

BCWAA v 3.0.3 Chapter Summaries

This document gives brief summaries of the chapters in the Blue Coat WAN Acceleration Administrator (BCWAA) Course.

Chapter 1: Blue Coat Product Family

This chapter provides an overview of all of Blue Coat's hardware and software products and how they work together to enable organizations to protect and enhance the performance of their networks. Specifically, the chapter introduces the ProxySG, ProxyAV, Blue Coat Director, and Blue Coat RA, the company's new SSL VPN appliance. The chapter also introduces Blue Coat Reporter and Web-filtering applications.

Chapter 2: WAN Optimization Features

IT managers work to achieve a complex goal: increasing efficiency while providing better control and security — while minimizing costs. Organizations can reach that goal by taking advantage of the MACH5 application-acceleration features in the Blue Coat SGOS. The chapter provides an introduction to the rest of the course by outlining the key elements of MACH5: bandwidth management, protocol optimization, object caching, byte caching, and compression.

Chapter 3: SG Deployment

This chapter describes what a proxy is, what it does, and how a proxy, particularly the ProxySG, can be deployed. Various deployment methods are examined: forward proxy, reverse proxy, configuring a transparent proxy and an explicit proxy. The chapter also discusses configuring the ProxySG transparently using the default gateway, bridging mode, WCCP and layer 4 switch. Details on configuring the ProxySG explicitly using the proxy auto config file and the Web proxy auto discovery methods are also discussed.

Chapter 4: Licensing and Upgrading the SG

This chapter focuses on what a customer must do to license their Blue Coat products and what behavior they should expect from their Blue Coat products in regards to the license. An overview of the basic information that each customer should know about the Blue Coat licensing system is provided. You will learn what types of licenses Blue Coat offers, which products have what type of license, and how each type of license is acquired. Additionally, you will learn what happens when the limitations of a license is exceeded and what happens when a license expires.

Chapter 5: SG Initial Setup

This chapter walks you through the steps you need to complete when setting up the ProxySG for the first time. Some of the concepts of initial configuration also apply to reconfiguring an existing ProxySG, or one that has been restored to factory-default settings.

Chapter 6: Services

This chapter introduces the Service feature, which determines which traffic is allowed or restricted through the ProxySG. It focuses on the Console Services and the Proxy Services, available through the Management Console. The chapter also discusses the service ports, service port actions and proxy service attributes in detail.

Chapter 7: Active Sessions

This chapter describes the statistical use of data for analyzing the network connections through a ProxySG. Active Sessions is the new statistical display in the Management Console incorporated into the new 5.1.4 release to capture and display the connections that flow through a ProxySG appliance. Network administrators can make informed decisions on what traffic should be optimized to enhance network efficiency. The chapter also explains the terminologies involved in interpreting the active sessions page and the processes that go behind to generate this data.

Chapter 8: Application Delivery Network

This chapter discusses the Application Delivery Network (ADN), which uses byte caching to reduce the amount of TCP traffic across a WAN. ADN accomplishes this by replacing large chunks of repeated data with small tokens representing that data. This chapter also discusses the two-sided deployment that ADN requires.

Chapter 9: CIFS Proxy

The Common Internet File System (CIFS) is popular in enterprise networks because it allows computers to share files and printers. However, CIFS is inefficient over low-bandwidth links or high-latency links, such as those typically found in enterprise branch offices. This chapter explains how the ProxySG optimizes the CIFS protocol through object caching and pipe lining.

Chapter 10: MAPI Proxy

MAPI is an RPC-based protocol used by Microsoft Outlook (client) to communicate with Microsoft Exchange (server). It enables the optimization of MAPI traffic between ProxySG appliances at opposite ends of a WAN link. This chapter explains how MAPI works and how organizations can use it to accelerate e-mail across the enterprise.

Chapter 11: Blue Coat SG Client

The SG Client is Blue Coat's solution for the ADN vision to extend application acceleration capabilities to the end-points. The SG client provides acceleration by using CIFS protocol optimization, CIFS object caching, and compression using gzip with ADN tunnels. The chapter discusses the main advantages of using the SG Client, which are, accelerated application delivery and as a solution for remote users without an SG appliance. Also covered in the chapter are details on sample SG deployment, general architecture, performance considerations and troubleshooting.

Chapter 12: Bandwidth Management

Bandwidth Management, one of the key elements of MACH5, allows you to give users access to resources while limiting the total amount of bandwidth that they use. It also allows you to set priorities for those resources. This chapter explains how bandwidth management works and how to implement it to improve network performance.