



# FortiDDoS-F - Release Notes

Version 6.1.4

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July 21, 2021

FortiDDoS-F 6.1.4 Release Notes

00-614-732238-20210721

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# Change Log

Date	Change Description
2021-07-21	FortiDDoS-F 6.1.4 Release Notes initial release

# Introduction

**Note:** This release is mandatory for all F-Series users. You must upgrade to Release 6.1.4 before upgrading to Release 6.2.0. Failure to do so will result in loss of the system configuration and/or crashing the packet processing system after upgrade.

This release also fixes a serious issue (731389) affecting traffic on FDD-200F.

This Release Notes covers the new features, enhancements, and known issues of FortiDDoS version 6.1.4 build number 0079.

FortiDDoS 6.1 features a clean-sheet new architecture that draws on more than 10 years of FortiDDoS' DDoS mitigation experience while providing a flexible and forward-looking solution to detect and mitigate Layer 3 to Layer 7 DDoS attacks for enterprise data centers. FortiDDoS uses machine learning and behavior based methods, and monitors hundreds of thousands of networking parameters to build an adaptive baseline of normal activity. It then monitors traffic against that baseline and defends against every DDoS attack.

For those familiar with FortiDDoS B- and E-Series, FortiDDoS 6.1 offers additional features, some changed functionality and some features that have been removed. A reference table is included for comparison.

## What's new

There are no new features for 6.1.4

### **B/E-Series Functionality not included in this release:**

- Support for FortiDDoS-CM Central Manager
- Security Fabric Integration with FortiOS Dashboard
- GTP-U support
- Distress ACL nor Auto-Distress ACL
- Multi-tenant support (SPP or SPP Policy Group)
- Fewer files included in Offline analysis file
- SPP Backup/Restore
- Attack Reports are Global only and are on-demand or on-schedule only. Report periods are Last 7 Days, Last Month or Last year only. (Removed per-SPP, per-SPP Policy, per-SPP Policy Group reports, on-Threshold reports and some time periods)
- REST API changes and requires documentation
- Log & Report > DDoS Attack Graphs
- SPP Policy Groups
- Log & Report > Diagnostics
- SPP-to-SPP Switching Policies. However, Cloud DDoS signaling and signaling thresholds are available.
- Restrict DNS Queries to specific subnets
- System Recommendation Option for Actual or System Max Outbound Threshold (5.4.0)
- Traffic Statistics Option for Peak or 95th Percentile Traffic (5.4.0)
- Syslog RFC 5424 or Fortinet proprietary secure "OFTP" protocol (5.4.0)
- Search for IP addresses within various ACLs (5.3.0)
- DNS LQ Upload and LQ Table size changes

### **VM limits**

- VMs have limited SPPs depending on model.
- VMs do not support Fail-Open option. Fail-Open support will be determined by the underlying server
- TCP Port Thresholds are calculated to 65,535 but Thresholds/Ranges are created for ports 1-1023 with one range for ports above 1023.
- TCP Port Graphs display traffic and drops for Ports 1-1023. Port 1024 displays peak traffic rate for any port from 1024-65,535 and total drops associated with any of those ports. Attack logs show full port range 1-65,535.
- UDP Port Thresholds are calculated to 65,535 but Thresholds/Ranges are created for 1-10,239 only with one range above that.
- UDP Port Graphs display traffic and drops for Ports 1-10,239. Port 10,240 displays peak traffic rate for any port from 10,240-65,535 and total drops associates with any of those ports. Attack logs show full port range 1-65,535 as well as reflected attack drops from ports 1-9,999.
- ICMP Type/Code Thresholds are calculated from 0-65,535 but Threshold/Ranges are created for 0-10,239 only. Indexes from 10,240 to 65,535 are included in one range.
- ICMP Type/Code graphs show indexes from 0/0 to 39/255 with all others showing in 40/0. Attack logs will show drops for Types/Codes for all Types/Codes from 0/0 to 255/255.

## Hardware and VM support

FortiDDoS 6.1.4 supports the following hardware models:

- FortiDDoS 200F
- FortiDDoS 1500F

FortiDDoS 6.1.4 is NOT compatible with any FortiDDoS A- / B- / E-Series hardware.

FortiDDoS Release 6.1.4 supports deployment of FortiDDoS-VM04/VM08/VM16 in the following virtual machine environments:

- VMware
- KVM

## Known issues

This section lists the known issues in FortiDDoS-F 6.1.4 release. For inquiries about particular bugs, please contact [Fortinet Customer Service & Support](#).

Bug ID	Description
731320	<p>During SPP creation, it takes several seconds for the back-end databases to be configured for each SPP. If the system is interrupted by a reboot, formatlogdisk or power failure, the databases may not be completed. The symptom will be missing graphs in some or all SPPs. After upgrading, adding an SPP, or after traffic is passing through FortiDDoS, user should:</p> <ol style="list-style-type: none"> <li>1) Check that Dashboard &gt; SPPs graph widget is showing traffic. If so, all databases are present. If not showing traffic (and traffic is present):</li> <li>2) Check Monitor &gt; SPPs. Cycle through all SPPs looking for traffic on each one. If any are not showing traffic use CLI execute spp-rrd-reset spp &lt;rule_name&gt; to reset those databases.</li> <li>3) If in doubt, use CLI execute rrd-reset All (note: "All").</li> </ol> <p>This should have no affect on existing traffic or drop data nor logs. It is purely a graphing issue.</p>
714102	After installing the VM, if traffic ports are deleted and added again, management ports are unreachable. After installing the VM, reboot the VM before changing Traffic ports (to SR-IOV, for example).
626478	Trusted Hosts are not checked if LDAP/RADIUS/TACACS+ external authentication is used.
668077	RADIUS and other external authentication 2FA is not available in 6.1.x.
670473	The "TCP Session Idle Timeout" for IPv6 is fixed at 528 seconds.
672585	Very small, invalid DNS packets may be dropped even when no DNS Anomalies are enabled with no logging.
676495	The Monitor > Layer 3 > Other: Fragmented Packets graph does not show Thresholds for TCP/UDP/Other Fragments.
677407	After a large IP or Domain Blocklist has been successfully uploaded to FortiDDoS, there is no indication that it is present on the system (no count of entries and no ability to search for an entry). Download will download the list as a text file to confirm.
678433, 678434	Release 6.1.x does not support LDAPS/STARTTLS
678445	Purging a large number of ACLs from an SPP can take more than 30 seconds with no progress indication.
679309	When configured with large numbers of ACLs and wide attacks across all ACLs, all logs may not show.
692550	Under heavy attack load, graphing may lag.
680412	The last x-axis label on the Dashboard Drops Graph is not always displayed.
685605	Under heavy flooding system may show DQRM memory drops when DQRM table is not full.



Bug ID	Description
688477	Under very heavy, sustained flooding across a wide range of parameters, reporting may be delayed.
690017	For FDD-200F and FDD-1500F: After creating a Service Protection Profile, you may see event logs like this: SPP:sp3 RRD Mismatch, expected : 227 but got :110 These are harmless and can be ignored.
693817	Failed LDAP logins don't provide information on the failure.
693789	When FDD-VM is operating on a virtual machine and underlying hardware supporting supporting SR-IOV, it is unable to disable the data ports.

## Resolved issues

The following issues have been resolved in the FortiDDoS-F 6.1.4 release. For inquiries about particular bugs, please contact [Fortinet Customer Service & Support](#).

Bug ID	Description
726193	Upgrading VMs from 6.x.x (< 6.1.4) to 6.2.0 will result in lost configuration. Upgrade from 6.x.x to 6.1.4 and then to 6.2.0.
726808	DNS TTL Too Long Anomaly was misconfigured. Correct configuration: TTL Too Long Anomaly enabled: TTL < or = 7 days allowed. Longer dropped. TTL Too Long Anomaly disabled: TTL < or = 30 days allowed. Longer dropped.
731389	On FDD-200F using ports 15 and 16 can result in a system crash.
732142	When upgrading from 6.1.4 to 6.2.0 the packet processing system might crash with certain configurations.

## Upgrade notes

**Note:** For VMs, upgrade to 6.1.4 before upgrading to 6.2.0. Appliances can upgrade from any 6.x.x release directly to 6.2.0.

On the VM platform, to avoid a network broadcast storm for the new deployment, each WAN/LAN interface pair is disabled by default so that traffic will not pass through.

In the initial deployment, please remember to enable the WAN/LAN interface pair via CLI

```
# config system l2-interface-pair
# edit l2-port1-port2
# set status enable
# next
# end
```



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