

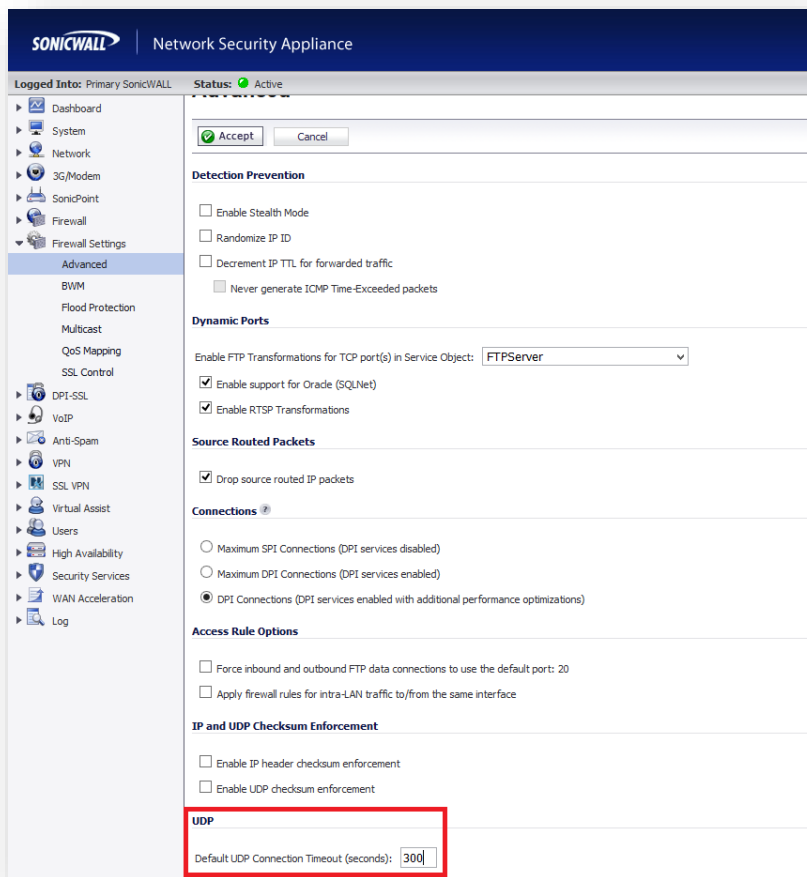


Sonicwall Configuration for TeleVoIPs

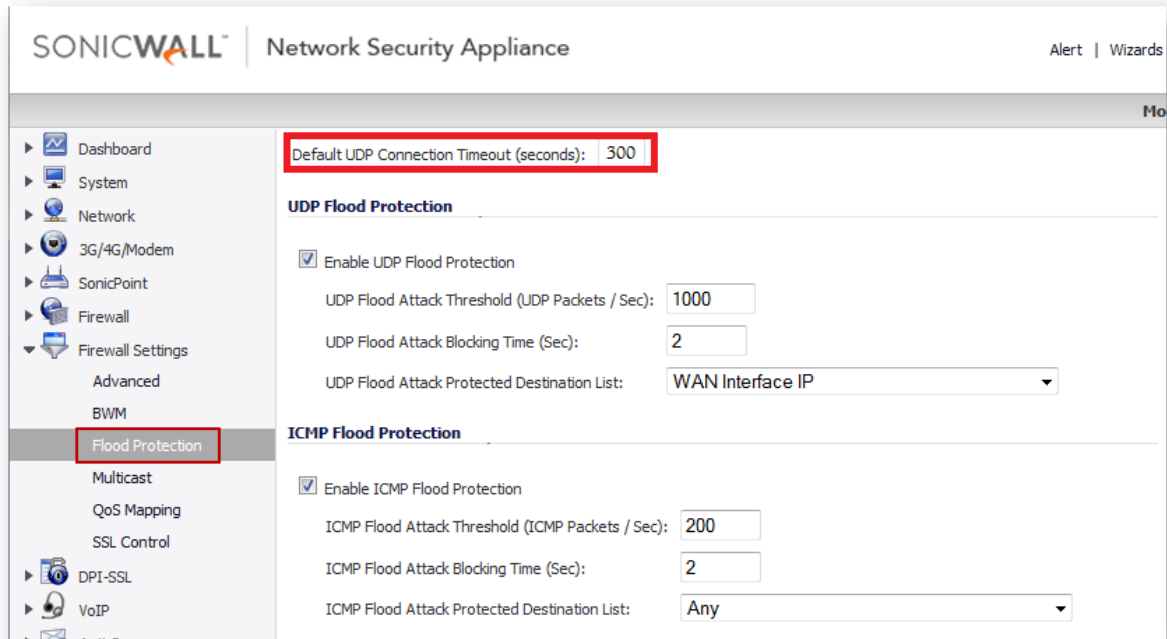
Follow the directions below to ensure proper configuration and QoS settings for SonicWall firewalls. Please understand, instructions may vary based on the model and firmware version of your device.

I. Required Changes

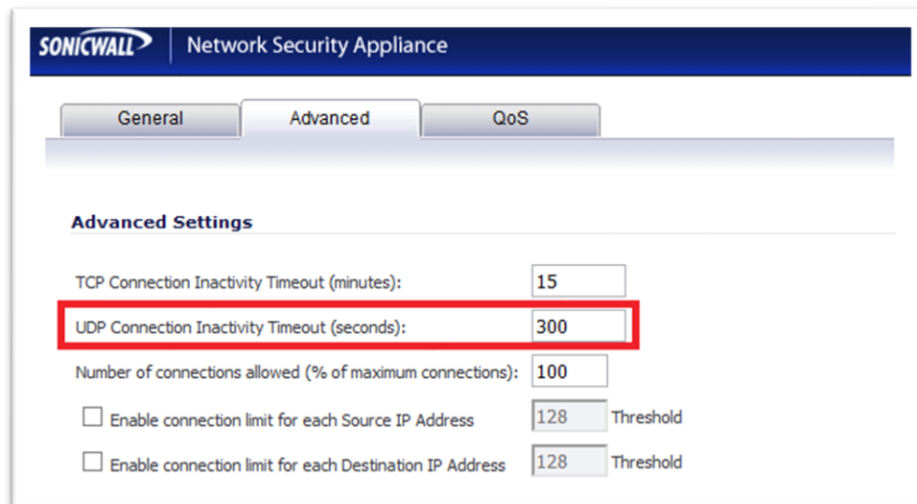
1. Older models - Go to **Firewall Settings > Advanced**
2. Under the **UDP** settings, set **Default UDP Connection Timeout** to **300**



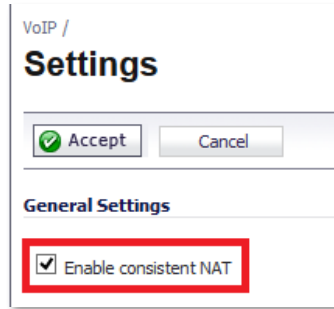
3. Newer Models - Under **Firewall Settings > Flood Protection** section set **Default UDP Connection Timeout to 300**.



4. Under **Firewall > Access Rules**, Edit the Rule that applies to the outbound traffic that the TeleVoIPs phones are on. Normally this is the Default **LAN to WAN** rule. Update the **UDP timeout to 300**. This is changed under the **Advanced** settings of that rule.



- Under **VOIP Settings**, check the box for **Enable consistent NAT**

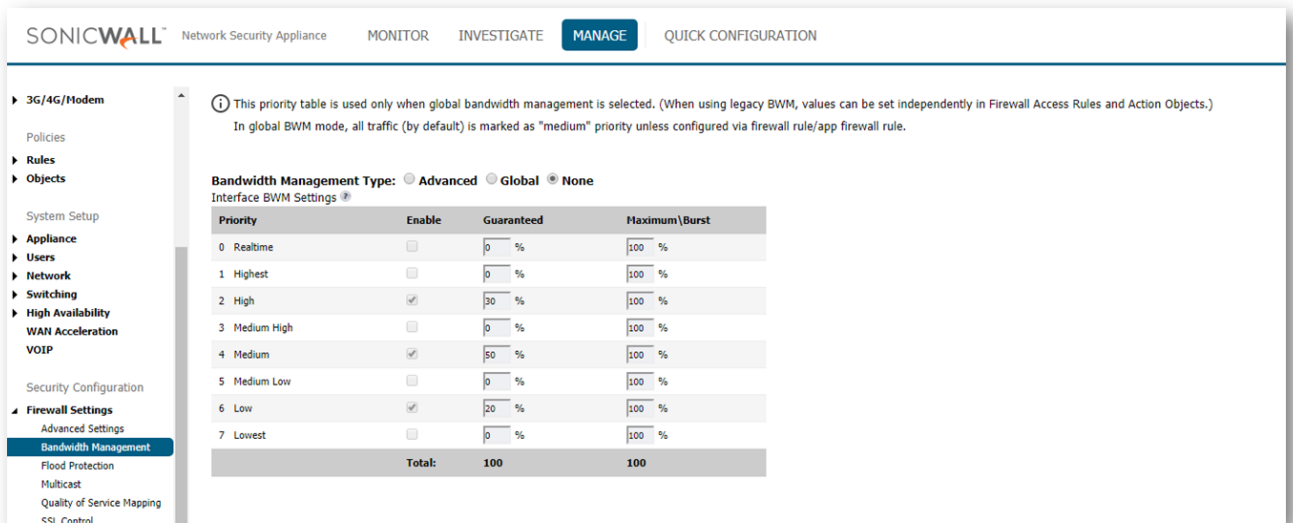


- If you are still experiencing issues, please reach out to support@televoips.com, as additional settings to Flood or Intrusion Protection may be required.

II. QoS Optimization (Recommended)

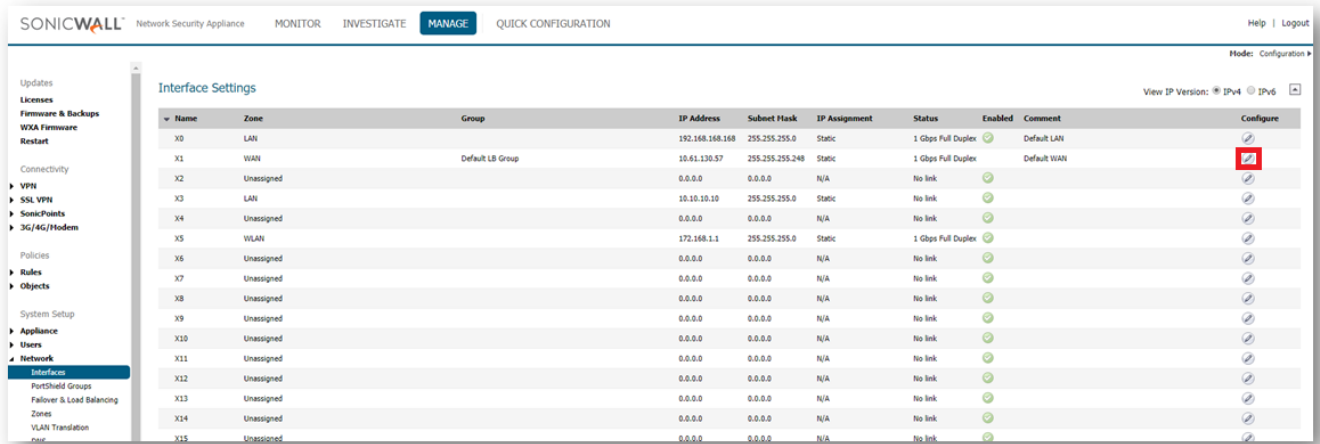
A. Enabling Bandwidth Management (Step 1)

- Go to **Firewall Settings > BWM**.
- Enable **0 Realtime** and set to 10% - 20%, Then modify either High or Low so total adds up to 100%
- Click **Accept** to save the settings.

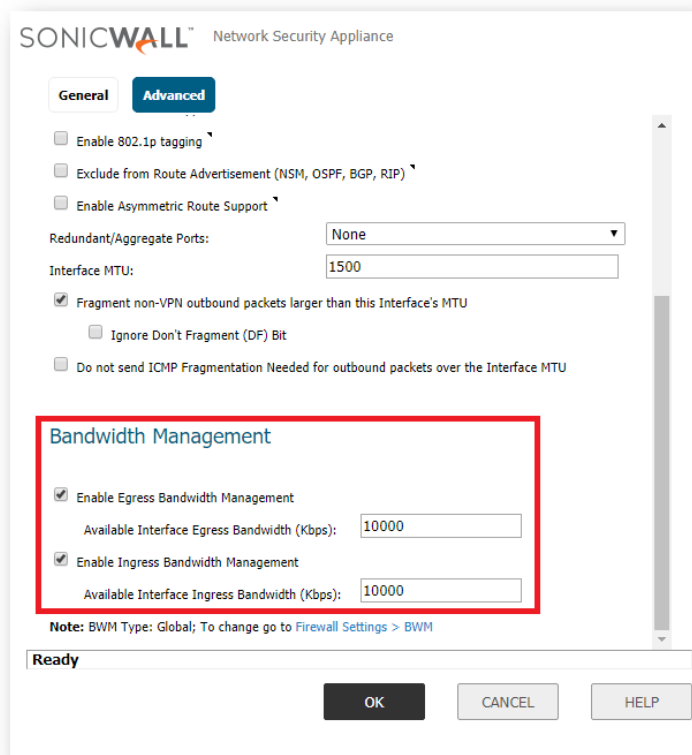


B. Enabling Bandwidth Management (Step 2)

1. Go to **Network > Interfaces** and on the right side of the screen open the **Configure** menu for the desired **WAN Interface**.



2. Go to the **Advanced** tab and **Enable** both the **Ingress** and **Egress Bandwidth Limitation** checkboxes.



- Input the **Ingress** and **Egress** Speeds of your WAN in Kbps. If you're unsure of these values, contact your ISP.
- Click **OK** to save the settings and close the window.

C. Enabling Bandwidth Management (Step 3)

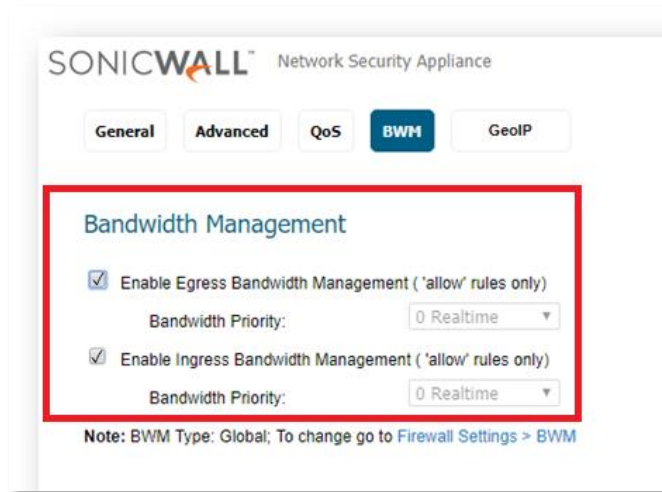
- Navigate to **Rules > Access Rules** and find the **Access Rule** you would like to apply **BWM** to:

If a new Access Rule is required, click **Configure** on the relevant **Access Rule** or click **Add** and create the rule by entering the desired **Source**, **Destination**, **Service**, etc. into the fields.

If creating a new rule set, click **Allow** from **Any to TeleVoIPs Phone server IP and Fax server** if applicable and **Any Port** and **Any Service**.

#	From	To	Priority	Source	Destination	Service	Action	Users Incl.	Users Excl.	Disable DPI	Flow report	Geo-IP	Botnet	EnableSip	EnableS23	Pkt monitor
1	DHIZ	DHIZ	1	Any	Any	Any	Allow	All	None							
2	DHIZ	DHIZ	2	Any	Any	Any	Allow	All	None							
3	DHIZ	LAN	2	Any	Any	Any	Deny	All	None							
4	DHIZ	VPN	1	WLAN RemoteAccess Networks	Any	Any	Allow	All	None							
5	DHIZ	VPN	2	WAN RemoteAccess Networks	Any	Any	Allow	All	None							
6	DHIZ	WAN	1	Any	Any	Any	Allow	All	None							
7	DHIZ	WAN	2	Any	Any	Any	Allow	All	None							
8	DHIZ	WLAN	1	Any	Any	Any	Deny	All	None							
9	DHIZ	WLAN	2	Any	Any	Any	Deny	All	None							
10	DHIZ	LAN	1	Any	Any	Any	Deny	All	None							
11	LAN	WAN	2	Any	Any	Any	Allow	All	None							
12	LAN	DHIZ	2	Any	Any	Any	Allow	All	None							
13	LAN	LAN	2	Any	All XO Management IP	HTTP Management	Allow	All	None							
14	LAN	LAN	3	Any	All XO Management IP	HTTP Management	Allow	All	None							

2. On the **Access Rule** creation/modification screen, select the **BWM** tab. Enable **Egress and Ingress Bandwidth Management** and select **0 Realtime Bandwidth Priority**.



3. Click **OK** to save the settings and close the window