

Engineering Development and 'The Cloud'

Benefits and Advantages of Using 'The Cloud' for Engineering Development

For some years it has been impossible to ignore the increasing presence of the 'The Cloud'

In effect, many of us use 'The Cloud' every day without realising it, as it has enabled a plethora of social media, internet-based shopping and Government services. The Internet of Things is growing exponentially. But let's consider the merits of using this Cloud as a means to execute software and systems engineering projects in a global 24/7 environment.

Low Cost - Elimination of up-front costs for purchasing and installation of software and hardware as well as ongoing maintenance and upgrades. Pay-as-you-go licensing models move the costs from capital purchases to operational expenditure. It also means that businesses only pay for usage and not costly unused licensing. For small businesses, the rental model on Software as a Service (SaaS) provides access to cutting edge software applications that would traditionally have been difficult to justify due to full-time licensing costs.

Time - Organisations can concentrate resources on their core business rather than management and maintenance of IT assets. Applications can be brought into use faster and the infrastructure can be adjusted rapidly to meet varying demand.

Scalability - The pay-as-you-go model enables a great deal of flexibility and scalability. It is very easy to increase and decrease both licensing and performance as needed.

Accessibility - The application can be made available to a user anywhere in the world with internet access.

Security - Security is often better than traditional systems because providers can devote specialised resources that many customers cannot afford.

cloudbaSE is SyntheSys' cloud-based licensing toolset for IBM® Rational® Software. Gone are the days when software was purchased on an annual basis using unreliable usage forecast. Software licences can now be accessed 'on demand', matching actual usage with actual licences.

Please contact us for more information, including how our cloudbaSE solution is being used in the nuclear and transportation industries.

What is 'The Cloud'?

Cloud computing is a model for enabling convenient, on-demand network access to a shared pool of configurable computing resources (e.g., networks, servers, storage, applications and services) that can be rapidly provisioned and released with minimal management effort or service provider interaction. A cloud can be either private (to an organisation), public (when it is available for public use), or a combination of the two. The public cloud is usually accessed via the internet.

Cloud Clients

(Customer's web browser, mobile app, etc.)



Software as a Service (SaaS)

(Supplier's software applications running on a cloud infrastructure. Customer does not manage or control the cloud infrastructure or the application, except for user-specific application settings.)

Platform as a Service (PaaS)

(Customer-provided applications. Customer does not manage or control the cloud infrastructure, but has control over the applications and configuration settings for the application-hosting environment.)

Infrastructure as a Service (IaaS)

(Any customer-provided software. Customer does not manage or control the cloud infrastructure.)

Information here is based on the United States' National Institute of Science and Technology definitions.

About SyntheSys

SyntheSys provides defence systems, training, systems and software engineering and technical management services over a spectrum of different industry sectors. Along with distinct support and consultancy services, our innovative product range makes us first choice provider for both large and small organisations. Established in 1988, the company focus is on fusing technical expertise with intuitive software applications to solve common industry challenges.

