A Novo Solutions Executive Business Brief
Computing in the Novo Cloud

The ‘Cloud’ has rolled in and by all accounts is here to stay, but is it really the magic bullet for most businesses and is it right for you? And are all clouds the same? Here’s what you need to know about computing in the Cloud, and what sets the Novo Cloud apart from the rest.

SaaS versus Cloud Solutions?
Novo Solutions has always offered hosted, or SaaS (software as a service) deployment options. It is a great option for many organizations because it provides:

- Lower maintenance and support costs than on-premise based alternatives
- Lower entry point than a licensed purchase
- Reduced challenges associated with upgrades, updates, and security patches
- The ability for remote employees to stay connected
- Reduce workload on already busy IT departments
- Highly customizable user settings
- Lower risk with the ability to easily change vendors if desired

Another key benefit is the fast deployment; the Novo infrastructure is ready to go, all that is needed is to enable it with a license. The result is a very speedy implementation – organizations are up and running in days, instead of weeks or months.

The SaaS model that began a few years ago has now evolved into the “Cloud’ computing model being utilized today. Improvements were made to enhance performance and strengthen security.

Cloud Computing Concerns:
So this idea of ‘hosting’ software and data on the web is not a new one. As mentioned, SaaS has been around for several years. So what makes ‘the cloud’ different?

Here are some of the concerns that were barriers to adopting a hosted model:

- **Security concerns** – organizations have the duty to keep their data safe; moving sensitive data to a shared environment was risky.
- **Integration issues** – will this integrate with the other software I am using?
- **Compliance concerns** – will the software meet our companies/industries compliance standards?
- **Upgrades** – how much control will I have over upgrades?
- **Disaster Recovery** – what will happen to my data if there is a problem? Will my data be able to be retrieved?

These are very valid concerns for any business, especially those with sensitive data such as financial, healthcare, and government agencies. The improved Cloud model is specifically designed for the delivery of cloud services, including multi-core processors, cloud-specific operating systems and combined offerings, thereby offering more security options for organizations.

Why the Cloud?
The past few years have brought sweeping changes to the way we communicate with each other. The world is rapidly changing, as are the tools we use. We have new kinds of devices and new technologies to connect these devices. This has made a huge impact on many businesses, including knowledge management and customer support operations.
Pushing information in the cloud improves collaboration; business partners, employees and customers all benefit from the ease and availability that Cloud computing delivers. Anyone with access to the Internet can now engage in operations through these web based services.

Another key benefit of computing in the Cloud is the cost savings. Businesses today are cash strapped and are looking to reduce costs without compromising services. The financial benefits of Cloud computing are huge. The Yankee Group estimates that Cloud computing brings cost reductions of 50% or more for IT spending. Typically IT spending demands high up front costs, with savings being realized over time. Cloud computing brings almost instant savings, since there are no large, up front costs around implementation.

Cloud computing typically brings cost reductions of 50% or more to IT operations
– Yankee Group

Types of Clouds:
Cloud computing offers organizations improved options that were not available with SaaS. Cloud models include:

- **Private/Internal Clouds** – emulate cloud computing on private networks capitalizing on data security, corporate governance, and reliability concerns. Users “still have to buy, build, and manage them” and as such do not benefit from lower up-front capital costs and less hands-on management.

- **Hybrid Clouds** – consist of multiple internal and/or external providers; an organization provides and manages some resources in-house and has others provided externally.

- **Community Clouds** – several organizations have similar requirements and seek to share infrastructure so as to realize some of the benefits of cloud computing.

- **Public Clouds** – a shared environment where service providers make resources, such as applications and storage, available to the general public over the Internet. Public clouds may have hundreds or even thousands of businesses running in isolated containers within the same physical environment.

Multiple models give organizations the ability choose the model that is best for them.

Most clouds that people are familiar with are the public clouds, also known as shared clouds or private virtual servers. Typically Firewalls (network devices that block certain types of network traffic and activity) are not available in public clouds because of the many types of services that
have to be allowed (i.e. in techno speak - many TCP ports have to be open). While public clouds are a relatively inexpensive offering, the security they provide is greatly reduced due to the lack of Firewall protection and the fact that so many different applications are running.

The Novo Private Cloud:
Through Rackspace, a trusted leader in Cloud computing services, Novo Solutions has adopted a secure, private cloud infrastructure for our customer’s data. Novo data is physically separated on dedicated hardware exclusively for Novo Solutions, providing high levels of security, reliability, and performance.

Partnering with Rackspace to provide a Novo Private Cloud provides Novo Solutions (and indirectly our cloud customers) with the following benefits:

- Full 24x7x365 support and management of the Private Cloud configuration including hardware, hypervisor layer, operating systems, database servers and infrastructure
- Virtual Machine provisioning
- Expert assistance in designing, configuring and deploying expansions to the Novo Private Cloud configuration
- The purchase and renewal of all software licenses including operating system, database and anti-virus updates
- The purchase and deployment of all related hardware components
- Around the clock management of the network and data center
- Industry leading SLAs
- High levels of security, reliability, scalability and performance
- Greener server utilization with reduced energy consumption

The Rackspace Private Cloud infrastructure allows Novo Solutions to provide a secure, reliable server environment to our customers, while at the same time, helps us stay focused on what we do best – providing leading Customer Support and Knowledge Management solutions and supporting those solutions.

So what exactly is a Private Cloud?
A Private Cloud is simply a dedicated hardware environment (pooled resources) with a virtualization layer running on top. This means that multiple virtual servers can be created and managed within a set of physical servers. And since it's an environment dedicated for Novo Solutions – with Firewall(s), Servers and Storage Area Network(s) – only our customers running our applications behind our secure Firewall are living on it.

Features Include:
- Dell Rack Servers
- Intel Quad-Core Nehalem Processors
- VMWare’s ESXi based Virtual Machines
- Fiber Channel Connected Storage Area Network (SAN) SAS RAID drives
- Fully Redundant Power & Network
- 24x7 Server Monitoring
- Managed Backup
The Cloud & Knowledge Management:

It has been said that knowledge is a byproduct of experience and interaction – the right tools allow you to bring this together within your organization and build upon this collective memory. Knowledge Management within the Cloud:

- Allows people to find the right answers faster and the first time. Having the right answers in your company knowledge base readily available to customers and/or support personnel reduces call volume, call handle time as well as increasing first call resolution.
- Enables you to bring answers through the right channels. Self service systems become as effective as agents, and customers can find answers on demand without a wait. Call volumes decrease as customers succeed.
- Improves Call Center Operations – with readily available knowledge first tier support is able to solve more complex cases with less training, lowering escalation rates and improving productivity.

Sensitive, company knowledge is kept secure in the Novo Cloud, and is able to be developed, edited, searched and retrieved on demand – all through an easy to use web portal.

The Cloud and Customer Support:

Providing first-class customer support is more important now than ever. When polled, 42% of people said that the most important factor in recommending a business to a family or friend is a good customer support operation where issues are resolved on the first call (Yankee Group). Combine that with 90% of businesses who say that their customers are more demanding than in
the past, and you can see that it is essential that support operations are not using outdated support software, so that they can keep up with these demands.

Providing customer support in the Novo Cloud ensures that you will using the most up-to-date version of our software. And whether you are providing support from a single location, or from multiple locations, all information is kept secure in a single, central system. This allows even remote employees to access the system from anywhere, at anytime.

**Conclusion:**

With the advances in security and delivery, Cloud computing is proving to be an excellent tool to improve business services while reducing costs. Author Nicholas Carr, argues that the cloud computing paradigm shift is similar to the displacement of electricity generators by electricity grids early in the 20th century. At first there was fear about pooling services with other businesses, but security measures were put in place and costs were greatly reduced by sharing infrastructure.

At Novo Solutions we offer all of our software as Cloud, Annual Subscription, and Licensed On-premise software deployment options. This gives you the option to try one environment, and switch to other if desired – keeping your data in tact. Please contact us for a free trial, so you can try our software using your own data. Quickly, you can be expediting services and saving money ‘in the Cloud’.

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*“As the digital lifestyle changes consumer behavior, managing the customer experience is not just merely capturing customer information and other requests, but a total customer service transformation for all industries”*  
- Yankee Group