



NS-DK 5.00

Introduction

The purpose of this Nat System document is to introduce the orientation of developments in NS-DK version 5.00 available since May 2006.

You will find in this release description:

- Elements relating to the implementation of Nat System's product strategy.
- A summary of the new functionalities offered in NS-DK 5.00
- A list of configurations and platforms supported by NS-DK 5.00
- A list of fixed bugs.

Every effort has been made to ensure the validity and accuracy of the information contained in this document. However, out of a continuing concern for quality and reliability, and for technical, marketing or timing reasons, it is possible that we will have to refine the content in the weeks to come. For this reason, this document cannot give rise to liability on the part of Nat System and does not constitute, therefore, a contractual commitment.

Aim of the version

Nat System's purpose is to offer its customers a better Return on Investment thanks to a high level of durability of their applications investment.

Today, gains made due to the operating and depreciation durability of NS-DK applications produced by our customers gives them a certain competitive advantage.

In the context of its constant search to offer the best tools on the market, Nat System is orienting changes to the next version of its NS-DK product in two major directions:

- To improve durability by supporting new technologies and by enabling many existing NS-DK applications to run under the new architectures with a minimum of changes.
- To increase the productivity of these tools by a revision of NS-DK's graphical interface. These changes in no way threaten our commitment to upwards binary compatibility: existing code will not need to be changed to continue to operate as described in existing documentation.

The new functionalities of NS-DK focus on:

- Modification of the tool interface to further increase productivity and offer developers a more user-friendly environment.
- Suppression of a number of historical limits.
- Upgrade of the NCL language.
- Upgrade of the NCL editor.
- New graphic controls and new display options.
- Better support of the ActiveX.
- Improvement of generation and debugging.
- Improvement of the Web Services interfaces.
- Support of new databases namely :
 - Oracle 10.2(10g) and Instant Client
 - DB2 8.2
 - Sybase 15
- Follow-up of environment upgrades.
- Support for the free compilers and database managers.

Note: The lists below are indicative and only represent a subset of the extension modules supplied with NS-DK 5.00

About

By clicking on the Help/About menu you will immediately see which version you are using:

- For the official or G.A. version you have Version 5.00.

Upgrades of NS-DK 5.00

Modification of the tool interface.

The principle underlying this new design is to exploit the possibilities of existing screens to the maximum by using the spaces available around windows during development.

This allows:

- Easier navigation between the different resources of the projet.
- Better visibility of the properties of the graphical controls.

The workspace is divided into 4 major zones:

- The **menu bars** with their two tool bars at the top.
- The resources **browser** to the left.
- The graphical control **property pane** to the right.
- The **working area** which permits the editing of windows and NCL scripts (libraries and events).

The **shortcuts** have been changed to be more similar to the Microsoft standard.

New XML project format.

At its clients' request Nat System has decided to adopt a more open project format thereby allowing you to eliminate the historical limits linked to the former binary project format. This new format can be read by the users and is better managed by Version control software. Moreover, automatic conversion from the former PRJ format to the new XNP format has been added to NS-DK.

Deleting historical limitations

The 64 KB limitation for NCL (libraries) and SCR (screen) type resources will be removed.

The limit on the NS-DK workspace path has been eliminated; in future you will be able to create a workspace under a directory with a long name containing blanks such as:

C:\Documents and Settings\My documents.

Enhancement of the NCL language.

NCL language will evolve thanks to the introduction of new APIs as well as new types.

New DynStr type

This new type will permit the definition of character strings without their size having to be defined.

The size of the variable will be adapted automatically according to its contents.

The size of the contents is not limited to 255 characters.

The conversion of a DynStr type variable into a CString will be automatic and vice versa.

DynStrs will therefore be usable with functions/instructions taking CString as a parameter. However, certain APIs have been optimized for DynStrs.

Extension of the POS% function

The POS% function will evolve thus allowing to search the position of a character string occurrence in another character string. Search for the nth occurrence from a precise position.

Changes to NCL services

A large number of NS-DK NCL services have parameters defined as INT(4) although in fact they are POINTER.

Version 5.00 corrects this anomaly in order to facilitate future upgrades of your architecture. The behaviour remains unchanged for your Windows 32 bit applications.

Passing parameters to an event

Passing a parameter the size of which is greater than 2 bytes to an event requires it to be broken down into two, 2 byte words prior to its being passed, via the Hiw and Low instructions.

With version 5.00 this prior breakdown will no longer be necessary; it will be possible to use the syntax:

SEND EXECUTED POINTER TO NOMCONTROL

Instead of:

SEND EXECUTED Low POINTER, Hiw POINTER TO NOMCONTROL

This change of syntax is also valid for the instructions POST, OPEN, CALL, etc.

New NCL services

New NCL services will permit the implementation of the.INI format files management.

Upgrade of NSWIN

The NSWIN.NCL service will be extended by functionalities specific to the Windows environments. The following functionalities will be added:

- Management of the Windows Registry in order to implement APIs to access the Windows registry database.
- Management of the position of the mouse pointer in order to provide APIs permitting recovery of the position of the mouse under Windows.
- ATTACHCHILDWINDOW has been improved and allows to resize the 'child windows' dynamically in the parent window by the end user. This allows to produce highly interesting interfaces.

Enhancement of the NCL editor.

The NCL scripts editor (libraries and events) has been improved it allows auto-completion of NCL verbs by pressing the [Ctrl]+spacebar keys.

Graphical controls and display.

Nat System will respond to several client concerns at the level of the NS-DK applications produced. The two areas are:

- A response to the problem of displaying a NS-DK application when there is a change of screen resolution.
- The provision of new controls or new functionality to existing controls.

Control anchoring

When a NS-DK application is being run on large screens, the user often expects to see more information when he resizes the application window.

He also wants the controls to remain attached globally in relation to the upper left-hand corner.

In order to permit this, Nat System is offering the option to “anchor” a control in NS-DK 5.00.

NS-ScreenExploser

This module responds to another issue: the size of characters becomes too small for users when you change screen or machine.

This module lets you, via configuration of the NSLIB.INI file, change the size of the various NS-DK controls: controls such as CheckBox or RadioButton which do not change size with anchoring are impacted by ScreenExploser.

The size of the characters is changed. You do not see more information, but it is larger.

Redefinition of the graphical origin

With the screen upgrades some clients want to split their screen in various zones so that the NS-DK application runs in one of these zones. It is currently necessary to update one window at a time in order to modify the origin of the windows whose position is relative to Windows office.

In NS-DK 5.00, it is now possible to redefine the position of the desktop origin (0,0) for an NS-DK application.

Control List

The SheetBox control lets you create simple lists (like a ListBox) but also lists in tree format.

This control is changing with version 5.00: it will be possible to define via its properties box:

- Title colours
- The colour of even and odd lines
- The colour of even and odd columns.
- To fix one or more columns to the left.
- To define an on-line entry format for each column.

In addition, it will be possible to define via programming:

- The colour of a cell.
- The option for a user to move columns via Drag & Drop.
- The option to sort a column by clicking on the column title.

Addition of external menus.

Version 5.00 of NS-DK introduces a new type of resources: external menus. It is now possible to reuse these resources via the projects and leave menu management to the new API (addition of bitmaps for the menu item, toolbar management and menu merger for MDI applications) and runtime.

Generation and debugging improvements.

Developments in NS-DK version 5.00 are oriented according to two directions:

- Optimization of the generator in order to support 64-bit targets.
- Simplification of debugging operations.

Automatic trace generator

NS-DK 5.00 will provide developers with a new generation option which will permit automatic generation of traces during a call to a function/instruction and its exit, as well as the entry and exit of an event.

The developer will be able to follow the progress of the execution of his application.

NS-Debugmem

This utility will be provided in version 5.00. It lets you detect memory leaks during execution of an NS-DK application.

Memory leaks are detected independently of their impact on execution. it will be possible to correct stability problems simply.

Optimisation for 64 bits

Generation is changed so as to become compatible with 64-bit targets.

Certain automatic transtyping mechanisms taken care of by the generator have thus been improved.

Improvement of the Web Services interface

The Web Services import assistant was introduced with NS-DK3.00. NS-DK 5.00 improves and simplifies the use of this interface by using the new options offered by the NCL language.

Nat System also commercialises a Web Service publication service based on existing NCL Libraries.

Support of new databases

- An effort has been made to support new versions of the most common databases. Indeed this new version will allow you to work with the same facility with Oracle 10.2, DB2 8.2, Sybase 15.
- It is now possible to use an Instant Client type connection to Oracle 10 g which will simplify the deployment process.
- In addition to MySQL, it is also possible to use the Express (free) versions of the following databases: Oracle, DB2, Sybase, Sql Server.

Support of new configurations

- This version was successfully tested on the new SP2 version of Windows XP.
- A new graphic target Linux KDE on Red Hat Enterprise version 3.0 was also tested with success

Free support of compilers and database engines

- At the request of its clients and in order to reduce the cost of development budget Nat System has validated the use of Microsoft's free compiler, i.e. the Visual C++ toolkit.
- Nat System also successfully tested the above-mentioned free databases

NB: The technical bulletin of NS-DK 3.00, describing all the improvements and extensions developed for NS-DK 3.00 and integrated in NS-DK 5.00, is available on the enclosed CD.

Supported configurations

Note that Nat System only guarantees the support and compatibility of the environments listed below.

NS-DK 5.00 : development environment

The following 32 bit operating systems are supported:

- Windows 2000 service pack 4
- Windows XP service pack 1 and pack 2

The compilers supported are:

- Microsoft Visual Studio 98
- Microsoft Visual Studio 2003
- Microsoft Visual Studio 2005
- Microsoft C++ Compiler Toolkit (free).

NS-DK 5.00 : client environment

List of compatibilities and configurations supported by NS-DK client 5.00.

Windows NT4 SP6a, 98 SE

The following DBMS pilots are supported:

- DB2 : 6.1, 7.2
- Oracle version 8i : 8.1.7
- Oracle version 9i : 9.0.1
- Oracle version 9i release 2 : 9.2.0
- Sql Server : 7.0, 2000
- ODBC 3.51
- Sybase 12.5.3, 15.0
- MySql 4.0

Windows 2000 SP4

The following DBMS pilots are supported:

- DB2 : 6.1, 7.2, 8.2
- Oracle version 8i : 8.1.7
- Oracle version 9i : 9.0.1
- Oracle version 9i release 2 : 9.2.0
- Oracle version 10.1
- Oracle version 10.2
- SQL Server : 7.0, 2000
- ODBC 3.51
- Sybase 12.5.3, 15
- MySql 4.0
- IConnect 2.5.TC1 for Informix 9.4

Windows XP (32 bits)

The following DBMS pilots are supported:

- DB2 7.2, 8.2
- Oracle version 9i : 9.0.1
- Oracle version 9i release 2 : 9.2.0
- Oracle version 10.1
- Oracle version 10.2
- Sql Server 2000
- ODBC 3.51
- Sybase 12.5.3 , 15
- MySql 4.0

Linux RedHat Enterprise 3

The following DBMS pilots are supported:

- Oracle version 8i : 8.1.7
- Oracle version 9i : 9.0.1
- Oracle version 9i release 2 : 9.2.0
- Oracle version 10.1
- Oracle version 10.2
- Mysql 3.2

The supported compiler is:

- GCC (GNU Compiler Collection) 3.2.2

Support of third products by their respective editors

- Oracle version 8i is no longer supported by Oracle since end 2004
- Microsoft no longer supports NT since end 2004
- Windows 98 will no longer be supported by Microsoft after June 2006

Product retirement

A version's technical state

The status of each technical state of a version passes successively from "current" to "transition" to "withdrawn".

A technical state starts with the general availability of a major, minor or maintenance version and results in:

- The assignment of "current" status to this version of the product
- The assignment of "transition" status to the previous "current" version of the product
- The assignment of "withdrawn" status to the previous "transition" version of the product

The table below summarizes the respective services guaranteed for the "current", "transition" and "withdrawn" versions of a product.

Sale: technical state available for sale.

Changes: operational coverage of the product changes with the next versions.

Bugs: analysis and correction of bugs is scheduled in current or future versions according to priorities.

Version increments: the product is ported onto new versions of the operating systems.

Use: assistance (helpdesk) is guaranteed by the Hot-Line center.

	Sale	Evolu.	Bugs P=0	BugsP=1,2,3	Version increments	Use
Current	Yes	Yes (1)	Yes	Yes	Yes	Yes
Transit	No	No	Yes	No	No (2)	Yes
Retirée	No	No	No	No	No	No

(1) The current version changes with the next technical state of the product.

(2) In some circumstances, version increments may be symmetrically compatible with the previous technical state in transition.

Nat System supports a version of its products for a minimum period of three years. A version is supported for a minimum period of 1 year as a current version, then for a minimum period of 1 year as a transition version of the product.

Version 1.60 will be withdrawn from the first october 2006.

Version 3.00.2 will be maintained in transition until the release of version 6.00 (non contractual designation) which is planned for the second half of 2007.

Version 5.00 replaces version 3.00.2.



List of fixed bugs in 5.00

ID	Description
7698	calc_put does not function properly
7697	Linux assertion NSPS.PAS, Line : 145
7695	Cab files Download problems in https
7690	Sorting Problem on a listbox with separators
7688	Refresh Problem with Activex
7685	Error DBMG on client: Select too complex -32223
7683	Cells content is concatenated instead of beeing replaced
7682	Colors Problem after DOC_PRINTFILE%
7675	Sql Server the ':' indicating a label is interpreted as host variable
7669	Bad display of listbox lines
7666	Bad display of tooltips in the toolbar
7655	Error 148 : ct_connect(): user api layer: internal Client Library error sybase
7654	Bad display of checkboxes in a classifier control
7653	Impossible to copy text from Outlook Web Access to NS-WP
7643	Assertion 1575 in nsgpi.pas when opening services
7636	mouse wheel does not work with nsw2wps3.dll look
7632	Bad value for constants
7620	I would like to set an input filter with SHEET_SETCOLUMNNDATA
7618	Cannot insert a crystalreport active'x from business object
7617	Trap with NSW2MS2K
7614	the debug check box is not unchecked
7611	Bad display with the instruction DOC_SETLIKEPRINTER for Ns-wp
7610	Several ncl functions which manage strings are limited to 255 characters
7609	Bad generation from webservices
7603	short cuts in combo boxes do not work with swedish specials characters
7599	Cannot insert a java bean active'x in a dialog box
7591	short cuts in combo boxes do not work with danish specials characters
7588	The NS_FUNCTION ROWCOUNT returns 0 after an SQL_EXEC_INSERT with oracle 8.0
7586	Activatewindow does not run under Xp sp2
7582	we should deliver NSo2VTYP dll, NCLand LIB with NSDK
7579	Cannot see the bitmap when the preload is not used
7578	Exception during a kill focus from a window
7577	Cannot update a project from NSHELPWRITTER 1.55 to 3.00
7576	Try desalloc a bad pointer, size=27 value=1004FA09h
7575	XML, '&' character and escape sequence
7571	Nsdesign should start with NSdesign.hlp
7570	Nsdesign Help pulldown menu is far from perfect
7566	It misses the constants ck_date% and ck_time% for nscal
7564	generator returns an error when a static text length is greater than 251
7560	wrong generated java code when function parameter or segment fields have %,\$
7559	Constant LVM_SORTITEMSEX is not present in nswcc.ncl
7556	the instruction openh does not run with an active'x (ocx)
7555	Cannot use clob with the driver oracle 8i
7554	cannot see picture button bitmap when in a template whose initcontext is coded
7543	mysql : with odbc syntax error when a select query contains a (
7541	since 3.00 we get a beep when we activate a shortcut
7540	Difference between Natstar and Dot net for the control date time picker.
7538	The borders are lost with CALC_SAVE
7537	ocx_active_key_messages doubles the key pressed in an applet
7536	nwx_parser_new twice produces a trap
7525	Trap when opening a dialog with a picture button
7522	oracle password cannot contains a '!
7521	exception when cdata section in xml buffer sent to a java web service
7519	Webservices : Pb when i include accent characters in my description
7516	The event DTN_CHANGEDATETIME is not notified under XP for a date time picker

7513	If you import the atached xml file you get the attached error log trace.txt
7505	Bad refresh for the combo box
7504	Difference if we insert an empty cstring to the sybase database
7501	The backspace or the cursors move (or erase) 2 characters at the same time
7497	Keyboard shortcuts for Tab folder (classifier) only work in last opened window
7494	Classifier: implement AUTOWIDTH, TABINDENT and BOLD dynamic parameters
7493	cannot set a user/password with NS_SOAPHTTP_SET_PROXY
7492	Client WebServices does not import a service with a parameter of the same name
7483	the string\$ lost the sign with a specific format
7480	The wsdl URI has already been specified , list return code:1
7477	trap when you load a lisbox with lines containing integers
7475	If you migrate an multi taget NSDK project you get a problem
7474	REPORT_INFO% returns always the unit in pixel
7472	REPORT_GETCOLUMN\$ returns nothing
7469	ODBC connexion without defining a DSN
7468	if you insert more than one line in a MLE the Vertical Scrollbar is enabled
7461	compilation error due to nswccapi.h
7460	a refto seems to be null but it is not
7459	Error 32120:NSSQLE120 ** INVALID NCL TYPE FOR ITEM
7447	the web services dialog includes a push buton called List Service >>
7446	When I import 2 webservices and Use the same prefix I get Problems
7445	cannot see the bitmap of the picture button when we check Preload
7427	anomalous size of the focus on a radio-buttons control
7285	Want to block all warnings from Oracle
7200	icon of a window is not shown in interpreted mode
7176	We should mention that when we use DDE events we should not use timer 1
7073	Problem with combo box with selection
6989	compiler not found when path is greater than 255 chatacters
6677	limit : maximum size for a bitmap is 64ko
6658	Tabulation problem with OCX.
6484	Tabulation problem with Tabs contol
6464	Wrong event order with NSTEST, and loss of parameters.
6081	IfDate% function returns true% if Date is empty or empty string
2705	leading blanks are not saved in nscalc format
2704	nsacalc sheet badly paint when some line height is set to zero
2703	NSWP2/P ERROR HBD ID 1966(ox6)
2698	Error 12 is returned if the file is not found by t_append%
2697	CALC_SCROLL_UP erases the unselected lines
2696	calc_setheading insert a blank line
2695	nsreport is no longer a report editor it's a file editor now !!!
2694	Genration error when lines terminated by LF (or CR) only are pasted into a
2693	When an MLE is only one line high, cannot scroll by moving the cusror in the
2692	Wrong MLE default bacground color in NS-Design
2691	Exception when changing border kind of a dialog containing an XMLE
2690	Exception on Template containing a Picture Button
2689	mysql : sql_exec ns_function listcolumns :c1\$, :c2\$ does not work
2685	We want to be able to parametrise the colors in NSDK
2684	bad position for nsreport child window.
2683	Trap under Win98 with treeview
2682	Specific Printing bug
2680	In Sheet Tree Box, Horizontal Scroll Bar doesn't permit to see last characters
2679	Cannot print a pdf file with adobe 6.0 and save it without the message box
2678	Change the font dynamically on a combobox, its size is not adjusted anymore
2677	dynamic menu : trap when insert two pulldown menus
2675	wrong function parameter value when function is in another dll
2674	cannot print code in nsdk 3.00 and windows 98
2673	picture button bitmap not shown when preload is checked and is in a template
2672	assertion when paste from nswp to nswp in NSWPFORM 2138
2670	The classifier does not have the nbrows in dynamic parameter

2666	want to manage https with nshttp library
2665	shortcut and dynamic menu
2664	Bad refresh with the functions TAB_ADD_TAB and TAB_DEL_TAB for the classifier
2662	Erreur avec NSTest lors de l'appel fonction passe en parametre
2661	NSStrCmp%
2660	Buf\$(Ind%) ne marche pas si Ind% > 32767
2655	the events associated with the menu are not working under xp with cross-system
2654	Problem sorting in ascending mode with a listbox control
2653	NSW2Sort : QSort and comparaison de chaines accentuees
2651	Disksize% and diskfree% return wrong value
2650	cannot be prevented from using XP look
2649	Cannot copy and paste from office XP to NS-WP
2647	With NSDBR, ALTER TABLE returns error SQLEX-022
2645	Error nsgpi/p 1234 with the function GetPathNameWithRelief\$
2644	Sheet Tree Box réinsertion de bitmaps après destruction des lignes
2643	Sheet Tree Box STV_DETACH%
2642	CB + Tabulations + DefaultBackGround + Disabled
2641	Evolution SheetTreeBox : STV_GetColNumberFromX
2640	Visibilité de la derniere colonne d'une SheetTreeBox
2639	Sheet Box Info
2637	SVT_SetCellBitmap KO for Line% > 0
2635	Check Ind% = UnknownFunction%()
2634	Classifiers and MultiTarget projects are incompatible
2633	TAB_SETSELECTABLE_TAB does lock the controls of the tab dialog
2630	Dynamic Background color for a classifier does not behave correctly
2610	GetPathName\$ tronque le nom complet du fichier sélectionné
2601	Manque NSMisc : GETDESKTOP*%
2574	MB_SYSTEM% CONSTANT is obsolete
2510	Lock d'un WCC
2502	NEW d'une constante en dur donne un warning a la compilation
2434	Getdir\$ return uppercased strings in 1.56
2406	invalid resource : if a file for combobox init start with a number
2370	C generator : pb with index of segment.
2307	Problem using instruction change hdlwnd% to x,y,w,h
2293	WITH SOME WIDTH, BORDER OF CLASSIFIER BADLY DRAWING
2292	NOT CORRECT DRAW OF A CLASSIFIER IF THE SIZE IS REDUCED
2290	HELP ON THE INFO BOX FOR A TABS HAS NO EFFECT
2170	POINTER Type can not be used with instruction UnloadDll nor GetProc
1801	No help on line for new 1.53 events and instructions
1379	NS-Design 1.53: 5/5 checks all resources
1081	A bitmap with 65535 colors badly displayed in test and binary modes
915	No more one hlpinitialize in same time...
839	Bug in the documentation of SubclassCallBack
831	NSFEXE Startexecute2% On Line Help example incorrect
806	INTEGER is replaced by INT(o) in the help field of NS-Design event box
763	CREATEBMP% does not evaluate environment variables all OS
663	Unsupported syntax for INVALIDATE (Documentation error)
365	B-940622/12--Set Font de NS-Design disable after selection of a button
213	B-940720/02--Bug de doc sur MB_HELP% (obsolete)

NS-DK is a registered trademark of Nat System.

All other trademarks mentioned in this document are registered trademarks of their respective companies.