

Scripting a Standalone CT703 or CT704 Attenuator

Goal: Operate a CT703 or CT704 WiFi Attenuator with a script. The LANforge GUI provides scripting support for the CT703 and CT704 Attenuators. This cookbook provides a basic example of how to script the signal strength up and down.

Requires LANforge 5.2.11+ and CT703 or CT704 Attenuator.



- 1. Create an Attenuator Script
 - A. In the Attenuators tab, select your attenuator and click Modify

LANforge Manager Version(5.3.5)										
<u>Control</u> <u>R</u> e	porting <u>T</u> ea	ar-Off <u>I</u> nfo <u>F</u>	lugins							
					St	op All	Restart Mar	nager	Refresh	HELP
Layer-4	Generic T	est Mgr 🛛 Te	st Group F	Resource Mgr	Event Log	Alerts	Port Mgr VAP	Stations	Messages	
Status	Layer-3	L3 Endp	s VolP/	RTP V	oIP/RTP Endps	s Arm	ageddon	WanLinks	Attenuators	File-IO
	Start Stop Modify Delete									
					Attenua	ators — 🔭				
Name	State	Script	Module 1	Module 2	Module 3	Module 4	Temperat			
1.1.60	Idle	None	0.0	0.0	0.0	0.0	84			
Logged in t	o: brent-52	3:4002 as: /	Admin							

B. You will see the *Modify Attenuator* window. Click on the **Script** button.

4	(Aodify Attenuator	
Name:	1.1.60		
Module 1:	0.0 (0 ddB)	 Synchronized 	Script
Module 2:	0.0 (0 ddB)	 Adjustment Value: 5 (50 ddB) 	▼ Adjust
Module 3:	0.0 (0 ddB)	•	
Module 4:	0.0 (0 ddB)	•	
	Sync	Apply OK	Cancel

C. The *Add/Modify Script* window opens. In the picture below you see a huge list of numbers (the attenuation levels). These numbers are not pre-populated. You can copy and paste them out of this document or create a series with other commands listed below.

4	Add/Modify Script
Attenuator Name	1.1.60 Script Type: ScriptAtten
Script Name:	attnr Group Action: All
🗹 Enable Script	🗹 Show Reports 🖉 Symmetric 📃 Loop 🔛 Hide Iteration Details 🔛 Hide Legend 🔛 Hide CSV
Loop Count	Forever Script Iterations: 192 (192) Estimated Duration: 16 m (16 m)
	Script Configuration
Run Duration:	5 s (5 s) 🗸
	Attenuations (ddB)
185, 195, 205, 215, ; 345, 355, 365, 375, ; 505, 515, 525, 535, ; 665, 675, 685, 695, ; 935, 925, 915, 905, ; 775, 765, 755, 765, 755, 765, 755, 765, 755, 765, 755, 75	22, 235, 245, 255, 245, 275, 285, 295, 305, 315, 325, 335, 85, 395, 405, 415, 425, 435, 445, 455, 455, 455, 655, 05, 715, 725, 735, 745, 755, 775, 775, 795, 055, 955, 945, 957, 885, 895, 905, 915, 925, 935, 944, 955, 955, 945, 957, 885, 875, 865, 855, 845, 835, 825, 815, 805, 795, 785, 357, 725, 715, 705, 695, 685, 657, 665, 655, 645, 625, 755, 565, 555, 545, 535, 525, 515, 505, 495, 485, 475, 465, 115, 405, 395, 385, 375, 366, 355, 644, 335, 325, 315, 305, 55, 242, 233, 225, 215, 205, 195, 1155, 145, 15, 85, 75, 65, 55, 45, 35, 25, 15, 5
I	Show Previous Report Sync Apply OK Cancel

- A. In the Script Type pulldown, select ScriptAtten
- B. Type in the name for the script, this example is called attnr
- C. Select Symmetric
- D. Choose 5 s for Run Duration. This will run the Attenuator at each ddB value for this period of time.
- E. Enter the following attenuation values for a 16 minute long test. This will send the attenuator from 5 to 955ddB and back:

F.	5, 15	5, 25,	, 35,	45,	55, 6	5, 75	, 85,	95,	105,	115,	125,	135,	145,	155,	165,	175,
	185,	195,	205,	215,	225,	235,	245,	255,	265,	275,	285,	295,	305,	315,	325,	335,
	345,	355,	365,	375,	385,	395,	405,	415,	425,	435,	445,	455,	465,	475,	485,	495,
	505,	515,	525,	535,	545,	555,	565,	575,	585,	595,	605,	615,	625,	635,	645,	655 ,
	665,	675 ,	685,	695,	705,	715,	725,	735,	745,	755 ,	765,	775,	785,	795,	805,	815,
	825,	835,	845,	855,	865,	875,	885,	895,	905,	915,	925,	935,	945,	955,	955,	945,
	935,	925,	915,	905,	895,	885,	875,	865,	855,	845,	835,	825,	815,	805,	795 ,	785,
	775,	765,	755,	745,	735,	725,	715,	705,	695,	685,	675,	665,	655,	645,	635,	625,
	615,	605,	595,	585,	575,	565,	555,	545,	535,	525,	515,	505,	495,	485,	475,	465,
	455,	445,	435,	425,	415,	405,	395,	385,	375,	365,	355,	345,	335,	325,	315,	305,
	295,	285,	275,	265,	255,	245,	235,	225,	215,	205,	195,	185,	175,	165,	155,	145,
	135,	125,	115,	105,	95,	85, 7	5, 65,	, 55,	45,	35, 2	5, 15	, 5				

G. ...click OK

D. In the Attenuators tab, you will notice that your attenuator now reads **Enabled** in the *Script* column. Select the attenuator and click the **Start** button.

LANforge Manager Version(5.3.5)									
Control Reporting Tear-Off Info Plugins									
Stop All Restart Manager Refresh	HELP								
Layer-4 Generic Test Mgr Test Group Resource Mgr Event Log Alerts Port Mgr VAP Stations Messages									
Status Layer-3 L3 Endps VolP/RTP VolP/RTP Endps Armageddon WanLinks Attenuators	File-I0								
Start Stop Modify Delete									
Attenuators									
Name State Script Module 1 Module 2 Module 3 Module 4 Temperat									
1.1.60 Idle Enabled 0.0 0.0 0.0 0.0 84									
/									
Logged in to: brent-523:4002 as: Admin									

E. The window Script Report will appear. This monitors the script behavior of the attenuator script.

<u>\$</u>		Script Report f	or: 1.1.60		0 8
<pre>Script on: 60 Script: ScriptAtten Name: attnr Flags: ACTIVE SHOW_REPORT SYMMETRI Group-Action: ALL Loop-Count: 0 Max-Iterations: 192 Iteration-Duration: 5000ms Attenuations: 5,15, 25, 35, 45, 55, 65, 75, 85, 95, 105, 115, 5,715, 725, 735, 745, 755, 765, 775, 785, 795 5,525, 515, 505, 495, 485, 475, 465, 455, 44 Steps-Completed: 0 Estimated total script duration: 9</pre>	C RUN_ON_MGR 125,135,145,155,165, ,805,815,825,835,845 5,435,425,415,405,38 60 seconds	175, 185, 195, 205 , 855, 865, 875, 88 5, 385, 375, 365, 3	, 215, 225, 235, 245, 255, 2 5, 895, 905, 915, 925, 935, 55, 345, 335, 325, 315, 305	65, 275, 285, 295, 305, 315, 325, 335, 345, 35 945, 955, 955, 945, 935, 925, 915, 905, 895, 8 , 295, 285, 275, 265, 255, 245, 235, 225, 215,	5, 365, 375, 38 85, 875, 865, 8 205, 195, 185,
Started At: Fri Nov 18 15:05:39 2 Script on: 60 Script: ScriptAtten Name: attnr Flags: ACTIVE SHOW_REPORT SYMMETRI Group-Action: ALL Loop-Count: 0 Max-Iterations: 192 Iteration-Duration: 5000ms Attenuations: 5,15,25,35,45,55,65,75,85,795,105,115, 5,75,725,785,745,755,765,775,785,795	00 secunds 016 C 125, 135, 145, 155, 165, .805, 815, 825, 835, 845	175,185,195,205 , 855,865,875,88	, 215, 225, 235, 245, 255, 2 5, 895, 905, 915, 925, 935,	65, 275, 285, 295, 305, 315, 325, 335, 345, 35 945, 955, 955, 945, 935, 925, 915, 905, 895, 8	5, 365, 375, 38 85, 875, 865, 8
<pre>5/525.15.505.495.485.475.465.455.44 Steps-Completed: 0 Estimated total script duration: 9 Started At: Fri Nov 18 15:05:39 2 # iteration: 1/192 Attenuator: 60 now # Attenuation: 5 machine-load: 0.00 # iteration: 2/192 Attenuator: 60 now</pre>	5,435,425,415,405,35 60 seconds 016 : 1479510344576ms d : 1479510349576ms d	uration: 5000ms	55, 345, 335, 325, 315, 305	, 295, 285, 275, 265, 255, 245, 235, 225, 215,	205,195,185,
# Attenuation: 15 machine-load: 0.00					

F. Also notice the attenuation values change in the LANforge Manager as the script runs.

Note: These values update every five seconds, so values may differ within the five second window.

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Control Reporting Tear-Off Info Plugins	
Stop All Restart Manager Refresh	HELP
Layer-4 Generic Test Mgr Test Group Resource Mgr Event Log Alerts Port Mgr VAP Stations Messages Status Layer-3 L3 Endps VolP/RTP VolP/RTP Armageddon WanLinks Attenuators	File-I0
Start Stop Modify Delete	
Allenvisions	
Initial State Scale Scale Module 1 Module 2 Module 3 Module 4 Emperature 1.1.60 Running Running 30.5 30.5 30.5 84	
Logged in to: brent-523:4002 as: Admin	

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