

All You Need to Know About HCL Notes 64-bit Clients

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Make Your Data Work For You

Host & Speaker







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Before We Start





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Agenda



- A closer look into HCL Notes 64-bit
- Upgrading from Notes 32-bit to Notes 64-bit
- Domino application design challenges
- Third-party Add-in dependencies



A closer look into HCL Notes 64-bit

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- Requested from customers and partners (for a long time)
- I officially heard about 64-bit Notes the first time at IBM Think 2018 in Las Vegas – announced for Notes 10.0.1

Home / IDEAMLC	CT-I-8 / New idea		
883 VOTED	Drastically improve the look and feel of the Not dramatic and modern <mark>, make it 64 bit,</mark> make it ea make it perform properly.	es client, make it sy to upgrade to,	
	Guest • Jul 16 2018 • Under Consideration	Home / NTS-I-41 / Kee S47 VOTED Kee as all mode datal Note	Vew idea ep a modern, strong, efficient Notes Client I "cloud" is around us, as a power user i am fastest with a client and no archive limit. So i need a ern, strong, efficient Notes client [best 64-Bit, as the Designer 64-Bit] dea). For People using bases sorry to say, nothing is better than a local client. Efficiency against the hype all online. Guest • Jul 17 2018 • Shipped

HCL Notes 12.0.2 is now available in 64-bit



Just ~4,5 Years later, we have a 64-bit Notes client

HCL Notes 12.0.2 64bit Multilingual User Interface	416.65MB Nov 11, 2022	Notes_12.0.2_Win_64bit_MUI.exe		
HCL Notes 12.0.2 for Windows 64bit Brazilian Portuguese	771.56MB Nov 10, 2022	Notes_12.0.2_Win_64bit_BPortuguese.exe		
HCL Notes 12.0.2 for Windows 64bit English	691.1MB Nov 08, 2022	Notes 12.0.2 Win 64bit English.exe		
HCL Notes 12.0.2 for Windows 64bit French	771.17MB Nov 10, 2022	Notes_12.0.2_Win_64bit_French.exe		
HCL Notes 12.0.2 for Windows 64bit German	778.12MB Nov 10, 2022	Notes_12.0.2_Win_64bit_German.exe		
HCL Notes 12.0.2 for Windows 64bit Italian	771.17MB Nov 10, 2022	Notes_12.0.2_Win_64bit_Italian.exe		
HCL Notes 12.0.2 for Windows 64bit Japanese	770.69MB Nov 10, 2022	Notes_12.0.2_Win_64bit_Japanese.exe		
HCL Notes 12.0.2 for Windows 64bit Korean HCL Notes 12.0.2 for Windows 64bit Korean	Tuner Files for Notes 12.0.2 fo	or Windows 64bit English	32KB Nov 14, 2022	♣ InstallShieldTuner_Notes_12.0.2_Win64_Eng.itw
+ HCL Notes 12.0.2 for Windows 64bit Simplified Chin + Install Shield	Tuner Files for Notes 12.0.2 fo	or Windows 64bit Multilingual	20.18KB Nov 14, 2022	InstallShieldTuner Notes 12.0.2 Win64 ML.zip
+ HCL Notes 12.0.2 for Windows 64bit Spanish		, i i i i i i i i i i i i i i i i i i i		
HCL Notes 12.0.2 for Windows 64bit Traditional Chil	l bit		1.57MB Nov 08, 2022	▲ NotesPeek64.exe
🗆 + HCL Notes, Designer 12.0.2 for Windows 64bit Braz 🔲 + Notes Install (Cleanup Tool for Notes 64bit		2.91MB Nov 14, 2022	➡ Nice64.exe
HCL Notes, Designer 12.0.2 for Windows 64bit French	1.06GB Nov 11, 2022	Notes_Designer_12.0.2_Win_64bit_French.exe		
HCL Notes, Designer 12.0.2 for Windows 64bit German	1.06GB Nov 11, 2022	Notes_Designer_12.0.2_Win_64bit_German.exe		
HCL Notes, Designer 12.0.2 for Windows 64bit Italian	1.02GB Nov 11, 2022	Notes Designer 12.0.2 Win 64bit Italian.exe		
HCL Notes, Designer 12.0.2 for Windows 64bit Japanese	1.06GB Nov 11, 2022	Notes_Designer_12.0.2_Win_64bit_Japanese.exe		
HCL Notes, Designer 12.0.2 for Windows 64bit Korean	1.06GB Nov 11, 2022	Notes_Designer_12.0.2_Win_64bit_Korean.exe		
HCL Notes, Designer 12.0.2 for Windows 64bit Simplified Chinese	1.05GB Nov 11, 2022	Notes_Designer_12.0.2_Win_64bit_SChinese.exe		
HCL Notes, Designer 12.0.2 for Windows 64bit Spanish	1.02GB Nov 11, 2022	Notes_Designer_12.0.2_Win_64bit_Spanish.exe		
HCL Notes, Designer 12.0.2 for Windows 64bit Traditional Chinese	1.06GB Nov 11, 2022	Notes Designer 12.0.2 Win 64bit TChinese.exe		

Advantages of HCL Notes 64-bit



- It's not the old (and slow) 32-bit Notes any longer
- State of the art technology \rightarrow 64-bit
- From a political point of view, it's now way easier to have HCL Notes as a strategic solution as it was with 32-bit
- As soon as there are only Notes 64-bit clients any longer, there might be other improvements like
 - ▶ 4 GB \rightarrow >18 EB (18 billion GB) or just 16 GB \bigcirc

Changes 32-bit → 64-bit I



This is only a disadvantage: Memory

	JZ-DIL		
>	HCL Notes (32 bit)	0,1%	155,2 MB

JJ L.

→ Citrix, Windows Terminal Server (and VDI)

$+/_{-}$ a factor of 2	64-bit		
	> 脉 HCL Notes	0%	393,6 MB

 Local transaction load unknown or possibly negligible

Name		Status	CPU	Memory
Apps (10)			
> 🧿 Goo	gle Chrome (16)	0,4%	329,6 MB	
> 🚺 HCL	Notes (32 bit)	0,1%	94,3 MB	
> 📵 Micr	osoft PowerPoint	0%	95,0 MB	
> 📫 Micr	osoft Teams (8)		0,9%	318,7 MB

Changes 32-bit \rightarrow 64-bit II



155,2 MB

32-	bit

W HCL Notes (32 bit) 0	,1%
------------------------	-----

Processes	Performance	App history	Startup Use	rs Details Services		
	~					
Name		PID	Status	Username	CPU	Working set (memory)
\\ nlnotes	.exe	22300	Running	fvogler	00	129.928 K
👐 notes2.	exe	26788	Running	fvogler	00	221.772 K
💶 ntaskld	r.exe	564	Running	fvogler	00	31.100 K

	64-bit						> 🐠 HCL Notes	
rozesse	Leistung	Арр	-Verlauf	Autostart	Benutze	r Details	Dienste	
lame	^		PID	Status	В	enutzerna.	CPU	Arbeitssatz (Speicher)
💵 nInotes	.exe		6876	Wird auso	jef p	anagenda	00	207.596 K
Ѡ notes2.	exe		8200	Wird ausg	jef p	anagenda	00	495.448 K
💷 ntaskld	r.exe		11412	Wird ausg	jef p	anagenda	00	20.636 K

Changes 32-bit \rightarrow 64-bit III



Program folder

C:\Program Files (x86)\HCL\Notes → C:\Program Files\HCL\Notes

COM Objects

- https://domino-ideas.hcltechsw.com/ideas/DDXP-I-324
- https://techtalk.gfi.com/32bit-object-64bit-environment/
- https://support.hcltechsw.com/csm?id=kb_article&sysparm_article=KB01015

• Registry

- ► HKEY_LOCAL_MACHINE\SOFTWARE\WOW6432Node\Lotus\Notes → HKEY_LOCAL_MACHINE\SOFTWARE\Lotus\Notes
- Installer(s):
 - ▶ Be careful \rightarrow Notes 32-bit Installer can't detect Notes 64-bit clients

Changes 32-bit \rightarrow 64-bit IV



- NICE64 (nice64.exe)
 - Notes_12.0.2_Win_64bit_English\Utility\NotesCustomizationKit_1_0.zip
 - Can (currently) only detect 64-bit clients "completely"
 - Run nice64.exe first and then nice.exe afterwards
 - A future Nice"96".exe version, which detects and cleans 32- and 64-bit clients, is possible but not decided by HCL yet

🚵 Notes Installer Clean Up 🛛 🗙	📸 Notes Installer Clean Up 🛛 🗙	A Notes Installer Clean Up X	🍰 Notes Installer Clean Up 🛛 🗙
HCL Notes 12.0.1 Rescan Wipe Mode	HCL Notes 12.0.1	HCL Notes 12.0.2 x64	HCL Notes 12.0.2 x64
Version: 12.01.21325 Date Installed: 20220521 Installed Location: Installed from: C: jusers f/krogle ~1.pan \appdata \joca\\temp\pft8a26.tmp Local package: C: WINDOWS\Installer \S8e8546.msi Uninstall Command: MBExec.exe /X(85574708-8EA2-472F-A82F-42675 Size on dik: 1018198 Major Version: 12 Minor Version: 12 Minor Version: 1 Program Location: C: \HCL \viotes\Client\ Data Location: c: \HCL \viotes\Data\	Version: 12.01.21325 Date Installed: 2020521 Installed Location: Installed from: C: jusers (%rogle ~ 1.pan \appdata \u0cal\temp\pft8a26.tmp Local package: C: (WINDOWS \u00f5 shaller \u00e48e846.msi Uninstall Command: MBExec.exe /X(85574708-8EA2-472F-A82F-42675 Size on disk: 1018198 Major Version: 12 Minor Version: 1	Version: 12.02.22194 Date Installed: 20220826 Installed from: C: \users\u00edschimi-1\u00edspdata\u00edschimi-1\u00edspdata\u00edschimi-1\u00edspdata\u00edschimi-1\u00eds	Version: 12.02.22194 Dete Installed: 20220826 Installed: Location: Installed: Coatobin: Installed: Grow: C1;users/admini~1/appdata/local/temp/hcl notes x64\ Local package: C1;WINDOWSUnstaller/9ad218.msi Uninstall Command: MBExec.exe /X(C52F6230-2228-4BC2-8A93-4D95: Size on disk: 688355 Major Version: 12 Minor Version: 2 V
, ☐ Remove all program files ☐ Remove all data files	Remove all program files Remove all data files	☐ Remove all grogram files ☐ Remove all data files	□ Remove all grogram files □ Remove all data files
Remove Quit	Remove Quit	Remove Quit	Remove Quit



Big changes – and as far as I can see – **big challenges**

Here are some HCL Kbase articles about Notes 12.0.2 64-bit:





Is this a showstopper for the HCL Notes 12.0.2 64-Bit? \rightarrow NO

By the way \rightarrow FP1 is upcoming







... for my **production environment** right now?





Upgrading from Notes 32-bit to Notes 64-bit

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In general, we do not recommend in-place upgrades at all. In case of an upgrade of a 32-bit Notes client this isn't even possible!

The following steps are needed to move from:

HCL/IBM Notes 32-bit → HCL Notes 12.0.2 64-bit



Step 1: Do a complete backup of your data directory and notes.ini

Step 2: Use the nice tool to uninstall the existing Notes client. (it is mandatory to use the 32-bit nice.exe)

			Rescall	Wipe Mode
Version: 9.01.132 Date Installed: 20 Installed Location Installed from: C:	94 1221222 ; /users\test\app \WINDOWS\Ins d: MsExec.exe	data Visa	\temp\pft5a61 2a21.msi 8c 7 7761 40 15	.tmp\
Locai package: C: Uninstall Comman Size on disk: 4695 Major Version: 9 Minor Version: 1 Program Location: Data Location: c:	: C:\901\IBM\We 901\IBM\Wotes	otes\ \Data\	5C7-7761-651	9C7C-362E#
Local package: C: Uninstall Comman Size on disk: 4695 Major Version: 9 Minor Version: 1 Program Location: 1 Data Location: c:	:42 : C:\901\IBM\W 901\IBM\Wotes	otes\ \Data\	5077761-658	9C/C-362EF



Step 3: Prepare your data directory.

If you install a multiuser client, the data folder can stay at the old position. But we recommend to move the data folder to the new default location

%LocalAppData%\HCL\Notes\Data

If you moved your aata directory, keep in mind to check your notes.ini for folder and directory changes as well.



Step 4: Install Notes 12.0.2 64-Bit

Pick the prepared folder if needed during the installation.

After installation and notes.ini has been prepared, Notes is ready for a first start.

See here for the "Notes 9.0.x to Notes 12.0.2 64-bit upgrade installation instructions" document:

https://support.hcltechsw.com/csm?id=kb_article&sysparm_article=KB0102196

Upgrading Notes 32-bit to Notes 12.0.2 64-bit V







Upgrading Notes 32-bit to Notes 12.0.2 64-bit VI



Experience all the premium features of MarvelClient Upgrade on 25 PCs for FREE.

You'll get

• A license key

- Unrestricted use on 25 computers*
- Instant access to MarvelClient Upgrade
- Access to our knowledge base

* The 25 computers require internet access for automatic licenses checkout.

Upgrade Now >









Domino application design challenges

Make Your Data Work For You



- Find and add code that compares whether NotesSession.Platform = "Windows/32" → will not work on 64-bit
- Or even LCase\$(Left\$(NotesSession.Platform, 3))="win"

• The latter ensures that the code runs on 64-bit BUT: the code may have to be adapted for 64-bit





- Declare Function Calls
 - Calls of Notes or operating system functions
 - "All" pointer and type variables must be checked and adjusted if necessary
 - ▶ Usually Long (32-bit) \rightarrow Double (64-bit)
 - The good news
 - Almost all of Notes own calls DO NOT have to be changed
 - DB and Window Handles are not pointers
 - The bad news
 - Which calls use pointers \rightarrow Microsoft documentation/Google, call by call
 - Some OS functions still return a double for handles (e.g. GetActiveWindow)
 - However, such values may then have to be passed to other functions via CLng(Var).

LotusScript Code III



Declare Function Calls



- ({|\||"|')win[A-Z\-\/2-6]*({|\||"|')
- declare function.*as long
- end type.*declare function



Declare Function Calls

🔳 Properties 🗙 👼 Events 🗙 👷 Problems 🗙 🚀 Search 🗙			
'declare function' - 379 matches in workspace			
V Us config_dev.nsf [panagenda\config_dev.nsf]			
Y 🗁 Code			\mathbf{v}
🗸 🧽 ScriptLibraries	Progress mornation	L	^
S Clipboard.lss (5 matches)	Searching for pattern 'declare func	ction'	
8: Declare Function getNDLDataWDUIDFromClipboard(t_replicaid As String, t_serverhint As String, t_duid As String, t_error As String) As Boolea			
9: Declare Function setClipboardText(pstrText As String) As Boolean			
10: Declare Function MyLeftToStringClipBoard(t_string As String, t_searchstring As String) As String	Scanning file 336 of 1,068: (I. Categorize).for	rm	
11: Declare Function getClipBoardText(pblnClearClipboard As Boolean, pstrTextOut As String) As Boolean			
12: Declare Function getNDLDataFromClipboard(t_replicaid As String, t_serverhint As String, t_error As String) As Boolean	Always rup in background		
> S Const.lss (6 matches)	Always full in background	Ν	
> DOMUtils.lss (10 matches)	Run in	Background Cancel Details >>	
> Sp DesignUtilities.lss (6 matches)			
> 5 EmbeddedImage.lss			_
> S Groups.lss (2 matches)			
V Solution (10 matches)			
13: Declare Function MyGetDatabaseRTF(t_server As String, t_filepath As String) As notesdatabase	N		
15: Declare Function getBase64[conData(db As notesdatabase) As String	14		
16: Declare Function MyGetHighColorIcon(doc As NotesDocument, db As NotesDatabase, flg_mode As integer) As String			
47: Declare Function W32_NSFItemInfo Lib LIB_W32 Alias "NSFItemInfo" (Byval hNT As Long, Byval N As LMBCS String, Byval nN As Integer, B	As BlockID, D As Integer, vB As BlockID, r	nV As Long) As Integ	
48: Declare Function W64, NSFItemInto Lib LIB_W32 Alias "NSFItemInto" (ByVal hNT As Long, ByVal N As LMBCS String, ByVal nN As Integer, IB	As BlockID64, D As Integer, vB As BlockID	064, nV As Long) As	
49: Declare Function AIX_NSFItemInto Lib LIB_AIX Alias "NSFItemInfo" (Byval hNT As Long, Byval N As LMBCS String, Byval nN As Integer, iB A:	BlockID, D As Integer, vB As BlockID, nV	/ As Long) As Integer	

LotusScript Code IV



We Recommend





We Recommend



DNA Applications [™]			Search
	Code Search		
⊞ Catalog ⊞ Usaqe			
⊞ Design			
Custom Insights Manage	Regular Expression. Examples: Simple: dblookup Multi-Option: db(lookuplexists) With modifiers: (?iw)(dbcolumn)		
Code Search	6 "Windows/32" "Windows/64"	↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓	Showing top 25 databases by number of matches
Custom Content	"Windows/32" 2 Select Case Lcase(ses "Windows/32" 3 Case "windows/32" "Windows/32" 4 getFilePath=Strle "Windows/32" 5 Case "macintosh": "Windows/32" 6 getFilePath=Strle "windows/32" 7 Case "macintosh":	<pre>2 Select Case Lcase(session.platform) 3 Case "windows/32": 4 getFilePath=Strleftback(strPath,"\") 5 Case "macintosh": 6 getFilePath=Strleftback(strPath,"/") 7 Case "mix":</pre>	Biog80 test/stdapps/biog80.nsf on Script Library : DXNotesUILibrary Code element : p/a
DM Open DataMiner	6 "Windows" 6 "Windows/32" 6 "Windows/32" 6 "Windows/32"	<pre>8 getFilePath=Strleftback(strPath,"/") 9 Case "linux": 10 getFilePath=Strleftback(strPath,"/") 11 End Select 12 End Function</pre>	Blog85 test/stdapps/blog85.nsf on Script Library : DXNotesUILibrary
pan agenda	<pre>b "windows/32" 6 "Windows" 6 "Windows" 6 "windows"</pre>	13	Code element : n/a Blog9 test/stdapps/blog9.nsf on
Imprint Contact Version 2.3.0	6 "windows"		Script Library : DXNotesUILibrary



Third party Add-in dependencies

Make Your Data Work For You

3rd party products



• Notes.ini

- EXTMGR_Addins=...
- ► NSF_HOOKS=...
- AddinMenu=...

Examples



- panagenda MarvelClient Essentials and licensed: since GA/12.0.53
 - Templates > 20220930; MarvelClient Upgrade since 12.0.32
- Ytria EZ Suite since V20
- Teamstudio Developer Tools 64-bit Beta currently ongoing
- Adobe? Salesforce? SAP? McAfee? Symantec?



- MarvelClient Upgrade will remain in 32-bit architecture (for now)
 - But of course it also fully supports for 64-bit upgrades and WITH/INSIDE a Notes 64-bit client
- MarvelClient Support Helper: New Version available → 4.0.1
 - <u>https://www.panagenda.com/kbase/pages/viewpage.action?pageId=55247160</u>

Q & A





THANK YOU!

Your Feedback Matters to Us









Links to panagenda's HCL Notes/Domino solutions mentioned in the presentation:

- MarvelClient
 - <u>https://www.panagenda.com/marvelclient/</u>
- MarvelClient Upgrade
 - https://www.panagenda.com/marvelclient/modules/marvelclient-upgrade/
- MarvelClient Essentials
 - https://www.panagenda.com/marvelclient/free-editions/marvelclient-essentials/
- iDNA Applications
 - <u>https://www.panagenda.com/idna-applications/</u>