



## 1 Introduction

DefensePro provides automated DDoS protection from fast-moving, high-volume, encrypted or very-short-duration threats and is part of Radware's attack mitigation solution. It defends against IoT-based, Burst, DNS and TLS/SSL attacks to secure organizations against emerging network multi-vector attacks, ransom DDoS campaigns, IoT botnets, phantom floods, and other types of cyberattacks.

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## 2 Purpose and Scope

This course, **DefensePro X Level 2**, is a structured [3-day certification](#) training.

It consists of a *practical* and a *theoretical* part.

In this course we focus on the advanced features used in many different DDoS protection deployments.

The course starts with a short repetition of the basics learned in the DefensePro Level 1 training and we give an overview of different DoS attacks. We go into more detail on traffic filters and signatures like we did in the Level 1 training. Flood detection with SSL protected data are our next topics. For behavioral protection, we have several different protective measures on our agenda; Anti-Scanning, UDP Advanced Protection and Quantile DOS. Next is troubleshooting and providing a well working setup for it. The hands-on part includes tuning and "War Games". We have prepared different DDoS attacks; students are required to find out the attacking parameters and setup suitable protection on DefensePro.

## 3 Target Audience and Prerequisites

The DefensePro Level 1 certification is a prerequisite.

This course is designed for technicians with a solid knowledge of networking in the areas of switching and routing.

Additionally, knowing how applications and network protocols are working (like TCP, HTTP, HTTPS) is a key asset for setting up signatures and traffic filters. Knowledge of penetration testing is very useful.

The features and functions of Radware devices discussed in this document are based on the following firmware version.

Product	Version
DefensePro	10.x
Cyber Controller	10.x

## 4 Objectives

- Dive deeper into traffic filters and signatures discussed in the DefensePro Level 1 course
- Detect SSL encrypted attacks and configure how to protect against
- Learn how to use additional BDoS attack detections
- Deploy DefensePro in various methods and Troubleshoot

## 5 DefensePro Presentations and Hands on Labs

### 5.1 Day 1

#### Presentations:

- Review of DefensePro Level 1
- Prominent Attack Vectors
- Advanced Traffic Filters
- Custom Signature
- Anti Scanning

#### Hands on Labs:

##### Administration and Initial Configuration:

- Initial Setup
- Traffic Filter
- Custom Signature
- Anti Scanning

### 5.2 Day 2

#### Presentations:

- SSL Protection
- HTTPS Protection
- Encrypted Web DDoS Protection (TLS Fingerprint Protection)
- Quantile DoS
- UDP Advanced Protection

## Hands on Labs:

### Network Flood Protection

- SSL Protection
- HTTPS Protection
- Encrypted Web DDoS
- Advanced UDP protection

## 5.3 Day 3

### Presentations:

- Troubleshooting and Deployment Guide
  - BDoS
  - DNS
  - Other protections

## Hands on Labs:

### Signature Protection

- Tuning BDoS
- Tuning DNS
- War games

### DP Level 2 Hands-On Exam

## 6 Certification

This course is the certification course to get recognized as:

### Radware Certified Security Expert (RCSE)

To be certified students need to pass a theoretical and a practical exams. The exams are available from any location, only internet access is required. The first attempt is included free of charge as part of the DefensePro Level 2 course. Additional attempts require a fee.

**Comprised of two parts, for both parts the minimum passing grade is 75%.**

### 6.1 Hands-On Practical Exam

The students need to setup a given DefensePro configuration based on customer requirements as learned in the hands-on part of the training. The exam is proctored and evaluated by Radware's technical training team.

### 6.2 Online Certification Exam

The online exam consists of Multiple-Choice-Questions based on the content presented in the theoretical part and test student's understanding of the solution.

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