Subject	Wireless Redstone SMP
Category	Server/Client Software Testing
Version	1.6 for 1.2.5
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Wireless Redstone SMP Test Strategy

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Objective

The purpose of this test is primarily to check that Wireless Redstone base and module/addon functionality is operational during mass load for SMP use and to make sure the finished product reaches a level of quality fit for public release.

If bugs/issues are uncovered during testing; the issues will be logged for further debugging. Test will continue if issues are found and patching will be done post-test, pre-release.

Test-breaking bugs are not expected, but if any come up during the test it will be paused for a quick patch. If the severity of bugs are so large that it is not possible to patch them in 15-30 minutes; the test will be put on hold and a new test will be scheduled for a later date. However, again, this is not expected to happen as the software has been tested on a smaller level beforehand.

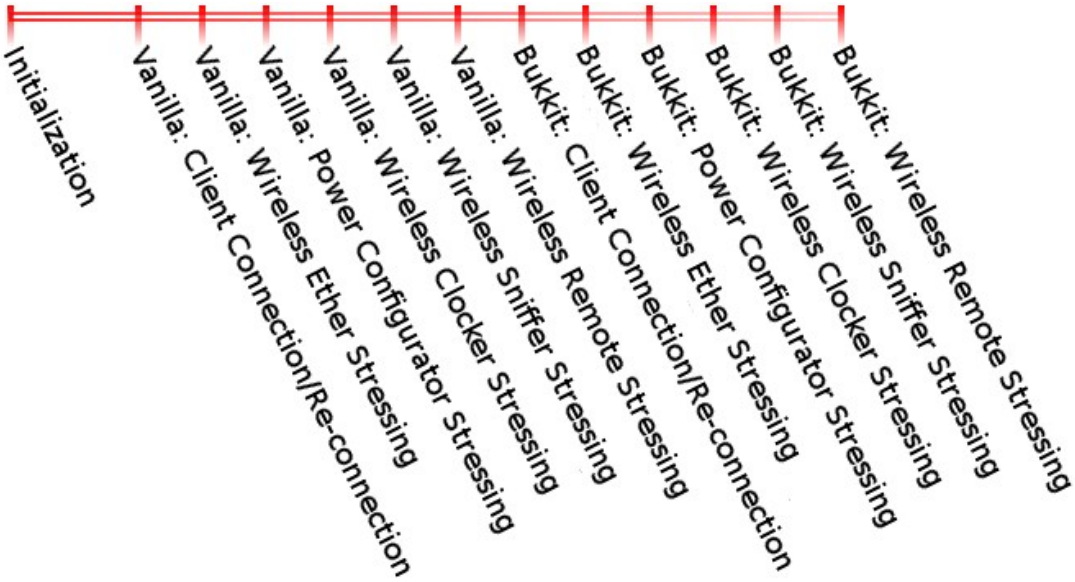
Success Criteria

- At least 5 participants throughout the test-cases.

  This is needed in order to make the test representative. The number involves active participants that follow the program. Participants that do not follow the program and do their own this is welcome as they still provide random activity the the server, but are excluded from the count and are not critical to the success of the test.

Plan and Time Estimates

Total time estimate is approximately 6 hours, 3 hours for each server. That With 30-60 minutes initialization period where distribution and installation of the mod is done. Participants are of course not required to stay for the entire test, but it is preferable.



Times may vary depending on issues that pop up and breaks.

Environment

Client

Communication:

- In game Minecraft chat.
- Highest ranked communications platform choice from the survey.

Software:

- Minecraft 1.2.5
- Recommended Forge Version, Client (1.3.5)
  (http://minecraftforge.net/forum/index.php/topic,5.0.html)
- Wireless Redstone and addons, v1.6 for 1.2.5
  (Download link will be distributed over IRC)

Requirements:

- Other mods are optional, but default block and packet IDs must be set in properties file to match the server.

Server (Vanilla)

Software:

- Minecraft Server 1.2.5
- Recommended Forge Version, Server (1.3.5)
- Wireless Redstone SMP v1.6 for 1.2.5

Server (Bukkit)

Software:

- CraftBukkit 1.7.3 for 1.2.5
- Recommended Forge Version, Server (1.3.5)
- Wireless Redstone Server and addons. v1.6 for 1.2.5

Test Cases

In all the following test cases it is useful if the participants/clients monitors their own resource consumption (memory, processor and network usage) and latency (lag, response time). Other things to watch out for is data validity, such as whether or not the different devices react as expected.

This kind of monitoring will also be done on the server side.

The test cases needs to be done twice. Once on Vanilla server, and the second time on a Bukkit server.

Client Connection/Re-connection

Connection/Re-connection testing involves making sure the client manages to connect/re-connect to the server successfully.

This test will also cover chunk loading during client connection for observing how the Wireless Redstone mod reacts to loading/unloading of chunks with active nodes.

Time estimate: ~30 minutes.

Wireless Ether Stressing

Ether stress testing involves spamming the world with a mass amount of wireless nodes (transmitters, receivers) and spamming their update ticks, such as toggling transmitters rapidly manually or via clocks.

Changing the ether during the stress is also valid, such as adding/removing nodes during use.

Time estimate: ~30 minutes.

Power Configurator Stressing

This case involves spamming opening of the power configurator's GUI, changing power direction on multiple receivers and multiple users on the same receiver.

Time estimate: ~30 minutes.

Wireless Clocker Stressing

Clocker stress testing involves spamming the world with multiple clockers and having them all clock at randomly inserted times (somewhere on the 200-5000 ms range preferably)

It also involves spamming the activation of multiple clockers.

Time estimate: ~30 minutes.

Wireless Sniffer Stressing

Stressing the Sniffer requires all users to have one or multiple sniffers each, having them all opened while changing the massive amount of nodes that are left after the Wireless Ether Stressing test case. The clockers that were spammed during the Wireless Clocker Stressing test case can also be used for spamming transmitting

Time estimate: ~30 minutes.

Wireless Remote Stressing

Remote stressing involves spamming the remote's pulses, opening GUI and moving about while using the remote to triggering the massive amount of receivers.

Time estimate: ~30 minutes.

Other

After all test cases are done on Vanilla and Bukkit servers, additional test cases which come up during testing can be executed. This involves suggested test cases given by participants and just randomly playing around with the mod.