BODi rS™

More Bandwidth. More Reliability. More Survivability

Intelligent Load Balancing: Enforced Balance

Application Note

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PATTON

Understanding Outbound Balance Routing

- The BODi delivers a simple, cost effective way to manage Multi WAN network environments through intelligent Load Balancing Algorithms and advanced VPN bonding technology. The BODi delivers in box solutions to help migrate away from expensive lease line WAN providers in favor of less expensive WAN deliveries, such as cable providers, fiber, and dsl providers, while providing or maintaining business or mission critical reliability and survive-ability to your network. This presentation will focus on pre-configured WAN Balancing Algorithms and how to easily setup and configure your BODi rS for your network needs.

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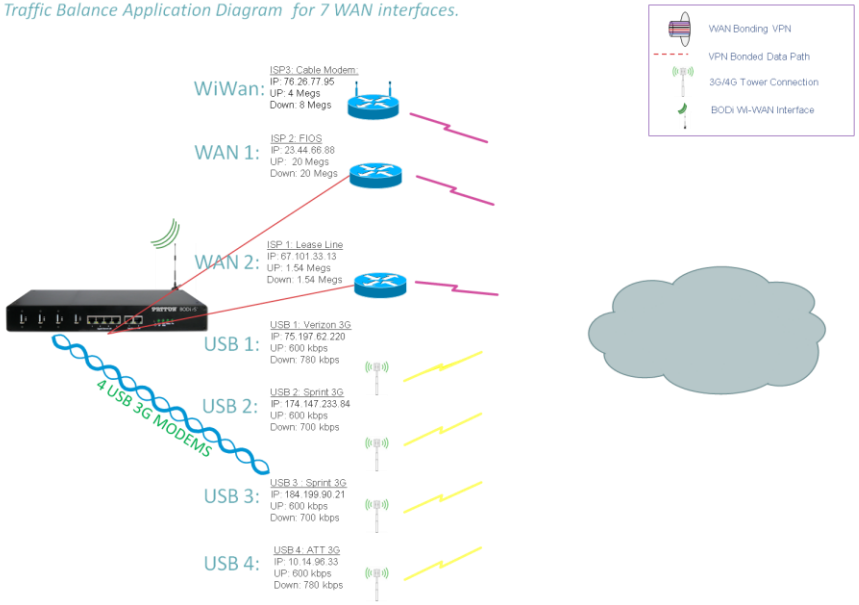
Load sharing across multiple WAN connections

- **Balance up to 7 WAN interfaces using preconfigured balancing algorithms**
  - **Weighted Balance**: Assign more traffic to a faster links or less traffic to a connection with a costly bandwidth caps.
  - **Priority:** Route traffic to your preferred link as long as it's available.
  - **Overflow Balance:** Prevent traffic flow from slowing down when the connection runs out of available bandwidth.
  - **Least Used:** Help you choose the better connection with more free bandwidth.
  - **Enforced:** Restrict outbound traffic to a particular connection.
  - **Lowest Latency:** Give you the fastest response time when using applications like online gaming.
  - **Persistence:** Eliminate session termination issue for HTTPS, E-banking, and other secure websites.

Traffic Balance Application Diagram for 7 WAN interfaces.



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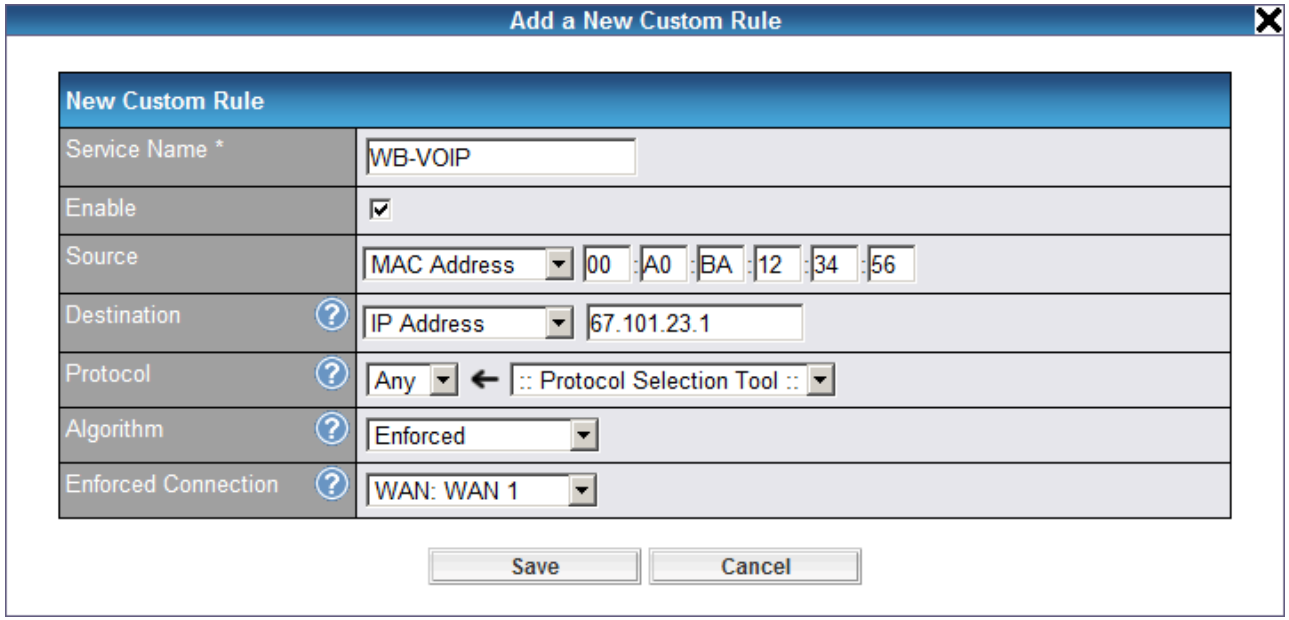
WAN Optimization: Let's Explore Enforced WAN Balance

- Configure BODi to enforce only one outgoing WAN interface
  - Enforce all selected outgoing traffic to go out only 1 WAN interface
  - Route by Source and Destination IP, Network, Protocol, Port
  - Use WAN BONDING as an 8th WAN interface



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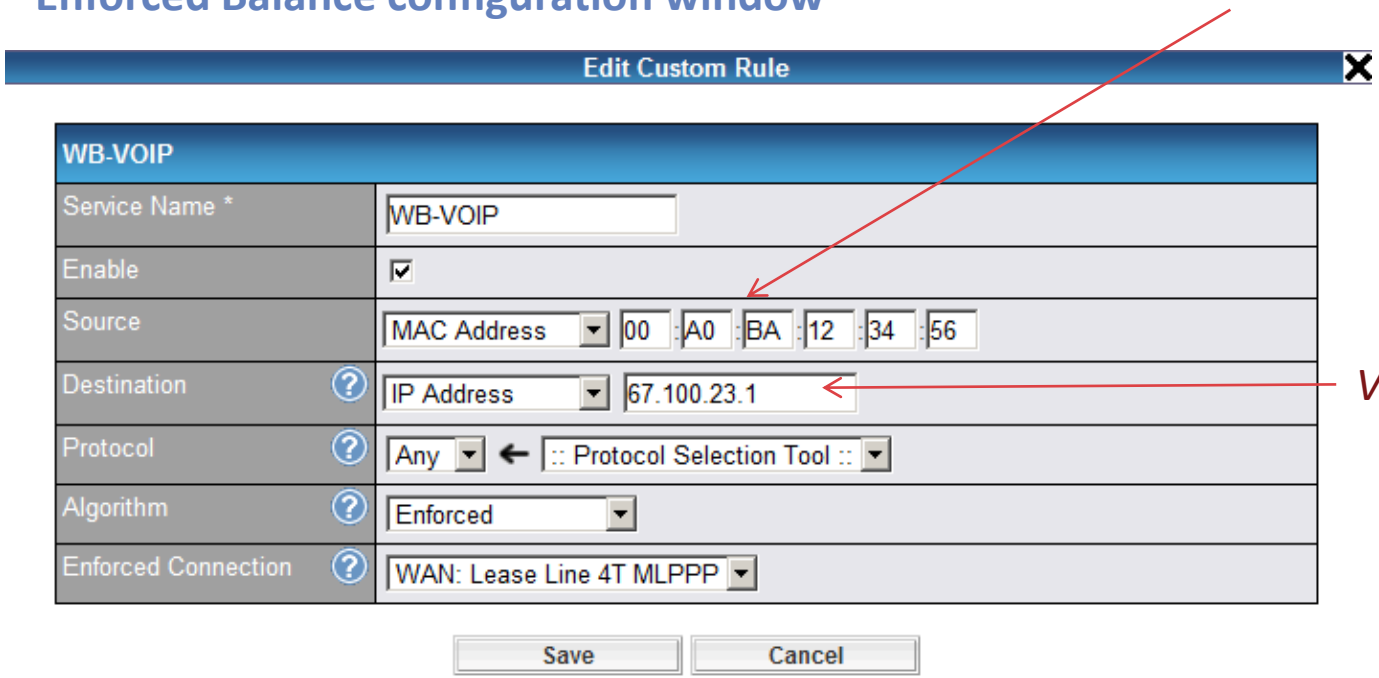
Enforced Balance configuration window

MAC Address of my Patton VOIP Gateway



VOIP Provider IP Address

Enforced VOIP Connection:

In this application my Patton VOIP Gateway is registered to my provider through a MLPPP Lease Line connection. Authentication for Outgoing Voice calls must be through this Lease Line Connection. This rule will enforce that all VOIP traffic from my Patton Gateway with the same *source MAC address: 00:A0:BA:12:34:56* above that has the *Destination IP Address: 67.100.23.1* will only use my lease line connection.

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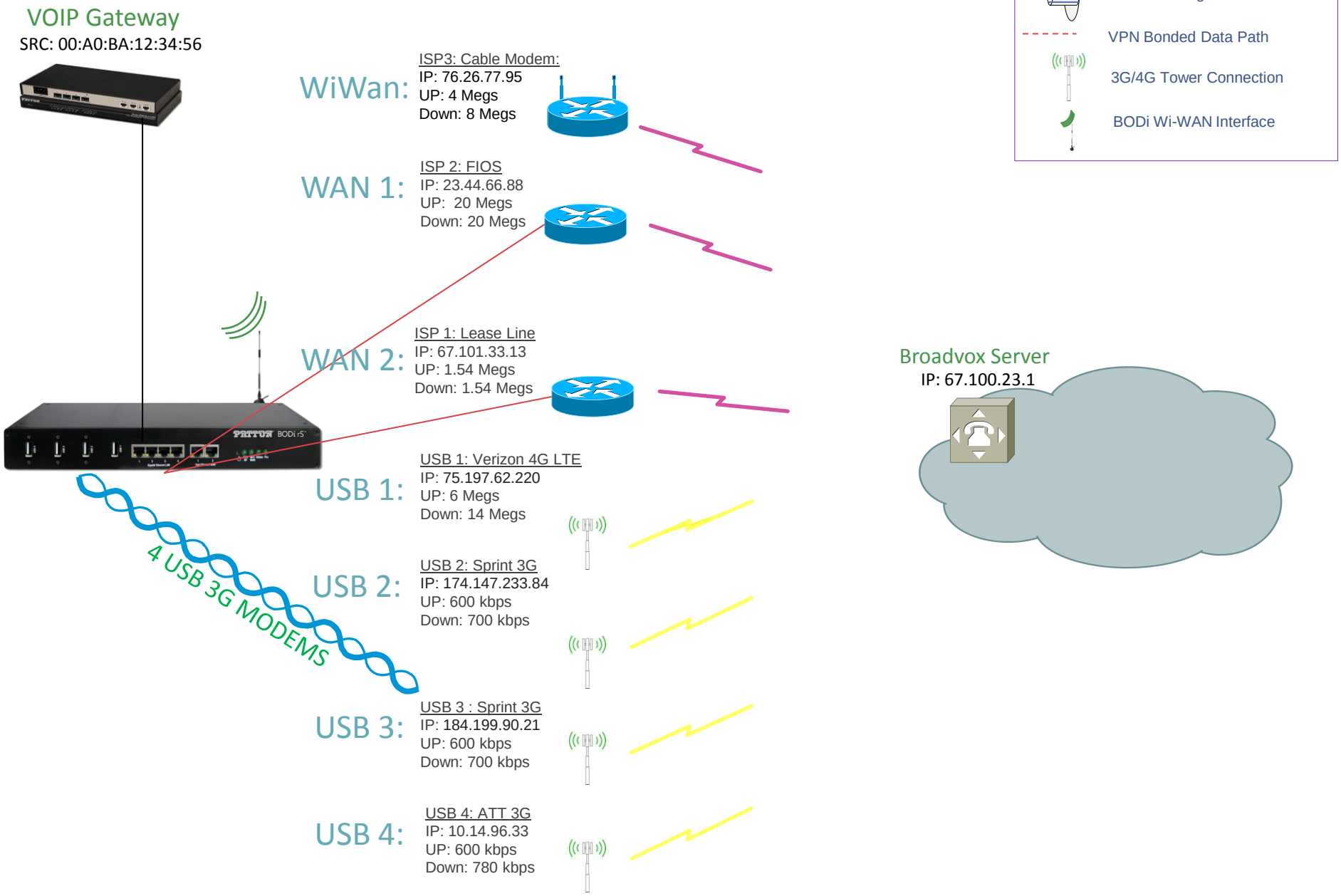
Enforced Outbound Traffic Balance App



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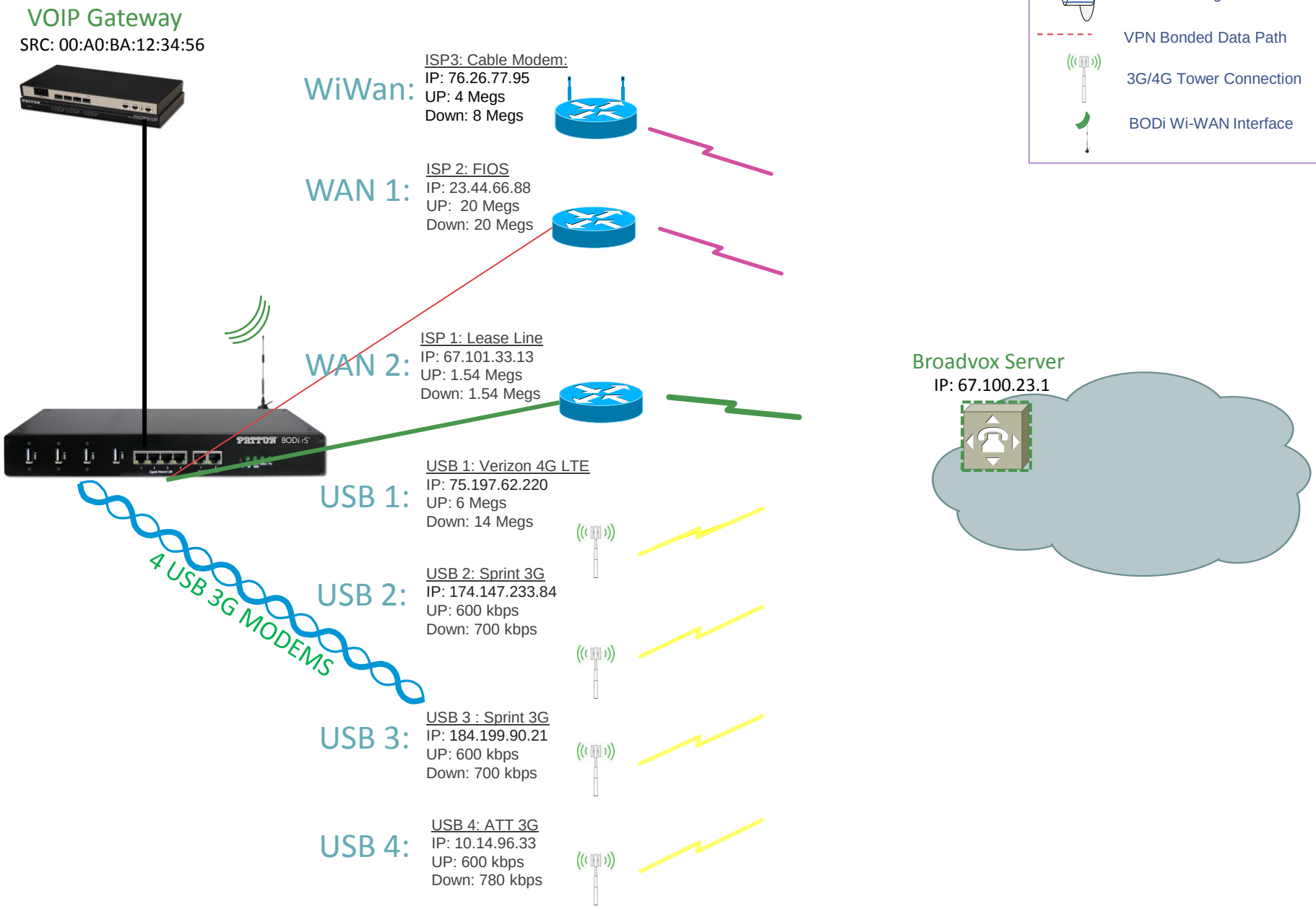
Enforced Outbound Traffic Balance App



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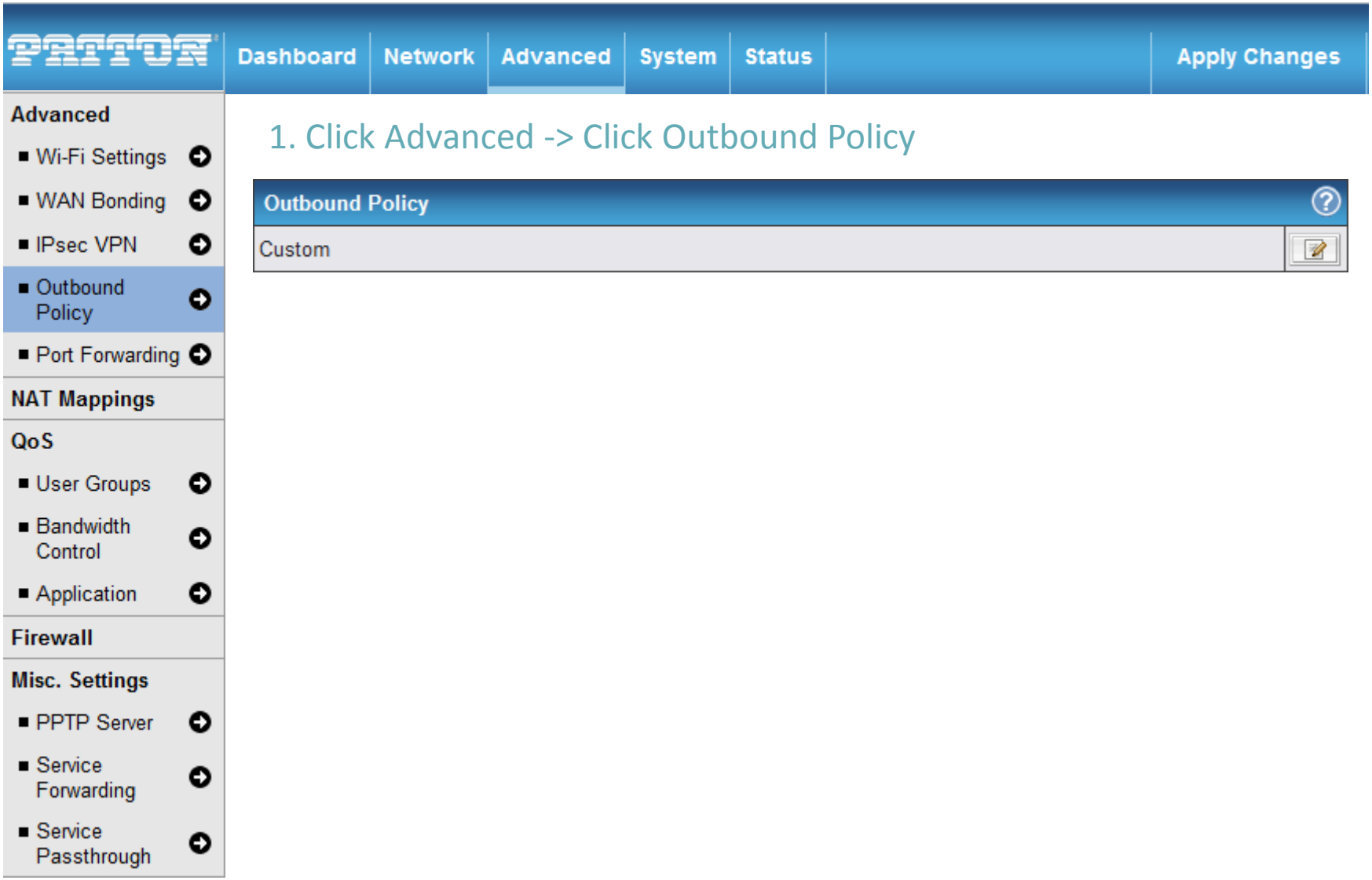
Step-by-Step: Configuration for Enforced Balance Policy



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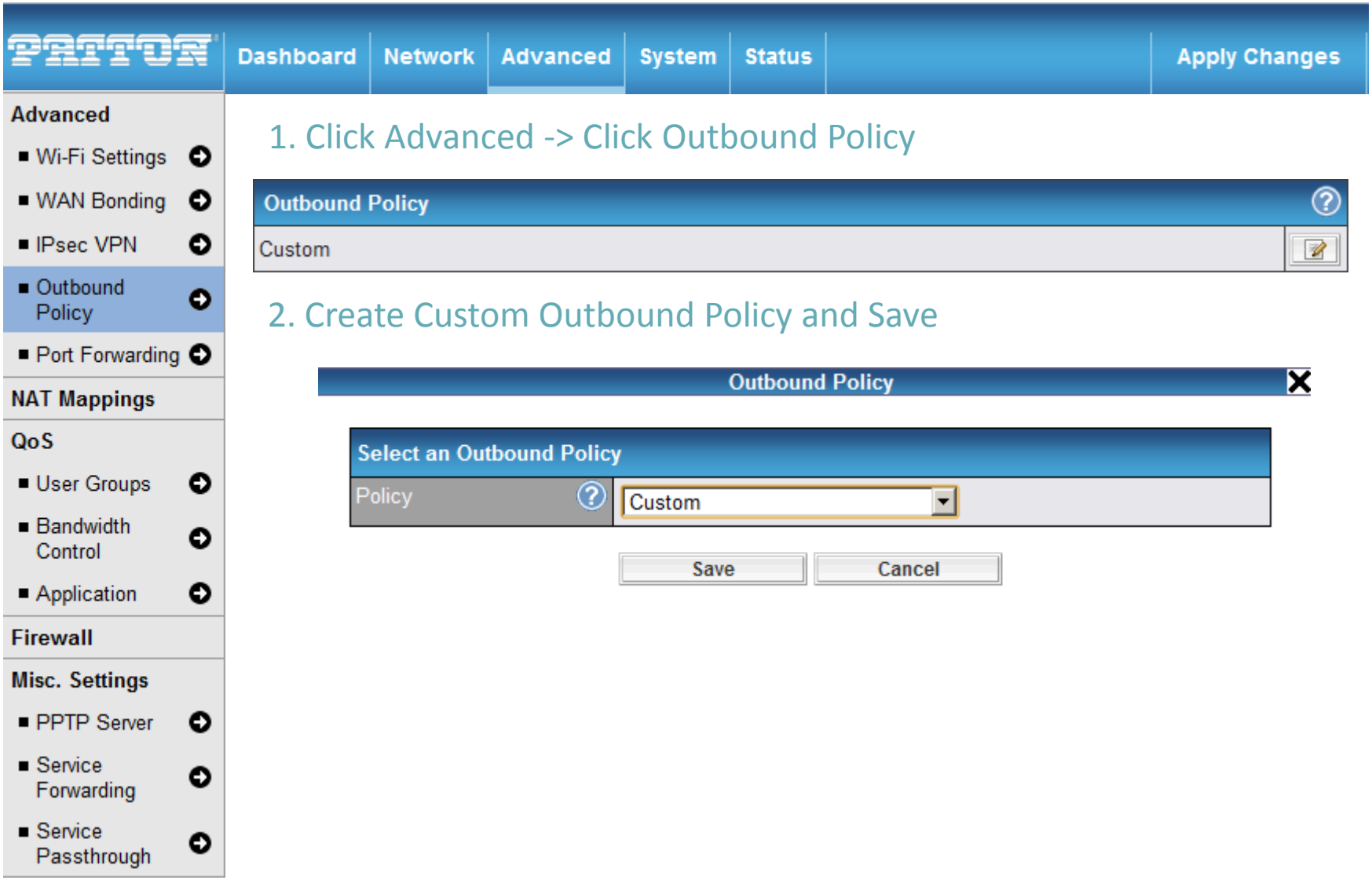

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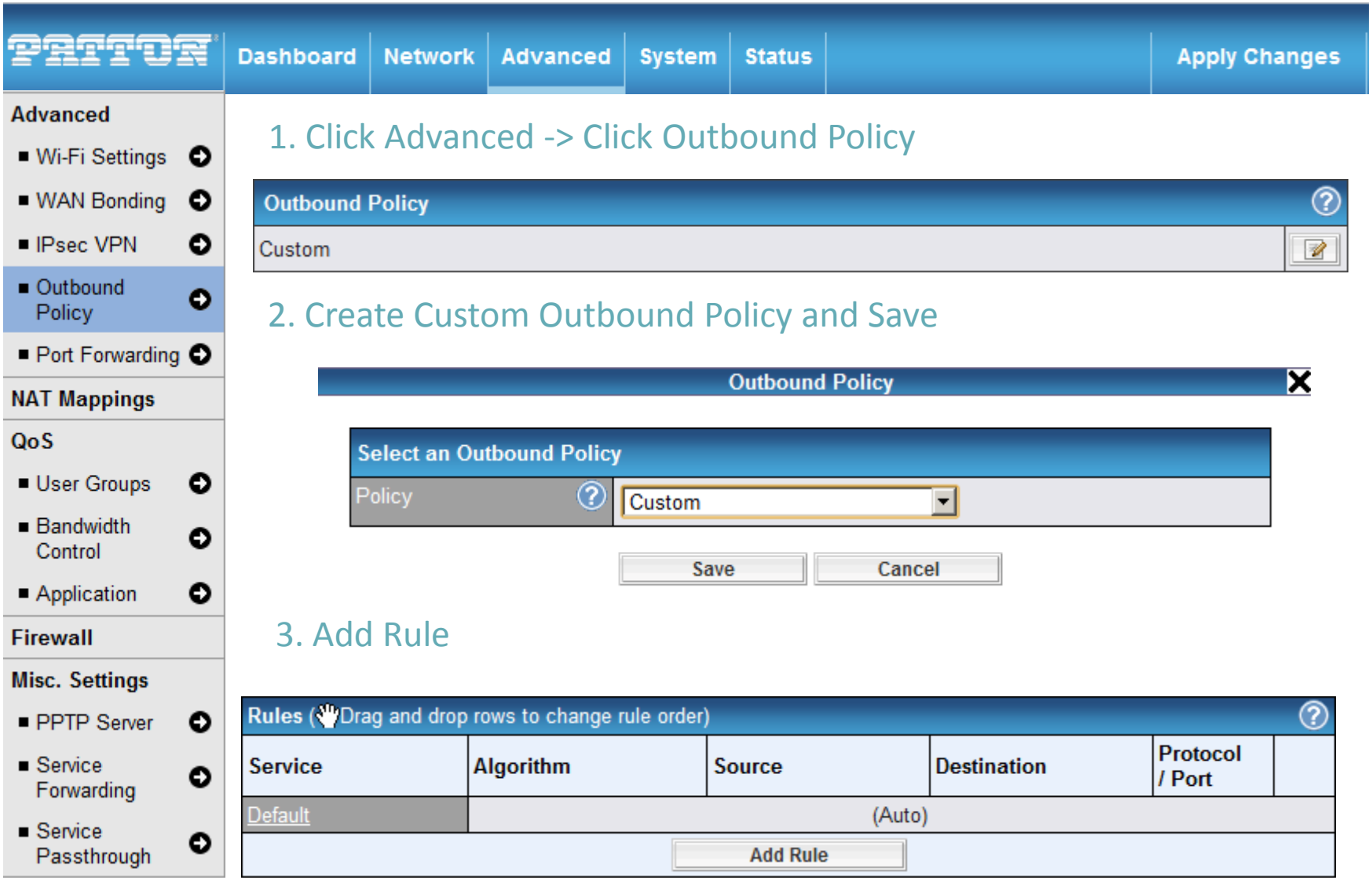

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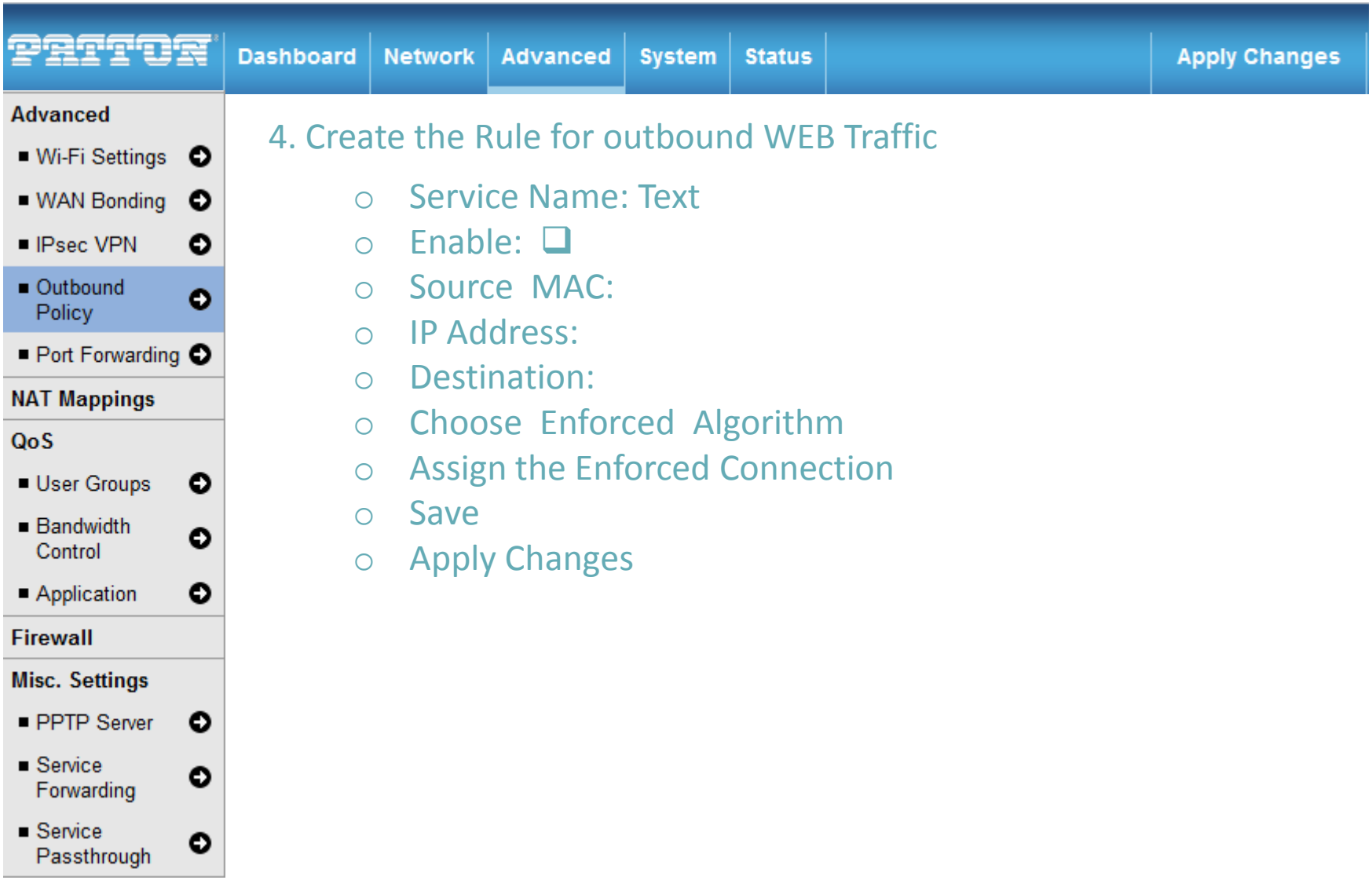

4. Create the Rule for outbound WEB Traffic

- Service Name: Text
- Enable: ❑
- Source MAC:
- IP Address:
- Destination:
- Choose Enforced Algorithm
- Assign the Enforced Connection
- Save
- Apply Changes

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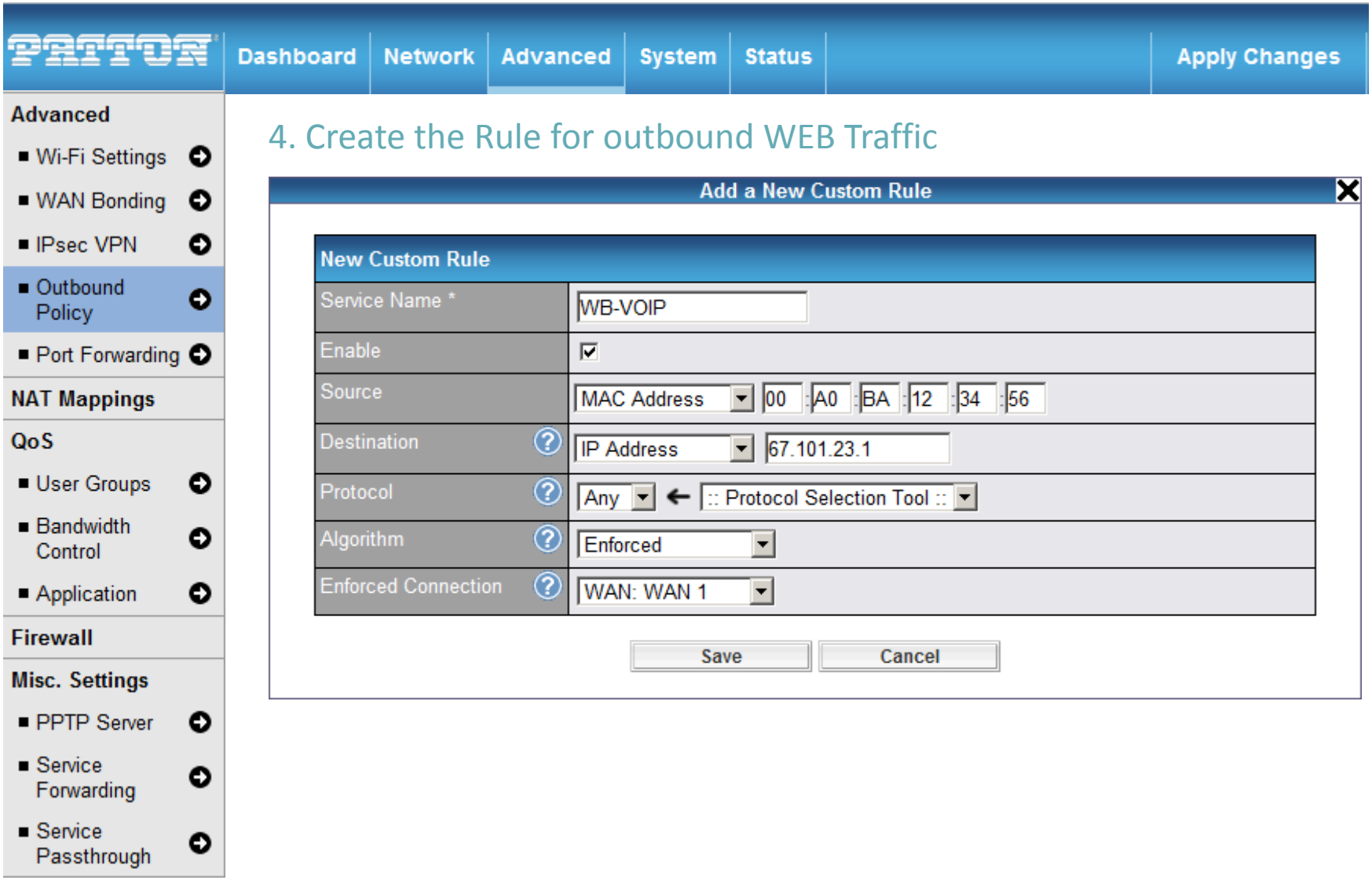
Step-by-Step: Configuration for Enforced Balance Policy



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Step-by-Step: Configuration for Enforced Balance Policy

PATTON | Dashboard | Network | Advanced | System | Status | Apply Changes

Advanced
- Wi-Fi Settings
- WAN Bonding
- IPsec VPN
- Outbound Policy
- Port Forwarding

NAT Mappings

QoS
- User Groups
- Bandwidth Control
- Application

Firewall

Misc. Settings
- PPTP Server
- Service Forwarding
- Service Passthrough

Rules (Drag and drop rows to change rule order)

Service	Algorithm	Source	Destination	Protocol / Port	
WAN Bonding Routes					
WB-SaveCash	Overflow Wi-Fi Cable Modem...	Any	Any	Any	✕
WB-HTTPS	Persistence (Auto)	Any	Any	TCP 443	✕
WB-VOIP	Enforced WAN: Lease Line 4T...	MAC Address 00:A0:BA:12:34:56	IP Address 67.100.23.1	Any	✕
WB-HTTP	Priority WAN: Wi-Fi Cable M...	Any	Any	TCP 80	✕
WB-staff	Weighted Balance 10:5:4:4:4:0:10	IP Network 10.10.5.0/24	Any	Any	✕
WB-guest	Weighted Balance 10:0:0:0:0:0:10	IP Network 10.10.6.0/28	Any	Any	✕
WB-Webinar	Lowest Latency	Any	www.gotomeeting.com	Any	✕
WB-Visuality	Enforced VPN: WAN BONDING	MAC Address 00:A0:BA:12:34:57	Any	Any	✕
Default	(Auto)				

Add Rule

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FOR FURTHER INFORMATION

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