

lytn⁺

AIops observability
Platform for SD-WAN



Lytn.io

Solution Brief

the context

Enterprises use more and more complex Infrastructures using the concept of so-called virtual components, that includes SDN (Software-Defined Networking) latest technologies such as SD-WAN.

The digital infrastructure became lately an even more important asset of the Enterprise, so employees, partners, contractors could do more and faster. IT managers are then more and more required to provide both the executive team and Line of Business (LoBs) managers with a concrete visibility regarding the gains and pains users feel from the infrastructure which by the way is required to evolve almost on a permanent basis.

This visibility is today mostly extracted from traditional monitoring tools, requiring complex setup with probes and other systems that could also potentially introduce cybersecurity issues. Monitoring tools deliver technical KPIs (Key Performance Indicators) that require a strong technical background to convert them into meaning full information for non-expert people. Last the latest SDN infrastructures introduce some new issues in the use of those tools as they may not see/capture some parts of the traffic. Today many companies create indicators with spreadsheets re-using some of the KPIs in order to track their own indicators.



Conclusion ?

Enterprises need new solutions, delivering indicators that are meaningful for both IT and LoBs staff and help to anticipate changes therefore budget adjustments and associated actions for an agile digital infrastructure.



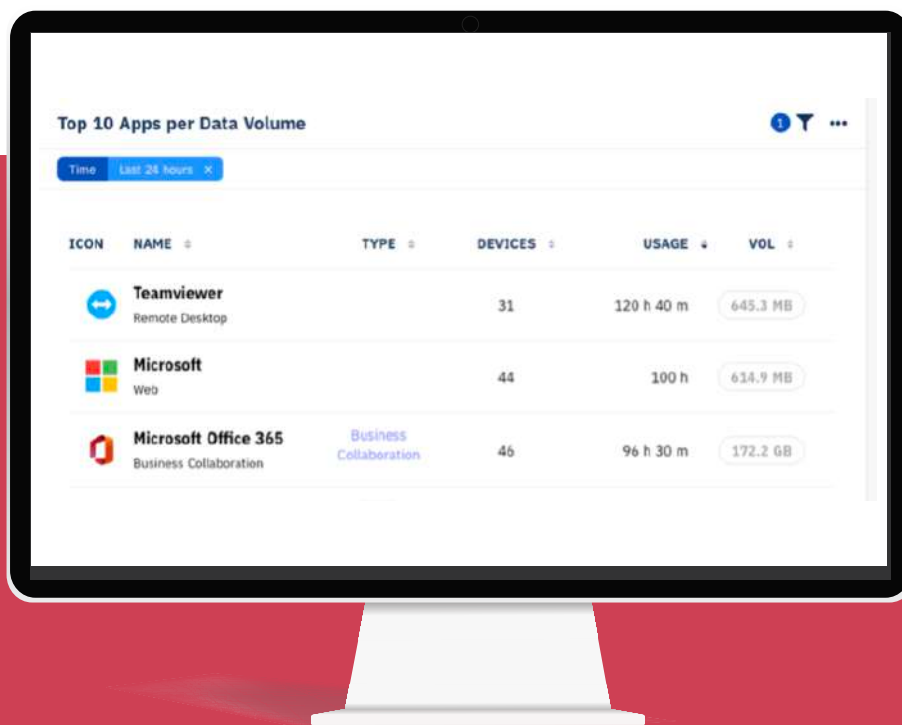
Solves two problems simultaneously :

- Deliver context-rich & end-to-end view that allows IT and LoB management to rapidly get visibility on the existing adaptability
- Agility of the networking infrastructure to support the business.

Observability lytn[✦]

Lytn has been designed to address all those challenges, provide meaningful information, on usage of the digital infrastructure, that can be inserted into reports, used for IT/LoB review meetings.

We call our Lytn product an *Observability platform*, and as it is using the very detailed information hidden inside an SD-WAN infrastructure, it has the capacity to deliver a new generation of indicators resulting from complex calculation & correlation of raw data about:



Sites



Users



Dispositifs



Applications



Service links
providers

Users of the Lytn SD-WAN Observability Platform

They can then see much elaborated indicators (included in what are called *Components*) fine-tuned to their needs and that can be assembled into groups called *Tabs*. *Tabs* are being grouped in a *Custom-Templates* that can be :

Shared among Users to improve experience. Each component can be exported (through a *channel*) for reporting inside any tool, and **tabs** can be shared across users of the Lytn SD-WAN Observability Platform, thus facilitating the task of people who only want to see results.

Sharing, Export/Import of those templates via Email to enable Lytn partners creating new *Templates* for their clients.



2 profiles are being proposed in version 1.0:

- IT user: has access to all parameters and *components*.
- Executive: has access to application and devices *components*

Supported versions for Release 1.0:

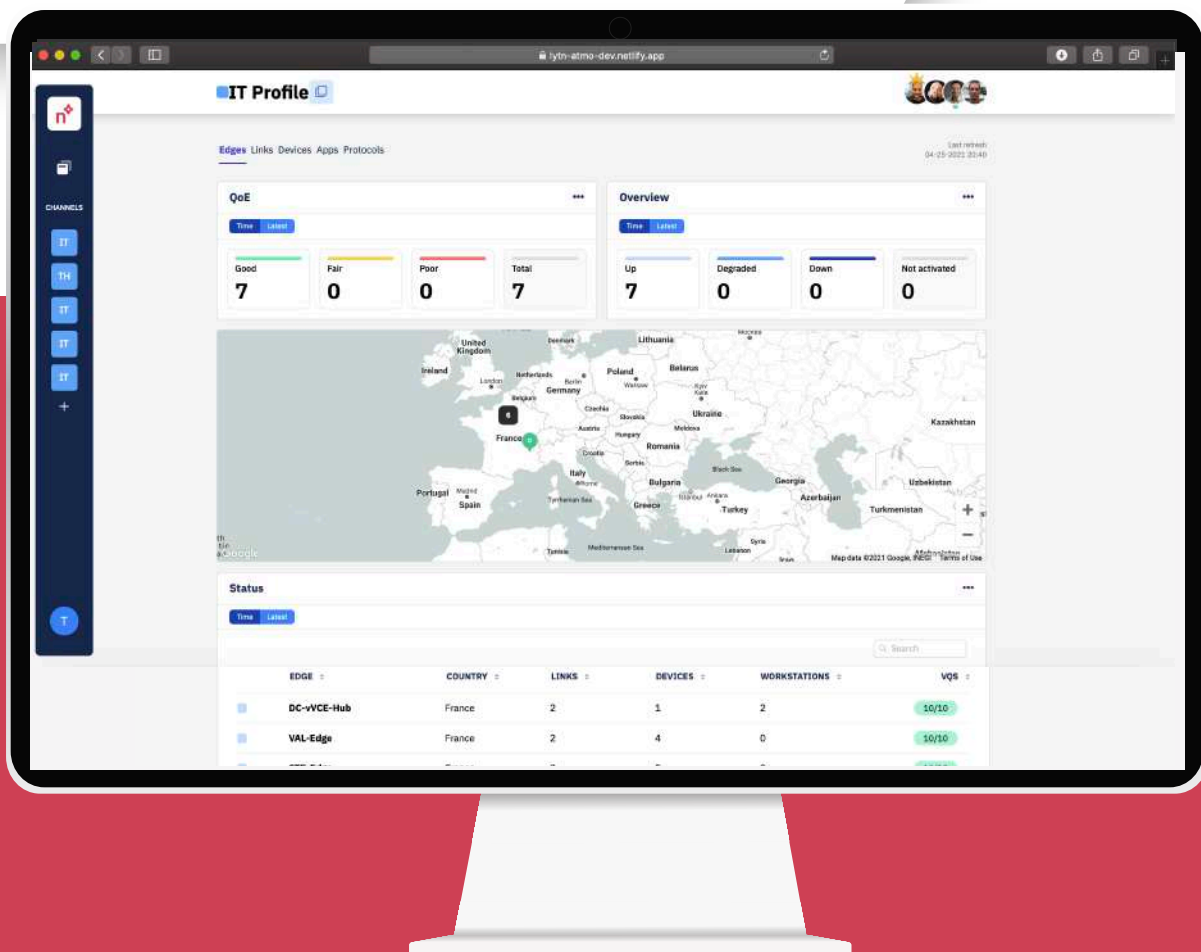
VeloCloud SD-WAN network	Version 3.4, 4.0
Browser for SaaS access	Chrome, Safari

Tabs & Components

can contain the following indicators related to an infrastructure:

Company Site

Global view of all Edge information including country, SP link names, number of links, devices connected & associated Quality of Service (LQS)



Note: LQS stands for “Lytn Quality Score” and is calculated for each SP link, it was designed to represent within a range from 10 to 100 the quality level of each individual link, with no average calculation.

LQS is a score out of 100 which represents the most reliable evaluation of the quality of a link ; taking into account the following key link- performance parameters: Saturation, Jitter, Latency and Packet Loss. A new LQS score is calculated every 10 minutes, 100 is the most perfect score, 10 the worst score, 0 means Link is Down.

LQS is a non-parametric score, there is no average calculation inside its core formula. It was designed so that there could be visibility on the « smallest » quality-impact event on a link, even several days, weeks after it occurred.

Links

Name of the attached Edge, peak value of saturation in % to/ from, bandwidth, LQS & detailed split of LQS over last 30 days

The screenshot displays the 'IT Profile' dashboard with a table of Lytn Quality Score. The table includes columns for LINK, EDGE, BANDWIDTH, SATURATION, and LQS. Below the table, there is a 'Quality Issues' section with a table of issues.

LINK	EDGE	BANDWIDTH	SATURATION	LQS
GE3 - Steer OVH Telecom	VAL-Edge France	12.9 Mbit/s 1.0 Mbit/s	0% @ 1%	67/100
GE3 - Steer OVH Telecom	STE-Edge France	8.7 Mbit/s 0.7 Mbit/s	0% @ 1%	93/100
GE3 - Steer OVH Telecom	CFD-Edge France	300.8 Mbit/s 301.2 Mbit/s	0% @ 0%	93/100
GE3 - Steer OVH Adsl	CHA-Edge France	17.2 Mbit/s 0.9 Mbit/s	0% @ 1%	94/100
GE3 - Steer Flowline SAS Internet	DC-vVCE-Hub France	95.4 Mbit/s 95.4 Mbit/s	25% @ 23%	95/100
GE3 - Steer Orange Pro FO	GRE-Edge France	359.5 Mbit/s 410.5 Mbit/s	0% @ 0%	97/100
GE3 - Steer OVH	GRE-Edge France	298.8 Mbit/s 295.8 Mbit/s	0% @ 0%	97/100
GE3 - Steer OVH Telecom	BRO-Edge France	297.7 Mbit/s 43.0 Mbit/s	0% @ 0%	98/100

EDGE	EDGE	BANDWIDTH	SATURATION	ISSUE
GE3 - Steer Orange Pro FO	GRE-Edge France	359.5 Mbit/s 410.5 Mbit/s	7% @ 0%	0.5% 0.0% 0.0%
GE3 - Steer Flowline SAS Internet	BRO-Edge France	91.6 Mbit/s 91.6 Mbit/s	20% @ 2%	0.5% 0.0% 0.0%

Devices

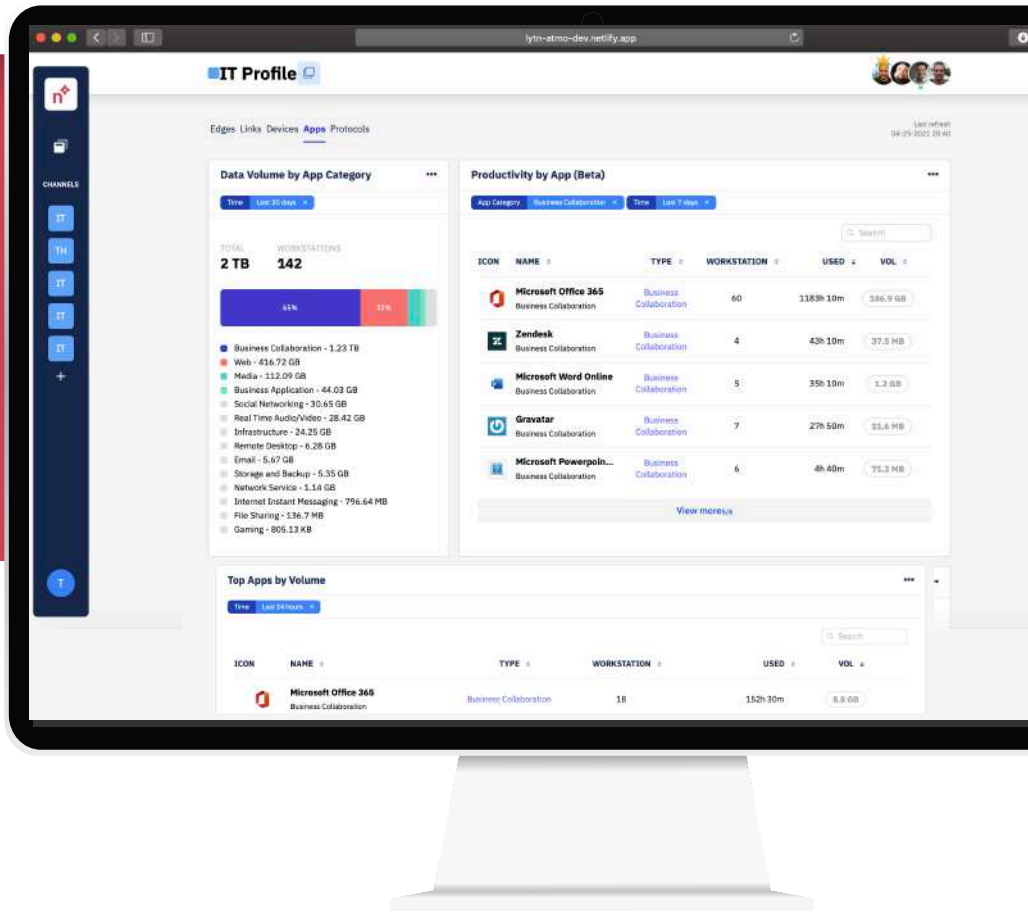
List of devices for an Edge, group of Edges, per category (human vs. object), volume of data exchanged and Applications used by each device

The screenshot displays the 'Data Volume by Device' section of the IT Profile dashboard. It features a table with columns for DEVICE, EDGE, CATEGORY, TYPE, and VOLUME.

DEVICE	EDGE	CATEGORY	TYPE	VOLUME
1 N/A OTHER - N/A 00:15:55:22:22:19	BRO-Edge France	Other	N/A	365.3 KB
2 N/A OTHER - N/A 00:15:55:29:17:01	BRO-Edge France	Other	N/A	363.9 KB
3 N/A N/A - N/A 00:40:94:65:2a:e0	BRO-Edge France	Other	N/A	5 MB
4 N/A OTHER - N/A 00:15:55:7a:4e:96	CFD-Edge France	Other	N/A	317.5 KB
5 N/A OTHER - N/A 00:15:55:08:a7:6d	BRO-Edge France	Other	N/A	135.9 KB
6 N/A OTHER - N/A 00:15:55:7a:4e:96	CFD-Edge France	Other	N/A	293.4 KB
7 N/A N/A - N/A 00:16:73:80:80:2e	BRO-Edge France	Other	N/A	3.5 MB
8 N/A UNKNOWN - N/A c8:66:9d:1a:41:40	CFD-Edge France	Other	N/A	2.6 MB

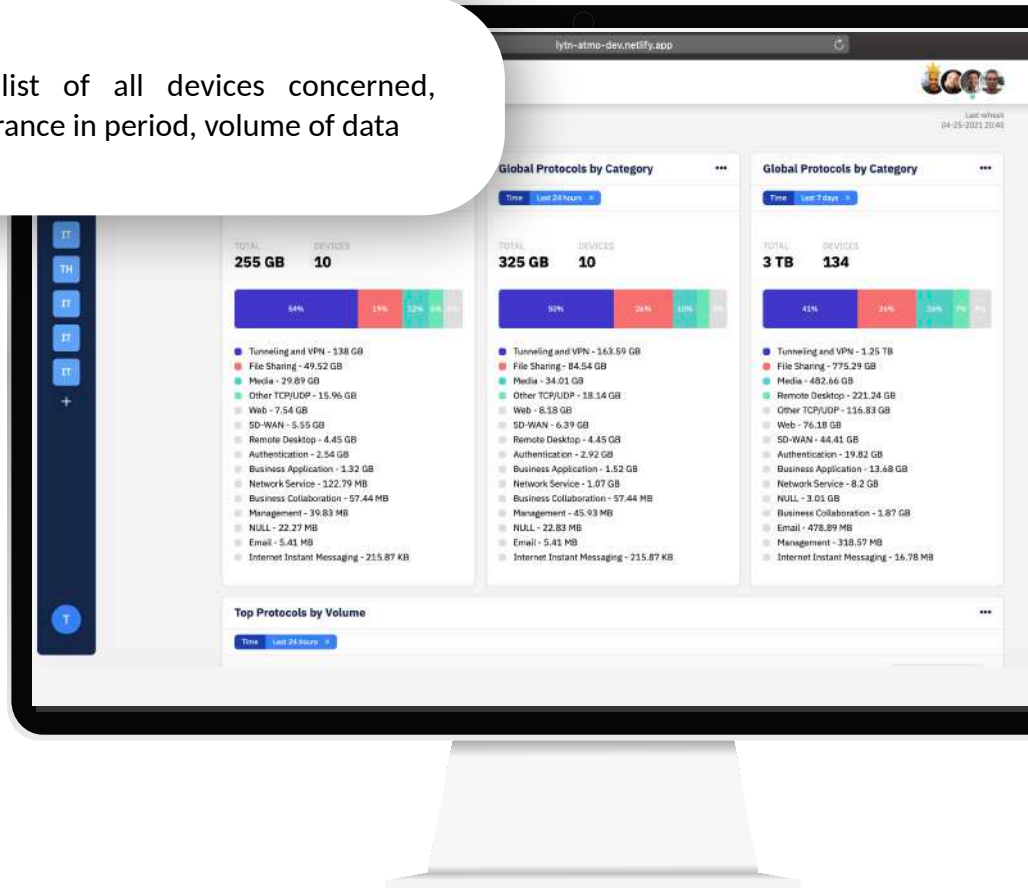
Applications

Volume & hours of data exchanged by name, category, all devices concerned

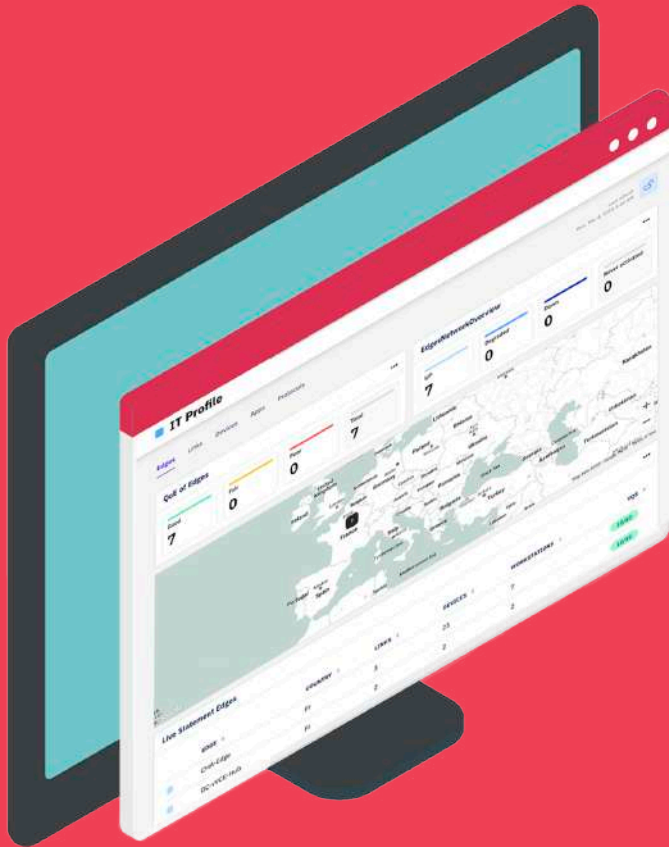


Protocols

Protocol, type, list of all devices concerned, number of appearance in period, volume of data



Most of those indicators can be filtered by



Time
Day, week...

Location
Country, region, world

be aggregated in order to
provide a global or more
focused view

USERS

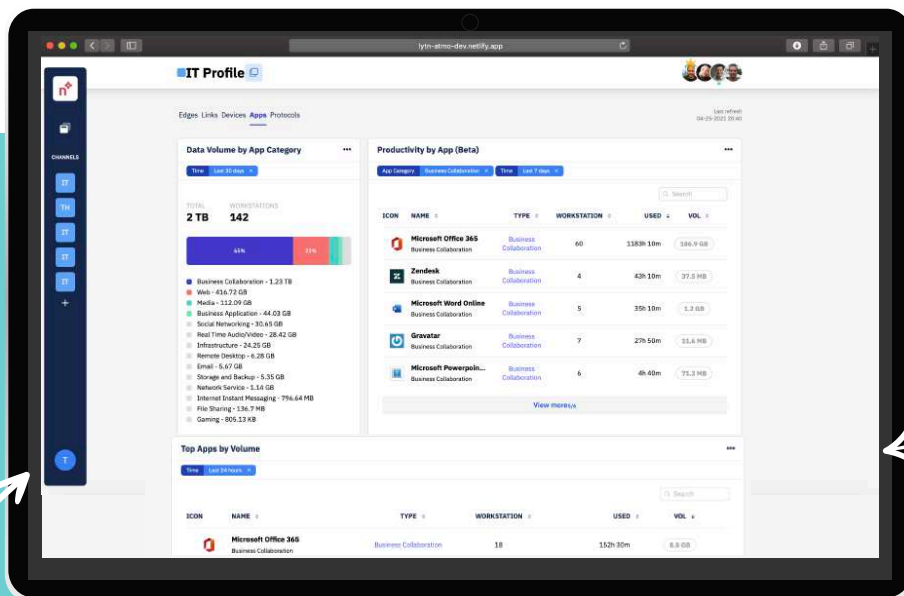


Each User has Credentials and a profile.

Profile could be IT or Business

When logging in the first time, each user accesses a Base Template

One modified, User has one or more Custom-Templates to use



Components

Channel

CUSTOM TEMPLATE



- Each Custom-template can then be shared with other users inside the same company
- Each Custom Template can be exported or imported between companies

SHARING

MONTH(S)



10 MIN

GLOBAL



LOCAL



EDGES



Up/down
Degraded
Non-activated
Data Volume

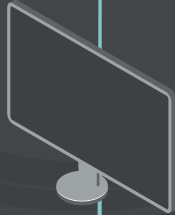
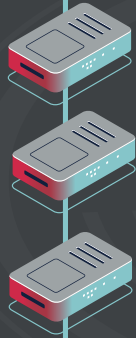
APPLICATIONS

Usage analytics



LINKS

Non-parametric analysis
Exception discovery



DEVICES

Multi-criteria classification



PROTOCOLS

Footprint survey



USERS

Applications consumption
Feedback loop

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Preliminary version, please contact us for any question on

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