

Abstract

Within the new scenarios created by Cloud Computing, Reply's role is that of service and technology provider, as well as solution and service integration enabler, supporting its clients in the implementation of innovative internal processes and helping them deal with any issues relating to the conversion of applications, infrastructure and traditional software environments so that they can become cloud compatible.

The Enterprise Cloud Computing Platform, developed by Reply, offers corporate users self-service applications and services that resolve the issue of actual resource availability and consequent organisational complexities. The Reply platform not only increases service delivery speed, but also fully complies with security requirements put in place to protect the business.

The solution allows for highly specialised and precise control of corporate assets and processes, thereby offering services that provide customers with obvious benefits: lower costs, a more targeted solution for company needs, enhanced productivity for people, processes and technologies.



Reply Private Cloud: bring the cloud paradigm inside the enterprise

Scenario

Traditional corporate applications are often very expensive and complicated to install, maintain and use. They require a data centre with physical space, a power supply, cooling, bandwidth, networks, servers and storage. Complicated stack software requires a team of experts for installation, configuration and execution. Development, testing, temporary management, production and failover environments are also necessary.

In a Cloud Computing model, on the other hand, applications are not accomplished locally, but in a data centre distributed around a network. This is the strength of Cloud Computing. Hardware and basic software and applications resources are progressively dematerialised in an abstract cloud of services. Here, in a self-service mode, users have direct access that allows dynamic creation, allocation, configuration, movement and updating of the IT resources their businesses need. A pay-per-use method is applied.

Cloud Computing is the result of a complex evolutionary cycle which started with the first attempts at moving away from the constraints of both hardware and operating systems and resulted in the creation of virtual server environments. It is today seen as the way forward and also has widespread implications for the more mass market oriented services. By freeing up the applications from the physical hardware layer, Cloud Computing can offer a drastic reduction in fixed costs, increasing infrastructure efficiency, scalability, flexibility and response times. Through the use of architecture based on "in the Cloud" virtualization a company can therefore focus on those functional aspects which support internal processes, market relations and the supply chain.

Cloud therefore represents a new model, in which the user sees the service supplied by the network, but not the implementation or the infrastructure required for its distribution. This kind of model no longer requires rapidly depreciating investments that lack versatility, but uses financial resources only in absolutely indispensable amounts and for the period of time needed to support the business, provided at a speed that was unthinkable until recently. A model, above all, capable of quickly shifting the cost to another direction should the market situation require it.

From “computer and applications” to “services”

Reply’s Cloud Computing model has substituted the traditional classification based on a rigid distinction between physical infrastructure and operating system or application with the concept of “service”. These services must satisfy the fundamental requisites of being **consistently priced** – irrespective of the physical resources used - **scalable, dynamic** and **immediately** delivered.

The user of a model “as a Service” (aaS) has total freedom to use the virtual resources and overlying applications available, which are “exposed” to a number of desktop devices and private and public networks, and accessed via standard internet interfaces.

The consequence of this approach is that there is a radical shift from the concept of IT seen as a cost to that of technology as a resource provided based on “use”, using a predefined and transparent pricing structure, thus resulting in a truly on demand solution.

Reply Enterprise Private Cloud

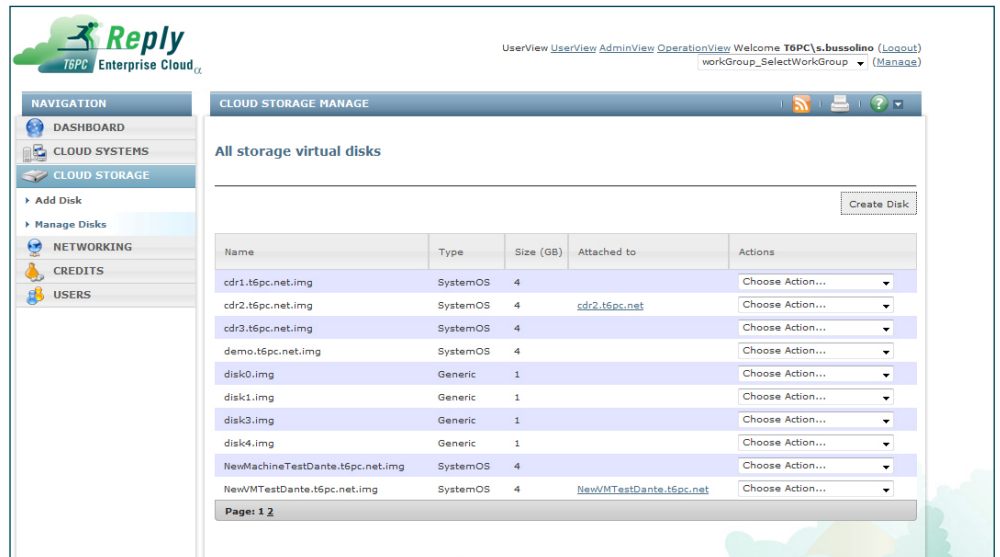
Reply’s Private Cloud Computing Platform optimises corporate IT resources used in the cycle of provisioning, delivery, monitoring and control of business-critical applications. It is characterized by flexibility in storage, processing and networking offerings; on-demand systems access; self-provisioning by the user or workgroup; centralised management through a unified dashboard for system administrators, workgroup managers and end users.

Reply’s solution offers corporate users self-service IT that is completely extraneous to all restrictions required in the management of network services, storage and server resources. Through integration of all its components, the platform allows for an extremely efficient, precise monitoring of corporate assets and processes. Last but not least, Reply’s platform automation increases performance speed as well as being totally compliant with security restrictions needed to protect the business.

From an architectural standpoint, Reply’s Enterprise Private Cloud platform is based on five underlying functions:

- system virtualisation
- storage
- networking
- monitoring of resources
- metering of resources

Each function is composed of diverse types and brands of hardware and software, with standardised functions made available through a software adaptation layer. This allows most of the company's existing hardware to integrate with Private Cloud, achieving progressive virtualisation as systems gradually interface with the platform's upper layers, thereby allowing organic growth of the "cloud".



The screenshot shows the 'All storage virtual disks' section of the Reply T6PC Enterprise Cloud dashboard. The dashboard includes a navigation menu on the left with options like DASHBOARD, CLOUD SYSTEMS, CLOUD STORAGE, Add Disk, Manage Disks, NETWORKING, CREDITS, and USERS. The main content area displays a table of virtual disks with the following data:

Name	Type	Size (GB)	Attached to	Actions
cdr1.t6pc.net.img	SystemOS	4		Choose Action...
cdr2.t6pc.net.img	SystemOS	4	cdr2.t6pc.net	Choose Action...
cdr3.t6pc.net.img	SystemOS	4		Choose Action...
demo.t6pc.net.img	SystemOS	4		Choose Action...
disk0.img	Generic	1		Choose Action...
disk1.img	Generic	1		Choose Action...
disk3.img	Generic	1		Choose Action...
disk4.img	Generic	1		Choose Action...
NewMachineTestDante.t6pc.net.img	SystemOS	4		Choose Action...
NewWMTesDante.t6pc.net.img	SystemOS	4	NewWMTesDante.t6pc.net	Choose Action...

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The dashboard is a self-service portal that can be used by IT administrators or directly by smart users to create and configure new virtual machines, initiate one or more requests, associate storage units and VLANs, configure security parameters, establish service visibility for the Internet or corporate intranet through firewalls, collect performance parameter data and implement internal departmental billing.

The Private Cloud Computing proprietary platform developed by Reply thus allows this new method of delivering services to be introduced quickly into the company.

Reply value

Starting from the concept that a Private Cloud system must be simple and accessible, Reply has developed a Private Cloud Computing Platform that is unique on the current Cloud scenario.

Reply's Enterprise Cloud Computing Platform ensures the user can request whatever they need without worrying about the availability of resources, and in a completely transparent manner considering the complexity the system has to manage.

Reply is able to assist its own customers with the substantial approach change in methods for requesting services from the company's IT department, providing end-to-end consulting support in understanding and selecting technology and applications solutions better suited to business needs.

Reply's objective is to guarantee its clients, through a range of integration and personalisation services for pre-existing systems, that they will be able to take full advantage of resources and services *in the cloud*, or use these tools to implement their new IT projects.

Reply [REY.MI] is specialized in design and implementation of solutions based on new digital media and communication channels. Operating through a network of highly focused companies, Reply provides the leading European Groups in the Telco & Media, Manufacturing and Services, Banking and Insurance Industries as well as the Public Sector with an effective support aimed at defining and developing business models enabled by the Web 2.0 and by the convergence paradigms. Reply services include: Consultancy, System Integration, Application Management and Business Process Outsourcing.

For further information: www.reply.eu