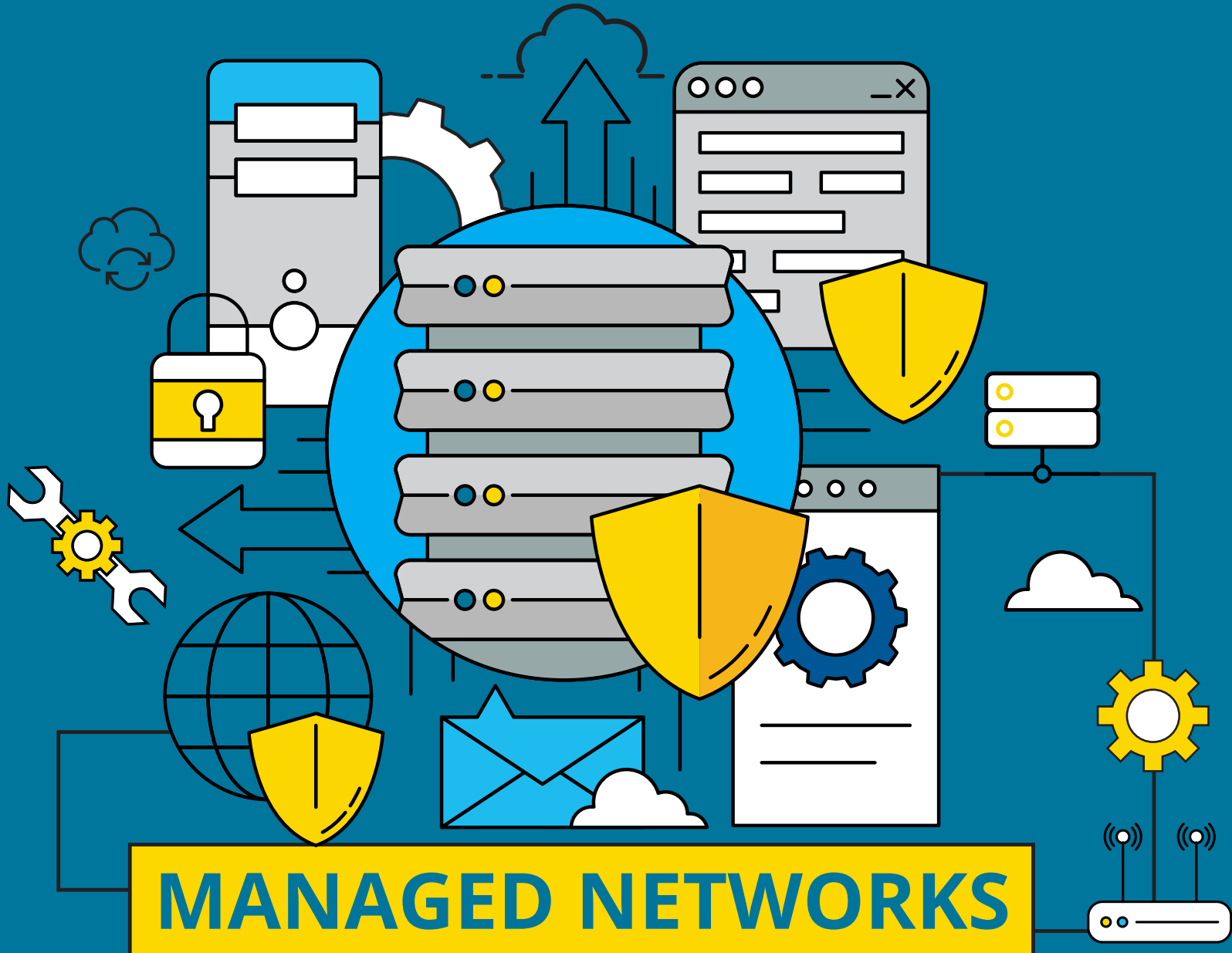
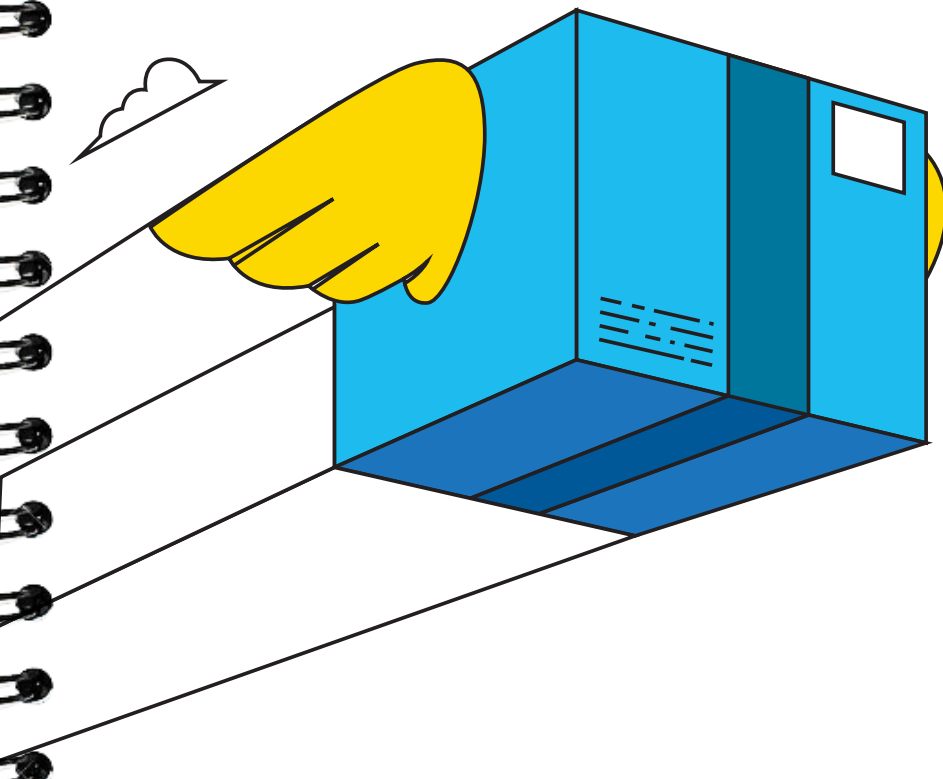


THE ESSENTIAL GUIDE TO



MANAGED NETWORKS

The Move to Managed Networks



Today's business world is shrinking. Businesses are connected 24/7 talking to customers, suppliers and partners round the globe. They need to be agile and fast to take advantage of new business opportunities, no matter where or when they are happening. This digital mind set demands a secure, reliable and robust infrastructure that inspires trust.

At the same time, network infrastructures are becoming bigger and bigger and more complex. Driven by an increase in mobility and the arrival of the Internet of Things (IoT), analytics, machine learning, Industry 4.0 and other new technologies coming down the pipe.

Despite this growing complexity, in many cases network budgets are not keeping pace with technology, putting a strain on IT departments and internal resources. Despite analyst firm Gartner predicting that global IT spend will hit \$3.7 trillion this year, up 4.5% on last year, spending patterns are shifting to emerging technologies such as blockchain and artificial intelligence (AI), which all bring promises of growth. This leaves many IT teams working overtime just to keep the network infrastructure lights on.

With CIOs looking to focus their attention on technologies that directly affect the business bottom line and spend less time on managing the IT infrastructure, many are looking for an alternative that is affordable and proven – which is where managed networks comes in.

Running the day-to-day infrastructure is the top workload for South-East Asian firms

IDG: Asian market report 2018

How is the network managed?

Outsourcing network operations to a trusted provider gives you access to a global team of networking professionals who possess the latest technologies, skills and continuous monitoring facilities to ensure system uptime and optimum performance levels.

Networks can be delivered as a cloud infrastructure service or installed and managed in house by the Managed Service Provider (MSP).

Managed networks can include hardware infrastructure resources, including servers, routers, switches and firewalls. It may also cover managed LANs, WANs, SD-WANs and other automated network support services. Timely risk management is also offered by way of backup, fixes and predictive maintenance, for example. The entire network is monitored and managed by the MSP.



10 ways MSPs can help you manage your network:

1. Future proof your network by accessing best in breed services
2. Predictable costs to control network budgets
3. Global networking expertise
4. Resilient, secure network infrastructure
5. Centralize your network to improve performance
6. Enhanced disaster recovery and business continuity
7. Continuous efficient and effective service levels
8. Integration and operability to provide your business with a state-of-the-art network
9. Instant access to real time performance data
10. 24/7 monitoring and support

Top three reasons South Asian firms consider MSPs:
Security, help with key IT skills and updating internal processes

IDG: Asian market report 2018

The Power of Automation

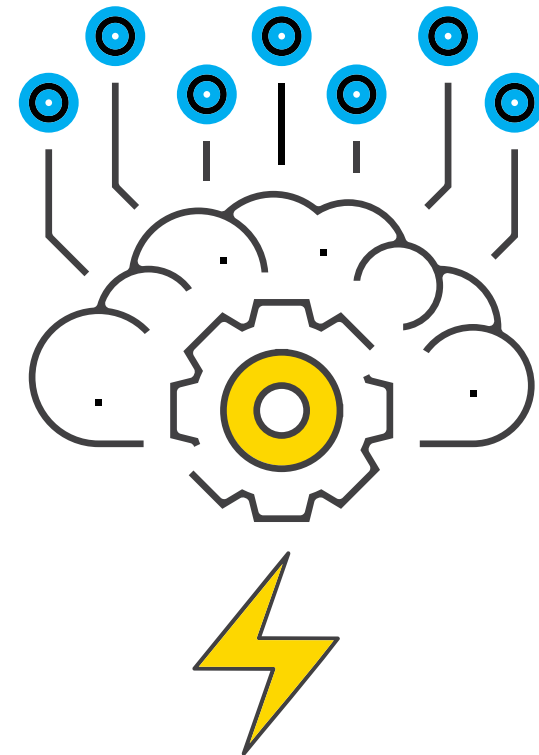
With next-generation network architectures becoming increasingly complex, it is a major headache for IT teams to manage the day-to-day-operations of their networks whilst also focusing on other business projects.

Automation can dramatically cut down on the amount of time IT teams must spend on networks just to keep the lights on. Network automation tools are the answer here and they are being rapidly adopted by South East Asian enterprises. But the planning, deployment, orchestration, ongoing maintenance and optimization of automated processes can be, by their very nature, difficult.

Automation isn't about taking human interaction out of the equation. It is about maximizing the use of their skillsets, so the right resources are allocated to tasks.

Automation, however isn't for automation's sake. Your MSP must understand where automation can deliver a strong IT infrastructure and where human interactions can deliver a better experience.

Smart MSPs are those that continually evaluate the service they offer to spot the areas where automation will allow them to lower cost of delivery and redistribute valuable resources.





Ultimately, automation enables MSPs to better allocate resources, improve efficiencies, accuracies and productivity that all contribute to reducing costs. The result is a provider that can focus its teams and capabilities on higher value tasks that add real value to you - the customer.

Automation is key to delivering a competitive and optimized managed network

Automation enables MSPs to dramatically improve operational efficiency, which in turn allows them to provide you with:

- Reduced costs by standardizing and automating simple tasks
- Proactive monitoring for improved routine maintenance and security
- Automatic monitoring and analysis to capacity plan and optimize performance
- Better response times
- Enhanced quality and consistency of service
- Improved control and predictability
- Less concern over staff turnover rates as many in-house tasks can be automated

Today's network management challenges

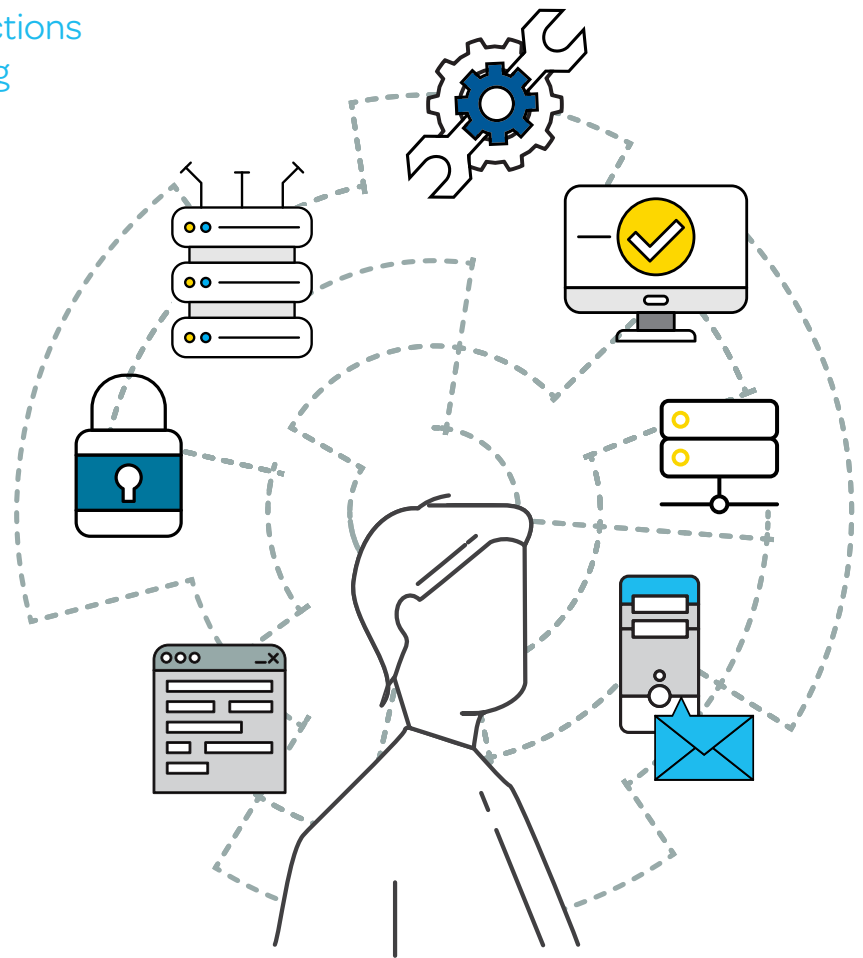
Enterprises are relying on a growing number of network connections both on-premises and to the cloud, which is creating a daunting management scenario for CIOs and IT teams.

It is a little surprising that companies are struggling to manage and secure their networks at both central and branch level. Maintaining network devices, security policies, and above all complexity, is a massive issue. This is often down to insufficient staff, high staff churn rates and lack of security expertise.

According to analyst firm Markets & Markets , the need for managed network services is now being driven by a need for effective management of business processes, reduced operating costs and better security.

Managed Network Services Market worth 59.38 Billion USD Globally by 2021

Markets & Markets Managed Network Services 2018



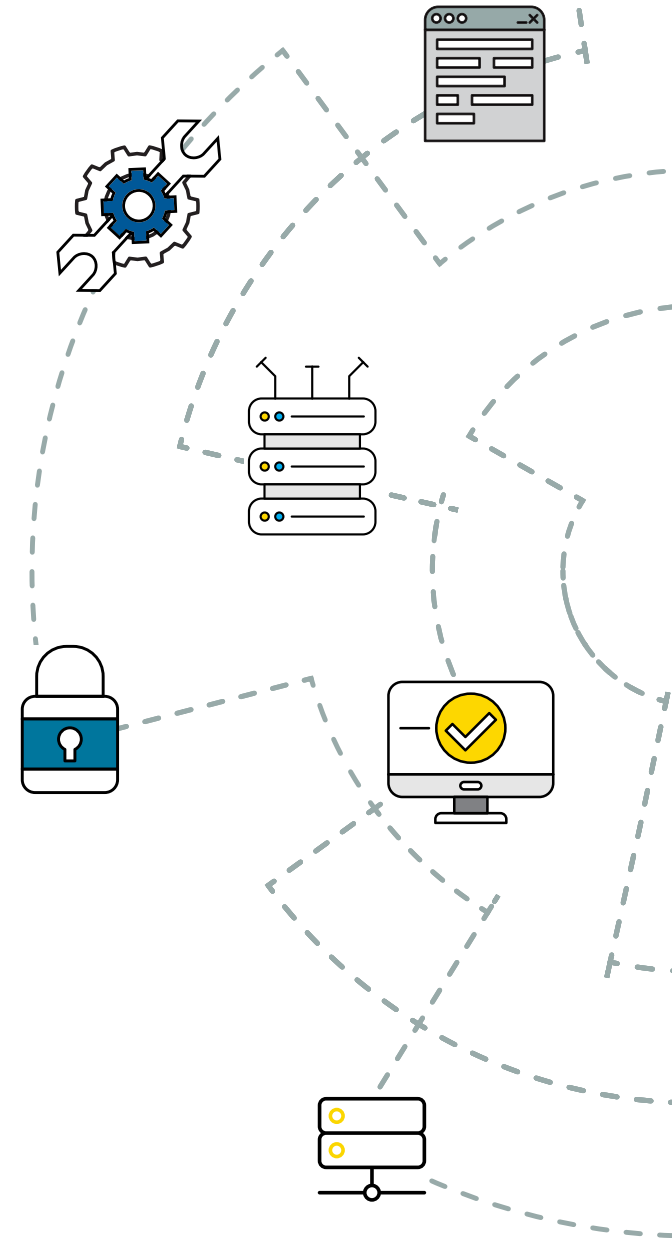
Today's network management challenges

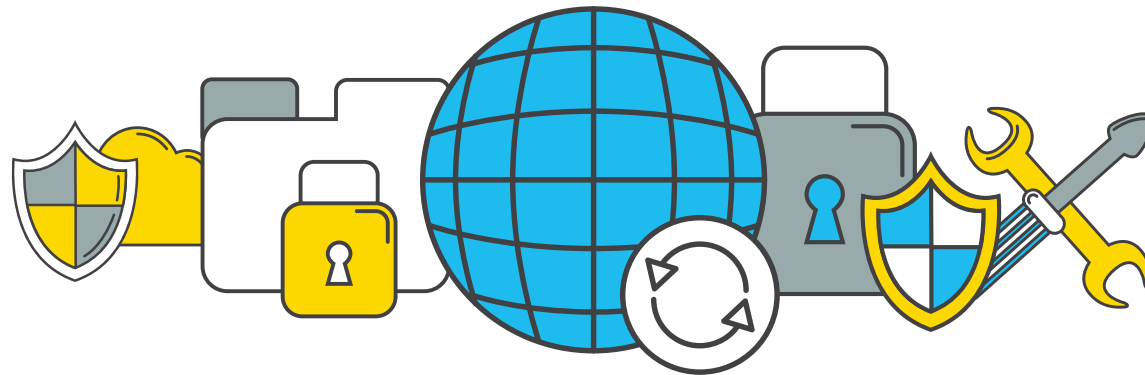
The integration of security into a Software-Defined Wide Area Network (SD-WAN) deployment by a managed network provider can address some of these fundamental Wide Area Network (WAN) challenges IT network teams are facing, for example. But there are SD-WAN management issues to address too, including interoperability, traffic management and a variation in the capabilities SD-WAN providers offer, which again create complexity. Especially, if an enterprise makes use of the ability to add multiple low-cost links at every site to meet redundancy and capacity goals.

A MSP can simplify and streamline your SD-WAN network management - helping keep pace with the increasing demands of your users, ensuring efficient connectivity and making sure you get the most out of bandwidth, so that IT staff can concentrate on other projects.

SD-WAN is the most popular planned project for South East Asian Firms

IDG: Asian market report 2018





Security is top of the boardroom agenda

Cyberattacks and data breaches are on the increase. Many enterprises in South East Asia aren't using adequate security tools to protect their networks.

According to global consulting firm AT Kearney's recent report, members of countries in the Association of Southeast Asian Nations need to significantly increase their spend on security to protect themselves from cyberattacks. ASEAN is made up of ten members: Indonesia, Malaysia, Philippines, Singapore, Thailand, Brunei, Vietnam, Laos, Myanmar, and Cambodia.

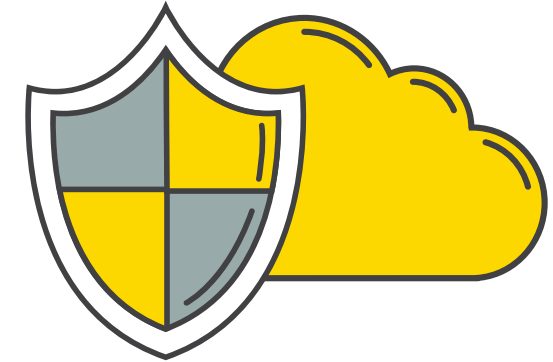
The digital economy in the Association of Southeast Asian Nations (ASEAN) has the potential to add \$1 trillion to GDP over the next 10 years.

AT Kearney: ASEAN an urgent call to action

Ignoring this warning could cost the top 1,000 companies in this region \$750 billion in market capitalization and stunt innovation. According to the report, enterprises are so keen to be part of digital growth, they are making a leap of faith without adequately protecting themselves.

67% of CISOs (Chief Information Security Officers) believe their companies are more likely to fall victim to a cyberattack or data breach in 2018

Threatmetrix cybercrime report 2017



Growing interconnectedness, a lack of transparency and rapid technological evolution have all made threat monitoring and response very difficult. Investing in and maintaining network security is expensive, not to mention finding the technical skills required which are in short supply. By handing over network security to a MSP, an enterprise can reap enormous benefits in shoring up infrastructure security.

IDC: South-East Asian market report 2018

These include:

1. Access to the skills of a highly professional team of security experts who are tuned into the very latest threats – and know how to protect your business.
2. Real time monitoring of the network to check for any unusual behavior that may flag up a threat.
3. Highly tuned automation tools capable of providing instant response to threats
4. Your MSP will provide access to resources that are designed to keep your network safe such as firewalls, intrusion prevention systems and network analyzers, ensuring they are kept up to date with the very latest technologies.
5. Access to 24/7 security reporting. This is paramount as the timing of a cyberattack is impossible to predict.

Managing networks for the future

By handing over the management of their complex, dynamic networks to a MSP, businesses can become more agile and flexible, capable of building a sustainable infrastructure roadmap for the future. CIOs can free up internal IT resources to work on innovation and development to drive the business forward, such as analytics solutions. The enterprise is not left limping along due to skills shortages, as it has a team of global IT experts on hand.

12% of Asian firms saying finding and keeping talent is now a primary concern

IDG: Asian market report 2018

Many enterprises have grown up managing their own networks and are nervous about handing them over to a MSP. It is therefore paramount that enterprises choose a MSP they can trust, that can integrate management, visibility and reporting in to an easy-to-understand 360 degree picture.

MSPs can be invaluable in helping enterprises select best-in-class technologies for specific tasks. Some enterprises looking to up their security for mobile workers using public networks are turning to Virtual Private Networks (VPNs), for example. They use methods such as encryption to protect data in transit. VPNs give businesses the security to share their data with employees and partners that are not always in an office environment. MSPs can provide you with expert advice on the configurations that would best suit your business and ensure you are supported on your VPN journey.



Selecting a MSP for managing networks is a critical business decision. Due to the increasing sophistication of networks, it is imperative that enterprises carefully evaluate potential MSPs to ensure they can meet future business goals.

Choose a network partner who has:

1. The ability to customize, architect and run networks that suit your business requirements based on best practices that will support your roadmap going forward.
2. Is capable of providing a secure and robust infrastructure with inbuilt security and disaster recovery across data centers and geographic locations
3. Can provide networks that are scalable and able to support new technologies
4. Can proactively manage your network, leaving you safe in the knowledge that you are being looked after by dedicated networking specialists at all times while you are focusing on core business.

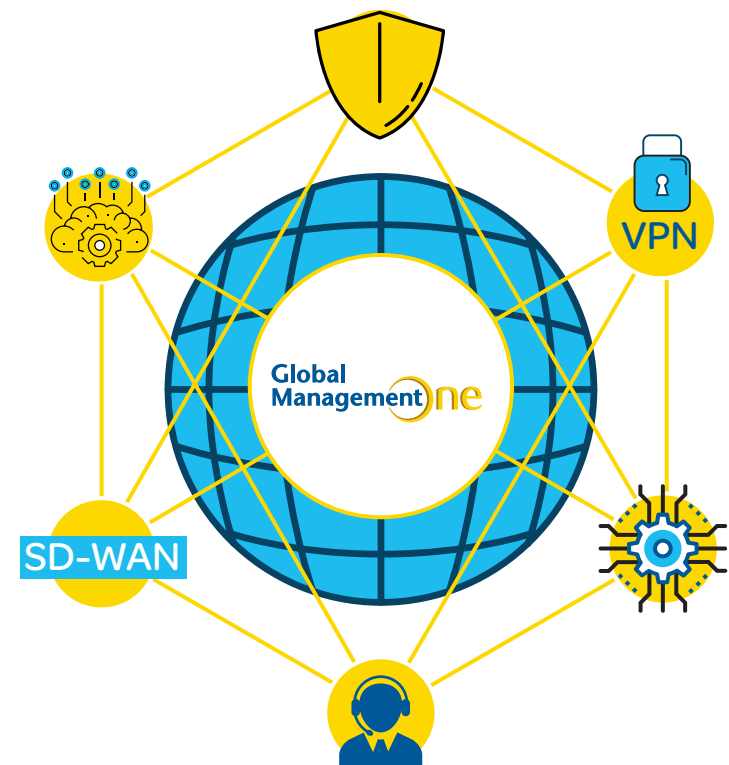
Why choose network management, part of a series of solutions from NTT Com's Global Management One?

Network management is fundamental part of our Global Management One (GMOne) solution portfolio – a full end-to-end worldwide service offering.

When combined with NTT Communications' substantial global resources – including a global SD-WAN offering, an extensive data center footprint and a history in managing mission critical systems - you have access to an extraordinary and comprehensive solutions menu that you can pick and choose from, backed by a single contract and management platform for your network management.

Security is paramount. GMOne can sit in a secure cloud platform and strictly adheres to International Organization for Standardization (ISO) policies and best security practices. We don't, for example, have access to any of your company passwords or users data.

There are no hidden costs and no large CAPEX investment is required either. A monthly charging model means that you can accurately forecast the cost of adding additional networking hardware to your GMOne solution. And you pay, only for what you consume.



Why choose network management, part of a series of solutions from NTT Com's Global Management One?

Backed by a billion dollar company with a proven track record you are free to transform at your own pace, safe in the knowledge that your network capabilities are in the best hands possible.

WE OFFER:



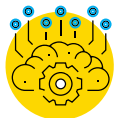
Global networking experts on call 24/7

SD-WAN

Extensive SD-WAN capabilities for those looking to migrate



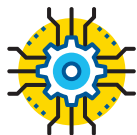
The ability to extend your Virtual Private Network (VPN) with high quality global network services offering coverage in over 190 countries/regions



Sophisticated automation tools to run specified workflows and tasks



Transparency via your own GMAOne Portal to track network activities and performance



Best-in-breed technologies and continual investment in research and development to ensure your network is state-of-the-art.

We know how crucial your network is to your business – which is why we are here every step of the way as your trusted advisor to ensure your network infrastructure is optimized for growth and future business opportunities – today and every day.

Why wait. Develop your network for success now.

“We were able to implement a high quality network to serve as the lifeline for Hitachi’s global promotion of its Social Innovation strategy”.

Mr Yasuo Ohashi, General Manager, IT strategy division for Hitachi Ltd commenting on NTT Com’s integrated network deployment



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Global Management One is a leading range of next generation managed services from NTT Communications, delivering smart, reliable and secure IT solutions that make an impact to the bottom line, energize businesses and propel innovation.

With offices in 110 cities world-wide, over 4,700 highly skilled engineers devoted to delivering pre-eminent managed services and a footprint of 140 data centers linked by our own global high speed network, we can deliver wherever our clients are located and at every stage of their journey to digital transformation.

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