Progress® Flowmon®

Flowmon Probe Specification

MODELS LIST

Valid from June 1, 2024

Flowmon Probe

Flowmon Probe is a high-performance appliance that monitors network traffic and generate IP flow statistics. The flow statistics are then exported to storage for further analysis by a Flowmon Collector or other NetFlow/IPFIX compatible application. The Probe provides NetFlow/IPFIX data necessary for network operations, troubleshooting, performance, and security monitoring.

Flowmon Probe is available in the form of a hardware appliance of 1U rack unit size and as a virtual appliance for deployment into VMware, Hyper-V, and KVM virtual environments.

Flowmon IPFIX Extensions

Flowmon Probe, a hardware-based or virtual appliance, supports **Flowmon IPFIX Extensions** which extend IPFIX information elements with monitoring of network performance statistics (Round-Trip Time, Server Response Time, delays, jitter, etc.) and application protocols such as HTTP, DNS, DHCP, SMB, E-mail, MSSQL, MySQL, PostgreSQL, VoIP SIP statistics, SSL/TLS, CoAP, IEC104 and others. For more information about Flowmon IPFIX Extensions, see the Flow Standards Specification document available at support.flowmon.com.

Supported L2 and Tunneling Protocols

Besides MAC addresses monitoring, Flowmon Probe also supports various L2 protocols and encapsulations such as VLAN, QinQ, MPLS, GRE, OTV, ESP, Avaya SPB, TRILL, and VxLAN. The monitoring interfaces of IFP-1000-CU, IFP-2000-CU, IFP-4000-CU, IFP-4000-SFP, IFP-10000-SFP+, IFP-20000-SFP+, IFP-4000PRO-CU and IFP-4000PRO-SFP can be used as targets for ERSPAN/GRE or VxLAN monitoring sessions.

Additional Modules for Probes

Flowmon Probes can be extended with additional modules (licensed separately) such as APM Probe, FPI Probe and IDS Probe. For details, please refer to corresponding specifications. Flowmon

© 2024 Progress. All Rights Reserved.

Probe needs to be covered by valid technical support in order to run additional module otherwise only standard Probe functionality is available and additional modules cannot be activated.

Hardware Appliance

Flowmon Probe in the form of a hardware appliance is a high-performance stand-alone device for monitoring all types of networks from 10 Mbps to 100 Gbps. Flowmon Probe comes in a **standard** or **Pro model** with a different number and type of monitoring ports. A hardware-based Flowmon Probe provides a **built-in flow collector** and Flowmon Monitoring Center (FMC) – application for flow collection, visualization, reporting, and analysis. The built-in collector is restricted to receive flow data only from the Probe itself. It is necessary to use a stand-alone Flowmon Collector for collecting data from other/multiple sources.

Flowmon Probe is equipped with two copper 10/100/1000 Mbps Ethernet **management ports** (except for IFP-1000-CU with only one management port) which can be used for appliance configuration, management, and flow data export. On the IFP-200000PRO-QSFP28 model, management ports can be upgraded to 10 Gbps Ethernet by purchasing an upgrade package. The upgrade package can be purchased only for new appliances (at the moment of purchase).

Flowmon Probe is also equipped with a **remote control** feature for remote monitoring of device conditions. It offers command-line access, a web GUI and a virtual console. All hardware-based models provide a dedicated network interface for remote control.

Pre-installation Manual document available at support.flowmon.com.

Virtual Appliance

Flowmon Probe in the form of a virtual appliance (VA) is a network monitoring appliance designed for deployment into a virtual environment (VMware, Hyper-V, KVM). Flowmon Probe VA provides functionality similar to the hardware-based Flowmon Probe appliance. Flowmon Probe VA models differ in the number and speed of supported monitoring ports. In contrast with the hardware-based appliance, a Flowmon Probe VA **does not include a built-in collector**, hence it is necessary to use a dedicated collector for NetFlow/IPFIX data storage and analysis.

Flowmon Probe VA supports up to two **management ports** (except for IFP-1000-VA with only one supported management port) which can be used for appliance configuration, management, and flow data export.

© 2024 Progress. All Rights Reserved.

Hardware Appliances

P/N[1]	Model	Performance Per Port[2]	Performance Per Appliance[2]	Monitoring Port	Flow Cache[3]	RAID	Disk Type	CPU[4]	RAM
IFP-1000-CU	Flowmon Probe 1000	1.48 Mpps	1.48 Mpps	1 x 10/100/1000 Mbps Ethernet	0.5 M	-	1 x SATA	8	32 GB
IFP-2000-CU	Flowmon Probe 2000	1.48 Mpps	2.96 Mpps	2 x 10/100/1000 Mbps Ethernet	0.5 M	-	1 x SATA	8	32 GB
IFP-4000-CU	Flowmon Probe 4000	1.48 Mpps	3 Mpps	4 x 10/100/1000 Mbps Ethernet	0.5 M	-	1 x SATA	8	32 GB
IFP-4000-SFP	Flowmon Probe 4000 SFP	1.48 Mpps	3 Mpps	4 x 1 Gbps Ethernet	0.5 M	-	1 x SATA	8	32 GB
IFP-10000-SFP+	Flowmon Probe 10000 SFP+	1.5 Mpps	1.5 Mpps	1 x 10/25 Gbps Ethernet	4 M	-	1 x SATA	12	64 GB
IFP-20000-SFP+	Flowmon Probe 20000 SFP+	1.5 Mpps	3 Mpps	2 x 10/25 Gbps Ethernet	4 M	-	1 x SATA	12	64 GB
IFP-40000-SFP+	Flowmon Probe 40000 SFP+	5 Mpps	20 Mpps	4 x 10/25 Gbps Ethernet	4 M	RAID1	2 x SATA	48	64 GB
IFP-4000PRO-CU	Flowmon Probe 4000 Pro	1.48 Mpps	3 Mpps	4 x 10/100/1000 Mbps Ethernet	0.5 M	RAID1	2 x SATA	8	32 GB
IFP-4000PRO-SFP	Flowmon Probe 4000 Pro SFP	1.48 Mpps	3 Mpps	4 x 1 Gbps Ethernet	0.5 M	RAID1	2 x SATA	8	32 GB
IFP-20000PRO-SFP+	Flowmon Probe 20000 Pro SFP+	14.8 Mpps	29.6 Mpps	2 x 10/25 Gbps Ethernet	4 M	RAID1	2 x SATA	48	128 GB
IFP-40000PRO-SFP+	Flowmon Probe 40000 Pro SFP+	14.8 Mpps	59.2 Mpps	4 x 10/25 Gbps Ethernet	4 M	RAID1	2 x SATA	48	128 GB
IFP-200000PRO-QSFP28	Flowmon Probe 200000 Pro QSFP28	100 Mpps[5]	150 Mpps[5]	2 x 40/100 Gbps Ethernet	32 M	RAID1	2 x SATA	40[6]	256 GB

[1] CU indicates a copper-based monitoring interface. SFP, SFP+ and QSFP28 interfaces require the use of a transceiver module chosen from Flowmon Accessories Price List according to the characteristics of the monitored network. Flowmon Probes supporting 10/25Gbps Ethernet monitoring can be used with 10Gbase SFP+ or 25Gbase SFP28 transceivers.

[2] Performance is measured in our test environment using the smallest supported packet size of 64 bytes. Flowmon Probe is configured without any optional L2/L3/L4/L7 protocol analysis, tunnel decapsulation or additionally installed packages. All RX/TX traffic of the monitored network is sent to a single monitoring port of the appliance. There are several other factors that may affect your specific performance, such as traffic type, average packet size, distribution of packet arrival times, number and type of L2/L3/L4/L7 protocols being analyzed or additionally installed packages. In deployments that split RX/TX traffic of the monitored network to different monitoring ports of the appliance, e.g. by using an optical TAP, NPM metrics will not be computed correctly, the quality of L2/L3/L4/L7 protocol analysis may be negatively impacted and the overall performance may not be optimal. While we do our best to represent the data as fairly and accurately as possible, your environment may experience different limits.

[3] The number of flow entries in flow cache per monitoring port.

[4] The number of CPU cores, with Hyper-Threading enabled.

[5] Performance is measured for IP traffic or IP traffic encapsulated in MPLS (up to 2 layers), VLAN or QinQ, without any optional L2/L3/L4/L7 protocol analysis or additionally installed packages. If other encapsulation protocols or appliance configuration options are used, performance may vary based on the encapsulation protocol and network traffic distribution and mixture. For example, the observed performance of an appliance monitoring a network with up to 100,000 flows per second whilst performing DNS, HTTP, NBAR2, TLS and NPM metrics analysis is approx. 6 Mpps per port.

[6] Model IFP-200000PRO-QSFP28 has Hyper-Threading disabled.

Flowmon Probe **IFP-200000PRO-QSFP28** can operate in **2x 100G** or **2x 40G** modes. We recommend to use transceivers from Flowmon Accessories Price List:

- 2x 100G mode: 2x 100G-QSFP28-SR4 or 2x 100G-QSFP28-LR4 transceivers.
- 2x 40G mode: 2x 40G-QSFP-SR4 or 2x 40G-QSFP-LR4 transceivers.

All models of a hardware-based Flowmon Probe are equipped with a built-in collector capable of processing **50,000 fps** (flows per second) and come with **1 TB storage capacity**

© 2024 Progress. All Rights Reserved.

Hardware Appliances – Operating conditions

P/N	Model	Dimensions (H x W x D) cm	Weight (kg)	PSU		Power Consumption		Heat Dissipation (max.)
				Power	Hot Swap	CPU Idle	CPU max	
IFP-1000-CU	Flowmon Probe 1000	1U, 4.3 x 43.4 x 56.3	12.5	450 W	no	54 W	121 W	1725 BTU/h
IFP-2000-CU	Flowmon Probe 2000	1U, 4.3 x 43.4 x 56.3	12.5	450 W	no	59 W	126 W	1725 BTU/h
IFP-4000-CU	Flowmon Probe 4000	1U, 4.3 x 43.4 x 56.3	12.5	450 W	no	59 W	126 W	1725 BTU/h
IFP-4000-SFP	Flowmon Probe 4000 SFP	1U, 4.3 x 43.4 x 56.3	12.5	450 W	no	54 W	121 W	1725 BTU/h
IFP-10000-SFP+	Flowmon Probe 10000 SFP+	1U, 4.3 x 43.4 x 56.3	13.1	600 W	no	72 W	156 W	2250 BTU/h
IFP-20000-SFP+	Flowmon Probe 20000 SFP+	1U, 4.3 x 43.4 x 56.3	13.1	600 W	no	72 W	156 W	2250 BTU/h
IFP-40000-SFP+	Flowmon Probe 40000 SFP+	1U, 4.3 x 43.4 x 71.2	18.6	2 x 800 W	yes	178 W	416 W	3000 BTU/h
IFP-4000PRO-CU	Flowmon Probe 4000 Pro	1U, 4.3 x 43.4 x 56.3	13.1	600 W	no	77 W	144 W	2250 BTU/h
IFP-4000PRO-SFP	Flowmon Probe 4000 Pro SFP	1U, 4.3 x 43.4 x 56.3	13.1	600 W	no	77 W	144 W	2250 BTU/h
IFP-20000PRO-SFP+	Flowmon Probe 20000 Pro SFP+	1U, 4.3 x 43.4 x 71.2	18.6	2 x 800 W	yes	127 W	354 W	3000 BTU/h
IFP-40000PRO-SFP+	Flowmon Probe 40000 Pro SFP+	1U, 4.3 x 43.4 x 71.2	18.6	2 x 800 W	yes	127 W	354 W	3000 BTU/h
IFP-200000PRO-QSFP28	Flowmon Probe 200000 Pro QSFP28	1U, 4.3 x 43.4 x 78.7	21.2	2 x 800 W	yes	230 W	701 W	3000 BTU/h

Continuous Operation:

- Temperature: 10°C to 35°C
- Relative Humidity[1]: 10% to 80% at 29°C

Expanded Operation[2]:

- Temperature: 5°C to 40°C
- Relative Humidity[1]: 5% to 85% at 29°C

[1] The specified temperature is the maximum dew point temperature.

[2] When operating in the expanded temperature range, system performance may be impacted. Device can work in this condition for up to 1% of annual operating hour

© 2024 Progress. All Rights Reserved.

Virtual Appliances

P/N	Model	Performance Per Port[1]	Performance Per Appliance[1]	Monitoring Interfaces	Flow Cache[2]	VMware ESXi	Microsoft Hyper-V	KVM	Minimum Configuration[3]
IFP-1000-VA	Flowmon Probe 1000 VA	Up to 0.3 Mpps	Up to 0.3 Mpps	1 x 1 Gbps Ethernet	0.5 M	5.5 and later	2012 R2 and higher	KVM 3.10.0 and higher QEMU 1.5.3 and higher libvirt 4.5.0 and higher	4 CPU cores, 8 GB RAM, min. 25 GB HDD
IFP-2000-VA	Flowmon Probe 2000 VA	Up to 0.3 Mpps	Up to 0.6 Mpps	2 x 1 Gbps Ethernet	0.5 M				4 CPU cores, 8 GB RAM, min. 25 GB HDD
IFP-4000-VA	Flowmon Probe 4000 VA	Up to 0.3 Mpps	Up to 1.2 Mpps	4 x 1 Gbps Ethernet	0.5 M				6 CPU cores, 8 GB RAM, min. 25 GB HDD
IFP-6000-VA	Flowmon Probe 6000 VA	Up to 0.3 Mpps	Up to 1.8 Mpps	6 x 1 Gbps Ethernet	0.5 M				6 CPU cores, 8 GB RAM, min. 25 GB HDD
IFP-10000-VA	Flowmon Probe 10000 VA	Up to 0.7 Mpps	Up to 0.7 Mpps	1 x 10 Gbps Ethernet	4 M				8 CPU cores, 8 GB RAM, min. 25 GB HDD
IFP-20000-VA	Flowmon Probe 20000 VA	Up to 0.7 Mpps	Up to 1.4 Mpps	2 x 10 Gbps Ethernet	4 M				8 CPU cores, 8 GB RAM, min. 25 GB HDD

[1] Performance is measured in our test environment using the smallest supported packet size of 64 bytes. Flowmon Probe is configured without any optional L2/L3/L4/L7 protocol analysis, tunnel decapsulation or additionally installed packages. In virtual environments, the performance depends on allocated resources, overall system load, and environment of deployment. There are several other factors that may affect your specific performance, such as traffic type, average packet size, distribution of packet arrival times, number and type of L2/L3/L4/L7 protocols being analyzed or additionally installed packages. While we do our best to represent the data as fairly and accurately as possible, your environment may experience different limits.

[2] A number of flow entries in flow cache per monitoring port.

[3] Some configuration options, such as supported disk size, may be limited by the customer's virtual environment regardless of which Flowmon Probe model has been selected. Any such limitations should be consulted with the vendor/distributor of the virtual environment.

[4] The Flowmon Probe VA must be running on a host system that supports the following instruction sets: MMX, SSE, SSE2, SSE3, SSSE3, CX16, SAHF and FXSR. For Intel CPUs, it corresponds to Intel Core 2 family and newer.

About Progress

Dedicated to propelling business forward in a technology-driven world, Progress (NASDAQ: PRGS) helps businesses drive faster cycles of innovation, fuel momentum and accelerate their path to success. As the trusted provider of the best products to develop, deploy and manage high-impact applications, Progress enables customers to build the applications and experiences they need, deploy where and how they want and manage it all safely and securely. Hundreds of thousands of enterprises, including 1,700 software companies and 3.5 million developers, depend on Progress to achieve their goals—with confidence. Learn more at www.progress.com

2024 Progress Software Corporation and/or its subsidiaries or affiliates. All rights reserved. Rev 2024/03 RITM0168479

Progress

/progresssw
/progresssw
/progresssw
/progress-software
/progress_sw_

Authorized Distributor :

SecureOne
Optimize with SECURITY

HQ Office (KL)
SecureOne Distribu on Sdn Bhd
200801027033 (828358 - X)
No.7, Jalan 1/109E, Desa Business Park,
Taman Desa, Jalan Kelang Lama,
58100 Kuala Lumpur, Malaysia.

Tel: +6(03) 7984 6086 Fax: +6(03) 7984 6032
Email: sales@secureone.com.my

Northern Office
SecureOne Distribu on (Northern) Sdn Bhd
201201003647 (977172 - H)
1A-2-02 @ One Precint (1160),
Lengkok Mayang Pasir,
11950 Bayan Baru, Penang, Malaysia.

Tel: +6(04) 619 2692 Fax: +6(04) 619 2699
Email: northern@secureone.com.my

www.secureone.com.my