

Unlocking the value  
of the cloud

Supercharging enterprise  
asset management  
with SaaS

- When choosing asset management software, organizations are increasingly gravitating toward Software as a Service (SaaS)—a cloud-based delivery model in which software is hosted centrally by a vendor and available on demand.
- The most commonly cited benefits of SaaS deployments include increased flexibility, simplified upgrades, lower upfront costs and predictable expenditures.
- The global datacenter footprint of the IBM Cloud, along with rigorous disaster recovery, backup procedures and security protocols, make IBM the ideal choice for SaaS hosting.
- SaaS deployments of IBM Maximo for asset management offer the functionality and flexibility organizations need to simplify adoption.

## Cloud-based vs On-premises comparison

### Cloud-based solutions

|   |                             |
|---|-----------------------------|
| + | Rapid time to value         |
| + | Non-technical configuration |
| + | Minimal IT involvement      |
| + | Upgrades included           |
| + | Frequent new features       |
| + | No hardware costs           |
| + | Subscription billing        |

### On-premises solutions

|   |                           |
|---|---------------------------|
| – | Long implementation       |
| – | Expensive customization   |
| – | IT resource dependent     |
| – | Separate MDM framework    |
| – | Expensive upgrades        |
| – | Long time to new versions |
| – | Added hardware costs      |
| – | Large upfront investment  |

Figure 1. Comparison of cloud-based vs. on-premises deployment

## Introduction

Right now, every business is seeking a competitive advantage through data. The connectedness of everything is transforming how asset-intensive industries work. Organizations that are able to harness this transformation are creating platforms from the Cloud, IoT and best-in-class applications like IBM® Maximo®, all delivered to users anywhere, anytime using Software as a Service (SaaS).

SaaS adoption is impacting all businesses and sectors, including those asset-intensive industries who are purchasing enterprise asset management (EAM) solutions. The predictable costs, ease of deployment and vendor-handled upgrades are increasingly appealing to maintenance leaders who often struggle to justify the cost savings necessary to warrant new expenditures. With SaaS, small and medium-sized companies are finding improved data security that exceeds their internal capabilities. Larger businesses are drawn to the simple upgradability, which allows them to attain new features without additional cost, and the ability to free up technical resources to pursue innovation (see Figure 1).

This buyer’s guide will dive into some of these features as a primer to getting started on your SaaS journey.

## What is Software as a Service?

Software as a Service (SaaS) is a delivery model where software functionality is hosted by a third party, rather than being installed on local IT infrastructure. This is in contrast to deploying software on premises, where clients will install software on local IT infrastructure and maintain both the software application and the related IT systems in-house. SaaS is typically paid for on a subscription or pay-per-use basis, as compared with deployed software, which is typically paid for using a perpetual license model.

SaaS is often associated with the cloud. Cloud computing, colloquially referred to as “the cloud”, is the delivery of on-demand computing resources—everything from applications to data centers—over the internet on a pay-for-use basis. Cloud-based applications are thus synonymous with SaaS.

## What are the benefits of SaaS?

There are many financial and operational benefits to using SaaS, but most of them boil down to allowing clients to focus on their core competencies and moving faster in their businesses. This frees up capital that is currently spent worrying about IT management and delaying business decisions due to upgrades and limited resources.

The 2017 IBM Institute for Business Value study “Winning Cloud Strategies” surveyed more than 2000 leaders across various industries and found that 65% of cloud leaders expect to be running Internet of Things (IoT) apps in the cloud within the next three years. These same leaders are focused on delivering the following three operational benefits:

- Enhancing technology agility (63 percent)
- Boosting employee satisfaction (57 percent)
- Improving business scalability (57 percent)

These business leaders consider the cloud to be the where they can experiment with new technologies, integrations and data-driven partnerships to create new business value for their clients.

**Financial:** As SaaS requires fewer in-house IT resources, it reduces operational risks and IT costs and allows resources to be redeployed to business priorities. Because SaaS contracts are governed by clear service level agreements (SLAs) between clients and vendors, IT no longer has to worry about ongoing non-strategic IT tasks. Many clients benefit from converting capital expenses related to IT into operational expenses. The lower up-front costs of SaaS result in a faster time to value, since there is less IT involvement and hardware configuration required. Once implemented, SaaS offers more predictable ongoing expenses that are contractually guaranteed. This allows clients to better optimize budget and further invest to grow their business.

**Innovation:** SaaS is also far more flexible than traditional deployed software. Because SaaS enables simplified upgrades and removes the need for clients to re-deploy software to take advantage of the latest versions, clients can benefit from the latest functionality offered by vendors. Since the software is hosted in the cloud, the updates can be pushed live to the client without needing to engage central IT.

Integrating new technologies faster—with reduced risk—is what the cloud offers. It provides access to partners and creates sandboxes where internal and external data can be combined with analytics and AI. It allows organizations to test out new approaches and offerings for their asset-intensive businesses, and find new insights and operating models for competitive advantage.

---

– **Public clouds** are owned and operated by companies that offer rapid access to affordable computing resources over a public network. With public cloud services, users don’t need to purchase hardware, software, or supporting infrastructure, because it’s owned and managed by providers.

– A **private cloud** is infrastructure that is operated solely for a single organization, whether managed internally or by a third party. It’s hosted either internally or externally. Private clouds can take advantage of cloud’s efficiencies while providing more control of resources, and steering clear of multi-tenancy.

– A **hybrid cloud** uses a private cloud foundation that is combined with the strategic integration and use of public cloud services. A private cloud can’t exist in isolation: it requires company IT resources and the public cloud. Most companies with private clouds will evolve to manage workloads across data centers, private clouds, and public clouds, thereby creating hybrid clouds.

---

With Maximo as a service, SaaS clients are the first to have access to new IBM solutions like Maximo Asset Health Insights, Scheduler Plus, IBM Maximo Network on Blockchain and other valuable functionality at the convergence of asset management and IoT.

**Security:** Despite the fact that the software and data resides outside of their data center, many organizations find SaaS deployments to provide better security than hosting on premises. This is because cloud vendors use economies of scale when it comes to security. This gives them enterprise security experts and capabilities beyond what most businesses can afford in the areas of infrastructure, identity, data, network and application security.

# Cloud services comparison

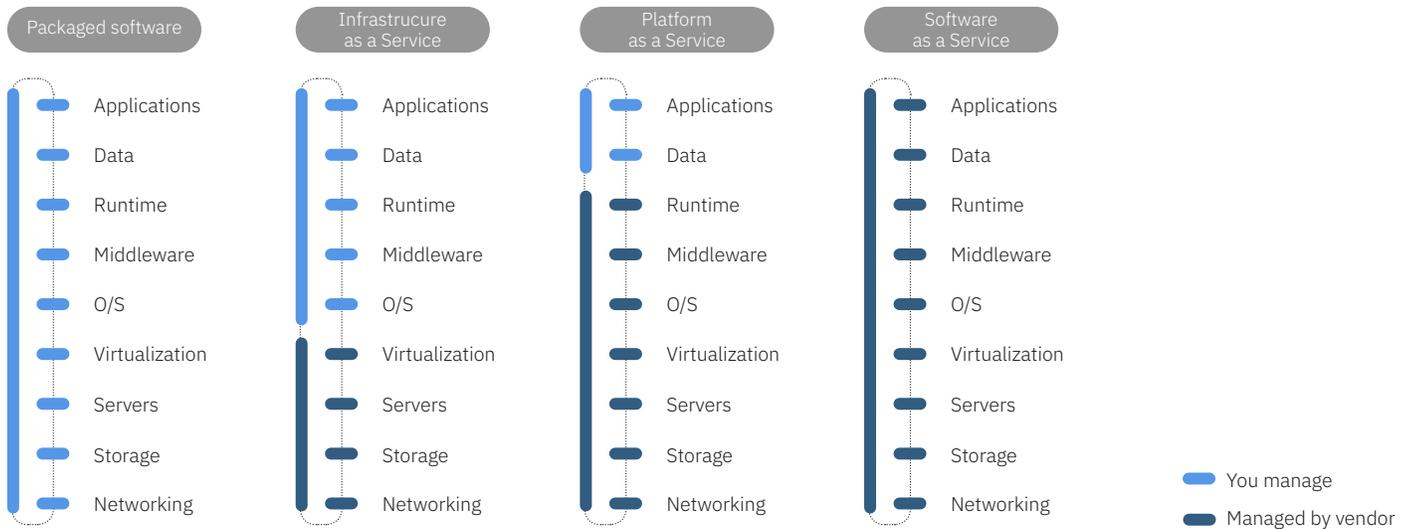


Figure 2. Comparison of services managed by each deployment model

## Why SaaS on the IBM Cloud?

Not only is IBM a leading provider of cloud data centers, but we also offer the world’s premier asset management software, Maximo. With IBM, a single vendor manages your asset management solution and brings you flexible cloud capabilities unrivaled by competitors.

Some SaaS providers rely on third-party cloud vendors to host their client applications and data, adding a layer of complexity in the service relationship. IBM, however, hosts SaaS applications in its own data centers. Because IBM owns the infrastructure, if something goes wrong the client only needs to deal with one entity, which controls both the infrastructure and application layers (See Figure 2).

With SaaS providers who rely on third-party hosting for their applications, a client can never be sure where in the cloud their sensitive data is stored. But IBM’s data centers exist in all regions worldwide, and are owned and operated by IBM. IBM maintains the highest level of data security and privacy in its cloud infrastructure, with rigorous disaster recovery and backup procedures. Cloud and SaaS clients benefit from dedicated client support and experts with extensive infrastructure and offerings experience.

IBM Cloud™ is designed for the enterprise and is well suited for the emerging hybrid cloud era: Gartner predicts that nearly 90% of large enterprises will have hybrid cloud deployments by the end of 2020. A one-size-fits all cloud strategy isn’t appropriate for complex enterprise clients. That’s why IBM offers public, private, and hybrid cloud solutions for each client’s unique needs.

## Why the world’s leading companies rely on the IBM Cloud:

- 100+ best-in-class business applications
- Broad coverage for front- and back-office roles across business and IT
- Deep domain expertise across 20 industries through IBM Global Business Services
- Available for purchase in more than 50 countries
- Supports stringent data residency requirements
- Enterprise-grade security standards
- Flexible support for third-party system integration
- Flexible deployments across public, private, and hybrid cloud environments

## Maximo SaaS offering landscape

**What SaaS options does IBM offer for Enterprise Asset Management?** Like other SaaS offerings at IBM, Maximo offers multiple SaaS options to meet the needs of thousands of clients. There are two core SaaS offerings for Maximo—Maximo EAM SaaS, and Maximo SaaS Dedicated (See Figure 3).

Maximo SaaS is the base offering for those looking for a low-cost, computerized maintenance management system (CMMS). It has a standard set of functionality and configurability intended for organizations looking for a simple CMMS platform. Maximo SaaS Dedicated has all of the functionality and configurability of the on-premise Maximo solution with the additional benefits of being hosted on the cloud. Ultimately, complexity, size and scope of how your assets need to be managed will determine which offering works for your organization.

## A comparison guide for IBM’s Enterprise Asset Management solutions (SaaS and on-premise)

| Offering                  | Maximo SaaS  | Maximo SaaS dedicated   | Maximo Enterprise Asset Management (on-prem):  |
|---------------------------|--|---|--|
| <b>Description</b>        | Maximo Enterprise Asset Management SaaS: An IBM Cloud-hosted SaaS multitenant solution with Maximo Scheduler | Maximo Enterprise Asset Management on Cloud Flex: IBM Cloud-hosted dedicated single-tenant solution to automate business process execution for asset management | Market leading integrated productivity tool and database manages all of your assets on a single software platform                                      |
| <b>Deployment model</b>   | Automatic deployment   | Deployed by cloud delivery service  | Deployed by customer   |
| <b>Licensing</b>          | Available flexible licensing reduces effective per user cost. See options at checkout                        | Flexible licensing reduces effective per user cost  | Flexible licensing reduces effective per user cost   |
| <b>Configurability</b>    | Limited configurability  | Fully configurable  | Fully configurable   |
| <b>Scalability</b>        | Available additional user-type license helps you scale while avoiding overage charges                        | Available additional user-type license helps you scale while avoiding overage charges   | Available additional user-type license helps you scale while avoiding overage charges  |
| <b>Add-ons</b>            | Includes base IBM Maximo Scheduler for enhanced scheduling capabilities                                      | Add-ons available (details at <a href="https://www.ibm.com/products/maximo/add-ons">https://www.ibm.com/products/maximo/add-ons</a> )                           | Add-ons available (details at <a href="https://www.ibm.com/products/maximo/add-ons">https://www.ibm.com/products/maximo/add-ons</a> )                  |
| <b>Integration</b>        | State-of-the-art cloud integrations with REST APIs and messaging hub   | Includes Maximo Integration Framework   | Includes Maximo Integration Framework  |
| <b>Industry solutions</b> | No industry solutions included   | Industry solutions available (details at <a href="https://www.ibm.com/products/maximo/industries">https://www.ibm.com/products/maximo/industries</a> )          | Industry solutions available (details at <a href="https://www.ibm.com/products/maximo/industries">https://www.ibm.com/products/maximo/industries</a> ) |
| <b>Software upgrades</b>  | Prompt upgrades  | Prompt upgrades   | Manual upgrades  |
| <b>Expense type</b>       | Operational  | Operational   | Capital  |

Figure 3. Comparison guide for IBM’s Enterprise Asset Management solutions

### Case study—SaaS in action

SaaS is one of IBM’s fastest growing businesses and for good reason—clients are seeing clear value by moving IT management responsibilities to vendors such as IBM, which have the scale and expertise to deliver on service level agreements in a cost-effective manner. Below are a few case studies of Maximo clients taking advantage of SaaS.

- Sodexo: Sodexo worked with IBM to migrate 1.2 million assets to the cloud. Using the IBM Maximo SaaS Flex asset management solution, two production instances were implemented on IBM Cloud, one in the United States and one in the EU. Sodexo has benefitted from faster upgrades, rapid deployment of new functionalities, scalability and simplified governance.

The shift to SaaS led to a 20 percent reduction in total cost of ownership (TCO) and increased cost predictability across the company’s buildings.

- Pacific Northwest National Laboratory: By using the IBM cloud platform, PNNL embarked on a transformation of its enterprise asset management strategy. It has designed and built a unified platform for managing approximately 40,000 assets, and has integrated more than 10 asset management systems as well as related processes and policies. Using the flexibility of IBM Maximo on SaaS, PNNL has also automated many of the tasks they rely on for managing operations, and created a new user interface for finding specific information faster.

### Getting started today with SaaS

Because Maximo and TRIRIGA are offered in many SaaS configurations, getting started is a matter of understanding which option is best suited to your operations.

Get in touch with your account representative or [talk to an expert](#) or [download a free trial](#).

© Copyright IBM Corporation 2018

IBM Corporation  
New Orchard Road  
Armonk, NY 10504

Produced in the United States  
of America November 2018

IBM, the IBM logo, Watson, , Maximo, and ibm.com are trademarks of International Business Machines Corp., registered in many jurisdictions worldwide. Other product and service names might be trademarks of IBM or other companies. A current list of IBM trademarks is available on the Web at “Copyright and trademark information” at: [ibm.com/legal/copytrade.shtml](http://ibm.com/legal/copytrade.shtml)

This document is current as of the initial date of publication and may be changed by IBM at any time. Not all offerings are available in every country in which IBM operates.

**The client examples cited are presented for illustrative purposes only. Actual performance results may vary depending on specific configurations and operating conditions.**

**It is the user’s responsibility to evaluate and verify the operation of any other products or programs with IBM products and programs.**

THE INFORMATION IN THIS DOCUMENT IS PROVIDED “AS IS” WITHOUT ANY WARRANTY, EXPRESS OR IMPLIED, INCLUDING WITHOUT ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND ANY WARRANTY OR CONDITION OF NON-INFRINGEMENT. IBM products are warranted according to the terms and conditions of the agreements under which they are provided.

Statement of Good Security Practices:

IT system security involves protecting systems and information through prevention, detection and response to improper access from within and outside your enterprise. Improper access can result in information being altered, destroyed, misappropriated or misused or can result in damage to or misuse of your systems, including for use in attacks on others. No IT system or product should be considered completely secure and no single product, service or security measure can be completely effective in preventing improper use or access. IBM systems, products and services are designed to be part of a lawful, comprehensive security approach, which will necessarily involve additional operational procedures, and may require other systems, products or services to be most effective. IBM DOES NOT WARRANT THAT ANY SYSTEMS, PRODUCTS OR SERVICES ARE IMMUNE FROM, OR WILL MAKE YOUR ENTERPRISE IMMUNE FROM, THE MALICIOUS OR ILLEGAL CONDUCT OF ANY PARTY.

Statements regarding IBM’s future direction and intent are subject to change or withdrawal without notice, and represent goals and objectives only.

65020065USEN-00

