



AKAMAI WEB PERFORMANCE FOUNDATIONS

Course Overview and Agenda

March 2023



```

fmt.Fprint(w, "ACTIVE"); } else { fmt.Fprint(w, "INACTIVE"); return; case <- timeout: fmt.Fprint(w, "TIMEOUT"); }); log.Fatal(http.ListenAndServe(":1337", nil)); };package main; import ( "fmt" "html" "log" "net/http" "strings" "time"
)
type struct { Target string; Count int64; }; func main() { controlChannel := make(chan ControlMessage); workerCompleteChan := make(chan bool); statusPollChannel := make(chan chan bool); workerActive := false; go admin(controlChannel, statusPollChannel);
statusPollChannel: respChan <- workerActive; case msg := <- controlChannel: workerActive = true; go doStuff(msg, workerCompleteChan); case status := <- workerCompleteChan: workerActive = status; }); func admin(cc chan ControlMessage, st
http.HandleFunc("/admin", func(w http.ResponseWriter, r *http.Request) { hostTokens := strings.Split(r.Host, ":"); r.ParseForm(); count, err := strconv.ParseInt(r.FormValue("count"), 10, 64); if err != nil { fmt.Fprint(w, err.Error()); return;
r.FormValue("target"), Count: count); cc <- msg; fmt.Fprint(w, "Control message issued for Target %s, count %d", html.EscapeString(r.FormValue("target")), count); }); http.HandleFunc("/status", func(w http.ResponseWriter, r *http.Request) { reqChan
:= reqChan; timeout := time.After(time.Second); select { case result := <- reqChan: if result { fmt.Fprint(w, "ACTIVE"); } else { fmt.Fprint(w, "INACTIVE"); }; return; case <- timeout: fmt.Fprint(w, "TIMEOUT"); }); log.Fatal(http.ListenAndServe
port ("fmt": "html" "log": "net/http": "strconv": "strings": "time" ); type ControlMessage struct { Target string; Count int64; }; func main() { controlChannel := make(chan ControlMessage); workerCompleteChan := make(chan bool); statusPollChannel
:= false; go admin(controlChannel, statusPollChannel); for { select { case respChan := <- statusPollChannel: respChan <- workerActive; case msg := <- controlChannel: workerActive = true; go doStuff(msg, workerCompleteChan); case status := <-
status; }); func admin(cc chan ControlMessage, statusPollChannel chan chan bool) { http.HandleFunc("/admin", func(w http.ResponseWriter, r *http.Request) { hostTokens := strings.Split(r.Host, ":"); r.ParseForm(); count, err := strconv.ParseInt

```

Course Overview

The Akamai Web Performance Foundations course for Akamai University is designed to familiarize you with the Akamai Web Performance portfolio and its key capabilities. It offers an introduction into the features of the Akamai Intelligent Platform that enable those capabilities through a combination of learning interventions such as conceptual discussions, hands-on lab exercises, facilitator-led demonstrations, and group-based activities.

Objectives

At the end of this course, you will be able to:

- Bring your site on to the Akamai Intelligent Edge Platform.
- Optimize and tune your site delivery settings.
- Refresh content on Akamai CDN.
- Derive insights into your site using analytics from the Akamai Control Center.
- Automate workflows by leveraging Akamai's APIs and CLIs.

Agenda

The Akamai Web Performance Foundations course curriculum consists of either:

- CLASSROOM TRAINING: 2 day (8 hours),
- ONLINE TRAINING: 3 days (4,5 hours each).

The agenda for this training is listed below.

```

fmt.Fprint(w, "ACTIVE"); } else { fmt.Fprint(w, "INACTIVE"); return; case <- timeout: fmt.Fprint(w, "TIMEOUT"); }); log.Fatal(http.ListenAndServe(":1337", nil)); };package main; import ( "fmt" "html" "log" "net/http" "strings" "time"
) ;func main() { controlChannel := make(chan ControlMessage);workerCompleteChan := make(chan bool); statusPollChannel := make(chan chan bool); workerActive := false;go admin(controlChannel, statusPollChannel, respChan := workerActive; case msg := <- controlChannel: workerActive = true; go doStuff(msg, workerCompleteChan); case status := <- workerCompleteChan: workerActive = status }); func admin(cc chan ControlMessage, st
http.HandleFunc("/admin", func(w http.ResponseWriter, r *http.Request) { hostTokens := strings.Split(r.Host, ":"); r.ParseForm(); count, err := strconv.Atoi(r.FormValue("count"), 10, 64); if err != nil { fmt.Fprint(w, err.Error()); return; r.ParseForm("target"), Count: count); cc <- msg; fmt.Fprint(w, "Control message issued for Target %s, count %d", html.EscapeString(r.FormValue("target")), count); }); http.HandleFunc("/status", func(w http.ResponseWriter, r *http.Request) { reqChan := reqChan; timeout := time.After(time.Second); select { case result := <- reqChan: if result { fmt.Fprint(w, "ACTIVE"); } else { fmt.Fprint(w, "INACTIVE"); }; return; case <- timeout: fmt.Fprint(w, "TIMEOUT"); }); log.Fatal(http.ListenAndServe(":1337", nil)); }; func main() { controlChannel := make(chan ControlMessage);workerCompleteChan := make(chan bool); statusPollChannel := false;go admin(controlChannel, statusPollChannel); for { select { case respChan := <- statusPollChannel: respChan <- workerActive; case msg := <- controlChannel: workerActive = true; go doStuff(msg, workerCompleteChan); case status := <- workerCompleteChan: workerActive = status; }); func admin(cc chan ControlMessage, statusPollChannel chan chan bool) { http.HandleFunc("/admin", func(w http.ResponseWriter, r *http.Request) { hostTokens := strings.Split(r.Host, ":"); r.ParseForm(); count, err := strconv.Atoi(r

```

Duration (min)	Module Name & Description
60	MODULE 1: INTRODUCTION <p>This module is an introduction to the challenges of the Internet and how the Akamai Intelligent Platform can address them with its key capabilities. It includes an overview of Akamai's Web Performance Solutions suite, describing the value proposition of each product and its corresponding feature set. This module talks about how a site is Akamaized. That is, how a website/application gets onto the Akamai network, especially from a DNS perspective. You will also learn how to configure a basic site on Akamai.</p>
40	MODULE 2: SECURE DELIVERY <p>In this module, we will learn about HTTPS and TLS Certificates, and how Akamai works with sites that are HTTPS enabled. You will also learn about the various types of certificates and how they can be obtained and deployed on the Akamai network.</p> <p>In this time, you will do a tech set-up of your systems and get started on configuring an HTTPS site on Akamai.</p> <p>LAB: CREATING AN AKAMAI WEB PROPERTY</p>
70	MODULE 3: CACHING <p>Learn the fundamentals of caching at the Akamai Edge including the benefits and testing. You will learn to configure basic Caching on Akamai Control Center.</p> <p>LAB: BASIC CACHING</p>
60	MODULE 4: VARIABLES <p>In this module, you will learn how to use an exciting new feature of Akamai Web Performance solutions - User-Defined Variables. These Variables allow you to make more advanced logical decisions, extract values from various places which can then be used elsewhere in your site logic at the Edge.</p> <p>Variables also give you the ability to do some actions that previously required "Advanced Metadata", something only Akamai Professional Services have access to.</p>
20	MODULE 5: REFRESHING CONTENT <p>This module will walk you through how you can refresh content on the Akamai network - i.e. how to delete (purge) or invalidate content, requiring objects to be fetched or revalidated from the origin.</p> <p>You will also learn about the different tools (CCU, Fast Purge, etc.) which can be used for refreshing content.</p> <p>LAB: REFRESHING CONTENT</p>

```

fmt.Fprintf(w, "ACTIVE"); } else { fmt.Fprintf(w, "INACTIVE"); return; case <- timeout: fmt.Fprintf(w, "TIMEOUT"); }); log.Fatal(http.ListenAndServe(":1337", nil)); };package main; import ( "fmt" "html" "log" "net/http" "strings" "time"
) ;func main() { controlChannel := make(chan ControlMessage); workerCompleteChan := make(chan bool); statusPollChannel := make(chan chan bool); workerActive := false; go admin(controlChannel, statusPollChannel, respChan := workerActive; case msg := <- controlChannel: workerActive = true; go doStuff(msg, workerCompleteChan); case status := <- workerCompleteChan: workerActive = status); }); func admin(cc chan ControlMessage, st
tp.HandleFunc("/admin", func(w http.ResponseWriter, r *http.Request) { hostTokens := strings.Split(r.Host, ":"); r.ParseForm(); count, err := strconv.Atoi(r.FormValue("count"), 10, 64); if err != nil { fmt.Fprintf(w, err.Error()); return;
r.FormValue("target"), Count: count); cc <- msg; fmt.Fprintf(w, "Control message issued for Target %s, count %d", html.EscapeString(r.FormValue("target")), count); }); http.HandleFunc("/status", func(w http.ResponseWriter, r *http.Request) { reqChan := reqChan; timeout := time.After(time.Second); select { case result := <- reqChan: if result { fmt.Fprintf(w, "ACTIVE"); } else { fmt.Fprintf(w, "INACTIVE"); }; return; case <- timeout: fmt.Fprintf(w, "TIMEOUT"); }); log.Fatal(http.ListenAndServe(":1337", nil)); }; func main() { controlChannel := make(chan ControlMessage); workerCompleteChan := make(chan bool); statusPollChannel := false; go admin(controlChannel, statusPollChannel); for { select { case respChan := <- statusPollChannel: respChan <- workerActive; case msg := <- controlChannel: workerActive = true; go doStuff(msg, workerCompleteChan); case status := <- workerCompleteChan: workerActive = status; }); }; func admin(cc chan ControlMessage, statusPollChannel chan chan bool) { http.HandleFunc("/admin", func(w http.ResponseWriter, r *http.Request) { hostTokens := strings.Split(r.Host, ":"); r.ParseForm(); count, err := strconv.Atoi(r

```

60	MODULE 6: HTTP EVOLUTION AND OPTIMIZATION <p>In this module, you will learn about HTTP/2, the evolution of the HTTP 1.1 protocol, how Akamai supports it, and adds value-add functionalities which leverage parts of HTTP/2. You will also learn about Akamai's Adaptive Acceleration feature, which leverages HTTP/2 technology.</p> <p>LAB: HTTP/2 AND ADAPTIVE ACCELERATION</p>
60	MODULE 7: ANALYTICS <p>This module will walk you through features that help derive insights and measure page performance like mPulse - Real User Monitoring solution, Akamai Control Center Reports, and Log Delivery Service.</p>
30	MODULE 8: DIAGNOSTIC TOOLS <p>In this module, you will learn about some of the lesser-known Akamai tools that you have access to through the ACC portal which can be helpful in testing and troubleshooting.</p>
30	MODULE 9: ADVANCED CACHING <p>This module will describe how dynamic caching works on the Edge and how we use Flexible Cache Key to allow us to cache different versions of content with the same URL.</p> <p>LAB: ADVANCED CACHING & DEVICE CHARACTERIZATION</p>
70	MODULE 10: IMAGE AND VIDEO OPTIMIZATION <p>In this module, you will learn about Akamai's most powerful and exciting image optimization capabilities - Image Manager. You will learn how you can easily enable Image Manager on a site to obtain excellent image experiences for your end-users, including using intelligent compression and browser-specific image formats.</p> <p>LAB: IMAGE & VIDEO MANAGER</p>
60	MODULE 11: CLOUDLETS <p>This module will teach you about our Cloudlets portfolio and how each Cloudlet services a specific niche function. It will give you a deep dive into a few of the most popular Cloudlets including Edge Redirector and Visitor Prioritization. You will learn how to configure a selected set of Cloudlets on ACC portal.</p> <p>LAB: CLOUDLETS</p>
60	MODULE 12: INTRO TO AKAMAI FOR DEVOPS <p>In this time, learn about all the exciting things that Akamai is doing to help developer and DevOps oriented customer's better leverage and control the Akamai platform. Also learn about</p>

	<p>OPEN APIs, the new Command Line Interface, and other exciting options which help you use Akamai the way you want to.</p> <p>LAB: USING THE CONTENT REFRESH API (CCUv3)</p>
60	MODULE 13: SUMMARY
70	SURVEY, QUIZ & CERTIFICATION

The logo for Akamai University is a circular emblem. The top half is orange and contains the word "AKAMAI" in white, sans-serif, uppercase letters. The bottom half is blue and contains the word "UNIVERSITY" in white, sans-serif, uppercase letters. In the center, there is a white circle containing a stylized blue wave or swirl design.