

# Course Overview and Agenda

Web Performance  
Performance & Offload

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Version 1.2



## Course Overview

The Performance and Offload training is a training in our Web Performance solutions designed to give you a deeper understanding of those features and optimizations specifically designed to give you greater web performance and origin offload. It consists of presentation material as well as hands-on lab experience to help you get a thorough understanding of these features and how to implement them.

## Objectives

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

- Describe the performance and offload features of the Akamai Web Performance Solutions portfolio.
- Describe the need for performance measurement and a variety of testing tools and best practices
- Configure and run performance measurements tests using WebPageTest to measure baseline web page performance, as well as performance improvement as a result of implementation of Akamai performance and offload features.
- Configure performance and offload features of the Akamai Web Performance products to improve the performance of a demo site.
- Use Akamai debug headers to understand how Akamai is affecting caching at the Edge.

## Prerequisites

- Have a working knowledge of Akamai's Luna Control Center and Property Manager in particular.
- Have taken the Akamai University Web Performance basic level course or have equivalent knowledge based on experience working with Akamai Web Performance products and Property Manager.

## Agenda

The Akamai University Performance & Offload curriculum consists of six modules spread over:

Classroom modality: 1 full day (8 hours)

Online modality: 2 half day (4 hours each day)

| Timing   | Module Name   | Duration (min) | Description  |
|--|---|----------------|--|
| 8:30 am – 9:00 am<br><i>(only Classroom training timing)</i> | <b>Gather and Get Setup</b>   | 30             | <b>Classroom sessions</b> feature breakfast at this time; <b>Online training</b> participants are encouraged to get connected early to ensure connectivity, audio, and microphone function.  |
|  | <b>Introductions and Tech Setup</b>                                 | 20             | Class introductions and technicalities like logins and software requirements.  |
|  | <b>Module 1: Introduction to Performance &amp; Offload training</b> | 20             | Explain the need for performance and offload features of Web Performance products and how Akamai facilitates performance and offload of customer content.  |
|  | <b>Getting Up and Running (Lab)</b>                                 | 20             | <i>Lab Components:</i> <ul style="list-style-type: none"> <li>• <i>Creating a configuration in property manager</i></li> <li>• <i>Setting up the hostname and origin server</i></li> <li>• <i>Other basic setup tasks</i></li> </ul> |
|  | <b>Module 2: Performance Measurement</b>                            | 20             | Discuss the need for Performance Measurement and the various tools used for it.  |
|  | <b>Baseline Performance Measurement (Lab)</b>                       | 20             | <i>Lab Components:</i> <ul style="list-style-type: none"> <li>• <i>Use <a href="http://WebPageTest.org">WebPageTest.org</a> to measure performance of your minimally configured site</i></li> </ul>                                  |
|  | <b>Module 3: Static Caching</b>                                     | 20             | Describe how static content can be cached at the Edge and at the Client, and the various purging mechanisms.   |
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|  | <b>Static Caching Lab</b>                                 | 20 | <p><i>Lab Components:</i></p> <ul style="list-style-type: none"> <li>• <i>Caching Static Content at the Edge</i></li> <li>• <i>Caching Static Content at the Client</i></li> </ul>  |
|  | <b>Static Caching Follow-up with Debug Headers (Lab)</b>  | 20 | <p><i>Lab Components:</i></p> <ul style="list-style-type: none"> <li>• <i>Dig into the Akamai debug headers to see how your static caching configuration is effecting the objects on your site</i></li> </ul>   |
|  | <b>Module 4: Image Optimization</b>                       | 25 | Explain the limitations of caching images and how Akamai solves them.   |
| <b>12:00 pm – 1:00 pm</b><br><i>(Only Classroom training timing)</i> | <b>Lunch break</b>  | 60 | For online classes timing will differ   |
|  | <b>Optimizing Images with Image Manager (Lab)</b>         | 20 | <p><i>Lab Components:</i></p> <ul style="list-style-type: none"> <li>• <i>Enable Image Manager in your configuration and at the origin</i></li> </ul>   |
|  | <b>Performance Measurement with Image Manager (Lab)</b>   | 25 | <p><i>Lab Components:</i></p> <ul style="list-style-type: none"> <li>• <i>Use the Akamai-created Chrome browser add-on for Developer Tools - Piez to see how Image Manager is affecting the images on your site</i></li> <li>• <i>Use WebPageTest.org to measure performance of your minimally configured site</i></li> </ul> |
|  | <b>Module 5: Dynamic Caching</b>                          | 30 | 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.  |
|  | <b>Dynamic Caching (Lab)</b>                              | 30 | <p><i>Lab Components:</i></p> <ul style="list-style-type: none"> <li>• <i>Configure three common dynamic caching use cases and post-implementation performance measurement</i></li> </ul>   |
|  | <b>Dynamic Caching Follow-up with Debug Headers (Lab)</b> | 20 | <p><i>Lab Components:</i></p> <ul style="list-style-type: none"> <li>• <i>Use Akamai Debug Headers to test out the functionality of Dynamic Caching in your browser.</i></li> </ul>   |

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|                          | <b>Module 6: Additional Best Practices</b> | 20 | Describe some of the best practices related to the performance and offload features of Web Performance products. |
|                          | <b>Feedback Survey</b>                     | 10 | Give us feedback on the quality of our course and instructors.   |
|                          |  | 10 | <b>Break</b>   |
|                          | <b>Summary</b>                             | 10 | Review of what we've covered in this course  |
| <b>4:00 pm – 5:00 pm</b> | <b>Quiz &amp; Certification</b>            | 60 |  |