels.

Boolean Expressions

Click the **•** button to add Boolean expressions to a search. The following Boolean operators are available:

- AND (default)—Returns topics that contain both search terms. You
 do not need to specify this operator unless you are using nested
 expressions.
- **OR**—Returns topics that contain either the first or second term.
- **NOT**—Returns topics that contain the first term without the second term.
- **NEAR**—Returns topics that contain both terms within eight words of each other.

Search Options

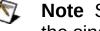
Use the following checkboxes on the **Search** tab to customize a search:

- **Search previous results**—Narrows the results from a search that returned too many topics. You must remove the checkmark from this checkbox to search all topics.
- Match similar words—Broadens a search to return topics that contain words similar to the search terms. For example, a search for "program" lists topics that include the words "programs," "programming," and so on.
- Search titles only—Searches only in the titles of topics.

Printing Help File Topics (Windows Only)

Complete the following steps to print an entire book from the **Contents** tab:

- 1. Right-click the book.
- 2. Select **Print** from the shortcut menu to display the **Print Topics** dialog box.
- 3. Select the **Print the selected heading and all subtopics** option.



Note Select Print the selected topic if you want to print the single topic you have selected in the **Contents** tab.

4. Click the **OK** button.

Printing PDF Documents

This help file may contain links to PDF documents. To print PDF documents, click the print button located on the Adobe Acrobat Viewer toolbar.

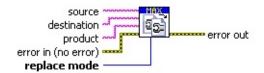
MAX Configuration

Use the MAX Configuration API to programmatically copy configuration data to and from systems and files. You can find the MAX Configuration API on the Measurement I/O palette.

Palette Object	Description
MAX Copy Configuration VI	Copies configuration data. Use this VI to import configuration data from a file into MAX, export configuration data from MAX out to a file, or copy configuration data directly from system to system. Not all products are supported; consult your product documentation.
MAX Generate Report VI	Creates reports to document a system. Use this VI to generate system reports in three formats: XML, HTML, and technical support reports. The HTML and XML formats provide human readable reports. Additionally, the XML format makes it convenient to archive reports with a configuration management tool and compare system reports. The technical support format generates a compressed file containing reports that are useful if you need to contact National Instruments Technical Support. The level of support for this VI depends on each device's driver software.

MAX Copy Configuration

Copies configuration data. Use this VI to import configuration data from a file into MAX, export configuration data from MAX out to a file, or copy configuration data directly from system to system. Not all products are supported; consult your product documentation.



- source specifies the configuration to copy. This input may specify either a configuration file or a MAX system configuration. To specify a configuration file, set source to a file path. To specify a MAX configuration, set source to "system://<host>", where <host> is a system hostname or IP address.
- destination specifies the destination to which to copy data. The format for destination is the same as for source.
- **product** specifies which product's data to copy. If you leave **product** unwired or specify a blank product name, this VI copies all configuration data from the source. If you specify a product name, this VI copies only that product's data. Product names are not casesensitive. For a list of valid product names, refer to the product documentation or visit <u>ni.com/info</u> and enter MAXCopyProducts.
- error in (no error) can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs. (Right-click the error in control on the front panel and select Explain Error or Explain Warning from the shortcut menu for more information about the error.)
 - status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred. (Right-click the error in control on the front panel and select Explain Error or Explain Warning from the shortcut menu for more information about the error.)
 - code is the error or warning code. (Right-click the error in control on the front panel and select Explain Error or Explain Warning from the shortcut menu for more information about

the error.)

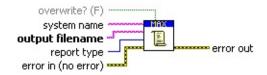
- source describes the origin of the error or warning. (Rightclick the error in control on the front panel and select Explain Error or Explain Warning from the shortcut menu for more information about the error.)
- replace mode specifies how to treat existing data at the destination. If you set replace mode to merge, this VI merges the source data in with any existing data at the destination. If you set replace mode to replace, this VI replaces all configuration data at the destination with the source data. If you specify a product, only that product's data is replaced.
- error out passes error or warning information out of a VI to be used by other VIs. Right-click the error out indicator on the front panel and select Explain Error or Explain Warning from the shortcut menu for more information about the error.
 - status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred. Right-click the error out indicator on the front panel and select Explain Error or Explain Warning from the shortcut menu for more information about the error.
 - code is the error or warning code. Right-click the error out indicator on the front panel and select Explain Error or Explain Warning from the shortcut menu for more information about the error.
 - source describes the origin of the error or warning. Right-click the error out indicator on the front panel and select Explain Error or Explain Warning from the shortcut menu for more information about the error.

MAX Generate Report

Creates reports to document a system. Use this VI to generate system reports in three formats: XML, HTML, and technical support reports. The HTML and XML formats provide human readable reports. Additionally, the XML format makes it convenient to archive reports with a configuration management tool and compare system reports. The technical support format generates a ZIP file containing reports that are useful if you need to contact National Instruments Technical Support. The level of support for this VI depends on each device's driver software.



Note This function provides a one-way export only. You cannot import the XML-based report into MAX.



- system name specifies the IP address or hostname of the system for which to generate the report. When left blank, this VI generates a report for the local system.
- **output filename** specifies the filename of the generated report. You must have the correct extension for the type of report to generate (.xml, .htm, .html, or .zip).
- overwrite? (F) is a Boolean control that specifies whether the VI should overwrite an output file if it already exists.
- report type specifies the type of report to generate (XML <0>, HTML <1>, Technical Support <2>).
- error in (no error) can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs. Right-click the error in control on the front panel and select Explain Error or Explain Warning from the shortcut menu for more information about the error.
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Status Codes

This help topic contains error codes returned by the MAX Configuration API. If an error condition occurs during a call to one of the MAX Configuration API functions, the return value status contains the returned error code.

Defined Constant	Value	Description
NIMAXError_PermissionDenied	-2147220560	Unable to write to Permission denied
NIMAXError_SystemNotFound	-2147220559	Unable to connect specified system. the system is online.
NIMAXError_TransformFailed	-2147220558	Error running tran generate report.
NIMAXError_NotInstalled	-2147220557	Unable to find NI I system. Please re
NIMAXError_LaunchFailure	-2147220556	Unexpected error nimax.exe.
NIMAXError_MissingTransform	-2147220554	Unable to find XS to generate report
NIMAXError_IncorrectExtension	-2147220553	Incorrect report filpprovided.
NIMAXError_FileReadOnly	-2147220552	Report file is read to generate report
NIMAXError_ReportOverwrite	-2147220551	Report file exists a NIMAX_FailIfOve flag was set.
NIMAXError_DirectoryError	-2147220550	Error creating dire report files.
NIMAXError_InvalidArgument	-2147024809	Invalid argument (cannot be the san product must be b valid entry)
NIMAXError_CannotOpenFile	-2147220480	Error opening a fil

NIMAXError_InsufficientPermissions	-2147220479	The object cannot accessed becausi insufficient permis
NIMAXError_NCECopierFailed	-2147220478	Error with the obj€
NIMAXError_FileOperationFailed	-2147220477	Error performing ε operation
NIMAXError_NameCollisionError	-2147220476	Names from one perpert have collideranother product e
NIMAXError_UnexpectedError	-2147220475	Unexpected error occurred
NIMAXError_NCENoStreamError	-2147220474	The product experits stream for improduct not give it or did not export a st
NIMAXError_NCECompressionError	-2147220473	Error compressing decompressing file
NIMAXError_NCEStreamReadError	-2147220472	Error reading from
NIMAXError_NCEStreamWriteError	-2147220471	Error writing to a s
NIMAXError_NCEStreamSeekError	-2147220470	Error seeking to a stream
NIMAXError_NCERepoNotReady	-2147220469	Repository not rea exported
NIMAXError_NCERepoInvalid	-2147220468	The file or stream import the reposition not a valid reposit
NIMAXError_NCERepoIncompat	-2147220467	The repository wa with a newer versi than what is on th machine
NIMAXError_NCENoImportStorage	-2147220466	The import storag be opened
NIMAXError_NCENoExportStorage	-2147220465	The export storag be created

NIMAXError_NCENoObjCopier	-2147220464	The object copier created
NIMAXError_CopyInProgress	-2147220463	A copy operation i progress
NIMAXError_FileNotRecognized	-2147220462	The custom file do belong to a given expert
NIMAXError_SystemNotSupported	-2147220461	A specified systen supported by this
NIMAXError_SystemNotReachable	-2147220460	A specified systen presumably support network errors preconnection
NIMAXError_ProductSoftwareNotInstalled	-2147220459	The remote NI Re target was reache product is not inst
NIMAXError_ProductSoftwareTooOld	-2147220458	The product is ins remote NI Real-Ti but is too old
NIMAXError_ProductSoftwareTooNew	-2147220457	The product is ins remote NI Real-Ti but is too new
NIMAXError_DataTooOld	-2147220456	The import data is (product is not bac compatible with the
NIMAXError_DataTooNew	-2147220455	The import data is (product is not for compatible with the
NIMAXError_NoItemsToCopy	-2147220454	The operation fails no source items w
NIMAXError_OrphanItems	-2147220453	The operation faile some items were
NIMAXError_DirtyItems	-2147220452	The operation faile some items were

not saved

NIMAXError_FileOverwrite	-2147220451	The operation fail would overwrite a
NIMAXError_ItemOverwrite	-2147220450	The operation fails would overwrite its
NIMAXError_MissingDependency	-2147220449	The operation fails of missing depend
NIMAXError_Timeout	-2147220448	The operation time
NIMAXError_OperationCanceled	-2147220447	The operation was by the client
NIMAXError_WarningConflicts	-2147220446	The operation fails of warning conflict
NIMAXError_ErrorConflicts	-2147220445	The operation faile of conflicts, in gen
NIMAXError_ItemsRequireUserInput	-2147220444	The operation fails of unresolved con requiring user inpu
NIMAXError_ProductExpertNotReady	-2147220443	A product is not reaccept the specific destination, but m ready in the future
NIMAXError_OrphanFiles	-2147220442	The operation fails some files were o
NIMAXError_IsConst		Caller called a normethod on an objection
NIMAXError_UnsupportedProductMode	-2147220440	A product does no attempted copy m merge to file

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	<u> </u>
Office	Telephone Number
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Austria	43 662 457990-0
Belgium	32 (0) 2 757 0020
Brazil	55 11 3262 3599
Canada	800 433 3488
China	86 21 5050 9800
Czech Republic	420 224 235 774
Denmark	45 45 76 26 00
Finland	385 (0) 9 725 72511
France	33 (0) 1 57 66 24 24
Germany	49 89 7413130
India	91 80 41190000
Israel	972 0 3 6393737
Italy	39 02 413091
Japan	81 3 5472 2970
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Lebanon	961 (0) 1 33 28 28
Malaysia	1800 887710
Mexico	01 800 010 0793
Netherlands	31 (0) 348 433 466
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Norway	47 (0) 66 90 76 60
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Portugal	351 210 311 210
Russia	7 495 783 6851
Singapore	1800 226 5886
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South Africa	27 0 11 805 8197
Spain	34 91 640 0085
Sweden	46 (0) 8 587 895 00
Switzerland	41 56 2005151
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