

TP LINK 300M Wireless N Router Setup

- 1- To put modem on bridge mode and enable PPPoE user name / password (for example for Bell) just go to Network => WAN => WAN Connection Type:

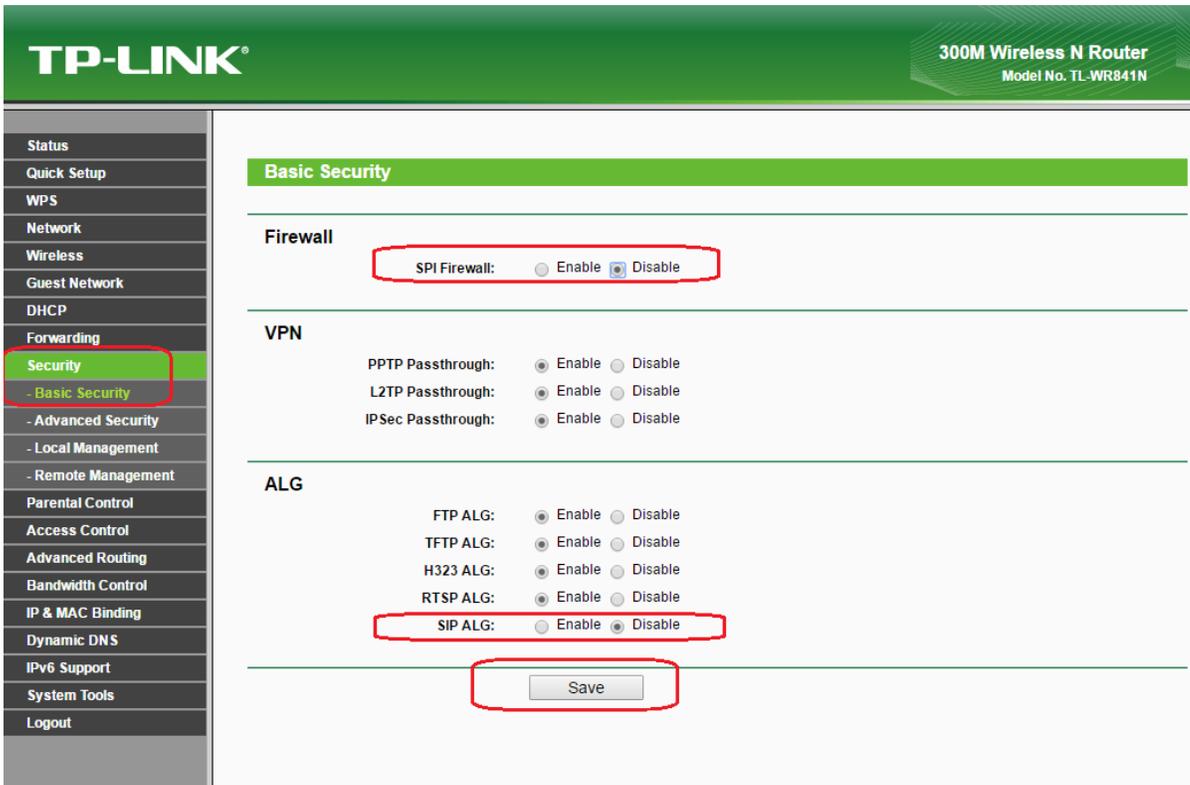
The screenshot shows the TP-LINK router's WAN configuration interface. The left sidebar contains a menu with 'Network' highlighted, and 'WAN' selected. The main content area is titled 'WAN' and contains the following settings:

- WAN Connection Type:** A dropdown menu is set to 'PPPoE/Russia PPPoE'. A 'Detect' button is located to the right.
- PPPoE Connection:** A section containing three input fields: 'User Name:', 'Password:', and 'Confirm Password:'.
- Secondary Connection:** Three radio buttons are present: 'Disabled' (selected), 'Dynamic IP', and 'Static IP (For Dual Access/Russia PPPoE)'.
- WAN Connection Mode:** Three radio buttons are present: 'Connect on Demand', 'Connect Automatically' (selected), and 'Time-based Connecting'. Below 'Time-based Connecting' are input fields for 'Period of Time: from 0 : 0 (HH:MM) to 23 : 59 (HH:MM)'. Below 'Connect on Demand' is a 'Max Idle Time' field set to 15 minutes.
- At the bottom of the mode section are 'Connect', 'Disconnect', and 'Disconnected!' buttons.
- At the very bottom of the page are 'Save' and 'Advanced' buttons.

- 2- Otherwise if there is no bridge mode just leave the WAN connection Type to default (which is Dynamic IP)

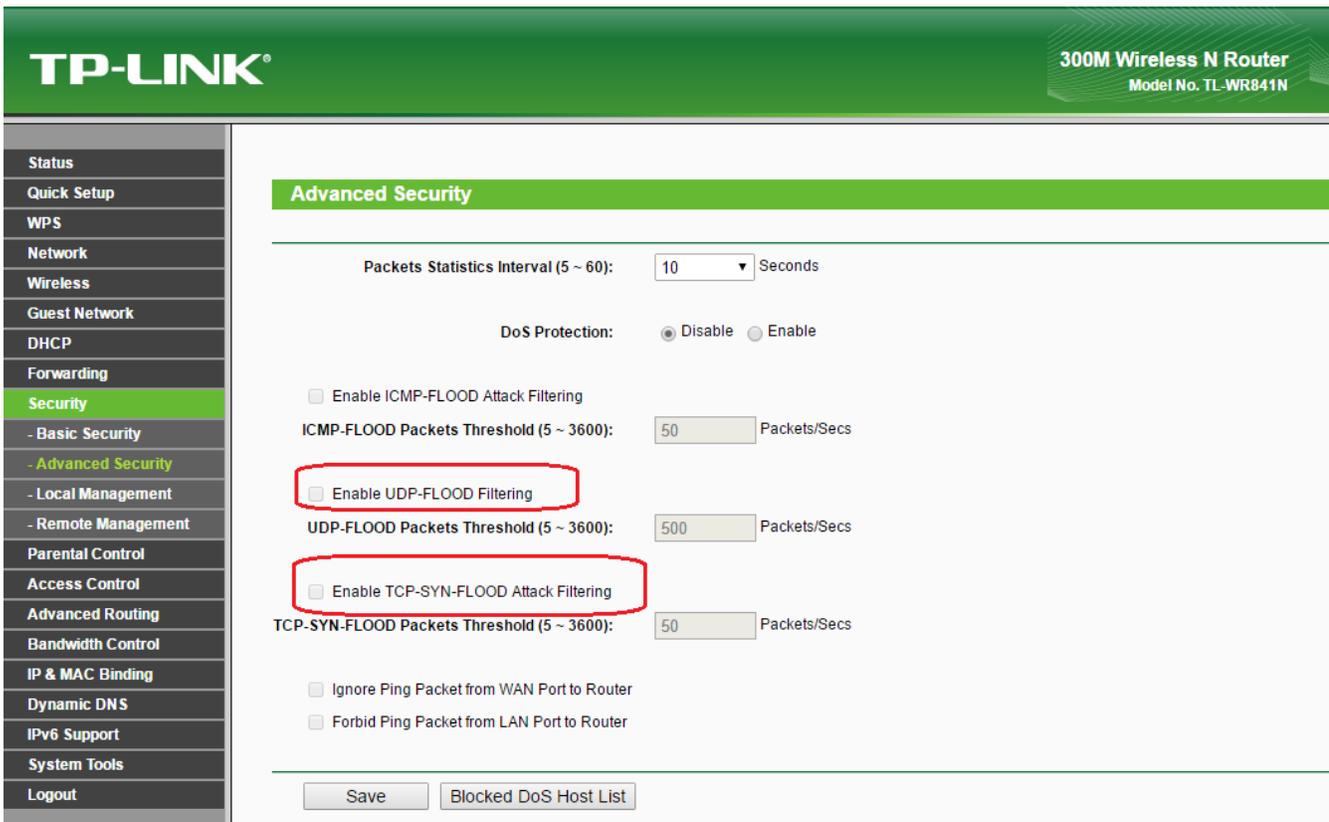
- 3- Security => Basic Security
 - a. Under Firewall, set SPI Firewall to Disable

- b. Under ALG, set SIP ALG to disable and save



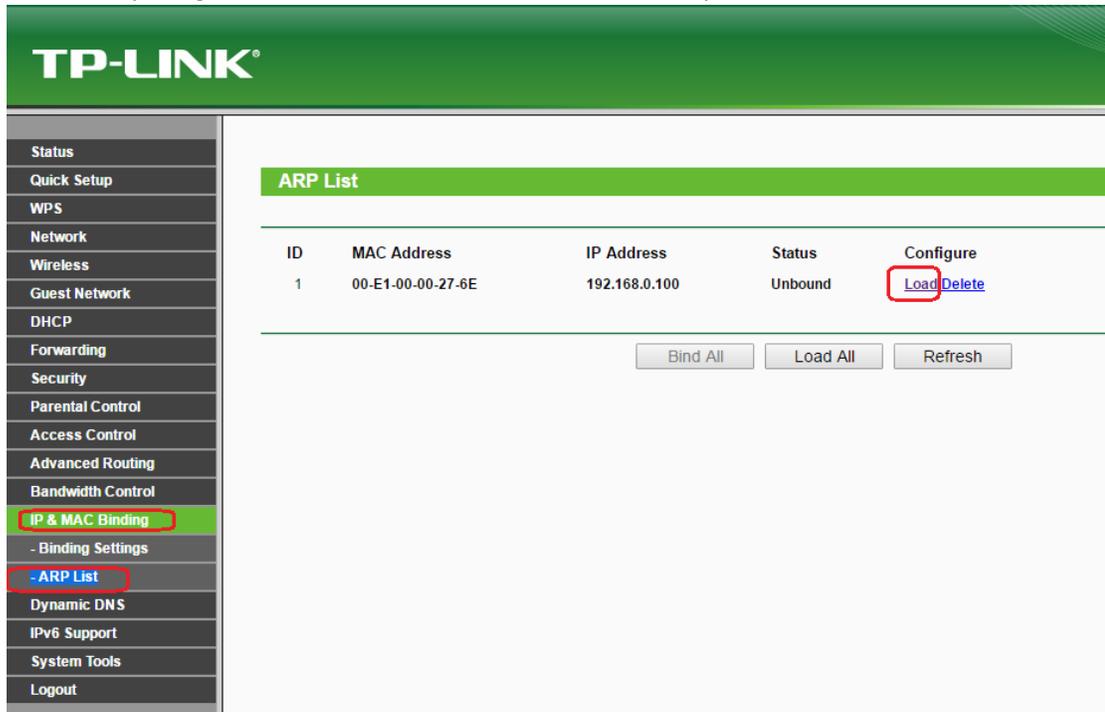
The screenshot shows the 'Basic Security' configuration page for a TP-Link 300M Wireless N Router (Model No. TL-WR841N). The left sidebar contains a menu with 'Security' highlighted, and 'Basic Security' selected. The main content area is divided into three sections: Firewall, VPN, and ALG. In the Firewall section, the 'SPI Firewall' option is set to 'Disable'. In the VPN section, 'PPTP Passthrough', 'L2TP Passthrough', and 'IPSec Passthrough' are all set to 'Enable'. In the ALG section, 'FTP ALG', 'TFTP ALG', 'H323 ALG', and 'RTSP ALG' are all set to 'Enable', while 'SIP ALG' is set to 'Disable'. A 'Save' button is located at the bottom of the page.

- 4- Security => Advanced Security, please ensure:
- a. UDP-Flood Filtering is disabled
 - b. TCP-SYN-Flood Attack Filtering is disabled (off)

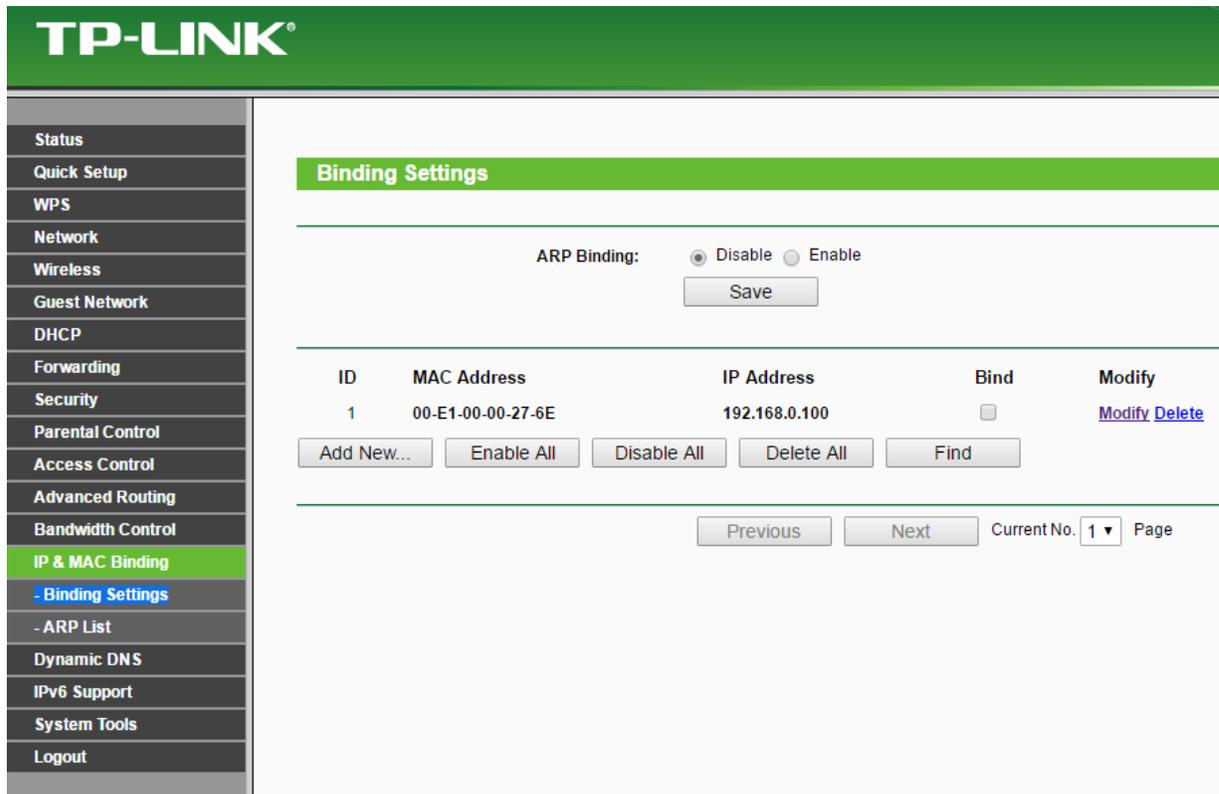


The screenshot shows the 'Advanced Security' configuration page for a TP-Link 300M Wireless N Router (Model No. TL-WR841N). The left sidebar contains a menu with 'Security' highlighted, and 'Advanced Security' selected. The main content area includes settings for 'Packets Statistics Interval (5 ~ 60):' set to 10 seconds, 'DoS Protection' set to 'Disable', and three checkboxes for attack filtering: 'Enable ICMP-FLOOD Attack Filtering' (unchecked), 'Enable UDP-FLOOD Filtering' (checked), and 'Enable TCP-SYN-FLOOD Attack Filtering' (checked). Below these are threshold settings: 'ICMP-FLOOD Packets Threshold (5 ~ 3600):' set to 50, 'UDP-FLOOD Packets Threshold (5 ~ 3600):' set to 500, and 'TCP-SYN-FLOOD Packets Threshold (5 ~ 3600):' set to 50. At the bottom, there are checkboxes for 'Ignore Ping Packet from WAN Port to Router' and 'Forbid Ping Packet from LAN Port to Router', both unchecked. A 'Save' button and a 'Blocked DoS Host List' button are located at the bottom of the page.

- 5- QoS (Quality of service): To be setup if client is sharing the VoIP Internet with Data
- Once all the phones are plugged in, please go to "IP & MAC Binding" => "-ARP List" and click on "Load" to statically assign an IP address to the mac address of the phones



- Once all devices are done, Click on "IP & MAC Binding" => "Binding Settings" to ensure devices are all added:



- c. Go to “Bandwidth Control Settings” => “Control Settings”, Enable Bandwidth Control and put a realistic value for Egress (Upload speed) and Ingress (Download speed) (values depend on client’s bandwidth)

The screenshot shows the TP-Link router web interface. The top header is green with the TP-LINK logo on the left and "300M Wireless N Router Model No. TL-WR841N" on the right. A left sidebar contains a menu with items like Status, Quick Setup, WPS, Network, Wireless, Guest Network, DHCP, Forwarding, Security, Parental Control, Access Control, Advanced Routing, Bandwidth Control (highlighted), Control Settings (sub-highlighted), - Rule List, IP & MAC Binding, Dynamic DNS, and IPv6 Support. The main content area is titled "Bandwidth Control Settings". It features a checkbox for "Enable Bandwidth Control" which is checked. Below it, "Line Type" has radio buttons for "ADSL" (selected) and "Other". There are two input fields: "Egress Bandwidth" with the value "10000" and "Ingress Bandwidth" with the value "20000", both labeled "Kbps". A "Save" button is located at the bottom right of the settings area.

- d. Lastly go to “Bandwidth Control Settings” => “Rule List” and create a rule per device (per IP), or if IPs are in a row you can just create a rule for the entire IP Range of the phones; the upload and download speed per each device need to be calculated and tuned based on the client’s bandwidth. We usually need to specify minimum 512 Kbps to each device

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ID	Description	Egress Bandwidth(Kbps)		Ingress Bandwidth(Kbps)		Enable	Modify
		Min	Max	Min	Max		
1	192.168.0.100	2000	5000	2000	5000	<input checked="" type="checkbox"/>	Modify Delete

Below the table, there are two buttons: "Add New..." (circled in red) and "Delete All". At the bottom, there are navigation buttons: "Previous", "Next", "Current No. 1", and "Page".