

BECKHOFF

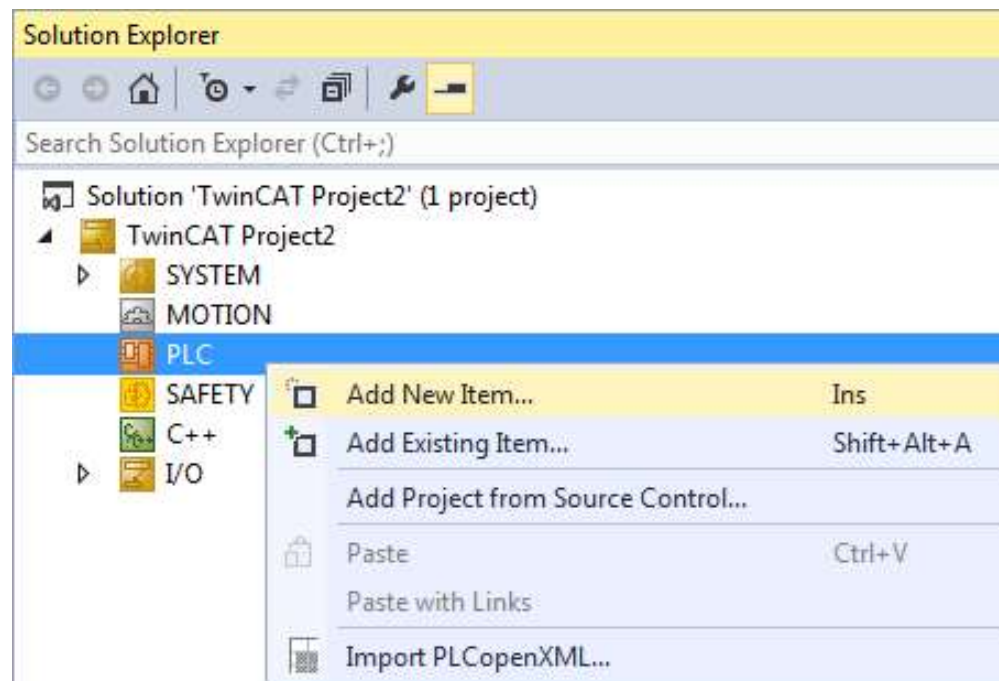


Adding the PLC Control

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- In the 'Solution Explorer', right-click on 'PLC' and select 'Add New Item'

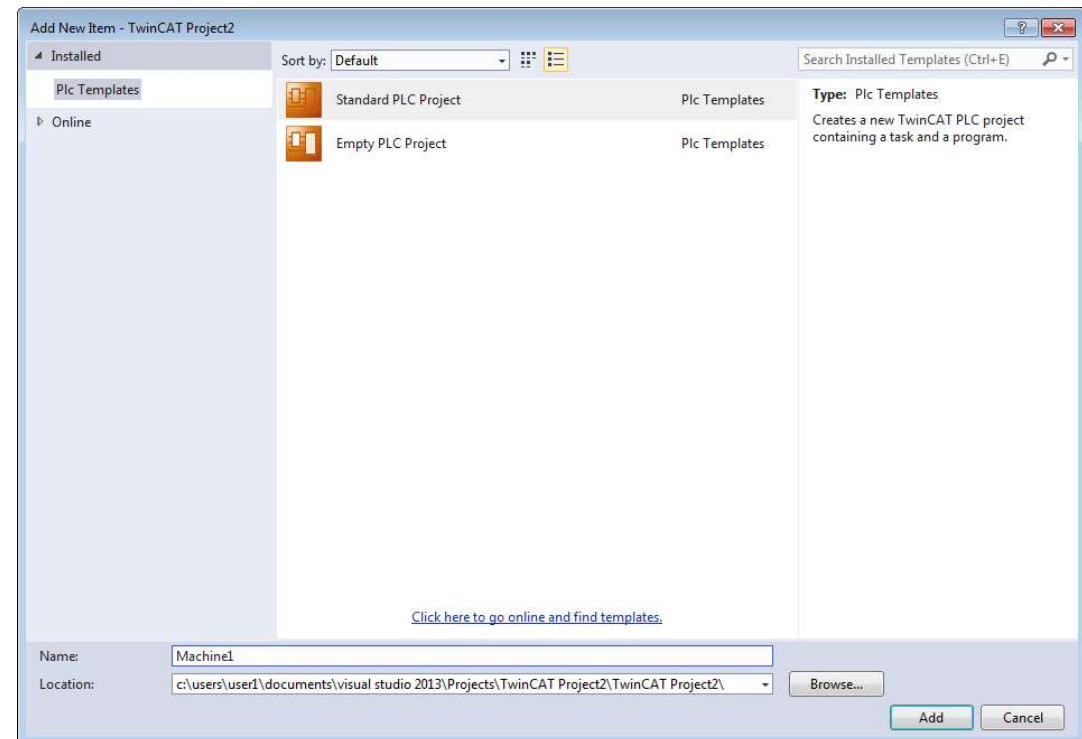


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- The 'Add New Item' window will allow you to select a 'Template'
- 'Standard PLC Template' is selected by Default
- Press 'Add' to continue

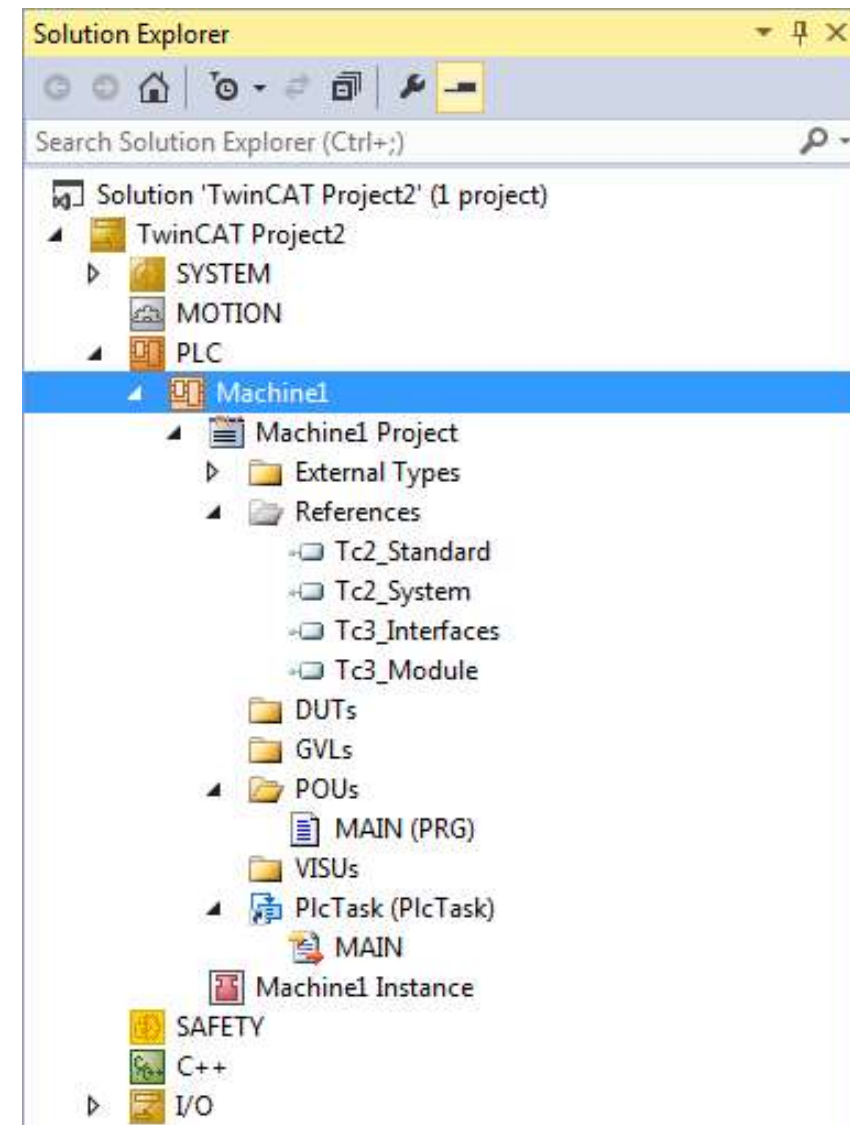
Note: The Empty PLC Project
is for creating user libraries



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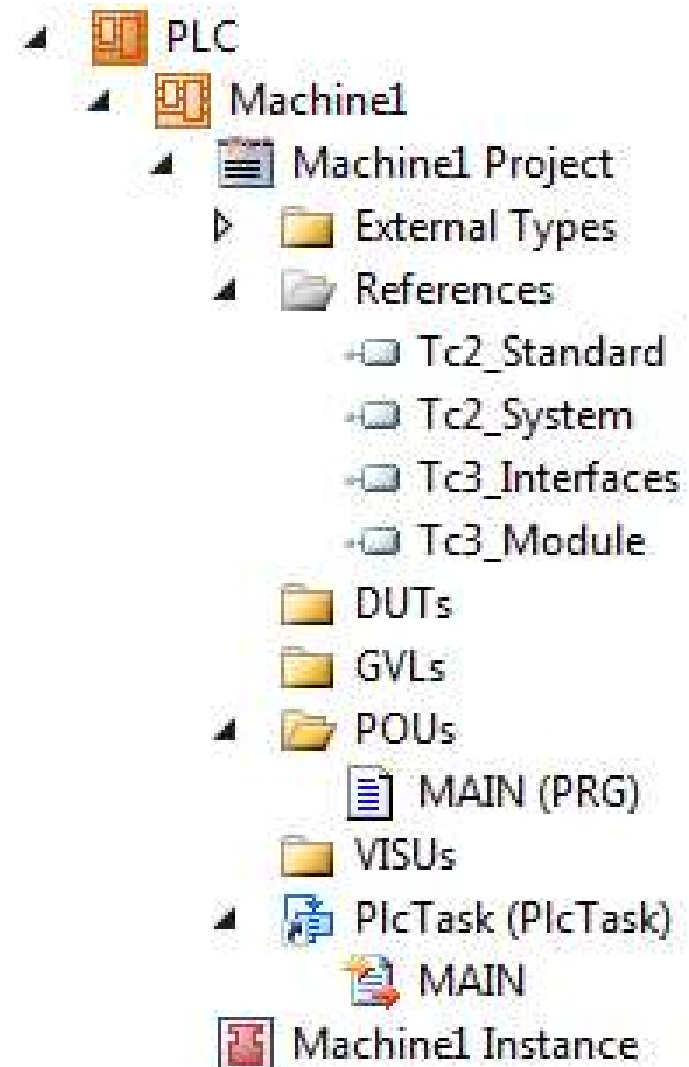
- In the 'Solution Explorer' you can see that the PLC Project has been added with the minimum amount of objects required for the PLC to operate.



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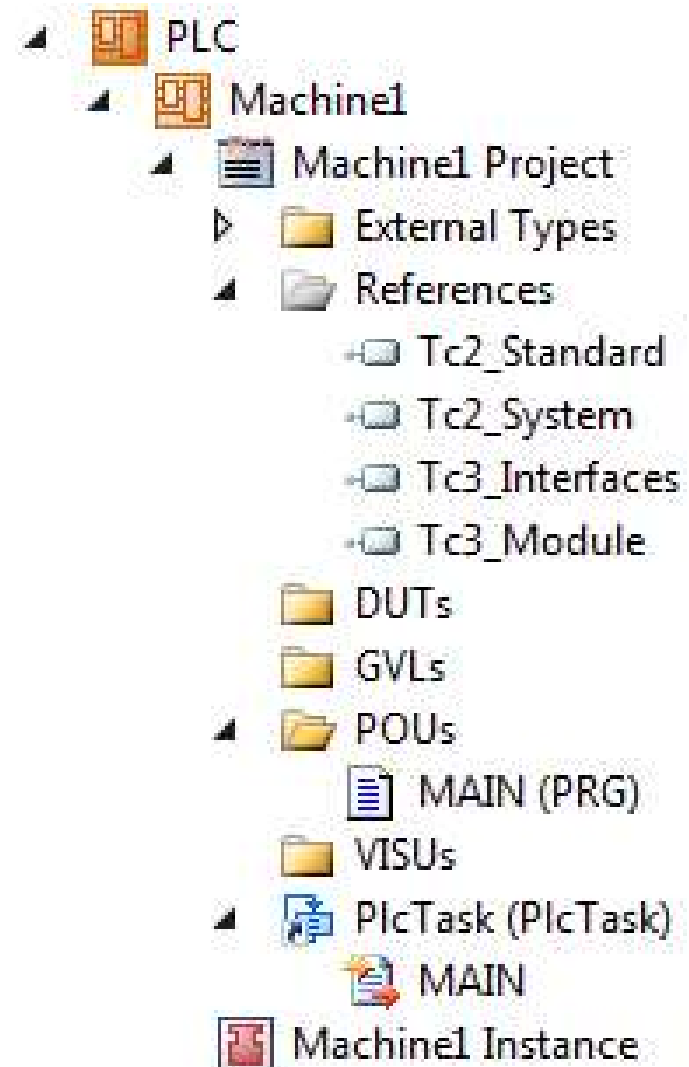
- The PLC can contain multiple Run-Times 'Machine1'
- Each Run-Time can contain multiple tasks



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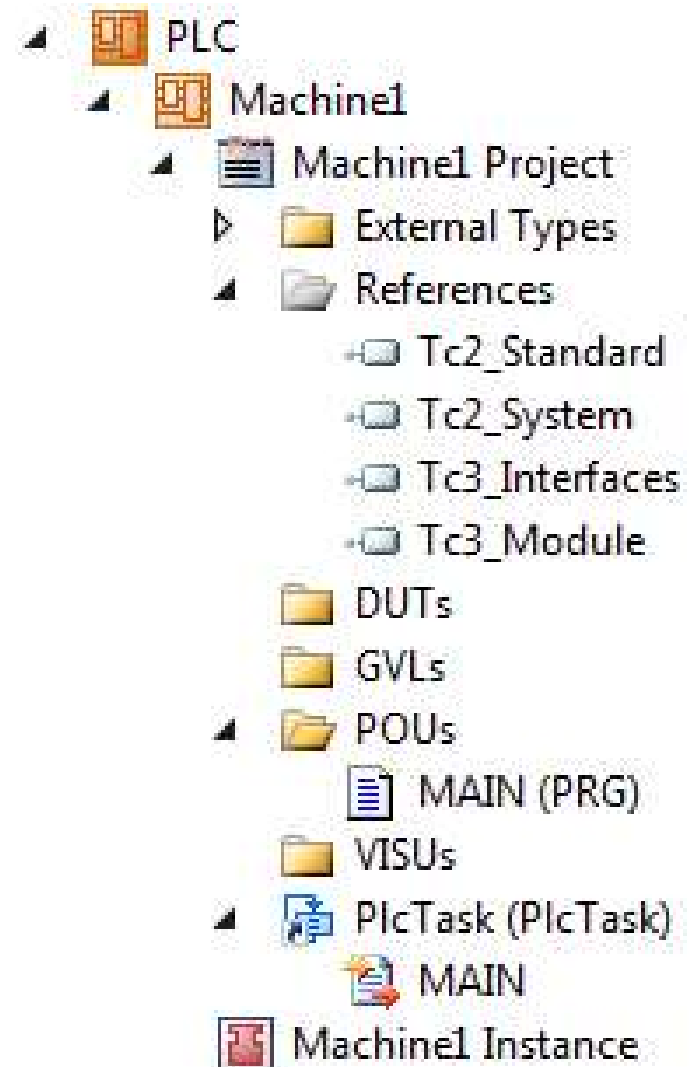
- The folder system is only a way to organize the other components of the project.
- The folders do not effect the operation in any way.



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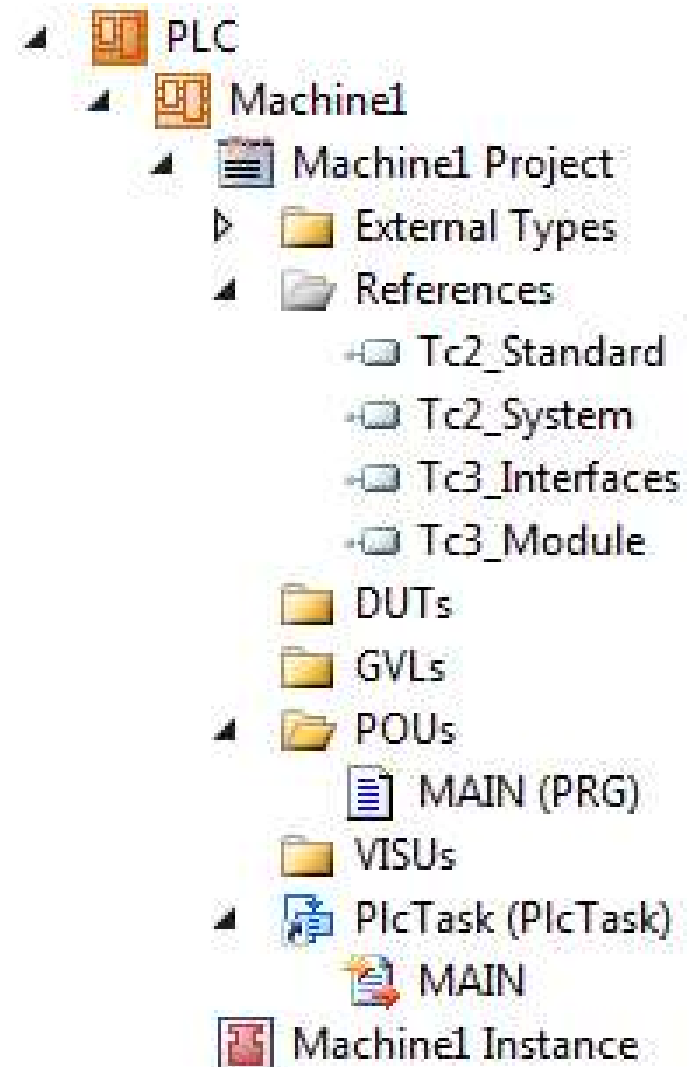
- The 'References' folder holds the libraries to be used by the Run-Time.
- The libraries seen here are included by default.



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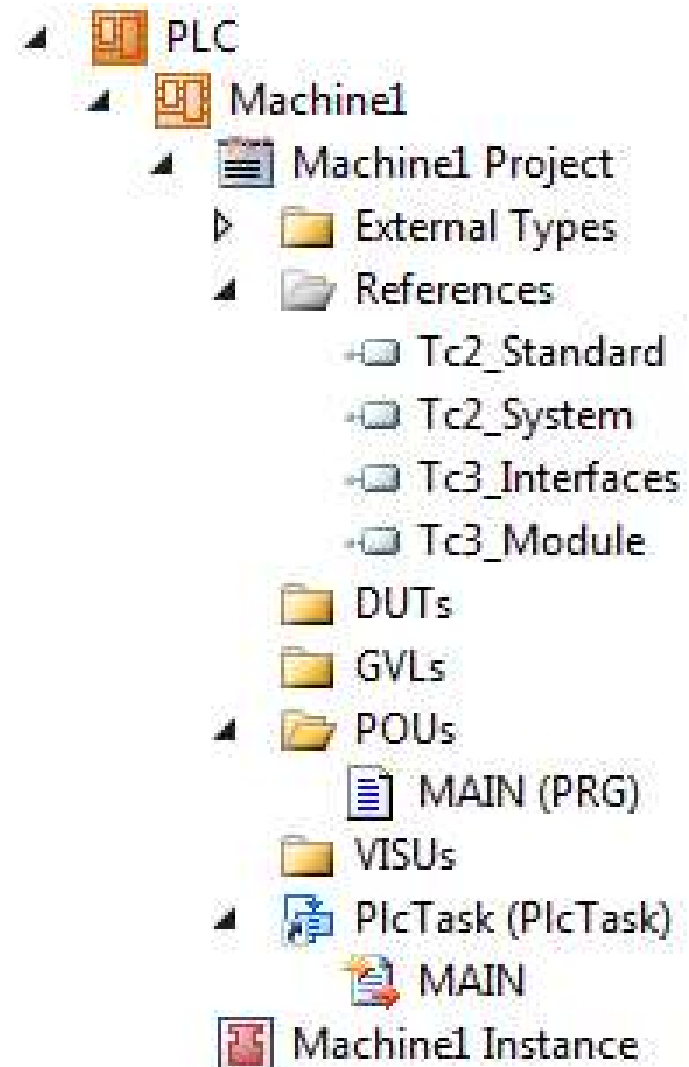
- The DUTs folder is intended to be used to hold Data Unit Types (also known as User Defined Variables).
- It is possible to create subfolders for separating Enums, Structures, etc.



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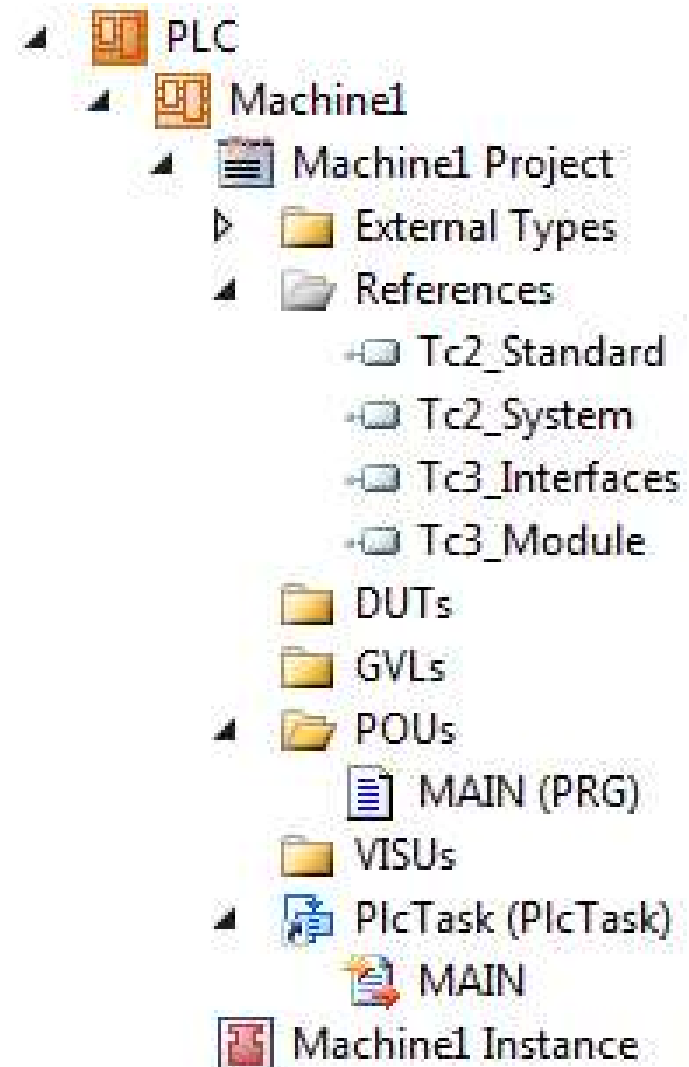
- The GVLs folder is for Global Variable Lists.
- Subfolders could be created for IO, HMI, Servos, physical sections of the machine...



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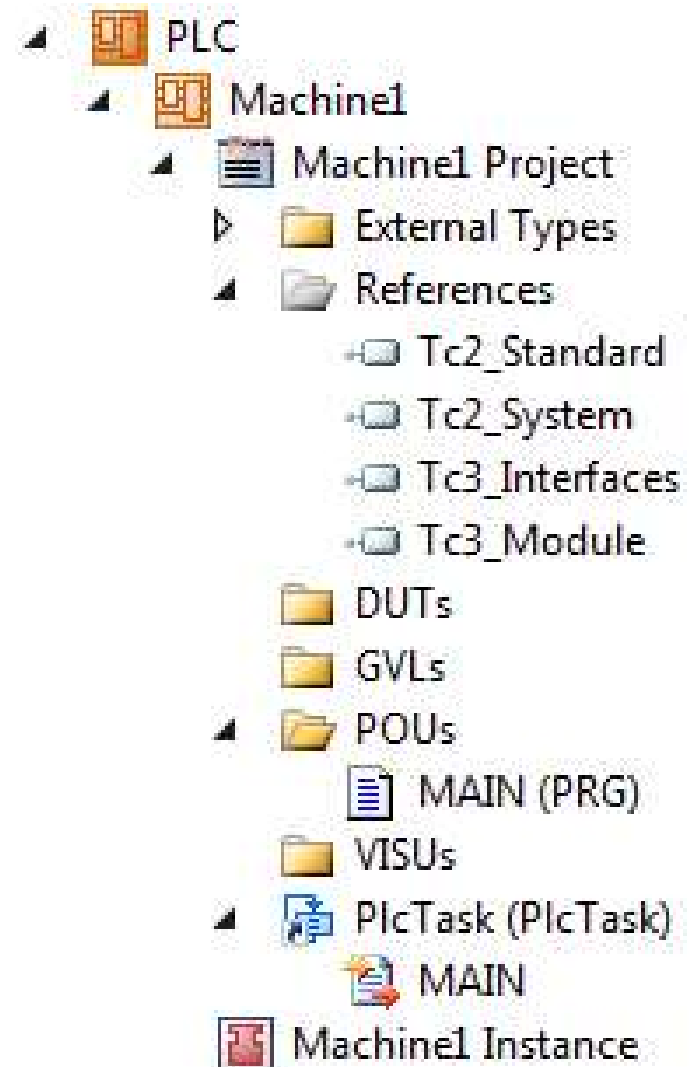
- The POU's folder contains the actual code.
- Sub folders for Functions and Function Blocks could be created here, or they could be placed at the same level as the POU's folder.



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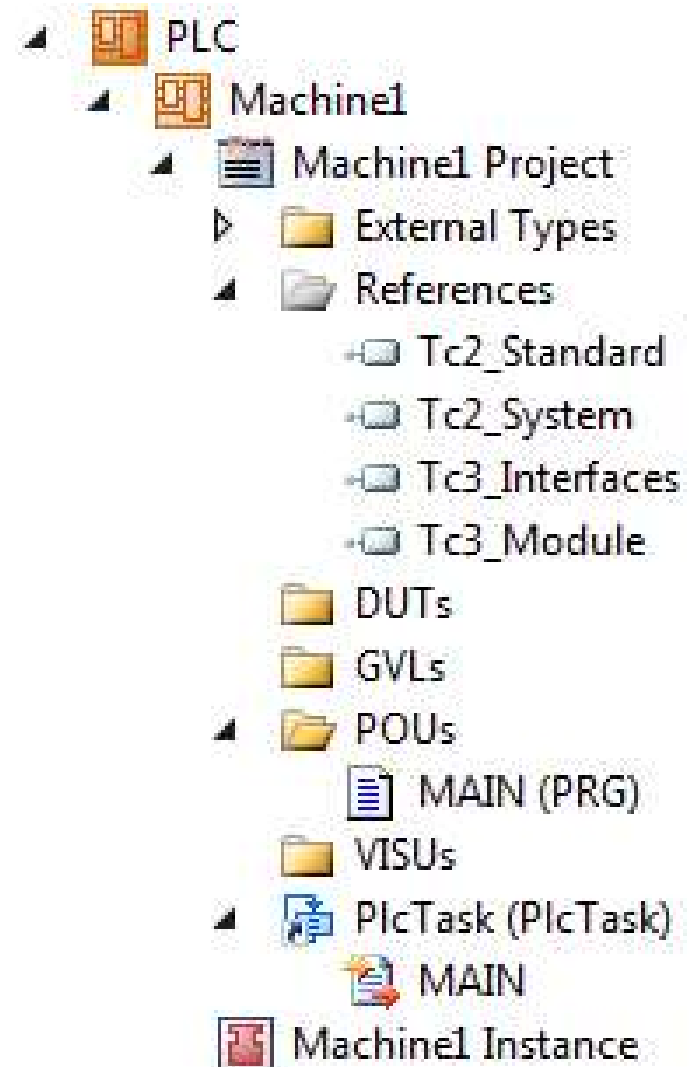
- The VISUs folder is for Visualizations.



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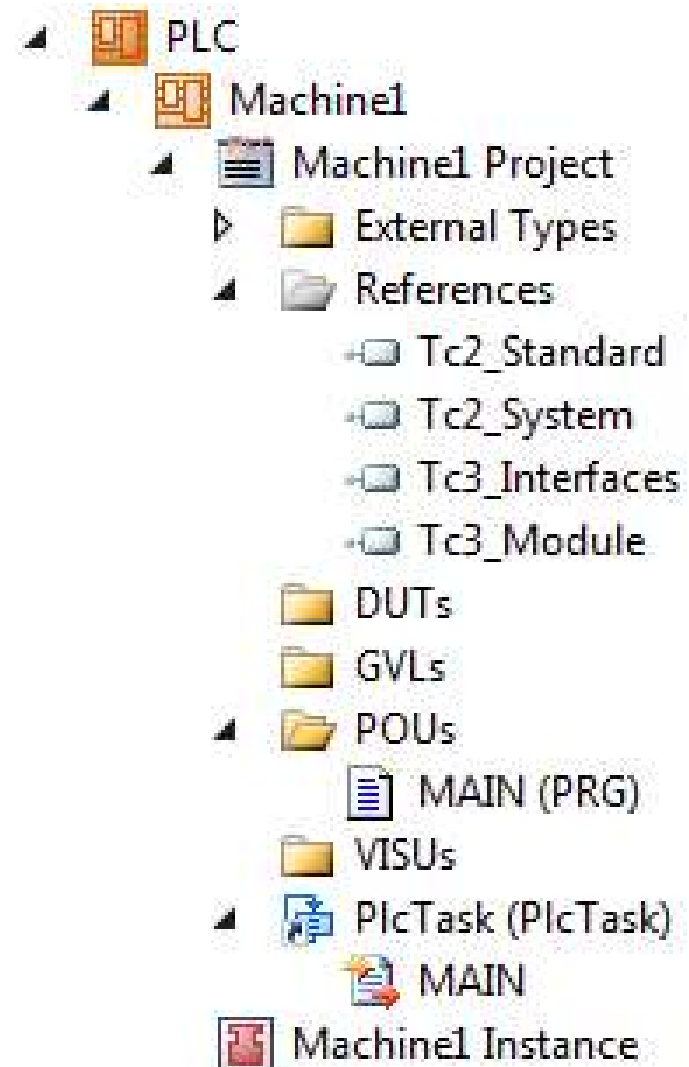
- The PlcTask is a short cut to the PlcTask under the 'SYSTEM' 'Tasks'.
- Here the Cycle Ticks can be changed.



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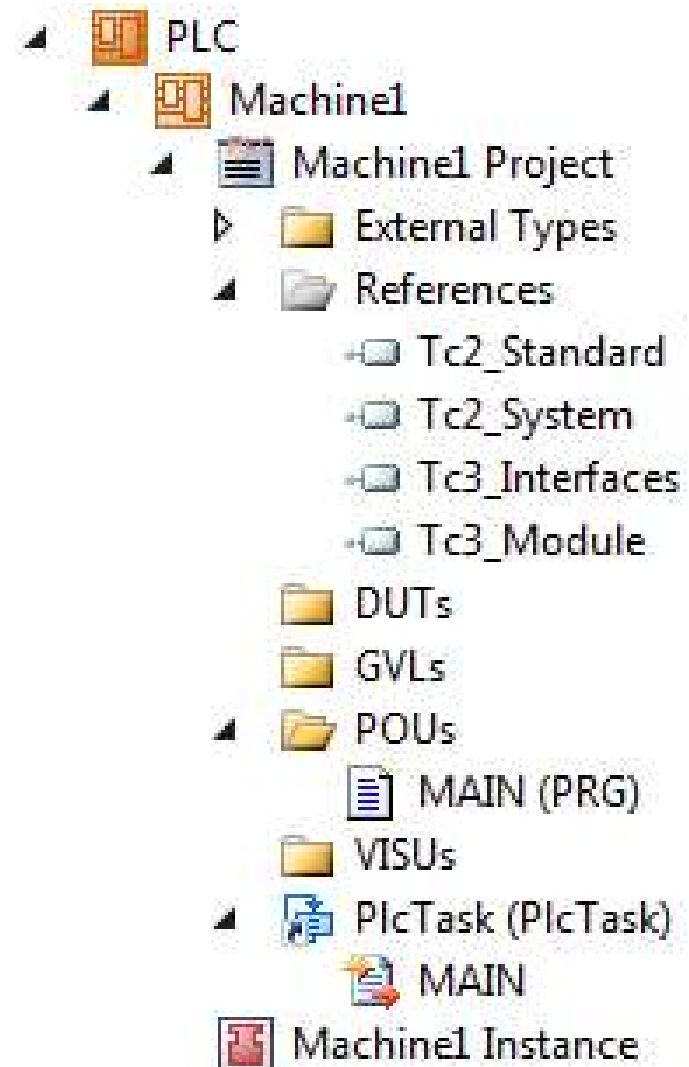
- The PlcTask calls the MAIN POU.
- Although it is possible to call multiple POUs directly from a Task, it is recommended to call only one. Then call the other POUs from MAIN.



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- Machine1 Instance will hold the variables of the PLC that are given %I and %Q addresses.
- The variables will be linked to and from here to other locations in the Solution Explorer.



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