Unlocking the value of the cloud
The benefits of deploying asset and facilities management as SaaS
When choosing asset and facilities 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, easy 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 and IBM TRIRIGA® for facilities management offer the functionality and flexibility organizations need to simplify adoption.

Introduction

SaaS adoption is impacting all businesses and sectors, including those purchasing asset and facilities management 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, while larger businesses are drawn to the simple upgradability, which allows them to attain new features without additional cost.

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

What is Software as a Service?

Software as a Service 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 Software as a Service.
When clients deploy software, they are the integrator and maintainer of all components of the IT value “stack” — the layers of hardware and software needed to create a complete application. The stack includes network infrastructure, servers, storage, operating systems, middleware, applications, and associated services. When utilizing SaaS, clients are only responsible for the application and its related services, and the vendor manages the rest of the IT value stack.

What are the benefits of SaaS?
There are many benefits to using SaaS, but most of them boil down to allowing clients to focus on their core competencies and businesses, as opposed to worrying about IT management.

SaaS requires fewer in-house IT resources, which 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 management under a SaaS model consists solely of monitoring SLA compliance as opposed to worrying about ongoing tasks such as system upgrades, performance monitoring and tuning, backup and recovery, data privacy and security, and other core IT concerns.

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 align costs to growth in their businesses.

SaaS is also far more flexible than traditional deployed software. Because SaaS enables easy 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. In the case of Maximo, for example, SaaS clients are the first to have access to Maximo Asset Health Insights, Scheduler Plus, and other valuable functionality at the convergence of asset management and the Internet of Things. Also, SaaS software enables organizations to rapidly resize without having to invest in additional hardware and IT infrastructure, which often takes months to produce and set up. Aligning IT to business objectives enables faster growth and the ability to adapt to rapidly changing market conditions.

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

- **A private cloud** is infrastructure operated solely for a single organization, whether managed internally or by a third party, and 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 combined with the strategic integration and use of public cloud services. The reality is a private cloud can’t exist in isolation from the rest of a company’s 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.

For more information on cloud computing, visit IBM’s [website on the topic](https://www.ibm.com).
Despite the fact that the software and data resides outside of their data center, many organizations find SaaS deployments to be more secure than hosting on premise. This is because cloud vendors have the benefit of economies of scale when it comes to security—giving them enterprise security experts and capabilities beyond what most businesses can afford.

Cloud services comparison

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 and facilities management software, Maximo and TRIRIGA. With IBM, a single vendor manages your asset or facilities 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 our own data centers. Because IBM owns the infrastructure, if something goes wrong the client only needs to deal with one entity who controls both the infrastructure and application layers.

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. We maintain the highest level of data security and privacy in our 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—an era that is already upon us: Gartner predicts that nearly half of large enterprises will have hybrid cloud deployments by the end of 2017. We recognize that a one-size-fits all cloud strategy isn’t appropriate for complex, enterprise clients. That’s why we offer public, private, and hybrid cloud solutions to 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 17 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

To learn more about IBM Cloud infrastructure solutions, visit the IBM SoftLayer® website.

Maximo SaaS offering landscape

<table>
<thead>
<tr>
<th>SaaS fundamentals</th>
<th>SaaS</th>
<th>SaaS flex</th>
</tr>
</thead>
<tbody>
<tr>
<td>Focus on standardization and ease of use</td>
<td>Core Maximo/TRIRIGA functionality in a SaaS model</td>
<td>Combines convenience of SaaS with flexibility of customization</td>
</tr>
<tr>
<td>Centered on basic use cases (asset and work order management)</td>
<td>Application builder, etc. included for unique configurations</td>
<td>Customers/Partners have full access to Dev environment</td>
</tr>
<tr>
<td>Limited # users</td>
<td>Single tenant</td>
<td>Work with CDS on Test and Production</td>
</tr>
<tr>
<td>Multi-tenant</td>
<td>Supported by DevOps</td>
<td>Available for Maximo and TRIRIGA</td>
</tr>
<tr>
<td>Supported by DevOps</td>
<td>Available for Maximo and TRIRIGA</td>
<td>Available for Maximo and TRIRIGA</td>
</tr>
<tr>
<td>Available for Maximo only</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Appeals to smaller, less mature users

Appeals to more advanced users looking for SaaS delivery model

Appeals to partners and advanced customers who want to customize their SaaS image

What SaaS options does IBM offer for Asset and Facilities Management?

Like other SaaS offerings at IBM, Maximo offers multiple SaaS options to meet the needs of our 3,000+ clients. There are three core SaaS offerings for Maximo—Maximo SaaS Fundamentals, Maximo SaaS, and Maximo SaaS Flex.

TRIRIGA SaaS follows a similar approach. TRIRIGA SaaS is a standardized single-tenant cloud offering for real estate and facilities management, covering all TRIRIGA modules. TRIRIGA SaaS Flex combines the convenience of SaaS with the flexibility of customization in the same SoftLayer environment.
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 that have the scale and expertise to deliver on service level agreements in a cost-effective manner. Below are a few stories of Maximo and TRIRIGA clients taking advantage of SaaS.

– **SaaS Fundamentals.** A Maximo business partner was working with a small manufacturer who just built a new factory and wanted to get it up and running quickly with quality enterprise asset management capabilities. Maximo SaaS Fundamentals offered a quick and cost-effective solution that supported this single site and 10 users initially responsible for site management and operations. To ensure the software could support growth in the factory, the manufacturer could have up to 50 users and the ability to upgrade to more comprehensive Maximo SaaS solutions as the business expands.

– **SaaS.** A large state agency in the United States wanted to make better-informed decisions about facilities management, with visibility into key performance measures related to lease expiration, lease rates (compared to market rates), space utilization, and energy efficiency. Because a key challenge for the state government agency was staying current with software versions, a SaaS solution was the ideal choice. Implementing TRIRIGA SaaS allowed the state to reduce their overall cost of operations and lower occupancy costs by identifying facilities with excessive costs by market.

– **SaaS Flex.** An established Maximo business partner was looking to include their own application in a first-of-its-kind solution for a complex client that has used Maximo for many years. Rather than building this into the client’s deployed Maximo environment in a customized, one-time use manner, the client and partner decided to use Maximo SaaS Flex to implement this new use case. Maximo SaaS Flex gave the partner the ability to update the hosted environment and enabled the work to be done more quickly. It could then be repeated across the client’s other sites without having to redo work for each local IT configuration.

Learn more about SaaS

To learn even more about SaaS for asset and facilities management, visit these IBM Cloud marketplace pages:

- Asset Management: [ibm.co/MarketplaceMaximo](ibm.co/MarketplaceMaximo)
- Facilities Management: [ibm.co/MarketplaceFM](ibm.co/MarketplaceFM)

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.

Our asset and facilities management experts have extensive expertise in client success, and can help you find the right solution for your business, regardless of where you are in your software evaluation process.

Get in touch with your account representative or [talk to an IBM expert today](https://www.ibm.com/solutions/asset-facilities).