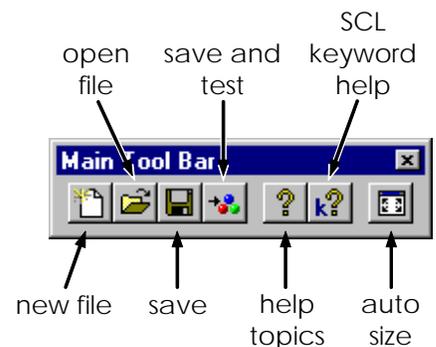


UPMACS Real Time Supervisory RTS Simulator System Installation Instructions January 24, 2014

1. Download UPMACS Software Installation files from UPMACS website at <http://www.upmacs.com/dloads/UPMACS-Installation-CD-Files.zip>
2. Unzip UPMACS Software Installation files.
3. Run <**Install U.P.M.A.C.S.EXE**> and select option that will install **both** <**Operate System**> AND <**Development System**>.
4. Download UPMACS RTS Simulator files from UPMACS website at http://www.upmacs.com/dloads/RTS_Sim.zip
5. Unzip UPMACS RTS Simulator files from **RTS_Sim.zip**.
6. Run <**Development System.exe**> and click on YES to run in Demo mode.
7. Select <**File**> <**Load**> the RTS simulator station file named **RTS Sim.upmacs-station**. This UPMACS Station file was built using the UPMACS Development system as an example of how the RTS interface works in an UPMACS M&C system.
8. Run the RTS simulator station file by clicking on the <**Save and Test**> button. This will load the station file into the UPMACS Operate system program.



9. You should now see a screen displaying simulated status of seven pieces of equipment that may exist in a TT&C earth station.
10. Clicking on the button labeled <**PROTOCOL**> will pop up a sub screen explaining the RTS commands and parameters relating to that piece of equipment.
11. You can now run the RTS2.EXE test program on the same computer OR any other PC that has IP access to the PC running the **RTS Sim.upmacs-station** file. RTS2.EXE is a real RTS program that runs to simulate the customer/End-User RTS interface that would be running on their own computer system.

12. Click on <**Connect**> and enter the computer name or IP address of the computer running UPMACS Operate and running the **RTS Sim.upmacs-station** file. This will establish an IP socket connection on port 8700 to establish the RTS link.
13. Once connected you can use the RTS2.EXE program to send RTS commands to the station. For example to change the Gain on the SSPA just click on <**Send**> then type in the <Program name> as *RTS[Vertex/RSI SSPA - Gain]*. Click on <**Add**> to enter some desired parameter.....for example enter **-15** then click OK. Click OK again and the RTS command will be sent.....SSPA Gain should change to -15dB and you should see the RTS command Gain change status show up in the Responses window of the RTS2.EXE program

IMPORTANT NOTES:

1. The Program name that you enter such as *RTS[Vertex/RSI SSPA - Gain]* must be the matching name of an SCL program that was created when the **RTS Sim.upmacs-station** file was built using the UPMACS Development system
2. In the UPMACS Development system you can Create/Edit and see all SCL programs by clicking on <**View**> <**Programs**>
3. The file **RTS2.zip** contains all the **C++ source files** used to create the RTS2.EXE simulator program. This code can be helpful to customer when coding their own RTS interface to UPMACS.

Direct any questions to
<mailto:support@upmacs.com>