

## How to setup bandwidth control function in DSR

This scenario is about customers intended to ensure important applications with Email, Web and file transfer that can obtain guarantee bandwidth for business requirement in LAN environment. And also, Email communication is their first priority; Web application is second priority and file transfer is third priority depends on company policy.

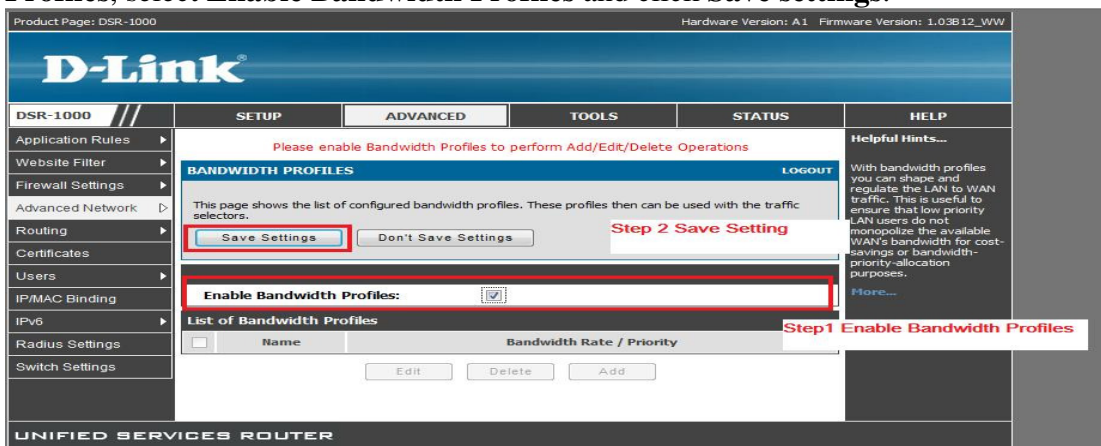
[Topology]:

PC1(192.168.10.100)----DSR-1000WAN1(1.1.1.1)------(1.1.1.2) Iperf\_Server

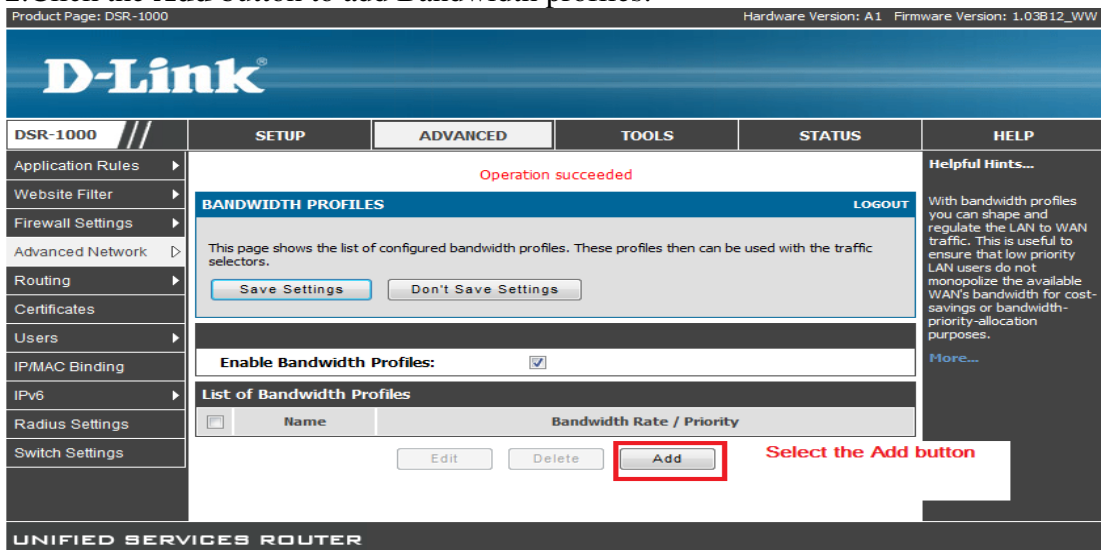
DSR-firmware:1.03.B12

[Configuration]:

1. Under the **ADVANCED**->**Advanced Network**-> **Traffic Management** ->**Bandwidth Profiles**, select **Enable Bandwidth Profiles** and click **Save settings**.



2. Click the **Add** button to add Bandwidth profiles.



3. Specify the **Name**, **Profile Type** and **Minimum Bandwidth Rate**, **Maximum bandwidth Rate**, **WAN Interface** like as follows and click the **Save Settings**:

**3a.Name:** This field is the unique identifier for the profile.

**3b.Profile Type:** This field is to specify if the profile is a rate controlling profile or a priority controlling profile. Rate control will allow the User to define a minimum and maximum rate in Kbps and the internet pipeline availability is accordingly bounded. For a Priority type profile the exact rate itself is not bounded rather associated traffic is allocated to pre-defined priority segments to ensure available bandwidth is first consumed first by the highest priority segment.

**3c.Priority:** This is the priority of the traffic to set the bandwidth rate on. Choose from low, medium and high priorities.

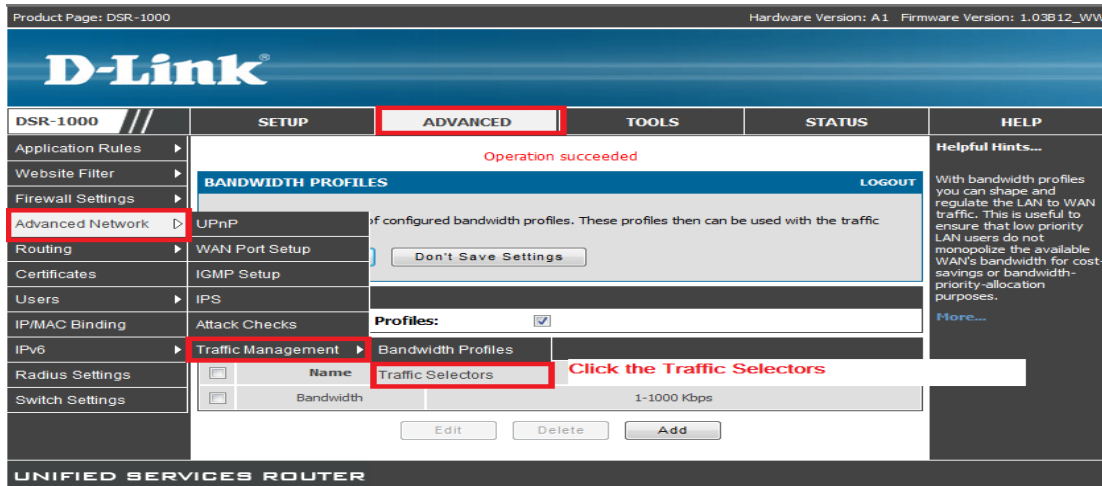
**3d.Minimum Bandwidth Rate:** This field is the minimum bandwidth value in Kbps for the profile

**3e.Maximum Bandwidth Rate:** This field is the maximum bandwidth value in Kbps for the profile.

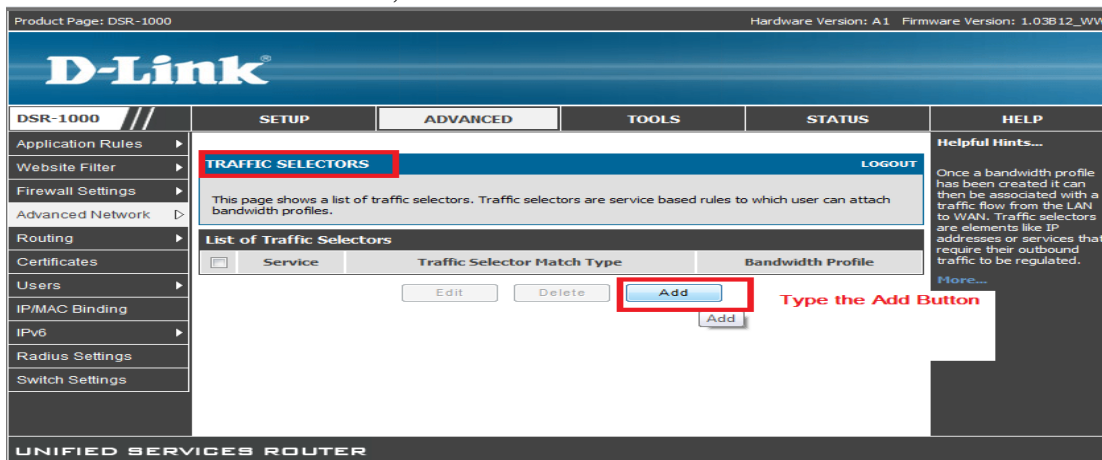
**3f.WAN Interface:** The WAN interface on which the bandwidth limiting profile is to be applied. Choose from Dedicated WAN (WAN1) or Configurable WAN (WAN2).

4. After click Save Settings, you will see the profiles has been created as figure.

5. Under the **ADVANCED->Advanced Network-> Traffic Management ->Traffic Selector**, double click it.



6. Under the **Traffic Selectors**, click **Add** button.



7. Specify the following fields and click Save Settings

**7a. Available Profiles:** Select from a list of configured bandwidth profiles upon which to apply the traffic selector criteria.

**7b. Service:** User can select from a list of pre-defined or custom defined services for the traffic selector rule. Custom services can be defined under Advanced->Firewall->Custom Services.

**7c. Traffic Selector Match Type:** The match type can be one of the following: IP, MAC address, Port name and Interface.

**IP Address:** If the traffic selector match type is IP, enter the IP address in this field.

**MAC Address:** If the traffic selector match type is MAC address, enter the MAC address in this field for the traffic selector rule.

**Port Name:** The LAN port number/name to apply the traffic selector rule if the match type is Port name.

**Interface:** If the match type is interface, select from the interface number provided in the drop down list. Only LAN and VLAN interfaces are applicable.

Product Page: DSR-1000 Hardware Version: A1 Firmware Version: 1.03B12\_WW

**D-Link**

DSR-1000 // SETUP ADVANCED TOOLS STATUS HELP

Application Rules Website Filter Firewall Settings Advanced Network Routing Certificates Users IP/MAC Binding IPv6 Radius Settings Switch Settings

**TRAFFIC SELECTORS** LOGOUT

This page allows user to configure various traffic rules, to which bandwidth profiles can be attached.

Save Settings Don't Save Settings

**Traffic Selector Configuration**

Available Profiles: Bandwidth  
 Service: ANY  
 Traffic Selector Match Type: IP  
 IP Address: 192.168.10.100  
 MAC Address: 00:1B:24:1E:4F:A8  
 Port Name: Port 1  
 Interface: 1

Helpful Hints...  
 Once a bandwidth profile has been created it can then be associated with a traffic flow from the LAN to WAN. Traffic selectors are elements like IP addresses or services that require their outbound traffic to be regulated.  
[More...](#)

8. After Save setting, it will be looks like the following figure.

Product Page: DSR-1000 Hardware Version: A1 Firmware Version: 1.03B12\_WW

**D-Link**

DSR-1000 // SETUP ADVANCED TOOLS STATUS HELP

Application Rules Website Filter Firewall Settings Advanced Network Routing Certificates Users IP/MAC Binding IPv6 Radius Settings Switch Settings

Operation succeeded

**TRAFFIC SELECTORS** LOGOUT

This page shows a list of traffic selectors. Traffic selectors are service based rules to which user can attach bandwidth profiles.

**List of Traffic Selectors**

<input type="checkbox"/>	Service	Traffic Selector Match Type	Bandwidth Profile
<input type="checkbox"/>	Bandwidth_Service	MAC	Bandwidth

Edit Delete Add

Helpful Hints...  
 Once a bandwidth profile has been created it can then be associated with a traffic flow from the LAN to WAN. Traffic selectors are elements like IP addresses or services that require their outbound traffic to be regulated.  
[More...](#)

UNIFIED SERVICES ROUTER

**[Testing result and procedure]:**

**1. Use the iperf and to see if the maximum bandwidth is below 1000K**

```
C:\Users\admin\Desktop\TEST tool\iperf>iperf -c 1.1.1.2
-----
Client connecting to 1.1.1.2, TCP port 5001
TCP window size: 8.000 KByte (default)
-----
[ 108] local 127.0.0.1 port 52894 connected with 1.1.1.2 port 5001
[ ID] Interval      Transfer    Bandwidth
[ 108] 0.0-10.6 sec  1.22 MBytes  967 Kbits/sec
-----
C:\Users\admin\Desktop\TEST tool\iperf>iperf -c 1.1.1.2
-----
Client connecting to 1.1.1.2, TCP port 5001
TCP window size: 8.000 KByte (default)
-----
[ 108] local 127.0.0.1 port 52906 connected with 1.1.1.2 port 5001
[ ID] Interval      Transfer    Bandwidth
[ 108] 0.0-10.9 sec  1.23 MBytes  944 Kbits/sec
-----
C:\Users\admin\Desktop\TEST tool\iperf>iperf -c 1.1.1.2
-----
Client connecting to 1.1.1.2, TCP port 5001
TCP window size: 8.000 KByte (default)
-----
[ 108] local 127.0.0.1 port 52922 connected with 1.1.1.2 port 5001
[ ID] Interval      Transfer    Bandwidth
[ 108] 0.0-10.8 sec  1.22 MBytes  944 Kbits/sec
-----
C:\Users\admin\Desktop\TEST tool\iperf>
```