Technical Note



Updating NV8500 Firmware with Leitch Protocol

Introduction

This note tells you how to upload Leitch protocol to the control card of an NV8500 family router and to select the Leitch protocol.

There are 3 basic steps:

- Re-install MRC.
- Upload new firmware to the router's control card.
- Choose Leitch protocol.

You must do this for each control card that is to operate under Leitch protocol.

After the update, the Leitch pass-through protocol will be enabled on control port 1 (the CTRL1 connector at the rear of the router). Note that CTRL2 does not support any third-party protocol.

Procedure

Re-Install MRC

1 Obtain the MRC installer from Miranda. Copy it to a USB device (e.g., a memory stick). The installer's name is MRC Install.exe.

Also copy the NV8500 firmware file to the USB device. Its file name is NV8500_HYB_FW_1.2.0.1684.RF.

2 Place the USB device in a USB slot of your configuration PC. Run the installer from the device:



Click 'Next' to step through the brief installation process. Follow the instructions.

Load the Firmware

- 1 Launch MRC.
- 2 Go to the 'Update Firmware' page.

Browse to select your new firmware file (from your USB device):

Firmwar	e File								
Router F	irmware	File							
F:\NV850	Immware File Immware File outer Firmware File Immovies State Immovies State Immovies State Immovies Versions Immovies State Ipdate In Use Needs Update Name Versi Part # Rev Description Immovies Immovies State Immovies State Immovies State								
Current Firmware Versions									
Update	In Use	Needs Update	Name	Versi	Part#	Rev	Description		
	V		BOOT	7.0.0.2	SV1039-04	A	EM0833Boot Mar 30 2011 18:23:56		

3 On the same page, choose the router control card you wish to update:

Edit Online		Name	Туре	IP Address 🔺	Expansion
\bigcirc	Active	Stus7512	NV7512	192.168.102.190	Stand Alone
Active Active Active Off-Line		Stu's BFF	NV8144	192.168.102.210	Primary
		*NV8576_TS	NV8576	192.168.102.211	Primary
		Unicon3 MRK 222	NV8576 Plus	192.168.102.222	Secondary
\bigcirc	Off-Line	Unicon3 MRK 223	NV8576 Plus	192.168.102.223	Secondarv
Fram	ne Summary Options		Firmwa	re Update Options	
	Refresh Summary	Reset Control	Card	Undate Firmware	View Past Undate Logs

4 You will see a line containing "PROT5" in the firmware list:

			MTRX2	7.0.0.2	SV1043-04	A	EM0833Mtrx8280Plus Mar 30 2011 18:24:22
		V	MTRX3	7.0.0.2	SV1044-04	A	EM0833Mtrx8576 Mar 30 2011 18:24:31
			MTRX4	7.0.0.2	SV1045-04	A	EM0833Mtrx8576Plus Mar 30 2011 18:24:40
	~		PROT5		SV1103-00	A	EM0833ProtLeitch Jul 13 2011 15:06:54
		V	OS	7.0.0.4	SV1051-06	A	EM0833OS Apr 15 2011 11:58:01
		V	IOXM-UI-001	7.0.0.0	SV0984-07	0	NV8500 3Gig SDI HYBRID 8 COAX IN (EM0814, SV0984)
		V	IOXM-UI-004	7.0.0.0	SV0984-07	0	NV8500 3Gig SDI HYBRID 8 COAX IN (EM0814, SV0984)
			0.000	2000	000004-07	0	

This line becomes present in the firmware list because the protocol firmware it represents is present in your new firmware file. Ensure that this line has a check mark in the 'Update' column.

5 Click 'Update Firmware' at the bottom of the page:

Off-Line Unico	n3 MRK 223	NV8576 Plus	192.168.102.223	Secondary	•
Frame Summary Options		Ein	mware Update Options	`	
C Refresh Summary	Reset Control Car	d	💽 Update Firmware	View Past Update Logs	

6 Confirm that you really want to update the firmware:

Update	Firmware X							
?	Select the firmware update type:							
_	Prompt for more information if needed							
	◯ Update will be unattended							
	Are you sure you want to update this control card							
	This router should be offline in a service window.							
	This update will take an estimated 5 minutes.							
	Yes No							

7 After a few seconds, the update will complete. If it was successful, you will see a completion message asking you whether you want to reset the control card:

	×						
?	All updates were successful						
	The control card must be reset for the update to take effect. Do you want to reset now?						
	Remember the response to this message						

Click 'Yes'. The reset takes about a minute. You will see a progress bar. Wait until the window with the progress bar disappears.

Choose Leitch Protocol

- 1 Go to the 'Miscellaneous' page of MRC.
- 2 Choose the router's control card at the bottom of the page.

	nor our of them				
Edit	Online	Name	Type	IP Address 🔺	Expansion
0	Active	**SQA Teresa	NV8280	192.168.102.155	Primary
0	Standby	*NV8576_TS	NV8576	192.168.102.167	Primary
0	Active	Stus7512	NV7512	192.168.102.190	Stand Alone
0	Active	Stu's BFF	NV8144	192.168.102.210	Primary
•	Active	*NV8576_TS	NV8576	192.168.102.211	Primary
0	Off-Line	Unicon3 MRK 222	NV8576 Plus	192.168.102.222	Secondary
0	Off-Line	Unicon3 MRK 223	NV8576 Plus	192.168.102.223	Secondary
0	Active	NV5128	NV5128	192.168.102.248	Stand Alone
	Active	NV5128	NV5128	192.168.102.249	Stand Alone

3 Choose 'Leitch Pass-Through' for the protocol under 'Control 1 Settings':

Control 1 Settings			
Protocol:	Leitch Pass-Through	•	
Control 1 (Main) Port:	enabled	•	
Reply When:	active only	•	
Control 2 Settings			

4 Click 'Update Control Card':

Reply When:		
Rear Diagnostic Port Settings		
Port Type: RS232		
Baud Rate: 38400	Update Control Card	

-Network Frame Summary-

After the update, the Leitch pass-through protocol will be enabled on control port 1 (the CTRL1 connector at the rear of the router). CTRL2 does not support Leitch or any other third-party protocol.

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