

TRANSMISSION WITH INNOVATION

amgsystems.com

# Configuring LACP (Link aggregation control protocol) on AMG (510 / 570)

Link Aggregation Control Protocol (LACP) is a standards-based method to control the bundling of several physical network links together to form a logical channel for increased bandwidth and redundancy purposes.

Here is a guide on configuring AMG (510/570) switches with LACP:

# AMG510 / AMG570

### Web GUI:

**Step 1:** Start by connecting two switches together by multiple ports which you would like to link using the Link aggregation control protocol.

**Step 2:** On the left-hand side of the Web GUI select Configuration > Aggregation > Groups

**Step 3:** Here you can select multiple ports to be grouped into one aggregated link for LACP to be enabled. Once you have selected your ports which you would like to link together, select the 'LACP (Active)' Mode for that group of ports and select save at the bottom of the page.

	Port Members												Group Configuration																				
Group ID	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	Mode		Revertive	Ma	x Bundle
Normal	0							۲	0	0		0		0		0	۲	0	0						۲								
1	0	$^{\circ}$	$^{\circ}$	$^{\circ}$	0	0	0	0	0	0	0	igodol	$^{\circ}$	igodoldoldoldoldoldoldoldoldoldoldoldoldol	$^{\circ}$	0	$^{\circ}$	$\bigcirc$	$^{\circ}$	LACP (Active)	~			16									
2	0	0	Ο	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Ο	0	0	0	$^{\circ}$	Disabled	~	<b>1</b>		16
3	0	$^{\circ}$	$\bigcirc$	$\bigcirc$	0	0	0	0	0	0	$^{\circ}$	$\bigcirc$	$\bigcirc$	$^{\circ}$	$\odot$	0	$^{\circ}$	$\bigcirc$	$\bigcirc$	$^{\circ}$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$^{\circ}$	$\bigcirc$	$\bigcirc$	$\odot$	Disabled	~			16
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$^{\circ}$	0	0	0	0	0	0	0	$^{\circ}$	Disabled	~	~		16
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$\bigcirc$	$\bigcirc$	0	0	0	0	0	0	$\bigcirc$	Disabled	~			16
6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Disabled	~			16
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$\bigcirc$	Disabled	~	<b>~</b>		16
8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Disabled	~	~		16
9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$\bigcirc$	0	0	0	0	0	0	0	0	Disabled	~			16
10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Disabled	~			16
11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	0	0	0	$\bigcirc$	$\bigcirc$	Disabled	~			16
12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Disabled	~			16
13	0	0	Ó	Ó	0	0	0	0	Õ	0	0	Õ	Ő	0	Ő	0	0	Ő	Ő	0	0	0	0	Ó	0	Ó	0	0	Disabled	~			16
14	0	0	0	0	Õ	0	0	0	0	0	Õ	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Disabled	~			16

Save Reset





TRANSMISSION WITH INNOVATION

amgsystems.com

**Step 4:** On switch 2, repeat the same as **Step 3** for the ports which are connected to switch 1 and select the 'Mode' drop down to 'LACP (Passive)', then select save at the bottom of the page.

**Step 5:** To verify your configuration, select Monitor > Aggregation > Status and check if the configured ports and aggregated ports are correct, with the correct LACP mode.

# Switch 1 (Active):

#### Aggregation Status

Aggr ID	Name	Туре	Speed	Configured Ports	Aggregated Ports
1	LLAG1	LACP_ACTIVE	1G	GigabitEthernet 1/10,12,14	GigabitEthernet 1/10,12,14

#### Switch 2 (Passive):

#### Aggregation Status

Aggr ID	Name	Туре	Speed	Configured Ports	Aggregated Ports
1	LLAG1	LACP_PASSIVE	1G	GigabitEthernet 1/9,11,13	GigabitEthernet 1/9,11,13

**Step 6:** To save your configurations at start up on the switch, select Maintenance > Configuration > Save startup-config.





TRANSMISSION WITH INNOVATION

amgsystems.com

# Command Line interface (CLI)

**Step 1:** Start by connecting two switches together by multiple ports which you would like to link using the Link aggregation control protocol.

**Step 2:** Once you are connected to the command line interface on one switch, enter configuration mode by entering the command *"configure terminal"*.

Step 3: Enable a link aggregation group by typing the command *"interface llag 1"*.

**Step 4:** Enter the interfaces of the ports you are going to configure in configuration mode by entering *"interface GigabitEthernet 1/10".* 

**Step 5:** To assign this port to the link aggregation group and set this link as active, enter the command *"aggregation group 1 mode active"*. Do this on each port interface you would like to group together and exit configuration mode by entering the *"exit"* command.

**Step 6:** You can verify your ports are correctly configured by entering the command *"show running-config"*.

**Step 7:** Save your configurations by entering *"copy running-config startup-config"*. This will save your configuration even in the event of the switch being turned off.

Step 8: On the second switch, repeat Steps 2 and 3.

**Step 9:** In the configuration of the ports that are being aggregated on Switch 2, enter the command *"aggregation group 1 mode passive"*. Once you have done this, exit configuration mode by using the "exit" command and repeat **Steps 6 and 7**.







amgsystems.com

Here is an example of LACP configurations in the CLI for Switch 1 and 2:

interface llag l	
interface GigabitEthernet 1/10	
poe mode plus	
aggregation group 1 mode active	
!	
interface GigabitEthernet 1/11	
poe mode pius	
: interface CicebitEthernet 1/12	
nce mode plus	
aggregation group 1 mode active	
I I I I I I I I I I I I I I I I I I I	
interface GigabitEthernet 1/13	
poe mode plus	
!	
interface GigabitEthernet 1/14	
poe mode plus	
aggregation group 1 mode active	
interface GigabitEthernet 1/9	
speed auto 10 100 1000	
aggregation group 1 mode passive	
: interface GigabitEthernet 1/10	
speed auto 10 100 1000	
!	
interface GigabitEthernet 1/11	
speed auto 10 100 1000	
aggregation group 1 mode passive	
interface GigabitEthernet 1/12	
speed auto 10 100 1000	
: interface GigabitEthernet 1/12	
speed auto 10 100 1000	
aggregation group 1 mode passive	

