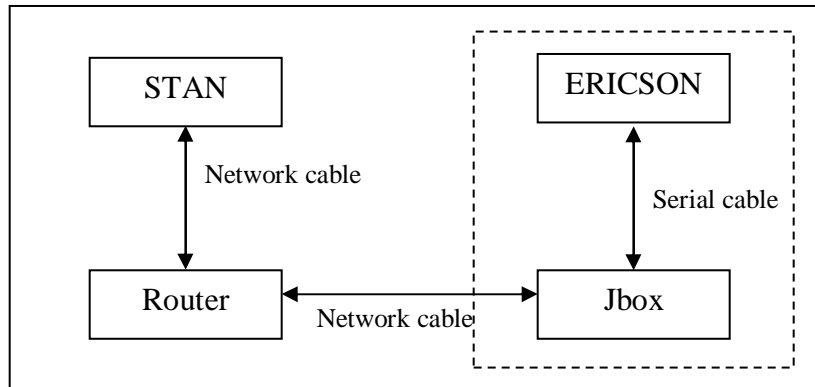# Procedure of Jbox Firmware Reflash and Parameter Setting
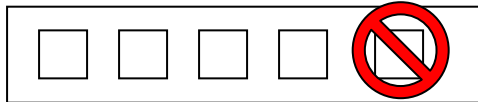
Caution:
Using the router with wireless capability will introduce strong interference to the normal communication between jboxes. Therefore, do NOT reflash jbox while you are experimenting with jboxes.

Procedure Illustration

Note:

1) Router port's usage;
2) For the parameter setting, only use the parts within the dashed rectangle.

Procedure of reflashing the firmware of jbox:

1. Connect the STAN to the router before start STAN with WinXP and login as mars2020;

2. Launch the tftp server on STAN and make sure the working directory (File->Configure->) contains the proper version of firmware (a file called ramdisk.gz);
*Currently, all the versions of firmware are stored in the "firmware" directory in "My document"

3. start->run->cmd; use "ipconfig" to check the IP address of STAN;

4. Contect the power-off jbox with Ericson using serial cable (serial port I on jbox board). The jbox is also connected to router with its network cable.

5. Start Ericson with Linux (NOT connected to router); Launch the minicom program after Ericson's startup;

6. Power on the jbox and press ESC within 3 second, otherwise, the jbox will start a self-boot process and we need to start from step 5 again;

7. Use the following command to check the serverip;
   "get serverip", if it is different from STAN's current IP address,
   Use the following command to reset the serverip;
   "set serverip xx.xx.xx.xx";

8. Use the following command
   "load ramdisk.gz" to start the reflash;

9. Once the reflash is done, quit the minicom program, power off the jbox.

Procedure of Jbox Parameter Setting:

There is no need for STAN and router;
So start from the step 4 in the reflashing procedure;

1. Start Ericson with Linux;

2. Contect the power-off jbox with Ericson using serial cable, launch the minicom program after startup;

3. Power on the jbox and press ESC within 3 second, otherwise, the jbox will start a self-boot process and we need to start from step 5 again;

4. Use the following command format:
   To check the parameter,
   "get [parameter name]";
   To reset the parameter;
   "set [parameter name] [new value]"

Parameters of interest:

ssid: Jboxes with the SAME ssid can communicate; (default value for Ft. Benning Demo: **ipaqERNI**)
channel: Jboxes with the SAME channel can communicate; (default value for Ft. Benning Demo: **11**)
nodeid: Usually, we won't change this value. If we change it, the jbox will assign different IP address to PC connected to it.
An example, if we set the jbox 21's nodeid to be 24.
When a PC is connected to this jbox, the Jbox's IP address will be "192.168.24.1" instead of "192.168.21.1", and the PC's IP address will be "192.168.24.3" instead of "192.168.21.2";