ASA/PIX 8.x: Block Certain Websites (URLs) Using Regular Expressions With MPF Configuration Example

Document ID: 100535

Contents

Introduction

This document describes how to configure the Cisco Security Appliances ASA/PIX 8.x that uses Regular Expressions with Modular Policy Framework (MPF) in order to block the certain websites (URLs).

Note: This configuration does not block all application downloads. For reliable file blocking, a dedicated appliance such as Ironport S Series or a module such as the CSC module for the ASA should be used.

Note: HTTPS filtering is not supported on ASA. ASA cannot do deep packet inspection or inspection based on regular expression for HTTPS traffic, because in HTTPS, content of packet is encrypted (SSL).

Prerequisites

Requirements

This document assumes that Cisco Security Appliance is configured and works properly.

Components Used

- Cisco 5500 Series Adaptive Security Appliance (ASA) that runs the software version 8.0(x) and later
- Cisco Adaptive Security Device Manager (ASDM) version 6.x for ASA 8.x

The information in this document was created from the devices in a specific lab environment. All of the devices used in this document started with a cleared (default) configuration. If your network is live, make sure

that you understand the potential impact of any command.

Related Products

This configuration can also be used with the Cisco 500 Series PIX that runs the software version 8.0(x) and later.

Conventions

Refer to the Cisco Technical Tips Conventions for more information on document conventions.

Background Information

Modular Policy Framework Overview

MPF provides a consistent and flexible way to configure security appliance features. For example, you can use MPF to create a timeout configuration that is specific to a particular TCP application, as opposed to one that applies to all TCP applications.

MPF supports these features:

- TCP normalization, TCP and UDP connection limits and timeouts, and TCP sequence number randomization
- CSC
- Application inspection
- IPS
- QoS input policing
- QoS output policing
- QoS priority queue

The configuration of the MPF consists of four tasks:

1. Identify the Layer 3 and 4 traffic to which you want to apply actions. Refer to Identifying Traffic Using a Layer 3/4 Class Map for more information.
2. (Application inspection only) Define special actions for application inspection traffic. Refer to Configuring Special Actions for Application Inspections for more information.
3. Apply actions to the Layer 3 and 4 traffic. Refer to Defining Actions Using a Layer 3/4 Policy Map for more information.
4. Activate the actions on an interface. Refer to Applying a Layer 3/4 Policy to an Interface Using a Service Policy for more information.

Regular Expression

A regular expression matches text strings either literally as an exact string, or by the use of metacharacters so you can match multiple variants of a text string. You can use a regular expression to match the content of certain application traffic; for example, you can match a URL string inside an HTTP packet.

Note: Use **Ctrl+V** in order to escape all of the special characters in the CLI, such as question mark (?) or a tab. For example, type **d[Ctrl+V]?g** in order to enter **d?g** in the configuration.

For the creation of a regular expression, use the **regex** command, which can be used for various features that require text matching. For example, you can configure special actions for application inspection with the use

of the Modular Policy Framework that uses an inspection policy map. Refer to the **policy map type inspect** command for more information. In the inspection policy map, you can identify the traffic you want to act upon if you create an inspection class map that contains one or more **match** commands or you can use **match** commands directly in the inspection policy map. Some **match** commands let you identify text in a packet using a regular expression; for example, you can match URL strings inside HTTP packets. You can group regular expressions in a regular expression class map. Refer to the **class−map type regex** command for more information.

This table lists the metacharacters that have special meanings.

Character	Description	Notes
.	Dot	Matches any single character. For example, **d.g** matches dog, dag, dtg, and any word that contains those characters, such as doggonnit.
(exp)	Subexpression	A subexpression segregates characters from surrounding characters, so that you can use other metacharacters on the subexpression. For example, **d(o|a)g** matches dog and dag, but **do|ag** matches do and ag. A subexpression can also be used with repeat quantifiers to differentiate the characters meant for repetition. For example, **ab(xy){3}z** matches abxyxyxyz.
|	Alternation	Matches either expression it separates. For example, **dog|cat** matches dog or cat.
?	Question mark	A quantifier that indicates that there are 0 or 1 of the previous expression. For example, **lo?se** matches lse or lose. **Note:** You must enter **Ctrl+V** and then the question mark or else the help function is invoked.
*	Asterisk	A quantifier that indicates that there are 0, 1 or any number of the previous expression. For example, **lo*se** matches lse, lose, loose, and so forth.
{x}	Repeat quantifier	Repeat exactly x times. For example, **ab(xy){3}z** matches abxyxyxyz.
{x,}	Minimum repeat quantifier	Repeat at least x times. For example, **ab(xy){2,}z** matches abxyxyz, abxyxyxyz, and so

		forth.
[abc]	Character class	Matches any character in the brackets. For example, **[abc]** matches a, b, or c.
[^abc]	Negated character class	Matches a single character that is not contained within the brackets. For example, **[^abc]** matches any character other than a, b, or c. **[^A−Z]** matches any single character that is not an uppercase letter.
[a−c]	Character range class	Matches any character in the range. **[a−z]** matches any lowercase letter. You can mix characters and ranges: **[abcq−z]** matches a, b, c, q, r, s, t, u, v, w, x, y, z, and so does **[a−cq−z]**. The dash (−) character is literal only if it is the last or the first character within the brackets: **[abc−]** or **[−abc]**.
""	Quotation marks	Preserves trailing or leading spaces in the string. For example, **" test"** preserves the leading space when it looks for a match.
^	Caret	Specifies the beginning of a line
\	Escape character	When used with a metacharacter, matches a literal character. For example, **\[** matches the left square bracket.
char	Character	When character is not a metacharacter, matches the literal character.
r	Carriage return	Matches a carriage return 0x0d
n	Newline	Matches a new line 0x0a
t	Tab	Matches a tab 0x09
f	Formfeed	Matches a form feed 0x0c
\xNN	Escaped hexadecimal number	Matches an ASCII character that uses a hexadecimal that is exactly two digits
\NNN	Escaped octal number	Matches an ASCII character as octal that is exactly three digits. For example, the character 040 represents a space.

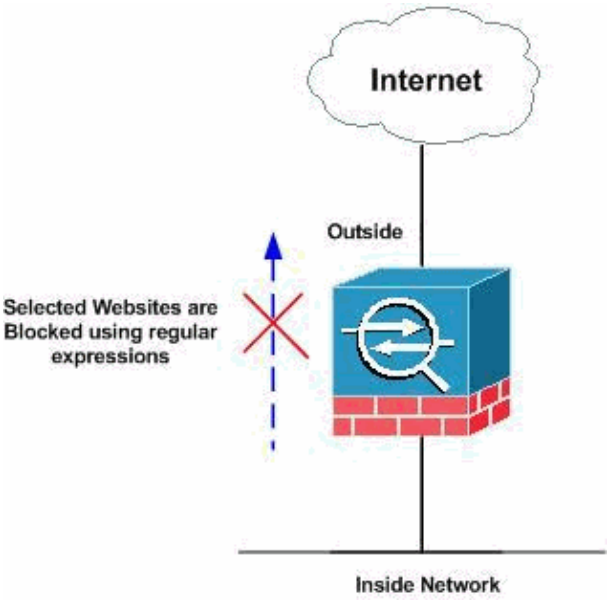
Configure

In this section, you are presented with the information to configure the features described in this document.

Note: Use the Command Lookup Tool (registered customers only) in order to obtain more information on the commands used in this section.

Network Diagram

This document uses this network setup:



Configurations

This document uses these configurations:

- ASA CLI Configuration
- ASA Configuration 8.x with ASDM 6.x

ASA CLI Configuration

ASA CLI Configuration

```
ciscoasa#show running-config
: Saved
:
ASA Version 8.0(2)
!
hostname ciscoasa
domain-name default.domain.invalid
enable password 8Ry2YjIyt7RRXU24 encrypted
names
!
interface Ethernet0/0
 nameif inside
 security-level 100
 ip address 10.1.1.1 255.255.255.0
!
interface Ethernet0/1
```

```
 nameif outside
 security-level 0
 ip address 192.168.1.5 255.255.255.0
!
interface Ethernet0/2
 nameif DMZ
 security-level 90
 ip address 10.77.241.142 255.255.255.192
!
interface Ethernet0/3
 shutdown
 no nameif
 no security-level
 no ip address
!
interface Management0/0
 shutdown
 no nameif
 no security-level
 no ip address
!
passwd 2KFQnbNIdI.2KYOU encrypted

regex urllist1 ".*\.([Ee][Xx][Ee]|[Cc][Oo][Mm]|[Bb][Aa][Tt]) HTTP/1.[01]"


!--- Extensions such as .exe, .com, .bat to be captured and
!--- provided the http version being used by web browser must be either 1.0 or 1.1


regex urllist2 ".*\.([Pp][Ii][Ff]|[Vv][Bb][Ss]|[Ww][Ss][Hh]) HTTP/1.[01]"

!--- Extensions such as .pif, .vbs, .wsh to be captured
!--- and provided the http version being used by web browser must be either
!--- 1.0 or 1.1


regex urllist3 ".*\.([Dd][Oo][Cc]|[Xx][Ll][Ss]|[Pp][Pp][Tt]) HTTP/1.[01]"


!--- Extensions such as .doc(word), .xls(ms-excel), .ppt to be captured and provided
!--- the http version being used by web browser must be either 1.0 or 1.1


regex urllist4 ".*\.([Zz][Ii][Pp]|[Tt][Aa][Rr]|[Tt][Gg][Zz]) HTTP/1.[01]"


!--- Extensions such as .zip, .tar, .tgz to be captured and provided
!--- the http version being used by web browser must be either 1.0 or 1.1


regex domainlist1 "\.yahoo\.com"
regex domainlist2 "\.myspace\.com"
regex domainlist3 "\.youtube\.com"


!--- Captures the URLs with domain name like yahoo.com,
!--- youtube.com and myspace.com


regex contenttype "Content-Type"
regex applicationheader "application/.*"


!--- Captures the application header and type of
!--- content in order for analysis
```

```
boot system disk0:/asa802-k8.bin
ftp mode passive
dns server-group DefaultDNS
 domain-name default.domain.invalid

access-list inside_mpc extended permit tcp any any eq www

access-list inside_mpc extended permit tcp any any eq 8080


!--- Filters the http and port 8080
!--- traffic in order to block the specific traffic with regular
!--- expressions


pager lines 24
mtu inside 1500
mtu outside 1500
mtu DMZ 1500
no failover
icmp unreachable rate-limit 1 burst-size 1
asdm image disk0:/asdm-602.bin
no asdm history enable
arp timeout 14400
route DMZ 0.0.0.0 0.0.0.0 10.77.241.129 1
timeout xlate 3:00:00
timeout conn 1:00:00 half-closed 0:10:00 udp 0:02:00 icmp 0:00:02
timeout sunrpc 0:10:00 h323 0:05:00 h225 1:00:00 mgcp 0:05:00 mgcp-pat 0:05:00
timeout sip 0:30:00 sip_media 0:02:00 sip-invite 0:03:00 sip-disconnect 0:02:00
timeout uauth 0:05:00 absolute
dynamic-access-policy-record DfltAccessPolicy
http server enable
http 0.0.0.0 0.0.0.0 DMZ
no snmp-server location
no snmp-server contact
snmp-server enable traps snmp authentication linkup linkdown coldstart
no crypto isakmp nat-traversal
telnet timeout 5
ssh timeout 5
console timeout 0
threat-detection basic-threat
threat-detection statistics access-list
!
class-map type regex match-any DomainBlockList
 match regex domainlist1
 match regex domainlist2
 match regex domainlist3


!--- Class map created in order to match the domain names
!--- to be blocked


class-map type inspect http match-all BlockDomainsClass
 match request header host regex class DomainBlockList


!--- Inspect the identified traffic by class
!--- "DomainBlockList".


class-map type regex match-any URLBlockList
 match regex urllist1
 match regex urllist2
```

```
 match regex urllist3
 match regex urllist4


!--- Class map created in order to match the URLs
!--- to be blocked


class-map inspection_default
 match default-inspection-traffic

class-map type inspect http match-all AppHeaderClass
 match response header regex contenttype regex applicationheader


!--- Inspect the captured traffic by regular
!--- expressions "content-type" and "applicationheader".


class-map httptraffic
 match access-list inside_mpc


!--- Class map created in order to match the
!--- filtered traffic by ACL


class-map type inspect http match-all BlockURLsClass
 match request uri regex class URLBlockList
!

!--- Inspect the identified traffic by class
!--- "URLBlockList".


!
policy-map type inspect dns preset_dns_map
 parameters
  message-length maximum 512
policy-map type inspect http http_inspection_policy
 parameters
  protocol-violation action drop-connection
 class AppHeaderClass
  drop-connection log
 match request method connect
  drop-connection log
 class BlockDomainsClass
  reset log
 class BlockURLsClass
  reset log


!--- Define the actions such as drop, reset or log
!--- in the inspection policy map.


policy-map global_policy
 class inspection_default
  inspect dns preset_dns_map
  inspect ftp
  inspect h323 h225
  inspect h323 ras
  inspect netbios
  inspect rsh
  inspect rtsp
  inspect skinny
```

```
  inspect esmtp
  inspect sqlnet
  inspect sunrpc
  inspect tftp
  inspect sip
  inspect xdmcp

policy-map inside-policy
 class httptraffic
  inspect http http_inspection_policy


!--- Map the inspection policy map to the class
!--- "httptraffic" under the policy map created for the
!--- inside network traffic.


!
service-policy global_policy global
service-policy inside-policy interface inside


!--- Apply the policy to the interface inside where the
websites are blocked.


prompt hostname context
Cryptochecksum:e629251a7c37af205c289cf78629fc11
: end
ciscoasa#
```

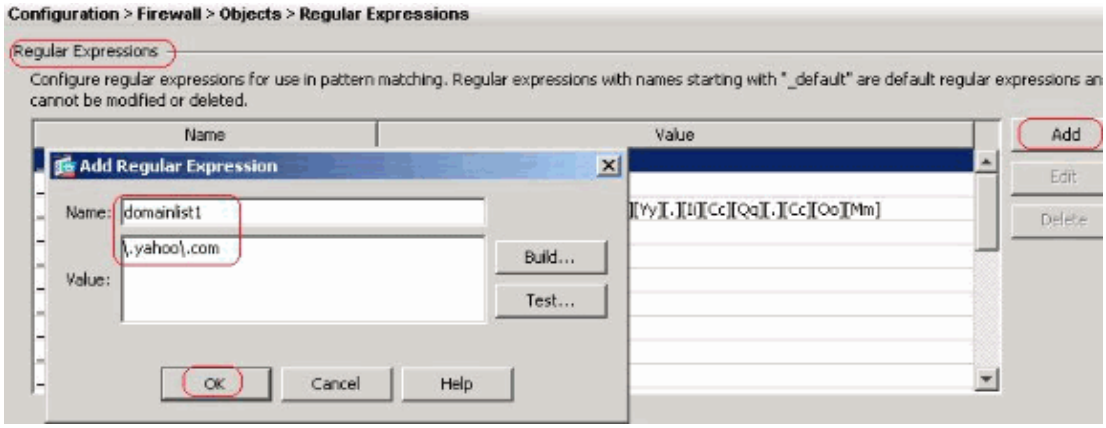
ASA Configuration 8.x with ASDM 6.x

Complete these steps in order to configure the regular expressions and apply them into MPF to block the specific websites as shown.

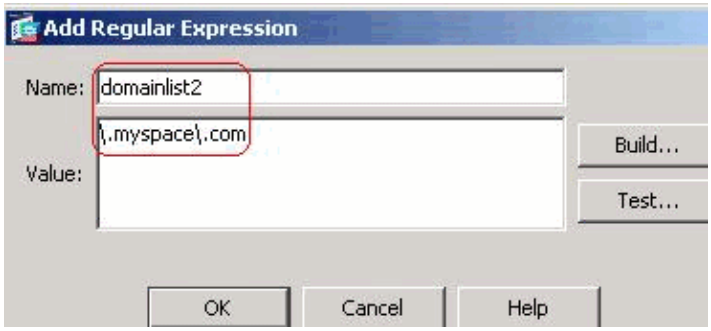
1. **Create Regular Expressions**

   Choose **Configuration > Firewall> Objects > Regular Expressions** and click **Add** under the tab **Regular Expression** in order to create regular expressions as shown.

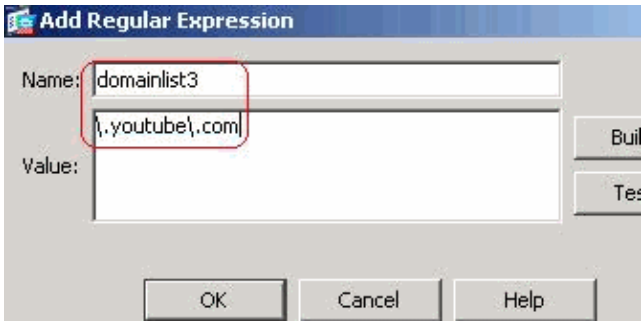
   a. Create a regular expression **domainlist1** in order to capture the domain name **yahoo.com**. Click **OK**.



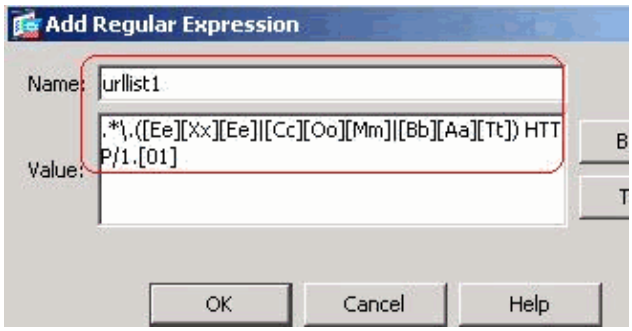
   b. Create a regular expression **domainlist2** in order to capture the domain name **myspace.com**. Click **OK**.



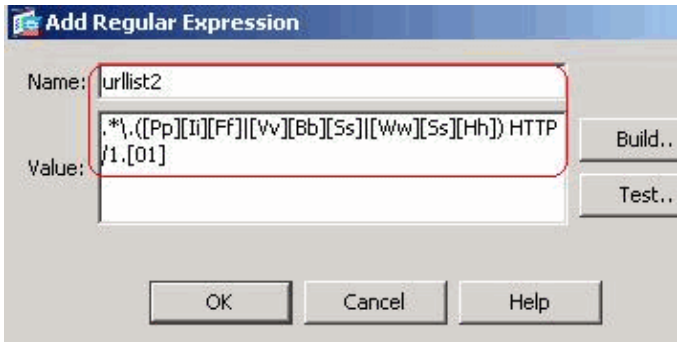
c. Create a regular expression **domainlist3** in order to capture the domain name **youtube.com**. Click **OK**.



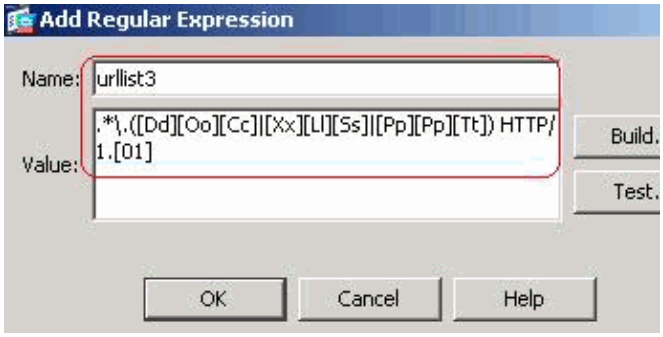
d. Create a regular expression **urllist1** in order to capture the file extensions such as **exe**, **com** and **bat** provided that the http version being used by web browser must be either 1.0 or 1.1. Click **OK**.



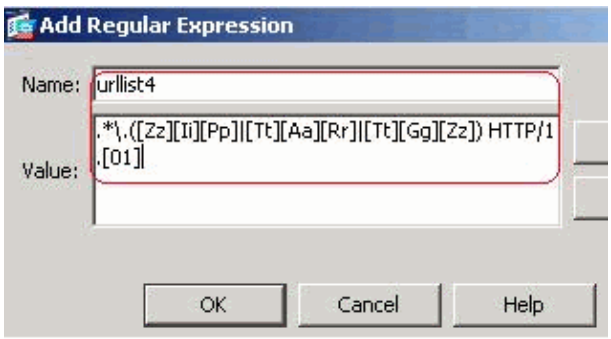
e. Create a regular expression **urllist2** in order to capture the file extensions such as **pif**, **vbs** and **wsh** provided that the http version being used by web browser must be either 1.0 or 1.1. Click **OK**.



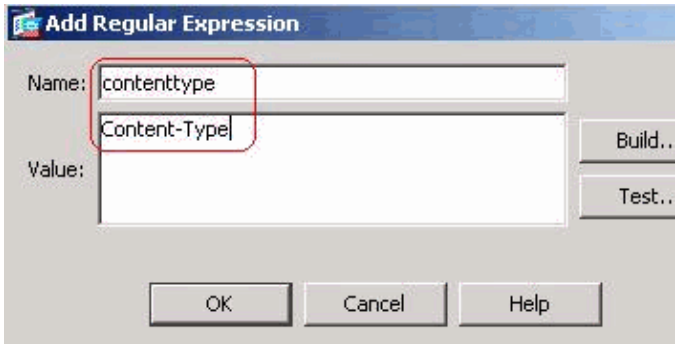
f. Create a regular expression **urllist3** in order to capture the file extensions such as **doc**, **xls** and **ppt** provided that the http version being used by web browser must be either 1.0 or 1.1. Click **OK**.



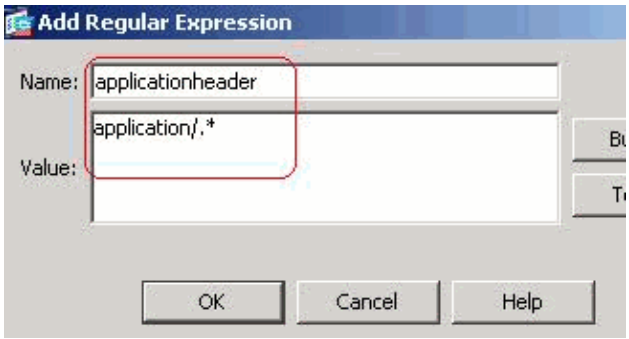
g. Create a regular expression **urllist4** in order to capture the file extensions such as **zip**, **tar** and **tgz** provided that the http version being used by web browser must be either 1.0 or 1.1. Click **OK**.



h. Create a regular expression **contenttype** in order to capture the content type. Click **OK**.



i. Create a regular expression **applicationheader** in order to capture the various application header. Click **OK**.



Equivalent CLI Configuration

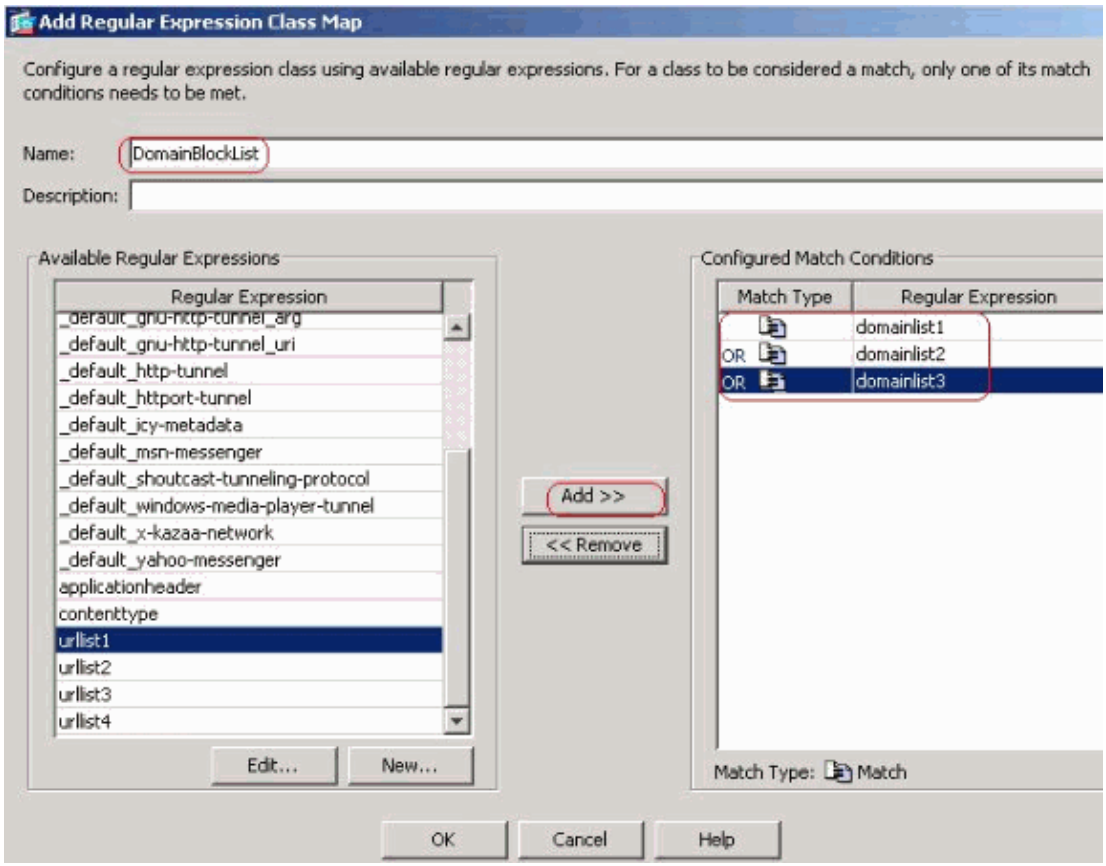
ASA CLI Configuration
ciscoasa#**configure terminal** ciscoasa(config)#**regex urllist1** ".*\.([Ee][Xx][Ee]|[Cc][Oo][Mm]|[Bb][Aa][Tt])$ ciscoasa(config)#**regex urllist2** ".*\.([Pp][Ii][Ff]|[Vv][Bb][Ss]|[Ww][Ss][Hh])$

```
ciscoasa(config)#regex urllist3 ".*\.([Dd][Oo][Cc]|[Xx][Ll][Ss]|[Pp][Pp][Tt])$
ciscoasa(config)#regex urllist4 ".*\.([Zz][Ii][Pp]|[Tt][Aa][Rr]|[Tt][Gg][Zz])$
ciscoasa(config)#regex domainlist1 "\.yahoo\.com"
ciscoasa(config)#regex domainlist2 "\.myspace\.com"
ciscoasa(config)#regex domainlist3 "\.youtube\.com"
ciscoasa(config)#regex contenttype "Content-Type"
ciscoasa(config)#regex applicationheader "application/.*"
```

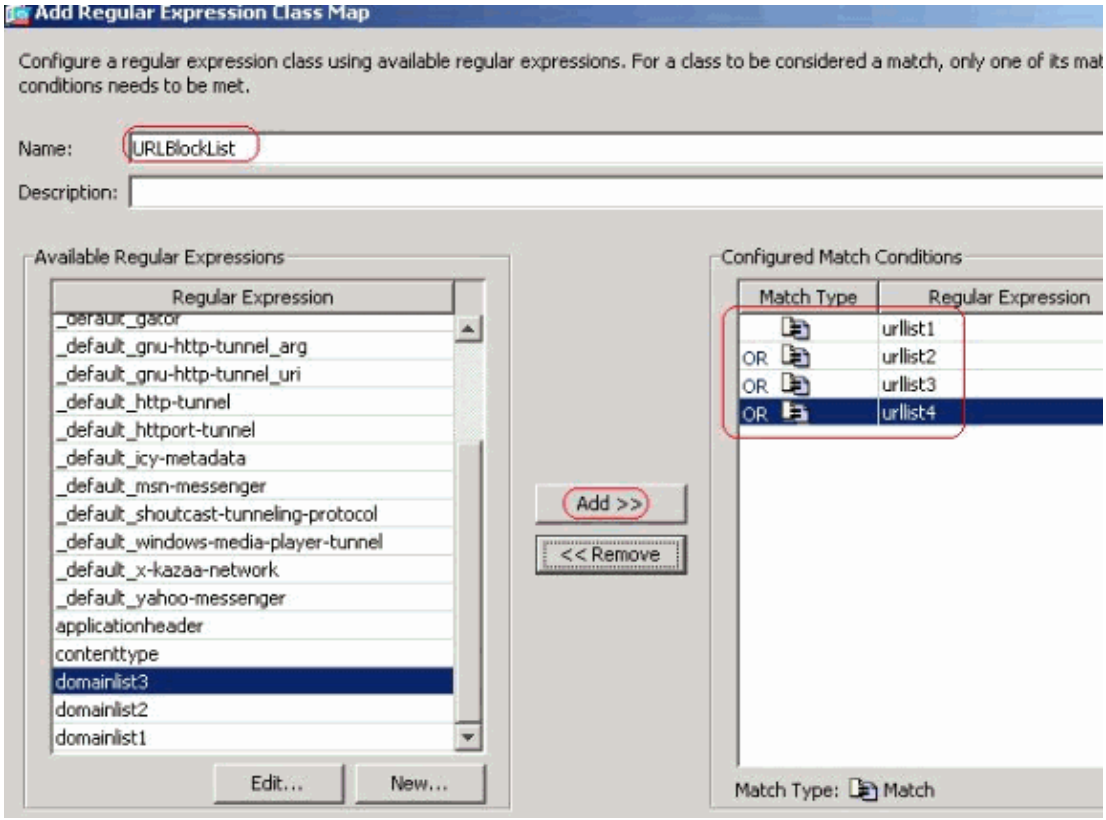
2. **Create Regular Expression Classes**

   Choose **Configuration > Firewall > Objects > Regular Expressions** and click **Add** under the tab **Regular Expression Classes** in order to create the various classes as shown.

   a. Create a regular expression class **DomainBlockList** in order to match any of the regular expressions domainlist1, domainlist2 and domainlist3. Click **OK**.



   b. Create a regular expression class **URLBlockList** in order to match any of the regular expressions urllist1, urllist2, urllist3 and urllist4. Click **OK**.



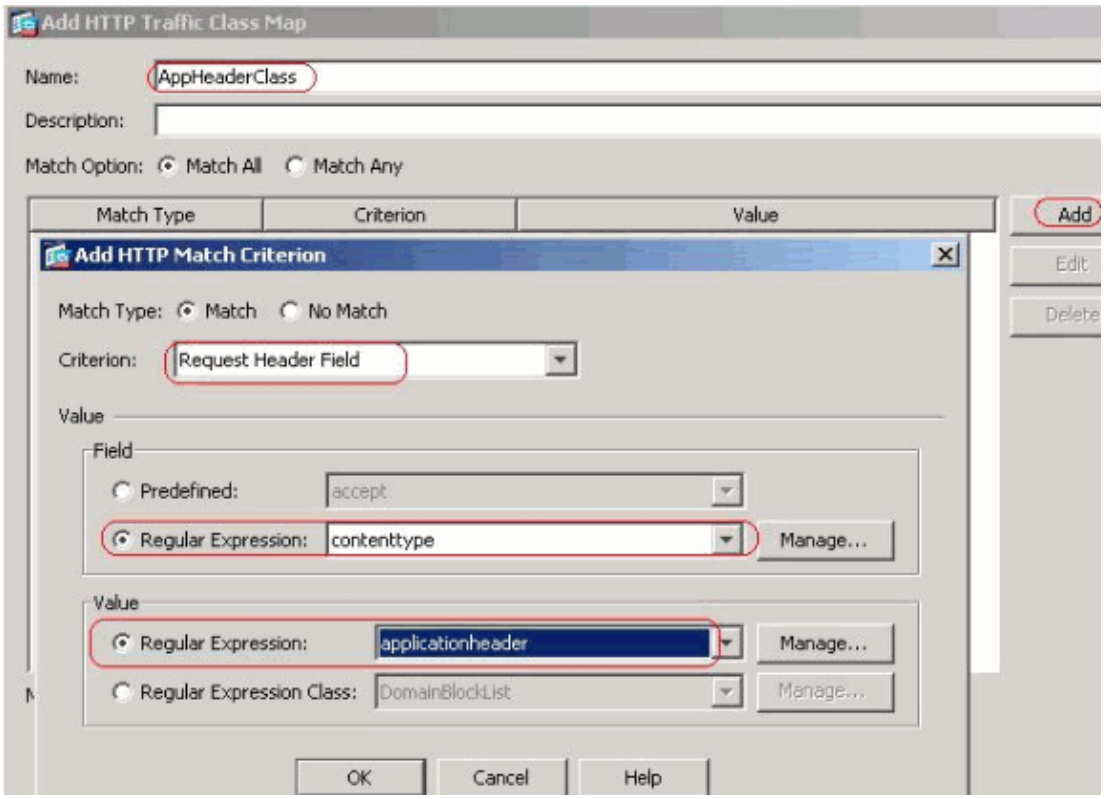
Equivalent CLI Configuration

ASA CLI Configuration
ciscoasa#**configure terminal** ciscoasa(config)#**class-map type inspect http match-all BlockDomainsClass** ciscoasa(config-cmap)#**match request header host regex class DomainBlockList** ciscoasa(config-cmap)#**exit** ciscoasa(config)#**class-map type regex match-any URLBlockList** ciscoasa(config-cmap)#**match regex urllist1** ciscoasa(config-cmap)#**match regex urllist2** ciscoasa(config-cmap)#**match regex urllist3** ciscoasa(config-cmap)#**match regex urllist4** ciscoasa(config-cmap)#**exit**

3. **Inspect the identified traffic with Class maps**

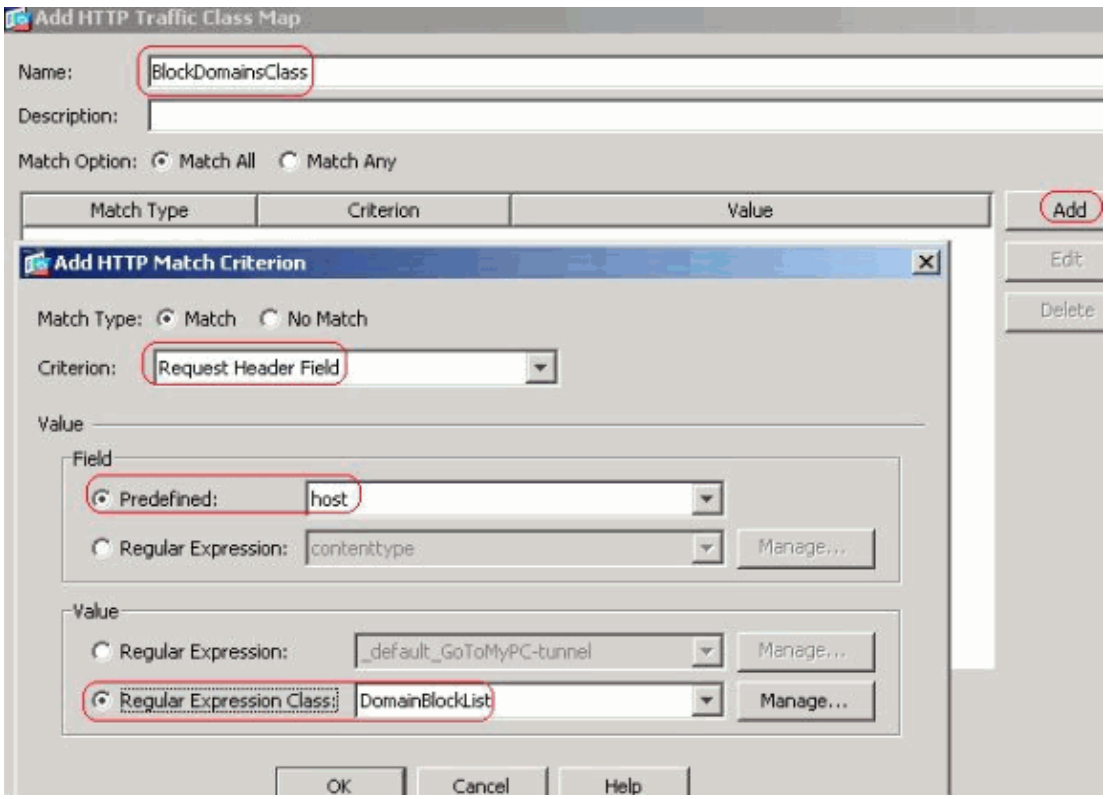
   Choose **Configuration > Firewall > Objects > Class Maps > HTTP > Add** in order to create a class map to inspect the http traffic identified by various regular expressions as shown.

   a. Create a class map **AppHeaderClass** in order to match the response header with regular expressions captures.



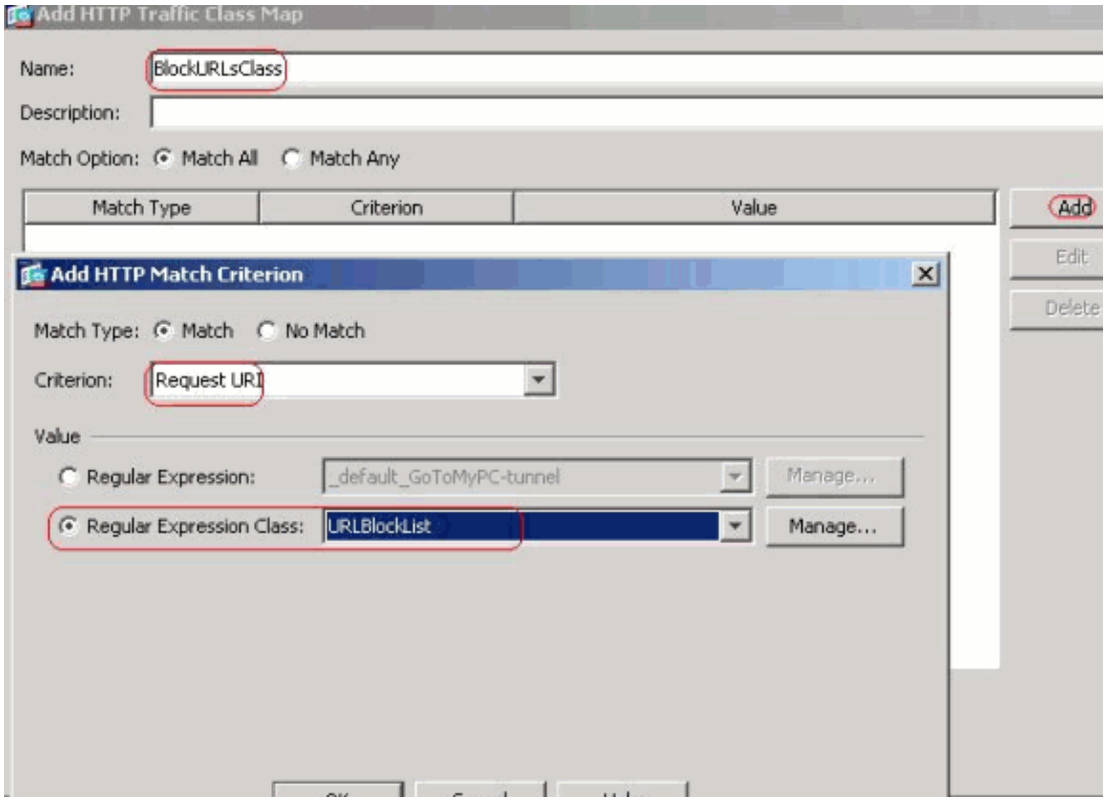
Click **OK**

b. Create a class map **BlockDomainsClass** in order to match the request header with regular expressions captures.



Click **OK**.

c. Create a class map **BlockURLsClass** in order to match the request uri with regular expressions captures.



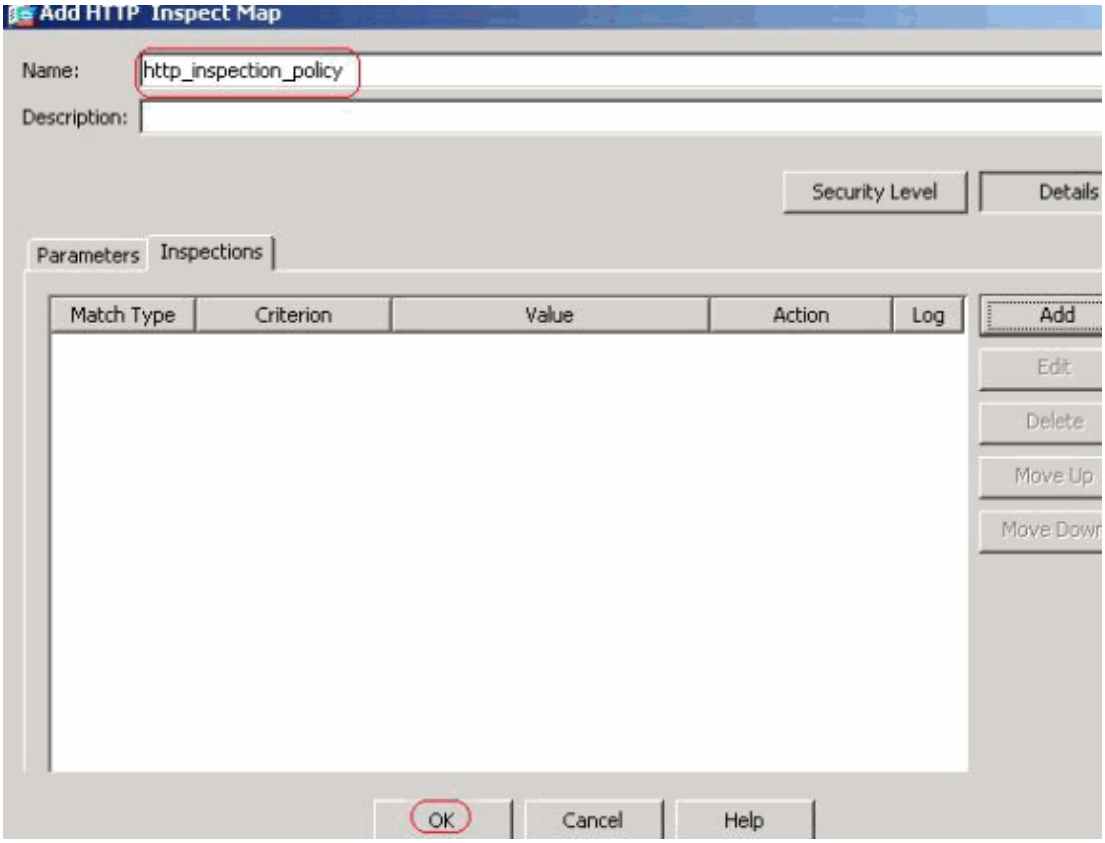
Click **OK**.

Equivalent CLI Configuration

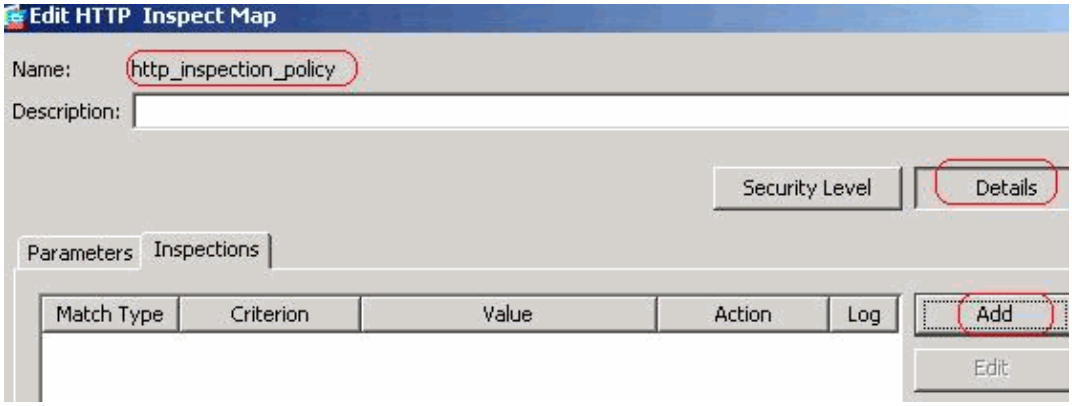
ASA CLI Configuration
ciscoasa#**configure terminal** ciscoasa(config)#**class-map type inspect http match-all AppHeaderClass** ciscoasa(config-cmap)#**match response header regex contenttype regex applicationhead** ciscoasa(config-cmap)#**exit** ciscoasa(config)#**class-map type inspect http match-all BlockDomainsClass** ciscoasa(config-cmap)#**match request header host regex class DomainBlockList** ciscoasa(config-cmap)#**exit** ciscoasa(config)#**class-map type inspect http match-all BlockURLsClass** ciscoasa(config-cmap)#**match request uri regex class URLBlockList** ciscoasa(config-cmap)#**exit**

4. **Set the actions for the matched traffic in the inspection policy**

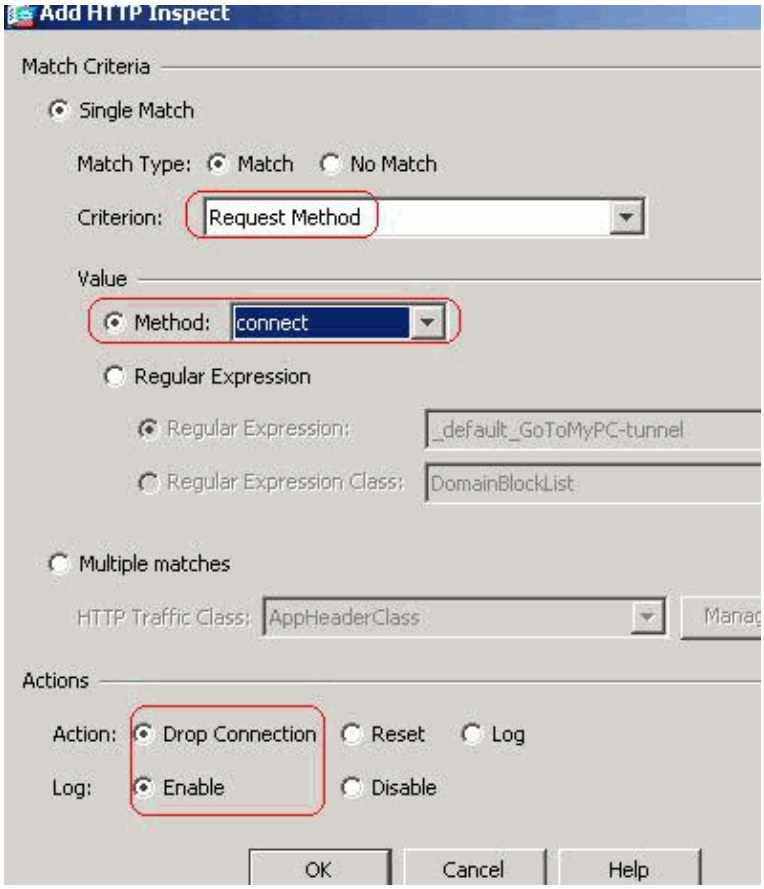
   Choose **Configuration > Firewall > Objects > Inspect Maps > HTTP** in order to create a **http_inspection_policy** to set the action for the matched traffic as shown. Click **OK**.



a. Choose **Configuration > Firewall > Objects > Inspect Maps > HTTP > http_inspection_policy (double click)** and click **Details > Add** in order to set the actions for the various Classes created so far.

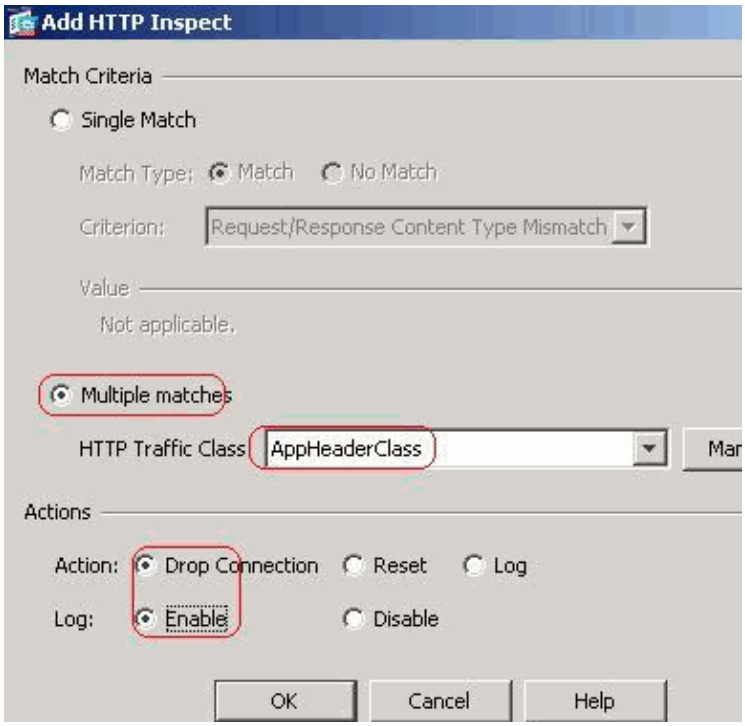


b. Set the action as **Drop Connection** and **Enable** the logging for the Criterion as Request Method and Value as connect.



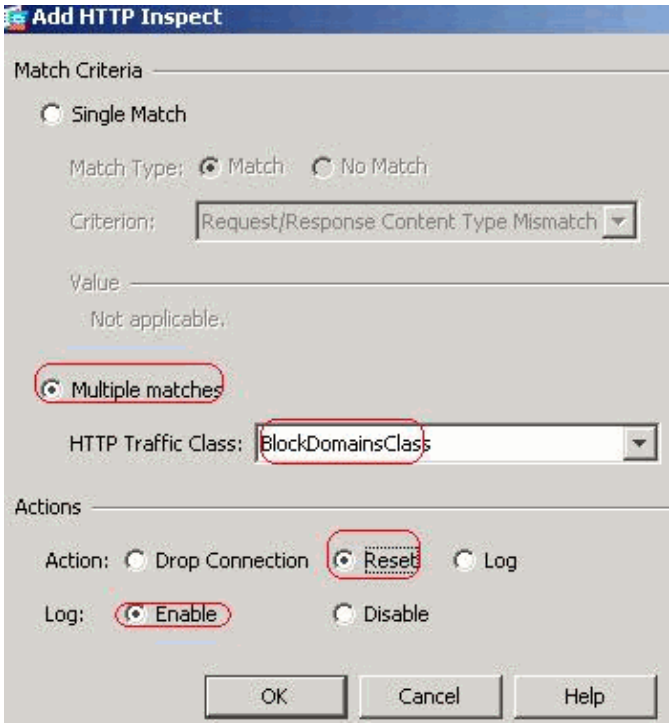
Click **OK**

c. Set the action as **Drop Connection** and **Enable** the logging for the class **AppHeaderClass** .



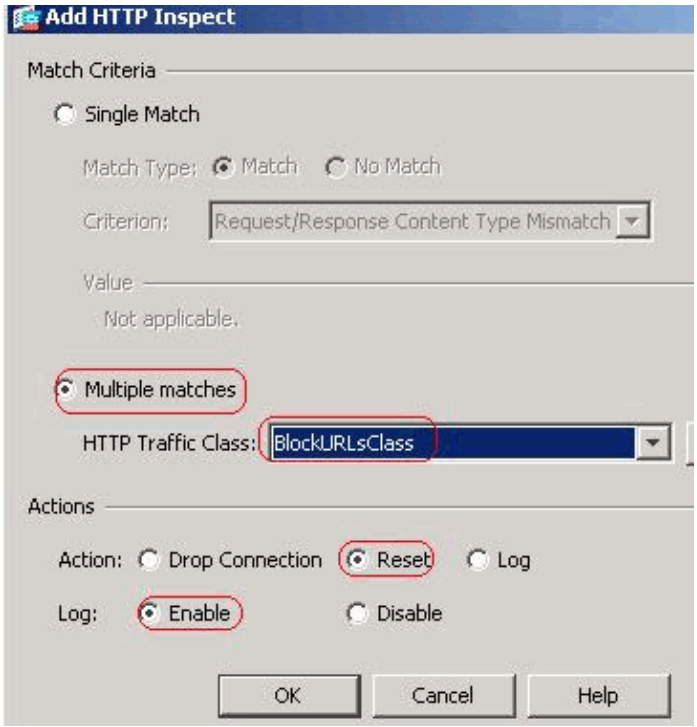
Click **OK**.

d. Set the action as **Reset** and **Enable** the logging for the class **BlockDomainsClass**.



Click **OK**

e. Set the action as **Reset** and **Enable** the logging for the class **BlockURLsClass**.



Click **OK**.

Click **Apply**.

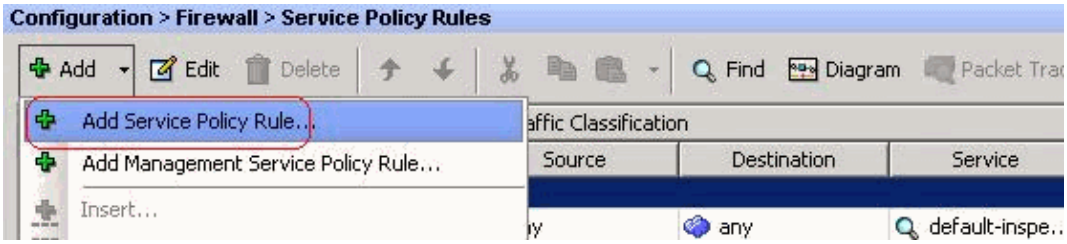
Equivalent CLI Configuration

ASA CLI Configuration

```
ciscoasa#configure terminal
ciscoasa(config)#policy-map type inspect http http_inspection_policy
ciscoasa(config-pmap)#parameters
ciscoasa(config-pmap-p)#match request method connect
ciscoasa(config-pmap-c)#drop-connection log
ciscoasa(config-pmap-c)#class AppHeaderClass
ciscoasa(config-pmap-c)#drop-connection log
ciscoasa(config-pmap-c)#class BlockDomainsClass
ciscoasa(config-pmap-c)#reset log
ciscoasa(config-pmap-c)#class BlockURLsClass
ciscoasa(config-pmap-c)#reset log
ciscoasa(config-pmap-c)#exit
ciscoasa(config-pmap)#exit
```

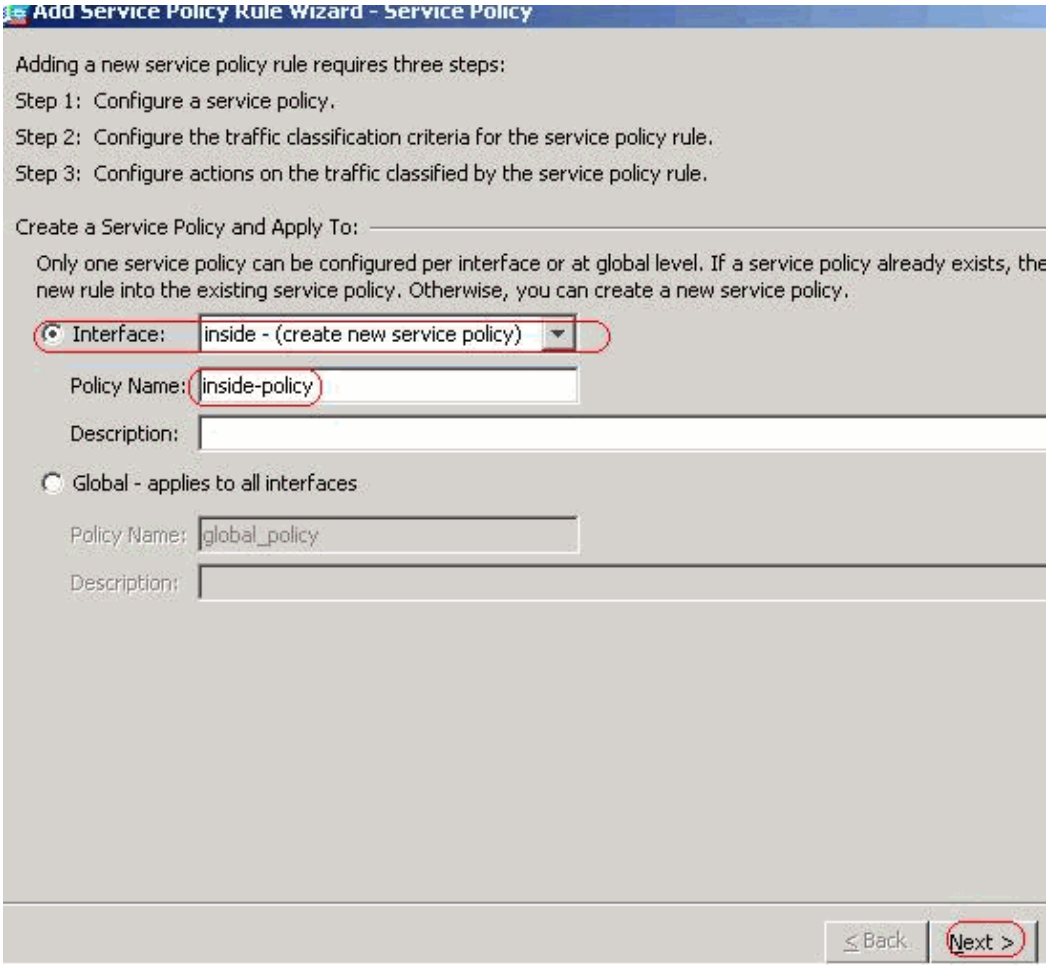
5. **Apply the inspection http policy to the interface**

   Choose **Configuration > Firewall > Service Policy Rules > Add > Add Service Policy Rule**.

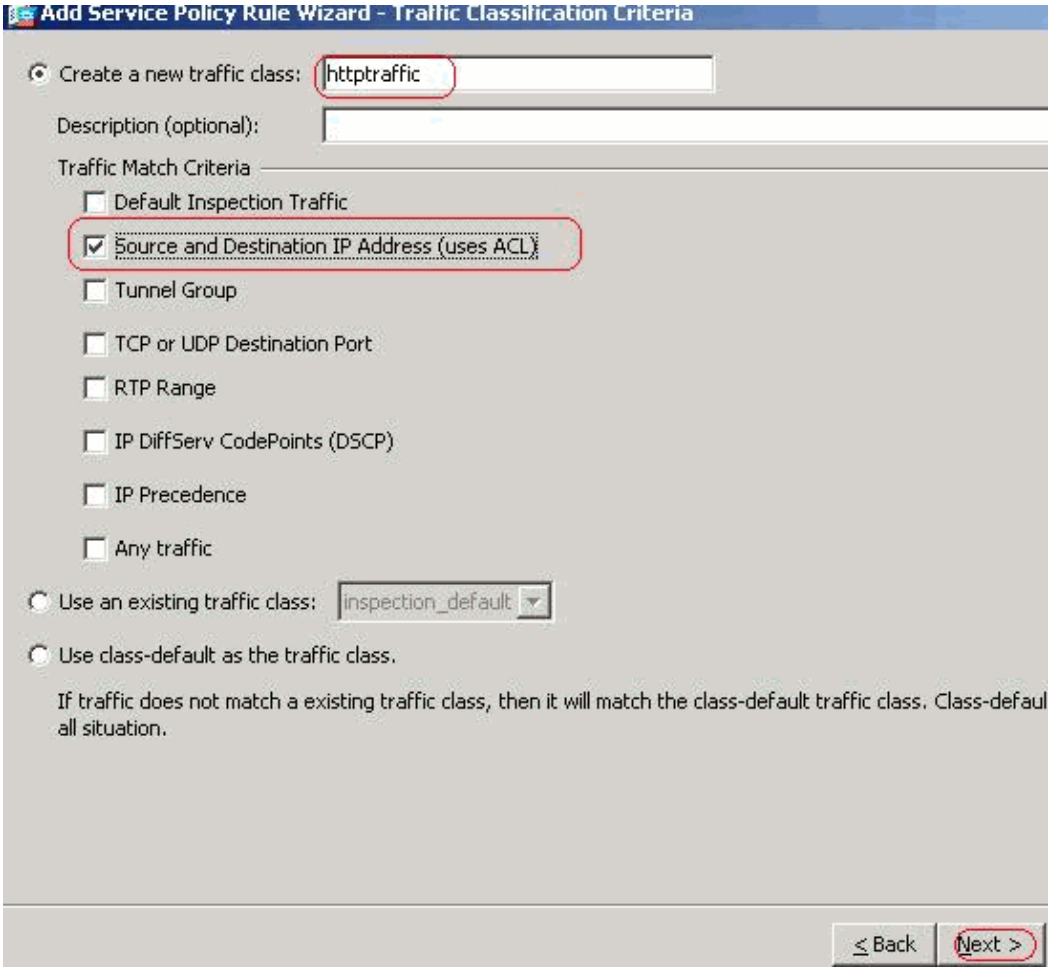


   a. **HTTP Traffic**

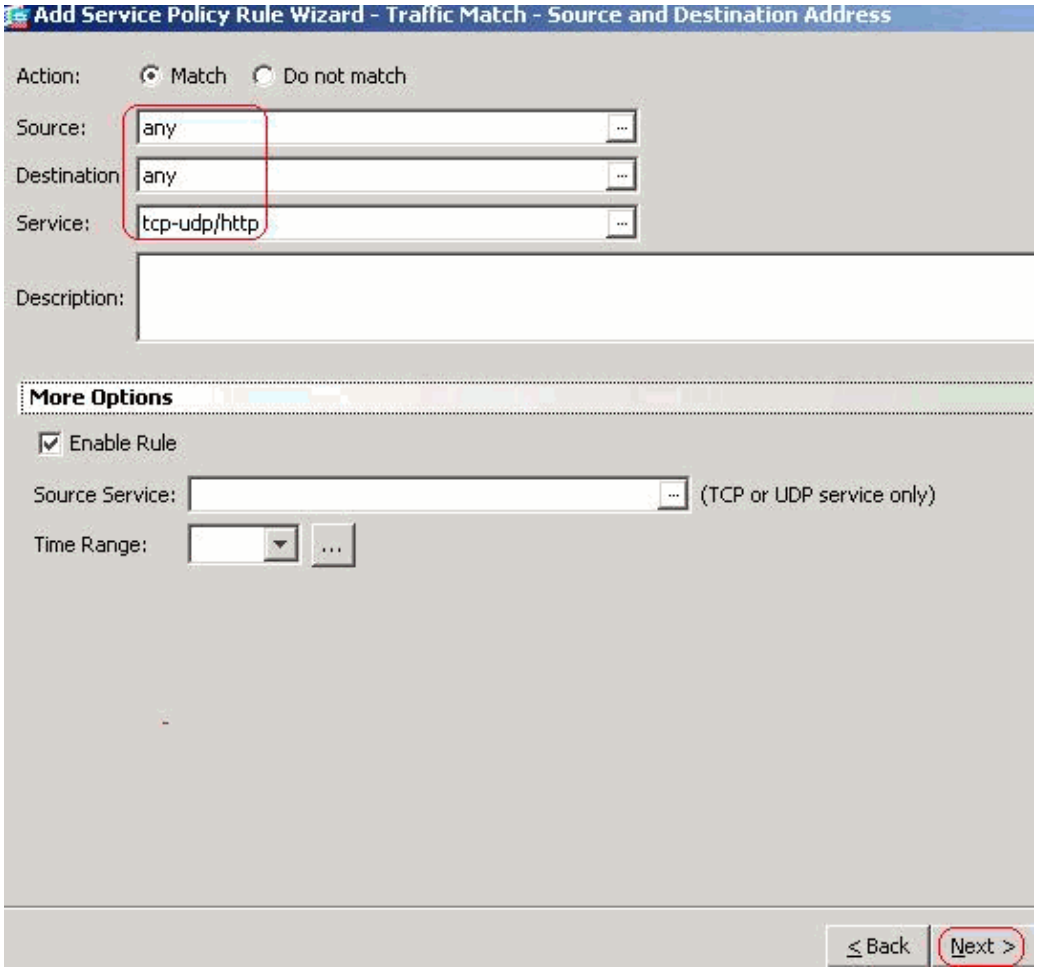
      a. Choose the **Interface** radio button with inside interface from the drop down menu and Policy Name as **inside-policy**. Click **Next**.



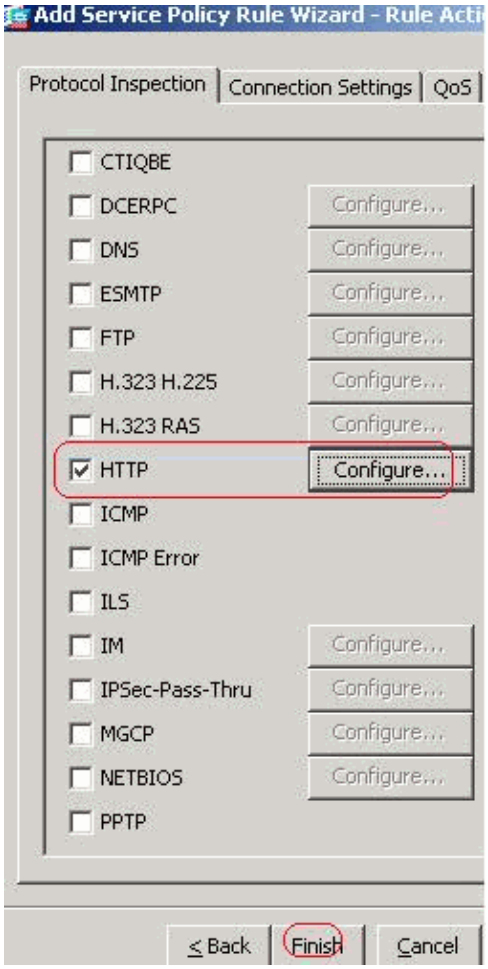
b. Create a class map **httptraffic** and check the **Source** and **Destination IP Address (uses ACL)**. Click **Next**.



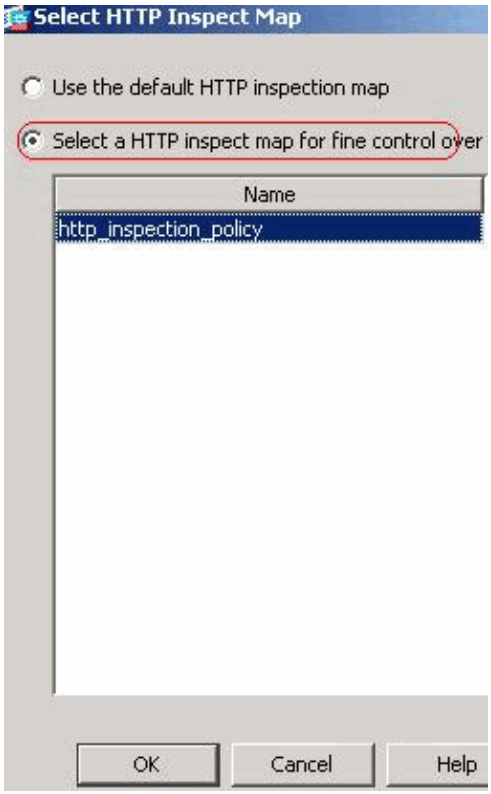
c. Choose the Source and Destination as any with service as **tcp−udp/http**. Click **Next**.



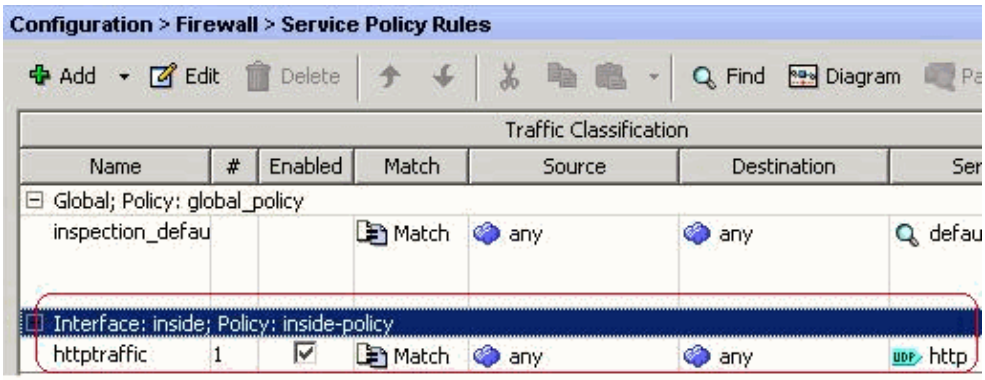
d. Check the **HTTP** radio button and click **Configure**.



e. Check the radio button **Select a HTTP inspect map for the control over inspection** as shown. Click **OK**.

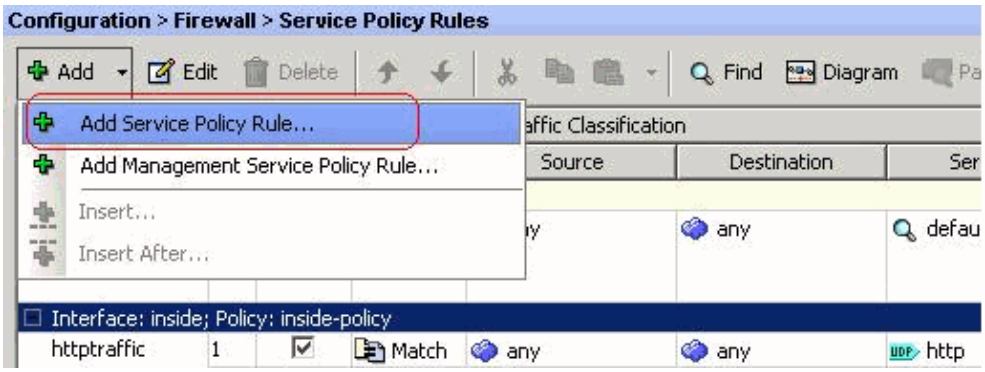


f. Click **Finish**.

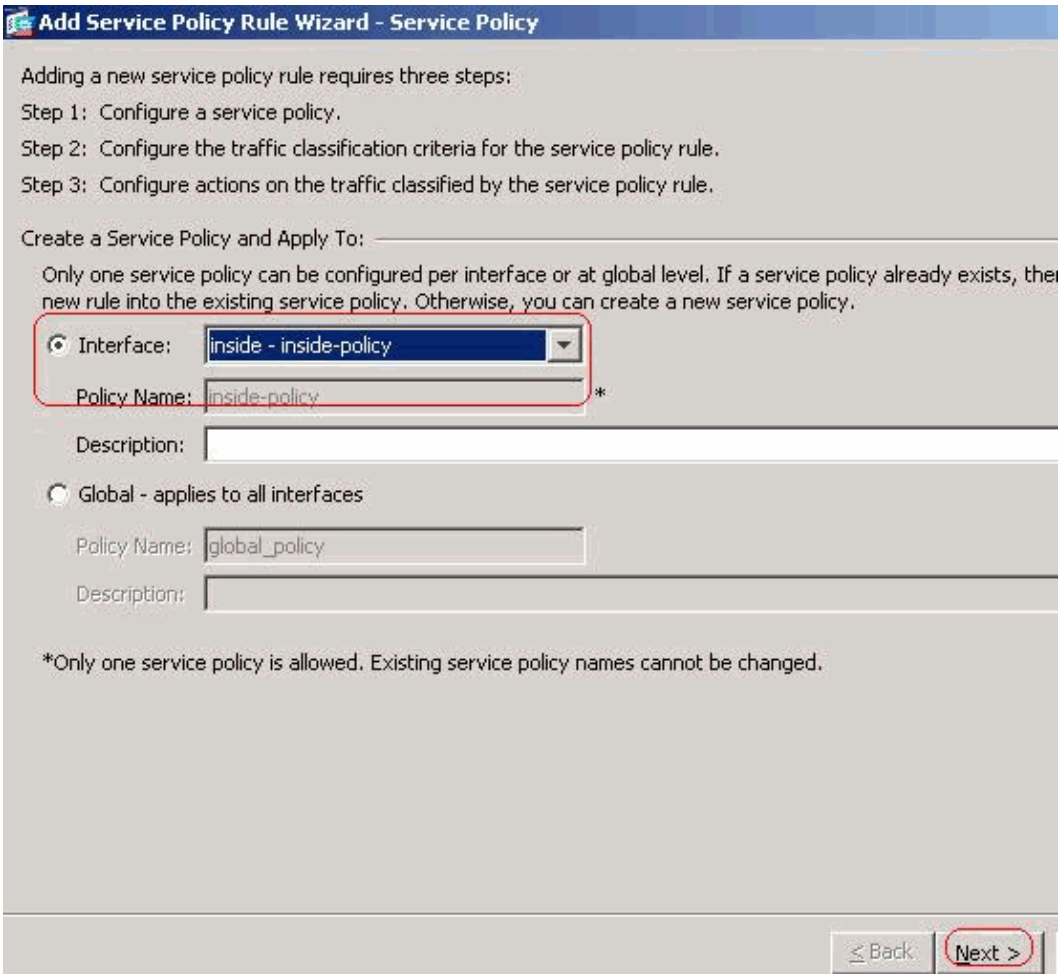


b. **Port 8080 Traffic**

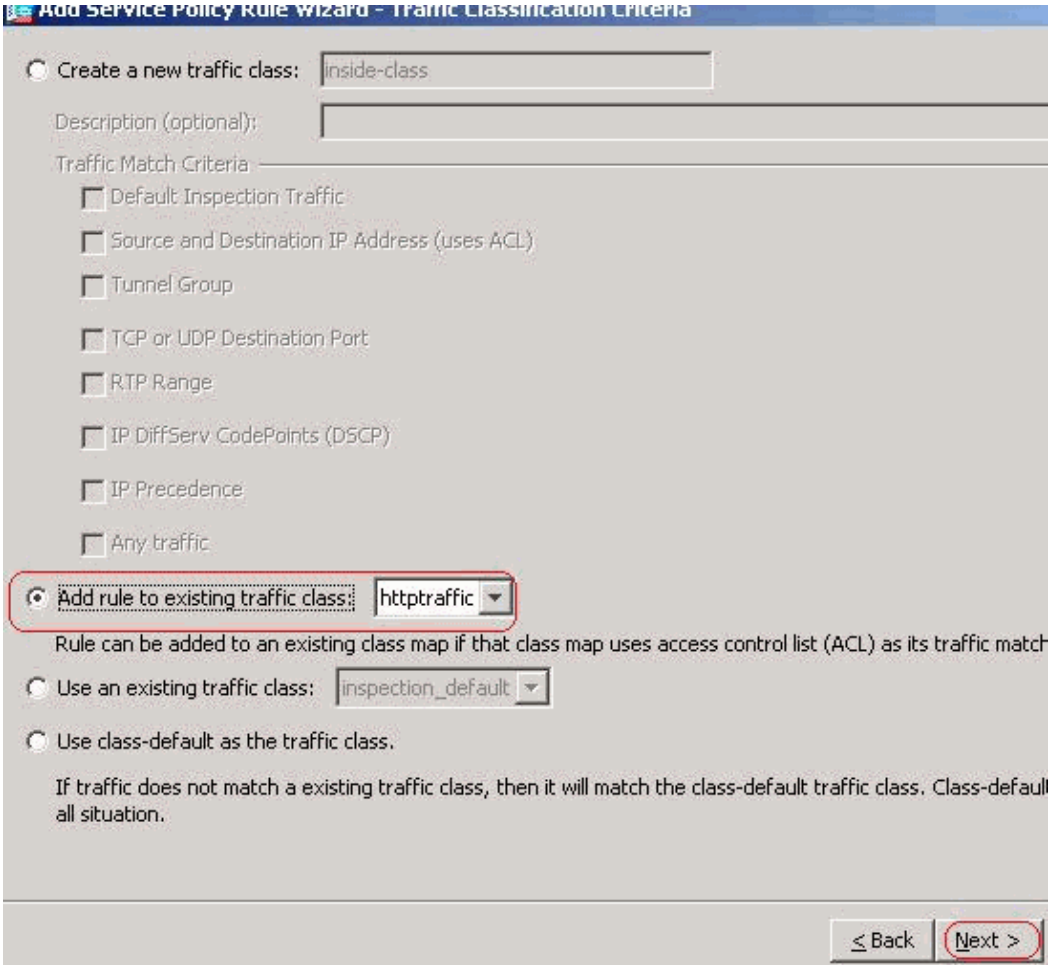
a. Again, choose **Add > Add Service Policy Rule**.



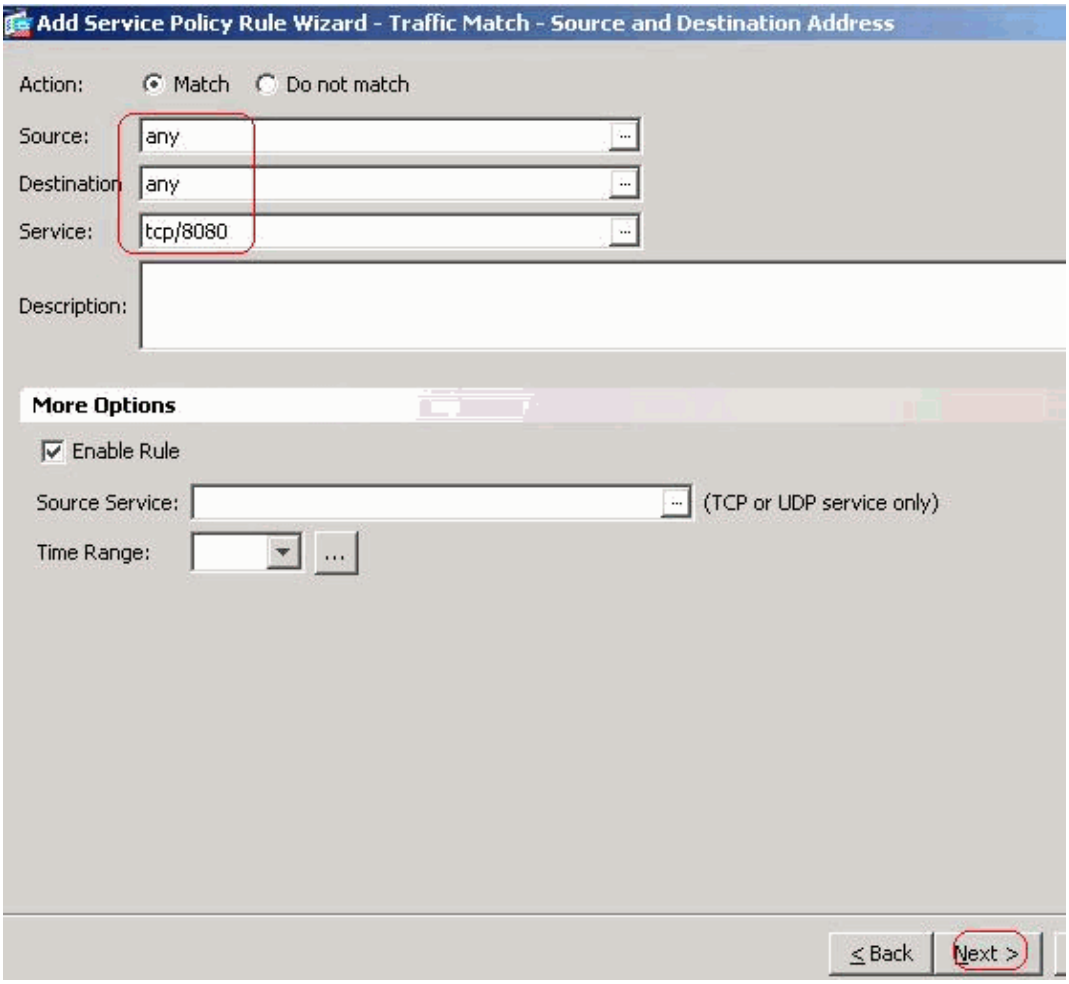
b. Click **Next**.



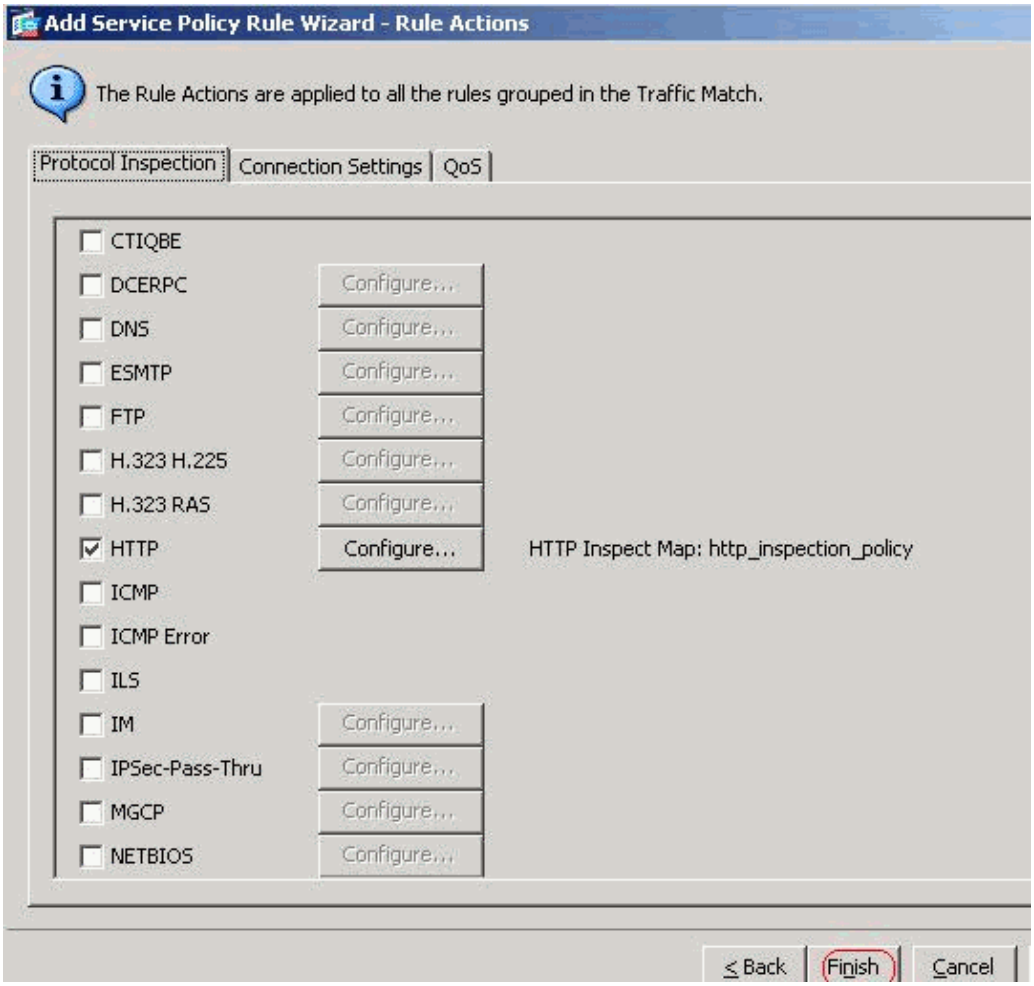
c. Choose the radio button **Add rule to existing traffic class** and choose **httptraffic** from the drop down menu. Click **Next**.

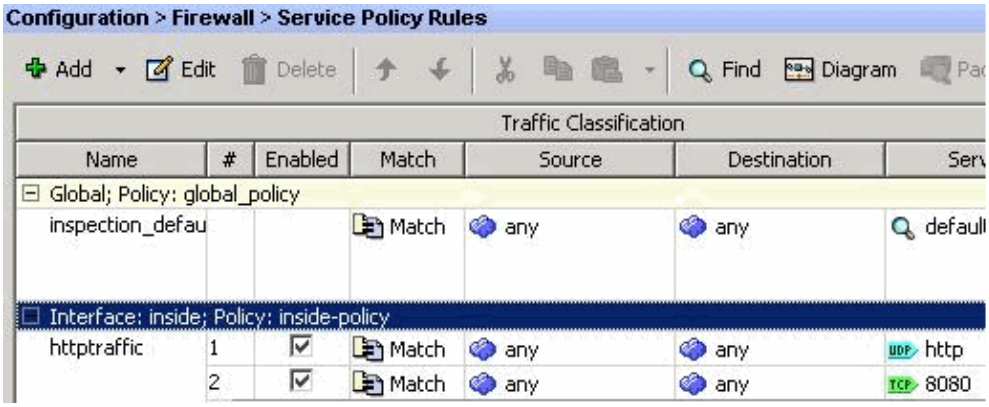


d. Choose the Source and Destination as any with **tcp/8080**. Click **Next**.



e. Click **Finish**.





Click **Apply**.

Equivalent CLI Configuration

ASA CLI Configuration

```
ciscoasa#configure terminal
ciscoasa(config)#access-list inside_mpc extended permit tcp any any eq www

ciscoasa(config)#access-list inside_mpc extended permit tcp any any eq 8080
ciscoasa(config)#class-map httptraffic
ciscoasa(config-cmap)#match access-list inside_mpc
ciscoasa(config-cmap)#exit
ciscoasa(config)#policy-map inside-policy
ciscoasa(config-pmap)#class httptraffic
```

```
ciscoasa(config-pmap-c)#inspect http http_inspection_policy
ciscoasa(config-pmap-c)#exit
ciscoasa(config-pmap)#exit
ciscoasa(config)#service-policy inside-policy interface inside
```

Verify

Use this section in order to confirm that your configuration works properly.

The Output Interpreter Tool (registered customers only) (OIT) supports certain **show** commands. Use the OIT to view an analysis of **show** command output.

- **show running-config regex** Shows the regular expressions that have been configured

```
ciscoasa#show running-config regex
regex urllist1 ".*\.([Ee][Xx][Ee]|[Cc][Oo][Mm]|[Bb][Aa][Tt]) HTTP/1.[01]"
regex urllist2 ".*\.([Pp][Ii][Ff]|[Vv][Bb][Ss]|[Ww][Ss][Hh]) HTTP/1.[01]"
regex urllist3 ".*\.([Dd][Oo][Cc]|[Xx][Ll][Ss]|[Pp][Pp][Tt]) HTTP/1.[01]"
regex urllist4 ".*\.([Zz][Ii][Pp]|[Tt][Aa][Rr]|[Tt][Gg][Zz]) HTTP/1.[01]"
regex domainlist1 "\.yahoo\.com"
regex domainlist2 "\.myspace\.com"
regex domainlist3 "\.youtube\.com"
regex contenttype "Content-Type"
regex applicationheader "application/.*"
ciscoasa#
```

- **show running-config class-map** Shows the class maps that have been configured

```
ciscoasa#show running-config class-map
!
class-map type regex match-any DomainBlockList
 match regex domainlist1
 match regex domainlist2
 match regex domainlist3
class-map type inspect http match-all BlockDomainsClass
 match request header host regex class DomainBlockList
class-map type regex match-any URLBlockList
 match regex urllist1
 match regex urllist2
 match regex urllist3
 match regex urllist4
class-map inspection_default
 match default-inspection-traffic
class-map type inspect http match-all AppHeaderClass
 match response header regex contenttype regex applicationheader
class-map httptraffic
 match access-list inside_mpc
class-map type inspect http match-all BlockURLsClass
 match request uri regex class URLBlockList
!
ciscoasa#
```

- **show running-config policy-map type inspect http** Shows the policy maps that inspects the http traffic that have been configured

```
ciscoasa#show running-config policy-map type inspect http
!
policy-map type inspect http http_inspection_policy
 parameters
  protocol-violation action drop-connection
 class AppHeaderClass
  drop-connection log
 match request method connect
  drop-connection log
```

```
 class BlockDomainsClass
  reset log
 class BlockURLsClass
  reset log
!
ciscoasa#
```

- **show running−config policy−map** Displays all the policy−map configurations as well as the default policy−map configuration

```
ciscoasa#show running−config policy−map
!
policy−map type inspect dns preset_dns_map
 parameters
  message−length maximum 512
policy−map type inspect http http_inspection_policy
 parameters
  protocol−violation action drop−connection
 class AppHeaderClass
  drop−connection log
 match request method connect
  drop−connection log
 class BlockDomainsClass
  reset log
 class BlockURLsClass
  reset log
policy−map global_policy
 class inspection_default
  inspect dns preset_dns_map
  inspect ftp
  inspect h323 h225
  inspect h323 ras
  inspect netbios
  inspect rsh
  inspect rtsp
  inspect skinny
  inspect esmtp
  inspect sqlnet
  inspect sunrpc
  inspect tftp
  inspect sip
  inspect xdmcp
policy−map inside−policy
 class httptraffic
  inspect http http_inspection_policy
!
ciscoasa#
```

- **show running−config service−policy** Displays all currently running service policy configurations

```
ciscoasa#show running−config service−policy
service−policy global_policy global
service−policy inside−policy interface inside
```

- **show running−config access−list** Displays the access−list configuration that runs on the security appliance

```
ciscoasa#show running−config access−list
access−list inside_mpc extended permit tcp any any eq www

access−list inside_mpc extended permit tcp any any eq 8080
ciscoasa#
```

Troubleshoot

This section provides information you can use to troubleshoot your configuration.

Note: Refer to Important Information on Debug Commands before you use **debug** commands.

- **debug http** Shows the debug messages for HTTP traffic

Related Information

- **Cisco ASA 5500 Series Adaptive Security Appliances Support**
- **Cisco Adaptive Security Device Manager (ASDM) Support**
- **Cisco PIX 500 Series Security Appliances Support**
- **Cisco PIX Firewall Software**
- **Cisco Secure PIX Firewall Command References**
- **Security Product Field Notices (including PIX)**
- **Requests for Comments (RFCs)**
- **Technical Support & Documentation − Cisco Systems**

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