

# FortiAnalyzer® BigData

DATA SHEET
FortiAnalyzer BigData 4500F

Big Data Analytics Scalable Performance Built-in High Availability





The FortiAnalyzer BigData 4500F delivers high-performance big data network analytics for large and complex networks. It is designed for large-scale data center and high-bandwidth deployments, offering the most advanced cyber threat protection by employing hyperscale data ingestion and accelerated parallel data processing. Together with its new distributed software and hardware architecture and Fortinet's high performance next generation firewalls, this powerful 4RU chassis offers blazing fast performance, enterprise-grade data resiliency, built-in horizontal scalability, and consolidated appliance management.

#### **High Performance**

- Totally redesigned and optimized architecture, employing the newest Big Data Kafka/Hadoop/Spark technologies
- Massive Parallel event streaming and data processing for highspeed ingestion, data storage and search capabilities
- The highest performing FortiAnalyzer appliance: 300,000 logs/ sec out-of-box, horizontally scalable to petabytes of storage

#### **Unified Appliance Management**

- Enterprise-grade Big Data Appliance with consolidated hardware and software monitoring through the Cluster Manager
- Simple installation, updating, expansion, and data management
- Built-in automation and customizable job templates

#### **Reliable and Scalable Deployment**

- Built-in enterprise high availability and data resiliency based on a newly optimized software and hardware architecture
- Designed for rapid scalability with multiple Big Data appliances using high speed 40Gb/s built-in switch modules
- Specifically designed to accelerate the visibility and expansion of the Fortinet Security Fabric

#### **Big Data Security Analytics**

- Monitor and analyze your entire network from end-to-end at an accelerated rate, maximizing the visibility of your entire attack surface, network traffic, applications, users, and end-point hosts
- Interactive dashboards and informative reports using realtime tracking of key security metrics, link health status and application steering performance
- Ready to use and customizable report templates for compliance, security posture assessments and system performance checks

### Rapid Incident Detection & Response

- Intuitive event and incident workflow for SOC teams to focus on critical alerts
- The built-in correlation engine automates and groups alerts to remove false positives
- Out-of-box connectors and extensive APIs for security teams to automate repetitive tasks

# **Highlights**

FortiAnalyzer Big Data supports all of the features and technologies of FortiAnalyzer family. FortiAnalyzer Big Data also provides additional scalability and high-speed performance using new massive parallel data processing and Collumnar Data Store processes. After the data ingest, the FortiAnalzyzer Big Data provides an easy to use front-end UI that interacts with the distributed big data SQL engine to search, query and aggregate the data.

		FORTIANALYZER APPLIANCES	FORTIANALYZER BIG DATA 4500F
Security Analytics	Log View	✓	<b>②</b>
	Interactive FortiView Dashboards	<b>⊘</b>	<b>②</b>
	Fabric View - Assets and Identity	<	<b>②</b>
	Out-of-Box Report Templates	<b>Ø</b>	<b>⊘</b>
Incident Response	Indicators of Compromise Service	<b>⊘</b>	<b>⊘</b>
	Event Correlation & Alerting	<b>Ø</b>	<b>⊘</b>
	Incident Escalation Workflow & Management	<b>⊘</b>	<b>⊘</b>
Automation & Integration	Security Fabric Connectors	<b>⊘</b>	<b>⊘</b>
	Security Fabric Integration	<b>⊘</b>	<b>⊘</b>
	REST API	<b>Ø</b>	<b>⊘</b>
Muti Tononov & DRAC	ADOM	<b>⊘</b>	<b>⊘</b>
Muti-Tenancy & RBAC	Role-Based Access Control	<b>⊘</b>	<b>⊘</b>
Performance & Scalability	Deployment	Small, Medium Enterprise	Large Enterprise & Service Providers
	High Availability and Redundancy	Yes, requires a second unit	Yes, built-in HA and redundancy
	Sustained Rate	Up to 100,000 logs/sec	Start at 300,000 logs/sec
	Horizontal Scalability	_	<b>⊘</b>
	Big Data Analytics Engine	_	<b>⊘</b>
	Massive Parallel Data Processing	-	<b>⊘</b>
	Distributed Architecture	_	<b>⊘</b>
	Collumnar Data Store	_	<b>⊘</b>
Appliance Management	Chassis	_	<b>⊘</b>
	Cluster Manager	_	<b>⊘</b>

To download the FortiAnalyzer Datasheet, please visit: https://www.fortinet.com/content/dam/fortinet/assets/data-sheets/fortianalyzer.pdf



## **Specifications**

FORTIANALYZER-BIG DATA 4500F	
Capacity and Performance	
GB/Day of Logs (raw logs)	20 TB
Log Ingestion Rate (logs/sec)*	300,000
Devices/VDOMs (Maximum)	10,000+
Max Number of Days Analytics**	30
Options Supported	
FortiGuard Indicator of Compromise (IOC)	<b>Ø</b>
Hardware Specifications	
Form Factor	4 RU
Total Interfaces	4x 40 GE QSFP and 8x 10 GE SFP+
Storage Capacity	Blade#1: 2 x NVMe 750 GB SSD = 1.5 TB; Blade#2 ~#14: 13 x 2 x 7.68 TB SSD x = 200 TB
Usable Storage	200 TB
Removable Hard Drives	28 (Max) SSD, each blade 2 x 2.5" Storage Device
Redundant Hot Swap Power Supplies	<b>⊘</b>

Dimensions	
Height x Width x Length (inches)	7 x 17.6 x 32
Height x Width x Length (cm)	17.8 x 44.7 x 81.3
Weight	240 lbs (108.96 kg)
Environment	
AC Power Supply	200-240 VAC, 50-60 Hz
Power Consumption (Average / Maximum)	4,745.48 W / 5,016.58 W
Heat Dissipation	16,947.75 (BTU/h)
Max Current	200-240 V / 10-9.8A
Operating Temperature	10°C ~ 35°C (50°F ~ 95°F)
Storage Temperature	-40°C to 60°C (-40°F to 140°F)
Humidity	8% to 90% (non-condensing)
Compliance	
Safety Certifications	FCC Part 15 Class A, RCM, VCCI, CE, UL/cUL, CB

<sup>\*</sup> maximum constant log ingestion rate that the FAZ-BD platform can maintain for minimum 48 hours without database and system performance degradation.

## **Order Information**

Product	SKU	Description
FortiAnalyzer-BigData-4500F	FAZ-BD-4500F	FortiAnalyzer high-performance chassis for big data analytics with 14 blade servers, 4x 40-Gbps QSFP Ports, 8x 10Gbps SFP+ Ethernet Ports, 300,000 logs/sec ingestion rate, and 200TB SSD storage in a single system. Horizontally scalable up to petabytes of storage.
IOC Subscription License	FC-10-BD45F-149-02-DD	Subscription license for the FortiGuard Indicator of Compromise (IOC)
24x7 FortiCare Contract	FC-10-BD45F-247-02-DD	24x7 FortiCare Contract



www.fortinet.com

Copyright © 2020 Fortinet, Inc. All rights reserved. Fortinet®, FortiGate®, FortiGate®, FortiGate®, and certain other marks are registered trademarks of Fortinet, Inc., and other Fortinet names herein may also be registered and/or common law trademarks of Fortinet. All other product or company names may be trademarks of their respective owners. Performance and other metrics contained herein were attained in internal lab tests under ideal conditions, and actual performance and other results may vary. Network variables, different networks environments and other conditions may affect performance results. Nothing herein represents any binding commitment by Fortinet, and Fortinet disclaims all warranties, whether express or implied, except to the extent Fortinet enters a binding written contract, signed by Fortinet's General Councils, with a purches, what has present that expressly warrants that the identified performance for perform according to certain expressly-identified in such binding written contract shall be binding on Fortinet. For absolute clarity, any such warranty will be limited to performance in the same ideal conditions as in Fortinet's internal lab tests. Fortinet disclaims in full any covenants, representations, and guarantees pursuant hereto, whether express or implied. Fortinet enserves the right to change, modify, transfer, or otherwise revise this publication without notice, and the most current version of the publication shall be applicable. Fortinet disclaims in full any covenants, representations, and guarantees pursuant hereto, whether express or implied. Fortinet reserves the right to change, modify, transfer, or otherwise revise this publication without notice, and the most current version of the publication shall be applicable.

FST-PROD-DS-FBD FBD-DAT-R03-202009

<sup>\*\*</sup> is the max number of days if receiving logs continuously at the sustained log ingestion rate. This number can increase if the average log rate is lower.