open systems

**INDUSTRY
SOLUTION BRIEF**

Power Digital Manufacturing

Deliver agile, secure networking
for your global operations.

What are some of the challenges global manufacturers face?

Deliver performance to difficult locations

IT must provide resilient connectivity in new, remote, or difficult locations. Deployments and integration into the existing infrastructure have to be fast and efficient.

Support legacy systems and IoT remotely

Driving modern production schedules on remote, sometimes legacy machinery and software isn't easy. Using IoT usually means increasing your attack surface.

Enable modern file transfer

To keep up with production requirements and to enable global collaboration, locations must have the bandwidth and the technology to move large files seamlessly.
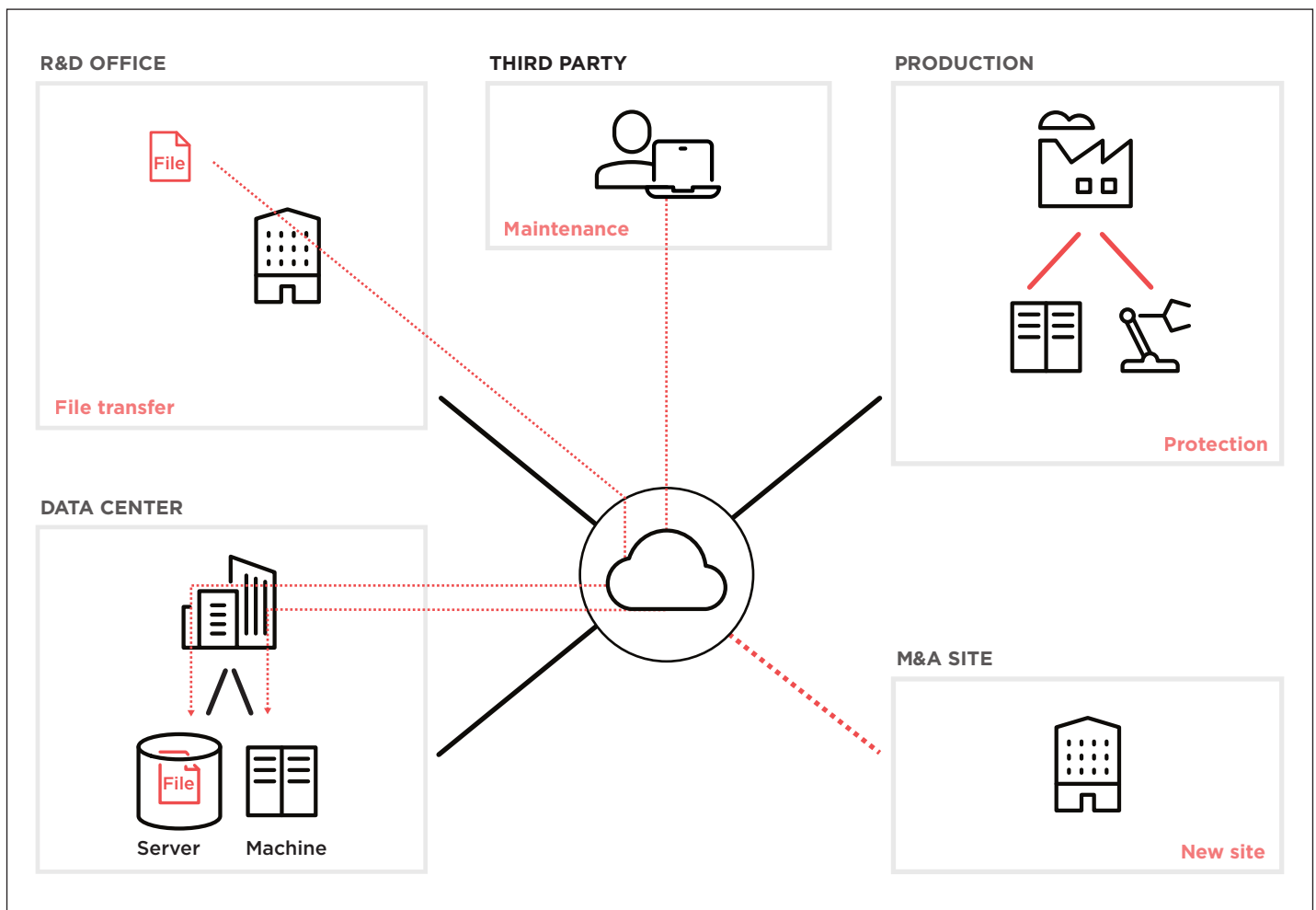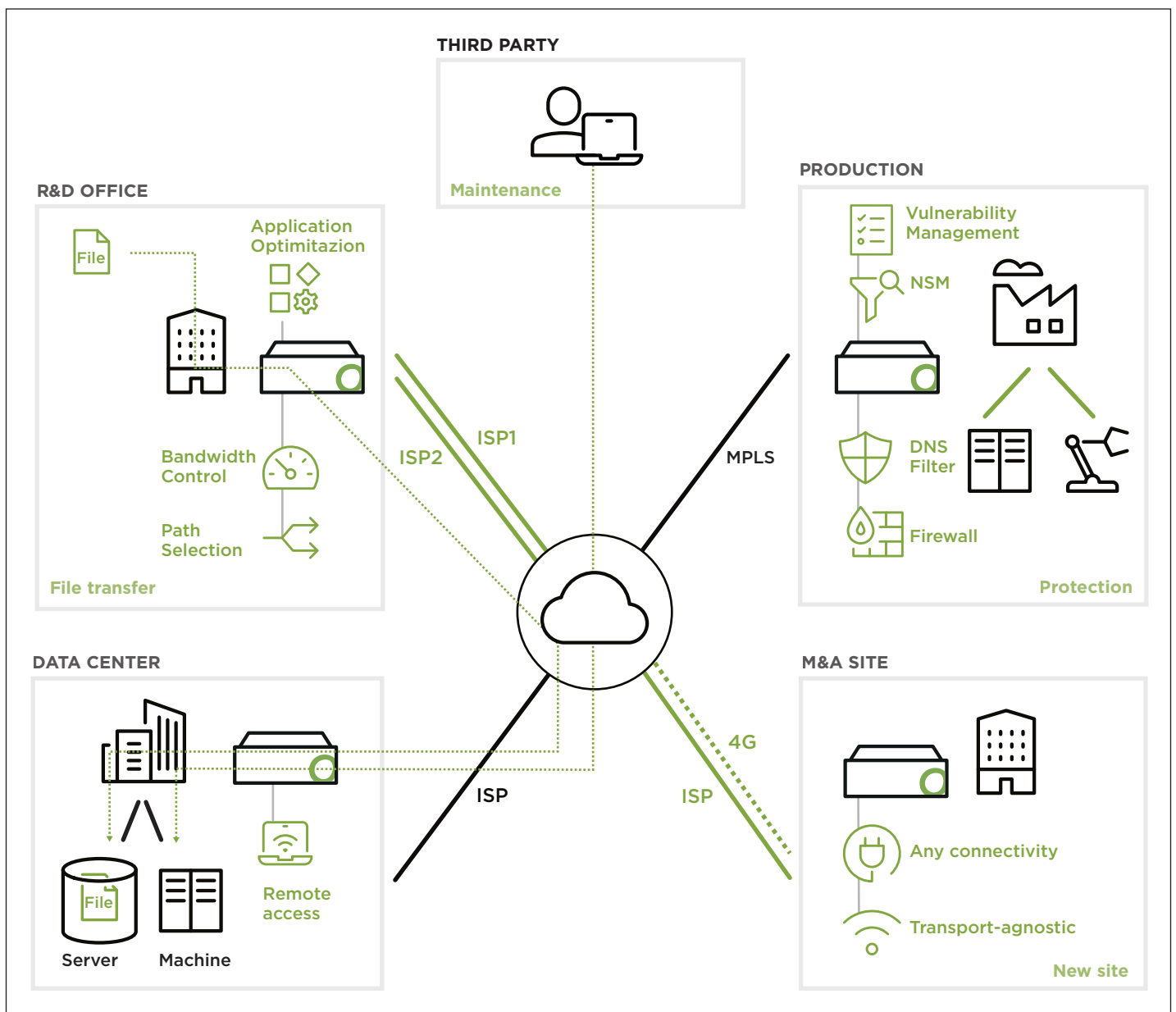

Common challenges in global manufacturing companies

Global manufacturing operations demand a secure, agile network

Manufacturers today must control and secure a worldwide environment that may include difficult or remote sites, legacy machine control systems, and IoT – even as they contend with ever-increasing demands for efficiency and speed in their digital operations. Globally distributed R&D and production mean that production sites must be enabled for high performance data sharing, remote operation and maintenance, and advanced access control and security.

Your SD-WAN is a key resource

A unified, secure network like the Open Systems SD-WAN is critical to enabling manufacturing environments to drive maximum efficiency and agility. With a unified network, organizations can seamlessly deliver a standardized menu of intelligent network services to any location, along with flexible connectivity that adapts to available lines. New sites can be brought online simply and easily. Critical operations can run securely and without interruption across a global environment. And Open Systems expert engineers are there to assist organizations at every step.

THIRD PARTY

Maintenance

PRODUCTION

Vulnerability Management

NSM

DNS Filter

Firewall

Protection

R&D OFFICE

File

Application Optimitazion

Bandwidth Control

Path Selection

File transfer

ISP1

ISP2

MPLS

DATA CENTER

Remote access

Server   Machine

File

ISP

ISP

4G

M&A SITE

Any connectivity

Transport-agnostic

New site

Open Systems solutions support global manufacturers to overcome their challenges

M&A SITE

Any connectivity

Transport-agnostic

New site

Let's address your potential challenges one by one

Deliver performance and simple deployments even in difficult locations

Often enterprise IT will be called upon to maintain operations in geographically or administratively difficult locations. Or, as a result of M&A, they may be asked to integrate new locations into the current infrastructure as quickly as possible. The opportunity cost of delays in securing connectivity and integrating new or challenging sites into your environment is real.

Open Systems Secure SD-WAN provides the flexibility, standardization, and automation necessary to add even your most difficult sites quickly and easily. Here are a few examples of how we do it:

Challenge   Open Systems solution

1

You may face limited connectivity in a location. For example, neither MPLS nor reliable internet is available, and you must use 4G/radio.

1

The Open Systems SD-WAN is **transport-agnostic**, and can run on any connectivity layer. This enables us to bring in connectivity as fast as possible, without waiting for physical lines.

2

Your choice of connectivity providers in a location may be severely limited, and getting the global provider to install a line at the new site will take some time.

2

Our SD-WAN is **fully hybrid capable** – whether you use internet or MPLS doesn't matter.

3

In your new location, import of deployment hardware may be difficult or only possible after significant paperwork and/or delays.

3

We currently operate – and **have expertise in – over 180 countries**. We're ready to assist your deployment, wherever it is.
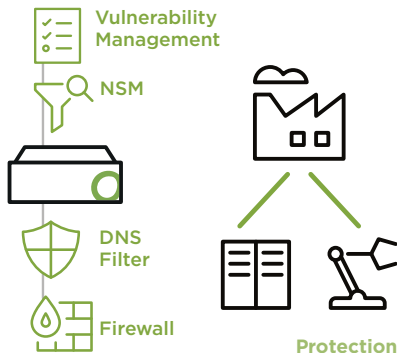
4

You may be tasked with integrating the local setup into the existing environment, fast.

4

The Open Systems SD-WAN features a high level of standardization and orchestration of configurations, as well as **automation** in alerting and deploying, that makes new **deployments easy and quick.**

PRODUCTION

Vulnerability Management

NSM

DNS Filter

Firewall

Protection

Enable secure, remote machine control and IoT

Production locations are often difficult to secure and maintain remotely. Industrial machines and machine control systems frequently don't support web proxies, making them vulnerable, and their control software may be also be at risk due to age or rigidity. Furthermore, granting secured access to third parties for maintenance is often cumbersome.

Open Systems solutions address these challenges with a variety of best-of-breed technologies – like a global, zone-based firewall, a DNS Filter, Vulnerability Management, and Network Security Monitoring – that means you can leverage your IoT without increasing the security risk.

Challenge   ## Open Systems solution

1

For added network security, you'd like to isolate business-critical and sensitive machines and IoT from day-to-day WAN activity by your users.

1

Open Systems SD-WAN features a **global, zone-based WAN firewall** that enables global internal network segmentation – effectively adding firewalls within your firewall – to protect your critical assets.

2

You'd also like to add additional protection for non-proxy-aware machines, IoT, and any aging, vulnerable software.

2

The Open Systems **DNS Filter**, as well as our **Vulnerability Management** and **Network Security Monitoring** solutions, allow you to add additional protection and monitor the status of that protection in real time.

3

Third-party providers need access to their machines for operations or to do maintenance on their IoT devices. As on-site visits are very costly this access should be possible from remote.

3

The integrated **Remote Access** solution from Open Systems provides secure machine access for suppliers which can be granularly controlled. For secure and monitored connections towards partner, the Open Systems Partner Connect can be added.

THIRD PARTY

Maintenance

R&D OFFICE

Bandwidth
Control

Path
Selection

Application
Optimization

File transfer
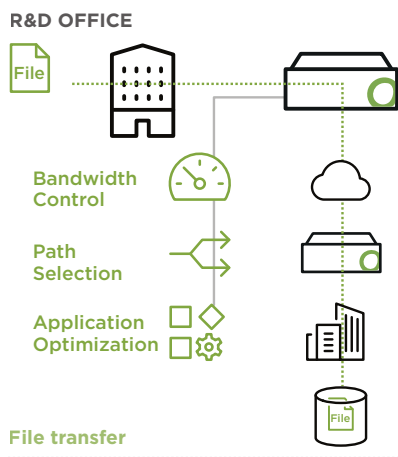
Provide all sites with adequate bandwidth

Modern production techniques involve global collaboration. R&D teams are often separated by continents from production sites. Global operations regularly involve the movement of large files and sensitive data. If one of your production sites can't handle GBs of data transfer efficiently and securely, you may be at a competitive disadvantage.

The Open Systems SD-WAN is hybrid by design, so it can run on any connectivity layer. Add in app-aware bandwidth control and path selection, and dynamic application optimization, and you have a network ready to drive your business.

Challenge   Open Systems solution

1

Your production site has limited bandwidth. You need to carefully segregate workloads and prioritize business-critical data transfers.

1

Our unified SD-WAN delivers performance protection to your business-critical apps with fine-grained tools and metrics that provide complete **control over bandwidth usage** and **path selection** per application, per location, and per connection.

2

Some applications need to transfer huge files containing sensitive data which must be possible in reasonable time.

2

Open Systems is going to offer integrated **application optimization** features – like caching and compression – to accelerate your bandwidth-consuming applications between dedicated sites in 2019.

Open Systems is a leading global provider of a secure SD-WAN that enables enterprises to grow without compromise. With assured security, AI-assisted automation and expert management that free valuable IT resources, Open Systems delivers the visibility, flexibility and control you really want with the performance, simplicity and security you absolutely need in your network.