



# **Ruijie RG-RSR20-X-28 Series Routers Release Notes, RGOS 10.4(3b114), Release(224463)**

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**Release Date: Dec. 5<sup>th</sup>, 2018**

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## Basic Information

Table 1 lists the basic information of the current release.

**Table 1 Basic Information of the Current Release**

<b>Current Release</b>	RGOS 10.4(3b114), Release(224463)
<b>Previous Release</b>	RGOS 10.4(3b89), Release(222475)
<b>Applicable Product</b>	RSR20-X-28
<b>Category</b>	Official release

## Hardware Supported

Table 2 shows the hardware supported by the RGOS 10.4(3b114), Release(224463).

**Table 2 Hardware Models**

Hardware Model	Version	Description
RSR20-X-28	1.00 or later	Router
HSIC-4G-LTE Card	1.01 or later	HSIC 4G card
HSIC-2E1/CE1 Card	1.00 or later	HSIC 2E1 card
HSIC-2HS Card	1.00 or later	HSIC 2 card



### Note

The hardware version number is rounded to the first decimal place. The numeral in the second decimal place does not change the supporting release.

## New Features

Table 3 shows the new features based on RGOS 10.4(3b114), Release(224463).

**Table 3 New Features**

Module	Description
802.1X authentication correlated with ACL	ACL is used for 802.1X authentication.
Voice VLAN	Voice VLAN is supported.
TCP MSS	TCP MSS settings are enabled globally by default.
EF-ACL	Expedited forwarding of ACL flow is supported.
Jumbo Frame	Jumbo frame is supported by the WAN port.
VRF Route Leakage	VRF route leakage is supported.
Router AG	Layer 3 aggregate port is supported.
SGS	SGS V2.0 is supported.

## Changes

Table 4 shows the changes based on RGOS 10.4(3b114), Release(224463).

**Table 4 Changes**

Module	Description
WEB	Link trunking was supported.

## Related Documentation

- Ruijie RSR20-X-28 Series Routers Hardware Installation and Reference Guide V1.09  
 This manual introduces the functional and physical features of the RSR20-X-28 series routers and provides the device installation steps, hardware troubleshooting, module technical specifications, and specifications and usage guidelines for cables and connectors.
- Ruijie RSR20-X-28 Series Routers RGOS Configuration Guide, Release 10.4(3b114)  
 This manual describes the various network protocols and their implementation principles for the RSR30-X series with the detailed configuration examples.
- Ruijie RSR20-X-28 Series Routers RGOS Command Reference, Release 10.4(3b114)  
 This manual describes the configuration commands related to the various network protocols supported on the RSR20-X-28 series routers RGOS 10.4(3b114) version in detail, including the command mode, parameter description, usage guide, and configuration examples.



### Note

You can obtain the related documents at: <http://www.ruijienetworks.com/>.

## Upgrade Files

**Table 6 Latest Firmware**

Applicable Product	Upgrade Firmware	File Size	MD5
RSR20-X-28	RSR20-X-28_10.4(3b114)_R22 5062_install.bin	24,574,016 bytes	E6C8A640E698F67DB59F33E5 F050E75E

## Upgrade Tips

The following are some tips for upgrading the RG-RSR20-X-28 Series Routers RGOS 10.4 (3b114):

- During the upgrade, pay attention to the prompt messages. If failures occur, please save the log and contact us for technical assistance.
- During the upgrade, it is recommended you not power off or reset the system, or plug/unplug any module.
- Use the **show version** command to check the firmware after the upgrade

## Upgrade Procedure

1. Connect the Console port of the router and the Trunk port of the PC via a USB cable. Enable on the PC terminal programs, such as Hyper Terminal or SecureCRT on Windows and Minicom on Linux. Set Baud rate to 9,600, Data bits to 8, and Stop bits to 1.
2. Connect the first port of the router to the Ethernet port of the PC directly or indirectly via an Ethernet cable. Make sure the router and the PC are mutually reachable. Disable firewall before the upgrade.
3. Enable the TFTP server on the PC and place the target BIN file in the TFTP directory.
4. Power on the router. If the main program is available, you are suggested to upgrade the router via the main program (refer to Step 5 for details). If the main program is not available, it is recommended to upgrade the router via Boot Loader (refer to Step 6 for details).
5. Upgrade the router via the main program.

- 1) Run the TFTP command to load the installation package to the router.

Command explanation:

**copy tftp://IP address (of the PC where the .bin file is installed) /name(of the .bin file) flash:/rgos.bin**

```
copy tftp://192.168.50.113/ RSR20-X-52_10.4(3b114)_R224463_install.bin
flash:/rgos.bin
Accessing tftp://192.168.50.113/RSR20-X-52_10.4(3b114)_R224463_install.bin...
System is running defragment, please wait...
Press Ctrl+C to quit
.....The file has existed, do you want to overwrite it? [yes/no]: y
```







```
*Dec 6 21:37:16: %UPGRADE-5-EXTITEM_INSTALLED: File /web/update_list.txt has
been installed in flash.
*Dec 6 21:37:16: %UPGRADE-5-EXTITEM_INSTALLED: File /web/web_config.text has
been installed in flash.
*Dec 6 21:39:17: %UPGRADE-5-EXTITEM_INSTALLED: File /web_management_pack.upd
has been installed in flash.
*Dec 6 21:39:17: %DEVICE-5-CHANGED: Device RSR20-X-52 (1) changed state to up.
*Dec 6 21:39:52: %LINEPROTO-5-UPDOWN: Line protocol on Interface VLAN 1, changed
state to up.
*Dec 6 21:39:52: %OAM-5-POWER: Power supply in slot 0 is on.
*Dec 6 21:39:54: %LINK-3-UPDOWN: Interface VLAN 1, changed state to up.
*Dec 6 21:39:55: %LINK-3-UPDOWN: Interface GigabitEthernet 0/0, changed state
to up.
*Dec 6 21:39:55: %LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet
0/0, changed state to up.
*Dec 6 21:39:57: %SYS-5-COLDSTART: System coldstart.

Ruijie>
```

3) Check the version information.

```
Ruijie#sh ver
System description      : Ruijie Router (RSR20-X-52) by Ruijie Networks
System start time      : 2018-12-06 21:41:11
System uptime         : 0:0:21:11
System hardware version : 1.00
System software version : RGOS 10.4(3b114) Release(224463)
System BOOT version    : 10.4(3b114) Release(224463)
System serial number   : G1L704L004443
System cpld version    : 0.0.8.0
Ruijie#
```

6. Upgrade the router via Boot Loader.

- 1) If the main program is not available, press Ctrl+C when the device starts, and enter Boot Loader to restore or upgrade software.

```
System bootstrap ...
Boot Version: RGOS 10.4(3b114) Release(224343)
Nor Flash ID: 0x017E1000, SIZE: 8388608Bytes
Using 1000.000 MHz high precision timer.
CLOCK-3-HW_CAL_INVALID: Hardware Calendar (RTC) Error.
MTD_DRIVER-5-MTD_NAND_FOUND: 1 NAND chips(chip size : 268435456) detected
Press Ctrl+C to enter Boot .

Hot Commands:
-----
```







```
#####  
#####  
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#####  
#####  
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#####  
#####  
#####  
##### [OK]  
Self decompressing the image succeed and will jump to 0x00010000...  
Ruijie General Operating System Software  
Release Software (tm), RGOS 10.4(3b114) Release(224463), Compiled Thu Dec 6  
18:06:47 CST 2018 by ngcf67  
Copyright (c) 1998-2018s by Ruijie Networks.  
All Rights Reserved.  
Neither Decompiling Nor Reverse Engineering Shall Be Allowed.  
*Dec 6 21:35:12: %MTD_DRIVER-5-MTD_NAND_FOUND: 1 NAND chips(chip size : 268435456)  
detected  
Upgrading BOOT...  
DO NOT POWER OFF!  
Erasing device...eeeeeeeeeeeeeeee [ok]  
Writing flash ##### [OK - 874,912 bytes]  
*Dec 6 21:36:34: %UPGRADE-5-LOCAL_BEG: Installing: 'flash: BOOT'.  
*Dec 6 21:36:37: %UPGRADE-5-LOCAL: Upgrading BOOT.  
*Dec 6 21:37:14: %UPGRADE-5-LOCAL_FIN: New software image installed in flash.  
*Dec 6 21:37:16: %UPGRADE-5-EXTITEM_INSTALLED: File /web/ucs_gb.db has been  
installed in flash.  
*Dec 6 21:37:16: %UPGRADE-5-EXTITEM_INSTALLED: File /web/ucs_big5.db has been  
installed in flash.  
*Dec 6 21:37:16: %UPGRADE-5-EXTITEM_INSTALLED: File /web/update_list.txt has  
been installed in flash.  
*Dec 6 21:37:16: %UPGRADE-5-EXTITEM_INSTALLED: File /web/web_config.text has  
been installed in flash.  
*Dec 6 21:39:17: %UPGRADE-5-EXTITEM_INSTALLED: File /web_management_pack.upd  
has been installed in flash.  
*Dec 6 21:39:17: %DEVICE-5-CHANGED: Device RSR20-X-52 (1) changed state to up.  
*Dec 6 21:39:52: %LINEPROTO-5-UPDOWN: Line protocol on Interface VLAN 1, changed  
state to up.  
*Dec 6 21:39:52: %OAM-5-POWER: Power supply in slot 0 is on.  
*Dec 6 21:39:54: %LINK-3-UPDOWN: Interface VLAN 1, changed state to up.
```

```
*Dec 6 21:39:55: %LINK-3-UPDOWN: Interface GigabitEthernet 0/0, changed state
to up.
*Dec 6 21:39:55: %LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet
0/0, changed state to up.
*Dec 6 21:39:57: %SYS-5-COLDSTART: System coldstart.

Ruijie>
```

7. Check the version to confirm successful upgrade.

```
Ruijie#sh ver
System description      : Ruijie Router (RSR20-X-52) by Ruijie Networks
System start time      : 2018-12-06 21:35:11
System uptime          : 0:0:10:54
System hardware version : 1.00
System software version : RGOS 10.4(3b114) Release(224463)
System BOOT version    : 10.4(3b114) Release(224463)
System serial number   : G1L704L004443
System cpld version    : 0.0.8.0
Ruijie#
```