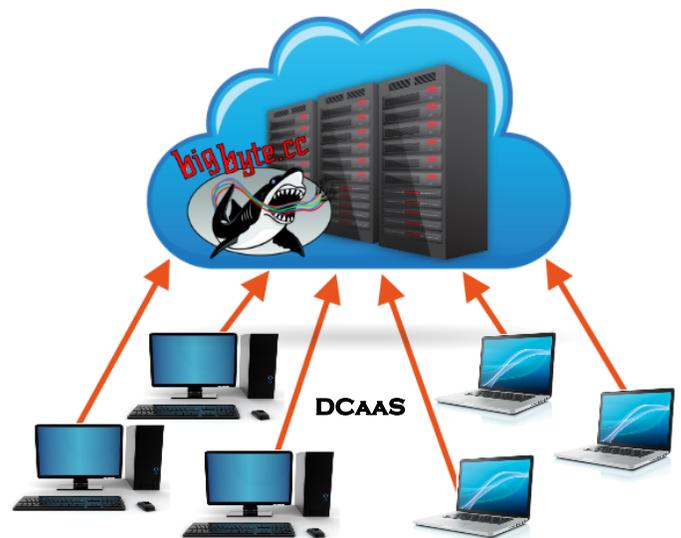# As-A-Service: What does it all mean?

As-a-Service: What does it all Mean?

We're going to review and explain the alphabet soup that surrounds computing offerings and terminology. It can be a tough knot to unravel if you aren't clear about what each offering covers, from "infrastructure, software, or platform as a service" (IaaS/SaaS/PaaS) to data center and computing as a service we're going to explain what services each model encompasses.

Data Center as a Service (DCaaS) is the provisioning of offsite physical data center facilities and infrastructure to clients. Clients rent or lease access to the provider's data center using the facility and redundant infrastructure owned and maintained by the DCaaS provider. The user creates and manages their own equipment (networking, storage and other computing resources) with either internal staff or a third party contractor.

Advantages:

- **Cost—** Large datacenters defray the costs of building and ongoing maintenance over a large customer base. You also get a better rate for power and bandwidth by moving your workload to a high use/low rate corporate pricing level.

- **Environmental—** Equipment is housed in a better physical environment: redundant power, cooling, and high-speed connectivity effectively replacing a huge capital expense (and a depreciating asset) with an operating expense.

- **Security—** Data Center provider handles all the physical security, surveillance, event logging and maintenance to these systems.

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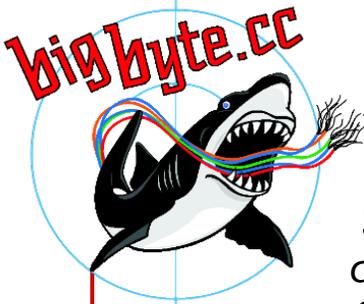
As-a-Service: What does it all Mean?

Software as a Service (SaaS), sometimes referred to as "on-demand software" is a software delivery model in which software and associated data are hosted on the cloud. SaaS is typically accessed via a web browser and is paid on a subscription basis, monthly or yearly as per requirement. The user does not manage or control the underlying cloud infrastructure including network, servers, operating systems, storage, or even individual application capabilities, with the possible exception of limited user-specific application configuration settings.


INTERNET — SOFTWARE — BACK UP

SAAS

Advantages:

- **Cost Savings:** Reduce IT support costs by outsourcing hardware and software maintenance and support to the SaaS provider. Unlike traditional software which is conventionally sold as a perpetual license with an up-front cost (and an optional ongoing support fee), SaaS providers generally price applications using a subscription fee, most commonly a monthly fee or an annual fee.
- **Various Systems are Supported:** SaaS has become a common delivery model for many business applications, from accounting software and human resource management to customer relationship management (CRM) systems.
- **Customization**: A customer can request a specific set of parameters that affect a programs functionality as well as the look-and-feel so that the application appears to be having the customer's brand.

Disadvantages:

- If the provider experiences an outage all SaaS applications are not accessible to the user until the provider comes back online. e.g. Email, databases, etc.
- You should consider putting in place a secured back up solution to ensure no loss of critical data. i.e. Colocation, Media back-ups, etc.
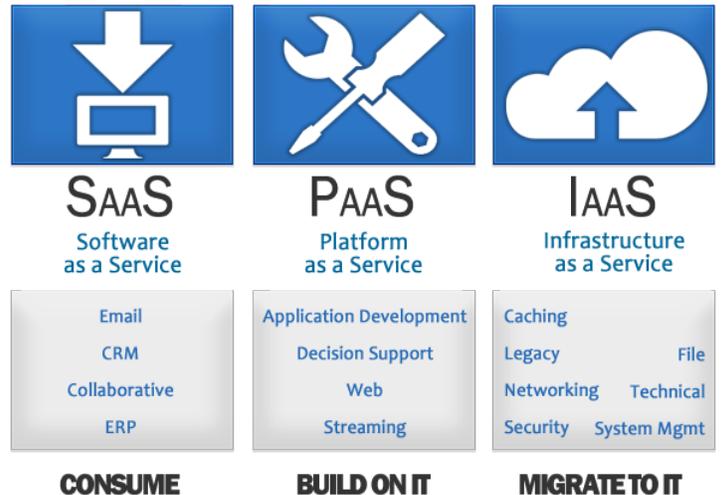
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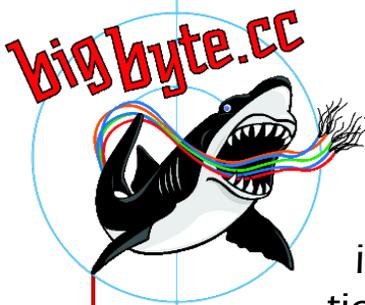
As-a-Service: What does it all Mean?

Platform as a Service (PaaS) is a category of cloud computing services that provide a computing platform and a solution stack as a service. Along with SaaS and IaaS, it is a service model of cloud computing. In this model, the consumer creates the software using tools and libraries from the provider. The consumer also controls software deployment and configuration settings. The provider provides the networks, servers and storage. Often used by software or website developers, PaaS platforms providing all of the facilities required to support the complete life cycle of building and delivering web applications and services entirely available from the Internet.
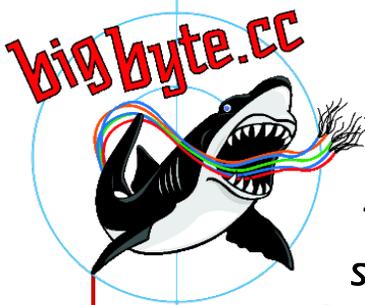
Infrastructure as a Service (Iaas) is a provisioning model in which an organization outsources the equipment used to support operations, including storage, hardware, servers and networking components. The service provider owns the equipment and is responsible for housing, running and maintaining it. The client typically pays on a per-use basis.

SaaS	PaaS	IaaS
Software as a Service	Platform as a Service	Infrastructure as a Service
Email	Application Development	Caching
CRM	Decision Support	Legacy / File
Collaborative	Web	Networking / Technical
ERP	Streaming	Security / System Mgmt
CONSUME	**BUILD ON IT**	**MIGRATE TO IT**

IaaS refers not to a machine that does all the work, but simply to a facility that offers it's clients extra storage space in servers and data centers. Other resources often include: images in a virtual machine image library, block and file-based storage, firewalls, load balancers, IP addresses, virtual local area networks (VLANs), and software bundles.

IaaS cloud providers supply these resources on demand from their large pools installed in data centers. For wide area connectivity, the Internet can be used or - - in carrier clouds – dedicated virtual private networks can be configured.

As-a-Service: What does it all Mean?

The "cloud" model is composed of a combination of three service models: Software as a Service (SaaS), Platforms as a Service (PaaS), and Infrastructure as a Service (IaaS).
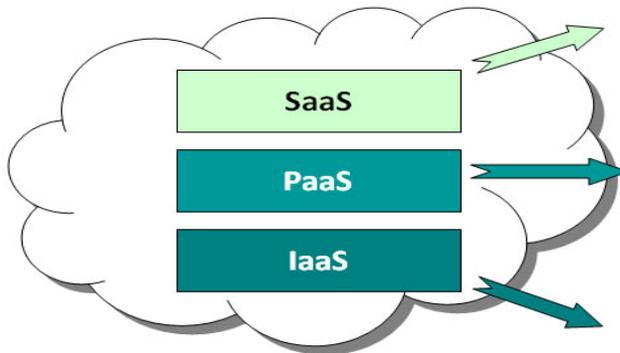
Who Uses It	What Services are available	Why use it?
Business Users	EMail, Office Automation, CRM, Website Testing, Wiki, Blog, Virtual Desktop ...	To complete business tasks
Developers and Deployers	Service and application test, development, integration and deployment	Create or deploy applications and services for users
System Managers	Virtual machines, operating systems, message queues, networks, storage, CPU, memory, backup services	Create platforms for service and application test, development, integration and deployment

Different types of cloud services are geared for different purposes. Choosing the one that is right for your business needs is key.

Other As-A-Service Models:

Compute as a Service (CaaS) enables customers to create a provider-based private cloud accessed either via the public Internet or private connections giving its users extra processing power that can be used for "cloud bursting" of in-house apps or as a testing and development platform. CaaS is ideal for new development projects, major events, mergers and migrations so that organizations can enable IT resources as and when required with minimum disruption to the business. CaaS allows companies to do internal charge-backs for resources con-sumed by individual departments or business units and provides a foundation for IT expansion.

Read more about As-A-Service models and how they can help your business HERE.
(http://info.apps.gov/content/what-are-services)

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