



**NetDefendOS Version:** 2.27.07

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## Revision History and System Requirement:

Firmware Version	Date	Model	Hardware Version
2.27.07	Apr. 03 2013	DFL-210/800/1600/2500 DFL-260/860	A1 (for all models), A2 (for DFL-210/800/1600/2500), A3 (for DFL-210/800/1600), A4/A5 (for DFL-210), B1 (for DFL-260/860)
2.27.06	Oct. 30 2012	DFL-210/800/1600/2500 DFL-260/860	A1 (for all models), A2 (for DFL-210/800/1600/2500), A3 (for DFL-210/800/1600), A4/A5 (for DFL-210), B1 (for DFL-260/860)
2.27.05	Dec 26 2011	DFL-210/800/1600/2500 DFL-260/860	A1 (for all models), A2 (for DFL-210/800/1600/2500), A3 (for DFL-210/800/1600), A4/A5 (for DFL-210), B1 (for DFL-260/860)
2.27.03	Nov 24 2010	DFL-210/800/1600/2500 DFL-260/860/1660/2560/2560G DFL-260E/860E	A1 (for all models), A2 (for DFL-210/800/1600/2500), A3 (for DFL-210/800/1600), A4/A5 (for DFL-210), B1 (for DFL-260/860)
2.27.02	Sep 13 2010	DFL-210/800/1600/2500 DFL-260/860/1660/2560/2560G	A1 (for all models), A2 (for DFL-210/800/1600/2500), A3 (for DFL-210/800/1600), A4/A5 (for DFL-210), B1 (for DFL-260/860)
2.27.01	July 5 2010	DFL-210/800/1600/2500 DFL-260/860/1660/2560/2560G	A1 (for all models), A2 (for DFL-210/800/1600/2500), A3 (for DFL-210/800/1600), A4/A5 (for DFL-210), B1 (for DFL-260/860)
2.27.00	May 14 2010	DFL-210/800/1600/2500 DFL-260/860/1660/2560/2560G	A1 (for all models), A2 (for DFL-210/800/1600/2500), A3 (for DFL-210/800/1600), A4/A5 (for DFL-210), B1 (for DFL-260/860)
2.26.02	Mar 4 2010	DFL-160 DFL-210/800/1600/2500 DFL-260/860/1660/2560/2560G	A1/A2 (for all models), A3/A4/A5 (for DFL-210/800/1600/2500), B1 (for DFL-260/860)
2.26.01	Jan 29 2010	DFL-160 DFL-210/800/1600/2500 DFL-260/860/1660/2560/2560G	A1/A2 (for all models), A3/A4/A5 (for DFL-210/800/1600/2500), B1 (for DFL-260/860)
2.26.00	Sep 15, 2009	DFL-210/800/1600/2500 DFL-260/860/1660/2560/2560G	A1 (for all models), A2/A3/A4/A5 (for DFL-210/800/1600/2500)
2.25.01.28	July 15, 2009	DFL-210/260/800/860/1600/2500	A1 (for all models), A2/A3/A4 (for DFL-210/800/1600/2500)
2.25.01.22	Jun 11, 2009	DFL-210/260/800/860/1600/2500	A1 (for all models), A2/A3/A4 (for DFL-210/800/1600/2500)
2.20.03	Oct 21, 2008	DFL-210/260/800/860/1600/2500	A1 (for all models), A2/A3/A4 (for DFL-210/800/1600/2500)
2.20.02	Jul 10, 2008	DFL-210/260/800/860/1600/2500	A1 (for all models), A2/A3/A4 (for DFL-210/800/1600/2500)

## Upgrading Instructions:

### Upgrading by using CLI via SCP protocol

SCP (Secure Copy) is a widely used communication protocol for file transfer. No specific SCP client is provided with NetDefendOS distributions but there exists a wide selection of SCP clients available for nearly all workstation platforms. SCP is a complement to CLI usage and provides a secure means of file transfer between the administrator's workstation and the NetDefend Firewall. Various files used by NetDefendOS can be both uploaded and downloaded with SCP. This feature is fully described in *Section 2.1.6, "Secure Copy" of NetDefend Firewall v2.27.05 user Manual*.

### Upgrading by using Web-UI

For detailed installation and upgrade instructions, please refer to the Firmware Upgrades chapter in the *NetDefend Firewall v2.27.05 User Manual*.

## New Features:

Firmware Version	New Features
2.27.07	No new features were introduced in the 2.27.07 release of NetDefendOS.
2.27.06	No new features were introduced in the 2.27.06 release of NetDefendOS.
2.27.05	<ol style="list-style-type: none"> <li>1. The WebUI page "Reset" now also contains a method for normal shutdown (same action as the CLI command "shutdown"). This method will gracefully close down tunnels, hand over to other HA unit (in HA scenarios) and so on.</li> <li>2. The cache size for the Web Content Filtering (WCF) feature has been increased. The size is now doubled on all hardware models.</li> <li>3. The drop down menu for services has been enhanced to show port numbers.</li> </ol>
2.27.03	<ol style="list-style-type: none"> <li>1. The File Integrity tab for ALGs has been re-arranged with a more logical view for MIME type check.</li> <li>2. Added possibility to sort data grids. Sorting on anything except column index will hide grouping.</li> <li>3. New setting for High Availability failover timeout value that specify the timeout before HA failover is triggered.</li> </ol>
2.27.02	<ol style="list-style-type: none"> <li>1. The D-Link DES-3528 switch can now be used by ZoneDefense.</li> <li>2. A new log message has been added indicating that an ARP resolve query failed.</li> <li>3. The following browsers are now supported: Firefox 3+, Opera 10.5+, Safari 3+, Internet Explorer 7+ and Chrome 4+.</li> </ol>
2.27.01	<ol style="list-style-type: none"> <li>1. A confirmation question will be prompted if the user attempts to execute a</li> </ol>

	CLI command that may cause system delays.
2.27.00	<ol style="list-style-type: none"> <li>1. Grouping configuration objects into logical groups makes it easier to manage large number of configuration objects. It is also possible to add a descriptive description and custom color to distinguish what these objects do. This grouping functionality is only for presentation and does not affect the existing functionality.</li> <li>2. Logging enabled by default on rules for the following objects: Access, DHCP Server, DHCP Relay, Routing Rule, Dynamic Routing Policy Rule, IDP Rule Action, IP Rule, OSPF Router Process, Threshold Action and User Authentication Rule.</li> <li>3. Static configuration objects default to their default values if the objects contain configuration errors. This will prevent the firewall to misbehave due to configuration errors on static objects.</li> <li>4. The script command has been updated to handle adding objects with dependencies between each other.</li> <li>5. User authentication has been updated with a new authentication source that will grant access to the user without checking any credentials. This functionality can be used to authenticate users from within login scripts etc, to make auditing easier.</li> <li>6. All rule page layouts have been updated for how to enter the interface and network combination to be more intuitive.</li> <li>7. The data grid in the Web User Interface now displays information for simple objects as tooltip (an example is a reference to an IP4Address which would show the address value as a tooltip).</li> </ol>
2.26.02	<p><i>[DFL-210/260/800/860/1600/1660/2500/2560/2560G]</i></p> <ol style="list-style-type: none"> <li>1. Added the possibility to disable and enable Ethernet interfaces using WebUser Interface.</li> <li>2. Separate icon for User Authentication enabled objects.</li> <li>3. Improved file names for backup packages, including the configuration version number.</li> <li>4. Connection Rate Statistic Values can be viewed using SNMP.</li> </ol>
2.26.01	<p><i>[DFL-210/260/800/860/1600/1660/2500/2560/2560G]</i></p> <ol style="list-style-type: none"> <li>1. The name of the authenticated user is logged together with the requested URL in HTTP ALG log messages</li> </ol> <p><i>[DFL-160]</i></p> <ol style="list-style-type: none"> <li>1. DHCP relaying through the firewall in transparent mode is supported</li> </ol>

	2. DH Group and PFS can be configured on IPsec interfaces
2.26.00	<ol style="list-style-type: none"> <li>1. The name of the authenticated user is logged together with the requested URL in HTTP ALG log messages</li> <li>2. DFL-210 and DFL-800 support anti-virus and dynamic web content filtering</li> </ol>
2.25.01.28	<p>No new features in this version.</p> <p>This firmware version is positioned to replace v2.25.01.22 because the v2.25.01 will cause device into cycle reboot when IPSec encapsulation was set as "Both".</p>
2.25.01.22	<ol style="list-style-type: none"> <li>1. Added version check for external language files</li> <li>2. Improved logging for Anti-SPAM</li> <li>3. New log message at failover triggered by linkmon</li> <li>4. A new advanced setting has been added to control the number of RADIUScommunication contexts that can be used simultaneously</li> <li>5. DNS name resolving uses the shared IP in High Availability setups</li> <li>6. Added support for Host Monitor for Routing</li> <li>7. Added command to handle language files on disk</li> <li>8. Improved LDAP functionality</li> <li>9. Redesign of the tuple value controller in the webUI</li> <li>10. Display of network objects</li> <li>11. Extended route monitoring capabilities</li> <li>12. The IPsec status page has been improved</li> <li>13. PCAP Recording</li> <li>14. New advisory link in virus found log messages</li> <li>15. The webUI has been extended to handle child objects in a tab</li> <li>16. Support of custom monitor interval in Linkmonitor</li> <li>17. ZoneDefense now supports DGS-3200 series switches</li> <li>18. Anti-Virus triggered ZoneDefense</li> <li>19. LDAP Authentication</li> <li>20. Route Load Balancing</li> <li>21. Extended SIP Application Layer Gateway supporting new scenarios</li> <li>22. TCP transport added to the SIP Application Layer Gateway</li> <li>23. Multiple media connections for SIP Application Layer Gateway</li> <li>24. PPTP server support for multiple PPTP clients behind the same NAT gateway</li> <li>25. PPTP server and client have been extended to support stateful MPPE</li> <li>26. Improved verification of IP4 values</li> <li>27. IDP Triggered Traffic Shaping</li> <li>28. AVSE_MaxMemory setting has been removed</li> </ol>

	<ul style="list-style-type: none"> <li>29. Relay IP address filter at DHCP Server</li> <li>30. Support for VLAN priority derived from IP DSCP precedence</li> <li>31. Gigabit Traffic Shaping Support</li> <li>32. The PPPoE client has been changed to support unnumbered PPPoE</li> <li>33. Improved server monitoring for Server Load Balancing</li> <li>34. The ping CLI command has been improved</li> <li>35. The schedule page has been improved</li> <li>36. SSL/TLS Termination</li> </ul>
2.20.03	1. No new features were introduced in the 2.20.03 release.
2.20.02	<ul style="list-style-type: none"> <li>1. MTU can be configured for PPPoE Interfaces</li> <li>2. MTU can be configured for PPTP/L2TP Client Interfaces.</li> </ul>

## Changes of Functionality:

Firmware Version	Modified Features
2.26.00	1. DFL-210 and DFL-800, remove IDP Maintenance Service

## Changes of MIB & D-View Module:

Support memory usage and TCP buffer usage monitoring.

## Problems Fixed:

Firmware Version	Problems Fixed
2.27.07	<ul style="list-style-type: none"> <li>1. In some rare occasions, the memory consumption of the firewall could increase unexpectedly when deploying cluster configurations.</li> <li>2. The output list from the CLI command 'vlan' was not sorted in VLAN ID order. This has been corrected and the command was enhanced with the parameters to segment long output lists 'num' and 'page'.</li> <li>3. The 'blacklist' CLI command did not set the correct port number and destination URL in its output.</li> <li>4. A configuration with the now obsolete selection of Log And Event Receiver category '36 (USAGE)' would send out empty log data. The configuration is now silently updated to exclude this category.</li> </ul>



5. The shared IP was not used in LDAP server queries for High Availability cluster nodes.
6. The realm string for HTTP basic authentication was incorrectly not optional in the configuration.
7. The unit for the OSPF memory max usage in the WebUI was 'kilobytes', but has now been corrected to 'bytes'.
8. The Local Gateway configured in an IPsec tunnel was not shown in the CLI command "ipsectunnels -iface" printout.
9. The link status of the DMZ, WAN1 and WAN2 interfaces on the DFL-860E model and DMZ and WAN on the DFL-260E would disappear shortly during the reconfigure process.
10. The filename for an attachment was incorrectly required for the SMTP ALG and POP3ALG. The ALGs have now been updated to handle attachments without filenames, according to the RFCs.
11. The SIP ALG did not use the "420 Bad Extension" response in certain circumstances.
12. The built in L2TP client did not work correctly when put behind a NAT device.
13. The configuration was not always updated correctly when upgrading to a newer version.
14. HTTPS webauth using Internet Explorer versions 8 and older did not show the logged in page after the user had logged in.
15. When using a large number of neighbors in nodes running OSPF, there was a rare possibility of memory corruption.
16. A prompt was not added after various SSH printouts in the CLI.
17. Routemon did not detect link state changes on some Realtek interfaces.  
Affected models: DFL-260E/DFL-860Es.
18. The link status info for the Realtek interfaces disappeared after a reconfigure.  
Affected models: DFL-260E/DFL-860E
19. In some scenarios with IDP configured, traffic of certain patterns could in rare circumstances be delayed
20. It was not possible to connect multiple L2TP/IPsec clients behind the same NAT gateway.
21. SNMP Interface Alias field was empty when selecting "Comment" in "Interface Alias".
22. If L2TP clients with the same local IP address established IPsec tunnels behind a NAT device there were sometimes problems with the connections.
23. The OSPF routes database was not updated during reconfigure in some High Availability scenarios.

	<p>24. In some unusual circumstances the use of XAuth based authentication would lead to an unexpected reboot</p> <p>25. The web user interface was not 100% compatible with Explorer 10. The basic structure has now been updated to render the page correctly in all major browsers.</p> <p>26. The firewall Dynamic Routing Rules did not properly export / import OSPF routes when they were filtered by "OSPF Tag range" or "Router Type".</p> <p>27. A few log message categories, such as SSL VPN and IPv6 Neighbor Discovery were missing from the log message exception list..</p> <p>28. In some scenarios when using IPsec with XAuth, ESP delete notifications would not be sent.</p>
2.27.06	<ol style="list-style-type: none"> <li>1. Corrected leap year problem where leap year day was added to January instead of February.</li> <li>2. The log event no_arp (ID:04100007) firewall action text was previously route_enabled, the text is now corrected to route_disabled.</li> <li>3. Time unit 'seconds' added to help texts in WebUI ALG SIP dialog and CLI command 'help ALG_SIP'.</li> <li>4. The memory consumption of the firewall could in some rare occasions increase unexpectedly when deploying cluster configurations.</li> <li>5. The output list from the CLI command 'vlan' was not sorted in VLAN ID order. This has been corrected and the command was enhanced with the parameters to segment long output lists using 'num' and 'page'.</li> <li>6. The 'blacklist' CLI command did not set the correct port number and destination URL in its output.</li> <li>7. The output text for the CLI command 'dns -list' was not formatted correctly when using SSH remote management.</li> <li>8. In rare occasions, closing down a SIP session could lead to an unexpected restart.</li> <li>9. Using the H323 ALG could in rare circumstances lead to malfunction.</li> <li>10. The corruption of a linked list could lead to a crash. This is corrected now.</li> <li>11. The output of the CLI command "ifstat" has been extended to list the shared MAC addresses on the interfaces of High Availability cluster nodes.</li> <li>12. During tunnel set up, the L2TP client would abort and restart tunnel negotiation if the server response deviated from commonly agreed communication protocols.</li> <li>13. In a rare High Availability situation where a large amount of IPsec traffic (with a very large number of tunnels) was making the firewall loaded, it was possible that both nodes were set as the active node.</li> </ol>



	<p>14. A prompt was not printed in the CLI after activating a new configuration.</p> <p>15. In scenarios where all routes announced in an OSPF area are added to a routing table, pre-existing static routes could be overwritten. Now static routes received from the OSPF process will not replace pre-existing static routes in a routing table.</p> <p>16. The filename for an attachment was incorrectly required for the SMTP ALG and POP3 ALG. The ALGs have now been updated to handle attachments without filenames, according to the RFCs.</p> <p>17. Static destination address translation would fail for transport mode IPsec traffic.</p> <p>18. When using a large number of neighbors in nodes running OSPF, there was a rare possibility of memory corruption.</p>
2.27.05	<p>19. An expired AV or IDP license in an HA environment could trigger unexpected behavior in the inactive cluster node.</p> <p>20. Some web authentication scenarios could lead to unexpected behavior by the firewall.</p> <p>21. Some VPN configurations using Radius Accounting did not report in/out octet statistics to the Radius Accounting server.</p> <p>22. The H.323 ALG did not allow FACILITY messages to be sent during the ALERTING state.</p> <p>23. In some cases, the ping -verbose CLI command did not print the correct translated port if the packet was affected by a SAT rule. The correct translated port will now be printed.</p> <p>24. In certain scenarios, traffic originating from LDAP could lead to unexpected behavior by the firewall.</p> <p>25. CorePlus did not handle lower and upper case correctly in some configuration scenarios where objects were named almost identically.</p> <p>26. In some High Availability scenarios, the HA setting ReconfFailoverTime was not obeyed, resulting in a failover when deploying a configuration on the active peer before the ReconfFailoverTime was reached.</p> <p>27. Setting up a High Availability cluster using the "backup and restore" method would result in problems synchronizing the configuration because of an invalid interface configuration. The units now correctly handle that interface configuration by using information from the old configuration.</p> <p>28. A recent change in scp (secure copy) use an end of option parameter that was handled erroneously by the firewall. Now this option is handled correctly and scp connections will no longer be closed unexpectedly.</p> <p>29. The Web Content Filtering (WCF) server connection could stall after a</p>

	<p>reconfigure and fail to resolve new URLs. The issue has been corrected together with additional server connection statistics for the 'httpalg -wfcache' CLI command.</p> <p>30. Some network scenarios caused the SIP ALG to close SIP calls two minutes after the call was established.</p> <p>31. Using a PPTP server together with pipes could occasionally prevent the PPTP server from accepting new connections.</p> <p>32. Passive OSPF-interfaces were allowed to send out "OSPF-hello" messages. Passive OSPF-interfaces are now prohibited from taking part in the OSPF discovery process.</p> <p>33. OSPF did not detect the link status of physical interfaces. Link status is now periodically monitored within OSPF.</p> <p>34. The HWM functionality was malfunctioning for the DFL-1600 and has been corrected in this release.</p> <p>35. The "Route Type" in "OSPF Actions" was incorrectly interpreted by the firewall when the configuration was activated.</p> <p>36. The source port 20 is now used when combining the SAT Action in an IPRule with the FTP ALG.</p> <p>37. An unexpected restart could occur during a configuration deployment when new IPsec tunnels were added to the configuration. Changes have been made to prevent a resource conflict, causing the unexpected restart.</p> <p>38. It was not possible to use all address object combinations in places like routes or in the Address Book. The WebUI validation code has been extended to handle arrays of IP4 Addresses in order to correct the problem.</p> <p>39. TLS ALG rejected SSL HELLOs with zero or more than 1 compression method.</p> <p>40. Invalid values entered in properties in the WebUI would silently be rejected. An error is now properly reported when a property has an error.</p> <p>41. Some cipher suite combinations prevented the AES256 algorithm to be used when establishing SSH administration sessions to the firewall.</p> <p>42. Some specially crafted SDP payloads could cause unexpected reboots of the firewall.</p> <p>43. The WebUI page for interface status showed the Send Rate and Receive Rate as average for the last 24h. The values have been updated to use the average for the last 2 minutes.</p>
2.27.03	<p>1. The usage column in the DHCP Server status page has been updated to show active clients.</p> <p>2. References to UserAuth privileges for authenticated users could change when modifying the number of configured privileges.</p>

	<p>3. The web server could under certain conditions deadlock and print a "500 - Internal Server Error" message when trying to access the web user interface. The web server has been extended with better error handling to prevent this kind of deadlock.</p> <p>4. The interface traffic counters were only of size 32-bit and often wrapped around when the throughput was high. Corresponding 64-bit counters have been added to ensure that wrapping will not occur as often as the corresponding 32-bit values.</p> <p>5. The block list file verification failed for files with a size smaller than one packet. The blocklist now validates the extension for the first packet when the content type could not be determined in the first packet.</p> <p>6. In certain scenarios, the voice transmitted through the SIP ALG terminated suddenly two minutes after the call was established.</p> <p>7. Office "xism" files were blocked by the SMTP ALG. Encrypted "xism" files are embedded in an "Office 97/2000 Compatible" container which results in an incorrect file typ according to file integrity control. The file integrity control has been updated to handle encrypted "xism" files.</p> <p>8. A faulty model check made the Switch Management not display all the switch ports in the WebUI for the DFL-860E model.</p> <p>9. The Realtek 8169 interface reported link down incorrectly. This caused route monitor to not work properly. Affects: DFL-260E and DFL-860E.</p> <p>10. The HTTP ALG failed to load web pages from certain web servers correctly. The HTTP ALG will now respond with a TCP RESET should the server continue to send packets after the client has closed the connection.</p> <p>11. Anti-virus scanning of zip files containing files with a large compressed size could sometimes lead to unexpected behavior.</p> <p>12. Using HTTP web authentication with a RADIUS server as authentication source, could in very rare scenarios cause the firewall to malfunction during save &amp; activate (reconfigure).</p> <p>13. Two HTTP ALGs with the same name, but with different case (e.g. "MYHTTPALG" and "myhttpalg"), could sometimes cause the firewall to freeze during save &amp; activate (reconfigure).</p>
2.27.02	<p>1. It was not possible to use User Authentication on IP4Group objects.</p> <p>2. Certain SIP server scenarios in REGISTER transactions made the firewall reject incoming SIP calls.</p> <p>3. In some situations when using SMTP ALG with Anti-Virus e-mails with attachments would not be completely transferred, resulting in a timeout. The ALG Anti-Virus feature now specifically logs failure to decompress encrypted zip</p>

	<p>files. A setting to allow or deny encrypted zip files have also been added.</p> <p>4. The usage bars on the DHCP Server status page were not displayed correctly when leases reached 100% usage.</p> <p>5. ACK messages for non 2xx PBXs responses were not forwarded by the SIP ALG.</p> <p>6. The DHCP Server did not send DHCP NAK messages in all scenarios. This change speeds up the process of receiving a new IP address lease in these scenarios.</p> <p>7. The SMTP ALG always allowed emails where the SMTP "from" address and email header "from" address did not match. A new setting has been added which allows the administrator to deny or tag these mails as spam.</p> <p>8. CLI command "ipsecdefines" has been removed from "techsupport" command.</p> <p>9. During configuration certain values were not reset after parsing an IGMP Report rule, which made the next IGMP Query misbehave. The configuration values are now properly reset after parsing IGMP Report rules.</p> <p>10. Incoming SIP traffic routed through an IPsec tunnel was discarded by the SIP ALG.</p> <p>11. Some empty configuration values were not written to the configuration. After a restart of the firewall the default values were used instead.</p> <p>12. Some buttons in the web user interface had truncated text.</p> <p>13. The reception of 255.255.255.254 as Framed-IP-Address in a RADIUS negotiation wasn't handled correctly in all installations. Now this will always lead to an IP being assigned, to the PPTP-/L2TP-client, from the configured IP pool.</p> <p>14. It was not possible to click on the IDP signature group links in the web user interface page "IDP Factory Signatures". Clicking on the link now lists the signatures in the group.</p> <p>15. The DNS client always dropped DNS replies that had the truncated bit set. The truncated bit indicates that the reply does not contain the complete response and that a new DNS request should be sent using TCP (if the client supports TCP DNS). The DNS client now uses the addresses in the partial response instead of ending up with no address at all.</p>
2.27.01	<p>1. Certain SIP PBX configurations blocked media transmission on calls established between devices located on the same interface of the firewall.</p> <p>2. The POP3 ALG did not reset its state after a failed authentication. This could cause the next login attempt to fail.</p> <p>3. Specific Intrusion Detection Protection (IDP) scenarios using hardware acceleration could cause scans to fail.</p>

	<p>4. Restarting a GRE interface did sometimes trigger an unexpected restart of the firewall.</p> <p>5. The POP3 ALG did not allow Digest-MD5 authentication.</p> <p>6. The SIP ALG could forward malformed SIP messages if a range 0-65535 was used as destination port in the SIP service configuration.</p> <p>7. Specific scenarios using the PPTP ALG could sometimes cause an unexpected restart of the firewall.</p> <p>8. The log message sent when reclassifying a URL using Web Content Filtering showed the wrong category. The log message has been updated to display the correct category.</p> <p>9. Web User Interface: Activating a configuration that had deleted an item that was represented in the navigation tree would not automatically update the navigation tree. This resulted in a navigation tree that did not correspond to the running configuration.</p> <p>10. Checked checkbox properties that were disabled were unchecked when submitting data in the Web User Interface (since information sent by a web browser is identical for an unchecked checkbox and a disabled checkbox). The configuration engine now correctly remembers the state of disabled checkboxes when submitting data.</p> <p>11. The HTTP ALG MIME type check did not have support for OpenDocument Text Documents (odt).</p> <p>12. Script execute did not allow the 'cc' command to run without parameters. The command has been updated.</p>
2.27.00	<p>1. The IP4 Group object didn't handle excluded addresses correctly. It's now possible to use excluded and included objects in the correct way.</p> <p>2. Certain SIP option messages with high values for the "expires" header field failed to be properly parsed. When that occurred incoming calls to phones placed behind the firewall failed.</p> <p>3. Some HTTP headers could cause HTTP connections through the HTTP ALG to be closed down prematurely.</p> <p>4. On DFL-260/ DFL-860, some specific high stressed Intrusion Detection and Protection scenarios using a hardware accelerator could drain the memory of the firewall.</p> <p>5. The SMTP ALG did not accept response codes that only contained numeric data.</p> <p>6. Browsing the Web User Interface over HTTPS would sometimes result in "Error 500 - Internal server error".</p> <p>7. On DFL-1600/DFL-1660/DFL-2500/DFL-2560(G), after a reconfiguration</p>

	<p>using a HA configuration the interface synchronization list for the Inactive node contained invalid interface references which could cause problems when connections were synchronized before the list was rebuilt. The references are now properly cleared during a reconfiguration.</p> <ol style="list-style-type: none"> <li>8. In the Web User Interface, when defining an IDP Rule, the check box to enable or disable the option "Protect against insertion/evasion attacks" was not visible.</li> <li>9. The CLI techsupport command always sent a "sesmgr_file_error" log message, even when it worked correctly. The techsupport command now only sends log message when it fails.</li> <li>10. A limitation on the number of simultaneous WebAuth transaction could prevent the authentication of authorized users.</li> <li>11. The IP Rule view in the Web User Interface was slow when viewing large collection of rules. The rendering speed has been improved.</li> <li>12. Dropdown menus in the Web User Interface used a fixed width, which caused objects with long names to push information outside the window. The dropdowns are now scaled to be able to show all the information. The dropdown also automatically scrolls to the selected item when opened.</li> <li>13. The Mappings and Leases links on the DHCP Server status page in the Web User Interface didn't work.</li> <li>14. Disabling objects with references in the Web User Interface would delete the objects and references instead. The objects are now only disabled when selecting to disable them.</li> </ol>
2.26.02	<p><i>[DFL-210/260/800/860/1600/1660/2500/2560/2560G]</i></p> <ol style="list-style-type: none"> <li>1. The "range" parameter in the "rules" CLI command did not work.</li> <li>2. The CLI command "dns -query" only returned one IP address even though the DNS Record contained multiple entries.</li> <li>3. An error in the configuration engine caused problems when configuring the first OSPF Area for an OSPF Router Process.</li> <li>4. When using services with the SYN flood protection (SYN Relay) functionality enabled, reconfigurations could result in unexpected behavior.</li> <li>5. Certain conditions sometimes led to an unexpected behavior when a firewall had IPsec tunnels configured.</li> <li>6. It was not possible to use User Authentication enabled objects in Routing Rules, Threshold Rules, IDP Rules or Pipe Rules.</li> <li>7. The log pages for the Web User Interface were rendered incorrectly resulting in artifacts on some web browsers.</li> <li>8. The SMTP ALG did not load all whitelist and blacklist entries if the number of</li> </ol>



	<p>entries were more than about 30. The entries that failed to load were silently ignored. All configured whitelisted and blacklisted addresses are now loaded and filtered correctly.</p> <p>9. Users were not properly logged in when IPsec LAN to LAN tunnels were configured to require IKE XAuth. This could cause an unexpected reboot. Now the LAN to LAN case is properly handled by IKE XAuth.</p> <p>10. The L2TP/PPTP Server overview grid did not have a column for "Server IP".</p> <p>11. The dropdown to select the interface for OSPF Neighbor in the Web User Interface printed the name wrongly. The dropdown code has been enhanced to handle this value correctly and print the proper name.</p> <p>12. The validation of the latency setting in the Host Monitor configuration was not correct. The configured value was lowered to an incorrect value.</p> <p>13. The setup wizard only created the second of the two possible Syslog servers. The first Syslog server is now correctly created by the wizard.</p> <p>14. The "min" and "preferred" input fields had swapped position on the configuration page for IPsec Algorithms and IKE Algorithms in the Web User Interface. The position of the input fields has been corrected.</p> <p>15. In the Web User Interface it was not possible to change order of objects that were both disabled and deleted. It's now possible to move objects that are both disabled and deleted.</p> <p><i>[DFL-160]</i></p> <p>1. Enabling POP3 on the Inbound Traffic page did not have any effect.</p>
2.26.01	<p><i>[DFL-210/260/800/860/1600/1660/2500/2560/2560G]</i></p> <p>1. A configuration that contains a routing table loop could lead to the watchdog being triggered. Now the configuration will fail to be activated with the following message: "Dynamic routing configuration error, possible configuration loop".</p> <p>2. Setting both "IKE Lifetime" and "IPsec Lifetime" to 0 seconds in an IPsec tunnel triggered a warning message on the console referring incorrectly to another property.</p> <p>3. Proposal lists were not properly listed in command line "ipsectunnel -iface" output.</p> <p>4. When using a user authentication rule for HTTPS with LDAP, an SSL socket was sometimes not closed, possibly resulting in instability.</p> <p>5. It was not possible to use certificates that had no alternative name set.</p> <p>6. Due to memory corruption occurring in some setups, the internal timers caused the firewall to restart unexpectedly. Depending on the traffic load, the reboots occurred periodically from a few hours up to several days. This issue has</p>

been corrected together with fixes in the loader.

7. The establishment of SYN flood protected TCP connection could be unnecessarily delayed due to the firewall dropping all the packets sent by the client side while waiting for the completion of the three-way handshaking between the firewall and the server.

8. Updates of the Anti-Virus database could only be done when the Anti-Virus functionality was enabled. The database can now be updated even though no Anti-Virus functionality is enabled

9. The license page showed an incorrect value for maximum number of PPP tunnels.

10. Running certain sequences of CLI commands (or performing corresponding actions in the Web User Interface) involving multiple "reject" commands, could cause a critical malfunction in some cases.

11. After running the CLI command "reject" with a configuration object as parameter, activation of configuration changes could fail with an error message, but "show -errors" would say that there were no errors. The "show -errors" command has been updated to correctly display these errors.

12. Keep-alive SIP pings were not handled correctly and would generate drop logs. The SIP pings are now handled correctly and a response pong is sent.

13. The console command always printed that it showed the events for the last 30 days even though nothing had happened. The command has been updated so it will print the date of the oldest entry. If entries exist that are older than 30 days it will print 30 days and truncate, if less than 30 days, date of last entry will be printed.

14. The system information slides on the front panel display could stop after showing the first sensor under certain conditions when Hardware Monitor was enabled. The system information slides can now loop through all pages without getting stuck. Only affected hardware models with front panel display.

15. There was a critical defect in the Web Content Filter functionality that could cause the firewall to reboot unexpectedly.

#### *[DFL-160]*

1. It did not work to have DHCP assigned IP on the WAN interface and at the same time relay DHCP requests to hosts on the LAN or DMZ in transparent mode.

2. If the Internet connection had dynamic IP address (DHCP enabled) and transparent mode was used on LAN or DMZ, the IP address on the LAN / DMZ interface was set to 0.0.0.0.

2.26.00

1. PPP negotiations were sometimes slower than necessary.
2. Deploying a configuration during heavy traffic load could cause a watchdog reboot.
3. It was possible to enable the anti-spam feature DNSBL on an SMTP-ALG without specifying any DNSBL servers. Configuring DNSBL without specifying any servers will now give an error.
4. Some errors in IPsec tunnel configuration were not correctly treated during the firewall start up process, resulting in IPsec tunnels not properly being set up. Now most of those errors make the tunnel be disabled and a warning message be displayed. For the most severe ones the configuration will be rejected by the system.
5. Running FTP-ALG in hybrid mode could result in the first packet being dropped when the connection to the server isn't established, and this leads to a three seconds delay. The connection from the ALG to the client will now not be initiated until the server connection is established towards the ALG.
6. It was not possible to move a rule up or down in the list if the rule was disabled.
7. The command "ipsecstats" could in some circumstances not show all tunnels when a tunnel name was given as an argument. The command now displays all the tunnels when tunnel name is given as an argument.
8. The command "ipsecstats" only listed the first matching IPsec SA when a tunnel name was given as an argument. The command now displays all IPsec SAs that are connected to the specified tunnel name.
9. The FTP-ALG virus scanner triggered an unexpected restart if the virus signature database was updated while files were being processed by an FTP-ALG configured with fail-mode set to allow.
10. The "ippool - show" CLI command output showed all configured pools, which could be a very long list. Now only the first ten are listed by default. The "-max <num>" option can be used to display more items.
11. The SIP-ALG didn't handle "183 Session Message" when initiating a new SIP call.
12. The return traffic for ICMP messages received on an IPsec transport mode interface was wrongly routed to the core itself and then dropped. The return traffic is now passed back using the same connection as it arrived on.
13. Tab completion in the command line interface (CLI) did not work on IPsec tunnels when using the "ipsecstats" command. Tab completion is now possible to use in the "ipsecstats" command.
14. The firewall did not accept certificates signed with RSA-SHA256.

15. Timezone setting could make the minimum date limit in scheduling to wrap and become a date into the future. The minimum and maximum dates in scheduling have been modified to be between the years 2000 and 2030 which will not trigger the incorrect behavior.
16. The SMTP-ALG incorrectly blocked emails sent using the CHUNKING (BDAT) extension. The ALG has been modified to remove the CHUNKING capability from the server's EHLO response. This allows the emails to pass through the ALG.
17. It was not possible to connect to the firewall using SSH if lots of public keys were registered in the SSH client.
18. The firewall could unexpectedly restart when disabling automatic updates of anti-virus and IDP updates.
19. IPsec tunnels with a DNS name as remote endpoint would cease to function after a remote endpoint IP address change.
20. Blacklist could potentially write to media up to five times each minute. The delay between possible writes has been increased to two hours.
21. It was not possible to configure "maximum authentication retries" for the SSH server in the web user interface. Configuration support has now been added.
22. There was a problem when multiple IPsec SAs referenced the same XAuth context.
23. If a DHCP lease of a reserved IP address was manually released in the DHCP server and the host requested a new lease, the host was not given the reserved IP again.
24. The UDP checksum was not correctly updated when the multiplex rule was used together with address translation (SAT SETDEST / NAT).
25. On some models, a data alignment error in the Route Load Balancing system could cause the firewall to malfunction.
26. Old configurations had an incorrect definition of the all\_tcpudp service. Upgrading from an older version to a newer version could cause problems. This problem has now been fixed and the old service will be converted during the upgrade.
27. In some scenarios, login attempts using the web user interface failed with the error message "Error 500 - Internal Server Error". No new login attempts were allowed until the system had been restarted. A synchronization lock for an internal buffer failed to reset during reconfigure and caused this issue.
28. Scripts created by "script -create" could previously have problems to run even when executed with "script -execute -force", because the generated script would sometimes incorrectly reference an object before it had been added. This

	<p>has been solved in such way that "script-create" always generates a script that will not reference an object before it has been created. Circular dependencies are resolved by first adding the objects without the problematic references, then later modifying the object to its final state.</p> <p>29. Since the web user interface uses UTF-8 encoding, a PSK containing ASCII characters with value of 128-255 would be stored as UTF-8 characters. UTF-8 characters are now converted back to ASCII characters when it is possible.</p>
2.25.01.28	<p>1. If the IPSec encapsulation was configured as "Both" then upgrade firmware to v2.25.01.22, it will cause device into cycle reboot.</p> <p>2. The WCF tab is shown on Non-UTM Firewall models. Basically, Non-UTM firewalls don't support dynamic WCF feature. It is no longer visible on non-UTM firewall models after upgrade to firmware v2.25.01.28.</p> <p>3. Startup Wizard is not displayed after reset configuration to default via WebGUI.</p>
2.25.01.22	<p>1. The advanced setting Block0000Src{Drop, DropLog, Ignore, Log} has been renamed toLog0000Src{Drop, DropLog}.The actions Log andIgnore have now been converted into DropLog and Drop.</p> <p>2. UpdateCenter caused problems in HA setups, sometimes locking up an HA node. HA also caused some problems for pseudo-reassembly</p> <p>3. The behavior of the TCP reassembly has been changed slightly to avoid causing orcontributing to ACK loops</p> <p>4. The firewall could generate multicast_ethernet_ip_address_mismatch log messages if itwas deployed in setups where another HA cluster was present. The heartbeats from the other HA setup were not recognized and triggered a log message. Heartbeats from other HA setups are now identified and silently dropped.</p> <p>5. Configuration errors in SSH management setup were not reported to the user.</p> <p>6. Ability to configure a source port for a NAT rule has been removed. This could be configured but would be ignored and the source port would still be randomly selected.</p> <p>7. Log messages regarding denied update of anti-virus or IDP signatures were incorrectly generated when no valid subscription existed for that service. The log messages have been removed.</p> <p>8. Redirecting HTTP users to the web authentication login page did not work correctly.</p> <p>9. A change of an interface's name could lead to the drainage of free buffers that eventually caused the firewall to stop handling traffic. The root cause of the</p>

leakage has been identified and fixed.

10. The functionality of the CLI command 'urlcache' has been moved into the 'httpalg-wccache' command. The new 'httpalg' flag '-wccache' lists the hosts which have overridden the content filter.

11. A predefined list of file types were missing in the configuration for ALG file integrity and anti-virus scan exclusion. Specifying the file extensions can now be done with support of a list of extensions.

12. The arguments to the CLI command "arpsnoop" have been changed. To enable snooping on all interfaces "all" should now be used instead of "\*" and "none" instead of "disable".

13. Some malformed HTTP URLs were always blocked when scanning with IDP. It is now possible to configure the way malformed HTTP URIs should be treated (log, drop, droplog, ignore).

14. Previously, ARP monitoring would be disabled if there was no gateway to monitor.

15. Previously a route could not be configured to include its own gateway among hosts to monitor, if the gateway address was obtained via DHCP.

16. A missing anti-virus signature database or a license file not allowing anti-virus scanning resulted in all traffic sent through an anti-virus enabled Application Layer Gateway to be blocked. Even though this behavior guaranteed that un-scanned traffic never passed through the gateway, it could lead to unexpected interrupts in traffic flows.

17. At shut down of the unit, connected SSH clients were not disconnected

18. The interface status page could show corrupted driver / hardware output when viewing VLAN interfaces. VLAN interfaces have no driver or hardware information so this field is now left empty.

19. Executing commands which used object arguments from within a script file did not work. It is now possible to execute such commands from within script files.

20. IP4HAAAddress peer address was not shown in the WebUI and CLI address book views. The HA peer address is now displayed in address book listings.

21. Idling system backup download for more than 5 seconds aborted the download. It is now possible to idle up to two minutes without having the download being aborted.

22. When the SMTP-ALG anti-virus engine detected multiple infected files within a single ZIP file, the name of the zip file was incorrectly added to the BlockedAttachments.txt file each time a virus was found. The zip file name is now only added once, no matter of the number of infected files within the zip file.



23. An HA node sometimes froze and had to be physically rebooted after updating IDP signatures via updatecenter.
24. The authentication method for IPsec tunnels was set to PSK as default value. When adding such tunnels from the CLI this was unclear. When using the CLI to create IPsec tunnels, the user must now explicitly specify the wanted authentication method.
25. Microsoft Windows LT2P over IPsec sessions could fail in the sequence of re-keys.
26. When using the CLI it was possible to add objects to already disabled folders. It is no longer possible to add objects to disabled folders.
26. The User Authentication logs sometimes contained faulty authentication information. Log events were also missing in some authentication scenarios
27. A file transfer scanned by the HTTP ALG with anti-virus activated could be aborted after a WindowZero event from the client.
28. The 'active' column of 'updatecenter -servers' command showed misleading information. The column shows which server that is the recommended server to use by the UTM services (Anti-virus, IDP and Web Content Filtering). The column has been renamed to 'Precedence' and a server is either marked as 'Primary' or 'Backup'.
29. PCAP captures on non-Ethernet interfaces were missing Ethernet headers causing Wireshark to fail opening the files.
30. The configuration user and session stored for the configuration changes sometimes indicated that the wrong user session stored the configuration. Now, the correct user session parameters are stored.
31. In rare cases, the Web Content Filtering feature could trigger an unexpected restart of the firewall.
32. A lease for a static host in a DHCP server was removed if a new lease with the same MAC-address was created. A lease is now removed if the new lease is within the same DHCP server and has the same MAC-address.
33. The webUI memory logger search fields used partial matching. The search fields are now using strict matching with the possibility to use the wildcards '\*' and '?'.
34. Outdated information was sometimes used when generating log events from the ALGs which could cause the device to restart.
35. It was not possible to select Local ID for certificates. Added configuration support for Local ID.
36. Configuring the static IPsec config mode IP pool with an address range where the least significant byte of the last address in the range is smaller than the least

significant byte of the first address in the range would cause the device to reboot when several tunnels are established. One example of such a range is 172.16.1.240-172.16.2.40.

37. Route Fail Over status information was faultily printed on the console every time the state of the route changed. These printouts are now removed and only the log events remain.

38. Changing the high availability setting "use unique shared MAC" could make both nodes of a high availability cluster go active.

39. There was a dependency between link monitors which resulted in that the effective ping interval was reduced for each new link monitor configured.

40. The CLI was missing a quick and easy way to list the available runtime services. A 'services' CLI command has been added. This command lists the runtime values of configured services.

41. It was not possible to send IKE messages through an IPsec interface. The result was that a pair of hosts could not establish an IPsec tunnel with each other using IKE if the negotiation needed to pass through an IPsec tunnel established by the firewall and a peer.

42. Netobject groups were not updated if the groups contained a dynamically changed (DHCP, PPPoE etc.) address.

43. IPsec-tunnels using DNS resolving of the remote gateway could sometimes not be established. The dynamic routes are now set properly for tunnels using DNS resolving of remote gateway.

44. Certain device parameters, such as the device name, were previously synchronized between the members of a HA cluster. To make it easier to distinguish between the members of a HA cluster; these parameters are no longer synchronized.

45. Route load balancing method spillover didn't take disabled routes into account.

46. When reclassifying a Web Content Filtering blocked site, the new category for the site was not immediately updated in the local cache. It could take up to five hours before the cached entry was updated. The local cache is now immediately updated once a site has been reclassified.

47. When activating HA in the WebUI, the browser was redirected to the shared IP address of the management interface. Now, the web browser is redirected to the private IP of the management interface.

48. The HTTP-ALG could fail to reconnect to Web Content Filter servers after a HA fail-over. The unit will now reconnect to the server when URLs need to be resolved.

49. The TCP stack used by TCP-based ALGs, web-based user authentication and remote management did not respond to SYNs with the window set to zero.
50. The CLI command "arp -flush <interface>" did not work. It has now been corrected. Flushing the ARP cache on all interfaces using "arp -flush" did work though.
51. The firewall did not respond to TCP Keep-Alive packets.
52. Management sessions to the WebUI could on low throughput links timeout before the web pages have been fully loaded. The timeout of the sessions has been increased in order to better handle this scenario.
53. A leak of addresses in the static IPsec config mode IP pool caused the number of addresses available to clients to shrink over time. It could also cause the device to reboot itself.
54. IPsec config mode configured with a static IP pool did not, in general, hand out the last address in a range to clients.
55. Log messages were not throttled correctly when the configured log receiver was offline and in return sent ICMP destination unreachable packets to the gateway. This made the gateway trigger more log messages which could lead to drained CPU resources.
56. IPsec config mode, configured with multiple subnets or a static IP pool with multiple ranges of addresses, falsely treated unchanged configurations as changed during reconfiguration and disconnected all tunnels.
57. Using Web Content Filtering, users were incorrectly displayed the "access has been denied" page if their HTTP request was generated while the WCF server connection was establishing. The URL category lookup request is now silently queued and sent to the WCF server once the connection has been established.
58. The HTTP-ALG blocked web pages with malformed charset statement in HTTP headers.
59. A misconfigured IPsec tunnel could in some scenarios cause the firewall to malfunction.
60. The firewall sometimes restarted unexpectedly when using IDP Pipes.
61. The LDAP client now handles authentication using PPP with CHAP, MS-CHAPv1 and MS-CHAPv2.
62. Adobe Illustrator (.ai) files (saved by recent versions of Illustrator) did not pass the MIME type check performed by the Application Layer Gateways since they were identified as PDF files.
63. Removing the use of DHCP on multiple interfaces could in some rare cases during reconfigure cause the firewall to perform an unexpected abort. Protection has been added to the timeout handling routine of DHCP.

	<p>64. HTTP-ALG generated information pages, e.g. Restricted site notice, could get incorrectly cached by downstream proxy servers. This could lead to proxy servers returning a cached error message even though no error page should be seen.</p> <p>65. The OSPF Interface was missing the 'network' configuration parameter. This caused problems in certain setups where IPsec tunnels configured with 0.0.0.0/0 as remote or local network. If the network parameter is not set, the network parameter is copied from the configured interface.</p> <p>66. The PPPoE client option "Force Unnumbered PPPoE" did not force Unnumbered PPPoE to be used.</p> <p>67. Under certain Traffic Sapping settings, lower precedences stop forwarding traffic when higher precedences start forwarding traffic.</p> <p>68. Configurations containing names or comments using certain special characters could cause the firewall to fail reading the configuration during startup.</p>
2.20.03	<ol style="list-style-type: none"> <li>1. ICMP Destination Unreachable packets were not sent when UDP packets hit a Reject rule.</li> <li>2. Web authentication and web server connections were not closed correctly at reconfiguration.</li> <li>3. The DHCP Server did just send replies back on the receiving interface without regarding routing decisions. The DHCP Server now performs a route lookup if the reply is destined for a host address (i.e. not an IP broadcast).</li> <li>4. HA setups with IDP scanning enabled, packets could be lost during a failover.</li> <li>5. Some services were using the private IP in HA setups for communicating. This is now changed and the shared IP is used.</li> <li>6. The DNS lookup of the IP address to a remote gateway failed under certain circumstances for IPSec interfaces.</li> <li>7. The CLI command for displaying updatecenter AV/IDP update status did not show enough information. It has now been improved.</li> <li>8. TCP connections could sometimes fail due to an incorrect sequence number check.</li> <li>9. A missing Content-Transfer-Encoding header field in e-mails could sometimes cause the SMTP-ALG session to malfunction.</li> <li>10. With TCP sequence validation turned on, closing existing connections would cause all subsequent attempts to reopen the same connection to be dropped with a log message about a bad sequence number. The situation would resolve itself after a timeout of about 50 seconds, but would still cause severe traffic impairment in certain situations (most noticeably HTTP traffic).</li> </ol>

This change will by default loosen the restrictions when an attempt to reopen a closed connection is received (ValidateSilent, ValidateLogBad), while still enforcing RFC correctness.

11. The SMTP-ALG could not tell the difference between the new Microsoft Office 2007 document file types and file type ZIP. This is because there is no difference that can be easily discovered (the new Microsoft Office files are in fact ZIP files with a different extension). An ALG configured to make file integrity checks would therefore signal these files as invalid (wrong mime type, wrong file suffix...). The ALG will now identify Office 2007 files as ZIP files. Anti-virus checks will, if enabled, scan the contents of the new Office 2007 files just like it would with a regular ZIP file.
12. IP address with suffixes .0 and/or .255 could incorrectly be assigned to IPSec config mode clients.
13. Nested MIME bodies could in some scenarios be blocked by the SMTP-ALG. For example, the SMTP-ALG could block images inserted as 'inline' with an error message indicating base64 decoding error. The recipient received the email without the attached image but an error message saying: "The attachment xxxx has been blocked by the Security Gateway". The ALG has been updated with better support for nested MIME blocks.
14. A user logging in via Web based user Authentication, when configured to handle user credentials via one or several RADIUS servers, it could cause an unexpected abort if no RADIUS server was reachable. This issue has been fixed.
15. The web user interface, the properties in "Dynamic Black Listing" were incorrectly enabled when action was set to something else than "protect".
16. The icon for removing IKE SA was missing, hence making it impossible to remove an IKE SA using the web user interface.
17. DNS Blacklist CLI command showed wrong status of blacklist servers on inactive HA member. Inactive HA member does not perform any anti-spam inspection so the inactive node is unaware of the status of the blacklist servers.
18. Email attachments with very long file names could cause memory corruption in the SMTP-ALG.
19. Log string sent to syslog receivers was not always correctly formatted. Some log arguments were not separated by a whitespace, resulting in invalid parsing by syslog receivers.
20. When restarting an interface on the DFL-1600 or DFL-2500, there has been a theoretical possibility of memory corruption. This issue has been fixed from

F/W v2.20.02 and later.

21. Connections were, under certain circumstances, incorrectly dropped by the IDP scanning engine when audit mode was used.
22. After IPSec tunnels were modified, the reconfiguration of the gateway was not done correctly. The result was that the gateway could go into unexpected abort state.
23. A configured external log receiver that does not accept log messages might send ICMP destination unreachable packets to the firewall. These packets would trigger new log messages resulting in high CPU utilization. Logging is now connection-based and the sending rate of log messages will be decreased by the firewall when it receives ICMP destination unreachable packets regarding log receiver connections.
24. TCP connections with SYN relay were not synchronized correctly. In case of HA failover, traffic on these connections would freeze.
25. Unnecessary DynDNS and HTTP-Poster re-posts were triggered during reconfigure. This is now avoided by always considering if the local interface IP address has been changed or if the HTTP-Poster/DynDNS configuration has been changed.
26. Some H.323 messages were incorrectly disallowed by the ALG. The H.323 Status Enquiry message is now allowed to be forwarded through the H.323-ALG.
27. The Fail Mode setting in the HTTP-ALG was not honored by the Dynamic Web Content Filtering.
28. The log message for expired or no valid Web Content Filtering license did only show up once. There is now a log message generated once a one minute. This should be more noticeable to the administrator.
29. The SMTP-ALG could in some scenarios cause instability to the system by losing track of SMTP state synchronization. The SMTP-ALG has been updated with improved state tracking and email syntax validation.
30. It was not possible to configure the primary NBNS server for L2TP/PPTP server interfaces in the web user interface.
31. The TCP monitoring of Server Load Balancing did not increase TCP sequence number in the reset packet sent to server in case of connection timeout. The sequence number is now increased by one.
32. Server Load Balancing did not use All-To-One for port numbers. When using a range on the service, the destination port would be the specified port plus the offset from the low port number in the service.
33. One of the log messages had an incorrect format. When the log message was



	<p>placed first in the log table, the web user interface memlog would display an empty page.</p> <p>34. The description text for IP Pools incorrectly specified that IP Pools could be used by L2TP and PPTP.</p> <p>35. A confusing Anti-Virus status message was visible in status page on non UTM capable devices. The message has been removed.</p>
2.20.02	<ol style="list-style-type: none"> <li>1. ICMP Destination Unreachable packets were not sent when UDP packets hit a Reject rule.</li> <li>2. Web authentication and web server connections were not closed correctly at reconfiguration.</li> <li>3. The DHCP Server did just send replies back on the receiving interface without regarding routing decisions. The DHCP Server now performs a route lookup if the reply is destined for a host address (i.e. not an IP broadcast).</li> <li>4. HA setups with IDP scanning enabled, packets could be lost during a failover.</li> <li>5. Some services were using the private IP in HA setups for communicating. This is now changed and the shared IP is used.</li> <li>6. The DNS lookup of the IP address to a remote gateway failed under certain circumstances for IPSec interfaces.</li> <li>7. The CLI command for displaying updatecenter AV/IDP update status did not show enough information. It has now been improved.</li> <li>8. TCP connections could sometimes fail due to an incorrect sequence number check.</li> <li>9. A missing Content-Transfer-Encoding header field in e-mails could sometimes cause the SMTP-ALG session to malfunction.</li> <li>10. With TCP sequence validation turned on, closing existing connections would cause all subsequent attempts to reopen the same connection to be dropped with a log message about a bad sequence number. The situation would resolve itself after a timeout of about 50 seconds, but would still cause severe traffic impairment in certain situations (most noticeably HTTP traffic). This change will by default loosen the restrictions when an attempt to reopen a closed connection is received (ValidateSilent, ValidateLogBad), while still enforcing RFC correctness.</li> <li>11. The SMTP-ALG could not tell the difference between the new Microsoft Office 2007 document file types and file type ZIP. This is because there is no difference that can be easily discovered (the new Microsoft Office files are in fact ZIP files with a different extension). An ALG configured to make file integrity checks would therefore signal these files as invalid (wrong mime type, wrong file suffix...). The ALG will now identify Office 2007 files as ZIP</li> </ol>

files. Anti-virus checks will, if enabled, scan the contents of the new Office 2007 files just like it would with a regular ZIP file.

12. IP address with suffixes .0 and/or .255 could incorrectly be assigned to IPSec config mode clients.
13. Nested MIME bodies could in some scenarios be blocked by the SMTP-ALG. For example, the SMTP-ALG could block images inserted as 'inline' with an error message indicating base64 decoding error. The recipient received the email without the attached image but an error message saying: "The attachment xxxx has been blocked by the Security Gateway". The ALG has been updated with better support for nested MIME blocks.
14. A user logging in via Web based user Authentication, when configured to handle user credentials via one or several RADIUS servers, it could cause an unexpected abort if no RADIUS server was reachable. This issue has been fixed.
15. The web user interface, the properties in "Dynamic Black Listing" were incorrectly enabled when action was set to something else than "protect".
16. The icon for removing IKE SA was missing, hence making it impossible to remove an IKE SA using the web user interface.
17. DNS Blacklist CLI command showed wrong status of blacklist servers on inactive HA member. Inactive HA member does not perform any anti-spam inspection so the inactive node is unaware of the status of the blacklist servers.
18. Email attachments with very long file names could cause memory corruption in the SMTP-ALG.
19. Log string sent to syslog receivers was not always correctly formatted. Some log arguments were not separated by a whitespace, resulting in invalid parsing by syslog receivers.
20. When restarting an interface on the DFL-1600 or DFL-2500, there has been a theoretical possibility of memory corruption. This issue has been fixed from F/W v2.20.02 and later.
21. Connections were, under certain circumstances, incorrectly dropped by the IDP scanning engine when audit mode was used.
22. After IPSec tunnels were modified, the reconfiguration of the gateway was not done correctly. The result was that the gateway could go into unexpected abort state.
23. A configured external log receiver that does not accept log messages might send ICMP destination unreachable packets to the firewall. These packets would trigger new log messages resulting in high CPU utilization. Logging is

now connection-based and the sending rate of log messages will be decreased by the firewall when it receives ICMP destination unreachable packets regarding log receiver connections.

24. TCP connections with SYN relay were not synchronized correctly. In case of HA failover, traffic on these connections would freeze.
25. Unnecessary DynDNS and HTTP-Poster re-posts were triggered during reconfigure. This is now avoided by always considering if the local interface IP address has been changed or if the HTTP-Poster/DynDNS configuration has been changed.
26. Some H.323 messages were incorrectly disallowed by the ALG. The H.323 Status Enquiry message is now allowed to be forwarded through the H.323-ALG.
27. The Fail Mode setting in the HTTP-ALG was not honored by the Dynamic Web Content Filtering.
28. The log message for expired or no valid Web Content Filtering license did only show up once. There is now a log message generated once a one minute. This should be more noticeable to the administrator.
29. The SMTP-ALG could in some scenarios cause instability to the system by losing track of SMTP state synchronization. The SMTP-ALG has been updated with improved state tracking and email syntax validation.
30. It was not possible to configure the primary NBNS server for L2TP/PPTP server interfaces in the web user interface.
31. The TCP monitoring of Server Load Balancing did not increase TCP sequence number in the reset packet sent to server in case of connection timeout. The sequence number is now increased by one.
32. Server Load Balancing did not use All-To-One for port numbers. When using a range on the service, the destination port would be the specified port plus the offset from the low port number in the service.
33. One of the log messages had an incorrect format. When the log message was placed first in the log table, the web user interface memlog would display an empty page.
34. The description text for IP Pools incorrectly specified that IP Pools could be used by L2TP and PPTP.
35. A confusing Anti-Virus status message was visible in status page on non UTM capable devices. The message has been removed.

## Known Issues:

Firmware Version	Known Issues
2.27.05	<ol style="list-style-type: none"> <li>1. The Oray.net Peanut Hull client does not work after they changed the protocol</li> <li>2. HA: Transparent Mode won't work in HA mode. There is no state synchronization for Transparent Mode and there is no loop avoidance.</li> <li>3. HA: No state synchronization for ALGs. No aspects of ALGs are state synchronized. This means that all traffic handled by ALGs will freeze when the cluster fails over to the other peer. if, however, the cluster fails back over to the original peer within approximately half a minute, frozen sessions (and associated transfers) should begin working again. Note that such failover (and consequent fallback) occurs each time a new configuration is uploaded.</li> <li>4. HA: Tunnels unreachable from inactive node. The inactive node in an HA cluster cannot communicate over IPsec, PPTP, L2TP and GRE tunnels, as such tunnels are established to/from the active node.</li> <li>5. Inactive HA member cannot send log events over tunnels.</li> <li>6. Inactive HA member cannot be managed / monitored over tunnels.</li> <li>7. OSPF: If the cluster members do not share a broadcast interface so that the inactive node can learn about OSPF state, OSPF failover over tunnels uses normal OSPF failover rather than accelerated (&lt;1s) failover. This means 20-30 seconds with default settings, and 3-4 seconds with more aggressively tuned OSPF timings.</li> <li>8. HA: No state synchronization for L2TP, PPTP and IPsec tunnels. There is no state synchronization for L2TP, PPTP and IPsec tunnels. On failover, incoming clients will re-establish their tunnels after the tunnels are deemed non-functional. This timeout is typically in the 30 -- 120 seconds range.</li> <li>9. HA: No state synchronization for IDP signature scan states. No aspects of the IDP signature states are synchronized. This means that there is a small chance that the IDP engine causes false negatives during an HA failover.</li> </ol>
2.27.03	<ol style="list-style-type: none"> <li>1. The Oray.net Peanut Hull client does not work after they changed the protocol</li> <li>2. HA: Transparent Mode won't work in HA mode. There is no state synchronization for Transparent Mode and there is no loop avoidance.</li> <li>3. HA: No state synchronization for ALGs. No aspects of ALGs are state synchronized. This means that all traffic handled by ALGs will freeze when the cluster fails over to the other peer. if, however, the cluster fails back over to the original peer within approximately half a minute, frozen sessions (and associated transfers) should begin working again. Note that such failover (and consequent fallback) occurs each time a new configuration is uploaded.</li> </ol>

	<p>4. HA: Tunnels unreachable from inactive node. The inactive node in an HA cluster cannot communicate over IPsec, PPTP, L2TP and GRE tunnels, as such tunnels are established to/from the active node.</p> <p>5. Inactive HA member cannot send log events over tunnels.</p> <p>6. Inactive HA member cannot be managed / monitored over tunnels.</p> <p>7. OSPF: If the cluster members do not share a broadcast interface so that the inactive node can learn about OSPF state, OSPF failover over tunnels uses normal OSPF failover rather than accelerated (&lt;1s) failover. This means 20-30 seconds with default settings, and 3-4 seconds with more aggressively tuned OSPF timings.</p> <p>8. HA: No state synchronization for L2TP, PPTP and IPsec tunnels. There is no state synchronization for L2TP, PPTP and IPsec tunnels. On failover, incoming clients will re-establish their tunnels after the tunnels are deemed non-functional. This timeout is typically in the 30 -- 120 seconds range.</p> <p>9. HA: No state synchronization for IDP signature scan states. No aspects of the IDP signature states are synchronized. This means that there is a small chance that the IDP engine causes false negatives during an HA failover.</p> <p>10. The function "StateKeepAlive" of NAT Pool is not working.</p> <p>11. SIP ALG: Limited functionality on SIP ALG. It supports three scenarios: (a) Protecting local clients - Proxy located on the Internet; (b) Protecting proxy and local clients - Proxy on the same network as clients; (c) Protecting proxy and local clients - Proxy on a DMZ interface. A more detailed description and network topologies can be found in the Admin Guide. Any scenario different from these three might be difficult to deploy.</p> <p>12. SIP ALG: Limited functionality on IP telephony. It is not support all functionality in RFC-3261 or other RFC's that is referred to from RC-3261. There may be third party SIP-aware units that cannot be configured to be compatible with the SIP-ALG.</p>
2.27.02	<p>1. The Oray.net Peanut Hull client does not work after they changed the protocol</p> <p>2. HA: Transparent Mode won't work in HA mode. There is no state synchronization for Transparent Mode and there is no loop avoidance.</p> <p>3. HA: No state synchronization for ALGs. No aspects of ALGs are state synchronized. This means that all traffic handled by ALGs will freeze when the cluster fails over to the other peer. if, however, the cluster fails back over to the original peer within approximately half a minute, frozen sessions (and associated transfers) should begin working again. Note that such failover (and consequent fallback) occurs each time a new configuration is uploaded.</p> <p>4. HA: Tunnels unreachable from inactive node. The inactive node in an HA</p>

	<p>cluster cannot communicate over IPsec, PPTP, L2TP and GRE tunnels, as such tunnels are established to/from the active node.</p> <p>5. Inactive HA member cannot send log events over tunnels.</p> <p>6. Inactive HA member cannot be managed / monitored over tunnels.</p> <p>7. OSPF: If the cluster members do not share a broadcast interface so that the inactive node can learn about OSPF state, OSPF failover over tunnels uses normal OSPF failover rather than accelerated (&lt;1s) failover. This means 20-30 seconds with default settings, and 3-4 seconds with more aggressively tuned OSPF timings.</p> <p>8. HA: No state synchronization for L2TP, PPTP and IPsec tunnels. There is no state synchronization for L2TP, PPTP and IPsec tunnels. On failover, incoming clients will re-establish their tunnels after the tunnels are deemed non-functional. This timeout is typically in the 30 -- 120 seconds range.</p> <p>9. HA: No state synchronization for IDP signature scan states. No aspects of the IDP signature states are synchronized. This means that there is a small chance that the IDP engine causes false negatives during an HA failover.</p> <p>10. The function "StateKeepAlive" of NAT Pool is not working.</p>
2.27.01	<p>1. The Oray.net Peanut Hull client does not work after they changed the protocol</p> <p>2. HA: Transparent Mode won't work in HA mode. There is no state synchronization for Transparent Mode and there is no loop avoidance.</p> <p>3. HA: No state synchronization for ALGs. No aspects of ALGs are state synchronized. This means that all traffic handled by ALGs will freeze when the cluster fails over to the other peer. if, however, the cluster fails back over to the original peer within approximately half a minute, frozen sessions (and associated transfers) should begin working again. Note that such failover (and consequent fallback) occurs each time a new configuration is uploaded.</p> <p>4. HA: Tunnels unreachable from inactive node. The inactive node in an HA cluster cannot communicate over IPsec, PPTP, L2TP and GRE tunnels, as such tunnels are established to/from the active node.</p> <p>5. Inactive HA member cannot send log events over tunnels.</p> <p>6. Inactive HA member cannot be managed / monitored over tunnels.</p> <p>7. OSPF: If the cluster members do not share a broadcast interface so that the inactive node can learn about OSPF state, OSPF failover over tunnels uses normal OSPF failover rather than accelerated (&lt;1s) failover. This means 20-30 seconds with default settings, and 3-4 seconds with more aggressively tuned OSPF timings.</p> <p>8. HA: No state synchronization for L2TP, PPTP and IPsec tunnels. There is no state synchronization for L2TP, PPTP and IPsec tunnels. On failover, incoming</p>



	<p>clients will re-establish their tunnels after the tunnels are deemed non-functional. This timeout is typically in the 30 -- 120 seconds range.</p> <p>9. HA: No state synchronization for IDP signature scan states. No aspects of the IDP signature states are synchronized. This means that there is a small chance that the IDP engine causes false negatives during an HA failover.</p> <p>10. The function "StateKeepAlive" of NAT Pool is not working.</p>
2.27.00	<p>1. The Oray.net Peanut Hull client does not work after they changed the protocol</p> <p>2. HA: Transparent Mode won't work in HA mode. There is no state synchronization for Transparent Mode and there is no loop avoidance.</p> <p>3. HA: No state synchronization for ALGs. No aspects of ALGs are state synchronized. This means that all traffic handled by ALGs will freeze when the cluster fails over to the other peer. if, however, the cluster fails back over to the original peer within approximately half a minute, frozen sessions (and associated transfers) should begin working again. Note that such failover (and consequent fallback) occurs each time a new configuration is uploaded.</p> <p>4. HA: Tunnels unreachable from inactive node. The inactive node in an HA cluster cannot communicate over IPsec, PPTP, L2TP and GRE tunnels, as such tunnels are established to/from the active node.</p> <p>5. Inactive HA member cannot send log events over tunnels.</p> <p>6. Inactive HA member cannot be managed / monitored over tunnels.</p> <p>7. OSPF: If the cluster members do not share a broadcast interface so that the inactive node can learn about OSPF state, OSPF failover over tunnels uses normal OSPF failover rather than accelerated (&lt;1s) failover. This means 20-30 seconds with default settings, and 3-4 seconds with more aggressively tuned OSPF timings.</p> <p>8. HA: No state synchronization for L2TP, PPTP and IPsec tunnels. There is no state synchronization for L2TP, PPTP and IPsec tunnels. On failover, incoming clients will re-establish their tunnels after the tunnels are deemed non-functional. This timeout is typically in the 30 -- 120 seconds range.</p> <p>9. HA: No state synchronization for IDP signature scan states. No aspects of the IDP signature states are synchronized. This means that there is a small chance that the IDP engine causes false negatives during an HA failover.</p> <p>10. The function "StateKeepAlive" of NAT Pool is not working.</p>
2.26.02	<p>1. The Oray.net Peanut Hull client does not work after they changed the protocol</p> <p>2. HA: Transparent Mode won't work in HA mode. There is no state synchronization for Transparent Mode and there is no loop avoidance.</p> <p>3. HA: No state synchronization for ALGs. No aspects of ALGs are state</p>

	<p>synchronized. This means that all traffic handled by ALGs will freeze when the cluster fails over to the other peer. if, however, the cluster fails back over to the original peer within approximately half a minute, frozen sessions (and associated transfers) should begin working again. Note that such failover (and consequent fallback) occurs each time a new configuration is uploaded.</p> <p>4. HA: Tunnels unreachable from inactive node. The inactive node in an HA cluster cannot communicate over IPsec, PPTP, L2TP and GRE tunnels, as such tunnels are established to/from the active node.</p> <p>5. Inactive HA member cannot send log events over tunnels.</p> <p>6. Inactive HA member cannot be managed / monitored over tunnels.</p> <p>7. OSPF: If the cluster members do not share a broadcast interface so that the inactive node can learn about OSPF state, OSPF failover over tunnels uses normal OSPF failover rather than accelerated (&lt;1s) failover. This means 20-30 seconds with default settings, and 3-4 seconds with more aggressively tuned OSPF timings.</p> <p>8. HA: No state synchronization for L2TP, PPTP and IPsec tunnels. There is no state synchronization for L2TP, PPTP and IPsec tunnels. On failover, incoming clients will re-establish their tunnels after the tunnels are deemed non-functional. This timeout is typically in the 30 -- 120 seconds range.</p> <p>9. HA: No state synchronization for IDP signature scan states. No aspects of the IDP signature states are synchronized. This means that there is a small chance that the IDP engine causes false negatives during an HA failover.</p> <p>10. The function "StateKeepAlive" of NAT Pool is not working.</p> <p>11. The DUT would be crash and reboot after restart the GRE interface.</p>
2.26.01	<p>1. The Oray.net Peanut Hull client does not work after they changed the protocol</p> <p>2. HA: Transparent Mode won't work in HA mode. There is no state synchronization for Transparent Mode and there is no loop avoidance.</p> <p>3. HA: No state synchronization for ALGs. No aspects of ALGs are state synchronized. This means that all traffic handled by ALGs will freeze when the cluster fails over to the other peer. if, however, the cluster fails back over to the original peer within approximately half a minute, frozen sessions (and associated transfers) should begin working again. Note that such failover (and consequent fallback) occurs each time a new configuration is uploaded.</p> <p>4. HA: Tunnels unreachable from inactive node. The inactive node in an HA cluster cannot communicate over IPsec, PPTP, L2TP and GRE tunnels, as such tunnels are established to/from the active node.</p> <p>5. Inactive HA member cannot send log events over tunnels.</p> <p>6. Inactive HA member cannot be managed / monitored over tunnels.</p>

	<p>7. OSPF: If the cluster members do not share a broadcast interface so that the inactive node can learn about OSPF state, OSPF failover over tunnels uses normal OSPF failover rather than accelerated (&lt;1s) failover. This means 20-30 seconds with default settings, and 3-4 seconds with more aggressively tuned OSPF timings.</p> <p>8. HA: No state synchronization for L2TP, PPTP and IPsec tunnels. There is no state synchronization for L2TP, PPTP and IPsec tunnels. On failover, incoming clients will re-establish their tunnels after the tunnels are deemed non-functional. This timeout is typically in the 30 -- 120 seconds range.</p> <p>9. HA: No state synchronization for IDP signature scan states. No aspects of the IDP signature states are synchronized. This means that there is a small chance that the IDP engine causes false negatives during an HA failover.</p>
2.26.00	<p>1. The Oray.net Peanut Hull client does not work after they changed the protocol</p> <p>2. HA: Transparent Mode won't work in HA mode. There is no state synchronization for Transparent Mode and there is no loop avoidance.</p> <p>3. HA: No state synchronization for ALGs. No aspect of ALGs are state synchronized. This means that all traffic handled by ALGs will freeze when the cluster fails over to the other peer. if, however, the cluster fails back over to the original peer within approximately half a minute, frozen sessions (and associated transfers) should begin working again. Note that such failover (and consequent fallback) occurs each time a new configuration is uploaded.</p> <p>4. HA: Tunnels unreachable from inactive node. The inactive node in an HA cluster cannot communicate over IPsec, PPTP, L2TP and GRE tunnels, as such tunnels are established to/from the active node.</p> <p>5. Inactive HA member cannot send log events over tunnels.</p> <p>6. Inactive HA member cannot be managed / monitored over tunnels.</p> <p>7. OSPF: If the cluster members do not share a broadcast interface so that the inactive node can learn about OSPF state, OSPF failover over tunnels uses normal OSPF failover rather than accelerated (&lt;1s) failover. This means 20-30 seconds with default settings, and 3-4 seconds with more aggressively tuned OSPF timings.</p> <p>8. HA: No state synchronization for L2TP, PPTP and IPsec tunnels. There is no state synchronization for L2TP, PPTP and IPsec tunnels. On failover, incoming clients will re-establish their tunnels after the tunnels are deemed non-functional. This timeout is typically in the 30 -- 120 seconds range.</p> <p>9. HA: No state synchronization for IDP signature scan states. No aspects of the IDP signature states are synchronized. This means that there is a small chance that the IDP engine causes false negatives during an HA failover.</p>

2.25.01.28	<ol style="list-style-type: none"> <li>1. The Oray.net Peanut Hull client does not work after they changed the protocol</li> <li>2. HA: Transparent Mode won't work in HA mode There is no state synchronization for Transparent Mode and there is no loop avoidance.</li> <li>3. HA: No state synchronization for ALGs No aspect of ALGs are state synchronized. This means that all traffic handled by ALGs will freeze when the cluster fails over to the other peer. if, however, the cluster fails back over to the original peer within approximately half a minute, frozen sessions (and associated transfers) should begin working again. Note that such failover (and consequent fallback) occurs each time a new configuration is uploaded.</li> <li>4. HA: Tunnels unreachable from inactive node The inactive node in an HA cluster cannot communicate over IPsec, PPTP, L2TP and GRE tunnels, as such tunnels are established to/from the active node.</li> <li>5. Inactive HA member cannot send log events over tunnels.</li> <li>6. Inactive HA member cannot be managed / monitored over tunnels.</li> <li>7. OSPF: If the cluster members do not share a broadcast interface so that the inactive node can learn about OSPF state, OSPF failover over tunnels uses normal OSPF failover rather than accelerated (&lt;1s) failover. This means 20-30 seconds with default settings, and 3-4 seconds with more aggressively tuned OSPF timings.</li> <li>8. HA: No state synchronization for L2TP, PPTP and IPsec tunnels There is no state synchronization for L2TP, PPTP and IPsec tunnels. On failover, incoming clients will re-establish their tunnels after the tunnels are deemed non-functional. This timeout is typically in the 30 -- 120 seconds range.</li> <li>9. HA: No state synchronization for IDP signature scan states No aspects of the IDP signature states are synchronized. This means that there is a small chance that the IDP engine causes false negatives during an HA failover.</li> </ol>
2.25.01.22	<ol style="list-style-type: none"> <li>1. If the IPSec encapsulation was configured as both, when upgrade firmware to v2.25.01.22, it will cause device into cycle reboot. This problem has been fixed in v2.25.01.28.</li> <li>2. The Oray.net Peanut Hull client does not work after they changed the protocol</li> <li>3. HA: Transparent Mode won't work in HA mode There is no state synchronization for Transparent Mode and there is no loop avoidance.</li> <li>4. HA: No state synchronization for ALGs No aspect of ALGs are state synchronized. This means that all traffic handled by ALGs will freeze when the cluster fails over to the other peer. if, however, the cluster fails back over to the original peer within approximately half a minute, frozen sessions (and associated transfers) should begin working again. Note that such failover (and consequent fallback) occurs each time a new configuration is uploaded.</li> </ol>

	<p>5. HA: Tunnels unreachable from inactive node The inactive node in an HA cluster cannot communicate over IPsec, PPTP, L2TP and GRE tunnels, as such tunnels are established to/from the active node.</p> <p>6. Inactive HA member cannot send log events over tunnels.</p> <p>7. Inactive HA member cannot be managed / monitored over tunnels.</p> <p>8. OSPF: If the cluster members do not share a broadcast interface so that the inactive node can learn about OSPF state, OSPF failover over tunnels uses normal OSPF failover rather than accelerated (&lt;1s) failover. This means 20-30 seconds with default settings, and 3-4 seconds with more aggressively tuned OSPF timings.</p> <p>9. HA: No state synchronization for L2TP, PPTP and IPsec tunnels There is no state synchronization for L2TP, PPTP and IPsec tunnels. On failover, incoming clients will re-establish their tunnels after the tunnels are deemed non-functional. This timeout is typically in the 30 -- 120 seconds range.</p> <p>10. HA: No state synchronization for IDP signature scan states No aspects of the IDP signature states are synchronized. This means that there is a small chance that the IDP engine causes false negatives during an HA failover.</p>
2.20.03	<p>1. The Oray.net for Peanut Hull DDNS client does not work after supplier changed the protocol.</p> <p>2. HA: Transparent Mode won't work in HA mode There is no state synchronization for Transparent Mode and there is no loop avoidance.</p> <p>3. HA: No state synchronization for ALGs No aspect of ALGs are state synchronized. This means that all traffic handled by ALGs will freeze when the cluster fails over to the other peer. if, however, the cluster fails back over to the original peer within approximately half a minute, frozen sessions (and associated transfers) should begin working again. Note that such failover (and consequent fallback) occurs each time a new configuration is uploaded.</p> <p>4. HA: Tunnels unreachable from inactive node The inactive node in an HA cluster cannot communicate over IPsec, PPTP, L2TP and GRE tunnels, as such tunnels are established to/from the active node.</p> <ul style="list-style-type: none"> <li>• Inactive HA member cannot send log events over tunnels.</li> <li>• Inactive HA member cannot be managed / monitored over tunnels.</li> <li>• OSPF: If the cluster members do not share a broadcast interface so that the inactive node can learn about OSPF state, OSPF failover over tunnels uses normal OSPF failover rather than accelerated (&lt;1s) failover. This means 20-30 seconds with default settings, and 3-4 seconds with more aggressively tuned OSPF timings.</li> </ul> <p>5. HA: No state synchronization for L2TP, PPTP and IPsec tunnels. There is no</p>

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|  | <p>state synchronization for L2TP, PPTP and IPSec tunnels. On failover, incoming clients will re-establish their tunnels after the tunnels are deemed non-functional. This timeout is typically in the 30 -- 120 seconds range.</p> <p>6. HA: No state synchronization for IDP signature scan states. No aspects of the IDP signature states are synchronized. This means that there is a small chance that the IDP engine causes false negatives during an HA failover.</p> |
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### Related Documentation:

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- NetDefend Firewall User Manual v2.27.05
- NetDefend Firewall CLI Reference Guide v2.27.05
- NetDefend Firewall Logging Reference Guide v2.27.05