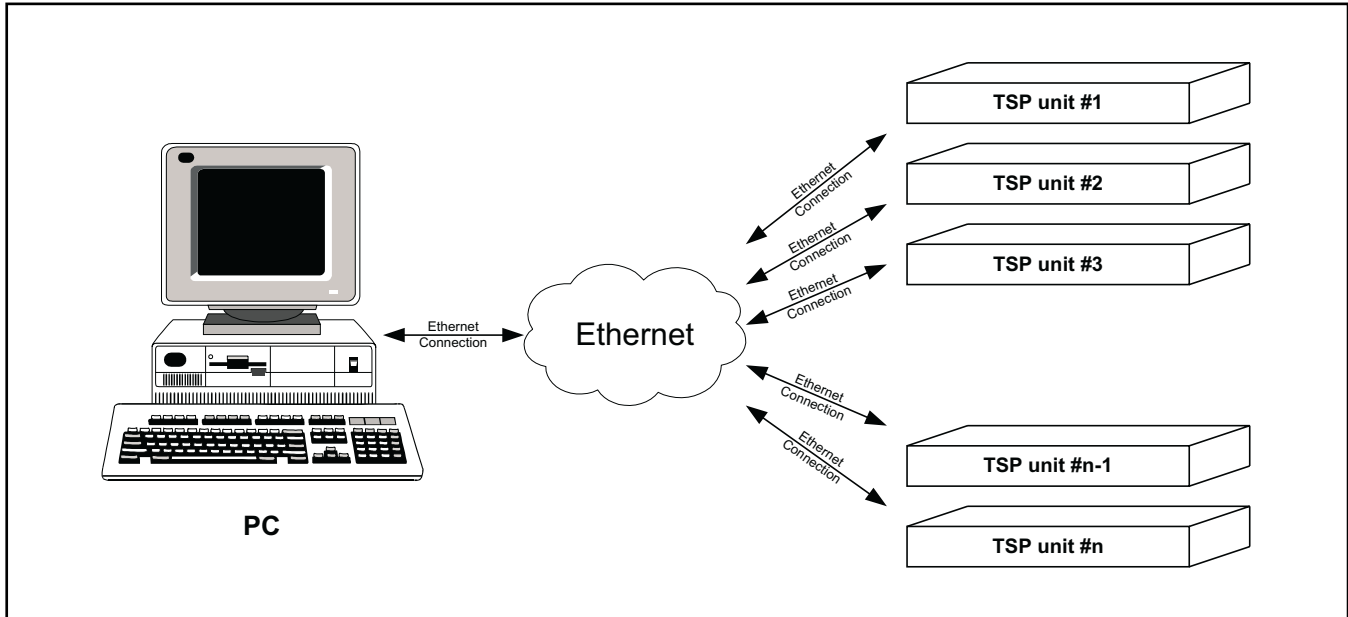


# Controlling Multiple Telecom Simulation Platform (TSP) Units from a Single PC

Teltone Corporation's Telecom Simulation Platform (TSP) provides a means for controlling multiple telecom simulations from a single location. The block diagram, below, shows a single PC using an ethernet connection to simultaneously control multiple TSP units.



## Preparation Steps:

1. Determine a unique name to assign to each TSP unit.
2. Determine the appropriate Subnet Mask for the network.
3. Obtain unique IP addresses for each TSP unit to be connected to the network.
4. Obtain a PC with serial and network connections (Note: a serial connection is necessary to assign IP addresses to TSP units).
5. Load the TSP-PC software into the PC and connect the PC to a network

## Preparing TSP units for Network Control

1. Launch the TSP-PC program (unless already running) on a PC with an available serial port.
2. Connect a serial cable between the PC and a TSP unit.
3. Energize the TSP unit and wait for ~20 seconds.
4. On the Units menu, select New and enter a unique name for that unit.
5. Select the appropriate Comm Port and click the Query Card Types button.
6. Select the Network tab and enter the appropriate Subnet Mask and a unique IP address for that TSP.
7. Click OK to send the IP assignment to the TSP unit.
8. On the Units menu, select the name for that unit.
9. Disconnect the serial cable from that TSP and connect the TSP to the network.
10. On the General tab, verify the Network Address is the appropriate IP for the unit name, then select Network connection and click OK.

11. If a connection failure message appears:
  - Verify the PC and the TSP are connected to the same network with the correct type of cables.
  - Verify the IP address and subnet mask were entered correctly.
  - Have your system administrator verify that your PC is configured to communicate with that IP address.
12. On the **File** menu, save the project.

To configure multiple TSPs, move the serial cable to the next TSP and repeat steps 3 through 12.

### **Establishing Network Control of multiple TSP units:**

1. Connect all TSP units to the network using ethernet cables.
2. Energize the TSP units.
3. Launch the TSP-PC program (unless already running).
4. Wait for the green light next to the ethernet connection on each TSP to energize.
5. If you have previously saved a project file, you may select **File, Open Project ...**, and the project name. (opening the project will initialize the network connections, and the PC will connect to the TSP units).
6. If you have not previously saved a project file, then for each TSP.
  - a. Select **Unit, New**.
  - b. Enter the name for the TSP, or select the name from the drop-down list, then click OK.
  - c. On the **General** tab of the units screen, select **Network connection** and enter the IP address.
  - d. Click **Query cardtypes**.
  - e. After querying the cardtype, you may configure each card as needed by selecting the appropriate **Slot** tab.
  - f. Click **OK** when finished configuring the Unit.
7. Create **Templates/Control Sets**, assign **Channels/Transmit Digits/Phone Numbers** to the **Control Sets** as described in the user manual.

## Example:

The screen pictured below shows a project called “Using Multiple TSP Units” with control of 6 TSP units labeled “1<sup>st</sup> Unit” through “6<sup>th</sup> Unit”. In this example, all units have a Single T-1 module in slot 2 and an 8-port POTS module in slot 3, but each unit operates independently, so different units may contain different combinations of modules.

Parameter	Value			
Control Set Type	Terminate			
Template	T1 Wink Start			
CHANNEL	STATUS	CALLS	CARD TYPE	
1st Unit.2.1.13	On-Hook	0	Single T-1	
1st Unit.2.1.14	On-Hook	0	Single T-1	
1st Unit.2.1.15	On-Hook	0	Single T-1	
2nd Unit.2.1.13	On-Hook	0	Single T-1	
2nd Unit.2.1.14	On-Hook	0	Single T-1	
2nd Unit.2.1.15	On-Hook	0	Single T-1	
3rd Unit.2.1.13	On-Hook	0	Single T-1	
3rd Unit.2.1.14	On-Hook	0	Single T-1	
3rd Unit.2.1.15	On-Hook	0	Single T-1	
4th Unit.2.1.13	On-Hook	0	Single T-1	
4th Unit.2.1.14	On-Hook	0	Single T-1	
4th Unit.2.1.15	On-Hook	0	Single T-1	
5th Unit.2.1.16	On-Hook	0	Single T-1	
5th Unit.2.1.17	On-Hook	0	Single T-1	
5th Unit.2.1.18	On-Hook	0	Single T-1	
6th Unit.2.1.13	On-Hook	0	Single T-1	
6th Unit.2.1.14	On-Hook	0	Single T-1	
6th Unit.2.1.15	On-Hook	0	Single T-1	

The Control Set “Terminate - Wink” is shown selected in the branch of the tree display in the left hand side of the screen above to show its channel assignments include channels from each of the units. This control set could have contained any or all T-1 channels from any or all of the units. For some testing, it may be convenient to start similar testing on multiple TSP using the same Enable button. For other testing, it may be appropriate to have different Enable buttons that apply to channels on a single unit.