Overview

Country: South Africa

Industry: Travel / Internet

Customer Profile
Travel IT is a leading online travel management company, which is part of the Tourvest Group. It operates an online travel booking engine that is used by many of the large corporate companies in South Africa, as well as SMMEs whose staff do a lot of travelling. The travel management system is accessed via the Internet and currently has 75,000 active users.

Business Situation
The central challenge facing Travel IT, as start-up company, was to acquire a sophisticated, high-speed IT infrastructure from the word go, without having to incur upfront CAPEX costs. It needed a “pay as you grow” solution that would allow it to hit the ground running and immediately expand as and when required.

Solution
EOH’s Cloud Services division provided a fully virtualised entire infrastructure environment on a Managed Hosted Cloud platform. Intelligent load balancing ensured speed and reliability, with a fully redundant secondary disaster recovery environment as a back up. High availability and optimal performance were key features of the solution.

Benefits
- Immediate readiness and quick growth
- Flexible infrastructure with optimum return on expenses
- A lean business with quick success
- Full realisation of opportunities
- No CAPEX
- Disaster recovery without additional investment
- Vendor-neutrality allowing most effective customer service
- Resources available for future expansion
Travel IT – from start-up to mature business success using only cloud infrastructure

Travel IT is a leading online travel management company, which is part of the Tourvest Group. The core of its services is an online travel booking engine that is used by many of the large corporate companies in South Africa, as well as SMMEs whose staff do a lot of travelling. Its main application is the management of travel spend, covering all aspects of corporate travel – from flight bookings to car rental, hotel reservations and forex.

The travel management system is accessed via the Internet and currently has 75,000 active users.

As an expert in all facets of cloud computing, EOH Cloud Services has created a series of educational videos that cover a wide range of topics.

For more information on the Cloud, visit www.youtube.com/user/eohcloud
The challenge

From its inception as a start-up company Travel IT wanted to deploy its new travel management application online without having to invest money in building its own infrastructure. It was crucial to keep CAPEX to an absolute minimum and to run as lean a business as possible, focusing only on core competencies.

It needed a high-speed infrastructure to house and deliver its system, which could expand in proportion to company growth once proof of concept had been demonstrated, operating on a “pay as you grow” basis.

Therefore the central challenge facing Travel IT was to acquire the use of a sophisticated IT infrastructure from the word go, which would be flexible and scalable to match company growth as it eased into the market. The company was absolutely clear that it did not want to build, own or manage any aspect of the infrastructure, including hardware, technology, software or licensing. The infrastructure solution needed to be fully managed, and not require the diversion of any Travel IT resources from its core business.

Real-time, data intensive system requiring very fast connectivity

Speed and reliability were crucial requirements. The online travel management application allows users to manage all aspects of business travel. The system operates in real time to retrieve, present and compare booking options and prices for airline tickets, car hire, hotel reservations and other aspects of business travel on a single unified dashboard.

Because the focus is on controlling travel spend, once an itinerary has been chosen, the system runs a further real-time comparison to check if there are other options available that would save costs. The potential savings are displayed, with the ability to change the bookings in the itinerary to take advantage of these. If changes are not made, the system includes a “missed savings” note in the final booking report.

An advanced workflow system allows for all itinerary choices and bookings to be sent up and down a chain of approval, with all parties able to see and compare options and potential savings.

The application represents a more cost-effective alternative to using a travel consultant, and offers the significant benefit of being able to view and manage all aspects of the itinerary in one place, using a single interface. Users do not have to navigate to all the individual booking systems of each supplier. Once a booking has been approved and finalised, the system automatically issues all tickets and send the itinerary to all relevant parties.

In order for the system to work optimally it needs to make a very large number of real time connections to a number of other systems (e.g. the flight booking lists of all relevant airlines), and very quickly process the data that is returned. This places a premium on speed of execution and connection speed, and it was therefore imperative that the infrastructure solution was able to satisfy these demands.

EOH Case Study - Hybrid Cloud and Cloud Backup
The solution

**EOH Cloud Services provided a fully virtualised entire infrastructure environment on a Managed Hosted Cloud platform. The environment was designed to allow Travel IT to consume computing resources using a tiered approach.**

This approach allows for the deployment of workloads using the cloud management layer, divided into a front-end (customer-facing website) in a secure DMZ for the necessary security isolation, and the procurement of computing resources for the back-end environment.

The solution is able to satisfy the different storage requirements of each of the two environments and their workloads, including SSD for the main database where a lot of the workload happens. The solid state provisioning resulted in a significant increase in processing speed for the most activity-intensive processes.

**Optimal performance for revenue-dependent services**

High availability and optimal performance were key requirements, given the real-time, data intensive nature of the system. Travel IT’s revenue has always depended on providing constant availability for its customers.

F5 load balancing technology was employed for the web service, providing intelligent traffic routing. This ensured high availability.

Disaster recovery, failover and redundancy were also important requirements. The system front-end is replicated across two separate data centres, to allow for future growth and to ensure that there is a failover option in the event of any failure in the primary data centre. This replicated front-end environment, including all the necessary data, allows Travel IT to be back online very quickly in a worst case scenario. To date this has not been necessary.
The results

The EOH Hosted Cloud solution allowed Travel IT to get up and running immediately as a lean start-up, with the full infrastructure capabilities needed to handle the amount of business it needed to attract. This was achieved efficiently and without any wasted expenditure or high initial costs.

From the outset, all infrastructure was leased on a “pay as you grow” basis, allowing Travel IT to contain and control IT costs, while always having the amount of infrastructure and technology it needed. The company continues to only pay for the tech it needs. It is also able to first test any infrastructure expansion in a virtual environment before committing to anything.

EOH’s Cloud Services division provided all the specialised skills, plus all firewall services. As a result, Travel IT did not have to employ any expensive IT resources and have them on its payroll.

All technology and hardware is enterprise-grade, which was a big advantage for a start-up company. It also has large bandwidth capacity, which is very important, especially to handle overseas connectivity.

The system has proven to be exceptionally reliable and robust, achieving 99.999% uptime during its lifespan.
The benefits

• Immediate readiness and quick growth
  The biggest benefit has been the successful launch of a lean cost-effective start-up that was completely ready to do business from the word go, with all the technology required to run a successful operation, and as much room as it needed to grow quickly.

• Flexible infrastructure with optimum return on expenses
  Travel IT gained a complete IT infrastructure without being locked in to any specific vendors and without being committed to an expensive, fixed infrastructure. It was able to obtain the exact type and extent of infrastructure that it needed. This ensured that there was no unused infrastructure or infrastructure wastage, which was especially important in the delicate start-up phase.

• A lean business with quick success
  Travel IT has been able to run a lean operation while still having all the technology and infrastructure it needs to land some big business and quickly achieve success.

• Full advantage of opportunities
  Because Travel IT was able to roll out on a complete infrastructure from the beginning, it was able to take advantage of all business opportunities, never having to turn away business or strain its resources through a lack of infrastructure.

• No CAPEX
  No initial CAPEX was required, which was a huge benefit for a start-up business. Travel IT’s CIO, Barry Painting, still proudly asserts that “as a CIO I never have to go and ask for CAPEX”. He also makes a point of noting that “We always said that we never wanted to own any hardware, and to this day we don’t”.

• Disaster recovery without additional investment
  A further advantage of the cloud infrastructure is that because all the servers are virtual, including backup and recovery, no additional investment was needed in order to replicate the technology and environment for disaster recovery purposes.

• Vendor-neutrality allowing most effective customer service
  The application is housed in a vendor-neutral data centre not aligned to any of the major ISPs, allowing any customer to connect to the IT travel service regardless of the service providers that they use. This has proven to be a substantial benefit.

• Resources available for future expansion
  On the back of the first few years of success, the company is embarking on a refresh of the solution architecture in order to tackle the next phase of growth. It is taking advantage of the in-house EOH skills to advise on how to do all of this – thus avoiding the need to hire in-house resources or engage expensive outside consultants.
With EOH Cloud Services the opportunities are endless...

Contact: 011 607 8100 • Email: info@eohcloud.co.za • www.eohcloud.co.za