Driving TCO

The Business Case for Migrating from Jamf Pro
On-Premises to Jamf Cloud

With the rapid evolution of enterprise technology, it is more critical than ever that IT and security leaders identify ways to reduce costs and improve staff efficiency and security — while also driving business growth. This can be difficult to do when an organization is devoting time and costs to tasks and areas that are not necessarily an organization's core competency or key business focus. One such area can be the internal costs and resources required to maintain on-premises (on-prem) infrastructure for key business software. In this case, we are going to demonstrate the costs of on-prem versus cloud-based hosting for managing your employees' hardware: laptops, tablets and phones. When these applications are managed on-prem, costs can include periodic hardware updates, ongoing annual software maintenance and support costs, and ongoing annual hardware maintenance costs. In addition to these hard costs, an on-prem solution requires resources to support the infrastructure and business applications, and is often one of the largest drivers of cost and the least top of mind. A move to the business application vendor's cloud has the potential to significantly reduce or eliminate many of these costs as well as provide an opportunity to strengthen IT security.

Hobson & Company, a research firm which focuses on Total Cost of Ownership (TCO) studies, worked with Jamf to explore the challenge of quantifying the true and complete costs of staying with the on-premises approach. The goal of this white paper is to highlight examples of cost savings opportunities that can be realized with a move from hosting Jamf Pro device management on-prem to **Jamf Cloud**. Research consisting of in-depth interviews with seven existing customers found that Jamf Cloud addresses customer challenges while delivering meaningful cost savings.

Challenges to hosting servers on-prem

Customers interviewed noted that there are consistent challenges with supporting the growth of Apple devices throughout these organizations. Below is a list of some of the most universal concerns.
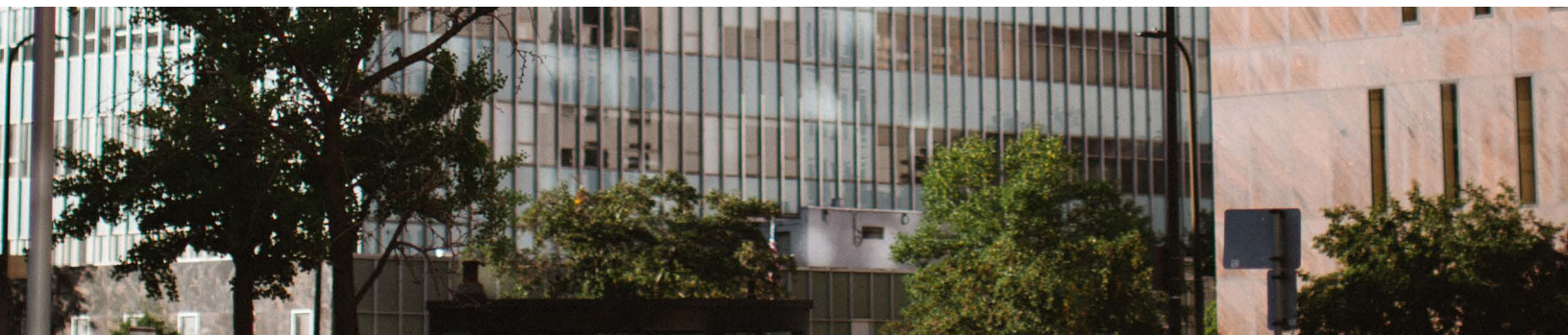
Reducing the time involved for software upgrades

Customers consistently reported that software upgrades are one of the largest on-prem efforts. Jamf Pro releases software frequently (at least seven times last year), but customers report that they do not have the resources to upgrade with every release. Instead, they are typically upgrading between three and four times each year. Each upgrade requires planning, execution, testing and error-fixing, and often involves resources from the network security team, database team and the Jamf administrator. Our research found the combined resources are spending an average of 80 hours per upgrade.

Ensuring business applications are always current

On-prem upgrades are not only time-consuming; they can also create business disruptions and can make it difficult to keep applications current. Customers noted that moving to Jamf Cloud provided evergreen technology, ensuring they were always using the latest software, and passing feature enhancements on to the business more quickly. In addition to getting faster access to Jamf Pro's latest features, it also enables faster access to Apple's most current operating systems: helping to ensure the most efficient and secure environment possible.

Reducing hardware costs

All of the costs associated with owning, monitoring and maintaining the back-end databases, operating systems, disaster recovery and on-prem servers should also be reviewed. There is the labor cost associated with the support and administration of all of the hardware as well as the costs associated with vendor support and overhead. Some customers pay for additional monthly fees for distribution point services that they no longer needed after their move to Jamf Cloud.

Reducing infrastructure and application support & administration

Customers had teams that ranged in size from one to five people with as many as five people helping to support both the core infrastructure systems and Jamf Pro. Some organizations dedicated these resources to Jamf Pro solutions, while others shared the resources, but customers agreed that a lot of their time was freed up with their move to Jamf Cloud. They noted that a move to the cloud allows them to focus their Jamf resources on providing direct value to their end users with innovative services and experiences, instead of managing and maintaining infrastructure.

Key Sources Of Costs

The cost savings of moving to Jamf Cloud are considerable. Based on interviews with both technical and business leaders at seven U.S. organizations, the cost savings fall into two categories:

• Major periodic upgrades
• Annual ongoing operations

Both of the cost areas can be further broken down into a set of specific costs. A sample of the costs for each are summarized below and will be fully explained and supported in the following section.

Cost Area	Specific Costs
Major periodic upgrades	IT infrastructure: periodic refresh (CapEx)
Annual ongoing expenses	• Application software upgrades: internal effort • Infrastructure support & administration • IT infrastructure annual expense (vendor support & overhead) • Disaster recovery: internal effort • Security

The following TCO example illustrates the potential cost savings for a sample organization when migrating from hosting Jamf Pro on-prem to hosting with Jamf Cloud, with the following key operational statistics:

Key Cost Element	Sample Input
Major periodic on-prem investments	
Infrastructure (hardware) refresh/update (every four years)	3 servers
Annual on-prem operating expenses	
Application software upgrades (four per year)	80 hrs/upgrade
IT infrastructure support & administration	45% of FTE
IT infrastructure vendor support & overhead	15% & 40%
Disaster recovery	60 hrs/incident
Security (reduced probability of an incident occurring)	2 point reduction
SaaS implementation costs	
Vendor professional services / implementation	$1,000
Internal effort	200 hrs

Major Periodic Investments

Infrastructure (HW)

On average, hardware needs to be refreshed every three to five years with on-prem solutions. These costs include application servers as well as many other hardware components, including back-up, development and test servers, networking hardware, load balancers and more. These costs may be incurred directly or in the form of a cross-charge against the organization's centralized data center costs, but in either case should be considered when assessing a move to the cloud.

Potential impact for the sample organization

	On-Premises	SaaS
Hardware used for Jamf	$15,000	N/A
HARDWARE REFRESH TOTAL	$15,000	$0
Refresh timing (Years 3-5)	4	

Ongoing Operations (Annual Costs)

Application software upgrades

Software upgrades are critical to ensuring business applications are current, but since managing an on-prem environment is time-consuming, regular upgrades are difficult to maintain. When considering a move to Jamf Cloud, organizations should include the time and resources needed to complete the work, including the planning and testing time associated with the upgrades.

Potential impact for the sample organization

	On-Premises	SaaS
Internal effort	$23,005	N/A
ON-PREMISES UPGRADE ANNUAL TOTAL	$23,005	$0

IT infrastructure support & administration

In most organizations, there is a core group of IT staff that support the on-premises servers managing tasks such as regular patches and fixes and the testing required. These resources can include IT Managers, Database Administrators, System Administrators, Security Teams and more. A move to the cloud would not eliminate this group, as they may be shared resources, but a move to the cloud frees up capacity among this group to devote to other priority work, and this should be factored into the cost analysis.

Potential impact for the sample organization

	On-Premises	SaaS
Internal Effort	$59,850	N/A
APPLICATION S&A ANNUAL TOTAL	$59,850	$0

IT infrastructure annual expense (OpEx)

In most organizations, there are fixed percentages used to estimate the overall cost of vendor expenses as well as overhead (space, heating, cooling, insurance, etc.). Customers typically report spending 15% of the cost of the hardware for vendor expenses, which includes service calls, spare parts, etc. In addition, they are typically spending 40% of the cost of the hardware to estimate all other overhead expenses.

Potential impact for the sample organization

	On-Premises	SaaS
IT infrastructure subscriptions (cost per year)	$0	N/A
HW maintenance - vendor support	$2,250	N/A
HW maintenance - overhead costs	$6,000	N/A
IT OPEX ANNUAL TOTAL	**$8,250**	**$0**

Disaster recovery

Occasionally, an organization's application server may go down and require unplanned effort to get the application back up and running. Customers reported this happening two to three times per year and requiring approximately 60 hours of combined effort to address the incident.

Potential impact for the sample organization

	On-Premises	SaaS
Internal effort	$12,941	N/A
DISASTER RECOVERY ANNUAL TOTAL	**$12,941**	**$0**

Mitigate risk

Customers reported having servers sitting in the demilitarized zone (DMZ) for their on-prem installation. With the migration to the cloud, those DMZ servers are no longer required. This, as well as more timely access to the latest Apple security features, led customers to say that they believe Jamf Cloud is up to 50% more secure than their on-prem installation. We are using a more conservative estimate of a 2% point reduction in the probability of experiencing a security incident.

Potential impact for the sample organization

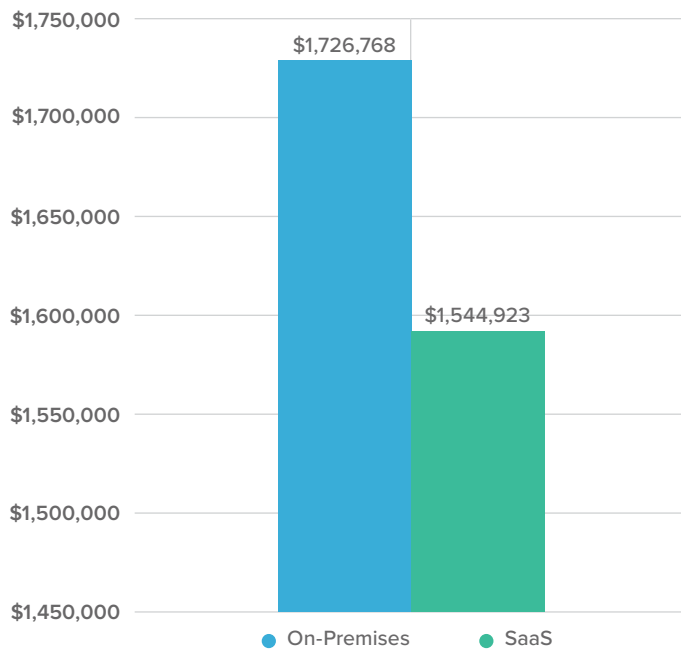|	On-Premises	SaaS
Probability of a security incident %	28%	26%
Cost of security incident	$665,000	$665,000
PROBABLE ANNUAL RISK EXPENSE	**$186,200**	**$172,900**

Overall Costs

For the sample organization, the total cost to continue hosting Jamf Pro on-prem over five years is $1.72 million. The total cost with a move to Jamf Cloud is $1.54 million. This results in a $182k cost savings over five years by moving to Jamf Cloud. These cost savings are realized in year one as the higher monthly SaaS costs are offset by savings in areas such as periodic upgrades, ongoing hardware maintenance and internal staff time.
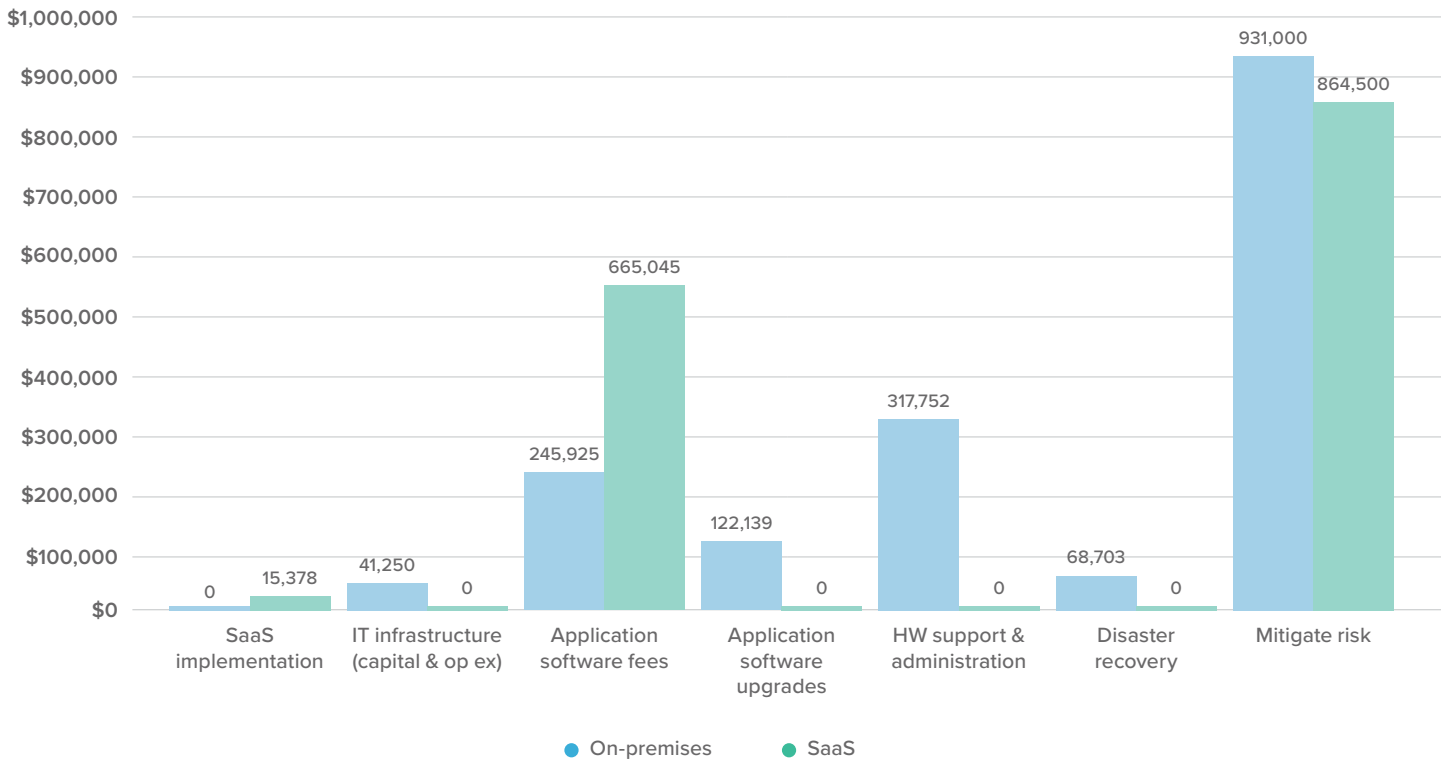
5-year total cost of ownership

On-Premises: $1,726,768
SaaS: $1,544,923

Cumulative total cost of ownership

	On-Premises	SaaS
Year 1	328,746	275,778
Year 2	669,991	558,928
Year 3	1,016,602	866,885
Year 4	1,368,789	1,201,852
Year 5	1,726,768	1,544,923

	Year 1	Year 2	Year 3	Year 4	Year 5
On-Premises	$328,746	$669,991	$1,016,602	$1,368,789	$1,726,768
SaaS	$275,778	$558,928	$866,885	$1,201,852	$1,544,923
Difference	$52,968	$111,063	$149,717	$166,937	$181,845
SaaS Saving (%)	16%	17%	15%	12%	11%

The chart below shows the extent to which each of the key cost areas contributes to the total costs of both hosting Jamf Pro on-prem and hosting Jamf Pro with Jamf Cloud over five years. For this sample organization, the elimination of the internal effort for upgrades and the IT infrastructure support and administration represent the majority of the cost savings in moving to Jamf Cloud.

Costs by category

Bar chart "Costs by category" comparing On-premises and SaaS costs:

Category	On-premises	SaaS
SaaS implementation	0	15,378
IT infrastructure (capital & op ex)	41,250	0
Application software fees	245,925	665,045
Application software upgrades	122,139	0
HW support & administration	317,752	0
Disaster recovery	68,703	0
Mitigate risk	931,000	864,500

Legend: ● On-premises ● SaaS

About Hobson & Company

Hobson & Company helps technology vendors and purchasers uncover, quantify and validate the key sources of value driving the adoption of new and emerging technologies. Our focus on robust validation has helped many technology purchasers more objectively evaluate the underlying business case of a new technology, while better understanding which vendors best deliver against the key value drivers. Our well researched yet easy-to-use ROI and TCO tools have also helped many technology companies better position and justify their unique value proposition.

For more information, please visit: **www.hobsonco.com**.

About Jamf

Jamf is committed to enabling IT to empower end users and bring the legendary Apple experience to businesses, education and government organizations via its product portfolio and the 80,000 members of Jamf Nation. Today, 30,000 global customers rely on Jamf to manage 15 million Apple devices.

To learn more, visit **www.jamf.com**.

For a complete analysis of the TCO your organization can expect with Jamf Pro, **contact us.**