



Procedure for WIMAX survey

Importance of site survey

A radio frequency (RF) site survey is the first step in the deployment of a Wireless network and the most important step to ensure desired operation.

Site survey is a process by which the surveyor studies the facility to understand the RF behavior, discovers RF coverage areas, checks for RF interference and determines the appropriate placement of Wireless devices

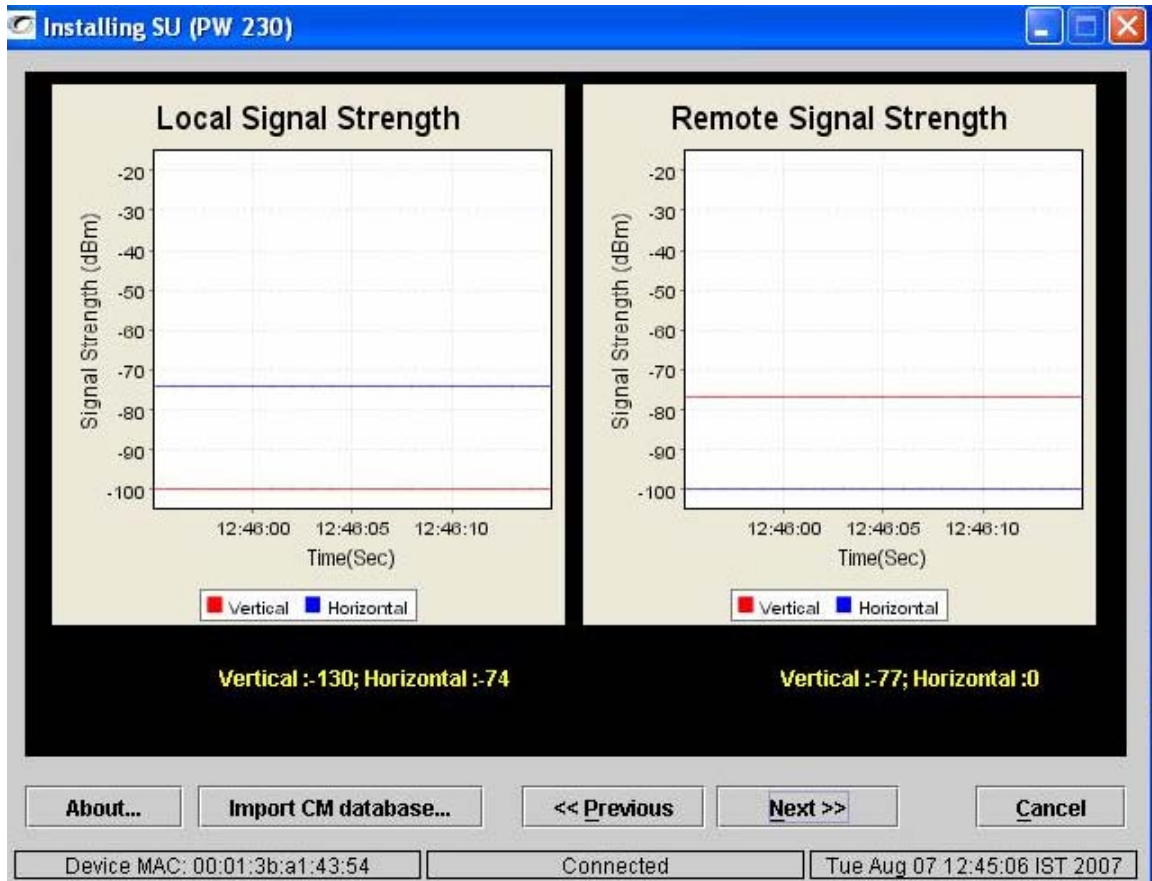
Required Equipments & Details:

Laptop having serial port and Telnet, FTP/TFTP, server/client.
Multimeter
Compass
GPS (with battery)
Installation Software TSAT (Telsima StarMax Alignment Tool)
Semi Outdoor SS with Omni antenna for testing.
Spare SS with PoE injector
RJ-45 Crimping tool with spare RJ-45 connectors.
Cat5 Cable, 100m
20 meter length, 230 V A.C power Extn wire with 5amp/15amp socket
One meter straight Ethernet cable for connecting laptop to SS.

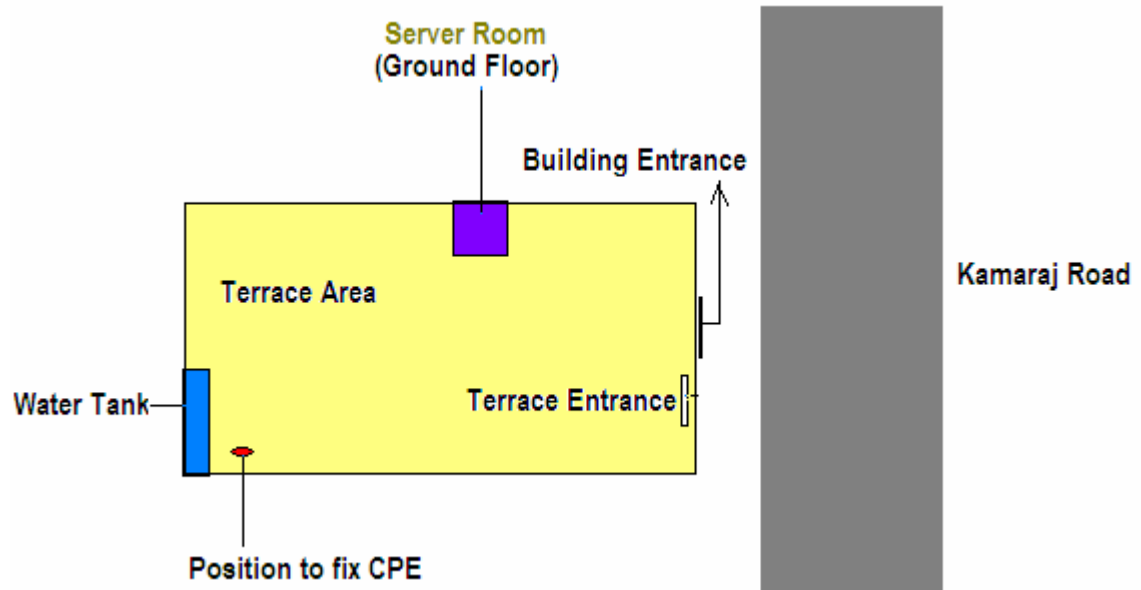
Procedure:

1. Confirm whether the address given in the work order is valid or not, if not intimate the same to vendor.
2. Contact the customer through phone and get permission for doing the survey, in case if there is no permission, update the status immediately to vendor team, else proceed and fix the timing for survey.
3. Visit the customer end and get the LAT, LONG & AMSL values from ground level.
4. Calculate the bearing angle (In distance calc point A should be the BSU LAT & LONG and point B should be CPE LAT & LONG consider the A to B bearing angle and check whether it is under coverage) and the hop distance for the same

5. Check for LOS from the customer terrace towards BSU with the help of a compass, and note if LOS/NLOS is applicable. Then proceed for L2 survey with the available pole, also configure the parameters according to the sector coverage. Check for other MMDS BSU in the vicinity, for getting perfect RSSI & CNIR using the TSAT tool.
5. If signal cannot be received, check all the CPE parameter like BSU ID, frequency, polarization, channel width and WSS (PW 760 means WSS default 1, if PW 1000 WSS according to the sector like 1,2,3 or 4). If signal strength is good, suggest the required height at customer premise with help of graph and contour map after completing the path survey.
6. Once we suggest the Pole or Mast confirm the quality of the building condition
7. Take a photo shot for where the mast or pole (exact location) is to be erected.
8. Prepare the survey report with all the collected data at the site. Check twice before sending the report.
9. Insert the site diagram with top view in the survey report, also mark the locations where the pole or mast is to be erected and the screen shot of throughput test and RSSI level.



Example Diagram:



13. Send the report to QC team, with a copy to concern GCL in charge