

ZENworks

OnDemand Content Reference

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Contents

About This Guide	5
1 Concepts and Requirements	7
Definitions	7
Ondemand Content Master - Requirements	8
Ondemand Content Server Architecture	9
2 Ondemand Content Configuration	11
Streaming Content Ondemand	12
Ondemand Content Management Server Configuration	13
Content Throttling	13
Pre-cached content distribution throttle rate	13
Ondemand Content Distribution Throttle Rate	19
Output Throttle Rate for Satellite Server	23
Configure the Content Download Settings	25
Configure the Content Cache Settings	25
Content Type Configurations	26
Configure Ondemand Content Master Settings	27
Modifying the Metadata path in the ODCPConfiguration file	28
Ondemand Content Cache Configuration	28
Pre-cached Content Cleanup	28
Ondemand Content Clean-up	29
Blacked out Schedule for Ondemand content	29

About This Guide

This *ZENworks Ondemand Reference* provides information to help you understand how ondemand content is managed in a ZENworks zone and how to configure ondemand content settings.

Audience

This guide is written for the ZENworks Configuration Management administrators.

Feedback

We want to hear your comments and suggestions about this manual and the other documentation included with this product. Please use the User Comments feature at the bottom of each page of the online documentation.

Additional Documentation

ZENworks Endpoint Security Management is supported by other documentation (in both PDF and HTML formats) that you can use to learn about and implement the product. For additional documentation, see the [ZENworks documentation website](#).

1 Concepts and Requirements

ZENworks ondemand content is content served to workstations from content servers upon request from the workstation. One example of this type of content in ZENworks is malware signature content used for malware scans and routines to disinfect workstation files on devices with the Antimalware Policy enforced.

ZENworks uses primary and satellite servers as content servers for ondemand content requests and distribution. All primary servers function as content servers, but satellite servers need to be assigned a Content Server role to function as a content server. Primary servers, and only primary servers, can also function as ondemand content masters (OCM) when so configured. The OCM distinction is typified by the ability to download content from a content distribution network (CDN).

Definitions

Reference the following definitions to better understand ondemand concepts, architecture, and configuration:

Ondemand Content

Content that is served to the requesting workstation or server upon request from that device.

Content Server

A primary server or satellite server with a Content Server role that is used to store content intended for replication to other workstations or other servers.

Ondemand Content Master (OCM)

A primary server with an OCM assignment, either by default or by designation in the Server Hierarchy configuration.

Content Distribution Network (CDN)

A server external to the ZENworks zone that maintains content intended for enterprise downloads to accomplish a specific purpose. Typically, patching, updating software, and updating system security.

Ondemand Content Master List

The ZENworks zone architecture of primary servers that are configured as OCMs for the purpose of ondemand content replication.

Content Replication Method

The ZENworks zone architecture of primary servers and satellite servers networked for the purpose of content replication.

Shared Content Repository

The ZENworks zone architecture of managing content storage on content servers.

Throttling

A configuration setting that determines the rate of content being downloaded to agent devices. This setting is designed to provide the least disruption of network operations due to content downloads.

Ondemand Content Master - Requirements

Ondemand content masters (OCM) download content for managed device distribution from content distribution networks (CDN). Only primary servers can be OCMs.

Configuring a proxy: If the OCM requires a proxy to access the service, the OCM server's Subscription proxy configuration file is used.

If you have configured your network to use a proxy server, you must configure the proxy server subscriptions.

- 1 On the Primary Server on which the Ondemand Content Master is configured to run, navigate to the `lpm-server.properties` file.

- ♦ `/etc/opt/microfocus/zenworks/`

An example of the content within the `lpm-server.properties` file is displayed below:

```
Debug=false
TTL=24
subscription-proxyaddress=
subscription-proxyport=
subscription-proxyuser=
subscription-proxypassword=
subscription-useNTLM=false
```

- 2 Modify and save the file with the following subscription proxy details:
 - ♦ Set the value of `subscription-proxyaddress` to the IP address of the proxy server.
 - ♦ Set the value of `subscription-proxyport` to the port number of the proxy server.
 - ♦ (Conditional) If the proxy is authentication-based, set the value of `subscriptionproxyuser` to the name of the proxy user.
 - ♦ (Conditional) If the proxy is authentication-based, set the value of `subscriptionproxypassword` to the password associated with the proxy user name.
 - ♦ It is recommended to use the `zman srpp` command to specify an obfuscated password instead of specifying the raw password.
 - ♦ (Conditional) If the proxy server uses an NTLM realm, set the value of `subscriptionuseNTLM` to true. By default, the value is false.
- 3 Restart the ZENworks services.

Accessing the CDN: The following URL must be open to access the CDN: <https://microfocus-2dcb60a8-26c9-4560-9cc2-34a16ea5f6e6.2d7dd.cdn.bitdefender.net>

Proxy Server Settings: This setting is useful for restrictive environments where you do not want all of your production servers to have Internet access. For more information, see [System Update Settings](#) in the [ZENworks System Updates Reference](#).

Ondemand Content Server Architecture

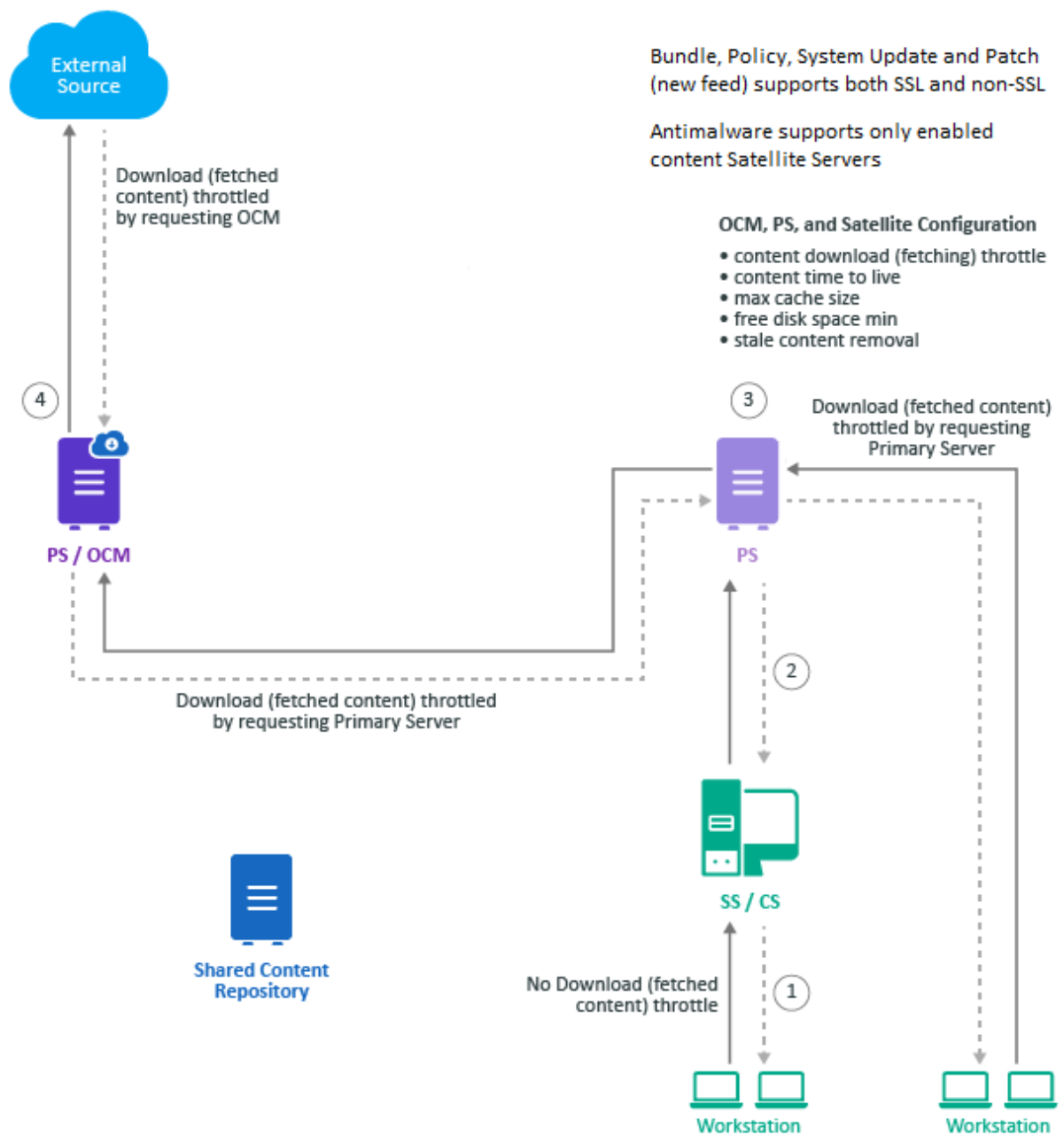
Ondemand content is replicated in similar fashion as other ZENworks content using both Primary and Satellite Servers or via a Shared Content Repository. The process for content requests originates with an agent on the workstation and each request moves upstream through content server channels until the request for content is fulfilled. This sequence is explained below:

1. A request for content is made by an agent installed on the workstation to its content server. Typically a satellite assigned a Content Server role. Satellite Server serving bundle, policy, system update and patch (new feed) content can have both SSL and non-SSL. Only for Antimalware content, content satellite SSL should be enabled.

If the content is available on that content server, it is served to the workstation.
2. If the content is not available, the satellite server checks its Content Replication Method to discover its upstream content server (a primary server) and forwards the request to that server.

If the content is available on that Primary Server and only throttling is enabled, it is throttled to the workstation through the satellite content server.
3. If the content is not available on the primary server, it checks its Ondemand Content Master list to discover its upstream OCM, and then sends the content request to that server.

If the content is available on the OCM, it is throttled to the workstation through the primary server.
4. If the content is not available upstream, the OCM downloads the content from the CDN and throttles it to the workstation through the primary server.



2 Ondemand Content Configuration

The Ondemand Content configuration enables you to control when and how fast a Content Server can download requested ondemand content, as well as define how long the content is cached.

Zone-level settings apply to all Content Servers, but the settings can be overridden on device folders and devices to provide more granular control for groups of Content Servers or individual Content Servers.

Zone Settings

To modify default zone settings in the ZENworks Control Center, navigate to **Configuration > Management Zone Settings > Bundle, Policy and Content > Ondemand Content** link. For specific information about configuration options, see:

- ♦ [Configure the Content Download Settings](#)
- ♦ [Configure the Content Cache Settings](#)

Device Folder Settings

To override zone settings on a device folder:

- 1 Click the **(Details)** link for the desired folder (for example, “Servers”).
- 2 Navigate to **Settings > Bundle, Policy and Content > Ondemand Content** link.
- 3 Click the **Override** link at the top of the page.
- 4 Modify the zone settings as required and **Apply** the changes. For specific information about configuration options, see:
 - ♦ [Configure the Content Download Settings](#)
 - ♦ [Configure the Content Cache Settings](#)

Device Settings

To override zone settings on a device:

- 1 Navigate to and click the device link. The device can be either a server or a workstation configured with a Content Server role.
- 2 Go to **Settings > Bundle, Policy and Content > Ondemand Content** link.

NOTE: The Ondemand Content link will only display in Bundle, Policy and Content settings for a Workstation device if the device is already configured as a satellite server with the Content Server role. For information about configuring Workstation devices as satellite servers, see [“Adding and Configuring Satellite Devices”](#) in the *ZENworks Primary Server and Satellite Reference*.

- 3 Click the **Override** link at the top of the page.

- 4 Modify the zone settings as required and **Apply** the changes. For specific information about configuration options, see:
- ◆ [Configure the Content Download Settings](#)
 - ◆ [Configure the Content Cache Settings](#)

Streaming Content Ondemand

From ZENworks Update 3 onwards, ondemand streaming of content is supported for all content types such as bundles, policies, system updates, and Patch content. Based on requirements, administrators can decide if the content has to be pre-cached or not.

After the zone is updated to update 3, by default the pre-caching is enabled for content types of bundles, policies, and system updates. To use the Ondemand way of distribution these settings have to be disabled at the zone level (ZCC > Configuration > Bundle, Policy and Content > Pre-Cached Content).

The screenshot shows the 'Pre-Cached Content' configuration window. At the top, it says 'Pre-Cached Content' and 'Select the content types to pre-cache and configure the target content servers.' Below this, there are two sections: 'Content Types' and 'Content Servers'.

Content Types:

- ☒ Bundles
- ☒ Policies
- ☒ System Updates
- ☐ Linux Patches
- ☐ Windows Patches
- ☐ Mac Patches

Content Servers:

- ☒ Automatically pre-cache content on new Primary Servers added to the zone
- ☐ Automatically pre-cache content on new Satellite Servers added to the zone

Pre-cache content on the following servers:

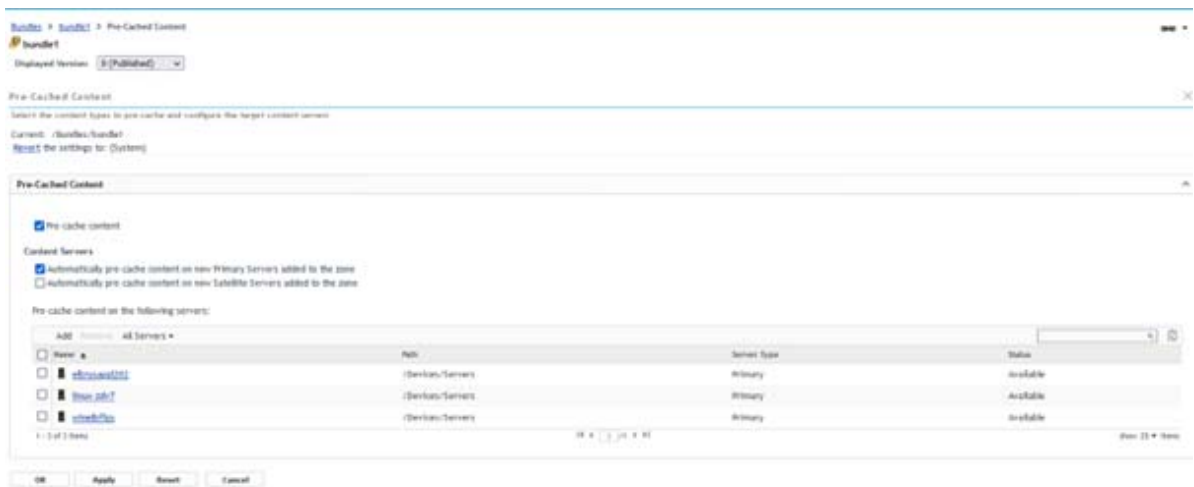
Name	Path	Server Type
rs1-ps1-linux	/Devices/Servers	Primary

1 of 1 items

Buttons: OK, Apply, Reset, Cancel

If the Administrator clears the pre-cached content types, the content gets created only on the server in which ZENworks Control Center is launched and it will not be replicated or pre-cached to the rest of the Primaries and Satellites, and the content gets distributed only through ondemand mode based on the requests from the manage devices.

Administrators can also have these settings configured at the Bundle, Policy, Bundle or Policy Folder levels.



Ondemand Content Management Server Configuration

ZENworks zone with Antimalware enabled or the new Patch Feed enabled, OCM is mandatory and this will be automatically configured as part of the feature enablement.

The Ondemand Content Master requires an Internet connection to communicate and download content from the external Antimalware cloud service or Patch New feed external source such as Google or Microsoft etc. This service is a Content Distribution Network (CDN) that manages all the malware signature files required to disinfect files on managed devices for Antimalware and for the Patch New feed it will download the patches from external sources like Google or Microsoft and content will be download based on the requests from manage devices.

In a zone, it is always recommended to have a single OCM server as a minimum requirement, and the Administrator can decide to have multiple OCM servers depending on the scale requirements so that the overall load can be distributed among OCM servers in the zone.

Content Throttling

Pre-cached content distribution throttle rate

The content replicated between Primary and Satellite Servers can also be throttled and scheduled. The outgoing throttle can be configured on the Primary Server properties, while the download throttle can be controlled for each content type configured on the satellite server.

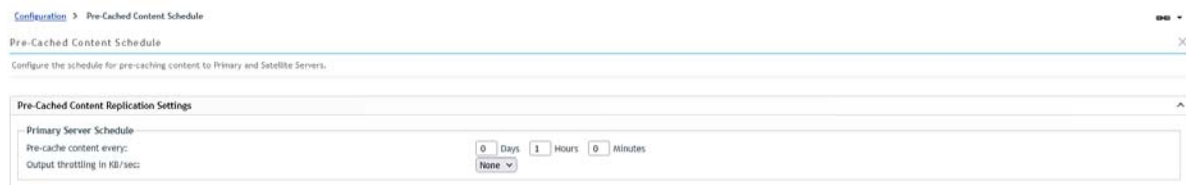
This rate specifies the maximum rate at which content (in kilobytes per second) is replicated. The actual rate can be lower, depending on other factors, including the number of downloads.

This can be configured at Zone, Network, Satellite levels:

Zone Level

At the Zone level, the pre-cached content throttle rate can be set in ZENworks Control Center. By default, this will be the rate at which content replication and pre-cached content will be served.

In ZCC, go to Configuration > Management Zone Settings > Bundle Policy and Content > Pre-Cached Content Schedule and set output throttling rate.



The screenshot shows the 'Pre-Cached Content Schedule' configuration page. The breadcrumb trail at the top is 'Configuration > Pre-Cached Content Schedule'. The page title is 'Pre-Cached Content Schedule' with a close button. Below the title is a subtitle: 'Configure the schedule for pre-caching content to Primary and Satellite Servers.' The main configuration area is titled 'Pre-Cached Content Replication Settings'. It contains a section for 'Primary Server Schedule' with the following settings: 'Pre-cache content every:' set to '0 Days 1 Hours 0 Minutes' and 'Output throttling in KB/sec' set to 'None'.

Network Location Level

At the Network Location level, pre-cached content throttle rate can be set in ZCC at the time of network location creation or can be modified in network location settings. This settings will be overriding the zone-level settings for the devices that are available in that network location.

While creating a network location, both upload and download throttle rates can be configured.

Create New Location

Step 1: Define Details

Enter the Location details.

Location Name: *

Description:

Download Throttle Rate (in KB/s): *

Upload Throttle Rate (in KB/s): *

Preferred Protocol for Communication: (Inherited) [Override Setting](#)
By default, the value is inherited from Zone setting.

Audit Data Upload: Enabled ▾

CIFS Server:

Fields marked with an asterisk are required.

To modify an existing upload or download throttle rate, in ZCC, go to Configuration > Location > Click any Location > Settings

Details
Servers
Relationships
Settings

Location

Download Throttle Rate (in KB/s):

Upload Throttle Rate (in KB/s):

Preferred Protocol for Communication: [Override Setting](#)

Audit Data Upload:

CIFS Server:

Last Modified: 10/8/2021 1:44 PM

HTTP Proxy - IPv4

Proxy IP Address:

Port:

Network Segment (in CIDR notation):

HTTP Proxy - IPv6

Proxy IP Address:

Port:

Network Segment (in CIDR notation):

Network Environment Level

At the Network Environment level, pre-cached content throttle rate can be set in ZCC while creating the network environment or can be modified in network environment settings. This setting overrides the network location level settings for the devices that are part of the environment.

We can configure both upload and download throttle rates for a network environment while creating an environment. To create a Network Environments in ZCC, go to Configuration > Locations > Network Environments > New

Create New Network Environment



Step 1: Define Details

Enter the Network Environment details.

Network Environment Name: *

Description:

Download Throttle Rate (in KB/s): *

Upload Throttle Rate (in KB/s): *

Preferred Protocol for Communication: (Inherited) [Override Setting](#)
By default, the value is inherited from Location or Zone setting.

Audit Data Upload: (Inherited) [Override Setting](#)
By default, the value is inherited from Location.

CIFS Server:

Fields marked with an asterisk are required.

The existing upload and download throttle rate for a network environment can be modified. To modify the existing Network Environments, in ZCC, go to Configuration > Location > Click any Environment > Settings.

Details	Servers	Relationships	Settings
Network Environment			
Download Throttle Rate (in KB/s):	<input type="text" value="0"/>		
Upload Throttle Rate (in KB/s):	<input type="text" value="0"/>		
Preferred Protocol for Communication:	Override Setting		
Audit Data Upload:	Override Setting		
CIFS Server:	<div></div>		
Last Modified:	10/11/2022 3:15 PM		
HTTP Proxy - IPv4			
Proxy IP Address:	<input type="text"/>		
Port:	<input type="text"/>		
Network Segment (in CIDR notation):	<input type="text"/>		
HTTP Proxy - IPv6			
Proxy IP Address:	<input type="text"/>		
Port:	<input type="text"/>		
Network Segment (in CIDR notation):	<input type="text"/>		

Satellite Server Level

At the Satellite Server level, the pre-cached content throttle rate can be set in ZCC as default for all agents that will be freshly promoted to the satellite or can be modified in the existing Satellite Server. This setting will be overriding the Network Environment Level setting.

We can modify setting for an existing satellite in ZCC, go to Devices > Select a Satellite device > Check Device > click on Action > configure satellite > click content configure

Similarly, we can add the default throttle rate for the device that is newly promoted as a Satellite Server. To add the throttle rate, go to Configuration > Bundle Policy and Content > Pre-cached Content Schedule > Default Satellite Schedule

Zone Level

At the zone level, the ondemand content throttle rate can be set in ZCC, this will be the default rate at which ondemand content will be served.

In ZCC, go to Configuration > Bundle, Policy and Content > Ondemand content > Content Download.

We can either edit the default value for all content types or override the default value for specific content types.

Content Download				
By default, a content server can download the requested ondemand content from its upstream source at any time without any bandwidth restrictions. If required, you can either edit the default values or add a new Content Download setting to override the default throttle rate and schedule.				
Add Edit Remove Move Up Move Down				
<input type="checkbox"/> Content Type	Days	Throttle Rate	Start Time	End Time
<input type="checkbox"/> Default	Mo, Tu, W, Th, F, Sa, Su	Unthrottled	00:00	23:59
1 - 1 of 1 items				
14 1 1 1 1 1 1 show 5 items				

Content Download Override

Content Type: Default

Throttle Rate:

Unthrottled

Throttled (KBps):

Schedule:

Sun

Mon

Tue

Wed

Thu

Fri

Sat

Start time (hh:mm): 0 : 00

End time (hh:mm): 23 : 59

☐

 Use Coordinated Universal Time (Current UTC 10:42 AM)

OK

Cancel

20 Ondemand Content Configuration

Content Download Override

Content Type: Antimalware

Antimalware

Patch

Bundle, Policy and System Update

Throttle Rate:

☒ Unthrottled
☐ Throttled
☐ Blacked Out (All Content Download Blocked)

Schedule:

Sun	Mon	Tue	Wed	Thu	Fri	Sat
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Start time (hh:mm):

1

:

00

End time (hh:mm):

1

:

00

☐ Use Coordinated Universal Time (Current UTC 10:44 AM)

OK

Cancel

Satellite Server Level

At the Satellite Server level, the ondemand content throttle rate can be set in ZCC and can be modified in the existing Satellite Server. This setting will be overriding the zone Level setting.

To modify the setting for an existing Satellite Server, in ZCC, go to Devices > Select Satellite Device Type > Check Device > click Action > configure Satellite Server > click configure (Content) > click on Ondemand Content configure > override settings.

We can either edit the default value for all content types or override the default value for specific content types.

Ondemand Content

Configure the Content Download and Content Cache settings for ondemand content on the content server.

Note: Ensure that you refresh the Satellite to get the settings changes immediately.

Current: (System)

(Override settings)

Content Download

By default, a content server can download the requested ondemand content from its upstream source at any time without any bandwidth restrictions. If required, you can either edit the default values or add a new Content Download setting to override the default throttle rate and schedule.

Content Type	Days	Throttle Rate	Start Time	End Time
<input type="checkbox"/> Default	Mo, Tu, We, Th, Fr, Sa, Su	Unthrottled	00:00	23:59

1 - 1 of 1 items

show 5 items

Content Download Override

✕

Content Type:

Default ▾

Throttle Rate:

☒ Unthrottled

☐ Throttled (KBps):

Schedule:

Sun	Mon	Tue	Wed	Thu	Fri	Sat
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Start time (hh:mm):

0 ▾

 :

00 ▾

End time (hh:mm):

23 ▾

 :

59 ▾

☐ Use Coordinated Universal Time (Current UTC 8:20 AM)

OK

Cancel

Content Download Override

Content Type:
Antimalware

Throttle Rate:

☒ Unthrottled

☐ Throttled (KBps):

☐ Blacked Out (All Content Download Blocked)

Schedule:

Sun	Mon	Tue	Wed	Thu	Fri	Sat
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Start time (hh:mm):
1
:
00

End time (hh:mm):
1
:
00

☐ Use Coordinated Universal Time (Current UTC 8:21 AM)

OK
Cancel

Output Throttle Rate for Satellite Server

The output throttle rate for a satellite server in ZCC will be the default throttle rate at which Satellite Server will be serving both precached as well as ondemand content. This setting will override the output throttle rate setting of both the Network Location and Network Environment settings.

This setting can be modified at the existing Satellite Servers level: in ZCC, go to Devices > select a Satellite Server> select Device > click Action > configure satellite > Server Settings

The screenshot shows a dialog box titled "Add Satellite Server" with a question mark and close button in the top right. It has three tabs: "General", "Server Settings" (which is selected and underlined in orange), and "Content Replication". Under the "Server Settings" tab, there are three input fields: "Port for content and/or collection HTTP requests: *" with the value "80", "Port for Secure HTTPS requests: *" with the value "443", and "Satellite server output Throttle Rate (in KB/s): *" with the value "0". At the bottom right, there are "OK" and "Cancel" buttons.

Overriding Throttle Rate at Bundle and Bundle Folder Level

Overriding Throttle Settings at Bundle Folder Level

The zone-level throttle rate setting can be overridden at the bundle level by making all the bundles in the bundle folder to ignore the default zone-level throttle rate.

In ZCC, go to Bundles > Click Details in the bundle folder > Settings > Bundle Management > Endpoint Throttle.

Select Ignore endpoint throttle value.

Endpoint Throttle

Configure endpoint throttling.

Ignore Throttle

☐ Ignore endpoint throttle value

OK

Apply

Reset

Cancel

Overriding Throttle Settings at Bundle Level

The zone level throttle setting can be overridden by ignoring the default throttle rate at the bundle level. This setting will override both the zone and bundle folder-level settings.

In ZCC, go to Bundles > Select Bundle > Settings > Bundle Management > Endpoint Throttle.

Select Ignore endpoint throttle value.

[Bundles](#) > [BundleActions](#) > Endpoint Throttle



BundleActions

Displayed Version: 0 (Published) ▼

Endpoint Throttle

Configure endpoint throttling.

Ignore Throttle

☐ Ignore endpoint throttle value

OK

Apply

Reset

Cancel

Configure the Content Download Settings

The Content Download settings enable you to define daily throttling of content downloads to ZENworks content servers based on enterprise bandwidth needs. For example, you can prohibit downloads altogether for certain time periods during the week, add a throttling rate for other time periods, and define again other time periods where little network traffic is expected for unrestricted downloads.

To configure your content download schedule, click **Add** in the Content Download panel for each download window that you want to set up and use the Content Download Override settings to define the throttle rate (Unthrottled, Throttled, or Blacked Out) and to schedule the window for that setting to apply (start and end times).

Configure the Content Cache Settings

The Content Cache settings enable you to define cache size limits, minimum requirements for disk space, and the content retention period for content downloaded to ZENworks ondemand content servers and satellites with an Ondemand Content role. You can also specifically set how long metadata and content are maintained for downloaded files. See the descriptions below for more information about metadata and content:

Metadata: The "index" file that the Content Server uses to know what content to send to a device when it requests an update. The metadata needs to have a short Time-to-Live (TTL) so that the Content Server requests it frequently and has the latest index of content. Otherwise, it will continue to serve it to devices, resulting in devices not receiving the most recent content.

Content: The content pertains to what the Content Server is downloading and distributing to managed devices. For example, malware signatures and agent updates for devices that have the Antimalware Agent installed. The content should have a longer TTL so that it does not repeat downloads.

- ♦ **Maximum Cache Size:** Set the Maximum Cache Size to define the upper limit of cached on-demand content. The default value is 1000 GB.

- ♦ **Minimum Free Disk Space:** Specify Minimum Free Disk Space to ensure sufficient storage is always available on the content server. The default value is 4 GB.

The default minimum value is 4GB and the maximum value is 1000GB.

Content Type Configurations

To change the default or currently configured settings for content type configurations, directly modify the Cache Size and Disk Space fields. To adjust the settings for Cache Life and Remove Unused Content After, select the desired option, and click Edit.

Cache life

It is a TTL (Time To Live) configuration that checks for stale on-demand content in the endpoint cache based on its last access time. This determines whether to stream the existing content or request a newer copy from an upstream Content Server.

Remove Unused Content After

If the On-Demand content on the Primary or Satellite is not accessed within the configured expiry time, it is automatically cleaned up from the On-Demand content folder in the content repository.

- ♦ **Antimalware Metadata:** The metadata must have a cache life to ensure that the Content Server regularly requests it and maintains the latest index of content. Without this, the Content Server may continue to serve outdated content to devices, preventing them from receiving the most recent updates.

By default, the Antimalware Metadata content has a short cache life of about 10 minutes to keep the content up-to-date.

Remove Unused Content After specifies the retention period for unused metadata before it is removed. By default, this period is set to 30 days, meaning any unused metadata older than 30 days will be deleted.

- ♦ **Antimalware Content:** Antimalware content should have a longer cache life to avoid repetitive downloads. By extending the cache life, the system can store the content for a longer period, reducing the need for frequent re-downloads and improving efficiency while ensuring that devices still receive the most current version when needed. By default, the cache life is set to 7 days.

Remove Unused Content After specifies the retention period for unused content before it is removed. By default, this period is set to 30 days, meaning any unused content older than 30 days will be deleted.

- ♦ **Bundle, Policy, and System Update:** The Cache Life setting is not applicable because bundles, policies, and system update content are directly available within ZENworks, eliminating the need for caching.

Remove Unused Content After specifies the retention period for unused data before it is removed. By default, this period is set to 10 days, meaning any unused data older than 10 days will be deleted.

- ♦ **Patch Catalog:** Cache Life refers to the duration that patch metadata is stored in the system before being cleared. By default, Cache Life is set to 4 hours, meaning the patch information will remain cached for 4 hours before it is automatically cleared.

Remove Unused Content After specifies the retention period for unused patch content before it is removed. By default, this period is set to 14 days, meaning any unused patch content older than 14 days will be deleted.

- ♦ **Patch Content:** The Patch Content includes underlining patch binaries. The content should have a longer cache life so that it does not repeat downloads.

Remove Unused Content After specifies the retention period for unused patch content before it is removed. By default, this period is set to 30 days, meaning any unused patch content older than 30 days will be deleted.

At the device level, if the Satellite Server is not updated to Update 3, then the Removed Unused Content After setting that was configured in Update 2, which is currently effective will be retained. This setting cannot be modified. After upgrading, the setting will be removed.

The Remove Unused Content After is applicable only for the ondemand content that is downloaded from the ZENworks ondemand content server.

To change the default or currently configured settings for the general cache, modify the fields directly for Cache Size, Disk Space, and Content Retention. To modify the settings for Cached File Time to Live, select Antimalware Metadata or Antimalware Content, and click [Edit](#).

NOTE: If the configured Maximum Cache Size is lower than the content-repo size, then ondemand contents are not downloaded on the Ondemand Content Master (OCM) from an external source. If the metadata files are not available in the OCM, then the patch scan might not work as expected. Similarly, if the configured Minimum Free Disk Space is lower than the available disk space, then the new contents are not downloaded, and requests are rejected.

Configure Ondemand Content Master Settings

Ondemand content masters (OCM) download content for managed device distribution from content distribution networks (CDN). Only primary servers can be OCMs. Satellite servers can function as ondemand content servers for content replication purposes, but they cannot download content from a CDN. There must always be at least one primary server designated as OCM.

OCMs require an Internet connection to communicate with and download content from the CDN. If the OCM requires a proxy to access the CDN, the OCM server's Subscription proxy configuration file (`lpm-server.properties`) is used. For more information on configuring the proxy, see [“Ondemand Content Master - Requirements” on page 8](#).

To designate a primary server as an OCM:

Navigate to Configuration > Server Hierarchy, select the primary server in the Server Hierarchy panel, and select **Set as Ondemand Content Master** in the Action drop-down menu.

To remove the OCM designation from a primary server:

Navigate to Configuration > Server Hierarchy, select the primary server in the Server Hierarchy panel, and select **Remove as Ondemand Content Master** in the Action drop-down menu.

While removing or deleting the ZENworks Server, ensure that you remember the following points:

1. If this is the last server with the OCM role, then the other Primary Server should be assigned the OCM role.
2. If the Content is not replicated when pre-caching of content is not enabled, then the content will not be available in the new OCM server if assigned.

Modifying the Metadata path in the ODCPConfiguration file

The .meta folder contains metadata files related to content that is being served on-demand. By default, the .meta folder is available in the following location:

Primary Server Path:

- ♦ /var/opt/microfocus/zenworks/content-repo/ondemand-content/.meta

Satellite Server Path:

- ♦ On Windows: %zenworks_home%\work\content-repo\ondemand-content\meta
- ♦ On Linux: /var/opt/novell/zenworks/content-repo/ondemand-content/.meta

If you wish to change the default location to any other location, open the ODCPConfiguration.properties file in the following location and change the location in the odc.meta.root parameter:

Primary Server Path

- ♦ /etc/opt/microfocus/zenworks/

Satellite Server Path:

- ♦ On Windows: %zenworks_home%\conf
- ♦ On Linux: /etc/opt/microfocus/zenworks/

IMPORTANT: For the changes to get effective, restart client management service on Primary Servers and restart jetty service on Satellite Servers.

Ondemand Content Cache Configuration

Pre-cached Content Cleanup

Content that is pre-cached or replicated on all the primary servers will be copied to the legacy content folder:

- ♦ /var/opt/microfocus/zenworks/content-repo/content

If any bundle or policy content associated with Content is deleted from the ZENworks Control Center, the content associated with it will be marked as Orphaned/superfluous and it gets cleaned based on the regular schedule at midnight and the loader module can clean up the content in subsequent intervals from the file system.

Ondemand Content Clean-up

Content that is served in an Ondemand fashion will be copied to the Ondemand content folder and the content is cleaned up based on the settings configured in the Ondemand settings page.

By default, the below values are set for the OnDemand clean-up with the values defined in the “Remove Unused Content After” for each content type.

Content Cache

Configure the Content Cache settings for ondemand content on the content server.

Maximum Cache Size: * GB

Minimum Free Disk Space: * GB

Content Type Configurations:

Name	Cache Life	Remove Unused Content After
<input type="checkbox"/> Antimalware Metadata	10 Minutes	30 Days
<input type="checkbox"/> Antimalware Content	7 Days	30 Days
<input type="checkbox"/> Patch Content	14 Days	30 Days
<input type="checkbox"/> Patch Catalog	4 Hours	30 Days
<input type="checkbox"/> Bundle, Policy and System Update	Not Applicable	10 Days

1 - 5 of 5 items

Based on this the contents that were not accessed since the no of days mentioned gets cleaned up automatically and the clean-up action runs every 4 hours, by default, and can be configured by changing the `cache-cleanup-interval-hours` value in the `ODCPConfiguration.properties` file:

Location on Primary Server

- ♦ `/etc/opt/microfocus/zenworks/`

Location on Satellite Server

- ♦ On Windows: `ZENworks\conf\ODCPConfiguration.properties`
- ♦ On Linux: `/etc/opt/novell/zenworks/ODCPConfiguration.properties`

Blacked out Schedule for Ondemand content

OnDemand content distribution blacked out schedule can be configured at each content type, so that during peak working hours the content distribution using ondemand mode will be stopped in the zone to reduce the traffic load and any requests from manage devices for the content that should be served in the ondemand mode will not be served.

To configure the settings, go to ZCC, click Configuration > Bundle,Policy and Content > OnDemand Content and add the content types based on requirements.

Example: By default, the Blacked out schedule is disabled for the content type as shown in the following image.

Ondemand Content

Configure the Content Download and Content Cache settings for ondemand content on the content server.
Note: Ensure that you refresh the Satellite to get the settings changes immediately.

Current: /Devices/Workstations/RPL-MD1-WIN10
[Revert](#) the settings to: (System)

Content Download

By default, a content server can download the requested ondemand content from its upstream source at any time without any bandwidth restrictions. If required, you can either edit or override the default throttle rate and schedule.

Add Edit Remove Move Up Move Down

Content Type	Days
<input checked="" type="checkbox"/> Default	M, Tu, W, Th, F, Sa, Su

1 - 1 of 1 items

Content Cache

Configure the Content Cache settings for ondemand content on the content server.

Maximum Cache Size: * 1000 GB
Minimum Free Disk Space: * 4 GB

Content Type Configurations:

Edit

Name	Cache Size	Remove Unused Content
<input type="checkbox"/> Antimalware Metadata	10 MB	30 Days
<input type="checkbox"/> Antimalware Content	7 GB	30 Days
<input type="checkbox"/> Patch Content	14 GB	30 Days
<input type="checkbox"/> Patch Catalog	4 GB	30 Days
<input type="checkbox"/> Bundle, Policy and System Update	Not Applicable	10 Days

1 - 5 of 5 items

Content Download Override X

Content Type: Default v

Throttle Rate:
☒ Unthrottled
☐ Throttled (KBps):

Schedule:

Sun	Mon	Tue	Wed	Thu	Fri	Sat
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Start time (hh:mm): 0 : 00 v
End time (hh:mm): 23 : 59 v
☐ Use Coordinated Universal Time (Current UTC 7:47 AM)

OK Cancel

To enable blocked out for content types like Patch or Antimalware or Bundle, Policy, System Update, add and configure the interval.

Content Download Override X

Content Type: Antimalware v

Throttle Rate:
☐ Unthrottled
☐ Throttled (KBps):
☒ Blacked Out (All Content Download Blocked)

Schedule:

Sun	Mon	Tue	Wed	Thu	Fri	Sat
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Start time (hh:mm): 6 : 00 v
End time (hh:mm): 10 : 00 v
☒ Use Coordinated Universal Time (Current UTC 8:52 AM)

OK Cancel

Ondemand Content

Configure the Content Download and Content Cache settings for ondemand content on the content server.
Note: Ensure that you refresh the Satellite to get the settings changes immediately.

Content Download

By default, a content server can download the requested ondemand content from its upstream source at any time without any bandwidth restrictions. If required, you can either edit the default values or add a new Content Download setting to override the default throttle rate and schedule.

Add	Edit	Remove	Move Up	Move Down
<input type="checkbox"/> Content Type	Days	Throttle Rate	Start Time	End Time
<input type="checkbox"/> Patch	W	Blacked Out	01:00	14:00
<input type="checkbox"/> Antimalware	M	Blacked Out	01:00	02:00
<input type="checkbox"/> Default	M, Tu, W, Th, F, Sa, Su	Unthrottled	00:00	23:59

1 - 3 of 3 items

Depending on the settings configured, the content will not be served during the blacked out schedule using the ondemand content distribution method.

As per the settings configured, Blacked out schedule for the Ondemand content distribution honoured and content won't be served.

These settings will be updating the OndemandContentproxy.json file on the Primary Servers and Content Satellites automatically. However, on Content Satellites the agent should be refreshed for these settings to get honoured.

The OndemandContentProxy.json file is available in the /etc/opt/microfocus/zenworks/ location.

After configuring the settings on the Content Satellite Servers, trigger the agent refresh either using zac ref or using a quick task.

Blacked out schedule can be override at Device or Device folder level as well and precedence taken for the settings configured at Device followed by Device folder followed by Zone level.

Devices > Workstations > RPL_MD1-WIN10 > Ondemand Content
RPL_MD1-WIN10

Ondemand Content

Configure the Content Download and Content Cache settings for ondemand content on the content server.
Note: Ensure that you refresh the Satellite to get the settings changes immediately.

Current: (System) (Override settings)

Content Download

By default, a content server can download the requested ondemand content from its upstream source at any time without any bandwidth restrictions. If required, you can either edit the default values or add a new Content Download setting to override the default throttle rate and schedule.

<input type="checkbox"/> Content Type	Days	Throttle Rate	Start Time	End Time
<input type="checkbox"/> Default	M, Tu, W, Th, F, Sa, Su	Unthrottled	00:00	23:59

1 - 1 of 1 items

Content Cache

Configure the Content Cache settings for ondemand content on the content server.

Maximum Cache Size: * 1000 GB
Minimum Free Disk Space: * 4 GB

Content Type Configurations:

<input type="checkbox"/> Name	Cache Life	Remove Unused Content After
<input type="checkbox"/> Antimalware Metadata	10 Minutes	30 Days
<input type="checkbox"/> Antimalware Content	7 Days	30 Days
<input type="checkbox"/> Patch Content	14 Days	30 Days
<input type="checkbox"/> Patch Catalog	4 Hours	30 Days
<input type="checkbox"/> Bundle, Policy and System Update	Not Applicable	10 Days

1 - 5 of 5 items

Close

