



# State of Application Services

2019 REPORT / FOCUS ON AMERICAS



# Key Findings

Cloud keeps its crown in the Americas (AMERS) as most strategic, while other regions look to data

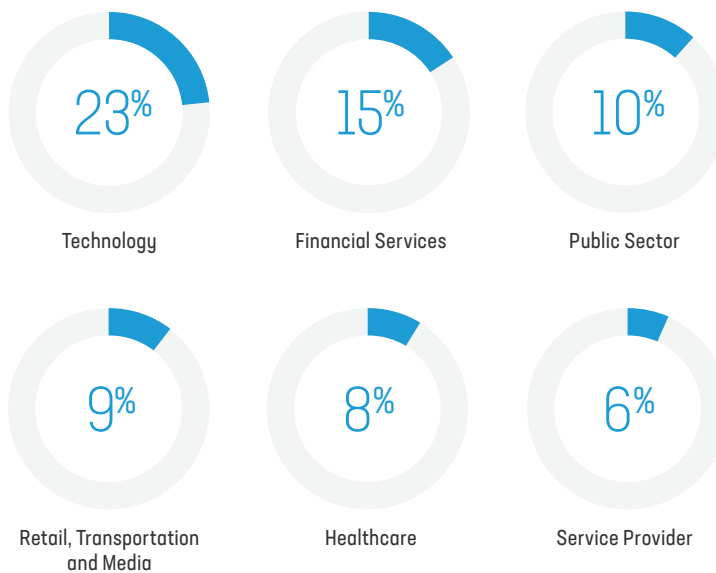
AMERS more aggressive in adoption of containers and microservices than other regions as a result of digital transformation; kubernetes passes tipping point

Respondents in AMERS behind other regions in automation and orchestration efforts

Repondents in AMERS significantly more confident they can protect apps than counterparts, especially on premises

In AMERS, SDN gateway is top of mind for deployments in 2019 while other regions focus on DNSSEC

**FIGURE 1: AMERS RESPONDENTS BY TECHNOLOGY SECTOR** (Demographics: 306 Respondents from North and South America)



SOURCE: F5 STATE OF APPLICATION SERVICES 2019

## TRENDS AND TECHNOLOGIES

Digital transformation continues to be a significant strategic driver globally. Organizations in all regions are eagerly embracing the shift. In both AMERS and other regions, 69% of organizations are working on digital transformation.

**FIGURE 2: DIGITAL TRANSFORMATION DRIVES STRATEGY AT SIMILAR RATES IN AMERS AND OTHER REGIONS**



**SOURCE:** F5 STATE OF APPLICATION SERVICES 2019

Across all geographies, top strategic goals include the desire to optimize IT and business processes and enjoy employee productivity improvements from digital transformation. AMERS shows slightly greater focus on IT optimization, but all three top the list of desired benefits. Despite this focus, just over one in three (34%) organizations globally indicate no interest in providing self-service outside IT. The extra emphasis on IT optimization in AMERS may be a result of a slower rate of automation of the production pipeline. Organizations in AMERS were behind that of their counterparts in each of the four key components of pipeline automation—app infrastructure, app services, networking, and security. Within those four domains, AMERS respondents are closest to their global counterparts in automating the deployment of application services—39% of companies indicated they have done so, compared to 42% of organizations in other regions that have already automated the application services component of their production pipeline.

## DIGITAL TRANSFORMATION PROJECT IN PLACE

The impact of digital transformation in AMERS is driven by a desire to realize IT optimization. While all regions are implementing automation and orchestration as a result of digital transformation, AMERS is aggressively focused on faster delivery of applications to market. Three out of five (59%) of AMERS respondents indicated this as a primary goal of digital transformation, compared to less than half (47%) of respondents from other regions. AMERS respondents also expressed significantly more interest in containers and microservices architectures, with over half (53%) indicating interest, compared to 41% in other regions. That interest is tied to Kubernetes surmounting a significant milestone—passing 50% deployment rates. In AMERS, 54% of respondents are using Kubernetes. Other regions have yet to reach that milestone, with Docker Swarm, Kubernetes, and Red Hat OpenShift in a dead heat at 45%, 45%, and 44% usage, respectively.

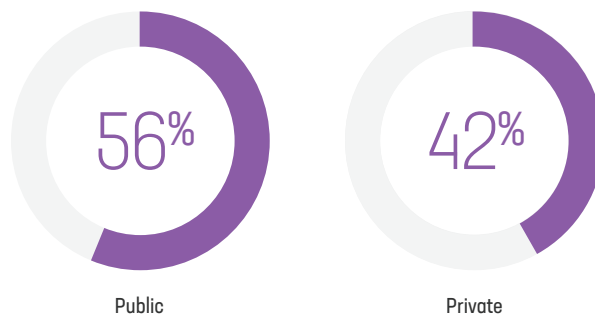
When it comes to orchestrating across IT, AMERS looks to Ansible (45%), GitHub Enterprise (38%), and Puppet (36%). Other regions showed a similar order of preference, but at lower adoption rates. Outside AMERS, just over one-third (34%) chose Ansible, while Puppet usage was even lower at 22%. Narrowing the focus to network automation, VMware and Cisco remain favorites in AMERS, with Jenkins and GitHub Enterprise making impressive debuts at 23% and 22% respectively. Other localities agree with AMERS, ranking VMware and Cisco at the number one and number two spots for network automation, but choosing OpenStack (33%) for third place. In contrast, automation with OpenStack in AMERS was much lower, with only 21% indicating this framework was in use.

## STRATEGY AND SECURITY CONCERNS

The differences between AMERS and other regions in strategy and security are striking.

While Big Data rose to the top in other regions with 48% tagging it as strategically most important, AMERS continues to focus on cloud, both public (56%) and private (42%). Real-time threat analytics fills out AMERS top three. Other regions agree on the strategic importance of this emerging technology, but AMER places greater strategic value on it, with 50% selecting this option compared to only 39% in other regions.

**FIGURE 3: AMERS RESPONDENTS FOCUS ON PUBLIC AND PRIVATE CLOUD WHILE OTHER REGIONS EMPHASIZE BIG DATA**



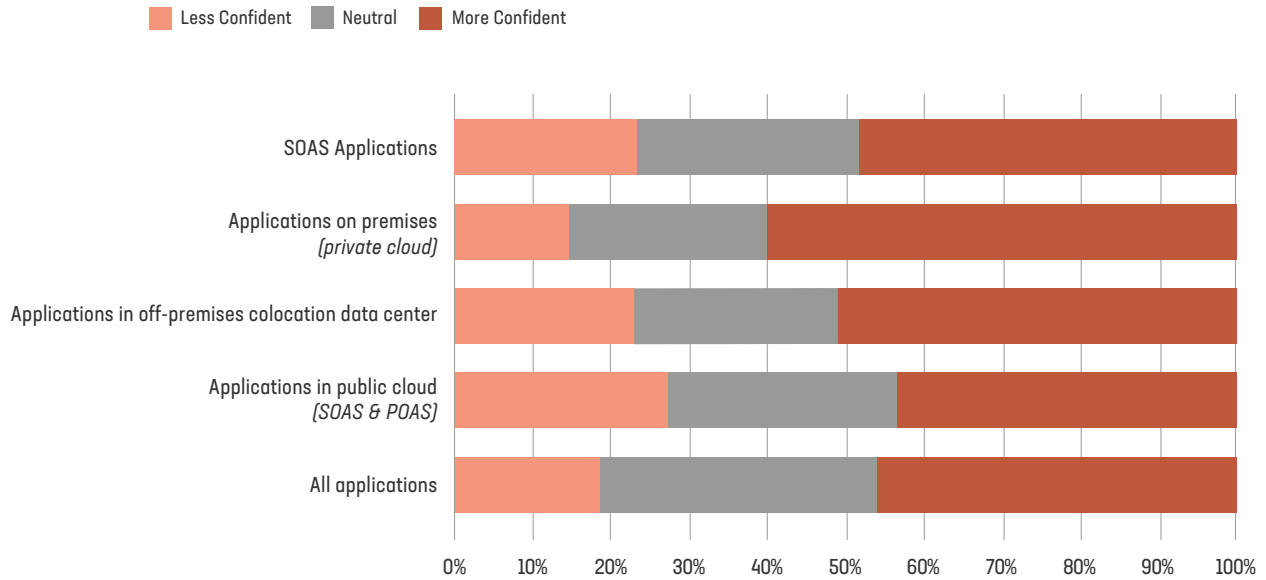
**SOURCE:** F5 STATE OF APPLICATION SERVICES 2019

Organizations in AMERS are more likely to have adopted a multi-cloud strategy than their global counterparts. Just over one-quarter (26%) of firms in AMERS indicate zero off-premises cloud presence, compared to 30% in other regions. Over one in eight (13%) organizations in AMERS are currently managing more than 11 different cloud providers. That's nearly double the 7% of firms in other regions who can say the same.

The enthusiastic adoption of public cloud by organizations in AMERS may be contributing to their increased confidence in protecting applications. Respondents in regions outside AMERS indicate less confidence in their ability to protect applications off-premises than counterparts in AMERS. All regions show the same tendency to be more confident protecting applications deployed in environments

over which they have greater control, such as on-premises private cloud and off-premises colocation environments. In those environments, respondents in AMERS are very confident, with 60% indicating confidence in protecting apps on-premises and 51% in colocation environments. All geographies show the least confidence in protecting applications in the public cloud, with 27% in AMERS and 25% in other regions less confident in their ability to withstand an application attack.

**FIGURE 4: AMERS ARE MORE CONFIDENT THAN THEIR GLOBAL COUNTERPARTS IN THE SECURITY OF THEIR APPS IN THE CLOUD**



SOURCE: F5 STATE OF APPLICATION SERVICES 2019

## APPLICATION SERVICES

As is the case globally, organizations in AMERS are executing strategically on their application service deployments and plans.

There is general agreement across all regions on the top five application services deployed today. Network firewall, anti-virus, SSL VPN, and spam mitigation make up four of the top five. In AMERS, load balancing (85%) rounds out the list while in other geographies, IPS/IDS (69%) takes the last spot.

With respect to plans for deployment, there is some agreement. DNSSEC, SDN gateway, and API gateways appear in the top five for all localities. In AMERS, Ingress Control (26%) and Bot Defense (26%) complete the list, while others put IoT gateways (29%) and HTTP/2 Gateways (24%) in the remaining two spots. These technology choices are all driven by movement toward modern application architectures, cloud environments, and containers. Notably, Bot Defense is a significant departure from the tendency toward application services that support digital transformation efforts. This capability is currently deployed in AMERS (59%) at greater rates than other geographies (48%). The focus on this defensive application service no doubt contributes to the greater confidence AMERS exhibits with respect to application layer attacks.