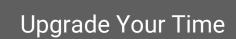


The Ultimate Administrator's Guide to HCL Nomad Web

September 19th, 2023



Host & Speaker





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Before We Start





All attendee lines are muted

This is to prevent interruptions during the presentation.



Please submit questions via the Chat or Q&A panel

Your questions will be addressed directly during the webinar or in the Q&A section after the presentation.



The webinar is being recorded

After the webinar, we will send you a mail to give access to the recording and presentation slides.



Share your feedback with us

Use the link provided at the end to let us know what we can do better.

Agenda



- A short introduction into HCL Nomad Web
- Latest releases
- Infrastructure overview and installation
- Best Practices
- ▶ **DEMO** if we have time ☺
- Bonus
- Q & A





Introduction to HCL Nomad Web









Nomad (mobile)

Nomad Web

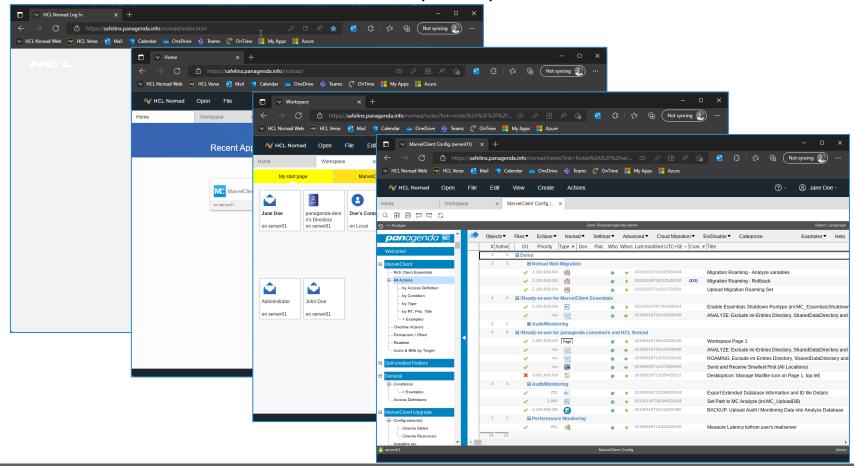
Official name "HCL Nomad for web browser"



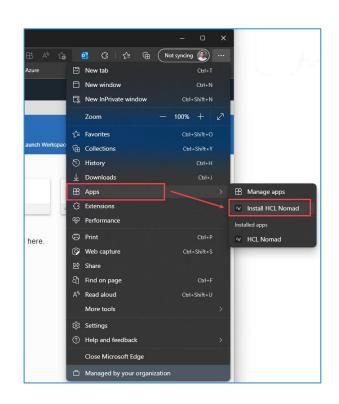


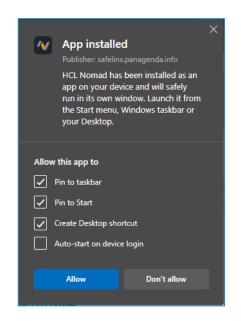






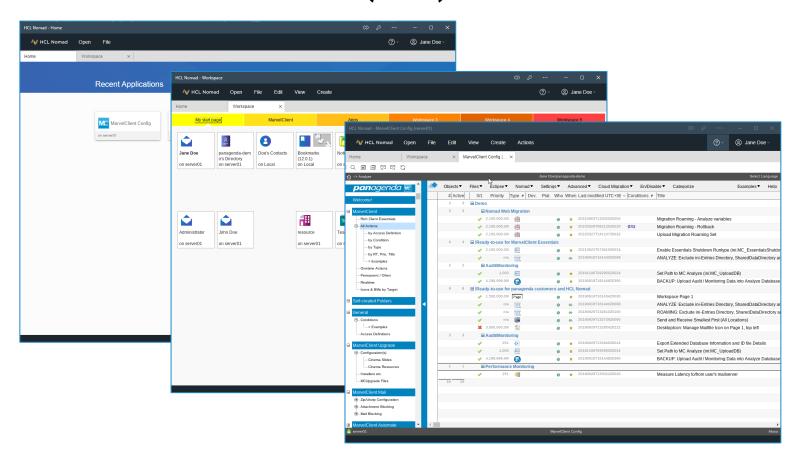














License requirements

To use HCL Nomad for web browsers, you agree to obtain and maintain an active subscription and Support for HCL Domino Complete Collaboration (CCB). Please note, only CCB customers are entitled to use HCL Nomad for web browsers.



A Match made in Heaven







MarvelClient is automatically included in Nomad (mobile) & Nomad Web

MarvelClient for Nomad (mobile) & Nomad Web



Analyze	Web unlicensed	Web + Basic	ios	Android
Desktop, Bookmarks	✓	✓	✓	√
notes.ini, User Preferences	✓	✓	√	✓
Mailfile Details	✓	✓	✓	✓
HCL Notes/Nomad Version and Installation Information	√	✓	√	√
Local Databases / Replicas		✓	✓	√
ECL		✓	√	√
Server ←→ Client Latency		✓	✓	√
Locations, Connections, Accounts, Certificates		✓	√	√
OS and Hardware Overview			√	√

panagenda

MarvelClient for Nomad (mobile) & Nomad Web (cont.)

Configuration	Web unlicensed	Web + Basic	ios	Android
notes.ini and MC Config Variables	✓	✓	√	✓
Any .ini, xml, or json File	√	✓	√	✓
User Preferences	✓	✓	√	√
Up/Download	Web unlicensed	Web + Basic	ios	Android
Upload Data for Analyze	✓	✓	√	√
Smart File Downloader			√	√
File Deployment (platform restrictions may apply)			√	✓
Run	Web unlicensed	Web + Basic	ios	Android
Run Agents		✓	√	✓
Run Notes Formulas		✓	√	√
Run Programs				√



MarvelClient for Nomad (mobile) & Nomad Web (cont.)

Migrate	Web unlicensed	Web + Basic	ios	Android
Mass Change to Update Database Links		✓	✓	✓
Mass Delete to Remove Database Links		✓	✓	✓

Manage	Web unlicensed	Web + Basic	ios	Android
Workspace Pages		✓	√	✓
Desktop Icons		✓	√	✓
Locations		✓	√	✓
Connections		✓	√	✓
ECL		✓	√	✓
Profile Documents		✓	√	√
Local Replicas*		✓	✓	√

^{*} Local replicas are available HCL Nomad Web 1.0.4 and higher



MarvelClient for Nomad (mobile) & Nomad Web (cont.)

Nomad Specific	Web unlicensed	Web + Basic	ios	Android
Recent Apps		✓	✓	✓
App Restrictions	✓	✓	√	✓
Nomad Location		✓	√	✓
Nomad Web Migration**	✓	✓		
Nomad Roaming***		✓	✓	✓

^{**} Nomad Web Migration is available in HCL Nomad Web 1.0.2 and higher

^{***} Nomad Roaming is available in HCL Nomad Web 1.0.5 and higher and needs to be licensed with panagenda





HCL Nomad Web - releases



Version	Release Date
1.0.9	2023-09-13
1.0.8	2023-05-24
1.0.7	2023-03-08
1.0.6	2022-12-06
1.0.5	2022-09-22
1.0.4	2022-07-13
1.0.3	2022-03-30
1.0.2	2021-12-14
1.0.1	2021-09-17
1.0.0	2021-05-27

HCL Nomad Web – current releases notes



What's new in HCL Nomad for web browsers

- → Release 1.0.9
 Ø
 - · Information box support

Information boxes are used to show Application Properties, Document Properties, Database Properties, Text Properties, Workspace Properties, etc. Rather than being a free floating dialog as the information box is in HCL Notes, the information box is shown docked on the right side.

- File > Import has been enhanced to support more previously unsupported file types. For more information, see Limitations.
- Domino Restyle updates:
 - · User-supplied themes.

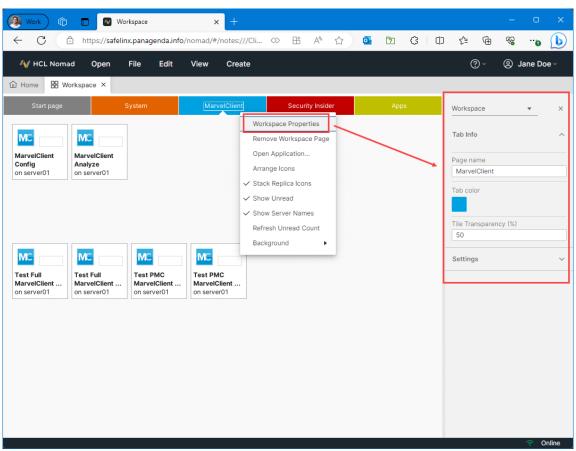
Restyle can now utilize user-supplied themes stored in a shared database. For more information, see Customizing themes with Restyle.

- Users can import an application icon. For more information, see the bullet on the fourth tab Create icon in Domino Restyle for Notes applications in the Notes documentation.
- · Shared fields and shared columns are now restyled. For more information, see Settings in the Restyle wizard.
- Users can optionally apply updated icons for action buttons and view column icons. For more information, see Settings in the Restyle wizard.
- · Restyle only selected portions of the application. For more information, see Settings in the Restyle wizard.
- Restyle can now utilize user-supplied typography. For more information, see Customize typography with Restyle.



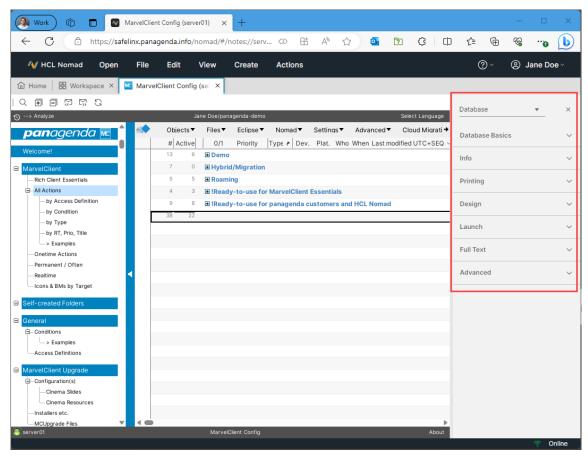






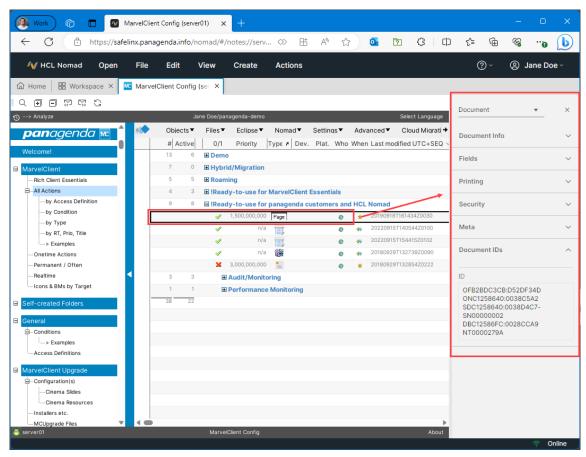
















Fixes

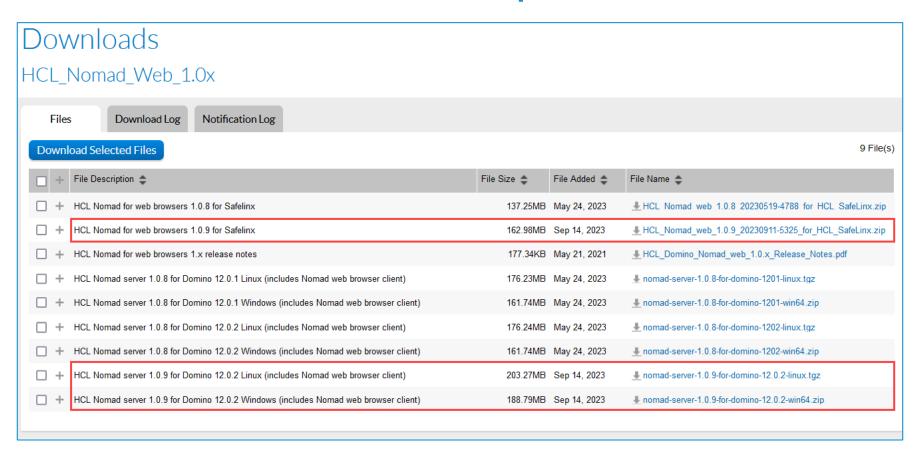
1.0.9

Issue Identifiers	Defect Article	Details
NWASM-5045	KB0107486	Attachments are not being searched when including attachments for Full Text Indexing when creating a local replica
NWASM-5273	KB0107475	Text alignment issues for pre-formatted text in drop-down menus and list boxes
NWASM-5274	KB0107472	Drop-down menu positioning in dialogs is incorrect
NWASM-5275	KB0107492	Field with "Native OS Style" with "allow multiple lines" disabled allows newlines
NWASM-5292	KB0105359	Combo box on a layer steals clicks intended for other components
NWASM-5339	KB0107490	The scroll bar for a tabbed table with embedded views on a dialog is shown below the table
NWASM-5364	KB0107504	Change password menu option should only be available if Nomad Shared Login is disabled
NWASM-5390	KB0107485	Quick Find and then change category chops search text to one character
NWASM-5440	KB0107487	File name containing & cannot be opened
NWASM-5456	KB0106509	Date fields not displayed the same way in Notes and Nomad for web browsers
NWASM-5511	KB0106416	Password field with Native OS style doesn't mask the characters
NWASM-5512	KB0107471	Behavior of "Dialog List" Field on Nomad for web browsers is not similar to that of Notes Clien
NWASM-5604	KB0106415	IME does not work in native input controls if the controls are on dialogs
NWASM-5605	KB0106594	File truncated error attaching multiple files with the same name
NWASM-5614	KB0106403	Firefox "View Saved Logins" pop up seen for all text fields if a password field is rendered anywhere on the page
NWASM-5615	KB0106411	When in a password field, tab is added to the input string rather than navigating between fields
NWASM-5631	KB0106407	NotesUIWorkspace.SaveFileDialog filter string may appear corrupted for non-ASCII characters
NWASM-5654	KB0106410	NotesUIWorkspace.SaveFileDialog does not appear if no filter is provided
NWASM-5659	KB0106408	Crash when reopening a document with a bitmap as the background of the form
NWASM-5694	N/A	Documentation incorrectly stated that LotusScript Lock and Unlock were unsupported when they are supported.
NWASM-5710	KB0107011	IME in dialogs does not work for the first character
NWASM-5725	KB0106762	Cannot save a file with non-ASCII characters using LotusScript
NWASM-5727	KB0106760	Unable to attach a file with a comma in the file name
NWASM-5732	KB0106936	Diagonal line is drawn across a button when highlighted
NWASM-5756	KB0107422	Nomad client setups through Nomad server on Domino fail when the mail server name includes non-ASCII characters



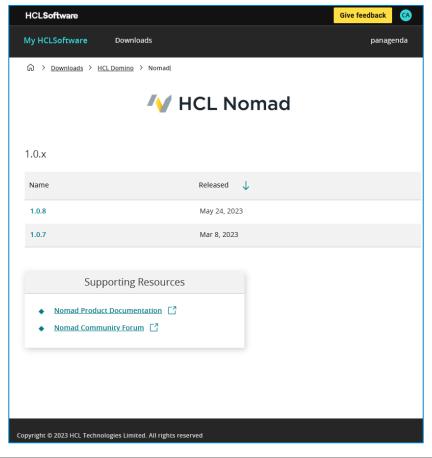


HCL Nomad Web - hclsoftware.flexnetoperations.com







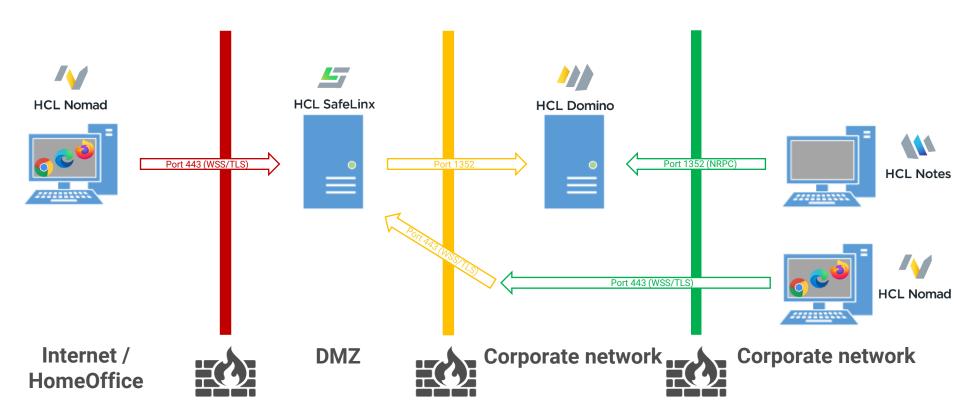




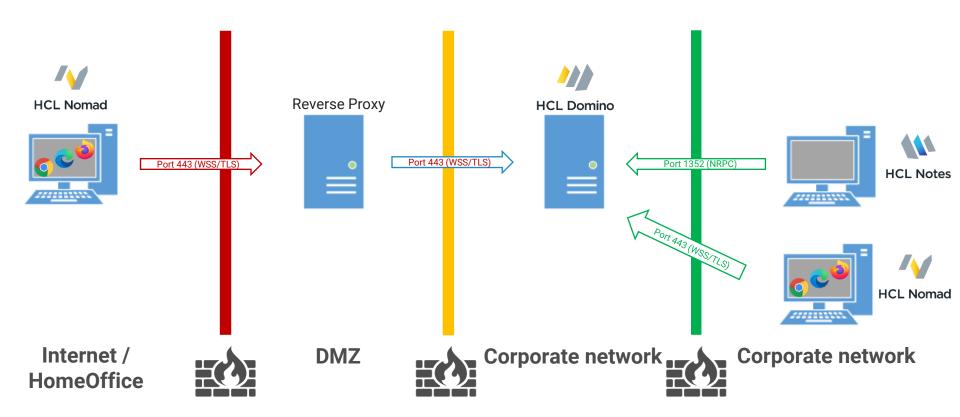
Infrastructure overview & Installation

HCL Nomad Web using SafeLinx











Quick Checklist / prerequisites before installation

- 1. Download "HCL Nomad server for Domino"
- 2. Domino 12.0.1 or 12.0.2* (Windows or Linux)
- 3. ID Vault needs to be enabled (ID's must be available in the Vault)
- 4. TLS certificate for Nomad server for Domino









TLS Certificate

Do you need a trusted / valid TLS certificate for Nomad Web?

→ YES!

Can you use the "new" Certificate Manager for configuring TLS certificates?

→ YES!







Name	Date modified	Туре	Size
HCL_Nomad_web_1.0.8_20230519-4788_for_HCL_SafeLinx.zip	14.06.2023 12:43	Compressed (zipped) Folder	140 549 KB
nomad-server-1.0.8-for-domino-1201-linux.tgz	14.06.2023 12:47	TGZ File	180 463 KB
nomad-server-1.0.8-for-domino-1201-win64.zip	14.06.2023 12:47	Compressed (zipped) Folder	165 626 KB
nomad-server-1.0.8-for-domino-1202-linux.tgz	14.06.2023 12:46	TGZ File	180 468 KB
nomad-server-1.0.8-for-domino-1202-win64.zip	14.06.2023 12:46	Compressed (zipped) Folder	165 626 KB

Installation

- 1. Pick one or more 1201 Fix Pack 1 or higher Domino server to install on.
- 2. Download and extract the corresponding zip/tar file for your platform into the Domino program directory.



Note:

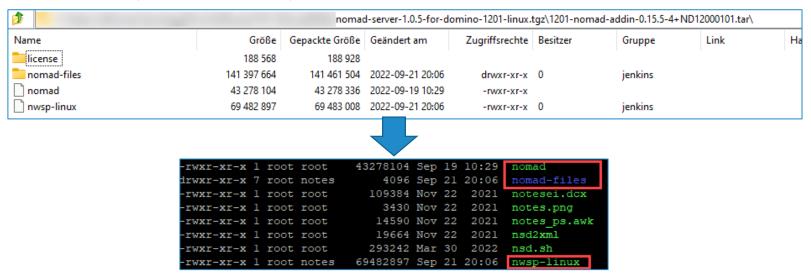
- The default directory for Linux is /opt/hcl/domino/notes/latest/linux/.
- The default directory for Windows is C:\Program Files\HCL\Domino.







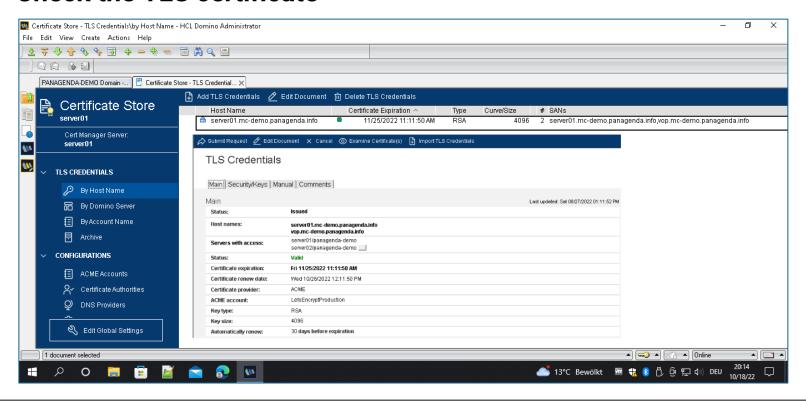
Installation (copy + unzip)



default directory for Linux is /opt/hcl/domino/notes/latest/linux/
default directory for Windows is C:\Program Files\HCL\Domino



Check the TLS certificate





Notes.ini

If you use the (new) CertMgr with Domino you need to add a notes.ini parameter. The value must match with one of your configured TLS certificates in the CertMgr database

NOMAD WEB HOST=domino.acme.com



Start HCL Nomad server task

Console command: load nomad

load nomad

[526278:000143-00007F9EA37EF700] 06/14/2023 12:30:52 PM Remote console command issued by christoph adler/panagenda: load nomad [690724:000002-00007FF3D93D27C0] 06/14/2023 12:30:52 PM Nomad: Build 0.15.7-1+ND12000101

[690724:000002-00007FF3D93D27C0] 06/14/2023 12:30:54 PM Nomad: Server initializing

[690724:000002-00007FF3D93D27C0] 06/14/2023 12:30:54 PM Nomad: Listening on 127.0.0.1:7125, CLIENT-IS-SERVER

[690724:000002-00007FF3D93D27C0] 06/14/2023 12:30:54 PM Nomad: Note: Requested port was 0, Actual listen port is 7125

[690724:000002-00007FF3D93D27C0] 06/14/2023 12:30:54 PM Nomad: Server initialized

Check Task, console command: sh tasks

[526278:000010-00007F9F1C88D700] Nomad

Listen for connect requests on 0.0.0.0:9443





top - 18:00:33 up 207 days, 6:50, 2 users, load average: 0.04, 0.08, 0.03
Tasks: 137 total, 1 running, 136 sleeping, 0 stopped, 0 zombie
%Cpu(s): 0.6 us, 0.3 sy, 0.0 ni, 98.8 id, 0.0 wa, 0.1 hi, 0.1 si, 0.1 st
MiB Mem : 7768.1 total, 5638.2 free, 1166.9 used, 963.0 buff/cache
MiB Swap: 0.0 total, 0.0 free, 0.0 used. 5655.5 avail Mem

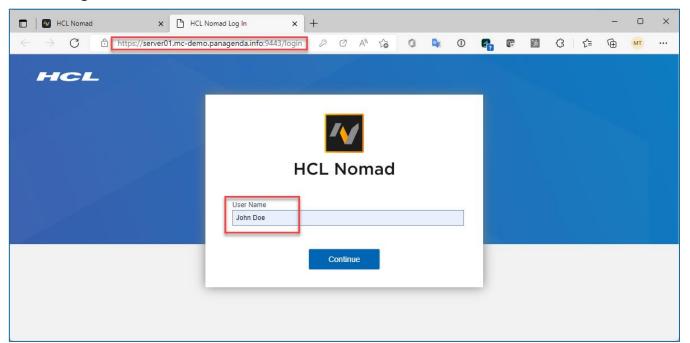
MiB Swap:	0.0 total	1, 0	.0 free,	0.0	used.	5655	5.5 avail	Mem
PID USER	PR N	I VIRT	RES	SHR S	%CPU	%MEM	TIME+	COMMAND
18571 notes	20 (0 1088.6m	69.3m	50.9m S	0.3	0.9	4:35.73	clrepl
16584 notes	20 (0 13.6m	3.lm	1.7m S	0.0	0.0	0:00.01	rc_domino_scrip
16642 notes	20 (0 2691.0m	260.lm	175.5m S	0.0	3.3	4:16.16	server
16679 notes	20 (0 623.3m	48.2m	28.5m S	0.0	0.6	0:14.11	logasio
16695 notes	20 (0 1155.6m	169.3m	147.9m S	0.0	2.2	3:48.07	event
17383 notes	20 (0 630.3m	75.4m	55.8m S	0.0	1.0	0:13.37	dircat
17386 notes	20 (0 630.6m	158.0m	138.3m S	0.0	2.0	0:26.19	replica
17388 notes	20 (827.lm	63.7m	42.7m S	0.0	0.8	1:23.50	router
17390 notes	20 (0 893.2m	100.1m	75.5m S	0.0	1.3	0:29.57	update
17394 notes	20 (0 629.6m	66.7m	45.8m S	0.0	0.9	0:17.93	amgr
17398 notes	20 (758.9m	255.6m	231.4m S	0.0	3.3	1:51.35	adminp
17400 notes	20 (0 629.3m	70.5m	51.2m S	0.0	0.9	0:22.80	sched
17401 notes	20 (0 622.8m	45.9m	27.1m S	0.0	0.6	0:15.13	calconn
17402 notes	20 (0 627.2m	67.5m	47.7m S	0.0	0.9	0:23.16	rnrmgr
17410 notes	20 (0 4421.0m	243.1m	109.7m S	0.0	3.1	2:13.45	http
17411 notes	20 (899.6m	233.1m	208.lm S	0.0	3.0	0:57.05	ldap
17412 notes	20 (0 693.4m	46.9m	29.0m S	0.0	0.6	0:26.44	daosmgr
17448 notes	20 (0 689.0m	87.4m	66.4m S	0.0	1.1	0:28.97	certmgr
17567 notes	20 (0 636.3m	124.8m	102.lm S	0.0	1.6	0:26.92	amgr
18345 notes	20 (627.lm	65.lm	46.lm S	0.0	0.8	0:15.80	cldbdir
40592 notes	20 (1236.4m	71.4m	47.9m S	0.0	0.9	0:03.35	nomad
40606 notes	20 (710.7m	73.8m	32.9m S	0.0	1.0	0:01.28	nwsp-linux
40614 notes	20 (911.7m	85.0m	33.lm S	0.0	1.1	0:01.85	nwsp-linux
40618 notes	20 (839.5m	74.3m	33.0m S	0.0	1.0	0:01.46	nwsp-linux
40621 notes	20 (913.0m	84.2m	33.2m S	0.0	1.1	0:01.70	nwsp-linux
40627 notes	20 (781.0m	84.5m	33.0m S	0.0	1.1	0:01.73	nwsp-linux
3893960 notes	20 (918.7m	92.0m	33.3m S	0.0	1.2	0:17.87	nwsp-linux
3893966 notes	20 (920.3m	93.8m	33.6m S	0.0	1.2	0:38.37	nwsp-linux





Open HCL Nomad and first login

The Nomad server is listening on Port: 9443 in default

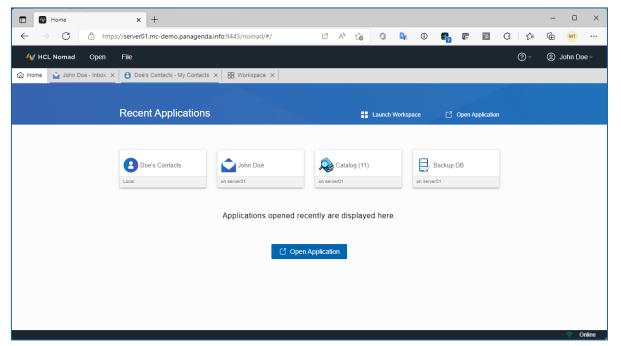






Open HCL Nomad and first login

The Nomad server is listening on Port: 9443 in default



HCL Nomad server for Domino



Configuration of the Nomad server

To change default settings, you need to create a YAML file in the Domino Data named:

nomad-config.yml

Here you can configure:

- Ports
- IP Addresses
- Certificates
- Cookies
- Refresh rates



HCL Nomad server for Domino



Configuration of the Nomad server (example)

```
#default host and port setting
     host: '0.0.0.0'
     port: 9443
     #default number of worker processes
    -cluster:
     v forks: 3
8
     #Session cookie configuration
    -session:
       secret: # default: randomly generated 32 character value
12
       sameSite: lax
13
       secure: true
14
15
      #LTPA behind SafeLinx
16
    □ltpa:
       cookieName: LtpaToken2
18
19
     #TLS
    -tlsOptions:
       ciphers: ECDHE-RSA-AES256-GCM-SHA384:ECDHE-RSA-AES128-GCM-SHA256:ECDHE-ECDSA-AES256-GCM-SHA384:ECDHE-ECDSA-AES128-GCM-SHA256
22
       honorCipherOrder: true
       secureOptions: SSL OP NO TLSvl | SSL OP NO TLSvl 1
24
      #Saml configuration
26
    -saml:
       issuer:
28
    claims:
29
         # Any claim you place here and map to a SAML claim will be read for the user
         # email: # default http://schemas.xmlsoap.org/ws/2005/05/identity/claims/emailaddress
    idp: # see https://github.com/node-saml/passport-saml#config-parameter-details
32
         entryPoint:
         cert:
34
     #Certificate configuration
     ca: # file location or contents of the ca's certificate pem file
     cert: # file location or contents of the certificate pem file
     key: # file location or contents of the certificate key pem file
```





Best Practices for HCL Nomad Web

How to configure Port 443 on Linux based Domino servers



Challenge:

Binding ports lower than 1024 is prohibited by default. (This is NodeJS standard security)

Solution:

You need to give the NodeJS task the right to bind to ports lower than 1024





Step 1:

Nomad must not run. Execute the following line to set the correct permissions

```
setcap 'cap_net_bind_service=+ep' /opt/hcl/domino/notes/latest/linux/nwsp-linux
```

Step 2:

Create a "nomad-config.yml" file in the Data Directory with the following two entries

```
GNU nano 2.9.8 nomad-config.yml
host: '0.0.0.0'
port: 443
```

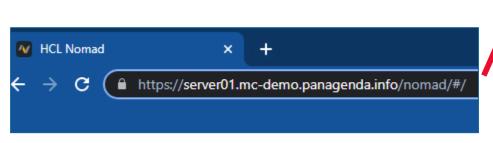


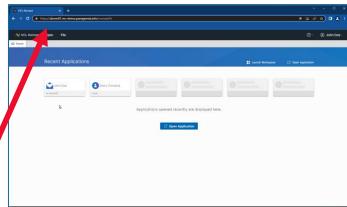
How to configure Port 443 on Linux based Domino servers

Step 3:

Start nomad on Domino. (load nomad)

```
> load nomad
> [926809:000002-00007F24F95937C0] 12/06/2022 07:18:12 PM Nomad: Build 0.15.5-19+ND12000101
[926809:000002-00007F24F95937C0] 12/06/2022 07:18:15 PM Nomad: Server initializing
[926809:000002-00007F24F95937C0] 12/06/2022 07:18:15 PM Nomad: Listening on 127.0.0.1:2801, CLIENT-IS-SERVER
[926809:000002-00007F24F95937C0] 12/06/2022 07:18:15 PM Nomad: Note: Requested port was 0, Actual listen port is 2801
[926809:000002-00007F24F95937C0] 12/06/2022 07:18:15 PM Nomad: Server initialized
```





Browers instead of installed Notes Clients

Cache

Browser Profiles

CPU & Memory consumption

Performance & sizing VDI / Citrix / VMware

Browsers Task Manager <shift> + <esc>

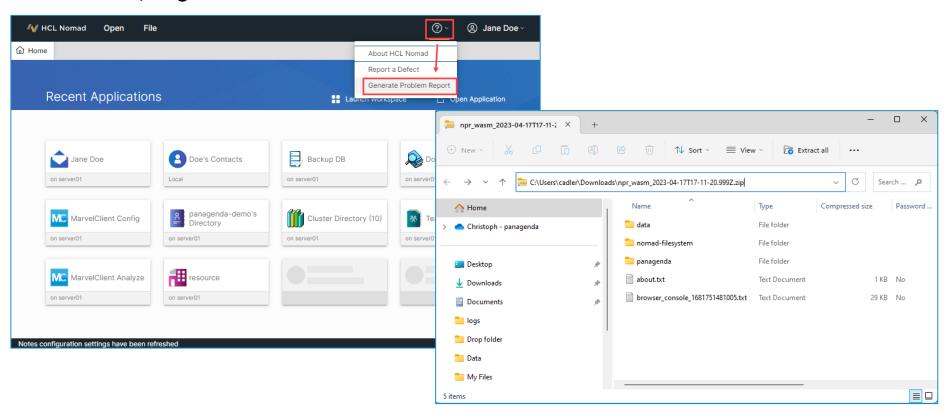
Developer Tools "console"

Log files

Where to find log files?



> Chrome, Edge & Firefox

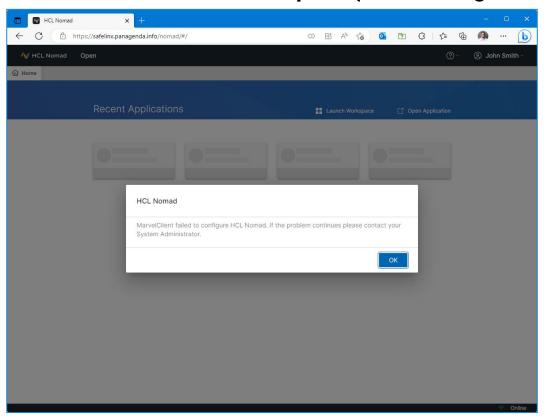


BUT

Example where logs couldn't help



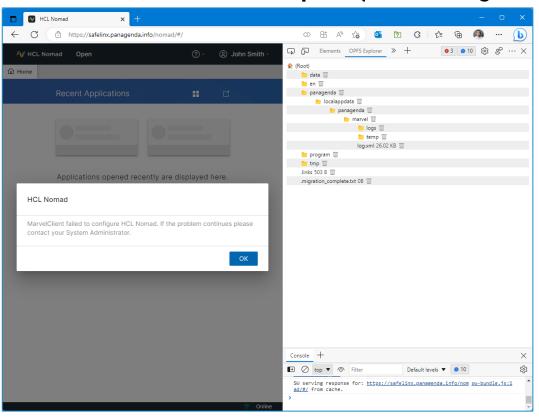
What if you can't use "Generate Problem Report" (issue during start-up)?



Troubleshooting/log files - 4. Browsers (cont.)



What if you can't use "Generate Problem Report" (issue during start-up) ?



Troubleshooting/log files - 4. Browsers (cont.)



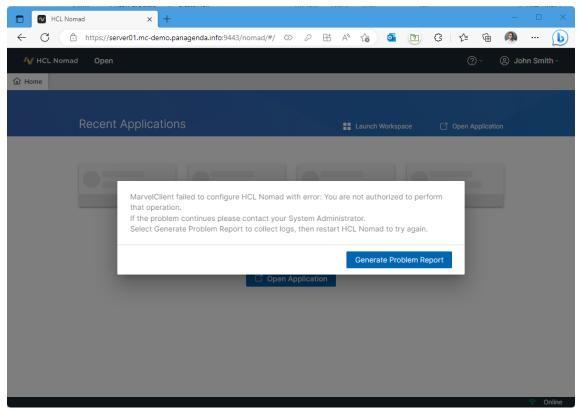
What if you can't use "Generate Problem Report" (issue during start-up)?

```
server01/panagenda-demo!!panagenda\panagenda.nst; NDError#: 16643 - File does not exist</m></le>
156
      <le><t>41268</t><1>2</1><i>2</i><f>AM::ActionMan Impl::VROpenSourceView::TryDB</f><m>trying to open config database:
       'CN=server01/0=panagenda-demo!!panagenda\pmc config.nsf'</m></le>
157
      <le><t>41269</t><1>2</l><i>2</l><i>5Open</f><m>Opening database: (00000000:00000000)
       'CN=server01/0=panagenda-demo!!panagenda\pmc config.nsf'</m></le>
158
159
160
      <le><t>41321</t><1>0</l></i><c>ERROR</c><f>AM::ActionMan Impl::VROpenSourceView::TryDB</f><m>could not open: GetDatabase: could not
      get database 'CN=server01/0=panagenda-demo!!panagenda\pmc config.nsf': Open: could not open database
       'server01/panagenda-demo!!panagenda\pmc config.nsf; NDError#: 582 - You are not authorized to perform that operation</m></le>
161
162
      <le><t>41323</t><1>0</l><ti>2</i><c>ERROR</c><f>RunViewreader</f><m>error while downloading new actions from config db: VROpenSourceView:
163
      could not locate a config db</m></le>
      <le><t>41324</t><1>2</1><i>>2</i><m>sending BUSY_MESSAGE_MARVELCLIENT_POSTSETUP</m></le>
164
      <le><t>41348</t><1>2</l><i>2</i><m>------</m></le>
165
      166
      <le><t>41350</t><l>></l></i><i>>2</i></f><m>run section afterloginbeforesync</m></le>
167
```

Troubleshooting/log files - 4. Browsers (cont.)



By the way: This issue is already fixed since Nomad Web 1.0.7



OPFS Explorer – Browser plugin



OPFS Explorer is a Chrome DevTools extension that allows you to explore the Origin Private File System (OPFS) of a web application.

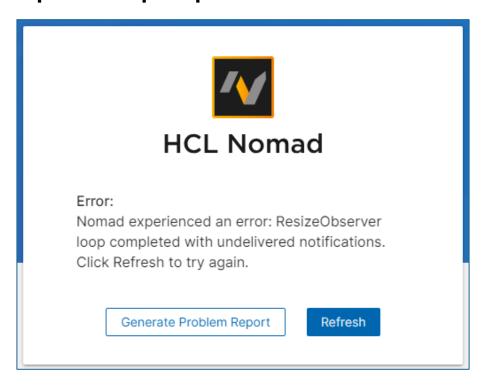


https://tinyurl.com/OPFSExplorer

Possible HCL Nomad Web 1.0.9 issue with LastPass



▶ If you use LastPass & HCL Nomad Web 1.0.9 in Chrome/Edge, you might see this here – after ID-Vault password prompt on initial start:



From NOTES to NOMAD WEB

MarvelClient - FREE Nomad Web Migration



 This functionality is included in CCB (free for all customers with active HCL maintenance)

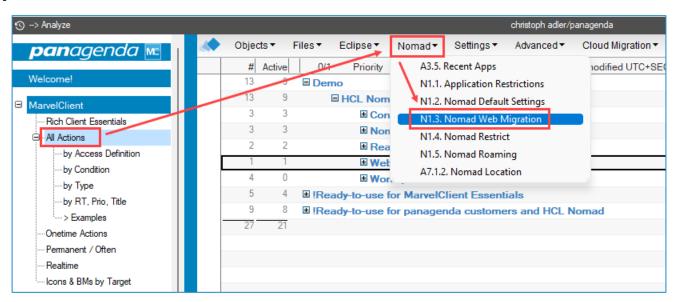
Requirement

Every user **must** have a user profile / upload document in the MarvelClient Analyze database (including bookmark.xml, desktop.xml and notes.ini) and **must not** be a Domino Roaming user.



MarvelClient - Nomad Web Migration (cont.)

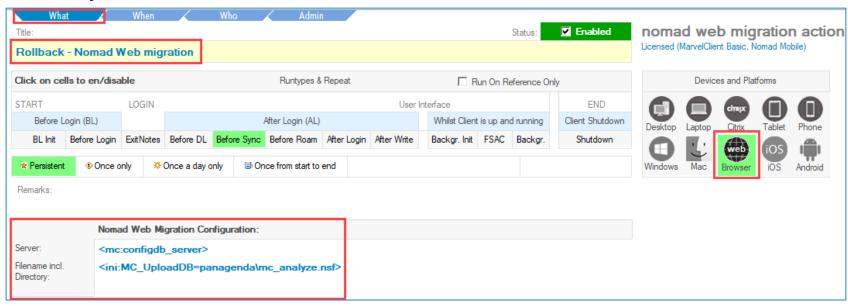
 A single and simple MarvelClient action brings happiness for your users





MarvelClient - Nomad Web Migration (cont.)

 A single and simple MarvelClient action brings happiness for your users



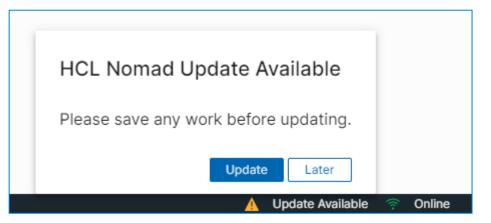
DEMOif we have enough time ©

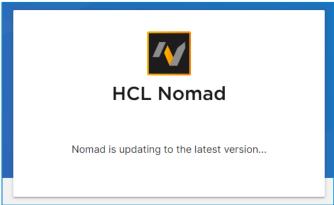




Questions we got asked at recent conferences

- How can I use NomadWeb if my Domino server(s) run on AIX or System i?
- How can I upgrade the local Nomad 'installations' in case of a new version is available?







3. We are using Microsoft Outlook. If we get document links from Domino Applications, Windows asks me with which Application the link should be opened. Can we configure it that Nomad Web will be used for those links?

→ see next slide



Questions we got asked at recent conferences - cont. *panagenda*

Example for Microsoft Edge

```
Windows Registry Editor Version 5.00
[HKEY CURRENT USER\SOFTWARE\Classes\notes]
"URL Protocol"=""
[HKEY CURRENT USER\SOFTWARE\Classes\notes\shell]
[HKEY CURRENT USER\SOFTWARE\Classes\notes\shell\open]
[HKEY CURRENT USER\SOFTWARE\Classes\notes\shell\open\command]
@="explorer.exe \"web+%1\""
[HKEY CURRENT USER\SOFTWARE\Classes\web+notes]
"URL Protocol"=""
[HKEY CURRENT USER\SOFTWARE\Classes\web+notes\DefaultIcon]
@="C:\\Program Files (x86)\\Microsoft\\Edge\\Application\\msedge.exe,0"
[HKEY_CURRENT_USER\SOFTWARE\Classes\web+notes\shell]
@="open"
[HKEY CURRENT USER\SOFTWARE\Classes\web+notes\shell\open]
[HKEY CURRENT USER\SOFTWARE\Classes\web+notes\shell\open\command]
@="\"C:\\Program Files (x86)\\Microsoft\\Edge\\Application\\msedge.exe\" --single-argument %1"
[HKEY CURRENT USER\SOFTWARE\Classes\web+notes\shell\open\ddeexec]
```





THANK YOU!



Your Feedback Matters to Us











A Closer Look: HCL Notes 14 and HCL Nomad Web

EPISODE #2

November 07th 2023

How to Perform HCL Notes 14 Upgrades Smoothly

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Christoph Adler

Head of Solution Consulting EMEA & HCL Ambassador
panagenda

