**COSY COMPILER -TUTORIAL**

1. Login to any ***i80labpcXX.ira.uka.de*** directly or using SSH or using X2Go Client. For example login as ***asip04*** into ***i80labpc02.ira.uka.de***
2. Copy template project in “***~/ASIP\_SS17/Session1/ASIPMeisterProjects”*** and rename it e.g. “***dlx\_basis”*** for ASIPmeister CPU “***dlx\_basis.pdb***”

asip04@i80labpc04:~/ASIP\_SS17/Session1/ASIPMeisterProjects:$cp -r /home/asip00/ASIPMeisterProjects/TEMPLATE\_PROJECT ./dlx\_basis

asip04@i80labpc04:~/ASIP\_SS17/Session1/ASIPMeisterProjects:$ls

dlx\_basis

1. Go to the directory “***~/ASIP\_SS17/Session1/ASIPMeisterProjects/dlx\_basis:$***”
2. Set the proper path and parameters in “env\_settings” like dlxsim path, project path and project name.
3. If you want to run a C file on your ASIP CPU, then you need compiler that can generate the assembly file for your application. We generate the compiler based on dlx\_basis.pdb project.
4. Open ASIPMeister CPU in the respective directory i.e. in dlx\_basis

asip04@i80labpc04:~/ASIP\_SS17/Session1/ASIPMeisterProjects/dlx\_basis:$ASIPmeister dlx\_basis.pdb &

1. Modify the CPU in ASIPmeister and generate the required files. A “meister” directory will be created in your ASIP project directory i.e. in “***dlx\_basis***”
2. Create the CoSy Compiler using “makeCoSy”; this will create a binary “basiscc” in your ASIP project directory.
3. If there are any errors in generation of the compiler you can use “contCoSy” to manually and gradually debug the errors and proceed accordingly.
4. Go to the directory “***~/ASIP\_SS17/Session1/ASIPMeisterProjects/dlx\_basis/Applications/Arith:$***” and type “***make clean***” clean this directory it there are previously generated files.
5. Now, to compile your C file use “***make sim***”.
6. To simulate your application using dlxsim enter the command “***make dlxsim***”.