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.

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 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.

1. Proxy Settings

First, let us edit Apache directives and add the ProxyPass and the ProxyPassReverse settings in the SSI 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:

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Motival Genery Summory Use the text box below to manually edit the Apache directives in /etc/apache2/sites-available/joshus.lab4.evoludata.com.com (bat apply to this virtual server, directory or ties.
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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 Virtualmin	0		Bootup and Shutdown			τ
Search Q			Boot system. Systemu			
> Webmin 4	B (Select all 🕑 Invert selection 🤇 😑	Create a new systemd service			
⊒ System 👻		Service name	Service description	Service status	Start at boot?	Running now?
		apache-htcacheclean	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 Filesystems		apache2.service	The Apache HTTP Server	Active (running)	Yes	Yes
Disk Ouotas		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
Running Processes		boot-complete.target	Boot Completion Check	Inactive (dead)	Always	No
		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 4		cryptsetup-pre.target	Local Encrypted Volumes (Pre)	Inactive (dead)	Always	No
ociveis •		cryptsetup.target	Local Encrypted Volumes	Active (active)	Always	Yes
C Tools 🔹 📢		dbus	D-Bus is a simple interprocess messaging system, used	Unknown	Yes	Yes
Notice data		dbus.socket	D-Bus System Message Bus Socket	Active (running)	Always	Yes
Networking •		dovecot	Init script for dovecot services	Unknown	Yes	Yes
		e2scrub_all.service	Online ext4 Metadata Check for All Filesystems	Inactive (dead)	Always	No
		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

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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

-			e Systemd Service		
		Sys	temd service details		
Service name	tikirealtime	.service			
	Systemd service to start the W	/S server			
Commands to run on startup	sudo -u user PHP -d sess	ion.save_path=/home/user/tmp	/home/user/public_html/tiki-realtime.p	hp	©
Commands to run on shutdown					G
Start at boot time?	Yes No				
Create					
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After this, you can check the content of your system service, and it should look something similar to the image below:

\leftarrow	C Edit Systemd Service	
	Systemd service details	
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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:

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	authz_dbd	Disabled	proxy_connect	Enabled
<u>م</u>	authz_dbm	Disabled	proxy_express	Disabled
	 authz_groupfile 	Disabled	roxy_fcgi	Enabled
bmin +	authz_host	Enabled	proxy_fdpass	Disabled
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	 authz_user 	Enabled	proxy_hcheck	Disabled
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SQL Database Server	 cem_meta 	Disabled	The second s	Disabled
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email Mail Filter	cgid	Disabled	remoteip	Disabled
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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.

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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...

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

equirements	Status	Message
eature enabled	🕑 good	Feature is enabled.
erver listening	🕑 good	Server is listening on local system port 8843.
onnectivity	🕑 good	Connection to WS server established successfully.
lessage exchange	🕑 good	Successfully exchanged messages with realtime server.

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

• Chatbots