

# SCHNEIDER ELECTRIC USES INTERCLOUD'S SERVICES TO SECURE AND CONTROL ACCESS TO ITS CLOUD APPLICATIONS

# CHALLENGE

Following a large scale adoption of Cloud technologies, Schneider Electric had to overcome many challenges in order to gua-

rantee performance for its employees who needed to have access to critical SaaS, PaaS and IaaS company applications, from more than 100 different countries.

# **SOLUTION**

To give Schneider Electric control over their cloud applications and ensure their global delivery, InterCloud implemented a comprehensive solution: The Cloud Delivery Platform is available in

the US, Europe and Asia Pacific and strengthens Cloud resources availability for all Schneider Electric's sites, through redundant connectivity within the same geographical areas. This enabled In-

terCloud to guarantee a quality of service (such as latency, jitter, packet loss, etc.), secure access and visibility into the network to their Cloud Computing platforms.

« Bypassing the public internet to reach our cloud applications has allowed us to access our key business data privately, thus securing our data and guaranteeing the performance of our critical applications around the world»

Lionel Marie, Network Architect
Schneider Electric

# BENEFITS

InterCloud commitment to quality of service guarantees end to end control of the network paths between Schneider Electric and the various Cloud providers such as AWS with AWS Direct Connect services. InterCloud Platform has allowed Schneider Electric to regain its ability to oversee and optimize its Cloud usage in a secure way. A typical

latency improvement of 30% was measured, and the jitter rate has been reduced by up to 80%, depending on the local loop operator.



# **CHALLENGE**

## CONTROL OVER CLOUD APPLICATIONS DELIVERY

Schneider Electric is investing heavily in its MPLS network and is always looking to improve the performance of its critical applications. The move to Cloud Computing requires a rethink of the solutions deployed to guarantee the best user experience. Historically, the network used by Schneider Electric to access its resources hosted in the Cloud was the Internet.

As is the case in many companies facing the exponential rise in access to the public internet, it was difficult to design and size these to ensure that all the critical applications hosted in the Cloud worked correctly. The QoS guarantees available on an MPLS network for the most critical flows (ERP, CRM, telephony, video conferencing) cannot in fact be implemented on the public internet. However, this need for prioritization has become vital with the increasing number of critical applications in the Cloud.

## STRENGTHENED METROLOGY AND SECURITY

On its MPLS network and data centers, Schneider Electric uses devices to measure network, system and application performance in order to detect any problems on the network between the user workstation and the applications and to rectify them. In SaaS or laaS environments, this metrology stops at the point of interconnect to the public internet, used to reach the Cloud service.

Having no visibility over a section of the application dataflow routes makes it impossible to diagnose the reason for a drop in performance and it is difficult to act quickly to correct the problem. On a security level, using the public internet network to transport sensitive data to a public Cloud is nearly always considered a risk, even if the data transmitted is encrypted by an SSL/TLS type mechanism.

# SCHNEIDER ELECTRIC NETWORKS INTERNET SCHNEIDER SINGLE ACCESS TO ALL CLOUDS FLEXIBILITY PERFORMANCE END TO END COMMITMENTS CONTROL SECURITY



# THE INTERCLOUD SOLUTION

## IMPROVING PERFORMANCE AND SECURITY

To ensure the performance and security of its Salesforce and Amazon Web Services dataflows in hybrid and Virtual Private Cloud mode Schneider Electric selected the InterCloud solution.

To guarantee end to end high performance, InterCloud leverages its own private network that enables Schneider Electric to connect to AWS & other providers and deliver their Cloud applications to geographically distributed users. Once connected to the InterCloud Edges (access point to the platform), Schneider Electric sites are set to access Amazon Web Services and AWS Direct Connect Services in Europe and Salesforce.com in the US, while InterCloud manages the routing and network configuration to those Cloud destinations.

In particular, InterCloud has four Edges that connect Schneider Electric's MPLS network to the Cloud Delivery Platform; one Edge is deployed in Paris for European users, one in Schneider Electric's data center in the US, one in Honk Kong for Chinese users and one in Singapore for the remaining users in Asia Pacific.

The Cloud traffic then borrows Schneider Electric's MPLS network in each region to reach the nearest regional Edge, configured to then send the dataflows directly to the appropriate Cloud destination.

Since InterCloud is committed to quality of service (latency, jitters, packet loss, etc.) and bandwidth, controlling the network routes taken to Cloud providers is then guaranteed from end to end.

From a security point of view, bypassing the public internet by leveraging the InterCloud Platform has secured the company traffic flows between Schneider Electric and Salesforce. Critical information is no longer transported across an unsecured public network. These same principles are used for applications hosted in the Virtual Private Clouds (VPC) of Amazon Web Services through AWS Direct Connect Services.

## OPTIMISED CLOUD TRAFFIC AND CUSTOMISED VISIBILITY

By adopting Salesforce as a CRM tool, Schneider Electric also wanted to ensure that its users had the best possible long term application experience.

To meet this need, dedicated dataflow analysis tools were selected in order to detect any degradation in network and application performance and, therefore, to be able to optimize the Cloud traffic.

InterCloud has supported Schneider Electric in this process by offering innovative solutions.

First of all, InterCloud provides dashboards, as a standard, for network performance in order to monitor whether SLAs are being met. Secondly, one of the challenges for Schneider Electric was being able to continue using its WAN optimization boxes (600 deployed worldwide) in order to optimize Salesforce dataflows from end to end.

To do this, the technology needed to be as close as possible to the Salesforce servers. On behalf of Schneider Electric, Inter-Cloud therefore maintains these boxes located within its own infrastructure, at less than a millisecond from the Cloud server.

Lastly, Schneider Electric has been able to install Network Performance Monitoring (NPM) equipment and an application probe (APM Application Performance Management) in the same place.

NPM software now provides the best possible end to end visibility of network flows, while APM software controls and compares the Salesforce application performance with the reference tool created by sensors already deployed across the rest of Schneider Electric's MPLS network.



# ABOUT SCHNEIDER ELECTRIC

A world specialist in energy management with operations in more than 100 countries, Schneider Electric offers integrated solutions for a large number of market sectors. The Group enjoys a leading position in customer sectors relating to Utilities & Infrastructures, Industries & Machine Manufacturers, Non-residential Buildings, Data Centres & Networks as well as Residential. Committed to making energy safe, reliable, efficient, productive and green, Schneider Electric works with individuals and organisations to help them make the most of their energy.

# **ABOUT INTERCLOUD**

InterCloud is the European leader in Cloud connectivity as a Service that enables global companies to deliver their Cloud resources in a fast, reliable and secure way.

By providing flexible and seamless Cloud access, InterCloud ensures that companies retain absolute control over their applications. Over 50 of them have placed their trust in InterCloud to deliver an appropriate solution to satisfy security and compliance needs in relation to the hybridization of their business applications

That is why major Cloud vendors like Amazon Web Services, Microsoft, Google Cloud, Salesforce, ServiceNow, IBM, SAP, Oracle Cloud, Outscale and Alibaba Cloud have opted for InterCloud's platform.



88-90 Boulevard de Sébastopol 75003 Paris +33 (0)1 81 80 26 00 contact@intercloud.com

www.intercloud.com