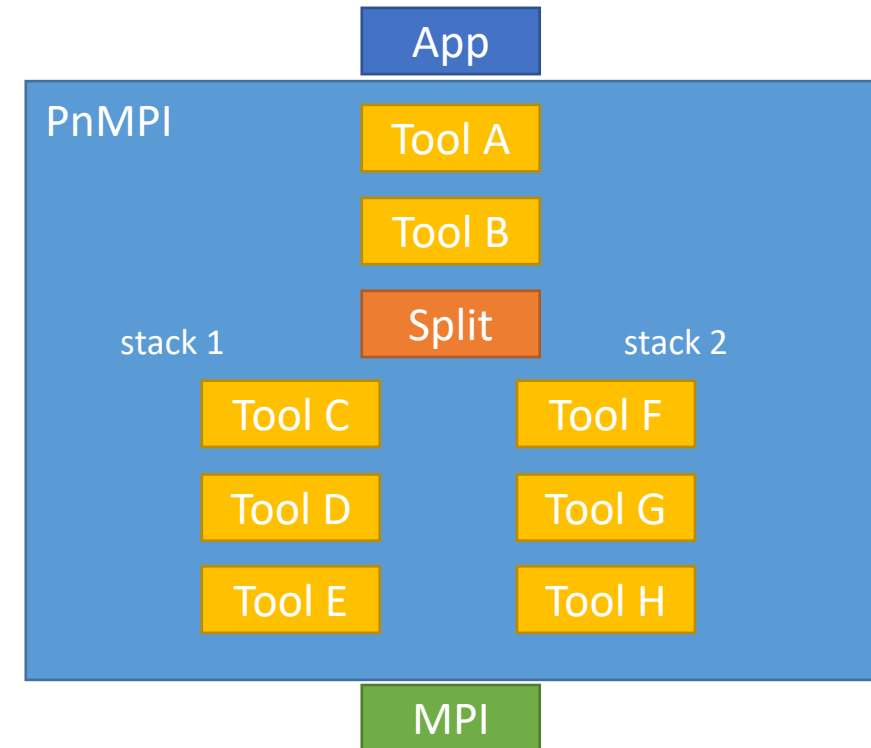


# Stacks and branches in PnMPI

pnmpi.conf:

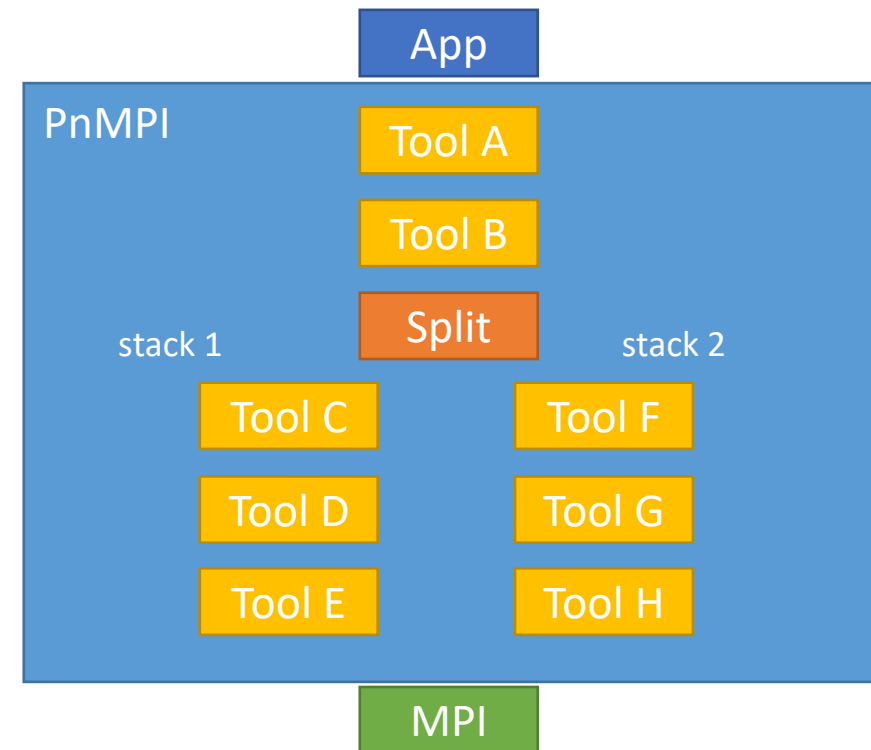
Tool	position in below env	→	tool_id
module A	1	→	0
module B	2	→	45
module Split	3	→	12
stack 1			
module C	4	→	3
module D	5	→	5
module E	6	→	13
stack 2			
module F	7	→	15
module G	8	→	42
module H	9	→	23

QMPI\_TOOLS=[A;B;Split]:[C:D:E]:[F:G:H]



# Split tool

```
MPI_Xy(...){  
  if(myRank%2)  
    PnMPI_Xy_newstack(„1“,...);  
  else  
    PnMPI_Xy_newstack(„2“,...);  
}
```



# Emulate PnMPI\_Xy\_NewStack

```
int QMPI_Get_stack_by_name(const char * name, int * stack_id);
```

```
int QMPI_New_stack_function(int stack_id, enum QMPI_Functions_enum function_enum,  
void (** function_ptr)(void), QMPI_Context * next_tool_context, int * next_tool_id  
)  
{  
    int res = QMPI_Get_function(stack_id, function_enum, function_ptr,  
next_tool_context, next_tool_id);  
    if(pos[next_tool_id] >= stacklimit[stack_id]) // no function on this stack  
        res = QMPI_Get_function(QMPI_MPI_ID, function_enum, function_ptr,  
next_tool_context, next_tool_id);  
    return res;  
}
```