



HCL Notes Designer: struggling with configuration variables

PART 1 /4 : NOTES.INI

Notes.ini: the basics

- ▶ Limitations of variable length
 - ▶ Text: 255 characters
 - ▶ Numeric: 2GB (2 147 483 647)
- ▶ Types
 - ▶ \$ or \$\$ prefix: by convention they are User Defined Variable
 - ▶ \$MyVar=MyValue
 - ▶ Mandatory for @Formula language
 - ▶ No prefix: by convention they are System variables
 - ▶ MyVar=MyValue
 - ▶ Policiesettings use these types of variable
- ▶ Returns an empty string if there is no Myvar= in notes.ini
- ▶ Case insensitive for variable name
 - ▶ MyVar == myVar == myvar == mYvAr ...

Notes.ini: the basics cont'd

- ▶ Location

- ▶ HCL Notes client notes.ini file:

- ▶ When used in fields events (Forms/Subforms/Frameset)
 - ▶ Actions in Design elements
 - ▶ Local or interactive agents

- ▶ HCL Domino Server notes.ini file:

- ▶ When used in scheduled agents
 - ▶ ?OpenAgent urls calls
 - ▶ Server restrictions are applied

- ▶ CGI

- ▶ CGI variables can be retrieved with @Environment Formula.

Notes.ini – Formula Language

- ▶ Cannot be used in columns and selection formulas
- ▶ Only User defined variable can be used (\$ prefixed)
- ▶ Setter
 - ▶ ENVIRONMENT formula keyword (User Workstation notes.ini only):
 - ▶ ENVIRONMENT MyVar:=MyValue;
 - ▶ Will set \$MyVar=Myvalue
 - ▶ DEFAULT formula keyword usage can be combined to provide default value
 - ▶ @Environment Formula
 - ▶ Syntax: @Environment(MyVar(s); MyValue(s))
 - ▶ All parameters can be a list (« Var1:Var2 », »Value1:Value2 »)
 - ▶ @SetEnvironment Formula
 - ▶ @SetEnvironement(« VATAmount »;@Text(VATAmount))
 - ▶ Numeric values should be converted to text before

Notes.ini – Formula Language

- ▶ Getter
 - ▶ ENVIRONMENT keyword (User Workstation notes.ini only):
 - ▶ ENVIRONMENT MyVar;
 - ▶ Will get value from notes.in « \$MyVar=» if \$MyVar=Myvalue
 - ▶ @Environment Formula
 - ▶ Syntax: @Environment(MyVar(s))
 - ▶ Numeric values should be converted from text to number with @TextToNumber formula.

Notes.ini – Formula Language

- ▶ When
 - ▶ Use it to retrieve or store temporary values bound to a user
- ▶ Where
 - ▶ In the title event of a form to user a preferred type of form on all creation made by the user
 - ▶ Whenever user preferences values are needed in a form

Notes.ini – LotusScript

- ▶ System variable: non prefixed variables can be used
- ▶ Optional parameter `isSystem`: set it to `True` to not prepend the `$` sign
- ▶ Optional parameter `isSystem` is set to `False` by default
- ▶ Signer should have the « Unrestricted » LS or Java execution rights (in Server Document Security section if code is run on server).
- ▶ Setter
 - ▶ `SetEnvironmentVar(« MyVar » , Value[, isSystem])`
 - ▶ Value is a Variant
- ▶ Getters
 - ▶ `GetEnvironmentString(« Myvar » [, isSystem])`
 - ▶ `GetEnvironmentValue(« Myvar »[,isSystem])`

Notes.ini - LotusScript

- ▶ When
 - ▶ Mainly when you do need a specific machine configuration/environment variable
 - ▶ MailServer, Mailfile, etc.
 - ▶ When an agent needs to read a server notes.ini variable depending on the server it runs on
 - ▶ ServerTasks, Domain, etc.
- ▶ Where
 - ▶ Whenever you can code with LS (LotusScript)
 - ▶ Do not get confused between local or server notes.ini

Notes.ini – Combining Formula and LS

- ▶ In a form's 'Window Title' event we ask the user if the document concerns France/China/Russia:
 - ▶ Title:="Document n° " + @Text(DocNumber);@If(@IsNewDoc; "";
@Return(Title));@Environment("CountryOrigin";"");ChoiceReturn:=@Prompt([OkCancelList]:[NoSort];"Document Creation";"Document: "; "Document opened by France"; "Document opened by France": "**Документ, открытый в России**": "**由中国打开的文件**");@Environment("CountryOrigin";ChoiceReturn);"Document"
- ▶ In the LS QueryOpen event of the same form, we check the notes.ini variable '\$CountryOrigin'
 - ▶ If IsNewdoc Then Dim s As New notessession Dim variableNotesIni As String variableNotesIni = s.GetEnvironmentString("CountryOrigin",False)If variableNotesIni="" Then MsgBox "You need to select the Country"+Chr(10) + "Creation is cancelled", 16, "Error"Continue=False Else Continue = True End If End If

Notes.ini - Java

- ▶ System variable: non prefixed variables can be used
- ▶ Optional parameter `isSystem`: set it to `True` to not prepend the `$` sign
- ▶ Optional parameter `isSystem` is set to `False` by default
- ▶ Signer should have the « Unrestricted » LS or Java execution rights (in Server Document Security section if code is run on server).
- ▶ Setter and getters are the same than LS functions
- ▶ Setter
 - ▶ `public void setEnvironmentVar(String vname, Object value [, boolean isSystem])`
- ▶ Getters
 - ▶ `public Object getEnvironmentValue(String vname, boolean issystem)`
 - ▶ `public String getEnvironmentString(String vname [, boolean isSystem])`

Notes.ini - Conclusions

- ▶ Not really a secure way to get and set preferences
 - ▶ You should not rely on the presence of the notes.ini variable.
 - ▶ Notes.ini can be resetted by the user or the helpdesk (or even an admin on a HCL Domino server)
- ▶ Combining languages (Formulas and LS or Java) can help solve complicated parameter usage