Date: 2016-01-09
Patch Name: WNTK4HRB_UpgradepatchesYear2015_Build20160109.exe

This is a global update that summerizes all enhancements & patches released during year 2015.

It only concerns **NTK-Premium Edition v1.14.P.0** originally installed from:
Setup_NTK_PREM_1.14P.0_Autumn14_Build20141018-0357.Exe

Special Notes & Recommendations:

A/ Prior to apply this patch, we strongly recommend you to make a backup copy of your C:\WNTK4HRB.

B/ This patch contains the new v2.5 of NTKdBU in which major structural changes have been done.
Hence, in order to avoid any conflicts with any previous NTKdBU v2.x, we strongly invite you (prior to run the patch setup) to remove manually the .\NTKdBU folder and its subfolders from your working NTK-Platform.

FYI: NTKdBU is located into parent directory: C:\WNTK4HRB\NTKAddon\

C/ This patch must be apply over your existing NTK platform: C:\WNTK4HRB\

To do so, just follow steps below:

1. Run the **WNTK4HRB_UpgradepatchesYear2015_Build20160108.exe** setup;
2. Select a temporary destination folder or keep on using with default setting;
3. Click the **'Start'** button for extracting files;
4. Open the destination folder previously choosen, Select all files & subfolders (Ctrl-A) - Copy the selection (Ctrl-C) - then, Move to your C:\WNTK4HRB\ installation and Paste the selection content over existing data (Ctrl-V).

SO, WHAT'S NEW?

As usual, many fixes and lot a new features have been implemented to the whole NTK-Framework, as well as the creation of new manuals and update of existing pdf documentations.

Below are some of the most significant, among others..........

***** .\CONTRIBS**
- OSVEREX.PRG GetWinVer() enhancements:
        + Added RtlGetVersion() wrapper
        + Added support for correct detection of
         WIN10 & greater, SERVER 2012 & SERVER 2016.

- PING.PRG (New tutorial) Based on the NTK_PING() API, this contrib shows how to verify that a particular IP address or hostname (local or through the web) exists and can accept requests.

*** .\CONTRIBS\NTKAdoRDD
- Improved MySql support. Fixes & Enhancements regarding Reccount & RecNo methods. Now both

methods return a correct value for the current recordset. Even when the ODBC driver doesn't implement/emulate the AdoDB's RecCount & AbsolutePosition APIs, or simply goes crazy! (see ado_reccount() & ado_recid() APIs in AdoRddNtk.prg)

- Added New support for MS-Excel .XLSX files and MS-Access .accdb files.
(see folder: .\contribs\AdoRddNtk\ )
e.g.

```
. . .
cSrcFileXLS := "Client.xlsx"
cSrcTableName := "[" +"Sheet$1" +"]"

// ---- Open the XLS or XLSX source file via the specified RDD
USE (cSrcFileXLS) VIA "ADORDD" TABLE AllTrim(cSrcTableName) NEW ALIAS Client SHARED
. . .
```
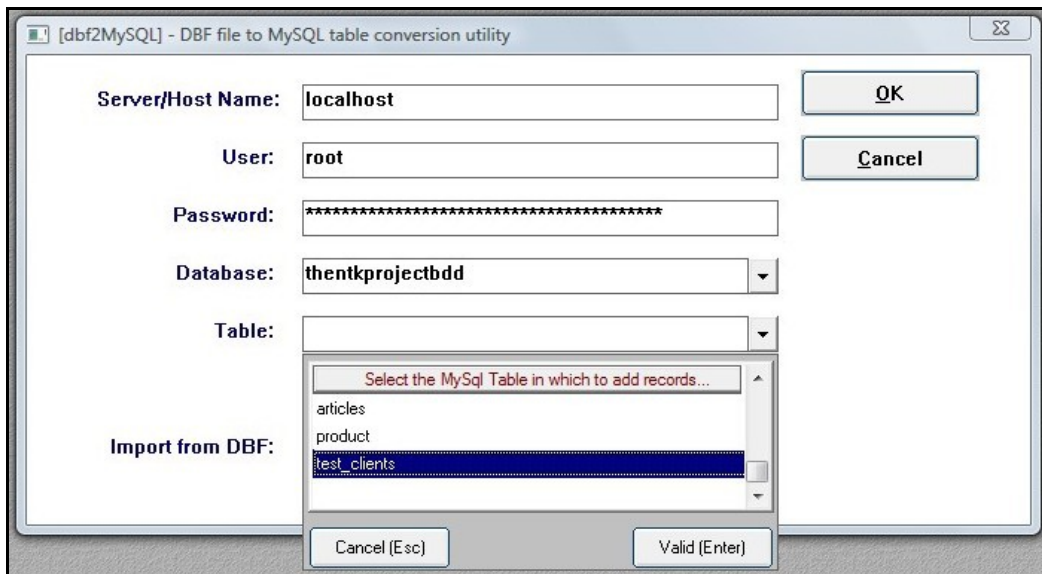
*** .\CONTRIBS\mySQL\ (New contribution)

This new contrib brings to the NTK developer the ability to handle tables of a mySQL database via a direct/native access. No need of an ODBC driver.
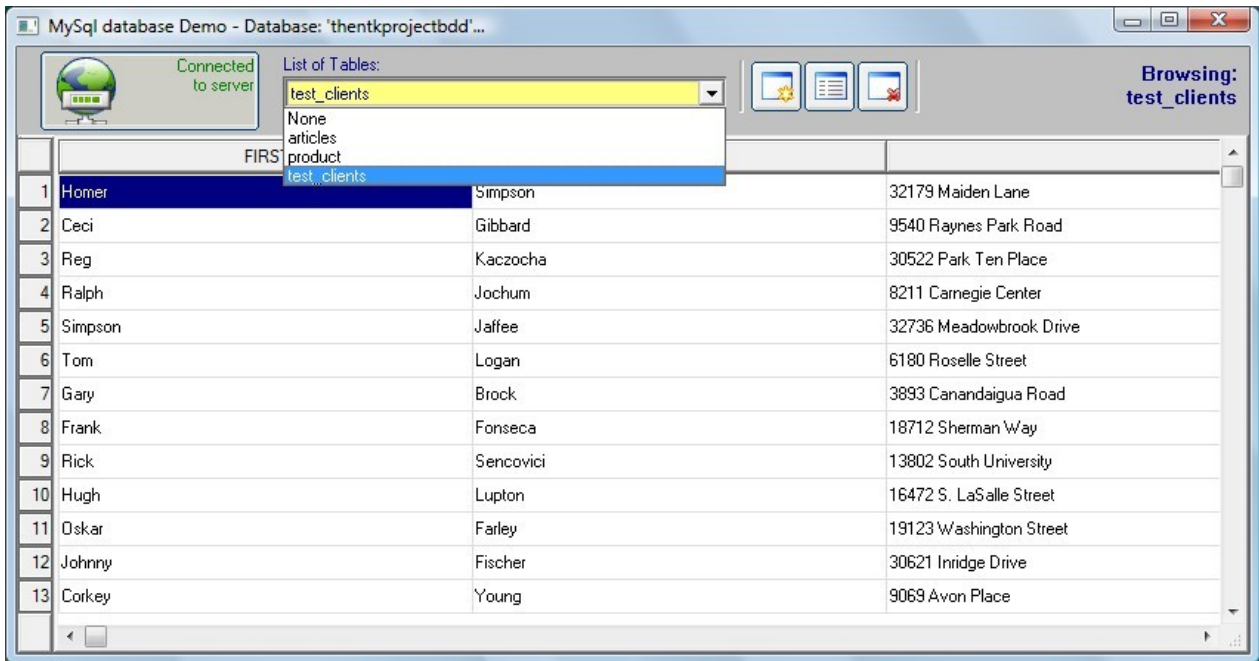
Content:
- wLibMySql.prg A library of functions for an easy access to MySql APIs via LIBMYSQL.LIB/.DLL

- Dbf2MySQL.prg A powerful DB utility capable to export records of a DBF to any table of a mySQL DB. Btw, it is also able to create the MySQL table from the DBF Structure when this latter does not exist. Moreover, Dbf2MySQL can be run either via the command line (silent mode driven by options) or using its built-in GUI.

- Test1.prg & Test2.prg A couple of tutorials that will help you to feel comfortable with usage
  of the dataset concept, and also to learn more about:
    + How to connect to a MySql Server
    + How to Get the list of DBs for the specified MySql Server/Host...
    + How to select a particular MySql database
    + How to create a new table within a MySql DB...
    + How to Get the list of tables for the specified MySql DB...
    + How to Perform a MySql query on the selected table, then generating
     a temporary DBF dataset with the matching records.
    + How to Browse the temporary DBF dataset. (GUI mode)
    + How to make a MySql query for reading fields data of a specific record.
    + How to make a MySql query for deleting a specific record.
    + How to make a MySql query for replacing field values of a specific record.

N.B.

As this MySQL contribution for NTK is based upon TMySQL.PRG, which is itself
part of the xHarbour's MYSQL contrib, you'll also have to upgrade your XHARBOUR.
To do so, just follow steps below:

1. Download the **XHRB1.2.1_CONTRIB_Patch20160801.exe** from your NTKWIP space
2. Uncompress the whole patch into the folder of your choice
3. Manually Copy-Paste the ..\CONTRIB\MYSQL\ subfolder and its content into your
   C:\XHARBOUR\CONTRIB\ directory
4. Manually Copy-Paste the ..\LIB\MySQL.lib file (stamped 04/01/2016 14:15) into
   your C:\XHARBOUR\LIB\ directory.

*** .\CONTRIBS\SnapShot

A brand new tutorial that shows how to take a picture of the whole screen,
a specified window, or a particular area, then save it to a .BMP file.

- SaveBmp.prg - Show usage of the new NTK_SaveBitmap() core Api.
- Snapshot.prg – A screen graber utility + Full source code of functions GrabFullScreen() & GrabWindow()

*** .\CONTRIBS\WComLib (The library for serial communications)
New functions added:
Com_Count(nPort) -> nTotalCharacters (in the input buffer),
          or a negative value if failed.
Com_GetStat(nPort) -> aCOMSTAT or Nil if failed. Retrieve status information
             about thespecified communications device.

See .\contribs\wcomlib\wcomlib.prg

*** NTKdBU 2.5 (New major version)
- Creation of a brand new 'Tahiti' visual theme/skin (mainly for Polynesian people who insisted to get a new theme rather based on gradients of blue color) ;-)

- Minors corrections & lot of enhancements has been done to the FRM Visual Designer (labels & reports) and its preview module

- Many improvements regarding the pan, zoom & pintch (Touch interface) facilities offered by the built-in FRM preview module.

- Enhanced the Touch support for Win10 devices. Particularly when user changes the device orientation.

- Creation of a brand new OPEN menu proposing a "Browse' option and an additional Popmenu that contains the list of quick shortcuts to DBFs recently used .
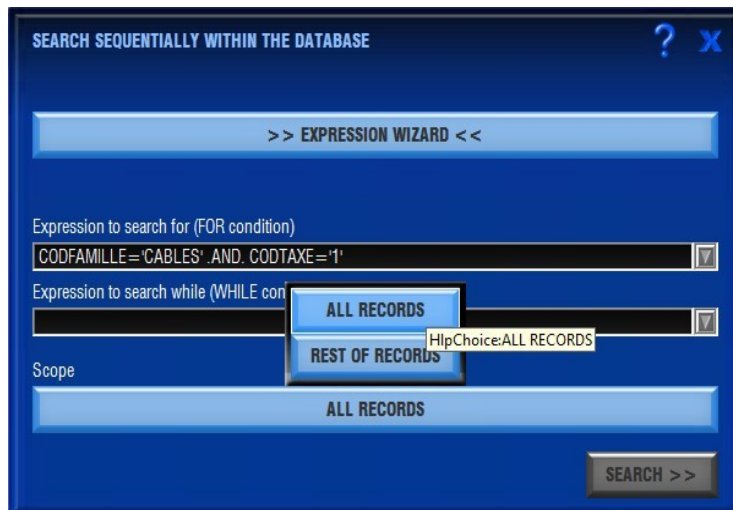

- Added a new REPLACE module. For replacing data concerning a group of records. Capability to define: a FOR or/and a WHILE condition, and the scope of the action.
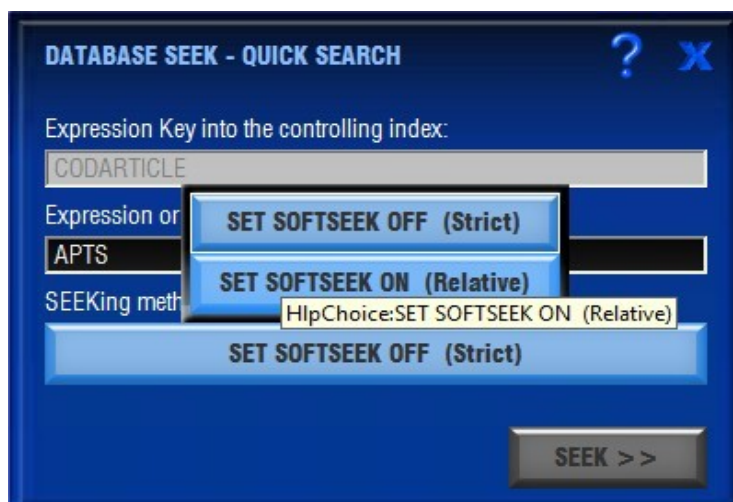 Possibility or not to use the Expression-Wizard & the Field-Explorer to automatically write an expression. (particularly handy when using NTKdBU with the finger on a tablet/mobile device)

- Added a new LOCATE module. For searching record or group of records corresponding to a particular expression. Capability to define : a FOR or/and a WHILE condition, and the scope of the action. Possibility or not to use the Expression-Wizard & the Field-Explorer to automatically write an expression. Capability to continue the search after hitting the first item matching the condition.
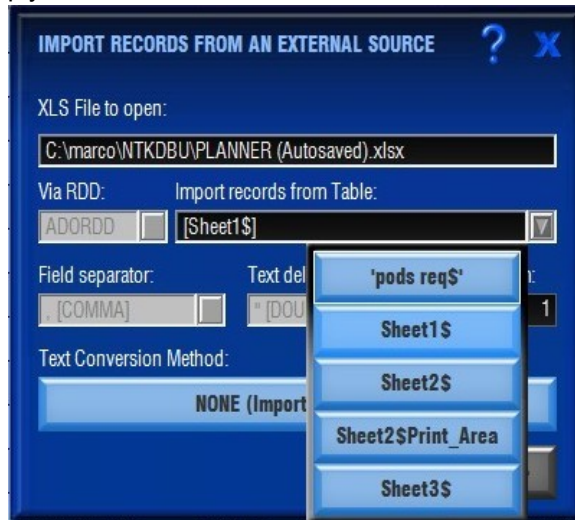

- Added a new SEEK module. For direct seeking a value or expression in the selected index. Capability to specify the SEEKing method : Strict (set softseek off) - or - Relative (set softseek off)

- Added a new IMPORT module. Capability to import data from an external source, into the current DBF.

i.e. CSV or TXT (ascii delimited) file, records from a sheet of a XLS/XLSX document, records from a table stored into a MDB file, or simply records from another DBF file.

- Added capability to allow user to create, manage and save customized views (List or Form, with possibility to select only the wished fields) of the current DBF. Also, if the SET DBU option is enabled in the NTKdBU settings ('Files' tab), next time, the DBF will reopen exactly in the same state it has been left before it closed. (list, form, recno, etc.)

***** .\DOC**
New manuals & Updates for the following Developer's Guides are now available:
- Flist.pdf
- NTKCore_Part1.pdf
- NTKCore_Part2.pdf
- NTKRad.pdf
- NTKReport_DeveloperGuide_fr.pdf (New manual)
- NTKSkin.pdf (New manual)

***** .\NTKRAD**
- DBEdit.PRG A new tutorial that shows how to perfectly mimic the DBedit() Clipper function in the Windows graphical environment. Very useful for migration of old Summer'87 applications.

*** NTKCore.Lib
New functions:
NTK_AnimateWindow()
NTK_LockSetForegroundWindow()
NTK_GetLastActivePopup()
NTK_WindowFromDC()
NTK_GetObjectType()
NTK_GetLogicalDriveStrings()   (Delayed - not fully tested. Release postponed 2016)
NTK_GetDriveType()   (Delayed - not fully tested. Release postponed 2016)
NTK_GetVolumeInformation()   (Delayed - not fully tested. Release postponed 2016)
NTK_FileTimeToSystemTime() (Delayed - not fully tested. Release postponed 2016)
NTK_SystemTimeToFileTime() (Delayed - not fully tested. Release postponed 2016)
NTK_GetTopWindow()
NTK_SaveBitmap()

** NTKRadEx.lib

New functions:

NtkAlert(<cMsg >, <aBtnOpt >, <nhIcon >, <cCaption >, <cColor >) -> nBtn

NtkDbEdit() | DbEdit([< nTop >], [<nLeft >], [< nBottom >], <nRight >] ,;
[< acColumns >] ,;
[< cUserFunction >] ,;
[< acColumnSayPictures > | <cColumnSayPicture >] ,;
[< acColumnHeaders > | <cColumnHeader >]) -> Nil

(See tutorial: \WNTK4HRB\NTKRAD\DBEDIT.PRG)

NtkDispout() | DispOut <exp>, <cDosColor>) -> Nil

NTK_GiveGetCol()
NTK_GiveGetRow()
NTK_GiveGetHeight()
NTK_GiveGetWidth()

NtkSetPos(<nRow>, <nCol>) | SetPos(<nRow>, <nCol>) -> Nil

*** NTKPreviewEngine
- Complete rewamping for Win10 and major improvements in NTKPreviewEngine   (.\NTKAddon\NTKReport\ NTKPreviewtEngine\ )

- Added the new REPORT_PEPREVIEW() function which aims to make a report preview in only one single line of code.
Find out more reading .\NTKAddon\NTKReport\NTKPreviewEngine\Readme.txt

FYI:
NTKPreviewEngine.EXE is a Standalone Print Engine powered by the NTKREPORT.LIB. As as fully autonomous tool (runtime) that embeds the NTKReport/NTKPreview technology, it may help developers or end-users to easily design and perform printings and/or previews of report list, labels, pictures, barcods, pre-printed forms .... without a line of code.

Full Syntax:
```
NTKPreviewEngine.EXE  cDBf  cFrm  lShowGets  cWndTitle  nWndStyle
```

NTKPreviewEngine can be run in command line from a Batch or a Dos-Shell:

```
C:\MyApp\> NTKPreviewEngine .\DBF\Test.dbf  .\FRM\DemoTEST\TEST_BasicLineModeA4.frm
```

- or - can be driven in silent mode by a parent Application i.e. MS-Dos, Windows Console or   GUI:
```
. . .
// Some code here
RUN "c:\MyApp\NTKPreviewEngine.exe" WITH ".\DBF\Test.dbf" ;
".\FRM\DemoTEST\TEST_BasicLineModeA4.frm"
...
```

- also – can be wrapped within your own UDF (see REPORT_PEPREVIEW() below):

```
...
REPORT_PEPREVIEW( hWndP, Nil, "c:\MyApp\Data\Employees.Dbf",;
  "c:\MyApp\Frm\Employees.Frm", .F., "MYAPP - Preview: List of Employees",;
  WS_SYSMENU+WS_MAXIMIZE )
...
```
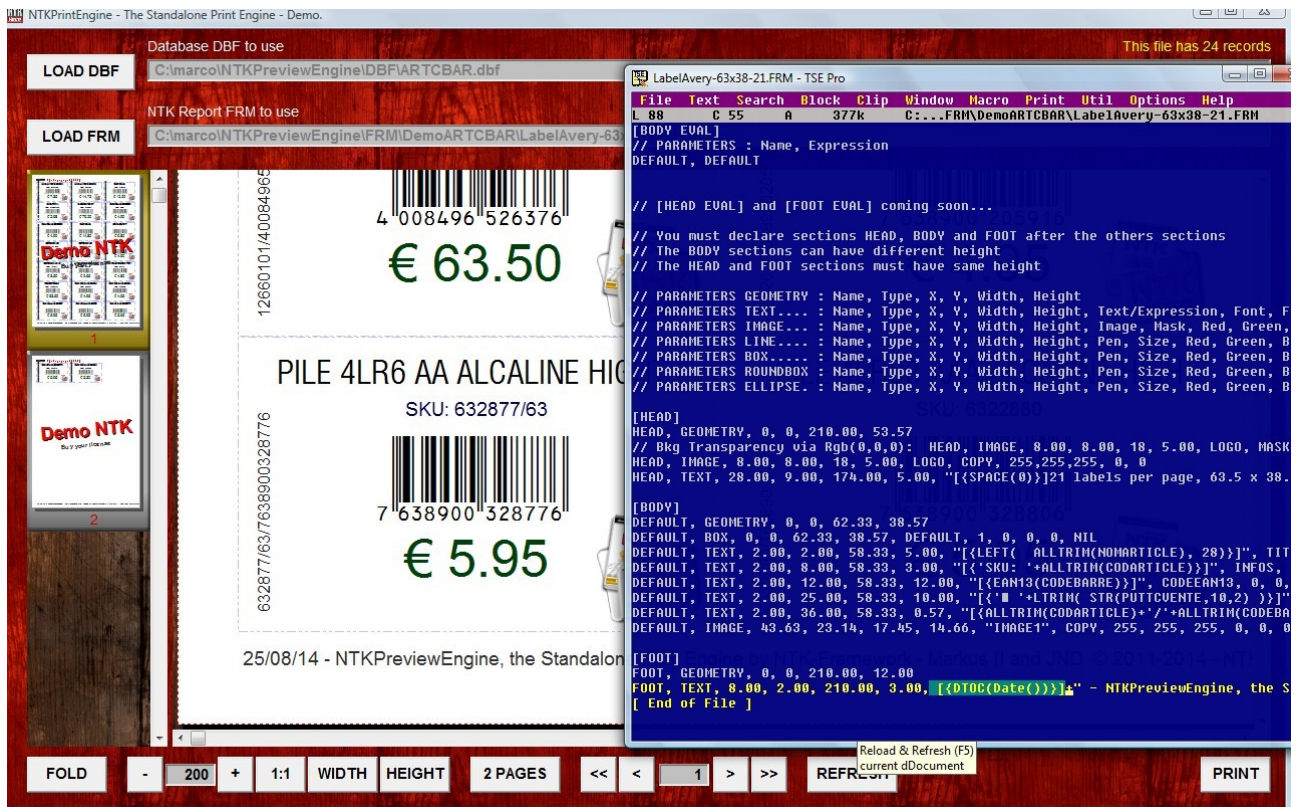
N.B.
.FRM printmasks for NTK are simple ASCII files easily editable via a basic text editor. Furthermore, they can be quickly transformed with a minimum effort into reusable models/templates for another program. So, their use is clearly a serious benefit in terms of productivity & maintainance!

Learn more about how a basic FRM is made, exploring this file:
.\NTKAddon\NTKReport\DemoPView\FRM\DemoTEST_BasicLineModeA4.FRM

Below a few examples of FRM printmasks performed with NTKPreviewEngine.exe:

FRM Mask: Label Avery 63x38x21, EAN13 Barcods – Preview: Single page.

FRM Mask: A4 Invoices - Preview: Single page

FRM Mask: Custom Picture Layout – Preview: Two pages.

*** NTKReport.Lib

- Two new Programmer's guides have been created :
NTKReport_DeveloperGuide_fr.pdf, 31 pages.
NTKReport_FRM-PrintMaskDesigning_fr.pdf, 8 pages

- Many improvements have been made to the ReportEngine object as well as to the built-in PreviewEngine object.

[ReportObject + PreviewObject]
In order to allow developers or advanced users to create & manipulate variables and invoke specific commands directly into the FRM printmask - two new objects have been introduced: (see NTKReport_DeveloperGuide_fr manual)

1. The SET object allows to declare/initialize a variable into the FRM and assign it a new value at any time e.g. in the HEADER, BODY, FOOTER or other sections. Handy for creating subTotals, Totals or GrandTotal vars...

2. The COMMAND object allows to invoke specific commands during the FRM execution. i.e. JUMPTO, NEXT,ENDDRAW, NEWPAGE, STOPPRIN, NEWCOLUMN, NEWLINE, JUMPTO (TOP / BOTTOM / PREVIOUS / NEXT), ETC.

Find out how this works - having a deeper look the following FRM samples:
.\NTKAddon\NTKReport\DemoPView\FRM\DemoTEST_withVARS_A4.FRM
.\NTKAddon\NTKReport\DemoPView\FRM\DemoTEST_withVARSandCMD_A4.FRM

[PreviewObject]
- Enhanced support of Win10 for touch gestures, pan, zoom & pintch

- Added capability to display 2 pages in the preview window and the possibility to swicth from the single page mode to the double page mode, and reverse.

- Several new APIs have been added in order to provide developers a full control to handle the interface of the preview-window, as well as the one of the thumbnail panel/window.
i.e.
RPT_CreateView(sName, hWinParent,....)
RPT_InitView(sName, hDB, sRPT, hOUT)
RPT_InitPagesView(cName)
RPT_DeleteView(cName).
RPT_ZoomPreview(cName, xMode, lReset)
RPT_JumpPreview(cName, xMode)
RPT_ResizePreview(cName, nPosX, nPosY, nWidth, nHeight)
RPT_SelectPages(cName,sMode)
RPT_PrintPages(cName, xMode, sTitle).
RPT_FoldPagesView(cName)
RPT_SwitchModeView(cName)
RPT_MenuView(cName)
RPT_MenuPage(cName)
RPT_ShowWait(cName) // DkGray translucent wait box

- New event/notification messages have been introduced:
WM_RPT_NEWPAGE
WM_RPT_NEWZOOM
WM_RPT_NEWFOLD
WM_RPT_NEWVIEW

Find out how to use them having a look to the source code of the following tutorials:
.\NTKAddon\NTKReport\DemoPView
.\NTKAddon\NTKReport\DemoPViewTouch

- Complete rewamping for Win10 of all the DEMOPVIEW* tutorials. See

.\NTKAddon\NTKReport\DemoPView\
.\NTKAddon\NTKReport\DemoPViewTouch\

FYI:
The NTKPreview layer/object has been developed to be used in association with the NTKReport layer/object in order to provide a true preview of the generated document (evaluation of instructions contained into a FRM printmask with records of a DBF table).

The display of the preview is splitted into two windows: The left side panel that contains the thumbnails of the document pages and the right side panel that shows the current page. NTKPreview allows to select and print any pages of the generated document. It owns a built- in support for gestures & multitouch inputs.

So, you can easily develop fancy reports with preview that take full advantage of touch capabilities brought by modern Windows tablets. i.e. Pan gestures, zoom & pintch with 2 fingers, etc.

Plus, NTKPreview includes full support for the most popular barcodes. i.e.   Code39, Ean8, Ean13, Code2of5, Code128, Datamatrix.
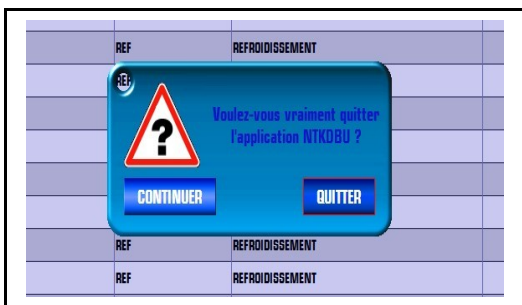

*** NTKSkin.Lib

- Creation of a new programmer's guide: NTKSkin.pdf, 53 pages.

- The NTKSkin library has been enriched with new functions in order to help NTK developers to build modern Applications for new mobile devices:
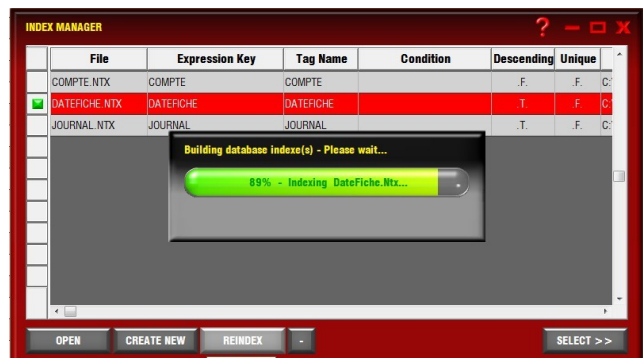
1. A high level graphic style. i.e. Easy Apis for designing of shaped & layered window with translucence,

2. Touch controls pan gestures, zoom & pintch (with a better support for Win10)

3. Responsive Design capabilities i.e. via the simple usage of the SKN_DrawSkin() function   in the onPaint procedure, the whole Apps layout can be self-adjusted to the screen resolution of the tablet, slate or all-in-one device it is running on.

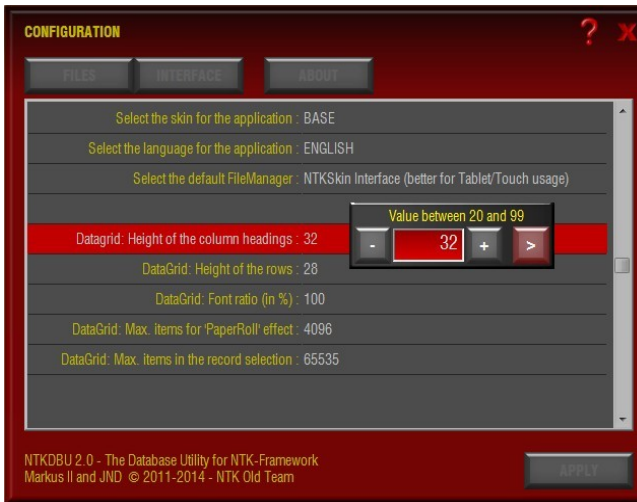FYI: NTKdBU has been fully developed with this technology.

Below some samples of NTKSkin capabilites..
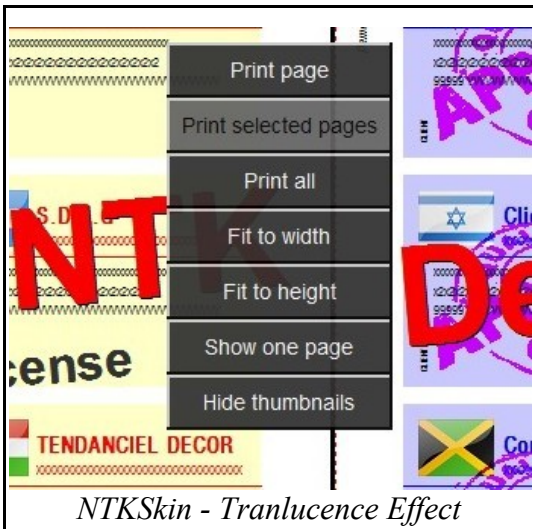

NTKSkin
- Transparency Effect

NTKSkin – Smart Gauge

NTKSkin - Numeric Gadget

NTKSkin - GetOpenFile/GetSaveFile

NTKSkin - Tranlucence Effect

And many more to come. . . Just keep in mind that NTK is a permanent Work In Progress. . .