

# Proxedo Network Security Suite 2 Log Messages Guide

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## Abstract

This document describes the log messages of PNS





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# List of Procedures

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# Preface

Welcome to the Proxedo Network Security Suite 2 Log Messages Guide!

This document describes the log messages of the various PNS components. The messages of each component can be found in their respective chapters. The format of log messages is the following:

- **Class:** The component that sent the log message. For example, *core*
- **Verbosity:** The verbosity level of the log message. If the log level of the component is lower than the verbosity level of the message, the message is not displayed. For example, *2*
- **Session ID:** An identifier that helps to find the log messages related to a particular connection. For example, *vela/intra\_HTTP:1/http*
- **Summary:** A short description of the event that happened. This part of the message is static and ends with a semicolon (;). Also, this part of the message is used as the title of the section describing the log message in the *PNS 2 Log Messages Guide*. For example, *Error connecting to remote host;*
- **Dynamic part:** The variables or parameter values that apply for the particular event. For example, *error='Connection refused'*

```
core.error(2): (vela/intra_HTTP:1/http): Error connecting to remote host;
error='Connection refused'
```

^	^	^	^
+class(verbosity level)			
	+session_id		
		+Summary	
			+Dynamic
part			

To enable , see *Procedure 1, Single-line log message for connections (p. vi)*.

## 1. Procedure – Single-line log message for connections

### Purpose:

PNS can log a single message for every connection that includes every relevant detail about the connection. That way, it is easy to find a specific connection, and also to process the connection data with external log analyzing tools. To enable logging a single message for every connection that includes every relevant detail about the connection, complete the following steps. This log message contains the following information:

- *session ID*: ID number of the TCP session.
- *rule ID*: The ID number of the firewall rule.
- *session start time (UNIX timestamp)*: Date when the connection started (UNIX timestamp).
- *session end time*: Date when the connection was closed (UNIX timestamp).

- *client proto*: The transport protocol used in the client-side connection. This is the protocol used in the transport layer (Layer 4) of the OSI model (for example, TCP, UDP, ICMP, and so on).
- *client IP*: The IP address of the client.
- *client port*: The port number of the client.
- *client zone*: The zone the client belongs to.
- *server proto*: The transport protocol used in the server-side connection. This is the protocol used in the transport layer (Layer 4) of the OSI model (for example, TCP, UDP, ICMP, and so on).
- *server IP*: The IP address of the server connected by PNS.
- *server port*: The port number of the server connected by PNS.
- *server zone*: The zone the client belongs to.
- *client local IP address (after NAT)*: The IP address of PNS used in the client-side connection.
- *client local port (after NAT)*: The port number of PNS used in the client-side connection.
- *server local IP address (after NAT)*: The IP address of PNS used in the server-side connection.
- *server local port (after NAT)*: The port number of PNS used in the server-side connection.
- *verdict*: Indicates what PNS decided about the connection.
  - *ACCEPTED*: PNS accepted the connection, and it was established without any problems.
  - *DENIED\_BY\_CONNECTION\_FAIL*: Connection failed, that is, it was allowed to pass PNS but timed out on the server.
  - *DENIED\_BY\_LIMIT*: PNS rejected the connection because it exceeded the **Thread limit** parameter of the instance, or the **Limit concurrency** parameter of the service.
  - *DENIED\_BY\_POLICY*: PNS did not find a matching firewall rule for the connection.
  - *DENIED\_BY\_UNKNOWN\_FAIL*: The connection failed for some reason.
  - *NO\_SERVICE\_FOUND*: PNS did not find a matching service for the parameters of the connection.
- *info*: Additional information about the connection (if any).

```
core.summary(4): (svc/example_service_name:1234): Connection summary; rule_id='N/A'  
  session_start='1406290229', session_end='1406290229',  
client_proto='TCP', client_address='10.10.1.10', client_port='3394',  
client_zone='example-zone',  
server_proto='TCP', server_address='10.10.1.10', server_port='3394',  
server_zone='example-zone',  
client_local='10.10.1.10', client_local_port='55268',  
server_local='10.10.60.253', server_local_port='55258',  
verdict='ACCEPTED',  
info='Ending forwarded session'
```

```
core.summary(4): (svc/example_service_name:1234): Connection summary; rule_id='N/A'  
  session_start='1406290229', session_end='1406290229',  
client_proto='TCP', client_address='10.10.1.10', client_port='3394',  
client_zone='example-zone',  
server_proto='TCP', server_address='10.10.1.10', server_port='3394',  
server_zone='example-zone',  
client_local='10.10.1.10', client_local_port='55268',
```



```
server_local='10.10.60.253', server_local_port='55258',  
verdict='NO_SERVICE_FOUND',  
info='No applicable service found for this client & server zone, dropping packet'
```

### Steps:

- Step 1. Login to your PNS host.
- Step 2. Execute the following commands:

```
echo 1 > /proc/sys/net/netfilter/kvela/log_session_verdict  
velactl log --logspec 'core:4'
```

- Step 3. Repeat this procedure on your other PNS firewall hosts.

### Expected result:

When a connection ends, PNS logs a single-line log message about the connection, for example:

```
core.summary(4): (svc/example_service_name:1234): Connection summary;  
rule_id='N/A' session_start='1406290229', session_end='1406290229',  
client_proto='TCP', client_address='10.10.1.10', client_port='3394',  
client_zone='example-zone',  
server_proto='TCP', server_address='10.10.1.10', server_port='3394',  
server_zone='example-zone',  
client_local='10.10.1.10', client_local_port='55268',  
server_local='10.10.60.253', server_local_port='55258',  
verdict='REJECTED_BY_POLICY'  
info=''
```





# Chapter 1. Application-level Gateway log messages

## 1.1.1. Starting proxy instance

**core.session 3**

This message reports that a new proxy instance is started.

## 1.1.2. Ending proxy instance

**core.session 4**

This message reports that a new proxy instance is stopped.

## 1.1.3. Sender address administratively prohibited

**smtp.policy 3**

This message indicates that the sender address was administratively prohibited and the request is rejected. Check the 'sender\_matcher' attribute.

## 1.1.4. Sender check successful

**smtp.debug 6**

This message reports that the sender address check was successful and the request is accepted.

## 1.1.5. Forbidden percent found in address local-part

**smtp.policy 3**

This message indicates that the email address local-part contains a percent sign and it is not permitted by the policy and the request is rejected. Check the 'permit\_percent\_hack' attribute.

## 1.1.6. Forbidden exclamation mark found in address local-part

**smtp.policy 3**

This message indicates that the email address local-part contains a exclamation mark and it is not permitted by the policy and the request is rejected. Check the 'permit\_exclamation\_mark' attribute.

## 1.1.7. Relaying denied

**smtp.policy 3**



This message indicates that relaying the given address is not permitted by the policy and the request is rejected. Check the 'relay\_check' attribute.

### **1.1.8. Relay check successful**

**smtp.debug 6**

This message reports that the relay check was successful and the request is accepted.

### **1.1.9. Recipient address administratively prohibited**

**smtp.policy 3**

This message indicates that the given recipient address is administratively prohibited and request is rejected. Check the 'recipient\_matcher' attribute.

### **1.1.10. Recipient check successful**

**smtp.debug 6**

This message reports that the recipient check was successful and the request is accepted.

### **1.1.11. Relay check, checking client\_zone**

**smtp.debug 7**

This message reports that the zone of the client is being checked.

### **1.1.12. Relay check, checking mail domain**

**smtp.debug 7**

This message reports that the domain name of the email is being checked.

### **1.1.13. Instance definition not found in policy**

**core.error 0**

This message indicates that the initialization function of the given instance was not found in the policy file.

### **1.1.14. Deinitialization requested for instance**

**core.debug 6**

This message reports that the given instance is stopping.

### **1.1.15. Cleaning up instance**

**core.debug 6**



This message reports that the given instance is freeing its external resources (for example its kernel-level policy objects).

#### **1.1.16. Client foreign port below 1024**

**ftp.policy 3**

This message indicates that the remote port is below 1024 and due to the violation the connection is closed.

#### **1.1.17. Server foreign port below 1024 in passive mode**

**ftp.policy 3**

This message indicates that the remote port is below 1024 and due to the violation the connection is closed.

#### **1.1.18. Server foreign port is not good in active mode**

**ftp.policy 3**

This message indicates that the server's remote port is not control\_port-1 or 20 and due to the violation the connection is closed.

#### **1.1.19. Unknown side when calling bounceCheck**

**ftp.policy 3**

This message indicates an internal error, please contact the Balasys QA team ([devel@balasys.hu](mailto:devel@balasys.hu)).

#### **1.1.20. Before NAT mapping**

**core.debug 4**

This message reports that the NAT type and the old address before the NAT mapping occurs.

#### **1.1.21. After NAT mapping**

**core.debug 4**

This message reports that the NAT type and the new address after the NAT mapping occurred.

#### **1.1.22. Unable to determine service, service lookup failed**

**core.policy 0**

This message indicates that the service lookup has failed for this session.

#### **1.1.23. No applicable service found for this client zone (cached)**

**core.policy 2**



This message indicates that no applicable service was found for this client zone in the services cache. It is likely that there is no applicable service configured in this ZoneDispatcher at all. Check your ZoneDispatcher service configuration. @see: Dispatcher.ZoneDispatcher

### **1.1.24. No applicable service found for this client zone**

#### **core.policy 2**

This message indicates that no applicable service was found for this client zone. Check your ZoneDispatcher service configuration. @see: Dispatcher.ZoneDispatcher

### **1.1.25. No applicable service found for this client & server zone (cached)**

#### **core.policy 2**

This message indicates that no applicable service was found for this client zone in the services cache. It is likely that there is no applicable service configured in this CSZoneDispatcher at all. Check your CSZoneDispatcher service configuration. @see: Dispatcher.CSZoneDispatcher

### **1.1.26. No applicable service found for this client & server zone**

#### **core.policy 2**

This message indicates that no applicable service was found for this client zone. Check your CSZoneDispatcher service configuration. @see: Dispatcher.CSZoneDispatcher

### **1.1.27. Outbound connection not permitted**

#### **core.policy 1**

This message indicates that a service trying to enter to the given zone was denied by the policy. Check that the destination zone is included in the target zone list of the service.

### **1.1.28. Error resolving hostname**

#### **core.error 3**

This message indicates that the given hostname could not be resolved. It could happen if the hostname is invalid or nonexistent, or it if your resolve setting are not well configured. Check your "/etc/resolv.conf"

### **1.1.29. Cache over shift-threshold, shifting**

#### **core.message 3**

This message indicates that the cache size(threshold) is reached, and cache is shifted. @see: Cache.ShiftCache

### **1.1.30. Matching regexp found**

#### **core.policy 4**



This message reports that a matching regexp pattern was found for the given string.

### **1.1.31. Error opening match file**

**core.policy 3**

This message indicates that the file containing the match regexps cannot be opened. It is likely that the file does not exist or it is not permitted to read. @see: `Matcher.RegexpFileMatcher`

### **1.1.32. Error opening ignore file**

**core.policy 3**

This message indicates that the file containing the ignore regexps cannot be opened. It is likely that the file does not exist or it is not permitted to read. @see: `Matcher.RegexpFileMatcher`

### **1.1.33. Cached recipient match found**

**core.debug 6**

This message reports that the recipient address has been already checked and the cached information is used.

### **1.1.34. Recipient validity not cached, trying the direct way**

**core.debug 6**

This message reports that the recipient address has not been already checked and it is going to be checked now directly.

### **1.1.35. SMTP sender was rejected, unable to verify user existence**

**core.error 3**

This message indicates that the sender address was rejected during the recipient address verify check and the recipient address is rejected.

### **1.1.36. Server accepted recipient**

**core.info 5**

This message reports that the recipient address verify was successful and it is accepted.

### **1.1.37. Server rejected recipient**

**core.info 4**

This message reports that the recipient address verify was unsuccessful and it is rejected.

### **1.1.38. SMTP error during recipient validity checking**

**core.error 3**

This message indicates that an SMTP error occurred during the recipient address verify and it is rejected.

### **1.1.39. Http accounting**

**http.accounting 4**

This is an accounting message that reports request details.

### **1.1.40. Request administratively prohibited**

**http.request 6**

This message indicates that the request was blocked by the URIFilter.

### **1.1.41. Evaluating BACL rule**

**core.auth 5**

This message reports that a REQUIRED type Basic ACL rule is evaluated with the given result.

### **1.1.42. BACL result**

**core.auth 4**

This message reports that every Basic ACL rule were evaluated with the given final result.

### **1.1.43. Proxy ending**

**core.session 5**

This message reports that this proxy instance was ended.

### **1.1.44. Proxy destroy**

**core.debug 6**

This message reports that this proxy instance was destroyed and freed.

### **1.1.45. Error while stacking child proxy**

**core.error 2**

This message indicates that an error occurred during child proxy stacking. The stacking failed and the subsession is destroyed.



### **1.1.46. Stacking custom child**

**core.debug 7**

This message reports that a new proxy is about to be stacked under the current proxy, as a child proxy.

### **1.1.47. User authentication successful**

**core.auth 3**

This message reports that the user authentication was successful.

### **1.1.48. Server connection failure**

**core.session 3**

This message indicates that the connection to the server failed.

### **1.1.49. Server connection established**

**core.session 3**

This message indicates that the connection to the server succeeded.

### **1.1.50. Server connection failure, no destination**

**core.session 3**

This message indicates that the connection to the server can not be established, because no server address is set.

### **1.1.51. All destinations are down, clearing cache and trying again**

**core.message 4**

This message reports that the remote end is down and the down state of the remote end is stored, so connection is wont be tried to it within the timeout latter.

### **1.1.52. Destination is down, skipping**

**core.message 4**

This message reports that the remote end is down, but the down state is not stored of the remote end, so connection will be tried to it next time.

### **1.1.53. Destination is down, keeping state**

**core.message 4**



This message reports that the remote end is down and the down state is stored of the remote end, so connection wont be tried within the timeout latter.

### **1.1.54. Side stacking failed, socketPair failed**

#### **core.session 3**

This message indicates that side stacking failed, because a socketPair creation is failed. It is likely that there is now resource available. Try increase fd limits.

### **1.1.55. Side-stacking proxy instance**

#### **core.session 4**

This message indicates that side stacking was successful.

### **1.1.56. Side-stacking failed**

#### **core.error 3**

This message indicates that side stacking failed.





## Chapter 2. Management Server log messages



## Chapter 3. MS Transfer Agent log messages



## Chapter 4. Authentication Server log messages



## Chapter 5. Authentication Agent log messages



## Chapter 6. Content Filtering log messages

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