

Exploratory Cloud Projects in IBM Research

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Cloud computing is here

This new IT delivery model can significantly reduce enterprise IT costs & complexities while improving workload optimization and service delivery. Cloud computing is massively scalable, provides a superior user experience, and is characterized by new, internet-driven economics. Information technology is changing rapidly, and now forms an invisible layer that increasingly touches every aspect of our lives. Power grids, traffic control, healthcare, water supplies, food and energy, along with most of the world's financial transactions, now depend on information technology.

Cloud workloads from IBM

IBM has cloud options. Whether you choose to build private clouds, use the IBM cloud, or create a hybrid cloud that includes both, these secure workload solutions provide superior service management and new choices for deployment.

You may have wondered about cloud computing as compared to grid computing. It is important to understand cloud computing service types and the similarities and differences between cloud and grid computing. Cloud computing may be advantageous over grid computing, what issues to consider in both, and there are security concerns to take into account.

To get cloud computing to work, you need three things: thin clients (or clients with a thick-thin switch), grid computing, and utility computing. Grid computing links disparate computers to form one large infrastructure, harnessing unused resources. Utility computing is paying for what you use on shared servers like you pay for a public utility (such as electricity, gas, and so on).

With grid computing, you can provision computing resources as a utility that can be turned on or off. Cloud computing goes one step further with on-demand resource provisioning. This eliminates over-provisioning when used with utility pricing. It also removes the need to over-provision in order to meet the demands of millions of users.

Project name if affiliated to a project

IBM

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