**EfficientIP: As Pandemic Reshapes Business,
Leaders Need to Consider These 5 IT Predictions for 2021**

*The "new normal" will include digital transformations
that will impact the success of ongoing remote work and education*

December 16, 2020 – PARIS – EfficientIP, a leading provider of network security and automation solutions specializing in DDI (DNS-DHCP-IPAM), today released five predictions for how the IT industry will develop in 2021. These predictions under-score how digital transformation will help businesses survive in an economy still wracked by the COVID-19 pandemic and negotiate a transition to a "new normal".

"Businesses should expect 2021 to accelerate many trends that we saw in 2020," says Ronan David, VP of Strategy at Effi-cientIP. "The COVID-19 pandemic has given leaders no choice but to transform, both from organizational and societal view-points. If enterprises want to succeed, they need to rely more on edge computing and the cloud, which saw a huge boost last year, but they also need to invest more in automation and security."

EfficientIP's predictions for IT trends are:

It's a Race to the Edge

In 2021, edge computing--or moving network capabilities to more dispersed areas, closer to where people live and work--will continue to grow. This is aided by containers at the edge, which can offer computing resources closer to the end-user in order to vastly reduce latency and improve bandwidth. Cloud computing providers who want to differentiate themselves will look to offer their own edge solutions, as will 5G telcos who will deploy infrastructure for their network operation and prepare private slicing offers. Edge networking, edge computing and the adoption of containers as a resource-sharing capa-bility offer real opportunities for adding more elasticity and dynamic scalability to physical and virtual machine capacities.

 "As we think about edge, we should also think about DNS services at the edge," David says. "It offers a number of benefits, including increased velocity and lowered response time, which can allow for new usages like communication between IoT devices for smart cities or utilities. This will enable so many other future capabilities."

Multi-Cloud Take-Up Will Rely on Cloud-Agnostic Solutions

Users need to be able to access critical apps and services from anywhere and at any time. This means that both business and cloud providers are deploying multiple clouds across multiple locations, since this improves resiliency and optimizes access delay for distributed workforces. According to Gartner, 80% of companies in 2019 were already using two or more public cloud providers. Enterprises will need solutions that allow them to easily switch from one cloud to another in hours rather than months; in addition to the big cloud players, they may consider smaller, regional ones that offer service speci-ficities and data protection capabilities.

Effective control of these environments will rely on cross-platform visibility and automation. That all starts with an accurate view of the IP plan structure & resources, making it important to use a cloud-agnostic DDI solution which brings global visi-bility, allows management of external resources and is fully meshed in the automation processes with other IT solutions.

Zero Trust Security Will Benefit From Improved Control on Accessing Apps

"Remote working has increased the vulnerability of every device used on a network," David says. "The principle of perimeter security—building a big wall to protect the village—no longer holds true. Attacks such as Phishing, Ransomware and DDoS are therefore becoming more numerous and more impactful."

In 2021, stronger Zero Trust focus will be put on segmentation and filtering in order to improve control over which devices can access which apps, domains and services. Current methods of restricting access using authentication leave the door open to malware attacks, and blacklisting via firewalls can only be applied to ALL clients. Enterprises will introduce more granular control, filtering at the client level (also called microsegmentation) to allow only specific users to reach selected apps. The pivotal role of DNS will enable new methods for controlling this access early in the traffic flow, helping to reduce exposure risk and thus protect vital infrastructure and apps.

5G Networks Will Become More Autonomous

"Many telco activities are still being performed manually," David says. "But the volume and complexity of these operations is growing rapidly, so they have become error-prone and time-consuming. The success of 5G rollout therefore hinges on greater adoption of automation and orchestration by telcos.»

In 2021, autonomous networks will accelerate service deployment and improve operational efficiency. Telcos striving towards zero-touch operations will automate more and more processes and workflows, helped by moving their network functions to a virtualized model (VNF). Automatic instantiation and dynamic scaling of services like DNS will be essential and key to realizing 5G private slice offers for organizations and IoT use cases, helping to optimize costs, ensure service quality and improve customer experience. Finally, for providing end-to-end automation of network provisioning and configuration, "Single Source of Truth" inventories for IP data will come to the forefront, enabling zero touch network and service management.

Automation Journeys Will Become More Industrialized

Automation can be started by companies of any size or maturity by making use of infrastructure-as-code, with the recommended approach being to automate single tasks rather than a global complex workflow. An infrastructure-as-code approach creates opportunities for standard deployments, allowing reproducible operations and error-free actions, which is exactly what small teams require for their day-to-day operations and for problem-solving. 2021 will be the year when network, security and IT automation teams make significant improvements to both process efficiency and ability to handle increasing complexity. Taking an "API-first" approach will be key to this, with IP address management being an easy first step in the automation journey for building reports, analysis and automation with external systems. Openness with API, standard configuration methods, webhooks and code kits will be highly important, helping infrastructure and operations teams move through small but valuable increments towards automation.

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