# Software in the cloud:
# An enterprise buyer's guide

**IFS**

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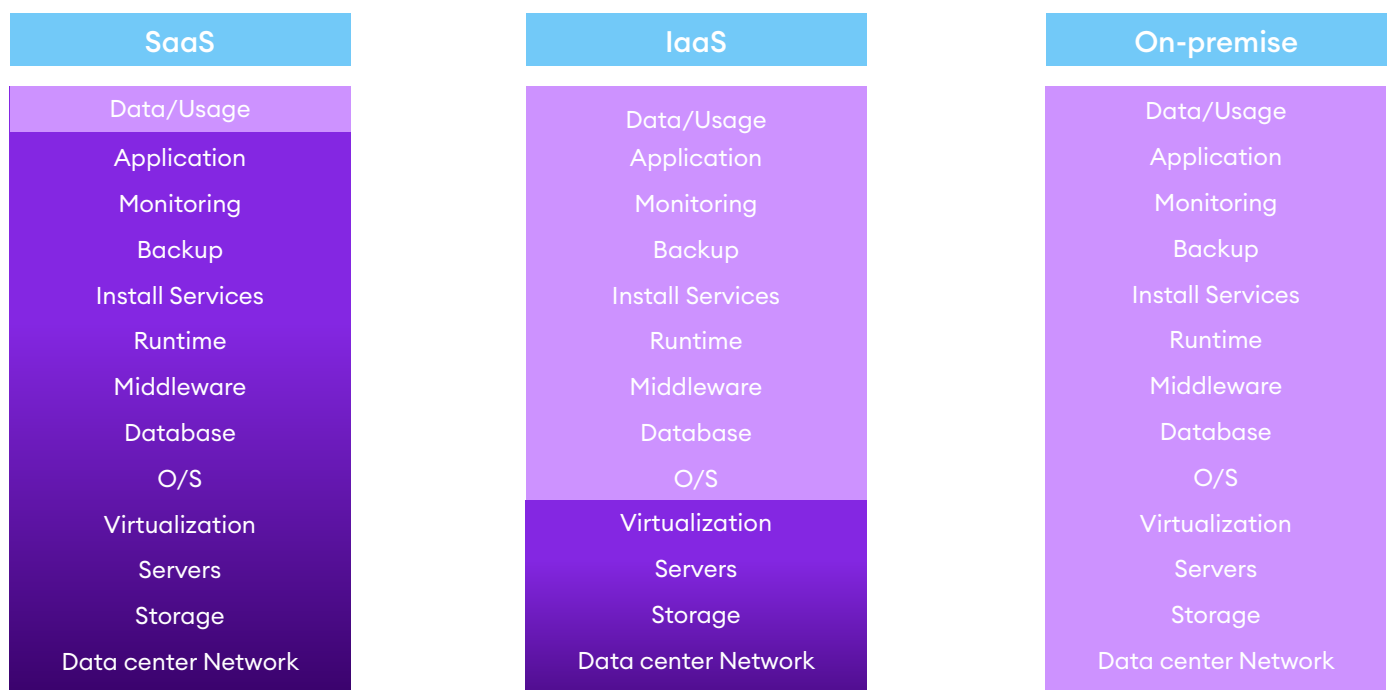# A bird's eye view for anyone considering a cloud service

Cloud computing is by now well-established, and for enterprise software, the cloud service model has been widely embraced. However, if you're at the early stages of considering a cloud service, it can be difficult among all the hype to know what's important when considering the move.

## This whitepaper unpacks these key considerations to help you make an informed choice. Read on if you'd like to:

- Gain a high-level understanding of the available deployment and service options for enterprise soft are

- Know what to evaluate when viewing cloud as a purchasing decision

- Understand the pros and cons of adopting a cloud service, including the key costs involved

- Get to grips with the four common concerns involved in moving to the cloud and know how to tackle them

## How much of your technology do you want to manage?

The technology stack required to run and maintain enterprise software has a number of component parts, including the databases that store and retrieve information and the servers that process requests and deliver information. One of the key questions to address when making your decision around deployment options is how much of this technology you want to manage yourself. The following diagram shows the three typical choices you will encounter:

| SaaS |
|---|
| Data/Usage |
| Application |
| Monitoring |
| Backup |
| Install Services |
| Runtime |
| Middleware |
| Database |
| O/S |
| Virtualization |
| Servers |
| Storage |
| Data center Network |

| IaaS |
|---|
| Data/Usage |
| Application |
| Monitoring |
| Backup |
| Install Services |
| Runtime |
| Middleware |
| Database |
| O/S |
| Virtualization |
| Servers |
| Storage |
| Data center Network |

| On-premise |
|---|
| Data/Usage |
| Application |
| Monitoring |
| Backup |
| Install Services |
| Runtime |
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**Responsibility:** ● Customer ● Service Provider

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**Users will record absences, view policy documents and submit training requests in the software via an internet browser. And the business will be able to control which of their employees can access the tool and how they use it.**

With Software as a Service (SaaS), a business will access and interact with, for example, an HR application over an internet connection. Users will record absences, view policy documents and submit training requests in the software via an internet browser. And the business will be able to control which of their employees can access the tool and how they use it. But, all of the background technology that enables the use of the software is managed by the vendor of the HR application. And that vendor will likely partner with a cloud platform provider, such as Microsoft Azure or Amazon Web Services, in managing that background technology. A SaaS vendor commits to an outcome; to supply the customer with access to the software, but a cloud platform provider only commits to providing the 'building blocks', not the solution. An example to highlight the difference: an application's server is running but the application itself isn't working, meaning the platform provider has met their responsibility but the SaaS vendor hasn't.

On-premise software sits at the other end of the spectrum, since the customer is responsible for managing all aspects. And the mid-point involves a more even split of responsibilities, labelled as "IaaS" (infrastructure as a Service) on the diagram.

Depending on the role you have within your organization, it might be difficult to tell which hosting option your enterprise has adopted for the software you use. But having an air-conditioned server room somewhere within your building, or a purpose-built facility that you own, is usually the most obvious indicator of an on-premise deployment. In the case of IaaS, the servers (along with virtualization, storage and the data center network) are not located on company premises, but instead reside in an off-site data center, where they are managed by a third-party.

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## Top Tip:

It is advisable to ask each vendor/supplier what other supplementary services they offer as this often exposes what the core service does and doesn't do. Areas such as application management (managing data, configurations and end-user requests at the application layer) are rarely in the scope of a cloud service.

## Buying a service

The adoption of enterprise software in the cloud is often largely a resourcing question where you decide which of your business assets you are willing and able to manage yourself and which will sit with the software provider. Many enterprises now view software procurement through the lens of buying a service or outcome, and the adoption of Office 365 is a good example of this. A typical initial question for enterprises considering the move to managed email is:

### Is running an email server really the best use of my company's time and money?

Office 365 has been successful because it answered with a convincing and resounding "no" to this question. And today you'll find few organizations that lament the days of "being under the hood" of the Microsoft Office suite. The truth is that running your own email server is relatively easy, so when you first move to the cloud model for larger, more complex enterprise software, the benefits you unlock are even greater. Three key reasons for the shift towards buying a service/outcome are: 1. It frees you up to focus on running your business rather than managing IT. Many organizations have decided their time and effort is better spent on the activities unique to their business that no or few others can do. In most cases, the company focus for these organizations isn't on running data centers and server rooms—such things would be a distraction.

2. The software vendor will be competing with others on the basis of expertise, commitment levels and the other elements that comprise a service. Therefore, you can expect the following as fairly standard when buying a service:

### Technical expertise:
A cloud operations team with specialist knowledge on security, cost optimization, inventory management and compliance assurance.

### Dedicated support:
Customers often find the number of support cases they raise per year is quite low. But 24x7x365 support has become commonplace because a quick, comprehensive response to issues as they arise is critical, especially when downtime may be involved.

### A single point of contact:
For the customer, resolving issues is simplified since only one provider is involved and held to account.

3. It lets your teams be enablers rather than doers. For example, if an enterprise acquires another company and the user community suddenly doubles, the IT team will have more than enough to do (things only they can do) without having to procure new servers, install and upsize them. But in a cloud service model, the team simply puts in a request to upscale and the provider will spin up the necessary resources.

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# Cost differences and implications

There are significant differences to how costs are paid, depending on how you deploy your software:

| | Cloud | | On-premise |
|---|---|---|---|
| License fee | Subscription Fee | Perpetual software license | Perpetual software license |
| Tax impact | Operating expense | Capital expense | Capital expense |
| Operating hardware & cloud support | Subscription Fee | Subscription Fee | Internal budget:<br>• Infrastructure<br>• Enterprise software administration<br>• Support |
| Budget impact | Predictable monthly cost, a minimum term often applies | Significant upfront expense for license and predictable monthly cost for cloud | Large upfront expense for license and servers, variable monthly cost to maintain |

On-premise can be the lowest cost to the customer, and this will be key to some organizations. For those that have the significant knowledge and experience required to host software themselves, on-premise may be the logical choice.

**However, when you're evaluating hosting costs, keep in mind:**

1. It's crucial to compare like for like. On-premise or hosting yourself via IaaS might initially appear cheaper than cloud. But be sure to include everything that on-premise doesn't include in your cost comparison. The cost of establishing and maintaining the servers and support for the software can be higher and more variable than you anticipate. Whereas buying a managed service includes 24/7 support, cloud ops expertise, application management and much more. Furthermore, businesses often widely underestimate the true total cost of on-premise, missing or miscalculating factors such as the cost of power and cooling a server room, provision of secure off-site backup storage, fire suppression, access control, service contracts for hardware failure and more.

2. Beware of the runaway costs of hosting yourself via IaaS. In these environments, your employees can often buy extra resources relatively easily if the infrastructure isn't configured to avoid this, meaning:

   • The existence of frequent small costs can be a hidden danger. On its own, each purchase may be small, but can come as a shock to a company when consolidated.

   • The cloud estate can quickly sprawl and it's easy to lose control and oversight. Unneeded resources may be left running i  people aren't aware whether the resource exists or whether it's redundant. They may also be unclear whether a particular resource is a dependency or not, i.e. their outlook is: "I don't know what all the implications of switching this off are, so it's safer to just leave it running."

That organizations find themselves in such situations is understandable. Maintaining control and oversight over an intricate web of assets needs specialism that may not be held in-house. It's an overhead, and one that many organizations have now washed their hands of by outsourcing to a service provider.

These runaway costs are much less of a threat when using a service provider, as the provider will help you put controls in place to manage service use. What's more, the service provider is responsible for providing an outcome. They handle the internal low-level cloud infrastructure resources and will typically provide customers with a much smaller, simpler and more comprehensible set of metrics (on the number of users, for example) that drive cost. Ultimately, they can offer customers a clear, predictable pricing model.

## Four cloud concerns: time to clear the air

The migration of enterprise software is an enormous decision, and there are several key concerns that buyers share. You can find further detail in our accompanying whitepaper: Adopting enterprise software in the cloud: questions for your vendor. But for now, here's the sum and substance:

| Concern | Reality |
|---|---|
| The cloud is less secure than on-premise | • Public cloud providers have a deeply vested interest in keeping their customers' data secure, and they safeguard servers with sophisticated physical and virtual protection.<br>• History shows that, in most cases, the root cause of security failures is customer rather than vendor error—regardless of environment. |
| I'll get "locked in" if I migrate to the cloud | • The best providers offer reasonably short commitment periods for a cloud service. However, since on-premise is licensed perpetually, a customer essentially commits for a longer time, in order to recoup or pay off their investment.<br>• To move data from one enterprise application to another often requires reformatting. This work would need to be done regardless of the hosting environment—an on-premise environment isn't any less "locked in". In fact, on-premise often becomes harder to migrate, since the system is typically in a less defined and well-structured state than a cloud solution. An on-premise solution is more likely to evolve over a period of time without comprehensive documentation and consideration. |
| Updates will be forced on me and cause disruption | • The best vendors provide a choice of when to deploy non-critical updates.<br>• In all environments, it's sensible for the patching of critical security vulnerabilities to be mandatory and automatic, since inaction is potentially disruptive at best, disastrous at worst. |
| Uptime and availability won't be good enough if I move to the cloud | • For most enterprises, availability and performance will substantially increase in the cloud.<br>• From most suppliers of enterprise software, you can expect a contractual commitment of around 99.5% for cloud availability at the application level. Regardless of where software is provisioned, 100% availability is cost prohibitive for the majority of companies—thus, there are few organizations that operate at that level.<br>• You should consider what the shape of your Application Operations team is and the target operating model. Experience across the industry shows it's rarely a cloud service that will be the bottleneck. A strong operations team working with your applications—whether they are in-house, outsourced or within a hybrid approach—coupled with a good cloud service is the safest and most predictable way of ensuring excellent uptime. |

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Factor in all the "behind the scenes" aspects that a managed service brings. In many ways, the sign of a good service is to forget it's there, so it can be very easy to overlook the background activities that ensure well-performing software.

## Explore your options

If you're considering the purchase of enterprise software, and all the various hosting options, it's critical to compare like for like. Factor in all the "behind the scenes" aspects that a managed service brings. In many ways, the sign of a good service is to forget it's there, so it can be very easy to overlook the background activities that ensure well-performing software.

Every business is unique and software buyers need a choice when it comes to deployment options. Enterprise Consulting and IFS offer that choice, taking your specific business context, environment and requirements into account before guiding you through your options for deploying ERP software.

You might be an enterprise for whom utmost control and customization are critical. If these two factors play a leading role in your decision and justify the added cost and responsibility, an on-premise environment could suit you best. Or perhaps you're a business with limited IT resources–in this instance, a cloud solution would help you focus on running and growing your business, rather than managing your applications' hosting and infrastructure.

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## About Enterprise Consulting

Enterprise Consulting is passionately committed to helping companies achieve business results with IFS. We offer services to support companies throughout their lifecycle including implementations, upgrades and optimizations. Enterprise Consulting can also manage a customer's IFS deployment in their Enterprise Managed Cloud hosting solution. Want to learn more about how we can help you? Request a free consultation at https://www.enterpriseconsulting.net/contact.

## About IFS

IFS develops and delivers enterprise software for companies around the world who manufacture and distribute goods, build and maintain assets, and manage service-focused operations. Within our single platform, our industry specific products are innately connected to a single data model and use embedded digital innovation so that our customers can be their best when it really matters to their customers–at the Moment of Service.

The industry expertise of our people and of our growing ecosystem, together with a commitment to deliver value at every single step, has made IFS a recognized leader and the most recommended supplier in our sector. Our team of 4,000 employees every day live our values of agility, trustworthiness and collaboration in how we support our 10,000+ customers. Learn more about how our enterprise software solutions can help your business today at ifs.com.