

How to Be a Better HCL Domino Admin Using AI

Engage 2026

Dominique Pérarnaud | Data101 | HCL Ambassador



French in the Basque country for 25 years · In the Yellow bubble since 2001

I like to build things.







DATA 101

HCL Business Partner

Based in Donostia / San Sebastián

Basque Country, Spain · Serving clients across Europe

"2nd region of Spain by GDP · Highest concentration of 3-Michelin-star restaurants in Europe"

 **SERVICES** **Domino Administration**
Audits, monitoring, troubleshooting **Custom Development**
LotusScript · Java · C API · @Formula **Infrastructure**
OpenResty · OIDC/SAML · TLS **Upgrade / Evolution & Maintenance Projects**
Domino upgrades · Verse · Traveler · Sametime · Rest API **OUR DOMINO UTILITIES** **Customized Catalog Template**
Free · Drop-in NTF replacement **Console Command Database**
Multi-server admin commands **Code Review Database**
DXL extraction + Audit **Digital Signature for Domino**
Server-side mail signing **Log Monitor**
Keyword-based reports & alerts

Code_Review_4
on Aizkorri

Open in Domino Designer

DATABASES STATUS

- All
- / Analysis Status
- Marked for analysis
- Db analysis with Data
- Db by ReplicalD

DESIGN ELEMENTS

- / DB Name
- / Path BD
- / BD Categories
- / Elt Name
- / Elt Name categorized
- / Type
- / Signer
- / Signer /Elt Name
- / ReplicalD /Signer

QUICK ANSWERS

CONFIGURATION

Generic information

Database

| | | | |
|-----------------------------|-------------------------|-------------------------------|------------------------------------|
| Design element title | Passthru Connection | Type of Design element | Forms |
| Alias | | | |
| BD Title | Aizkorri's LogDUPLICATE | Is template | |
| BD Server | Aizkorri/data101 | Categories | |
| BD Path | log_duplicate.nsf | Inherited from | StdNotesLog |
| Replica ID | 85258CDD00254DAD | Signer | Domino Template Development/Domino |
| Modification Date | | Language | Unknown |

```

Code
<?xml version='1.0' encoding='utf-8'?>
<!DOCTYPE form SYSTEM 'xmlschemas/domino_14_0.dtd'>
<form name='Passthru Connection' alias='Passthru Connection' xmlns='http://www.lotus.com/dxl'
version='14.0' maintenanceversion='0.5' replicaaid='85258CDD00254DAD' nocompose='true'
htmlallfields='true' publicaccess='false' designerversion='8.5.3' language='en'>
<noteinfo noteid='31a' unid='40D82D84FE94CD9985256990006B386C' sequence='153'>
<created><datetime>20001107T143107,96-05</datetime></created>
<modified><datetime dst='true'>20250805T024736,80-04</datetime></modified>
<revised><datetime>20210809T132721,49+00</datetime></revised>
<lastaccessed><datetime dst='true'>20250805T024736,79-04</datetime></lastaccessed>
<addedtofile><datetime dst='true'>20250805T024736,79-04</datetime></addedtofile></noteinfo>
<updatedby><name>CN=Domino Template Development/O=Domino</name></updatedby>
<revisions><datetime>20031111T134510,48-05</datetime><datetime dst='true'>20040907T101655,78-04</datetime><datetime
dst='true'>20040907T182022,16-04</datetime><datetime dst='true'>20040907T182040,33-04</datetime><datetime
dst='true'>20040907T182041,94-04</datetime><datetime dst='true'>20040907T182137,32-04</datetime><datetime
>20210125T141654,05-06</datetime></revisions>
<wassignedby><name>CN=Domino Template Development/O=Domino</name></wassignedby>
<globals><code event='options'><lotusscript>Option Public
Use "lsLogEntryDoc"

</lotusscript></code><code event='declarations'><lotusscript>Dim clLogEntryDoc As clLogEntryDoc
  
```

Catalog (12)

Add Bookmark Open

Search in View 'Applicationsby ODS File Format - Title'

Show results

Search for

| | ODS FileFormat | NTF / NSF | Title | Logical Size (bytes) | Physical Size (bytes) | Filename |
|---|---|-----------|-------|----------------------|-----------------------|----------|
| ★ | ▶ 20 - Need update on ODS | 6 | | 2,849,792 | 3,407,872 | |
| ★ | ▶ 41 - Need update on ODS | 2 | | 6,168,576 | 5,906,432 | |
| ★ | ▶ 43 - Default ODS in v9 | 18 | | 75,862,016 | 73,191,424 | |
| ★ | ▶ 51 - Supported in v10.0.1 | 15 | | 32,661,504 | 32,645,120 | |
| ★ | ▶ 52 - Supported in v9 - Default in v10 / v11 | 37 | | 249,425,920 | 245,039,104 | |
| ★ | ▶ 53 - New ODS in v10 | 4 | | 139,952,128 | 131,563,520 | |
| ★ | ▶ 55 - New ODS in v12 - Default in v14 | 261 | | 29,377,772,544 | 8,249,056,512 | |
| ★ | ▶ No info | 7 | | 43,913,216 | 0 | |
| | | 350 | | 29,928,605,696 | 8,740,809,984 | |

- Domain Search
- Applications
 - by Category
 - by Category and Stats
 - by Hierarchy
 - by Num. Documents
 - by Size Db/Num Documents
 - by Num. Design Elts
 - by Path - Title
 - by Server Admin.
 - by Title
 - by Server
 - by Master Template
 - by Template inherited
 - by Size
 - by Size > 1 Gb
 - by Size > 10 Gb
 - by Size > 64 Gb
 - by Size > 256 Gb
 - by ODS and Title
 - by ODS
 - by FT Index Frequency and Siz
 - by FT Index Frequency
 - by Type DB
 - Without category
 - by Replica ID
 - by Last Modification Catalog
 - by Access

Log Monitor

This application allows you to generate reports based on matches of a list of keywords contained in documents. The initial goal was to search in **log.nsf**, but the scope has since been broadened. The application can search on any server, in any database, any view, and any field.

| PROD 9.7 MonitorLog_NTF | | | | | | |
|--|--|----------------------|-----------------|--|---------------------------------|-------------------------|
| <input checked="" type="checkbox"/> New Configuration <input checked="" type="checkbox"/> Run all the report <input checked="" type="checkbox"/> Run the selected report Create a Report for Code Review | | | | | | |
| Server to search ^ | Database to search ^ | View to search ^ | Field to search | String to search (ignore case) ^ | String to avoid (ignore case) ^ | Process all documents ^ |
| * | log.nsf | MailRoutingEvents | EventList | error | | All documents |
| * | log.nsf | MailRoutingEvents | EventList | access denied | | All documents |
| * | log.nsf | MailRoutingEvents | EventList | 0 message[s] received | | All documents |
| * | log.nsf | MailRoutingEvents | EventList | no route found to domain | | All documents |
| * | log.nsf | MailRoutingEvents | EventList | error transferring message | | All documents |
| * | log.nsf | MailRoutingEvents | EventList | Recipient could not be found | | All documents |
| * | log.nsf | Miscellaneous Events | EventList | SMTP Server | | All documents |
| * | log.nsf | Miscellaneous Events | EventList | Authentication failed | | All documents |
| * | log.nsf | Miscellaneous Events | EventList | Authentication failed for user | | All documents |
| * | log.nsf | Miscellaneous Events | EventList | EVENT_CORRELATION_POOL_SIZE | | All documents |
| * | log.nsf | Miscellaneous Events | EventList | ATTEMPT TO ACCESS SERVER | | All documents |
| * | log.nsf | Miscellaneous Events | EventList | authentication failure using internet password | | All documents |
| * | log.nsf | Security Events | EventList | Error: ID in vault is inactive | | All documents |
| * | log.nsf | Security Events | EventList | Unable to read rollover values from view | | All documents |
| * | log.nsf | Security Events | EventList | Error: Wrong Password | | All documents |
| * | log.nsf | Security Events | EventList | Entry not found in index | | All documents |
| * | log.nsf | Security Events | EventList | Unable to find ID for | | All documents |
| Aizkorri/data101 | dominique\AnalisisCodigo_vDesign_By_Path_All | codigolist | | LlamarMediantePA1Param | | All documents |
| Aizkorri/data101 | dominique\AnalisisCodigo_vDesign_By_Path_All | codigolist | | New CIMConexion(| | All documents |



The Admin's Dilemma + AI as Your Second Pair of Hands

5 min



Act 1 — AI Helps You Build Tools Faster

10 min



Act 2 — AI Makes You a Better Domino Admin

28 min



Closing — What AI Did for Me as a Domino Admin

3 min

6 live demos · From HTML toys to C Extension Managers

The Admin's Dilemma



Hundreds of databases, many undocumented (audit for upgrades)



notes.ini files nobody maintains (new customers, admin is gone...), delayed Crash analysis



Legacy LotusScript nobody wants to touch



Traveler issues, web access demands (NO Nomad)



The work grows. The team doesn't.

How many of you have used AI to solve a Domino problem?

That's what this session is about.

Not AI in general. AI for us.

HCL Domino + RGPD + AI

The landscape

- **Geopolitics** — the 1M engineers stat, data colonization, dark web prices
- **The VC Trap** — the junkies metaphor, physical limits, energy/copper
- **Scarcity Tiers** — the rationing scenario, visually as a priority stack
- **The Choice** — external dependency vs. sovereign ownership, side by side
- **CTA** — the sovereign stack pitch (Domino + Ollama + OpenResty + KEEP + n8n)



HCL Domino in the Age of AI

Engage 2026

Dominique Pérarnaud | Data101 | HCL Ambassador

The Geopolitical Reality

⚠ WAKE-UP CALL

1M

ENGINEERS ON AI

In China. The US has 200,000.

9/10

French citizens' data on dark web for €0.20–0.60

NSA

OpenAI feeds foreign intelligence agencies

KILL SW.

Foreign actors can disconnect us — kill switch

ZERO

European sovereignty in AI. US-colonized digital zone.

\$ UNSUSTAINABLE MODEL

"Every token you consume today
is paid for with VC money."

When the funding dries up, we will have become **junkies begging for AI resources** — and the price will be very high.

Each new data center generation demands

10× more electricity and is incompatible with the last. We are hitting hard physical limits: copper, chips, energy.

PRIORITY TIERS · AI BECOMES
RATIONED

Who Gets AI When It Runs Out?

TIER 1

us US Military & Intelligence Agencies

TIER 2

 Banks, Insurance, Large Corporates

TIER 3

 The rest of us — if we're lucky

TIER 4

X Everyone else — left out of the equation

DECISION FRAMEWORK

External Provider

- Price volatility at will
- Kill switch in someone else's hands
- Zero privacy guarantee
- VC-funded — today's price \neq tomorrow's
- Damocles' sword — always.

Own Your AI

- Local, on-premises deployment
- Your data stays yours — always
- No kill switch. No dependency.
- Predictable, stable cost
- Full digital sovereignty.

Own Your Intelligence.

HCL Domino + Local LLMs + OpenResty + KEEPER + n8n

A practical, GDPR-compliant, sovereign AI stack. No VC dependency. No kill switch. No compromise.

The question is not *whether* to use AI.

It is

who controls it — and whether that answer is **you**.

AI as Your Second Pair of Hands



AI doesn't replace you. It doesn't understand your infrastructure.

- ✓ **Writes code faster than you**
- ✓ **Reads documentation you forgot existed**
- ✓ **Builds tools you never had time to build**

You stay in control. You decide what runs where. Your data, your servers, your rules.



Claude

Build



Ollama

Run local AI



OpenResty

Route & proxy



KEEP

Domino REST



n8n

Orchestrate



Domino

Your platform

Claude helps me BUILD → **Local HTML / Embedded web interface / Domino server extensions / Experimental Verse interface**



Nov 2025 – The starting point:

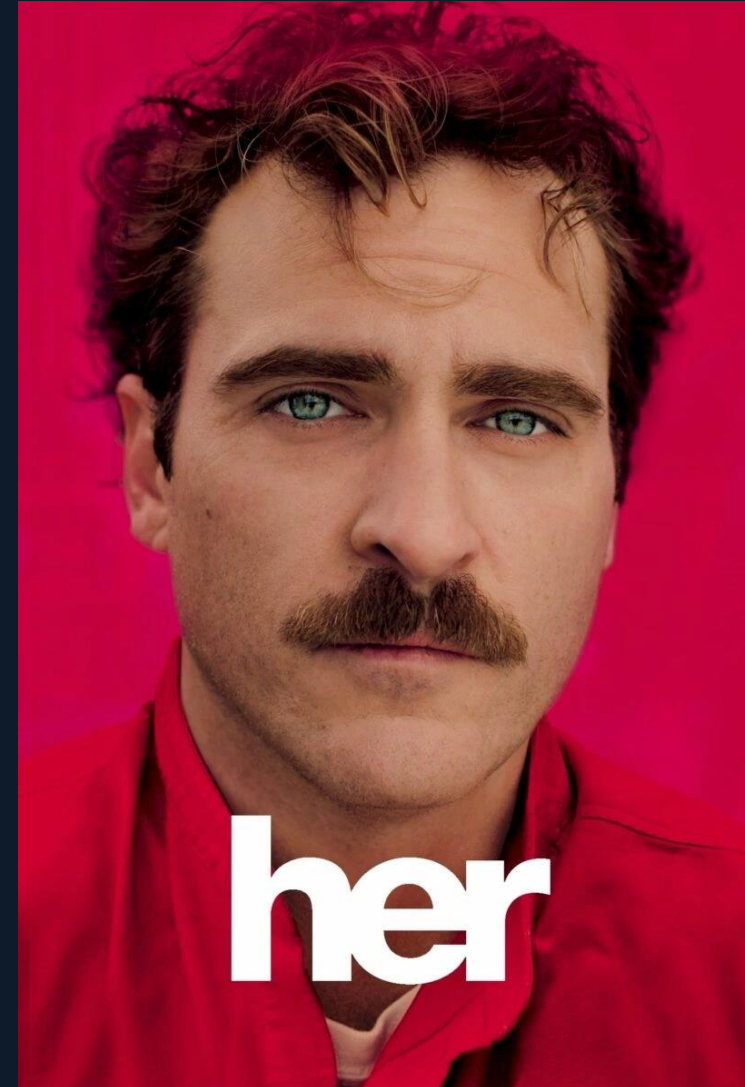
Portfolio tracker. Notes.ini Auditor.

Described it to Claude, had 2 working standalone HTML app in 20 minutes.

No server, no subscription, data stays on my laptop.

The Elephant in the room

 **Claude**
Opus 4.7



ACT 1

AI helps you build tools
you never had time for

1 WordPress Publisher Pipeline

THE PAIN

A concert photographer published 5 gallery posts/year across 5 languages, 30 photos each. An hour per post. He wanted to scale — the workflow was killing him.

THE TECH

WPML API + image processing pipeline.
AI helped build the workflow and debug API calls.
A week project took two days.

DEMO

Runs on his infrastructure. Photos, translations — nothing leaves his server.

1

WordPress Publisher Pipeline



Gallery Publisher + Photo Processor

Process your photos · Resize · Rename · ZIP · Publish to WordPress WPML (5 languages)

STEP 1 IMAGE PROCESSOR

Image Processor

Resize, rename and add copyright to your photos. Accepts individual images, full folders or ZIP archives. Once processed, send them directly to the gallery.

PROJECT NAME (USED AS FILENAME BASE) MAX SIZE (PX)

COPYRIGHT (VISUAL WATERMARK ON IMAGE + EXIF IN JPEG)



Drag images or a ZIP file here
JPG · PNG · WebP · ZIP with images

Folder: requires Chrome/Edge · ZIP: works in all browsers

STEP 2 WORDPRESS PUBLISHER


Post Data — WPML (5 languages)

English Español Français Deutsch Euskara

TITLE (ENGLISH)

DESCRIPTION / BODY (ENGLISH)

Gallery Images



Drag images here
JPG · PNG · WebP — or use the image processor above


★ Featured Image

Will be assigned as the featured image in all 5 posts.


1

WordPress Publisher Pipeline




Drag images here
JPG - PNG - WebP — or use the image processor above 1

★ **Featured Image**
Will be assigned as the featured image in all 5 posts.


Drag the featured image here
JPG, PNG or WebP — single image upload

⚙️ **WordPress Configuration**

WORDPRESS SITE URL

WORDPRESS USER

Use the login username, not the display name

APPLICATION PASSWORD


Generated in WP Admin → Your profile → Application Passwords

POST STATUS

PUBLICATION DATE AND TIME

Date and time to be used when creating the post in WordPress

★ **Featured Image**
Will be assigned as the featured image in all 5 posts.


Drag the featured image here
JPG, PNG or WebP — single image upload

⚙️ **WordPress Configuration**

WORDPRESS SITE URL

WORDPRESS USER

Use the login username, not the display name


APPLICATION PASSWORD

Generated in WP Admin → Your profile → Application Passwords

POST STATUS

PUBLICATION DATE AND TIME

Date and time to be used when creating the post in WordPress

 **Publish**

2

FacturaScan

THE PAIN

Spanish FakturaBAI invoices. Accountant retyping PDFs into Excel.
Every month. By hand.

THE TECH

HTML + PDF.js, coordinate-based text extraction. Claude helped
find a Y/X sorting bug in minutes.

DEMO

Tax data never left the browser. Not even a server call.

FacturaScan

BASE IMPONIBLE · IVA · IRPF

100% Local



Arrastra tus facturas aquí

Uno o varios PDFs. Todo se procesa en tu navegador, sin subir nada a internet.

BASE IMPONIBLE TOTAL (SIN IVA)

13.973,05 €

5 facturas con importe detectado

TOTAL IVA 21%

2934,35 €

TOTAL RETENCIÓN IRPF 15%

0,00 €

Cantidad retenida / no cobrada

IMPORTE TOTAL FACTURADO (CON IVA)

16.907,40 €

Líquido a percibir: 16.907,40 €

| ARCHIVO | NÚMERO | FECHA | BASE IMPONIBLE | IVA 21% | RETENCIÓN IRPF 15% | TOTAL FACTURA |
|---|------------|------------|----------------|----------|--------------------|--------------------|
| B95674065_20260105_TB-2026- ✓ Extraído correctamente | TB-2026-F3 | 05/01/2026 | 1100,00 € | 231,00 € | - | 1331,00 € × |
| B95674065_20260107_TB-2026- ✓ Extraído correctamente | TB-2026-F4 | 07/01/2026 | 4559,36 € | 957,47 € | - | 5516,83 € × |
| B95674065_20260115_TB-2026- ✓ Extraído correctamente | TB-2026-F5 | 15/01/2026 | 50,00 € | 10,50 € | - | 60,50 € × |
| B95674065_20260105_TB-2026- ✓ Extraído correctamente | TB-2026-F1 | 05/01/2026 | 3732,79 € | 783,89 € | - | 4516,68 € × |
| B95674065_20260105_TB-2026- F_2_ ✓ Extraído correctamente | TB-2026-F2 | 05/01/2026 | 4530,90 € | 951,49 € | - | 5482,39 € × |

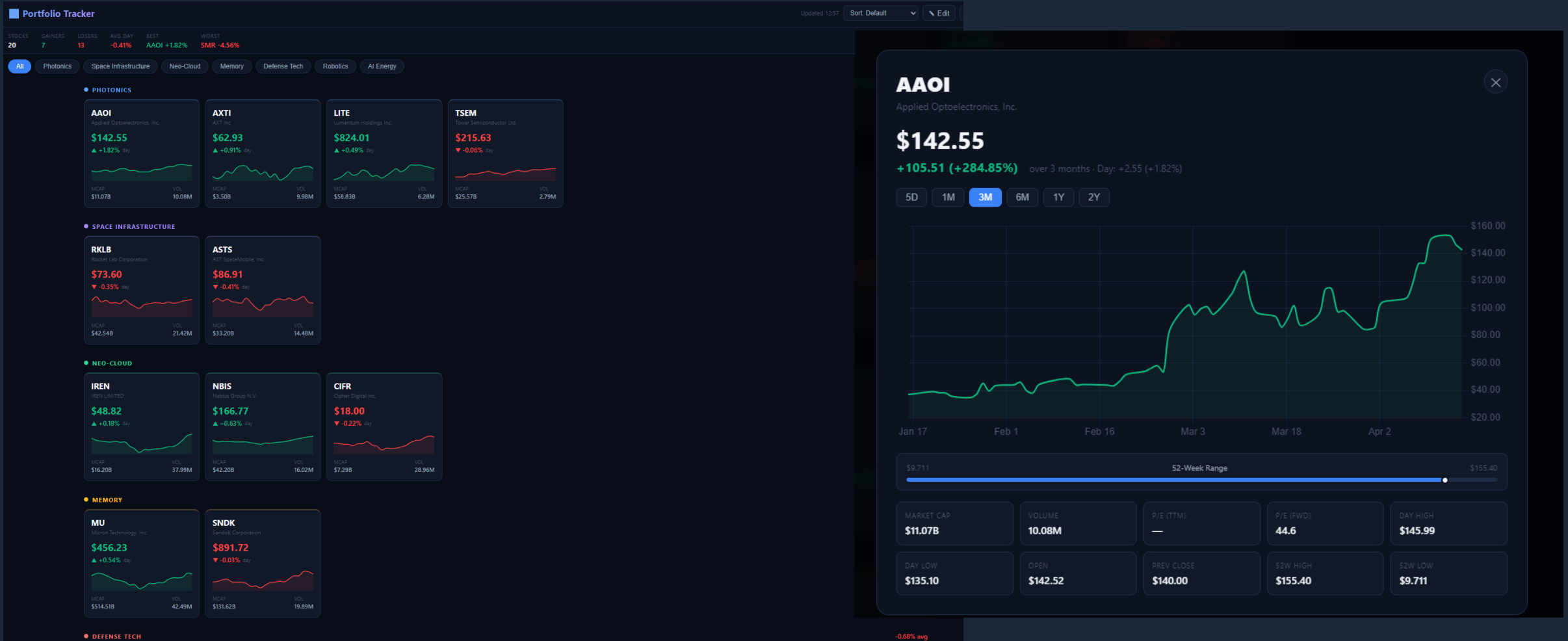
Limpiar todo

CSV

Excel

Bonus: Stock Exchange Tracker

DEMO



So far, any developer could build this with AI.

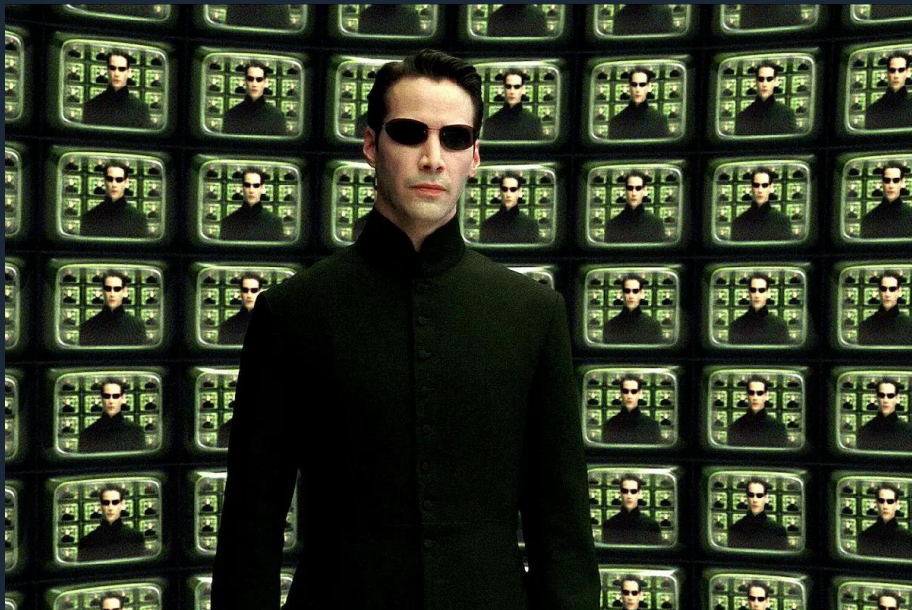
But we're not any developers.

We're Domino admins.

Let's go inside Domino.

ACT 2

AI makes you a better Domino admin & the New “Man-In-The-Middle”



Some examples of chat

"NotesNext — Live Deployment via OpenResty on demo.data101.es"

"HCL Domino Sovereignty Manifesto — PPTX Deck"

"Domino Mail Signature via C Extension Manager — Security review"

"AI Concepts Deep Dive — RAG, Distillation, Ollama, Notes-to-Markdown Pipeline"

"Sovereign AI Stack vs Manus AI — On-Premise Architecture & Hardware"

"Notes.ini Auditor — Claude API Integration with Streaming Analysis"

"Read-Only MCP Server Add-In for HCL Domino — C API Architecture"

3 Notes.ini Auditor

THE PAIN

Abandoned customers. Previous Domino Admin left.
200+ lines. Half undocumented.
Customers asking for an audit

THE TECH

Standalone HTML, zero backend. Drag & drop analysis with
parameter explanations. Google Translate integration. Built with
AI in a day.

DEMO

The private data from notes.ini never leaves your browser. Anonymization is key.

3 Notes.ini Auditor

DEMO

Notes.ini Auditor

HCL Domino — Security & Configuration Analyzer

Offline — built-in database only

LOCAL ONLY

- 1 Load file
- 2 Anonymize
- 3 Fetch descriptions
- 4 Audit results



Drop your notes.ini file here

Works with Notes client (`notes.ini`) and Domino server (`notes.ini` / `server.ini`).

All data is anonymized locally — nothing is ever sent to a server.

Browse file

3

Notes.ini Auditor

DEMO

Notes.ini Auditor

HCL Domino — Security & Configuration Analyzer

Offline — built-in database only
LOCAL ONLY

1 Load file
2 Anonymize
3 Fetch descriptions
4 Audit results

Data anonymized: 10 item(s) anonymized: DN: CN=alfa/O=ingesp · DN: CN=gamma/O=ingesp · ServerDN: opt/hcl/domino · ServerDN: notes/14000000/linux · ServerDN: local/notesdata/ServerID_gamma_arsys ...

2
CRITICAL

14
WARNING

32
INFO

0
OK

Export CSV

Export Report

Clear & start over

FILTER:

All
Critical
Warning
Info
OK
Unknown

AUDIT RESULTS 121 of 121 parameters

| SEVERITY | PARAMETER ID | CURRENT VALUE | WHAT IT DOES | RECOMMENDED ACTION |
|----------|--------------------|---------------------------------------|--|---|
| Critical | KeyFileName | /ANON-SERVER/ANON-ORG/ANON-COUNTRY_id | Path to the server's ID file. | Store server ID in secure, access-controlled location. Back up regularly. |
| Critical | TRANSLOG_Status | 1 | Transaction logging status (0=off, 1=on). | Enable (1) for all production servers for crash recovery. |
| Warning | Cluster_admin_on | 1 | Access control parameter — review carefully. [-] | — |
| Warning | DisableLDAPonAdmin | 0 | Access control parameter — review carefully. [-] | — |
| Warning | Ports | TCPIP | List of enabled network ports/protocols. | Remove any unused or legacy protocols. |
| Warning | LOG_SESSIONS | 1 | Logs user session information (0=off, 1=on). | Enable (1) for security auditing. |
| Warning | Admin | LocalDomainAdmins | Access control parameter — review carefully. [-] | — |
| Warning | TRANSLOG_AutoFixup | 1 | Automatically repairs corrupted transaction log. | Set to 1 for automatic recovery. |

15 / 20

3.1 Notes.ini Auditor using Claude via API

THE PAIN (is the same)

Abandoned customers. Previous Domino Admin left.
200+ lines. Half undocumented.
Customers asking for an audit

THE TECH

Single-file browser tool that audits HCL Domino notes.ini files locally, classifies risks, and generates a Claude AI expert report — with full anonymization and zero server dependency.
Google Translate integration. Built with AI in a day.

DEMO

The private data from notes.ini never leaves your browser. Anonymization is key (Again).

3.1 Notes.ini Auditor using Claude via API

DEMO

- Claude is analysing your configuration...
- Evaluating security parameters...
- Identifying risks and anomalies...
- Formulating recommendations...
- Finalising the report...

AI Security Analysis — Claude

Generated — raw text (JSON parse failed)

```

{
  "healthScore": 62,
  "healthLabel": "Fair",
  "executiveSummary": "This Domino 14.0 FP1 server exhibits multiple security vulnerabilities including exposed server ID file, disabled SSL d",
  "criticalIssues": [
    {
      "title": "Server ID File Stored in Accessible Location",
      "detail": "KeyFileName points to '/ANON-SERVER/ANON-ORG/ANON-COUNTRY.id' which appears to be in a network-accessible or no",
      "action": "Immediately relocate the serverID file to the local data directory (e.g., /local/notesdata/) with file system permissions restricte",
    },
    {
      "title": "Transaction Logging Without Archive Protection",
      "detail": "TRANSLLOG_Style=0 (circular logging) combined with TRANSLLOG_Status=1 means transaction logs are overwritten cyclically. V",
      "action": "Change TRANSLLOG_Style to 1 (archive mode) or 2 (linear mode) depending on backup architecture. Implement transaction log",
    },
  ],
  "warnings": [
    {
      "title": "SSL Debug Logging Enabled in Production",
      "detail": "Debug_SSL_All=3 enables verbose SSL/TLS debugging output to console and logs. This degrades performance, creates exce",
      "action": "Remove 'Debug_SSL_All=3' from notes.ini immediately or set to 0. Restart the HTTP task to ensure clean state. Review recent l",
    },
    {
      "title": "I DAP Anonymous Access Potentially Enabled"
    }
  ]
}

```

AI Security Analysis — Claude

Generated by claude-sonnet-4-5 · 19:00:44



Fair Security Posture

42, Poor This Domino server exhibits severe security vulnerabilities including an exposed server ID file in a non-secure location. In Accessible Data Path KeyFileName points to /ANON-SERVER/ANON-ORG/ANON-COUNTRY.id, which appears to be in a network-accessible or no

CRITICAL ISSUES

None identified.

WARNINGS

None identified.

TOP PRIORITY ACTIONS

- TRANSLOG_Style=0 configures circular logging, which provides limited point-in-time recovery capability.**
Combined with TRANSLLOG_MaxSize=1000MB and TRANSLLOG_AutoFixup=1, database corruption or crash may result in permanent data loss. Duration is inadequate for finance/healthcare sectors with regulatory retention requirements. Establish log rotation/backup scripts.
- Change TRANSLLOG_Style to 1 (archive logging) to enable media recovery and point-in-time restore capabilities.**
Establish automated transaction log backup procedures before logs are overwritten. Size TRANSLLOG_Path appropriately for 24-hour retention.
- I DAP Authentication Disabled on Admin Client**

4 VSCode + Claude → Web Interface for Any NSF

THE PAIN

Dozens of Notes databases with no web interface. Users want browser access. Nomad is not possible.
Rebuilding each by hand = months per database.

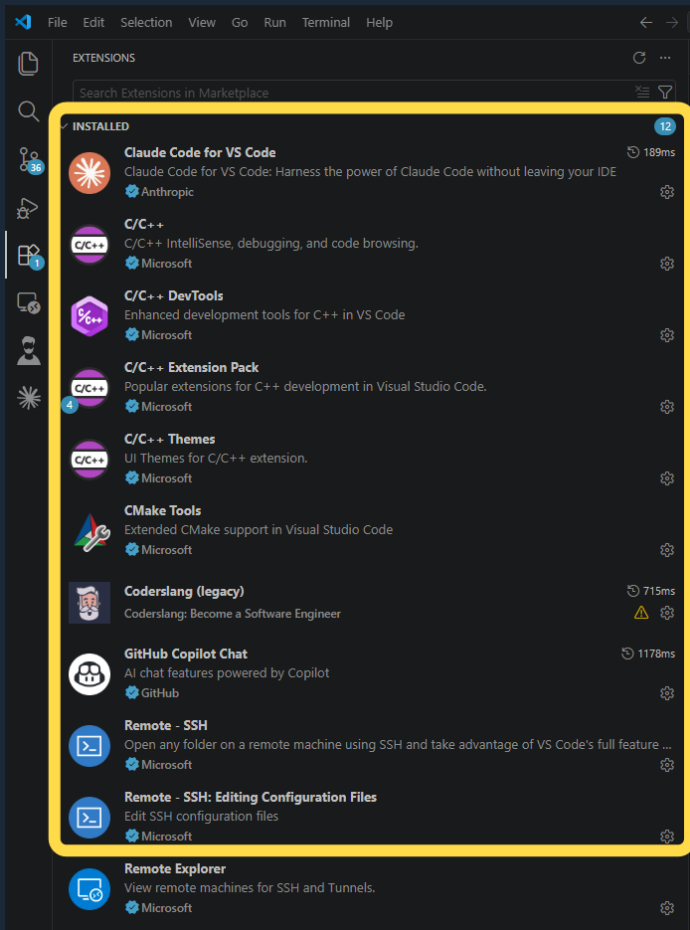
THE TECH

Domino on-disk NSF → VS Code + Claude extension → AI reads forms & views → generates web frontend.
Review, adjust, deploy.

DEMO

AI writes the code. The code runs on premise, talks to your Domino server. Data stays where it belongs.

4 VSCode + Claude → Web Interface for Any NSF



CONFIGURATION - PLUGINS

Claude Claude For VS Code
SSH access

FRONT END DEVELOPMENT FOR WEB APPLICATION DATA

- Should it start as a simple command/result table, or include filters/search and pagination over the JSON feed?

a standalone static HTML/JS page stored in the webcontent folder

All Console Command.view:4

Checking `WebContent` folder contents to confirm where to place the new static page and scripts.

Reviewed `WebContent` and planned structure

I've confirmed `WebContent` has only `WEB-INF`, so the standalone page will be a new root-level static asset.

Created memory file `plan.md`

Proposed plan

A standalone static page will be added under `WebContent`, with new HTML, JS, and CSS files.

What will be created

- `WebContent/console-audit.html`

File Edit Selection View Go Run Terminal Help
vscodesendcommand

EXPLORER

OPEN EDITORS

- config C:\Users\Dominique\ssh
- DominoAlertAgent.lss C:\Users\Dominique\Downloads
- sendCommand_1.lss Code\ScriptLibraries

VSCODESENDCOMMAND

- .settings
- AppProperties
- Code
- Agents
- ScriptLibraries
 - ComponentList.lss
 - ComponentList.lss.metadata
 - sendCommand_1.lss
 - sendCommand_1.lss.metadata
- dbscript.lldb
- Forms
- Framesets
- META-INF
- Pages
- Resources
- SharedElements
- Views
 - All Console Command.view
 - By Command and date.view
 - By Server.view
- WebContent
 - css
 - console-audit.css
 - js
 - console-audit.js
 - WEB-INF
 - faces-config.xml
 - xsp.properties
 - console-audit.html
 - .classpath
 - .project
 - \$.RSHistory
 - plugin.xml

Code > ScriptLibraries > sendCommand_1.lss

```

1 '++LotusScript Development Environment:2:5:(Options):0:7
2 %REM
3   Library sendCommand_1
4   Created May 29, 2025 by Administrador/demo
5   Description: Comments for Library
6 %END REM
7 Option Public
8 Option Declare
9
10
11 '++LotusScript Development Environment:2:5:(Forward):0:1
12 Declare Sub Initialize
13
14 '++LotusScript Development Environment:2:5:(Declarations):0:2
15
16 '++LotusScript Development Environment:2:2:Initialize:1:10
17 Sub Initialize
18   Dim session As New NotesSession
19   Dim serverName As String
20   Dim consoleCommand As string
21   Dim consoleReturn As string
22
23   serverName$ = ""
24   consoleCommand$ = InputBox$("Type command:", _
25     "Send console command")
26   consoleReturn$ = session.SendConsoleCommand( _
27     serverName$, consoleCommand$)
28   MessageBox consoleReturn$, consoleCommand$
29 End Sub

```

CLAUDE CODE CHAT

FRONT END DEVELOPMENT FOR WEB APPLICATION DATA

create a front end of a web application based on the data available at:

Evaluated front-end development and searched for resources

Checking existing web assets and relevant view data to determine how to build the front-end.

Searched for files matching specific patterns

Reviewing form/view definitions and any existing web config to shape the front-end.

Reviewed 4 files and planned front-end development

create a web application based on the following data available at the web server, in json format:

<https://demo.data101.es/sendcommand.nsf/A69F51D0C133D42B00258C990051A5F1?ReadViewEntries&Outputformat=JSON&Start=5&Count=15>

the format of the json is:

```

{
  "@timestamp": "20260331T153219,20Z",
  "@tolevelentries": "52",
  "viewentry": [
    {
      "@position": "5",
      "@unid": "5D0638EE7FB1C44800258D0100601DA0",
      "@noteid": "1206",
      "@siblings": "52",
      "entrydata": [
        {
          "@columnnumber": "0",

```

+ sendCommand_1.lss

Describe what to build

+ Agent Auto

Local Default Approvals

SESSIONS

New Session

OLDER 2

- Develop project against Domino server 3 wks ago
- Front end development for web applicatio... 3 wks ago

4 VSCode + Claude → Web Interface for Any NSF

<https://demo.data101.es/sendcommand.nsf/console-audit.html>

Console Audit Viewer

Loads the Domino view JSON feed and displays server console command results in a searchable table.

Refresh

Search command / server / result

Enter search text

Loaded 15 entries from the feed.

| Timestamp | Server | Command | Result |
|------------------------|------------------|----------------|---|
| 2025-09-10 17:29:50 | data101/ demo | Show Diskspace | Available disk space 234,581,106,688 bytes |
| 2025-09-10 17:29:50 | data101/ demo | Show Heartbeat | data101/demo's elapsed time: 451635 seconds |

5 C Extension Manager — Traveler signature

THE PAIN

Mobile users send email from Traveler with no corporate signature. Compliance hates it. Marketing hates it. You've heard about it.

THE TECH

C API · EM_NOTEUPDATEMAILBOX hook · NIFFindByKey on \$VIMPeople. Claude helped write and debug C code — a niche where documentation is scarce and every byte matters.

DEMO

Signature applied on your Domino server. Mail never detours through an external service. Free.

5 C Extension Manager – Traveler signature

HCL Domino Traveler

Corporate Signature Extension

Implementation Guide | HCL Domino C API Extension Manager

Version 1.0 | Compatible with Domino 12.x and 14.x

Contenido

- 1. Overview
 - Architecture
- 2. Prerequisites
 - 2.1 Build environment
 - 2.2 Runtime prerequisites on the server
- 3. Delivered Files
- 4. Step-by-Step Implementation
 - Step 1 Prepare the Corporate Logo
 - Step 2 Customise Constants in traveler_sig.h
 - Step 3a Build on Windows
 - Step 3b Build on Linux
 - Step 4 Deploy to the Domino Server

2.1 Build environment

| Component | Windows | Linux |
|-----------------|---------------------------------|---------------------------|
| Compiler | Visual Studio 2019+ (cl.exe) | GCC 9+ or Clang 10+ |
| Build tool | nmake.exe (VS Developer Prompt) | GNU make |
| C API headers | HCL Domino C API 14.0 SDK | HCL Domino C API 14.0 SDK |
| Import lib | notes.lib (in NOTESDIR) | libnotes.so (in NOTESDIR) |
| Platform define | /D NT /D W32 | -DLINUX -DUNIX -DW32 |

Flujo completo (v2)

```
EM_NOTEUPDATEMAILBOX
├─ NAMELookup2($Users) → FirstName, LastName, Title...
└─ NIFFindByKey(\SignaturesByUser) → plantilla HTML con tokens
    └─ sustitución {FirstName} {Title} {Logo}...
        └─ CDHTMLBEGIN + HTML + CDHTMLEND → Body
```

Nombre

- Makefile.linux
- Makefile.win
- traveler_sig.c
- traveler_sig.h

6 Verse on Premise / NotesNext

ARCHITECTURE

OpenResty on port 443 (frontend proxy)

Domino + Verse on port 8443 (backend)

Replace Sequoia frontend

Keep KEEP backend

BUILT WITH AI

Reverse-engineered Verse JARs

Discovered hidden DevUtil.class proxy

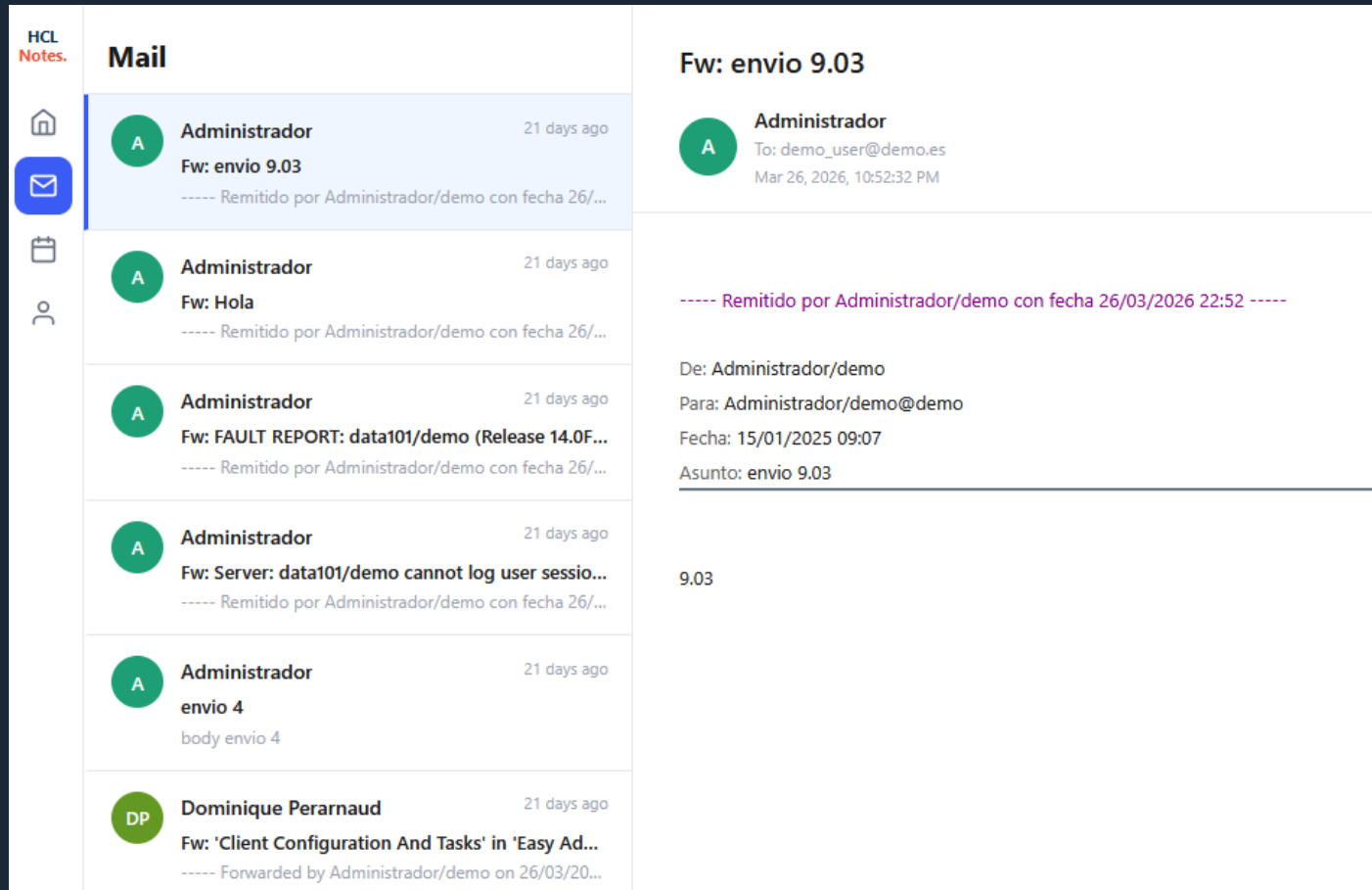
Generated React/Vite/TypeScript frontend

One developer. With AI.

DEMO — Login → Inbox → Mail

6

Verse on Premise / NotesNext



HCL Notes.

Mail

- Administrador** 21 days ago
Fw: envio 9.03
----- Remitido por Administrador/demo con fecha 26/...
- Administrador** 21 days ago
Fw: Hola
----- Remitido por Administrador/demo con fecha 26/...
- Administrador** 21 days ago
Fw: FAULT REPORT: data101/demo (Release 14.0F...
----- Remitido por Administrador/demo con fecha 26/...
- Administrador** 21 days ago
Fw: Server: data101/demo cannot log user sessio...
----- Remitido por Administrador/demo con fecha 26/...
- Administrador** 21 days ago
envio 4
body envio 4
- Dominique Perarnaud** 21 days ago
Fw: 'Client Configuration And Tasks' in 'Easy Ad...
----- Forwarded by Administrador/demo on 26/03/20...

Fw: envio 9.03

Administrador
To: demo_user@demo.es
Mar 26, 2026, 10:52:32 PM

----- Remitido por Administrador/demo con fecha 26/03/2026 22:52 -----

De: Administrador/demo
Para: Administrador/demo@demo
Fecha: 15/01/2025 09:07
Asunto: envio 9.03

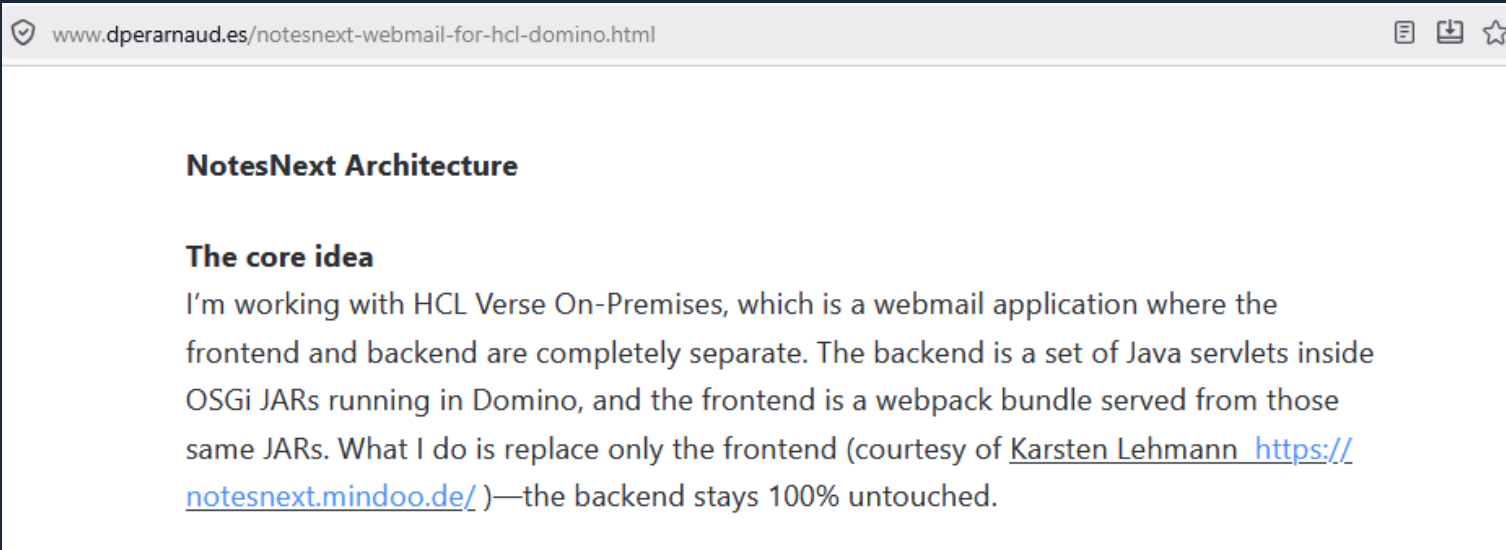
9.03

6 Verse on Premise / NotesNext

The screenshot displays the HCL Notes application interface. On the left, a vertical sidebar contains navigation icons for Home, Messages, Calendar, and Contacts. The main content area is titled "Contacts" and features three filter tabs: "All", "Favorites", and "Recent". Below these tabs, a list of contact cards is shown. The first card, for "data101", is highlighted with a blue border and includes "Email" and "Chat" buttons. The second card, for "Administrador", also has "Email" and "Chat" buttons. Three other contact cards are visible but their details are blurred. On the right side of the interface, a user profile for "data101" is displayed, featuring a blue circular avatar with the letter "D", three communication options (Email, Chat, Call), and a "Notes name" field containing "data101".

6

Verse on Premise / NotesNext



www.dperarnaud.es/notesnext-webmail-for-hcl-domino.html

NotesNext Architecture

The core idea

I'm working with HCL Verse On-Premises, which is a webmail application where the frontend and backend are completely separate. The backend is a set of Java servlets inside OSGi JARs running in Domino, and the frontend is a webpack bundle served from those same JARs. What I do is replace only the frontend (courtesy of [Karsten Lehmann https://notesnext.mindoo.de/](https://notesnext.mindoo.de/))—the backend stays 100% untouched.

Three layers

Layer 1 — The browser

I build a React single-page application. When a user opens <https://demo.data101>, they get my custom UI. It calls Domino APIs using the same session cookies that Domino already set during login. From the browser's point of view, it's just a normal web app.

Layer 2 — OpenResty (the traffic cop)

Development vs production

In development, I can still run `npm run dev` on port 41735 with `VOP_WebpackDevServerEnabled=1` for hot reload.

In production, OpenResty serves the compiled `dist/` folder. The only real differences are a single `notes.ini` setting and whether Vite is running.

What AI Did for Me as a Domino Admin



Built client tools in hours instead of weeks



Audited servers faster and more thoroughly



Gave legacy databases a web frontend



Wrote C API code I wouldn't have attempted



Started rebuilding a Verse frontend solo


AI didn't replace me. It made me the admin I always wanted to be.

What is next?

DCA **DOMINO CRASH ANALYZER**
IBM_TECHNICAL_SUPPORT - AI-POWERED FORENSICS

● localhost:5100 ● READY

API KEY `sk-ant-api03-... (or set via env var)`



DROP IBM_TECHNICAL_SUPPORT FILES HERE

Select all files from the IBM_TECHNICAL_SUPPORT folder - multiple files accepted
Text files are read and analyzed - Binary files are listed (name + size for context)

`msd_*.log` `fault_recovery.log` `SEMDEBUG_*.TXT` `console_*.log` `kill_*.log` `pid.nbf` `*.dmp (listed)` `*.badnsf (listed)`

What is next?

▲ FORENSIC REPORT · CONFIDENTIAL

Windows Defender ↔ HCL Domino Interference Analysis

Source files: Logfile.PML (513 MB) + MPSupportFiles.cab (14 MB)

SERVER

data101_demos_server_01

OS

WS 2022 DC Build 20348

DOMINO INSTALL

C:\Program
Files\HCL\Domino\

DOMINO DATA

D:\data\
(HarddiskVolume6)

CRASH EVENT

2026-04-15 @ 11:59:12

DEFENDER VERSION

4.18.26030.3011

INFRASTRUCTURE

Hyper-V VM ·
data101_demos.com

RAM

8 GB / 8 GB used

01 - EXECUTIVE SUMMARY

● Root Cause Confirmed: All Defender exclusions for Domino are broken — wrong drive letters

The GPO configures `E:\Notes\data` as the Domino data exclusion, but the server's actual Domino data lives on `D:\data\`. Every attempt to apply that exclusion fails with `ERROR_FILE_NOT_FOUND (0x80070002)`, logged hundreds of times per day. Windows Defender is actively scanning all NSF files in real-time with no exclusions in effect.

● Domino binary path is completely unexcluded

The GPO excludes `%systemdrive%\notes` (= `C:\notes`). The actual Domino installation is at `C:\Program Files\HCL\Domino\`. That path is never excluded. WdFilter (altitude 328010, 7 instances) is intercepting every DLL load, every file open on that path.

▲ nserver.exe crashed at 11:59:12 on April 15

Core dump confirmed at `V:\logfiles\server\core_nserver_w64I_DE-TSTAPPC011_2026_04_15@11_59_12.dmp`. Defender's IOAV, Behavior Monitor, and NIS were all fully active. Defender attempted DLL injection (CopyAccelerator) into `nserver.exe` — failed with `hr=0x80070005 (ACCESS_DENIED)`, suggesting the scan engine was actively probing the process at crash time.

▲ nnotes.dll scan taking 937–968 ms per scan request

MPLog confirms `ncompact.exe` (1,111 scan requests, max 968 ms on `nnotes.dll`) and `OpenHandleCollector.exe` (max 937 ms on `nnotes.dll`, 9% estimated impact). This directly explains Domino I/O stalls and semaphore deadlocks during compaction tasks.

What is next?

Data101 Domain DEMO

Updated 7:39:20

🔄 25s

| | | | | |
|---------|--------|----------|-----------------|-----------|
| SERVERS | ONLINE | DEGRADED | CRITICAL PROBES | DEAD MAIL |
| 3 | 2 | 1 | 2 | 2 |

● Glasgow-Hub-01

ONLINE

| | | |
|---------|------|-------|
| PENDING | DEAD | USERS |
| 6 | 0 | 42 |

● AMgr ● REST API ● HTTP

● Glasgow-Mail-02

ONLINE

| | | |
|---------|------|-------|
| PENDING | DEAD | USERS |
| 3 | 0 | 18 |

● AMgr ● REST API ● HTTP

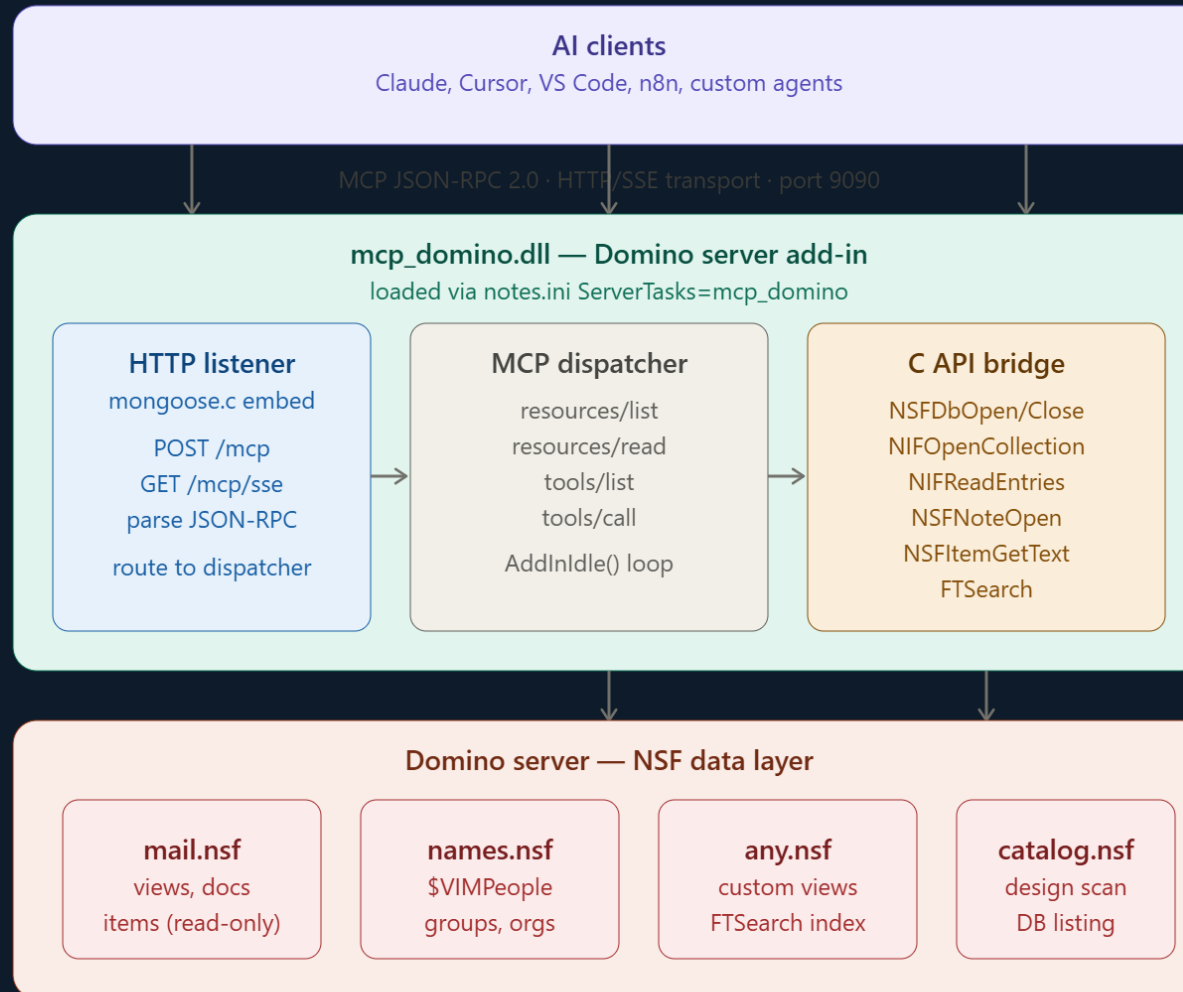
● Server-03

DEGRADED 2 crit

| | | |
|---------|------|-------|
| PENDING | DEAD | USERS |
| 58 | 2 | 10 |

● AMgr ● REST API ● HTTP

What is next?



What is next?



Configure Claude API

Enter your Anthropic API key to enable AI-powered analysis. Get yours at console.anthropic.com. The key is stored only in your browser's localStorage — never sent anywhere except directly to the Anthropic API.

ANTHROPIC API KEY

Your key starts with `sk-ant-`

MODEL

⚠ Your API key is stored in localStorage on this device only. Do not share this file with the key pre-filled. Use in a trusted environment.

Clear key Cancel Save & Close

Console temporarily unavailable

Claude Console is currently experiencing a temporary service disruption. We're working on it, please check back soon.

You're in!

Prompt in the Claude Console or explore the API docs

Explore Console

Create and evaluate prompts in the Claude Console

[Prompt in console](#)

API Reference

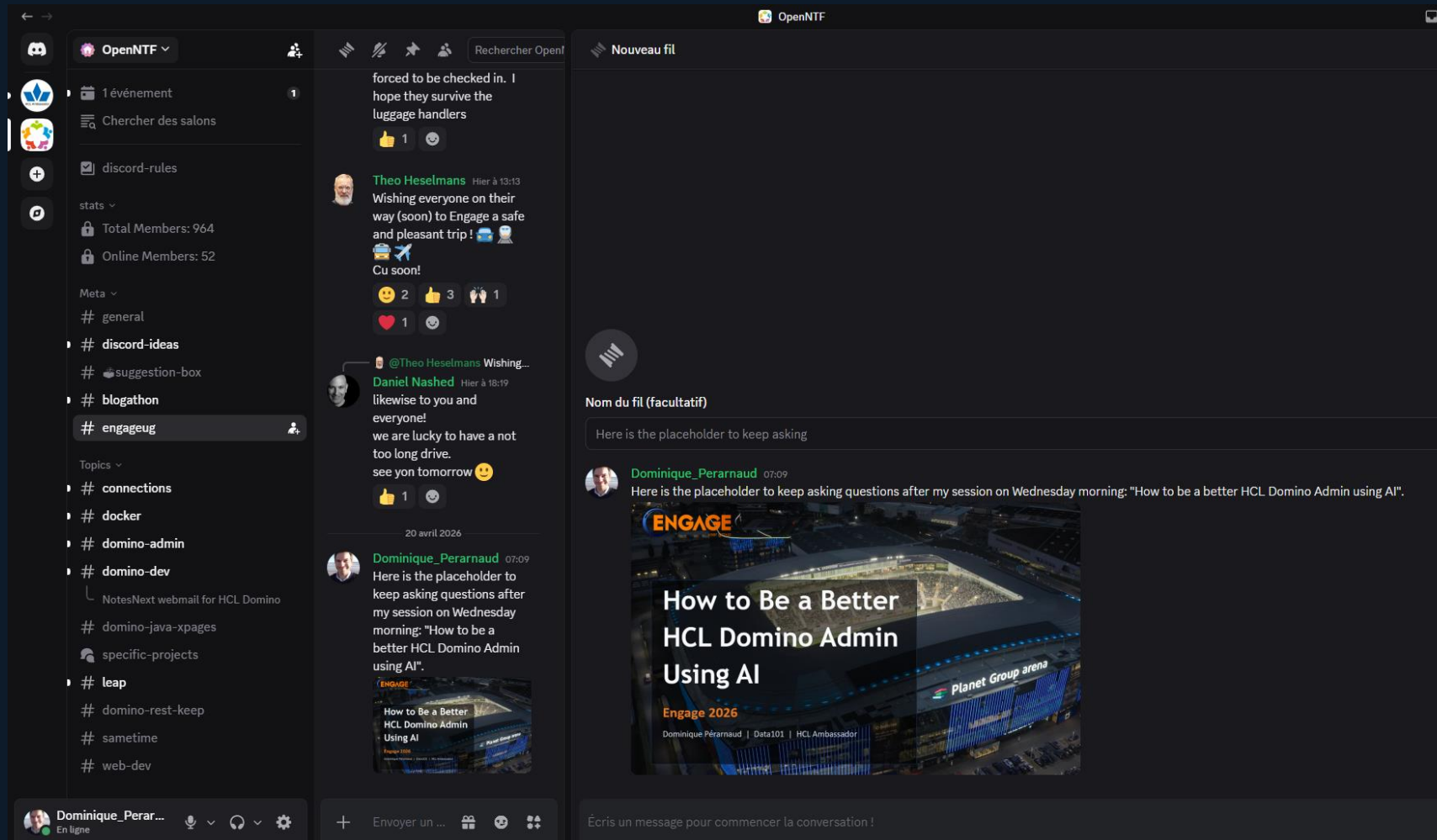
Explore our API and Client SDK documentation

[Explore API docs](#)

[Manage API keys](#)

Questions?

Keep talking on Discord: OpenNTF #Engageug




The screenshot shows a Discord chat window for the OpenNTF server. The left sidebar displays the server name 'OpenNTF' and a list of channels including #general, #discord-ideas, #engageug (selected), and various topic channels like #connections, #docker, and #domino-admin. The main chat area shows a message from Theo Heselmans wishing everyone a safe trip, followed by a reply from Daniel Nashed. A date separator for '20 avril 2026' is visible. Below that, a message from Dominique Perarnaud includes a placeholder for a video titled 'How to Be a Better HCL Domino Admin Using AI'. The video thumbnail shows a large arena at night with the text 'ENGAGE', 'How to Be a Better HCL Domino Admin Using AI', and 'Engage 2026'. The bottom of the chat shows the input field and a list of online members including Dominique Perarnaud.

Thank you !

Dominique Pérarnaud

Data101 · HCL Ambassador

 dperarnaud.es

 dperarnaud@data101.es