

SPECIFICATIONS

LIVESP

LIVESP DEPLOYMENT

LiveSP Deployment Requirement

Component	Sizing Tool *
Hardware	LiveSP can be deployed on a single server or a distributed infrastructure. I/O is optimized for random data access, Data storage is implemented on the physical machine with SSD. The other components can be virtualized.
Operating System	The current supported and validated Linux distribution are (Debian, Red hat, Ubuntu) with Kernel version greater than 3.10. Kernel version 3.16 onwards is recommended for higher performance data access.
Browser	Service providers, administrators, operation team and end-customers access LiveSP through support web browsers. Supported web browsers are IE 11, Mozilla Firefox (latest), Google Chrome (latest, Safari (latest)

LiveSP Sizing Guide

Component	Sizing Tool *								
Link (Bandwidth)	<p>Bandwidth = Average flow size * Flow count at this max traffic * Predicted max aggregated traffic.</p> <p>Typical enterprise network with 10000 live interfaces, static template = 200 Mbps</p>								
Hardware (Storage)	<p>Storage = Client profiles * Data retention rule * Predicted average aggregated traffic</p> <table border="1"> <tbody> <tr> <td>Virtual Environment</td> <td>Proxy: 1 * 4 CPU, 4 GB RAM, 1 SAS 20 GB</td> </tr> <tr> <td></td> <td>Collect: 2 * 8 CPU, 16 GB RAM, SAS 1TB</td> </tr> <tr> <td></td> <td>Services: 4 * 8 CPU, 8 GB RAM, 1 SAS 200 GB</td> </tr> <tr> <td>Physical Environment</td> <td>2 * [20 CPU, 128 GB RAM, 3 TB SSD disk/ 3 TB Backup]</td> </tr> </tbody> </table>	Virtual Environment	Proxy: 1 * 4 CPU, 4 GB RAM, 1 SAS 20 GB		Collect: 2 * 8 CPU, 16 GB RAM, SAS 1TB		Services: 4 * 8 CPU, 8 GB RAM, 1 SAS 200 GB	Physical Environment	2 * [20 CPU, 128 GB RAM, 3 TB SSD disk/ 3 TB Backup]
Virtual Environment	Proxy: 1 * 4 CPU, 4 GB RAM, 1 SAS 20 GB								
	Collect: 2 * 8 CPU, 16 GB RAM, SAS 1TB								
	Services: 4 * 8 CPU, 8 GB RAM, 1 SAS 200 GB								
Physical Environment	2 * [20 CPU, 128 GB RAM, 3 TB SSD disk/ 3 TB Backup]								

** LiveSP sizing tool is designed to help size Link and Storage. It is based on observations on large networks, but could vary on traffic profile. Please contact LiveSP support for details analysis.*

Flow Information

Flexible NetFlow FNF V9: (IPv4&6 compatible) Version v9 has brought FNF capability, which makes Netflow a highly versatile protocol. Its flexibility makes it particularly more relevant for complex reporting and heterogeneous data.

- Flexible key field aggregation
- variable number of data fields.
- unidirectional or bidirectional
- sampled or not
- multi-vendor (430 standardized fields, thousands vendor-specific fields)
- aggregated, synchronized or not for exports

IPFIX: (“IP Flow Information eXport”) also referred to as NFv10, IPFIX is the industry standardized version of Netflow. It builds on NFv9 for most of the features, and brings additional flexibility (variable-length fields, sub-application extracted fields, options-data).

Note: Netflow version 9 and IPFIX are the export protocols of choices for AVC, because they can accommodate flexible record format and multiple records required by Flexible Netflow infrastructure. IPFix is recommended.

If service providers choose a centralized collection, they must size the collection link properly. Link sizing recommendation depends on:

- IWAN features enabled: More features = more data to export.
- Bandwidth per site repartition: headquarter with 500 employees will have more variety (=more export) than a small office with 20 employees)
- The time traffic distribution: the CPEs don’t have their max traffic at the same time.

<p>A Typical 10000 CP enterprise SP IWAN network required a 200 Mbps bandwidth Collection Link Max Speed = Average Flow Size * Predicted Max Aggregated Traffic * Flow Count at this Max Traffic</p>
--