

Packeteer PacketShaper Specialist Certification Examination Specification

Introduction

This is an exam specification for the Packeteer PacketShaper Specialist examination. The specification defines the content of the examination, the relevant background and experience needed to become a certified PacketShaper Specialist.

Exam Purpose

This test will certify that the successful candidate has the important knowledge and skills necessary to properly operate and configure all Packeteer products, including; PacketSeeker, PacketShaper, and PacketShaper Xpress. In addition, a candidate will be able to use monitoring and reporting features to identify and troubleshoot network and application performance problems as well as take appropriate action using control mechanisms to optimize performance at an intermediate level.

Background and Experience

- Can install and configure PacketShaper, choosing the right model based on a documented plan usually developed by a PacketShaper Expert.
- Can use traffic discovery to create a traffic tree and use manual classification to create basic enterprise and central site traffic trees, but not necessarily an inheritable or multi-level trees.
- Can generate and interpret top-level reports, but not necessarily more detailed diagnostic reports.
- Can apply basic controls to address primary network and application performance problems.
- Can apply basic troubleshooting skills using some diagnostic skills. May not be able to read a packet trace.
- Knows the difference between policy and partition, and understands the pitfalls and benefits of applying each.
- Knows the available feature-set of PacketWise, but may not be able to use all of them.

Notes:

- Acceleration will be integrated in version 8.0 of the product
- SkyX is a standalone product that will not be in the exam
- Questions will not specifically identify model numbers or software version numbers.

Exam Structure

The knowledge domains measured by this examination and the extent to that they are represented in the examination are shown in the table below.

Note: This examination blueprint includes weighting, test objectives, and example content. Enabling sub-skills are included to clarify the test objectives and should not be construed as a comprehensive listing of the examination.

The table below lists the domains measured by this examination and the extent to which they are represented in the examination.

Domain	% of Examination
1.0 Install and Configure Packet-Shaper Hardware	15%
2.0 Classify Traffic	25%
3.0 Analyze and Report	25%
4.0 Control Traffic	25%
5.0 Compression	10%
Total	100%

Response Limits

The examinee selects, from four (4) or more response options, the option(s) that best completes the statement or answers the question. Distracters or wrong answers are response options that examinees with incomplete knowledge or skill would likely choose, but are generally plausible responses fitting into the content area defined by the test objective.

Test item formats used in this examination are:

Multiple-choice (single answer): The examinee selects one option that best answers the question or completes a statement.

Multiple-response (multiple answers): The examinee selects more than one option that best answers the question or completes a statement. The question will state how many options are correct, i.e. – (Choose TWO).

Sample Directions: Read the statement or question and from the response options, select only the option(s) that represent the most correct or best answer(s) given the information provided.

Domain 1 – Install and Configure PacketShaper Hardware

This domain addresses the product features and proficiency to recognize how to install and configure Packeteer solutions.

1.1 Recognize product fundamental features and benefits.

Enabling sub-skills:

- Purpose of advanced settings
- Purpose of high availability features
- PacketShaper visibility features
- General capabilities and features of SkyX when product is merged with PacketShaper
- Identify implications with Firewalls, Proxies, VPN's and VLAN and how they will effect the other functions of PacketShaper

1.2 Recognize how to properly execute an implementation plan for installing and configuring a Packeteer solution.

Enabling sub-skills:

- Identify basic topology
- Identify the purpose of and configure command scheduling
- Identify correct cable orientations (CAT5 and Fiber SX, SC, FX)
- Configure PacketShaper basic settings from CLI and WUI
- Configure advanced settings
 - Security options
 - Fail-over modes, bypass (copper, fiber, LEM, and LEM2), and high availability features

Domain 2 - Classify Traffic

This domain covers the area of classifying network traffic and optimizing network trees.

2.1 Recognize how to classify network traffic, and organize and optimizing network trees.

Enabling sub-skills:

- Basic network classification concepts
- Identify when to apply manual traffic classification and know the available criteria
- Organize the traffic tree using parent, folder, and exception classes
- Construct traffic classes with single and multiple matching rules
- Identify if classification is working properly

Domain 3 - Analyze and Report

This domain addresses specific report features, the differences between them and the proper way to interpret PacketShaper reports.

3.1 Analyze traffic and identify causes of operational performance problems to report.

Enabling sub-skills:

- Review reports and interpret data
- Basic network application performance concepts
- Identify causes of performance problems
 - Congestion patterns
 - Bursty applications
 - Reports comparing these with RTM graphs

3.2 Identify reports to monitor traffic activity.

Enabling sub-skills:

- Recognize proper usage of Adaptive Response
- Identify thresholds and SLAs for critical applications based on traffic performance analysis
- Determine events to register with the appropriate notification technique (email, SNMP and/or SYSLOG) and monitor event status through the web interface

Domain 4 - Control Traffic

This domain covers traffic types, the use of traffic controls, how to evaluate relationships between partitions and policies, and how to centrally manage traffic.

4.1 Review environment, differentiate between traffic types, and determine appropriate control mechanisms taking into consideration business priorities and traffic characteristics.

Enabling sub-skills:

- Recognize how to set PS controls on bandwidth allocation (flow and aggregate)
- Recognize difference between protection and containment
- Identify settings for a traffic class
- Identify what is a transaction
- Identify how to apply controls
 - Identify various traffic classes
 - Recognize effect of controls on network delay and run reports
 - Identify implications and ramifications of making changes when control is applied

4.2 Create, review and evaluate relationships between partitions and policies.

Enabling sub-skills:

- Recognize flow limits and class licenses
- Create specific policies and partitions
- Recognize proper use of partitions, appropriate partition settings (fixed, burstable, and/or dynamic) for a traffic class
- Recognize policy type
- Rate vs. priority
- Discard, never-admit, or ignore
- Evaluate complex relationships between partitions and policies considering
- Over-subscription

- Effective partition size
- Flow capacity for a given partition
- Guaranteed rate failures

Domain 5 - Compression

This domain covers compression configuration, activation, operation and reporting.

5.1 Recognize how to configure, activate, operate and report on compression.

Enabling sub-skills:

- Identify how to activate and configure compression including:
 - Configuring compression per class
 - Limiting compression partners and hosts
 - Changing compression type per class
 - How tunnels are built
 - How different algorithms affect traffic