



VERTIV EBOOK

# IT at the Edge: Remotely Diagnose and Recover Devices

Edge complexity requires a new approach

Managing problems at the edge

Remotely diagnose, troubleshoot, and restore outages

Key considerations for selecting an IT management tool

Conclusion and resources

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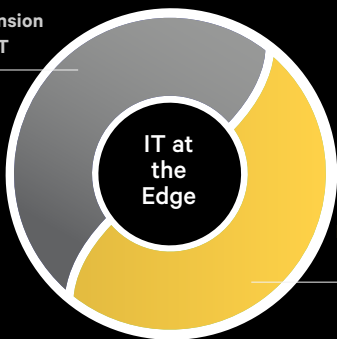
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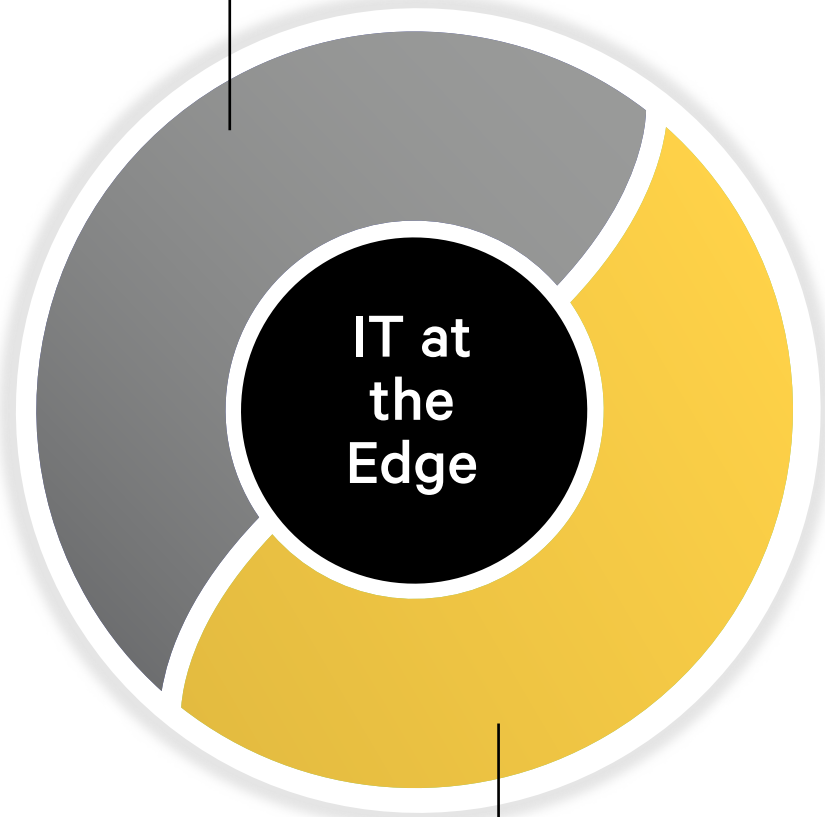
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Managing Expansion  
and Growth of IT  
Devices



Remotely Diagnosing  
and Resolving Issues  
at Edge Locations

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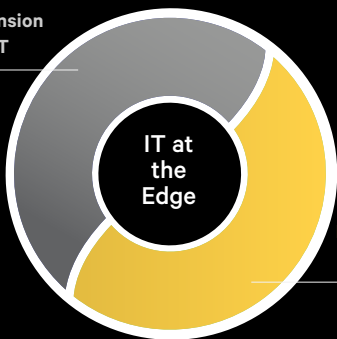
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## Edge complexity requires a new approach

The growth of edge computing is creating new demands on IT organizations. In our eBook, [IT at the Edge: Visibility and Management for Growth](#), we review what is driving this edge growth and some considerations for better visibility, clarity, and management of IT equipment to support organizational growth. But what happens when problems arise? This eBook reviews how to understand, manage, and resolve outages at the edge in the most cost- and resource-effective way.

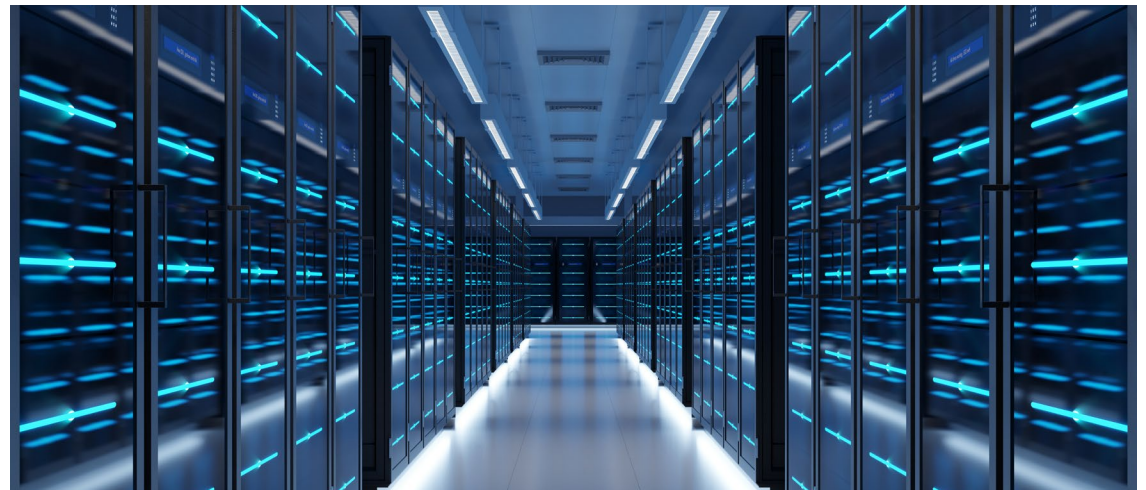
### The IT market is changing and so must the solutions

#### Today's IT

- On-premises equipment
- Little or no remote access
- Unable to meet growing performance demands
- Manual IT configuration
- Challenged with multiple management products
- Aged technology and capability

#### Tomorrow's IT

- Manage hybrid environment
- Enable remote workplace
- Scale systems from enterprise to edge
- Automate data center IT management
- Build open standards and platforms
- High security measures



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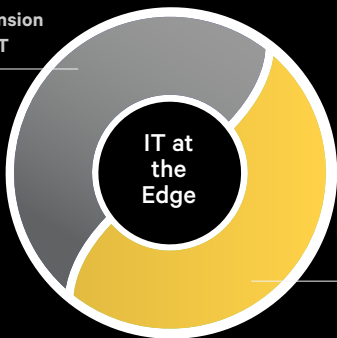
## Managing problems at the edge

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## Managing problems at the Edge

Data centers are typically strategically sited to boost business performance and are run by both on-site and remote staff. Edge sites, on the other hand, are located wherever your users are. They may be unmanned and hard to reach or even considered to be dark sites. If your edge sites go down, they could take employees offline or eliminate digital product and service delivery to part of your customer base.

Edge growth is driving the following challenges:

### Diagnostics

- Need to quickly diagnose problems when they occur without being on site
- Must have visibility and data across vast amounts of equipment

### Skill Limitations

- Organizations don't have skilled staff everywhere they are needed
- Unqualified staff physically on site can inadvertently damage equipment

### Maintaining Uptime

- Need to see device and equipment status to understand outages
- Need to ensure status and continuity without skilled resources on site

### Cost of Recovery

- Edge growth makes accessing all the physical sites unreasonable or unsustainable
- Sending teams on site to resolve issues is costly and time consuming

## [Why Data Center and Edge Site Business Continuity Is Now a C-Suite Priority](#)





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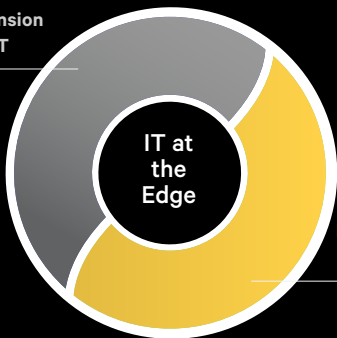
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## Remotely diagnose, troubleshoot, and restore outages

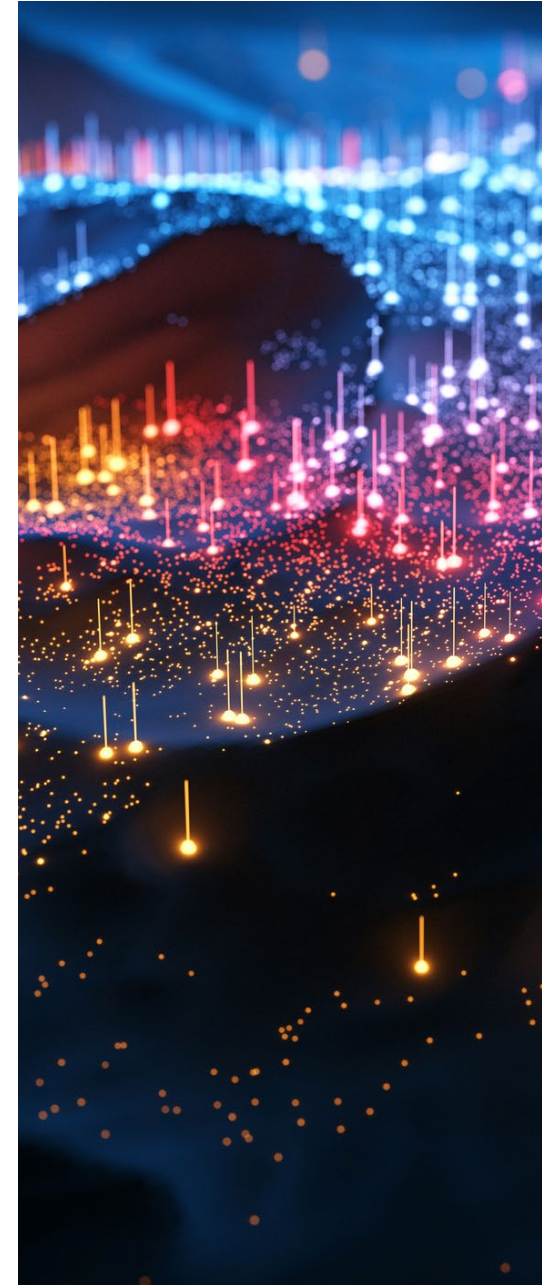
The theme of data center management today is liberation — from on-site management processes, costly and limiting hardware, and reliability issues. Data center managers and critical infrastructure directors are increasingly using virtualization to reduce their dependence on hardware. These leaders want to reduce their data center footprint; virtualize infrastructure tools; and take full advantage of cloud capabilities, such as ultra-fast provisioning and the ability to scale instantly.

Today's advanced edge sites need to ensure infrastructure resilience with always-on, always-connected out-of-band management to recover from any outages, especially at remote sites, rapidly.

Here's how it works:

- View health and status of all devices across sites
- Receive notifications when a problem arises
- Diagnose and understand which devices cause an outage or issue
- Remotely access equipment and devices from anywhere
- Use cellular capabilities to connect to equipment and restore service, even when the network is down or doesn't exist
- Recover systems to healthy state by remotely connecting into compute, network or physical infrastructure devices
- Recycle power on systems as needed
- Use audit events and alarm history to understand what may be contributing to device issues

[Read more about managing IT at the edge.](#)



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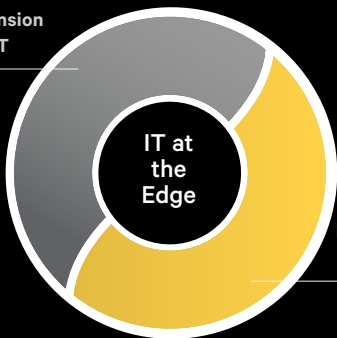
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## Key considerations for selecting an IT management tool

### Pursue software-first strategies

There will always be a market for data centers, however, even cloud and colocation providers are pursuing software-first strategies to increase business flexibility and speed of deployment. All users benefit by gaining high availability of resources, strengthening business continuity and disaster recovery, and minimizing their dependence on physical devices that need to be replaced at end of life.

### Extend virtualization gains

Companies already have virtualized applications, desktops, networks, servers, and storage. Now that so many data center and IT teams are working remotely, these professionals would like to virtualize management tools as well, benefitting from tools that can easily be migrated to any server and provide economies of scale.

### Improve visibility and control

With virtualization, teams use automated processes to monitor, manage, upgrade, power up and down, scale, and replicate resources, improving their control.

### The Benefits:

- Improved visibility and control
- Improved scaling
- Increased business resilience
- Reduced total cost of ownership

[Learn about Vertiv solutions for IT management.](#)



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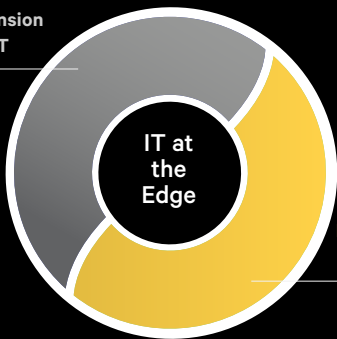
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## Conclusion and Resources

With the right tools, you can ensure strong management, diagnostics, and resolution of IT equipment for all your edge locations. Ensure optimal performance of your devices and equipment across all your edge locations to increase availability, reduce downtime, and remotely and save time and resources

[Click here to learn more.](#)

### Additional Resources



[IT at the Edge:  
Visibility and  
Management for Growth](#)



[From Enterprise to Edge:  
Speeding Deployment and  
Management of Complex  
IT Infrastructures](#)



[Maximizing the Edge  
Computing Opportunity With  
Centralized IT Management](#)

### See how Vertiv customers are using IT Management Solutions



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[Leading Global Retailer Improves  
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