Series 2000 2455X Rev 1 Modem / Router

Wireless Firmware

Document Number: 0013-001-000741 Document Version: 1.0 (09 Febuary, 2021)

Firmware Version: 16.19.A01.04

CYBERTEC

Documentation Control

Generation Date: February 9, 2021

Copyright © 2021 Cybertec Pty Limited

All rights Reserved.

No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of Cybertec Pty Limited.

Cybertec Pty Limited has intellectual property rights covering subject matter in this document. Except as expressly provided in any written license agreement from Cybertec Pty Limited, the furnishing of this document does not give you any license to this intellectual property.

Legal Information

The contents of this document are provided "as is". Except as required by applicable law, no warranties of any kind, either express or implied, including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose, are made in relation to the accuracy and reliability or contents of this document. Cybertec Pty Ltd reserves the right to revise this document or withdraw it at any time without prior notice.

Under no circumstances shall Cybertec Pty Ltd be responsible for any loss of data or income or any special, incidental, and consequential or indirect damages howsoever caused.

More information about Cybertec can be found at the following Internet address: http://www.cybertec.com.au

Contents

1	Intro	oduction	1
2	Vers	ion	1
3	App	licability	1
4	Firn	ware Upgrade Procedure	2
	4.1	Connect to the Web interface	2
	4.2	Model and Firmware Version Check	3
	4.3	Wireless Firmware Upgrade	4

1 Introduction

This document provides details of the wireless firmware and the firmware upgrade procedure for the Cybertec Series 2000 Model 2455X Rev 1 Modem / Router.

2 Version

The latest version of the Model 2455X Rev 1wireless firmware is: 16.19.A01.04

The firmware upgrade file for the current release is: S2455X-Rev1-MFW-1619A0104.zip

The zip file contains two files, the upgrade file, for example S2455X-Rev1-MFW-1619A0104.upg and the MD5 hash of the upgrade file.

The upgrade file is the file to be used to upgrade the unit.

3 Applicability

The wireless firmware described in this document is only applicable for the Model 2455X Rev 1.

The firmware upgrade will fail for any other model.

4 Firmware Upgrade Procedure

The wireless firmware upgrade procedure for the Series 2000 Model 2455X Rev1 Modem / Router is described.

The procedure is similar to the standard firmware upgrade procedure. The standard firmware upgrade procedure is described in the Series 2000 firmware release notes, this document is referenced in the procedure following.

4.1 Connect to the Web interface

- Connect to the Web interface of the modem either via the Ethernet interface or the wireless interface if web access is enabled.
- If connecting via the Ethernet interface:
 - $\circ~$ Connect an Ethernet cable between the modem and the PC which will be used for the upgrade.
 - Open a web browser on the PC and enter the IP address of the LAN address of the modem. Note: The IP address of the modem may be configured differently for each installation. The default IP address is 10.10.10.10
- If connecting via the wireless interface:
 - Open a web browser on the PC and enter the IP address of the wireless interface.
- When prompted supply the user-name and password.
- The main status page should now be displayed.
- If the main page is not shown check:
 - If using the Ethernet interface:
 - The Ethernet cable is connected correctly to the modem and the PC.
 - The IP address of the modem is correct.
 - The Ethernet ports are enabled.
 - If using the wireless interface:
 - The wireless IP address is correct and is publicly accessible.
 - The firewall rules have been set to allow wireless web access.

4.2 Model and Firmware Version Check

Select System > Information. The System Information page will be displayed and will appear as shown in Figure 1, Figure 2 or Figure 3.

System Information

Series 2455X Inf	ormation	
Model	2455X	
Hardware Revision	1	
Serial Number		
Application Version	1.8.1.0	
Bootloader Version	3.00	
Hardware Add	resses	
LAN MAC	USE 252 and 10 feet law	
Wireless IMEI	Representation and the	
SIM 1 IMSI		
Wireless Software Version	15.63_ENG5001	

Figure 1: The System Information page with no wireless firmware warning indicated.

System	Information	14:31:32 03/02/20			
	Series 245	55X Information			
	Model	2455X			
	Hardware Revision	1			
	Serial Number	1001000			
	Application Version	1.8.4.0			
	Bootloader Version	3.00			
	Hardware Addresses				
	LAN MAC	data policies de la construcción de			
	Wireless IMEI	Static Static Space			
	SIM 1 IMSI				
	Wireless Software Version	15.63 ENG5001,A01.00 New firmware version available			

Figure 2: The System Information page with wireless firmware upgrade warning indicated.

System Information	14:55:55 03/02/20	
Series 2455X Ir	formation	
Model	2455X	
Hardware Revision	1	
Serial Number	areas a	
Application Version	1.8.4.0	
Bootloader Version	3.00	
Hardware Ad	dresses	
LAN MAC	OD DO NOT THE DAY	
Wireless IMEI	Matter Scheroperson	
SIM 1 IMSI		
Wireless Software Version	16.19,A01.04	

Figure 3: The System Information page with wireless firmware upgraded.

4.2.1 Model Check

The model should be listed as 2455X and the Hardware Revision listed as 1.

If the model and hardware are not listed as "2455X" and "1" then do not proceed as the wireless firmware is not applicable for the unit.

The System Information pages shown in Figures 1, 2 and 3 are for Model 2455X Hardware Revision 1.

4.2.2 Application Firmware Version

The application firmware version should be listed as 1.8.4.0 or higher.

If the firmware version is not at least 1.8.4.0 then a firmware upgrade is required before proceeding further. For information on upgrading the unit to the latest version refer to the Series 2000 Firmware Release Notes (Document 0013-001-000632).

The System Information page show in Figure 1 indicates an application firmware version of 1.8.1.0 so a firmware upgrade will be required before performing the wireless firmware upgrade. Whereas the System Information page shown in Figures 2 and 3 indicate an application firmware version of 1.8.4.0 so no application firmware is required before proceeding.

4.2.3 Wireless Firmware Version

The wireless firmware version may already be at the latest version of 16.19.A01.04 in which no warning message will be listed under the wireless firmware version. If this is the case then the wireless firmware is up to date and no further action is required.

If a later wireless firmware is available the message "New firmware version available" will be displayed under the Wireless Software Version.

The System Information page show in Figure 2 indicates a new wireless firmware version is available so the wireless upgrade procedure should be followed to upgrade the firmware. Whereas the System Information page shown in Figure 3 does not have a message associated with the wireless firmware which indicates the wireless firmware is up to date so no further action is required.

4.3 Wireless Firmware Upgrade

Navigate to the System > Backup & Upgrade. The System Backup & Upgrade page will be displayed. In the section "Upgrade Firmware" click the Browse button then browse to and select the wireless firmware upgrade file. Figure 4 shows the Backup & Upgrade page with the wireless firmware upgrade file selected.

Backup	& Upgrade			14:32:06 03/0	2/2021
	n 	Backup current	configuration	1	
	CONTRACT TAXAB	owner, No. of Concession, Name		the term in parent	
	Resto		configuratio	n	
	Select configuration file		Browse	No file selected.	
		Uplo	ad		
			irmware		
Current firmware version				1.8.4.0	
	Select upload file	Browse.	\$2455	X-Rev1-MFW-1619A0104.upg	
		Uplo	ad		

Figure 4: The System Backup & Upgrade page with the wireless firmware upgrade file loaded.

Click the Upload button to start the upload of the file. The file will be uploaded to the unit, when it is complete the page will appear like that shown in Figure 5

Backup & Upgrade	14:37:51 03/02/2021
Backu	p current configuration
carrowski 75/37/2 -anning J	STREET ANTEL AND ONLY AND ADDRESS OF THE ADDRESS
Restore	e a saved configuration
Select configuration file	Browse No file selected.
	Upload
L	Jpgrade firmware
Status of uploaded file	Passed
Filename	S2455X-Rev1-MFW-1619A0104.img
Release	V1.8.4.0.B01186
Build date	01/02/2021
Upgrade	Cancel Upgrade

Figure 5: Wireless firmware upgrade file uploaded.

Click the Upgrade button to start the upgrade process. The page will change to that shown in Figure 6. Note the upgrade can be cancelled at this point by clicking the Cancel Upgrade button.

	the set of	220
Backup current configuration		
CONTRACT TELETION		
R	estore a saved configuration	n
Select configuration file	Browse	No file selected.
	Upload	
15		
N2.		
	Upgrade firmware	
The upgrade is now starting.		
The upgrade will take several minutes to complete and the modern will be offling during this time.		
The upgrade will take several minu	ites to complete and the mod	tem will be offline during this time

Figure 6: Wireless firmware upgrade in progress.

The unit will now go off-line for a period of time and when it comes back it should automatically start doing the upgrade.



Once the Upgrade has started power must be maintained to the modem to prevent corruption of the Flash memory.

The module upgrade process will take more than 10 minutes. During this time the status page will show the network status disabled, as shown in Figure 6

Alarms		14:44:06 03/02/2021
		System
	Power On Self Test	Passed
	Temperature (°C)	now: 38.75, min: 38.75, max: 38.75
	Uptime	00:01:26
		Wireless
	Network Status	Disabled
	Connection Status	Fault
		Network
	LAN	No Fault
		Services
	DHCP Server	No Fault
	VPN	Disabled
	Serial Server	Disabled

Figure 7: Status page while Wireless firmware upgrade is in progress.

The system log will indicate the progress of the wireless firmware upgrade, the start of which is shown in Figure 8 and following is an example of the syslog messages during upgrade.

yst	tem Log 14:44:14 03/02/2
198	3 18-83-86 wrw. This softwart is the property of Liberton Pip Lin.
1100	3 10.00108 arts Hernise ; 1.0.0.0 (as 10 1011
Trails.	3 14-4511 and Memoranium Institution, Nagrant respond
1.00	a tel de las avec d'amperiantication M.C. annumentant approximations must fact un table
-	A 14-40-50 were LAW 17 address to 100-50, 5
-	A 19 AV NO WAY LONG THE ADDRESS OF A REAL OF
-	A TATAL AND AN AVAILABLE AND
-	a to be an an independent of the second se
	a second second (Second Second Se
1100	3 14 41 38 work[2008] MCT 1989 services 1.7 Agents subspect conservat
1.08	3 14-40 DE Brossing[DDM]: startist, service I.08-12 carbonics 108
1.00	3 10.45 30 dramming[2030]: complim time options: 254 500 gring? no.60cs no.60cs no.120 to 2007 DEF
Task.	1 14-87-98 Munagers (Morg) 20001 - 2007, 27 yange 102 108.21,200 - 102.200 53,000, tanan time 10
Trade 1	1 14 41 19 disease(1998), institute interior diseases card
1.00	A 14 AT 18 ADDRESS TARGET AND ADDRESS OF THE TAX AD TARGET
	A 14 AU IN ADDRESS OF A DESCRIPTION OF A 14 AUGUST AND A 14 AUGUST AND A 14 AUGUST AUGUST A 14 AUGUST AUGUS
-	a to do in another from the first state of the state of t
Eab	2 14 42 52
reb	3 14:45:55 mrx[2006]: AUIN: Login for user admin from Login (192.166.15.2) Successful.
Feb	3 14:44:04 msp: Module Firmware Upgrade available
Feb	3 14:44:05 msp: Starting module firmware upgrade

Download

Figure 8: The System Log during upgrade.

Start of RF Wireless firmware upgrade:

```
Feb 1 15:13:59 msp: Module Firmware Upgrade available
Feb 1 15:14:00 msp: Starting module firmware upgrade
Feb 1 15:14:19 msp: Sending packet #: 1000
Feb 1 15:14:47 msp: Sending packet #: 2000
Feb 1 15:15:10 msp: Sending packet #: 3000
```

Feb	1	15:15:30	msp:	Sending	packet	#:	4000
Feb	1	15:15:54	msp:	Sending	packet	#:	5000
Feb	1	15:16:15	msp:	Sending	packet	#:	6000
Feb	1	15:16:38	msp:	Sending	packet	#:	7000
Feb	1	15:16:59	msp:	Sending	packet	#:	8000
Feb	1	15:17:20	msp:	Sending	packet	#:	9000
Feb	1	15:17:44	msp:	Sending	packet	#:	10000
Feb	1	15:18:04	msp:	Sending	packet	#:	11000
Feb	1	15:18:29	msp:	Sending	packet	#:	12000
Feb	1	15:18:49	msp:	Sending	packet	#:	13000
Feb	1	15:19:12	msp:	Sending	packet	#:	14000
Feb	1	15:19:33	msp:	Sending	packet	#:	15000
Feb	1	15:19:54	msp:	Sending	packet	#:	16000
Feb	1	15:20:18	msp:	Sending	packet	#:	17000
Feb	1	15:20:39	msp:	Sending	packet	#:	18000
Feb	1	15:21:03	msp:	Sending	packet	#:	19000
Feb	1	15:21:23	msp:	Sending	packet	#:	20000
Feb	1	15:21:46	msp:	Sending	packet	#:	21000
Feb	1	15:22:08	msp:	Sending	packet	#:	22000

The RF hardware will now be re-started, then messages similar to the following will will be seen in the log:

Feb 1 15:23:47 msp: Module Firmware Patch available Feb 1 15:23:48 msp: Starting module firmware upgrade Feb 1 15:24:15 msp: Sending packet #: 1000

The RF Hardware will again re-start.

The upgrade is now complete, the System Information page will now show the upgraded wireless firmware version and the upgrade message will no longer be shown.

Syste	m Information	14:55:55 03/02/202		
	Series 2455X Info	ormation		
	Model	2455X		
	Hardware Revision	1		
	Serial Number	areas a		
	Application Version	1.8.4.0		
	Bootloader Version	3.00		
	Hardware Add	resses		
	LAN MAC	DD DD and R No. So		
	Wireless IMEI	And the Device Statements		
	SIM 1 IMSI			
	Wireless Software Version	16.19,A01.04		

Figure 9: The System Information page after the upgrade.



Cybertec Pty Limited ABN 72 062 978 474 19 Buffalo Road Gladesville NSW 2111 Australia Phone: +61 2 9807 5911 www.cybertec.com.au