

IP Address Management

Opening the door to an efficiently managed IP future



In order to connect to today's networks, clients have to have IP addresses. Without IP addresses, networks wouldn't work. Yet fail to manage them, and networks would grind to a halt anyway.

When the number of IP addresses in use by BT shot past the 70 million mark, the hidden cost of trying to keep track of them was increasing even faster. The buck stopped at Kevin Bates' door; and the answer was right there on his doorstep. Cygna IPControl™ from Cygna Labs brought things back in line. Now, although IP address numbers in BT will inevitably continue to grow, costs no longer keep pace.



With more and more web-enabled devices and applications demanded, service providers have to run ever faster just to stand still. IPControl™ from Cygna Diamond IP brings the control we need to manage IP addresses now and in the future.

BT streamlines IP address management for 70 million addresses with Cygna IPControl™ from Cygna Labs

Challenge

IP addresses are the unique identifiers that enable devices such as computers and printers to recognise and talk to each other across the internet and corporate infrastructures. It's essential that they're well managed: allocating the same IP address twice would be catastrophic.

As a world-leading service provider BT already uses 70 million IP addresses. And the job of managing them is getting harder. "That quantity is growing rapidly as the company strives to support demand for new network-attached devices from both internal users and external customers," explains Kevin Bates, Lead Designer for IP Address Management in BT Innovate and Design.

It's not only that. Virtualisation means that previously isolated IP domains, such as data centres, are being brought into direct contact with the wider world. The IP address management time bomb was ticking; new thinking was needed. Quick to recognise its strategic importance, BT implemented the award-winning Cygna IPControl™ technology.

Solution

Cygna IPControl is an advanced IP address management system that enables organisations to maintain a centralised IP address inventory, configure and manage servers, and track and report on usage of IP addresses and associated IP device information. Offering full lifecycle management, from device discovery to configuration management, its intuitive user interface and standard templates simplify administration. The Cygna IPControl application can be loaded onto customers' own hardware, pre-installed on Cygna Sapphire hardware, virtual or cloud appliances, or deployed as a hybrid of both.

In BT, numerous tools – from in-house spreadsheets to proprietary applications – had been historically used for IP address management in different parts of the company. That fragmentation spawned inefficiency in what was already a very labour intensive area. So, in just 18 months, BT moved all 70 million of its IP addresses under the management of the Cygna IPControl platform, greatly simplifying the administration of its data centres across the globe.

Value

One of the key benefits of Cygna IPControl is its user friendliness. Kevin Bates says: "The simplicity and consistency of the Cygna IPControl interface allows administrators to rapidly climb the learning curve and quickly achieve best practice outcomes." Furthermore, because IPControl is cloud- based and accessed via a web browser, rather han sitting on a PC, it can be managed from anywhere. And that makes it ideal for field-based staff.

The benefits to BT from the Cygna IPControl solution have already started to come through. In the past extracting IP address information, and then formatting and loading the data, was a complex and expensive operation requiring specialist IT expertise. Now IP address management in BT is largely automated, with addresses identified and allocated via a software-based IPControl template. This feeds auto-build tools, before the data is downloaded onto network devices like routers and switches.

Such a zero touch approach massively reduces implementation times and virtually eliminates errors, improving customer service. Furthermore, by taking over mundane manual tasks, it lowers costs and allows IT professionals to focus on more productive work. "With IPControl we have a structured solution that complies with all relevant industry standards," concludes Kevin Bates. "Cost reduction from IP address management consolidation means we're looking forward to a three-year return on investment in the order of 150 per cent."



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Kevin Bates, Lead Designer, IP Address Management, BT Innovate and Design

Core services

Diamond IP is a leading provider of software and appliances that help customers effectively manage complex IP networks to maintain a centralised address inventory for IPv4 and IPv6 addresses, configure and manage DNS and DHCP servers, and track and report on IP addresses and associated IP device information. IPControl™ is a comprehensive full-lifecycle IP address management solution. It can be loaded as an application on customers' hardware, pre-installed on IPControl Sapphire appliances, or arranged as a combination of both.

For more information about Cygna Labs products and services, please contact us at