

Resource Configuration Mode Commands

Resource configuration mode commands allow you to limit the usage of resources by one or more contexts. To create a resource class and access resource configuration mode, enter the **resource-class** command. The CLI prompt changes to (config-resource). For information about the commands in resource configuration mode, see the commands in this section. Use the **no** form of this command to delete a resource class.

resource-class *name*

no resource-class *name*

Syntax Description

<i>name</i>	Name assigned to the new resource class. Enter an unquoted text string with no spaces and a maximum of 64 alphanumeric characters. You can also use the resource class called default .
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Command Modes

Configuration mode
Admin context only

Command History

Release	Modification
A1(7)	This command was introduced.

Usage Guidelines

The commands in this mode require the Admin user role. For details about role-based access control (RBAC) and user roles, see the *Cisco 4700 Series Application Control Engine Appliance Virtualization Configuration Guide*.

After you create and configure the class, use the **(config-context) member** command in context configuration mode to assign a context to the class.

Examples

To create a resource-class called RC1 and enter resource configuration mode, enter:

```
host1/C1(config)# resource-class RC1
host1/C1(config-resource)
```

To remove the RC1 resource class from the configuration, enter:

```
host1/C1(config)# no resource-class RC1
```

Related Commands

(config-context) member

(config-resource) limit-resource

To limit system resources for all members of a resource class, use the **limit-resource** command. Use the **no** form of this command to restore the default resource settings for all resources or individual resources for all members (contexts) of a resource class.

```
limit-resource {acc-connections | acl-memory | all | buffer {syslog} | conc-connections |
  http-comp | mgmt-connections | proxy-connections | rate {bandwidth | connections |
  inspect-conn | mac-miss | mgmt-traffic | ssl-connections | syslog} | regexp | sticky | xlates}
  {minimum number} {maximum {equal-to-min | unlimited}}
```

```
no limit-resource {acc-connections | acl-memory | all | buffer {syslog} | conc-connections |
  http-comp | mgmt-connections | proxy-connections | rate {bandwidth | connections |
  inspect-conn | mac-miss | mgmt-traffic | ssl-connections | syslog} | regexp | sticky | xlates}
  {minimum number} {maximum {equal-to-min | unlimited}}
```

Syntax Description	
acc-connections	Limits the number of application acceleration connections.
acl-memory	Limits memory allocated for ACLs.
all	Limits all resources to the specified value for all contexts assigned to this resource class.
buffer syslog	Limits the amount of buffering for syslog messages.
conc-connections	Limits the number of simultaneous connections.
http-comp	Limits the HTTP compression rate.
mgmt-connections	Limits the number of management connections.
proxy-connections	Limits the number of proxy connections.
rate	Limits the resource as a number per second for the following: <ul style="list-style-type: none"> • bandwidth—Limits context throughput in bytes per second. • connections—Limits the number of connections of any kind per second. • inspect conn—Limits the number of application protocol inspection connections per second for File Transfer Protocol (FTP) and Real Time Streaming Protocol (RTSP) only. • mac-miss—Limits the ACE traffic sent to the control plane when the encapsulation is not correct in packets per second. • mgmt-traffic—Limits the management traffic in bytes per second. • ssl-connections—Limits the number of SSL connections per second. • syslog—Limits the number of syslog messages per second.
regexp	Limits the amount of regular expression memory.
sticky	Limits the number of entries in the sticky table. You must configure a minimum value for sticky to allocate resources for sticky entries, because the sticky software receives no resources under the unlimited setting.
xlates	Limits the number of network and port address translations entries.

minimum <i>number</i>	Specifies the lowest acceptable value. Enter an integer from 0.00 to 100.00 percent (two-decimal places of granularity). The <i>number</i> argument specifies a percentage value for all contexts that are members of the class. When used with the rate keyword, the <i>number</i> argument specifies a value per second.
maximum { equal-to-min unlimited }	Specifies the maximum resource value: either the same as the minimum value or no limit.

Command Modes

Resource configuration mode
Admin context only

Command History

Release	Modification
A1(7)	This command was introduced.

Usage Guidelines

You can limit all resources or individual resources for all members (contexts) of a resource class. For example, you can limit only concurrent connections, probes, or sticky table entries.

For details about the system resource maximum values when you use the **limit-resource** command, see the *Cisco 4700 Series Application Control Engine Appliance Virtualization Configuration Guide*

To use the stickiness feature, you must configure a minimum limit for sticky resources. For more information, see the *Cisco 4700 Series Application Control Engine Appliance Server Load-Balancing Configuration Guide*.

If you lower the limits for one context (context A) to increase the limits of another context (context B), you may experience a delay in the configuration change because the ACE will not lower the limits of context A until the resources are no longer being used by the context.

The limit that you set for individual resources when you use the **limit-resource** command overrides the limit that you set for all resources when you use the **limit-resource all** command.

Examples

To allocate 20 percent of all resources (minimum and maximum) to all member contexts of the resource class, enter:

```
(config-resource)# limit-resource all minimum 20% maximum equal-to-min
```

To restore resource allocation to the default of 0 percent minimum and 100 percent maximum for all resources to all member contexts, enter:

```
(config-resource)# no limit-resource all
```

Related Commands

This command has no related commands.