

Fun with LibreOffice Calc

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Collabora
Online

Technical Day
COOL
days



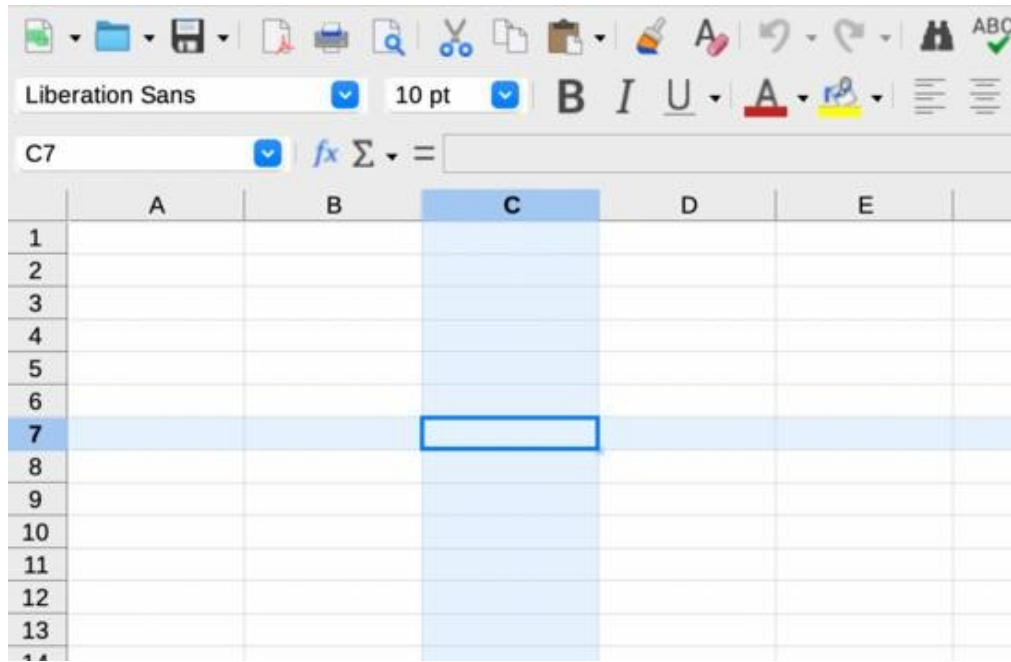
LibreOffice Technology





LibreOffice has received...

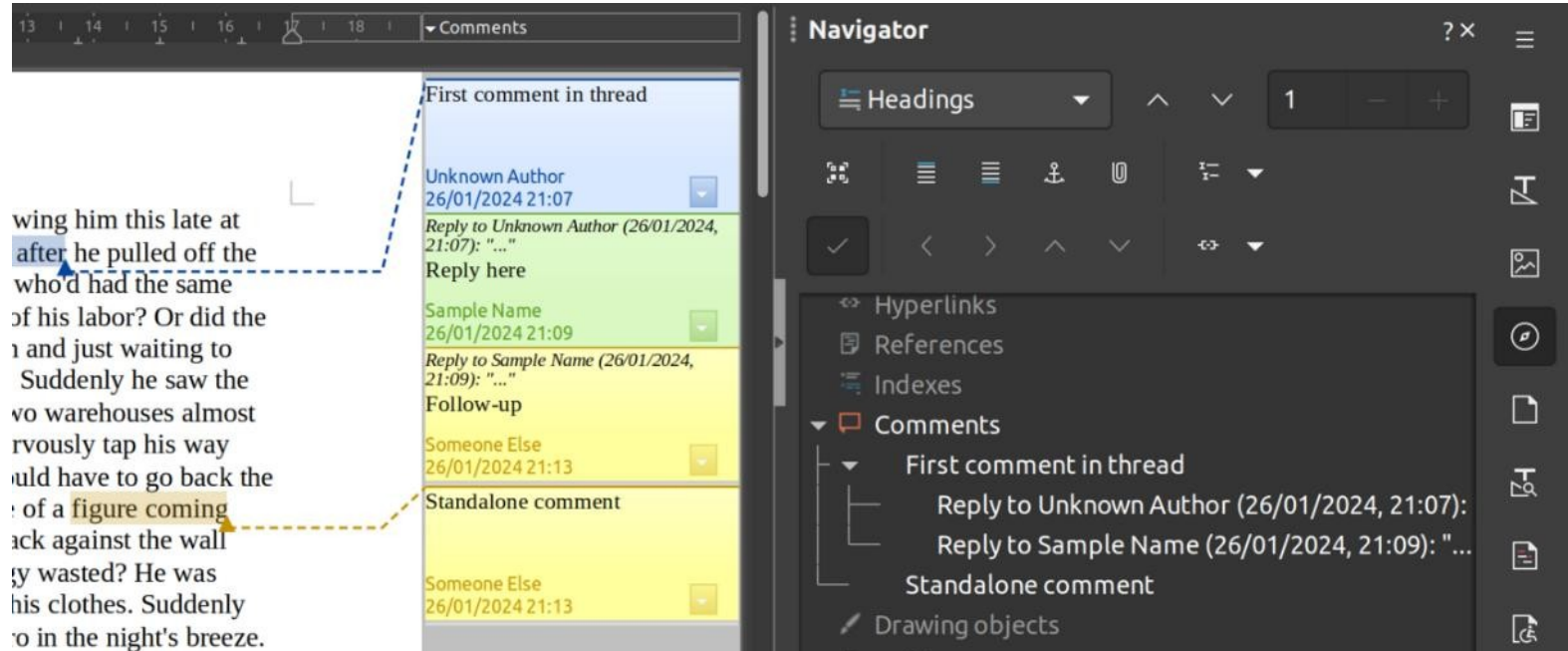
- Column/Row highlighting (Sahil Gautam)





LibreOffice has received...

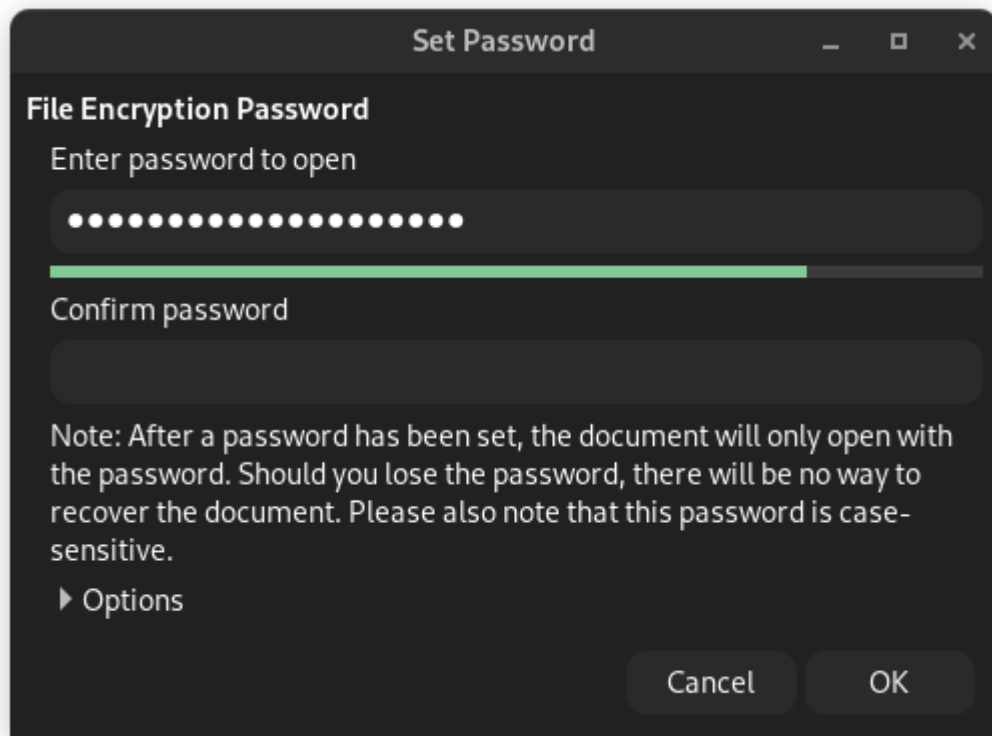
- Numerous improvements at the Navigator (Jim Raykowski)





LibreOffice has received...

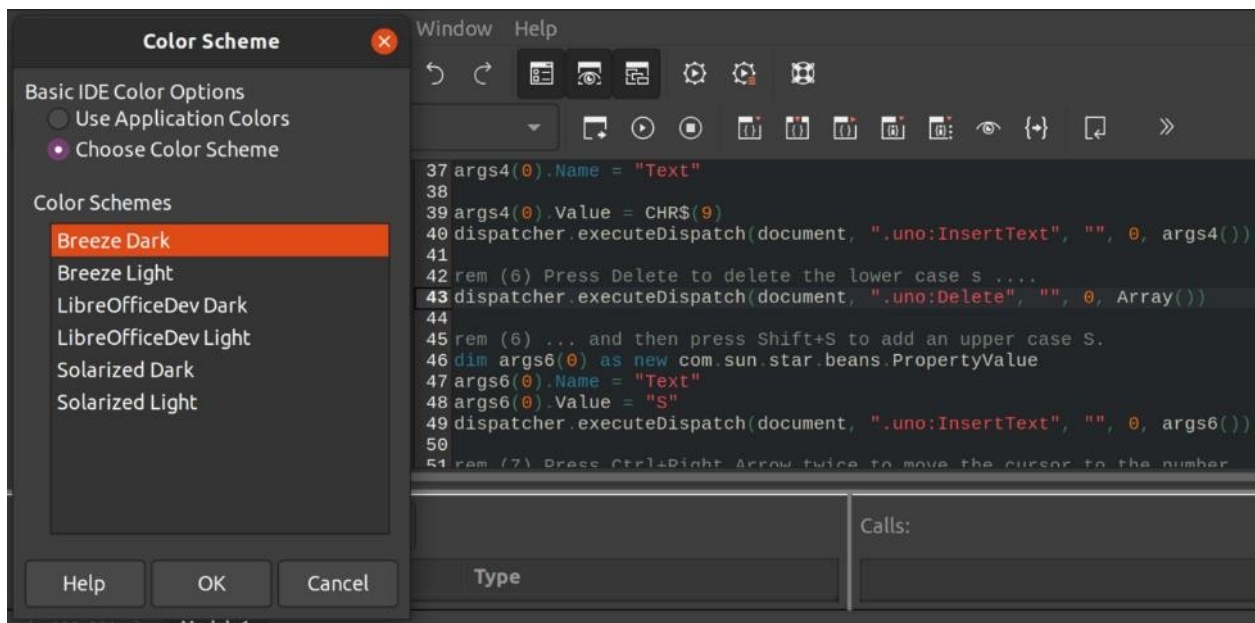
- Improved password security UX (Sarper Akdemir)





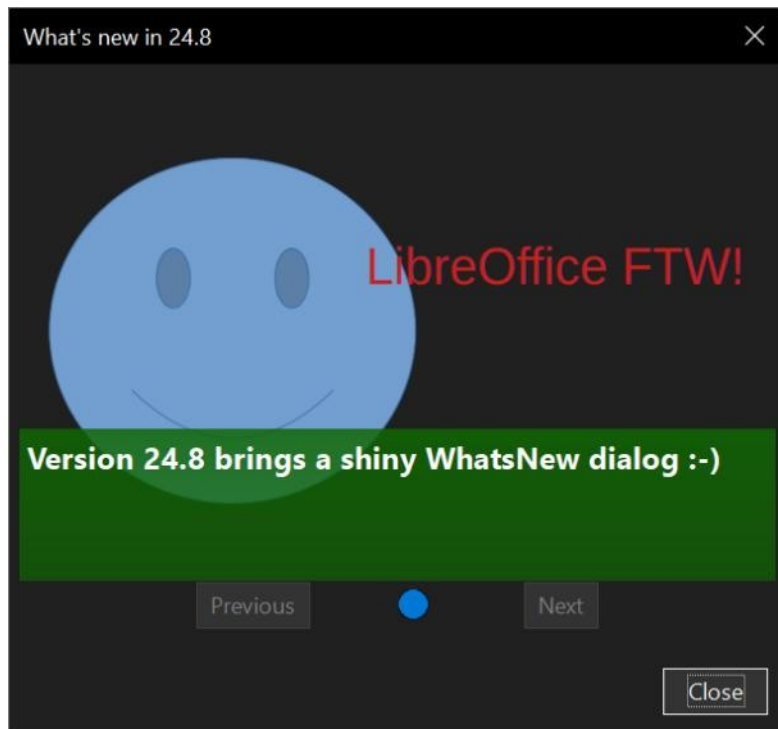
LibreOffice has received...

- Color scheme in Basic IDE (Rafael Lima)



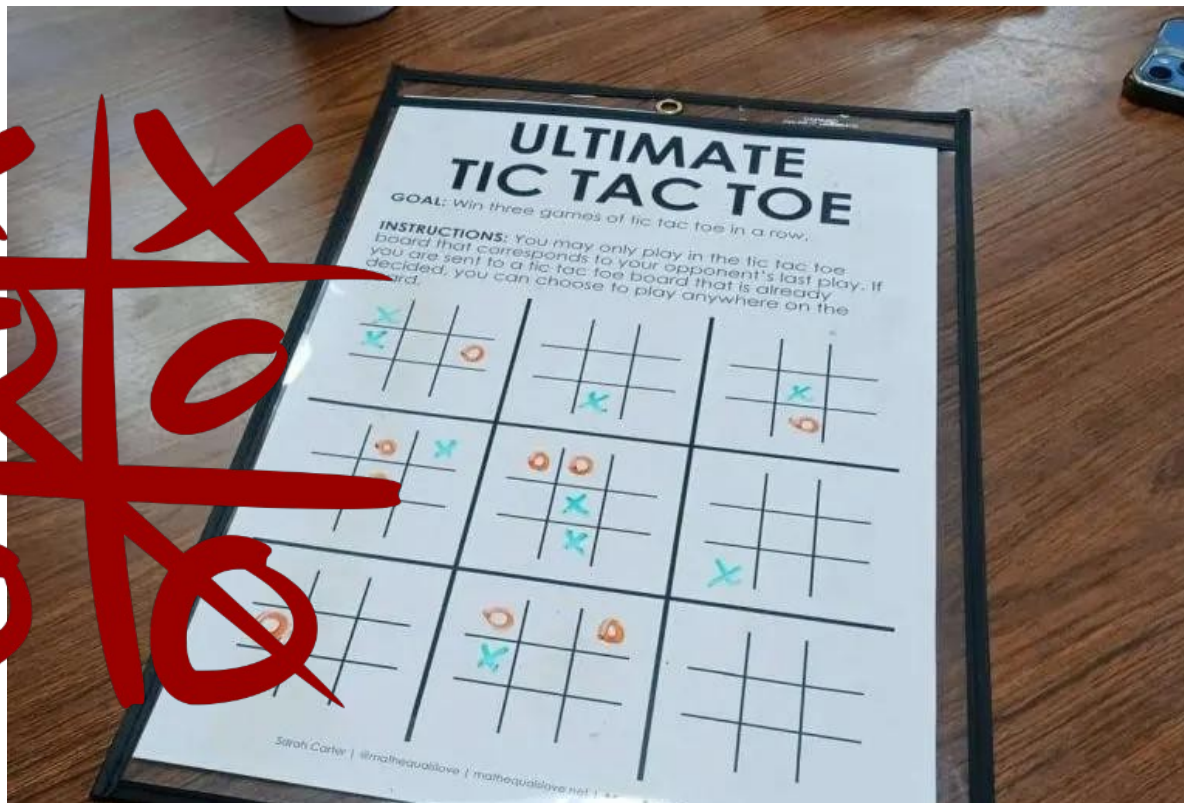
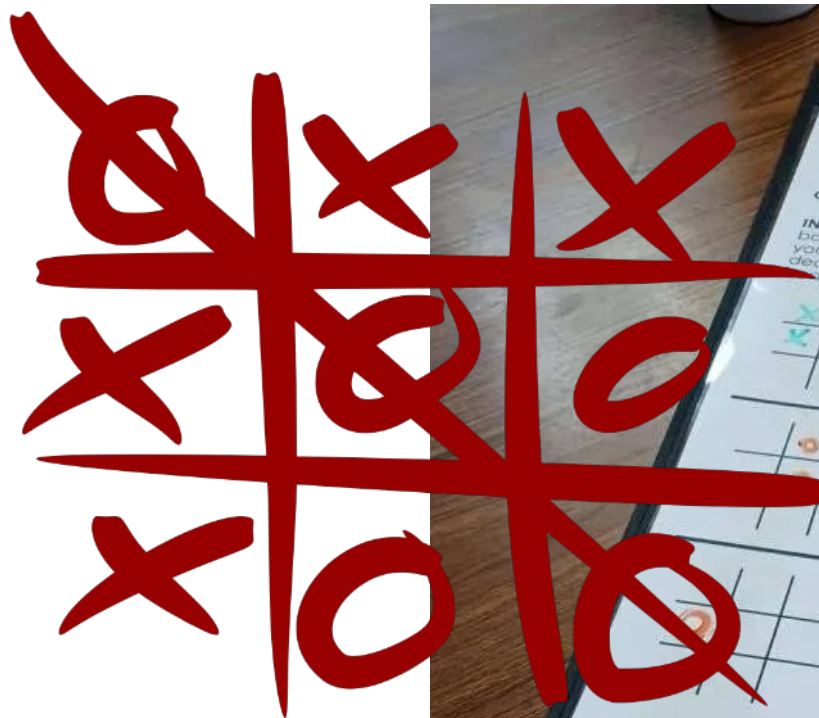
LibreOffice has received...

- What's New / Welcome dialog (Heiko Tietze)





But it's much more fun...



<https://mathequalslove.net/ultimate-tic-tac-toe/>



Board setup...

- Merge surrounding cells
- Prevent clicking outside
 - Sheet protection
- Verify input
 - Validity: accept only x and o

	A	B	C	D	E	F	G	H	I	J	K	L	M
1													
2													
3													
4													
5													
6													
7													
8													
9													
10													
11													
12													
13													

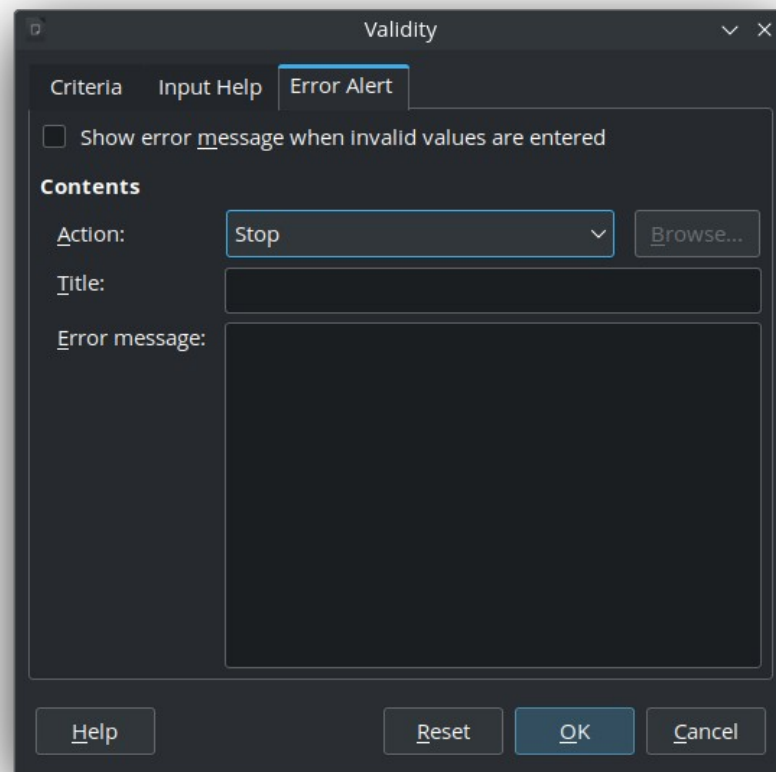


Validity...

- Bug 159595 - Data validation without error check allows to enter data other than defined

→ fixed by Julien Nabet

- Reopened: “While this patch is perfectly legit, the issue was so old that some users (like me) had the habit to use it like a feature, that could be called a ‘suggestions dropdown’.”





Better to realize per macro...

```
oMouseClickedHandler = createUnoListener("MouseClicked_",  
    "com.sun.star.awt.XMouseClickedHandler")  
  
ThisComponent.getCurrentController().addMouseClickedHandler(  
    oMouseClickedHandler)  
  
Function MouseOnClick_mouseReleased(oEvt) As Boolean  
    oCell = ThisComponent.getCurrentSelection()  
    DoCheckCell(oCell)  
  
End Function
```

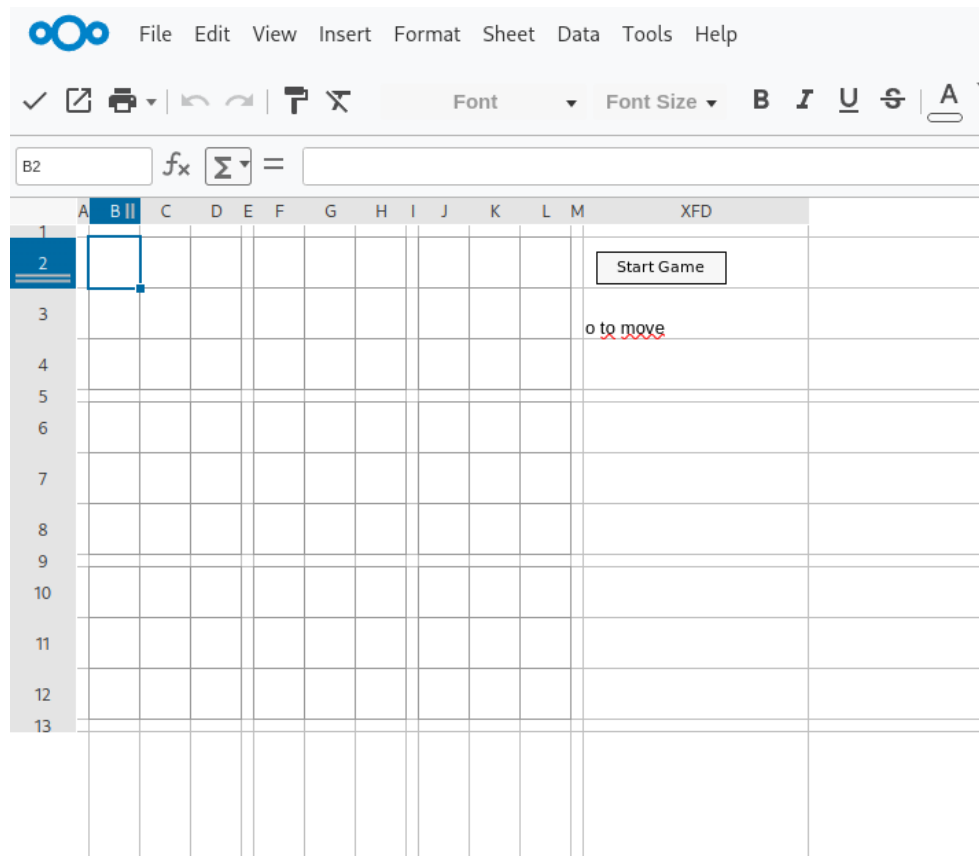
Some more logic and online?

DoClearBoard()

IsGameDone()

IsBoardDone()

...





Offline against AI

	A	B	C	D	E	F	G	H	I	J	K	L	M	XFD
1														
2														
3														
4														
5														
6														
7														
8														
9														
10														
11														
12														
13														

Start Game

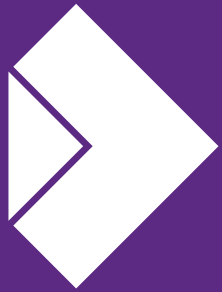
o to move




AI? DIY!

```
30 Sub DoComputeMove
31   Dim aCells()
32   Dim aCellCount
33   aCellCount = 0
34
35   For i = 1 to 11
36     For j = 1 to 11
37       oCell = oSheet.getCellByPosition(i, j)
38       If (i <> 4) AND (j <> 4) AND (i <> 8) AND (j <> 8) AND _
39         (oCell.CellBackColor = COL_WHITE) AND (oCell.GetString() = "") Then
40         Redim Preserve aCells(aCellCount)
41         aCells(aCellCount) = Array(i,j)
42         aCellCount = aCellCount + 1
43       End If
44     Next j
45   Next i
46   z = Int(aCellCount * Rnd)
47   oCell = oSheet.getCellByPosition(aCells(z)(0),aCells(z)(1))
48   DoCheckCell(oCell)
49 End Sub
```

<https://extensions.libreoffice.org/en/extensions/show/70056>



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days —  —



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Thank you!

By Heiko Tietze



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