UCM630x - 1+N Media Cluster Guide

INTRODUCTION

UCM630X 1+N media cluster feature allows clustering multiple media servers with one UCM to expand the meeting capabilities of the UCM630X Series. Thus, allowing meetings of a larger scale to be hosted on the UCM630X.

The deployment architecture of this feature consists of one main business server that handles signaling, and at least one other server handling the media traffic. Please see the illustration below.



Important

Please note that 1+N media cluster feature is currently supported on the UCM6304 and UCM6308 only.

Notes

• All UCMs that make up the media cluster must be under the same switch, and their IP addresses must be in the same network segment.

- The Business Server and Media Servers must use the same firmware version.
- Please ensure that the IP addresses of the business server and media server in the cluster environment do not change. Otherwise, the

connection between the cluster devices will be affected. The cluster will need to be rebuilt if a change in IP address occurs.

CONFIGURATION STEPS

The configuration of the cluster feature consists of two main parts, one part will be about the configuration of the business server, and the other

part will be about the configuration of the media server(s).

Business Server

Step 1: Setting static IP address

To ensure that the connection isn't lost to the business server, the user must configure a static IP on the business server. This can either done on the DHCP server by reserving an IP address using the MAC address of the network interface of the UCM, or we can set a static IP address on the intended network interface of the UCM. To set the address statically on the UCM, please follow the steps below:

1. Access the UCM's web UI, navigate to System Settings > Network Settings, and then set a static IP on the network interface which is connected to the network where the media servers are hosted.

IPv4 Address IPv6	6 Address Network Port Traffic Control
Preferred DNS Server	
LAN 1	
IP Method	Static ~
* IP Address	192.168.5.161
* Subnet Mask	255.255.255.0
* Gateway IP	192.168.5.1
* DNS Server 1	192.168.5.1
DNS Server 2	
Layer 2 QoS 802.1Q/VLAN Tag	0
Layer 2 QoS 802.1p Priority Value	0

Business Server IP Configuration

2. Click "Save" to save the configuration on the UCM.

Step 2: Configure the Cluster-related settings

To configure the UCM as the business server, please follow the steps below:

1. Navigate to **System Settings > Cluster**, then tick the option **Enable Media Cluster**.

2. Choose "Business Server" as the **Device Role.**

3. Enter a multicast IP address that will be used to send multicast traffic. Please ensure that the IP address used is within the range of multicast IP addresses.

4. Enter a port range start value and end value in the corresponding fields. Please ensure that the range of ports is between 1024 – 65535.

5. Enter the Business Server Listening Port number. Please ensure that the port number is within the range 1024 – 65535.

Cluster					
Enable Media Cluster					
* Device Role	● Business Server ○ Media Server				
* Multicast Network Port	● LAN1 ○ LAN2				
* Multicast IP Address	224.0.1.27				
* Multicast Address Port Start Value	10000				
* Multicast Address Port End Value	10300				
* Business Server Listening Port	9528				
Media Server					
* Media Server IP	192.168.5.171	•			
	Add IP Address	•			
Media Server Switch Threshold					
If the memory or CPU usage of this media server is exceeded, media service functionality w time. Otherwise, this UCM will continue to be used as the media server.					
* Memory Usage Threshold (%)	90				
	Cancel Save				

Business Server Configuration

- 6. Then, we will enter the media server addresses, we can enter the addresses for now, then assign them later to the media server(s), in this example, we will assign the IP address 192.168.5.171, which will be set as a static IP address for the media server(s) in the following section regarding the configuration steps for the media server(s).
- 7. Once all the settings mentioned above are configured, please click "Save" to save the configuration.

Media Server

Similar to the business server, we also need to set the static IP address for the media server to avoid losing the connection to it.

1. Access the UCM's web UI, navigate to System Settings > Network Settings, and then set a static IP on the network interface which is

connected to the network where the business server is hosted.

IPv4 Address IPv6 A	ddress Network Port Traffic Cont	rol
Preferred DNS Server		
LAN 1		
IP Method	Static ~	
* IP Address	192.168.5.171	
* Subnet Mask	255.255.255.0	
* Gateway IP	192.168.5.1	
* DNS Server 1	192.168.5.1	
DNS Server 2		
Layer 2 QoS 802.1Q/VLAN Tag	0	
Layer 2 QoS 802.1p Priority Value	0	

Media Server IP Configuration

2. Click "Save" to save the configuration on the UCM.

Step 2: Configure the Cluster-related settings

To configure the UCM as a media server, please follow the steps below:

1. Please navigate to **System Settings > Cluster**

- 2. Tick the option "Enable Media Cluster"
- 3. Select "Media Server" as the Device Role
- 4. Enter the IP address of the business server and the listening port configured on the Business server.

Enable Media Cluster			
* Device Role	O Business Server 💿 Media Server		
* Business Server IP and Port	192.168.5.161	1	9528



Media Server Configuration

5. Then click "Save" to save the configuration.