**System Commander**

System commander is a general command parser based on system console, and acts as one part of system service. It is quite similar to DOS command shell, which will provide quite easy and convenient user interface for user interaction, stack configuration, etc…

And it is easy to add new user app commands via commander APIs.

Commander source code:

<stack>\microchip\system\system\_command.c

<stack>\microchip\include\system\system\_command.h

Commander APIs:

|  |  |
| --- | --- |
| **Function name** | **Description** |
| Bool SYS\_COMMAND\_INIT(void) | Initialize the system commander |
| int \_SYS\_COMMAND\_ADDGRP(const cmdDcpt\* pCmdTbl, int nCmds) | Add new command group into system command manager |
| int \_SYS\_COMMAND\_TASK(void) | Commander task running in while(1) |

**How to enable the system commander in your application(3 steps)**

1. #define SYS\_CONSOLE\_ENABLE and SYS\_COMMAND\_ENABLE in system\_profile.h;
2. Calling SYS\_Initialize() during main initialization;
3. Calling \_SYS\_COMMAND\_TASK() in main’s while(1) loop;

**How to add new command (group) into system commander(3 steps)**

1. Provides command table

const cmdDcpt userCmdTbl[]=

{

{"cmd1", UserCmd1, ": user command 1"},

{"cmd2", UserCmd2, ": user command 2"}

};

1. Implement user command entry

Take UserCmd1 for example:

int UserCmd1 (int argc, char\*\* argv)

{

SYS\_CONSOLE\_MESSAGE(“Hello World!\r\n”);

return true;

}

1. Add user command group into commander by

\_SYS\_COMMAND\_ADDGRP(userCmdTbl, sizeof(userCmdTbl)/sizeof(\*userCmdTbl))

**Available examples using system commander in TCPIP V6**:

1. Iperf – network benchmark application: iperf\_app.c;
2. Tcpip commands – network configuration commands: tcpip\_commands.c;

***Note:***

By default the commander supports maximum 3 user command groups, that is defined by MAX\_CMD\_GROUP in system\_command.c and maximum 10 command arguments for one command, defined by MAX\_CMD\_ARGS.If you application needs more than this, just adjust these macros accordingly.