INTRODUCTION

Thank you for completing the VMware Secure-by-Design Network Advisor, with research and analysis by IDC. As organizations embrace digital transformation and adopt new practices such as cloud, SaaS, and IoT, it is very difficult to effectively secure their IT estate with a perimeter-based solution alone. Indeed, the sheer scale and changing nature of the threat environment mean that security breaches will happen — and this requires a new posture on security: one that is focused on near-real-time breach detection, containment, and mitigation.

Enterprise networks play a critical role in enabling this new security posture. New networking tools such as software-defined networking, microsegmentation, and advanced monitoring enable end-to-end visibility across the entire infrastructure and into the cloud. However, moving from an existing network state to an intelligent, secure-by-design network requires careful planning and execution.

To help organizations assess their network maturity and benchmark against peers, IDC has developed the Secure-by-Design Network Advisor Tool. This interactive self-assessment tool is built on IDC's in-depth understanding of enterprise networking and security markets.

The Secure-by-Design Network Advisor Tool uses a comparison framework which groups organizations into three levels of maturity, based on their approach to:

Based on your responses, this report provides an assessment of your organization's approach to secure-by-design networking. It also outlines essential and tailored guidance to help you plan and prepare for your network evolution.

YOUR RESULTS

Organizations can only effectively secure their IT estate in the era of digital transformation if this goes hand in hand with an evolution of their network. IDC has created the Secure-by-Design Network Advisor Tool to help organizations assess the ability of their network to deliver security by design. It scores organizations on their approach to network infrastructure, operations, and security. Based on individual responses we class organizations into three levels of maturity: Followers, Generalists, and Leaders.

Your organization has been positioned as a Network Generalist (Level 2 of 3), which means your organization is in line with its peers overall.

	Network Follower	Network Generalist	Network Leader
Your Result			
Network Infrastructure			
Intelligent Network Operations			
Security-enabled Networking			

These results indicate that there is room for improvement for your organization when it comes to your approach to secure-by-design networking. This report outlines advice on areas to focus on to turn your network into a driver of digital transformation.

Network Infrastructure

Enterprise networks are a critical enabler of security by design. An organization's approach to purchasing, replacing, and managing network infrastructure impacts overall IT security. Best practices include taking a strategic and architectural approach to buying network solutions, actively updating network infrastructure before it reaches end of support, and adopting software-defined networking tools that enable greater network visibility.

	Network Follower	Network Generalist	Network Leader
Overall Performance			
Network Infrastructure			
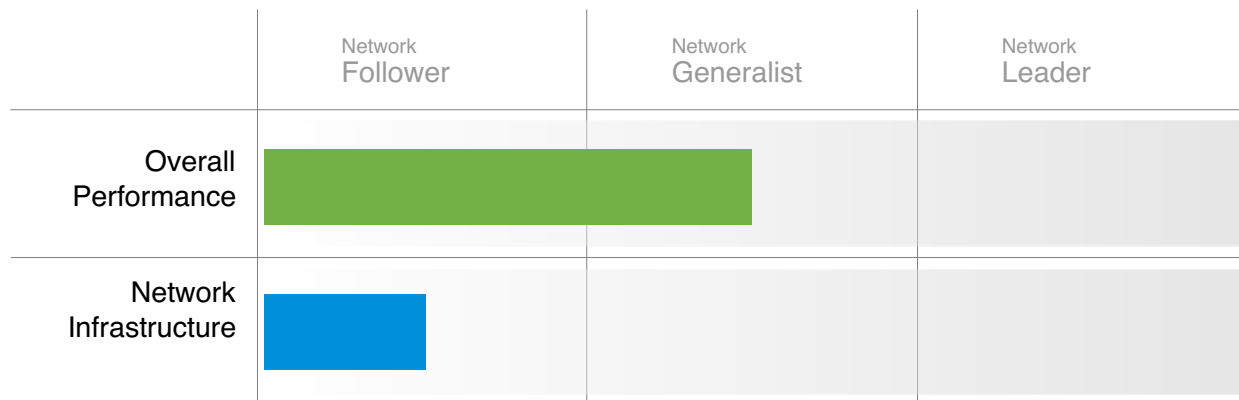
Based on your responses, your organization is lagging behind the average when it comes to network infrastructure capabilities, which means this area is less developed than its overall performance as a Network Generalist.

Q1. How extensively do you currently use software-defined networking in the following areas of your network?

You rank behind your Network Generalist peers, and your adoption of network virtualization tools is limited. To move to the next level you need to investigate how network virtualization tools can help you meet business objectives such as improving security and use of cloud.

Q2. How do you tend to buy your network solutions?

Your score places you in line with other Network Generalists. You are buying network solutions strategically in some cases. The increasing strategic importance of the network should be reflected in your approach to buying network solutions, and you should try to accelerate your long-term technology road map across all network infrastructure and purchase consistently with that. This will help you to improve performance, interoperability, and cost effectiveness.

Q3. Which of the following best describes your approach to ageing network hardware?

In line with your overall ranking as a Network Generalist, you tend to run networking gear while it is supported then renew it. This enables your organization to fairly quickly take advantage of new networking tools that are essential for hyperconnected and multicloud environments. To move up to the next level you should adopt a proactive approach to refreshing your network infrastructure.

Intelligent Network Operations

Enterprise networks are becoming more complicated because of the increasing number of endpoints and the growing practice of using multiple and hybrid cloud environments. Legacy network infrastructure relies on manual operations which are no longer fit for purpose because of the sheer volume of network traffic and number of endpoints. Therefore, enterprises need to adopt intelligent networking tools to optimize network security and performance in the era of digital transformation.

	Network Follower	Network Generalist	Network Leader
Overall Performance			
Intelligent Network Operations			

Based on your responses, your organization is ahead of the average when it comes to intelligent network operations, which is more advanced than its overall ranking as a Network Generalist.

Q4. How do you manage your network today?

Your score places you ahead of other Network Generalists. Though you still perform some tasks manually, you have mostly automated your network management. To progress in this area you should explore how these remaining manual tasks can be automated. Integrating automation with policies and intelligence will put you on the road toward self-optimizing network orchestration.

Q5. How is your network security policy managed today?

Based on your overall ranking you are ahead other Network Generalists. Security plays a critical role in an organization's strategy and operations. It is often seen as the number 1 challenge and most companies indicate they are improving network security in response to accelerating requirements. Your network rapidly detects and responds to contain threats, which is essential in protecting your organization's assets. Solutions that combine predictive analytics and automation to automatically reconfigure policies could take your security to the next level.

Q6. What is your approach to using network intelligence to optimize the network?

In line with your overall ranking as a Network Generalist you take structural measures to optimize your network. However, you could benefit from exploring a more proactive and forward-looking approach. Predictive analytics can help you anticipate performance issues and improve optimization.

Security-enabled Networking

Creating a network that enables security by design across your infrastructure requires changes to tools, people, and processes. Best practices include adopting new networking tools such as microsegmentation and anomaly detection, breaking down silos between the network and security teams, and involving the security team at the inception of digital transformation projects.

	Network Follower	Network Generalist	Network Leader
Overall Performance			
Security-enabled Networking			

Based on your responses, your organization is in line with the average when it comes to security-enabled networking, which is consistent with its overall ranking as a Network Generalist.

Q7. What is the approach to security risks in your organisation?

Based on your overall score, you are in line with other Network Generalists. Network transformation introduces new risks for the organization. You are proactive in your transformation journey toward achieving security by design at all levels of operations and teams. You should continue to drive change by implementing digital risk as an integral part of cybersecurity and make security operations a core part of corporate risk management.

Q8. To what extent do you make use of the following in your network/infrastructure?

You rank behind your Network Generalist peers by making limited use of tools and functions like anomaly detection and network microsegmentation. To move to the next level start investigating the value these tools can add to your business.

Q9. To what extent is IT security embedded into new business initiatives in your organization? [SELECT ONE]

Your position is in line with other Network Generalists. Bringing security in post-release remains a risky strategy. You should aim to embed security as early as possible in the initiative. This increases visibility and awareness of the cyberincident plan, and ensures the business has a full view of the cybersecurity risk management strategy. If there are any deviations between the business planned risk and the security team's understanding of that risk, then this can be identified and resolved early and quickly.

CONCLUSION

Digital transformation is changing the cybersecurity landscape and exposing enterprises to more threats than ever before. A new approach to security is required, and with new networking tools enabling greater visibility, threat detection, and mitigation, the enterprise network is becoming an essential part of organizations' security strategy.

Essential Guidance

1. You should focus on further developing a strategic roadmap for the evolution of your WAN. Assess the current status of your network, and where you want it to be in the future. Prepare a gradual migration path that leverages the existing infrastructure where possible. Hybrid architectures, cloud connectivity, local Internet break-outs and network virtualization should feature prominently on this roadmap.

2. From an operational perspective the WAN is increasingly hampered by complexity, inefficiency and tedious processes which can make everyday tasks such as adding sites, updating policies or connecting to cloud services a real struggle. This prevents the network from delivering the desired business outcomes, like gaining agility, increasing productivity, and improving differentiation. Explore how centralization and automation can help you streamline your WAN operations.

As a Network Generalist you already view your network as an important asset and take a strategic approach to purchasing and operating your network. To become a Network Leader you need to develop a road map to migrate from legacy network equipment to software-defined, virtualized network solutions. These will enable you to upgrade your network functions and security through software updates, and provide enhanced visibility across your ICT estate.