

CLOUD ADOPTION, DEVELOPMENT & MANAGEMENT

Cloud computing offers companies a unique opportunity to leapfrog traditional, expensive IT investments normally made by enterprises in much the same way that rapid deployment of wireless technology enabled consumers to skip landlines and move directly to mobile devices. Storm Reply, with the experience and abilities it has cultivated regarding the new paradigms of Cloud Computing, can assist its customers in the assessment, adoption and management of Cloud solutions.

STORM REPLY'S CLOUD OFFER

In general, cloud computing allows companies to benefit from a greater return on investments as regards hardware and software, a reduction in IT, administration and infrastructure costs, providing the opportunity to accelerate deployment times in order to face the changes which the company must undergo in an even more efficient way.

The economical aspect seems to predominate, since the management of company systems is too costly: immediate, noticeable reduction of upfront IT costs and a more prompt response to rapid market changes will be perceived.

Using cloud-based systems, companies are able to:

- Focus on their own core business;
- Promptly react to rapid market changes;
- Exploit the latest technological innovations;
- Be more flexible.

Using the cloud technology, savings are also possible due to its pay-per-use character. This concept is especially apparent in environments where having 24-hour active systems is not required, such as in development, testing and certifying environments where machines work only in certain hours (working hours or even only a few days a month), thus allowing considerable savings. However, 24-hour use is also competitive compared to "on-premise" cost.

CONSULTANCY, DEVELOPMENT AND MANAGEMENT

Storm Reply Srl, with its consolidated methodology and partnership with two market leaders such as Google and Amazon Web Services, is able to act as a partner in the assessment of a Cloud Computing adoption and migration strategy. In particular, Storm Reply operates in the following areas:

Collaboration: offering onPremise2Cloud email migration (IBM Lotus Domino, Microsoft Exchange, others) services, and facilitating the adoption of the Google Apps for Business platform by managing Change Management and user training processes.

Ecommerce: creating ecommerce sites, exploiting the Cloud's scalability but guaranteeing the maximum security levels in compliance with PCI/DSS, and integrating ecommerce on the main Social Networks.

Cloud Development & Migration: thanks to the services offered by Amazon Web Services, migrating applications to Clouds in order to exploit the scalability and decrease the TCO thanks to pay-per-use logics. Via the "scaling engine" developed by Storm Reply, application scalability may be automated right from the business rules, not merely infrastructure rules. Creating scalable applications via Google App Engine, the Google platform which takes advantage of being realised with services natively used by Google, such as BigTable.

Cloud Managed System & Security Services: once the Cloud project has been realised, Storm Reply is able to manage it through 24/7 logics, in order to create the application system and the security monitoring system.

Cloud Infrastructure Services: innovative Disaster Recovery models which exploit the scalability logics to minimise costs may be designed using Amazon Web Services' IaaS services, such as storage and redundancy.

Just like greenfield applications can benefit from the cloud, existing applications can also benefit from the cloud. For existing applications, we recommend creating a migration plan, and transitioning application by application. This enables organisations to gain experience with the cloud as they begin to transition larger chunks of their infrastructure. When creating this plan, you will notice that several apps can be easily moved, especially nowadays. Moreover, regarding other apps, they can take advantage of a methodical phased plan approach.

Whether you are a startup or an SMB or Large enterprise or an SI helping a customer, the strategy does not really need to change.



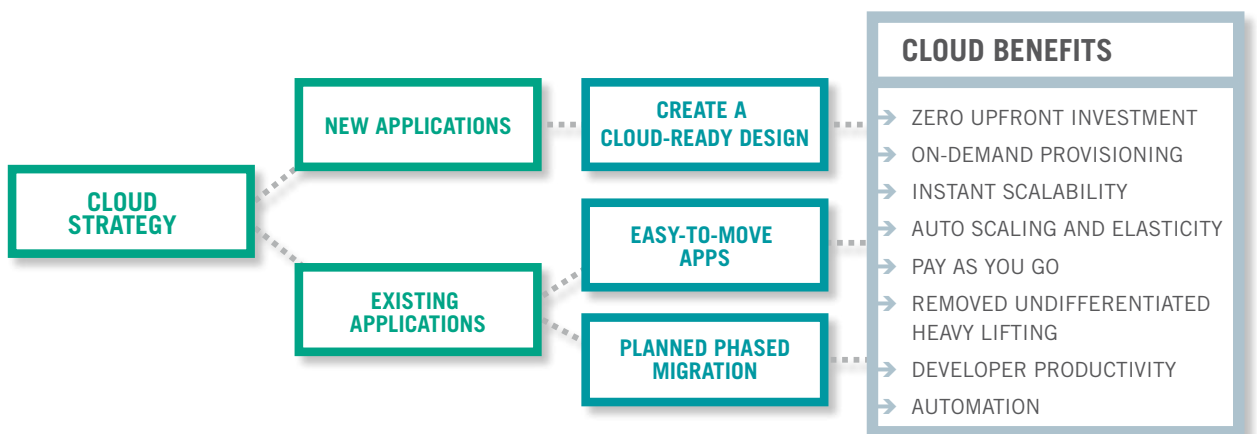
MIGRATION APPROACH

There are several approaches to creating a cloud strategy. The creation of a cloud strategy really depends on a company's needs. We normally consider the two following approaches.

For new applications, new architectures are created and designed with the cloud in mind. Among our customers, many have been able to quickly leverage some cloud architecture patterns to implement elasticity from ground up, loosely coupling, etc., in other words, to create a cloud-ready design from scratch.

ONPREMISE INTEGRATION

A fundamental factor to consider when migrating to the Cloud is the connection with services and On-premise systems. The scalability provided by the Cloud infrastructure is not normally guaranteed to the same extent as with internal services. The service throttling system and information caching design is a key aspect. It must not overload internal resources while protecting however the scalability logics.



SYSTEM, OPERATION & SECURITY MONITORING

The service integrates the basic system monitoring made available by the cloud provider with a series of activities having the following objectives.

- Detecting operation and performance anomalies with 24/7 logic (refer to the following table)
- Guaranteeing that problems are dealt with and managed with 24/7 coverage following procedures which may include:
 - predetermined first-class actions to restore efficiency and performance
 - escalation towards defined points of contact
 - escalation towards service providers used by the application (e.g. external web service providers)
- Guaranteeing independent assessment of service level
 - application performance and response times
 - availability and service level by the hosting platform
 - availability of external services used by the application
- Keeping track of the cases managed in order to facilitate problem management activities
- Reporting

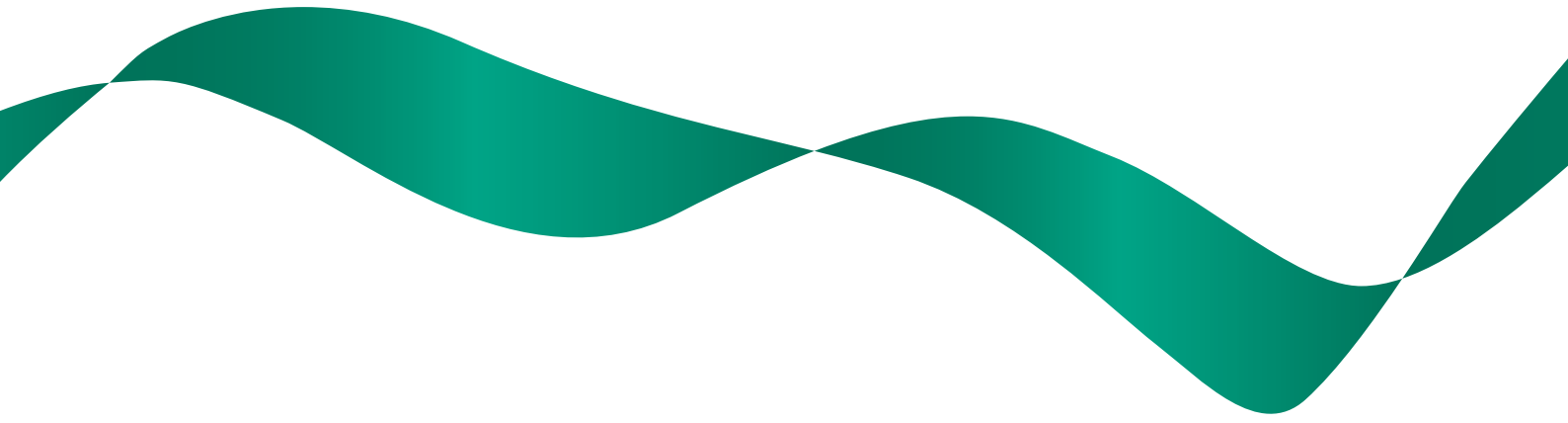
Presence on the Internet exposes applications to risks. Both active measures, such as intrusion prevention systems, and monitoring measures which are designed to detect possible threats in real time are useful for risk protection.

The suggested solution satisfies both needs through different service options, including:

- provision of HIPS protection agents to be installed on the virtual machine hosting the application
- activation of log recording from front ends and RDS services
- management of the HIPS protection agents including activities such as: signature updates, security policy tuning performed by the internal management consoles at Reply SOC
- 24/7 monitoring and correlation of the system logs, applications and protection agents in order to proactively detect possible security incidents
- Reply specialists' analysis of security incidents
- support in managing security incidents
- adjustment of incident detection mechanism and incident management procedure to new threats
- incident tracking
- periodic reporting of all detections

As with other Reply services, while maintaining a general supply framework, the service is set up with maximum flexibility and can be adapted to the real security needs of each application. When the service is being launched, assistance is provided by Reply's SOC security specialists in order to define the protection and monitoring logics best suited to the context to be protected.





Reply Group's Storm Reply specialises in innovative services based on Cloud Computing models. In particular, Storm Reply assists companies in the process of converting applications and infrastructures to Cloud Computing, providing services of consultancy and solution integration in the areas of Software as a Service (SaaS), Platform as a Service (PaaS) and Infrastructure as a Service (IaaS). Storm Reply provides end-to-end support, from consultancy services to the choice of the Cloud model best suited to the needs of individual companies, from the implementation and integration of custom applications and platforms, to maintenance and management services with easy-to-measure use-based pricing. Partnerships with leading global vendors including Google and Amazon allow Storm Reply to deliver the solutions that are best suited to each company's individual needs, both in terms of the model selected and technology adopted. Storm Reply is part of Reply's development strategy for Cloud Computing, a core area of enterprise investment.

For further information: www.reply.eu - storm@reply.eu