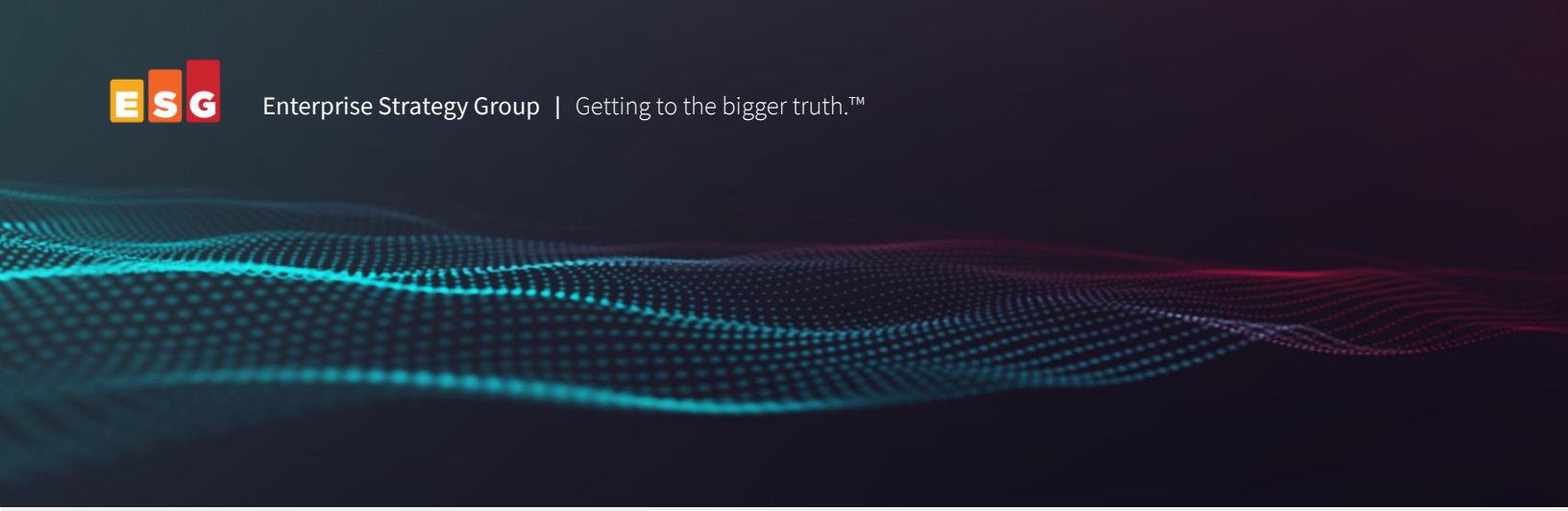


ESG WHITE PAPER

AWS Microsoft Licensing Considerations

Best Practices to Reduce Costs and Maintain Operational Agility for Workloads Moving to the Cloud

By Mark Bowker, Senior Analyst

May 2021

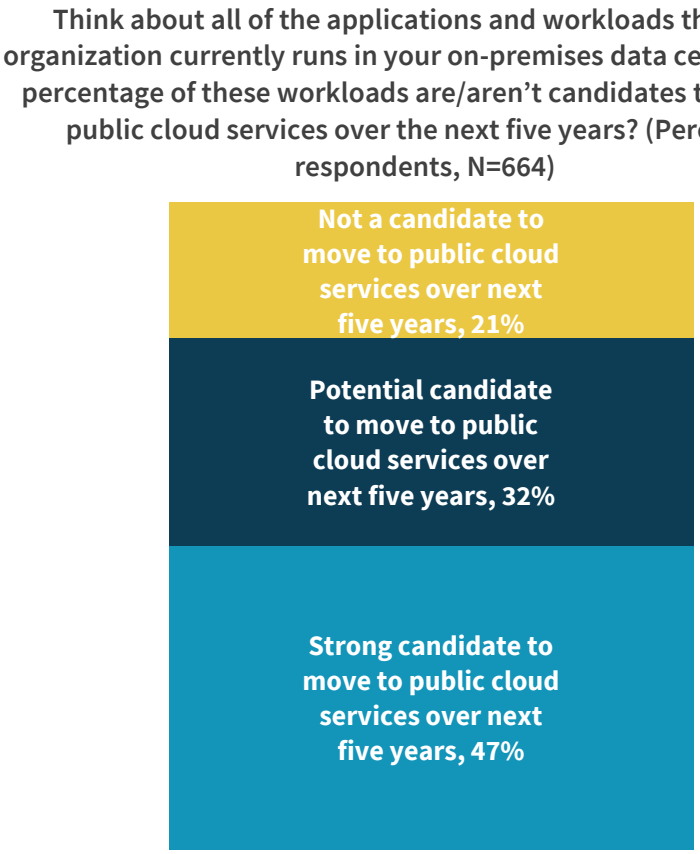
This ESG White Paper was commissioned by Amazon Web Services (AWS) and is distributed under license from ESG.

Contents

Workloads Are Moving to the Cloud

Organizations' cloud strategies have accelerated rapidly as confidence levels in the availability, performance, scalability, and security of the cloud increase. Decision makers recognize advantages such as the ability to shift from CapEx models that focus on the cost of infrastructure and fixed investments to OpEx models that are designed around pay-per-usage, lower total cost of ownership (TCO), operational flexibility and efficiency, and customer experience improvement. This momentum will increase, a trend supported by ESG research that shows that nearly 8 in 10 remaining on-premises workloads will be cloud candidates over the next five years (see Figure 1).[1]

Figure 1. Nearly 8 in 10 On-premises Workloads Are Cloud Candidates



Source: Enterprise Strategy Group

As businesses move workloads from their data centers to the cloud, they will want to identify opportunities to reduce costs through licensing best practices .

Microsoft Workload Licensing Considerations

Organizations should inspect licensing at the same time that they are making platform strategy and public cloud infrastructure decisions. Microsoft licenses are often a significant IT budget line item, and the ability to bring your own

[1] Source: ESG Research Report, *2021 Technology Spending Intentions Survey*, January 2021. All ESG research references and charts in this white paper have been taken from this research report.

licenses (BYOL) plays a role in Microsoft customers' decision to migrate to public cloud services. For products like Windows Server, customers' license renewal decisions can potentially restrict their choice to use purchased licenses on public cloud. Also, customers who convert their perpetual Windows Server licenses to subscription risk losing rights to bring their licenses to other public cloud providers. These licensing terms can increase customers' TCO, constrain innovation and also impact customer's ability to modernize the applications to cloud-native solutions. Hence, it is important for businesses to examine license renewal decisions carefully.

Important licensing considerations include:

- What is the IT vendor's philosophy behind the trends and changes in licensing terms?
- How easy it is to manage and track licenses in the cloud?
- Have licensing terms become more or less restrictive over time?
- Do licensing terms increase or decrease workload flexibility, cloud, and modernization choices?
- How important is the ability to move workloads to and from public clouds as needed?
- What is the end-of-support security update model and its associated costs and implications for cybersecurity vulnerabilities?
- What are the potential compliance issues, if any, that could result from making uninformed decisions?

Licensing considerations include the types of license, the potential changes to license terms, and the frequency of changes, as well as whether or not a license has active Software Assurance. In particular, businesses need to be aware that bring-your-own-license (BYOL) options can be restricted when customers convert from perpetual licenses without license mobility to subscriptions that do not permit BYOL.

Perpetual Microsoft licenses are owned by the customer. These licenses cover the use of a license/version in perpetuity. Subscription Microsoft licenses are term based, and the right to use a license expires if it is not renewed. The impact of the October 2019 licensing changes for BYOL for Windows Server differs for perpetual and subscription licenses as follows:

- Perpetual Windows Server licenses remain eligible for BYOL to AWS if these licenses were purchased before October 1, 2019 (or as a true-up under an agreement effective before October 1, 2019) as long as the version deployed was released before October 1, 2019.
- Subscription Windows Server licenses lose eligibility for BYOL to AWS at the time of subscription renewal or when the licenses are converted from perpetual to subscription licensing.[2]

When Microsoft customers purchase Windows Server licenses, they can purchase either perpetual (owned) or subscription (rented) licenses, and the choice affects BYOL to cloud and in turn, TCO.

Software licenses eligible for the License Mobility benefit covered by active Software Assurance do not have the BYOL restrictions. The eligible products are Microsoft Exchange Server, Microsoft SharePoint Server, Microsoft SQL Server,

[2] Source: Amazon Web Services, *Amazon Web Services and Microsoft Frequently Asked Questions*.

Microsoft System Center, Microsoft Remote Desktop Services (user client access licenses or CALs), Microsoft Skype for Business Server. Microsoft Dynamics products, and Microsoft BizTalk Server.[3]

Implications of Licensing Trends

The importance of examining license renewal terms should be an organization-wide initative, given licensing trends and what they portend for the future. Organizations of all sizes run Windows workloads on-premises. These workloads generally run under server software licenses that may, because of historically changing terms, affect the pace of cloud migration, the choice of public cloud provider, and modernization paths. Without reviewing renewal terms and determining if, how, and when affected workloads may move to the cloud, decision makers risk being surprised by limited options and/or the need for potentially costly workarounds.

The key takeaway? Allow sufficient time prior to expiration or renewal dates to evaluate license terms, costs, and modernization scenarios to enable stakeholders to make sound decisions without deadline pressure.

AWS Licensing Options

As mentioned above, license renewal decisions can affect an organization's flexibility to migrate workloads to the prefered cloud option, which in turn could affect the pace and cost of modernization. Microsoft license holders have flexible options with potentialy favorable economics in AWS, as shown in Table 1. At a high level, the options are:

- AWS license included — applies to Windows Server and SQL Server.
- Bring licenses to AWS (License Mobility through Software Assurance) — shared tenancy for products eligible for License Mobility with Software Assurance.
- Bring licenses (licenses not eligible for License Mobility) — dedicated options for products without License Mobility.

Handling license workload movement and cost optimization can be daunting given short-, medium-, and long-term objectives. The following best practices can help guide thinking about next steps:

- Convert Windows Server subscription licenses purchased before October 1, 2019 to perpetual licenses. When organizations "buy out" these licenses prior to the subscription renewal date, they are allowed to maintain BYOL rights to use Windows Server licenses on AWS.
- Consider license-included options for varying infrastructure. These allow organizations to take advantage of reduced management overhead for fluctuating levels of business activity.
- Consider BYOL for stable, predictable workloads. Potentially, organizations can realize significant savings by reusing licenses. And businesses can take advantage of the virtualization benefits of licensing at the physical level.

No matter what organizations choose to do, they have the opportunity to take advantage of a modernization path with potential cost savings for Microsoft workloads by moving to AWS. When organizations buy licenses from AWS, Windows Server includes two administrative Remote Desktop Services connections for use by administrators. The modernization

[3] Source: Amazon Web Services, *Microsoft Licensing on AWS: Options for Using Microsoft Software Licenses on the AWS Cloud*.

path for SQL Server may lead to Amazon Relational Database Service (RDS), which offers a fully managed SQL Server database, or to Amazon Aurora, which provides enterprise-grade performance without requiring SQL Server licenses.[4]

Table 1. Summary of AWS Microsoft Licensing Options

License Included	License Mobility	Amazon EC2 Dedicated Options
On-demand, spot, or reserved instances	Requires active Software Assurance	Software Assurance/License Mobility not required for licenses purchased prior to 10/1/2019 and not upgraded to versions released after 10/1/2019
Pay-as-you-go pricing	Includes SQL Server, Remote Desktop Services, Exchange, SharePoint	Windows Server can be deployed on a Dedicated Host
Multi-tenant or dedicated	Excludes Windows Server, Windows Desktop, and Microsoft Office	Customers are responsible for compliance with licensing terms
AWS-provided images	Requires a verification process	Customers import and use their own software
Support for current and legacy versions	Customers import and use their own software	
AWS manages licensing and compliance		

Source: Enterprise Strategy Group

The Bigger Truth

Innovation is happening at a rapid pace. According to ESG research, public cloud infrastructure adoption (including serverless) has almost doubled in the last five years. Those responsible for infrastructure/platform decisions need to be proactive about planning their modernization routes and timing, as well as their strategies to optimize costs along the stages of their journeys. Licensing decisions can have a critical impact on your business and need detailed analysis, and available tools and assessments make it easier to prioritize, organize, and execute on business strategies.

Research shows that a majority of workloads will likely move to the cloud as confidence in the availability, performance, scalability, and security of the cloud increases. It's never too early to begin planning. In particular, analyze Windows Server perpetual licenses versus subscription strategies carefully to optimize TCO and accomplish innovation objectives.

Maintaining existing licensing agreements or making uninformed licensing decisions can be expensive and limiting. Businesses can leverage AWS assessments to help determine footprint, actual resource consumption, and instant sizes to help determine cost optimization recommendations. As organizations clarify the scope of what to move to the cloud and the true costs, including credits, discounts, rebates, and licensing, they are in a much better position to migrate workloads within optimal timeframes.

[4] Source: Amazon Web Services, *Amazon Web Services and Microsoft Frequently Asked Questions*.

Enterprise Strategy Group is an IT analyst, research, validation, and strategy firm that provides market intelligence and actionable insight to the global IT community.


www.esg-global.com


contact@esg-global.com


508.482.0188