

## **Analysis and Generation of Build File (AnaGenBuild.doc)**

### ***Problem Summary***

Project Team who are using RSA / RAD / WID / Eclipse tools to develop J2EE and SCA Projects are writing ANT build file to compile and package their sources outside of IDE.

Writing ANT Build file is sometimes said to be tremendous task and require lots of effort and time and sometimes cause impact on project delivery.

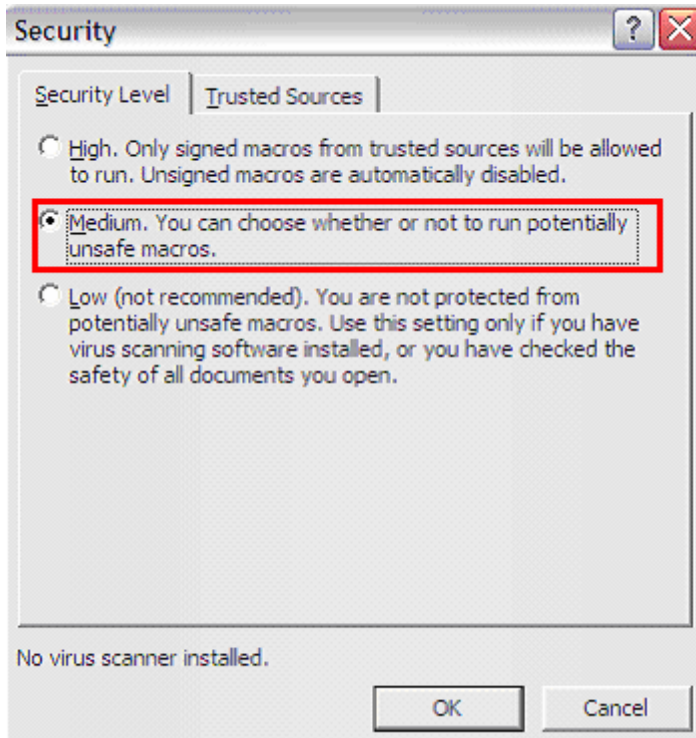
### ***Solution Summary***

AnaGenBuild Tool is being developed to speed up the writing of ANT build file (which is in XML format). This saves effort and time to construct the ANT build file.

### ***Pre-Requisites to run the AnaGenBuild tool***

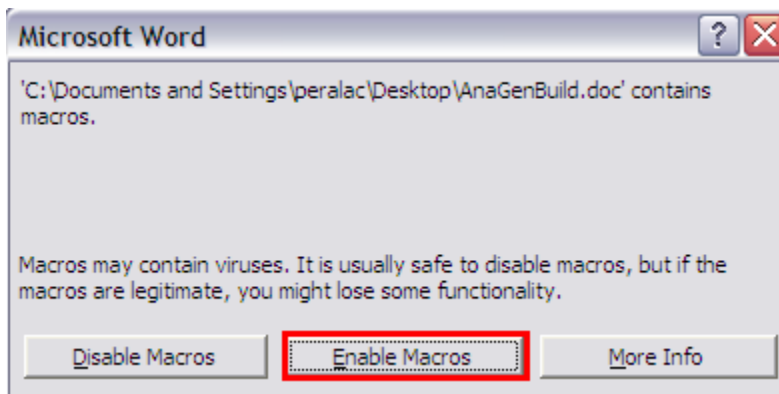
Microsoft Word from MS Office Suite is the only pre-requisite to run the tool.

Check that Macro Security is set to Medium from the menu Tools->Macro->Security in MS-Word.



[This picture shows Macro->Security dialog box choosing “Medium” level of security]

When prompted while opening the file AnaGenBuild.doc, “Enable Macros” button should be selected to ensure that VBA Macros are enabled to run the tool.



[This picture shows “utility tool contains macros” dialog and author recommends “Enable Macros” button to be clicked]

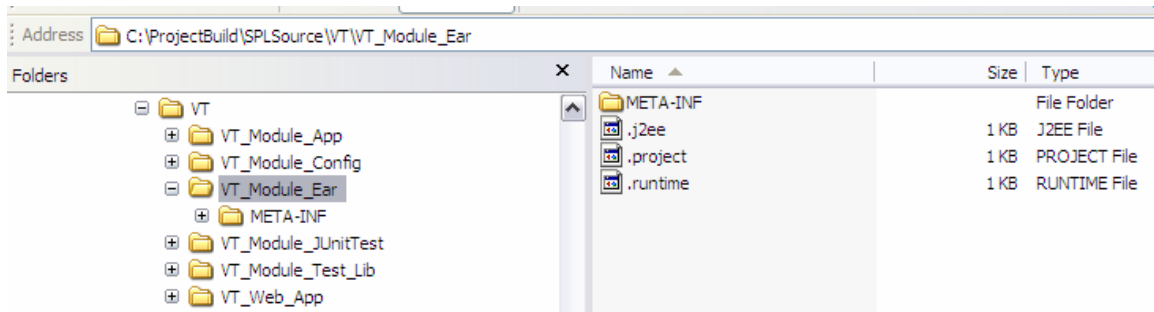
## ***Working with AnaGenBuild tool***

This tool supports two kinds of Build file generation.

1. J2EE (Java 2 Enterprise Edition)
2. SCA (Service Component Architecture)

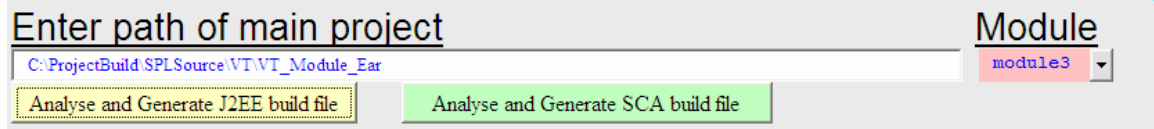
## J2EE build file generation

Lets take the example of RSA Project Folder Structure as in the below image



[This picture shows windows folder structure of J2EE Project by selecting VT\_Module\_Ear folder as base]

In the Textbox of the AnaGenBuild Tool, provide .project file location path as in the below image and change the module in the dropdown to module3

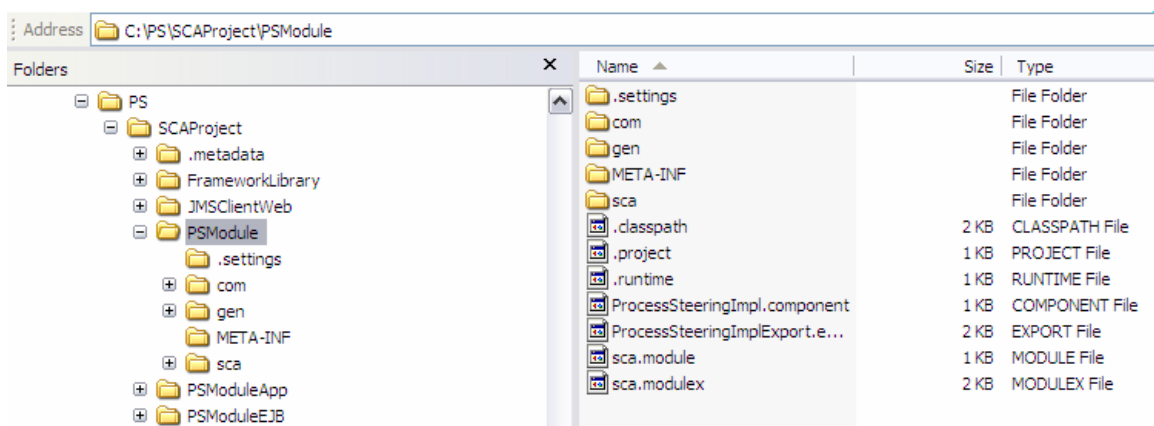


[This picture shows base folder path of J2EE Project being entered in AnaGenBuild utility tool]

and finally click on the Yellow colored button to Analyze and Generate J2EE build file.

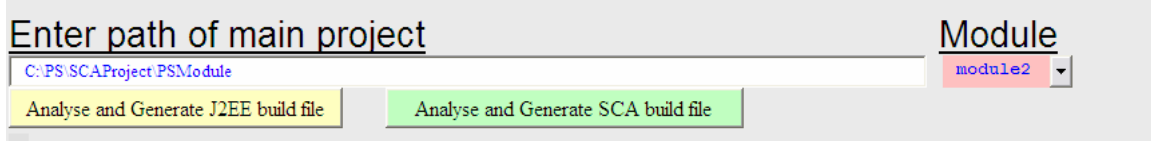
## SCA build file generation

Lets take the example of WID Project Folder Structure as in the below image



[This picture shows windows folder structure of SCA Project by selecting PSModule folder as base]

In the Textbox of the AnaGenBuild Tool, provide sca.module file location path as in the below image and change the module in the dropdown to module2

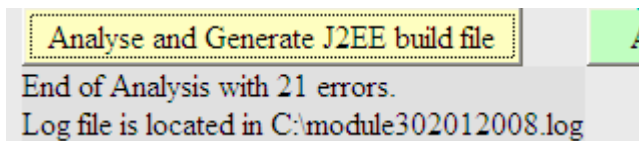


[This picture shows base folder path of SCA Project being entered in AnaGenBuild utility tool]

and finally click on the Green colored button to Analyze and Generate SCA build file.

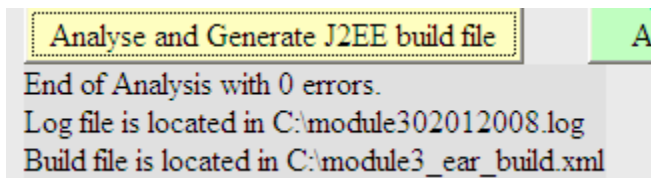
## ***Output of the AnaGenBuild tool***

In case of any errors found by the tool, Log file will be generated and is available in C:\(root) directory as seen in the below image



[This picture shows “End of Analysis with 21 errors” and Log file location in the AnaGenBuild utility tool]

Correct the errors if any and perform the same steps as above. Finally the build file will be generated and is notified as seen in the below image.



[This picture shows “End of Analysis with 0 errors” and Log as well as Build file location in the AnaGenBuild utility tool]

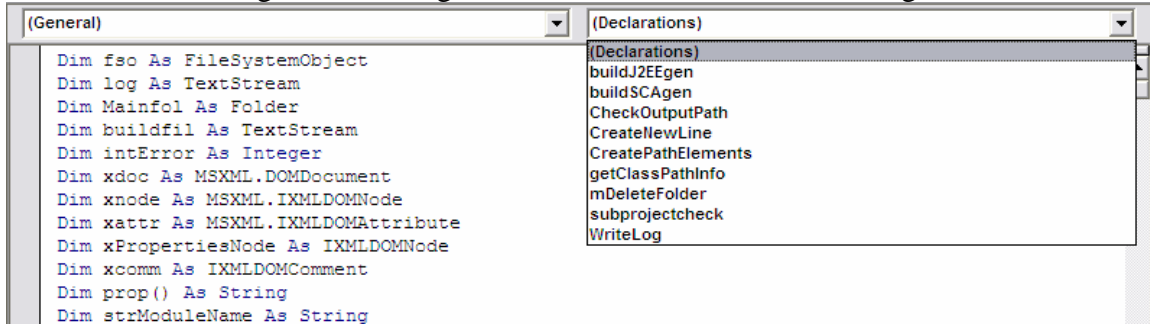
## ***Working with VBA Macros***

Select the Visual Basic Editor Menu in MS-Word as seen in the below image



[This picture shows “Tools->Macro->Visual Basic Editor” menu path of MS-Word]

VBA Code is having the following functions as seen in the below image

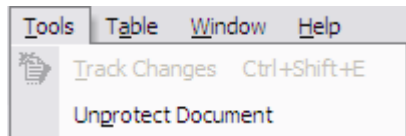


[This picture shows Dropdown list in right side of Microsoft Visual Basic Editor in MS-Word containing list of macros used in this utility tool]

- buildJ2EEgen – Invoked when J2EE button is pressed
- buildSCAgen – Invoked when SCA button is pressed
- CheckOutputPath – Create output folder for placing ear file if not exists
- CreateNewLine – Format the build file (Beautifying with Tabs and Blank Lines)
- CreatePathElements – Read .classpath file and generate path elements for J2EE
- getClassPathInfo - Read .classpath file and generate path elements for SCA
- mDeleteFolder – Delete folder in the file system
- subprojectcheck – Read .classpath file and generate Log file (Analysis Section)
- WriteLog – Writes Log file

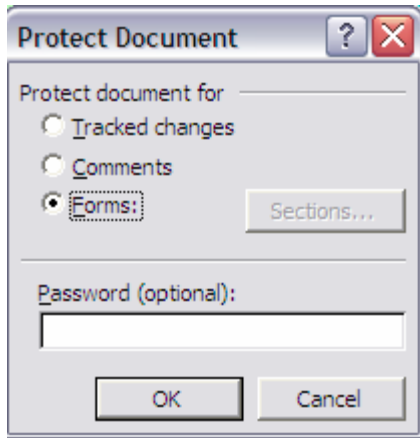
### ***Additional Information***

- To Change the module elements in the dropdown list , Make changes to the list in the Document\_Open() procedure where Array() is used.
- To Change the Instructions of the AnaGenBuild document, Choose “Unprotect Document” from the menu as seen in the below image



[This picture shows “Tools->Unprotect Document” menu path of MS-Word]

After making changes to the Instructions, Choose “Protect Document” from the menu and select “Forms” option as seen in the below image.



[This picture shows "Protect Document" dialog box of MS-Word choosing Forms option]