



# Next Generation Data Center Management...

## Unified Visibility and Management of the Data Center and Network Creates Unprecedented Gains at One of South Africa's Largest Service Providers



### THE PLAYERS

**CUSTOMER:** **Imperial Online** – A member of Imperial Holding's Group, Imperial Online is one of South Africa's largest and most comprehensive service providers. By providing enterprise-level data centers and hosting services, ISP connectivity, telecommunications, equipment sales and high quality customer care, Impol is unique in bringing a full slate of IT services to its clients. With over 150 employees and thousands of unique customer sites nationally, **Imperial Online** is one of the fastest growing IT companies in South Africa.

**PARTNER:** Solution Blox – Based in Gauteng, South Africa, Solution Blox is a certified reseller of Dorado Software's Redcell products. Solution Blox provides infrastructure management products and services to customers throughout EMEA.

**PROVIDER:** Dorado Software – With over 5000 enterprise and SMB customers and 100 worldwide service providers utilizing their Redcell product, Dorado Software, based in California, USA, is a leading global provider of infrastructure and service management software.

Dorado's Redcell product portfolio finds, configures and monitors converging IT and network assets including servers, storage, networking and security devices and applications. Redcell also automates infrastructure lifecycle management from visibility, proactive monitoring, change detection and remediation, troubleshooting, OS/file and patch updating, service provisioning, to reporting on everything.

### THE BUSINESS SITUATION

Rapid growth and profit pressure is a common problem among ISPs and hosting providers these days, especially in the emerging African markets where broad band internet is still a price and scare commodity. A highly expansive and competitive internet marketplace is providing consumers and businesses more choices at lower market values.

**Imperial Online**, while forecasting their growth rate, was especially cognizant of these forces and the new policies enacted within the South African government designed to spur internet and telecommunications growth. The combination of these forces made it critical for **Imperial Online** to provide highest-value service levels and best choices for businesses and consumers - a part of that being highly available data centers and network infrastructures.

With over 3500 unique customer sites and a high level of revenue coming from data center hosting, the need for consolidated views of the overall infrastructure including servers, switches, security, storage and external network events was vital. The current method of monitoring included no less than 12 different tools and a lot of man hours by IT technicians, many of which did not provide clear paths of interconnectivity.

Additionally, with a third state-of-the-art data center coming online in Cape Town later in the year, **Imperial Online** knew there was a need to improve the existing infrastructure monitoring and management tools in order to provide the high-availability services they have become known for.

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## THE TECHNICAL SITUATION

The **Imperial Online** infrastructure is comprised of over 1000 servers and switches throughout 3 data centers and numerous customer sites. The converging next gen infrastructure is comprised of equipment from various manufacturers including Cisco, Juniper and HP. Both Windows and Linux operating systems are utilized in the data center and at some customer premises where Imperial Online manages the network.

Many customers access **Imperial Online** infrastructure via their local or regional Telco company, making visibility into the customer premises difficult. Furthermore, changes to assets within the telco-owned infrastructure sometimes created a ripple effect of service availability in **Imperial Online's** environment.

In order to maintain control over such an expansive infrastructure, over a dozen individual network and server tools were employed to discover, monitor, configure and report on the disparate devices. Gaining a comprehensive view, and control, of the environment was difficult at best due to the lack of interoperability of the tools. Especially troublesome was the prospect of providing performance and status reporting to management and customers – individual reports were typically hand-merged into a single document. In short, a pro-active approach to managing such an extensive environment was proving time-consuming and expensive.

## THE SOLUTION

The result of a thorough selection process, Dorado Software and Solution Blox were chosen to provide a proof of concept project at Imperial Online. Two driving factors in the selection of Dorado Software was the modular offering – individual services can be purchased separately – and the combination of server and network monitoring in a single platform. Another feature that separated Dorado from other product considerations was Redcell's multi-tenant capabilities: customer networks can be logically segmented and identified for various functions and activities.

From a cost standpoint, Dorado solutions were a fraction of most typical enterprise-level solutions with competing platforms asking as much as \$50 to \$100 per-device per-year. Cost of ownership for the 3-year study Impol was utilizing made these solutions prohibitively expensive.

Other deciding factors on the selection of Redcell included level of risk: many open-source solutions were available to **Imperial Online** but the lack of a central support mechanism with vested responsibility to the product made the cost/risk equation untenable.

During the 10 week proof of concept, stakeholders were impressed with the lights-out management capabilities of Redcell. When technicians received text messages that firmware upgrades were tested and successfully installed on a variety of disparate network devices, a large step towards proving the capabilities was overcome.

Following the successful proof of concept, full deployment commenced and was completed in an accelerated timeframe, the first portion of the project being a massive data collection and consolidation project headed by Solution Blox. During the deployment process, Dorado provided custom integration and driver software for various devices on the customer network including integration for some previously unsupported HP devices. An ongoing operations project is in effect in order to provide expanded functionality including integration with Impol's Customer Service Management system.

## THE BENEFITS

At the conclusion of the Redcell deployment project, **Imperial Online** had taken a key step towards managing their Next Generation Data Centers. The most immediate benefit was the consolidation of over a dozen monitoring and management products into a single product: Dorado Redcell. This single, integrated platform spanning multiple layers, domains, networks and services created immediate benefits including streamlined infrastructure management, reduced operational costs, increased network availability, increased staff productivity and evaluation, and enhanced customer satisfaction.

Besides the ability to manage the entire data center and network infrastructure from a single console, operational efficiencies also include consolidated reporting. A challenge in competing platforms and historically a painstaking and time-consuming task, Redcell now automatically creates and distributes key environment reports to stakeholders.



Business opportunities from the Redcell deployment include the ability to monitor and manage customer networks from the Redcell console. With the inherent cross-device functionality and recently developed multi-tenant capabilities within Redcell, customer network and MPLS management provides Impol's customers with additional value-add services.

The capability of Redcell was a big driver in negotiating with regional and national Telcos for increased collaboration. An additional benefit from the combination of Impol's growth and the Redcell deployment was the ability to gain crucial Telco-owned CPE equipment change information. Now, updates to Telco-owned equipment are recognized by Redcell and visible to Impol network engineers. This visibility greatly improves the change and risk-management strategy of Impol operations.

Since Redcell's deployment, Impol has moved forward with integration between Redcell and the Impol CRM system. This integration provides dramatically improved customer service with respects to customer-managed equipment, network statuses and change management. Additional workflow layers have been added as well, creating more efficient and streamlined customer interactions.

Dorado's Customer Service and product enhancement resources have provided a key role in realizing the **Imperial Online** customer success. From multi-tenant functionality to additional device support, Dorado has proved responsive and able to change in order to ensure success at Impol. Even with a large time-differential, Dorado has been able to strike a rhythm with the customer from a communication and response standpoint. These abilities have made it possible for Solution Blox to expand offerings further eastward into additional EMEA territory.

## CONCLUSION

The result of a deliberate selection and cost analysis process and thorough proof of concept exercise, **Imperial Online** was confident that Redcell would meet the objectives of creating an efficient Next Generation Data Center. By leveraging Redcell's inherent asset lifecycle and environment management capabilities, Imperial Online is on the leading edge of providing best-in-class services to their clients. In addition, successful collaboration and project management between Dorado, **Imperial Online** and Solution Blox made for a smooth and successful platform deployment. The Impol team has moved from being reactive and in crisis control mode, to being proactive managing the client services more effectively.

## ABOUT REDCELL

Redcell offers complete IT lifecycle management of your entire infrastructure—visibility, configuration file back-up & restoration, software (OS) release management, comprehensive logging & auditing, service & device health monitoring, performance management, change detection and remediation, event management & automation, graphical service, network, and device topology, service provisioning, and comprehensive reporting on everything!

## QUOTES –

•*"Dorado's Redcell product has provided our organization with the data environment visibility and management that we have been looking for. It helps us meet customer demands by maximizing our high availability services in a cost-effective way."* Andries Coetzee – General Manager

•*"Now, with Dorado's Redcell reporting capabilities, my staff can focus on customer-facing value additions rather than stitching together performance and statistic reports from disparate tools. I have a more visible and uniformly managed network AND data center with the reporting to prove it."* Sias Basson - Operations Director

•*"My ability to forecast network and data center needs, gain visibility into our Telco's activities and provide comprehensive lights-out management of critical infrastructure is made possible by Dorado's Redcell product suite. I am more confident than ever that our environment can easily meet and exceed our customer's demands."* Philip Wege - Network & Security Team Leader



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