

This article describes the process and CLI commands for troubleshooting compression in the ACE.

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Overview of Compression

Compression is supported on the ACE30 module running software version A4(1.x) and later and on the ACE 4700 series appliance (all software releases). You can configure compression by entering the **compress** command under a Layer 7 load-balancing policy. For example:

```
class-map type http loadbalance match-any L7default-compression- exclusion-mime-type_CLASS
  description Classmap for default SLB compression exclusion mime-types.
  2 match http url .*gif
  3 match http url .*css
  4 match http url .*js

policy-map type loadbalance first-match L7_COMP_SLB_POLICY
  class L7default-compression-exclusion-mime-type_CLASS
    serverfarm SFARM1
  class class-default
    serverfarm SFARM1
    compress default-method deflate <----- Configured compression method

interface vlan 200
  service-policy L7_COMP_SLB_POLICY
  no shutdown
```

For compression to work, a client must send a request with an ACCEPT-ENCODING method of gzip or deflate. If a client sends both methods, then the ACE uses the configured method. The ACE rewrites the ACCEPT-ENCODING header to IDENTITY to indicate to the server that it should not compress the return data. By default, the ACE does not compress responses that are less than 512 bytes. You can change this minimum size threshold by using an HTTP parameter-map as follows:

```
parameter-map type http HTTP_PARAMMAP
  compress minimum-size 100
```

The ACE does not compress the server response if the response contains HTTP/1.0, HTTP responses other than 200 OK and 100 Continue, and the following:

- cache-control: not transform
- content-MD5

You can configure various others parameters using an HTTP parameter map (for example, mimetype and user-Agent).

Troubleshooting Compression

To display compression statistics, enter the following command:

```
switch/Admin# show service-policy L7_COMP_SLB_POLICY detail

Status      : ACTIVE
Description: -----
Interface:  vlan 1 108
```

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```

service-policy: L7_COMP_SLB_POLICY
class: vip
VIP Address:      Protocol:  Port:
2.0.5.1          tcp          eq      80
loadbalance:
  L7 loadbalance policy: pm
  VIP ICMP Reply      : ENABLED
  VIP state: OUTOFSERVICE
  Persistence Rebalance: ENABLED
  curr conns          : 0          , hit count          : 0
  dropped conns       : 0
  client pkt count    : 0          , client byte count: 0
  server pkt count    : 0          , server byte count: 0
  conn-rate-limit     : 0          , drop-count        : 0
  bandwidth-rate-limit : 0          , drop-count        : 0
  L7 Loadbalance policy : pm
  class/match : h
  ssl-proxy client : c
  LB action :
    primary serverfarm: sf1
    state: DOWN
    backup serverfarm : -
  hit count          : 0
  dropped conns      : 0
  compression        : on  <----- Compression is enabled if the v
compression:
  bytes_in : 0          bytes_out : 0  <--- Number of bytes transmitted aft
  Compression ratio : 0.00%  <----- Percentage of data compressed
  Gzip: 0          Deflate: 0  <----- Number of times the method is u
compression errors:
  User-Agent : 0          Accept-Encoding : 0  |
  Content size: 0          Content type : 0  |
  Not HTTP 1.1: 0          HTTP response error: 0  |-- Check these error counters to s
  Others : 0          |
  Parameter-map(s):          |--
  
```