Supply Chain Products

Microsoft Cloud Services

Microsoft has built datacenters around the world, 4 in the USA. The USA East and West are for application servers and the North and South for database servers. The servers are placed into shipping containers which each house their own power regulation and cooling. The containers are sent to Dell and Hewlett Packard where they are filled with thousands of individual servers. The shipping containers are shipped back to the datacenters and plugged in without ever opening the container doors.

Microsoft created a new version of Windows named Azure to run on these servers. The word Azure means a tone of blue – sky blue. SCP rents a minimum of one individual application server per instance of SCP software and we can support multiple servers for large clients. Servers come in different sizes with multiple cores and memory sizes at varying costs. Azure automatically supports load balancing to spread the workload over multiple servers if so required for a single client. All of the individual Azure instances are tied together into the "Azure Fabric".

The Fabric tests each individual server every minute. If one of your servers fails, the fabric automatically starts up another server within the container and automatically installs the SCP software. If the entire container fails, the fabric automatically chooses to start up a server in a different container within the same datacenter. If the entire datacenter fails, the fabric automatically chooses a different datacenter. Our customer's online system would never be down for more than 1 minute. After a specific threshold of failed servers is reach with a shipping container, the entire container is unplugged and returned to Dell for complete replacement of all individual servers. Based on a customer's actual usage response time, the fabric will automatically switch datacenters to insure the lowest possible latency (response time of the network).

Microsoft created a new database named Azure SQL based upon their current SQL Server database engine. SCP rents one database server per instance of SCP software. Based on a customer's actual usage response time, the fabric will automatically switch datacenters to insure the lowest possible latency. One database server will support up to 250 customer databases. Every update is automatically replicated to a second hard drive within the datacenter. All updates are also automatically replicated to a second datacenter. This means that a customer's data is automatically stored in 3 separate places within 2 different geographic locations. The Azure Fabric also automatically tests every individual Azure SQL instance every minute and will automatically startup another if required.

A customer can utilize any reporting tools which support Microsoft SQL Server to access their data. This reporting tool can reside on the customer's corporate server or users PC.

Security to the data can be restricted to:

1. Specific IP addresses – for example, a customer could specify that access is only allowed from within their corporate office building.
2. Specific User/Password to the database server.
3. Specific User/Password to the customer database within the specific server.

SCP supports the current version of all major web browsers: Microsoft Internet Explorer, Google Chrome, Apple Safari and Mozilla Firefox.