

Market Share

Worldwide Cloud System Management Software Market Shares, 2017: Strong Growth Continues

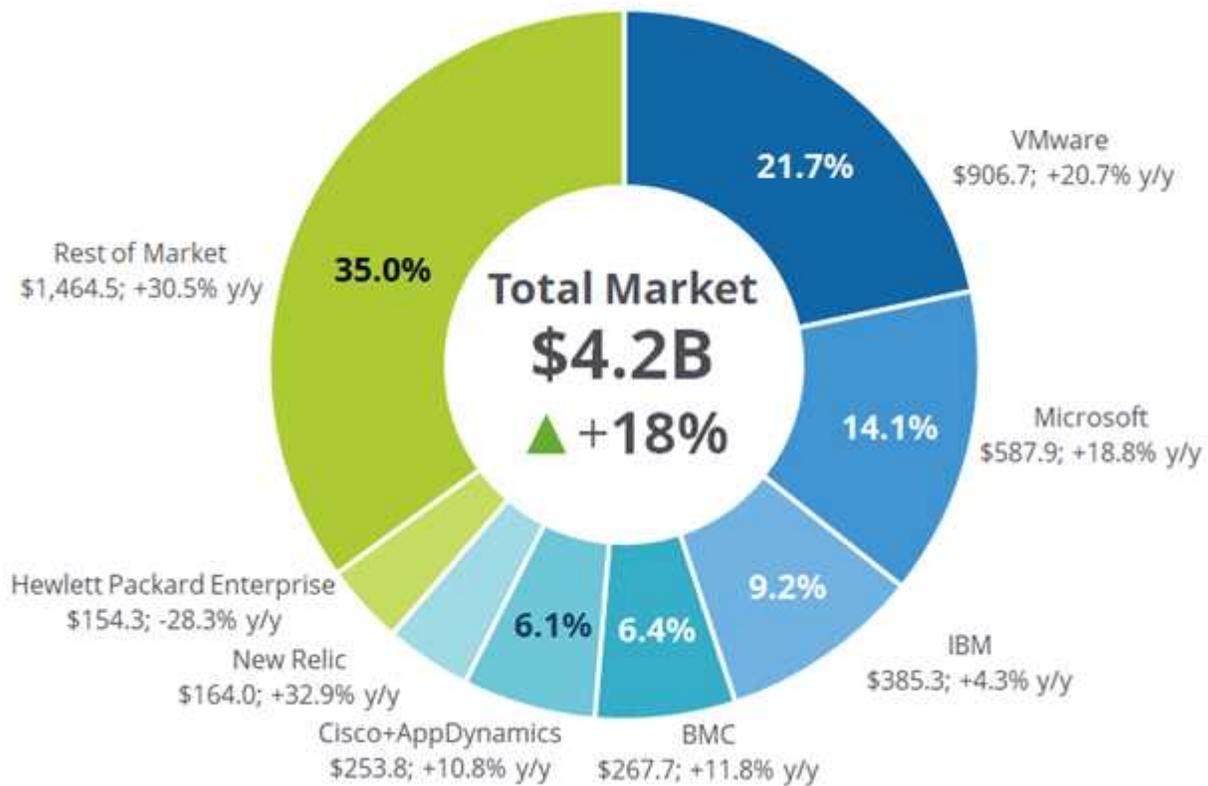
Stephen Elliot

Tim Grieser

IDC MARKET SHARE FIGURE

FIGURE 1

Worldwide Cloud System Management Software 2017 Share Snapshot



Note: 2017 Share (%), Revenue (\$M), and Growth (%).

Source: IDC, 2018

EXECUTIVE SUMMARY

According to IDC estimates, total worldwide cloud system management software market revenue was \$4.2 billion in 2017 as calculated in U.S. current currency. Revenue for this market increased by a strong 18% in 2017, growing to exceed \$4 billion for the first time.

VMware continued to lead the market based on revenue, followed by Microsoft, IBM, and BMC. Cisco gained market share in 2017 partially due to completion of the AppDynamics acquisition early in the year. Refer back to Figure 1 for a summary snapshot of the total market and leading market share vendors in 2017. Refer to Table 1 for a detailed list of vendors active in this market.

This IDC study discusses 2017 vendor market shares and market activity across the worldwide cloud system management software market, a submarket of IDC's IT system and service management (ITSSM) software market. Vendor market shares for the full ITSSM market are published in *Worldwide IT System and Service Management Software Market Shares, 2017: First Look* (IDC #US44150718, July 2018).

"IDC estimates that vendor revenue in the worldwide cloud system management software and SaaS market grew 18% in 2017 to exceed \$4 billion," according to Stephen Elliot, program vice president, Management Software and DevOps. Growth in this market is driven by the need to manage performance, capacity, costs, end-user experience, and automated operations across hybrid cloud and multicloud environments. Enterprise use of multicloud architectures is rapidly transforming the way enterprise infrastructure and operations and associated development teams provision, configure, monitor, and optimize digital business services for employees, customers, and partners."

ADVICE FOR TECHNOLOGY SUPPLIERS

In 2017, the cloud system management software market saw a continued increase in demand for monitoring and analytics solutions optimized for multicloud (private, hybrid, public, PaaS, etc.) environments. This trend began in 2016 as more organizations grew their process and organizational maturity to support multiple clouds; each cloud is now a new silo for IT organizations to manage. This is notable as line-of-business managers often drive some adoption of cloud architectures, with IT pulled into the purchase decision post-decision. Besides creating a certain amount of "shadow IT," IT executives are attempting to organize best practices with multicloud adoption, garner cost controls, and recharge their organization structures and talent pools. Demand for more traditional ITSSM functionality, such as standalone provisioning, configuration, and orchestration solutions as they relate to managing the cloud, did not slow down in 2017 but found itself subsumed by the deployment environment aspects as well as by the always prevalent demand for a full suite of functions over single-function products.

The worldwide cloud systems management software market continues to expand as increasing numbers of enterprises and cloud service providers embrace public cloud, private cloud, hybrid cloud, and multicloud architectures. It is important for cloud system management technology providers to recognize that their potential market includes all types of providers as much as the classic enterprise IT user.

Functionality should be designed for a wide range of production and DevOps workloads including support for policy-based automation, end-user self-service, consumption-based costing, advanced IT operations analytics, and other functions. These capabilities are needed to ensure agile reactions to

rapidly shifting business priorities, Community-driven open source innovation is an increasingly common strategy for adding functionality and value through integrating various open source community functions.

As part of a transition to hybrid cloud and multicloud, customers are shifting priorities away from simply automating cloud provisioning and self-service and putting greater emphasis on application performance, infrastructure capacity, automation, cost optimization, configuration compliance, and integrated service management workflows. It is important for technology providers to support related API-based integrations across monitoring, analytics, governance, reporting, and automation, all key features customers are looking for. This includes open API integrations between noncloud and all kinds of cloud-based solutions to allow customers to create the mix of services and tools needed to monitor, manage, and optimize the full range of resources included in today's multivendor, multideployment-type environments. Customers will increasingly desire the ability to link performance, capacity, and cost analytics to provisioning and migration automation and service management ticketing systems on a seamless, real-time basis.

MARKET SHARE

Table 1 shows market revenue, market share, and growth rates for leading vendors in 2017. The top vendors by share were VMware, Microsoft (including Azure), and IBM. APM and IT operations analytics vendors such as New Relic, Splunk, Dynatrace, Datadog, and Cisco (including AppDynamics revenue after the 2017 acquisition) as well as AWS were some of the fastest-growing vendors. ServiceNow and Oracle also showed significant growth, serving customers seeking unified, fully functioning SaaS-based cloud management platforms. Revenue from SaaS-based solutions increased 25%, while on-premise solutions grew just under 18%.

TABLE 1**Worldwide Cloud System Management Software Revenue by Vendor,
2015-2017 (\$M)**

	2015	2016	2017	2017 Share (%)	2016–2017 Growth (%)
VMware	646.0	751.1	906.7	21.7	20.7
Microsoft	360.8	494.7	587.9	14.1	18.8
IBM	367.4	369.4	385.3	9.2	4.3
BMC	209.7	239.5	267.7	6.4	11.8
Cisco+AppDynamics	182.4	229.1	253.8	6.1	10.8
New Relic	64.9	123.4	164.0	3.9	32.9
Hewlett Packard Enterprise	210.2	215.2	154.3	3.7	-28.3
Splunk	60.1	95.5	133.7	3.2	40.0
ServiceNow	51.9	79.0	113.4	2.7	43.5
Oracle	55.7	84.8	101.4	2.4	19.6
Dynatrace	35.9	77.2	89.7	2.1	16.2
Datadog	14.1	41.8	81.1	1.9	94.2
CA Technologies	74.0	71.8	73.7	1.8	2.7
Micro Focus	–	–	66.0	1.6	NA
Red Hat	48.4	54.5	62.9	1.5	15.4
AWS	8.2	41.6	58.0	1.4	39.3
Puppet	18.2	34.6	43.6	1.0	26.0
RightScale	26.1	32.1	38.9	0.9	21.2
ScienceLogic	22.3	33.2	36.4	0.9	9.5
Turbonomic	12.6	24.4	27.9	0.7	14.2
Chef	6.4	18.3	27.4	0.7	49.5
Densify (formerly Cirba)	11.7	22.7	24.5	0.6	8.2
DXC	14.4	15.4	15.4	0.4	0.0
Embotics	10.1	12.4	13.0	0.3	5.2
Other	343.2	383.2	457.5	10.9	19.4
Total	2,854.7	3,545.0	4,184.0	100.0	18.0

Note: AppDynamics revenue transitioned to Cisco post 2017 acquisition.

Source: IDC, September 2018

WHO SHAPED THE YEAR

VMware continues to lead the market, reflecting the company's ongoing efforts to offer customers a unified approach to cloud management monitoring, analytics, and automation. With vCloud Suite and vSphere with Operations Management, VMware has used its management software and SaaS-delivered portfolio to differentiate vSphere and help maintain overall corporate revenue growth even as its core hypervisor market has matured and standalone hypervisor sales have flattened. As many enterprises have opted to build private clouds using VMware technology, the company's management offerings have been widely deployed into cloud environments. At VMworld 2018 customer events, VMware introduced a series of new products that demonstrate the company's commitment to evolving its portfolio to support the needs of multicloud enterprise strategies, including updates to vRealize Suite.

Microsoft continued to extend its multicloud management footprint across on-premise System Center deployments, the SaaS-based Microsoft Operations Management Suite (OMS), and Microsoft Azure cloud management services. Microsoft Operations Management Suite, a public cloud-based solution introduced in 2015, gained traction as Microsoft's fully unified OMS and System Center licenses, allowing System Center customers with service assurance to access all OMS services and capabilities via existing System Center licenses. Promotional efforts encouraging conversion of System Center licenses to OMS have also been popular. With these upgrades, Microsoft's customers have access to unified management across heterogeneous clouds including physical and virtual servers, Azure public cloud, and third-party public clouds such as Amazon Web Services, as well as support for cloud and on-premise-based Windows Server, Linux, VMware, and OpenStack environments. Microsoft has heavily promoted its "cloud solution provider" channel program over the past year, which has resulted in strong customer interest in a range of Microsoft cloud services, including management solutions.

Building on its acquisition of ITapp, ServiceNow has established itself as a significant multicloud cloud system management platform matching its success in the broader portion of ITSSM in managing noncloud environments. The company's cloud management solution tightly integrates multicloud template design, service request, deployment orchestration, usage monitoring, subscription management, and cost optimization functionality with ServiceNow's core IT operations management (ITOM) and IT service management (ITSM) workflow engine, configuration, machine learning, and incident management platform services. In 2017 and into 2018, ServiceNow continued a string of acquisitions to support this new area, including most recently the acquisition of VendorHawk. ServiceNow says the addition of VendorHawk's expertise in managing SaaS usage and redundancy enhances the current ServiceNow software asset management offering and brings new capabilities in SaaS spend and supplier management. It claims VendorHawk will be integrated into the Now Platform and offered as part of a ServiceNow Software Asset Management release in 2019. The company's cloud management capabilities are getting increasing attention from enterprise customers that want to implement unified cloud and service management workflows, policies, and support strategies consistently across large-scale IT environments that depend on both cloud and noncloud assets.

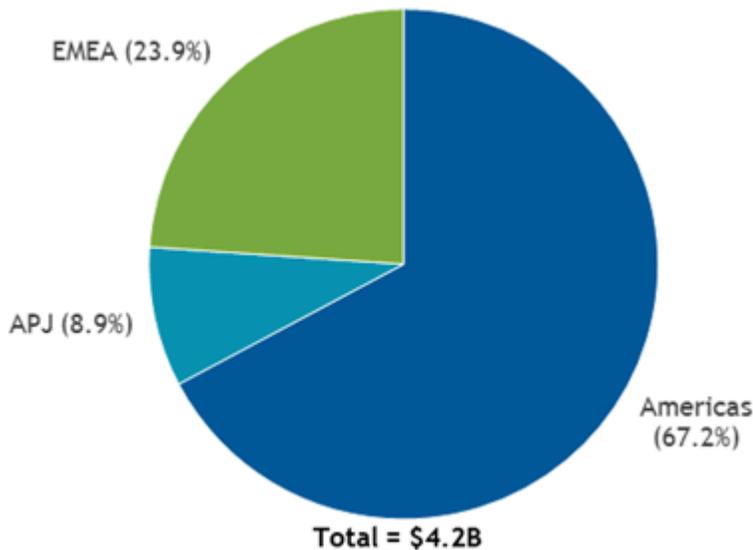
MARKET CONTEXT

Worldwide Cloud System Management Software Revenue by Region Snapshot, 2017

In 2017, the worldwide cloud system management software market saw continued strong growth. As shown in Figure 2, the Americas continued to be the largest region with 67.2% share due to the relative majority and larger scale of many enterprise and public IaaS and PaaS clouds in the region.

FIGURE 2

Worldwide Cloud System Management Software Revenue Share by Region, 2017



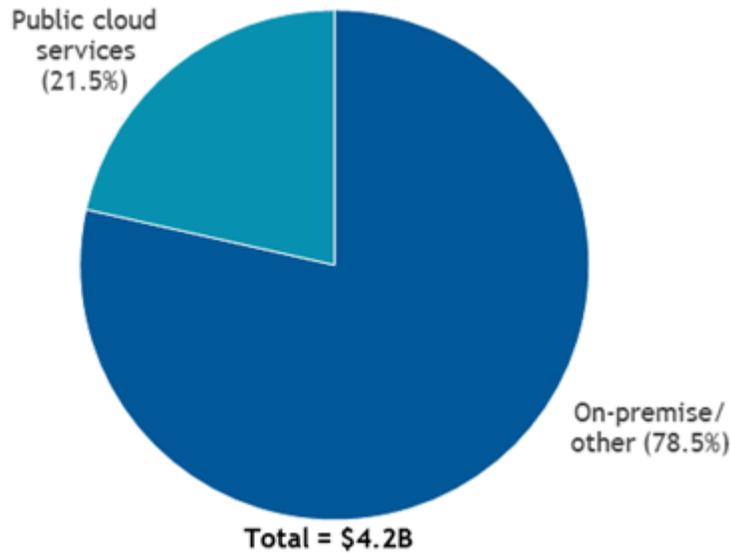
Source: IDC, September 2018

Worldwide Cloud System Management Software Revenue by Deployment Type Snapshot, 2017

SaaS-based delivery of cloud system management solutions has continued to increase. Figure 3 illustrates that public cloud SaaS-delivered cloud system management is a significant part of the market, representing 21.5% of the market revenue in 2017.

FIGURE 3

Worldwide Cloud System Management Software Revenue Share by Deployment Type, 2017



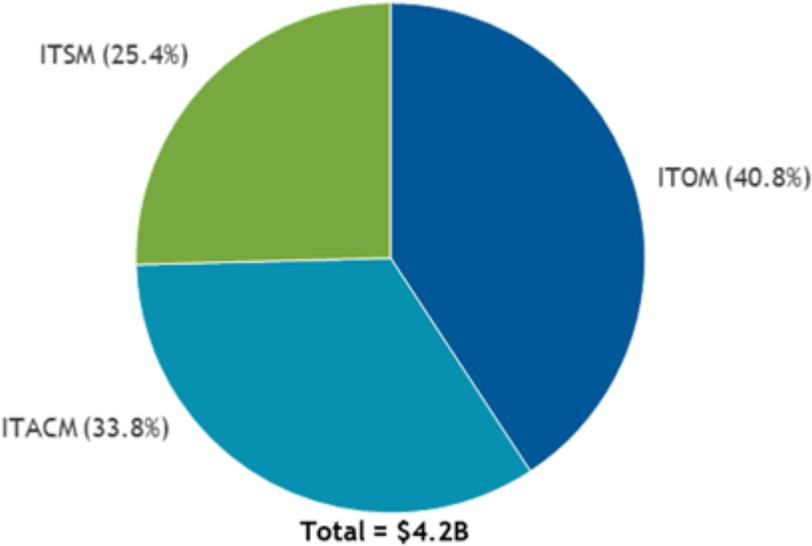
Source: IDC, September 2018

Worldwide Cloud System Management Software Revenue by Functional Market Snapshot, 2017

Cloud system management software includes portions of market revenue from three IDC functional markets as defined in *IDC's Worldwide Software Taxonomy, 2017* (IDC #US42961816, August 2017). The three software functional markets are IT automation and configuration management (ITACM), IT operations management (ITOM), and IT service management (ITSM). Figure 4 illustrates the relative portion of cloud system management software revenue from each functional market.

FIGURE 4

Worldwide Cloud System Management Software Revenue Share by Functional Market, 2017



Source: IDC, September 2018

Significant Market Developments

As a group, cloud-native vendors such as Datadog, New Relic, and ServiceNow saw strong cloud system management software growth rates over the past year. These vendors have invested actively to provide enterprises with state-of-the-art, integrated, application-aware performance analytics, business insight, and cloud infrastructure management capabilities. Partnerships with major service providers of all types and associated partner go-to-market programs have helped to raise visibility for the group at a time when history tilts potential business toward the traditional heritage supplier group.

In addition to modern cloud-native workloads, IDC sees growing numbers of enterprise IT teams evaluating and moving legacy workloads to public cloud infrastructure when the economics and operational considerations make sense. After years of resisting in-house chargeback for cloud services, more and more enterprises are recognizing the need to take a unified view of cost, security, and performance across all workloads and cloud assets if only to ensure that the enterprise can maintain regulatory compliance, protect its information assets, and hold down infrastructure costs.

Successful cloud systems management technology providers are making it easier for customers to transition from traditional product-specific licensing to more unified and integrated management solutions. Subscription usage-based pricing models and try-and-buy options are also important to many customers.

METHODOLOGY

The IDC software market sizing and forecasts are presented in terms of commercial software revenue. IDC uses the term commercial software to distinguish commercially available software from custom software. Commercial software is programs or codesets of any type commercially available through sale, lease, rental, or as a service. Commercial software revenue typically includes fees for initial and continued right-to-use commercial software licenses. These fees may include, as part of the license contract, access to product support and/or other services that are inseparable from the right-to-use license fee structure, or this support may be priced separately. Upgrades may be included in the continuing right of use or may be priced separately. These are counted by IDC as commercial software revenue.

Commercial software revenue excludes service revenue derived from training, consulting, and systems integration that is separate (or unbundled) from the right-to-use license but does include the implicit value of software included in a service that offers software functionality by a different pricing scheme. It is the total commercial software revenue that is further allocated to markets, geographic areas, and sometimes operating environments. For further details, see *IDC's Worldwide Software Taxonomy, 2018* (IDC #US44220818, September 2018).

Bottom-up/company-level data collection for calendar year 2017 began in January 2018, with in-depth vendor surveys and analysis to develop detailed 2017 company models by market, geographic region, and operating environment.

The data presented in this document is IDC estimates only.

Note: All numbers in this document may not be exact due to rounding.

MARKET DEFINITION

The worldwide IT cloud systems management software market is an IDC competitive market that reflects portions of revenue reported in the system and service management software secondary market described in *IDC's Worldwide Software Taxonomy, 2017* (IDC #US42961816, August 2017). The major functions performed by software within this secondary market (functional markets or submarkets) are IT operations management (ITOM), IT automation and configuration management (ITACM), and IT service management (ITSM) software that discovers, tracks, records, and manages configuration and problem information related to IT end users, devices, infrastructure, and operations.

Revenue estimates for this competitive market include license, maintenance, and subscription revenue for packaged software and monthly fees for delivering SaaS solutions used to actively manage on-premises cloud solutions and hosted private and hybrid clouds as well as public cloud services environments, including virtual private clouds, which IDC considers to be public cloud services.

It is important to note that, in cases where cloud systems management software functionality is bundled as part of converged or integrated hardware platforms or free features of public cloud services, software value is not recognized as revenue unless it is tracked and reported by the hardware or cloud services vendor using separate SKUs or similar revenue recognition methods. Professional services, training, and implementation support services are excluded as well.

IDC's revenue estimates include flagship cloud systems management software solutions and associated systems management software, management packs, and SaaS to the extent that they are sold and deployed specifically to enable the operation of private, public, and/or hybrid cloud environments.

In general, cloud environments will have many of the following cloud systems management software capabilities actively in use:

- Self-service cloud infrastructure, middleware, and application provisioning automation, including a service catalog and policy-based life-cycle management capabilities
- Automated infrastructure and virtualization configuration automation and workload migration to enable elastic infrastructure resource pooling and sharing across multiple workloads and user groups
- Orchestration solutions to enable integrated provisioning, migration, and control of complex cloud workloads and enable cloud infrastructure and services on a coordinated basis
- The ability to track cloud resource consumption to support life-cycle management, capacity planning, and (optionally) chargeback/showback

In addition, as cloud environments become more mature, many organizations will include additional, more sophisticated capabilities including:

- Performance monitoring and analytics for workloads and infrastructure used to enable and deliver public and private cloud services and optimize resource capacity
- Cloud service brokering, governance, and service-level management
- Root cause analysis and problem remediation software to optimize ongoing SLAs and end-user experiences
- Automated workload management to support complex data and process flows across cloud infrastructure
- API-based integrations

IT environments that are highly virtualized but do not include the ability to dynamically scale and share resources and provision resources on a self-serve, consumption-aware basis do not qualify for this study since end-user self-service and consumption-based metering are critical elements of any cloud environment.

Systems management software capabilities delivered via the SaaS model are only included to the extent that they are used to enable management of cloud environments, as described previously. The fact that systems management software is sold and delivered via a SaaS public cloud service model to manage a noncloud environment does not qualify it to be included in the estimates for the ITCSM market because many systems management SaaS solutions are used to manage and monitor resources that operate in noncloud environments and architectures.

RELATED RESEARCH

- *IDC's Worldwide Software Taxonomy, 2018* (IDC #US44220818, September 2018)
- *Worldwide IT System and Service Management Software Market Shares, 2017: First Look* (IDC #US44150718, July 2018)
- *Worldwide IT System and Service Management Software Forecast, 2018-2022: First Look* (IDC #US43535018, February 2018)

About IDC

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