Realtime
New in Tiki25. Use built-in websockets server within Tiki to enable realtime communication features of the app.

At first for Tiki Manager Package, but will later be added to other Tiki Features.

Powered by https://packagist.org/packages/cboden/Ratchet and https://reactphp.org

This will require a special server configuration (possibly root access). tiki-check.php will indicate if server is correctly set up.

Initial commit: https://gitlab.com/tikiwiki/tiki/-/merge_requests/1638

In this documentation, we are going to configure Virtualmin (but any other server can be used), and then we will check if it worked.

Configuration
Requirements
We already have a Tiki instance up and running, on Virtualmin, now we need these four things: Proxy Settings, Realtime Service, proxy_wstunnel, and Realtime feature in Tiki in order to get Realtime working.

1. Proxy Settings
First, let us edit Apache directives and add the ProxyPass and the ProxyPassReverse settings in the SSl virtual host. We make both point to /ws ws://localhost:8080/
To do this, we go to Virtualmin -> Services -> Configure SSL Website -> Edit Directives.
In the text box that opens, we add ProxyPass /ws ws://localhost:8080/ and ProxyPassReverse /ws ws://localhost:8080/ at the end, like shown in the picture below:

2. Realtime Service
At this step, we need to create a Systemd service to start the WS server.
N.B: Start the WS server with the same user that Tiki web requests run as (to avoid permission issues) - e.g. sudo -u www-data php tiki-realtime.php
The process is simple. Just go to Webmin -> System -> Bootup and Shutdown -> create a new system service.
In the opening form, we fill in the **Service name**, the **service description**, and the **commands to run on startup**. As we don't need to shut this down, we are going to leave empty the "Commands to run on shutdown" field, check Yes for Start at boot time option, and click **create**.

**The command to run on startup** is:
```
sudo -u user PHP -d session.save_path=/home/user/tmp
/home/user/public_html/tiki-realtime.php
```
Replace user with your user

After this, you can check the content of your system service, and it should look something similar to the image below:

3. **The proxy_wstunnel**

The last step here in Virtualmin is to make sure the prexy_wstunnel module is enabled.

To do this, go to **Webmin -> Servers -> Apache Webserver -> Global configuration -> Configure**
Apache Modules, and check the `proxy_wstunnel` module checkbox, like in the figure below:

4. Realtime feature

At this step, we need to enable Realtime feature in Tiki. When not enabled, this feature is visible only upon search.

Under **Settings -> Control Panels**, in the "Search preferences" search box, type a keyword, "realtime", for example.

After this is done, Tiki Realtime should be well set up and working. There is a way to check that. So let's see if everything went well...

Check that Realtime is working

This task is as simple as opening our Tiki and running "Server Check"

To do this step, you need to go under **Settings -> Control Panels -> Global Setup -> General Settings** and find "Server Fitness", click on it, and on the page that opens, scroll down until you find the "Tiki Realtime" section. If Tiki Realtime is working, all the requirements status should be "Good" as shown in the image below: