

How to Bring
HCL Nomad Web and Domino
Together Without SafeLinx

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Host & Speaker



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Agenda

- **Introduction - What is HCL Nomad?**
- **Current Versions, Features and Requirements**
- **HCL Nomad Server for Domino**
- **Surprise ... and Q & A**





What is HCL Nomad?

What is HCL Nomad?



Nomad (mobile)

Nomad Web

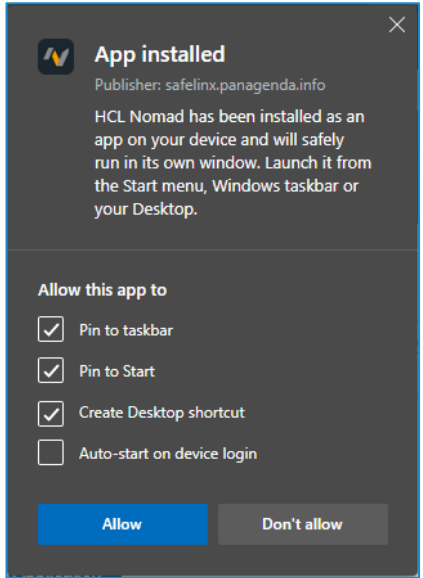
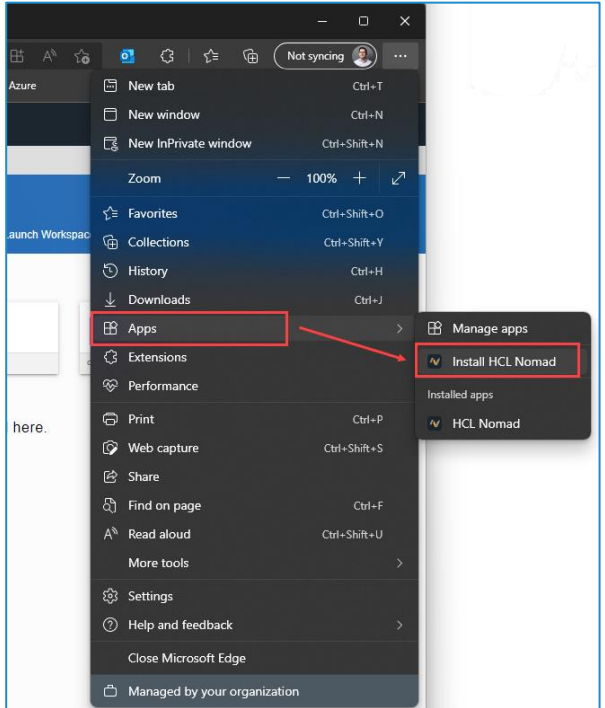
Official name
"HCL Nomad for web browser"

What is HCL Nomad?

The screenshot displays the HCL Nomad web interface. The top navigation bar includes 'HCL Nomad Web', 'HCL Verse', 'Mail', 'Calendar', 'OneDrive', 'Teams', 'OnTime', 'My Apps', and 'Azure'. The main content area is divided into sections: 'Home', 'Workspace', and 'Recent Apps'. The 'Home' section features a 'My start page' and user cards for 'Jane Doe on server01', 'panagenda-demo's Directory on server01', and 'Doe's Cont... on Local'. The 'Recent Apps' section shows 'MarvelClient on server01', 'Administrator on server01', and 'John Doe on server01'. A 'MarvelClient Config (server01)' window is open, showing a table of configurations.

#	Active	0/1	Priority	Type	Dev.	Plat.	Who	When	Last modified UTC+SE	Conc.	Title
Demo											
3	3										
MarvelClient											
Rich Client Essentials											
All Actions											
- by Access Definition											
- by Condition											
- by Type											
- by RT, Prio, Title											
- Examples											
Onetime Actions											
Permanent / Other											
Realtime											
Icons & BMs by Target											
Self-created Folders											
General											
- Conditions											
- Examples											
- Access Definitions											
MarvelClient Upgrade											
- Configuration(s)											
- Cinema Slides											
- Cinema Resources											
- Infrastructure etc.											

What is HCL Nomad?



What is HCL Nomad?

The image displays the HCL Nomad user interface, which is a workspace management tool. It features a top navigation bar with 'HCL Nomad', 'Open', and 'File' menus. Below this is a 'Recent Applications' section showing 'MarvelClient Config' on 'server01'. The main workspace area is divided into several panes:

- Left Pane:** A list of users and resources, including 'Jane Doe', 'panagenda-dem o's Directory', 'Doe's Contacts', 'Bookmarks (12.0.1)', 'Administrator', 'John Doe', and 'resource'.
- Top Pane:** A workspace overview with tabs for 'My start page', 'MarvelClient', and multiple 'Workspace' instances.
- Right Pane:** A detailed configuration view for 'MarvelClient Config (server01)'. It includes a left sidebar with a tree view of configuration categories like 'MarvelClient Essentials', 'General', 'MarvelClient Upgrade', 'MarvelClient Mail', and 'MarvelClient Automate'. The main area shows a table of configuration items.

Active	Q1	Priority	Type	Dev.	Plat.	Who	When	Last modified	UTC+SE	Conditions	Title
3	3										Migration Roaming - Analyze variables
3	3										Migration Roaming - Rollback
3	3										Upload Migration Roaming Set
4	4										Enable Essentials Shutdown Runtime (ni.MC_EssentialsShutdo
2	2										Set Path to MC Analyze (ni.MC_UploadDB)
9	8										BACKUP: Upload Audit / Monitoring Data into Analyze Database
3	3										Workspace Page 1
1	1										ANALYZE: Exclude Ini-Entries Directory, SharedDataDirectory at
3	3										ROAMING: Exclude Ini-Entries Directory, SharedDataDirectory at
1	1										Send and Receive Smallest First (All Locations)
3	3										Desktopicon: Manage Mailfile Icon on Page 1, top left
1	1										Export Extended Database Information and ID file Details
1	1										Set Path to MC Analyze (ni.MC_UploadDB)
1	1										BACKUP: Upload Audit / Monitoring Data into Analyze Database
1	1										Measure Latency before user's mailserver



Current Versions, Features and Requirements

Current Versions

- HCL Nomad server for Domino → 1.0.6 (for Domino 12.0.1)
- HCL Nomad server for Domino → 1.0.6 (for Domino 12.0.2)

- HCL Nomad for web browsers → 1.0.6
- HCL SafeLinx → 1.3.0.1

HCL Nomad Web 1.0.6 – New Features

What's new in HCL Nomad for web browsers

Release 1.0.6

- **Domino Restyle updates:**

- Navigators in the application are restyled.
- Applications can choose to change their launch property to a standardized frameset. For more information, see [Launch property features](#).

- **panagenda MarvelClient updates in the Analyze Database:**

Additional information is now returned from the browser and reported in the Analyze Database:

- browser name
 - browser version
 - os name
 - os version
 - user agent string
- **Nomad server on Domino on Domino 12.0.2:**
Nomad server on Domino now runs on Domino 12.0.2 in addition to 12.0.1.
- Bug fixes.



Requirements (with SafeLinx)



HCL SafeLinx



SSL



HCL Nomad



HCL Domino



Requirements (without SafeLinx)


HCL SafeLinx




SSL




HCL Nomad
Server for Domino




HCL Domino



Your new best friend → the browser!

Only 64-bit desktop web browsers are supported

- Firefox 83 or higher → no native PWA support since version 85
- Google Chrome 80 or higher → (if \geq v108, you need Nomad Web 1.0.6)
- Microsoft Edge 85 or higher



Your new best friend(s) → the “chrome/edge” browser(s)

Change in Chrome and Edge >= Version 108.x

<https://developer.chrome.com/blog/new-in-chrome-108/>

Here's what you need to know:

- It is easier to create adaptive UIs with new [viewport size units](#).
- Color vector fonts now include support for [variable fonts](#).
- The methods in the interface `FileSystemSyncAccessHandle`, part of the File System Access API, are now [synchronous](#).
- And there's plenty [more](#)



HCL Nomad Web 1.0.6 – Fixes

Fixes

1.0.6

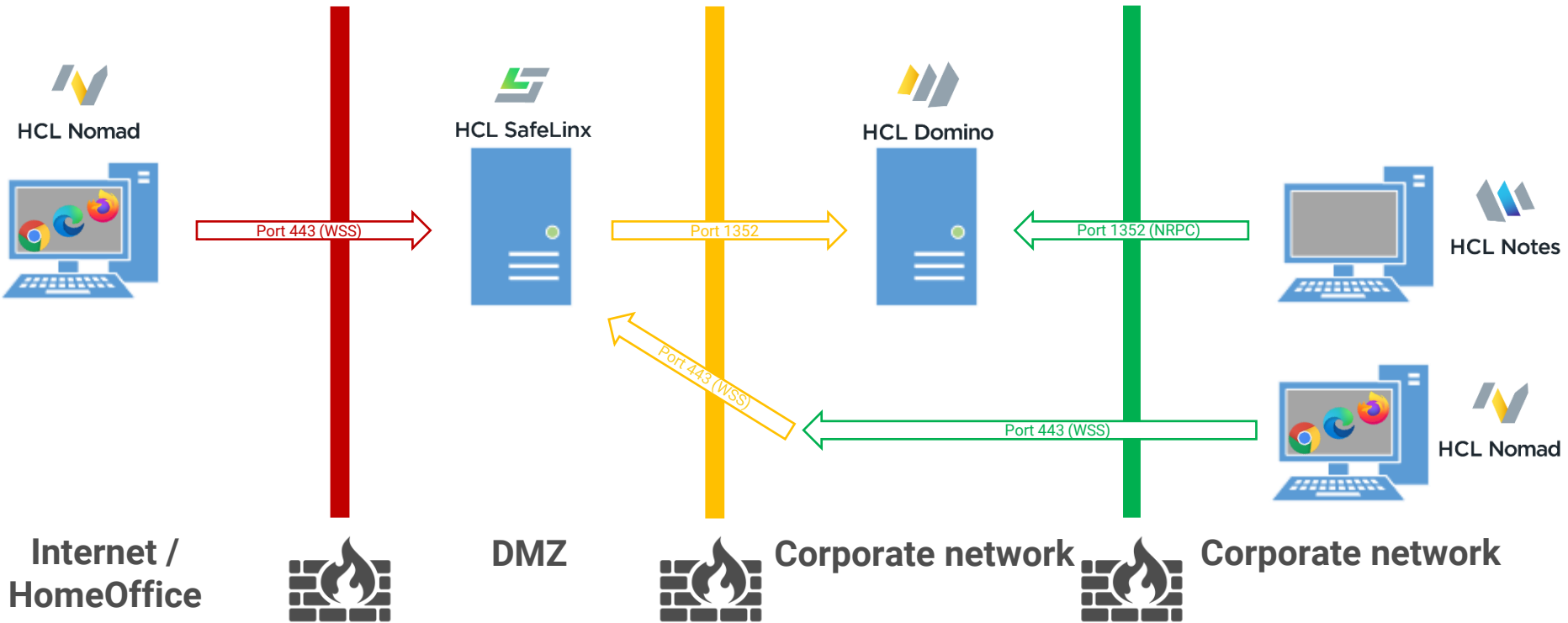
Issue Identifiers	Details
NWASM-2465	Russian: Customize This View: Fix for the dialog columns being too narrow.
NWASM-2466	Russian: Customize This View: Fix the truncation of "Сортировать".
NWASM-2566, NWASM-4224, NWASM-4426	Update the Time Picker and Date Picker to fix multiple issues and improve usability.
NWASM-4191	Add support for "Other..." in the Open Application dialog to access Domino servers that are not pre-populated from the Workspace or other sources.
NWASM-4192	Fix for field borders in table structures not being displayed correctly.
NWASM-4355	When running in Japanese, display the \ character as the Yen character.
NWASM-4379	Add files need to support an Include of Isconst.Iss.
NWASM-4382	Update the notes:// readme with more information needed to get Firefox working for notes:// links.
NWASM-4505	Fix for crashes when run on Google Chrome version 108 or Microsoft Edge version 108.



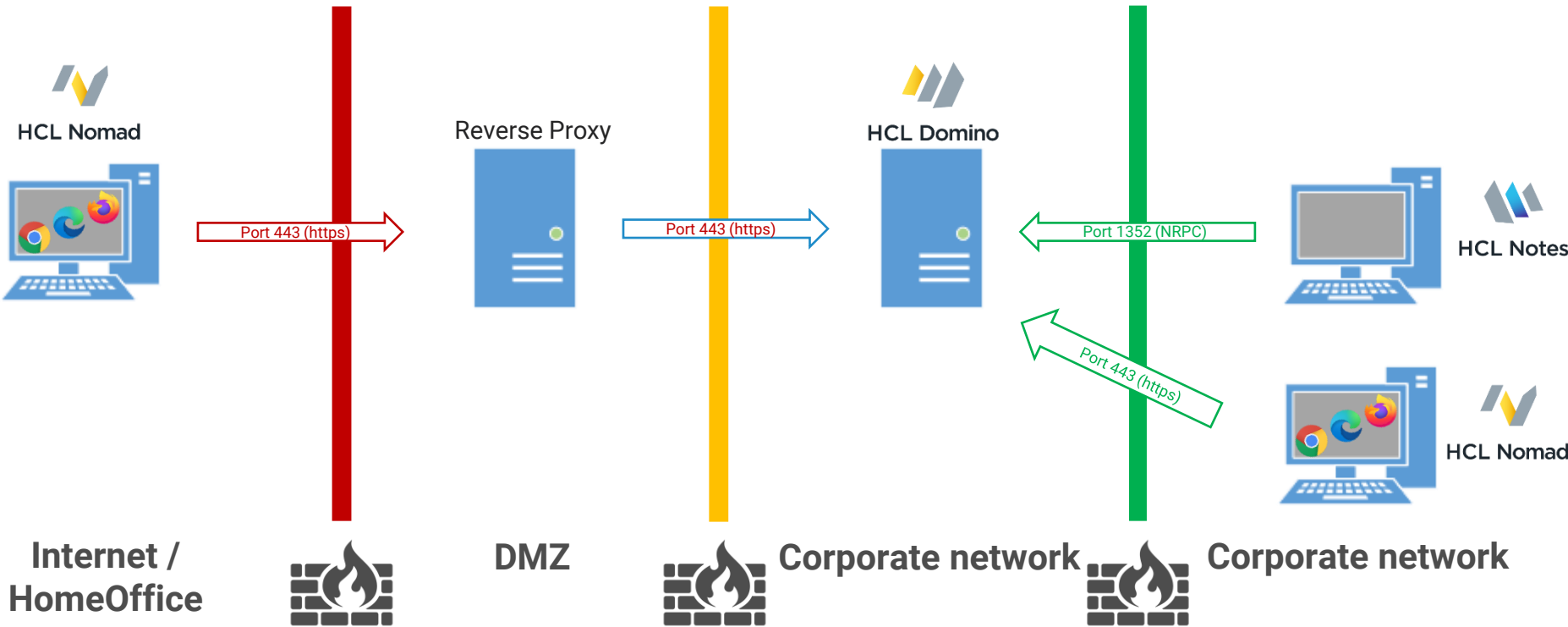


HCL Nomad server for Domino

HCL Nomad server for Domino



HCL Nomad server for Domino



HCL Nomad server for Domino

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



HCL 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!**



HCL Nomad server for Domino

https://help.hcltechsw.com/nomad/1.0_admin/nomadserver_domino.html

 nomad-server-1.0.6-for-domino-1202-linux.tgz	06.12.2022 13:29	TGZ-Datei	176.475 KB
 nomad-server-1.0.6-for-domino-1201-linux.tgz	06.12.2022 13:29	TGZ-Datei	176.470 KB
 nomad-server-1.0.6-for-domino-1202-win64.zip	06.12.2022 13:28	ZIP-komprimierte...	161.963 KB
 nomad-server-1.0.6-for-domino-1201-win64.zip	06.12.2022 13:28	ZIP-komprimierte...	161.963 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.



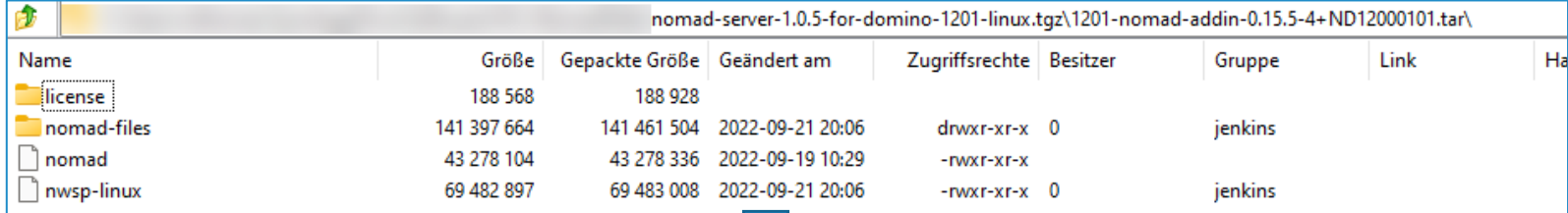
Note:

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



HCL Nomad server for Domino

Installation (copy + unzip)



Name	Größe	Gepackte Größe	Geändert am	Zugriffsrechte	Besitzer	Gruppe	Link	Ha
license	188 568	188 928						
nomad-files	141 397 664	141 461 504	2022-09-21 20:06	drwxr-xr-x	0	jenkins		
nomad	43 278 104	43 278 336	2022-09-19 10:29	-rwxr-xr-x				
nwsp-linux	69 482 897	69 483 008	2022-09-21 20:06	-rwxr-xr-x	0	jenkins		

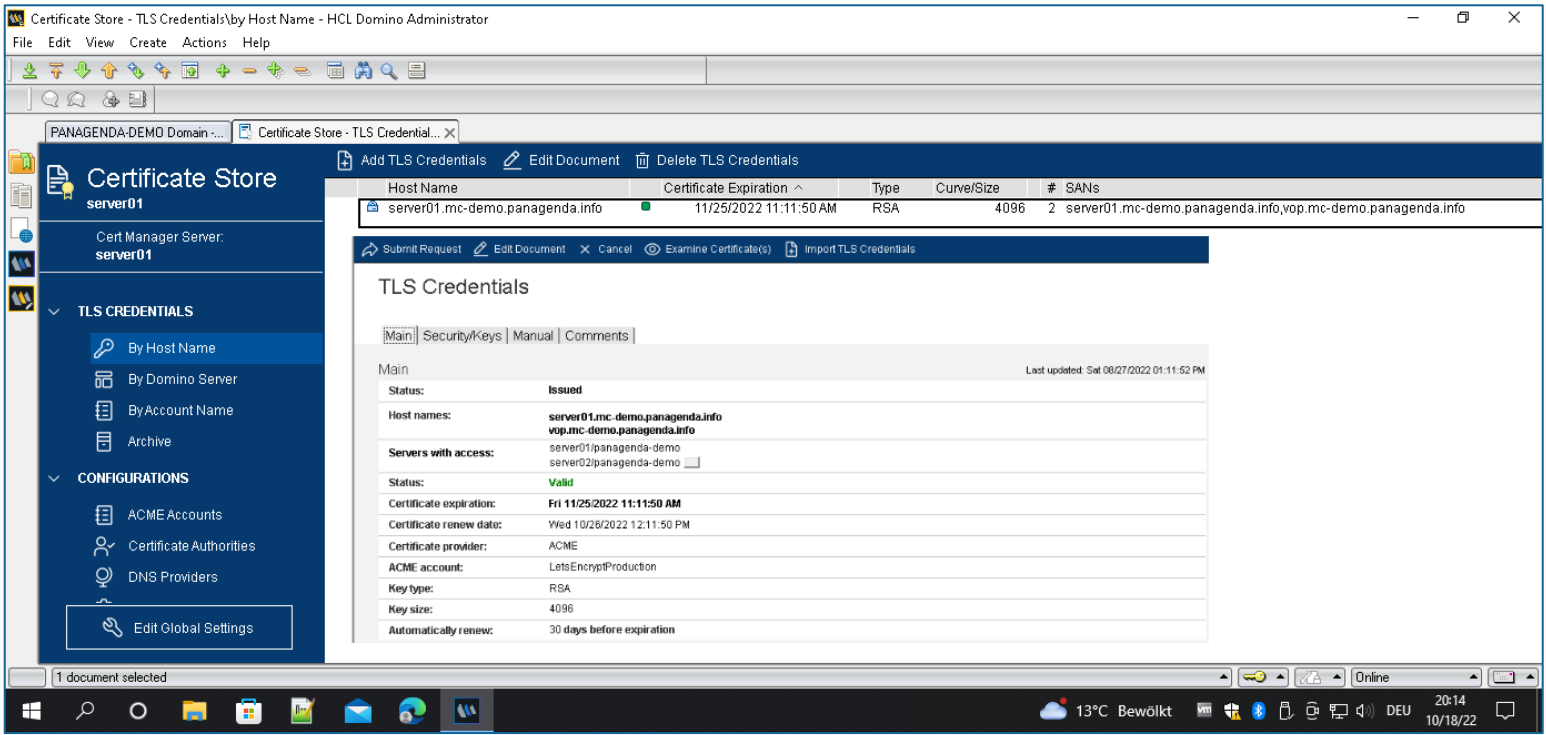


```
-rwxr-xr-x 1 root root 43278104 Sep 19 10:29 nomad
drwxr-xr-x 7 root notes 4096 Sep 21 20:06 nomad-files
-rwxr-xr-x 1 root root 109384 Nov 22 2021 notesei.dcx
-rwxr-xr-x 1 root root 3430 Nov 22 2021 notes.png
-rwxr-xr-x 1 root root 14590 Nov 22 2021 notes_ps.awk
-rwxr-xr-x 1 root root 19664 Nov 22 2021 nsd2xml
-rwxr-xr-x 1 root root 293242 Mar 30 2022 nsd.sh
-rwxr-xr-x 1 root notes 69482897 Sep 21 20:06 nwsp-linux
```

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

HCL Nomad server for Domino

Check the TLS certificate



The screenshot shows the HCL Domino Administrator interface. The left sidebar is titled "Certificate Store" and includes sections for "server01", "Cert Manager Server: server01", "TLS CREDENTIALS" (with sub-options: "By Host Name", "By Domino Server", "By Account Name", "Archive"), and "CONFIGURATIONS" (with sub-options: "ACME Accounts", "Certificate Authorities", "DNS Providers", "Edit Global Settings").

The main window displays a table of TLS Credentials:

Host Name	Certificate Expiration	Type	Curve/Size	# SANs
server01.mc-demo.panagenda.info	11/25/2022 11:11:50 AM	RSA	4096	2 server01.mc-demo.panagenda.info,vop.mc-demo.panagenda.info

Below the table, the "TLS Credentials" details for the selected entry are shown:

Main: Security/Keys | Manual | Comments

Main Last updated: Sat 08/27/2022 01:11:52 PM

Status: Issued

Host names: server01.mc-demo.panagenda.info
vop.mc-demo.panagenda.info

Servers with access: server01|panagenda-demo
server02|panagenda-demo

Status: Valid

Certificate expiration: Fri 11/25/2022 11:11:50 AM

Certificate renew date: Wed 10/26/2022 12:11:50 PM

Certificate provider: ACME

ACME account: LetsEncryptProduction

Key type: RSA

Key size: 4096

Automatically renew: 30 days before expiration

The Windows taskbar at the bottom shows the system tray with the date 10/18/22 and time 20:14.

HCL Nomad server for Domino

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
```

HCL Nomad server for Domino

Start HCL Nomad server task

Console commad: [load nomad](#)

```
load nomad
> [040592:000002-00007F6B674B97C0] 10/18/2022 05:31:24 PM Nomad: Build 0.15.5-4+ND12000101
[040592:000002-00007F6B674B97C0] 10/18/2022 05:31:26 PM Nomad: Server initializing
[040592:000002-00007F6B674B97C0] 10/18/2022 05:31:26 PM Nomad: Listening on 127.0.0.1:21813, CLIENT-IS-SERVER
[040592:000002-00007F6B674B97C0] 10/18/2022 05:31:26 PM Nomad: Note: Requested port was 0, Actual listen port is 21813
[040592:000002-00007F6B674B97C0] 10/18/2022 05:31:26 PM Nomad: Server initialized
```

Check Task, console commad: [sh tasks](#)

```
[016642:000010-00007F37AA40A700] Nomad Listen for connect requests on 0.0.0.0:9443
```

HCL Nomad server for Domino

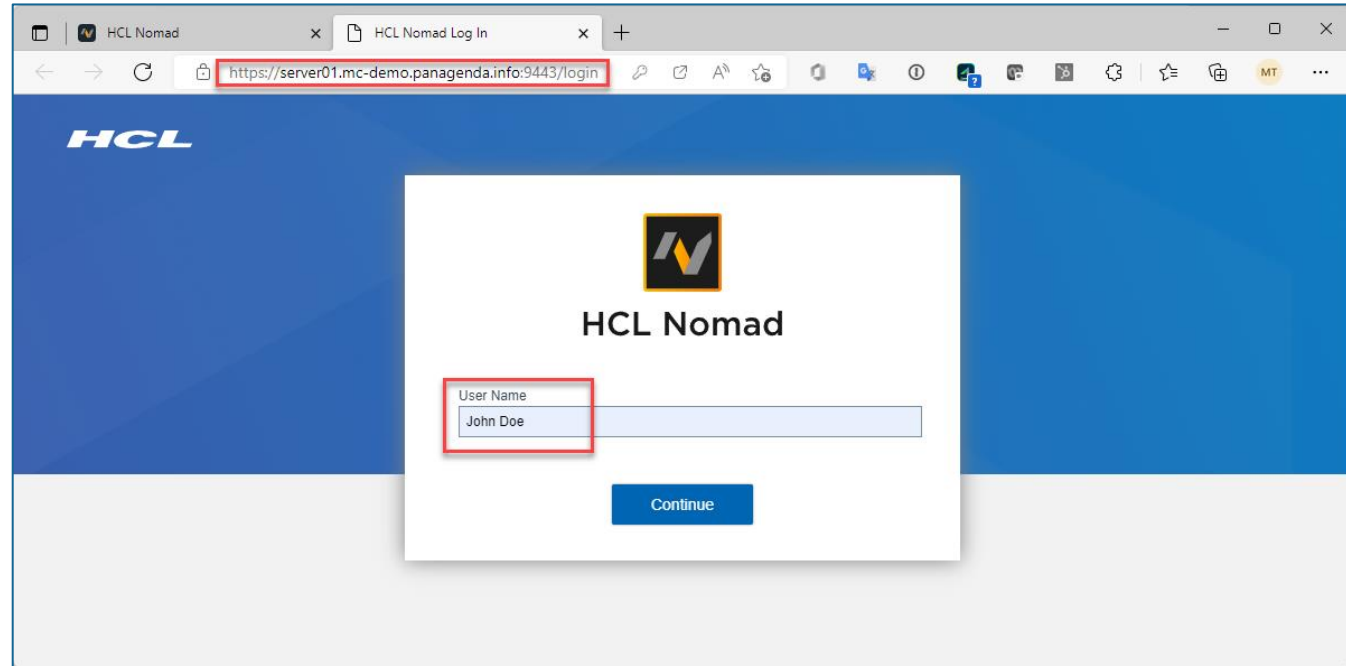
```
top - 18:00:33 up 207 days, 6:50, 2 users, load average: 0.04, 0.08, 0.03
Tasks: 137 total, 1 running, 136 sleeping, 0 stopped, 0 zombie
%Cpu(s): 0.6 us, 0.3 sy, 0.0 ni, 98.8 id, 0.0 wa, 0.1 hi, 0.1 si, 0.1 st
MiB Mem : 7768.1 total, 5638.2 free, 1166.9 used, 963.0 buff/cache
MiB Swap: 0.0 total,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

PID	USER	PR	NI	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	3.1m	1.7m	S	0.0	0.0	0:00.01	rc_domino_scrip
16642	notes	20	0	2691.0m	260.1m	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	0	827.1m	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	0	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	0	899.6m	233.1m	208.1m	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	102.1m	S	0.0	1.6	0:26.92	amgr
18345	notes	20	0	627.1m	65.1m	46.1m	S	0.0	0.8	0:15.80	clbdbdir
40592	notes	20	0	1236.4m	71.4m	47.9m	S	0.0	0.9	0:03.35	nomad
40606	notes	20	0	710.7m	73.8m	32.9m	S	0.0	1.0	0:01.28	nwsp-linux
40614	notes	20	0	911.7m	85.0m	33.1m	S	0.0	1.1	0:01.85	nwsp-linux
40618	notes	20	0	839.5m	74.3m	33.0m	S	0.0	1.0	0:01.46	nwsp-linux
40621	notes	20	0	913.0m	84.2m	33.2m	S	0.0	1.1	0:01.70	nwsp-linux
40627	notes	20	0	781.0m	84.5m	33.0m	S	0.0	1.1	0:01.73	nwsp-linux
3893960	notes	20	0	918.7m	92.0m	33.3m	S	0.0	1.2	0:17.87	nwsp-linux
3893966	notes	20	0	920.3m	93.8m	33.6m	S	0.0	1.2	0:38.37	nwsp-linux

HCL Nomad server for Domino

Open HCL Nomad and first login

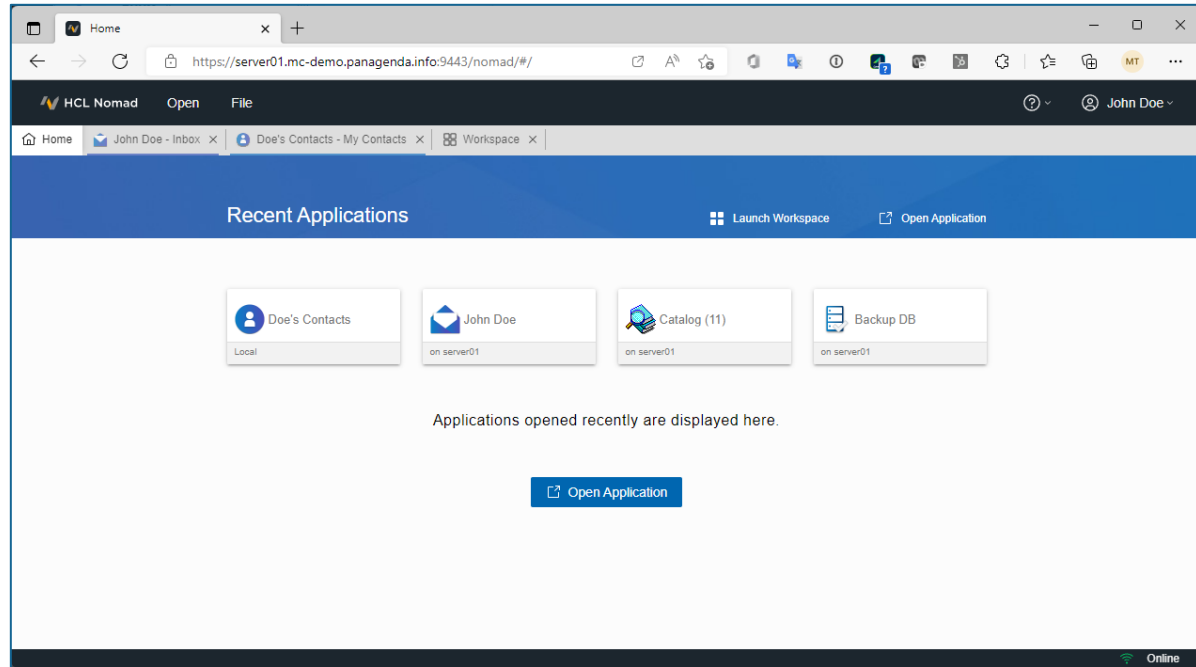
The Nomad server is listening on Port: 9443 in default



HCL Nomad server for Domino

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)

```
1 #default host and port setting
2 host: '0.0.0.0'
3 port: 9443
4
5 #default number of worker processes
6 cluster:
7   forks: 3
8
9 #Session cookie configuration
10 session:
11   secret: # default: randomly generated 32 character value
12   sameSite: lax
13   secure: true
14
15 #LTPA behind SafeLink
16 ltpa:
17   cookieName: LtpaToken2
18
19 #TLS
20 tlsOptions:
21   ciphers: ECDHE-RSA-AES256-GCM-SHA384:ECDHE-RSA-AES128-GCM-SHA256:ECDHE-ECDSA-AES256-GCM-SHA384:ECDHE-ECDSA-AES128-GCM-SHA256
22   honorCipherOrder: true
23   secureOptions: SSL_OP_NO_TLSv1 | SSL_OP_NO_TLSv1_1
24
25 #Saml configuration
26 saml:
27   issuer:
28   claims:
29     # Any claim you place here and map to a SAML claim will be read for the user
30     # email: # default http://schemas.xmlsoap.org/ws/2005/05/identity/claims/emailaddress
31   idp: # see https://github.com/node-saml/passport-saml#config-parameter-details
32   entryPoint:
33   cert:
34
35 #Certificate configuration
36 ca: # file location or contents of the ca's certificate pem file
37 cert: # file location or contents of the certificate pem file
38 key: # file location or contents of the certificate key pem file
```



Tip of the day: 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

Tip of the day: How to configure Port 443 ...

... on Linux based (Domino) servers (continued)

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
```

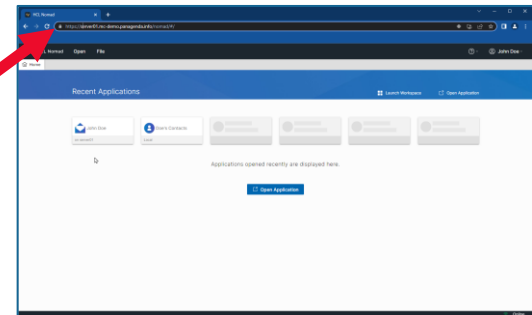
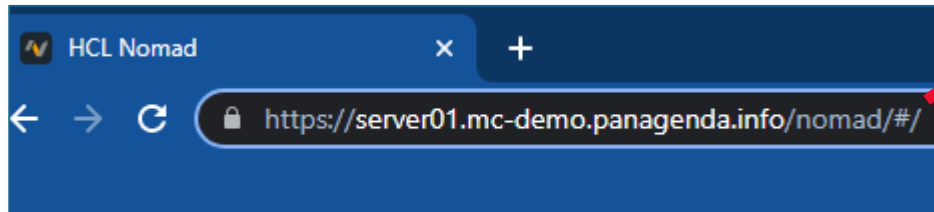
Tip of the day: How to configure Port 443 ...

... on Linux based (Domino) servers (continued)

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
```



Surprise 😊





Document Properties

by panagenda



Version 12.0.12



New Features in v12.0.12

- **New optional columns for the Summary and Signed fields**
(right-click the field table for a menu that lets you show or hide columns)
- **New copy menu options let you easily copy field names, values, or all info**
- **New menu option to open documents by NotelD or UNID → Pro only**
- **New ability to compare profile documents, and to see what fields changed when a document is modified → Pro only**





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

January 24th, 2023

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