

# VK-RZ/V2L How To run RDP in Yocto



VK-RZ/V2L v2.0 Board



### Content:

1.	INTRODUCTION	3
2.	SOLUTION	3



### 1. Introduction

<u>VK-RZ/V2L</u> is industrial oriented board, compatible with Raspberry Pi 4 shields. It is based on <u>Renesas</u> <u>R9A07G054L23GBG</u>, **Dual ARM Cortex-A55 + Cortex-M33 MCU**. The main purpose of this manual is to show how to connect to this board through **R**emote **D**esktop application using the RDP **P**rotocol. For more info about this board, please read the full <u>manual</u>.

### 2. Solution

First, make sure **rdp-backend.so** is available in **/usr/lib64/libweston**. If not, flash the vkrzv2l board with the image that contains it (**core-image-weston-vkrzv2l-rdp.simg**) using the <u>vkPyFlasher</u> tool. For more info how to use that tool, checkout vkPyFlasher's <u>manual</u>.

Second, modify the **weston** service. The way to do it, is to add **2 ExecStartPre** lines in the **weston@.service** file, located at **/lib/systemd/system**. The content of that file should look like this:

#### [Unit]

```
Description=Weston Wayland Compositor
RequiresMountsFor=/run
Conflicts=plymouth-quit.service
After=systemd-user-sessions.service plymouth-quit-wait.service
```

#### [Service]

User=%i PAMName=login EnvironmentFile=-/etc/default/weston StandardError=journal PermissionsStartOnly=true IgnoreSIGPIPE=no

```
ExecStartPre=/bin/sh -c "if [ ! -f /etc/xdg/weston/rdp.crt ] || [ ! -f
/etc/xdg/weston/rdp.key ]; then openssl req -newkey rsa:2048 -nodes -keyout
/etc/xdg/weston/rdp.key -x509 -days 3650 -out /etc/xdg/weston/rdp.crt -subj
\"/C=BG/ST=Plovdiv/L=Plovdiv/O=Vekatech/OU=info@vekatech.com/CN=vkrzv2l\";
fi"
```



### How To run RDP in Yocto

ExecStartPre=/bin/sh -c "echo 'OPTARGS=\"--backend=rdp-backend.so --rdptls-cert=/etc/xdg/weston/rdp.crt --rdp-tls-key=/etc/xdg/weston/rdp.key -no-config\"' > /etc/default/weston" ExecStart=/usr/bin/weston-start -v -e --\$OPTARGS

> To try if the **RDP** is working, restart the board:

reboot.

 $\rightarrow$  Check what IP is assigned to the board:

ifconfig.

 $\rightarrow$  On the Host PC, open the RDP client.

Remmina.

 $\rightarrow$  Use that IP in the RDP client and press Enter.

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RDP ~	192.168	.2.124					8
Name $\wedge$	Group	Labels	Server	Plugin	Last used	l	
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Remmina App

 $\rightarrow$  When asked for username and password just press OK



## How To run RDP in Yocto

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+	Enter RDP authentication credentials				
83 113	Username				
	Password				
	Domain				
	Save password				
	OK				
>					

#### Login to Yocto



 $\rightarrow$  You should now see the Yocto's Desktop shell

Remote Yocto Desktop shell



## How To run RDP in Yocto

**Revision overview list** 

Revision number	Description changes
0.1	Initial

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