

BCCPA v 3.0.3 Chapter Summaries

This document gives brief summaries of the chapters in the Blue Coat Certified Proxy Administrator(BCCPA) textbook.

Chapter 1: Understanding Proxy Servers

This chapter explains what a proxy server is and how it is an important part of securing your private network. You will learn how a proxy server complements a firewall to fully secure your internal network. Also discussed in this chapter are various features of the ProxySG, such as caching, content filtering, WAN acceleration and SSL interception. Features that aid the ProxySG in acting both as a gateway proxy and a WAN acceleration proxy are also covered in this chapter.

Chapter 2: 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 3: 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 4: 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 5: 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 6: 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 7: SG Management Console

This chapter introduces the ProxySG graphical user interface, which is how users most commonly work with their appliances. It focuses on the Management Console and its various features, which students use extensively during lab exercises.

Chapter 8: Policy Management

This chapter expands on the concepts presented in the ProxySG Graphical User Interface chapter. It explains how policies are created to enforce an organization's rules for acceptable Web use. This chapter also illustrates why only a secure proxy with an object-handling operating system can offer the framework needed to identify and enforce policies across an entire enterprise.

Chapter 9: 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 10: Hypertext Transfer Protocol (HTTP)

This chapter describes HTTP and how it is used to transport information across the Internet. It provides an introduction to HTTP concepts and terminology and describes how it is used to deliver content across the Web.

Chapter 11: Authentication Introduction

This chapter details the kind of authentication challenges handled by the ProxySG in explicit proxy mode. You will learn how you can control access to the ProxySG, how the ProxySG challenges users before forwarding their requests, and how it passes challenges and credentials between the OCS and user agent.

Chapter 12: Authentication Realms

The ProxySG supports a wide, and constantly growing, number of authentication realms. This chapter focuses on the most commonly used realms — NTLM, LDAP, and Local — and introduces sequence authentication, the method for searching multiple realms for a specific user's credentials.

Chapter 13: Content Filtering

This chapter introduces the fundamentals of content filtering, both onbox and offbox. It also discusses Blue Coat Web Filter, which takes a hybrid approach to content filtering. It maintains a local database of categorized sites but also requests updates from a network of servers if it does not find the categorization locally.

Chapter 14: Instant Messaging Filtering

Instant Messaging (IM) has become a useful tool in the enterprise, enabling co-workers to communicate quickly and easily. However, IM also raises security concerns. This chapter discusses how the Blue Coat SG helps an organization maintain control over the communication through instant messaging (IM).

Chapter 15: Creating Notifications and Exceptions

This chapter outlines how administrators can create custom Web pages to inform network users about the organization's acceptable user policy (AUP). Notifying users why they cannot access a resource can reduce the number of unnecessary calls to the organization's help desk from users.

Chapter 16: Access Logging

This chapter explains what access logs are, how they are used, and describes the various access logging features on the ProxySG. It also provides an overview of access logging and explains some common log file terminology.

Chapter 17: Introduction to Blue Coat Reporter

This chapter presents an overview of the Blue Coat Reporter, a powerful reporting tool that provides fast and easy log file importation from the ProxySG with more than 150 pre-defined reports. Reporter's identity-based reporting on Web communications enables enterprises to evaluate Web policies and manage network resources more effectively.

Chapter 18: Blue Coat Reporter Installation

Blue Coat Reporter installation can be done in many ways depending on the version you plan to install. This chapter presents an overview of installing Reporter, Reporter Sizing Guide; a tool you can use while deploying Reporter in your organization, hardware guidelines and first time access to Reporter. This chapter also talks about accessing Reporter over HTTP and HTTPS, creating and managing data profiles and how to upgrade your existing version of Reporter to the most current version of 8.3.2.2.

Chapter 19: Blue Coat Reporter Graphical User Interface

The Administrative menu is the graphical user interface for setting up various parameters in Reporter. This chapter walks you through the various sub menus available under the Administrative menu. Detailed sections on Data Profiles, Scheduler option, Configuring Users and Settings and finally Licensing Reporter are discussed here.

Chapter 20: Introduction to ProxyAV

This chapter introduces the Blue Coat AV, Blue Coat's virus-scanning appliance. Traditional, Web antivirus gateways often lack scalability and performance for HTTP and FTP scanning, which leaves desktops vulnerable. The Blue Coat AV, combined with the Blue Coat SG, provides scalability for virus scanning, plus complete visibility and control of enterprise Web communications.

Chapter 21: ICAP Fundamentals

This chapter provides a brief introduction to ICAP, explains what ICAP means to the future of Internet content handling, and discusses how ProxySG is ideally suited to handle these ICAP enabled value-added services. In other words, ICAP allows its clients to pass HTTP based (HTML) messages (Content) to ICAP servers for adaptation. Also discussed in the chapter are ICAP REQMOD, ICAP RESMOD, Patience page and Trickleing features of the ICAP client.

Chapter 22: Service and Support

This chapter provides a high-level overview of the support options that are available to Blue Coat customers worldwide. It outlines the different levels and types of service, including online access to open, review, and comment on technical support cases.

Appendix A: Deployment Planning

Planning and designing the most efficient deployment is the most important decision you have to make, second only to the one of actually buying the ProxySG. This appendix gives detailed information about different kinds of ProxySG deployments.

Appendix B: Conditional Probability — Bayes Theorem

Modern content-filtering technology, as well as spam e-mail detection, relies on some fundamental theorems of statistical analysis. This appendix discusses, at a very high level, the Bayes Theorem, which enables you to determine the probability of a future event based on knowledge that a different event already occurred.