Gauntlet® for IRIX® Netperm Table Reference Guide

Version 4.1

Document Number 007-3822-001

CONTRIBUTORS

Written by Renate Kempf based on material from Trusted Information Systems, Inc. Production by Mary Macanek

Engineering contributions by Jessica Humphreys, Ed Mascarenhas, Dj Padzensky, and Mayank Vasa.

St. Peter's Basilica image courtesy of ENEL SpA and InfoByte SpA. Disk Thrower image courtesy of Xavier Berenguer, Animatica.

© 1998, Silicon Graphics, Inc.— All Rights Reserved

The contents of this document may not be copied or duplicated in any form, in whole or in part, without the prior written permission of Silicon Graphics, Inc.

RESTRICTED RIGHTS LEGEND

Use, duplication, or disclosure of the technical data contained in this document by the Government is subject to restrictions as set forth in subdivision (c) (1) (ii) of the Rights in Technical Data and Computer Software clause at DFARS 52.227-7013 and/or in similar or successor clauses in the FAR, or in the DOD or NASA FAR Supplement. Unpublished rights reserved under the Copyright Laws of the United States. Contractor/manufacturer is Silicon Graphics, Inc., 2011 N. Shoreline Blvd., Mountain View, CA 94043-1389.

Silicon Graphics and the Silicon Graphics logo are registered trademarks of Silicon Graphics, Inc. UNIX is a registered trademark in the United States and other countries, licensed exclusively through X/Open Company, Ltd. Gauntlet is a trademark of Trusted Information Systems, Inc. Lotus Notes is a registered trademark of Lotus Development Corporation. Windows is a registered trademark and Windows NT and NewShow are trademarks of Microsoft Corporation. RealAudio ia a registered trademark and RealVideo is a trademark of Real Networks, Inc. VODLive is a trademark of VDOnet Corporation. Netscape Navigator is a registered trademark of Netscape Communications, Inc. Java and JavaScript are trademarks of Sun Microsystems, Inc.

Gauntlet® for IRIX® Netperm Table Reference Guide Document Number 007-3822-001

Contents

About This Guide xix Audience xix Structure of This Guide xix Conventions xx 1. **Understanding the Netperm Table** 1 Policy Rules 2 Application-Specific Rules 2 Rules for Proxies 2 Gauntlet Applications and the Netperm Table 3 How the Netperm Table is Used 3 2. Netperm Table Setup 5 Precedence in Netperm Tables 6 Netperm Table Format 6 Comments in Netperm Tables 7 Netperm Table Keywords 7 Attributes in Netperm Tables 9 3. **Policies and Services** 11 Creating New Policies 11 How to Create a New Policy 11 Example for Creating a New Policy 12 Adding Proxy Services 13 Denying Proxy Services 14

4.

```
Denying Services by Network or Host 14
   Denying Access From a Host or Network 15
       Denying Access by Proxy 15
       Denying Access From a Host or Network 15
   Denying Access to a Host, Network, or Proxy 16
       Denying Access by Proxy 16
       Denying General Access to a Host or Network 16
Controlling Services by User, Group, or Time 16
   Controlling Services by User or Group 17
   Controlling Services by Operation 17
Attribute Reference 19
accept-count 20
   Syntax 20
   Example 20
admin-user 21
   Syntax 21
   Example 21
   Gauntlet Firewall Manager 21
agent 22
   Syntax 22
   Example 23
   Gauntlet Firewall Manager 23
anon-user 24
   Syntax 24
   Example 24
authenticate (all but pcxdpp) 25
   Syntax 25
   Example 25
   Gauntlet Firewall Manager 25
authenticate (pcxdpp only) 26
   Syntax 26
   Example 26
```

```
authserver 27
   Syntax 27
   Example 27
   Gauntlet Firewall Manager 27
authtype 28
backend 28
   Syntax 28
   Example 28
badadmin 29
   Syntax 29
   Example 29
   Gauntlet Firewall Manager 29
baddir 30
   Syntax 30
   Example 30
   Gauntlet Firewall Manager 30
badsleep 31
   Syntax 31
   Example 31
bind-address 32
   Syntax 32
   Example 32
bind-inside 33
   Syntax 33
   Example 33
block 34
   Syntax 34
   Example 34
buffer-size 35
   Syntax 35
   Example 35
```

```
check-server-ip 36
   Syntax 36
   Example 37
child-limit 38
   Syntax 38
   Example 38
   Gauntlet Firewall Manager 38
circuitexec 39
   Syntax 39
   Example 39
   Gauntlet Firewall Manager 39
circuitsperuser 40
   Syntax 40
   Example 40
   Gauntlet Firewall Manager 40
circuit-timeout 41
   Syntax 41
   Example 41
   Gauntlet Firewall Manager 41
client 42
   Syntax 42
   Example 43
   Gauntlet Firewall Manager 43
connect-timeout 44
   Syntax 44
   Example 44
   Gauntlet Firewall Manager 44
content-failunsafe 45
   Syntax 45
   Example 45
```

```
content-ftpcheck 46
   Syntax 46
   Example 46
   Gauntlet Firewall Manager 46
contentscan-msg 47
   Syntax 47
   Example 47
   Gauntlet Firewall Manager 47
cvp-handling 48
   Syntax 48
   Example 48
   Gauntlet Firewall Manager 48
cvp-server 49
   Syntax 49
   Example 49
   Gauntlet Firewall Manager 49
cyber_masks 50
   Syntax 50
   Example 51
   Gauntlet Firewall Manager 51
data-port 52
   Syntax 52
   Example 52
database (authsrv only) 53
   Syntax 53
   Example 53
database (pcxdpp only) 54
   Syntax 54
   Example 54
denial-msg 55
   Syntax 55
   Example 55
   Gauntlet Firewall Manager 55
```

```
denydest-msg 56
   Syntax 56
   Example 56
   Gauntlet Firewall Manager 56
deny-spam 57
   Syntax 57
   Example 57
   Blocks all messages from spammer@spam.com 57
destination 58
   Syntax 58
   Example 58
   Gauntlet Firewall Manager 59
directory 60
   Syntax 60
   Example 60
   Gauntlet Firewall Manager 60
display 61
   Syntax 61
   Example 61
dssagent 62
   Syntax 62
   Example 62
dsshost 63
   Syntax 63
   Example 63
   Gauntlet Firewall Manager 63
dsskey 64
   Syntax 64
   Example 64
dssport 65
   Syntax 65
   Example 65
```

```
enable 66
   Syntax 66
   Example 67
   Gauntlet Firewall Manager 67
exec 68
   Syntax 68
   Example 68
extended-permissions 69
   Syntax 69
   Example 69
   Gauntlet Firewall Manager 69
feature 70
   Syntax 1 70
   Example 71
   Gauntlet Firewall Manager 71
   Syntax 2 71
   Example 71
   Gauntlet Firewall Manager 71
force_source_address 72
   Syntax 72
   Example 72
   Gauntlet Firewall Manager 72
forward 73
   Syntax 73
   Example 74
forward (authenIP only) 75
   Syntax 75
   Example 77
   Gauntlet Firewall Manager 77
function 78
   Syntax 78
   Example 80
   Gauntlet Firewall Manager 80
```

```
groupid 81
   Syntax 81
   Example 81
   Gauntlet Firewall Manager 81
handoff 82
   Syntax for ftp-gw 82
   Example 82
   Gauntlet Firewall Manager 82
   Syntax for http-gw 83
   Example 83
   Gauntlet Firewall Manager 83
header 84
   Syntax 84
   Example 85
help-msg 86
   Syntax 86
   Example 86
   Gauntlet Firewall Manager 86
hosts (authory only) 87
   Syntax 87
   Example 87
hosts (all but authsrv) 88
   Syntax 88
   Example 89
   Gauntlet Firewall Manager 89
if-inside 90
   Syntax 90
   Example 90
   Gauntlet Firewall Manager 90
if-outside 91
   Syntax 91
   Example 91
   Gauntlet Firewall Manager 92
```

```
keepalive-timeout 93
   Syntax 93
   Example 93
   Gauntlet Firewall Manager 93
local 94
   Syntax 94
   Example 95
   Gauntlet Firewall Manager 95
local-domain 96
   Syntax 96
   Example 96
log 97
   Syntax 97
   Example 98
   Gauntlet Firewall Manager 98
log (smap only) 99
   Syntax 99
   Example 99
manager 100
   Syntax 100
   Example 100
   Gauntlet Firewall Manager 100
maxbad 101
   Syntax 101
   Example 101
maxbytes 102
   Syntax 102
   Example 102
maxchildren 103
maxrecip 103
   Syntax 103
   Example 103
```

```
maxsessions 104
   Syntax 104
   Example 104
NetShow 105
   Syntax 105
   Example 105
   Gauntlet Firewall Manager 105
nobogus 106
   Syntax 106
   Example 106
operation 107
   Syntax 107
   Example 108
   Gauntlet Firewall Manager 108
ourname 109
   Syntax 109
   Example 109
password change 110
   Syntax 110
   Example 110
   Gauntlet Firewall Manager 111
password-timeout 112
   Syntax 112
   Example 112
peer-net 113
   Syntax 113
   Example 113
   Gauntlet Firewall Manager 113
permit-relay 114
   Syntax 114
   Example 114
```

```
pop-server 115
   Syntax 115
   Example 115
   Gauntlet Firewall Manager 115
port 116
   Syntax 116
   Example 117
   Gauntlet Firewall Manager 117
ports 118
   Syntax 118
   Example 119
printer 120
   Syntax 120
   Example 120
   Gauntlet Firewall Manager 120
prompt 121
   Syntax 121
   Example 121
   Gauntlet Firewall Manager 121
proxy 122
   Syntax 122
   Examples 122
   Gauntlet Firewall Manager 123
quarantine-dir 124
   Syntax 124
   Example 124
   Gauntlet Firewall Manager 124
RealAudio 125
   Syntax 125
   Example 125
   Gauntlet Firewall Manager 125
```

```
require-source 126
   Syntax 126
   Example 126
securidhost 127
   Syntax 127
   Example 127
   Gauntlet Firewall Manager 127
send-broken-post-requests 128
   Syntax 128
   Example 128
   Gauntlet Firewall Manager 128
sendmail 129
   Syntax 129
   Example 129
   Gauntlet Firewall Manager 129
server 130
   Syntax 130
   Example 131
   Gauntlet Firewall Manager 131
shellfile 132
   Syntax 132
   Example 132
snmp-manager 133
   Syntax 133
   Example 133
   Gauntlet Firewall Manager 133
system-contact 134
   Syntax 134
   Example 134
   Gauntlet Firewall Manager 134
```

```
system-location 135
   Syntax 135
   Example 135
   Gauntlet Firewall Manager 135
system-name 136
   Syntax 136
   Example 136
   Gauntlet Firewall Manager 136
tempdir 137
   Syntax 137
   Example 137
timeout 138
   Syntax 138
   Example 138
   Gauntlet Firewall Manager 138
tmp-directory 139
   Syntax 139
   Example 139
transparency 140
   Syntax 140
   Example 140
unknown 141
   Syntax 141
   Example 141
url 142
   Syntax 143
   Example 143
   Gauntlet Firewall Manager 143
url-filter 144
   Syntax 144
   Example 144
   Gauntlet Firewall Manager 144
```

```
userid 145
   Syntax 145
   Example 145
   Gauntlet Firewall Manager 145
user-servers 146
   Syntax 146
   Example 146
   Gauntlet Firewall Manager 146
user-timeout 147
   Syntax 147
   Example 147
   Gauntlet Firewall Manager 147
VDOLive 148
   Syntax 148
   Example 148
   Gauntlet Firewall Manager 148
virtual-net 149
   Syntax 149
   Example 150
   Gauntlet Firewall Manager 150
wakeup 151
   Syntax 151
   Example 151
   Gauntlet Firewall Manager 151
welcome-msg 152
   Syntax 152
   Example 152
   Gauntlet Firewall Manager 152
work_time 153
   Syntax 153
   Example 154
   Gauntlet Firewall Manager 154
```

```
Syntax 155
         Example 155
         Gauntlet Firewall Manager 155
     xgateway 156
         Syntax 156
         Example 156
         Gauntlet Firewall Manager 156
5.
     Keyword Reference 157
     ahttp-gw 157
     aol-gw 158
     alerts 158
     authenIP 158
     authsrv 159
     ck-gw 160
     cserve-gw 161
     finger 161
     ftp-gw 162
     gopher-gw 163
     gui 163
     http-gw 164
     info-gw 165
     ldap-gw 165
     lnotes-gw 166
     login-sh 166
     lp-gw 167
     mmp 167
     mssql-gw 168
     netacl 168
     netconfig 169
     NetShow 169
     nntp-gw 170
     pcxdpp 170
```

xforwarder 155

plug-gw 171 pop3-gw 171 radm 172 RealAudio 172 rlogin-gw 172 rsh-gw 173 smap 174 smapd 174 snmpd 175 snmp-gw 175 ssl-gw 176 strmwrks-gw 176 syb-gw 177 tn-gw 177 VDOLive 178 whois 179 x-gw 179 Index 181

About This Guide

The *Netperm Table Reference Guide* describes the Gauntlet Firewall network permissions (netperm) table and explains how to use it.

Note: Trusted Information Systems, the manufacturer of the Gauntlet product, recommends using the Gauntlet Firewall Manager graphical user interface to configure your firewall. However, if you have an unusual configuration or need to configure an option that you cannot set through the Gauntlet Firewall Manager, the netperm table is available.

Audience

This reference guide is intended for firewall administrators. It assumes familiarity with UNIX system administration, networking, network administration, and basic firewall concepts. System administrators should be familiar with TCP/IP, domain name service, sendmail, and router configuration.

Structure of This Guide

This reference guide has the following chapters:

- Chapter 1, "Understanding the Netperm Table," describes the netperm table, including policy and application-specific rules.
- Chapter 2, "Netperm Table Setup," explains how to modify the netperm table and explains netperm table syntax.
- Chapter 3, "Policies and Services," explains how to create new policies, add or deny proxy services, deny services by network or host, and control services by user, group, or time.
- Chapter 4, "Attribute Reference," lists all netperm table attributes and provides the information you need to use them.

• Chapter 5, "Keyword Reference," lists each netperm table keyword and the attributes it can use.

Conventions

These type conventions and symbols are used in this guide:

Italics— executable names, filenames, IRIX commands, manual/book titles, new terms, utilities, variable command-line arguments, and variables to be supplied by the user in code examples, and syntax statements.

Fixed-width type—Code examples, prompts, and onscreen text.

Bold fixed-width type—User input, including keyboard keys, printing and nonprinting.

> (Single angle bracket)—Indicates "downward" movement in the graphical user interface. For example, "Environment > Firewall Access tab > UserName" means "In the Environment window, click the Firewall Access tab, then choose User Name."

Understanding the Netperm Table

The netperm table (/usr/local/etc/netperm-table) contains configuration information for the Gauntlet Firewall. The kernel, proxies, and other applications read configuration information from this table.

The recommended method of configuring the Gauntlet Firewall is through the Gauntlet Firewall Manager graphical user interface. Edit the netperm table only if you:

- · Have an unusual configuration, such as four network interface cards
- Need to configure an option that you cannot set through the Gauntlet Firewall Manager

Changes you make to the netperm table may conflict with the settings generated by the Gauntlet Firewall Manager.

This chapter describes the Gauntlet Firewall's network permissions (netperm) table by discussing the different types of rules:

- "Policy Rules" on page 2
- "Application-Specific Rules" on page 2

Policy Rules

Policies are collections of general configuration information. Policies allow you to closely map your security requirements to the configuration of your Gauntlet firewall. Gauntlet configuration policies often include information such as:

- Types of proxies that the firewall can start
- Permitted (or denied) destinations for requests
- Authentication requirements

The source address of the request is the basis for a policy. You define policies for a set of hosts. You can easily use the same set of rules for a group of hosts by creating a generic policy describing what these hosts can and cannot do.

Application-Specific Rules

In addition to policy rules, the netperm table includes configuration information for proxies and other firewall applications, such as:

- Userid and groupid under which a proxy should run
- Directories that the proxies should use as their root directories
- Messages that proxies should display when denying or accepting requests
- Length of idle time before the proxies should terminate the connection
- More specific lists of permitted and denied destination networks for a particular proxy

Rules for Proxies

Suppose, for example, that the SMAP proxy reads the netperm table and determines the userid under which it should run and the directory into which it should place mail. The TELNET proxy reads the netperm table to determine how long a session must be idle before it disconnects the session. The specific configuration options for each proxy are described in Chapter 4, "Attribute Reference."

You can also include rules to permit or deny a particular service for requests to specific addresses or networks. For example, you can configure the HTTP proxy to deny requests

to a particular host or network. All of the other proxies, such as the smapd server, continue to use the generic policy and send information to that site, while the HTTP proxy denies requests to that site.

Because the proxies and applications read the netperm table from top to bottom and stop on the first match, you must put proxy-specific rules before the generic policies. When the relevant proxy parses the configuration information, it uses the proxy specific rule rather than the more general policy rule.

For example, the FTP proxy includes a specific rule that denies requests to the destination ftp.bigu.edu. You have created a policy for untrusted hosts, near the bottom of the netperm table, which includes a rule that allows all proxies and applications to send to any destination. Because the more restrictive rule is above the generic policy in the netperm table, the FTP proxy uses the restrictive rule and denies requests to ftp.bigu.edu.

Gauntlet Applications and the Netperm Table

Other Gauntlet applications such as the authentication server and the IP screening utility also read configuration information from the netperm table. For example, configuration information in the netperm table tells the authentication server how many incorrect login attempts to allow before disabling an account.

How the Netperm Table is Used

As part of the startup process, a proxy or application reads the netperm table looking for applicable configuration rules. It parses the table from top to bottom, looking for rules that match its name. It also matches wildcard rules that apply to all applications. For example, the TELNET proxy (tn-gw) looks for rules that match tn-gw and *.

The proxy goes through these steps:

- 1. It uses the rules to determine if it can accept the request from the source address.
- 2. It determines whether the requested service is an explicitly permitted service.
 - If the request is not permitted, the proxy denies it.
 - If the request is permitted, the proxy uses the other rules to determine whether it has to authenticate the request, and whether it can send the request to the specified destination.

The application also finds and uses rules for itself in the netperm table.

For example, using the default untrusted policy, the TELNET proxy allows TELNET requests from any outside network to any destination. The proxy also uses the untrusted policy to determine that it has to authenticate the user and it gets information about which server it should use to authenticate the user.

Netperm Table Setup

This chapter provides important information about netperm table setup. You can modify the netperm table using your favorite text editor.

Note: Be sure to make a backup copy of the original netperm table. Do *not* edit in the section labeled Computer Generated Area (between the #BEGIN WARNING and #END WARNING marks).

With a few exceptions, you do not need to restart the proxies for the changes to take effect. Each time the proxies start new processes, they check the last modification time of the netperm table. If the time has changed, the proxies reread the netperm table. However, there are several proxies that must be restarted when you make changes to certain attributes. Chapter 4, "Attribute Reference," lists each attribute and notes whether restart is necessary.

This chapter contains information on the netperm table syntax in the following sections:

- "Precedence in Netperm Tables" on page 6
- "Netperm Table Format" on page 6
- "Comments in Netperm Tables" on page 7
- "Netperm Table Keywords" on page 7
- "Attributes in Netperm Tables" on page 9

Precedence in Netperm Tables

Applications and proxies read the rules from the top of the table to the bottom. They use the first rule that applies for a particular attribute. If there are multiple rules in the table that could apply for an attribute, the application uses the first one it finds.

For example, a netperm table attribute contains the following rule:

```
smapd: userid uucp
```

and later in the file contains the rule:

```
smapd: userid mail
```

When *smapd* parses the netperm table, it uses the first rule it finds, and runs as the user uucp.

Netperm Table Format

Each line in the netperm table contains a separate configuration rule in the format:

keyword: attribute valuelist

where:

- keyword indicates the application to which the rule applies. The wildcard (*) indicates the rule is valid for all applications and proxies. A comma-separated list of multiple keywords indicates the rules applies to all of the applications in the list. The keyword usually matches the name of the service or the value of the -as flag in the startup script.
- *attribute* is a configuration parameter for the application or proxy.
- valuelist is the value for the specific configuration parameter. Some attributes allow multiple values.

A rule must fit on a single line. The length of a line varies by operating system, but is usually around 1,024 bytes. There is no provision for continuing lines.

The keyword(s), attribute, and value list can be separated by spaces or tabs.

Comments in Netperm Tables

A hash mark (#) at the beginning of a line indicates a comment. Applications ignore any text between the hash mark at the beginning of the line and the end of the line. If the hash mark appears later in the line, applications treat the hash mark as a normal character. Applications treat the following line as a comment:

```
#set timeout to five minutes
```

Applications treat the following line as invalid syntax:

```
tn-gw: timeout 3000 #set timeout to five minutes
```

Note: Some default comments in the netperm table include information for the substitution driver. They begin with #%subs-start and end with #%subs-end. Do *not* delete these lines.

Netperm Table Keywords

The following table lists some common keywords for proxies and other applications. You can create your own keywords. Be sure that the keyword matches the value for the -as name flag you used when starting the proxy in a startup script

 Table 2-1
 Common Keywords and Associated Applications

Keyword	Application		
ahttp-gw	Authenticating HTTP proxy (using the HTTP proxy)		
aol-gw	America Online proxy (using the plug proxy with -as)		
alerts	IPFS		
authenIP	IP screening configuration applications		
authsrv	Authentication server		
ck-gw	Circuit proxy		
cserve-gw	CompuServe proxy (using the plug proxy with -as)		
finger	Proxy for finger.		
ftp-gw	FTP proxy		

Table 2-1 (continued)	Common Keywords and Associated Applications		
Keyword	Application		
gopher-gw	Gopher proxy (using the HTTP proxy with -as)		
gui	Gauntlet Firewall Manager		
http-gw	HTTP proxy		
info-gw	Web and Gopher server (Info proxy)		
lnotes-gw	Lotus Notes proxy (using the plug proxy with -as)		
login-sh	Login shell		
lp-gw	Line printer proxy		
mssql-gw	Microsoft SQL proxy.		
mbase-gw	MediaBase proxy		
mmp	Multimedia proxy		
netacl-fingerd	Network access control proxy running finger service		
netacl-ftpd	Network access control proxy running FTP service		
netacl-rlogind	Network access control proxy running rlogin service		
netacl-telnetd	Network access control proxy running telnet service		
netconfig	IP screening configuration applications		
NetShow	NetShow proxy (using the mmp proxy)		
nntp-gw	NNTP news proxy (using the plug proxy with -as)		
pcxdpp	PC Extender DPP daemon		
plug-gw	Plug proxy		
policy-name	Policy		
pop3-gw	POP3 mail proxy		
radm	Remote administration scripts		
RealAudio	RealAudio/RealVideo proxy (using the mmp proxy)		
rlogin-gw	Rlogin proxy		

 Table 2-1 (continued)
 Common Keywords and Associated Applications

Keyword	Application		
rsh-gw	Remote shell proxy		
smap	SMTP mail client		
smapd	SMTP mail server		
snmpd	SNMP network management agent		
snmp-gw	SNMP network management proxy		
ssl-gw	SSL proxy (using the plug proxy with -as)		
strmwrks-gw	Streamworks proxy		
syb-gw	Sybase proxy		
tn-gw	TELNET proxy		
VDOLive	VDOLive proxy (using the mmp proxy)		
whois	whois proxy (using the plug proxy with -as)		
x-gw	X11 proxy		

Attributes in Netperm Tables

Attributes vary by proxy and application, though some attributes are common to multiple applications. Consult the reference information in Chapter 4, "Attribute Reference," for more information on applicable attributes and values.

Policies and Services

This chapter tells you how to create new policies, add or deny proxy services, deny services by network or host, and control services by user, group, or time. The chapter has the following sections:

- "Creating New Policies" on page 11
- "Adding Proxy Services" on page 13
- "Denying Proxy Services" on page 14
- · "Denying Services by Network or Host" on page 14
- · "Controlling Services by User, Group, or Time" on page 16

Creating New Policies

You can create additional policies to fit your security requirements for different groups of inside hosts and networks. Remember that all policies are based on the source address of the request. Creating a new policy involves modifying the netperm table.

How to Create a New Policy

To create a new policy:

- 1. Add a line indicating:
 - · Source networks that use the policy
 - · Name of the policy
- 2. Add rules indicating which proxies this policy allows.
- 3. Add rules indicating permitted destinations, authentication, and logging.
- 4. Place the policy lines above or below the section generated by the Gauntlet Firewall Manager, as appropriate (see "Precedence in Netperm Tables" on page 6).

Example for Creating a New Policy

Suppose, for example, that the generic policy for Yoyodyne uses the default Gauntlet trusted policy. The security policy for Yoyodyne calls for restricting a particular group of systems (and set of addresses) to TELNET and rlogin to a particular set of outside networks.

To implement this policy, you can create a more restrictive policy:

```
1#define inside hosts who will use the policy
2*: permit-hosts 204.255.154.0:255.255.255.128 -policy restrictive
3#define the policy
4policy-restrictive: permit-proxy netacl-telnetd tn-gw
5policy-restrictive: permit-proxy netacl-rlogind rlogin-gw
6policy-restrictive: permit-destination 192.33.112.*
7policy-restrictive: authenticate *
8policy-restrictive: autherver 127.0.0.1
```

- Line 2 indicates that all proxies and applications (*) should use the restrictive policy for requests from the designated subnet. If you specify the policy for only the TELNET (tn-gw) and rlogin (rlogin-gw) proxies instead of for all (*), all other proxies (such as the HTTP and FTP proxies) skip this policy and use another policy.
- Lines 4 and 5 indicate that this policy permits the TELNET and rlogin proxies. All other proxies with requests from hosts within 204.255.154.0:255.255.255.128 deny the request after parsing these lines.
- Line 6 indicates that these proxies can send requests to the set of destinations: 192.33.112.*. The TELNET and rlogin proxies deny requests to any other destinations after parsing this line.
- Lines 7 and 8 indicate that users on these networks must authenticate with the authentication server on the firewall.

You must put this policy above the trusted policy so the proxies will use these rules rather than the more permissive trusted policy. You may also want to create a matching restrictive untrusted policy to restrict access from outside networks to this internal subnet.

Note that this type of policy may not prevent users on this inside network from reading news and sending e-mail. The recommended setup for the Gauntlet firewall calls for central mail and news servers on the inside networks. The news readers and mail agents on the restricted subnet communicate directly with the news and mail servers. These servers, which are not on the restricted subnet, communicate directly with the firewall.

If, however, you are running mail and news servers on the firewall, this more restrictive policy does deny e-mail and news activities from the restricted subnet.

Adding Proxy Services

You can add proxy services at any point as your security policies change. This section addresses the changes you must make to the netperm table to use the proxy. See the *Gauntlet for IRIX Administrator's Guide* for information on other configuration requirements for the various proxies.

To add a proxy service:

- 1. Add the name of the proxy to the permit-proxy line of the appropriate policy.
- 2. Add a section for proxy-specific rules above the policy sections. These rules can include items such as userid, groupid, time-out, and denial messages. Consult the reference information for the proxy for information on proxy options.

For example, suppose that Yoyodyne wants to add support for Quote of the Day (qotd) service for users on its inside networks. This involves using the proxy. First, add a line to the trusted policy:

```
99policy-trusted: permit-proxy qotd-gw
```

Next, create a section above the policies in which you define the communications rules for the Quote of the Day connection:

```
95# QotD (through plug proxy) rules
96# ------
97qotd-gw: port qotd * -plug-to qotd.bigu.edu -port qotd
```

Denying Proxy Services

You can remove proxy services as your security policies change. You can use the Proxy Configuration options in the Gauntlet Manager graphical user interface, or you can modify the netperm table.

To remove a proxy service, remove or comment out the permit-proxy line in the appropriate policy.

For example, assume Yoyodyne no longer wishes to allow users to rlogin from outside networks. The administrator modifies the untrusted policy:

44#policy-untrusted: permit-proxy rlogin-gw

Denying Services by Network or Host

You can deny services to and from specific networks and hosts. You can do this for all the proxies through a policy, or for individual proxies.

When you deny service, you can specify by IP address or by host. If you specify by IP address, proxies deny access based on that IP address. Be sure that you explicitly deny all IP addresses a system or site may have.

Because, in most cases, a proxy sees an IP address for only a given connection request, there are additional considerations when specifying hostnames in permit or deny rules. The firewall must perform additional processing steps to convert the address that is in the packet and the hostname that is in the configuration rule to the same format so that it can compare the values.

If you deny by hostname, the proxy must use DNS to map the source or destination address (in the packet) into a hostname. If the proxy cannot perform this mapping, it considers the address to be unknown.

Denying Access From a Host or Network

You can deny access from a particular host or network on a per-proxy basis or on a general basis.

Denying Access by Proxy

To deny access by proxy, add a deny-hosts line to the specific proxy.

For example, Yoyodyne does not want anyone on any system at Big University to have TELNET access to Yoyodyne:

```
50 tn-gw: deny-hosts *.bigu.edu
```

Later, Yoyodyne determines they need to deny access only from the dial-in systems at Big University:

```
50 tn-gw: deny-hosts dial*.bigu.edu
```

Denying Access From a Host or Network

You can also deny access from a particular host or network for all proxies and applications.

To deny access for all applications, add a deny-hosts line above the untrusted policies. Use a wildcard as the keyword to indicate that the rule applies to all policies.

You must include this rule above the policy rules. The policies are based on permitted hosts. Including the deny-hosts rule in a policy has no effect because the application is using the permit-hosts rule that defines the policy.

Note that the SMAP proxies do not use the policy rules, so you still receive mail from the denied host or network.

For example, Yoyodyne does not want anyone or any service at Big University to communicate with Yoyodyne:

```
103 *: deny-hosts *.bigu.edu
...
140 *: permit-hosts * -policy outside
```

Denying Access to a Host, Network, or Proxy

You can deny access to a particular host or network on a proxy or general basis.

Denying Access by Proxy

To deny access by proxy, add a deny-destination line to the specific proxy.

For example, Yoyodyne does not want anyone on the inside networks to transfer files using FTP from any hosts at Big University:

```
55 ftp-gw: deny-destination *.bigu.edu
```

Denying General Access to a Host or Network

You can also deny access to a particular host or network for all proxies and applications.

To deny access for all applications, add a deny-destination line to the appropriate policy.

For example, Yoyodyne does not want anyone on the inside network to communicate with Big University:

```
108 policy-trusted: deny-destination *.bigu.edu
```

Note that the SMAP proxies do not use the policy rules, so you can still send mail to the denied host or network.

Controlling Services by User, Group, or Time

You can control access to the following proxies on a per user, per group, or time of day basis:

ck-gw Circuit proxy
ftp-gw FTP proxy
rlogin-gw Rlogin proxy
rsh-gw Rsh proxy
tn-gw TELNET proxy

Controlling Services by User or Group

You can permit or deny access to certain proxies by user or group as follows:

- 1. Add the *operations* attribute to your authors configuration to specify who can perform the operation and what services they can access.
- 2. Add the *authenticate* attribute to the appropriate policy or proxy to require users to authenticate before using the service.
- 3. Add the *extended-permissions* attribute to the appropriate policy or proxy to indicate that the authentication server should check information specified by the operations keyword.

For example, Yoyodyne wants to permit only members of the group Developer to use the rlogin proxy when accessing outside hosts:

```
55 authory: permit-operation group Developer rlogin-gw *
....

100 rlogin-gw: authenticate *
101 rlogin-gw: extended-permissions *
```

These commands prevent any other users who are not members of group Developer (in the Gauntlet authentication database) from using the rlogin proxy.

Controlling Services by Operation

You can permit or deny access to certain proxies by time of day.

To control access by time of day:

- 1. Add the *operations* attribute to your authors configuration to specify who can perform what operations, and what services they can access, and when.
- 2. Add the *authenticate* attribute to the appropriate policy or proxy to require users to authenticate before using the service.
- 3. Add the *extended-permissions* attribute to the appropriate policy or proxy to indicate that the authentication server should check information specified by the operations keyword.

Suppose, for example, that Yoyodyne wants to deny TELNET between 5:00 p.m. and 11:00 p.m.:

```
55authsrv: deny-operation user * tn-gw * * time 17:00 23:00 56authsrv: permit-operation user * tn-gw * * ...

100tn-gw: authenticate * 101tn-gw: extended-permissions *
```

Line 55 denies TELNET access between 5:00 p.m. and 11:00 p.m.

Line 56 permits TELNET access. You must include this rule because you must explicitly permit operations when you specify extended permissions.

The deny rule must appear before the permit rule because the proxies use the first matching rule. If you specify the permit rule before the deny rule, the authentication server would never read the deny rule, because the permit rule matches all TELNET operations.

Attribute Reference

This chapter lists and describes all netperm table attributes.

The chart for each attribute indicates which proxies, applications, or policies can use that attribute. For example, a bullet (•) next to tn-gw means you can use this attribute for the TELNET proxy.

A bullet next to policy-*policy* indicates that you can use this attribute in a policy definition. All proxies that use this policy use this attribute.

You can always use any attribute after the wildcard (*) keyword. *All* proxies read this rule.

Note: The http-gw keyword in the tables on the following pages indicates the HTTP proxy when authentication is turned on. Rules marked with the ahttp-gw keyword are active only when the authentication option of the HTTP is enabled.

See "Netperm Table Format" on page 6 for more information on how attributes are used.

accept-count

Specifies how many processes the proxy forks to listen for connections on a port.

•	ahttp-gw	•	gopher-gw	•	mssql-gw		RealAudio		strmwrks-gw
•	aol-gw		gui		netacl	•	rlogin-gw	•	syb-gw
	alerts	•	http-gw		netconfig		rsh-gw	•	tn-gw
	authenIP	•	info-gw		NetShow		smap		VDOLive
•	authsrv	•	ldap-gw	•	nntp-gw		smapd	•	whois
	ck-gw	•	lnotes-gw		pcxdpp		snmpd		x-gw
•	cserve-gw		login-sh	•	plug-gw		snmp-gw		policy-policy
•	finger	•	lp-gw	•	pop3-gw		mbase-gw		
•	ftp-gw		mmp		radm	•	ssl-gw		

You cannot set this attribute through the Gauntlet Firewall Manager.

Syntax

accept-count processes

processes Number of processes the proxy should fork.

Example

http-gw: accept-count 50

The HTTP proxy forks 50 processes to listen for connections.

admin-user

Specifies the name of the administrative user for the firewall, which the Gauntlet Firewall Manager uses to authenticate before making changes to the firewall's configuration.

ahttp-gw	gopher-gw	mssql-gw	RealAudio	strmwrks-gw
aol-gw	• gui	netacl	rlogin-gw	syb-gw
alerts	http-gw	netconfig	rsh-gw	tn-gw
authenIP	info-gw	NetShow	smap	VDOLive
authsrv	ldap-gw	nntp-gw	smapd	whois
ck-gw	lnotes-gw	pcxdpp	snmpd	x-gw
cserve-gw	login-sh	plug-gw	snmp-gw	policy-policy
finger	lp-gw	pop3-gw	mbase-gw	
ftp-gw	mmp	radm	ssl-gw	

Syntax

admin-user user

user

Name of the administrative user for the firewall. This account must exist in the authentication database.

Example

gui: admin-user fwadmin

The Gauntlet Firewall Manager prompts for authentication information from fwadmin before making changes to the firewall's configuration.

Gauntlet Firewall Manager

Environment > Firewall Access tab > UserName

agent

Specifies the name of a network management agent that the SNMP proxy can contact.

ahttp-gw	gopher-gw	mssql-gw	RealAudio	strmwrks-gw
aol-gw	gui	netacl	rlogin-gw	syb-gw
alerts	http-gw	netconfig	rsh-gw	tn-gw
authenIP	info-gw	NetShow	smap	VDOLive
authsrv	ldap-gw	nntp-gw	smapd	whois
ck-gw	lnotes-gw	pcxdpp	snmpd	x-gw
cserve-gw	login-sh	plug-gw	• snmp-gw	policy-policy
finger	lp-gw	pop3-gw	mbase-gw	
ftp-gw	mmp	radm	ssl-gw	

Syntax

{permit deny}-agent host [get !get] [set !set] [trap !trap]					
permit	Agents to which the proxy can send information.				
deny	Agents to which the proxy cannot send information.				
host	Name of a network management agent that the SNMP proxy can contact. Specify by IP address or hostname.				
get	The proxy allows the network manager to access information on this agent.				
!get	The proxy does not allow the network manager to access information on this agent. $% \label{eq:continuous}%$				
set	The proxy allows the network manager to set information on this agent. \\				
!set	The proxy does not allow the network manager to set information on this agent.				
trap	The proxy allows this agent to send traps to the network manager.				

 $! trap \hspace{1.5cm} \textbf{The proxy does not allow this agent to send traps to the network} \\$

manager.

Example

```
snmp-gw: permit-agent 204.255.154.3 trap
```

The SNMP proxy allows the agent on the system 204.255.154.3 to send traps to the network manager.

Gauntlet Firewall Manager

Services > SNMP tab > Configure > HostName or IP Address

anon-user

Specifies the string that the HTTP proxy provides to anonymous FTP servers when prompted for a user name as a password. If you do not use this attribute, the proxy sends the string httpsw@.

ahttp-gw	gopher-gw	mssql-gw	RealAudio	strmwrks-gw
aol-gw	gui	netacl	rlogin-gw	syb-gw
alerts	• http-gw	netconfig	rsh-gw	tn-gw
authenIP	info-gw	NetShow	smap	VDOLive
authsrv	ldap-gw	nntp-gw	smapd	whois
ck-gw	lnotes-gw	pcxdpp	snmpd	x-gw
cserve-gw	login-sh	plug-gw	snmp-gw	policy-policy
finger	lp-gw	pop3-gw	mbase-gw	
ftp-gw	mmp	radm	ssl-gw	

You cannot set this attribute through the Gauntlet Firewall Manager.

Syntax

anon-user password

password

String that the HTTP proxy provides to anonymous FTP servers when prompted for a user name as a password. Any printable ASCII characters, except space or tab, are valid.

Example

http-gw: anon-user firewall-user@yoyodyne.com

The HTTP proxy should use the name firewall-user@yoyodyne.com when prompted for a user name as a password by an anonymous FTP server.

authenticate (all but pcxdpp)

Specifies whether or not users must authenticate when accessing these proxies. Proxies that do not support authentication ignore this setting. This is equivalent to the **-auth** and **-authall** options in previous versions.

•	ahttp-gw	gopher-gw	mssql-gw	RealAudio	strmwrks-gw
	aol-gw	gui	netacl	• rlogin-gw	syb-gw
	alerts	• http-gw	netconfig	rsh-gw	• tn-gw
	authenIP	info-gw	NetShow	smap	VDOLive
	authsrv	ldap-gw	nntp-gw	smapd	whois
•	ck-gw	lnotes-gw	pcxdpp	snmpd	x-gw
	cserve-gw	login-sh	plug-gw	snmp-gw	• policy-policy
	finger	lp-gw	• pop3-gw	mbase-gw	
•	ftp-gw	mmp	radm	ssl-gw	

Syntax

authenticate *

*Provided for future extensibility.

Example

policy-untrusted: authenticate *

All requests from hosts on the outside network must authenticate.

Gauntlet Firewall Manager

Firewall Rules > Service Groups tab > AuthServer

authenticate (pcxdpp only)

Specifies whether the DPP daemon considers links between the firewall and the PC to be trusted or untrusted. If you use the authenticate attribute, the DPP daemon considers the link to be private. If you do not use the authenticate attribute, the DPP daemon considers the link to be trusted.

This attribute is optional. If you do not specify it, the DPP daemon uses the authenticate settings for the trusted or untrusted policy, as appropriate.

ahttp-gw	gopher-gw	mssql-gw	RealAudio	strmwrks-gw
aol-gw	gui	netacl	rlogin-gw	syb-gw
alerts	http-gw	netconfig	rsh-gw	tn-gw
authenIP	info-gw	NetShow	smap	VDOLive
authsrv	ldap-gw	nntp-gw	smapd	whois
ck-gw	lnotes-gw	 pcxdpp 	snmpd	x-gw
cserve-gw	login-sh	plug-gw	snmp-gw	policy-policy
finger	lp-gw	pop3-gw	mbase-gw	
ftp-gw	mmp	radm	ssl-gw	

You cannot set this attribute through the Gauntlet Firewall Manager.

Syntax

authenticate *

*Provided for future extensibility.

Example

pcxdpp: authenticate

The DPP daemon considers the link between the firewall and PC Extender to be private.

authserver

Specifies the host that is running the authentication server that the proxies use for authenticating users.

•	ahttp-gw	gopher-gw	mssql-gw	RealAudio	strmwrks-gw
	aol-gw	gui	netacl	• rlogin-gw	syb-gw
	alerts	http-gw	netconfig	rsh-gw	• tn-gw
	authenIP	info-gw	NetShow	smap	VDOLive
	authsrv	ldap-gw	nntp-gw	smapd	whois
•	ck-gw	lnotes-gw	pcxdpp	snmpd	x-gw
	cserve-gw	• login-sh	plug-gw	snmp-gw	• policy-policy
	finger	lp-gw	• pop3-gw	mbase-gw	
•	ftp-gw	mmp	radm	ssl-gw	

Syntax

authserver host [port]

host Host running the authentication server. Specify IP address or hostname.

port Port on the host that the proxies use for communicating with the

authentication server.

Example

policy-untrusted: authserver 127.0.0.1 7777

Proxies must use the authentication server on the firewall itself using port 7777.

Gauntlet Firewall Manager

Firewall Rules > Service Groups tab > AuthServer and Port

authtype

Obsolete. Use the authserver attribute (see "authserver" on page 27).

backend

Name of the executable to which the authenticating HTTP proxy passes requests after handling the authentication. The executable handles FTP, Gopher, and other protocols.

• ahttp-gw	gopher-gw	mssql-gw	RealAudio	strmwrks-gw
aol-gw	gui	netacl	rlogin-gw	syb-gw
alerts	• http-gw	netconfig	rsh-gw	tn-gw
authenIP	info-gw	NetShow	smap	VDOLive
authsrv	ldap-gw	nntp-gw	smapd	whois
ck-gw	lnotes-gw	pcxdpp	snmpd	x-gw
cserve-gw	login-sh	plug-gw	snmp-gw	policy-policy
finger	lp-gw	pop3-gw	mbase-gw	
ftp-gw	mmp	radm	ssl-gw	

You cannot set this attribute through the Gauntlet Firewall Manager.

Syntax

backend executable

executable

Name of the executable to which the authenticating HTTP proxy passes requests after handling the authentication.

Example

ahttp: backend /usr/local/etc/http-gw

The authenticating HTTP proxy passes processing to /usr/local/etc/http-gw.

badadmin

Specifies the user name to which the *smapd* server forwards mail that it cannot deliver.

ahttp-gw	gopher-gw	mssql-gw	RealAudio	strmwrks-gw
aol-gw	gui	netacl	rlogin-gw	syb-gw
alerts	http-gw	netconfig	rsh-gw	tn-gw
authenIP	info-gw	NetShow	smap	VDOLive
authsrv	ldap-gw	nntp-gw	• smapd	whois
ck-gw	lnotes-gw	pcxdpp	snmpd	x-gw
cserve-gw	login-sh	plug-gw	snmp-gw	• policy-policy
finger	lp-gw	pop3-gw	mbase-gw	
ftp-gw	mmp	radm	ssl-gw	

You cannot set this attribute through the Gauntlet Firewall Manager.

Syntax

badadmin user

user Name of a user or alias.

Example

smapd: badadmin firewalladmin

Send mail to the firewalladmin alias.

Gauntlet Firewall Manager

Environment > Mail tab > SMAP > Notify for undeliverable mail

baddir

Specifies the directory in which the *smapd* server places any spooled mail that it cannot deliver normally.

ahttp-gw	gopher-gw	mssql-gw	RealAudio	strmwrks-gw
aol-gw	gui	netacl	rlogin-gw	syb-gw
alerts	http-gw	netconfig	rsh-gw	tn-gw
authenIP	info-gw	NetShow	smap	VDOLive
authsrv	ldap-gw	nntp-gw	• smapd	whois
ck-gw	lnotes-gw	pcxdpp	snmpd	x-gw
cserve-gw	login-sh	plug-gw	snmp-gw	• policy-policy
finger	lp-gw	pop3-gw	mbase-gw	
ftp-gw	mmp	radm	ssl-gw	

Syntax

baddir directory

directory

Name of a directory on the same device as the spool directory. Do not include a trailing slash (/) character. Ensure that this directory exists and has the same owner and permission as the directory that smap normally uses.

Example

smapd: baddir /var/spool/smap/badmail

Places the undelivered mail in the /var/spool/smap/badmail directory.

Gauntlet Firewall Manager

Environment > Mail tab > SMAP > Place undeliverable mail here

badsleep

Specifies for how long the authentication server disallows logins from a user who has attempted (and failed) to log in five times in a row.

	ahttp-gw	gopher-gw	mssql-gw	RealAudio	strmwrks-gw
	aol-gw	gui	netacl	rlogin-gw	syb-gw
	alerts	http-gw	netconfig	rsh-gw	tn-gw
	authenIP	info-gw	NetShow	smap	VDOLive
•	authsrv	ldap-gw	nntp-gw	smapd	whois
	ck-gw	lnotes-gw	pcxdpp	snmpd	x-gw
	cserve-gw	login-sh	plug-gw	snmp-gw	policy-policy
	finger	lp-gw	pop3-gw	mbase-gw	
	ftp-gw	mmp	radm	ssl-gw	

You cannot set this attribute through the Gauntlet Firewall Manager.

Syntax

badsleep *seconds*

seconds

Number of seconds the authentication server sleeps before allowing login attempts from a user who has attempted (and failed) to log in five times in a row. If this attribute is set to 0, the authentication server allows an unlimited number of unsuccessful login attempts. If this attribute is not set, the authentication server disables the account after the user attempts (and fails) to log in five times in a row.

Example

authsrv: badsleep 1200

The authentication server sleeps for 20 minutes (1200 seconds) after five unsuccessful login attempts.

bind-address

Specifies the IP address to which a proxy is bound. Binding a proxy to a particular address allows you to offer that service only for requests to that address. This attribute is useful when you have assigned multiple IP addresses to one of your network interface cards, and want to allow only a particular type of traffic for one of those addresses.

You can bind different proxies to different addresses, but all of these proxies can use the same port. This configuration is useful when you need to offer multiple services on the same port, but with different addresses. When using bind-address, you must also run a new version of the proxy, create a startup script for the proxy, and create a policy that uses the new proxy.

$\overline{}$									
•	ahttp-gw	•	gopher-gw		mssql-gw		RealAudio		strmwrks-gw
•	aol-gw		gui		netacl	•	rlogin-gw	•	syb-gw
	alerts	•	http-gw		netconfig	•	rsh-gw	•	tn-gw
	authenIP	•	info-gw		NetShow		smap		VDOLive
•	authsrv	•	ldap-gw	•	nntp-gw		smapd	•	whois
	ck-gw	•	lnotes-gw		pcxdpp		snmpd		x-gw
•	cserve-gw	•	login-sh	•	plug-gw		snmp-gw		policy-policy
•	finger	•	lp-gw	•	pop3-gw		mbase-gw		
•	ftp-gw		mmp		radm	•	ssl-gw		

You cannot set this attribute through the Gauntlet Firewall Manager.

Syntax

bind-address address

address IP address to which you want to bind a proxy.

Example

aol-gw: bind-address 204.255.154.1

Bind the AOL proxy to the IP address 204.255.154.1.

bind-inside

Specifies the inside interface and address of the trusted network inside the firewall. Used to create the packet screening rule that denies packets on the outside interfaces with trusted network addresses to prevent IP spoofing.

ahttp-gw	gopher-gw	•	mssql-gw	RealAudio	strmwrks-gw
aol-gw	gui		netacl	rlogin-gw	• syb-gw
alerts	http-gw	•	netconfig	rsh-gw	tn-gw
authenIP	info-gw		NetShow	smap	VDOLive
authsrv	ldap-gw		nntp-gw	smapd	whois
ck-gw	lnotes-gw		pcxdpp	snmpd	x-gw
cserve-gw	login-sh		plug-gw	snmp-gw	policy-policy
finger	lp-gw		pop3-gw	mbase-gw	
ftp-gw	mmp		radm	ssl-gw	

You cannot set this attribute through the Gauntlet Firewall Manager.

Syntax

bind-inside -if insideinterface -addr insidenetwork

insideinterface Interface name of the inside interface of the firewall for example, ec0.

Valid values vary by type of physical connection.

insidenetwork IP address and subnet mask of a trusted network inside the firewall. The

* wildcard is valid.

Example

```
netconfig: bind-inside -if ec0 -addr 10.0.1.0:255.255.255.0
```

Inside interface of firewall is ec0 and network inside the firewall uses 10.0.1.* addresses.

block

Specifies that the FTP proxy does not allow file transfers of designated types.

a	http-gw	gopher-gw	mssql-gw	RealAudio	strmwrks-gw
a	ol-gw	gui	netacl	rlogin-gw	syb-gw
a	lerts	http-gw	netconfig	rsh-gw	tn-gw
a	uthenIP	info-gw	NetShow	smap	VDOLive
a	uthsrv	ldap-gw	nntp-gw	smapd	whois
c	k-gw	lnotes-gw	pcxdpp	snmpd	x-gw
C	serve-gw	login-sh	plug-gw	snmp-gw	policy-policy
fi	inger	lp-gw	pop3-gw	mbase-gw	
• ft	tp-gw	mmp	radm	ssl-gw	

You cannot set this attribute through the Gauntlet Firewall Manager.

Syntax

block { input | output }

input The FTP proxy does not allow file transfers from server to client.

output The FTP proxy does not allow file transfers from client to server.

Example

ftp-gw: block output

The FTP proxy prevents file transfers from client to server.

buffer-size

Specifies the size of the internal buffer that the proxy uses for transferring data. If you do not use this attribute, the proxy uses a buffer of 16,384 bytes.

If you use this attribute and specify an invalid value (for example, a negative number), the proxy uses a buffer of 8,192 bytes.

_									
	ahttp-gw		gopher-gw		mssql-gw		RealAudio		strmwrks-gw
•	aol-gw		gui		netacl		rlogin-gw		syb-gw
	alerts		http-gw		netconfig		rsh-gw		tn-gw
	authenIP		info-gw		NetShow		smap		VDOLive
	authsrv	•	ldap-gw	•	nntp-gw		smapd	•	whois
	ck-gw	•	lnotes-gw		pcxdpp		snmpd		x-gw
•	cserve-gw		login-sh	•	plug-gw		snmp-gw		policy-policy
•	finger		lp-gw		pop3-gw		mbase-gw		
	ftp-gw		mmp		radm	•	ssl-gw		

You cannot set this attribute through the Gauntlet Firewall Manager.

Syntax

buffer-size buffer

buffer

Size of the internal buffer that the proxy uses for transferring data.

Example

ssl-gw: buffer-size 32768

The SSL proxy uses an internal buffer size of 32,768 bytes.

check-server-ip

Specifies whether or not the proxy checks the IP address of the server sending the packets against the IP address in the clients request. By default, the proxy compares the IP address in the client request to the IP address in the incoming packets. If the IP addresses do not match, the proxy drops the packet.

Some multimedia sites use multiple servers to service requests. By default, the proxy drops packets. If your users need to access these types of sites, use this attribute to turn off IP checking on incoming packets.

ahttp-gw	gopher-gw	mssql-gw	• RealAudio	strmwrks-gw
aol-gw	gui	netacl	rlogin-gw	syb-gw
alerts	http-gw	netconfig	rsh-gw	tn-gw
authenIP	info-gw	 NetShow 	smap	VDOLive
authsrv	ldap-gw	nntp-gw	smapd	whois
ck-gw	lnotes-gw	pcxdpp	snmpd	x-gw
cserve-gw	login-sh	plug-gw	snmp-gw	policy-policy
finger	lp-gw	pop3-gw	• mbase-gw	
ftp-gw	• mmp	radm	ssl-gw	

You cannot set this attribute through the Gauntlet Firewall Manager.

Syntax

check-server-ip $\{0 \mid 1\}$

- Proxies check the IP address of the incoming packets against the IP address in the client request. If the IP addresses do not match, the proxy drops the packet.
- Proxies do not check the IP address of the incoming packets against the IP address in the client request.

Example

```
mmp-gw: check-server-ip 1
```

The multimedia proxy does not check the IP address of incoming packets against the IP address in the client request.

child-limit

Specifies the maximum number of child processes that each daemon allows to run at the same time.

ahttp-gw	• gopher-gw	• mssql-gw	RealAudio	strmwrks-gw
• aol-gw	gui	• netacl	• rlogin-gw	• syb-gw
alerts	• http-gw	netconfig	• rsh-gw	• tn-gw
authenIP	• info-gw	NetShow	smap	VDOLive
• authsrv	• ldap-gw	• nntp-gw	smapd	• whois
ck-gw	• lnotes-gw	pcxdpp	snmpd	x-gw
• cserve-gw	login-sh	• plug-gw	• snmp-gw	• policy-policy
• finger	• lp-gw	• pop3-gw	mbase-gw	
• ftp-gw	mmp	radm	• ssl-gw	

Syntax

child-limit processes

processes

Maximum number of child processes that each daemon allows to run at a given time. If this attribute is set to 0 or is not set, the daemon allows an unlimited number of child processes to run at the same time.

Example

tn-gw: child-limit 10

The TELNET proxy allows only ten child processes to run at the same time.

Gauntlet Firewall Manager

Services > Service tab > ChildLimit

circuitexec

Specifies the location of the program that the circuit proxy runs once it allows a connection from the client program.

	ahttp-gw	gopher-gw	mssql-gw	RealAudio	strmwrks-gw
	aol-gw	gui	netacl	rlogin-gw	syb-gw
	alerts	http-gw	netconfig	rsh-gw	tn-gw
	authenIP	info-gw	NetShow	smap	VDOLive
	authsrv	ldap-gw	nntp-gw	smapd	whois
•	ck-gw	lnotes-gw	pcxdpp	snmpd	x-gw
	cserve-gw	login-sh	plug-gw	snmp-gw	• policy-policy
	finger	lp-gw	pop3-gw	mbase-gw	
	ftp-gw	mmp	radm	ssl-gw	

Syntax

circuitexec programs

programs

Location and name of the program that the circuit proxy runs once it allows a connection from the client program.

Example

ck-gw: circuitexec /usr/local/etc/circuit

The circuit proxy is in /usr/local/etc.

Gauntlet Firewall Manager

You cannot set this attribute through the Gauntlet Firewall Manager.

circuitsperuser

Specifies the maximum number of client/server connections that can be active in one user session.

ahttp-gw	gopher-gw	mssql-gw	RealAudio	strmwrks-gw
aol-gw	gui	netacl	rlogin-gw	syb-gw
alerts	http-gw	netconfig	rsh-gw	tn-gw
authenIP	info-gw	NetShow	smap	VDOLive
authsrv	ldap-gw	nntp-gw	smapd	whois
• ck-gw	lnotes-gw	pcxdpp	snmpd	x-gw
cserve-gw	login-sh	plug-gw	snmp-gw	• policy-policy
finger	lp-gw	pop3-gw	mbase-gw	
ftp-gw	mmp	radm	ssl-gw	

Syntax

circuitsperuser circuits

circuits

Maximum number of client/server connections that can be active in one user session.

Example

ck-gw: circuitsperuser 12

A user can have 12 active sessions.

Gauntlet Firewall Manager

Services > Circuit tab > Add or Modify > # Circuits allowed per user

circuit-timeout

Specifies the amount of time the client/server connection is idle (no network activity) before disconnecting. Overridden by the -timeout option of the server attribute for a particular server. See "server" on page 130

	ahttp-gw	gopher-gw	mssql-gw	RealAudio	strmwrks-gw
	aol-gw	gui	netacl	rlogin-gw	syb-gw
	alerts	http-gw	netconfig	rsh-gw	tn-gw
	authenIP	info-gw	NetShow	smap	VDOLive
	authsrv	ldap-gw	nntp-gw	smapd	whois
•	ck-gw	lnotes-gw	pcxdpp	snmpd	x-gw
	cserve-gw	login-sh	plug-gw	snmp-gw	• policy-policy
	finger	lp-gw	pop3-gw	mbase-gw	
	ftp-gw	mmp	radm	ssl-gw	

Syntax

circuit-timeout minutes

minutes Number of minutes without client/server activity before disconnecting.

Example

ck-gw: circuit-timeout 15

The client/server activity can be idle for 15 minutes before disconnecting.

Gauntlet Firewall Manager

Services > Circuit tab > Add or Modify > Circuit Timeout

client

Specifies the *lp* commands that the firewall denies or logs from clients to remote server queues.

ahttp-gw	gopher-gw	mssql-gw	RealAudio	strmwrks-gw
aol-gw	gui	netacl	rlogin-gw	syb-gw
alerts	http-gw	netconfig	rsh-gw	tn-gw
authenIP	info-gw	NetShow	smap	VDOLive
authsrv	ldap-gw	nntp-gw	smapd	whois
ck-gw	lnotes-gw	pcxdpp	snmpd	x-gw
cserve-gw	login-sh	plug-gw	snmp-gw	• policy-policy
finger	• lp-gw	pop3-gw	mbase-gw	
ftp-gw	mmp	radm	ssl-gw	

Syntax

client clients -printer serverqueue [{-deny | -log} [{ lpcommands } | all]]

clients Specifies single hosts, entire networks, or subnets. Specify by IP address

or hostname. The wildcard * is valid.

serverqueue Name of the printer queue on the remote server to which this rule

applies.

deny Commands that clients cannot execute. The default allows users to issue

all *lp* commands.

log Extended logging applies. Extended logging includes the number of

bytes transferred from client to server and time duration. Extended logging does not include data transfer from server to client, as this

consists mostly of acknowledgments to client's command.

lpcommands

lp commands that the clients can issue when sending jobs through the proxy. The space between the "{" and "}" and the list entries is required. Valid keywords, which correspond to the first level *lp* protocol commands, are:

- restart
- print
- status_sh
- status_ln
- remove

all

The deny or log attribute applies to all *lp* commands.

Example

```
lp-gw: client 10.0.1.* -printer lp_sales -log {restart remove}
```

The proxy logs the restart and remove commands when any clients on the inside network (10.0.1.*) print to the remote printer queue lp_sales (on the remote server).

Gauntlet Firewall Manager

Services > LP tab > Add or Modify > Client Queue

connect-timeout

Specifies the amount of time the user has to start the client application before the proxy stops listening at the service port. This attribute also controls the amount of time the user has to respond to the query asking them to allow the connection.

ahttp-gw	gopher-gw	mssql-gw	RealAudio	strmwrks-gw
aol-gw	gui	netacl	rlogin-gw	syb-gw
alerts	http-gw	netconfig	rsh-gw	tn-gw
authenIP	info-gw	NetShow	smap	VDOLive
authsrv	ldap-gw	nntp-gw	smapd	whois
• ck-gw	lnotes-gw	pcxdpp	snmpd	x-gw
cserve-gw	login-sh	plug-gw	snmp-gw	• policy-policy
finger	lp-gw	pop3-gw	mbase-gw	
ftp-gw	mmp	radm	ssl-gw	

Syntax

connect-timeout minutes

minutes

Number of minutes the proxy waits at the service port for a client application connection before it disconnects.

Example

ck-gw: connect-timeout 3

The user has three minutes to start the client application before the proxy stops listening.

Gauntlet Firewall Manager

Services > Circuit tab > Add or Modify > Connect Timeout

content-failunsafe

Specifies whether or not the content-scanning enabled proxies allow data transfers when content scanning is enabled but not working (for example, the server is unreachable). The proxies normally exit when a transfer is attempted while content scanning is broken so that unscanned data cannot enter your protected network.

If content-failunsafe is not used (it is off by default), the content-enabled proxies do not allow data transfers when content scanning is enabled but not working. This attribute has no effect when content scanning is not enabled.

ahttp-gw	gopher-gw	mssql-gw	RealAudio	strmwrks-gw
aol-gw	gui	netacl	rlogin-gw	syb-gw
alerts	• http-gw	netconfig	rsh-gw	tn-gw
authenIP	info-gw	NetShow	smap	VDOLive
authsrv	ldap-gw	nntp-gw	• smapd	whois
ck-gw	lnotes-gw	pcxdpp	snmpd	x-gw
cserve-gw	login-sh	plug-gw	snmp-gw	policy-policy
finger	lp-gw	pop3-gw	mbase-gw	
• ftp-gw	mmp	radm	ssl-gw	

You cannot set this attribute through the Gauntlet Firewall Manager.

Syntax

content-failunsafe {on | off}

Example

ftp-gw: content-failunsafe on

The FTP proxy (when content scanning is enabled) allows data transfers even when content scanning is not working.

content-ftpcheck

Specifies the types of transfers for which the FTP proxy should scan the contents of the files. Use this attribute as part of a policy, rather than for the proxy itself.

ahttp-gw	gopher-gw	mssql-gw	RealAudio	strmwrks-gw
aol-gw	gui	netacl	rlogin-gw	syb-gw
alerts	http-gw	netconfig	rsh-gw	tn-gw
authenIP	info-gw	NetShow	smap	VDOLive
authsrv	ldap-gw	nntp-gw	smapd	whois
ck-gw	lnotes-gw	pcxdpp	snmpd	x-gw
cserve-gw	login-sh	plug-gw	snmp-gw	• policy-policy
finger	lp-gw	pop3-gw	mbase-gw	
• ftp-gw	mmp	radm	ssl-gw	

Syntax

content-ftpcheck types

types

Types of transfers for which the FTP proxy scans the contents. Valid keywords are:

- **retr**—Scan files that are being transferred from server to client.
- **stor**—Scan files that are being transferred from client to server.

Example

policy-untrusted: content-ftpcheck retr stor

When the FTP proxy is used as part of the untrusted policy, it scans all files being transferred.

Gauntlet Firewall Manager

Services > FTP tab > Add or Modify > Scan FTP Puts or Scan FTP Gets

contentscan-msg

Specifies the name of the file that the proxy displays as a welcome banner upon successful connection to the proxy when content scanning is enabled. If this attribute is not used, the proxy generates a default welcome message.

ahttp-gw	gopher-gw	mssql-gw	RealAudio	strmwrks-gw
aol-gw	gui	netacl	rlogin-gw	syb-gw
alerts	http-gw	netconfig	rsh-gw	tn-gw
authenIP	info-gw	NetShow	smap	VDOLive
authsrv	ldap-gw	nntp-gw	smapd	whois
ck-gw	lnotes-gw	pcxdpp	snmpd	x-gw
cserve-gw	login-sh	plug-gw	snmp-gw	policy-policy
finger	lp-gw	pop3-gw	mbase-gw	
• ftp-gw	mmp	radm	ssl-gw	

Syntax

contentscan-msg file

file

Name of the file that the proxy displays as a welcome banner upon successful connection to the proxy when content scanning is enabled.

Example

ftp-gw: contentscan-msg /usr/local/etc/ftp-contentscan-msg.txt

The FTP proxy displays the contents of the file /usr/local/etc/ftp-contentscan-msg.txt upon successful connection when content scanning is enabled.

Gauntlet Firewall Manager

Services > FTP tab > Add or Modify > CVP Welcome Msg

cvp-handling

Specifies the type of handling to use when the proxy receives a file or message that failed the content scan.

ahttp-gw	gopher-gw	mssql-gw	RealAudio	strmwrks-gw
aol-gw	gui	netacl	rlogin-gw	syb-gw
alerts	• http-gw	netconfig	rsh-gw	tn-gw
authenIP	info-gw	NetShow	smap	VDOLive
authsrv	ldap-gw	nntp-gw	• smapd	whois
ck-gw	lnotes-gw	pcxdpp	snmpd	x-gw
cserve-gw	login-sh	plug-gw	snmp-gw	policy-policy
finger	lp-gw	pop3-gw	mbase-gw	
• ftp-gw	mmp	radm	ssl-gw	

Syntax

cvp-handling { reject | repair }

reject The proxy discards the failed file or message.

repair The proxy attempts to repair the message. If the repair is successful, the

proxy delivers the file or message.

Example

http-gw: cvp-handling reject

The HTTP proxy discards all files that fail the content scan.

Gauntlet Firewall Manager

Services > FTP or HTTP tab > Add or Modify > Infected File Handling

Environment > Mail > Infected File Handling

cvp-server

Specifies the server that the proxy uses for content scanning services.

ahttp-gw	gopher-gw	mssql-gw	RealAudio	strmwrks-gw
aol-gw	gui	netacl	rlogin-gw	syb-gw
alerts	• http-gw	netconfig	rsh-gw	tn-gw
authenIP	info-gw	NetShow	smap	VDOLive
authsrv	ldap-gw	nntp-gw	• smapd	whois
ck-gw	lnotes-gw	pcxdpp	snmpd	x-gw
cserve-gw	login-sh	plug-gw	snmp-gw	policy-policy
finger	lp-gw	pop3-gw	mbase-gw	
• ftp-gw	mmp	radm	ssl-gw	

Syntax

cvp-server host port

host Host running the content scanning server. Specify by IP address or

hostname. Wildcards are not valid.

port Port on the host on which the content scanning server is running.

Example

ftp-gw: cvp-server 10.0.1.57 18181

The FTP proxy uses a content scanner on the system 10.0.1.57 using port 18181.

Gauntlet Firewall Manager

Services > FTP or HTTP tab > Add or Modify > CVP HostName and CVP Port

Environment > Mail > CVP HostName and CVP Port

cyber_masks

Lets you specify what Cyber Patrol categories are blocked for work time hours and leisure time hours. Categories not blocked are allowed.

This attribute has no effect unless Cyber Patrol is active. Refer to the *Gauntlet Firewall Administrator's Guide* for descriptions of each category listed under "Syntax."

Use this attribute as part of a policy, rather than for the proxy itself.

See also the attributes "feature" on page 70, "url" on page 142 and "work_time" on page 153.

ahttp-gw	gopher-gw	mssql-gw	RealAudio	strmwrks-gw
aol-gw	gui	netacl	rlogin-gw	syb-gw
alerts	• http-gw	netconfig	rsh-gw	tn-gw
authenIP	info-gw	NetShow	smap	VDOLive
authsrv	ldap-gw	nntp-gw	smapd	whois
ck-gw	lnotes-gw	pcxdpp	snmpd	x-gw
cserve-gw	login-sh	plug-gw	snmp-gw	• policy-policy
finger	lp-gw	pop3-gw	mbase-gw	
ftp-gw	mmp	radm	ssl-gw	

Syntax

policy-http-gw_Trusted: cyber_masks work_mask leisure_mask

work mask

The bitmasks for Cyber Patrol categories that are denied during work time hours. The categories are:

- Violence/Profanity—0x0001
- Partial Nudity—0x0002
- Full Nudity—0x0004
- Sexual Acts/Text—0x0008

- Gross Depictions/Text—0x0010
- Intolerance—0x0020
- Satanic/Cult—0x0040
- Drugs/Drug Culture—0x0080
- Militant/Extremist—0x0100
- Sex Education—0x0200
- Questionable/Illegal & Gambling—0x0400
- Alcohol/Tobacco—0x0800
- Sports/Leisure—0x1000
- Not Yet Used #1—0x2000 *
- Not Yet Used #2—0x4000 *
- Search Engines—0x8000
 - * Reserved for future categories. Setting these bits has no effect.

To determine the bitmask for a group of categories, use a hexadecimal calculator. To determine the bitmask for Violence, Partial Nudity, Full Nudity and Sexual Text, for example, enter 0001 (for Violence), click *OR*, then enter 0002 (for Partial Nudity), click *OR* again, then 0004 (for Full Nudity), click *OR*, then enter 0008 (for Sexual Acts/Text), and click *OR* a final time. The result, F, is the bitmask for these three categories. You can perform the same procedure for any combination of categories.

leisure mask

The bitmasks for Cyber Patrol categories that are denied during leisure time hours. The categories are the same as for *work_mask*.

Example

```
policy-http-gw_Trusted: cyber_masks 1FFF FFF
```

All Cyber Patrol categories except Search Engines are denied during work time hours, while all categories except Search Engines and Sports/Leisure are denied during leisure time hours.

Gauntlet Firewall Manager

Services > HTTP tab > Add or Modify > Cyber Patrol

data-port

Specifies that the FTP proxy requires FTP data connections to use port 20, the default port specified in the RFC for FTP. By default, the FTP proxy uses a random, nonprivileged port for the data connection. Some FTP software packages and routers require that the data connection use port 20.

ahttp-gw	gopher-gw	mssql-gw	RealAudio	strmwrks-gw
aol-gw	gui	netacl	rlogin-gw	syb-gw
alerts	http-gw	netconfig	rsh-gw	tn-gw
authenIP	info-gw	NetShow	smap	VDOLive
authsrv	ldap-gw	nntp-gw	smapd	whois
ck-gw	lnotes-gw	pcxdpp	snmpd	x-gw
cserve-gw	login-sh	plug-gw	snmp-gw	policy-policy
finger	lp-gw	pop3-gw	mbase-gw	
• ftp-gw	mmp	radm	ssl-gw	

You cannot set this attribute through the Gauntlet Firewall Manager.

Syntax

data-port port

port

Port name or number on which the FTP proxy listens for data connections.

Example

ftp-gw: data-port 20

FTP proxy requires data connections on port 20.

database (authsrv only)

Specifies the pathname of the database that the authentication server uses. This attribute is mandatory, unless you compile the authentication server with a specific database path.

	ahttp-gw	gopher-gw	mssql-gw	RealAudio	strmwrks-gw
	aol-gw	gui	netacl	rlogin-gw	syb-gw
	alerts	http-gw	netconfig	rsh-gw	tn-gw
	authenIP	info-gw	NetShow	smap	VDOLive
•	authsrv	ldap-gw	nntp-gw	smapd	whois
	ck-gw	lnotes-gw	pcxdpp	snmpd	x-gw
	cserve-gw	login-sh	plug-gw	snmp-gw	policy-policy
	finger	lp-gw	pop3-gw	mbase-gw	
	ftp-gw	mmp	radm	ssl-gw	

You cannot set this attribute through the Gauntlet Firewall Manager.

Syntax

database path

path

Path of the database that the authentication server uses.

Example

authsrv: database /usr/local/etc/fw-authdb

The authentication server uses the authentication database in /usr/local/etc/fw-authdb.

database (pcxdpp only)

Specifies the pathname of the database that the authentication server uses to check administrative keys for PC Extender to firewall links.

This attribute is required.

ahttp-gw	gopher-gw	mssql-gw	RealAudio	strmwrks-gw
	Sobrier 8	1110041 811	Tream regard	Strinivino giv
aol-gw	gui	netacl	rlogin-gw	syb-gw
alerts	http-gw	netconfig	rsh-gw	tn-gw
authenIP	info-gw	NetShow	smap	VDOLive
authsrv	ldap-gw	nntp-gw	smapd	whois
ck-gw	lnotes-gw	 pcxdpp 	snmpd	x-gw
cserve-gw	login-sh	plug-gw	snmp-gw	policy-policy
finger	lp-gw	pop3-gw	mbase-gw	
ftp-gw	mmp	radm	ssl-gw	

You cannot set this attribute through the Gauntlet Firewall Manager.

Syntax

database path

path

Pathname of the database that the authentication server uses to check administrative keys.

Example

pcxdpp: database /usr/local/etc/mgmt/dpp-authdb

The authentication server uses the database /usr/local/etc/mgmt/dpp-authdb.

denial-msg

Specifies the file that the proxy displays when it denies access because a user does not have permission to use the proxy.

	ahttp-gw	gopher-gw	mssql-gw	RealAudio	strmwrks-gw
	aol-gw	gui	netacl	• rlogin-gw	syb-gw
	alerts	http-gw	netconfig	rsh-gw	• tn-gw
	authenIP	info-gw	NetShow	smap	VDOLive
	authsrv	ldap-gw	nntp-gw	smapd	whois
•	ck-gw	lnotes-gw	pcxdpp	snmpd	x-gw
	cserve-gw	login-sh	plug-gw	snmp-gw	• policy-policy
	finger	lp-gw	pop3-gw	mbase-gw	
•	ftp-gw	mmp	radm	ssl-gw	

Syntax

denial-msg file

file

Name of the file the proxy displays when it denies access because a user does not have permission to use the proxy. If no file is specified, the proxy generates a default message.

Example

ftp-gw: denial-msg /usr/local/etc/ftp-deny.txt

Displays the file /usr/local/etc/ftp-deny.txt when the FTP proxy denies access to a user.

Gauntlet Firewall Manager

Services > Service tab > Add or Modify > Deny Use Message

denydest-msg

Specifies the file the proxy displays when it denies access because a user is trying to access a destination that he or she is not permitted to access.

í	ahttp-gw	gopher-gw	mssql-gw	RealAudio	strmwrks-gw
í	aol-gw	gui	netacl	• rlogin-gw	syb-gw
á	alerts	• http-gw	netconfig	rsh-gw	• tn-gw
í	authenIP	info-gw	NetShow	smap	VDOLive
í	authsrv	ldap-gw	nntp-gw	smapd	whois
(ck-gw	lnotes-gw	pcxdpp	snmpd	x-gw
(cserve-gw	login-sh	plug-gw	snmp-gw	• policy-policy
1	finger	lp-gw	pop3-gw	mbase-gw	
• 1	ftp-gw	mmp	radm	ssl-gw	

Syntax

denydest-msg file

file

Name of the file the proxy displays when it denies access to a user who tries to access a disallowed destination. If no file is specified, the proxy generates a default message.

Example

tn-gw: denydest-msg /usr/local/etc/tn-denydest.txt

Displays the file /usr/local/etc/tn-denydest.txt when the TELNET proxy denies access to a user.

Gauntlet Firewall Manager

Services > Service tab > Add or Modify > Deny Destination

deny-spam

Adds unwanted domain names and email addresses to your anti-spam database. Keep in mind that specifying a particular email address is not foolproof. A remote mailer can lie about its address but not about its domain.

ahttp-gw	gopher-gw	mssql-gw	RealAudio	strmwrks-gw
aol-gw	gui	netacl	rlogin-gw	syb-gw
alerts	http-gw	netconfig	rsh-gw	tn-gw
authenIP	info-gw	NetShow	• smap	VDOLive
authsrv	ldap-gw	nntp-gw	smapd	whois
ck-gw	lnotes-gw	pcxdpp	snmpd	x-gw
cserve-gw	login-sh	plug-gw	snmp-gw	policy-policy
finger	lp-gw	pop3-gw	mbase-gw	
ftp-gw	mmp	radm	ssl-gw	

Syntax

deny-spam address

address

Domain name or email address for which you want to deny all messages.

Example

smap: deny-spam spammer@spam.com

Blocks all messages from spammer@spam.com

destination

Specifies destination hosts and network permissions.

•	ahttp-gw	•	gopher-gw	•	mssql-gw	•	RealAudio	•	strmwrks-gw
•	aol-gw	•	gui	•	netacl	•	rlogin-gw	•	syb-gw
	alerts	•	http-gw		netconfig	•	rsh-gw	•	tn-gw
	authenIP	•	info-gw	•	NetShow		smap	•	VDOLive
	authsrv	•	ldap-gw	•	nntp-gw		smapd	•	whois
•	ck-gw	•	lnotes-gw		pcxdpp		snmpd		x-gw
•	cserve-gw		login-sh	•	plug-gw	•	snmp-gw	•	policy-policy
•	finger	•	lp-gw	•	pop3-gw	•	mbase-gw		
•	ftp-gw	•	mmp		radm	•	ssl-gw		

Syntax

{permit | deny}-destination destination-list

permit destination-list

Hosts to which the proxies and applications can send requests.

deny destination-list

Hosts to which the proxies and applications cannot send requests.

destination-list

Single hosts, entire networks, or subnets. Specify by IP address or hostname. The wildcard * is valid. Use the word unknown to match hosts that do not have DNS entries or whose forward and reverse lookups do not match. Specify multiple destinations using braces {} and separating the items with spaces. If no *destination-list* is specified, no destinations are valid.

Example

policy-restrictive: permit-destination 192.3.4.*

Permits applications to send requests to hosts on the 192.3.4 network

Gauntlet Firewall Manager

 $Firewall\ Rules > Service\ Groups\ tab > Destinations$

Services > Service tab > Destinations

Services > Service tab > Add or Modify > Destinations

directory

Specifies the directory that the proxy makes its root directory before providing service. For the info-gw proxy, specifies the directory they use as the root of their database. This attribute is equivalent to the **-chroot** option in previous versions.

ahttp-gw	• gopher-gw	• mssql-gw	• RealAudio	• strmwrks-gw
• aol-gw	• gui	• netacl	• rlogin-gw	• syb-gw
alerts	• http-gw	netconfig	• rsh-gw	• tn-gw
authenIP	• info-gw	• NetShow	• smap	• VDOLive
authsrv	• ldap-gw	• nntp-gw	• smapd	• whois
• ck-gw	• lnotes-gw	pcxdpp	snmpd	• x-gw
• cserve-gw	login-sh	• plug-gw	• snmp-gw	policy-policy
finger	• lp-gw	• pop3-gw	• mbase-gw	
• ftp-gw	• mmp	radm	• ssl-gw	

Syntax

directory directory

directory

Specifies the directory that the proxy makes its root directory before providing service.

Example

smap, smapd: directory /var/spool/smap

The *smap* and *smapd* proxies use the directory /var/spool/smap as their root directories.

Gauntlet Firewall Manager

Services > Service tab > Locked Room

display

Specifies the destination display on which applications display.

ahttp-gw	gopher-gw	mssql-gw	RealAudio	strmwrks-gw
aol-gw	gui	netacl	rlogin-gw	syb-gw
alerts	http-gw	netconfig	rsh-gw	tn-gw
authenIP	info-gw	NetShow	smap	VDOLive
authsrv	ldap-gw	nntp-gw	smapd	whois
ck-gw	lnotes-gw	pcxdpp	snmpd	• x-gw
cserve-gw	login-sh	plug-gw	snmp-gw	• policy-policy
finger	lp-gw	pop3-gw	sql-gw	
ftp-gw	mmp	radm	ssl-gw	

You cannot set this attribute through the Gauntlet Firewall Manager.

Syntax

display host:displaynumber.screennumber

host Name of the system to which the display is physically connected.

displaynumber Number of the display on the system.

screennumber Number of the screen for the display.

Example

```
x-gw: display redwood :10.0
```

The X gateway displays all X applications on the display attached to the redwood system.

dssagent

Specifies the name that is registered as the agent on the Defender Security Server.

	ahttp-gw	gopher-gw	mssql-gw	RealAudio	strmwrks-gw
	aol-gw	gui	netacl	rlogin-gw	syb-gw
	alerts	http-gw	netconfig	rsh-gw	tn-gw
	authenIP	info-gw	NetShow	smap	VDOLive
•	authsrv	ldap-gw	nntp-gw	smapd	whois
	ck-gw	lnotes-gw	pcxdpp	snmpd	x-gw
	cserve-gw	login-sh	plug-gw	snmp-gw	policy-policy
	finger	lp-gw	pop3-gw	sql-gw	
	ftp-gw	mmp	radm	ssl-gw	

You cannot set this attribute through the Gauntlet Firewall Manager.

Syntax

dssagent agent

agent

Name that is registered as the agent on the Defender Security Server.

Example

authsrv: dssagent gauntlet

Gauntlet is registered as the agent on the Defender Security Server.

dsshost

Specifies the name of the host running the Defender Security Server software.

	ahttp-gw	gopher-gw	mssql-gw	RealAudio	strmwrks-gw
	aol-gw	gui	netacl	rlogin-gw	syb-gw
	alerts	http-gw	netconfig	rsh-gw	tn-gw
	authenIP	info-gw	NetShow	smap	VDOLive
•	authsrv	ldap-gw	nntp-gw	smapd	whois
	ck-gw	lnotes-gw	pcxdpp	snmpd	x-gw
	cserve-gw	login-sh	plug-gw	snmp-gw	policy-policy
	finger	lp-gw	pop3-gw	sql-gw	
	ftp-gw	mmp	radm	ssl-gw	

Syntax

dsshost hostname

hostname

Name of the host running the Defender Security Server software. Specify by IP address or hostname.

Example

authsrv: dsshost dimension

The Defender Security Server is running on dimension.

Gauntlet Firewall Manager

You cannot set this attribute through the Gauntlet Firewall Manager.

dsskey

Specifies the SNK key string that the authentication server uses when authenticating with the Defender Security Server.

				I
ahttp-gw	gopher-gw	mssql-gw	RealAudio	strmwrks-gw
aol-gw	gui	netacl	rlogin-gw	syb-gw
alerts	http-gw	netconfig	rsh-gw	tn-gw
authenIP	info-gw	NetShow	smap	VDOLive
• authsrv	ldap-gw	nntp-gw	smapd	whois
ck-gw	lnotes-gw	pcxdpp	snmpd	x-gw
cserve-gw	login-sh	plug-gw	snmp-gw	policy- <i>policy</i>
finger	lp-gw	pop3-gw	sql-gw	
ftp-gw	mmp	radm	ssl-gw	

You cannot set this attribute through the Gauntlet Firewall Manager.

Syntax

dsskey snk_key

snk_key

SNK key string (in hex) that the authentication server uses when authenticating with the Defender Security Server. This value must match the string displayed when you registered your firewall as an agent.

Example

authsrv: dsskey 53 94 dd 90 a3 b7 29 e1

Shows the SNK key string the authentication server uses.

dssport

Specifies the port that the authentication server uses when communicating with the Defender Security Server.

	ahttp-gw	gopher-gw	mssql-gw	RealAudio	strmwrks-gw
	aol-gw	gui	netacl	rlogin-gw	syb-gw
	alerts	http-gw	netconfig	rsh-gw	tn-gw
	authenIP	info-gw	NetShow	smap	VDOLive
•	authsrv	ldap-gw	nntp-gw	smapd	whois
	ck-gw	lnotes-gw	pcxdpp	snmpd	x-gw
	cserve-gw	login-sh	plug-gw	snmp-gw	policy-policy
	finger	lp-gw	pop3-gw	sql-gw	
	ftp-gw	mmp	radm	ssl-gw	

You cannot set this attribute through the Gauntlet Firewall Manager.

Syntax

dssport port

port

Port that the authentication server uses when communicating with the Defender Security Server. The default port is 2626.

Example

authsrv: dssport 2626

The authentication server communicates with the Defender Security Server on port 2626.

enable

Specifies the types of alerts that the Gauntlet kernel generates and logs. If there is no enable entry, all alerts are enabled.

ahttp-gw	gopher-gw	mssql-gw	RealAudio	strmwrks-gw
aol-gw	gui	netacl	rlogin-gw	syb-gw
• alerts	http-gw	netconfig	rsh-gw	tn-gw
authenIP	info-gw	NetShow	smap	VDOLive
authsrv	ldap-gw	nntp-gw	smapd	whois
ck-gw	lnotes-gw	pcxdpp	snmpd	x-gw
cserve-gw	login-sh	plug-gw	snmp-gw	policy-policy
finger	lp-gw	pop3-gw	sql-gw	
ftp-gw	mmp	radm	ssl-gw	

Syntax

enable {options | none}

options

Specifies the types of alerts the Gauntlet kernel generates and logs. Valid options are:

- TCP—packets sent to TCP ports without active listeners
- UDP—packets sent to UDP ports without active listeners
- Source—source-routed packets
- Sedir—ICMP redirects
- Screen—packets dropped by the local or forward packet screen

none

The Gauntlet kernel does not generate security alerts for any of the above activities.

Example

alerts: enable TCP UDP

The Gauntlet kernel generates security alerts for packets sent to TCP and UDP ports without active listeners.

Gauntlet Firewall Manager

Reports > Alerts tab

exec

Specifies a program that the proxy invokes to handle a service. This attribute is equivalent to the **-exec** option in previous versions.

ahttp-gw	gopher-gw	mssql-gw	RealAudio	strmwrks-gw
aol-gw	gui	• netacl	rlogin-gw	syb-gw
alerts	http-gw	netconfig	rsh-gw	tn-gw
authenIP	info-gw	NetShow	smap	VDOLive
authsrv	ldap-gw	nntp-gw	smapd	whois
ck-gw	lnotes-gw	pcxdpp	snmpd	x-gw
cserve-gw	login-sh	plug-gw	snmp-gw	policy-policy
finger	lp-gw	pop3-gw	mbase-gw	
ftp-gw	mmp	radm	ssl-gw	

You cannot set this attribute through the Gauntlet Firewall Manager.

Syntax

exec program [options]

program Name of the program to invoke.

options Command line options for the program.

Example

netacl-fingerd: exec /bin/cat /usr/local/etc/finger.txt

The *netacl* daemon invokes the *cat* program to display the file */usr/local/etc/finger.txt* for *finger* requests.

extended-permissions

Specifies whether the proxies check for extended permissions for users as they authenticate. Checking for extended permissions tells the authentication server to obey the attribute's keywords when it reads the netperm-table. This attribute is equivalent to the -extend and -extnd options in previous versions. When you turn on extended permissions, the proxies that use extended permissions deny all operations. You must then explicitly permit the proxies to allow activities by creating rules using the operations attribute. Use care when specifying extended permissions for policies.

	ahttp-gw	gopher-gw	mssql-gw	RealAudio	strmwrks-gw
	aol-gw	gui	netacl	• rlogin-gw	syb-gw
	alerts	http-gw	netconfig	• rsh-gw	• tn-gw
	authenIP	info-gw	NetShow	smap	VDOLive
	authsrv	ldap-gw	nntp-gw	smapd	whois
•	ck-gw	lnotes-gw	pcxdpp	snmpd	x-gw
	cserve-gw	login-sh	plug-gw	snmp-gw	• policy-policy
	finger	lp-gw	pop3-gw	mbase-gw	
•	ftp-gw	mmp	radm	ssl-gw	

Syntax

extended-permissions *

Example

ftp-gw: extended-permissions *

FTP proxy checks for extended permissions when authenticating users.

Gauntlet Firewall Manager

Firewall Rules > Users tab > Restrictions; Services > Service tab > Add or Modify > Restrictions

feature

Specifies particular features explicitly permitted or denied. Denying a feature causes the HTTP proxy to remove the related tags from within the HTML code. Lets you control general features rather than specific portions of the HTTP protocol.

ahttp-gw	gopher-gw	mssql-gw	RealAudio	strmwrks-gw
aol-gw	gui	netacl	rlogin-gw	syb-gw
alerts	• http-gw	netconfig	rsh-gw	tn-gw
authenIP	info-gw	NetShow	smap	VDOLive
authsrv	ldap-gw	nntp-gw	smapd	whois
ck-gw	lnotes-gw	pcxdpp	snmpd	x-gw
cserve-gw	login-sh	plug-gw	snmp-gw	• policy-policy
finger	lp-gw	pop3-gw	mbase-gw	
ftp-gw	mmp	radm	ssl-gw	

Syntax 1

http-gw: {permit | deny}-feature features

features Lists particular HTTP features.

Valid features are:

- activeX (deny removes <EMBED> and <OBJECT> tags)
- frames
- html2
- cyberpatrol (permit activates support for Cyber Patrol software)
- java (deny removes <APPLET> tags)
- script (deny removes <SCRIPT> tags>)
- kanji (permit allows Kanji characters as described in RFC 1468)
- legacy-kanji (permit allows Kanji characters as implemented in Gauntlet 3.2)
- multipart-form (blocks a file upload bug in Netscape Navigator)

Example

http-gw: deny-feature java javascript

The HTTP proxy removes Java or JavaScript tags from within any HTML accessed through the proxy.

```
policy-http-gw_Trusted: permit-feature cyberpatrol
```

Cyber Patrol is enabled at the policy level.

Gauntlet Firewall Manager

Services > HTTP tab > Add or Modify > Deny Special Features

You cannot set portions of this attribute through the Gauntlet Firewall Manager.

Syntax 2

Specifies features in which the HTTP proxy restricts HTML to comply with that feature type.

http-gw: feature features

features Lists particular HTTP features. Valid features are: frames, html2, java,

script

Example

http-gw: feature html2

The HTTP proxy removes from any HTML that it accesses all HTML that does not meet the HTML2 standards.

Gauntlet Firewall Manager

Services > HTTP tab > Add or Modify > Deny Special Features

You cannot set portions of this attribute through the Gauntlet Firewall Manager.

force_source_address

Specifies that the plug proxy uses the IP address of the originating host as the source address of the packet when sending a request to the destination host. If this attribute is not specified, the firewall uses its own IP address as the source address of the packet, causing all packets to look as if they originated on the firewall. You must use officially registered, routable addresses on your trusted networks to use this attribute.

	ahttp-gw		gopher-gw		mssql-gw		RealAudio		strmwrks-gw
•	aol-gw		gui		netacl		rlogin-gw		syb-gw
	alerts		http-gw		netconfig	•	rsh-gw		tn-gw
	authenIP		info-gw		NetShow		smap		VDOLive
	authsrv	•	ldap-gw	•	nntp-gw		smapd	•	whois
	ck-gw	•	lnotes-gw		pcxdpp		snmpd		x-gw
•	cserve-gw		login-sh	•	plug-gw		snmp-gw		policy-policy
	finger		lp-gw		pop3-gw		mbase-gw		
	ftp-gw		mmp		radm	•	ssl-gw		

Syntax

force_source_address { on | off }

Example

aol-gw: force_source_address on

The plug proxy for America Online uses the IP address of the originating host as the source address of the packet when sending the packet on to the destination host.

Gauntlet Firewall Manager

Services > Plug tab > Add or Modify > Source Address

You cannot set this attribute through the Gauntlet Firewall Manager for some proxies.

forward

Specifies the name of a host to which the HTTP proxy forwards requests for which it can find no destination information.

The HTTP proxy uses this information as a last resort, when it cannot find any other information in the request. This may happen when transparency is not enabled.

ahttp-gw	• gopher-gw	mssql-gw	RealAudio	strmwrks-gw
aol-gw	gui	netacl	rlogin-gw	syb-gw
alerts	• http-gw	netconfig	rsh-gw	tn-gw
authenIP	info-gw	NetShow	smap	VDOLive
authsrv	ldap-gw	nntp-gw	smapd	whois
ck-gw	lnotes-gw	pcxdpp	snmpd	x-gw
cserve-gw	login-sh	plug-gw	snmp-gw	policy-policy
finger	lp-gw	pop3-gw	mbase-gw	
ftp-gw	mmp	radm	ssl-gw	

You cannot set this attribute through the Gauntlet Firewall Manager.

Syntax

forward pattern -protocol protocol -tohost host:port

pattern Pattern in the URL for which the HTTP proxy uses this rule. Quotation

marks are not required.

-protocol protocol

Protocol that the HTTP proxy uses when communicating with the

remote host. Valid values are FTP, Gopher, and HTTP

-tohost host:port

Host and port to which the HTTP proxy forwards requests and the port on which it connects. Use IP addresses or hostnames. Specify ports by port number.

Example

http-gw: forward /pub* -protocol ftp -tohost ftp.bigu.edu

The HTTP proxy forwards all requests with a URL starting with the string "/pub" to the host ftp.bigu.edu using the FTP protocol.

forward (authenIP only)

Specifies screening rules that apply to packets that the firewall would normally forward (like a router) because their destinations are hosts other than the firewall itself.

The packet screening facility reads rules specified with the authenIP keyword before rules (including default Gauntlet firewall rules) specified with the netconfig keyword. The recommended way to add forward rules is through the packet screening editor in the administration tools.

	ahttp-gw	gopher-gw	mssql-gw	RealAudio	strmwrks-gw
	aol-gw	gui	netacl	rlogin-gw	syb-gw
	alerts	http-gw	netconfig	rsh-gw	tn-gw
•	authenIP	info-gw	NetShow	smap	VDOLive
	authsrv	ldap-gw	nntp-gw	smapd	whois
	ck-gw	lnotes-gw	pcxdpp	snmpd	x-gw
	cserve-gw	login-sh	plug-gw	snmp-gw	policy-policy
	finger	lp-gw	pop3-gw	mbase-gw	
	ftp-gw	mmp	radm	ssl-gw	

Syntax

{permit | deny | absorb}-forward [-proto protocol] [-if interface] -srcaddr address -dstaddr address [-srcport port] [-dstport port]

permit-forward Packets are forwarded from one interface of the firewall to the other, as a router does.

deny-forward Packets are neither forwarded from one interface of the firewall to the other nor absorbed for processing as if they were addressed for the firewall. The firewall drops these packets.

absorb-forward The firewall accepts these packets as if their destination were the firewall itself and passes them on to the appropriate utility or proxy.

-proto protocol

The particular protocol for which this rule is valid. Valid values are defined in RFC 1700. Specify by protocol name or number. The wildcard * is valid.

You can specify a subset of the ICMP protocol.

Use the following syntax

.icmp: [!] *subtype* [& | | [!] *subtype*] [& | | [!] *subtype*]

where: *subtype* specifies one of subtypes of the ICMP protocol. Specify by subtype name.

Valid subtypes are:

ECHO

ECHOREPLY

IREQ

IREQREPLY

MASKREPLY

MASKREQ

PARAMPROB

REDIRECT

ROUTERADVERT

ROUTERSOLICIT

SOURCEQUENCH

TIMXCEED

TSTAMP

TSTAMPREPLY

UNREACH

! specifies that a particular subtype is not permitted.

& specifies multiple subtypes that are allowed.

| specifies that any of the listed subtypes are allowed.

-if interface

Name of the interface on which the packet arrives. Valid values vary by operating system and type of physical connection. The wildcard * is valid.

-srcaddr address

Source IP address and netmask of the packet. The wildcard address 0.0.0.0:0.0.0.0 is valid.

-dstaddr address

Destination IP address and netmask of the packet. The wildcard address 0.0.0.0:0.0.0.0 is valid.

-srcport *port* Source port of the packet by port number. The wildcard * is valid.

-dstport *port* Destination port of the packet by port number. The wildcard * is valid.

Example

```
authenIP: permit-forward -if ef1 -proto UDP -srcaddr
10.0.1.120:255.255.255.255 -dstaddr 10.0.1.33:255.255.255.255 -srcport
* -dstport 161
authenIP: permit-forward -if ef0 -proto UDP -srcaddr
10.0.1.33:255.255.255.255 -dstaddr 10.0.1.120:255.255.255.255 -srcport
* -dstport 161
```

The firewall forwards UDP packets (which can originate on any port) between an SNMP management station (10.0.1.120) on the trusted network and another workstation on the (204.255.154.27) untrusted network of the Gauntlet Intranet Firewall.

```
authenIP: permit-forward -if ef1 -proto icmp: !ROUTERADVERT |
!ROUTERSOLICIT -srcaddr 10.0.1.120:255.255.255.255 -dstaddr
10.0.1.33:255.255.255.255 -srcport * -dstport *
```

The firewall forwards all ICMP packets except ROUTERADVERT and ROUTERSOLICIT from a host on the trusted network (10.0.1.120) and a host on the untrusted network (10.0.1.33).

The commands *must* be on one line. They are wrapped here for readability.

Gauntlet Firewall Manager

Environment > Packet Screening tab > Add or Modify > Permit traffic to forward without any proxy application

function

Specifies particular functions of the protocol that are explicitly permitted or denied.

ahttp-gw	gopher-gw	mssql-gw	RealAudio	strmwrks-gw
aol-gw	gui	netacl	rlogin-gw	syb-gw
alerts	• http-gw	netconfig	rsh-gw	tn-gw
authenIP	info-gw	NetShow	smap	VDOLive
authsrv	ldap-gw	nntp-gw	smapd	whois
ck-gw	lnotes-gw	pcxdpp	snmpd	x-gw
cserve-gw	login-sh	plug-gw	snmp-gw	• policy-policy
finger	lp-gw	pop3-gw	mbase-gw	
• ftp-gw	mmp	radm	ssl-gw	

Syntax

ftp-gw: {permit | deny}-function functions

functions Specifies functions that are permitted or denied.

Valid values for the FTP proxy are:

- ABOR—Abort previous command
- ACCT—Specify account
- ALLO—Allocate storage
- APPE—Append to a file
- CDUP—Change to parent of current working directory
- CWD—Change working directory
- DELE—Delete a file
- HELP—Give help information
- LIST—List files in a directory

- MKD—Make directory
- MODE—Specify data transfer mode
- NLST—List names of files in directory
- NOOP—Do nothing
- PASS—Specify password
- PASV—Prepare for server-to-server transfer
- PORT—Specify data connection port
- PWD—Print the current working directory
- QUIT—Terminate session
- REIN—Full user terminate
- REST—Restart incomplete transfer
- RETR—Retrieve a file
- RMD—Remove a directory
- RNFR—Specify rename-from filename
- RNTO—Specify rename-to filename
- SITE—Nonstandard commands
- SIZE—Return size of a file
- SMNT—Structure mount
- STAT—Return status of server
- STOR—Store a file
- STOU—Store a file with a unique name
- STRU—Specify data transfer structure
- SYST—Show operating system server type
- TYPE—Specify data transfer type
- USER—Specify user name
- XCUP—Change to parent of current working directory
- XCWD—Change working directory

- XMKD—Make a directory
- XPWD—Print the current working directory
- XRMD—Remove a directory

Valid values for the HTTP proxy are:

- BINARY—Read Files
- DIR—List Directories
- EXEC—Exec Commands
- FTP—FTP Requests
- GOPHER—Gopher Requests
- HTTP—HTTP Requests
- HTTPREQ—HTTP Requests
- PLUS—Gopher+ Commands
- READ—Requests
- TEXT—Read Files
- TYPE—Content-type of header
- WAIS—Search Commands
- WRITE—Write Data

Example

ftp-gw: deny-function RETRs

The FTP proxy does not allow people to retrieve (RETR) files.

http-gw: deny-function FTP

The HTTP proxy does not allow FTP requests through the HTTP proxy.

Gauntlet Firewall Manager

Services > FTP tab > Operations

Services > HTTP tab > Add or Modify > Operations

groupid

Specifies the group ID the proxy uses when running.

•	ahttp-gw	•	gopher-gw		mssql-gw		RealAudio	•	strmwrks-gw
	aol-gw		gui	•	netacl		rlogin-gw		syb-gw
	alerts	•	http-gw		netconfig		rsh-gw	•	tn-gw
	authenIP		info-gw		NetShow	•	smap		VDOLive
	authsrv		ldap-gw		nntp-gw	•	smapd		whois
•	ck-gw		lnotes-gw		pcxdpp		snmpd		x-gw
	cserve-gw		login-sh		plug-gw	•	snmp-gw	•	policy-policy
	finger	•	lp-gw		pop3-gw		mbase-gw		
•	ftp-gw		mmp		radm		ssl-gw		

Syntax

groupid group

group

Name of the group, either a name or numeric ID from the /etc/group file.

Example

info-gw: groupid uucp

The Info Server runs using the group ID of uucp.

Gauntlet Firewall Manager

Services > Service tab > GroupID

handoff

Specifies the name of a host to which the FTP proxy or HTTP proxy hands the proxy request. This allows you to redirect FTP or HTTP requests to another system running an FTP or HTTP server, such as an anonymous FTP server running on your service net.

ahttp-gw	gopher-gw	mssql-gw	RealAudio	strmwrks-gw
aol-gw	gui	netacl	rlogin-gw	syb-gw
alerts	• http-gw	netconfig	rsh-gw	tn-gw
authenIP	info-gw	NetShow	smap	VDOLive
authsrv	ldap-gw	nntp-gw	smapd	whois
ck-gw	lnotes-gw	pcxdpp	snmpd	x-gw
cserve-gw	login-sh	plug-gw	snmp-gw	policy-policy
finger	lp-gw	pop3-gw	mbase-gw	
• ftp-gw	mmp	radm	ssl-gw	

Syntax for ftp-gw

ftp-gw: handoff host[:port]

host[:port]

The host and port to which the FTP proxy forwards requests and the port on which it connects. Use IP addresses or hostnames. Specify port by service name or port number. If no port number is specified, the proxy uses port 21 by default.

Example

ftp-gw: handoff ftp.yoyodyne.com

The FTP proxy on the firewall hands all requests on port 21 to the FTP server (ftp.yoyodyne.com) running on the service network.

Gauntlet Firewall Manager

Services > FTP tab > Add or Modify > Handoff Host and Handoff Port

Syntax for http-gw

Specifies the name of a host to which the HTTP proxy hands the proxy request. This allows you to use several proxies, such as the HTTP proxy on the firewall and a caching proxy.

The HTTP proxy communicates with the next proxy as if it were a client rather than another proxy. You cannot use this setting in place of specifying the HTTP proxy in your browser. The handoff attribute does not work for FTP or Gopher URLs.

http-gw: handoff host[:port]

host[:port]

Specifies the host and port to which the HTTP proxy forwards requests and the port on which it connects. Use IP addresses or hostnames. Specify port by service name or port number. If no port number is specified, the proxy uses port 80 by default.

Example

http-gw: handoff fire-in.yoyodyne.com

The HTTP proxy on the firewall inside the network (fw-engineering.engineering.yoyodyne.com) hands all requests between the corporate network and the Internet (fire-in.yoyodyne.com) to the firewall.

Gauntlet Firewall Manager

Services > HTTP tab > Add or Modify > Handoff Host and Handoff Port

header

Specifies HTTP headers that the proxy permits or denies. Denying a header causes the HTTP proxy to remove the related information from the request when it sends the header to the destination host.

ahttp-gw	gopher-gw	mssql-gw	RealAudio	strmwrks-gw
aol-gw	gui	netacl	rlogin-gw	syb-gw
alerts	• http-gw	netconfig	rsh-gw	tn-gw
authenIP	info-gw	NetShow	smap	VDOLive
authsrv	ldap-gw	nntp-gw	smapd	whois
ck-gw	lnotes-gw	pcxdpp	snmpd	x-gw
cserve-gw	login-sh	plug-gw	snmp-gw	policy-policy
finger	lp-gw	pop3-gw	mbase-gw	
ftp-gw	mmp	radm	ssl-gw	

You cannot set this attribute through the Gauntlet Firewall Manager.

Syntax

http-gw: {permit | deny}-header header

header

Headers you wish to explicitly permit or deny (remove). You can specify only one header per line. Consult the HTTP 1.0/1.1 specifications for a list of headers. Certain headers are always processed by the HTTP proxy and are dealt with specifically:

- Connection
- · Content-Length
- Content-Type
- Location
- Proxy-Connection

Example

```
http-gw: deny-header user-agent
http-gw: deny-header x-*
```

The HTTP proxy removes the user agent header and headers that begin with x- before sending the request to the destination host.

help-msg

Specifies the file that the proxy displays when the user accesses the *help* command.

	ahttp-gw	gopher-gw	mssql-gw	RealAudio	strmwrks-gw
	aol-gw	gui	netacl	• rlogin-gw	syb-gw
	alerts	http-gw	netconfig	rsh-gw	• tn-gw
	authenIP	info-gw	NetShow	smap	VDOLive
	authsrv	ldap-gw	nntp-gw	smapd	whois
•	ck-gw	lnotes-gw	pcxdpp	snmpd	x-gw
	cserve-gw	login-sh	plug-gw	snmp-gw	• policy-policy
	finger	lp-gw	pop3-gw	mbase-gw	
•	ftp-gw	mmp	radm	ssl-gw	

Syntax

help-msg file

file

Name of the file the proxy displays when the user accesses the *help* command. If no file is specified, the proxy displays a list of internal commands.

Example

rlogin-gw: help-msg /usr/local/etc/rlogin-help.txt

Displays the file */usr/local/etc/rlogin-help.txt* when a user requests access from the rlogin proxy.

Gauntlet Firewall Manager

Services > Service tab > Add or Modify > Help Message

hosts (authory only)

Specifies the hosts that can connect to the authentication server.

	ahttp-gw	gopher-gw	mssql-gw	RealAudio	strmwrks-gw
	aol-gw	gui	netacl	rlogin-gw	syb-gw
	alerts	http-gw	netconfig	rsh-gw	tn-gw
	authenIP	info-gw	NetShow	smap	VDOLive
•	authsrv	ldap-gw	nntp-gw	smapd	whois
	ck-gw	lnotes-gw	pcxdpp	snmpd	x-gw
	cserve-gw	login-sh	plug-gw	snmp-gw	policy-policy
	finger	lp-gw	pop3-gw	mbase-gw	
	ftp-gw	mmp	radm	ssl-gw	

You cannot set this attribute through the Gauntlet Firewall Manager.

Syntax

authsrv: {permit | deny}-hosts hosts

hosts

Hosts from which the authentication server accepts connections. Specify individual systems, entire networks, or subnets. Use IP addresses or hostnames. The wildcard * is valid.

Example

authsrv: permit-hosts 127.0.0.1

The authentication server accepts connections only from the firewall itself (localhost).

hosts (all but authsrv)

Specifies the hosts for which the proxy uses a particular policy, or the hosts that can use the proxy.

ahttp-gw	• gopher-gw	• mssql-gw	• RealAudio	• strmwrks-gw
• aol-gw	• gui	• netacl	• rlogin-gw	• syb-gw
alerts	• http-gw	netconfig	• rsh-gw	• tn-gw
authenIP	• info-gw	• NetShow	smap	• VDOLive
authsrv	• ldap-gw	• nntp-gw	smapd	• whois
• ck-gw	• lnotes-gw	pcxdpp	• snmpd	• x-gw
• cserve-gw	login-sh	• plug-gw	• snmp-gw	policy-policy
• finger	• lp-gw	• pop3-gw	• mbase-gw	
• ftp-gw	• mmp	• radm	• ssl-gw	

Syntax

{permit | deny}-hosts -policy policy

permit-hosts hosts

Hosts for which the proxy uses a particular policy, or hosts that can use the proxy.

deny-hosts hosts

Hosts that cannot use the proxy.

hosts

Hosts for which the proxy uses the particular policy. When used without the **-policy** option, indicates the hosts that can use the proxy. Specifies single hosts, entire networks, or subnets. Specify by IP address or hostname. The wildcard * is valid.

-policy *policy* Name of the policy these hosts use.

Example

```
*: permit-hosts 10.0.4.* -policy restrictive
```

All requests from the network 10.0.4.* use the policy "restrictive".

```
rsh-gw: permit-hosts 10.0.1.12
```

The host 10.0.1.12 can use the RSH proxy.

```
ftp-gw: deny-hosts 10.0.1.0:255.255.255.0
```

All the hosts on the 10.0.1.0:255.255.255.0 subnet cannot use the FTP proxy.

Gauntlet Firewall Manager

Firewall Rules > Rules tab

if-inside

Specifies the name and the IP address of the inside interface of the firewall. Used to create local screening rules that accept packets for the inside interface. Used to create forward screening rules that absorb packets if transparency is on.

ahttp-gw	gopher-gw	mssql-gw	RealAudio	strmwrks-gw
aol-gw	gui	netacl	rlogin-gw	syb-gw
alerts	http-gw	 netconfig 	rsh-gw	tn-gw
authenIP	info-gw	NetShow	smap	VDOLive
authsrv	ldap-gw	nntp-gw	smapd	whois
ck-gw	lnotes-gw	pcxdpp	snmpd	x-gw
cserve-gw	login-sh	plug-gw	snmp-gw	policy-policy
finger	lp-gw	pop3-gw	sql-gw	
ftp-gw	mmp	radm	ssl-gw	

Syntax

if-inside -if insideinterface -addr insideIPaddress

insideinterface Interface name of the inside interface of the firewall. Valid values vary by operating system and type of physical connection.

InsideIPaddress IP address and subnet mask of the inside interface of the firewall.

Example

```
netconfig: if-inside -if lel -addr 10.0.1.100:255.255.255.255
```

The inside interface of the firewall is le1 and the inside address of the firewall is 10.0.1.100.

Gauntlet Firewall Manager

Environment > IP Spoofing tab

if-outside

Specifies the name of an outside or service net interface and the IP address of the outside or service net interface of the firewall. Used to create local screening rules that accept packets for the outside interface.

ahttp-gw	gopher-gw	mssql-gw	RealAudio	strmwrks-gw
aol-gw	gui	netacl	rlogin-gw	syb-gw
alerts	http-gw	 netconfig 	rsh-gw	tn-gw
authenIP	info-gw	NetShow	smap	VDOLive
authsrv	ldap-gw	nntp-gw	smapd	whois
ck-gw	lnotes-gw	pcxdpp	snmpd	x-gw
cserve-gw	login-sh	plug-gw	snmp-gw	policy-policy
finger	lp-gw	pop3-gw	mbase-gw	
ftp-gw	mmp	radm	ssl-gw	

Syntax

if-outside -if outsideinterface -addr outsideIPaddress

outsideinterface Interface name of the outside or service net interface of the firewall.
 Valid values vary by operating system and type of physical connection.
 outsideIPaddress IP address and subnet mask of firewall's outside or service net interface.

Example

```
netconfig: if-outside -if wel -addr 204.255.154.100:255.255.255.255
```

Firewall outside interface is we1, firewall the outside address is 204.255.154.100. netconfig: if-outside -if we2 -addr 204.255.154.30:255.255.255.255

Firewall service net interface is we2, IP address of we2 is 204.255.154.30.

Gauntlet Firewall Manager

Environment > IP Spoofing tab

keepalive-timeout

Specifies the amount of time that the Gauntlet Firewall Manager waits for activity from the client before shutting itself down. If you do not use this attribute, the Gauntlet Firewall Manager waits 7200 seconds (2 hours) for activity before shutting itself down.

ahttp-gw	gopher-gw	mssql-gw	RealAudio	strmwrks-gw
aol-gw	• gui	netacl	rlogin-gw	syb-gw
alerts	http-gw	netconfig	rsh-gw	tn-gw
authenIP	info-gw	NetShow	smap	VDOLive
authsrv	ldap-gw	nntp-gw	smapd	whois
ck-gw	lnotes-gw	pcxdpp	snmpd	x-gw
cserve-gw	login-sh	plug-gw	snmp-gw	policy-policy
finger	lp-gw	pop3-gw	mbase-gw	
ftp-gw	mmp	radm	ssl-gw	

Syntax

keepalive-timeout *seconds*

seconds

Number of seconds that the Gauntlet Firewall Manager waits for activity from the client before shutting itself down.

Example

gui: keepalive-timeout 1800

Gauntlet Firewall Manager waits 30 minutes (1800 seconds) before shutting itself down.

Gauntlet Firewall Manager

Environment > Firewall Access tab > Keep Alive

local

Specifies screening rules that apply to packets with a destination of the firewall itself.

Note that the packet screening facility reads rules specified with the **authenIP** keyword before rules (including default Gauntlet firewall rules) specified with the **netconfig** keyword. The recommended way to add local rules is through the packet screening editor in the administration tools.

ahttp-gw	gopher-gw	mssql-gw	RealAudio	strmwrks-gw
aol-gw	gui	netacl	rlogin-gw	syb-gw
alerts	http-gw	netconfig	rsh-gw	tn-gw
• authenIP	info-gw	NetShow	smap	VDOLive
authsrv	ldap-gw	nntp-gw	smapd	whois
ck-gw	lnotes-gw	pcxdpp	snmpd	x-gw
cserve-gw	login-sh	plug-gw	snmp-gw	policy-policy
finger	lp-gw	pop3-gw	mbase-gw	
ftp-gw	mmp	radm	ssl-gw	

Syntax

{permit | deny}-local [-proto protocol] [-if interface] -srcaddr address -dstaddr address [-srcport port] [-dstport port]

permit-local The firewall accepts packets for local delivery and processing.

deny-local The firewall does not accept packets for local delivery. The firewall

drops these packets.

-proto protocol Protocol for which this rule is valid. Valid values are specified in RFC

1770. Specify by protocol name or number. The wildcard * is valid.

-if interface Name of the interface on which the packet arrives. Valid values vary by

operating system and type of physical connection. The wildcard * is

valid.

-sreaddr address

Source IP address and netmask of the packet. The wildcard address 0.0.0.0:0.0.0.0 is valid.

-dstaddr address

Destination IP address and netmask of the packet. The wildcard address 0.0.0.0:0.0.0.0 is valid.

-srcport *port* Source port of the packet. Specify by port number. The wildcard * is

valid.

-dstport port Destination port of the packet. Specify by port number. The wildcard *

is valid.

Example

```
authenIP: deny-local -if ef0 -proto TCP
-srcaddr 192.168.1.0:255.255.255.0 -dstaddr 0.0.0.0:0.0.0 -srcport *
-dstport 25
```

The firewall denies all TCP connections on its outside interface (ef0) on port 25 (the SMTP port) from one network (192.168.1.0).

The command *must* be on one line. It is wrapped here for readability.

Gauntlet Firewall Manager

Environment > Packet Screening > Add or Modify > Deliver traffic locally to the firewall and Deny traffic

local-domain

Specifies the domains that are allowed to receive messages from anywhere. You always want your local domains to be able to receive mail from anywhere, so put all your domain names on this line.

This attribute and permit-relay (page 114) together provide the mailer with network knowledge about the domain. This helps the mailer guard against relay attacks, which occur when an outside host connects to your mail port and uses your mailer to send mail from you to outside your network.

ahttp-gw	gopher-gw	mssql-gw	RealAudio	strmwrks-gw
aol-gw	gui	netacl	rlogin-gw	syb-gw
alerts	http-gw	netconfig	rsh-gw	tn-gw
authenIP	info-gw	NetShow	smap	VDOLive
authsrv	ldap-gw	nntp-gw	• smapd	whois
ck-gw	lnotes-gw	pcxdpp	snmpd	x-gw
cserve-gw	login-sh	plug-gw	snmp-gw	policy-policy
finger	lp-gw	pop3-gw	mbase-gw	
ftp-gw	mmp	radm	ssl-gw	

Syntax

smap: local-domain domainnames]

domainnames Space-separated list of domain names.

Example

smap:local-domain fred.com celeste.com

Allows the local domains fred.com and celeste.com to receive messages from anywhere.

log

Specifies that proxies log only the operations listed, rather than all operations (the default). Note that the FTP proxy does not log all FTP operations by default. This attribute is equivalent to the **-log** command in previous versions.

ahttp-gw	gopher-gw	mssql-gw	RealAudio	strmwrks-gw
aol-gw	gui	netacl	rlogin-gw	syb-gw
alerts	• http-gw	netconfig	rsh-gw	tn-gw
authenIP	info-gw	NetShow	smap	VDOLive
authsrv	ldap-gw	nntp-gw	smapd	whois
ck-gw	lnotes-gw	pcxdpp	snmpd	x-gw
cserve-gw	login-sh	plug-gw	snmp-gw	• policy-policy
finger	• lp-gw	pop3-gw	mbase-gw	
• ftp-gw	mmp	radm	ssl-gw	

Syntax

log operations

operations

Specifies operations the proxies log. Refer to the function attribute (page 80) for a list of supported FTP functions.

Valid values for the HTTP proxy are:

- BINARY—Read files
- DIR—List directories
- EXEC—Exec commands
- FTP—FTP requests
- GOPHER—Gopher requests
- HTTP—HTTP requests
- HTTPREQ—HTTP requests
- PLUS—Gopher+ commands

- READ—Requests
- TEXT—Read files
- TYPE—Content-type of header
- WAIS—Search commands
- WRITE—Write data

Valid values for the lp proxy are:

- all
- print
- remove
- restart
- status-ln (long)
- status-sh (short)

Example

policy-trusted: log RETR STOR

The trusted policy logs only retrieve (RETR) and storage (STOR) activities.

Gauntlet Firewall Manager

Services > FTP tab > Operations

Services > HTTP tab > Add or Modify > Operations

You cannot set this attribute through the Gauntlet Firewall Manager for all proxies.

log (smap only)

Controls the anti-spam / anti-relay logging. If you don't put a log command in the smap portion of your netperm table, smap will not make a log entry whenever a spam or relay message is dropped.

ahttp-gw	gopher-gw	mssql-gw	RealAudio	strmwrks-gw
aol-gw	gui	netacl	rlogin-gw	syb-gw
alerts	http-gw	netconfig	rsh-gw	tn-gw
authenIP	info-gw	NetShow	• smap	VDOLive
authsrv	ldap-gw	nntp-gw	smapd	whois
ck-gw	lnotes-gw	pcxdpp	snmpd	x-gw
cserve-gw	login-sh	plug-gw	snmp-gw	policy-policy
finger	lp-gw	pop3-gw	mbase-gw	
ftp-gw	mmp	radm	ssl-gw	

Syntax

log spam-reject relay- reject

spam-reject Enables logging when relays are dropped.

relay-reject Enables logging when spam messages are dropped.

Example

spam: relay-reject spam-reject

Enables logging for both relays and spam messages that are dropped.

manager

Specifies the manager that the SNMP proxy can contact.

ahttp-gw	gopher-gw	mssql-gw	RealAudio	strmwrks-gw
aol-gw	gui	netacl	rlogin-gw	syb-gw
alerts	http-gw	netconfig	rsh-gw	tn-gw
authenIP	info-gw	NetShow	smap	VDOLive
authsrv	ldap-gw	nntp-gw	smapd	whois
ck-gw	lnotes-gw	pcxdpp	snmpd	x-gw
cserve-gw	login-sh	plug-gw	• snmp-gw	policy-policy
finger	lp-gw	pop3-gw	mbase-gw	
ftp-gw	mmp	radm	ssl-gw	

Syntax

manager manager [port agent-port] [trap trap-port]

manager Name of the network manager that can use the proxy. Specify by IP

address or hostname.

port *agent-port* Port on which the agent is listening for queries from the SNMP manager.

If you do not include the *agent-port* option, the proxy uses port 161.

trap trap-port Port on which the proxy listens for trap messages from the agents. If you

do not include the *agent-port* option, the proxy uses port 162.

Example

snmp-gw: manager 10.0.1.123

The network manager on 10.0.1.123 can use the SNMP proxy.

Gauntlet Firewall Manager

Services > SNMP tab > Manager's Network Address

maxbad

Specifies the number of incorrect consecutive login attempts a user can make before the authentication server disables the account.

If you do not use this attribute, the authentication server disables a user account after five unsuccessful login attempts.

	ahttp-gw	gopher-gw	mssql-gw	RealAudio	strmwrks-gw
	aol-gw	gui	netacl	rlogin-gw	syb-gw
	alerts	http-gw	netconfig	rsh-gw	tn-gw
	authenIP	info-gw	NetShow	smap	VDOLive
•	authsrv	ldap-gw	nntp-gw	smapd	whois
	ck-gw	lnotes-gw	pcxdpp	snmpd	x-gw
	cserve-gw	login-sh	plug-gw	snmp-gw	policy-policy
	finger	lp-gw	pop3-gw	mbase-gw	
	ftp-gw	mmp	radm	ssl-gw	

You cannot set this attribute through the Gauntlet Firewall Manager.

Syntax

maxbad logins

logins

Maximum number of incorrect login attempts a user can make before the authentication server disables the account.

Example

authsrv: maxbad 3

The authentication server allows three incorrect login attempts before disabling an account.

maxbytes

Specifies the maximum size (in bytes) of mail messages that the *smap* client accepts. After receiving the maximum number of bytes, the *smap* client truncates the message and sends the truncated message to the recipient. The *smap* client accepts the remaining data from the sender and discards it. If this attribute is not used, the *smap* client does not set a limit on the size of mail messages.

ahttp-gw	gopher-gw	mssql-gw	RealAudio	strmwrks-gw
aol-gw	gui	netacl	rlogin-gw	syb-gw
alerts	http-gw	netconfig	rsh-gw	tn-gw
authenIP	info-gw	NetShow	• smap	VDOLive
authsrv	ldap-gw	nntp-gw	smapd	whois
ck-gw	lnotes-gw	pcxdpp	snmpd	x-gw
cserve-gw	login-sh	plug-gw	snmp-gw	policy-policy
finger	lp-gw	pop3-gw	mbase-gw	
ftp-gw	mmp	radm	ssl-gw	

You cannot set this attribute through the Gauntlet Firewall Manager.

Syntax

maxbytes bytes

bytes Maximum size (in bytes) of mail messages that the *smap* client accepts.

Example

smap: maxbytes 2048

The smap client accepts messages up to a size of 2 MB

maxchildren

Obsolete. Use the child-limit attribute (see "child-limit" on page 38.)

maxrecip

Specifies the maximum number of recipients that the *smap* client accepts in the SMTP dialog. If the SMTP dialog indicates that there are more recipients than allowed, then the *smap* client discards the message. The message is not delivered to anyone. If this attribute is not used, the smap client allows an unlimited number of recipients.

ahttp-gw	gopher-gw	mssql-gw	RealAudio	strmwrks-gw
aol-gw	gui	netacl	rlogin-gw	syb-gw
alerts	http-gw	netconfig	rsh-gw	tn-gw
authenIP	info-gw	NetShow	• smap	VDOLive
authsrv	ldap-gw	nntp-gw	smapd	whois
ck-gw	lnotes-gw	pcxdpp	snmpd	x-gw
cserve-gw	login-sh	plug-gw	snmp-gw	policy-policy
finger	lp-gw	pop3-gw	mbase-gw	
ftp-gw	mmp	radm	ssl-gw	

You cannot set this attribute through the Gauntlet Firewall Manager.

Syntax

maxrecip recipients

recipients Maximum number of recipients the smap client accepts in SMTP dialog.

Example

smap: maxrecip 25

The smap client accepts mail with a maximum of 25 recipients.

maxsessions

Specifies the maximum number of concurrent sessions that a single process of the HTTP proxy can support. When this limit is exceeded, the proxy creates a new process to handle the additional load.

• ahttp-gw	gopher-gw	mssql-gw	RealAudio	strmwrks-gw
aol-gw	gui	netacl	rlogin-gw	syb-gw
alerts	http-gw	netconfig	rsh-gw	tn-gw
authenIP	info-gw	NetShow	smap	VDOLive
authsrv	ldap-gw	nntp-gw	smapd	whois
ck-gw	lnotes-gw	pcxdpp	snmpd	x-gw
cserve-gw	login-sh	plug-gw	snmp-gw	policy-policy
finger	lp-gw	pop3-gw	mbase-gw	
ftp-gw	mmp	radm	ssl-gw	

You cannot set this attribute through the Gauntlet Firewall Manager.

Syntax

maxsessions sessions

sessions

Maximum number of concurrent sessions that a single process of the HTTP proxy can support.

Example

ahttp-gw: maxsessions 10

The authenticated HTTP proxy allows a maximum of ten concurrent sessions for a single process before creating a new process.

NetShow

Specifies the port on which the NetShow proxy listens for requests.

ahttp-gw	gopher-gw	mssql-gw	RealAudio	strmwrks-gw
aol-gw	gui	netacl	rlogin-gw	syb-gw
alerts	http-gw	netconfig	rsh-gw	tn-gw
authenIP	info-gw	NetShow	smap	VDOLive
authsrv	ldap-gw	nntp-gw	smapd	whois
ck-gw	lnotes-gw	pcxdpp	snmpd	x-gw
cserve-gw	login-sh	plug-gw	snmp-gw	policy-policy
finger	lp-gw	pop3-gw	mbase-gw	
ftp-gw	• mmp	radm	ssl-gw	

Syntax

NetShow port

port

Port on which the NetShow proxy listens for requests. Specify by port number or by port name as specified in /etc/services.

Example

mmp: NetShow 1755

The NetShow proxy listens for requests on port 1755.

Gauntlet Firewall Manager

Services > NetShow tab > Ports

nobogus

Specifies that the authentication server indicates that a user ID does not exist when users attempt to log in and fail.

If this attribute is not specified and a user enters a nonexistent user name, the authentication server always responds with a bogus SNK challenge.

	ahttp-gw	gopher-gw	mssql-gw	RealAudio	strmwrks-gw
	aol-gw	gui	netacl	rlogin-gw	syb-gw
	alerts	http-gw	netconfig	rsh-gw	tn-gw
	authenIP	info-gw	NetShow	smap	VDOLive
•	authsrv	ldap-gw	nntp-gw	smapd	whois
	ck-gw	lnotes-gw	pcxdpp	snmpd	x-gw
	cserve-gw	login-sh	plug-gw	snmp-gw	policy- <i>policy</i>
	finger	lp-gw	pop3-gw	mbase-gw	
	ftp-gw	mmp	radm	ssl-gw	

You cannot set this attribute through the Gauntlet Firewall Manager.

Syntax

nobogus true

Note: You must remove or comment out this setting if you wish to disable it. The settings "nobogus false" and "nobogus off" are not valid.

Example

authsrv: nobogus true

The authentication server indicates that the user ID does not exist (rather than displaying a bogus SNK challenge) when users attempt to log in and fail.

operation

Specifies explicitly permitted or denied operations for particular users or groups at particular times of day.

Note: The authentication server only uses these rules when the policy or the proxy uses the extended-permissions attribute (see "extended-permissions" on page 69.)

_					
	ahttp-gw	gopher-gw	mssql-gw	RealAudio	strmwrks-gw
	aol-gw	gui	netacl	rlogin-gw	syb-gw
	alerts	http-gw	netconfig	rsh-gw	tn-gw
	authenIP	info-gw	NetShow	smap	VDOLive
•	authsrv	ldap-gw	nntp-gw	smapd	whois
	ck-gw	lnotes-gw	pcxdpp	snmpd	x-gw
	cserve-gw	login-sh	plug-gw	snmp-gw	policy-policy
	finger	lp-gw	pop3-gw	mbase-gw	
	ftp-gw	mmp	radm	ssl-gw	

Syntax

authsrv: {permit | deny}-operation [user users | group groups] service destination [options] [time start end]

permit-operation

Operations to be permitted.

deny-operation

Operations to be denied.

user *users* Specifies names of users for which the proxies use this rule. The

wildcard * is valid.

group *groups* Names of groups for which the proxies use this rule. The wildcard * is

valid.

service Name of a service for which this rule applies. Valid values are:

ck-gw—circuit proxy

- ftp-gw—FTP proxy
- rlogin-gw—rlogin proxy
- rsh-gw—rsh proxy
- tn-gw—TELNET proxy
- *—all of these proxies

destination

Hosts to which the proxies can or cannot send requests. Specify individual systems, entire networks, or subnets. Use IP addresses or hostnames. The wildcard * is valid.

options

Specifies particular operations for each protocol that can be controlled. Valid values are:

- ck-gw—none
- ftp-gw—Consult the ftpd(1) man page
- rlogin-gw—none
- · rsh-gw-none
- tn-gw-none

time start

Time at which the proxy begins using this rule. Specify time in hours and minutes (between 00:00 and 23:59).

time end

Time at which the proxy stops using this rule. Specify time in hours and minutes (between 00:00 and 23:59).

Example

```
authsrv: permit-operation group sales tn-gw * time 08:00 17:00
```

The sales group is permitted to use TELNET to connect to any destination only between the hours of $8:00\ a.m.$ and $5:00\ p.m.$

```
authsrv: permit-operation user robert ftp-gw ftp.yoyodyne.com
```

The user robert is permitted to use FTP to connect only to ftp.yoyodyne.com.

Gauntlet Firewall Manager

Firewall Rules > Users tab > Restrictions Services > Service tab > Add or Modify > Restrictions

ourname

Specifies the host and domain name that the graphical administrative tool or HTTP proxy uses when putting its own name into nontransparent forwarded URLs (links). Because the firewall may have different hostnames, this attribute allows you to specify which hostname to use.

ahttp-gw	gopher-gw	mssql-gw	RealAudio	strmwrks-gw
aol-gw	• gui	netacl	rlogin-gw	syb-gw
alerts	• http-gw	netconfig	rsh-gw	tn-gw
authenIP	info-gw	NetShow	smap	VDOLive
authsrv	ldap-gw	nntp-gw	smapd	whois
ck-gw	lnotes-gw	pcxdpp	snmpd	x-gw
cserve-gw	login-sh	plug-gw	snmp-gw	policy-policy
finger	lp-gw	pop3-gw	mbase-gw	
ftp-gw	mmp	radm	ssl-gw	

You cannot set this attribute through the Gauntlet Firewall Manager.

Syntax

ourname hostname

hostname

Name of the host that the GUI or HTTTP proxy uses when prepending URLs. Specify an individual interface. Use an IP address or hostname.

Example

```
gui: ourname 10.0.1.100
```

The GUI displays all pages as being on 10.0.1.100 (the inside interface of the firewall).

```
http-gw: ourname fire-in.yoyodyne.com
```

The HTTP proxy (if needed) prepends fire-in.yoyodyne.com (the inside interface of the firewall) to all URLs when rewriting them.

password change

Specifies password change options for allowing users to change passwords in authentication management system from within the TELNET and rlogin proxies.

	ahttp-gw	gopher-gw	mssql-gw	RealAudio	strmwrks-gw
	antip gw	gopher gw	msqi gw	Real/ Idalo	Stillwiks gw
	aol-gw	gui	netacl	• rlogin-gw	syb-gw
	alerts	http-gw	netconfig	rsh-gw	• tn-gw
	authenIP	info-gw	NetShow	smap	VDOLive
	authsrv	ldap-gw	nntp-gw	smapd	whois
•	ck-gw	lnotes-gw	pcxdpp	snmpd	x-gw
	cserve-gw	login-sh	plug-gw	snmp-gw	• policy-policy
	finger	lp-gw	pop3-gw	mbase-gw	
•	ftp-gw	mmp	radm	ssl-gw	

Syntax

{permit | deny}-password change

permit Hosts from which users can change their passwords. This is equivalent

to the -passok option in previous versions

deny Hosts from which users cannot change their passwords. Including a

deny-password change rule has the same effect as not including those

hosts in a permit-password change rule.

Example

policy-trusted: permit-password change

Allows users on the inside network to change their passwords from both the TELNET and rlogin proxies.

tn-gw: permit-password change

Allows users to change their passwords using the TELNET proxy. If this is the only permit-password change rule in the netperm table, users can only change their password from the TELNET proxy (not from the rlogin proxy).

Gauntlet Firewall Manager

Firewall Rules > Service Groups tab > Password Change

password-timeout

Specifies the amount of time between authentication requests. This attribute is useful if you are using a strong authentication system that uses one-time passwords, and you do not want to force your users to reauthenticate frequently. If you do not use this attribute, the proxy asks users to reauthenticate every 300 seconds (5 minutes).

• ahttp-gw	gopher-gw	mssql-gw	RealAudio	strmwrks-gw
aol-gw	gui	netacl	rlogin-gw	syb-gw
alerts	http-gw	netconfig	rsh-gw	tn-gw
authenIP	info-gw	NetShow	smap	VDOLive
authsrv	ldap-gw	nntp-gw	smapd	whois
ck-gw	lnotes-gw	pcxdpp	snmpd	x-gw
cserve-gw	login-sh	plug-gw	snmp-gw	policy-policy
finger	lp-gw	pop3-gw	mbase-gw	
ftp-gw	mmp	radm	ssl-gw	

You cannot set this attribute through the Gauntlet Firewall Manager.

Syntax

password-timeout seconds

seconds Number of seconds between authentication requests by the proxy.

Example

ahttp-gw: password-timeout 1800

The authenticating HTTP proxy prompts users to reauthenticate every 30 minutes (1800 seconds).

peer-net

Specifies the IP address of networks that are part of the trusted network but are separated from the firewall by a bridge or a router. Use this attribute if you have multiple inside networks that you want to reach from hosts using PC Extender. If you do not use this attribute, hosts using PC Extender can only reach hosts on the network to which the firewall is directly connected.

ahttp-gw	gopher-gw	mssql-gw	RealAudio	strmwrks-gw
aol-gw	gui	netacl	rlogin-gw	syb-gw
alerts	http-gw	netconfig	rsh-gw	tn-gw
authenIP	info-gw	NetShow	smap	VDOLive
authsrv	ldap-gw	nntp-gw	smapd	whois
ck-gw	lnotes-gw	 pcxdpp 	snmpd	x-gw
cserve-gw	login-sh	plug-gw	snmp-gw	policy-policy
finger	lp-gw	pop3-gw	mbase-gw	
ftp-gw	mmp	radm	ssl-gw	

Syntax

peer-net network

network

Network that is part of the trusted network but is separated from the firewall by a bridge or a router. Specify by IP address. The * wildcard is valid.

Example

pcxdpp: peer-net 10.0.7.*

The PC Extender DPP daemon considers hosts on the 10.0.7.* to be peer networks.

Gauntlet Firewall Manager

Environment > Peer Networks tab > Add

permit-relay

Defines, one per line, the sites that are allowed to send relayed messages, that is, who is allowed to use your mail gateway to send mail anyway. You normally want all your own users to be able to send mail anywhere.

This attribute and local-domain (page 96) together provide the mailer with network knowledge about the domain. This helps the mailer guard against relay attacks, which occur when an outside host connects to your mail port and uses your mailer to send mail from you to outside your network.

ahttp-gw	gopher-gw	mssql-gw	RealAudio	strmwrks-gw
aol-gw	gui	netacl	rlogin-gw	syb-gw
alerts	http-gw	netconfig	rsh-gw	tn-gw
authenIP	info-gw	NetShow	• smap	VDOLive
authsrv	ldap-gw	nntp-gw	smapd	whois
ck-gw	lnotes-gw	pcxdpp	snmpd	x-gw
cserve-gw	login-sh	plug-gw	snmp-gw	policy-policy
finger	lp-gw	pop3-gw	mbase-gw	
ftp-gw	mmp	radm	ssl-gw	

Syntax

smap: permit-relay domainname

domainnames Domain name allowed to send relayed messages.

Example

```
smap:permit-relay fred.com
smap:permit-relay celeste.com
```

Allows the local domains fred.com and celeste.com to send relayed messages.

pop-server

Specifies the name of the system on which the POP3 server is running. This attribute is required for the POP3 proxy when you are using APOP authentication.

ahttp-gw	gopher-gw	mssql-gw	RealAudio	strmwrks-gw
aol-gw	gui	netacl	rlogin-gw	syb-gw
alerts	http-gw	netconfig	rsh-gw	tn-gw
authenIP	info-gw	NetShow	smap	VDOLive
authsrv	ldap-gw	nntp-gw	smapd	whois
ck-gw	lnotes-gw	pcxdpp	snmpd	x-gw
cserve-gw	login-sh	plug-gw	snmp-gw	policy-policy
finger	lp-gw	• pop3-gw	mbase-gw	
ftp-gw	mmp	radm	ssl-gw	

Syntax

pop-server host

host

Name of the host on which the POP3 server is running (IP address or hostname).

Example

pop3-gw: pop-server mail

The POP3 proxy accesses the POP3 server running on the inside mail hub, mail.

Gauntlet Firewall Manager

Environment > Mail tab > POP3 > POP server location

port

Specifies the connection rule for this instance of the plug proxy, including hosts and ports.

ahttp-gw	gopher-gw	• mssql-gw	RealAudio	strmwrks-gw
• aol-gw	gui	netacl	rlogin-gw	syb-gw
alerts	http-gw	netconfig	rsh-gw	tn-gw
authenIP	info-gw	NetShow	smap	VDOLive
authsrv	• ldap-gw	• nntp-gw	smapd	• whois
ck-gw	• lnotes-gw	pcxdpp	snmpd	x-gw
• cserve-gw	login-sh	• plug-gw	snmp-gw	policy-policy
• finger	lp-gw	pop3-gw	mbase-gw	
ftp-gw	mmp	radm	• ssl-gw	

Syntax

port port hosts [-plug-to hosts] [-privport *] [-port port]

port Name or port number, as specified in /etc/services.

hosts Hosts from which connections can originate: single hosts, entire

networks, or subnets. Specify by IP address or hostname. The wildcard

* is valid.

-plug-to hosts Hosts to which the plug proxy connects: single hosts, entire networks, or

subnets. Specify by IP address or hostname.

-privport Proxy uses a reserved port number when connecting.

* Provided for future extensibility.

-port *port* Port on which the plug proxy connects on the remote host. Specify the

name or port number, as specified in /etc/services.

Example

```
qotd-gw: port qotd * -plug-to qotd.bigu.edu -port qotd
```

Creates a plug proxy rule for a Quote of the Day server (qotd-gw) which allows all hosts to connect to the Quote of the Day server at Big University on the *qotd* port.

Gauntlet Firewall Manager

Services > Plug tab > Add or Modify > Port

You cannot set this attribute through the Gauntlet Firewall Manager for all proxies.

ports

Specifies the ports on the destination host to which the proxy can connect. If you do not use this attribute, the proxy can connect to any port. Without this attribute, users can use the TELNET proxy to access any other network service that uses ASCII. This attribute is useful if you wish to ensure that the TELNET proxy is used only for accessing TELNET.

Without this attribute, users can designate a destination when they connect to an SSL server. This SSL connection connects to the remote service, which may or may not be running SSL. This attribute is useful if you wish to ensure that the HTTP proxy is used only to connect to standard SSL ports.

ahttp-gw	gopher-gw	mssql-gw	RealAudio	strmwrks-gw
aol-gw	gui	netacl	rlogin-gw	syb-gw
alerts	• http-gw	netconfig	rsh-gw	• tn-gw
authenIP	info-gw	NetShow	smap	VDOLive
authsrv	ldap-gw	nntp-gw	smapd	whois
ck-gw	lnotes-gw	pcxdpp	snmpd	x-gw
cserve-gw	login-sh	plug-gw	snmp-gw	policy-policy
finger	lp-gw	pop3-gw	mbase-gw	
ftp-gw	mmp	radm	ssl-gw	

Syntax

{permit | deny}-ports port-list

permit-ports port-list

List of ports to which the proxy can connect. Specify by port number or service name (as specified in */etc/services*). The wildcard * is valid. Use the ! character to deny a particular service.

deny-ports port-list

List of ports to which the proxy cannot connect.

You cannot set this attribute through the Gauntlet Firewall Manager.

Example

tn-gw: permit-ports 4000

The TELNET proxy allows connections only to port 4000.

http-gw: permit-ports 8000 8080 ssl !*

The HTTP proxy allows connections only to a few common HTTP ports (8000 and 8080) and the SSL port (443) and denies connections to every other port (!*).

printer

Specifies a mapping from a client's print queue name to a server's host and print queue.

ahttp-gw	gopher-gw	mssql-gw	RealAudio	strmwrks-gw
aol-gw	gui	netacl	rlogin-gw	syb-gw
alerts	http-gw	netconfig	rsh-gw	tn-gw
authenIP	info-gw	NetShow	smap	VDOLive
authsrv	ldap-gw	nntp-gw	smapd	whois
ck-gw	lnotes-gw	pcxdpp	snmpd	x-gw
cserve-gw	login-sh	plug-gw	snmp-gw	policy-policy
finger	• lp-gw	pop3-gw	mbase-gw	
ftp-gw	mmp	radm	ssl-gw	

Syntax

printer clientqueue -host server -printer serverqueue

clientqueue Name of a client print queue.

-host *server* Server on which the remote printer queue is.

-printer serverqueue

Name of the remote printer queue to which a proxy sends the print jobs. If the server queue is not specified, the client's queue name is used as server queue name.

Example

lp-gw: printer lp_remote -host blaze.clientsite.com -printer lp3

Maps the printer queue lp_remote to the queue lp3, which is running on blaze.clientsite.com.

Gauntlet Firewall Manager

Services > LP tab > Add or Modify > Print Server and Server Queue

prompt

Specifies the prompt the proxies use in command mode.

	ahttp-gw	gopher-gw	mssql-gw	RealAudio	strmwrks-gw
	aol-gw	gui	netacl	• rlogin-gw	syb-gw
	alerts	http-gw	netconfig	rsh-gw	• tn-gw
	authenIP	info-gw	NetShow	smap	VDOLive
	authsrv	ldap-gw	nntp-gw	smapd	whois
•	ck-gw	lnotes-gw	pcxdpp	snmpd	• x-gw
	cserve-gw	login-sh	plug-gw	snmp-gw	• policy-policy
	finger	lp-gw	pop3-gw	mbase-gw	
	ftp-gw	mmp	radm	ssl-gw	

Syntax

prompt prompt

prompt

String that the proxy displays in command mode. Quotation marks are not required, but are recommended for strings that include spaces.

Example

```
tn-gw: prompt "Yoyodyne TELNET proxy> "
```

The TELNET proxy displays the prompt "Yoyodyne TELNET proxy>".

Gauntlet Firewall Manager

Services > Service tab > Add or Modify > Command line prompt

proxy

Specifies proxy permissions.

ahttp-gw	gopher-gw	mssql-gw	RealAudio	strmwrks-gw
aol-gw	gui	netacl	rlogin-gw	syb-gw
alerts	http-gw	netconfig	rsh-gw	tn-gw
authenIP	info-gw	NetShow	smap	VDOLive
authsrv	ldap-gw	nntp-gw	smapd	whois
ck-gw	lnotes-gw	pcxdpp	snmpd	x-gw
cserve-gw	login-sh	plug-gw	snmp-gw	• policy-policy
finger	lp-gw	pop3-gw	mbase-gw	
ftp-gw	mmp	radm	ssl-gw	

Syntax

{permit | deny}-proxy proxy-list

permit-proxy Proxies that this policy allows to run.

deny-proxy Hosts that this policy does not allow to run. Including a deny-proxy rule

has the same effect as not including those proxies in a permit-proxy rule.

proxy-list Name of the proxy. This name must match the name specified in

/usr/local/etc/mgmt/rc or on the command line to start the proxy. If the

proxy was started using the -as flag, use that name here.

Examples

policy-restrictive: permit-proxy ftp-gw http-gw

Allows the FTP and HTTP proxies to run.

policy-restrictive: permit-proxy webster

Allows a plug proxy configured for webster traffic to run.

Gauntlet Firewall Manager

Firewall Rules > Service Groups tab

quarantine-dir

Specifies the directory in which the *smapd* server places messages that fail the content scan. If you are using a content scanning engine to quarantine mail, you must specify this attribute.

ahttp-gw	gopher-gw	mssql-gw	RealAudio	strmwrks-gw
aol-gw	gui	netacl	rlogin-gw	syb-gw
alerts	http-gw	netconfig	rsh-gw	tn-gw
authenIP	info-gw	NetShow	smap	VDOLive
authsrv	ldap-gw	nntp-gw	• smapd	whois
ck-gw	lnotes-gw	pcxdpp	snmpd	x-gw
cserve-gw	login-sh	plug-gw	snmp-gw	policy-policy
finger	lp-gw	pop3-gw	mbase-gw	
ftp-gw	mmp	radm	ssl-gw	

Syntax

quarantine-dir *directory*

directory

Directory in which the *smapd* server places messages that fail the content scan. Do not include a trailing slash (/). Ensure that this directory has the same owner and permission as the mail spool directory (as set by the directory attribute) that the *smapd* server uses.

Example

smapd: quarantine-dir /var/mail/quarantine

The *smapd* server places files that fail the content scan into the /var/mail/quarantine directory.

Gauntlet Firewall Manager

Environment > Mail tab > Quarantine area

RealAudio

Specifies the port on which the RealAudio proxy listens for requests.

ahttp-gw	gopher-gw	mssql-gw	RealAudio	strmwrks-gw
aol-gw	gui	netacl	rlogin-gw	syb-gw
alerts	http-gw	netconfig	rsh-gw	tn-gw
authenIP	info-gw	NetShow	smap	VDOLive
authsrv	ldap-gw	nntp-gw	smapd	whois
ck-gw	lnotes-gw	pcxdpp	snmpd	x-gw
cserve-gw	login-sh	plug-gw	snmp-gw	policy-policy
finger	lp-gw	pop3-gw	mbase-gw	
ftp-gw	• mmp	radm	ssl-gw	

Syntax

RealAudio port

port

Port on which the RealAudio proxy listens for requests. Specify by port number or by port name as specified in */etc/services*.

Example

mmp: RealAudio 7070

The RealAudio proxy listens for requests on port 7070.

Gauntlet Firewall Manager

Services > RealAudio tab > Ports

require-source

Specifies whether or not users of the X11 proxy, when starting the X11 proxy, must specify the name of the host from which they will be connecting.

If you do not use this attribute, users do not need to specify the name of the host when starting the X11 proxy.

ahttp-gw	gopher-gw	mssql-gw	RealAudio	strmwrks-gw
aol-gw	gui	netacl	rlogin-gw	syb-gw
alerts	http-gw	netconfig	rsh-gw	tn-gw
authenIP	info-gw	NetShow	smap	VDOLive
authsrv	ldap-gw	nntp-gw	smapd	whois
ck-gw	lnotes-gw	pcxdpp	snmpd	• x-gw
cserve-gw	login-sh	plug-gw	snmp-gw	policy-policy
finger	lp-gw	pop3-gw	mbase-gw	
ftp-gw	mmp	radm	ssl-gw	

You cannot set this attribute through the Gauntlet Firewall Manager.

Syntax

require-source { on | off }

Example

x-gw: require-source on

Users of the X11 proxy must specify the name of the host when starting the X11 proxy.

securidhost

Specifies the name of the firewall that is registered as the client hostname on the ACE/Server. Because the firewall may have various hostnames, this attribute allows you to specify which hostname to use.

	ahttp-gw	gopher-gw	mssql-gw	RealAudio	strmwrks-gw
	aol-gw	gui	netacl	rlogin-gw	syb-gw
	alerts	http-gw	netconfig	rsh-gw	tn-gw
	authenIP	info-gw	NetShow	smap	VDOLive
•	authsrv	ldap-gw	nntp-gw	smapd	whois
	ck-gw	lnotes-gw	pcxdpp	snmpd	x-gw
	cserve-gw	login-sh	plug-gw	snmp-gw	policy-policy
	finger	lp-gw	pop3-gw	mbase-gw	
	ftp-gw	mmp	radm	ssl-gw	

Syntax

securidhost firewall

firewall

Name of the firewall that is registered as the client hostname on the ACE/Server. Specify an individual system. Use an IP addresses or hostname.

Example

authsrv: securidhost fire-in.yoyodyne.com

The SecurID server communicates with the firewall's inside interface as fire-in.yoyodyne.com.

Gauntlet Firewall Manager

You cannot set this attribute through the Gauntlet Firewall Manager.

send-broken-post-requests

Specifies whether or not the HTTP proxy sends a carriage return/line feed after the data to the HTTP server when sending a POST request. Some designers of Web pages have ignored the HTTP specifications when creating their forms. These forms always expect to receive a carriage return/line feed after the data.

If you do not use this attribute, the HTTP proxy follows the HTTP specifications and does not send a carriage return/line feed after sending the data to an HTTP server.

ahttp-gw	gopher-gw	mssql-gw	RealAudio	strmwrks-gw
aol-gw	gui	netacl	rlogin-gw	syb-gw
alerts	• http-gw	netconfig	rsh-gw	tn-gw
authenIP	info-gw	NetShow	smap	VDOLive
authsrv	ldap-gw	nntp-gw	smapd	whois
ck-gw	lnotes-gw	pcxdpp	snmpd	x-gw
cserve-gw	login-sh	plug-gw	snmp-gw	policy-policy
finger	lp-gw	pop3-gw	mbase-gw	
ftp-gw	mmp	radm	ssl-gw	

Syntax

send-broken-post-requests { on | off }

Example

http-gw: send-broken-post-requests on

The HTTP proxy does not follow the HTTP specifications and sends a carriage return / line feed after sending data.

Gauntlet Firewall Manager

Services > HTTP tab > Add or Modify > Follow conventional posting rules

sendmail

Specifies an alternate path for *sendmail* or another mail delivery program you are using to deliver your mail inside your perimeter.

ahttp-gw	gopher-gw	mssql-gw	RealAudio	strmwrks-gw
aol-gw	gui	netacl	rlogin-gw	syb-gw
alerts	http-gw	netconfig	rsh-gw	tn-gw
authenIP	info-gw	NetShow	smap	VDOLive
authsrv	ldap-gw	nntp-gw	• smapd	whois
ck-gw	lnotes-gw	pcxdpp	snmpd	x-gw
cserve-gw	login-sh	plug-gw	snmp-gw	policy-policy
finger	lp-gw	pop3-gw	mbase-gw	
ftp-gw	mmp	radm	ssl-gw	

Syntax

sendmail program

program

An alternate path for the *sendmail* executable or other program you are using to deliver mail.

Example

smapd: sendmail /usr/sbin/sendmail

The smapd server uses the sendmail executable in /usr/sbin/sendmail.

Gauntlet Firewall Manager

Environment > Mail tab > SMAP > Alternate mail program

server

Specifies a server for which the proxy handles client/server connections.

ahttp-gw	gopher-gw	mssql-gw	RealAudio	strmwrks-gw
aol-gw	gui	netacl	rlogin-gw	syb-gw
alerts	http-gw	netconfig	rsh-gw	tn-gw
authenIP	info-gw	NetShow	smap	VDOLive
authsrv	ldap-gw	nntp-gw	smapd	whois
• ck-gw	lnotes-gw	pcxdpp	snmpd	x-gw
cserve-gw	login-sh	plug-gw	snmp-gw	policy-policy
finger	lp-gw	pop3-gw	mbase-gw	
ftp-gw	mmp	radm	ssl-gw	

Syntax

server *service* -port *remote-port* [-host *remote-host*] [-hostport *port*] [-timeout *minutes*] [-nookay]

server *service* Symbolic name for the service. Must be unique. Used by the proxy to create the menu of available services.

-port remote-port

Port on the remote host to which the circuit proxy connects. Specify by service name or port number.

-host remote-host

Name of the remote host to which the circuit proxy connects. Specify an individual system. Use IP address or hostname. This option is required if you are not using transparency.

-hostport *port* Port on which the proxy connects on the remote host.

-timeout *minutes*

Number of minutes the client/server connection is idle before disconnecting for this service

-nookay

Specifies that the proxy does not prompt the user to confirm before listening on the service port for a connection.

Example

ck-gw: server oracle -host db.clientsite.com -port oracle

The circuit proxy provides service for an Oracle server on the host db.clientsite.com.

Gauntlet Firewall Manager

Services > Circuit tab > Server Settings

shellfile

Specifies the name of the file in which the login shell finds information about users and their shells.

ahttp-gw	gopher-gw	mssql-gw	RealAudio	strmwrks-gw
aol-gw	gui	netacl	rlogin-gw	syb-gw
alerts	http-gw	netconfig	rsh-gw	tn-gw
authenIP	info-gw	NetShow	smap	VDOLive
authsrv	ldap-gw	nntp-gw	smapd	whois
ck-gw	lnotes-gw	pcxdpp	snmpd	x-gw
cserve-gw	• login-sh	plug-gw	snmp-gw	policy-policy
finger	lp-gw	pop3-gw	mbase-gw	
ftp-gw	mmp	radm	ssl-gw	

You cannot set this attribute through the Gauntlet Firewall Manager.

Syntax

shellfile file

file Name of the file that contains a list of users and their shells.

Example

login-sh: shellfile /usr/local/etc/login-shellfile

The login shell program looks in the */usr/local/etc/login-shellfile* file for information about users and their shells

snmp-manager

Specifies the IP address of the SNMP manager to which the SNMP agent on the firewall sends traps. If you do not use this attribute, the SNMP agent on the firewall does not send traps.

ahttp-gw	gopher-gw	mssql-gw	RealAudio	strmwrks-gw
aol-gw	gui	netacl	rlogin-gw	syb-gw
alerts	http-gw	netconfig	rsh-gw	tn-gw
authenIP	info-gw	NetShow	smap	VDOLive
authsrv	ldap-gw	nntp-gw	smapd	whois
ck-gw	lnotes-gw	pcxdpp	• snmpd	x-gw
cserve-gw	login-sh	plug-gw	snmp-gw	policy-policy
finger	lp-gw	pop3-gw	mbase-gw	
ftp-gw	mmp	radm	ssl-gw	

Syntax

snmp-manager host

host

SNMP manager to which the SNMP agent on the firewall sends traps. Specify by IP address.

Example

snmpd: snmp-manager 10.0.1.58

The SNMP agent on the firewall sends traps to the SNMP manager running on the host 10.0.1.58.

Gauntlet Firewall Manager

Environment > SNMP Agent tab > SNMP Manager

system-contact

Specifies the information that the SNMP agent supplies as the contact when the network manager sends a request for the *system.sysContact* MIB-II variable. Use this attribute to provide information about the department to contact about the firewall. If you do not use this attribute, the firewall uses "Trusted Information Systems, Inc., +1 888 FIREWALL.""

ahttp-gw	gopher-gw	mssql-gw	RealAudio	strmwrks-gw
aol-gw	gui	netacl	rlogin-gw	syb-gw
alerts	http-gw	netconfig	rsh-gw	tn-gw
authenIP	info-gw	NetShow	smap	VDOLive
authsrv	ldap-gw	nntp-gw	smapd	whois
ck-gw	lnotes-gw	pcxdpp	• snmpd	x-gw
cserve-gw	login-sh	plug-gw	snmp-gw	policy-policy
finger	lp-gw	pop3-gw	mbase-gw	
ftp-gw	mmp	radm	ssl-gw	

Syntax

system-contact contact

contact

Information the SNMP agent supplies as the contact to the SNMP manager. If you use spaces in the contact, use quotation marks around the information.

Example

snmpd: system-contact "Systems Group 301-555-7135"

The SNMP agent sends the information "Systems Group 301-555-7135" when queried.

Gauntlet Firewall Manager

Environment > SNMP Agent tab > Contact

system-location

Specifies the information that the SNMP agent supplies about the location when the network manager sends a request for the *system.sysLocation* MIB-II variable. Use this attribute to provide information about the location of the firewall. If you do not use this attribute, the firewall sends "unknown."

ahttp-gw	gopher-gw	mssql-gw	RealAudio	strmwrks-gw
aol-gw	gui	netacl	rlogin-gw	syb-gw
alerts	http-gw	netconfig	rsh-gw	tn-gw
authenIP	info-gw	NetShow	smap	VDOLive
authsrv	ldap-gw	nntp-gw	smapd	whois
ck-gw	lnotes-gw	pcxdpp	• snmpd	x-gw
cserve-gw	login-sh	plug-gw	snmp-gw	policy-policy
finger	lp-gw	pop3-gw	mbase-gw	
ftp-gw	mmp	radm	ssl-gw	

Syntax

system-location location

location

Information the SNMP agent supplies as the location to the SNMP manager. If you use spaces in the location, use quotation marks around the information.

Example

```
snmpd: system-location "Rockville: Third Floor: Room 468"
```

The SNMP agent sends the information "Rockville: Third Floor: Room 468" when queried.

Gauntlet Firewall Manager

Environment > SNMP Agent > Firewall Location

system-name

Specifies the information that the SNMP agent supplies about the name of the agent when the network manager sends a request for the *system.sysName* MIB-II variable. Use this attribute to provide information about the hostname of the firewall. If you do not use this attribute, the firewall sends its fully qualified domain name.

ahttp-gw	gopher-gw	mssql-gw	RealAudio	strmwrks-gw
aol-gw	gui	netacl	rlogin-gw	syb-gw
alerts	http-gw	netconfig	rsh-gw	tn-gw
authenIP	info-gw	NetShow	smap	VDOLive
authsrv	ldap-gw	nntp-gw	smapd	whois
ck-gw	lnotes-gw	pcxdpp	• snmpd	x-gw
cserve-gw	login-sh	plug-gw	snmp-gw	policy-policy
finger	lp-gw	pop3-gw	mbase-gw	
ftp-gw	mmp	radm	ssl-gw	

Syntax

system-name name

name

Information the SNMP agent supplies as the location to the SNMP manager. Specify by hostname or IP address. If you use spaces in the name, use quotes around this information.

Example

snmpd: system-name "fire-in.yoyodyne.com"

The SNMP agent sends the information fire-in.yoyodyne.com when queried.

Gauntlet Firewall Manager

Environment > SNMP Agent > Firewall Name

tempdir

Specifies the directory in which the Authenticating HTTP proxy places its temporary files.

• ahttp-gw	gopher-gw	mssql-gw	RealAudio	strmwrks-gw
aol-gw	gui	netacl	rlogin-gw	syb-gw
alerts	http-gw	netconfig	rsh-gw	tn-gw
authenIP	info-gw	NetShow	smap	VDOLive
authsrv	ldap-gw	nntp-gw	smapd	whois
ck-gw	lnotes-gw	pcxdpp	snmpd	x-gw
cserve-gw	login-sh	plug-gw	snmp-gw	policy-policy
finger	lp-gw	pop3-gw	mbase-gw	
ftp-gw	mmp	radm	ssl-gw	

You cannot set this attribute through the Gauntlet Firewall Manager.

Syntax

tempdir directory

directory

Directory in which the Authenticating HTTP proxy places temporary files.

Example

ahttp-gw: tempdir /usr/tmp

The Authenticating HTTP directory places temporary files in the /usr/tmp directory.

timeout

Specifies the amount of time the proxy is idle (with no network activity) before disconnecting. To disable the timeout feature for a proxy, do not set the timeout value to zero. Instead, set the timeout attribute to a large value, such as 10 years (315,360,000 seconds).

	ahttp-gw	•	gopher-gw	•	mssql-gw	•	RealAudio	•	strmwrks-gw
•	aol-gw	•	gui	•	netacl	•	rlogin-gw	•	syb-gw
	alerts	•	http-gw		netconfig	•	rsh-gw	•	tn-gw
	authenIP	•	info-gw	•	NetShow	•	smap	•	VDOLive
	authsrv	•	ldap-gw	•	nntp-gw	•	smapd	•	whois
	ck-gw	•	lnotes-gw		pcxdpp	•	snmpd	•	x-gw
•	cserve-gw		login-sh	•	plug-gw	•	snmp-gw	•	policy-policy
•	finger	•	lp-gw	•	pop3-gw	•	mbase-gw		
•	ftp-gw	•	mmp		radm	•	ssl-gw		

Syntax

timeout seconds

seconds Number of seconds the proxy is idle before disconnecting.

Example

policy-trusted: timeout 1800

The trusted policy allows 1800 seconds (30 minutes) of idle time before the proxies disconnect.

Gauntlet Firewall Manager

Services > Service tab > Timeout

tmp-directory

Specifies the directory in which the *smapd* server creates temporary files during content scanning. If you do not use this attribute, the *smapd* server places temporary files in the */tmp* directory.

ahttp-gw	gopher-gw	mssql-gw	RealAudio	strmwrks-gw
aol-gw	gui	netacl	rlogin-gw	syb-gw
alerts	http-gw	netconfig	rsh-gw	tn-gw
authenIP	info-gw	NetShow	smap	VDOLive
authsrv	ldap-gw	nntp-gw	• smapd	whois
ck-gw	lnotes-gw	pcxdpp	snmpd	x-gw
cserve-gw	login-sh	plug-gw	snmp-gw	policy-policy
finger	lp-gw	pop3-gw	mbase-gw	
ftp-gw	mmp	radm	ssl-gw	

You cannot set this attribute through the Gauntlet Firewall Manager.

Syntax

tmp-directory directory

directory

Directory in which the *smapd* server creates temporary files during content scanning. Do not include a trailing slash (/) character. Ensure that this directory has the same owner and permission as the mail spool directory (as set by the directory attribute) that *smapd* server uses. See "directory" on page 60.

Example

smapd: tmp-directory /var/tmp/smapd

The *smapd* server creates temporary files in the /var/tmp/smapd directory.

transparency

Specifies that the firewall uses inbound to outbound transparency. Used to create the packet screening rule in the forward rule set that absorbs packets from inside addresses to outside addresses for handling by the appropriate proxy or service.

ahttp-gw	gopher-gw	mssql-gw	RealAudio	strmwrks-gw
aol-gw	gui	netacl	rlogin-gw	syb-gw
alerts	http-gw	 netconfig 	rsh-gw	tn-gw
authenIP	info-gw	NetShow	smap	VDOLive
authsrv	ldap-gw	nntp-gw	smapd	whois
ck-gw	lnotes-gw	pcxdpp	snmpd	x-gw
cserve-gw	login-sh	plug-gw	snmp-gw	policy-policy
finger	lp-gw	pop3-gw	mbase-gw	
ftp-gw	mmp	radm	ssl-gw	

You cannot set this attribute through the Gauntlet Firewall Manager.

Syntax

transparency {-on | - off}

-on Inbound to outbound transparency is on.-off Inbound to outbound transparency is off.

Example

netconfig: transparency -on

Inbound to outbound transparency is on.

unknown

Specifies a list of names that the authentication server checks (in addition to the authentication database) when checking for extended permissions on a per user basis.

If the user name is not in the authentication database or in the list of names, the authentication server logs the attempt and indicates that the user is not valid. If the user name is found in the list of names, the authentication server assigns the user name to the group "unknown."

	ahttp-gw	gopher-gw	mssql-gw	RealAudio	strmwrks-gw
	aol-gw	gui	netacl	rlogin-gw	syb-gw
	alerts	• http-gw	netconfig	rsh-gw	tn-gw
	authenIP	info-gw	NetShow	smap	VDOLive
•	authsrv	ldap-gw	nntp-gw	smapd	whois
	ck-gw	lnotes-gw	pcxdpp	snmpd	x-gw
	cserve-gw	login-sh	plug-gw	snmp-gw	policy-policy
	finger	lp-gw	pop3-gw	mbase-gw	
	ftp-gw	mmp	radm	ssl-gw	

You cannot set this attribute through the Gauntlet Firewall Manager.

Syntax

permit-unknown names

names A list of names, separated by spaces. The wildcard * is valid.

Example

authsrv: permit-unknown scooter hikita penny

The authentication server considers scooter, hikita, and penny to be valid user names when it checks for extended permissions.

url

Lets you specify that certain URLs be denied to your users. If a user attempts to access a denied URL, the result is a message indicating that access to this URL is denied. You can use this feature to deny access to any URL whether or not you are using Cyber Patrol. If you are using Cyber Patrol, these denied sites are in addition to the sites denied by Cyber Patrol. You can also allow access to URLs that would otherwise be blocked by Cyber Patrol

Note that any URL to which you permit or deny access takes precedence over Cyber Patrol settings.

Use this attribute as part of a policy, rather than for the proxy itself.

See also the "cyber_masks" on page 50, "feature" on page 70, and "work_time" on page 153.

ahttp-gw	gopher-gw	mssql-gw	RealAudio	strmwrks-gw
aol-gw	gui	netacl	rlogin-gw	syb-gw
alerts	• http-gw	netconfig	rsh-gw	tn-gw
authenIP	info-gw	NetShow	smap	VDOLive
authsrv	ldap-gw	nntp-gw	smapd	whois
ck-gw	lnotes-gw	pcxdpp	snmpd	x-gw
cserve-gw	login-sh	plug-gw	snmp-gw	• policy-policy
finger	lp-gw	pop3-gw	mbase-gw	
ftp-gw	mmp	radm	ssl-gw	

Syntax

policy-http-gw_Trusted: {permit | deny}-url *url*permit-url URLs permitted for your users.
deny-url URLs denied to your users.

url An entire URL, or a substring of a URL:

- .jpg matches all URLs with .jpg somewhere in the URL
- yoyodyne.com matches all URLs with yoyodyne.com in the URL
- ftp:// matches all URLs with ftp:// in the URL

Example

policy-http-gw_Trusted: permit-url yoyodyne.com

You want your users to be able to access any URL in the yoyodyne.com domain, even if Cyber Patrol has it blocked.

Gauntlet Firewall Manager

Services > HTTP tab > Add or Modify > URL Filtering

url-filter

Specifies characters that you want to deny in a URL.

ahttp-gw	gopher-gw	mssql-gw	RealAudio	strmwrks-gw
aol-gw	gui	netacl	rlogin-gw	syb-gw
alerts	• http-gw	netconfig	rsh-gw	tn-gw
authenIP	info-gw	NetShow	smap	VDOLive
authsrv	ldap-gw	nntp-gw	smapd	whois
ck-gw	lnotes-gw	pcxdpp	snmpd	x-gw
cserve-gw	login-sh	plug-gw	snmp-gw	policy-policy
finger	lp-gw	pop3-gw	mbase-gw	
ftp-gw	mmp	radm	ssl-gw	

Syntax

url-filter filterlist

filterlist

xurl-encoded string of characters that you want to deny in a URL. See the HTML RFC or other HTML specification documents for lists of xurl-encoded characters.

Example

http-gw: url-filter %0D%0A

You do not want to see the carriage return/line feed characters in any URLs.

Gauntlet Firewall Manager

Services > HTTP tab > Add or Modify > URL Filtering

userid

Specifies the user ID the proxy uses when running. This attribute is equivalent to the –user command in previous versions.

•	ahttp-gw	•	gopher-gw		mssql-gw		RealAudio	•	strmwrks-gw
	aol-gw		gui	•	netacl		rlogin-gw		syb-gw
	alerts	•	http-gw		netconfig		rsh-gw	•	tn-gw
	authenIP		info-gw		NetShow	•	smap		VDOLive
	authsrv		ldap-gw		nntp-gw	•	smapd		whois
•	ck-gw		lnotes-gw		pcxdpp		snmpd		x-gw
	cserve-gw		login-sh		plug-gw	•	snmp-gw	•	policy-policy
•	finger	•	lp-gw		pop3-gw		mbase-gw		
•	ftp-gw		mmp		radm		ssl-gw		

Syntax

userid user

user Specifies the user as a name or a numeric ID from the /etc/passwd file.

Example

smap, smapd: userid uucp

The *smap* and *smapd* processes run as the user uucp.

Gauntlet Firewall Manager

Services > Service tab > UserID

user-servers

Specifies the servers a particular user can access. Also specifies which services a particular users sees when using the circuit proxy menu.

ahttp-gw	gopher-gw	mssql-gw	RealAudio	strmwrks-gw
antip-gw	gopher-gw	IIISSq1-gw	RealAddio	Stilliwiks-gw
aol-gw	gui	netacl	rlogin-gw	syb-gw
alerts	http-gw	netconfig	rsh-gw	tn-gw
authenIP	info-gw	NetShow	smap	VDOLive
authsrv	ldap-gw	nntp-gw	smapd	whois
• ck-gw	lnotes-gw	pcxdpp	snmpd	x-gw
cserve-gw	login-sh	plug-gw	snmp-gw	• policy-policy
finger	lp-gw	pop3-gw	mbase-gw	
ftp-gw	mmp	radm	ssl-gw	

Syntax

user-servers { user user | group group } [-deny] service

user *user* Name of a user who can access a particular service.

group *group* Name of a group who can access a particular service.

-deny Specifies that the user can use all services except those explicitly denied.

service Names of particular services. Must match the name of a service specified

through a server attribute.

Example

ck-gw: user-servers group Grads accounting

The group Grads can use the accounting service.

Gauntlet Firewall Manager

Services > Circuit tab > User Settings

user-timeout

Specifies the amount of time the proxy is idle with no active client connections before disconnecting.

ahttp	-gw	gopher-gw	mssql-gw	RealAudio	strmwrks-gw
aol-g	w	gui	netacl	rlogin-gw	syb-gw
alert	3	http-gw	netconfig	rsh-gw	tn-gw
auth	enIP	info-gw	NetShow	smap	VDOLive
auth	srv	ldap-gw	nntp-gw	smapd	whois
• ck-gv	v	lnotes-gw	pcxdpp	snmpd	x-gw
cserv	e-gw	login-sh	plug-gw	snmp-gw	• policy-policy
finge	r	lp-gw	pop3-gw	mbase-gw	
ftp-g	w	mmp	radm	ssl-gw	

Syntax

user-timeout minutes

minutes

Number of minutes the proxy is active with no client connections before disconnecting.

Example

ck-gw: user-timeout 10

The proxy waits ten minutes without an active client connection before disconnecting.

Gauntlet Firewall Manager

Services > Circuit tab > Add or Modify > User Timeout

VDOLive

Specifies the port on which the VDOLive proxy listens for requests.

ahttp-gw	gopher-gw	mssql-gw	RealAudio	strmwrks-gw
aol-gw	gui	netacl	rlogin-gw	syb-gw
alerts	http-gw	netconfig	rsh-gw	tn-gw
authenIP	info-gw	NetShow	smap	VDOLive
authsrv	ldap-gw	nntp-gw	smapd	whois
ck-gw	lnotes-gw	pcxdpp	snmpd	x-gw
cserve-gw	login-sh	plug-gw	snmp-gw	policy-policy
finger	lp-gw	pop3-gw	mbase-gw	
ftp-gw	• mmp	radm	ssl-gw	

Syntax

VDOLive port

port

Port on which the VDOLive proxy listens for requests. Specify by port number or by port name as specified in /etc/services.

Example

mmp: VDOLive 7000

The VDOLive proxy listens for requests on port 7000.

Gauntlet Firewall Manager

Services > VDOLive tab > Port

virtual-net

Specifies how the DPP daemon tells the firewall to add rules to the kernel to implement transparency. If you do not use the virtual-net attribute, the firewall adds rules for each trusted host. If you use the virtual-net attribute, the DPP daemon tells the firewall to create rules for each virtual network that you specify. Using the virtual-net attribute, the DPP daemon no longer tells the firewall to create rules for a host if the host is part of the specified virtual network.

This attribute is optional.

ahttp-gw	gopher-gw	mssql-gw	RealAudio	strmwrks-gw
aol-gw	gui	netacl	rlogin-gw	syb-gw
alerts	http-gw	netconfig	rsh-gw	tn-gw
authenIP	info-gw	NetShow	smap	VDOLive
authsrv	ldap-gw	nntp-gw	smapd	whois
ck-gw	lnotes-gw	 pcxdpp 	snmpd	x-gw
cserve-gw	login-sh	plug-gw	snmp-gw	policy-policy
finger	lp-gw	pop3-gw	mbase-gw	
ftp-gw	mmp	radm	ssl-gw	

Syntax

virtual-net virtualnetworks [-trusted]

virtualnetworks Virtual networks. Specify by IP address and netmask of the virtual network.

-trusted Specifies that the DPP daemon tells the firewall to create rules that indicate the virtual network is a trusted network.

Example

pcxdpp: virtual-net 10.0.10.0:255.255.255.0 -trusted

The DPP daemon tells the firewall to create one set of rules for the whole 10.0.10.* network, a trusted network.

Gauntlet Firewall Manager

Environment > Virtual Networks > Add

wakeup

Specifies the amount of time that the *smapd* server sleeps between scans of the spool directory for undelivered mail. If no value is specified, *smapd* uses a default value of 30 seconds.

ahttp-gw	gopher-gw	mssql-gw	RealAudio	strmwrks-gw
aol-gw	gui	netacl	rlogin-gw	syb-gw
alerts	http-gw	netconfig	rsh-gw	tn-gw
authenIP	info-gw	NetShow	smap	VDOLive
authsrv	ldap-gw	nntp-gw	• smapd	whois
ck-gw	lnotes-gw	pcxdpp	snmpd	x-gw
cserve-gw	login-sh	plug-gw	snmp-gw	policy-policy
finger	lp-gw	pop3-gw	mbase-gw	
ftp-gw	mmp	radm	ssl-gw	

Syntax

wakeup seconds

seconds

Number of seconds that the *smapd* server sleeps between scans of the spool directory.

Example

smapd: wakeup 120

The *smapd* server sleeps for 120 seconds between scans.

Gauntlet Firewall Manager

Environment > Mail tab > SMAP > Wakeup frequency

welcome-msg

Specifies the file that the proxy displays as a welcome banner upon successful connection to the proxy.

	ahttp-gw	gopher-gw	mssql-gw	RealAudio	strmwrks-gw
	aol-gw	gui	netacl	• rlogin-gw	syb-gw
	alerts	http-gw	netconfig	rsh-gw	• tn-gw
	authenIP	info-gw	NetShow	smap	VDOLive
	authsrv	ldap-gw	nntp-gw	smapd	whois
•	ck-gw	lnotes-gw	pcxdpp	snmpd	x-gw
	cserve-gw	login-sh	plug-gw	snmp-gw	• policy-policy
	finger	lp-gw	pop3-gw	mbase-gw	
•	ftp-gw	mmp	radm	ssl-gw	

Syntax

welcome-msg file

file

Name of the file the proxy uses as a welcome banner upon successful connection to the proxy. If no file is specified, the proxy generates a default message.

Example

tn-gw: welcome-msg /usr/local/etc/tn-welcome.txt

Displays the file /usr/local/etc/tn-welcome.txt when a user successfully connects to the TELNET proxy.

Gauntlet Firewall Manager

Services > Circuit tab > Welcome

Services > Service tab > Add or Modify Welcome Message

work_time

Lets you establish work (and leisure) time hours for the Cyber Patrol filtering software from Microsystems Software, which lets you block access to objectionable material.

This attribute has no effect unless Cyber Patrol is active. Refer to the *Gauntlet Firewall Administrator's Guide* for more information about Cyber Patrol.

Note: Leisure time hours are all hours outside of the defined work time hours.

See also the "cyber_masks" on page 50, "feature" on page 70, and "url" on page 142.

ahttp-gw	gopher-gw	mssql-gw	RealAudio	strmwrks-gw
aol-gw	gui	netacl	rlogin-gw	syb-gw
alerts	• http-gw	netconfig	rsh-gw	tn-gw
authenIP	info-gw	NetShow	smap	VDOLive
authsrv	ldap-gw	nntp-gw	smapd	whois
ck-gw	lnotes-gw	pcxdpp	snmpd	x-gw
cserve-gw	login-sh	plug-gw	snmp-gw	policy-policy
finger	lp-gw	pop3-gw	mbase-gw	
ftp-gw	mmp	radm	ssl-gw	

Syntax

work_time day_mask start_time end_time

day_mask

The bitmask of the day of the week or a range of days, from 00 to 7F. The bitmasks for the days of the week are:

- Sunday—0x01
- Monday—0x02
- Tuesday—0x04
- Wednesday—0x08
- Thursday—0x10

- Friday—0x20
- Saturday—0x40

To determine the bitmask for a range of days, use a hexadecimal calculator. To determine the bitmask for Monday through Friday, for example, enter 02 (for Monday), click OR, then enter 04 (for Tuesday), click OR again, and continue through 20 (for Friday) and click OR a final time. The result, 3E, is the bitmask for Monday through Friday.

start_time

The time of the day when *work_time* begins, using the twenty-four-hour system (sometimes called "military time"). For example, 0800 is 8 a.m. and 1700 is 5 p.m.

end time

The time of the day when *work_time* ends, using the twenty-four-hour system.

Example

http-gw: work_time 3E 800 0000

Work time hours are 8 a.m. to midnight Monday through Friday.

Gauntlet Firewall Manager

Services > HTTP tab > Add or Modify > Cyber Patrol > Define Work Times

xforwarder

Specifies the location of the executable to which the TELNET and rlogin proxies pass requests for the X proxy. Generally specifies the location of the X proxy.

ahttp-gw	gopher-gw	mssql-gw	RealAudio	strmwrks-gw
aol-gw	gui	netacl	• rlogin-gw	syb-gw
alerts	http-gw	netconfig	rsh-gw	• tn-gw
authenIP	info-gw	NetShow	smap	VDOLive
authsrv	ldap-gw	nntp-gw	smapd	whois
ck-gw	lnotes-gw	pcxdpp	snmpd	x-gw
cserve-gw	login-sh	plug-gw	snmp-gw	• policy-policy
finger	lp-gw	pop3-gw	mbase-gw	
ftp-gw	mmp	radm	ssl-gw	

Syntax

xforwarder program

program

Location of the executable to which the TELNET and rlogin proxies pass requests for the X proxy.

Example

policy-trusted: xforwarder /usr/local/etc/x-gw

The TELNET and rlogin proxies use the standard X proxy for requests from the inside network.

Gauntlet Firewall Manager

Services > Service tab > Add or Modify > Xforwarder location

xgateway

Specifies X11 proxy permissions.

ahttp-gw	gopher-gw	mssql-gw	RealAudio	strmwrks-gw
aol-gw	gui	netacl	• rlogin-gw	syb-gw
alerts	http-gw	netconfig	rsh-gw	• tn-gw
authenIP	info-gw	NetShow	smap	VDOLive
authsrv	ldap-gw	nntp-gw	smapd	whois
ck-gw	lnotes-gw	pcxdpp	snmpd	x-gw
cserve-gw	login-sh	plug-gw	snmp-gw	• policy-policy
finger	lp-gw	pop3-gw	mbase-gw	
ftp-gw	mmp	radm	ssl-gw	

Syntax

{permit | deny}-xgateway *

permit The TELNET and rlogin proxies can accept requests to start the X11

proxy.

deny The TELNET and rlogin proxies do not accept requests to start the X11

proxy.

Provided for future extensibility.

Example

```
policy-trusted: permit-xgateway *
```

Allows the hosts on the inside network to start the X11 proxy.

Gauntlet Firewall Manager

Services > Service tab > Allow X11 requests

Keyword Reference

This chapter lists each keyword and the attributes it can use. For more information about a specific attribute, refer to its description in Chapter 4, "Attribute Reference."

ahttp-gw

The ahttp-gw keyword supports the following attributes:

- authserver
- backend
- bind-address
- accept-count
- authenticate
- authserver
- destination
- groupid
- maxsessions
- password-timeout
- tempdir

aol-gw

The aol-gw keyword supports the following attributes:

- · accept-count
- bind-address
- buffer-size
- child-limit
- destination
- directory
- force_source_address
- hosts
- port
- timeout

alerts

The alerts keyword supports the following attribute:

• enable

authenIP

The authenIP keyword supports the following attributes:

- forward
- local

authsrv

The authserv keyword supports the following attributes:

- accept-count
- authserver
- badsleep
- bind-address
- child-limit
- database
- dssagent
- dsshost
- dsskey
- dssport
- hosts
- maxbad
- nobogus
- operation
- securidhost
- unknown

ck-gw

The ck-gw keyword supports the following attributes:

- authenticate
- authserver
- circuitexec
- circuitsperuser
- circuit-timeout
- connect-timeout
- denial-msg
- destination
- directory
- extended-permissions
- groupid
- help-msg
- hosts
- password change
- prompt
- server
- userid
- user-servers
- user-timeout
- welcome-msg

cserve-gw

The cserve-gw keyword supports the following attributes:

- accept-count
- bind-address
- buffer-size
- child-limit
- destination
- directory
- force_source_address
- hosts
- port
- timeout

finger

The finger keyword supports the following attributes:

- accept-count
- bind-address
- buffer-size
- child-limit
- destination
- directory
- force_source_address
- hosts
- port
- timeout

ftp-gw

The ftp-gw keyword supports the following attributes:

- accept-count
- authenticate
- authserver
- bind-address
- block
- child-limit
- contentscan-msg
- content-ftpchk
- cvp-handling
- cvp-server
- data-port
- denial-msg
- denydest-msg
- destination
- directory
- extended-permissions
- functions
- groupid
- handoff
- help-msg
- hosts
- log
- timeout
- userid
- welcome-msg

gopher-gw

The gopher-gw keyword supports the following attributes:

- accept-count
- bind-address
- child-limit
- destination
- directory
- forward
- groupid
- hosts
- timeout
- userid

gui

The gui keyword supports the following attributes:

- admin-user
- destination
- directory
- hosts
- keepalive-timeout
- ourname
- timeout

http-gw

The http-gw keyword supports the following attributes:

- accept-count
- anon-user
- authenticate
- backend
- bind-address
- child-limit
- cvp-handling
- cvp-server
- denydest-msg
- destination
- directory
- feature
- forward
- function
- groupid
- handoff
- header
- hosts
- log
- ourname
- ports
- send-broken-post-requests
- timeout
- url-filter
- userid

info-gw

The info-gw keyword supports the following attributes:

- accept-count
- bind-inside
- child-limit
- destination
- directory
- hosts
- timeout

Idap-gw

The ldap-gw keyword supports the following attributes:

- accept-count
- bind-address
- buffer-size
- child-limit
- destination
- directory
- force_source_address
- hosts
- port
- timeout

Inotes-gw

The lnotes-gw keyword supports the following attributes:

- accept-count
- bind-address
- buffer-size
- child-limit
- destination
- directory
- force_source_address
- hosts
- port
- timeout

login-sh

The login-sh keyword supports the following attributes:

- authserver
- bind-address
- shellfile

lp-gw

The lp-gw keyword supports the following attributes:

- accept-count
- bind-inside
- child-limit
- client
- destination
- directory
- groupid
- hosts
- log
- mbase
- printer
- timeout
- userid

mmp

The mmp keyword supports the following attributes:

- · check-server-ip
- directory
- hosts
- NetShow
- RealAudio
- timeout
- VDOLive

mssql-gw

The mssql-gw keyword supports the following attributes:

- accept-count
- bind-inside
- child-limit
- destination
- directory
- hosts
- port
- timeout

netacl

The netacl-gw keyword supports the following attributes:

- bind-address
- child-limit
- destination
- directory
- groupid
- exec
- timeout
- userid

netconfig

The netconfig keyword supports the following attributes:

- bind-inside
- if-inside
- if-outside
- transparency

NetShow

The NetShow keyword supports the following attributes:

- check-server-ip
- destination
- directory
- hosts
- timeout

nntp-gw

The nntp-gw keyword supports the following attributes:

- accept-count
- bind-address
- buffer-size
- child-limit
- destination
- directory
- force_source_address
- hosts
- port
- timeout

pcxdpp

The pcxdpp-gw keyword supports the following attributes:

- authenticate
- database
- hosts
- peer-net
- virtual-net

plug-gw

The plug-gw keyword supports the following attributes:

- accept-count
- bind-address
- buffer-size
- child-limit
- destination
- directory
- force_source_address
- hosts
- port
- timeout

pop3-gw

The pop3-gw keyword supports the following attributes:

- accept-count
- authenticate
- authserver
- bind-address
- child-limit
- database
- destination
- directory
- groupid
- hosts
- pop-server

- timeout
- userid

radm

The radm-gw keyword supports the following attribute:

hosts

RealAudio

The RealAudio-gw keyword supports the following attributes:

- · check-server-ip
- destination
- directory
- hosts
- timeout

rlogin-gw

The rlogin-gw keyword supports the following attributes:

- · accept-count
- authenticate
- authserver
- bind-address
- child-limit
- denial-msg
- denydest-msg
- destination

- directory
- extended-permissions
- help-msg
- hosts
- password change
- prompt
- timeout
- welcome-msg
- xforwarder
- xgateway

rsh-gw

The rsh-gw keyword supports the following attributes:

- bind-address
- child-limit
- destination
- directory
- extended-permissions
- force_source_address
- hosts
- timeout
- userid

smap

The smap keyword supports the following attributes:

- deny-spam
- directory
- groupid
- local-domain
- log
- maxbytes
- maxrecip
- permit-relay
- timeout
- userid

smapd

The smapd-gw keyword supports the following attributes:

- badadmin
- baddir
- cvp-handling
- cvp-server
- directory
- groupid
- maxbytes
- quarantine-dir
- sendmail
- timeout
- tmp-directory

- userid
- wakeup

snmpd

The snmpd-gw keyword supports the following attributes:

- hosts
- snmp-manager
- system-contact
- system-name
- system-location
- timeout

snmp-gw

The snmp-gw keyword supports the following attributes:

- agent
- child-limit
- destination
- groupid
- directory
- manager
- timeout
- userid

ssl-gw

The ssl-gw keyword supports the following attributes:

- accept-count
- bind-address
- buffer-size
- child-limit
- destination
- directory
- force_source_address
- hosts
- port
- timeout

strmwrks-gw

The strmwrks-gw keyword supports the following attributes:

- hosts
- destination
- directory
- groupid
- userid
- timeout

syb-gw

The syb-gw keyword supports the following attributes:

- accept-count
- bind-inside
- child-limit
- destination
- directory
- hosts
- port
- timeout

tn-gw

The tn-gw keyword supports the following attributes:

- accept-count
- authenticate
- authserver
- bind-address
- child-limit
- denial-msg
- denydest-msg
- destination
- directory
- extended-permissions
- groupid
- help-msg
- hosts

- password change
- ports
- prompt
- timeout
- userid
- welcome-msg
- xforwarder
- xgateway

VDOLive

The VODLive keyword supports the following attributes:

- check-server-ip
- destination
- directory
- hosts
- timeout

whois

The whois keyword supports the following attributes:

- accept-count
- bind-address
- buffer-size
- child-limit
- destination
- directory
- force_source_address
- hosts
- port
- timeout

x-gw

The x-gw keyword supports the following attributes:

- directory
- display
- hosts
- prompt
- require-source
- timeout

Index

A	SNK key string, 64
	unknown, 141
accept-count, 20	authserver, 27
activeX(permit/deny), 70	authserv keyword, 159
Administrator's Guide conventions, xx	authtype See, 28
admin-user, 21	
agent, 22	В
ahttp-gw keyword, 157	h
alerts keyword, 158	backend, 28
alerts logged, 66	badadmin, 29
anon-user, 24	baddir, 30
anonymous FTP server, 24	badsleep, 31
handoff, 82	banner, 47
aol-gw keyword, 158	bind-address, 32
APOP authentication, 115	bind-inside, 33
-auth option (previous version), 25	block, 34
-authall option (previous version), 25	buffer-size, 35
authenIP keyword, 158	
authenticate, 25	С
authenticate(all but pcxdpp), 25	C
authenticate (pcxdpp only), 26	changing firewall configuration, 21
authentication server	check-server-ip, 36
database path for PC Extender, 54	child-limit, 38
database pathname, 53	child processes, maximum, 38
extended permissions, 69	chroot See directory
host, 87	circuitexec, 39
maxbad, 101	circuit proxy
names to check, 141 nobogus, 106	user access, 146
11000503, 100	

circuitsperuser, 40	DPP daemon, 26, 149
circuit-timeout, 41	dssagent, 62
ck-gw keyword, 160	dsshost, 63
client, 42	dsskey, 64
client-server connections, maximum, 40	dssport, 65
client to server transfer, blocking, 34	-
connect-timeout, 44	_
content-failunsafe, 45	E
content-ftpcheck, 46	enable, 66
content scan	exec, 68
banner, 47	extended permissions, 141
failure message, 48	extended permissions, 141
contentscan-msg, 47	and operation, 107
conventions, xx	and opening, 22
cserve-gw keyword, 161	
cvp-handling, 48	F
cvp-server, 49	
cyber-mask, 50	failed logins, 31
Cyber Patrol	feature, 70
blocked categories, 50	finger, 68
leisure time, 153	finger keyword, 161
	firewall, changing configuration, 21
D	force_source_address, 72
	forking processes, 20
database (authsrv only), 53	forward, 73
database (pcxdpp only), 54	forward (authenIP only), 75
data-port, 52	forward rules, 75
Defender Security Server, 62, 63, 64, 65	frames(permit/deny), 70
denial-msg, 55, 57	FTP
denydest-msg, 56	anon-user, 24
deny-spam, 57	backend, 28
destination, 58	ftp-gw keyword, 162
directory attribute, 60	FTP proxy block, 34
directory for undeliverable mail, 30	content scan type, 46
display, 61	default logging, 97
	handoff, 82

port 20 requirement, 52	I	
function, 78	ICMP protocol, 76	
	if-inside, 90	
G	if-outside, 91	
Conhar haskand 29	info-gw keyword, 165	
Gopher, backend, 28 gopher-gw keyword, 163	inside interface, 90	
groupid, 81	internal buffer size, 35	
gui keyword, 163	IP address	
gar noy word, 100	checking, 36 force_source_address, 72	
	inside interface, 90	
Н	outside interface, 91	
handoff, 82	peer-net, 113	
FTP or Gopher URLs, 83	related to proxy, 32 IP spoofing, 33	
header, 84	n spooning, 33	
help-msg, 86		
hosts, 88	J	
hosts (authsrv only), 87	: (
html2(permit/deny), 70	java (permit/deny), 70	
http-gw keyword, 164		
HTTP proxy	K	
anon-user, 24 backend, 28		
concurrent session maximum, 104	kanji (permit/deny), 70	
denying features, 70	keepalive-timeout, 93	
forward, 73		
handoff, 83	L	
handoff to FTP or Gopher URLs, 83 header, 84		
permitting features, 70	ldap-gw keyword, 165	
POST request, 128	legacy-kanji(permit/deny), 70	
temporary file, 137	lnotes-gw keyword, 166	
	local, 94, 96, 114	
	local-domain, 96	
	location information, 135	
	log, 97	

log(smap only), 99	anon-user, 24
logins	authenticate, 25
disallowed after failed, 31	authenticate(all but pcxdpp), 25
maximum incorrect, 101	authenticate (pcxdpp only), 26
login-sh keyword, 166	authserver, 27
lp commands	backend, 28
from client, 42	badadmin, 29
log, 98	baddir, 30
lp-gw keyword, 167	badsleep, 31
ip-gw keyword, 107	bind-address, 32
	bind-inside, 33
M	block, 34
141	buffer-size, 35
mail messages	check-server-ip, 36
maximum recipients, 103	child-limit, 38
maximum size, 102	circuitexec, 39
quarantine-dir, 124	circuitsperuser, 40
sendmail, 129	circuit-timeout, 41
undelivarable, 29, 30	client, 42
manager, 99, 100	connect-timeout, 44
maxbad, 101	content freshock 46
	content-ftpcheck, 46 contentscan-msg, 47
maxbytes, 102	cvp-handling, 48
maxchildren See child-limit, 103	cvp-nanding, 40 cvp-server, 49
maximum client/server connections, 40	cyber-mask, 50
maxrecip, 103	database (authsrv only), 53
maxsessions, 104	database (pcxdpp only), 54
mmp keyword, 167	data-port, 52
mssql-gw keyword, 168	denial msg, 55, 57
mosqi 8w neg word, 100	denydest-msg, 56
	destination, 58
N	directory, 60
	display, 61
netacl-gw keyword, 168	dssagent, 62
netconfig keyword, 169	dsshost, 63
netperm-table attributes	dssk, 64
accept-count, 20	dssport, 65
admin-user, 21	enable, 66
agent, 22	exec, 68
u50111, ww	extended-permissions, 69

feature, 70	shellfile, 132
force_source_address, 72	snmp-manager, 133
forward, 73	system-contact, 134
forward (authenIP only), 75	system-location, 135
function, 78	system-name, 136
groupid, 81	tempdir, 137
handoff, 82	timeout, 138
header, 84	tmp-directory, 139
help-msg, 86	transparency, 140
host(authsrv only), 87	unknown, 141
hosts, 88	url, 142
if-inside, 90	url-filter, 144
if-outside, 91	userid, 145
keepalive-timeout, 93	user-servers, 146
local, 94, 96, 114	user-timeout, 147
log, 97	virtual-net, 149
manager, 99, 100	VODLive, 148
maxbad, 101	wakeup, 151
maxbytes, 102	welcome-msg, 152
maxrecip, 103	work_time, 153
maxsessions, 104	xforwarder, 155
NetShow, 105	xgateway, 156
nobogus, 106	NetShow, 105
operation, 107	NetShow keyword, 169
ourname, 109	· ·
password change, 110	network management agent, 22
password-timeout, 112	nntp-gw keyword, 170
peer-net, 113	nobogus, 106
pop-server, 115	
port, 116	
ports, 118	0
printer, 120	
prompt, 121	operation, 107
proxy, 122	outname, 109
quarantine-dir, 124	outside interface, 91
RealAudio, 125	,
require-source, 126	
securidhost, 127	Р
send-broken-post-requests, 128	
sendmail, 129	packet screening edito, 75
server, 130	passok option See passok, 110
	passon option see passon, 110

password, 24	R
password_change, 110	
password-timeout, 112	radm-gw keyword, 172
PC Extender, 26	RealAudio, 125
peer-net, 113	RealAudio-gw keyword, 172
pcxdpp-gw keyword, 170	relayed messages, 96, 114
peer-net, 113	relay-reject, 99
permissions	require-source, 126
extended permissions, 69	RETR, 98
See denial-msd, denydest-msg, destination	RFC, 76
permit-relay, 114	rlogin-gw, 172
plug-gw keyword, 171	rlogin proxy password change, 110
plug proxy	root directory, 60
force_source_address, 72 port, 116	rsh-gw, 173
pop3-gw keyword, 171	
POP3 proxy pop-server, 115	S
pop-server, 115	
port, 116	screening rules firewall destination packets, 94
ports, 118	for outside interface, 91
POST request, 128	script(permit/deny), 70
printer, 120	securidhost, 127
processes	send-broken-post-requests, 128
maximum number of child processes, 38	sendmail, 129
per connection, 20	server, 130
prompt, 121	server to client transfer, blocking, 34
proxies	shellfile, 132
group ID, 81 internal buffer size, 35	
related IP address, 32	smap relayed messages, 114
root directory, 60	smapd-gw, 174
proxy, 122	SMAPD server
	badadmin, 29, 30 wakeup, 151
Q	smap keyword, 174
	SMAP proxy
quarantine-dir, 124	sendmail, 129

SMAP server temporary files, 139 SMTP proxy maximum recipients, 103 SNK, 106	timeout, 138 tmp-directory, 139 tn-gw, 177 transparency, 140
SNK key string, 64	trusted network, 33
· ·	turning off IP checking, 36
SNMP agent contact information, 134 firewall host name, 136 location information, 135 snmpd-gw, 175	U UDP, 67, 77
snmp-gw, 175	undeliverable mail, 29, 30
snmp-manager, 133	unknown, 141
SNMP proxy	url. 142
contact agent, 22	url-filter, 144
manager, 100	URL prepending, 109
spam-reject, 99	user for undeliverable mail, 29
ssl-gw, 176	
STOR, 98	userid, 145
strmwrks-gw, 176	user-servers, 146
strong authentication	user-timeout, 147
password-timeout, 112	
syb-gw, 177	V
system-contact, 134	
system-location, 135	virtual-net, 149
system-name, 136	VODLive, 148
2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2	VODLive keyword, 178
Т	187
THE AVER	W
TELNET proxy	wakeup, 151
password change, 110 TELNET access, 118	welcome banner, 47
tempdir, 137	welcome message
time-out	contentscan-msg, 47
before showdown, 93	welcome-msg, 152
client/server connection, 41	welcome-msg, 152
connect-timeout, 44	whois keyword, 179

```
wildcard characters
authenIP, 77
client, 42
cvp-server, 49
peer-net, 113
port-list, 118
unknown, 141
work_time, 153
```

X

X11 proxy
permissions, 156
require source, 126
xforwarder, 155
xforwarder, 155
xgateway, 156
x-gw keyword, 179
xurl-encoded string to be denied, 144

Tell Us About This Manual

As a user of Silicon Graphics products, you can help us to better understand your needs and to improve the quality of our documentation.

Any information that you provide will be useful. Here is a list of suggested topics:

- · General impression of the document
- · Omission of material that you expected to find
- · Technical errors
- Relevance of the material to the job you had to do
- · Quality of the printing and binding

Please send the title and part number of the document with your comments. The part number for this document is 007-3822-001.

Thank you!

Three Ways to Reach Us

- To send your comments by **electronic mail**, use either of these addresses:
 - On the Internet: techpubs@sgi.com
 - For UUCP mail (through any backbone site): [your_site]!sgi!techpubs
- To **fax** your comments (or annotated copies of manual pages), use this fax number: 650-932-0801
- To send your comments by traditional mail, use this address:

Technical Publications Silicon Graphics, Inc. 2011 North Shoreline Boulevard, M/S 535 Mountain View, California 94043-1389