

# OPENNTF WEBINARS

October, 2022

DQL, Compare DBs Report tool and Document Properties  
Plugin





# AGENDA

- Welcome
- Presentation:
  - Document Properties Plugin – Julian Robichaux
  - Compare DBs Reports Tool – Andre Guirard
  - Create Views from Other DBs – John Curtis
- Q and A - All





# THANKS TO THE OPENNTF SPONSORS

- HCL made a contribution to help our organization
  - Funds these webinars!
  - Contests like Hackathons
  - Running the organization
- Prominic donates all IT related services
  - Cloud Hosting for OpenNTF
  - Infrastructure management for HCL Domino and Atlassian Servers
  - System Administration for day-to-day operation





# THIS IS OUR COMMUNITY

- Join us and get involved!
- We are all volunteers
- No effort is too small
- If your idea is bigger than you can do on your own, we can connect you to a team to work on it
- Test or help or modify an existing project
- Write guides or documentation
- Add reviews on projects / stars on Snippets





# NEXT WEBINAR

- November OpenNTF Webinar - Integrate Keycloak with Domino for identity management with Heiko Voigt
- Register at :
  - <https://www.openntf.org/webinars>





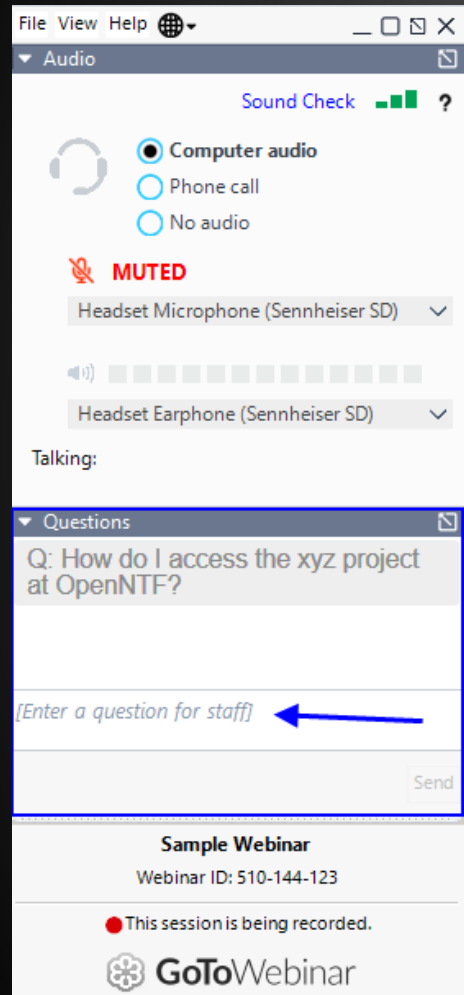
# DECEMBER HAPPY HOUR

- Join us in December for a virtual Happy Hour!





# ASKING QUESTIONS



- First Question – Will this be recorded?
  - Yes, view on YouTube!!!
  - <https://www.youtube.com/user/OpenNTF>
- Use the Questions Pane in GoToWebinar
- We will get to your questions at the end of the webinar
- The speakers will respond to your questions verbally
  - (not in the Questions pane)
- Please keep all questions related to the topics that our speakers are discussing!!!
- Unrelated Question => post at:
  - <https://openntf.org/discord>





# PRESENTATIONS

Document Properties Plugin – Julian Robichaux  
Compare DBs Reports Tool – Andre Guirard  
Create Views from Other DBs – John Curtis







# Document Properties

by panagenda

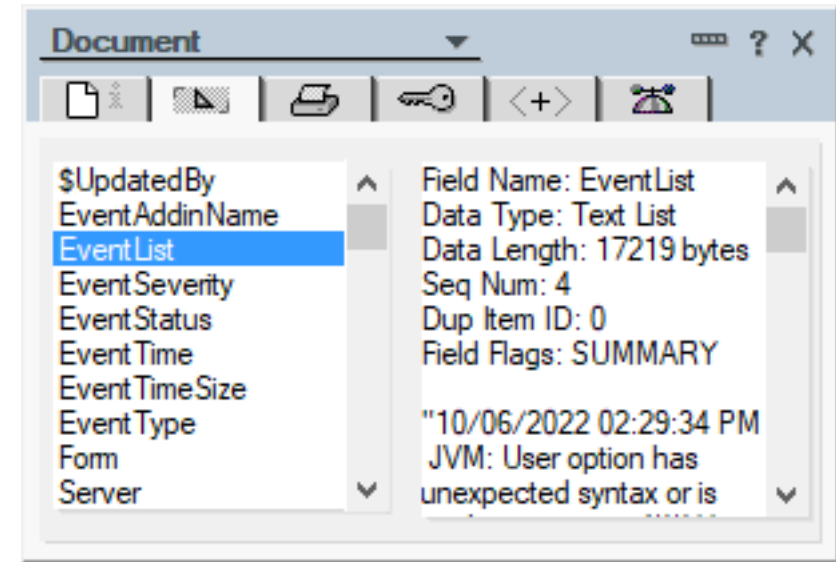
presentation by Julian

Make Your Data Work For You



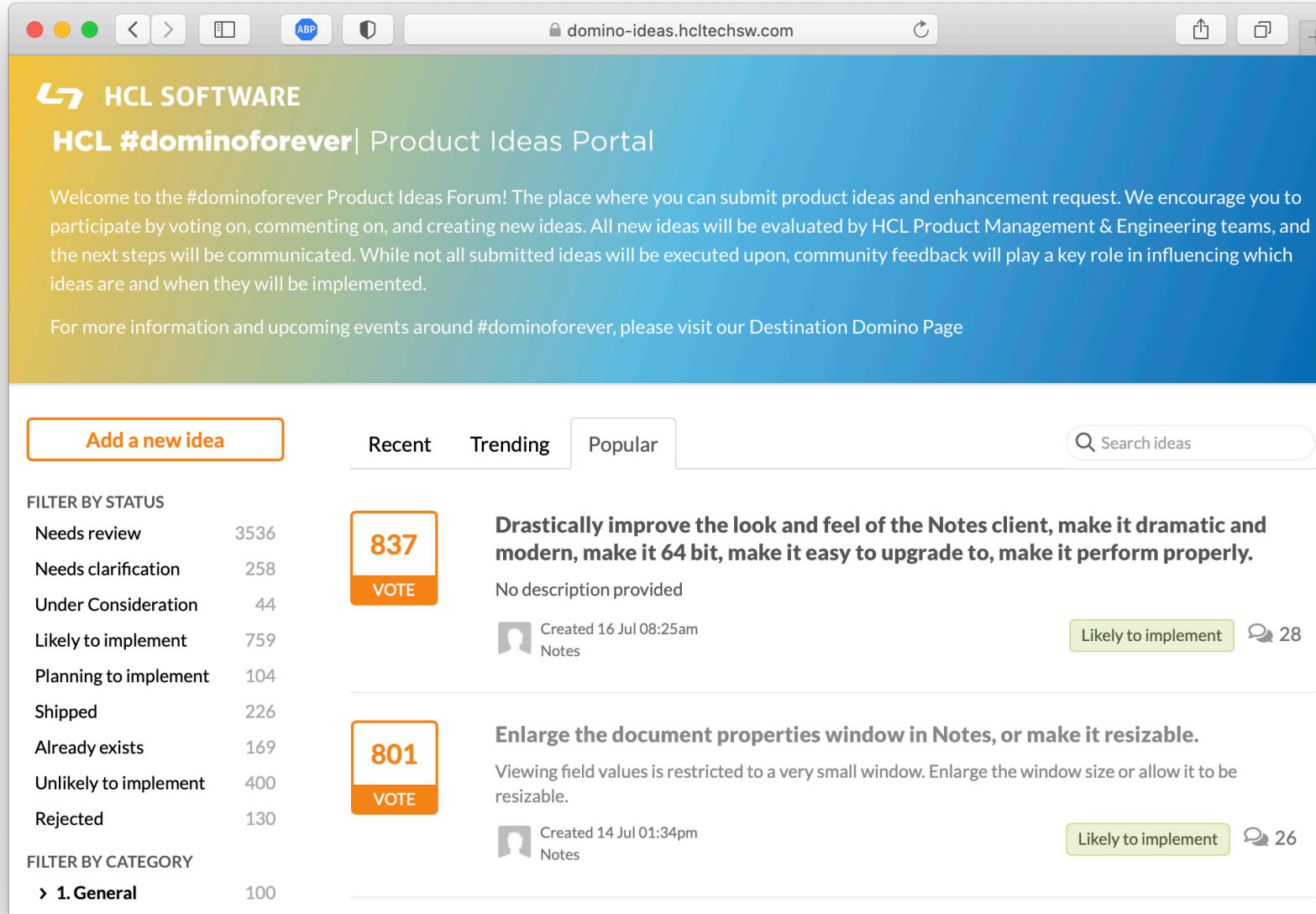
# What is the Document Properties Plugin?

- Alternative to the “classic” document properties box
- Many quality of life improvements
  - Resizable
  - Sortable
  - Searchable
  - and so much more!
- Created because we wanted it internally, and...





# Other People Wanted It Too



The screenshot shows a web browser window displaying the HCL Software Product Ideas Portal. The page has a blue header with the HCL logo and the text "HCL #domino forever | Product Ideas Portal". Below the header, there is a welcome message and a link to the Destination Domino Page. The main content area features a sidebar with filters, a list of ideas, and a search bar.

**HCL SOFTWARE**  
**HCL #domino forever | Product Ideas Portal**

Welcome to the #domino forever Product Ideas Forum! The place where you can submit product ideas and enhancement request. We encourage you to participate by voting on, commenting on, and creating new ideas. All new ideas will be evaluated by HCL Product Management & Engineering teams, and the next steps will be communicated. While not all submitted ideas will be executed upon, community feedback will play a key role in influencing which ideas are and when they will be implemented.

For more information and upcoming events around #domino forever, please visit our Destination Domino Page

[Add a new idea](#)

Recent Trending Popular

Search ideas

**FILTER BY STATUS**

Needs review	3536
Needs clarification	258
Under Consideration	44
Likely to implement	759
Planning to implement	104
Shipped	226
Already exists	169
Unlikely to implement	400
Rejected	130

**FILTER BY CATEGORY**

> 1. General	100
--------------	-----

**837**  
VOTE

**Drastically improve the look and feel of the Notes client, make it dramatic and modern, make it 64 bit, make it easy to upgrade to, make it perform properly.**

No description provided

Created 16 Jul 08:25am  
Notes

Likely to implement 28

**801**  
VOTE

**Enlarge the document properties window in Notes, or make it resizable.**

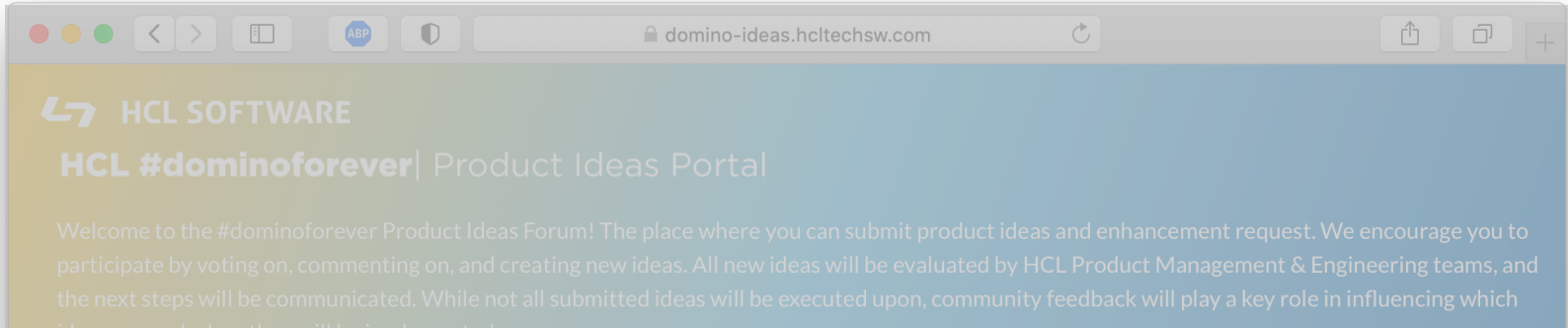
Viewing field values is restricted to a very small window. Enlarge the window size or allow it to be resizable.

Created 14 Jul 01:34pm  
Notes

Likely to implement 26



# Other People Wanted It Too



801

VOTE

## Enlarge the document properties window in Notes, or make it resizable.

Viewing field values is restricted to a very small window. Enlarge the window size or allow it to be resizable.

Created 14 Jul 01:34pm  
Notes

Likely to implement

26

Planning to implement104

Shipped226

Already exists169

Unlikely to implement400

Rejected130

FILTER BY CATEGORY

> 1. General100

801

VOTE

Enlarge the document properties window in Notes, or make it resizable.

Viewing field values is restricted to a very small window. Enlarge the window size or allow it to be resizable.

Created 14 Jul 01:34pm  
Notes

Likely to implement

26



# The Basics

Document Properties Plugin



# The Basics: How Do You Open It?

Date	#	Starting Time	Ending Time
julian robichaux/panagenda			
10/04/2022			
	1	07:46 AM	
10/06/2022			
	1	02:07 PM	
	2	02:29 PM	
10/10/2022			
	1	01:58 PM	
	2	02:03 PM	
	3	02:07 PM	
	4	02:22 PM	
	5	02:23 PM	

Document Properties

Cut Ctrl+X

Copy Ctrl+C

Copy as Document Link

Copy Selected as Table

Paste Ctrl+V

Open

Edit Ctrl+E

Forward

Print... Ctrl+P

Delete Del

Open in New Window

Create Bookmark...

Advanced Properties >

Document Properties Ctrl+Alt+L

Profile Documents

Compare Selected Documents

Compare Later

Compare With 'Compare Later'



# The Basics: How Do You Open It?

Date	#	Starting Time	Ending Time
julian robichaux/panagenda			
10/04/2022			
10/06/2022	1	07:46 AM	02:07 PM
2	02:07 PM	02:29 PM	
10/10/2022	1	01:58 PM	02:00 PM
2	02:03 PM	02:06 PM	
3	02:07 PM	02:09 PM	
4	02:22 PM	02:22 PM	
5	02:23 PM		

Julian Robichaux's Log - IBM Notes

File Edit View Create Actions Tools Window Help

New Open Close Save As... AutoSave Application Replication Locations Import... Export... Page Setup... Print Preview... Print... Preferences... Properties Advanced Properties Security Change Password... Sametime Close All Exit

Document Properties Profile Documents Compare Selected Documents Compare Later Compare With 'Compare Later'

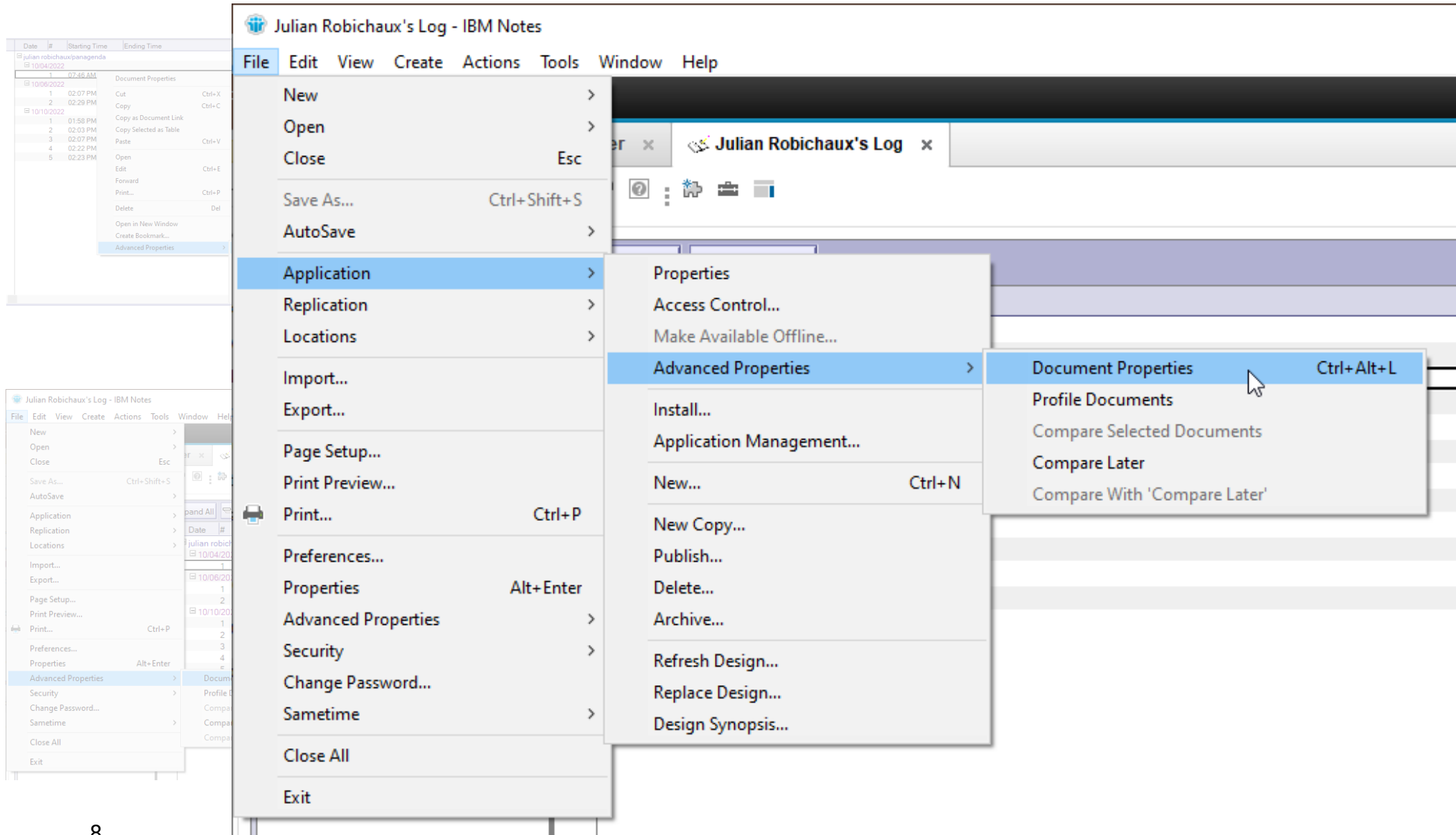
Document Properties Profile Documents Compare Selected Documents Compare Later Compare With 'Compare Later'

Document Properties Profile Documents Compare Selected Documents Compare Later Compare With 'Compare Later'

Date	#	Starting Time	Ending Time
julian robichaux/panagenda			
10/04/2022			
1	07:46 AM	02:07 PM	
10/06/2022			
1	02:07 PM	02:29 PM	
2	02:29 PM	01:56 PM	
10/10/2022			
1	01:58 PM	02:00 PM	
2	02:03 PM	02:06 PM	
3	02:07 PM	02:09 PM	
4	02:22 PM	02:22 PM	
5	02:23 PM		



# The Basics: How Do You Open It?



The screenshot displays the IBM Notes application interface. The main window is titled "Julian Robichaux's Log - IBM Notes". The "File" menu is open, showing options like New, Open, Close, Save As..., AutoSave, Application, Replication, Locations, Import..., Export..., Page Setup..., Print Preview..., Print..., Preferences..., Properties, Advanced Properties, Security, Change Password..., Sametime, Close All, and Exit. The "Application" menu is open, showing options like Properties, Access Control..., Make Available Offline..., Advanced Properties, Install..., Application Management..., New..., New Copy..., Publish..., Delete..., Archive..., Refresh Design..., Replace Design..., Design Synopsis..., and Close All. The "Advanced Properties" menu is open, showing options like Document Properties, Profile Documents, Compare Selected Documents, Compare Later, and Compare With 'Compare Later'. The "Document Properties" menu is open, showing options like Document Properties, Profile Documents, Compare Selected Documents, Compare Later, and Compare With 'Compare Later'. The "Document Properties" menu item is highlighted with a mouse cursor.

Julian Robichaux's Log - IBM Notes

File Edit View Create Actions Tools Window Help

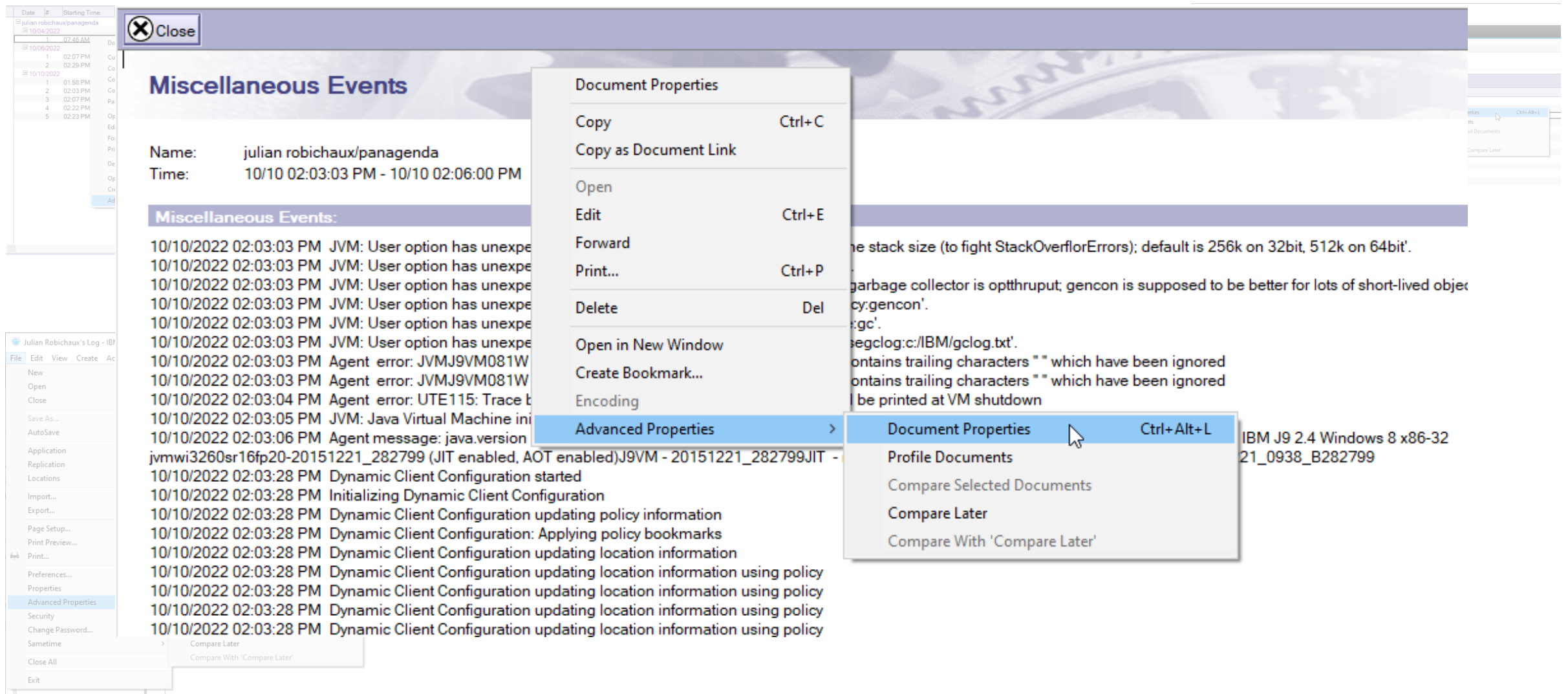
New Open Close Save As... AutoSave Application Replication Locations Import... Export... Page Setup... Print Preview... Print... Preferences... Properties Advanced Properties Security Change Password... Sametime Close All Exit

Properties Access Control... Make Available Offline... Advanced Properties Install... Application Management... New... New Copy... Publish... Delete... Archive... Refresh Design... Replace Design... Design Synopsis...

Document Properties Profile Documents Compare Selected Documents Compare Later Compare With 'Compare Later'



# The Basics: How Do You Open It?



The screenshot displays the Panagenda application interface. The main window, titled 'Miscellaneous Events', shows a list of events for the date 10/10/2022. The events are listed in a table with columns for Date, #, and Starting Time. The events are as follows:

Date	#	Starting Time
10/10/2022	1	07:48 AM
10/10/2022	2	02:07 PM
10/10/2022	3	02:29 PM
10/10/2022	4	02:03 PM
10/10/2022	5	02:22 PM
10/10/2022	6	02:23 PM

The 'Miscellaneous Events' window is open, showing the following details:

- Name: julian robichaux/panagenda
- Time: 10/10 02:03:03 PM - 10/10 02:06:00 PM

The 'Miscellaneous Events' list contains the following entries:

- 10/10/2022 02:03:03 PM JVM: User option has unexpe
- 10/10/2022 02:03:03 PM JVM: User option has unexpe
- 10/10/2022 02:03:03 PM JVM: User option has unexpe
- 10/10/2022 02:03:03 PM JVM: User option has unexpe
- 10/10/2022 02:03:03 PM JVM: User option has unexpe
- 10/10/2022 02:03:03 PM JVM: User option has unexpe
- 10/10/2022 02:03:03 PM Agent error: JVMJ9VM081W
- 10/10/2022 02:03:03 PM Agent error: JVMJ9VM081W
- 10/10/2022 02:03:04 PM Agent error: UTE115: Trace b
- 10/10/2022 02:03:05 PM JVM: Java Virtual Machine ini
- 10/10/2022 02:03:06 PM Agent message: java.version
- jvmwi3260sr16fp20-20151221\_282799 (JIT enabled, AOT enabled)J9VM - 20151221\_282799JIT -
- 10/10/2022 02:03:28 PM Dynamic Client Configuration started
- 10/10/2022 02:03:28 PM Initializing Dynamic Client Configuration
- 10/10/2022 02:03:28 PM Dynamic Client Configuration updating policy information
- 10/10/2022 02:03:28 PM Dynamic Client Configuration: Applying policy bookmarks
- 10/10/2022 02:03:28 PM Dynamic Client Configuration updating location information
- 10/10/2022 02:03:28 PM Dynamic Client Configuration updating location information using policy
- 10/10/2022 02:03:28 PM Dynamic Client Configuration updating location information using policy
- 10/10/2022 02:03:28 PM Dynamic Client Configuration updating location information using policy
- 10/10/2022 02:03:28 PM Dynamic Client Configuration updating location information using policy

The 'Document Properties' context menu is open, showing the following options:

- Copy (Ctrl+C)
- Copy as Document Link
- Open
- Edit (Ctrl+E)
- Forward
- Print... (Ctrl+P)
- Delete (Del)
- Open in New Window
- Create Bookmark...
- Encoding
- Advanced Properties (Ctrl+Alt+L)

The 'Advanced Properties' sub-menu is open, showing the following options:

- Document Properties (Ctrl+Alt+L)
- Profile Documents
- Compare Selected Documents
- Compare Later
- Compare With 'Compare Later'

The 'File' menu is open, showing the following options:

- New
- Open
- Close
- Save As...
- AutoSave
- Application
- Replication
- Locations
- Import...
- Export...
- Page Setup...
- Print Preview...
- Print...
- Preferences...
- Properties
- Advanced Properties
- Security
- Change Password...
- Sametime
- Close All
- Exit

The 'Compare Later' sub-menu is open, showing the following options:

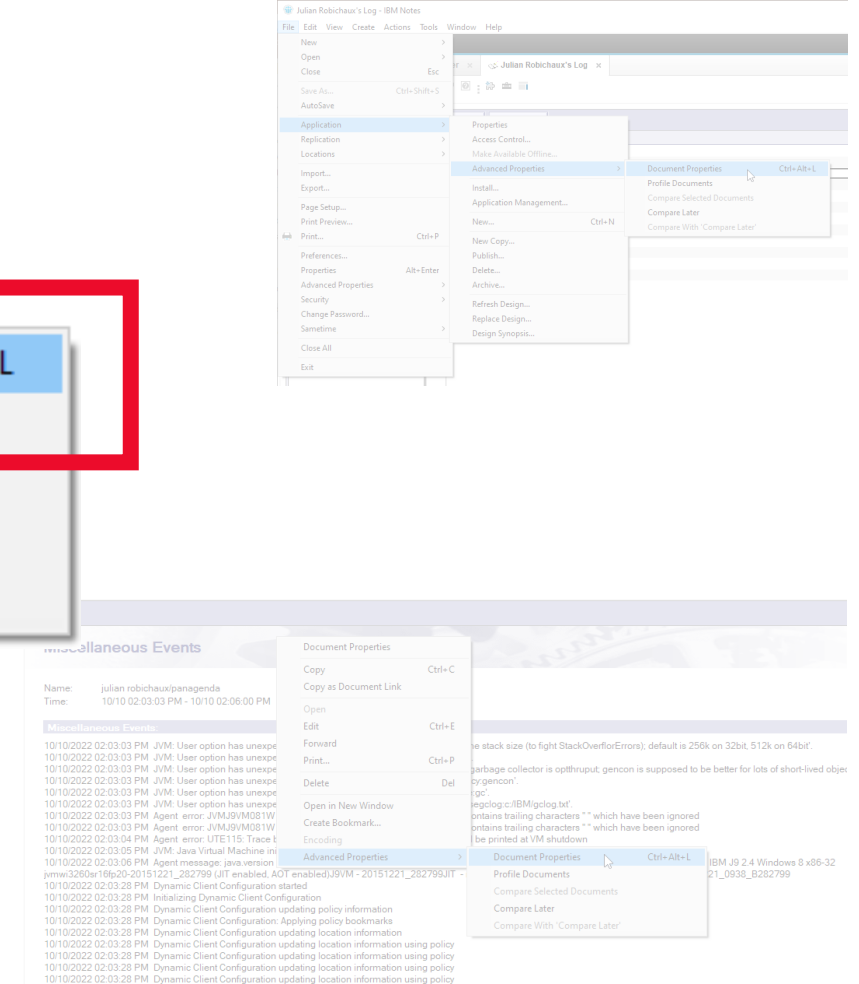
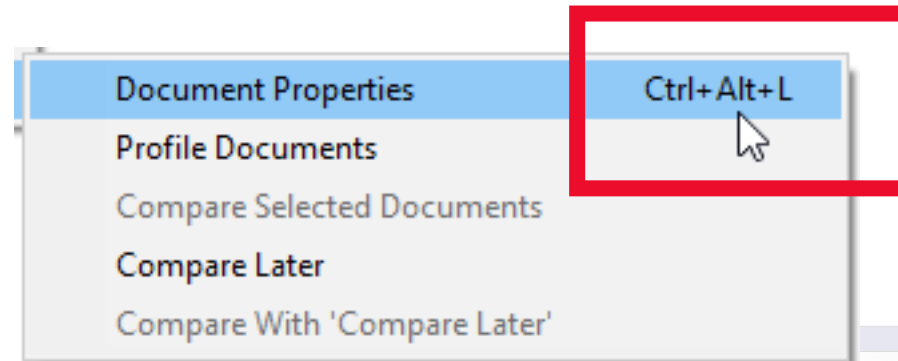
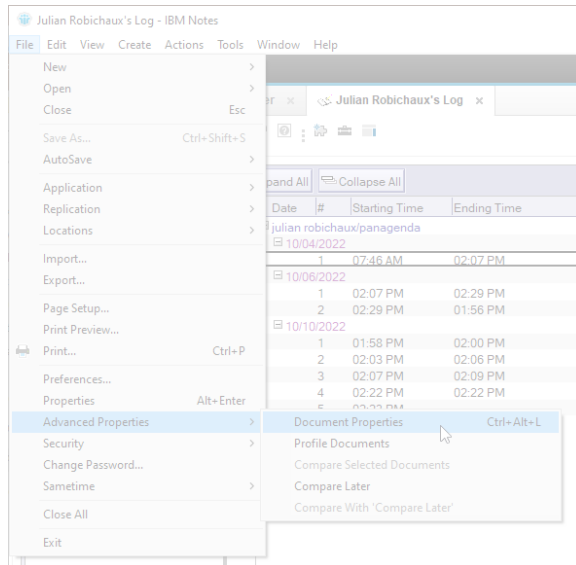
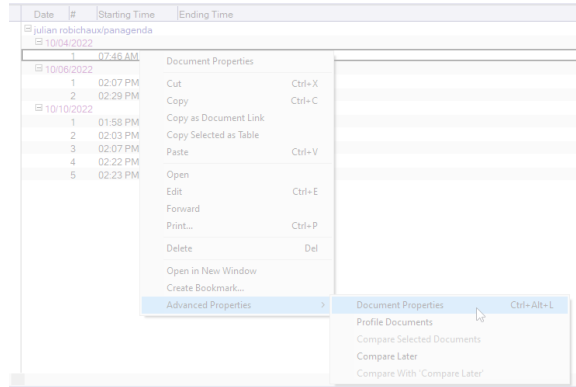
- Compare Later
- Compare With 'Compare Later'

The 'Compare Later' sub-menu is also open, showing the following options:

- Compare Later
- Compare With 'Compare Later'



# The Basics: How Do You Open It?





# What Does It Look Like?

Document Properties Plugin



# Default Tab: All The Fields

Advanced Document Properties - panagenda Timezone Helper [313A4EBEB00D887085257EB4004E30CB]


Fields Info Attachments

Search:  copy ▾

Field Name	Data Type	Size	Value
\$ConflictAction	Text	3	3
\$FILE	Attachment	925	extension.xml
\$Revisions	Time\Date List	38	09/02/2015 10:14:52 AM;09/02/2015 10:14:52 ..
\$UpdatedBy	Names	33	CN=julian robichaux/O=panagenda
\$V2AttachmentOp...	Text	3	0
ApprovalStatusCha...	Names	2	
ApprovalStatusCha...	Text	2	
ApprovalStatusHist...	Text	2	
AttachModified	Time\Date	10	09/02/2015 03:11:57 PM
AttachName	Text	15	extension.xml
AttachSize	Text	5	925
Authors	Authors List	47	CN=julian robichaux/O=panagenda;[Admins
capabilities	Text	2	
capabilitiesURL	Text	2	
Categories	Text	13	CoolPlugins
Description	Text	27	panagenda Timezone Helper

Field Name: \$Revisions  
Data Type: Time\Date List  
Data Length: 38 bytes  
Field Flags: SUMMARY

09/02/2015 10:14:52 AM EDT  
09/02/2015 10:14:52 AM EDT  
09/02/2015 10:15:22 AM EDT  
09/02/2015 03:12:25 PM EDT

 ☒ Follow Document Selections Close

if the document  
is open in a tab,  
you also get  
**computed text**



# Info Tab

Advanced Document Properties - panagenda Timezone Helper [313A4EBEB00D887085257EB4004E30CB]


Fields Info Attachments

Created: 09/02/2015 10:14:02 AM EDT  
Accessed: 09/02/2015 04:14:52 PM EDT  
Modified: 09/02/2015 04:14:52 PM EDT  
Modified By: CN=julian robichaux/O=panagenda

Size: 3,358 bytes  
NoteID: 20E6  
UNID: 313A4EBEB00D887085257EB4004E30CB  
URL: notes:///85257D66004525D3.nsf/0/313A4EBEB00D887085257EB4004E30CB?OpenDocument

DB Name: Local Widgets  
DB Server:  
DB Path: c:\IBM\Notes9\Data\julian\LocalWidgets.nsf  
ReplicaID: 85257D66004525D3

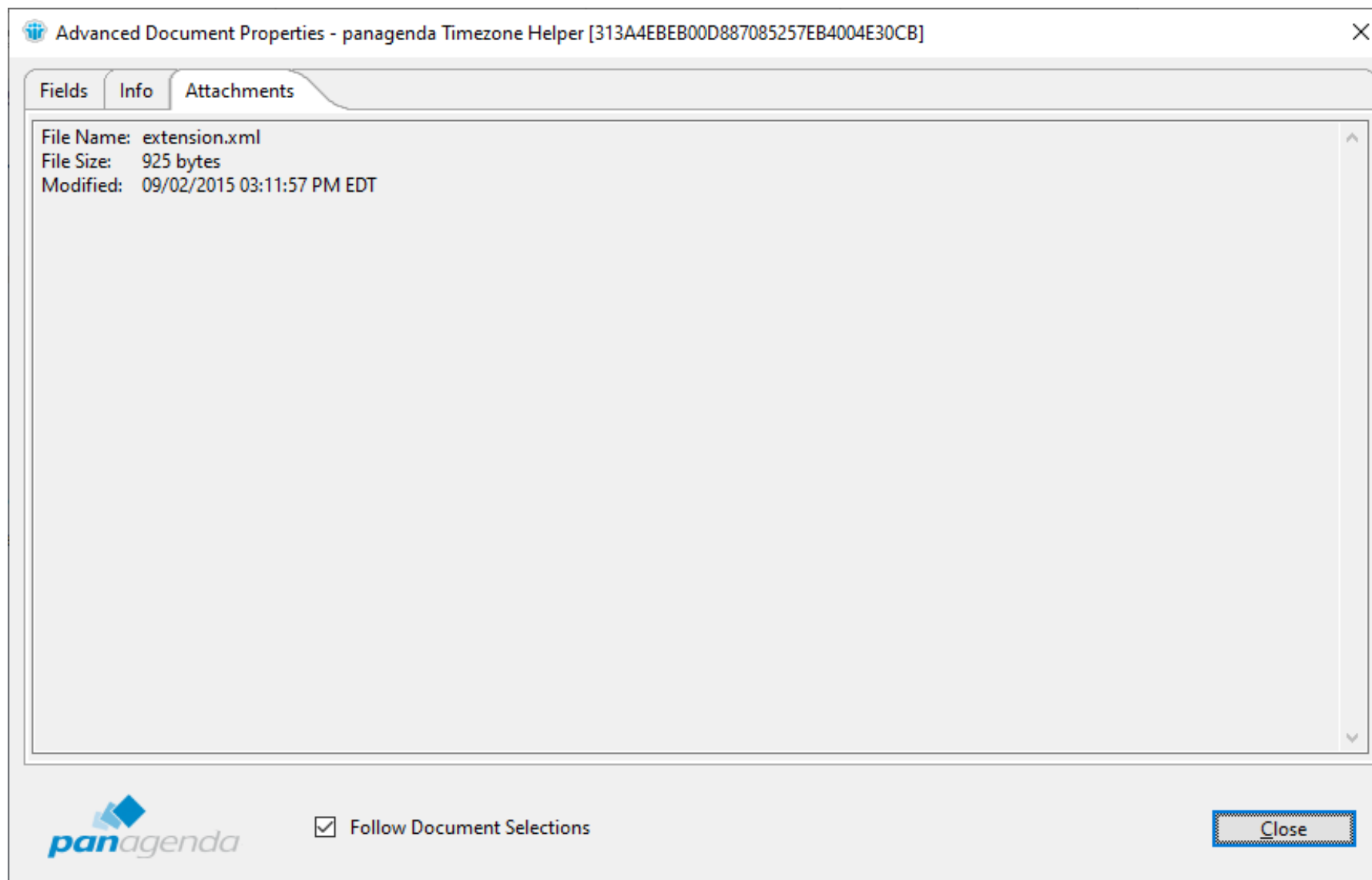
plugin version 12.0.11

 ☒ Follow Document Selections Close

select, copy, and paste any  
of this to the clipboard

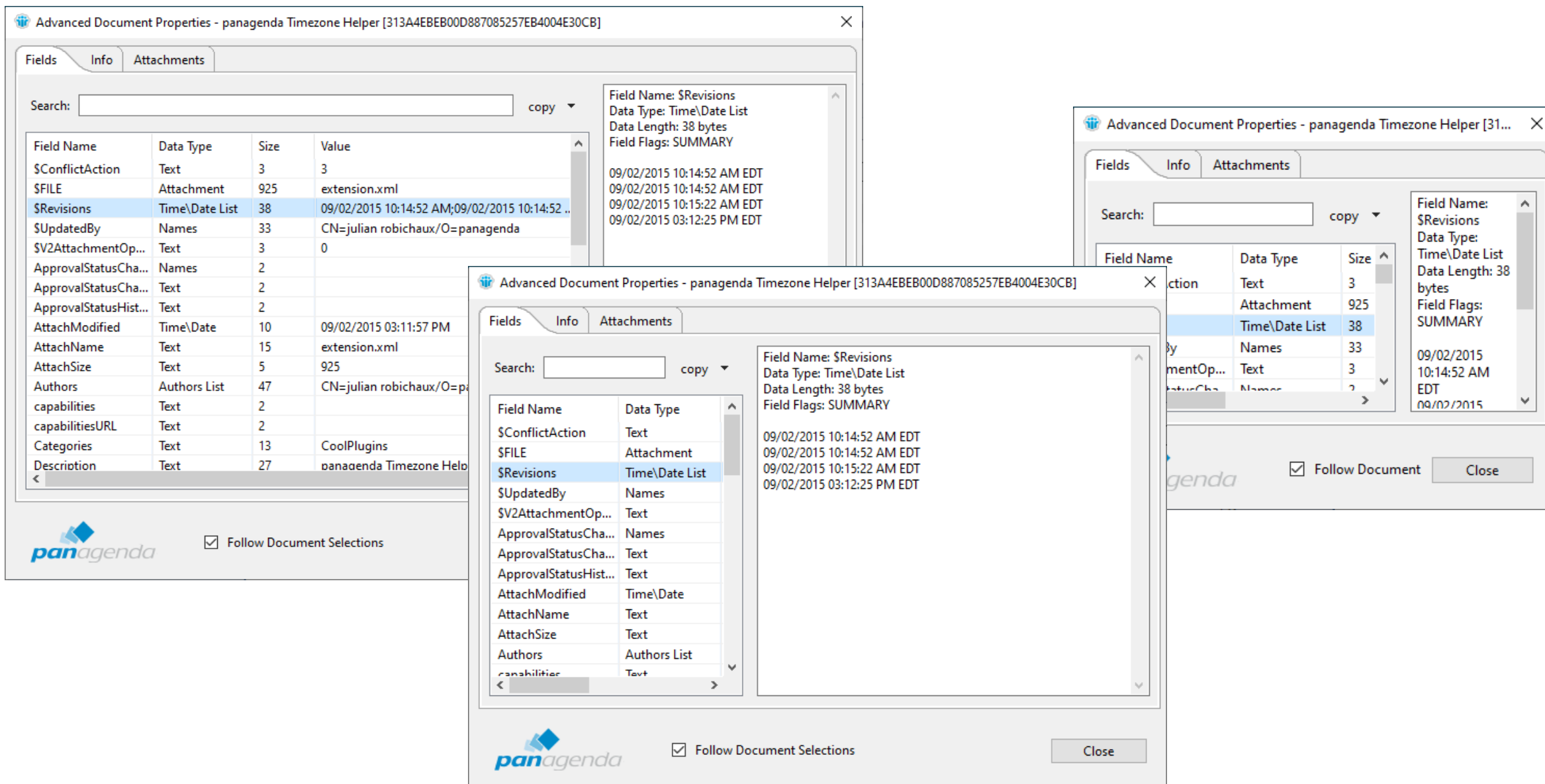


# Attachments Tab





# Resizable Window, Panel, and Columns



The image displays three overlapping instances of the 'Advanced Document Properties - panagenda Timezone Helper' window, illustrating its resizable capabilities. Each window has a title bar with the application name and a close button. The main content area is divided into three tabs: 'Fields', 'Info', and 'Attachments'. The 'Fields' tab is active in all three windows, showing a table of document fields and a detailed view of the selected field.

**Fields Tab Content:**

Field Name	Data Type	Size	Value
\$ConflictAction	Text	3	3
\$FILE	Attachment	925	extension.xml
\$Revisions	Time\Date List	38	09/02/2015 10:14:52 AM;09/02/2015 10:14:52 ..
\$UpdatedBy	Names	33	CN=julian robichaux/O=panagenda
\$V2AttachmentOp...	Text	3	0
ApprovalStatusCha...	Names	2	
ApprovalStatusCha...	Text	2	
ApprovalStatusHist...	Text	2	
AttachModified	Time\Date	10	09/02/2015 03:11:57 PM
AttachName	Text	15	extension.xml
AttachSize	Text	5	925
Authors	Authors List	47	CN=julian robichaux/O=panagenda
capabilities	Text	2	
capabilitiesURL	Text	2	
Categories	Text	13	CoolPlugins
Description	Text	27	panagenda Timezone Hel...

**Field Details Panel (Right):**

Field Name: \$Revisions  
Data Type: Time\Date List  
Data Length: 38 bytes  
Field Flags: SUMMARY

09/02/2015 10:14:52 AM EDT  
09/02/2015 10:14:52 AM EDT  
09/02/2015 10:15:22 AM EDT  
09/02/2015 03:12:25 PM EDT

The windows are shown in various states of overlap and resizing, demonstrating the application's flexibility. The bottom-most window includes a 'Follow Document' checkbox and a 'Close' button.



# Playing With Fields

Document Properties Plugin



# Sort Columns By Clicking The Header

Advanced Document Properties - panagenda Timezone Helper [313A4EBEB00D887085257EB4004E30CB]


Fields Info Attachments

Search:  copy

Field Name	Data Type	Size	Value
ToolAttach	Rich Text	1,546	- extension.xml
\$FILE	Attachment	925	extension.xml
ThumbDisplay	Rich Text	164	
Details	Rich Text	104	
providerId	Text	55	com.ibm.rcp.toolbox.prov.provider.ToolboxProvis...
Authors	Authors List	47	CN=julian robichaux/O=panagenda;[Admins]
OrigAttachInfo	Text	39	C:\Users\julian\Desktop\extension.xml
OriginalFileName	Text	39	C:\Users\julian\Desktop\extension.xml
\$Revisions	Time\Date List	38	09/02/2015 10:14:52 AM;09/02/2015 10:14:52 AM;0...
statisticResponseU...	Text	34	C975DC1492C01D4085257EB4004E443C
\$UpdatedBy	Names	33	CN=julian robichaux/O=panagenda
DocAuthor	Names	33	CN=julian robichaux/O=panagenda
Description	Text	27	panagenda Timezone Helper
Title	Text	27	panagenda Timezone Helper
DocKey	Text	18	JULX-9ZYJPU-TOOL
AttachName	Text	15	extension.xml

Field Name: \$Revisions  
Data Type: Time\Date List  
Data Length: 38 bytes  
Field Flags: SUMMARY

09/02/2015 10:14:52 AM EDT  
09/02/2015 10:14:52 AM EDT  
09/02/2015 10:15:22 AM EDT  
09/02/2015 03:12:25 PM EDT

 ☒ Follow Document Selections Close



# Search Field Names + Values (even dates)

Advanced Document Properties - panagenda Timezone Helper [313A4EBEB00D887085257EB4004E30CB]

Fields Info Attachments

Search: julian copy ▾

Field Name	Data Type	Size	Value
Authors	Authors List	47	CN=julian robichaux/O=panagenda;
OrigAttachInfo	Text	39	C:\Users\julian\Desktop\extension.xr
OriginalFileName	Text	39	C:\Users\julian\Desktop\extension.xr
\$UpdatedBy	Names	33	CN=julian robichaux/O=panagenda
DocAuthor	Names	33	CN=julian robichaux/O=panagenda

panagenda ☒ Follow Document Selections Close

Advanced Document Properties - panagenda Timezone Helper [313A4EBEB00D887085257EB4004E30CB]

Fields Info Attachments

Search: extension copy ▾

Field Name	Data Type	Size	Value
ToolAttach	Rich Text	1,546	- extension.xml
\$FILE	Attachment	925	extension.xml
OrigAttachInfo	Text	39	C:\Users\julian\Desktop\extension.xr
OriginalFileName	Text	39	C:\Users\julian\Desktop\extension.xr
AttachName	Text	15	extension.xml
OriginalName	Text	15	extension.xml
PendingAttach	Text	15	extension.xml
SavedFileName	Text	15	extension.xml

panagenda ☒ Follow Document Selections Close

Advanced Document Properties - panagenda Timezone Helper [313A4EBEB00D887085257EB4004E30CB]

Fields Info Attachments

Search: 2015 copy ▾

Field Name	Data Type	Size	Value
\$Revisions	Time\Date List	38	09/02/2015 10:14:52 AM;09/02/2015 10
AttachModified	Time\Date	10	09/02/2015 03:11:57 PM



# Easily Copy Field Values

Advanced Document Properties - panagenda Timezone Helper [313A4EBEB00D887085257EB4004E30CB]

Fields Info Attachments

Search:  copy ▼

Field Name	Data Type	Size	Value
ToolAttach	Rich Text	1,546	- extension.xml
\$FILE	Attachment	925	extension.xml
ThumbDisplay	Rich Text	164	
Details	Rich Text	104	
providerId	Text	55	com.ibm.rcp.toolbox.prov.provide
Authors	Authors List	47	CN=julian robichaux/O=panagenc
OrigAttachInfo	Text	39	C:\Users\julian\Desktop\extension
OriginalFileName	Text	39	C:\Users\julian\Desktop\extension
\$Revisions	Time\Date List	38	09/02/2015 10:14:52 AM;09/02/2015
statisticResponseU...	Text	34	C975DC1492C01D4085257EB4004E4
\$IndatedRv	Names	33	CN=julian robichaux/O=panagenc

Field Name: \$Revisions  
Data Type: Time\Date List  
Data Length: 38 bytes  
Field Flags: SUMMARY

09/02/2015 10:14:52 AM EDT  
09/02/2015 10:14:52 AM EDT  
09/02/2015 10:15:22 AM EDT  
09/02/2015 03:12:25 PM EDT

Undo  
Cut  
Copy  
Paste  
Delete  
Select All  
Right to left Reading order  
Show Unicode control characters  
Insert Unicode control character >  
Open IME  
Reconversion

panagenda ☒ Follow Document Selections



# Export Some/All Fields As CSV

Advanced Document Properties - panagenda Timezone Helper [313A4EBEB00D887085257EB4004E30CB]

Fields Info Attachments

Search:

copy ▾

Field Name: providerId  
Data Type: Text

Field Name	Data Type	Size	Value
ToolAttach	Rich Text	1,546	- extension.xml
\$FILE	Attachment	925	extension.xml
ThumbDisplay	Rich Text	164	
Details	Rich Text	104	
providerId	Text	55	com.ibm.rcp.toolbox.prov...
Authors	Authors List	47	CN=julian robichaux/O=panagenc
OrigAttachInfo	Text	39	C:\Users\julian\Desktop\extension
OriginalFileName	Text	39	C:\Users\julian\Desktop\extension
\$Revisions	Time\Date List	38	09/02/2015 10:14:52 AM;09/02/201
statisticResponseU...	Text	34	C975DC1492C01D4085257EB4004E4
\$UndatedRv	Names	33	CN=julian robichaux/O=panagenc

selected rows as CSV  
all rows as CSV  
selected row names  
selected row values  
selected row info

selected row names, values, and info new in Notes 12.0.2!

☒ Follow Document Selections

Close

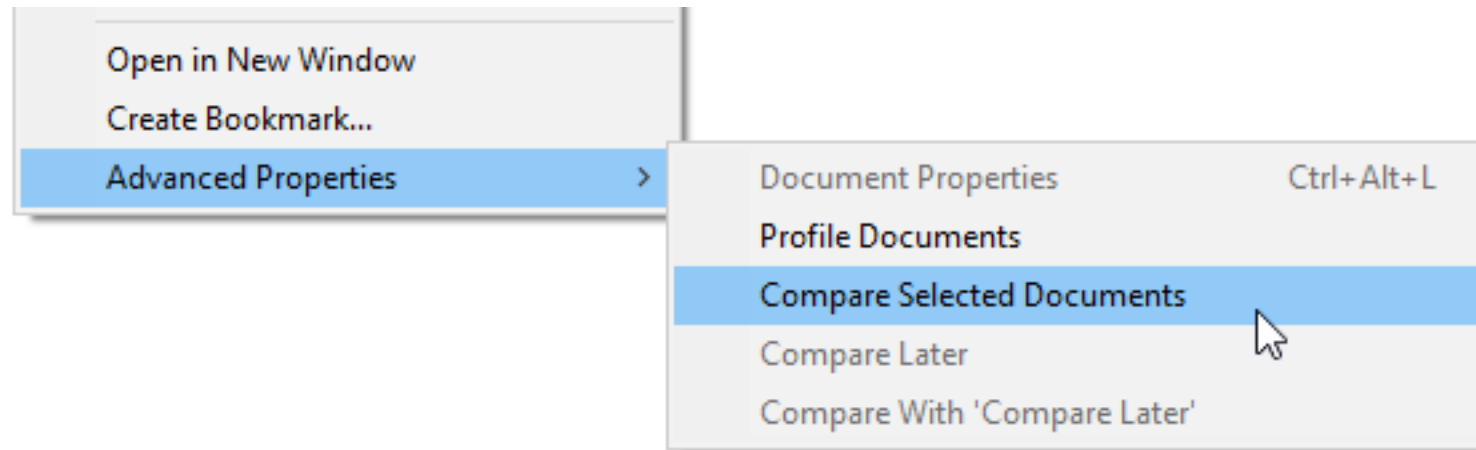


# Comparing Documents

Document Properties Plugin



# Select Two Documents In A View And...





# Select Two Documents In A View And...

**green** == field doesn't exist in other document

**yellow** == field is different

**white** == field is the same

Document Compare: panagenda Timezone Helper [313A4EBE00D887085257EB4004E30CB] - Bad Extension [9CE060C3BBC0FA5B85257E90004BF2E2]

Database: c:\IBM\Notes9\Data\julian\LocalWidgets.nsf  
Document: panagenda Timezone Helper; Modified: 09/02/2015 04:14:52 PM EDT

Database: c:\IBM\Notes9\Data\julian\LocalWidgets.nsf  
Document: Bad Extension; Modified: 07/28/2015 09:53:01 AM EDT


Search:  copy

Field Name	Data Type	Size	Value
\$ConflictAction	Text	3	3
<b>\$FILE</b>	<b>Attachment</b>	<b>925</b>	<b>extension.xml</b>
<b>\$Revisions</b>	<b>Time\Date List</b>	<b>38</b>	<b>09/02/2015 10:14:52 AM;09/02/2015</b>
\$UpdatedBy	Names	33	CN=julian robichaux/O=panagend
\$V2AttachmentOp...	Text	3	0
ApprovalStatusCha...	Names	2	
ApprovalStatusCha...	Text	2	
ApprovalStatusHist...	Text	2	
AttachModified	Time\Date	10	09/02/2015 03:11:57 PM
AttachName	Text	15	extension.xml
AttachSize	Text	5	925
Authors	Authors List	47	CN=julian robichaux/O=panagend

Field Name: AttachModified  
Data Type: Time\Date  
Data Length: 10 bytes  
Field Flags: SUMMARY  
09/02/2015 03:11:57 PM

Field Name	Data Type	Size	Value
\$ConflictAction	Text	3	3
<b>\$Revisions</b>	<b>Time\Date List</b>	<b>22</b>	<b>07/28/2015 09:52:28 AM;07/28/2015</b>
\$UpdatedBy	Names	33	CN=julian robichaux/O=panagend
\$V2AttachmentOp...	Text	3	0
ApprovalStatusCha...	Names	2	
ApprovalStatusCha...	Text	2	
ApprovalStatusHist...	Text	2	
AttachModified	Text	2	
AttachName	Text	2	
AttachSize	Text	2	
Authors	Authors List	47	CN=julian robichaux/O=panagend
capabilities	Text	2	

Field Name: AttachModified  
Data Type: Text  
Data Length: 2 bytes  
Field Flags: SUMMARY  
""

 ☒ Synchronize Selections Show: All fields



# Or Select One Doc For 'Compare Later'...

Import Open Add Widget to Catalog

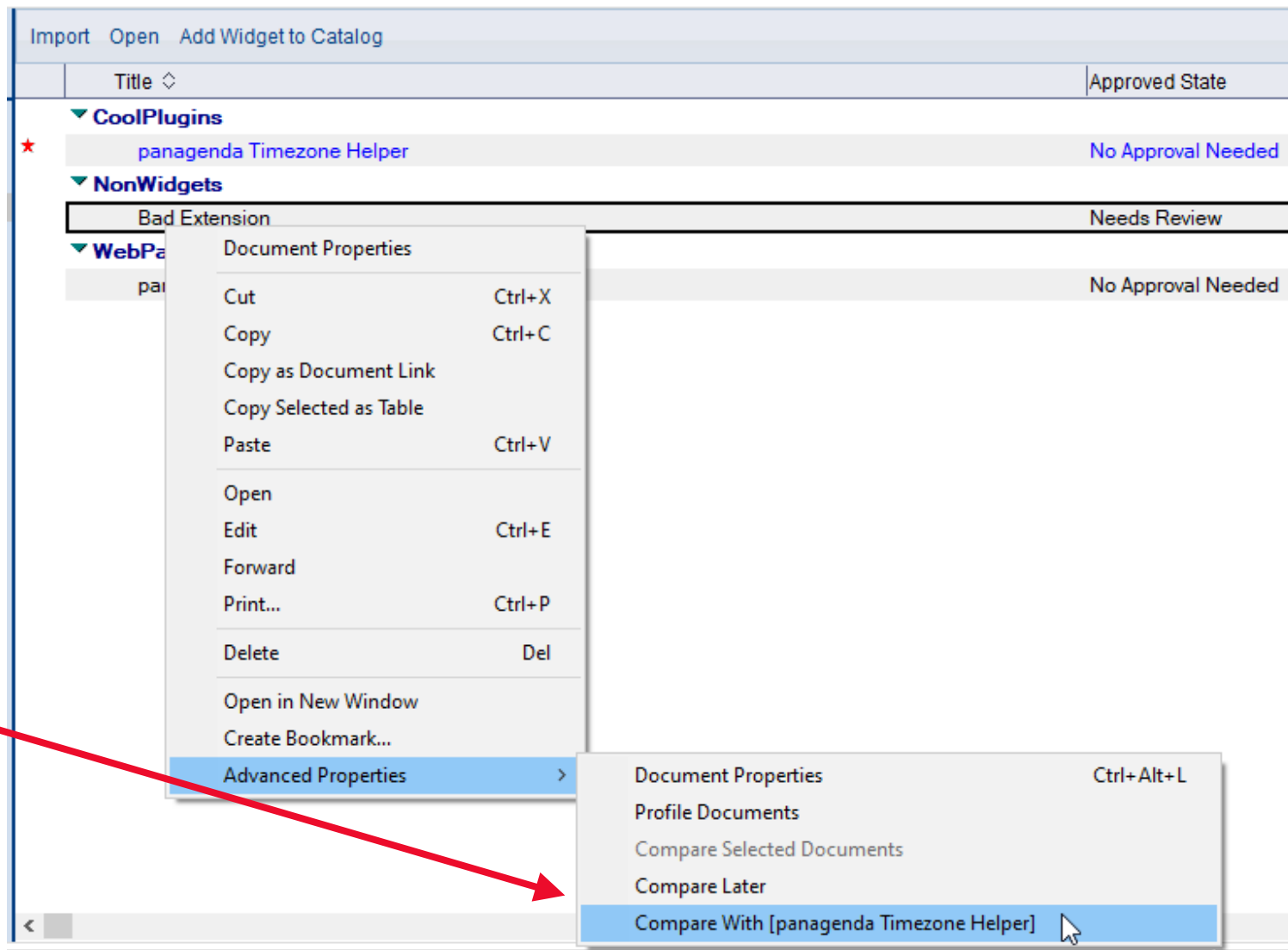
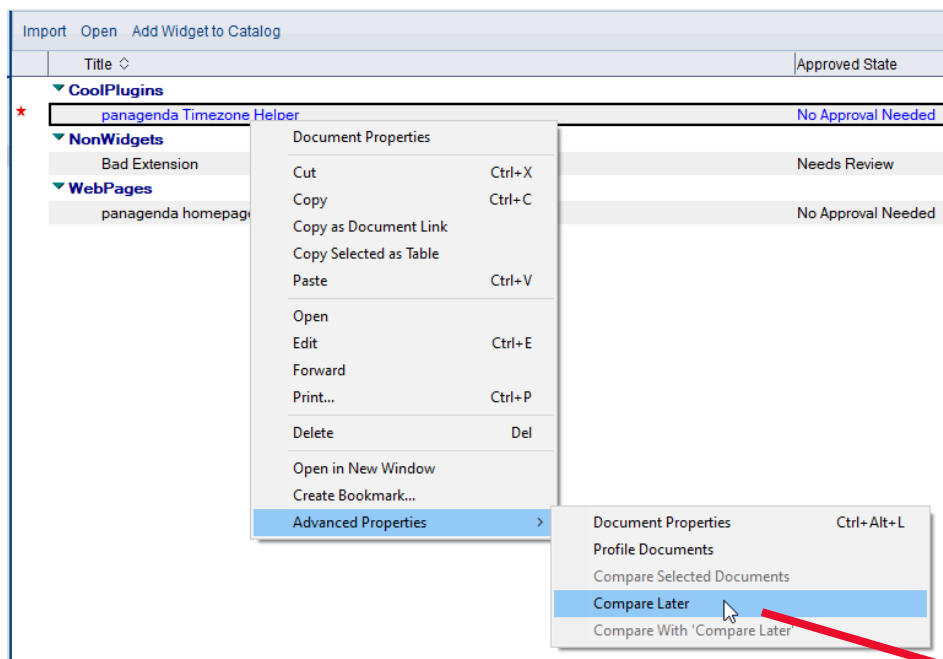
Title ▾	Approved State
▼ CoolPlugins	
★ panagenda Timezone Helper	No Approval Needed
▼ NonWidgets	
Bad Extension	Needs Review
▼ WebPages	
panagenda homepage	No Approval Needed

Document Properties  
Cut Ctrl+X  
Copy Ctrl+C  
Copy as Document Link  
Copy Selected as Table  
Paste Ctrl+V  
Open  
Edit Ctrl+E  
Forward  
Print... Ctrl+P  
Delete Del  
Open in New Window  
Create Bookmark...  
Advanced Properties >

Document Properties Ctrl+Alt+L  
Profile Documents  
Compare Selected Documents  
Compare Later  
Compare With 'Compare Later'



# ...Then Choose Another Doc And 'Compare With'



the two docs can be in  
different views or databases



# Bonus Features

Document Properties Plugin



# Profile Documents

Open in New Window

Create Bookmark...

Advanced Properties >

Document Properties

Ctrl+Alt+L

Profile Documents

Compare Selected Documents

Compare Later

Compare With 'Compare Later'

 Choose A Profile Document

Please choose a profile document from the list below:

Search:

PROFILE NAME

USER NAME/KEY

LAST MODIFIED

(otsprofile)

toolbox\_otsuniquekey

12/11/2014 10:02:20 AM EST

(statdataversion)

07/28/2015 09:59:12 AM EDT

gadgetproxymetadata

toolbox\_metadatauniquekey

12/11/2014 10:02:14 AM EST

tmpprofile

07/28/2015 09:49:33 AM EDT

☐ Keep dialog open

OK

Cancel



# Multiple Dialogs At Once

Local Widgets - By Category - IBM Notes

Advanced Document Properties - panagenda Timezone Helper [313A4EBE00D887085257EB40...]

Advanced Document Properties - Bad Extension [9CE060C3BBC0FA5B85257E90004BF2E2]

Advanced Document Properties - panagenda homepage [CFF70B91AB9CE48585257E90004CD4...]

Follow Document Selections

Close

panagenda

All widgets by version

All Docs by Form

Document Queue

Keywords

1 document selected

panagenda

Fields Info Attachments

Search: [ ] copy

Field Name	Data Type	Size	Value
ApprovalStatusCha...	Names	2	
ApprovalStatusCha...	Text	2	
ApprovalStatusHist...	Text	2	
AttachModified	Time\Date	10	09/02/2015 03:11:57 PM
AttachName	Text	15	extension.xml
AttachSize	Text	5	025

Field Name: AttachModified  
Data Type: Time\Date  
Data Length: 10 bytes  
Field Flags: SUMMARY

Fields Info Attachments

Search: [ ] copy

Field Name	Data Type	Size	Value
ApprovalStatusCha...	Text	2	
ApprovalStatusHist...	Text	2	
AttachModified	Text	2	
AttachName	Text	2	
AttachSize	Text	2	
Authors	Authors List	47	CN=Julian rok

Field Name: AttachModified  
Data Type: Text  
Data Length: 2 bytes  
Field Flags: SUMMARY

Fields Info Attachments

Search: [ ] copy

Field Name	Data Type	Size	Value
ApprovalStatusCha...	Names	2	
ApprovalStatusCha...	Text	2	
ApprovalStatusHist...	Text	2	
AttachModified	Time\Date	10	07/28/2015 09:59:12 AM
AttachName	Text	15	extension.xml
AttachSize	Text	5	512

Field Name: AttachModified  
Data Type: Time\Date  
Data Length: 10 bytes  
Field Flags: SUMMARY



# Follow Document Selections

Advanced Document Properties - panagenda Timezone Helper [313A4EBEB00D887085257EB4004E30CB]


Fields Info Attachments

Search:  copy

Field Name	Data Type	Size	Value
\$ConflictAction	Text	3	3
\$FILE	Attachment	925	extension.xml
\$Revisions	Time\Date List	38	09/02/2015 10:14:52 AM;09/02/2015 10:14:52 ..
\$UpdatedBy	Names	33	CN=julian robichaux/O=panagenda
\$V2AttachmentOp...	Text	3	0
ApprovalStatusCha...	Names	2	
ApprovalStatusCha...	Text	2	
ApprovalStatusHist...	Text	2	
AttachModified	Time\Date	10	09/02/2015 03:11:57 PM
AttachName	Text	15	extension.xml
AttachSize	Text	5	925
Authors	Authors List	47	CN=julian robichaux/O=panagenda;[Admins
capabilities	Text	2	
capabilitiesURL	Text	2	
Categories	Text	13	CoolPlugins
Description	Text	27	panagenda Timezone Helper

Field Name: \$Revisions  
Data Type: Time\Date List  
Data Length: 38 bytes  
Field Flags: SUMMARY

09/02/2015 10:14:52 AM EDT  
09/02/2015 10:14:52 AM EDT  
09/02/2015 10:15:22 AM EDT  
09/02/2015 03:12:25 PM EDT

 ☒ Follow Document Selections Close

fields and info change  
when you select a  
different document



# Administration Options

Document Properties Plugin



# Hide Menus From Users

notes.ini value	default value	possible values	description
<b>AdvProp_MenuVisible</b>	1	0, 1	If this value is 1 (default) the Advanced Properties menu will be visible. Set this to 0 to hide the entire menu and all submenus.
<b>AdvProp_MenuVisibleInMailView</b>	1	0, 1	If this value is 1 (default) the Advanced Properties menu will be visible in the right-click menu in folders and views in the mail database. Set this to 0 to hide the entire menu and all submenus in this situation. This does not affect the top-level menus, and it only affects right-click behavior in mail views.
<b>AdvProp_CompareLaterMenuVisible</b>	1	0, 1	If this value is 1 (default) the Compare Later and Compare With 'Compare Later' menus will be visible. Set this to 0 to hide these menus.
<b>AdvProp_ProfileMenuVisible</b>	1	0, 1	If this value is 1 (default) the Profile Documents menu will be visible. Set this to 0 to hide the Profile Documents menu.



# Profile Document Options

notes.ini value	default value	possible values	description
<b>AdvProp_ProfileAllowDelete</b>	0	0, 1	If this value is 0 (default) the Delete button on the Profile Document list dialog will be hidden. Set this to 1 to display the Delete button on the dialog, which allows you to delete a selected profile document in the list.
<b>AdvProp_ProfileShowAll</b>	0	0, 1	If this value is 0 (default) only public profile documents and profile documents with the current user's name as a key will be available for deleting or viewing. Set this to 1 to list all profile documents, including documents that are assigned to other users.



# Disable Hotkey

notes.ini value	default value	possible values	description
<b>AdvProp_HotkeyEnabled</b>	1	0, 1	<b>Version 12.0.8 (or Notes 12.0.1 FP1) and higher:</b> If this value is 1 (default) the CTRL-ALT-L key combination (CMD-ALT-L on MacOS) can be used to launch a Document Properties dialog when a document is the current selection. Setting this to 0 will disable the hotkey.

All these notes.ini entries, and other admin topics are at:

<https://www.panagenda.com/kbase/display/mc/Administration+Options+and+Troubleshooting>



# How Do I Get Me Some Of This?

Document Properties Plugin



# Supported Clients

- **Included with Notes 12.0.1** and later (nothing to install!)
- For older clients, download from:  
<https://info.panagenda.com/en/document-properties>
- Windows and Mac
  - including Win64 client
- Tested all the way back to **Notes 9.0.1** on Windows



# Installing On Older Clients

- Download the zip file from <https://info.panagenda.com/en/document-properties>
- Do one of the following:
  - **Drag-and-drop** the zip file to your “My Widgets” panel in the sidebar
  - Extract the zip file and import into a **Domino Update Site** database
- More detailed instructions here:  
<https://www.panagenda.com/kbase/display/mc/Installing+the+Document+Properties+Plugin>



# Document Properties PRO

Document Properties Plugin



# Document Properties PRO



- When you download the zip file from the panagenda website, it also includes **Document Properties PRO** as an option install
- Installs on Notes 12.0.1+ right next to the built-in Document Properties plugin
- Installs on older clients all by itself
  - no previous Document Properties install required
- What does that give me...?



# Edit Fields!

Advanced Document Properties - panagenda Timezone Helper [313A4EBEB00D887085257EB4004E30CB]

Fields Info Attachments

Search:  copy ▼

Field Name	Data Type	Size	Value
\$ConflictAction	Text	3	3
\$FILE	Attachment	925	extension.xml
\$Revisions	Time\Date...	38	09/02/2015 10:14:52 AM;09/02/2015 10:14:52 AM;09/...
\$UpdatedBy	Names	33	CN=julian robichaux/O=panagenda
\$V2AttachmentOp...	Text	3	0
ApprovalStatusCha...	Names	2	
ApprovalStatusCha...	Text	2	
ApprovalStatusHist...	Text	2	
AttachModified	Time\Date	10	09/02/2015 03:11:57 PM
AttachName	Text	15	extension.xml
AttachSize	Text	5	925
Authors	Authors List	47	CN=julian robichaux/O=panagenda;[Admins]
capabilities	Text	2	
capabilitiesURL	Text	2	
Categories	Text	13	CoolPlugins
Description	Text	27	panagenda Timezone Helper
Details	Rich Text	104	

edit ▼

- create new field
- modify selected field
- delete selected field
- copy selected field(s)
- paste copied field(s)

☐ Follow Document Selections

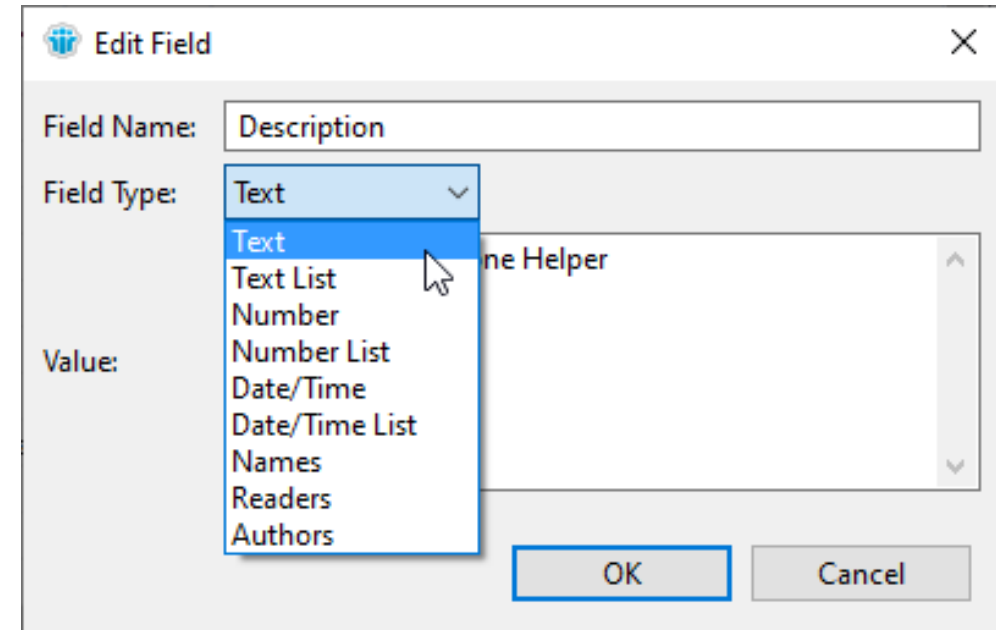
Close

or **copy** fields  
from one doc  
and **paste**  
to another



# Some Caveats

- This doesn't bypass Notes ACL
  - If you couldn't edit a document before, you still can't
  - \$Revisions and \$UpdatedBy get updated when you add/change/delete
- No extra privileges in Full Admin Access Mode
  - Sorry, just a limitation of the Notes API
- Only certain field types
- **WITH GREAT POWER COMES GREAT RESPONSIBILITY!**





# Prevent Users From Using PRO

- **Wait, I don't want my users to have this!**
- notes.ini setting: **AdvProp\_NoPro=1**
  - even if the plugin is installed, the Edit menu won't appear
- Also use policies to prevent users from installing plugins as widgets
  - probably a good idea anyway





# Document Properties

by panagenda

## Questions?

[julian.robichaux@panagenda.com](mailto:julian.robichaux@panagenda.com)

<https://info.panagenda.com/en/document-properties>



# CompareDBs Reports

---

Andre Guirard

HCL (Retired)



## AGENDA

What is CompareDBs Reports?

Modes of operation

### **DEMO**

Integration with SCCS & task trackers

Useful option settings

Q & A





### CompareDBs is...

---

A tool combining design synopsis and design comparison, for use in code reviews.

- Used internally by HCL.
- Outputs DXL (Domino-XML) modified for readability
  - Not re-importable
- Comparison report highlights differences
- Strips useless information
- Stores reports for searching
- Intended for:
  - Code reviews
  - Record of changes
  - Porting template customizations
  - Translation checking



## Slide 4

view Sightings by Date SightingsByDate			
line #	source	line #	target
	<pre>&lt;view name='Sightings\by Date' alias='SightingsByDate' bgcolor='#e0e0ff' headers='beveled' version='12.0' noreplace='true' onrefresh='displayindicator' onopengoto='lastopened' rowspacing='1' showinmenu='false' showmargin='true' shrinkrows='false' uniquekeys='false' altrowcolor='#e0ffff' marginwidth='0px' totalscolor='black' unreadcolor='black' unreadmarks='none' publicaccess='false' rowlinecount='1' headerbgcolor='white' marginbgcolor='white' opencollapsed='false' boldunreadrows='false' evaluateactions='false' headerlinecount='1' showhierarchies='false' extendlastcolumn='false' hidemarginborder='false' allownewdocuments='false' maintenanceversion='2.0' allowcustomizations='true' showresponsehierarchy='true'&gt; &lt;noteinfo/&gt; &lt;code event='selection'&gt;&lt;formula&gt;SELECT Form = "Sighting"&lt;/formula&gt;&lt;/code&gt; 4 &lt;actionbar bgcolor='#f0f0f0' bordercolor='black'&gt;   &lt;actionbuttonstyle bgcolor='#f0f0f0'&gt;     &lt;font color='system'&gt;       &lt;border style='solid' width='0px 0px 1px'&gt;         ...</pre>		
		5	<pre>&lt;actionbar bgcolor='#e1e1e1' bordercolor='black'&gt;   &lt;actionbuttonstyle bgcolor='#f0f0f0'&gt;     &lt;font color='system'&gt;       &lt;border style='solid' width='0px 0px 1px'&gt;         ...</pre>
view Sightings\by Species SightingsBySpecies			
line #	source	line #	target
	<pre>&lt;view name='Sightings\by Species' alias='SightingsBySpecies' bgcolor='#c2efff' headers='beveled' version='12.0' noreplace='true' onrefresh='displayindicator' onopengoto='lastopened' rowspacing='1' showinmenu='false' showmargin='true' shrinkrows='false' uniquekeys='false' altrowcolor='#e0ffff' marginwidth='0px' totalscolor='black' unreadcolor='black' unreadmarks='none' publicaccess='false' rowlinecount='1' headerbgcolor='white' marginbgcolor='white' opencollapsed='false' boldunreadrows='false' evaluateactions='false' headerlinecount='1' showhierarchies='false' extendlastcolumn='false' hidemarginborder='false' allownewdocuments='false' maintenanceversion='2.0' allowcustomizations='true' showresponsehierarchy='true'&gt; &lt;noteinfo/&gt; 3 &lt;code event='selection'&gt;&lt;formula&gt;SELECT <b>FA11</b>   &lt;/formula&gt;&lt;/code&gt;   &lt;actionbar bgcolor='#f0f0f0' bordercolor='black'&gt;</pre>		
		3	<pre>&lt;code event='selection'&gt;&lt;formula&gt;SELECT Form=<b>   Sighting2</b>&lt;/formula&gt;&lt;/code&gt;   &lt;actionbar bgcolor='#f0f0f0' bordercolor='black'&gt;</pre>

In this example difference report between two versions of an application, the view Sightings by Date has the action bar background color slightly different, and the view Sightings by Species selection formula was changed to select only Sighting documents instead of all documents. The parts that are the same are the full screen width, while the different parts are split left and right. If the two sides aren't very different, the changed words are also highlighted. Notice the "... " at the end of the first table. The report shows only the parts that are different, with a few lines before and after for context.



## 5 CompareDBs Cleaned-up DXL

### Raw DXL

```
<?xml version='1.0' encoding='utf-8'?>
<!DOCTYPE helpaboutdocument SYSTEM 'xmschemas/domino_12_0_2.dtd'>
<helpaboutdocument xmlns='http://www.lotus.com/dxl' version='12.0'
maintenanceversion='2.0'
replicaid='862588060049471A' publicaccess='false' designerversion='8.5.3'
default='true' renderpassthrough='true'>
<noteinfo noteid='1b6' unid='257C38F16B77C24F86258809005F4C41' sequence='2'>
<created><datetime dst='true'>20221012T122054,41-05</datetime></created>
<modified><datetime dst='true'>20221012T122203,46-05</datetime></modified>
<revised><datetime dst='true'>20221012T122203,45-05</datetime></revised>
<lastaccessed><datetime dst='true'>20221012T122203,45-
05</datetime></lastaccessed>
<addedtofiles><datetime dst='true'>20221012T122054,46-
05</datetime></addedtofiles></noteinfo>
<updatedby><name>CN=Admin/O=PJF</name></updatedby>
<wassignedby><name>CN=Admin/O=PJF</name></wassignedby>
<body><richtext>
<pardef id='1'/>
<par def='1'><run><font size='20pt' style='bold' color='purple'>About Cryptid
Catalog</run></par>
<pardef id='2' spacebefore='1.5'/>
<par def='2'><run><font size='12pt'>Tell us about your sightings </run><run
><font size='12pt' style='bold'>here</run><run><font
size='12pt'>!</run></par></richtext></body></helpaboutdocument>
```

### CompareDBs Synopsis

```
<helpaboutdocument default='true' version='12.0' publicaccess='false'
renderpassthrough='true' maintenanceversion='2.0'>
<noteinfo/>
<body>
<richtext>
<par def='FFFFFFF'>
<run font='20pt color=purple bold'>About Cryptid Catalog</run>
</par>
<par def='2F1C0550'>
<run font='12pt'>Tell us about your sightings </run>
<run font='12pt bold'>here</run>
<run font='12pt'>!</run>
</par>
</richtext>
<pardef id='2F1C0550' spacebefore='1.5'/>
<pardef id='FFFFFFF'>
</body>
</helpaboutdocument>
```

Among the information we consider useless for purposes of code review are various timestamps, note ID, who updated it last – anything that doesn't affect functionality. A code review report, shouldn't have a lot of differences you don't care about. We also prettify the XML. This is intended for *people* to read – it isn't valid DXL (or even valid XML).



## 6 CompareDBs Cleaned-up DXL

### Raw DXL

```
<run><font size='12pt' />Tell us about  
your sightings ...
```

### CompareDBs Synopsis

```
<run font='12pt'>Tell us about your  
sightings...
```

Modified for compactness  
(e.g. no font element).

Besides just deleting unwanted information, the tool also reformats some things to make them shorter. For instance, the “font” element is removed and any information in it moved to a containing “run” element.



## 7 CompareDBs Cleaned-up DXL

---

### Raw DXL

```
<run><font size='12pt' style='bold' />Full </run>  
<run><font size='12pt' style='bold' />description:</run>
```

### CompareDBs Synopsis

```
<run font='12pt bold'>Full description:</run>
```

Merge identically styled text runs (by default).

In rich text, a piece of text that's formatted all the same can get divided into multiple “runs” behind the scenes. By default, CompareDBs merges these into a single element. Shorter, more readable.

This is an option because sometimes you do care about these breaks – they affect translation using DGW, and can cause unwanted line breaks in the middle of a word, so sometimes you'd want to turn this feature off so your difference report shows you merged the text into a single run.



## 8 CompareDBs Cleaned-up DXL

### Raw DXL

```
<pardef id='2' spacebefore='1.5' />  
<par def='2'><run><font size='12pt' />Tell  
us about your sightings ...
```

Sequential pardef ID (2) can  
change when editing rich text.

Hashed ID (2F1C0550) only  
changes if paragraph attributes  
change.

### CompareDBs Synopsis

```
<par def='2F1C0550'>  
  <run font='12pt'>Tell us about your  
  sightings</run>  
...  
<pardef id='2F1C0550' spacebefore='1.5' />  
...
```

When you save rich text, the “pardef” elements that describe such things as line spacing and indentation, are turned into sequentially numbered “pardef” elements. That means if you change the formatting of one paragraph, all the “pardef” elements get new numbers, and each paragraph that uses that formatting refers to it by the new number. So you see dozens of differences to the “par” elements where actually nothing has changed.

To get around this, CompareDBs replaces the sequential numbers with a hash code based on the paragraph options. The “def” value is only different if the formatting has changed.

These are just a few of many changes made to simplify the output and mask irrelevant changes.



## Operational Modes

---

### ✓ COMPARISONS

Code Review

Update Review

### ✓ SYNOPSIS

Design Synopsis

- **Code review** compares versions of an application
- **Update review** compares your custom template with new version of original template
- **Design synopsis** exports design description to an NSF
- Add custom reports, e.g. compare not design, but documents that use a specified form
- You can also customize the default modes



# Demo

- For my example I'm using a simple Notes application, and I have two versions I want to compare.
- Design reports DB was created from CompareDBs Reports template on Domino server.
- To start running a comparison or a design synopsis, we choose an option in the navigation.
- There's a view where an administrator can configure these options. The outline on the left is built on the fly based on the documents in this view, so if you add your own, it'll show up just like the ones that come from the template.
- Let's run a design synopsis first.
- The forms remember what you last exported.
- You can re-export a synopsis to an existing synopsis NSF.
- The design synopsis output is an NSF with a document for each design element.
- You can export multiple databases to the same synopsis NSF. That's why the view is categorized by application title.
- The Database note contains a summary of how the design elements were signed – so you can confirm there aren't ECL issues without looking at every design element.
- For file-type design elements, header information is given – so you can see whether it inherits from a template or whatever. And the file data is also included.
  - Embedded, if CompareDBs can figure out how to display it.
  - Attached, if not
  - Or in some cases, where the data is a BLOB we know can't be opened, like a JAR file, as a length and hash value so you can at least tell it's changed.
- Images are displayed twice, on different colored backgrounds to make sure there's enough contrast to see one of them. These are too small – I'm reporting that as a bug.
- As much as possible we try to make every setting into a human-readable description.
- Back to the Design Reports database.



- Let's look at code reviews next. The database saves a copy of a difference report for each fix in the SCCS. We can search the database for which fix included a particular change.
- These aren't automatically created as part of an SCCS submission – that's a possible future thing. Currently the developers are required to create them manually.
- Really, as a developer you want to look at them before submitting anyway, because it's an excellent way to find mistakes or changes you made without meaning to. You can view the report without saving, until you're ready to do your submission and save the final version.
- This report shows differences associated with a past submission.
  - There's a link to view the fix record in your default web browser (e.g. in GIT).
  - There's also links to view the bug reports or tasks the fix was intended to address. This works for bug tracking systems that are Notes client applications, or anything with a web-based UI, such as JIRA.
  - Configuring SCCS integration is optional; the application is still useful without that.
- Direct integration with SCCS wasn't possible for the first release of this application. We couldn't get GIT to use our tool to run a report comparing two arbitrary versions of an NTF in its repository.
- However there's a web-based UI for Design Reports. At HCL, we required developers to get the URL of the relevant design report and paste it into the GIT fix record associated with the submission.
- Let's see how to create the report.
- I click Code Review and tell it what to compare. I can compose a report like the one we were looking at, or export the DXL files to temporary folders and use my preferred file system compare tool to view their differences. Let's do that.
- Here I'm using Beyond Compare. Individual users can choose which tool to use. There's a file for each design element, and the two NSF's were exported into two different folders so we can compare those folders recursively.
- Looking at the database settings, we can see the new version is set to launch in a frameset, among other things.
- In the Profile form, some text was set to indent a quarter inch.
- And so on.
- I can instead create a report of the differences. I don't have to save it, but if I do, I can specify the task ID and fix ID of the submission.
- To configure the integration with outside systems, an administrator uses Configuration – Application.
- In HCL's case we had change requests coming from two different sources – a Notes-based bug reporting system and JIRA, so we had a formula to look at the task ID and decide which one to open. This example just uses JIRA.
- For mapping records to an SCCS, you can define a list of projects and associated URLs, plugging in the fix identifier as part of the URL.
- Again, you don't have to configure this, and you don't have to put all your projects in one database. Use the template to create as many as you need for different teams.



## Useful options

---

- Merge text runs or not (as mentioned earlier)
- Flag all strings in source code and static text (to highlight possible translation issues)
- Export documents
  - Specify which documents via formula or view.
  - Handy because sometimes documents are part of a template design.
  - Specify how to construct a unique document ID for matching purposes (in case the UNIDs don't match).
- Have reports show new design elements inline, vs as attachments, vs just listing the design element names (for cases where the report's excessively long)
- Ignore case differences
- Compare UNIDs (for versions of a template, so a changed UNID doesn't create duplicate design elements during replication)
- The default options are good for nearly all cases – don't mess unless there's a problem,
- Create new custom compare configurations for specific exceptions in your environment



There's more to this...

---

- Read the Help Using document.



## Scavenge for useful code

---

- CompareDBs has LotusScript libraries for many advanced functions:
  - Find differences between strings
  - Extract file data from a design element (e.g. the JPG file in an Image design element)
  - Compose a nice rich text report
  - Manage temporary folders
  - In-memory data structures (queues, massive arrays, ...)
  - Call C API functions on all supported client OS
  - Parse rich text CD records
  - Fancy XML processing
  - Parse LotusScript code to identify module names, variable names...
  - Examples of MVC implementation for Notes forms
  - UI operations such as "don't show this message again" checkboxes
- I of course don't suggest you swipe copyrighted code, but it may be instructive to see how these things are done.
- Several of these are available in the OpenNTF project "LotusScript Gold Collection"



# What's new in Domino Core Application Development

**... where Application Development Features Never Stop!**

**John Curtis**

*Software architect*

*HCL Digital Solutions*





# Agenda

- **Domino Query Language**
- **Query Results Processing**
- **Core Domino improvements**
- **Backend (Lotusscript, Java) features**



# DQL in v12.0x

- **Embedded formula language**
- **Named document sets**
- **Design document queries**
- **Embedded full text search query syntax**



# DQL Embedded Formula Language

- **v12.01**
- **Syntax**
  - **@FL or @formula (case insensitive)**
  - **Embedded syntax enclosed in single quotes**

@fl('@length') > 2430

@FORMULA('@left(fld1;3) = "abl" or @left(fld2;2) = "ab"')

- **Provides**
  - **Intra-document terms (between different fields)**
  - **Full expression support**
  - **HUGE library of existing functionality**



# DQL Embedded Formula Language

- Combines with ANY other syntactic element

@fl('@length') > 2430 or 'my view'.column1 = 'Juliet' and contains ('Capulet')

- 2 modes –

@fl('@length') > ?val1

→ allows for ?substitution

@fl('@length>2430')

→ allows for multiple terms in formula language

- Always uses NSF scanning (not views or full text)
- 256 byte max per term
- Further completes search options in DQL
- *Should I be using DQL?* → burning question



# DQL Named result sets

- v12.01
- DQL in clause – uses collected sets of documents in views and/or folders (these have always been results!!!)
- Expanded to use custom-created, named DQL results

In all ('myset', 'Important View', 'Less important folder')

In ('myset') or @ModifiedInThisFile < @dt('2014-01-01')

where 'myset' could be created from a long-running query, like

@ModifiedInThisFile >= @dt('2014-01-01') or Lastname = 'Jones' and city in ('Albuquerque', 'Hoboken') and shoesize >= 10

**(No need for views of FT indexes – filtered nsf scanning)**



# Using Named result sets

- **Gain in performance – 100x to 1000x faster**
- **Usage details**
  - **Use cases – reporting, daily/hourly documents searched for constantly**
  - **Static sets – do NOT refresh automatically (yet)**
  - **They do NOT replicate (yet)**
  - **Database limits (500 per database, 50MB in total stored size) – can be overridden**
  - **They expire – discarded automatically by updall – but settable (8760 is one year)**



# How to create named result sets

- New (v12.01) Java and LotusScript (Notes)DominoQuery execute method arguments

DocumentCollection execute(String query, *String resultname, boolean replace*)  
throws NotesException

DocumentCollection execute(String query, *String resultname, boolean replace, int expirehours*) throws NotesException

**resultname** - unique name for this document set – for use in DQL “in”

**replace** – replaces the current document set saved with that name

**expirehours** – how many hours until the document set is discarded (default 24)



# Managing named result sets

- Using updall -j

updall <dbpath> -j <opt> manages named named document sets, with options:

deleteOne	<name>	deletes one named document set
deleteAll		deletes all named document sets
deleteOld		deletes old, expired named named document sets
report		generates a report of named named document sets

- deleteOne overrides expiration date
- deleteAll destroys all named document sets in a database – powerful, use carefully
- More controls using backend classes:
  - (Notes)Database .RemoveAllQueryNamedResults



# DQL Design Document Queries

- **v12.03**
- **Query-level setting (either data or design documents)**
- **Allows for internal \$field access – where values are strings, numbers or timedates**

@fl('@matches(\$flags; "\"?F\*\"')') → finds all folders

\$title = 'new view' → matches view name or foldername

- **Only nsf scan terms allowed (no views or FT searching)**



# DQL Embedded Full Text Search

- **v12.03**
- **Use FTSearch syntax *you already have***
- **Full support of the GTR syntax, optimized execution**

@ftsearch('[name] = Jones\* and [date\_of\_birth] is present')

@fts('field delivery\_date > 1/1/2022 and field area\_code = 2?233?')

- **FORCES full text index to be used**
- **Integrates existing searches with full DQL Boolean functionality**
- **CONTAINS operator is unchanged**



# **DQL Formula Language and Named Results Demo**



# **(Notes)QueryResultsProcessor (QRP)**

- **DQL**

- **As a Domino search service, finds documents from a single database**
- **Allows traversal using DocumentCollection**
- **Does NOT**
  - **Fetch viewable/presentable data from the database**
  - **Sort data by anything other than NoteID**
  - **Get results from multiple databases**
  - **Do that all on the fly, with discardable results**

- **So .. The QRP was built**

- **Delivered in multiple parts across v12 and point releases**



# How to think about QRP views

- **Consider how you create views in Designer, you need**
  - Selection criteria
  - Columns to compute view data, sort it, etc.
- **Same with QRP views but they allow separate**
  - Selection criteria for each set of documents
  - Computed column rules for each set of documents
- **QRP views are different in that**
  - Their data spans databases and sets of documents
  - Query results, not refreshable or replicable design elements
  - Created to expire, be programmatically rebuilt and populated



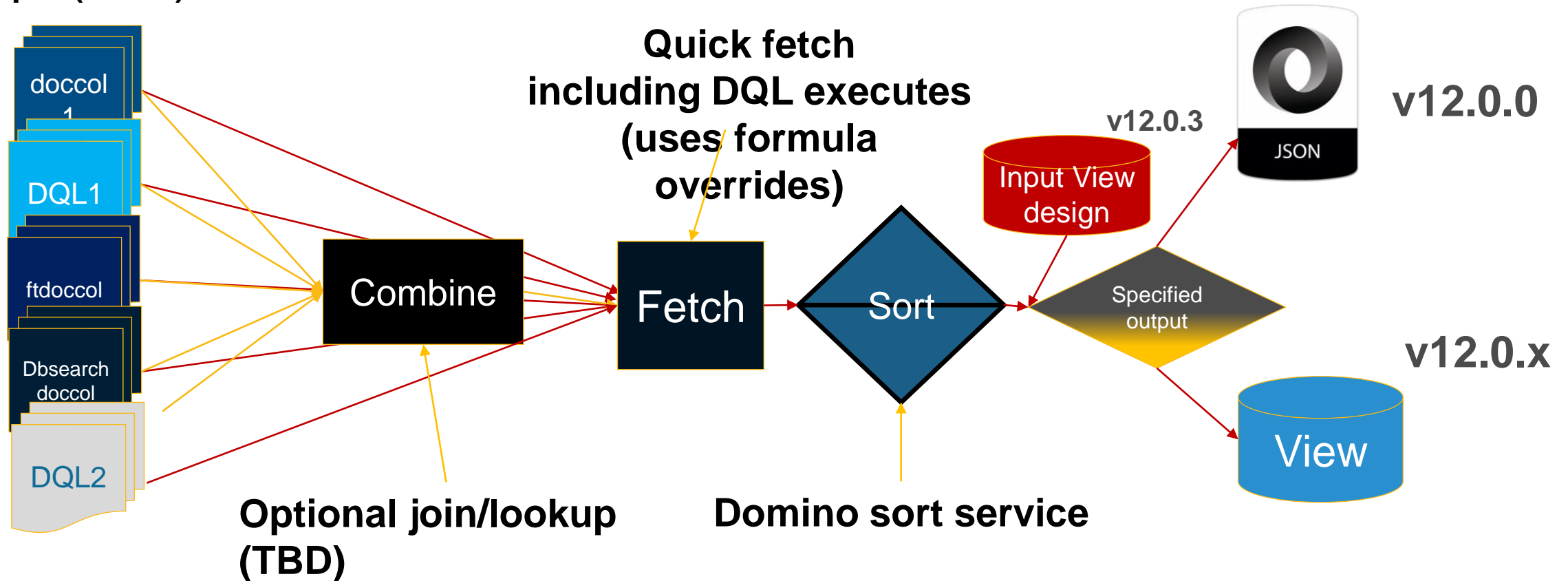
# QRP view copy

- **V12.03**
- **Will allow for QRP views with custom design**
  - All graphics and rich text attributes retained
- **Additive and modified input data, you can:**
  - Add columns (always to the right)
  - Override column titles
  - Change column sort, categorization and hidden attributes



# QueryResultsProcessor Flow

Input (Notes) Document Collections





# QRP reading materials

[https://help.hcltechsw.com/dom\\_designer/12.0.0/basic/H\\_NOTESQUERYRESULTSPROCESSOR\\_CLASS.html](https://help.hcltechsw.com/dom_designer/12.0.0/basic/H_NOTESQUERYRESULTSPROCESSOR_CLASS.html)

[https://help.hcltechsw.com/dom\\_designer/12.0.0/basic/H\\_QUERYRESULTSPROCESSOR\\_CLASS\\_JAVA.html](https://help.hcltechsw.com/dom_designer/12.0.0/basic/H_QUERYRESULTSPROCESSOR_CLASS_JAVA.html)

<https://jdcurtis.blog/2021/11/29/the-query-results-processor-part-one/>

<https://jdcurtis.blog/2021/11/30/the-query-results-processor-part-two/>

<https://jdcurtis.blog/2021/12/02/the-queryresultsprocessor-part-three/>

<https://frostillic.us/blog/posts/2022/1/13/dql-queryresultsprocessor-and-jnosql>

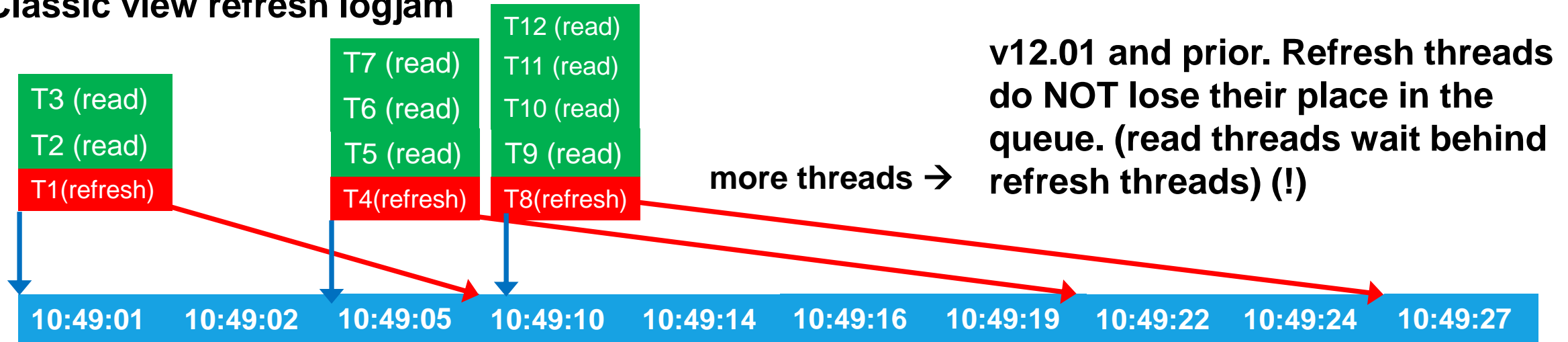


# QRP Copy View Demo



# Core Domino Improvements

## Classic view refresh logjam



= Database last modified (update time) when the user/thread placed into the queue



= Database last modified (update time) of changes the user/thread with which the thread updated the view

Tx (read)

= Thread waiting to read the view

Ty (refresh)

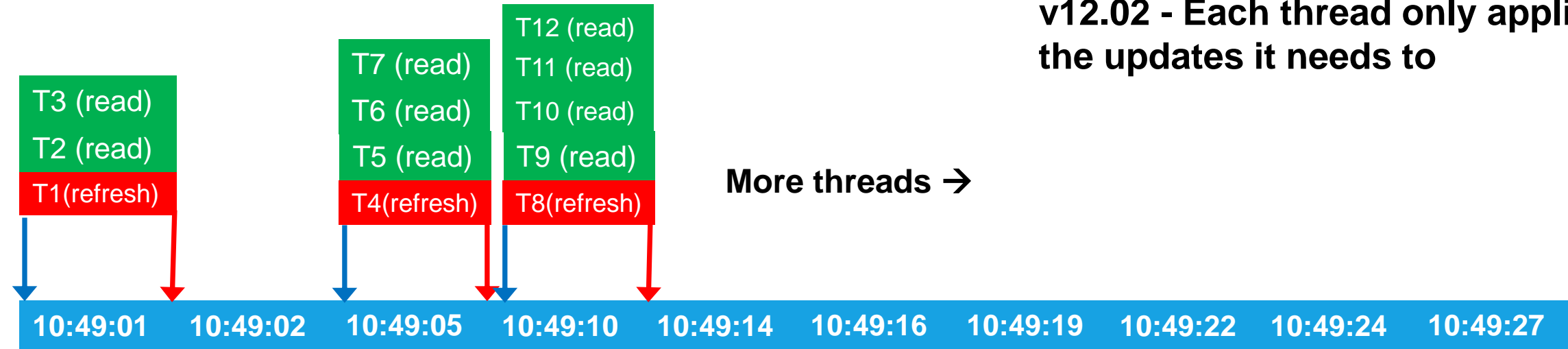
= Thread waiting to refresh (update) the view



# Core Domino Improvements

View refresh logjam relief!!

v12.02 - Each thread only applies the updates it needs to

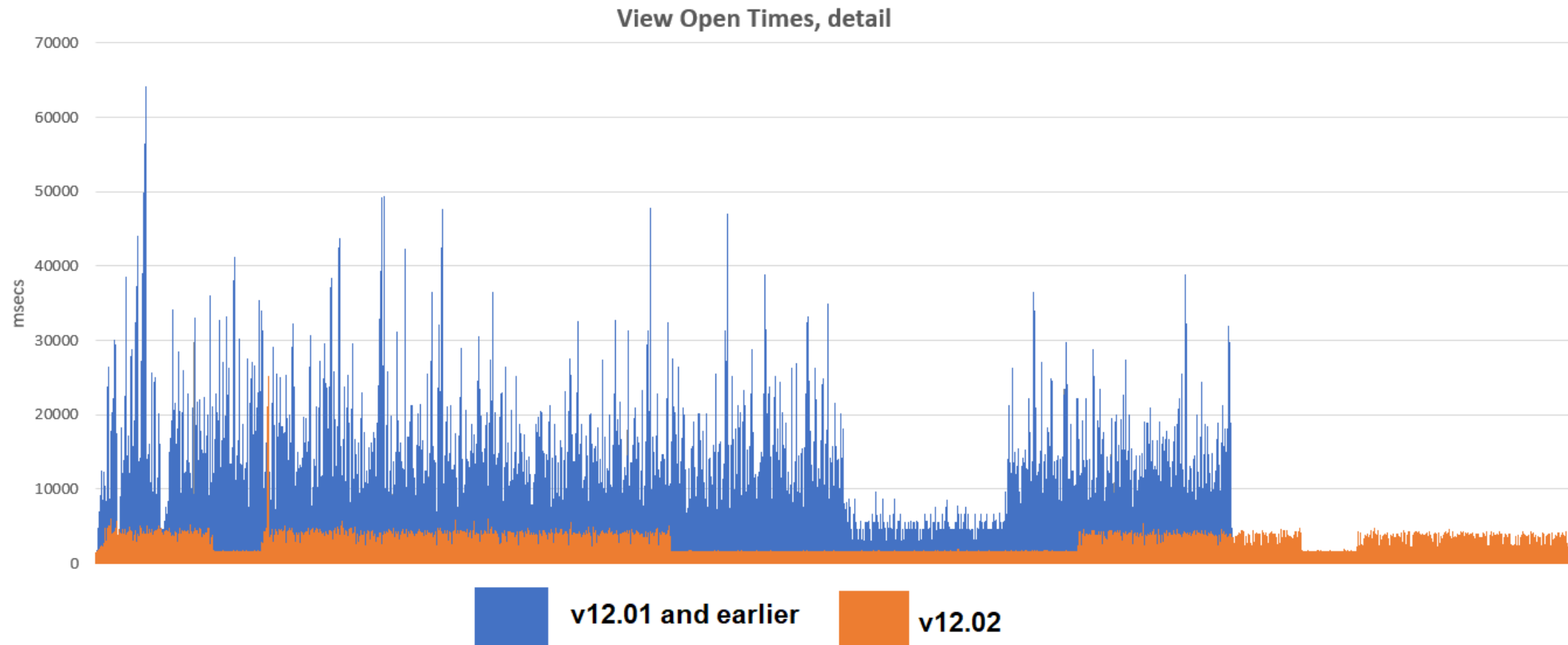


- Many, MANY more refreshes can happen in a given timeframe
- MAJOR
  - response time improvement
  - throughput increase



# Core Domino Improvements

- 100K+ view opens versus relentless 20+ doc updates/second





# Core Domino Improvements

- **12.03 (or later)**
- **NSF sharding**
  - **To improve compact, backup, etc**
- **Optimized Reader Lists**
  - **Greatly improved scanning and traversal of documents and views when access is sparse**



# Lotusscript/Java Large Summaries Support

- To enable, per database

Create\_R12\_Databases=1 (notes.ini)

Compact <dbname> -ls on -c

- Turns on large summaries and moves db to ODS 55
- New limit in document summary data:
  - 16MB total document summary and that's it!  
(cumulative maximum size of all summary fields)



# Lotusscript/Java Large Summaries Support

- **What you get**
  - **Read and write large text fields and long field lists**
    - **Lists still have a max of 64k ENTRIES but total list data size is only bounded by maximum summary size**
  - **Works with Summary and Non-summary fields**
  - **All (Notes)Item methods “just work” seamlessly**
  - **Overall size also supported by**
    - **Dynamic array type (Lotusscript)**
    - **Vector (Java)**



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# (Notes)Database Encrypt/Decrypt methods

- **(Notes)Database encrypt and decrypt:**

`db.encrypt(strength, deferred)`

`db.decrypt(deferred)`

- **If deferred (most common and useful) – next time it's opened, compact run enqueued**
- **If “while you wait” it will take time**
- **Local databases only**
- **Encryption strength is same as**

`db.(get)EncryptionStrength()`



**HCL**

*Relationship*<sup>TM</sup>  
BEYOND THE CONTRACT

\$10 BILLION ENTERPRISE | 159,000 IDEAPRENEURS | 50 COUNTRIES



WATCH THE FILM



# QUESTIONS?

Use the GoToWebinar Questions Pane

Please keep all questions related to the topics that our speakers are discussing!!!

Unrelated Question => post at:

<https://openntf.org/discord>

