

# DNS Guardian Administration & Configuration

## Training Course

**SOLIDserver software version:**

8.4

**Course type:**

Choice of Instructor-led or Self-paced eLearning with hands-on labs

**Duration:**

Instructor-led: 19 hours (spread over 3 or 4 days)

Self-paced: 12 to 14 hours

**Lab access:**

Instructor-led: For course duration

Self-paced: 12 hours (over a 15-day period)

**Audience:**

System and network administrators

**Prerequisites:**

Completion of SOLIDserver Administration training that includes DNS management

**Certifications:**

DNS Guardian Administrator  
DNS Guardian Advanced Administrator

## Training Summary

**Overview:**

Via the hands-on training, the participants will acquire the knowledge to manage and configure DNS Guardian to detect and protect against threats.

**Objectives:**

By the end of the course, the students will be able to:

- Describe the function and benefits of DNS Guardian
- Understand how DNS traffic metrics are used in Analytics, Statistics and Triggers
- Configure Triggers and view log entries
- Use CQF for to provide DNS filtering and application access control
- Create and provision lists, rulesets and rules
- Create tags and use them in rules with tagmatch and tagjoin
- Use CQF with DNS Threat Pulse
- Use the Blastcli to access the Guardian Configuration and Cache
- Use the Blastcli to analyze DNS Attacks
- Monitor Guardian performance & statistics
- Use the Rescue Mode and Servfail Diff features
- Understand the benefits of Cache Sharing

# Course Content

The course is divided into 3 focus areas.

## DNS Guardian Administration

### DNS Guardian Introduction

- DNS Guardian Description
- Introduction to Guardian Threat Protection

### Introduction to Guardian Management

- Web Interface Overview
- CLI Overview
- Threat Detection in Action

### DNS Metrics and Statistics

- DNS Traffic Metrics
- DNS Guardian Statistics
- View Statistics in the Web UI

### DNS Guardian Analytics

- View Analytics in the Web UI

### DNS Guardian Trigger Overview

- Triggers Overview
- Manage Policies and Triggers
- View Trigger Values in the Log

### Trigger Action and Logging

- Trigger Actions
- Trigger Logging

### Threat Analysis & Mitigation

#### Data Exfiltration

- Investigate a Data Exfiltration Attack
- Use Triggers as a Countermeasure

### Threat Analysis & Mitigation

#### DNS Server Attacks

- Volumetric Attacks
- Stealth / Slow Drip Attacks
- Investigation and Countermeasures

## DNS Threat Pulse

- Introduction to CQF and Threat Pulse
- CQF Lists and Rules
- Configure Client Query Filtering with DNS Threat Pulse

## DNS Intelligence Center (IC)

- Introduction to DNS Intelligence Center
- Data Collection and Upload
- Investigation of threats and suspicious domains

## DNS Client Query Filtering

### CQF Lists

- CQF Lists
- Create a List & List Entry

### CQF Rules

- CQF Rulesets & Rules
- Create a Ruleset & Rule

### Use CQF to Tune Triggers

- False Positive Trigger Actions
- Tune Triggers Using a CQF Rule
- Tune Triggers Using a CQF List

### CQF Client Identifiers and Lists

- Filter Using Source Client
- Add a Rule Using a Client List
- List Management
- Client Identifiers
- Lists With Multiple Identifiers

### View Client Identifiers

- View Client Identifiers
- Configuring a View Client Identifier



As one of the world's fastest growing DDI vendors, EfficientIP helps organizations drive business efficiency through agile, secure and reliable network infrastructures. Our unified management framework for DNS-DHCP-IPAM (DDI) and network configurations ensures end-to-end visibility, consistency control and advanced automation. Additionally, our unique 360° DNS security solution protects data confidentiality and application access from anywhere at any time. Companies rely on us to help control the risks and reduce the complexity of challenges they face with modern key IT initiatives such as cloud applications, virtualization, and mobility. Institutions across a variety of industries and government sectors worldwide rely on our offerings to assure business continuity, reduce operating costs and increase the management efficiency of their network and security teams. Copyright © 2023 EfficientIP, SAS. All rights reserved. EfficientIP and SOLIDserver logo are trademarks or registered trademarks of EfficientIP SAS. All registered trademarks are property of their respective owners. EfficientIP assumes no responsibility for any inaccuracies in this document or for any obligation to update information in this document.

## CQF Tags

- Add Tags
- Add a List Entry with a Tag

## CQF Rules with Threat Pulse

- Tune Threat Pulse using CQF Rules
- Use Tags with Threat Pulse

## Application Access Control Using Tags

- Reminder: Rule Definitions
- Use Tag for Application Access Control

## Advanced Configuration

### BlastCLI

- Blastcli Overview
- Cache Responses
- Cache Dump
- Reset Cache Command
- Cache Analysis

### Using BlastCLI to Analyze Triggers

- Sloth DNS Attack Analysis
- DNS Exfiltration Attack Analysis

### BlastCLI Statistics

- BlastCLI Statistics
- Client Statistics
- Client Statistics for Invalid Query Attack
- Client Statistics Distribution

### Adaptive Security Features

- Rescue Mode
- Servfail Diff

### CQF Lists and Rules Configuration

- List & RuleSet Provisioning
- List Statistics

## Cache and Client Management

- Cache Sharing
- Cache Management
- Client Management

## Other Guardian Features

- Guardian on Authoritative Server
- Guardian with an ECS-Enabled Recursive Server
- Secure DNS Traffic with DoT and DoH
- Transparent DNS Proxy Feature
- TOS/DSCP Marking



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