



## ERICSSON UNIFIED DELIVERY NETWORK

### Administration Portal User's Guide

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# Contents

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<b>1 Overview .....</b>	<b>1-1</b>
About This Guide.....	1-2
What is UDN? .....	1-3
UDN Concepts and Terminology.....	1-5
Portal .....	1-5
Entity .....	1-5
UDN Content Caching .....	1-6
Service Provider Delivery: On-Net Versus Off-Net .....	1-7
UDN System Components.....	1-8
Service Provider Edge Delivery Nodes .....	1-8
Analytics.....	1-8
Monitoring and Availability.....	1-8
Secure Customer-Controlled Caching .....	1-8
UDN Core Cache .....	1-8
UDN Benefits.....	1-10
<b>2 Getting Started with the Admin Portal.....</b>	<b>2-1</b>
Accessing the Portal.....	2-2
Exploring Starbursts.....	2-6
Viewing Data Over Time .....	2-6
Key Performance Indicators .....	2-7
Identifying Account Types .....	2-8
Identifying Trial Properties.....	2-9
Sorting Displayed Entities.....	2-10
Displaying the Table View .....	2-10
Navigating Between Accounts, Groups, and Properties .....	2-12
Starburst Navigation .....	2-12
Breadcrumb Navigation .....	2-12
Drop-down Navigation .....	2-12
Managing your User Information or Password .....	2-13
<b>3 Generating Reports.....</b>	<b>3-1</b>
Viewing Reports.....	3-2
Traffic Overview Report .....	3-4
Scope .....	3-4
Settings.....	3-4
Content .....	3-4
Cache Hit Rate Report .....	3-7
Scope .....	3-7
Settings.....	3-7
Content .....	3-7
Unique Visitors Report .....	3-9

Scope .....	3-9
Settings .....	3-9
Content .....	3-9
Service Provider On / Off Net Report .....	3-13
Scope .....	3-13
Settings .....	3-13
Content .....	3-13
Contribution Report .....	3-15
Scope .....	3-15
Settings .....	3-15
Content .....	3-15
File Error Report .....	3-17
Scope .....	3-17
Settings .....	3-17
Content .....	3-17
URL Report .....	3-19
Scope .....	3-19
Settings .....	3-19
Content .....	3-19

---

<b>4 Working with Accounts .....</b>	<b>4-1</b>
Viewing Account Information .....	4-2
Creating or Modifying an Account .....	4-4
Deleting an Account .....	4-6
Managing DNS Domains and Records .....	4-7
Viewing DNS Information .....	4-7
Managing DNS Domains .....	4-8
Managing DNS Records .....	4-9

---

<b>5 Working with Users .....</b>	<b>5-1</b>
Understanding User Roles and Permissions .....	5-2
Viewing Role Details .....	5-3
Viewing and Managing Users .....	5-4
Deleting a User .....	5-6

---

<b>6 Working with Groups .....</b>	<b>6-1</b>
Viewing and Managing Groups .....	6-2
Deleting a Group .....	6-5

---

<b>7 Working with Properties .....</b>	<b>7-1</b>
Viewing Properties .....	7-2
Adding a Property .....	7-5
Modifying Property Hostname Settings .....	7-6
Modifying Property Default Settings .....	7-8
Modifying Property Security Settings .....	7-11
Publishing Property Settings .....	7-12
Deleting a Property .....	7-14

---

<b>8 Managing Cache Content .....</b>	8-1
Caching Policy Overview.....	8-2
Adding or Modifying a Caching Policy .....	8-3
Adding or Modifying a Default Caching Policy.....	8-9
Token Authentication Policy Example.....	8-14
Content Targeting Policy Example.....	8-18
Publishing Caching Policies .....	8-21
Purging Cache Content.....	8-23
<b>9 Managing Security Settings .....</b>	9-1
Managing SSL Certificates.....	9-2
<b>10 Accessing Support Resources.....</b>	10-1
Accessing Support .....	10-2
Accessing Documentation .....	10-4
<b>11 Playback Demonstration.....</b>	11-1



---

## Figures

Figure 1-1:	High-Level View of UDN . . . . .	1-4
Figure 1-2:	Relationship Between Account, Groups, and Properties . . . . .	1-6
Figure 1-3:	Content Caching and Flow . . . . .	1-7
Figure 2-1:	Portal Main Window . . . . .	2-3
Figure 2-2:	Starburst Help . . . . .	2-6
Figure 2-3:	Key Performance Indicators Display . . . . .	2-8
Figure 2-4:	Account Types . . . . .	2-9
Figure 2-5:	Trial Property . . . . .	2-9
Figure 2-6:	Sorting Displayed Entities . . . . .	2-10
Figure 2-7:	Entity Table View . . . . .	2-10
Figure 2-8:	Breadcrumb Navigation . . . . .	2-12
Figure 2-9:	Drop-down Navigation Menu . . . . .	2-12
Figure 2-10:	User Profile Modal Window . . . . .	2-13
Figure 3-1:	Service Provider On/Off Net Report . . . . .	3-2
Figure 3-2:	Traffic Overview Report: Bandwidth Area . . . . .	3-4
Figure 3-3:	Traffic Overview Report: Transfer by Time Area . . . . .	3-5
Figure 3-4:	Traffic Overview Report: By Geography Area . . . . .	3-6
Figure 3-5:	Traffic Overview Report: By Country Area . . . . .	3-6
Figure 3-6:	Cache Hit Rate Report: Chart Area . . . . .	3-7
Figure 3-7:	Cache Hit Rate Report: Table Area . . . . .	3-8
Figure 3-8:	Unique Visitors Report: Visitors by Time Area . . . . .	3-9
Figure 3-9:	Unique Visitors Report: Visitors by Geography Area . . . . .	3-10
Figure 3-10:	Unique Visitors Report: Visitors by Country . . . . .	3-11
Figure 3-11:	Unique Visitors Report: Visitors by Browser . . . . .	3-11
Figure 3-12:	Unique Visitors Report: Visitors by Operating System . . . . .	3-12
Figure 3-13:	SP On/Off Net Report: Traffic Overview . . . . .	3-13
Figure 3-14:	SP On/Off Net Report: Volume Chart . . . . .	3-14
Figure 3-15:	SP On/Off Net Report: Data Table . . . . .	3-14
Figure 3-16:	Contribution Report: Traffic Chart . . . . .	3-15
Figure 3-17:	Contribution Report: Traffic Table . . . . .	3-16
Figure 3-18:	File Error Report: Client Errors . . . . .	3-17
Figure 3-19:	File Error Report: Byte and Request Volumes . . . . .	3-18
Figure 3-20:	URL Report: Top URLs . . . . .	3-19
Figure 3-21:	URL Report: All URLs . . . . .	3-20
Figure 4-1:	Account Summary Page . . . . .	4-2
Figure 4-2:	Account Management Page . . . . .	4-3
Figure 4-3:	Account Management Page: Account Tab . . . . .	4-4
Figure 4-4:	Account Management Page: No Account Selected . . . . .	4-6
Figure 4-5:	Account Management: DNS Tab . . . . .	4-7
Figure 4-6:	Account Management: DNS Tab Domain Area . . . . .	4-8
Figure 4-7:	Account Management: DNS Tab . . . . .	4-9
Figure 5-1:	Account Management: Roles Tab . . . . .	5-3
Figure 5-2:	Account Management: Users Tab . . . . .	5-4
Figure 5-3:	Accounts Page: Users Tab . . . . .	5-6
Figure 6-1:	Group Content Summary Page . . . . .	6-2
Figure 6-2:	Account Management: Groups Tab . . . . .	6-3
Figure 6-3:	Account Management: Groups Tab . . . . .	6-5

Figure 7-1:	Property Summary Page .....	7-2
Figure 7-2:	Property Summary Graph .....	7-3
Figure 7-3:	Add Property .....	7-5
Figure 7-4:	Property Configuration Page: Hostname Tab .....	7-6
Figure 7-5:	Property Configuration: Defaults Tab .....	7-9
Figure 7-6:	Property Configuration .....	7-12
Figure 7-7:	Property Settings: Publish Version .....	7-13
Figure 7-8:	Property Summary Page .....	7-14
Figure 8-1:	Property Configuration: Policies Tab .....	8-3
Figure 8-2:	Add Policy Window .....	8-4
Figure 8-3:	Add Policy: Choose Condition Modal Window .....	8-5
Figure 8-4:	Policy Rule: Choose Action Modal Window .....	8-7
Figure 8-5:	Ordering Match Conditions .....	8-8
Figure 8-6:	Add Policy Screen .....	8-9
Figure 8-7:	Add Policy: Choose Condition Modal Window .....	8-10
Figure 8-8:	Policy Rule: Choose Action Modal Window .....	8-12
Figure 8-9:	Ordering Match Conditions .....	8-13
Figure 8-10:	Property Configuration: Policies Tab .....	8-14
Figure 8-11:	Token Authentication Policy: Choose Match Condition .....	8-15
Figure 8-12:	Add Policy: Choose Action .....	8-16
Figure 8-13:	Add Policy: Token Authentication .....	8-17
Figure 8-14:	Property Configuration: Policies Tab .....	8-18
Figure 8-15:	Content Targeting Policy: Content Targeting Areas .....	8-19
Figure 8-16:	Ordering Match Conditions or Actions .....	8-20
Figure 8-17:	Property Configuration: Policies Tab .....	8-21
Figure 8-18:	Property Settings: Publish Version .....	8-22
Figure 8-19:	Property Summary Page .....	8-23
Figure 8-20:	Property Summary Page: Purge Status Tab .....	8-24
Figure 8-21:	Purge Content .....	8-25
Figure 9-1:	Security Page: SSL Certificate tab .....	9-2
Figure 9-2:	Upload Certificate .....	9-3
Figure 10-1:	Support: Tickets Tab .....	10-2
Figure 10-2:	Support: Documentation Tab .....	10-4
Figure 11-1:	Playback Demonstration .....	11-2

---

## Tables

Table 2-1:	Portal Interface Features .....	2-3
Table 2-2:	Navigation Icons .....	2-4
Table 4-1:	DNS Domain Settings .....	4-8
Table 4-2:	DNS Record Settings .....	4-10
Table 5-1:	Predefined Portal Role Permissions .....	5-2
Table 7-1:	Property Summary Information .....	7-3
Table 8-1:	Specifying Policy Match Conditions .....	8-5
Table 8-2:	Specifying Policy Match Conditions .....	8-10



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# **Chapter 1**

## **Overview**

This chapter contains the following sections:

- “[About This Guide](#)”
- “[What is UDN?](#)”
- “[UDN Concepts and Terminology](#)”
- “[UDN System Components](#)”
- “[UDN Benefits](#)”

## **About This Guide**

The goal of this guide is to help users of the Unified Delivery Network (UDN) Portal to:

- Familiarize themselves with the Portal interface.
- Generate Portal reports that display information about UDN traffic
- View and configure their UDN Properties, Groups, and Services.
- View and configure cache settings, including policies and purging.

You can find instructions for viewing this guide in “[Accessing Documentation](#)” in Chapter 10.

## **What is UDN?**

Ericsson's Unified Delivery Network (UDN) is a content distribution solution that is primarily designed to optimize content acquisition and delivery by:

- Transporting content along a dynamically optimized path from its current source to its current destination.
- Delivering cached content from a location as close to the end user as possible.
- Providing operational transparency to enable display of detailed reports and status information.

Every component of UDN's design serves these primary goals.

For content providers, UDN strives to provide the best quality of service for the lowest cost. Content providers identify which content they want UDN to deliver, and can designate whether they want to deliver content from their own origin or from a location within UDN core. Using the UDN Portal, content providers can then monitor end user access and consumption patterns by generating detailed, customized performance reports.

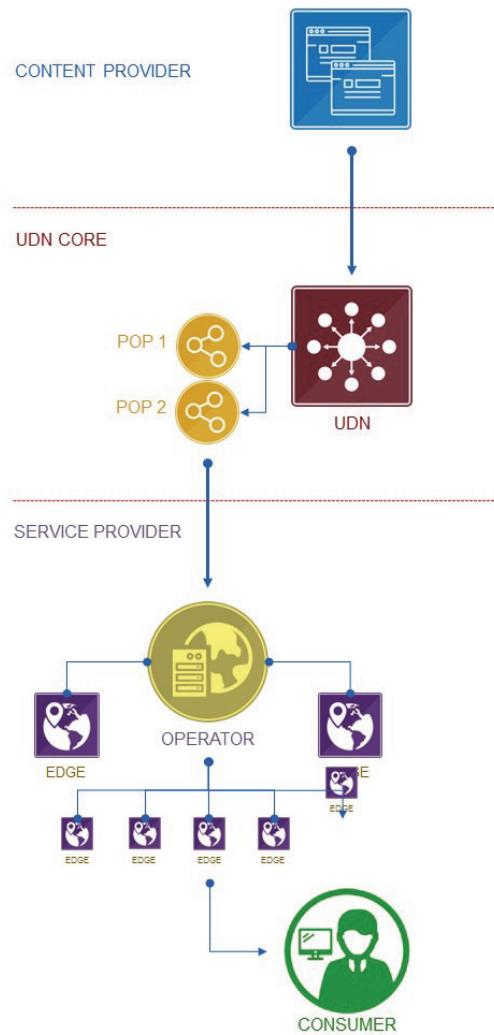
For service providers, UDN enables strategic placement of UDN service provider edge servers to increase capacity and lower delivery costs. In addition, service providers can use the UDN Portal to control how content is delivered through their network in order to optimize their content delivery profits. Performance data from the content delivery platform is gathered and stored for on-demand analytics that provide dynamic, detailed information on end user access and consumption patterns.

The heart of UDN is called the UDN core. Comprised of a collection of strategically placed core servers, the UDN core is designed to:

- Intelligently cache content at the UDN core and service provider edge.
- Send end-user requests for content to the optimal cache location for fulfillment.
- Gather analytics to support customer reporting and to optimize UDN operation.
- Enable custom configuration of content caching and delivery to support customer goals.
- Secure communications between UDN components and UDN customers.

*What is UDN?*

**Figure 1-1: High-Level View of UDN**



## UDN Concepts and Terminology

Before you use the Portal, please familiarize yourself with the concepts and terminology below. It will make it easier to perform the tasks described in this guide.

### Portal

The UDN Portal is the web-based graphical user interface used to monitor and manage the Unified Delivery Network. This guide introduces the Portal and describes how to use it to accomplish common tasks.

The Portal provides a customized experience to each of the three primary user types: Content Providers, Service Providers, and Service Administrators.

- UDN Administrators can view and manage UDN entities, view reports on content sources and content distribution, and manage content caching.
- Content Providers can view and manage groups and the properties that belong to them, view reports on content sources and content delivery, and manage content caching.
- Service Providers can view and manage Service Provider settings, and view reports on content delivery for both on-net and off-net traffic.

### Entity

One of the goals of the Portal is to enable you to create and logically organize all of the things you need to manage and monitor. An Entity is defined as something that can be managed and monitored by the Portal. Entities within the Portal refers to one of three things: an Account, a Group, or a Property.

The highest level entity in the Portal is an Account. There are two types of accounts: a Content Provider account and a Service Provider account. Within an account you can create one or more groups, and within a group you can create one or more properties. [Figure 1-2](#) shows how this hierarchy works.

Because the Portal is designed for flexibility, different customers can organize entities in different ways. For a Content Provider, a group might be a collection of television or video channels, or it might be a collection of different service types (video, gaming, or other services) associated with a specific product. For a Service Provider, a group might include properties in geographic locations that deliver the same brand of content. The goal is to identify how your organization wants to organize its properties and apply that structure to all properties you define in the Portal.

**Figure 1-2: Relationship Between Account, Groups, and Properties**

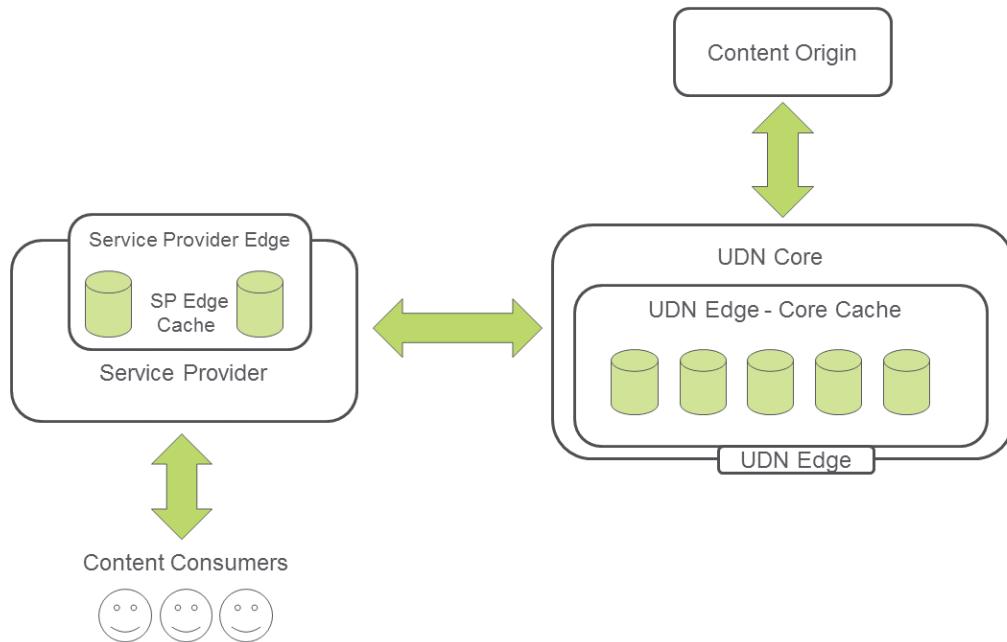


## **UDN Content Caching**

UDN is designed to optimize content caching and delivery, delivering content from the cache closest to the end user. To optimize cache locations, When UDN caches content, it can do so in two types of places: the Service Provider Edge and the UDN Edge.

The ideal location from which to deliver content is the Service Provider Edge (SP Edge) cache because this cache is located closest to the content consumer who requested the content. The content consumer is an end user who is a Service Provider subscriber.

When content is not available at the SP Edge, UDN checks to see if the content is stored in the UDN Edge, which is a component of the UDN Core. If the content is not available in the UDN Core, UDN goes to the origin to retrieve the content and, as the content is delivered, if it is cacheable, it is cached both at the UDN Core and the SP Edge for delivery to future users. [Figure 1-3](#) shows where content is cached, and how it is delivered, in UDN.

**Figure 1-3: Content Caching and Flow**

## Service Provider Delivery: On-Net Versus Off-Net

The Service Provider (SP) On/Off Net Report allows Service Provider partners to see how much traffic to their subscribers is being served to end users directly from the Service Provider edge (On Net). On-Net traffic provides the best end user experience due to the proximity of UDN SP edge servers in the SP delivery network to the user, and results in the highest revenue share for the Service Provider delivering it.

Why might traffic be served off-net? A request from a subscriber might be routed to either outside the SP Edge or to another Service Provider for a variety of reasons including:

- A lack of server availability for the SP that owns the subscriber.
- The SP network edge's inability to satisfy the request due to issues such as SSL delivery problems or a lack of SSL service.
- Advanced cache control requirements that cannot be properly identified by the SP network
- Network saturation/volume

Availability is determined based on the health or load of the SP Edge servers. If the SP Edge associated with the end user cannot fulfill the request, UDN routing will bring this subscriber to the UDN Edge (part of the UDN Core) or another SP in order to obtain the content.

## **UDN System Components**

The following sections describe the components that comprise the UDN system.

### **Service Provider Edge Delivery Nodes**

Edge delivery nodes are responsible for UDN streaming content delivery. Edge delivery nodes are built for streaming rather than storage. They are located as close to the consumer as possible to provide geo-optimized delivery of popular content. Whenever an asset or live stream reaches a certain popularity threshold, it is automatically replicated to the appropriate number of edge delivery nodes in the desired geographical location.

### **Analytics**

UDN System analytics provides operators with the ability to understand both the composition and the volume of their content delivery. Data is collected, aggregated, and analyzed on an ongoing basis from numerous sources within the CDN environment. Reports provide historical and current information which can help enable operators to tailor content caching and delivery as well as empowering them to make informed business decisions.

Analytics also feed billing systems across multiple revenue types. Designated billing information can be generated and delivered to Content Providers and Service Providers.

### **Monitoring and Availability**

The UDN System uses persistent connections, intelligent content management, and both multi-site and multi-server database redundancy to provide additional layers of protection for system operation. UDN continuously and systematically monitors system and server health and availability.

Additional protection features on-the-fly failover, and can include load balancing and clustering where additional capabilities in redundancy and fault tolerance are required. The UDN system is designed to accommodate flash events where a surge due to an event causes a dramatic increase in system loads, which might ordinarily strain a CDN system. Built-in congestion and overflow handling capabilities prevent bottlenecks and ensure continuous content delivery.

### **Secure Customer-Controlled Caching**

Cache management via the UDN Portal enables content management personnel to specify policies for content caching and purge/invalidate content once it is no longer available to users. Secure system multi-tenancy ensures that content generated by different Content Providers can only be accessed by its owner.

### **UDN Core Cache**

The Core Cache is a dynamically optimized, geographically distributed, extensible caching platform. It is the primary component of the UDN Service. Strategic location at highly-connected Internet Points-of-Presence (PoPs) reduces bandwidth costs, ensures global availability, and speeds content delivery to end users.

### **Universal Cache Technology**

Universal Cache technology enables a highly scalable Content Delivery Network (CDN) that efficiently delivers both its own managed content as well as OTT services from a common caching infrastructure. The front end of this system stores the metadata of published assets and interfaces with a storage system that hosts these assets. In addition, media upload, download, and processing, is performed by a system that communicates job processing and status information with external asset management systems.

This technology is comprised of two main components: the Conductor and the Provisioner.

- The Conductor accepts HTTP and HTTPS traffic, parses it, decides how to fulfill the request, and returns a result. The conductor process is responsible for discovering content regardless of its current location. In response to a request from the client, the conductor may either deliver the requested content directly from its local storage or forward the request to another node in the network acting as a caching proxy server.
- The Provisioner is the service that tracks content location within the Universal Cache, and manages purging and invalidation of cached content.

### **Content Acquisition Optimization**

At frequent intervals, a PoP cluster in the UDN Core will send out HTTP requests to strategic targets. The latency for each response is used to create a rotating optimize path selection group for content acquisition. Path information is stored along with other route selection criteria to ensure that content acquired from the origin is retrieved as quickly as possible.

### **Global and Local Load Balancing**

UDN's global and local load balancing system determines the fastest and closest location from which to serve content to consumers. Continuous testing of performance and latency ensures optimized content delivery. Policy-driven routing decisions are based on geography, network and server load, and business rules. Load balancing is performed globally, at the UDN Core, and locally, at Service Provider sites. The goal is to match Content Providers' needs to the CDN's needs while ensuring high availability, high performance, and low cost.

## **UDN Benefits**

UDN provides the following benefits:

- UDN enables content providers to connect with last-mile service providers and place content caches in the service provider network. Rather than focusing on content delivery optimization through points of presence outside the last mile, UDN caches content close to the end user, at the service provider edge, for rapid, high-quality content delivery.
- UDN's network overlay uses intelligent caching, server load balancing, and dynamic request routing to optimize the user experience.
- Ericsson continuously monitors UDN performance and operations across the entire infrastructure ensuring optimized operation.
- Ericsson provides coordinated deployment of software and configuration to UDN servers, along with secure remote management, resulting in the ability to increase resources on-demand.
- UDN offers customers continuous insight into content delivery by providing targeted, content-centric analytics. Reporting is focused on content distribution and delivery data to provide transparency into UDN operations and content delivery.
- On top of the delivery and management system technology, UDN serves a central contracting role for global content delivery with content provider and service provider partners worldwide. Collaboration between Ericsson, content providers, and service providers increases quality of service while decreasing delivery cost.
- UDN's secure multi-tenant architecture provides a hierarchy to support different roles and permissions, enabling data security at all levels for secure visibility by Content Providers and Service Providers, and their subsidiaries, resellers, and partners.

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## **Chapter 2**

# **Getting Started with the Admin Portal**

The UDN Administrator Portal is a Graphical User Interface (GUI) web application that serves as the management application for UDN administration, configuration, and monitoring. This chapter introduces you to the Portal and its main features.

This chapter contains the following sections:

- “[Accessing the Portal](#)”
- “[Exploring Starbursts](#)”
- “[Navigating Between Accounts, Groups, and Properties](#)”
- “[Managing your User Information or Password](#)”

## **Accessing the Portal**

The Portal is a web-based interface that enables you to view and manage settings associated with UDN Services.

### **N O T E** \_\_\_\_\_

For security reasons, if you leave the Portal interface idle for too long, you will automatically be logged out.

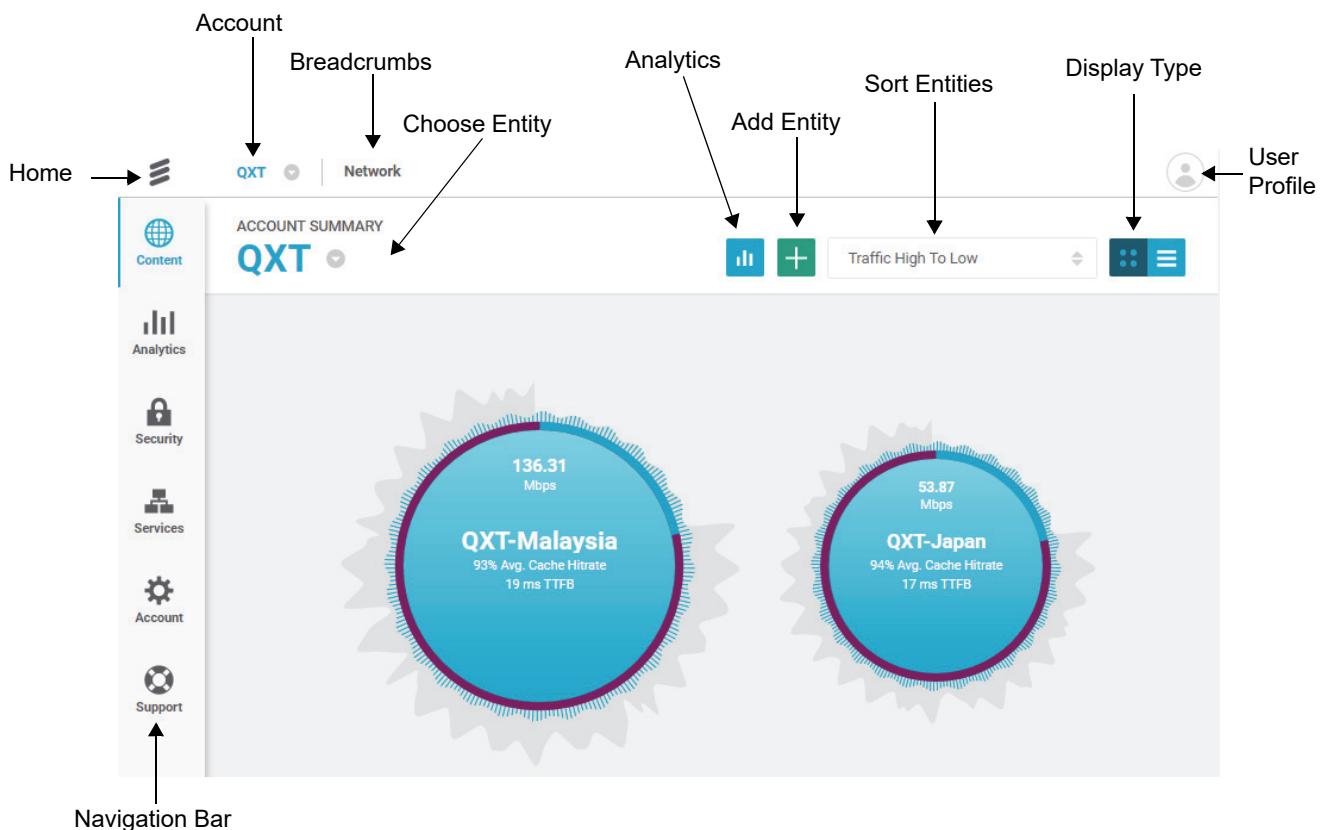
To access the Portal:

1. Open the browser of your choice. The following browsers are supported for Portal access at this time:
  - Chrome Version 48 or later
  - Internet Explore Version 11 or later
  - Safari Version 9 or later
  - Firefox Version 45 or later
2. To access the Portal, navigate to:  
<https://portal.ericssonudn.com>
3. To log in to the Portal, enter your username and password.

### **N O T E** \_\_\_\_\_

Username entry is not case sensitive, but password entry is.

4. The main window of the UDN Administrator Portal displays ([Figure 2-1](#)). The features of the Portal are described in [Table 2-1](#).

**Figure 2-1: Portal Main Window**

When you log into the Portal for the first time, you will be presented with a visual representation of UDN traffic in the form of one or more starbursts. The starburst feature is used to represent information associated with an entity, whether that entity is an account (the highest level managed entity), a group, or a property (the lowest level managed entity). For more information about starbursts, see “[Exploring Starbursts](#)”.

The Portal interface provides the controls listed in [Table 2-1](#):

**Table 2-1: Portal Interface Features**

Feature	Description
Navigation Bar	The left side of the Portal window displays the Navigation Bar. Icons in the Navigation Bar are listed in <a href="#">Table 2-2</a> .
Account Selector	The current Account is listed, followed by a selector enabling you to select from a list of alternate Accounts that are available to you. For more information, see “ <a href="#">Drop-down Navigation</a> ”.
Breadcrumbs	Breadcrumbs show you the path to your current view, and provide links to selections up the breadcrumb path to higher level views. For more information, see “ <a href="#">Breadcrumb Navigation</a> ”.
Choose Entity	This selector enables you to select other entities at the level of the currently selected entity (Account, Group, or Property).

**Table 2-1: Portal Interface Features (Continued)**

Feature	Description
Add Entity	The Add (+) button enables you to add an entity to the current view. <ul style="list-style-type: none"> <li>From the Account view, this button enables you to add a Group.</li> <li>From the Group view, this button enables you to add a Property.</li> </ul>
Sort Entities	You can select from several options to sort the displayed entities alphabetically, or by traffic volume. For more information, see “ <a href="#">Sorting Displayed Entities</a> ”.
Display Type	You can choose whether to display entities as starbursts, or as table rows. For more information, see “ <a href="#">Displaying the Table View</a> ”.
User Profile	Select this icon to view or modify your user profile. For more information, see “ <a href="#">Managing your User Information or Password</a> ”.
Main Window	The main (working) area of each screen displays information, typically in the form of starbursts. Each starburst represents a managed entity in the form of an account, a group, or a property. See “ <a href="#">Exploring Starbursts</a> ” for a detailed explanation of starbursts.

5. Down the left side of the screen, you will view a number of icons you can click to access the main features of the Portal. These icons are described in [Table 2-2](#).

Note that clicking any icon will bring you to a page associated with that icon’s Portal feature, and any information shown on that page will be associated with the entity in the current Portal view. For example, if you are viewing a group, clicking the Analytics icon will display reports for the traffic data associated with that group.

**Table 2-2: Navigation Icons**

Icon	Name	Use
	Home	From any view, clicking the Home icon brings you to the highest level Portal page.
	Content	Clicking the Content icon brings you to the Content Summary page which displays information for entities associated with Content Providers.
	Analytics	Clicking the Analytics icon brings you to the Analytics page where you can view charts and generate reports. For more information on generating reports, see <a href="#">Chapter 3, “Generating Reports”</a> .
	Security	Clicking the Security icon brings you to the Security page. The Security page enables you to load SSL certificates. For more information on Security features, see <a href="#">Chapter 9, “Managing Security Settings”</a> .

**Table 2-2: Navigation Icons (Continued)**

Icon	Name	Use
 Account	Account	Clicking the Account icon brings you to the Account Management page where you can view and manage groups and users. For more information, see <a href="#">Chapter 6, “Working with Groups”</a> and <a href="#">Chapter 5, “Working with Users”</a> .
 Support	Support	Clicking the Support icon brings you to a page where you can file and track support tickets, access support tools, and view documentation. For more information, see <a href="#">Chapter 10, “Accessing Support Resources”</a> .

**N O T E** —————

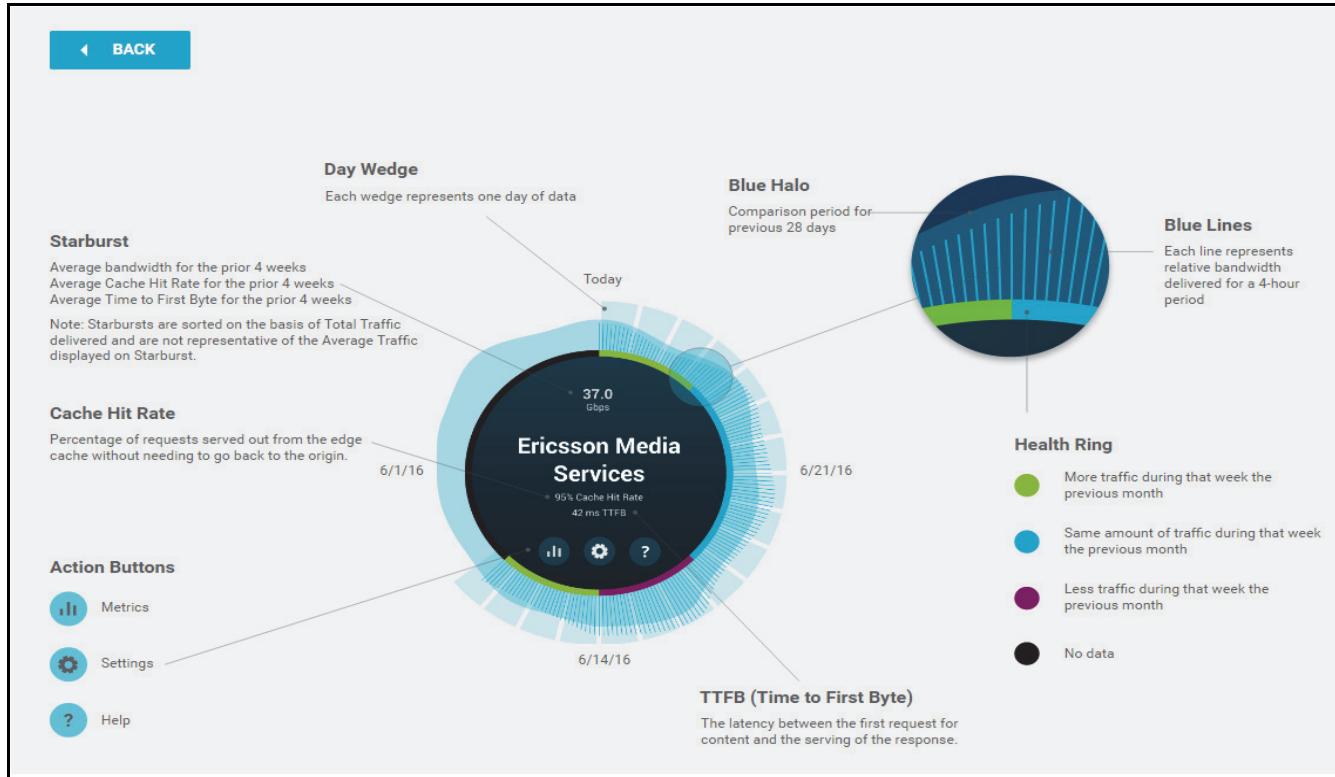
Features associated with the Services icon will be available in a future release.

## Exploring Starbursts

The Portal is used to manage and generate reports on three different levels of entity: accounts, groups, and properties. Each account contains one or more groups, and each group contains one or more properties. Analytics information for an entity is an aggregation of the data for all entities below it.

Within the Portal, each entity is graphically represented as a starburst. You can view a Help page in the Portal (Figure 2-2) by hovering over any starburst and clicking the “?” icon that displays in its center.

**Figure 2-2: Starburst Help**



Following is an overview of the rich collection of information that the starburst data visualization provides.

## Viewing Data Over Time

The starburst represents the last 28 days of traffic activity for an account, group, or property.

If you picture each starburst (all starbursts have the same layout regardless of whether they represent an account, group, or property) as the circular face of a clock:

- The 12:00 position at the top of the starburst represents today.
- The quarter-circle section between 12:00 and 3:00 represents the past week (the past 7 days).
- The quarter-circle section between 3:00 and 6:00 represents 2 weeks ago (the time between 14 days ago and 7 days ago).
- The quarter-circle section between 6:00 and 9:00 represents 3 weeks ago (the time between 21 days ago and 14 days ago).

- The quarter-circle section between 9:00 and 12:00 represents 4 weeks ago (the time between 28 days ago and 21 days ago).

You will notice a solid ring, called the Health ring, around the inner edge of each starburst. For each week of traffic in the outer “halo”, you will find the color of the inner ring represents how that week's traffic compares to traffic during the same time period four weeks earlier. When you hover over any point on the Health ring, a color key displays, enabling you to easily interpret the colored segments of the ring.

There is a halo of lines, or rays, radiating out from the edge of each starburst. Each line represents the relative bandwidth delivered over a 4-hour period. Longer lines represent higher levels of traffic and shorter lines represent lower levels over the time period. You will typically notice a natural variation in bandwidth use over the course of a day (represented by 6 adjacent lines), but can also note other data trends as they appear.

As you mouse over the halo, the hover text shows the date and specific metrics for a particular day. For property starbursts, the rays for each day have a wedge, or slice, highlighting the day's boundaries.

Clicking on a particular wedge brings up the property summary showing a bandwidth graph for the date of the wedge you selected.

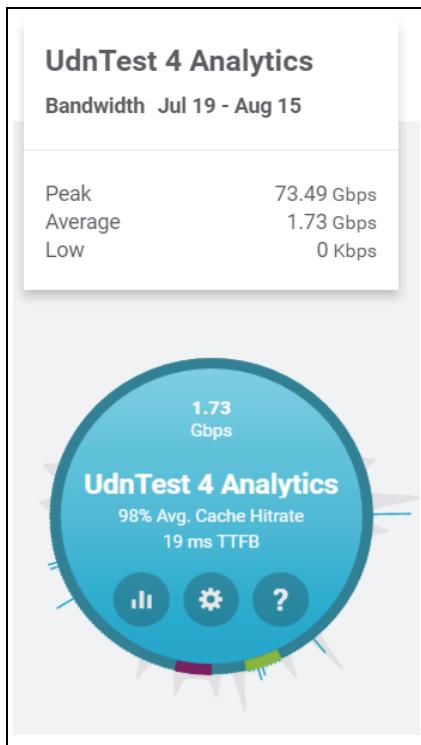
## Key Performance Indicators

When the starburst for an entity (account, group, or property) displays, key performance indicators display automatically in the middle of the starburst. In addition to the name of the entity, information averaged over the past month displays, including:

- The average bandwidth (in Gbps)
- The average cache hit rate for the past 28 days (as a percentage)
- The average time to first byte (TTFB) in milliseconds for the past 28 days

A starburst display provides access to additional information when you hover over different areas:

- When you hover over any point in the center of the starburst, you can view the Peak, Average, and Low bandwidth for the most recent 28-day period ([Figure 2-3](#)).
- When you hover over any area on the solid-color health ring at the perimeter of the circle, a color key displays to assist you in interpreting the ring colors displayed.
- When you hover over any section on the halo (rays) outside the center circle, you can view the Peak, Average, and Low bandwidth for the date represented by that halo section.

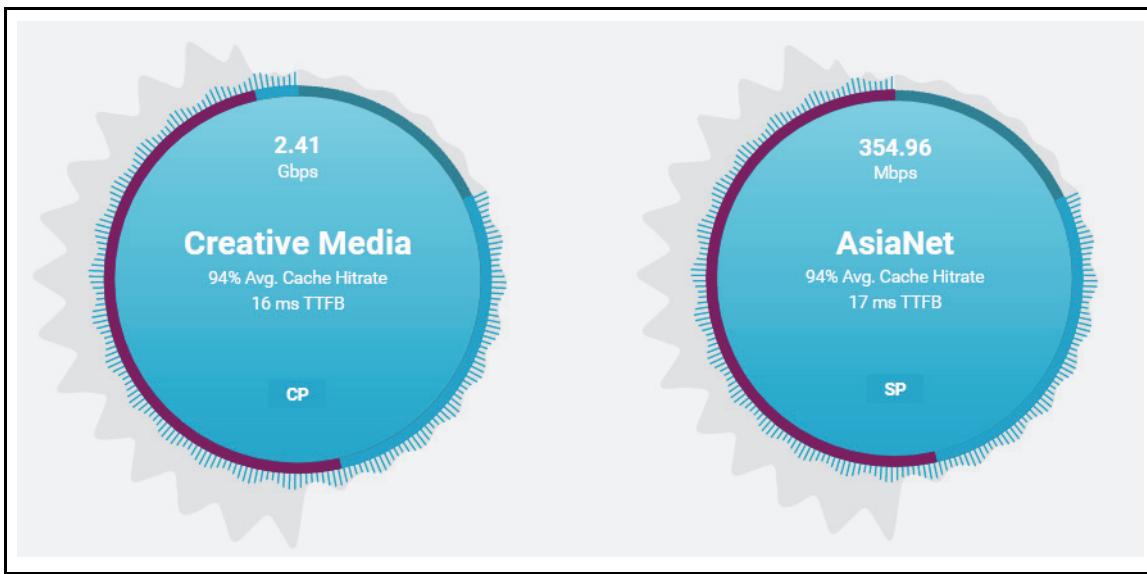
**Figure 2-3: Key Performance Indicators Display**

Note that all metrics for an individual starburst are an aggregate of any entities beneath that starburst:

- An account starburst displays an aggregate of the data for all of the groups that belong to that account.
- A group starburst displays an aggregate of the data for all of the properties belonging to that group.
- A property is the smallest entity available on the Portal.

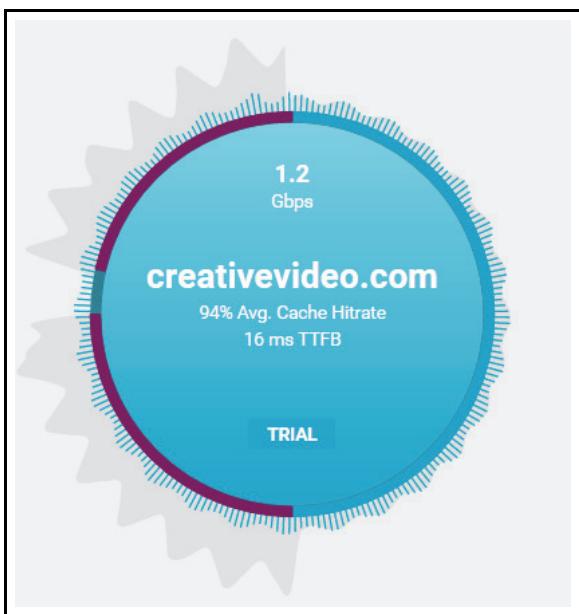
## Identifying Account Types

When a UDN Administrator views a view displaying multiple accounts, the Portal indicates which type of customer an account belongs to: a service provider (SP) or a content provider (CP). The Portal labels each starburst with the account type at the bottom. When you hover over the starburst, the account type label is replaced by the Analytics, Configure, and Help icons that typically display at the bottom of a starburst.

**Figure 2-4: Account Types**

## Identifying Trial Properties

When new properties are deployed, they can be created as either Trial or Production properties. When a property is a Trial property, the starburst representing that property will indicate that as shown in [Figure 2-5](#). When you hover over the starburst, the Trial label is replaced by the Analytics, Configure, and Help icons that typically display at the bottom of a starburst.

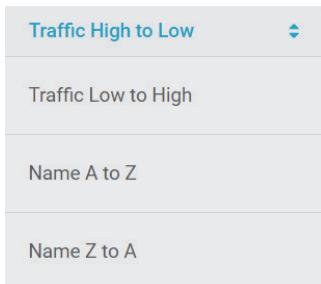
**Figure 2-5: Trial Property**

## Sorting Displayed Entities

At the top of any page, to the right of the title of the entity you are viewing (account, group, or property), there is a drop-down which enables you to sort the information you are displaying. You can sort based on traffic (Traffic High to Low or Traffic Low to High), or you can sort alphabetically (Name A to Z or Name Z to A).

Note that when you sort by traffic, the sorting is performed based on the total transfer rate but the starbursts display the average transfer rate.

**Figure 2-6: Sorting Displayed Entities**



## Displaying the Table View

As an alternative to the starburst view, you can choose to display the same information as a series of rows in a table.



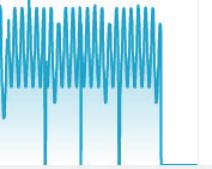
To display the Table View, click the Table View icon at the top right of the page:



To return to the starburst view at any time, click the Starburst View icon:

Sample rows from the Table View are shown in [Figure 2-7](#).

**Figure 2-7: Entity Table View**

<b>GP-J</b>   	<table border="1"> <tr> <td>Peak</td><td>12.6 Gbps</td><td><b>91 %</b></td><td><b>13 ms</b></td></tr> <tr> <td>Low</td><td>555.56 Kbps</td><td>Avg. Cache Hit Rate</td><td>Avg. TTFB</td></tr> <tr> <td>Average</td><td>6.14 Gbps</td><td></td><td></td></tr> </table>	Peak	12.6 Gbps	<b>91 %</b>	<b>13 ms</b>	Low	555.56 Kbps	Avg. Cache Hit Rate	Avg. TTFB	Average	6.14 Gbps			<table border="1"> <tr> <td>Peak</td><td>12.6 Gbps</td><td><b>91 %</b></td><td><b>13 ms</b></td></tr> <tr> <td>Low</td><td>555.56 Kbps</td><td>Avg. Cache Hit Rate</td><td>Avg. TTFB</td></tr> <tr> <td>Average</td><td>6.14 Gbps</td><td></td><td></td></tr> </table>	Peak	12.6 Gbps	<b>91 %</b>	<b>13 ms</b>	Low	555.56 Kbps	Avg. Cache Hit Rate	Avg. TTFB	Average	6.14 Gbps		
Peak	12.6 Gbps	<b>91 %</b>	<b>13 ms</b>																							
Low	555.56 Kbps	Avg. Cache Hit Rate	Avg. TTFB																							
Average	6.14 Gbps																									
Peak	12.6 Gbps	<b>91 %</b>	<b>13 ms</b>																							
Low	555.56 Kbps	Avg. Cache Hit Rate	Avg. TTFB																							
Average	6.14 Gbps																									
<b>GP-K</b>   	<table border="1"> <tr> <td>Peak</td><td>5.98 Gbps</td><td><b>92 %</b></td><td><b>13 ms</b></td></tr> <tr> <td>Low</td><td>350 Mbps</td><td>Avg. Cache Hit Rate</td><td>Avg. TTFB</td></tr> <tr> <td>Average</td><td>3.13 Gbps</td><td></td><td></td></tr> </table>	Peak	5.98 Gbps	<b>92 %</b>	<b>13 ms</b>	Low	350 Mbps	Avg. Cache Hit Rate	Avg. TTFB	Average	3.13 Gbps			<table border="1"> <tr> <td>Peak</td><td>5.98 Gbps</td><td><b>92 %</b></td><td><b>13 ms</b></td></tr> <tr> <td>Low</td><td>350 Mbps</td><td>Avg. Cache Hit Rate</td><td>Avg. TTFB</td></tr> <tr> <td>Average</td><td>3.13 Gbps</td><td></td><td></td></tr> </table>	Peak	5.98 Gbps	<b>92 %</b>	<b>13 ms</b>	Low	350 Mbps	Avg. Cache Hit Rate	Avg. TTFB	Average	3.13 Gbps		
Peak	5.98 Gbps	<b>92 %</b>	<b>13 ms</b>																							
Low	350 Mbps	Avg. Cache Hit Rate	Avg. TTFB																							
Average	3.13 Gbps																									
Peak	5.98 Gbps	<b>92 %</b>	<b>13 ms</b>																							
Low	350 Mbps	Avg. Cache Hit Rate	Avg. TTFB																							
Average	3.13 Gbps																									

The Table View displays the following information for a rolling 4-week period:

- The name of the entity (account, group, or property).
- The last time the entity was modified, and the user who modified it.
- A chart indicating the daily bit rate over the past 28 days. Note that you can hover over the chart for detailed information.
- The Peak, Lowest, and Average bit rate for traffic over the past 28 days.
- The average cache hit rate for the past 28 days.
- The average Time to First Byte (TTFB), in milliseconds, for the past 28 days.

The Table View also provides the following icons:

- To configure settings for the displayed entity, click the Configure icon.



- To view analytics for the displayed entity, click the Analytics icon.



## **Navigating Between Accounts, Groups, and Properties**

There are several ways you can navigate between entities (accounts, groups and properties) in the Portal: breadcrumb navigation, starburst navigation, and drop-down navigation.

### **Starburst Navigation**

To navigate to a lower-level entity in the Portal, click on a starburst. Clicking on a starburst brings you to a display that shows a starburst for each of the entities it contains:

- Clicking on an account starburst brings you to a page that displays a starburst for each of the groups belonging to that account.
- Clicking on a group starburst brings you to a page that displays a starburst for each of the properties belonging to that group.

### **Breadcrumb Navigation**

To navigate to a higher-level entity in the Portal hierarchy, you can traverse back up the path you used to navigate to your current view by clicking any item in the breadcrumb trail of links at the top of the page.

**Figure 2-8: Breadcrumb Navigation**



You can navigate to the highest level view by clicking the Ericsson logo in the upper left corner.

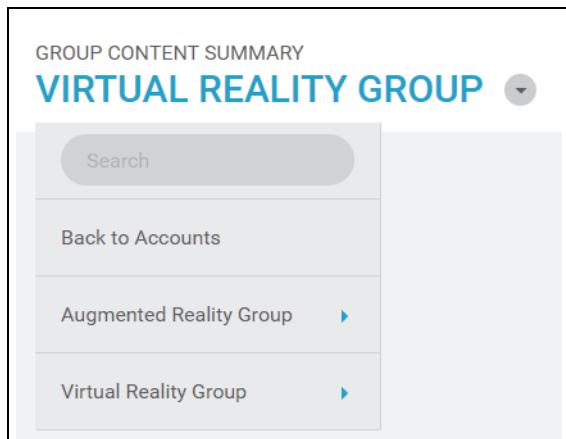
### **Drop-down Navigation**

The Portal also provides a drop-down selector that enables you to navigate either one level up from your current location, or to choose from other entities at the same level as the one you are currently viewing ([Figure 2-9](#)).

For example, if you are viewing a group, the drop-down selector at the top of the page enables you to navigate up one level to view accounts, or to choose to view a different group belonging to the same account as the group you are viewing.

In addition, you can search for an entity using the Search field. Note that search terms are not case sensitive.

**Figure 2-9: Drop-down Navigation Menu**



## Managing your User Information or Password

In order to access the portal, you must have a user account. In order to create this account, information about you has been entered into the UDN Service by an administrator. The Portal enables you to modify this information.

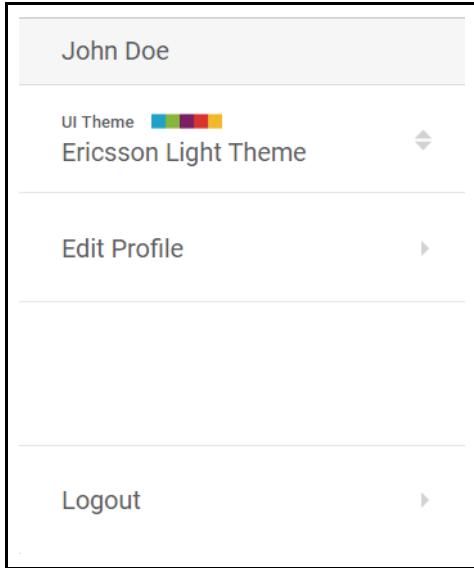
To view or modify your user profile settings:

1. Click the user avatar at the upper right corner of the Portal screen.



The User Profile modal window displays ([Figure 2-10](#)).

**Figure 2-10: User Profile Modal Window**



2. Under UI Theme, you can change the UI Theme you want to view (Ericsson Light Theme and Ericsson Dark Theme), based on your preference.
3. To view or modify your User settings, choose Edit Profile.

When you edit your profile, you can:

- Modify your name by entering your changes.
- Modify your contact information (telephone number) by entering your changes.
- Change your password by clicking CHANGE.

### NOTE —————

If you change your password, you will need to log back into the system.



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## **Chapter 3**

# **Generating Reports**

UDN analytics enable you to monitor crucial metrics that directly affect the success of your business, helping you to make timely decisions regarding content management, storage, and delivery. UDN reports are designed to provide actionable and relevant information for Portal users and their management.

UDN reports provide detailed information on bandwidth delivered by provider, by time, and by geography. You can identify which URLs are most popular and which URLs are suffering content delivery failures. You can also view information on how frequently cached content is being served, to identify opportunities for cache optimization.

This chapter contains the following sections:

- “Viewing Reports”
- “Traffic Overview Report”
- “Cache Hit Rate Report”
- “Unique Visitors Report”
- “Service Provider On / Off Net Report”
- “Contribution Report”
- “File Error Report”
- “URL Report”

## Viewing Reports

The Portal enables you to dynamically generate a number of predefined report types, specifying the desired date range for the data you want displayed.

When you click the Analytics icon, the Portal will display reporting information associated with the currently selected entity (account, group, or property) associated with that page. If you select the Analytics icon for a property starburst or summary, the report will reflect the data available for that property. If you select the Analytics icon for a group starburst or summary, the report will include aggregated data from all properties belonging to that group. Likewise, reporting for an account displays a total of all data for all properties belonging to all groups within that account.

To view a report:

1. Navigate to the entity (account, group, or property) whose data you want to view.
2. Doing one of the following:

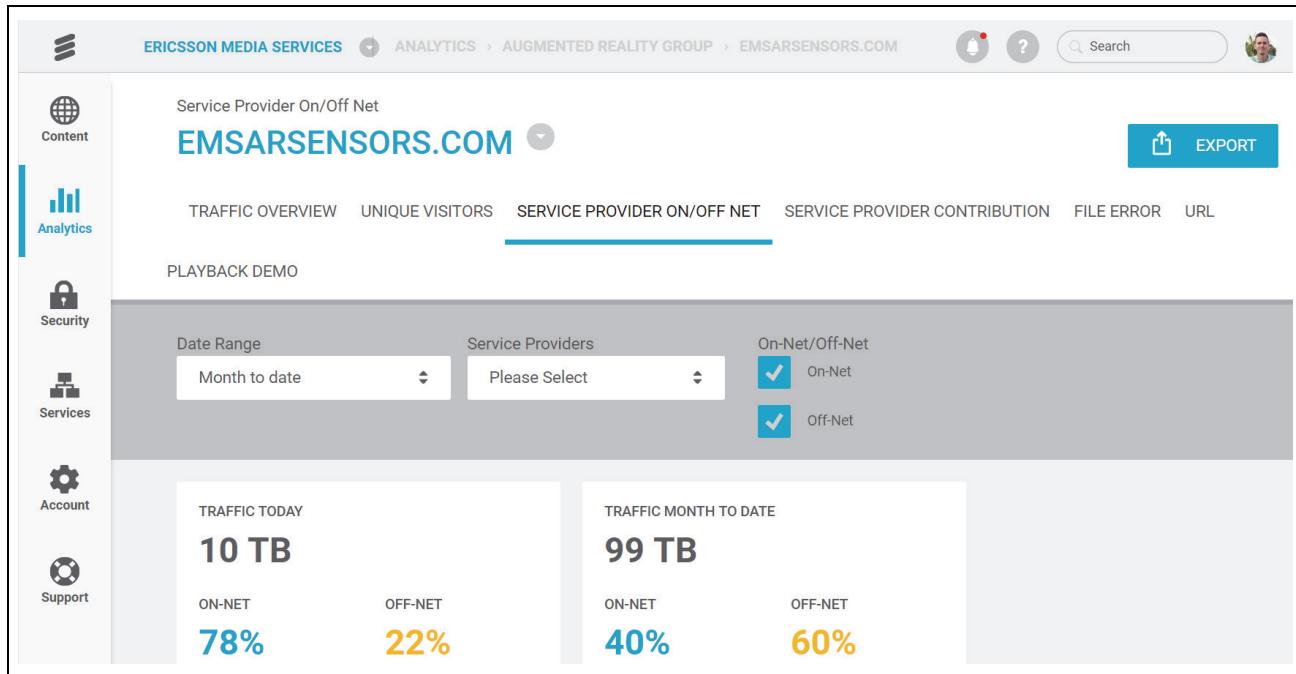
- Click the Analytics icon on the left navigation bar.  
  
Note that you need to hover the cursor in the center of the starburst in order for this icon to display.
- Click the Analytics icon inside any starburst.  

- Click the Analytics icon on any summary page.  


A Report page displays for the selected entity (account, group, or property).

3. You can select different types of reports by choosing the tabs that display above the report. Figure 3-1 shows an example of the Service Provider On/Off Net Report.

**Figure 3-1: Service Provider On/Off Net Report**



ERICSSON MEDIA SERVICES ANALYTICS AUGMENTED REALITY GROUP EMSARSENSORS.COM Search

Content

Analytics

Analytics

TRAFFIC OVERVIEW UNIQUE VISITORS SERVICE PROVIDER ON/OFF NET SERVICE PROVIDER CONTRIBUTION FILE ERROR URL

PLAYBACK DEMO

Date Range Month to date Service Providers Please Select On-Net/Off-Net

On-Net Off-Net

TRAFFIC TODAY 10 TB ON-NET 78% OFF-NET 22%

TRAFFIC MONTH TO DATE 99 TB ON-NET 40% OFF-NET 60%

4. Each report has a specified date range. By default, each report type shows data for the Month to Date. You can modify this setting by selecting from a predefined list of options (Last Month, Last Week, and so forth), or you can specify a Custom Date Range.

When you specify a date range that spans multiple days, the data displays in daily increments. When you specify a single day, the data displays in hourly increments.

**N O T E** \_\_\_\_\_

Each report type offers settings that allow you to generate more customized reports. Detailed information about each report type is available in the following sections.

5. When information is displayed in chart form, you can hover your cursor over separate parts of the graph in order to view more detailed information.
6. When information is displayed in table form, you will see a small triangle appear next to some column headings. You can sort the table rows in ascending or descending order based on the column content by clicking these headings.
7. You can Export a displayed report to a CSV (comma separated variable) file format by clicking the Export button. The resulting csv file name includes the report type and the entity (account, group, or property) for which data is included.
8. Once you have generated a report, you can select a different entity from the selector at the top of the page.

When you do so, if the report is availability for the entity type (account, group, or property), the same report type will display for the selected entity. If it is not available, a report type that is available for that entity will display.

## Traffic Overview Report

The Traffic Overview Report shows detailed bandwidth usage information for the account, group, or property selected. This report provides a general view of the traffic being carried by the UDN service. This report summarizes content delivery information based on traffic type and data type for a given date range.

### Scope

This report is available to users who have been assigned either the UDN\_Admin, CP\_Admin, or CP\_User role. You can generate this type of report for an account, group, or property.

### Settings

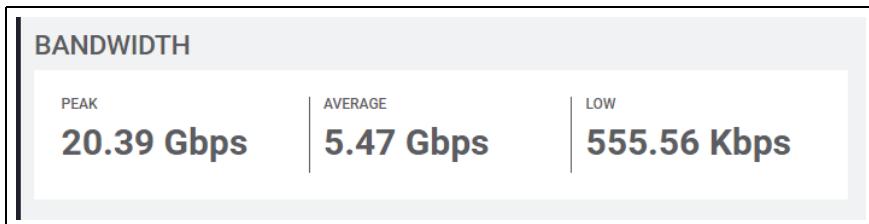
You can specify the following settings for this report:

- Date Range: specify a date range and, if desired, select whether you want a comparison between this date range and the previous date range of the same duration.
- Traffic type: select HTTP traffic, HTTPS traffic, or both.
- Data type: select Bandwidth or Requests.

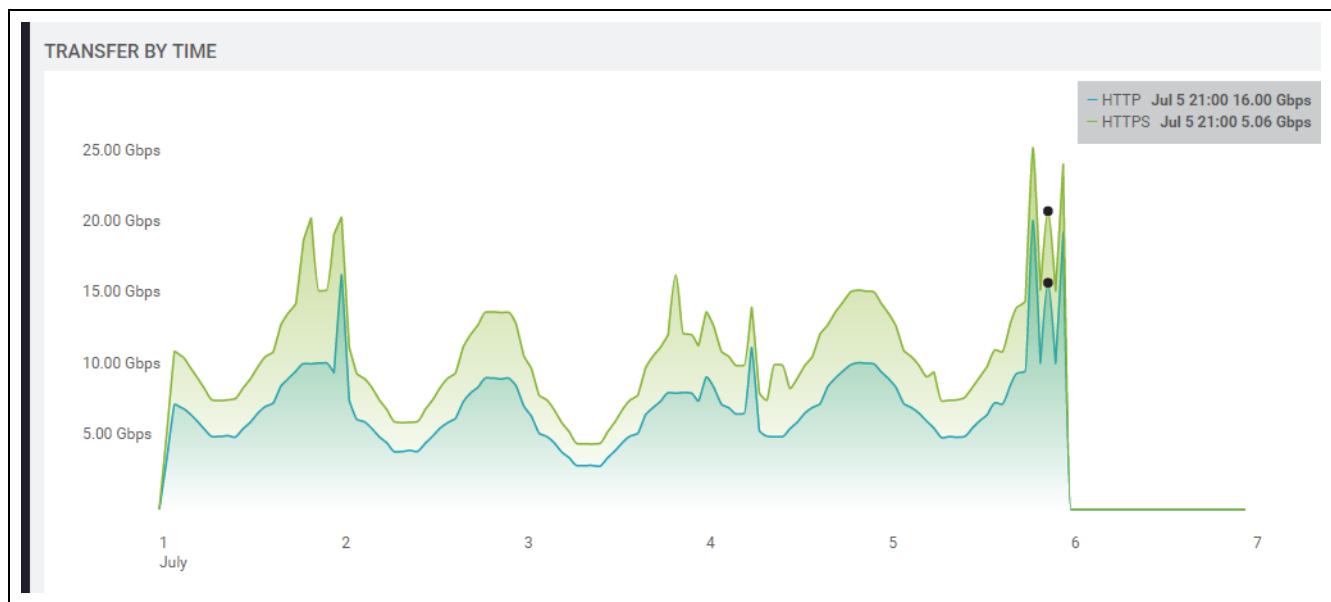
### Content

When viewing the Traffic Overview report, the Bandwidth area at the top ([Figure 3-2](#)) displays Peak, Average, and Low bandwidth values over the total date range. If you select Requests, Peak, Average, and Low values will display.

**Figure 3-2: Traffic Overview Report: Bandwidth Area**

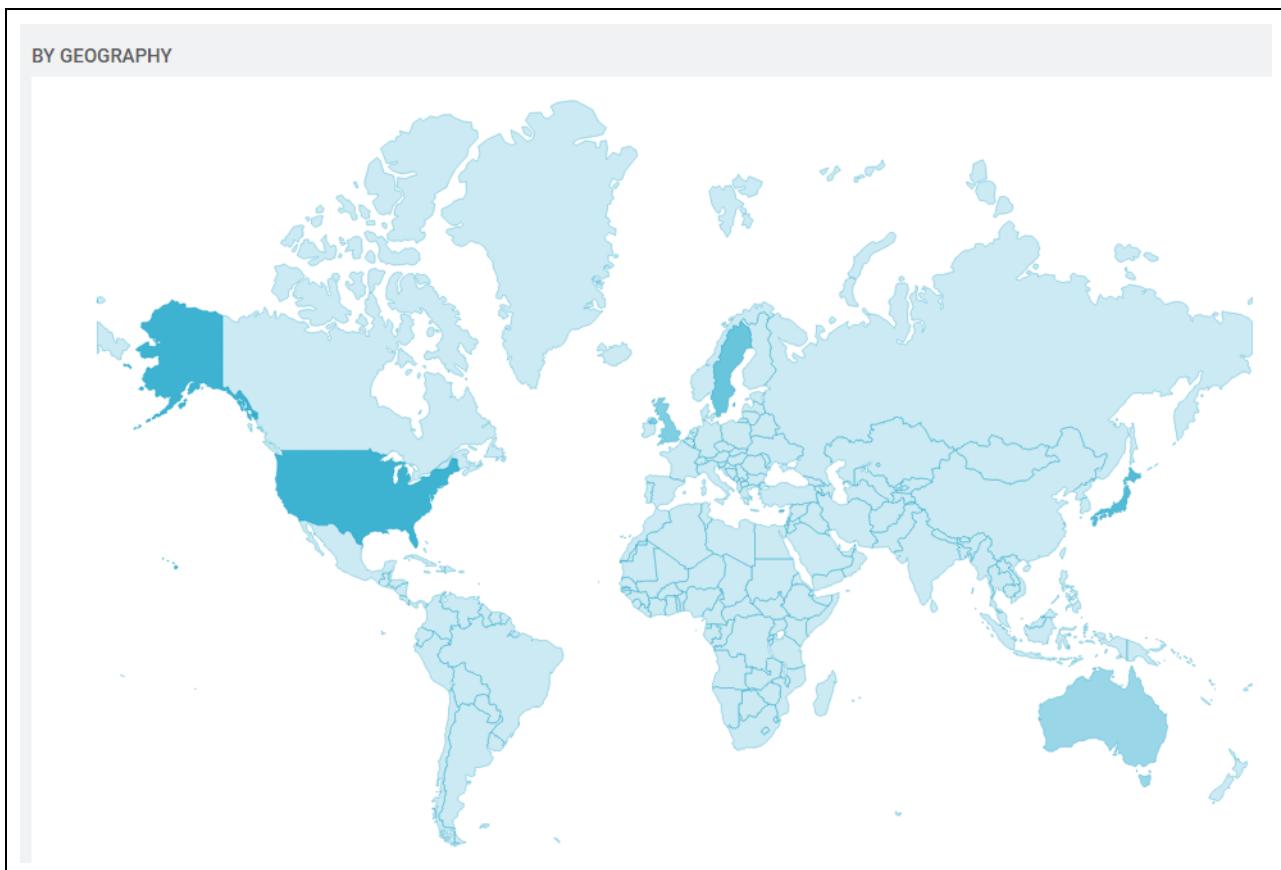


The Transfer by Time area ([Figure 3-3](#)) displays a graph showing the volume of data transferred over the dates specified.

**Figure 3-3: Traffic Overview Report: Transfer by Time Area**

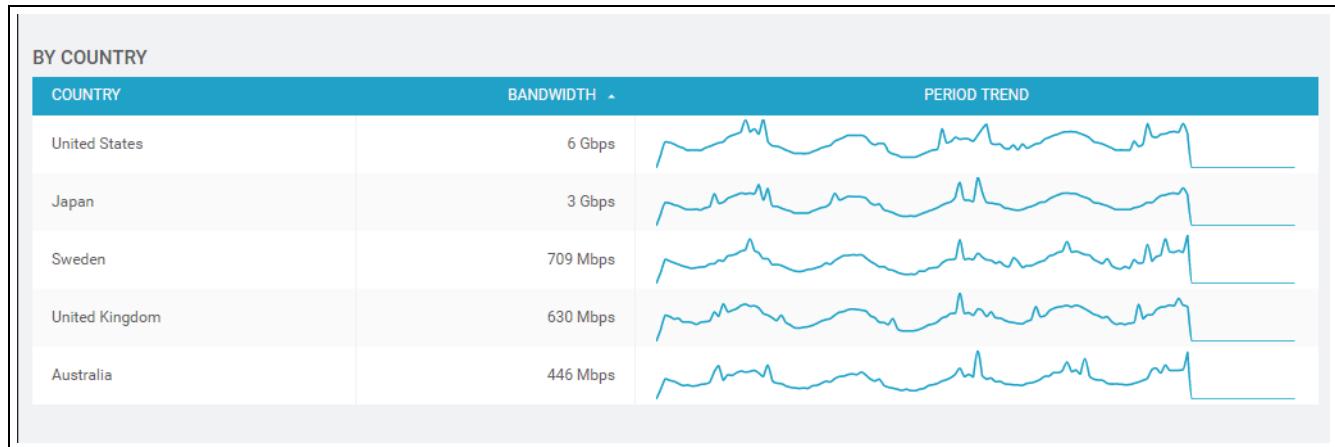
The By Geography area ([Figure 3-4](#)) displays traffic information in the form of a world map. Darker areas indicate more traffic. Hovering over a specific country displays the total traffic in that country over the specified data range.

**Figure 3-4: Traffic Overview Report: By Geography Area**



The By Country area at the bottom of the report (Figure 3-5) shows bandwidth volume information and a chart line indicating traffic trends for the specified time period for the top five countries.

**Figure 3-5: Traffic Overview Report: By Country Area**



## Cache Hit Rate Report

The Cache Hit Report shows the percentage of traffic served from the SP Edge cache for each day over a specified date range. Serving content from the SP Edge cache is ideal for end users, because the locally cached content can be delivered quickly, providing a high quality experience. Note that the cache hit rate reflects any content types that are not appropriate to cache (non-cacheable content or long tail content).

### Scope

This report is available to users who have been assigned either the UDN\_Admin, CP\_Admin, or CP\_User role. You can generate this type of report for an account, group, or property.

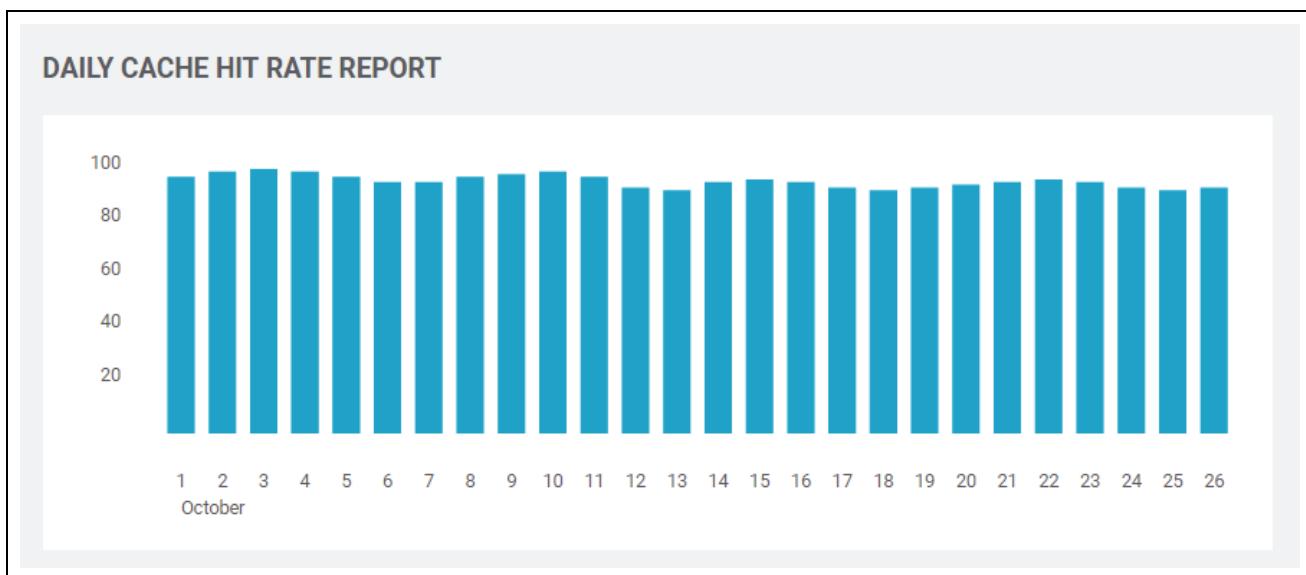
### Settings

You can specify the date range for this report.

### Content

When viewing the Cache Hit Overview report, the chart at the top of the report ([Figure 3-6](#)) displays the cache hit rate as a percentage for each day in the specified date range. Note that you can select whether you want the data displayed in the form of an Area Chart or a Column Chart.

**Figure 3-6: Cache Hit Rate Report: Chart Area**



The bottom of the Cache Hit Rate report displays the same information in table form ( ).

**Figure 3-7: Cache Hit Rate Report: Table Area**

DATE	CACHE HIT RATE (%)
10/25/2016	93%
10/24/2016	92%
10/23/2016	93%
10/22/2016	95%
10/21/2016	96%
10/20/2016	95%
10/19/2016	94%

## Unique Visitors Report

The Unique Visitors Report shows the number of unique visitors to a particular URL. A unique visitor is defined as a visitor that has consumed content for a given property from a given device one or more times in the specified date range. An increase in unique visitors indicates that more end users are requesting UDN content.

### NOTE

Tracking for unique visitors is done via a UDN cookie. For those visitors that disable or disallow cookies the IP address and User Agent are used as a proxy.

### Scope

This report is available to users who have been assigned either the UDN\_Admin, CP\_Admin, or CP\_User role. You can generate this type of report for an account, group, or property.

### Settings

This report enables you to choose a specific date or month for which data is displayed.

### Content

When viewing the Unique Visitors report, the Visitors by Time area at the top ([Figure 3-8](#)) displays the number of unique visitors over the specified time period.

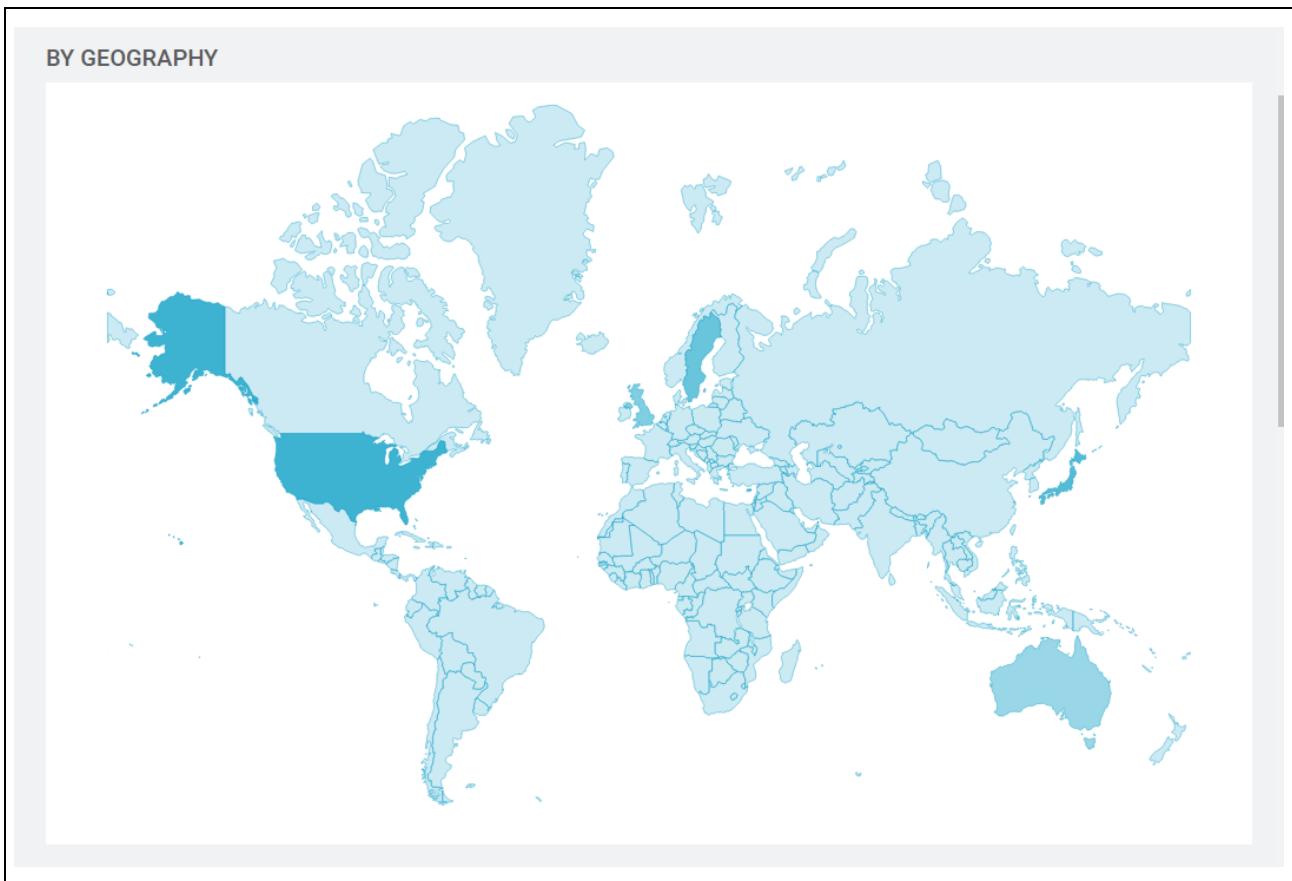
**Figure 3-8: Unique Visitors Report: Visitors by Time Area**



The By Geography area displays visitor information in the form of a world map ([Figure 3-9](#)). Hovering over a specific country displays the total number of unique visitors for that country over the specified data range. Darker areas indicate more traffic.

Note that the Unique Visitor geographical breakdown is ranking countries by the number of unique visitors for that country. This is different than the Traffic Overview geographical breakdown which ranks the countries by the amount of traffic consumed, so it is possible a country that has the highest number of unique visitors is one of the lower countries relative to traffic consumption, and conversely a country with a low number of unique visitors may be consuming the most traffic.

**Figure 3-9: Unique Visitors Report: Visitors by Geography Area**



The next section displays unique visitor information By Country ([Figure 3-10](#)). This section displays the top five countries by volume, the total number of unique visitors in that country over the date range, the percent of visitors in that country, a period trend chart, and the percent change from the start of the date range to the end. You can hover over any portion of the Period Trend charts to display information for a specific date.

**Figure 3-10: Unique Visitors Report: Visitors by Country**

BY COUNTRY			
COUNTRY	TOTAL VISITORS ▲	% OF VISITORS	PERIOD TREND
United States	1,493,366	52.0%	
Japan	778,277	27.1%	
Sweden	188,604	6.6%	
United Kingdom	168,335	5.9%	
Australia	116,934	4.1%	

The next section displays unique visitor information By Browser (Figure 3-11). This section displays the top five browsers by volume, the total number of unique visitors using each browser over the date range, the percent of visitors with that browser, a period trend chart, and the percent change from the start of the date range to the end. You can hover over any portion of the Period Trend charts to display information for a specific date.

**Figure 3-11: Unique Visitors Report: Visitors by Browser**

BY BROWSER			
BROWSER	TOTAL VISITORS ▲	% OF VISITORS	PERIOD TREND
Chrome	170,787	46.7%	
Firefox	94,551	25.9%	
Safari	27,974	7.7%	
Internet Explorer	24,238	6.6%	
Unknown	22,930	6.3%	

The next section displays unique visitor information By Operating System (Figure 3-12). The section displays the top five operating systems in use by unique visitors, the total number of unique visitors over the date range, the percent of visitors with that operating system, a period trend chart, and the percent change from the start of the date range to the end. You can hover over any portion of the Period Trend charts to display information for a specific date.

**Figure 3-12: Unique Visitors Report: Visitors by Operating System**

BY OPERATING SYSTEM			
OPERATING SYSTEM	TOTAL VISITORS ▲	% OF VISITORS	PERIOD TREND
Windows	159,294	43.6%	
Mac OS X	109,253	29.9%	
Linux	55,133	15.1%	
Unknown	38,316	10.5%	
iOS	2,618	0.7%	

## Service Provider On / Off Net Report

The Service Provider (SP) On/Off Net Report allows Service Provider partners to see how much traffic to their subscribers is being served to end users directly from the Service Provider edge (On Net). On-Net traffic provides the best end user experience due to the proximity of UDN SP edge servers in the SP delivery network to the user, and results in the highest revenue share for the Service Provider delivering it.

Why might traffic be served off-net? A request from a subscriber might be routed to either outside the SP Edge or to another Service Provider for a variety of reasons including:

- A lack of server availability for the SP that owns the subscriber.
- The SP network edge's inability to satisfy the request due to issues such as SSL delivery problems or a lack of SSL service.
- Advanced cache control requirements that cannot be properly identified by the SP network
- Network saturation/volume

Availability is determined based on the health or load of the SP Edge servers. If the SP Edge associated with the end user cannot fulfill the request, UDN routing will bring this subscriber to the UDN Edge (part of the UDN Core) or another SP in order to obtain the content.

### Scope

This report is available to users who have been assigned either the UDN\_Admin, SP\_Admin, or SP\_User role. You can generate this type of report for an account, group, or property.

### Settings

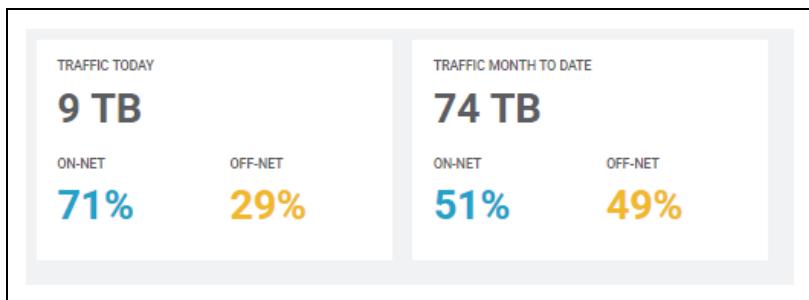
You can specify the following settings for this report:

- Date range
- Traffic type: select On-Net traffic, Off-Net traffic, or both

### Content

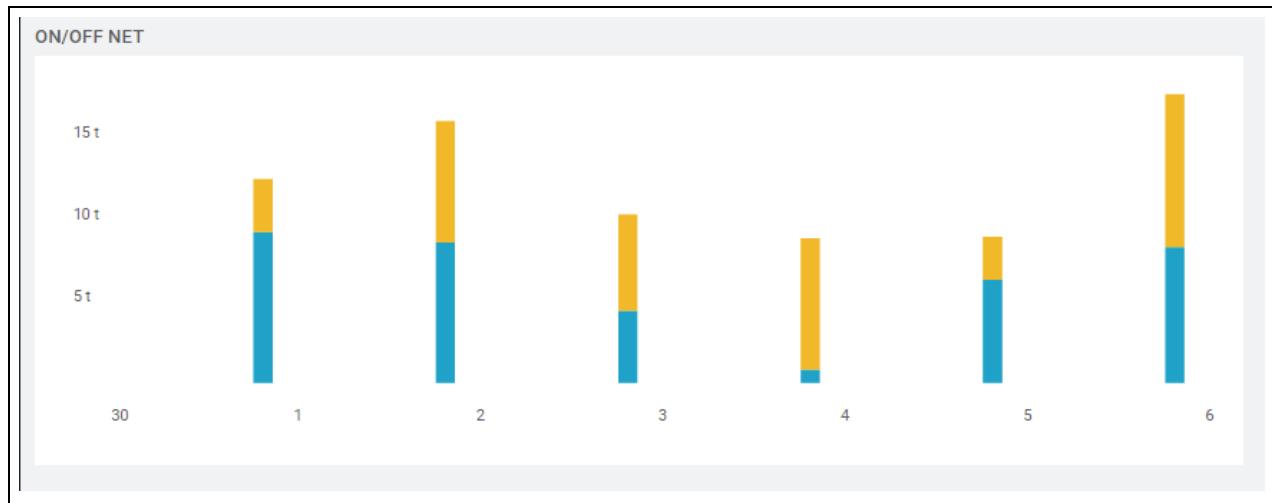
When viewing the SP On/Off Net report, the area at the top displays traffic information for both the current date and the specified date range ([Figure 3-13](#)).

**Figure 3-13: SP On/Off Net Report: Traffic Overview**



The next section of the report ([Figure 3-14](#)) shows the traffic volume both On and Off Net for each day in the range specified.

**Figure 3-14: SP On/Off Net Report: Volume Chart**



The last section of the report (Figure 3-15) displays a table with specific data for each date in the range specified.

**Figure 3-15: SP On/Off Net Report: Data Table**

DATE	ON NET (BYTES)	ON NET (%)	OFF NET (BYTES)	OFF NET (%)	TOTAL (BYTES)
07/05/2016	8 TB	47%	9 TB	53%	18 TB
07/04/2016	6 TB	70%	3 TB	30%	9 TB
07/03/2016	817 GB	9%	8 TB	91%	9 TB
07/02/2016	4 TB	43%	6 TB	57%	10 TB
07/01/2016	9 TB	54%	7 TB	46%	16 TB
06/30/2016	9 TB	74%	3 TB	26%	12 TB

## Contribution Report

The Contribution Report provides detailed traffic information for each Service Provider (SP) or Content Provider (CP) that supported the content delivery of a particular account, group, and/or property. Information is broken down by geography.

### Scope

This report is available to all users. You can generate this type of report for an account, group, or property.

UDN Administrators can also generate this report on all accounts.

### Settings

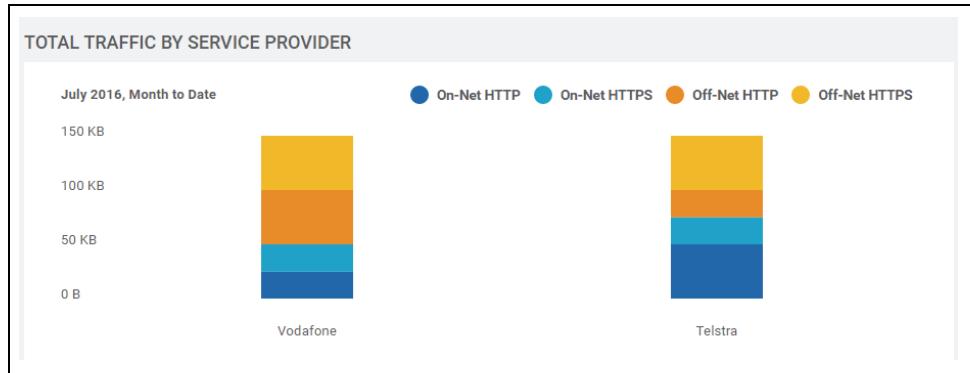
This report allows you to specify the following settings:

- Date range
- Providers and provider groups for whom data is available. You can either select the desired entity from the Provider drop-down menu, or you can type the name of the entity in the search field to filter the items in the dropdown to only those that match your search term.
- Delivery type: select On-Net, Off-Net, or both.
- Service type: select HTTP, HTTPS, or both.

### Content

The top of the report displays a chart that shows traffic volume per Provider for each traffic type (based on your settings). [Figure 3-16](#) shows an example of a Contribution Report generated for a Service Provider.

**Figure 3-16: Contribution Report: Traffic Chart**



The following section ([Figure 3-17](#)) provides the same information in table form.

**Figure 3-17: Contribution Report: Traffic Table**

Service Provider	Country	Traffic	% of Traffic ▾
Vodafone	Germany	150 KB	35%
Telstra	Australia	150 KB	30%
Vodafone	France	150 KB	20%

## File Error Report

The File Error Report shows requests for an asset that resulted in a 4xx or 5xx (error) response. The results are sorted and the top 15 assets are displayed.

This report does not describe why a particular error occurred, primarily because the causes for a specific error type are many and varied. For example, a 404 error (file not found) could be caused by a requested file being moved, renamed, or deleted, or the file may be temporarily unavailable.

### Scope

This report is available to users who have been assigned either the UDN\_Admin, CP\_Admin, or CP\_User role. You can only generate this type of report for a property, not for a group or an account.

### Settings

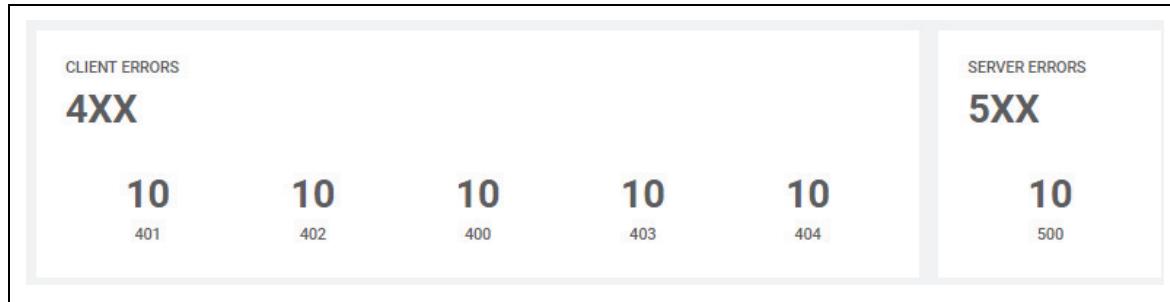
This report enables you to specify the following settings:

- Date range
- Service types: select HTTP, HTTPS, or both
- Status codes: select one, some, or all

### Content

The top of the report ([Figure 3-18](#)) displays the number of Client Errors (listed by error type), and Server Errors for the dates specified. The report lists error information for redirection errors (3XX), client errors (4XX), and server errors (5XX).

**Figure 3-18: File Error Report: Client Errors**



The rest of the report ([Figure 3-19](#)) lists Byte and Request volumes for URLs associated with errors.

**Figure 3-19: File Error Report: Byte and Request Volumes**

FILE ERRORS		BYTES ▾	
STATUS	URL	BYTES	REQUESTS
503	/Traditionless.gqf	2 TB	7,595
501	/Traditionless.gqf	2 TB	7,505
500	/Traditionless.gqf	2 TB	7,443
501	/physiologize/determiner/imperially/Incarnate/lorenzenite/geotherm/ogdoas.gca	2 TB	7,416
500	/tympanotemporal/bohireen/tragicomic/jocote/disleaf.fti	2 TB	7,359
500	/physiologize/determiner/imperially/Incarnate/lorenzenite/geotherm/ogdoas.gca	2 TB	7,343

## URL Report

The URL Report shows all accelerated assets ranked by traffic volume (GB delivered) over the specified date range.

### Scope

This report is available to users who have been assigned either the UDN\_Admin, CP\_Admin, or CP\_User role. You can only generate this type of report for a property, not for an account or a group.

### Settings

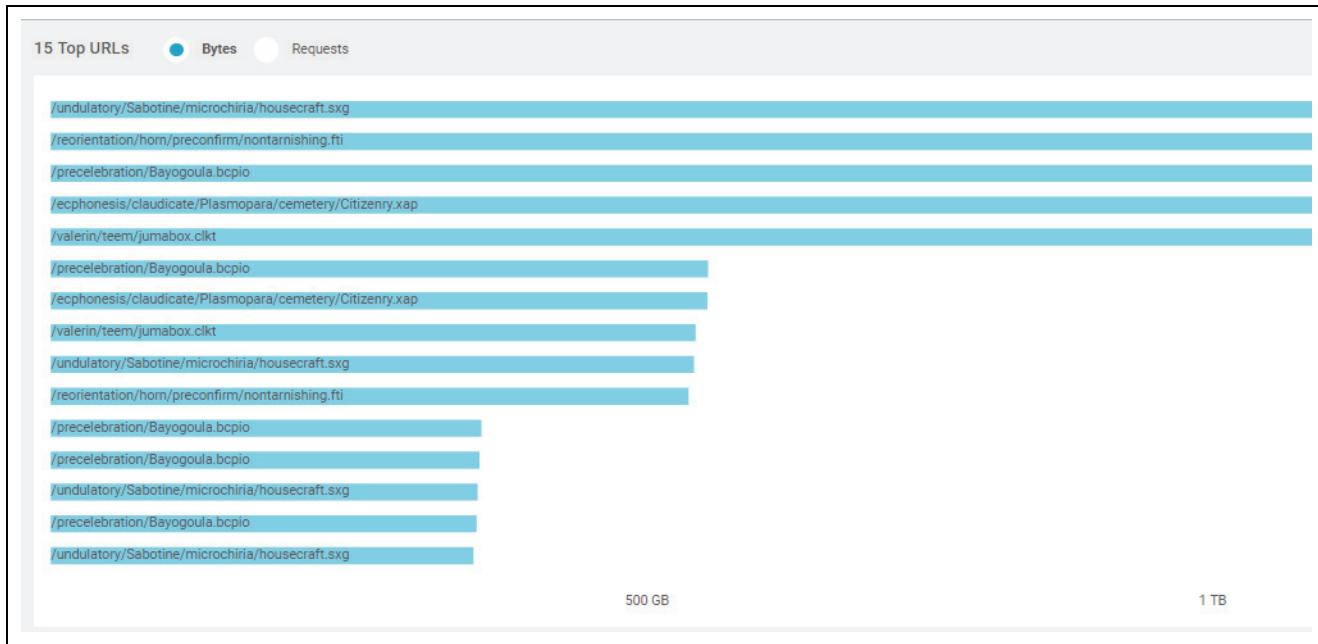
This report enables you to specify the following settings:

- Date range
- Service type: select HTTP, HTTPS, or both
- Status codes: select one, several, or all

### Content

The top of the report (Figure 3-20) displays a chart that shows the relative volume of traffic associated with different URLs. You can choose whether to display data associated with Bytes or Requests.

**Figure 3-20: URL Report: Top URLs**



The bottom of the report (Figure 3-21) lists header information. Each URL is listed with its associated Bytes and Requests volume.

Above this table and to the right, you will find a Search field where you can enter a URL. The search field acts as a filter for the list below, and displays partial and full matches depending on the URL information you enter. Note that search terms are not case sensitive.

**Figure 3-21: URL Report: All URLs**

All URLs	BYTES	REQUESTS
URL		
/unmaritime/beflounce/aupaka/cynopithecoid/Asperugo.weba	735 GB	2,941
/Pennatae/Lumine/Violety/Saturnal/holden/vulgarization.uva	734 GB	2,936
/quininic/unspike/Pompilidae/Incorriginly.jsonml	734 GB	2,935
/experiencer/procoracoid/periodicalist.cdx	733 GB	2,931
/Unexiled/autrefois/rubescence/Unplausibleness.ppsm	723 GB	2,890
/experiencer/procoracoid/periodicalist.cdx	326 GB	1,304
/unmaritime/beflounce/aupaka/cynopithecoid/Asperugo.weba	326 GB	1,303
/quininic/unspike/Pompilidae/Incorriginly.jsonml	321 GB	1,285
/Unexiled/autrefois/rubescence/Unplausibleness.ppsm	316 GB	1,263
/Pennatae/Lumine/Violety/Saturnal/holden/vulgarization.uva	315 GB	1,259
/unmaritime/beflounce/aupaka/cynopithecoid/Asperugo.weba	231 GB	922

---

## **Chapter 4**

# **Working with Accounts**

Accounts are defined as UDN customers, companies that either send content to UDN (Content Providers), or receive content from UDN (Service Providers).

### **N O T E**

---

Only UDN Administrators can add or modify accounts.

This chapter contains the following information.

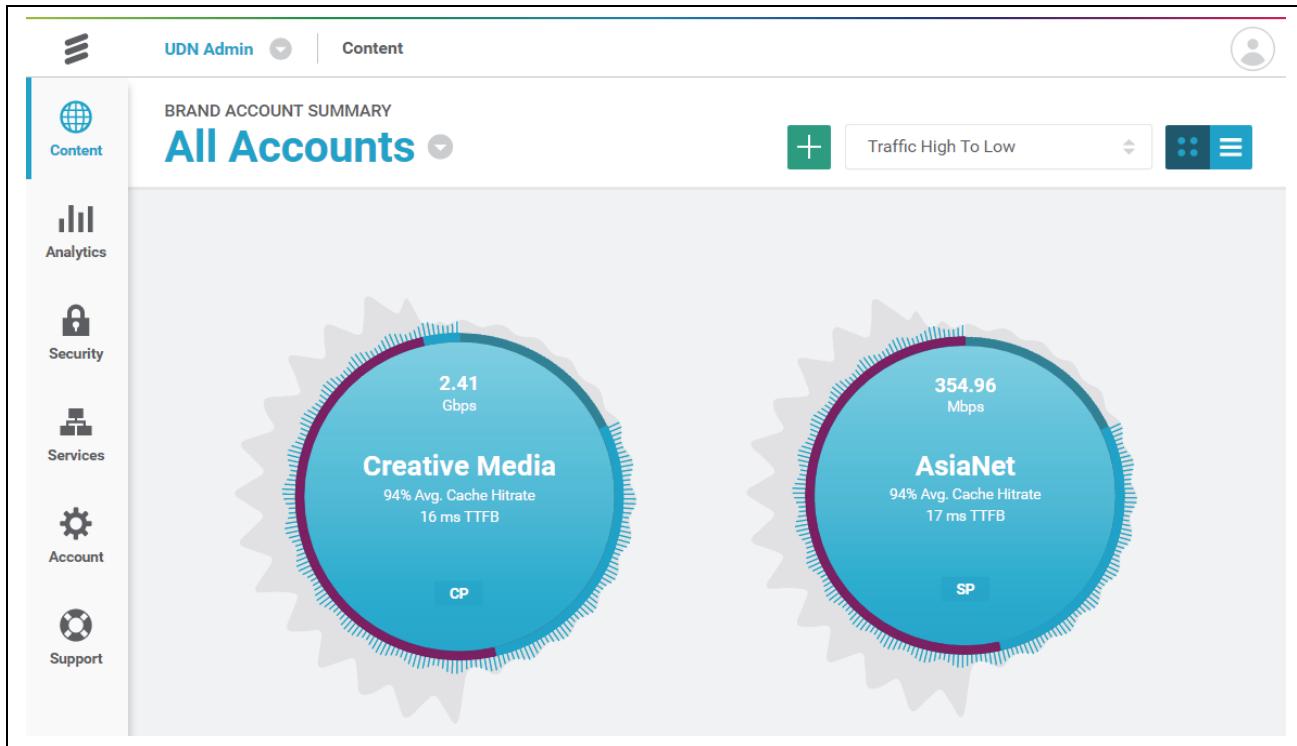
- “[Viewing Account Information](#)”
- “[Creating or Modifying an Account](#)”
- “[Deleting an Account](#)”
- “[Managing DNS Domains and Records](#)”

## Viewing Account Information

To view account information:

1. From any page, click the Ericsson logo in the upper left corner. The Account Summary page displays (Figure 4-1).

**Figure 4-1: Account Summary Page**



2. To view information with a single account, do one of the following:
  - Click the desired account starburst.
  - Click the selection icon at the top of the page to choose from a drop-down list of accounts.
3. To view account details, click the Account icon in the left navigation bar. The Account Management page displays.
4. Select the Account tab (Figure 4-2).

The Account tab displays the Brand, Account Name, Account Type, and Services associated with the selected Account.

**Figure 4-2: Account Management Page**

The screenshot shows the 'ACCOUNT MANAGEMENT' section for the account 'Creative Media'. The 'ACCOUNT' tab is selected, showing the following details:

Brand	UDN
Account Name	Creative Media
Account Type	Content Provider
Services	<input checked="" type="checkbox"/> Media Delivery

## **Creating or Modifying an Account**

To create or modify an account:

1. Do one of the following:
  - If you want to add an account, click the Ericsson icon at the top right corner of the page, then click the Add (+) icon.
  - If you want to modify an existing account, navigate to the summary view of that account, then click the Account icon in the left navigation bar.

The Account Management page displays.

2. Select the Account tab ([Figure 4-3](#)).

**Figure 4-3: Account Management Page: Account Tab**

The screenshot shows the Account Management interface for a 'Creative Media' account. The top navigation bar includes 'ACCOUNT MANAGEMENT' and the account name 'Creative Media'. Below the navigation are tabs for 'ACCOUNT', 'GROUPS', and 'USERS', with 'ACCOUNT' being the active tab. The main content area is titled 'Account' and contains the following information:

Brand	UDN
Account Name	Creative Media
Account Type	Content Provider
Services	<input checked="" type="checkbox"/> Media Delivery

3. Enter the Account Name.
4. Choose the Account Type:
  - Service Provider - An account for a Service Provider customer.
  - Content Provider - An account for a Content Provider customer.
  - CloudScale - An account used to specify UDN network systems that are not part of a Service Provider configuration.

**N O T E** \_\_\_\_\_

Note that you cannot modify the account type for an existing account.

5. Select any Services that will be used by this account.

**N O T E** \_\_\_\_\_

For this release, you must select Media Delivery.

6. When finished, click Save.

**N O T E** \_\_\_\_\_

You can also modify account settings by clicking the Configure (gear) icon on an account starburst.

## Deleting an Account

The Portal allows UDN\_Admin users to delete accounts. Deleting an account also results in the deletion of any groups, users, or properties associated with this account.

### CAUTION

Delete with care: you cannot restore a deleted account.

To delete an account:

1. From any page, click the Ericsson logo in the upper left corner. The Accounts view displays.

### NOTE

Do not select a specific account.

2. Click the Account icon in the left navigation bar. The Account Management page displays a listing of all accounts (Figure 4-4).

**Figure 4-4: Account Management Page: No Account Selected**

The screenshot shows the Account Management page with the following details:

- Header:** UDN Admin, Account Management.
- Left Navigation Bar:** Content, Analytics, Security, Services, Account (highlighted), Support.
- Section Header:** ACCOUNT MANAGEMENT, No active account.
- Sub-headers:** ACCOUNTS (selected), USERS, DNS, ROLES.
- Search Bar:** Search (with placeholder) and a green plus sign button.
- Table Headers:** ACCOUNT NAME, TYPE, ID, BRAND, SERVICES.
- Table Data:** Four rows of account information:

ACCOUNT NAME	TYPE	ID	BRAND	SERVICES	Actions
0_e2e_account	Content Provider	212	udn	Media Delivery	
	Content Provider	266	udn	Media Delivery	
Account for testing permissions	Service Provider	110	udn	UDN Network Partner - On-Net	
Account with users	Content Provider	23	udn	Media Delivery	

3. Locate the row containing the desired account. If needed, you can use the Search box to find a specific account. Note that search terms are not case sensitive.
4. Click the Delete (trash) icon on that row to delete the account.
5. Confirm your deletion.

## Managing DNS Domains and Records

In order to properly configure the UDN Service, Administrators need to create DNS records in the Portal. DNS records provide mapping information that informs the DNS server the IP address associated with each domain. It also instructs the UDN Service on how to handle requests that are sent to each domain.

### Viewing DNS Information

To view DNS information:

1. Click the Ericsson icon at the upper left of the Portal interface.
2. Click the Account icon in the left navigation bar.
3. Click the DNS tab.

**Figure 4-5: Account Management: DNS Tab**

HOSTNAME	ADDRESS	TTL	
aa.aa.bb	asd.asd	123	
aaa-dal	169.44.77.125	32	
aaa.dal	169.44.77.125	60	
aaa.qqq.www	aa.aaaaaa.aa	4600	

#### NOTE

The DNS tab only displays when no specific account is selected.

The DNS tab displays the following information:

- The top of the page displays the currently selected domain. You can choose a different domain by using the drop-down selector to the right.
- A table lists DNS Records associated with this Domain. Records are organized by record type. Each DNS record lists the Hostname, Address, and Time-to-Live (TTL) for that Record.



## Managing DNS Domains

UDN Administrators need to configure and manage the Domains associated with each UDN Service customer.

- Click the Ericsson logo in the upper left corner of the Portal.
- Click the Account icon in the left navigation bar.
- Click the DNS tab. Note the Domain area at the top of the tab.

**Figure 4-6: Account Management: DNS Tab Domain Area**



- To add or edit a Domain:
  - Do one of the following:
    - To modify a domain, first select the desired domain using the selector drop-down, then click the Edit (pencil) icon to the far right.
    - To add a Domain, click the add (+) icon.
  - Specify the settings associated with this Domain ([Table 4-1](#)).

**Table 4-1: DNS Domain Settings**

Setting	Description
Domain Name	The name of this domain
Primary NameServer	The primary nameserver for this domain.
Contact	Specify the email address of the person primarily responsible for this Domain.
Refresh	The refresh rate for DNS information in this domain.
TTL	The Time to Live for DNS information.
Negative TTL	The Time to Live for negative response to DNS queries.

- When finished, click Add if you created a Domain, or click Save if you modified one.
- To Delete a Domain:
  - Select the desired domain using the selector drop-down.
  - Click the Edit (pencil) icon to the far right.
  - Click Delete.
  - Confirm your selection to complete the operation.

## Managing DNS Records

DNS Records tell the DNS server the IP address associated with a specific domain, and how to handle requests sent to that domain.

1. Click the Ericsson logo in the upper left corner of the Portal.
2. Click the Account icon in the left navigation bar. The DNS tab displays (Figure 4-7).

**Figure 4-7: Account Management: DNS Tab**

The screenshot shows the 'ACCOUNT MANAGEMENT' interface with the 'DNS' tab selected. At the top, it says 'No active account'. Below the tabs (ACCOUNTS, USERS, DNS, ROLES), the domain 'cdx-dev.unifieddeliverynetwork.net' is selected. On the right, there are '+ ADD RECORD' and 'Edit' buttons. The main area shows '354 RECORDS' with a search bar and an 'ADD RECORD' button. Under 'A Records', there is a table with columns: HOSTNAME, ADDRESS, and TTL. The table contains four rows with the following data:

HOSTNAME	ADDRESS	TTL
aa.aa.bb	asd.asd	123
aaa-dal	169.44.77.125	32
aaa.dal	169.44.77.125	60
aaa.qqq.www	aa.aaaaaa.aa	4600

### NOTE

The DNS tab only displays when no specific account is selected.

1. To add a DNS Record:
  - a. Do one of the following:
    - To create a DNS Record, click Add Record.
    - To modify a Record, locate the row for that Record in the Records tables. Records are organized by Record type, which can help you locate the desired Record. You can also enter information for that Record in the Search field.

Once you have located the row associated with the DNS Record you want to modify, click the Edit (pencil) icon.

- b. Enter the information associated with the DNS Record, as described in [Table 4-2](#).

**Table 4-2: DNS Record Settings**

Record Type	Description	Settings
A	Address Records, also called Host Records, link a domain to the physical IPv4 address of a computer hosting that domain's services.	<ul style="list-style-type: none"> <li>• Host Name:</li> <li>• Address</li> <li>• TTL Value</li> </ul>
AAAA	Address Records, also called Host Records, link a domain to the physical IPv6 address of a computer hosting that domain's services.	<ul style="list-style-type: none"> <li>• Host Name:</li> <li>• Address</li> <li>• TTL Value</li> </ul>
CNAME	Canonical Name records act as domain name aliases.	<ul style="list-style-type: none"> <li>• Host Name:</li> <li>• Address</li> <li>• TTL Value</li> </ul>
DNAME	DNAME Records are used to map/rename a sub-tree of the DNS name space to another domain.	<ul style="list-style-type: none"> <li>• Host Name:</li> <li>• Address</li> <li>• TTL Value</li> </ul>
HINFO	HINFO Records specify the host/server's CPU type and operating system.	<ul style="list-style-type: none"> <li>• Host Name:</li> <li>• Address</li> <li>• TTL Value</li> </ul>
MX	MX Records direct a domain's email to the servers hosting the domain's user accounts.	<ul style="list-style-type: none"> <li>• Host Name:</li> <li>• Address</li> <li>• Priority</li> <li>• TTL Value</li> </ul>
NAPTR	NAPTR Records store rules used by DDDS (Dynamic Delegation Discovery System) adaptations.	<ul style="list-style-type: none"> <li>• Host Name:</li> <li>• Address</li> <li>• Priority</li> <li>• TTL Value</li> </ul>
NS	Name Server Records determine which servers will communicate DNS information for a domain.	<ul style="list-style-type: none"> <li>• Host Name:</li> <li>• Address</li> <li>• TTL Value</li> </ul>
PTR	PTR Records are primarily used to map IP addresses to domain names (the reverse of A and AAAA Records).	<ul style="list-style-type: none"> <li>• Host Name:</li> <li>• Address</li> <li>• TTL Value</li> </ul>
SPF	SPF Records specify which hosts (email servers) are allowed to send emails from a domain name.	<ul style="list-style-type: none"> <li>• Host Name:</li> <li>• Address</li> <li>• TTL Value</li> </ul>

**Table 4-2: DNS Record Settings (Continued)**

<b>Record Type</b>	<b>Description</b>	<b>Settings</b>
SRV	SRV Records specify the location of a service.	<ul style="list-style-type: none"> <li>• Host Name:</li> <li>• Address</li> <li>• Priority</li> <li>• TTL Value</li> </ul>
TXT	TXT Records provide descriptive human or machine readable text information to sources outside your domain	<ul style="list-style-type: none"> <li>• Host Name:</li> <li>• Address</li> <li>• TTL Value</li> </ul>

2. To delete a DNS Record, locate the row for that Record in the Records tables.

Records are organized by Record type, which can help you locate the desired Record.

You can also enter information for that Record in the Search field. Note that search terms are not case sensitive.

Once you have located the row associated with the DNS Record you want to modify, click the Delete (trash) icon.

3. Confirm your selection to complete the operation.



---

## **Chapter 5**

# **Working with Users**

The Portal can only be accessed by people who have been added as Portal users. Each user is associated with a specific Portal account. When a Portal user is added, they are assigned a user role which grants them permission to access specific Portal features.

This chapter contains the following sections:

- “[Understanding User Roles and Permissions](#)”
- “[Viewing and Managing Users](#)”
- “[Deleting a User](#)”

## Understanding User Roles and Permissions

In order to access the Portal, people must be added to the Portal as users, and when a user is created, they are given a User Role chosen from those predefined in the Portal.

Roles fall under one of two categories: Administrator or User. In addition to the ability to view information in the Portal, users who have been assigned an Administrator role can also create, modify, and delete items through the Portal interface. Those with a User role can view items in the Portal interface, but cannot create, modify, or delete them.

Each role provides specific permission to access different features of the UDN Portal, as shown in [Table 5-1](#).

### NOTE

For users associated with Content Provider accounts, there are two types of user roles: CP Admin and CP User. CP Administrators can view, create, and modify settings for those features they have permission to access. CP Users can only view settings associated with those features.

### NOTE

For users associated with Service Provider accounts, there are two types of user roles: SP Admin and SP User. SP Administrators can view, create, and modify settings for those features they have permission to access. SP Users can only view settings associated with those features.

**Table 5-1: Predefined Portal Role Permissions**

Portal Feature	UDN Administrator	Content Provider	Service Provider
Account	X	X	X
Analytics	X	X	X
Analytics - Daily Cache Hit Rate Report	X	X	
Analytics - File Error Report	X	X	
Analytics - Contribution Report	X	X	X
Analytics - SP On/Off Net Report	X	X	X
Analytics - Traffic Overview Report	X	X	
Analytics - Unique Visitors Report	X	X	
Analytics - URL Report	X	X	
Configuration	X	X	
Content	X	X	X
DNS	X		
Security	X	X	
Services	X	X	
Support	X	X	X

**N O T E**

If a user attempts to access a feature that their role does not grant permission for them to use a message will display.

## Viewing Role Details

Note that only UDN Administrators can view Role details.

To view Role information:

1. Navigate to the summary page for the desired account.
2. Click the Roles tab.

**Figure 5-1: Account Management: Roles Tab**

ROLE	PERMISSIONS	ASSIGNED TO
UDN_Admin	Security, Config, Analytics, Playback Demo, Analytics - Daily Cache Hit Rate +11	5 Users
SP_User	Analytics, Support, Analytics - SP On/Off Net, Content/Network	10 Users
SP_Admin	Config, Analytics, Account, Support, Analytics - SP On/Off Net +1	15 Users
CP_User	Security, Config, Analytics, Analytics - Daily Cache Hit Rate, Support +7	13 Users
CP_Admin	Security, Config, Analytics, Analytics - Daily Cache Hit Rate, Account +8	26 Users

3. Click the Edit tab to view detailed permissions information for each role.

**N O T E**

You cannot custom-define roles in this release, nor can you edit or delete predefined roles.

## Viewing and Managing Users

To view user information:

1. Navigate to the summary page for the desired account.
2. Click the Users tab. A list of all current users displays. For each user, the table lists their Email (which is also their user name), Password, Role, and any groups they belong to.

**Figure 5-2: Account Management: Users Tab**

The screenshot shows the 'ACCOUNT MANAGEMENT' section for 'Creative Media'. The 'USERS' tab is active. There are four users listed:

EMAIL	PASSWORD	ROLE	GROUPS
bryan@creativemedia.com	*****	CP_Admin	User has no groups
cm_admin@creativemedia.com	*****	CP_Admin	User has no groups
cm_user@creativemedia.com	*****	CP_Admin	User has no groups
sampo@idean.com	*****	CP_User	User has no groups

3. To search for a specific user, enter information in the Search area. Note that search terms are not case sensitive.
4. To view users with specific Roles, select the desired option in the Role drop-down list.

### NOTE

Users are not assigned to groups in this release, so searching for users in the groups drop-down will yield no results.

5. To add a user, click the Add (+) icon.

### NOTE

Only users with Admin permissions can add other users. For more information on user roles see “[Understanding User Roles and Permissions](#)”.

- a. Specify the user’s email (which acts as their username).
- b. Specify and confirm the user’s password. Passwords must meet the following requirements:
  - Between 8-15 characters long

- Contain at least one uppercase letter
  - Contain at least one lowercase letter
  - Contain at least one number
  - Contain at least one special character (non-alphanumeric characters)
- c. Select the user's Role.
  - d. Click Save to save your changes, or click X to cancel the operation.
6. To edit a user, locate the row associated with that user in the table, and click EDIT.

**N O T E** —————

Only users with an Admin Role can edit users. For more information on user roles see [“Understanding User Roles and Permissions”](#).

Specify the information associated with this user by entering:

- Their email (which acts as their username)
  - Their first name
  - Their last name
  - Their phone number
  - Their password
  - Their user role.
7. When finished, click Save to save your changes, or click Cancel to cancel the operation.

## Deleting a User

Only Users with Admin permissions can delete users. For more information on Roles see “[Understanding User Roles and Permissions](#)”.

To delete a User:

1. Navigate to the summary page for the desired account.
2. Click the Users tab.

**Figure 5-3: Accounts Page: Users Tab**

The screenshot shows the 'ACCOUNT MANAGEMENT' section for 'Creative Media'. The 'USERS' tab is selected. At the top, there is a search bar and two dropdown menus for 'All Roles' and 'All Groups'. Below the header, it says '4 USERS'. A table lists four users with columns for EMAIL, PASSWORD, ROLE, and GROUPS. Each user row has edit and delete icons. The data is as follows:

EMAIL	PASSWORD	ROLE	GROUPS	
bryan@creativemedia.com	*****	CP_Admin	User has no groups	
cm_admin@creativemedia.com	*****	CP_Admin	User has no groups	
cm_user@creativemedia.com	*****	CP_Admin	User has no groups	
sampo@idean.com	*****	CP_User	User has no groups	

3. Locate the row associated with the user in the table, and click the Delete (trash) icon on that row.
4. Confirm the deletion to complete the operation.

---

## **Chapter 6**

# **Working with Groups**

Groups are defined as collections of properties associated with a specific account. For a Content Provider, a group might be a collection of television or video channels, or it might be a collection of different service types (video, gaming, or other services) associated with a specific product. For a Service Provider, a group might include properties in geographic locations that deliver the same brand of content.

Groups also include a collection of users who have permission to access that group.

This chapter contains the following sections:

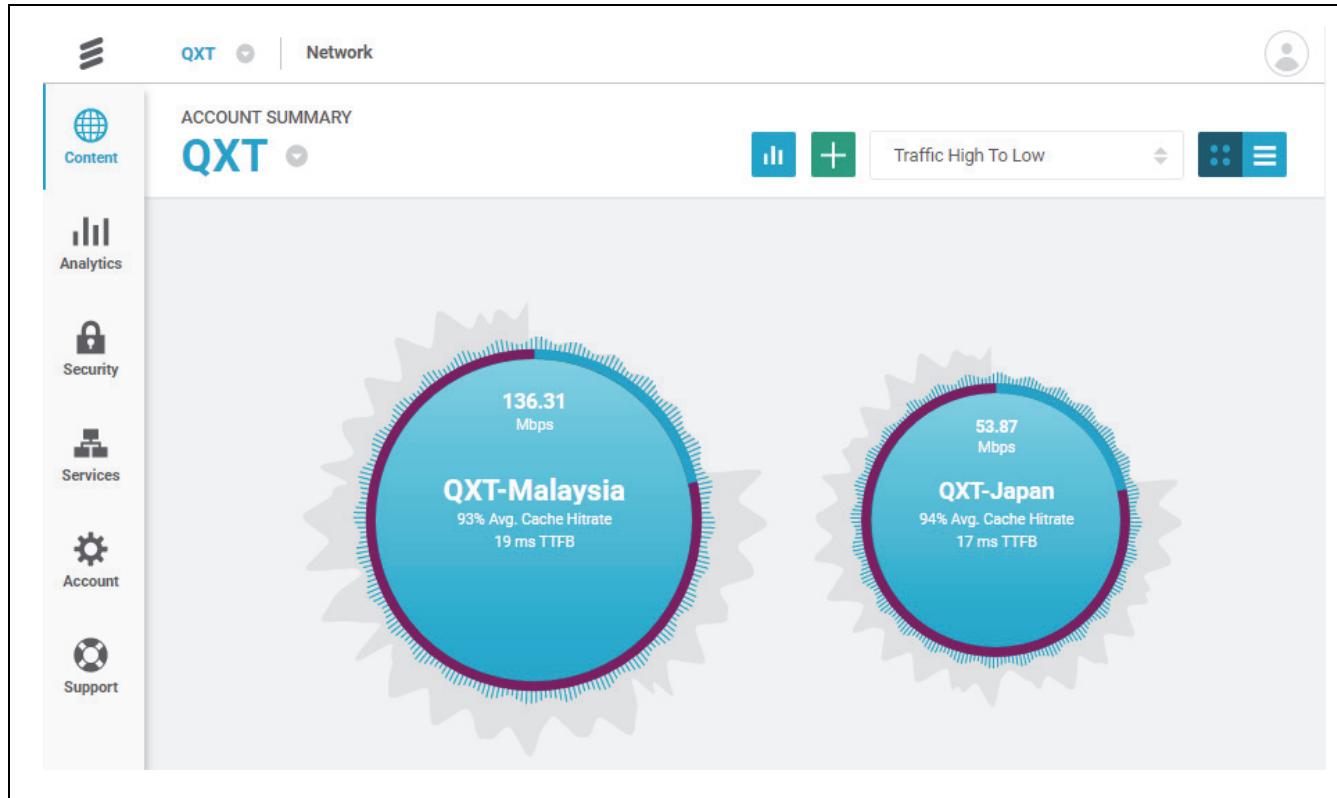
- “[Viewing and Managing Groups](#)”
- “[Deleting a Group](#)”

## **Viewing and Managing Groups**

To view and manage groups:

1. Navigate to the summary page for the desired account.
2. Select a group by doing one of the following:
  - Click the selection icon to choose from a drop-down list of groups.
  - Click the desired group starburst to display additional information for that group.
3. Information for the selected group displays on the Group Content Summary page ([Figure 6-1](#)). This page displays a starburst for each property that belongs to the group.

**Figure 6-1: Group Content Summary Page**



### **NOTE**

If you wish to add or modify the properties associated with this group, refer to [Chapter 7, “Working with Properties”](#) for further information.

4. Click the Account icon in the left navigation bar. The Account Management page displays.
5. Click the Groups tab ([Figure 6-2](#)) to view information about all existing groups associated with this account.

**Figure 6-2: Account Management: Groups Tab**

The screenshot shows the 'ACCOUNT MANAGEMENT' interface with the 'Creative Media' account selected. The 'GROUPS' tab is active, displaying a list of three groups:

NAME	MEMBERS	CREATED ON	Actions
Creative Media-group_1	No members	09/16/2016	
new groupp	No members	11/24/2016	
test	No members	11/16/2016	

A search bar and a green '+' button are located at the top right of the group list.

6. To add a group:

**N O T E** \_\_\_\_\_

Only users with Admin permissions can add groups. For more information on user roles see “[Understanding User Roles and Permissions](#)”.

- a. Click the Add (+) icon. The Add New Group modal window displays.
- b. Enter the Name of the group.
- c. Enter the Billing Number and the Billing Mode of the group.
- d. Click Save to create the group or click Cancel to cancel the operation.

7. To edit a group:

**N O T E** \_\_\_\_\_

Only users with an Admin Role can edit groups. For more information on user roles see “[Understanding User Roles and Permissions](#)”.

- a. Locate the row associated with that group in the table.
- b. Click the Edit (pencil) icon at the end of that row.
- c. If desired, edit the Name of the group.
- d. If desired, edit the Billing Number and the Billing Mode of the group.
- e. If desired, you can remove Properties from your group by locating the row containing the Property in the Properties table and clicking the Delete (trash) icon.
- f. Click Save to save your changes or click Cancel to cancel the operation.

**N O T E** —————

You can also modify group settings by clicking the Configure (gear) icon on any group starburst.

## Deleting a Group

The Portal allows users with the appropriate privileges to delete groups. Note that when you delete a group, any properties associated with that group are also deleted.

### CAUTION

Delete with caution: you cannot restore a deleted group.

### NOTE

Only users with an Admin Role can delete groups. For more information on user roles see “[Understanding User Roles and Permissions](#)”.

To delete a group:

1. Navigate to the summary page for the desired account.
2. Click the Account icon in the left navigation bar. The Account Management page displays.
3. Click the Groups tab.

**Figure 6-3: Account Management: Groups Tab**

ACCOUNT MANAGEMENT

**Creative Media**

NAME	MEMBERS	CREATED ON	
Creative Media-group_1	No members	09/16/2016	
new grouppp	No members	11/24/2016	
test	No members	11/16/2016	

1. Locate the row associated with that group in the table.
2. Click the Delete (trash) icon at the end of that row.
3. Confirm your action to complete the operation.



---

## Chapter 7

# Working with Properties

Each UDN property represents a Content Provider's published host name, or the URL of the actual asset to be accelerated. The Portal provides a rich collection of settings to enable you to specify the unique parameters associated with each Content Provider's property.

### NOTE —————

If you want to specify caching policies, see [Chapter 8, “Managing Cache Content”](#) for detailed instructions.

This chapter contains the following sections:

- “[Viewing Properties](#)”
- “[Adding a Property](#)”
- “[Modifying Property Hostname Settings](#)”
- “[Modifying Property Default Settings](#)”
- “[Modifying Property Security Settings](#)”
- “[Publishing Property Settings](#)”
- “[Deleting a Property](#)”

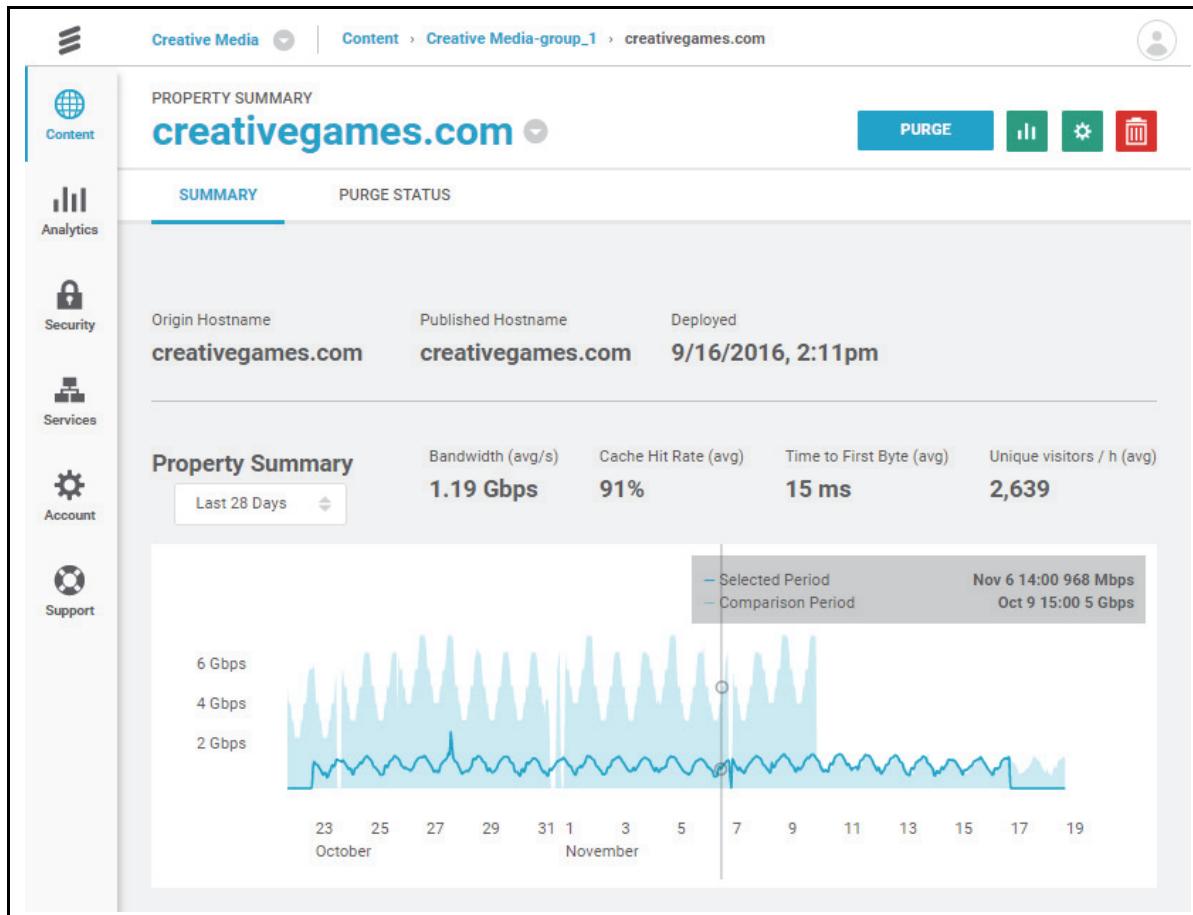
## Viewing Properties

To view and manage a property:

1. Navigate to the summary page for the desired account.
2. Navigate to the group to which the desired property belongs by doing one of the following:
  - Click the selection icon to choose from a drop-down list of groups.
  - Click the desired group starburst to display information for that group.
3. Navigate to the desired property by doing one of the following:
  - Click the selection icon to choose from a drop-down list of properties.
  - Click the desired property starburst to display information for that property.

The Property Summary page displays (Figure 7-1).

**Figure 7-1: Property Summary Page**

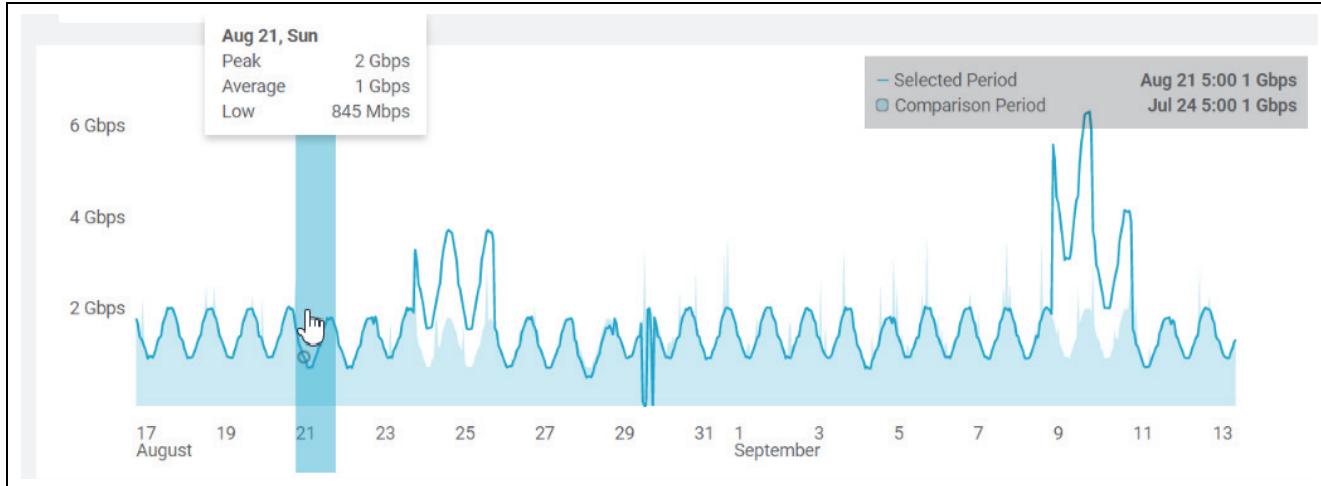


At the top of the summary, the Portal displays the Origin Hostname, the Published Hostname, and the date the property was deployed.

Below that is a drop-down selector that enables you to choose the period of time for which you want to display data.

4. The chart at the top of the summary page provides additional detail on a specific day when you hover over any portion of the graph ([Figure 7-2](#)).

**Figure 7-2: Property Summary Graph**



#### NOTE

When you hover over a specific date, then click on it, the graph will zoom in to show data for that day.

The Property Summary page displays the following information about the property:

**Table 7-1: Property Summary Information**

Information	Description
Property Name	The name of the property, followed by a drop-down icon that enables you to select any other property in that group.
Origin Hostname	The URL of the origin associated with the property.
Published Hostname	The hostname associated with the property.
Deployed date	The date of this property's configuration deployment.
Property Summary date range selector	Enables you to specify the date range to display in the chart below. You can choose to view data for the Last 28 Days, or to specify a Custom Date Range.
Bandwidth (avg/s)	The average bandwidth over the specified date range.
Cache Hit Rate (avg)	The average cache hit rate for this property over the specified date range.
Time to First Byte (avg)	The average TTFB over the specified date range.
Unique Visitors / hour (avg)	The average number of unique visitors per hour over the specified date range.

5. There are icons at the upper right which enable you to access other Portal features, enabling you to:
- Purge content from the property, as described in “[Purging Cache Content](#)” in Chapter 8.

- Generate reports for traffic associated with this property, as described in [Chapter 3, “Generating Reports”](#)

## Adding a Property

Only users with an Admin Role can add properties. For more information on user roles see “[Understanding User Roles and Permissions](#)”.

To add a property:

1. Navigate to the group to which you want to add the property.
2. At the upper left of the Group Summary page, click the Add (+) icon.
3. The Add Property page displays ([Figure 7-3](#)).

**Figure 7-3: Add Property**

The screenshot shows a modal dialog box titled "Add Property". The title bar also includes the text "MatchedWithSP / GP-J". The main content area contains two fields: "New Host Name" with an empty input field, and "Deployment Mode" with two radio button options: "Trial" (selected) and "Production". At the bottom right are two buttons: "CANCEL" and "SAVE".

4. Enter the Host Name for the new property.
5. Select the Deployment Mode for this property.
6. Click Save.
7. Once you have created your property, you can customize its settings. For detailed information, see “[Modifying Property Hostname Settings](#)”.

## Modifying Property Hostname Settings

When initially configuring a property, or modifying an existing property, you can modify hostname settings. These settings enable you to specify origin, host header, and hostname information.

### NOTE

Only users with an Admin Role can modify properties. For more information on user roles see “[Understanding User Roles and Permissions](#)”.

To modify property hostname settings:

1. Navigate to the group to which the property belongs.
2. Locate the desired property, then click the Configure icon.



You can find this icon on the Table View row for a specific property, or at the top of a Property Summary page. To access this icon on a starburst page, hover over the center of the starburst for that property until the Configure icon displays.

3. Click the Hostname tab in order to view Hostname settings for this property ([Figure 7-4](#)).

**Figure 7-4: Property Configuration Page: Hostname Tab**

HOSTNAME		DEFAULTS	POLICIES	SECURITY
Deployment Mode	Trial			
Customer Origin	creativevideo.com			
Origin Port	80			
Host Header Value	<input type="button" value="Use Other Hostname Value"/> creativevideo.com			
Origin Forward Path (optional)	/			
Published Hostname Value	creativevideo.com			

4. Specify the URL for the Customer Origin, which is the web server that holds the CP content.

The Customer Origin is the publicly addressable location of the web server from which the UDN platform will retrieve content for delivery to end users.

This address can be either a fully qualified domain name or an IP address. Typically, the customer origin is a subdomain of the delivery domain such as origin.example-domain.com.

5. Specify the Origin Port.

By default, the UDN platform will use port 80 to fetch HTTP content and port 443 to fetch HTTPS content.

6. Specify the Host Header Value, which is the value that the UDN caching server will use for the origin host name.

You can choose from three options:

- Select Use Other Hostname Value in order to specify a custom value, which you do in the field that displays after you select this option.
- Select Use Origin Hostname in order to use the Customer Origin specified on this tab as your Host Header Value.
- Select Use Published Hostname in order to use the Published Hostname Value on this tab as your Host Header Value.

7. The Origin Forward Path is an optional setting that should only be used if the content on the origin does not use the same request path as the end user request path.

By default, the Origin Forward Path will be set to the path of the end user URL request.

If you want to specify a separate request path, do so here.

8. The Published Hostname Value is the hostname used to deliver content to the end users (sometimes called a Vanity Hostname). This Published Hostname must be a sub-domain value.

**N O T E** \_\_\_\_\_

The Published Hostname Value cannot be modified in this version of the Portal.

9. When finished, click Save.

## Modifying Property Default Settings

When initially configuring a property, or modifying an existing property, you need to modify default settings associated with cache control.

### NOTE

---

Only users with an Admin Role can modify properties. For more information on user roles see “[Understanding User Roles and Permissions](#)”.

To modify property hostname settings:

1. Navigate to the group to which the property belongs.
2. Locate the desired property, then click the Configure icon.



You can find this icon on the Table View row for a specific property, or at the top of a Property Summary page. To access this icon on a starburst page, hover over the center of the starburst for that property until the Configure icon displays.

3. To Configure property default settings, click the Defaults tab ([Figure 7-5](#)).

**Figure 7-5: Property Configuration: Defaults Tab**

**CONFIGURATION**  
**creativevideo.com**   
UPDATED: Nov, 21 2016, 7:04 am | DEPLOYED: Sep, 16 2016, 2:11 pm, Test User  
**PUBLISH**

**HOSTNAME** **DEFAULTS** **POLICIES** **SECURITY**

### ORIGIN CACHE CONTROL

- UDN Tracking Cookie: NO
- Remove Vary Header from response: YES
- Ignore case from origin: YES
- Enable e-Tag support: False
- Honor Origin Cache Control: NO
- CDN TTL: 0 Seconds

### CACHE KEY - QUERY STRING

- Cache Key: Ignore All Query Parameters

### EDGE CACHE DEFAULT RULES

POLICY	APPLIES TO	MATCH CONDITIONS	ACTIONS
No policies rules have been added yet.			

- Set “UDN Tracking Cookie” to either Yes or No.

This setting allows you to control whether or not UDN tracking cookies are used.

- Set “Remove Vary Header From Response” to either Yes or No.

This setting allows you to specify whether or not to include the Vary Header in the returned content.

- Set “Ignore Case from Origin” to either Yes or No.

This setting provides support for situations where content received from the origin is case sensitive.

- Specify the type of e-tag Support for the origin cache.

This setting specifies whether the origin supports entity tags (E-tags) in the HTTP header. E-tag usage is one of several mechanisms that HTTP provides for web cache validation, which allows a client to make conditional requests. This allows caches to be more efficient, and saves bandwidth, as a web server does not need to send a full response if the content has not changed.

You can choose from the following settings:

- Strong
  - Weak
  - False
8. Specify whether or not to Honor Origin Cache Control.
- This setting determines whether cache control settings in the HTTP header, which affect control of the cache from the origin, are to be honored.
- In some cases, the Origin is used for multiple purposes, not just as a caching origin, and these values may not apply to UDN usage.
9. Specify the CDN Time To Live (TTL) value:
- This TTL setting specifies the period of time (specified in seconds, minutes, hours, or days) that the cached object will remain valid in the cache. Once a cached object is no longer valid, that object will be fetched from the origin when it is next requested.
- If no cache rule match is found in the configuration, or if UDN is instructed to use the Origin's cache control policy and there is no explicit maximum age value, the CDN Time-to-Live (TTL) value will be applied.
10. The middle section of the Defaults tab enables you to specify cache key settings to modify caching behavior. By default, the entire query string value, along with the URL path, is utilized as the cache key value.
- To specify the cache key query string, select the appropriate cache key control:
- Include all query parameters
  - Ignore all query parameters
  - Include some parameters
- If you choose “Include Some Parameters”, specify one or more Query names (parameters) associated with this caching behavior.
11. Finally, on the Defaults tab, you can specify Edge Cache Default Rules (default policies). For detailed instructions see [Chapter 8, “Managing Cache Content”](#).

## Modifying Property Security Settings

If you plan to use UDN to deliver HTTPS Content, you will need to configure Security settings.

### NOTE \_\_\_\_\_

Only users with an Admin Role can modify properties. For more information on user roles see “[Understanding User Roles and Permissions](#)”.

To modify property security settings:

1. Navigate to the group to which the property belongs.
2. Locate the desired property, then click the Configure icon.



You can find this icon on the Table View row for a specific property, or at the top of a Property Summary page. To access this icon on a starburst page, hover over the center of the starburst for that property until the Configure icon displays.

3. To enable HTTPS:
  - a. Change the Enable HTTP selector from NO to YES.
  - b. Select the appropriate SSL certificate.
  - c. Click Save.

### NOTE \_\_\_\_\_

For information on how to load an SSL Certificate, refer to [Chapter 9, “Managing Security Settings”](#).

## Publishing Property Settings

Property configuration settings are delivered to UDN properties by publishing them. By disconnecting the process of modifying and reviewing property settings from the process of delivering those settings so they take affect, the Portal enables you to modify and review property settings at your leisure. Note that publishing property settings will not disrupt current content delivery.

### NOTE

Only users with an Admin Role can publish property settings. For more information on user roles see “[Understanding User Roles and Permissions](#)”.

### CAUTION

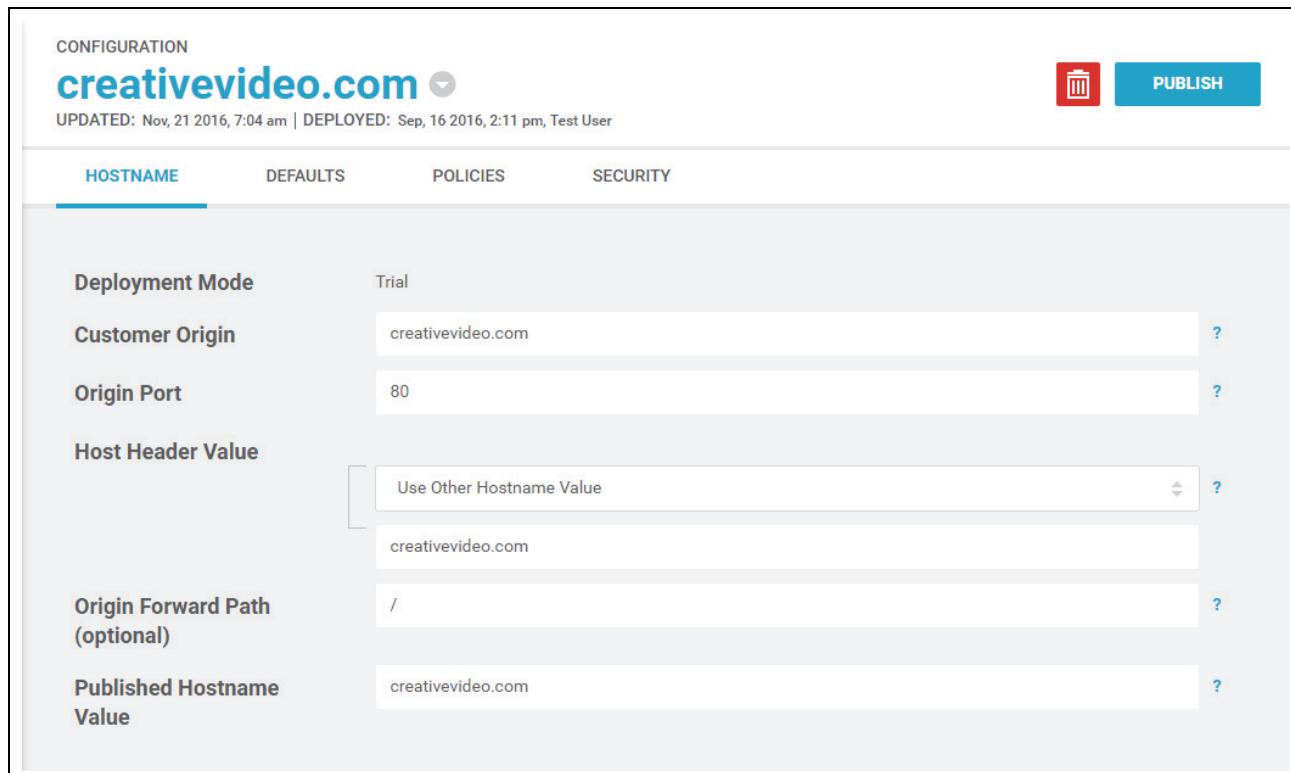
Publish with caution, as there is no current way to roll back publication to a previous configuration.

To publish property settings:

1. Navigate to the summary page for the desired property.
2. In the upper right corner of the Property Summary page, click the Configure icon.  


The Property Configuration page displays ([Figure 7-6](#)).

**Figure 7-6: Property Configuration**



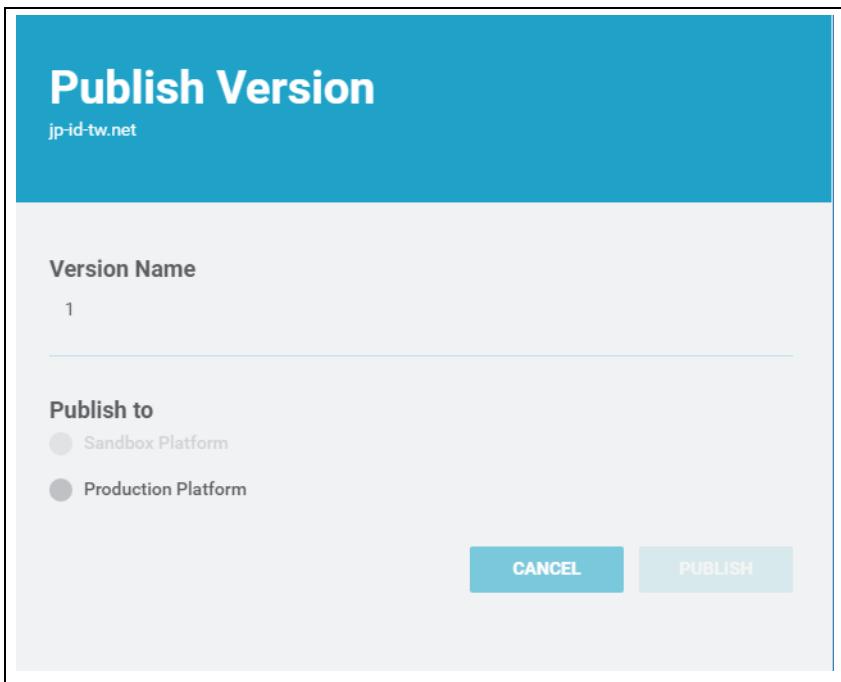
The screenshot shows the 'CONFIGURATION' section for the property 'creativevideo.com'. At the top, it displays 'UPDATED: Nov, 21 2016, 7:04 am | DEPLOYED: Sep, 16 2016, 2:11 pm, Test User'. There are four tabs: 'HOSTNAME' (selected), 'DEFAULTS', 'POLICIES', and 'SECURITY'. The 'HOSTNAME' tab contains the following fields:

- Deployment Mode:** Trial
- Customer Origin:** creativevideo.com
- Origin Port:** 80
- Host Header Value:** A dropdown menu shows 'Use Other Hostname Value' and a list item 'creativevideo.com'.
- Origin Forward Path (optional):** /
- Published Hostname Value:** creativevideo.com

A red 'PUBLISH' button is located in the top right corner of the configuration area.

3. Click Publish. The Publish Version page displays ([Figure 7-7](#)).

**Figure 7-7: Property Settings: Publish Version**



4. Select the option to publish to the Production Platform.

**N O T E** \_\_\_\_\_

For this version, you can only publish to the Production Platform.

5. Click Publish.

## Deleting a Property

Only users with an Admin Role can delete properties. For more information on user roles see “[Understanding User Roles and Permissions](#)”.

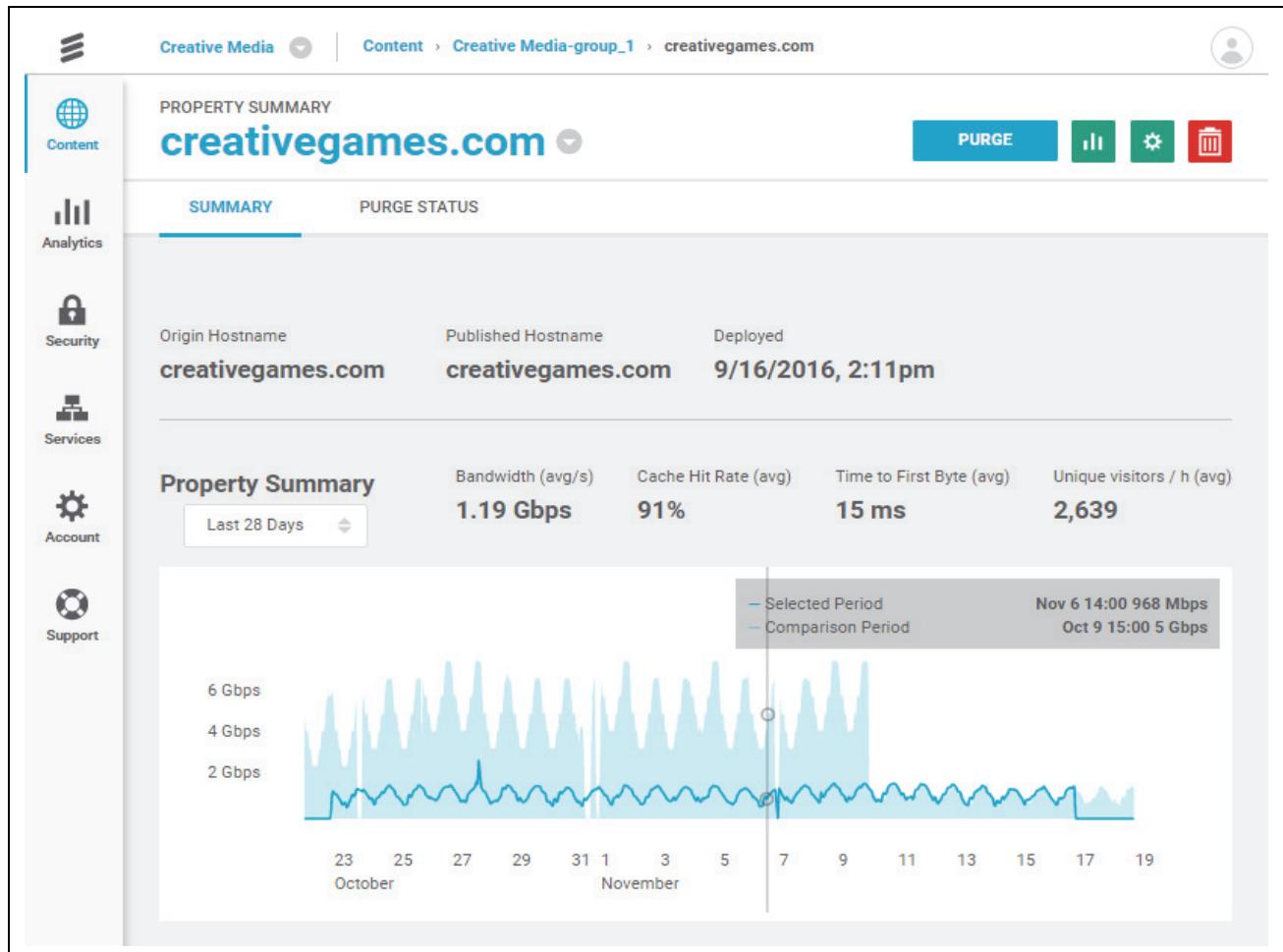
### NOTE

If you wish to delete one or more properties belonging to a single group, you can do this by modifying the group to which the properties belong. For more information, see “[Viewing and Managing Groups](#)” in Chapter 6.

To delete a property.

1. Navigate to a page where you can view the desired property.
2. Click the Configure (gear) icon for the property. The Property Summary page displays (Figure 7-8).

**Figure 7-8: Property Summary Page**



3. Click the Delete (trash) icon.
4. Confirm your selection to complete the operation.

---

# **Chapter 8**

## **Managing Cache Content**

Once an object is cached, ordinarily it remains in the cache until it expires or is removed to make room for new content. At times, you will want to remove content from the cache prior to its normal expiration time. You can choose to purge this content, removing it from the cache, or invalidate the content, by forcing it to be ignored by the cache.

Policies enable you to control content caching for a specific property. You can specify conditions associated with property content, and the actions you want UDN to take when those conditions are met. Cache Control rules defined in the Portal are pushed out to the UDN production environment.

This chapter contains the following sections:

- “[Caching Policy Overview](#)
- “[Adding or Modifying a Caching Policy](#)”
- “[Adding or Modifying a Default Caching Policy](#)”
- “[Token Authentication Policy Example](#)”
- “[Content Targeting Policy Example](#)”
- “[Publishing Caching Policies](#)”
- “[Purging Cache Content](#)”

#### **N O T E** \_\_\_\_\_

In this release, Token Authentication and Content Targeting policies can only be created by UDN Administrators.

## **Caching Policy Overview**

By default, the Service Provider Edge (SP Edge) does not cache any content. The Portal enables you to define caching policies that are then applied to content requests as they are processed by the SP Edge. But before you configure policies, it is important to know how these policies are defined and applied.

At the simplest level, UDN caching policies, or rules, consist of two basic parts: a match condition, and an action. A match condition is what the SP edge server looks for in every piece of content that arrives from the UDN Core. An action is what the SP edge server does with that content when it detects a match.

For greater content caching control, a single Policy can include multiple match conditions and multiple actions. Note that the actions associated with a Policy Rule are not triggered unless the requested content meets ALL match conditions specified for that rule.

A match condition has three parts. The first is the type of match, which is the type of information you want the policy to act on, such as a Hostname, URL, or Query String. The second is the match string, which is a user-specified string of text that UDN searches for in each content request processed by this property. The final part enables you to specify when you want the policy activated, such as when the match string is found in the content request, or when it is not found in the content request.

When you create a policy, Each policy has one or more match conditions. Simply stated, a match condition specifies when the policy will act on a specific content request.

For example, if you wanted to perform a specific action if a query string was part of the URL for a piece of requested content, then you would specify the query string when defining the policy, and then specify that you want the policy applied when that string is found in the content request. Then you would choose the appropriate action to take when this query string is present. For example, you could specify that the cache freshness value is no-store when in the presence of a particular name-value pairing in the query string.

Note that defined policies do not apply when content matches certain conditions that disqualify it for caching. Content that meets any of the following conditions will not be cached:

- Content has no validator such as an Etag or a last-modified response header.
- Content has no expiry information such as an Expires response header or a Max-Age specified in a cache-control response header.
- Content is explicitly marked as no-cache, no-store, or private.

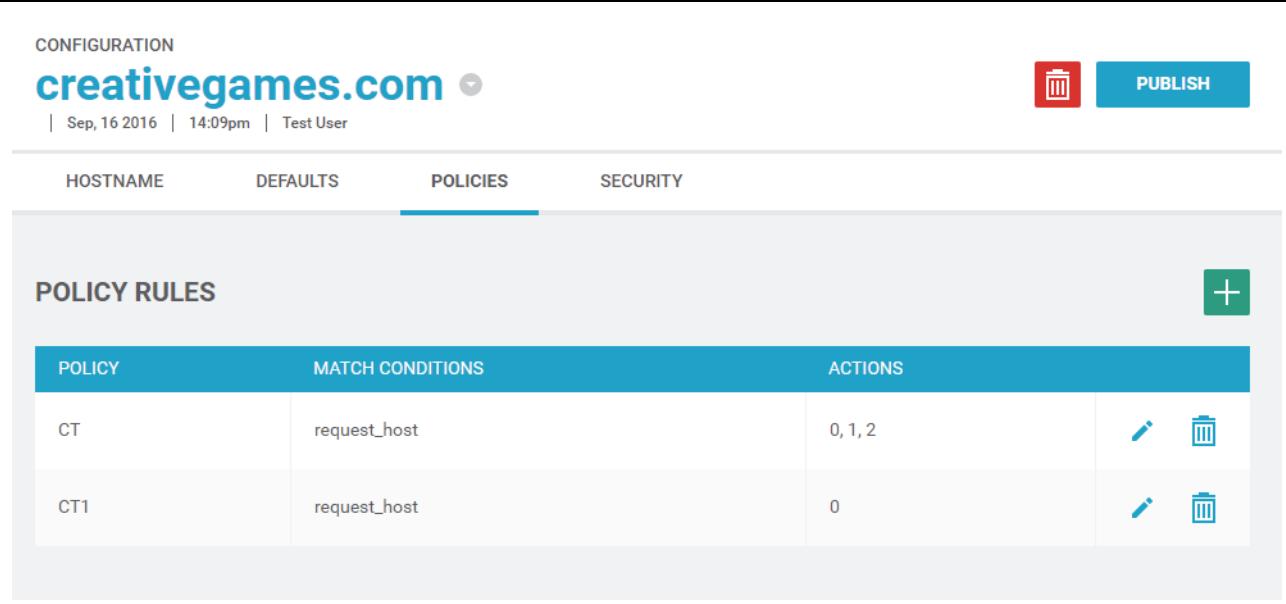
## Adding or Modifying a Caching Policy

A policy is a specific action you want the UDN system to take when it encounters a particular set of circumstances. You can define policy rules in the Portal to specify these circumstances, and what you want the cache to do when they occur.

To add or change a caching policy:

1. Navigate to the summary page for the desired property.
  2. Click the Configure icon in the upper left corner of the page. 
- The Property Configuration page displays.
3. Click the Policies tab. A list of current Policy Rules displays in table form.

**Figure 8-1: Property Configuration: Policies Tab**

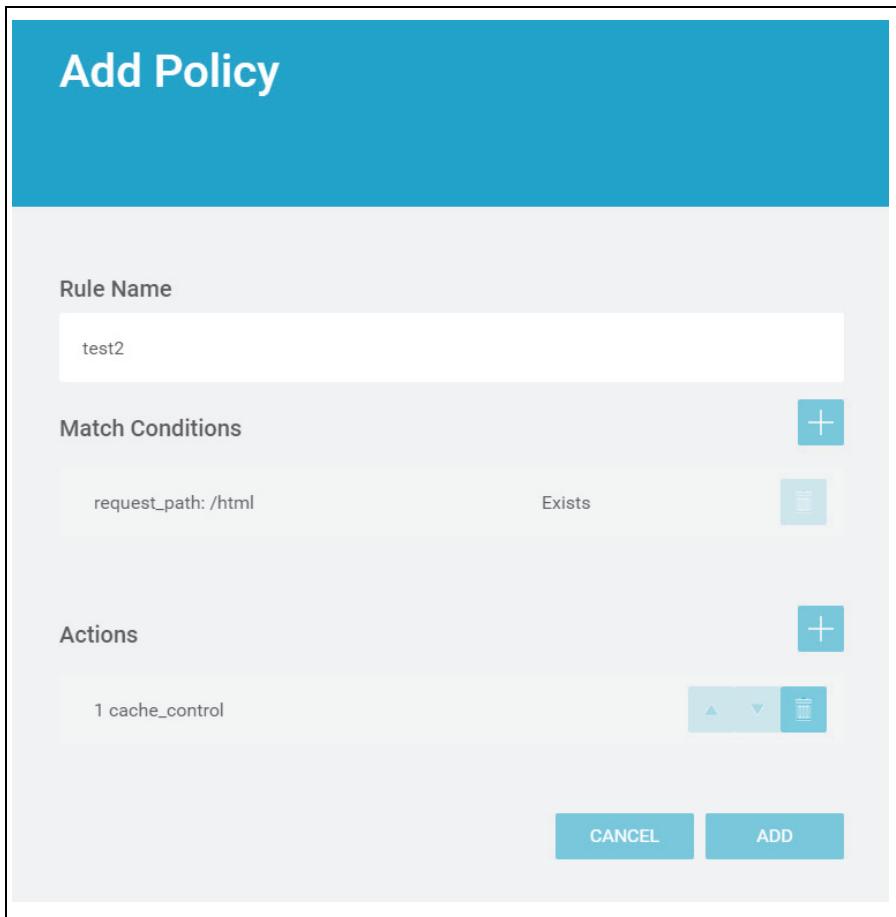


POLICY	MATCH CONDITIONS	ACTIONS
CT	request_host	0, 1, 2  
CT1	request_host	0  

4. Do one of the following:
  - To add a policy, click the Add (+) icon. The Add Policy window displays.
  - To edit a policy, locate the row associated with that policy in the Policy Rules table and click the Edit (pencil) icon on that row. The Edit Policy window displays.

The Add Policy and Edit Policy windows are very similar. [Figure 8-2](#) shows the Add Policy window.

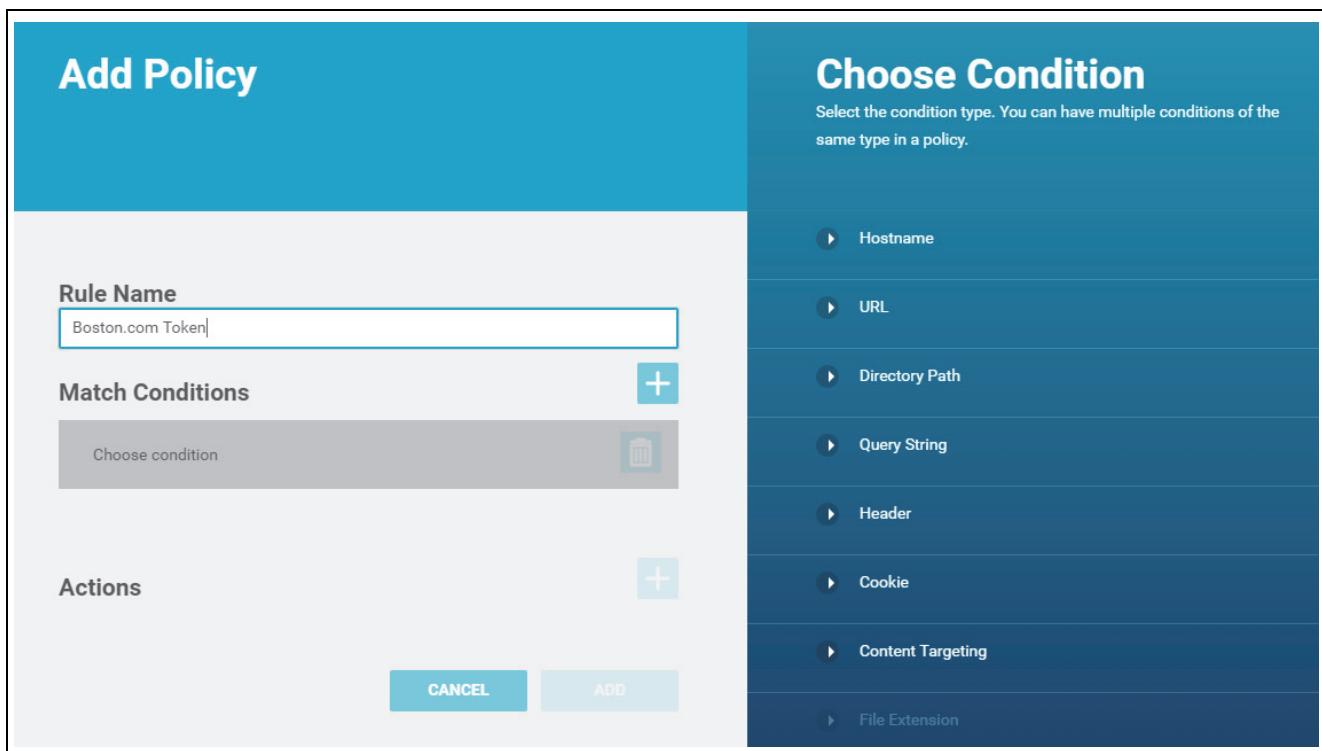
**Figure 8-2: Add Policy Window**



5. Specify a name for the Rule you are adding to the Policy. Consider adopting a meaningful naming convention that lets you uniquely identify rules based solely on their name.
6. Next, specify the match conditions for this rule.

To specify Match Conditions for this Rule:

- a. Click the Add (+) icon to the right of the Match Conditions label. The Choose Condition modal window displays.

**Figure 8-3: Add Policy: Choose Condition Modal Window**

- b. Click the condition you want associated with this rule. You can specify conditions associated with a Hostname, URL, Directory Path, Query String, Header, Cookie, or Content Targeting.

A modal window displays that enables you to specify the condition criteria.

#### NOTE ——————

In this release, Token Authentication and Content Targeting policies can only be created by UDN Administrators.

- c. When you define a condition, for each condition type, you must indicate the text the system will search for within the content request, and under what conditions you want the system to trigger the policy. The available conditions are listed in [Table 8-1](#).

For example, you could choose to have a policy apply only when a specific directory path does not exist in the content request. Or you could choose to have a policy apply only when a content request contains a specified query string.

**Table 8-1: Specifying Policy Match Conditions**

Condition Type	Condition Text	Match Types (Choose One)
Hostname	Enter the host name.	<ul style="list-style-type: none"> <li>Exists</li> <li>Does Not Exist</li> </ul>
URL	Enter the URL.	The policy applies when the specified URL matches the content URL.

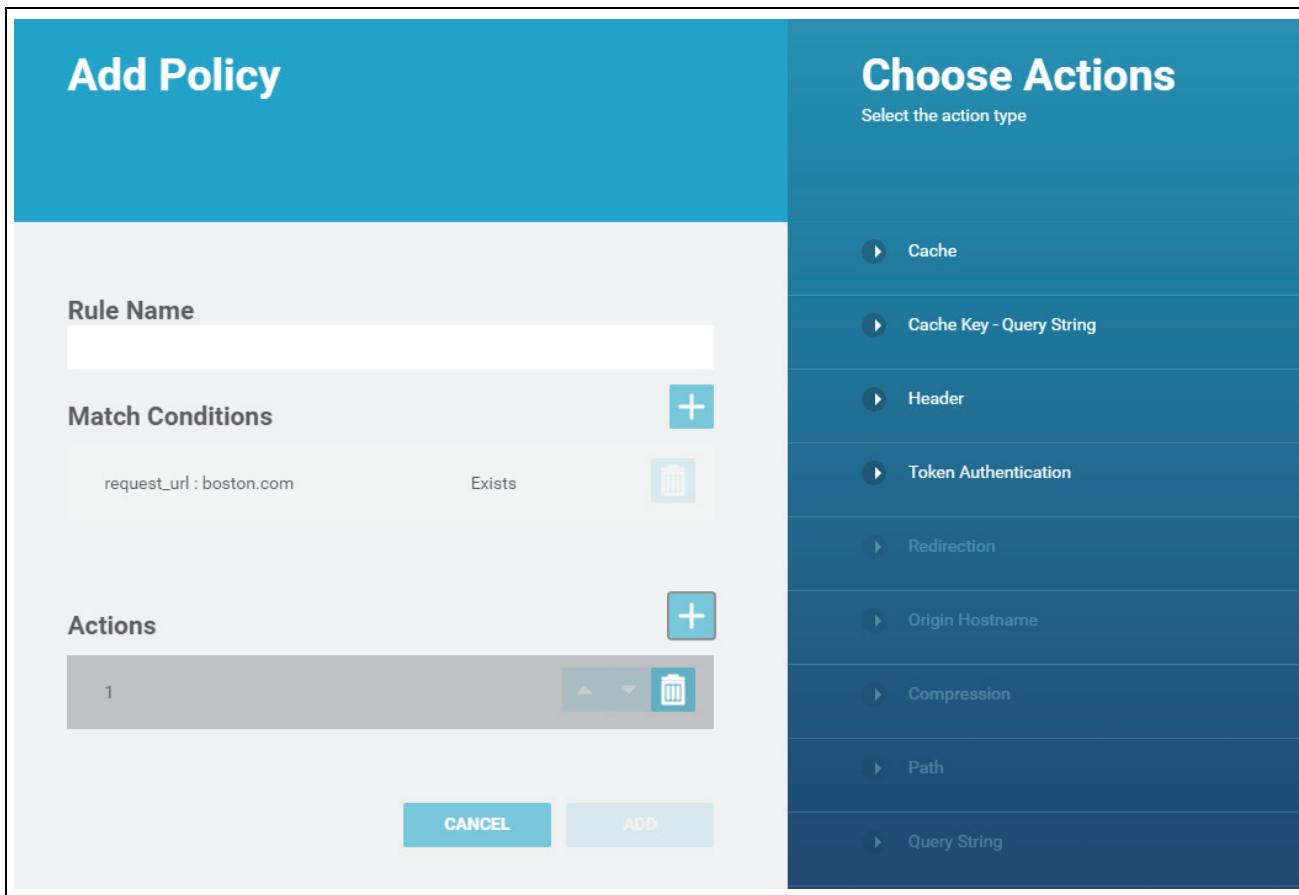
**Table 8-1: Specifying Policy Match Conditions (Continued)**

Condition Type	Condition Text	Match Types (Choose One)
Directory Path	Enter the directory path.	<ul style="list-style-type: none"> <li>• Exists</li> <li>• Does Not Exist</li> </ul>
Query String	Enter the query string.	<ul style="list-style-type: none"> <li>• Exists</li> <li>• Does Not Exist</li> <li>• Contains</li> <li>• Does Not Contain</li> </ul>
Header	Enter the header.	<ul style="list-style-type: none"> <li>• Exists</li> <li>• Does Not Exist</li> <li>• Contains</li> <li>• Does Not Contain</li> </ul>
Cookie	Enter the name of the cookie.	<ul style="list-style-type: none"> <li>• Exists</li> <li>• Does Not Exist</li> <li>• Contains</li> <li>• Does Not Contain</li> </ul>
Content Targeting	Enter a list of areas to include in the policy, separated by commas. Enter a list of areas to exclude from the policy, separated by commas.	<p>The policy applies to content being requested from areas included in the policy.</p> <p>The policy is not applied to content being requested from areas excluded from the policy.</p>

**NOTE** \_\_\_\_\_

In this release, Token Authentication and Content Targeting policies can only be created by UDN Administrators.

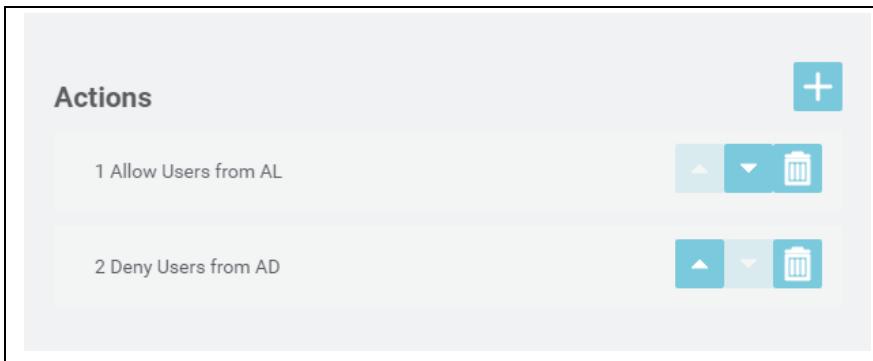
- d. When finished, click Save Match.
  - e. Create additional matches, if needed, for this Policy Rule.
7. To specify the Action the system will take when the match condition is met:
    - a. Click the Add (+) icon to the right of the Actions label. The Choose Action modal window displays.

**Figure 8-4: Policy Rule: Choose Action Modal Window**

- b. Select the Action Type you want associated with this rule. This selection specifies the type of action you want the UDN system to take when the match conditions are met. You can select Cache, Cache Key - Query String, or Header.
  - c. Enter the caching action you want taken.
  - d. When finished click Save Action.
  - e. If you wish, you may specify additional actions that will trigger when this Policy Rule applies.
8. Once you have finished specifying Match Conditions and Actions for this rule, you may want to change the priority in which they're applied.

Use the up and down arrows (triangles) to the right of the available Actions or Conditions to organize them in the desired order ([Figure 8-5](#)). You can use the Delete (trash) icon to remove a Match Condition or Action.

**Figure 8-5: Ordering Match Conditions**



9. When you are satisfied with the Policy Rule settings, click Add.

**N O T E** \_\_\_\_\_

Additions and changes to the list of Policies associated with a property are not automatically applied to the property. To apply any Policy updates you have made, you will need to Publish them. For detailed information, see “[Publishing Caching Policies](#)”.

## Adding or Modifying a Default Caching Policy

To manage Edge Cache Default Rules:

- Do one of the following:
  - To add a new policy, click the Add (+) icon.
  - To modify an existing policy, locate the policy in the table and click Edit on that row.

The Add or Edit Policy dialog box displays.

**Figure 8-6: Add Policy Screen**

Add Policy

Rule Name

test2

Match Conditions

request_path: /html	Exists	
---------------------	--------	--

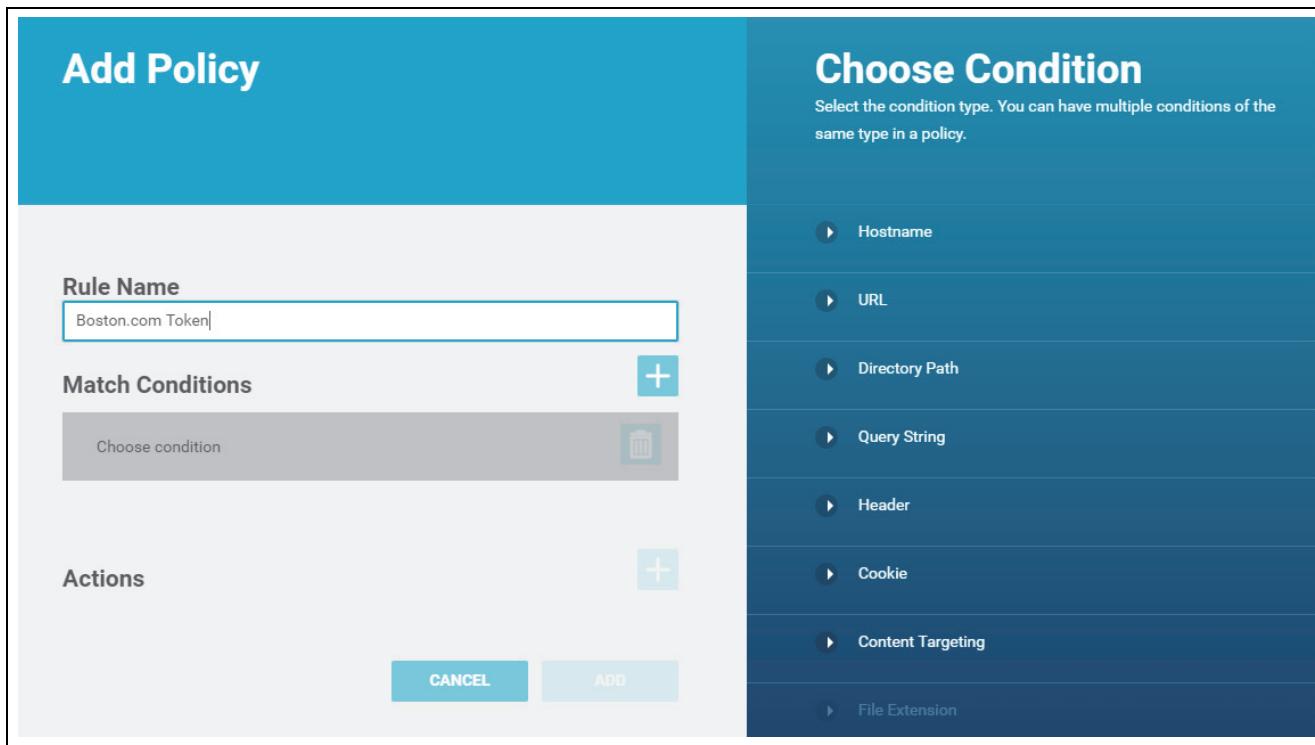
Actions

1 cache_control	
-----------------	--

CANCEL ADD

- Specify a name for the Rule you are adding to the Policy. Consider adopting a meaningful naming convention that lets you uniquely identify rules based solely on their name.
- If the Choose Condition modal window is not already showing, click the Add (+) icon to the right of the Match Conditions label. The Choose Condition modal window displays (Figure 8-7). Now you must specify the first Match Condition associated with your Policy.

**Figure 8-7: Add Policy: Choose Condition Modal Window**



Click to select the condition you want associated with this rule. You can specify conditions associated with a Hostname, Directory Path, Query String, Header, Cookie, or Content Targeting.

**NOTE**

In this release, Token Authentication and Content Targeting policies can only be created by UDN Administrators.

When you define a condition, for each condition type, you must indicate the text the system will search for within the content request, and under what conditions you want the system to trigger the policy. For example, you could choose to have a policy apply only when a specific directory path does not exist in the content request. Or you could choose to have a policy apply only when a content request contains a specified query string. The available conditions are listed in [Table 8-1](#).

**Table 8-2: Specifying Policy Match Conditions**

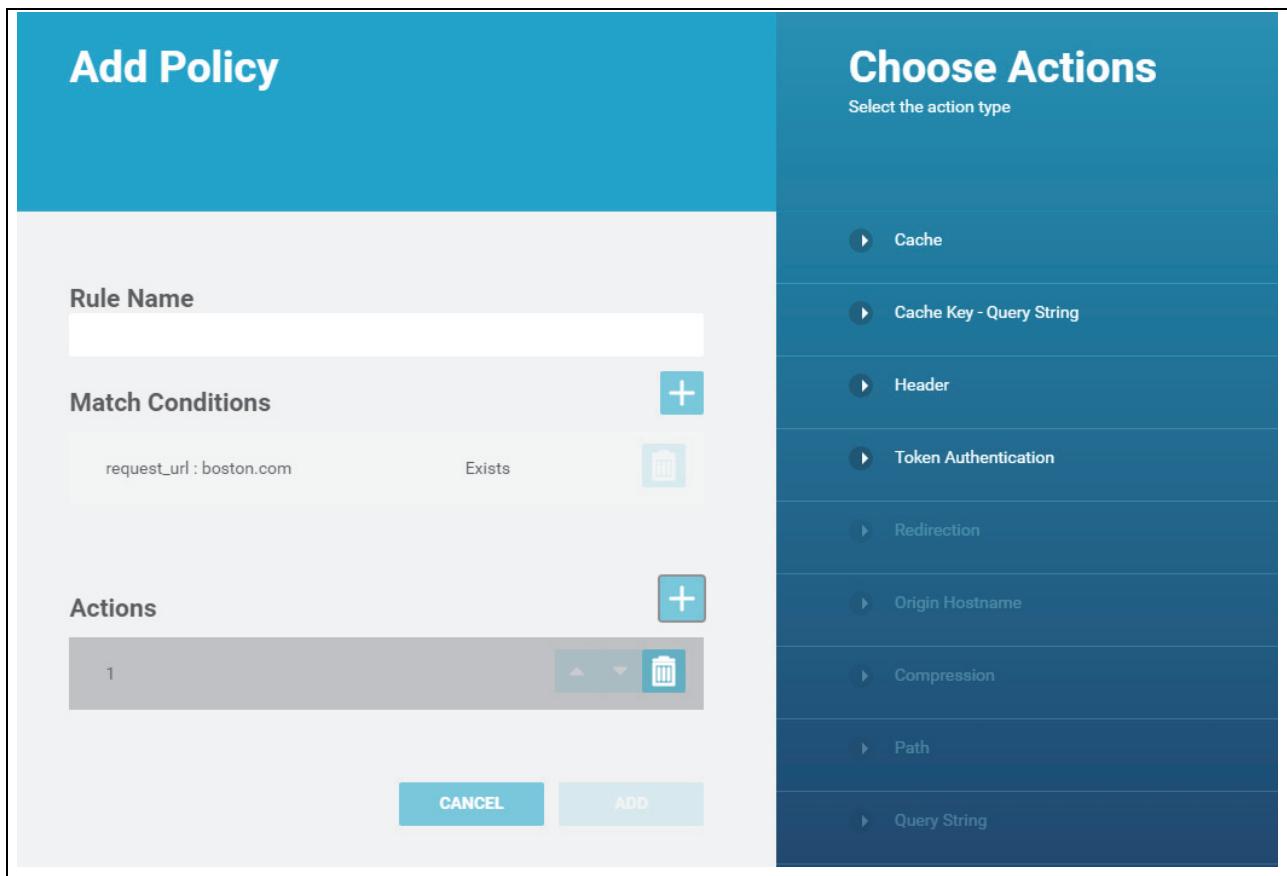
Condition Type	Condition Text	Match Types (Choose One)
Hostname	Enter the host name.	<ul style="list-style-type: none"><li>• Exists</li><li>• Does Not Exist</li></ul>
URL	Enter the URL.	The policy applies when the specified URL matches the content URL.
Directory Path	Enter the directory path.	<ul style="list-style-type: none"><li>• Exists</li><li>• Does Not Exist</li></ul>

**Table 8-2: Specifying Policy Match Conditions (Continued)**

Condition Type	Condition Text	Match Types (Choose One)
Query String	Enter the query string.	<ul style="list-style-type: none"> <li>• Exists</li> <li>• Does Not Exist</li> <li>• Contains</li> <li>• Does Not Contain</li> </ul>
Header	Enter the header.	<ul style="list-style-type: none"> <li>• Exists</li> <li>• Does Not Exist</li> <li>• Contains</li> <li>• Does Not Contain</li> </ul>
Cookie	Enter the name of the cookie.	<ul style="list-style-type: none"> <li>• Exists</li> <li>• Does Not Exist</li> <li>• Contains</li> <li>• Does Not Contain</li> </ul>
Content Targeting	Enter a list of areas to include in the policy, separated by commas. Enter a list of areas to exclude from the policy, separated by commas.	<p>The policy applies to content being requested from areas included in the policy.</p> <p>The policy is not applied to content being requested from areas excluded from the policy.</p>

- When finished, click Save Match.
  - Create additional matches, if needed, for this Policy Rule.
- d. To specify the Action the system will take when the match condition is met:
- Click the Add (+) icon to the right of the Actions label. The Choose Action modal window displays.

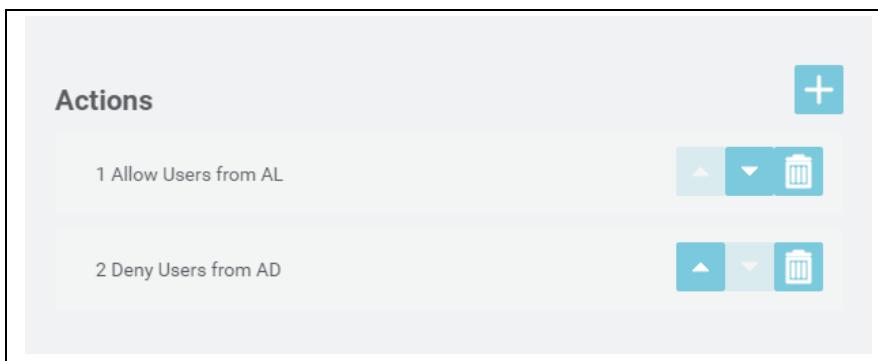
**Figure 8-8: Policy Rule: Choose Action Modal Window**



- Select the Action Type you want associated with this rule. This selection specifies the type of action you want the UDN system to take when the match conditions are met. You can select Cache, Cache Key - Query String, or Header.
  - Enter the caching action you want taken.
  - When finished click Save Action.
  - If you wish, you may specify additional actions that will trigger when this Policy Rule applies.
10. Once you have finished specifying Match Conditions and Actions for this rule, you may want to change the priority in which they're applied.

Use the up and down arrows (triangles) to the right of the available Match Conditions or Actions to organize them in the desired order ([Figure 8-5](#)). You can remove Match Conditions or Actions using the Delete (trash) icon.

**Figure 8-9: Ordering Match Conditions**



- e. When finished specifying information for this Policy Rule, click Add.

## Token Authentication Policy Example

UDN Token Authentication enables content providers (CP) to apply authentication and time-based access restrictions for content acquisition to fulfill end user requests. In these cases a Content Provider creates a URL that requires a token in order to validate an incoming request.

To create a token authentication caching policy:

1. Navigate to the summary page for the desired property.
2. In the upper right corner of the Property Summary page, click the Configure icon.  
The Property Configuration page displays.
3. Click the Policies tab. A list of current Policies displays in table form.



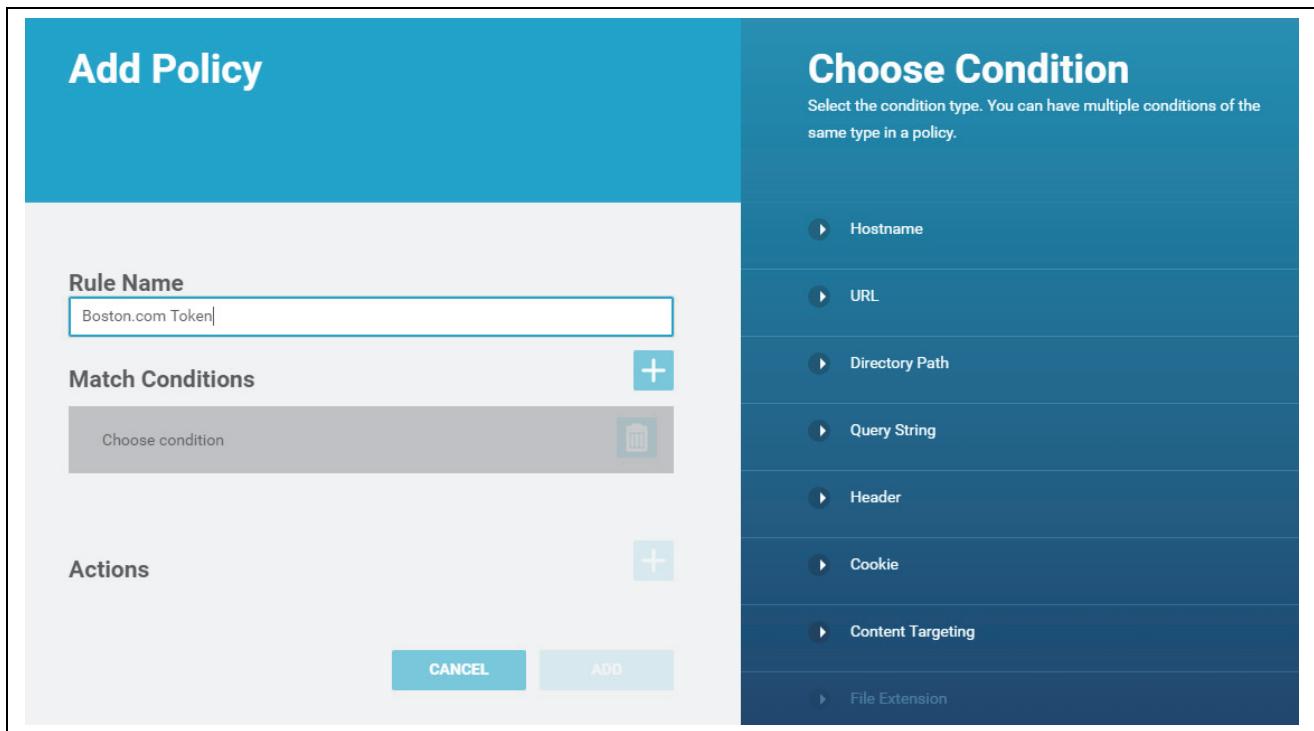
**Figure 8-10: Property Configuration: Policies Tab**

POLICY	MATCH CONDITIONS	ACTIONS
CT	request_host	0, 1, 2
CT1	request_host	0

4. To add a new policy, click the Add (+) icon. The Add Policy screen displays (Figure 8-11).
5. Enter a name for the policy Rule. The name should indicate that this is a Token policy for a specific site (URL).
6. The Choose Condition modal window automatically displays when you add a Policy (Figure 8-11).
7. A token authentication policy requires that you specify a URL for the match condition. In the Choose Condition modal window, select URL.
8. Enter the URL when prompted, then click Save.

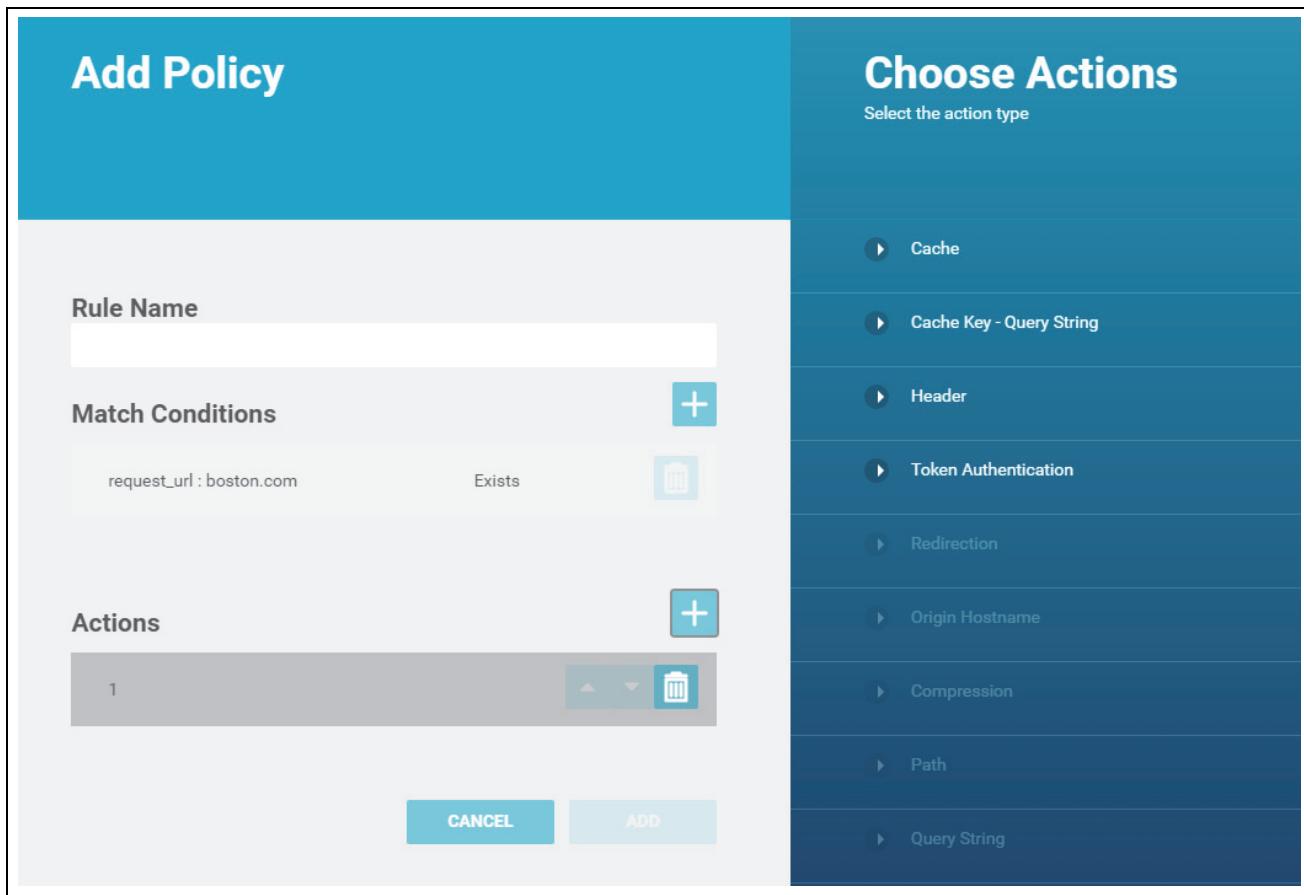
### NOTE

When creating a Token Authentication policy, you can only specify one Match Condition, and it must be a URL match.

**Figure 8-11: Token Authentication Policy: Choose Match Condition**

9. Now you must specify an Action for this policy. To do so, click the Add (+) button next to Actions. The Choose Action modal window displays ([Figure 8-12](#)).
10. On the Choose Action modal window, select Token Authentication.

**Figure 8-12: Add Policy: Choose Action**

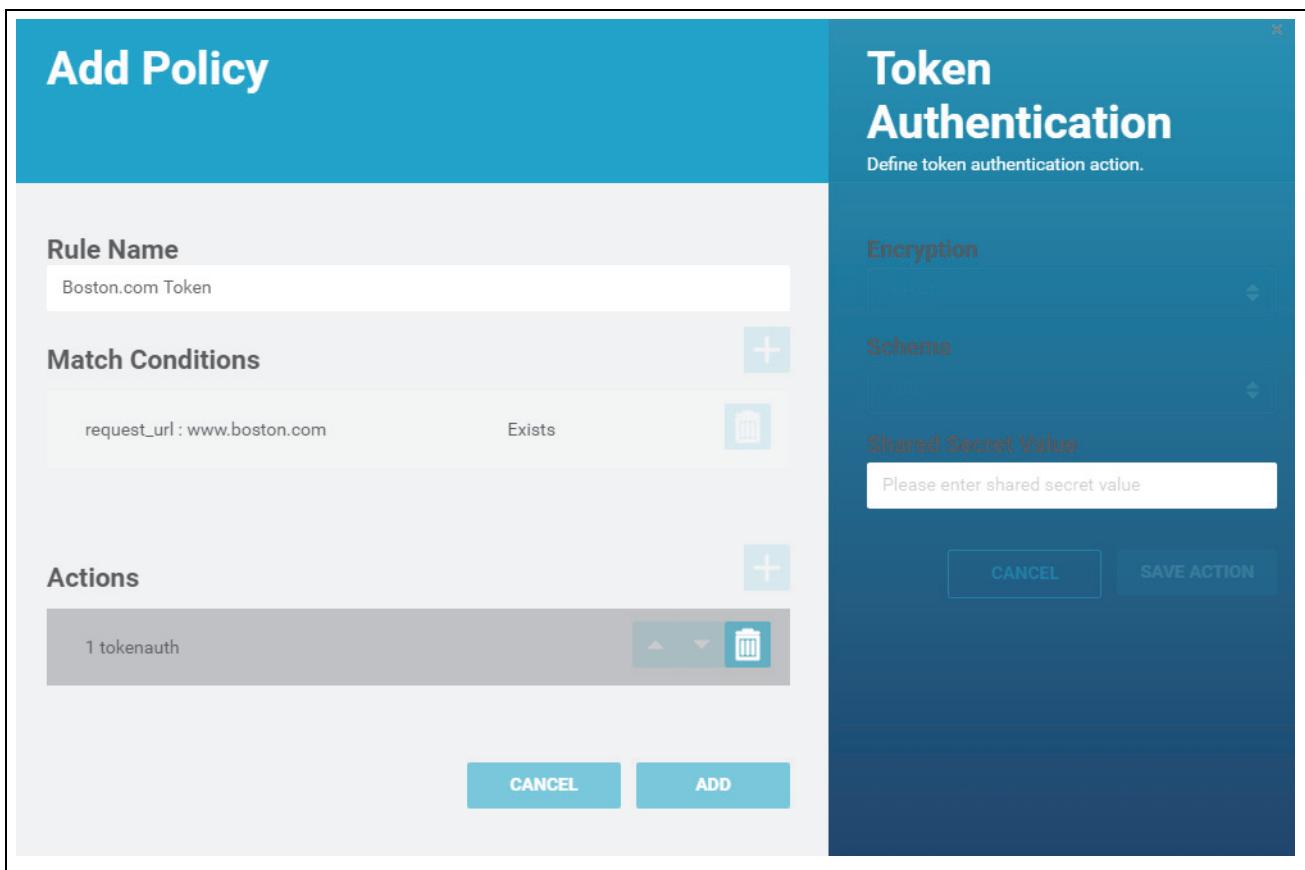


11. To enter the Token Authentication information associated with this Action, enter the Shared Secret Value for this Token, then click Save Action.([Figure 8-13](#)). Note that the Encryption and Schema fields are set to a predetermined value in this release.

**N O T E** \_\_\_\_\_

When creating a Token Authentication policy, you can only specify one Action.

**Figure 8-13: Add Policy: Token Authentication**



12. When you have finished specifying Policy information, click Add at the bottom of the Add Policy window.

## Content Targeting Policy Example

The Portal enables users who have purchased the content targeting service to configure content targeting policies on a per-country basis. UDN Content Targeting enables Content Providers to control content delivery by specifying where content can, and cannot, be delivered. It can also enable Content Providers to direct clients to country-specific sites to acquire content, optimizing content delivery.

To create a content targeting policy:

1. Navigate to the summary page for the desired property.
2. In the upper right corner of the Property Summary page, click the Configure icon.  
The Property Configuration page displays.
3. Click the Policies tab. A list of current Policies displays in table form.

**Figure 8-14: Property Configuration: Policies Tab**

The screenshot shows the 'CONFIGURATION' section for the domain 'creativegames.com'. At the top, there is a blue header bar with the domain name and a gear icon. Below the header, the date and time ('Sep, 16 2016 | 14:09pm | Test User') and a 'PUBLISH' button are visible. The main area has tabs for 'HOSTNAME', 'DEFAULTS', 'POLICIES' (which is underlined, indicating it is selected), and 'SECURITY'. Under the 'POLICIES' tab, there is a section titled 'POLICY RULES' with a '+' button. A table lists two policy rules:

POLICY	MATCH CONDITIONS	ACTIONS
CT	request_host	0, 1, 2
CT1	request_host	0

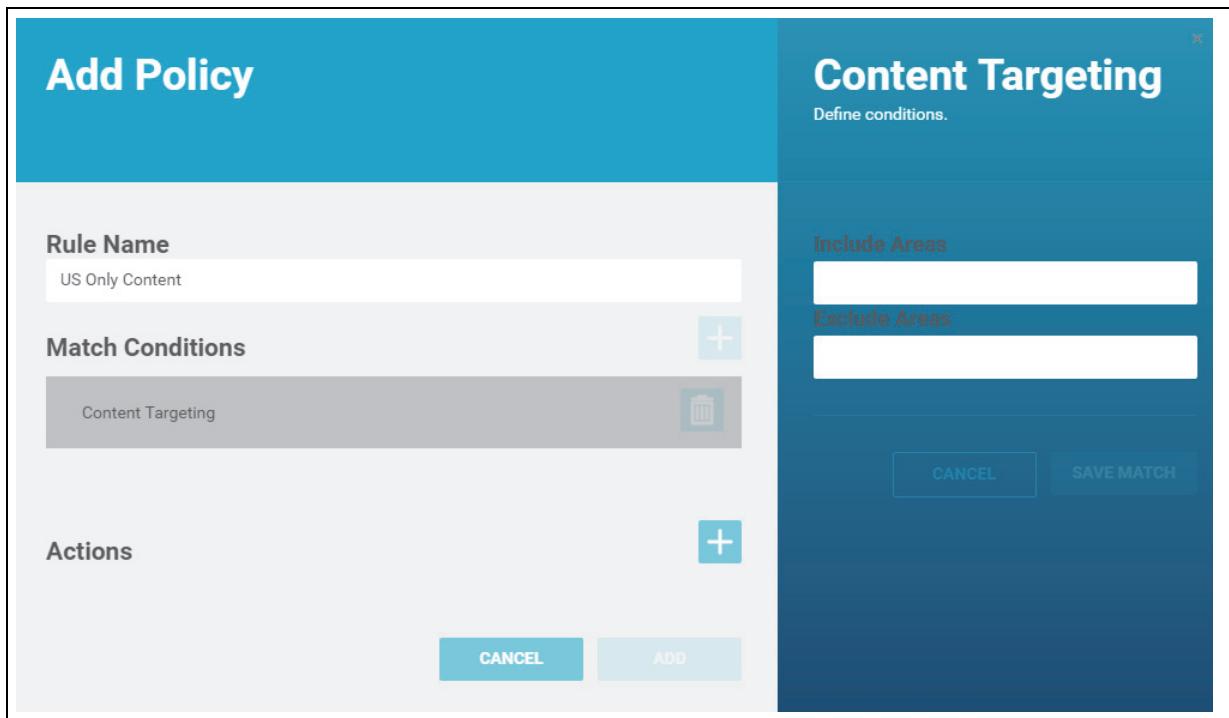
4. To add a new policy, click the Add (+) icon. The Add Policy screen displays (Figure 8-11).
5. Enter a name for the policy Rule. The name should indicate that this is a Content Targeting policy for a specific region or country.
6. The Choose Condition modal window automatically displays when you add a Policy. If it does not, click the Add (+) icon. In the Choose Condition modal window select Content Targeting. The Content Targeting actions modal window displays (Figure 8-15).

### NOTE

When you specify Content Targeting as the Match Condition, that match condition will be the only match condition permitted for the policy.

7. In the Content Targeting actions modal window, specify the countries to be included in delivery, and those to be excluded. A list of countries displays when you click in each field. Select as many countries as needed for each area. When finished, then click Save Match.

Figure 8-15: Content Targeting Policy: Content Targeting Areas



8. You can add more Content Targeting actions by clicking the Add (+) button at the top of the Actions area.

For each Action, you specify three options:

- Action: whether to Allow, Redirect, or Deny requests for content from the specified area.
- Users From or Users Not From: whether you want the Action to occur when the user is from the specified area, or whether you want the Action to occur when the user is not from the specified area.
- Location: the countries whose users you want this policy to affect.

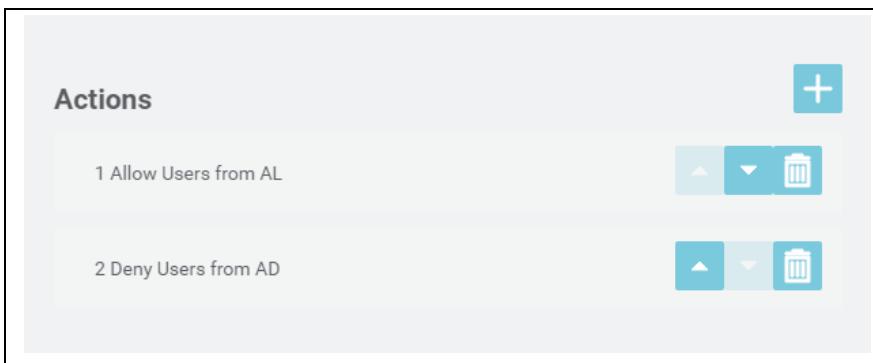
For example, you could create a Policy that Allows requests for content from a specified group of countries in the first Action, and Denies requests from all other countries in the second action.

When you have finished specifying the settings for an Action, click Save Action

9. Once you have finished specifying Match Conditions and Actions for this rule, you may want to change the priority in which they're applied.

Use the up and down arrows (triangles) to the right of the available Actions or Conditions to organize them in the desired order (Figure 8-16).

**Figure 8-16: Ordering Match Conditions or Actions**



10. When you are satisfied with the Policy Rule settings, click Add.

**N O T E** \_\_\_\_\_

Additions and changes to the list of Policies associated with a property are not automatically applied to the property. To apply any Policy updates you have made, you will need to Publish them. For detailed information, see “[Publishing Caching Policies](#)”.

## Publishing Caching Policies

Property configuration settings, including caching policies, are delivered to UDN properties by publishing them. By disconnecting the process of modifying and reviewing property settings from the process of delivering those settings so they take affect, the Portal enables you to modify and review property settings at your leisure. Note that publishing property settings will not disrupt current content delivery.

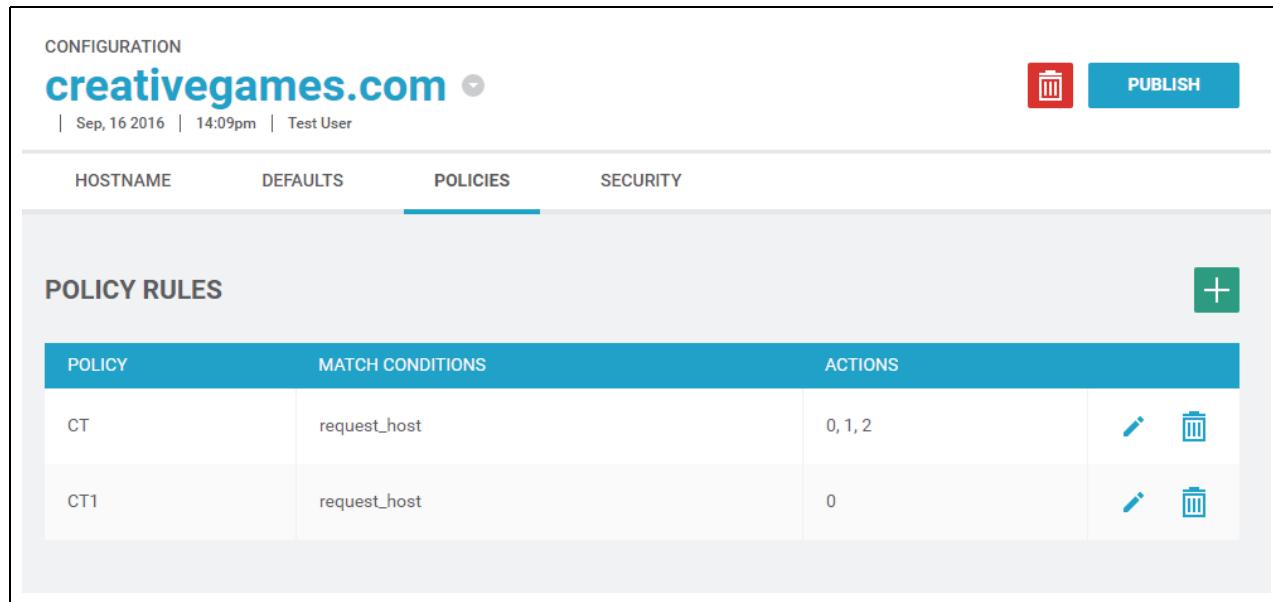
### NOTE

Publish with caution, as there is no current way to roll back publication to a previous configuration.

To publish any new or modified caching policies (and other property-specific configuration settings):

1. Navigate to the summary page for the desired property.
2. In the upper right corner of the Property Summary page, click the Configure icon.  The Property Configuration page displays.
3. Click the Policies tab. A list of current Policies displays in table form (Figure 8-17).

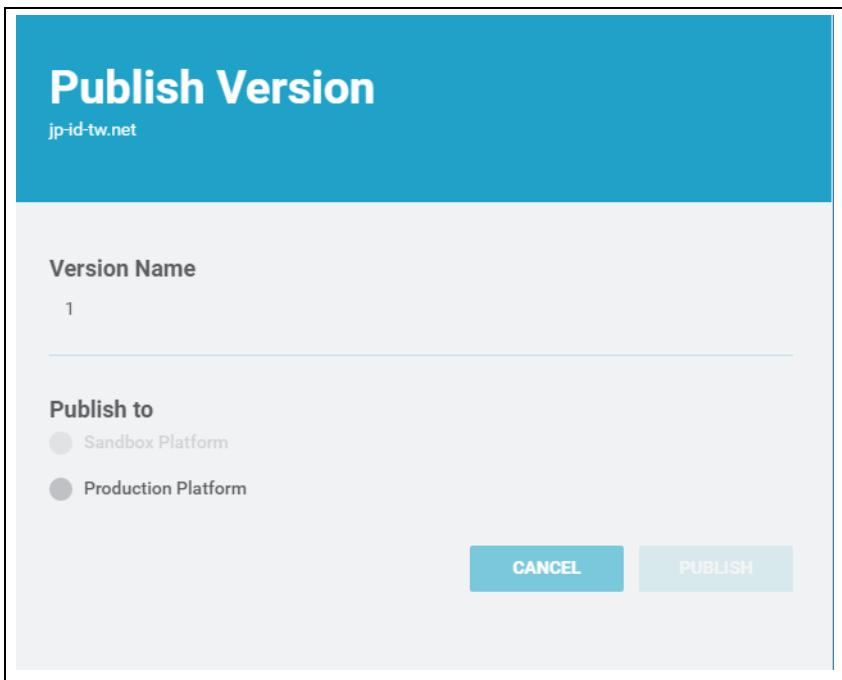
**Figure 8-17: Property Configuration: Policies Tab**



POLICY	MATCH CONDITIONS	ACTIONS
CT	request_host	0, 1, 2
CT1	request_host	0

4. Review any policy changes you have made before publishing.
5. When ready, click Publish. The Publish Version page displays (Figure 8-18).

Figure 8-18: Property Settings: Publish Version



6. Select the option to publish to the Production Platform.

**N O T E** \_\_\_\_\_

For this version, you can only publish to the Production Platform.

7. Click Publish.

## Purging Cache Content

UDN will cache an asset until the asset's time-to-live (TTL) expires. After the asset's TTL expires, when a client requests the asset from the edge node, the edge node will retrieve a new version of the asset to serve the client request and refresh the cache.

Sometimes you may wish to purge cached content from a property and force that property to retrieve new assets. This might be due to updates to your web application, or to quickly update assets that contain incorrect information.

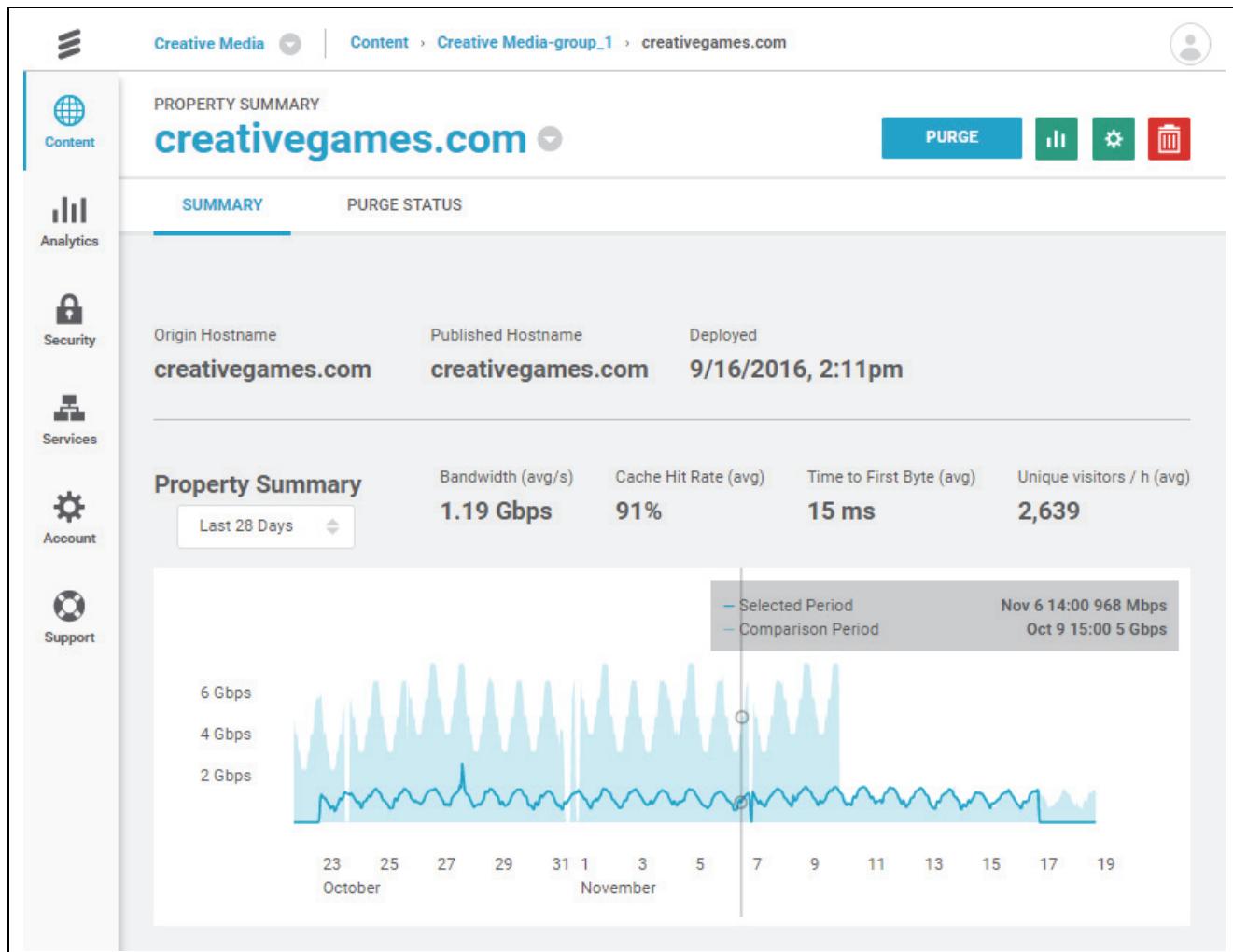
### NOTE

Only users with Admin permissions can purge cache content. For more information on user roles see “[Understanding User Roles and Permissions](#)”.

To purge content from a property:

1. Navigate to the desired property, then click the property to display its Property Summary page. [Figure 8-19](#) shows the Summary tab.

**Figure 8-19: Property Summary Page**



2. To view the status of current and past Purge operations, click the Purge Status tab ([Figure 8-20](#)).

**Figure 8-20: Property Summary Page: Purge Status Tab**

The screenshot shows the 'PROPERTY SUMMARY' page for 'creativevideo.com'. At the top, there are tabs for 'SUMMARY' and 'PURGE STATUS', with 'PURGE STATUS' being the active tab. Below the tabs is a section titled 'PURGE HISTORY' containing a table with the following data:

START TIME	END TIME	INITIATED BY	DESCRIPTION
11/18/2016 03:17		super@ericssonudn.com	
11/17/2016 19:38		super@vidscale.com	
11/17/2016 19:31		super@vidscale.com	
11/17/2016 18:38		super@vidscale.com	
11/17/2016 18:38		super@vidscale.com	

3. Click Purge at the top of the page. The Purge Content modal window displays.

**Figure 8-21: Purge Content**

The screenshot shows a 'Purge Content' dialog box. At the top, it asks 'What do you want to purge?' with a dropdown menu set to 'URLs'. Below this, there's a section for 'URLs to Purge' with a text input field labeled 'Enter URLs' and a note 'Up to 100 urls, separated by comma'. Under 'Content Removal Method', the 'Delete content' option is selected. In the 'Notification' section, there's a checkbox 'Notify me when purge is completed' which is checked. A 'Note' section contains a placeholder 'A note about the purge'. At the bottom are 'CANCEL' and 'PURGE' buttons.

4. Specify the content you want to purge. Choose one of the following:
  - URLs
  - Directories
  - Hostnames
  - Entire Group (All Hostnames)
5. Enter the details of what content you want purged:
  - If you are purging URLs, enter one or more URLs to purge, separated by commas.
  - If you are purging Directories, enter one or more Directories to purge, separated by commas.
  - If you are purging Hostnames, enter one or more Hostnames to purge, separated by commas.
  - If you are purging the content for an Entire Group, you need not specify anything as the purge request applies to all Hostnames.

6. Specify the Content Removal Method you want UDN to use. You can choose to either Invalidate Content or Delete Content.

When making your selection, note that invalidating content makes content unavailable more quickly, but deletion of invalidated content removes content from UDN caches more quickly.

7. Select the Notification check box if you want to be notified when the requested purge is completed.
8. If desired, for future reference, add a note regarding why you initiated this purge.
9. When ready, click Purge.

---

## **Chapter 9**

# **Managing Security Settings**

For those customers who have purchased the Secure Delivery service, the UDN Portal enables users to manage security settings associated with SSL certificates.

This chapter contains the following sections:

- “[Managing SSL Certificates](#)”

## Managing SSL Certificates

To manage SSL certificates:

1. Navigate to the Summary Page for the group to which you want to add the SSL Certificate.
2. Click the Security icon in the left navigation bar.
3. The Security page displays. Click the SSL Certificate tab (Figure 9-1).  
This page lists previously uploaded certificates.

**Figure 9-1: Security Page: SSL Certificate tab**

TITLE	COMMON NAME	GROUP
ssl-cert-title	qa_test1.0.4-b1-105	Creative Media-group_1

4. To add or edit an SSL Certificate:
    - a. Do one of the following:
      - To add a new SSL Certificate, click the Add (+) icon.
      - To edit an existing SSL Certificate, locate the certificate in the list and click the Edit (pencil) icon.
- The Upload or Edit Certificate modal window displays. Figure 9-2 shows the Upload Certificate modal window.

**Figure 9-2: Upload Certificate**

The screenshot shows a web-based form titled "Upload Certificate". The form has a teal header bar. Below it, there are four input fields: "Assign to Group" (containing "GP-J"), "SSL Cert Title" (empty), "Private Key" (empty), and "Certificate" (empty). Each field is preceded by a label.

- b. Enter the Title for the SSL Certificate.
  - c. Copy and paste the Private Key associated with the Certificate.
  - d. Enter the Certificate itself.
  - e. When finished, click Save.
5. To delete an SSL Certificate:
- a. Select the row associated with the SSL Certificate you want to delete.
  - b. Click the Delete (trash) icon on that row.
  - c. Confirm the deletion to complete the operation.



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## **Chapter 10**

# **Accessing Support Resources**

The Support page of the Portal provides access to the ZenDesk ticketing application. it also provides access to Portal documentation. This chapter contains the following sections:

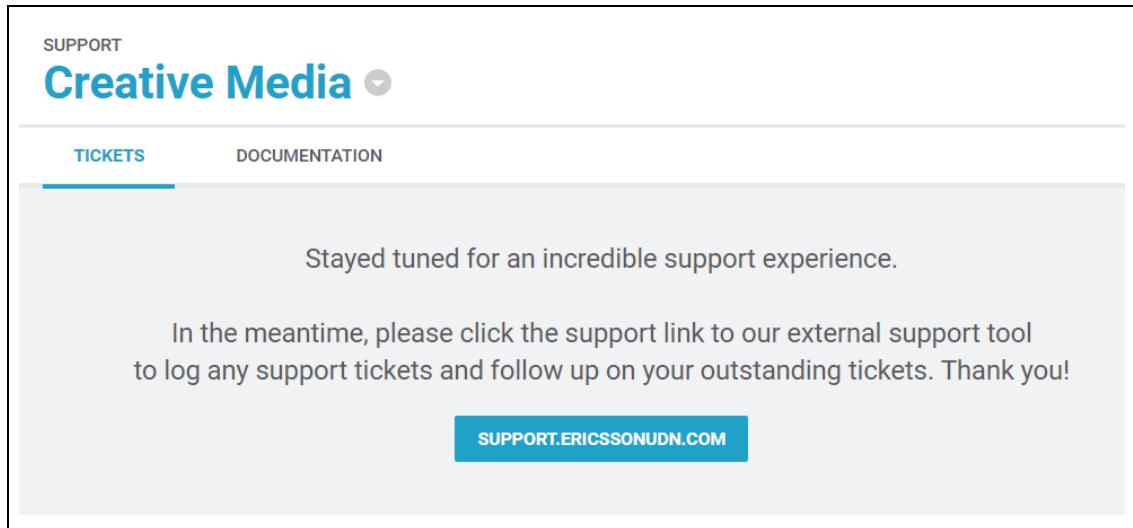
- “[Accessing Support](#)”
- “[Accessing Documentation](#)”

## Accessing Support

To access Support:

1. Click the Support icon on the left navigation bar. the Support page displays (Figure 10-1).

**Figure 10-1: Support: Tickets Tab**



2. To access the Ericsson UDN Support Site, click the SUPPORT.ERICSSONUDN.COM button. The link will bring you to the UDN Support site. The site provides links to helpful UDN information including Frequently Asked Questions.
3. To Submit a Request for assistance, click the Submit a Request link in the upper right corner of the page. The Submit a Request page displays.
4. To file a ticket, select UDN Support Ticket.
  - a. Enter the following information for your request:
    - Subject: Enter a title for your ticket briefly describing the current issue.
    - Description: Enter a description of your current issue or need.
    - Priority: Select a priority for your issue.
    - Type: Select the issue Type (Question, Incident, Problem, Task, or Integration)
    - Service Type: Specify the Service Type associated with your request.
    - Attachments: Add any attachments that you feel would benefit the support effort.
  - b. When finished, click Submit.
5. To make a change request, select UDN Change Request
  - a. Enter the following information for your request:
    - Subject: Enter a title for your ticket briefly describing the current issue.
    - Description: Enter a description of your current issue or need.
    - Change Type: Specify whether this is a normal, standard, or emergency change.
    - Service Type: Specify the service type associated with your request.

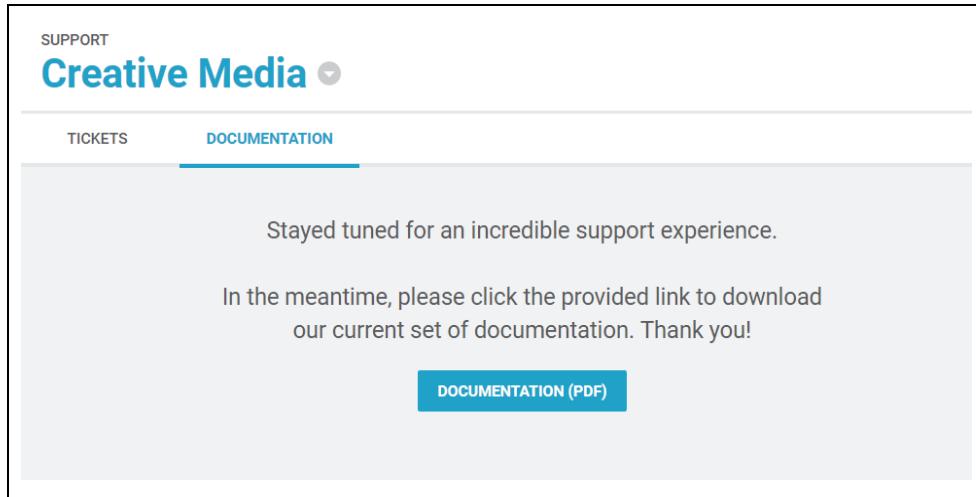
- Change Risk: Specify the risk level of the change.
  - Change Impact: Select the impact of the change on your system.
  - Attachments: Add any attachments that you feel would benefit the support effort.
- b. When finished, click Submit.

## Accessing Documentation

To access the Portal User Guide associated with your User Role:

1. Click the Support icon on the left navigation bar.
2. Click the Documentation tab ([Figure 10-2](#)).

**Figure 10-2: Support: Documentation Tab**



3. Click the DOCUMENTATION (PDF) button. The user guide associated with your current user role launches as a PDF file.

**N O T E** \_\_\_\_\_

Adobe Acrobat Reader is required to display the User Guide. You can download Acrobat Reader free from Adobe. For more information visit <https://get.adobe.com/reader/>.

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## **Chapter 11**

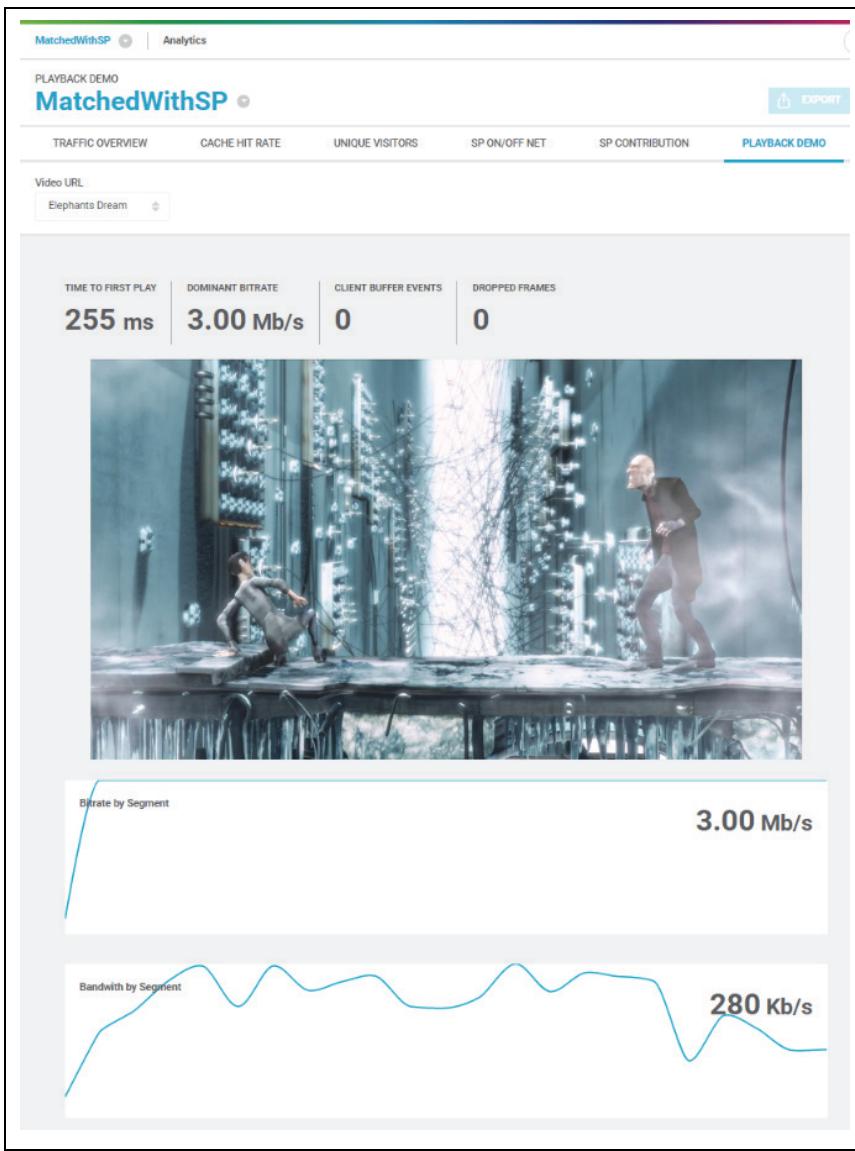
# **Playback Demonstration**

The Portal also provides an example of content playback which can be used for demonstration purposes. This page allows a demonstration of HLS video being played over the UDN. You can choose from one of several 15-minute videos to display. For consistency, each video was encoded with the same specifications.

To access this demonstration:

1. Click the Analytics icon on the left navigation bar.
2. Click the Playback Demo tab. The playback demonstration begins.
3. You can select from a list of several videos. When you select a video, the video plays, displaying key performance indicators. The video window is followed by two charts. The first displays Bitrate by Segment, and the second displays Bandwidth by Segment.

**Figure 11-1: Playback Demonstration**



Several Key Performance Indicators for this playback demonstration are available:

- Time to First Play - This metric tracks the amount of elapsed time between when a request to play the video has been sent to the time in which the required number of frames have been transferred to fill the player's playback buffer and the system actually begins to render the video.
- Dominant Bitrate - Adjustable Bit Rate (ABR) video allows the player to request playback at different bit rates to compensate for various network conditions. The Dominant bit rate shows the bit rate that is being played the most. The actual value is dependent on the maximum bit rates at which the video was created to play. For this demo, the maximum bitrate is 3.8Mbps, with other bit rates at 3.0Mbps, 1.8Mbps, 900Kbps, and 500 Kbps.
- Client Buffer Events - This metric shows the number of times the player's playback buffer was exceeded, which cause the video to pause while more data was being requested.
- Dropped Frames - This metric shows the number of Frames that were dropped. Dropping a few frames is typically not noticeable but is an indication of poor network performance as some frames are not received or are received too late to be rendered.