

Configuring Bandwidth Control to a Siretta Router

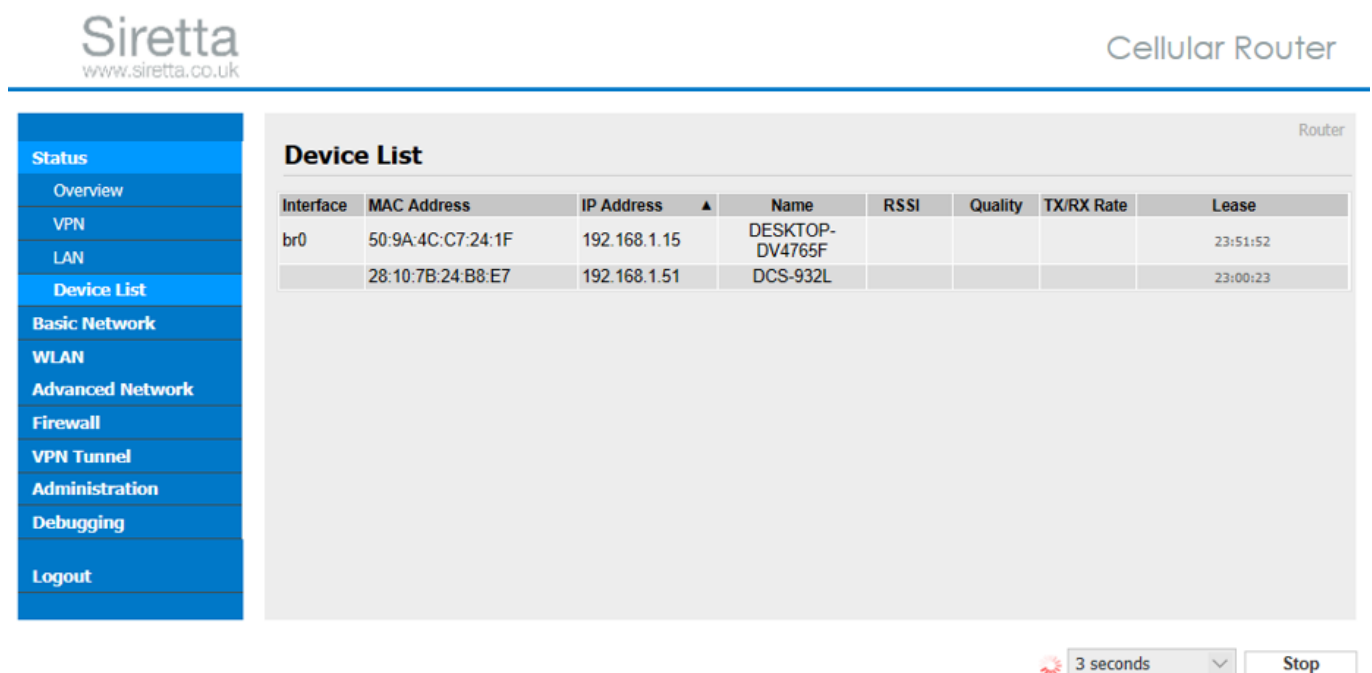
This guide provides step by step instructions for the configuration of Bandwidth Control on a Siretta router. These instructions may be used with any Siretta router. This document explains how to set bandwidth limits for specific devices attached to the router in order to control overall data usage on the cellular network.

The following products were used to create this document: -

- QUARTZ-W22-UMTS (EU) + ACCECSORIES
- CAMERA DCS-932L
- PC for configuration both Camera and router
- Data enabled sim card

Steps to configure bandwidth control:

1. Insert data enabled sim card into the router and configure it as explained in the Router Quick Start guide (separate document)
2. Once the router is connected to the cellular DATA network ready to transfer data, it will have been assigned an IP address by the cellular network (10.136.164.140 in this example).
3. Attach the camera to be bandwidth controlled (DCS-932L) to one LAN port of the router.
4. Navigate to Device List on the router GUI and you will see the listed devices as per the screenshot below which indicates MAC and local IP addresses of the devices attached to the router.



Siretta Cellular Router
www.siretta.co.uk


Interface	MAC Address	IP Address ▲	Name	RSSI	Quality	TX/RX Rate	Lease
br0	50:9A:4C:C7:24:1F	192.168.1.15	DESKTOP-DV4765F				23:51:52
	28:10:7B:24:B8:E7	192.168.1.51	DCS-932L				23:00:23

3 seconds

Note: Mac address of the camera is 28:10:7B:24: B8:E7

5. Navigate to advanced network tab of the router GUI.
6. Navigate to the Bandwidth Control sub-tab.

7. Check the “Enable Control” box.
8. Enter the MAC address of the device you wish to bandwidth control. In this example it is the camera with MAC address of 28:10:7B:24: B8:E.
9. Enter values for DL Rate, DL Ceil, UL Rate, UL Ceil and Priority.
10. Click Add, you will be presented with the screenshot below.


Cellular Router

Status

Basic Network

WLAN

Advanced Network

Port Forwarding

Port Redirecting

DMZ

IP Passthrough

Triggered

Captive Portal

linkCONNECT

UPnP/NAT-PMP

Bandwidth Control

VRRP

Static DHCP

Firewall

VPN Tunnel

Administration

Debugging

Logout

Bandwidth Control Router

Enable Control

Max Available Download Rate kbit/s

Max Available Upload Rate kbit/s

IP IP Range MAC Address	DLRate	DLCeil	ULRate	ULCeil	Priority	✕
28:10:7B:24:B8:E7	500000kbps	500000kbps	500000kbps	500000kbps	Highest	
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	Normal	⌵

Default Class

Enable Default Class

11. Table below explains parameters used in configuring bandwidth control.

Max Available Download Rate	Limit all the devices which are connected to the router
Max Available Upload Rate	Limit all the devices which are connected to the router
IP/ IP Range/MAC Address	Limit a specific user rata by IP/IP Range/ MAC Address
DL Rate	Download rate
DL ceil	Max download rate
UL Rate	Upload rate
UL ceil	Max upload rate
Priority	The priority of a specific user
Default Class	Limit the other devices which are not limited in the MAC/ IP list.

Note: -

DL rate range between 1 and 999999

DL Ceil range between 1 and 999999

UL rate range between 1 and 999999

UL Ceil range between 1 and 999999

Select priority from: -

- Lowest
- Low
- Normal
- High
- Or Highest from the drop-down menu.12. Click save and wait for the service to restart.

13. Now the setting is complete, Camera bandwidths is controlled by router.

Note: -

Multiple devices can be added using the similar way as described in this document.

14. Default Class can be enabled by checking “Enable Default Class” check box on step 11 above.

15. Enter default parameters of your choice (700000 used for the purpose of this guide).

- Status
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- UPnP/NAT-PMP
- Bandwidth Control**
- VRRP
- Static DHCP
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- VPN Tunnel
- Administration
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- Logout

Router

Bandwidth Control

Enable Control

Max Available Download Rate kbit/s

Max Available Upload Rate kbit/s

IP IP Range MAC Address	DLRate	DLCeil	ULRate	ULCeil	Priority	✕
28:10:7B:24:B8:E7	500000kbps	500000kbps	500000kbps	500000kbps	Highest	
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	Normal	▼

Default Class

Enable Default Class

Download Rate kbit/s

Download Ceil kbit/s

Upload Rate kbit/s

Upload Ceil kbit/s

16. Click save and wait for the service to restart.
17. Now the setting is complete with Default Class Enabled.

Note: The purpose of default class is to limit the other devices which are not limited in the IP/MAC address lists. For example in this guide camera (DCS-932L) and PC connected to the router as seen in step 5 above, we have limited camera with "IP/ IP Range/MAC Address" list, and the default class is enabled, this limit will work for the PC.

This application note can be used for setting other devices than stated in the document.

Any queries please contact support@siretta.co.uk

Siretta's range of router products can be found at the following link
<https://www.siretta.com/industrial-Routers/>