# Sizing Guide for ProxySG Deployments Reverse Proxy SGOS Version 6.1 11 October 2011

# Blue Coat

	Deployment Mode		Licen	sing	Hardware Spec						
Model	Reverse Proxy		Concurrent Licensed Client IPs		Storage		CPU Cores	Memory	Preinstalled Option Cards	On-board Network Ports	Power Supply
	Max Client Bandwidth	Transactions / Second	Without ADN Enabled	With ADN Enabled	Drives	Total Storage (GB)					
210-25-PR	10Mbps	200	No licensed	l user limit	1	137	1	1GB	SSL	2 port 100BT Passthru	Single
510-25-PR	50Mbps	400	No licensed	l user limit	2	640	1	2GB	2 port 1000BT Passthru, SSL	2x1000BT	Single
810-25-PR	200Mbps	1700	No licensed	l user limit	4	1200	2	6GB	2 port 1000BT Passthru, SSL	2x1000BT	Single
9000-5-PR 9000-10-PR 9000-20-PR	450Mbps 500Mbps 750Mbps	3500 4500 6500	No licensed No licensed No licensed	l user limit I user limit I user limit	4 8 10	2000 4000 5000	2 2 4	4GB 8GB 16GB	SSL SSL SSL	4 port 1000BT Passthru 4 port 1000BT Passthru 4 port 1000BT Passthru	Redundant Redundant Redundant

### **Reverse Proxy**

Assumes 70% peak CPU load with 12k HTTP objects and limited SSL. Because it is usually impossible to control the number of clients connecting in a reverse proxy deployment, only models without user limits are recommended. Always use SGOS Proxy Edition for reverse proxy deployments.

#### Max Client Bandwidth

Maximum client side bandwidth. Server side bandwidth is typically much lower due to proxy caching.

### Transactions / Second

This is the number of HTTP requests per a second that can be sustained by the ProxySG. ProxySGs are licensed based on concurrent client IP addresses only. Other parameters, such as Max Bandwidth and Transactions / Second are suggested values based on the physical capacity of the system.

#### **Concurrent Licensed Client IPs**

Licensed users is measured as the number of unique client IP addresses with open inbound TCP connections to the ProxySG. The measurement is instantaneous and concurrent. It is not based on the average over any time interval. The administrator can configure the ProxySG to either bypass connections from new users, to delay them until another client drops all of its connections or to attempt to accept them. The default is to accept them.

### No licensed user limit

ProxySG 9000 series models and models labeled '-25' have no license limit on the number of concurrent users. The hardware configurations of the '-25' models are identical to the '-20' model for each platform. The licensed user limit for the '-20' models are near the hardware's capacity if most features are enabled. Use the '-25' models if the number of users is not

known or if your use of the appliance enables more users to be processed than the license limit allows.

#### Hardware Spec

SSL accelerator cards are included where listed. A separate license is required to activate SSL termination. 2x1000BT and 4x1000BT passthru cards can be programmed to act as bridges or independent ports: a 2x1000BT passthru card can be used as a single 2-port bridge or 2 independent Ethernet interfaces



Figure 1: Example Reverse ProxySG deployment scenario

These guidelines show the relative power of ProxySG appliances. Appropriate configurations can vary significantly from these guidelines and will depend on technical requirements.

Copyright © 2010 Blue Coat Systems, Inc. All rights reserved worldwide. No part of this document may be reproduced by any means nor translated to any electronic medium without the written consent of Blue Coat Systems, Inc. Specifications are subject to change without notice. Information contained in this document is believed to be accurate and reliable, however, Blue Coat Systems, Inc. assumes no responsibility for its use, Blue Coat is a registered trademark of Blue Coat Systems, Inc. in the U.S. and worldwide. All other trademarks mentioned in this document are the property of their respective owners.

## EXAMPLE: Front-ending Outlook Web Access (OWA)

- Highly variable number of users (total email accounts ~1700)
- Transactions/second is unknown
- Bandwidth peaks at 20Mbps

Model	Reverse Proxy				
	Max Client Bandwidth	Transactions / Second			
210-25-PR	10Mbps	200			
510-25-PR	50Mbps	400			
810-25-PR	200Mbps	1700			
9000-5-PR 9000-10-PR	450Mbps 500Mbps	3500 4500			
9000-20-PR	750Mbps	6500			

Because we know that throughput peaks at 20Mbps in this example, we can rule out the SG210-25-PR model (which is appropriate for maximum client bandwidth of 10Mbps.

The appropriate ProxySG appliance in this example is the SG510-25-PR.

### Notes:

- Although not included in the Reverse Proxy Sizing Guide, user licensed models: SG210, SG510, and SG810 (-5, -10, and -20) can be used for reverse proxy if the number of concurrent users is known (which might be true for internal corporate applications).
- If antivirus protection is required, quote the AV1200-A as part of the solution
- If SSL proxy is required, a separate SSL license (2 x SW-SSL-SG810-10) will need to be included on the quote. The appropriate service options should also be included.

### EXAMPLE: Front-ending a Content Delivery Network

- Unknown number of users
- Peak load estimated at 1500 transactions/second
- Redundancy is mandatory
- Bandwidth peaks at 100Mbps

Model	Reverse Proxy				
	Max Client Bandwidth	Transactions / Second			
210-25-PR	10Mbps	200			
510-25-PR	50Mbps	400			
810-25-PR	200Mbps	1700			
9000-5-PR 9000-10-PR 9000-20-PB	450Mbps 500Mbps 750Mbps	3500 4500			

Because the throughput requirement peaks at 100Mbps in this example, we can rule out anything below the SG810-25-PR model. As redundancy is mandatory, a cluster of 2 x SG810-25-PR is needed.

#### Notes:

- In many CDN deployments, redundant hardware is preferred. This can often mean quoting clustered units. For less robust redundancy, a single SG9000 offers redundant power supplies.
- Although not included in the Reverse Proxy Sizing Guide, user licensed models: SG210, SG510, and SG810 (-5, -10, and -20) can be used for reverse proxy if the number of concurrent users is known (which might be true for internal corporate applications).

Copyright © 2010 Blue Coat Systems, Inc. All rights reserved worldwide. No part of this document may be reproduced by any means nor translated to any electronic medium without the written consent of Blue Coat Systems, Inc. Specifications are subject to change without notice. Information contained in this document is believed to be accurate and reliable, however, Blue Coat Systems, Inc. assumes no responsibility for its use, Blue Coat is a registered trademark of Blue Coat Systems, Inc. in the U.S. and worldwide. All other trademarks mentioned in this document are the property of their respective owners.