

MAX Communication Server Release 7.5

> Quality of Service Configuration Guide

June 11, 2015



This document describes how to add QoS tags for MaxCS RTP packets. These procedures have been validated on MaxCS Release 7.5.

Configure the MaxCS Server

- 1. Open the Local Group Policy Editor on the MaxCS server: In Windows, click **Start**. In the Search box, enter **gpedit.msc** and press **Enter**.
- 2. Open MMC: In Windows, click Start. In the Search box, enter mmc and press Enter.
- 3. On the *File* menu, click Add/Remove Snap-in. In the dialog box, click Group Policy Object Editor and click Add.

nap-in	Vendor	<u> </u>	Console Root	Edit Extensions
ActiveX Control	Microsoft Cc			
Authorization Manager	Microsoft Co			Remove
Certificates	Microsoft Co			
Component Services	Microsoft Cc			Move <u>U</u> p
Computer Management	Microsoft Cc			
Device Manager	Microsoft Cc			Move <u>D</u> own
Disk Management	Microsoft an	<u>A</u> dd >		
Event Viewer	Microsoft Cc			
Folder	Microsoft Cc			
Group Policy Object Editor	Microsoft Cc			
IP Security Monitor	Microsoft Cc			
IP Security Policy Manage	Microsoft Cc			
Link to Web Address	Microsoft Cc.	•		Ad <u>v</u> anced
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Figure 1: The Add or Remove Snap-ins dialog box

- 4. In the next dialog box, click **Browse**.
- 5. You can click either **This computer** to edit the Local Group Policy object, or click **Users** to edit Administrator, Non-Administrator, or per-user Local Group Policy objects.
- 6. Click Ok. Click Finish.
- 7. Switch back to the Local Group Policy Editor. In the left pane, expand Local Computer Policy > Computer Configuration > Windows Settings.
- 8. Right-click Policy-based QoS and select Create new policy.



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File Action View Help					
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 Local Computer Policy Mean Policy Computer Configuration 	on	Policy Name	Application Name	Protocol	Source Port
⊞					
	on Policy /Shutdown)				
	5				
	Create new p Advanced Q	oolicy oS settings			
-	View				
	Export List				
	Help				
Policy-based QoS		<u> </u>			

Figure 2: The Local Group Policy Editor window

9. In the new window, enter a policy name and specify a DSCP value from 0-63. Click **Next**.

Policy-based QoS	X
Create a QoS policy A QoS policy applies a Differentiated Services Code Point (DSCP) value, throttle rate, or both to outbound TCP, UDP, or HTTP response traffic. Policy name: AltiGen_QoS	
Specify DSCP Value:	
Specify Outbound Throttle Rate:	
Learn more about QoS Policies	
< Back Next > Cancel	

Figure 3: Enter a name for the policy and a DSCP value



10. Select **All applications** and then click **Next**.

Policy-based QoS
This QoS policy applies to:
All applications
O Only applications with this executable name:
Example: application.exe or %ProgramFiles%\application.exe
Only <u>H</u> TTP server applications responding to requests for this URL:
Include subdirectories and files
Example: http://myhost/training/ or https://*/training/ Example of non-standard TCP port: http://myhost:8080/training/ or https://myhost:*/training/
Learn more about QoS Policies
< <u>₿</u> ack <u>N</u> ext > Cancel

Figure 4: Specify the policy applies to all applications

11. Select Any source IP address and Any destination IP address in this panel and click Next.

Policy-based QoS				
Specify the source and destination IP addresses. A QoS policy can be applied to outbound traffic that is from a source or to a destination IP (IPv4 or IPv6) address or prefix. For HTTP response traffic, the destination IP address or prefix denotes the client(s) that issued the HTTP request.				
This QoS policy applies to:				
Any source IP address				
○ <u>O</u> nly for the following source IP address or prefix:				
This QoS policy applies to:				
Any destination IP address				
○ Only for the following destination IP address or prefix:				
Example for a host address: 1.2.3.4 or 3ffe:ffff::1 Example for an address prefix: 192.168.1.0/24 or fe80::1234/48				
Learn more about QoS Policies				
< <u>B</u> ack <u>N</u> ext > Cancel				

Figure 5: Specify source and destination IP addresses



12. Open MaxCS Administrator. Obtain the port range (in the *Local Ports* column) in the **Current Resource Statistics** window.

hh	Current Resource Statistics					— — ×	
Kefresh Interval							
Contamina ID	G.711 only resources					G.711 / G.722 / G.723 / G.729 k eso	
Galeway ID	Total	Active 6.711	Total	A G	.711	Active G.722	Active G.723
00	200	0	0		0	0	0
<							
acket JB Pao	cket loss Total Packe	t los Max Packe	t koss	Jitter	Local Port	5	Kemote IP 🔨
-	-	-	-	-	49664/5		-
· ·	-	-	-	-	49666/7		-
-	-	-	-	-	49668/9		-
-	-	-	-	-	49670/1		-
-	-	-	-	-	49672/3		-
-	-	-	-	-	49674/5		-
-	-	-	-	-	49676/7		-
-	-	-	-	-	49678/9		-
-	-	-	-	-	49680/1		-
-	-	-	-	-	49682/3		-
-	-	-	-	-	49084/5		-
-	-	-	-	-	49080/7		-
	-	-	-	_	49000/9		-
	_	-	_		49692/3		
<							>
			-				
Gateway ID	Meet e confere	nce Messbe	r Count				^
00	00.00		0				=
0 00	00:01		- 0				
00	00:03	0	0				
0 00	00:04	C	0				
0 00	00:05	C	0				
0 00	00:06	C	0				~
JL					_		

Figure 6: MaxCS Administrator Current Resource Statistics



- 13. Switch back to the QoS policy window.
 - A. Select **UDP** for the protocol.
 - B. Select **From this source port number or range** and enter the port range from step 12.
 - C. Select To any destination port.
 - D. Click Finish.

Policy-b	ased QoS
Specify the protocol and port numbers. A QoS policy can be applied to outbound traffic u range, or a destination port number or range.	sing a specific protocol, a source port number or
Select the protocol this QoS policy applies to:	
Specify the source port number:	
O From any source port	
• From this source port number or range:	49664:50062
	Example for a port: 443 Example for a port range: 137:139
Specify the destination port number:	
• To any destination port	
\bigcirc To this destination port number or range:	
Learn more about QoS Policies	
	< <u>B</u> ack Finish Cancel

Figure 7: Set QOS options

Configure Each MaxAgent Client System

Repeat the steps listed in the previous section on each MaxAgent client system: add the policy with the same steps, but use port number 30000.

Notes

If you had a Windows client machine on which you are pushing Policy Based QoS, and you noticed in a subsequent network trace that the DSCP value is 0x00, perform these steps:

1. If you need to make DSCP values to take effect on the adapter which does not have Domain access, you need to add the following registry on the system:

HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\services\Tcpip\QoS

Type: REG_SZ



Name: Do not use NLA

Value: 1

Create the key "QoS" if it does not exist.

After you create the QoS registry key, reboot the computer.

2. If step 1 does not work, create an additional registry entry:

HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\services\Tcpip\Parameters] "DisableUserTOSSetting"=dword:00000000

Reboot the server and check the behavior.

If the system belongs to a domain, log in as a domain user; logging in as the local administrator or a user will not work.