



# Cisco Unified SIP Proxy Route Commands

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- **route table file**
- **route table**
  - **key default-sip**
  - **key group**
  - **key policy**
  - **key response**
  - **key route-uri target-destination**
  - **key target-destination**
- **route group**
  - **element route-uri**
  - **element route-uri target-destination**
  - **element target-destination**
  - failover-codes**
  - time-policy (element)**
  - weight**

## route table file

To load the routes for a route table from a file, use the **route table** file command in Cisco Unified SIP Proxy configuration mode. To delete the route table and the routes loaded from a file, use the **no** form of this command.

**route table** *table\_name* **file** *route-file*

**no route table** *table\_name* **file** *route-file*

<b>Syntax Description</b>	<i>table_name</i>	Specifies the route table name as configured using the <b>route table</b> command.
	<b>file</b> <i>route-file</i>	Specifies the file you are loading the route information from. The file path must start with pfs:/cusp/routes/.

**Command Default** None

**Command Modes** Cisco Unified SIP Proxy configuration (cusp-config)

<b>Command History</b>	<b>Cisco Unified SIP Proxy Version</b>	<b>Modification</b>
	1.0	This command was introduced.
	8.5	This command was updated as follows: <ul style="list-style-type: none"> <li>• You can now have a route table that consists of both routes loaded from a file and routes configured on the system.</li> <li>• You no longer need to keep the route table file in the upload location after you have uploaded the information from the file.</li> </ul>

### Usage Guidelines

- Route table restriction:
  - In Cisco Unified SIP Proxy Release 1.1.x, a route table can consist of either routes loaded from a file using this command or routes configured using the **route table** submode commands, but a route table cannot be mixed with routes loaded from a file and configured on the system.
  - In Cisco Unified SIP Proxy Release 8.5 and later versions, after you use this command, you are put into route submode. Therefore, after you load routes from the file, you can make further changes to the route table. You can now have a route table that consists of both routes loaded from a file and routes configured on the system.
- Location of the route table file:
  - In Cisco Unified SIP Proxy Release 1.1.x, the file that you uploaded must remain in that location or else the system will lose the route configuration upon reboot.
  - In Cisco Unified SIP Proxy Release 8.5 and later versions, you do not need to keep the file in that location.

**Note**

This command requires that you use the **commit** command for the configuration changes to take effect.

**Examples**

The following example loads routes from file routes.txt into route table t1:

```
se-10-0-0-0(cusp-config) > route table t1
se-10-0-0-0(cusp-config-rt) > exit
se-10-0-0-0(cusp-config) > route table t1 file pfs:/cusp/routes/routes.txt
```

The following example deletes the route table:

```
se-10-0-0-0(cusp-config) > no route table t1
```

**Related Commands**

Command	Description
<b>commit</b>	Enables configuration changes for selected Cisco Unified SIP Proxy commands to take effect.
<b>key group</b>	Assigns a route group to a routing table and associates it with a key number.
<b>key response</b>	Assigns a response code to a key in a routing table.
<b>key route-uri target-destination</b>	Assigns a route-URI to a lookup key in a routing table and replaces the target destination with the specified value in the outgoing SIP request.
<b>key target-destination</b>	Assigns a request-URI to a key in a routing table.
<b>route table</b>	Creates a route table and enters route table configuration mode.

# route table

To create a route table and enter route table configuration mode, use the **route table** command in Cisco Unified SIP Proxy configuration mode. To delete the route table, use the **no** form of this command.

**route table** *table\_name*

**no route table** *table\_name*

<b>Syntax Description</b>	<i>table_name</i>	Specifies the name of the route table.
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<b>Command Default</b>	A route table is not configured.	
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<b>Command Modes</b>	Cisco Unified SIP Proxy configuration (cusp-config)	
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<b>Command History</b>	<b>Cisco Unified SIP Proxy Version</b>	<b>Modification</b>
	1.0	This command was introduced.

<b>Usage Guidelines</b>	<p>After you enter this command, you enter route table configuration mode. Use the commands in this configuration mode to configure the routes to be added to the route table. Lookups are performed on the route table keys that are specified using the <b>key group</b>, <b>key target-destination</b>, <b>key response</b>, and <b>key route-uri target-destination</b> commands. Keys with white space need to be specified using quotation marks.</p>
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A route table can consist of routes configured using the submodule commands accessed using this command, or routes loaded from a file using the **route table file** command, however a route table cannot be mixed with routes configured on the system and loaded from a file.



### Note

This command requires that you use the **commit** command for the configuration changes to take effect.

### Examples

The following configures route table t1:

```
se-10-0-0-0(cusp-config) > route table t1
se-10-0-0-0(cusp-config-rt) >
```

The following example deletes the route table:

```
se-10-0-0-0(cusp-config) > no route table t1
```

Related Commands	Command	Description
	<b>commit</b>	Enables configuration changes for selected Cisco Unified SIP Proxy commands to take effect.
	<b>key group</b>	Assigns a route group to a routing table and associates it with a key number.
	<b>key response</b>	Assigns a response code to a key in a routing table.
	<b>key route-uri target-destination</b>	Assigns a route-URI to a lookup key in a routing table and replaces the target destination with the specified value in the outgoing SIP request.
	<b>key target-destination</b>	Replaces a target destination with the specified value in an outgoing SIP request.
	<b>route table file</b>	Loads the routes for a route table from a file.

## key default-sip

To configure the message in the route table to be simply routed using RFC 3263, use the **key default-sip** command in route table configuration mode. To remove the key from the route table, use the **no** form of this command.

**key** *key* **default-sip** *network*

**no key** *key* **default-sip**

Syntax Description	key	Specifies the route table lookup key.
	<i>network</i>	Specifies the name of the SIP network associated with this route (previously configured using the <b>sip network</b> command).

**Command Default** None

**Command Modes** Route table configuration (cusp-config-rt)

Command History	Cisco Unified SIP Proxy Version	Modification
	1.0	This command was introduced.

**Usage Guidelines** The lookup key represents the portion of the SIP message that is being matched, and must be unique to the routing table.

**Examples** The following example configures the message in the route table to be routed using RFC 3263:

```
se-10-0-0-0(cusp-config)> route table t1
se-10-0-0-0(cusp-config-rt)> key 973 default-sip external
```

The following example removes the lookup key from the route table:

```
se-10-0-0-0(cusp-config)> route table t1
se-10-0-0-0(cusp-config-rt)> no key 973 default-sip
```

Related Commands	Command	Description
	<b>key group</b>	Assigns a route group to a routing table and associates it with a key number.
	<b>key policy</b>	Assigns a route policy to a key in a routing table.
	<b>key response</b>	Assigns a response code to a key in a routing table.
	<b>key route-uri target-destination</b>	Assigns a route-URI to a lookup key in a routing table and replaces the target destination with the specified value in the outgoing SIP request.

<b>Command</b>	<b>Description</b>
<b>key target-destination</b>	Replaces a target destination with the specified value in an outgoing SIP request.
<b>route table</b>	Creates a route table and enters route table configuration mode.

# key group

To assign a route group to a routing table and associate it with a lookup key number, use the **key group** command in route table configuration mode. To remove the route group assignment from the lookup key in the routing table, use the **no** form of this command.

**key** *key group* *route-group name*

**no key** *key*

<b>Syntax Description</b>	<i>key</i>	Specifies the route table lookup key. The lookup key represents the portion of the SIP message that is being matched, and must be unique to the routing table.
	<i>route-group name</i>	Specifies the name of the route-group.

**Command Default** None

**Command Modes** Route table configuration (cusp-config-rt)

<b>Command History</b>	<b>Cisco Unified SIP Proxy Version</b>	<b>Modification</b>
		1.0

**Usage Guidelines** You cannot assign a route group and a request URI (using the **key target-destination** command) to the same key number.



**Note**

This command requires that you use the **commit** command for the configuration changes to take effect.

**Examples** The following example assigns a previously-configured route group to a routing table and assigns it a key number:

```
se-10-0-0-0(cusp-config) > route group users
se-10-0-0-0(cusp-config-rg) > exit
se-10-0-0-0(cusp-config) > route table t1
se-10-0-0-0(cusp-config-rt) > key 973 group users
```

The following example removes the lookup key from the route table:

```
se-10-0-0-0(cusp-config) > route table t1
se-10-0-0-0(cusp-config-rt) > no key 973
```



Related Commands	Command	Description
	<b>commit</b>	Enables configuration changes for selected Cisco Unified SIP Proxy commands to take effect.
	<b>key default-sip</b>	Configures the message in the route table to be routed using RFC 3263.
	<b>key policy</b>	Assigns a route policy to a key in a routing table.
	<b>key response</b>	Assigns a response code to a key in a routing table.
	<b>key route-uri target-destination</b>	Assigns a route-URI to a lookup key in a routing table and replaces the target destination with the specified value in the outgoing SIP request.
	<b>key target-destination</b>	Replaces a target destination with the specified value in an outgoing SIP request.
	<b>route table</b>	Creates a route table and enters route table configuration mode.

# key policy

To assign a lookup policy to a key in a routing table, use the **key policy** command in route table configuration mode. To remove the route policy assignment from the key in the routing table, use the **no** form of this command.

**key** *key policy route-policy*

**no key** *key policy route-policy*

Syntax Description		
	<i>key</i>	Specifies the route table lookup key number. The lookup key represents the portion of the SIP message that is being matched, and must be unique to the routing table.
	<i>route-policy</i>	Specifies the route lookup policy (configured with the <b>policy lookup</b> command) to be used in the routing table.

**Command Default** None

**Command Modes** Route table configuration (cusp-config-rt)

Command History	Cisco Unified SIP Proxy Version	Modification
	1.0	This command was introduced.

**Usage Guidelines** Use this command to configure a defined routing policy to advance to when route advance processing exhausts all specified next hop tuples. This command requires that the policy first be configured using the **policy lookup** command.



**Note**

This command requires that you use the **commit** command for the configuration changes to take effect.

**Examples** The following example assigns a previously-configured lookup policy to a routing table and assigns it a key number:

```
se-10-0-0-0(cusp-config) > policy lookup p1
se-10-0-0-0(cusp-config-lookup) > exit
se-10-0-0-0(cusp-config) > route table t1
se-10-0-0-0(cusp-config-rt) > key 973 policy p1
```

The following example removes the lookup key from the route table:

```
se-10-0-0-0(cusp-config) > route table t1
se-10-0-0-0(cusp-config-rt) > no key 973
```

Related Commands	Command	Description
	<b>commit</b>	Enables configuration changes for selected Cisco Unified SIP Proxy commands to take effect.
	<b>key default-sip</b>	Configures the message in the route table to be routed using RFC 3263.
	<b>key group</b>	Assigns a route group to a routing table and associates it with a key number.
	<b>key response</b>	Assigns a response code to a key in a routing table.
	<b>key route-uri target-destination</b>	Assigns a route-URI to a lookup key in a routing table and replaces the target destination with the specified value in the outgoing SIP request.
	<b>key target-destination</b>	Replaces a target destination with the specified value in an outgoing SIP request.
	<b>policy lookup</b>	Configures a lookup policy and enters lookup policy configuration mode.
	<b>route table</b>	Creates a route table and enters route table configuration mode.

## key response

To assign a response code to a lookup key in a routing table, use the **key response** command in route table configuration mode. To remove the response code assignment from the lookup key in the routing table, use the **no** form of this command.

**key** *key* **response** *response-code*

**no key** *key* [**response** *response-code*]

Syntax Description		
<i>key</i>		Specifies the route table lookup key number. The lookup key represents the portion of the SIP message that is being matched, and must be unique to the routing table.
<i>response-code</i>		Specifies the response code as configured using the <b>failover-resp-code</b> command.

**Command Default** None

**Command Modes** Route table configuration (cusp-config-rt)

Command History	Cisco Unified SIP Proxy Version	Modification
	1.0	This command was introduced.

**Usage Guidelines** This command requires that you configure the **failover-resp-code** command first.



**Note**

This command requires that you use the **commit** command for the configuration changes to take effect.

### Examples

The following example assigns a response code to a routing table and assigns it a key number:

```
se-10-0-0-0(cusp-config)> server-group sip t1
se-10-0-0-0(cusp-config-sg)> failover-resp-code 404
se-10-0-0-0(cusp-config-sg)> exit
se-10-0-0-0(cusp-config)> route table t1
se-10-0-0-0(cusp-config-rt)> key 973 response 404
```

The following example removes the lookup key from the route table:

```
se-10-0-0-0(cusp-config)> route table t1
se-10-0-0-0(cusp-config-rt)> no key 973
```

Related Commands	Command	Description
	<b>commit</b>	Enables configuration changes for selected Cisco Unified SIP Proxy commands to take effect.
	<b>failover-resp-code</b>	Configures a failover response code for a SIP server group.
	<b>key default-sip</b>	Configures the message in the route table to be routed using RFC 3263.
	<b>key group</b>	Assigns a route group to a routing table and associates it with a key number.
	<b>key policy</b>	Assigns a route policy to a key in a routing table.
	<b>key route-uri target-destination</b>	Assigns a route-URI to a lookup key in a routing table and replaces the target destination with the specified value in the outgoing SIP request.
	<b>key target-destination</b>	Replaces a target destination with the specified value in an outgoing SIP request.
	<b>route table</b>	Creates a route table and enters route table configuration mode.

## key route-uri target-destination

To assign a route-URI to a lookup key in a routing table and replace the target destination with the specified value in the outgoing SIP request, use the **key route-uri target-destination** command in Cisco Unified SIP Proxy route table configuration mode. To remove the route-URI assignment from the lookup key in the routing table, use the **no** form of this command.

**key** *key* **route-uri** *route-uri* **target-destination** *target-destination* *network*

**no** *key* [**route-uri** *route-uri* **target-destination** *target-destination* *network*]

<b>Syntax Description</b>	<i>key</i>	Specifies the route table lookup key number. The lookup key represents the portion of the SIP message that is being matched, and must be unique to the routing table.
<b>route-uri</b> <i>route-uri</i>		Specifies the URI in the route header field to be assigned to the routing table.
<b>target-destination</b> <i>target-destination</i>		Specifies the host and port and transport of the request-URI. The format of this field is host:port:transport; port and transport are optional. .
<i>network</i>		Specifies the SIP network name as configured using the <b>sip network</b> command.

**Command Default** None

**Command Modes** Cisco Unified SIP Proxy route table configuration (cusp-config-rt)

<b>Command History</b>	<b>Cisco Unified SIP Proxy Version</b>	<b>Modification</b>
	1.0	This command was introduced.

**Usage Guidelines** The route-URI must be configured first using the **element route-uri** command.



**Note**

This command requires that you use the **commit** command for the configuration changes to take effect.

**Examples** The following example assigns a route-URI to a routing table and assigns it a key number:

```
se-10-0-0-0(cusp-config) > route group users
se-10-0-0-0(cusp-config-rg) > element route-uri sip:external@example.com internal 1.0
se-10-0-0-0(cusp-config-rg) > exit
se-10-0-0-0(cusp-config) > route table t1
se-10-0-0-0(cusp-config-rt) > key 973 route-uri sip:external@example.com;lr
target-destination 192.168.1.1:5060 external
```

The following example removes the lookup key from the route table:

```
se-10-0-0-0(cusp-config) > route table t1
se-10-0-0-0(cusp-config-rt) > no key 973
```

Related Commands	Command	Description
	<b>commit</b>	Enables configuration changes for selected Cisco Unified SIP Proxy commands to take effect.
	<b>element route-uri</b>	Adds a route-URI header and replaces it with a request URI header in a route group, and enters element configuration mode.
	<b>key default-sip</b>	Configures the message in the route table to be routed using RFC 3263.
	<b>key group</b>	Assigns a route group to a routing table and associates it with a key number.
	<b>key policy</b>	Assigns a route policy to a key in a routing table.
	<b>key response</b>	Assigns a response code to a key in a routing table.
	<b>key target-destination</b>	Replaces a target destination with the specified value in an outgoing SIP request.
	<b>route table</b>	Creates a route table and enters route table configuration mode.
	<b>sip network</b>	Creates a logical SIP network and enters SIP network configuration mode.

## key target-destination

To replace a target destination with the specified value in an outgoing SIP request, use the **key target-destination** command in route table configuration mode. To remove the request-URI from the key in the routing table, use the **no** form of this command.

**key** *key* **target-destination** *target-destination network*

**no key** *key* [**target-destination** *request-uri-host-port network*]

Syntax Description		
<i>key</i>		Specifies the route table lookup key number. The lookup key represents the portion of the SIP message that is being matched, and must be unique to the routing table.
<i>target-destination</i>		Specifies the host and port and transport of the request-URI to be assigned to the routing table. The format of this field is host:port:transport; port and transport are optional.
<i>network</i>		Specifies the SIP network name.

**Command Default** None

**Command Modes** Route table configuration (cusp-config-rt)

Command History	Cisco Unified SIP Proxy Version	Modification
	1.0	This command was introduced.

**Usage Guidelines** The request-URI must be configured first using the **element target-destination** command. You cannot assign a request-URI and a route group (using the **key group** command) to the same key number.



**Note**

This command requires that you use the **commit** command for the configuration changes to take effect.

### Examples

The following example assigns a target destination to a routing table and assigns it a key number:

```
se-10-0-0-0(cusp-config) > route group users
se-10-0-0-0(cusp-config-rg) > element target-destination sip:external@example.com internal
1.0
se-10-0-0-0(cusp-config-rg) > exit
se-10-0-0-0(cusp-config) > route table t1
se-10-0-0-0(cusp-config-rt) > key 973 target-destination hostnameB internal
```



The following example removes the lookup key from the route table:

```
se-10-0-0-0(cusp-config) > route table t1
se-10-0-0-0(cusp-config-rt) > no key 973
```

Related Commands	Command	Description
	<b>commit</b>	Enables configuration changes for selected Cisco Unified SIP Proxy commands to take effect.
	<b>element target-destination</b>	Adds a target destination element to a route group and enters element configuration mode.
	<b>key default-sip</b>	Configures the message in the route table to be routed using RFC 3263.
	<b>key group</b>	Assigns a route group to a routing table and associates it with a key number.
	<b>key policy</b>	Assigns a route policy to a key in a routing table.
	<b>key response</b>	Assigns a response code to a key in a routing table.
	<b>key route-uri target-destination</b>	Assigns a route-URI to a lookup key in a routing table and replaces the target destination with the specified value in the outgoing SIP request.
	<b>route table</b>	Creates a route table and enters route table configuration mode.

## route group

To create a route group and enter route group configuration mode, use the **route group** command in Cisco Unified SIP Proxy configuration mode. To remove the route group, use the **no** form of this command.

```
route group route-group-name [time-policy] [weight]
```

```
no route group route-group-name
```

Syntax Description		
	<i>route-group-name</i>	Specifies the name of the route group.
	<b>time-policy</b>	(Optional) Enables the time-based routing configurations configured with the <b>policy time</b> command that this route group will use if implementing time-based routing. This option is disabled by default.
	<b>weight</b>	(Optional) Enables weight-based routing configurations for the route group. If selected, the route group uses weight as the algorithm to pick the next route. This option is disabled by default.

**Command Default** None

**Command Modes** Cisco Unified SIP Proxy configuration (cusp-config)

Command History	Cisco Unified SIP Proxy Version	Modification
	1.0	This command was introduced.

**Usage Guidelines** This command configures a route group and its route group elements. A route group is a set of one or more route group elements or next-hop tuple configurations. Route groups allow specific sets of next-hop data tuples to be reused across multiple route configurations.



**Note**

This command requires that you use the **commit** command for the configuration changes to take effect.

**Examples** The following example creates a route group g1 and enters route group configuration mode:

```
se-10-0-0-0(cusp-config)> route group g1
se-10-0-0-0(cusp-config-rg)>
```

The following example creates a route group using weight-based routing:

```
se-10-0-0-0(cusp-config)> route group g1 weight
```

The following example creates a route group using both time-based and weight-based routing:

```
se-10-0-0-0(cusp-config) > route group g1 time-policy weight
```

The following example deletes a route group:

```
se-10-0-0-0(cusp-config) > no route group g1
```

Related Commands	Command	Description
	<b>commit</b>	Enables configuration changes for selected Cisco Unified SIP Proxy commands to take effect.
	<b>element route-uri</b>	Adds a route-URI element to a route group.
	<b>element target-destination</b>	Adds a target destination element to a route group and enters element configuration mode.
	<b>policy time</b>	Creates a time policy and enters time-policy configuration mode.
	<b>show routes table</b>	Displays the configured Cisco Unified SIP Proxy routes.

## element route-uri

To add a route-URI header and replace it with a request URI header in a route group, and to enter element configuration mode, use the **element route-uri** command in Cisco Unified SIP Proxy route group configuration mode. To remove the route entry from the route group, use the **no** form of this command.

**element route-uri** *route-uri network* [*q\_value*]

**no element route-uri** *route-uri network*

Syntax Description	Command	Description
	<b>route-uri</b> <i>route-uri</i>	Specifies the Route-URI header.
	<b>request-uri</b> <i>request-uri</i>	Specifies the Request-URI header that will replace the Route-URI header.
	<i>network</i>	Specifies the SIP network configured with the <b>sip network</b> command.
	<i>q_value</i>	(Optional) Represents a real number that specifies the priority of the server group element with respect to others in the server group. Valid values are from 0.0 to 1.0. The default is 1.0.

**Command Default** The route-URI element is not configured.

**Command Modes** Cisco Unified SIP Proxy route group configuration (cusp-config-rg)

Command History	Cisco Unified SIP Proxy Version	Modification
	1.0	This command was introduced.

**Usage Guidelines** More than one route-URI can be assigned to a given network.

For the **weight** option, each element in a server group is assigned a weight such that the element will receive a traffic load that is proportional to its weight relative to the weights of other elements of the same priority (q-value) in the server group.



**Note**

This command requires that you use the **commit** command for the configuration changes to take effect.

**Examples**

The following example adds a route-URI element to a route group:

```
se-10-0-0-0(cusp-config) > route group g1
se-10-0-0-0(cusp-config-rg) > element route-uri sip:external@example.com ;lr internal
se-10-0-0-0(cusp-config-rg-element) >
```

The following example removes a route-URI element from a route group:

```
se-10-0-0-0(cusp-config) > route group g1
```

```
se-10-0-0-0(cusp-config-rg) > no element route-uri sip:external@example.com ;lr internal
```

Related Commands	Command	Description
	<b>commit</b>	Enables configuration changes for selected Cisco Unified SIP Proxy commands to take effect.
	<b>element target-destination</b>	Adds a target destination element to a route group and enters element configuration mode.
	<b>failover-codes</b>	Configures the failover codes for the request-URI element or route-URI element.
	<b>route group</b>	Creates a route group and enters route group configuration mode.
	<b>time-policy (element)</b>	Configures the time-policy used if implementing time-based routing.
	<b>weight</b>	Configures the percentage assigned to the request-URI or route-URI in the route group if implementing weight-based routing.

## element route-uri target-destination

To add a route-URI element to a route group and to enter element configuration mode, use the **element-route-uri** command in Cisco Unified SIP Proxy route group configuration mode. To remove the route entry from the route group, use the **no** form of this command.

**element route-uri** *route-uri* **request-uri-host-port** *request-uri-host-port* *network* [*q\_value*]

**no element route-uri** *route-uri* *network*

Syntax Description		
	<i>route</i>	Specifies the Route-URI header.
	<i>request-uri-host-port</i>	Specifies the Request-URI-host-port in the request. The format of this field is host:port; port is optional.
	<i>network</i>	Specifies the SIP network configured with the <b>sip network</b> command.
	<i>q_value</i>	(Optional) Represents a real number that specifies the priority of the server group element with respect to others in the server group. Valid values are from 0.0 to 1.0. The default is 1.0.

**Command Default** The route-URI element is not configured.

**Command Modes** Cisco Unified SIP Proxy route group configuration (cusp-config-rg)

Command History	Cisco Unified SIP Proxy Version	Modification
	1.0	This command was introduced.

**Usage Guidelines** More than one route-URI can be assigned to a given network.



**Note**

This command requires that you use the **commit** command for the configuration changes to take effect.

**Examples** The following example adds a route-URI element to a route group:

```
se-10-0-0-0(cusp-config) > route group g1
se-10-0-0-0(cusp-config-rg) > element route-uri sip:external@example.com;lr
request-uri-host-port 192.168.1.1:5060 internal
se-10-0-0-0(cusp-config-rg-element) >
```

The following example removes a route-URI element from a route group:

```
se-10-0-0-0(cusp-config) > route group g1
se-10-0-0-0(cusp-config-rg) > no element route-uri sip:external@example.com;lr
request-uri-host-port 192.168.1.1:5060
```

Related Commands	Command	Description
	<b>commit</b>	Enables configuration changes for selected Cisco Unified SIP Proxy commands to take effect.
	<b>element target-destination</b>	Adds a target destination element to a route group and enters element configuration mode.
	<b>failover-codes</b>	Configures the failover codes for the request-URI element or route-URI element.
	<b>route group</b>	Creates a route group and enters route group configuration mode.
	<b>sip network</b>	Creates a logical SIP network and enters SIP network configuration mode.
	<b>time-policy (element)</b>	Configures the time-policy used if implementing time-based routing.
	<b>weight</b>	Configures the percentage assigned to the request-URI or route-URI in the route group if implementing weight-based routing.

## element target-destination

To add a target destination element to a route group and to enter element configuration mode, use the **element target-destination** command in route group configuration mode. To remove the route entry from the route group, use the **no** form of this command.

**element target-destination** *target-destination network* [*q\_value*]

**no element target-destination** *target-destination*

Syntax Description	Parameter	Description
	<i>target-destination</i>	Specifies the next hop tuples based off the target-destination in the request. The format of this field is host:port; port is optional.
	<i>network</i>	Specifies the SIP network configured with the <b>sip network</b> command.
	<i>q_value</i>	(Optional) Represents a real number that specifies the priority of the server group element with respect to others in the server group. Valid values are from 0.0 to 1.0. The default is 1.0.

**Command Default** The request-URI element is not configured.

**Command Modes** Cisco Unified SIP Proxy route group configuration (cusp-config-rg)

Command History	Cisco Unified SIP Proxy Version	Modification
	1.0	This command was introduced.

### Usage Guidelines



#### Note

This command requires that you use the **commit** command for the configuration changes to take effect.

### Examples

The following example adds a target destination element to a route group:

```
se-10-0-0-0(cusp-config) > route group g1
se-10-0-0-0(cusp-config-rg) > element target-destination hostnameB internal
se-10-0-0-0(cusp-config-rg-element) >
```

The following example removes a target destination element from a route group:

```
se-10-0-0-0(cusp-config) > route group g1
se-10-0-0-0(cusp-config-rg) > no element target-destination hostnameB
```



Related Commands	Command	Description
	<b>commit</b>	Enables configuration changes for selected Cisco Unified SIP Proxy commands to take effect.
	<b>element route-uri</b>	Adds a route-URI element to a route group.
	<b>failover-codes</b>	Configures the failover codes for the request-URI element or route-URI element.
	<b>route group</b>	Creates a route group and enters route group configuration mode.
	<b>sip network</b>	Creates a logical SIP network and enters SIP network configuration mode.
	<b>time-policy (element)</b>	Configures the time-policy used if implementing time-based routing.
	<b>weight</b>	Configures the percentage assigned to the request-URI or route-URI in the route group if implementing weight-based routing.

# failover-codes

To configure the failover codes for an element request-URI or element route-URI, use the **failover-codes** command in element request-URI or element route-URI configuration mode. To remove the failover code, use the no form of this command.

**failover-codes** *codes* [ - *code*] [ , *continue*]

**no failover-codes**

<b>Syntax Description</b>	<i>codes</i>	Specifies the SIP response codes, which are separated by a comma. A single white space must be entered before and after each comma and dash used to denote a multiple range.
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**Command Default** No failover codes are configured.

**Command Modes** Element configuration (cusp-config-rg-element)

<b>Command History</b>	<b>Cisco Unified SIP Proxy Version</b>	<b>Modification</b>
	1.0	This command was introduced.

**Usage Guidelines** Route advance occurs if the proxy receives one of the specified response codes from the downstream element.

**Examples** The following example adds response codes to a route-URI element in a route group:

```
se-10-0-0-0(cusp-config)> route group g1
se-10-0-0-0(cusp-config-rg)> element route-uri sip:external@example.com internal 1.0
se-10-0-0-0(cusp-config-rg-element)> failover-codes 502 , 503
```

The following example adds response codes to a route-URI element in a route group:

```
se-10-0-0-0(cusp-config)> route group g1
se-10-0-0-0(cusp-config-rg)> element route-uri sip:external@example.com internal 1.0
se-10-0-0-0(cusp-config-rg-element)> failover-codes 502 , 504 - 508 , 588
```

The following example removes the failover codes from the route-URI element:

```
se-10-0-0-0(cusp-config-rg)> element route-uri sip:external@example.com internal 1.0
se-10-0-0-0(cusp-config-rg-element)> no failover-codes
```

Related Commands	Command	Description
	<b>commit</b>	Enables configuration changes for selected Cisco Unified SIP Proxy commands to take effect.
	<b>element route-uri</b>	Adds a route-URI element to a route group.
	<b>element target-destination</b>	Adds a target destination element to a route group and enters element configuration mode.
	<b>route group</b>	Creates a route group and enters route group configuration mode.
	<b>time-policy (element)</b>	Configures the time-policy used if implementing time-based routing.
	<b>weight</b>	Configures the percentage assigned to the request-URI in the route group if implementing weight-based routing.

## time-policy (element)

To configure the time policy for an element request-URI or element route-URI, use the **time-policy** command in element request-URI or element route-URI configuration mode. To remove the time policy, use the **no** form of this command.

**time-policy** *policy*

**no time-policy**

<b>Syntax Description</b>	<i>policy</i>	Specifies the time policy previously configured using the <b>policy time</b> command if implementing time-based routing. This option is only valid if the <b>time-policy</b> option is specified in the <b>route group</b> command.
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<b>Command Default</b>	None
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<b>Command Modes</b>	Element configuration (cusp-config-rg-element)
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<b>Command History</b>	<b>Cisco Unified SIP Proxy Version</b>	<b>Modification</b>
	1.0	This command was introduced.

### Examples

The following example configures a time policy for a route-URI element:

```
se-10-0-0-0(cusp-config) > route group g1
se-10-0-0-0(cusp-config-rg) > element route-uri sip:external@example.com internal 1.0
se-10-0-0-0(cusp-config-rg-element) > time-policy tp1
```

The following example removes the time policy from the element route-URI:

```
se-10-0-0-0(cusp-config-rg) > element route-uri sip:external@example.com internal 1.0
se-10-0-0-0(cusp-config-rg-element) > no time-policy
```

<b>Related Commands</b>	<b>Command</b>	<b>Description</b>
	<b>commit</b>	Enables configuration changes for selected Cisco Unified SIP Proxy commands to take effect.
	<b>element route-uri</b>	Adds a route-URI element to a route group.
	<b>element target-destination</b>	Adds a target destination element to a route group and enters element configuration mode.
	<b>failover-codes</b>	Configures the failover codes for the request-URI element or route-URI element.

Command	Description
<b>route group</b>	Creates a route group and enters route group configuration mode.
<b>weight</b>	Configures the percentage assigned to the request-URI in the route group if implementing weight-based routing.

# weight

To configure the weight percentage assigned to a request-URI or route-URI if implementing weight-based routing, use the **weight** command in element configuration mode. To remove the weight, use the **no** form of this command.

**weight** *weight*

**no weight**

<b>Syntax Description</b>	<i>weight</i>	Specifies the percentage assigned to the request-URI or route-URI element in the route group if implementing weight-based routing. The valid range is from 0 to 100. If not configured, the default weight is 50. This option is only valid if the <b>weight</b> option is specified in the <b>route group</b> command.
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**Command Default** 50

**Command Modes** Element configuration (cusp-config-rg-element)

<b>Command History</b>	<b>Cisco Unified SIP Proxy Version</b>	<b>Modification</b>
	1.0	This command was introduced.

**Usage Guidelines** Each element in a route group is assigned a weight. Each element receives a traffic load that is proportional to its weight.

**Examples** The following example configures the route-URI element to have a percentage-weight of 50 for weight-based routing:

```
se-10-0-0-0(cusp-config)> route group g1
se-10-0-0-0(cusp-config-rg)> element route-uri sip:external@example.com internal 1.0
se-10-0-0-0(cusp-config-rg-element)> weight 50
```

The following example removes the weight value from the element route-URI:

```
se-10-0-0-0(cusp-config-rg)> element route-uri sip:external@example.com internal 1.0
se-10-0-0-0(cusp-config-rg-element)> no weight
```

<b>Related Commands</b>	<b>Command</b>	<b>Description</b>
	<b>commit</b>	Enables configuration changes for selected Cisco Unified SIP Proxy commands to take effect.
	<b>element route-uri</b>	Adds a route-URI element to a route group.

<b>Command</b>	<b>Description</b>
<b>element target-destination</b>	Adds a target destination element to a route group and enters element configuration mode.
<b>failover-codes</b>	Configures the failover codes for the request-URI element or route-URI element.
<b>route group</b>	Creates a route group and enters route group configuration mode.
<b>time-policy (element)</b>	Configures the time-policy used if implementing time-based routing.

■ weight



■ weight

■ weight