## Realtime

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

**This is optional. If your server doesn't support this, it's OK.** If you have it, supported features will be faster and smoother. For now, it is used for Tiki Manager Package, and 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.

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

# Configuration

## Requirements

We already have a Tiki instance up and running, on Virtualmin, now we need to take into account a few more things: **Proxy Settings**, **Realtime Service**, **proxy\_wstunnel**, **Realtime** feature, and **Realtime port** in Tiki in order to get Realtime working.

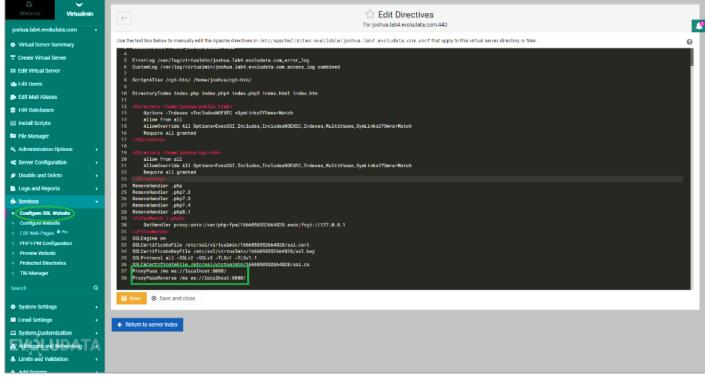
Realtime working

1. Proxy Settings

irst, let us edit Apache directives and add the ProxyPass and the ProxyPassReverse settings in the SSI virtual host. W make both point to */ws ws://localhost:8080/* 

#### To do this, we go to *Virtualmin -> Services -> Configure SSL Website -> Edit Directives*.

n 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:



Click to expand

## 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 systemd** service.

Webmin Virtual		>	Bootup and Shutdown Boot system : Systemd			τ
arch	٩					
Webmin		8 Select all 🛛 E Invert selection 🤇 🖽				
System		Service name	Service description	Service status	Start at boot?	Running now?
			Start the htcacheclean helper	Unknown	No	No
Bootup and Shutdown		apache-htcacheclean.service	Disk Cache Cleaning Daemon for Apache HTTP Server	Inactive (dead)	No	No
Change Passwords		apache2	Start the web server	Unknown	Yes	Yes
Disk and Network Filesystem	s 🗌	apache2.service	The Apache HTTP Server	Active (running)	Yes	Yes
Disk Quotas		apparmor	AppArmor init script. This script loads all AppArmor profiles.	Unknown	No	Unknown
		apparmor.service	Load AppArmor profiles	Active (exited)	Yes	Yes
Filesystem Backup		apt-daily-upgrade.service	Daily apt upgrade and clean activities	Inactive (dead)	Always	No
Log File Rotation		apt-daily-upgrade.timer	Daily apt upgrade and clean activities	Active (waiting)	Yes	Yes
MIME Type Programs		apt-daily.service	Daily apt download activities	Inactive (dead)	Always	No
PAM Authentication		basic.target	Basic System	Active (active)	Always	Yes
		boot-complete.target	Boot Completion Check	Inactive (dead)	Always	No
Running Processes		certbot.service	Certbot	Inactive (dead)	Always	No
Scheduled Cron Jobs		certbot.timer	Run certbot twice daily	Active (waiting)	Yes	Yes
Software Package Updates		console-getty.service	Console Getty	Inactive (dead)	No	No
Software Packages		console-setup.service	Set console font and keymap	Active (exited)	Yes	Yes
System Documentation		console-setup.sh	Set console font and keymap	Unknown	Yes	No
		cron	cron is a standard UNIX program that runs user-specified	Unknown	Yes	Yes
System Logs		cron.service	Regular background program processing daemon	Active (running)	Yes	Yes
System Logs Viewer		cryptdisks-early.service	cryptdisks-early.service	Inactive (dead)	No	No
Users and Groups		cryptdisks.service	cryptdisks.service	Inactive (dead)	No	No
Servers		cryptsetup-pre.target	Local Encrypted Volumes (Pre)	Inactive (dead)	Always	No
001010		cryptsetup.target	Local Encrypted Volumes	Active (active)	Always	Yes
Tools	• 🗆	dbus	D-Bus is a simple interprocess messaging system, used	Unknown	Yes	Yes
		dbus.socket	D-Bus System Message Bus Socket	Active (running)	Always	Yes
Networking		dovecot	Init script for dovecot services	Unknown	Yes	Yes
Hardware IID A		e2scrub_all.service	Online ext4 Metadata Check for All Filesystems	Inactive (dead)	Always	No
. V. XLUDA		e2scrub_all.timer	Periodic ext4 Online Metadata Check for All Filesystems	Active (waiting)	Yes	Yes
Cluster 🗎	•	e2scrub_reap.service	Remove Stale Online ext4 Metadata Check Snapshots	Inactive (dead)	Yes	No
Un-used Modules		emergency.service	Emergency Shell	Inactive (dead)	Always	No

Click to expand

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 **Ye** 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

<del>~</del>	← Create Systemd Service						
		Systemo	nd service details	h			
Service name	tikirealtime	.service					
Service description	Systemd service to start the WS server						
Commands to run on startup	sudo -u user PHP -d session.sav	e_path=/home/user/tmp /home	me/user/public_html/tiki-realtime.php				
Commands to run on shutdown			•				
Start at boot time?	● Yes ○ No						
O Create							
← Return to bootup an	d shutdown actions						

Click to expand

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

4	🟫 Edit Systemd Service	
=	Systemd service details	
		0
Start at boot time? Current status	● Yes ○ No Running with PID 1135	- 1
Save 🕨	Start Now     C Restart Now     Stop Now     Delete	
← Return to boot	up and shutdown actions	

Click to expand

3. The proxy\_wstunnel

The last step here in Virtualmin is to make sure the proxy\_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:

	- count_regr	Urbaureu	PLOVA)	Lindvieu
⇔ –	authnz_ldap	Disabled	proxy_ajp	Disabled
Webmin Virtualmin	<ul> <li>authz_core</li> </ul>	Enabled	proxy_balancer	Enabled
	authz_dbd	Disabled	proxy_connect	Enabled
Search Q	authz_dbm	Disabled	proxy_express	Disabled
	<ul> <li>authz_groupfile</li> </ul>	Disabled	proxy_fcgi	Enabled
Webmin	authz_host	Enabled	proxy_fdpass	Disabled
□ System •	authz_owner	Disabled	proxy_ftp	Disabled
a system .	<ul> <li>authz_user</li> </ul>	Enabled	proxy_hcheck	Disabled
🖀 Servers 🗸 👻	<ul> <li>autoindex</li> </ul>	Enabled	proxy_html	Disabled
Apache Webserver	brotil	Disabled	proxy_http	Enabled
AWStats Reporting	<ul> <li>buffer</li> </ul>	Disabled	proxy_http2	Disabled
	cache	Disabled	proxy_scgi	Disabled
BIND DNS Server	cache_disk	Disabled	prove wool	Disabled
<ul> <li>Dovecot IMAP/POP3 Server</li> </ul>	cache_socache	Disabled	proxy_wstunnel	Enabled
MySQL Database Server	cem_meta	Disabled	- Istostono	Disabled
<ul> <li>Postfix Mail Server</li> </ul>	🗹 cgi	Enabled	reflector	Disabled
Proemail Mail Filter	cgid	Disabled	remoteip	Disabled
	charset_lite	Disabled	reqtimeout	Enabled
ProFTPD Server	data data	Disabled	request	Disabled
• Reed User Mail	🗹 dav	Enabled	rewrite	Enabled
SSH Server	✓ dav_fa	Enabled	sed	Disabled
Virtualmin Virtual Servers	dav_lock	Disabled	seasion	Disabled
X tools +	dbd	Disabled	session_cookie	Disabled
A 1999	deflate	Enabled	session_crypto	Disabled
🖧 Networking 🔹	dialup	Disabled	session_dbd	Disabled
Hardware	🗹 dir	Enabled	<ul> <li>setervif</li> </ul>	Enabled
a halowaic 4	dump_io	Disabled	skotmem_plain	Disabled
😂 Cluster 🔹 🔹	echo	Disabled	slotmem_shm	Enabled
A. 11-11-14-14-14-14	env env	Enabled	socache_dbm	Disabled
n- Un-used Modules •	expires	Disabled	socache_memcache	Disabled
😂 Refresh Modules	ext_filter	Disabled	socache_redis	Disabled
O Dashboard	fogid	Enabled	socache_shmcb	Enabled
O Dashboard	file_cache	Disabled	speling	Disabled
	filter	Enabled	✓ ssl	Enabled
	headers	Disabled	✓ status	Enabled
14 🎍 >_ 🛪 🍰 root 🗿 🖓	heartbeat	Disabled	substitute	Disabled
	heartmonitor	Disabled	Suexec	Enabled
	http2	Disabled	unique_id	Disabled
	ldent	Disabled	userdir	Disabled
WidSule menaged bosting	Imagemap	Disabled	usertrack	Disabled
EVOLUDAIA	include	Disabled	vhost_allas	Disabled
• •	info info	Disabled	xml2enc	Disabled
	Ibmethod_bybusyness	Disabled		
	Ibmethod_byrequests	Disabled		

Click to expand

4. Realtime feature

At this step, we need to enable Realtime feature in Tiki. When not enabled, this feature is visible only upon search. Jnder **Settings** -> **Control Panels**, in the "Search preferences" search box, type a keyword, "realtime", for example

🔹 🔻 Preference Filters -	Access ▼ Content ▼ System ▼ Tools ▼		۲				
Search preferences Q							
🔒 Admin Dashboard	G	General Settings •					
🔀 Global Setup		Global site configuration, date formats, etc.					
General Settings							
O Features	-	This installer 2 metrus V server rithess C checkler updates room Apply					
Wizards	G	Seneral Preferences General Setting	35 Navigation Date and Time No Tabs				
🖾 Look & Feel							
Registration & Log in	Se	erver					
A Modules	Te	emporary directory	/home/joshua/public_html/temp				
Q Search	_		branche C 0				
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Profiles	Co	ontact					
🏚 Main Features	C	ontact us	000				
A Miscellaneous			You can use Trackers to create oustom Contact Us forms.				
😸 Users & Community	Sta	ats					
🍫 Advanced	st	tats					
			Apply				
×							

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5. The Realtime port

Let's note that this not required, but it is an interesting preference and usefull in some cases (default port is not available), because it allows you to set the port on which the server will be listening to. 8080 is the port number by default...

😳 🛛 🔻 Preference Filters 🝷	Access * Content * System * Tools *			۵
Search preferences Q ♠ Admin Dashboard ¥ Global Setup	Global site con	figuration, date formats, etc. aller ≡ Menus ♥ Server Fi		Apply
General Settings     General Settings     Wizards	General Pri	eferences General Settings	Navigation Date and Time	No Tabs
Look & Feel  Registration & Log in  Modules  Categories	Server Temporary	01	nome/joshua/public_html/temp	
og Callegonies Q. Soarch © Profiles	Realtime Til	ki 🕑	2 (adversed)      8843      3 (adversed)      If not specified, port 8080 will be used	
<ul> <li>▲ Main Features</li> <li>▲ Miscellaneous</li> <li>▲ Users &amp; Community</li> </ul>	Contact Contact us		♥ ● You can use Trackers to create custom Contact Us forms.	
♥ Advanced	Stats <sub>Stats</sub>		000	
			Apply	

Click to expand

Let's note also that Tiki Realtime can also be started from CLI by running, from the project root, the command **php tiki-realtime.php**, and, here too, the port can be specified by adding a port parameter to the command: **php tikirealtime.php -p 8843** which means port number will be set to **8843**.

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 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:

Realtime Tiki			
Status	Message		
🕑 good	Feature is enabled.		
🕑 good	Server is listening on local system port 8843.		
🕑 good	Connection to WS server established successfully.		
🕑 good	Successfully exchanged messages with realtime server.		
	<ul><li>✓ good</li><li>✓ good</li><li>✓ good</li></ul>		

Click to expand

# For developers

- Initial commit: https://gitlab.com/tikiwiki/tiki/-/merge\_requests/1638
- If you'd like some guidance to deploy this to various Tiki features, please reach out to Marc Laporte

#### **Related links**

 $\cdot$  Chatbots