



Lotusscript manager is a handy tool for Lotus Notes developers and can be used for code auditing

The application is completely written in visual basic.net.

Full source code is included.

Compile it using the free VB.NET Express Edition.

### **System requirements:**

Windows 2000/XP/Vista/7

Lotus Notes 8 or higher (tested on 8.5.1)

Microsoft .NET 3.5

As a Lotusscript developer for 7 years I really missed these features so in my free time I created this application.

It has almost the same functions as Teamstudio's Script Browser.

But from my experience that application doesn't search for code references in ALL design elements.

Lotus Notes 8.5.1 contains a really good new lotusscript editor, but still misses most of these functions.

### **The functions in this application (version 1.4.1):**

- search (multiple) databases for ALL lotusscript, javascript and formula code
- save your code to an external xml file, use it for version management
- compare two database designs of saved xml files and look at the differences in your code or missing (design) elements
- find references to your functions or even design elements (where do I use my view in my code?)
- lotusscript, javascript and formula code preview with syntax highlighting
- open declaration for code preview
- find unused variables or find the local declaration of a variable
- directly open every design element in Lotus Designer.
- add a Lotus Notes 8 or 8.5 / eclipse toolbar to your designer client (

If you like this application or have suggestions please let me know!

Ferry Kranenburg (ferry.kranenburg@bureaubos.nl)

## 1. Installation

Installation is simple. No setup or installation with admin privileges is needed.

- Download the "lotusscript manager vx.x - executable.zip" from OpenNTF.org
- Unpack the zip file to a directory you specify
- Installation done. Make sure the file 'TabControlEX.dll' is always located at the same directory or else the program will not start!
- Start the program with 'lsmanager.exe'

## 2. File & Options

### 2a. Always on top

When working with the domino designer and lotusscript manager it is sometimes handy to have this tool 'by hand'. When setting "always on top", Lotuscript Manager always displays on top of all other programs.

### 2b. Syntax highlighting

Code Syntax highlighting can be very slow on older computers. If you have a lot of very long code then this function may take a while. You can turn it off. (default=on)

### 2c. Select Lotuscript / formula / javascript language

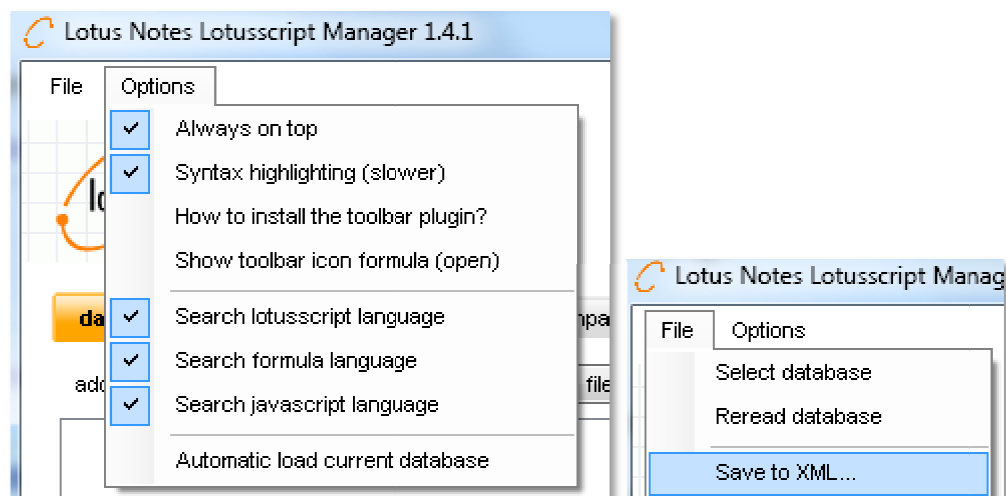
Select all the code languages you would like see. Design elements that do not contain any of the selected code languages will not get displayed!

### 2d. Automatic load current database

Turn this feature on if you start the tool using the toolbar icon or the eclipse plugin. It will automatically load the current database you are working on.

### 2e File -> save to XML

Saves all code of the currently selected database to a specified XML file. This file can later be opened by Lotuscript Manager or other XML file reader.

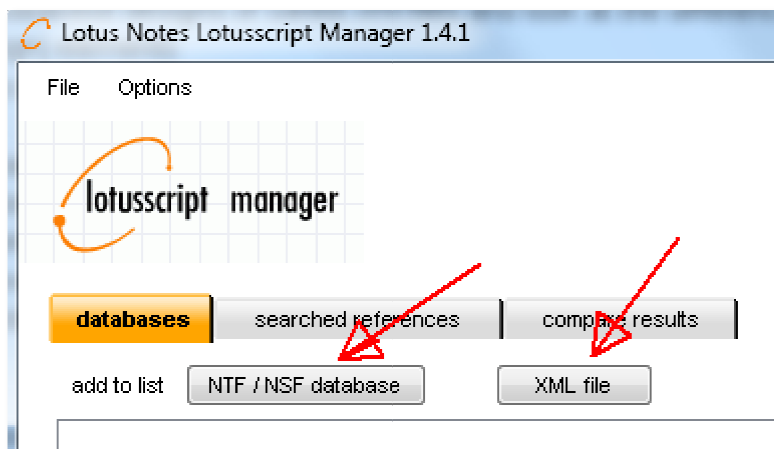


### 3. Select database or Lotuscript Manager XML file

Select a NTF template or NSF database. You may select multiple databases at once (unlike Lotus Notes itself) using the CTRL button.

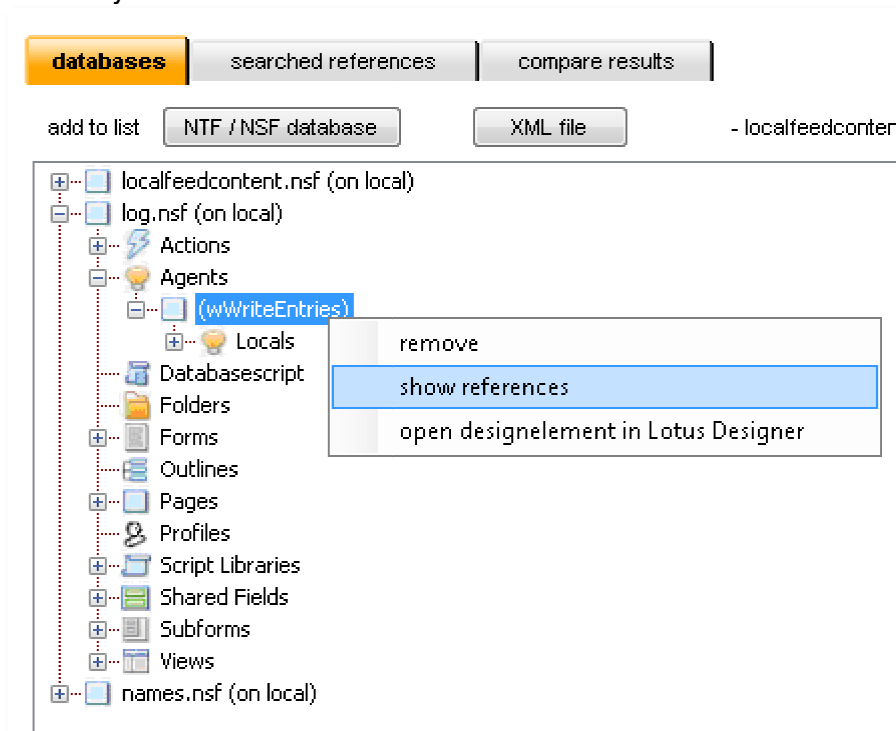
Since version 1.3 you could load a previously saved XML file. The XML file contains all the raw code of the database at the time of saving. Click the button 'XML file' to load (multiple) XML files.

After selection click 'Select' or 'Open' in the dialog to load the databases. Databases with a lot of code or servers with a slow link may take a while to load. The progressbar on the bottom will show you which design element is being processed and shows when it's done.



#### 4. Right click menu in 'Databases/References/Compare' tabs

- **remove** a database from the list using the 'remove' option.
- **show references** will show you where in the code the selected element name is being called. This function compares to code TEXT only, so it may return 'false positives'!
- **open design element**, opens the design element directly in your Lotus Designer. Quick and easy.



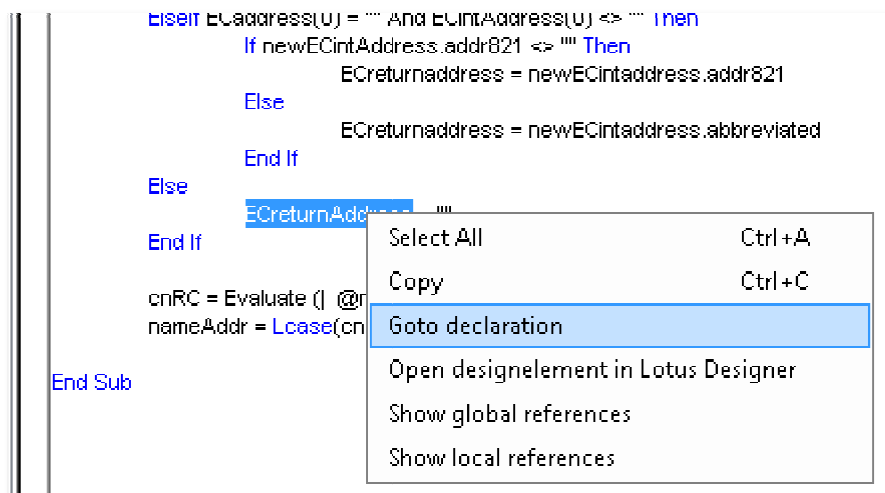
## 5. Right click menu in 'code review' tab

When you select something in the code review it automatically selects the whole word. That makes it easy to find references to the selected text in you code.

- **Goto declaration** - select a variable in the code (formula not supported!) and it will jump where the variable is declared. This function does not support global variables. Use the search function or 'show global references' to find it's declaration.

- **Show global references** - will search the entire database for the text you selected. If you selected a design element name then it will find it (e.g. it will find the view in db.getview("<clickedthis>")

- **Show local references** - visually shows in the current piece of code where the selected text is being used using a color.



```
ElseIf ECaddress(U) = "" And ECintAddress(U) <> "" Then
    If newECintAddress.addr821 <> "" Then
        ECreturnaddress = newECintaddress.addr821
    Else
        ECreturnaddress = newECintaddress.abbreviated
    End If
Else
    ECreturnAddress = ""
End If

cnRC = Evaluate (| @r
nameAddr = Lcase(cn

End Sub
```

The screenshot shows a code editor with a right-click context menu open over the text 'ECreturnAddress'. The menu items are: 'Select All' (Ctrl+A), 'Copy' (Ctrl+C), 'Goto declaration' (highlighted), 'Open designelement in Lotus Designer', 'Show global references', and 'Show local references'. The code in the background is a LotusScript snippet with conditional logic for setting 'ECreturnaddress' based on 'newECintAddress' and 'ECintAddress' values.

## 6. Unused variables tab

For the selected element it counts the uses of the variables and show you wich variables are not used in the code. If the count is 1 then the variable is only declared but not used. The code preview will underline red these variables also.

code review	unused local variables	references
VariableName	Used count	
Dim s As New NotesSession(line 1)	53	
Dim w As New NotesUIWorkspace(line 2)	13	
Dim db As NotesDatabase(line 3)	3	
Dim key(0) As String(line 4)	6	
Dim view As NotesView(line 5)	6	
Dim uidoc As NotesUIDocument(line 6)	4	
Dim doc As NotesDocument(line 7)	26	
Dim doc2 As NotesDocument(line 8)	10	
Dim helpdoc As NotesDocument(line 9)	3	
<u>Dim connectiontype As String(line 10)</u>	1	
<u>Dim locationtype As String(line 11)</u>	1	
Dim done As Integer(line 12)	4	

## 7. Code comparing

Select exactly two databases, XML or NSF/NTF, it does not matter. It must be the same replica or copy to succesfully compare the design elements.

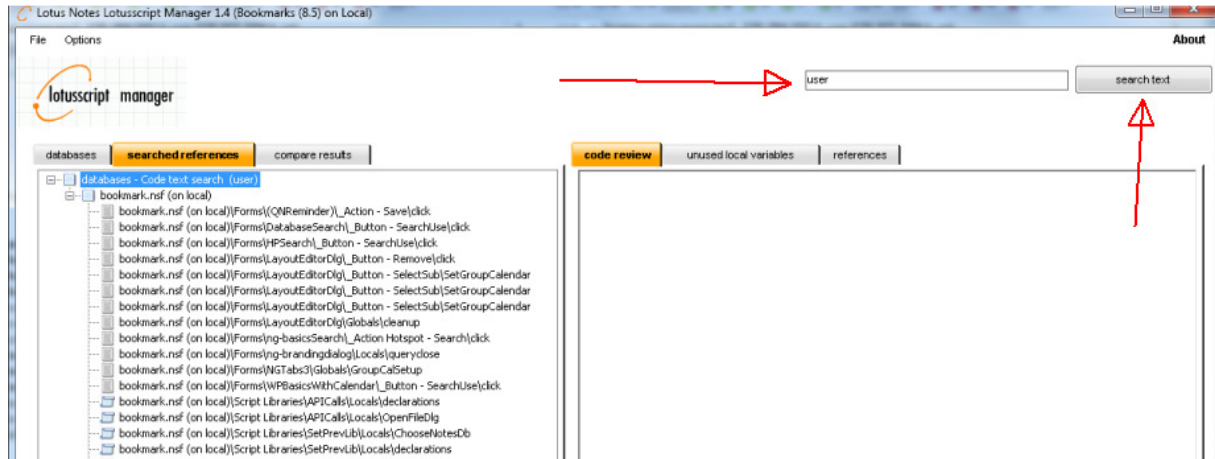
Use the button compare all code to find out wich design elements are missing or what code elements are changed, on big databases this process can be really slow. Use the 'compare script libraries' button if you only need to audit the script libraries.

You can save the output to a XML file. XML files can be opened later by Lotuscript manager or a internet browser / XML file reader.

The screenshot shows a software interface for code comparison. At the top, there are three tabs: 'databases', 'searched references', and 'compare results' (which is highlighted in orange). Below the tabs are three buttons: 'compare all code', 'compare script libraries only', and 'Save results to XML'. At the bottom, there is a tree view showing the results of the comparison. The tree is expanded to show 'Found 3 code differences'. The first item is '2.xml\Forms\{\$Subscription\\_Button - Check\options', which is highlighted in blue. The second and third items are '2.xml\Outlines\SubscriptionFormOutline\Locals\value'.

## 8. Searching across all selected databases for text

You can quickly search multiple databases using the search button. The search is very quick. You can click on each search result (on the tab search references) at any time, right click on a piece of text and find all the references of the selected text.



If you use this program, please let me know if you have questions, bugs or new ideas for new features.

Ferry Kranenburg