

### SOLUTION BRIEF

# FLEXPOOL: A SOFTWARE SUBSCRIPTION-BASED CAPACITY POOLING MODEL

SIMPLIFY CONSUMPTION OF SECURE APP DELIVERY SERVICES ACROSS MULTIPLE ENVIRONMENTS

A software subscription with capacity pooling model provides organizations the flexibility to allocate and distribute secure application services whenever and wherever they need them – across virtual and bare metal instances for traditional on-premise data centers and hybrid cloud infrastructures.

# CURRENT SOFTWARE MODEL TRENDS AND CHALLENGES

Amid the wave of new technology trends, like digitization, cloud computing, IoT and data analytics, IT must adopt to the changing conditions, and rewrite the rules on how organizatinos must consume technology and deliver value to users.

Take for example the emerging dominance of 'east-west' traffic flows, due in part to routine relocation of virtual machines, which results in the need to dynamically move the associated application services that front-end these virtual machines.

Another trend is the ubiquitous availability of public and private cloud computing and software as a service (SaaS), as it causes customers to reconsider the ways in which they consume capabilities, applications, and services.

Software licensing models can be intricate and unwieldly. Add to the mix the delicate balancing act of spreading workloads across applications, multiple clouds and on-premise data centers and things get even more complicated.

### CHALLENGE

Software license complexity can be a major challenge for customers navigating application delivery across on-premise and cloud environments.

#### SOLUTION

FlexPool is a software subscription model that makes the software licensing portable and invisible, while providing the user visibility, management and control.

## BENEFITS

- Flexibly allocate and re-distribute capacity across applications, multiple clouds and data centers
- Centralize operations with only one pool to manage, rather than many instance licenses
- Realize full visibility via a dashboard that provides usage monitoring, analytics and more
- Eliminate overprovisioning by dynamically apportioning capacity

# BUSINESSES GRAPPLE WITH THE FOLLOWING ISSUES TODAY:

- Inflexible models with current infrastructure solutions make it difficult to adapt to the emerging needs of the future
- Changing instance capacity means a lengthy procurement cycle, manually installing a new license and forcing a software reboot
- Lack of a viable software license model to dynamically allocate capacity across their cloud environments – and can't monitor or track the licenses

Are your applications deployed on-premise today? Are you planning to migrate to the cloud in the future? Or do you have a mix of both today? Modern businesses require a licensing model that matches their real-time deployment flexibility, including support for hybrid cloud, virtual, bare metal and on-premise. Organizations are looking for greater value, lower costs, and portability that allows them to plan their capacity for the future.

According to a Gartner report, "By 2020, more than 80 percent of software vendors will change their business model from traditional license and maintenance to subscription. The debate is over about whether the software industry will move to a new licensing and revenue model. Most new spending will be under the subscription model of software-as-a-paidfor-service, with payments made over time and/or based on usage."

Mark Andreessen's famous "Software is Eating the World" had companies examine their current models and how to evolve toward software. Regardless of industry, C-level executives and IT directors are reimagining their businesses. Along with that comes a change to their networks. It's no longer just about hardware, it's about automation, cloud and the ability to consume solutions when and where organizations want and need them – whether now or in the future.

# ORGANIZATIONS REQUIRE THE FOLLOWING IN A SUBSCRIPTION MODEL:

- Methods to control costs and accelerate solution deployment
- A licensing scheme that matches the flexibility of the cloud
- Ability to granularly scale from small to large instance size
- · Ability to scale the capacity pool size
- · Dynamically change instance capacities automatically
- A central management tool to automatically license and instantiate software instances as needed

# THE A10 NETWORKS FLEXPOOL CONSUMPTION MODEL

A10 Networks' FlexPool<sup>™</sup> software subscription model addresses these issues by simplifying the transition for IT organizations to a software-centric, Layer 4-7 infrastructure. FlexPool gives customers the choice and flexibility they have been looking for – it's a capacity pool license available across A10's software solutions, spanning virtual, bare metal and hybrid cloud infrastructures.

As customers make the journey from on-premise to the cloud and manage both environments, they want flexibility with how they consume secure application services. Critical to this choice is the agility to scale their capacity as their needs grow. A10 recognizes this and realizes organizations need a software solution that makes hybrid clouds simple by giving the security and control of a private cloud and the self-service and automation of a public cloud.

A10 is helping customers to seamlessly transition to cloud with allocation of capacity across multi-cloud environments.

A10 FlexPool's aggregated capacity model allows customers to flexibly and automatically allocate and re-distribute capacity across applications, multiple clouds and data centers. For scenarios involving many apps, locations or varying workloads, FlexPool is more than three times as economically efficient as alternative instance-based pools. License simplification with FlexPool also reduces the difficulty of managing licenses compared to perpetual based models. One pool can scale to potentially support thousands of applications and FlexPool includes maintenance and support along with software upgrades.

#### FEATURES AND BENEFITS

Organizations can dynamically and flexibly allocate capacity and share the pool as needed – anywhere, anytime. Instances can be mixed and matched in sizes and can be created instantly and scaled for on-demand consumption. Business can align security and application services consumption with resource availability to prevent service disruption.

FlexPool is packaged as a capacity pool, available in bandwidths of 10 Gbps, 50Gbps and 100 Gbps is offered in both Standard (A10 Thunder® ADC/Thunder CGN) and Advanced (adds Thunder CFW) feature sets. Organizations choose to procure pools in any combination of these increments or in a customized quantity as needed. Customers obtain investment protection with complete license portability across on-premise and multicloud environments. By globally apportioning the pool they can balance out transient traffic flows to eliminate overprovisioning while preventing resource shortages.

With its agile subscription model, A10 FlexPool helps customers and IT organizations:

- · Avoid IT expenses resulting from overprovisioning
- Improve time to market by maintaining a safe buffer of capacity, ready for use when you need it
- Keep capacity ahead of demand with regular monitoring – with ability to easily increase it as needed
- Pay for only the capacity needed
- Minimize upfront CAPEX
- Buy fixed capacity based on their business needs, with the option to grow capacity as requirements change

#### FLEXIBLE ALLOCATION

Enables on-demand consumption of application services from a shared, scalable capacity-based pool.

#### INVESTMENT PROTECTION

Allows complete license portability across all on-premise and cloud environments while eliminating overprovisioning.

#### **OPERATIONAL SIMPLICITY**

Simplifies infrastructure control, license and user management with comprehensive visibility.

#### FLEXPOOL FLEXIBILITY IN ACTION

A10 Networks FlexPool and vThunder® line of virtual appliances support a wide range of third-party environments – from virtual to cloud, including hypervisors for VMware ESXi, Microsoft Hyper-V and KVM, as well as versions for AWS and Azure Marketplaces (including AWS GovCloud and Azure Government). FlexPool also supports private clouds utilizing OpenStack, VMware vRO and Cisco ACI.



Figure 1: FlexPool enables secure application services to be allocated across multiple environments

# FLEXPOOL DEPLOYMENT MODELS

For enterprises and service providers, FlexPool can be leveraged in several variations:



Figure 2: Single pool option



#### Figure 3: Multi-pool option



#### **INSTANCE POOL**

This model is an enterprise-wide single pool for businesses to consume networking and security services and want to deploy a floating pool of fixed size instances. Instance pools are ideal for organizations looking to deploy a floating pool of fixed instance size (i.e., deploy 50 instances of 1G each), or for organizations that wish to configure minimum, maximum and default bandwidths to 1G in A10's Global License Management (GLM). It's also suited for organizations that want to use any instance requesting resources to be allocated via only fixed bandwidths.



#### SINGLE POOL

An enterprise-wide single pool to consume networking and security services. Capacity allocation is enforced at the user and application level. This scenario is ideal for organizations composed of multiple sites with traditional software deployments utilizing homogeneous services (Standard or Advanced) across their operations. This supports a mixed size of instances from a single pool.



## MULTI-POOL

A dedicated pool for each site. Capacity allocation can be enforced at the pool level (i.e., 10G fixed per instance). This model is ideal for organizations with multiple sites, traditional software deployments and mixed services with a dedicated license type (Standard or Advanced) per pool. In this scenario, guaranteed quality of service of the instances and capacity for their end-users is required.

## MANAGE YOUR LICENSE AND GET ANALYTICS

A central management portal, A10 Networks' GLM, provides visibility and usage monitoring for FlexPool, which supports A10 Networks' software-based Thunder appliances for application delivery, IPV4 preservation/IPv6 migration and firewalling. For customers who have automated systems that can connect to the GLM to obtain the licenses, they can achieve significant operational efficiencies.

A10 vThunder and Bare Metal licenses that are utilized in conjunction with capacity pooling are accessed, distributed, and monitored through A10's GLM. Devices running A10 Networks Advanced Core Operating System (ACOS®) must be able to connect to the Internet and reach the GLM. If a direct connection from the device to the GLM is not feasible – either for security or other reasons – a forward explicit proxy server such as Tinyproxy or Squid may be configured in order for the connection to the GLM to be established.



#### GLM ENTAILS THE FOLLOWING:

- GLM Self-service Portal the master licensing system for A10 Networks. GLM is managed by A10 Networks and is the primary entry point for viewing licensing plans and data usage for your instances. GLM collects information from ACOS instances and issues licenses upon request. The GLM provides a GUI where you can view and manage advanced licensing functions.
- Forward Proxy this is a proxy server that is installed and runs on premise within the production environment. The proxy server sits in the datacenter between the ACOS devices and the GLM, with the internet in between. The forward proxy server is an optional component for production environments that are highly isolated and secure. The forward proxy server requires an IP address or a hostname, as well as a port number.
- vThunder a virtualized, software-only version of an ACOS appliance; they maintain feature parity with standard hardware-based devices. A10 vThunder enable organizations to gain flexible, easy-to-deploy and highperformance secure application services that run on a choice of industry-leading hypervisors or in the cloud for capacities up to 20 Gbps.
- Thunder Bare Metal software-only version of the ACOS devices. This solution does not have a hypervisor layer to maximize device throughput and eases installation and configuration. Capacities up to 40 Gbps are supported.

Figure 4: Capacity Pool License with Global Licensing Manager

# *FLEXPOOL: ACCOMPLISH GOALS TODAY; BE PREPARED FOR THE FUTURE*

A10's strategy is to provide customers with flexible options for purchasing software to address their most important use cases in secure application services. FlexPool provides businesses greater value, license portability, and ongoing innovation, and allows organizations to more efficiently plan software expenses while preparing their infrastructure environments for the future.

#### NEXT STEPS

To take FlexPool for a test drive, try a 30-day trial for free at a10networks.com/solutions/flexpool.

#### ABOUT A10 NETWORKS

A10 Networks (NYSE: ATEN) is a Secure Application Services<sup>™</sup> company, providing a range of high-performance application networking solutions that help organizations ensure that their data center applications and networks remain highly available, accelerated and secure. Founded in 2004, A10 Networks is based in San Jose, Calif., and serves customers globally with offices worldwide.

For more information, visit: a10networks.com or tweet @A10Networks.



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