

Setting up Your VersaCall System & Mesh Network

Step 1 - Set Up the Control Unit

First thing you will need to do is plug in all the peripherals. Check the end of the cables, there will be a sticker on them. Find the corresponding jack on the back of the computer, and make the connections. Once this is accomplished you can start up the computer. User name is "versacall", and the password is 6676776. Open up explorer and if it doesn't automatically open the VT2000 web site, type in "localhost" in the address bar.

You should now have the sign-in screen for the system. User name and password is "admin". You are now at the home screen for the system.

Step 2 - Set Up the Mesh Umbrella

Now, on to the modules. If you have battery operated modules, you will receive mesh repeater(s) with your order. The repeater's establishes the mesh umbrella. These come with a power supply and antenna. Screw in the antenna and connect the power supply. You will also see a sticker with the mac address of the repeater module on it. Please make a note of this number and the location you place the repeater, you will need it for testing. The repeaters have a range up to 500' or possibly more from the system or another repeater. The repeaters link to each other to form the mesh network. This may be shorter due to your facilities infrastructure. The remaining module will have a range up to 250', so keep that in mind when you place the repeaters around your facility.

The repeaters require 110V power. Find a good place for the repeater in the ceiling (higher is always better), and plug the module in. After a couple of moments the yellow LED will start to blink, this is the module initializing and trying to locate the mesh coordinator attached to the system. Once it finds the coordinator it will start to flash green. If after a couple of minutes the LED does not go green, you are not linked to the system and will need to move it closer to the system. If you have more than one repeater in your system follows the same steps as the first repeater.

For setting up a mesh network umbrella for an entire site, we would prefer a site layout for the placement of the repeaters. In lieu of this, place the repeaters in equal distant areas of the plant site or follow the 500' guidelines outlined above.

Step 3 - Testing for Wireless Coverage

After the initial repeater is mounted you can locate the remaining repeaters. Try to set up the repeaters to cover your shop floor. If you require more repeaters please contact your VersaCall - 858-677-6766 ext. 400 or your salesperson.

After all the repeaters are installed, go back to the system and go to the diagnostics tab and select the Mesh Status button. This will show you the repeaters that are active and talking with the system. If for some reason you are missing one, check the address of the ones that are on the page and locate the one that is missing. You might need to move that box around or see if the power has been removed.

Depending on where your other modules are located the page will show them also if they are within range of either the coordinator or one of the connected repeaters.

Testing the Site for Wireless Coverage

Running a Packet Test

A packet test is a method of testing the coverage of the wireless receiver of the VT2000 System. It is done by initiating a packet test on an input device and viewing the results on the system. The input module sends out numbered sequential packets. This is used to test the communication reliability from the module to the system. The goal is 100% throughput. Anything less should be increased by use of a repeater. The longer the packet test runs, the better the test. Packet Tests are supported with both Data Input Modules and Reason Code Modules.

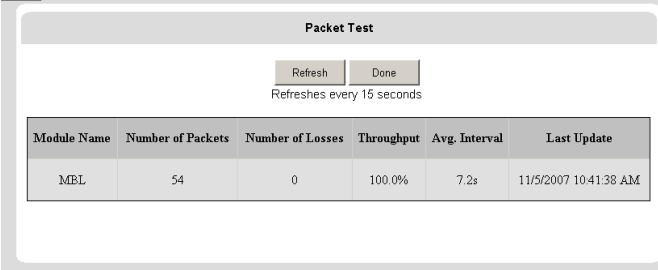
Starting a Packet Test with the Reason Code Module

In order to put the RCM into packet test mode, perform the following:

1. Power up and go to the main menu of the Reason Code Module.
2. Press and hold the Clear button for approximately 10 seconds.
3. The packet test should start. You can use the up/down arrows to change the interval of the packets. The default is 10 seconds.
4. Leave the box in this mode for a period of time. An hour is a fairly good estimation, but longer is always better.
5. When you want to get out of the packet test mode, press the back button to return to the main menu.

Viewing Packet Test Results

To view the results of the packet test, go to **Home > Diagnostics > Packet Test**



Module Name	Number of Packets	Number of Losses	Throughput	Avg. Interval	Last Update
MBL	54	0	100.0%	7.2s	11/5/2007 10:41:38 AM

The Packet Test screen includes the following information:

Module Name	Name of the module performing the packet test
Number of Packets	Amount of packets that have been sent across so far during the test We want to make sure a couple hundred packets go through in order to assume we have a valid test.
Number of Losses	Number of lost packets - should be 0 for 100% reliability
Throughput	Percentage of good packets to total packets - <i>should be 100%, ideally</i>
Average Interval	Average interval in between packets - should be representative of the interval set on the module The minimum interval is around 5 seconds
Last Update	Time stamp of the last update that came through - should be fairly close to the current time if the test is still running

You can now place the remaining modules out on the lines and test them.