



Creolink scales DNSBOX solution in line with growth

CHALLENGE

Business growth led to revision in DNS requirements - DNSSEC, IPv6

Supporting new service offerings without the headaches of a system upgrade

SOLUTION

1x DNSBOX master and 1x failover master

2x DNSBOX slaves

Easy, affordable upgrade to full DDI solution

BENEFIT

Reliable DNS system - 7+ years

DNSSEC support to facilitate TLD hosting

Full visibility and control of IP space



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Creolink is the leading telecommunications services provider in Cameroon. It has a 14 year pedigree in providing high-speed internet access and telephony connectivity across multiple remote sites, to a commercial and residential customer base.

Providing better user experience through reliable DNS services

When CreoLink first contacted ApplianSys in 2008, it had 500 IP addresses and was serving 600 residential and corporate customers. At the time, Network Manager at CreoLink, Daniel Kemayou, deployed a **DNSBOX300** master and 2 **DNSBOX100** slaves for handling DNS.

Business expansion – a shift in requirements

Now, CreoLink delivers telecommunication services to more than 10,000 customers and has widened the scope of its offering to include Top-Level-Domain (TLD) hosting. This has prompted a revision of its DNS requirements - with security a top priority, especially for domain hosting services.

Most TLDs support DNSSEC – a security extension of the DNS protocol that digitally signs DNS records with a set of encrypted keys, making them harder to fake and protecting against cache poisoning.

DNSBOX Sales Executive Ross Horn explains: "For effective cache poisoning protection, everyone in the 'chain' of a DNS request must sign their records, including hosting service providers like CreoLink. But managing encryption keys manually is error-prone and a single mistake in the "key rollover" could cripple CreoLink's ability to resolve records for its customers."

CreoLink needed a solution that would handle DNSSEC automatically.

Preparing for continued network growth – Ipv6

Another concern for CreoLink was IP addresses management (IPAM): with more subscribers using IPv6 devices, the service provider needed visibility of IP addresses to plan growth efficiently. This involves:

Managing IP addresses and allocating them to different subnets and domains;

Planning IP address allocation for future growth: assigning blocks to specific domains, keeping others free and having a system to handle both IPv4 and IPv6 client devices.



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Simple upgrade to fully integrated DDI

Outsourcing these services was not an option because Creolink wouldn't be able to guarantee security, nor have direct control over when and how changes were made on an external IPAM system.

Pleased with the existing **DNSBOX** solution, Daniel contacted his ApplianSys Account Manager, Ross Horn, to discuss upgrade options.

"It was clear that Creolink's new requirements would easily be met by a simple upgrade to **DNSBOX**'s fully integrated DDI management solution. One of the key benefits of the **DNSBOX** solution is its flexibility in fitting specific requirements and the ease with which it can be scaled – very affordably – as these requirements grow in complexity and/or size," says **DNSBOX** Sales Executive, Ross Horn.

Following this, the ISP deployed two **DNSBOX200** slaves in different cities, remotely managed by a **DNSBOX400** master.

"The solution makes it easy to store DNSSEC keys securely, providing automated zone signing and key management. It also comes with a feature rich, well documented XML-RPC Application Programming Interface (API). Creolink can use this to create new bespoke applications, such as one to allow creating domain names directly from the provider's website.

"The IPAM module makes it very easy to get full visibility of their IP space and effectively plan for and allocate IP addresses to various clients – and it's all done centrally," says Ross.

RESULTS

DNSBOX has proven to be a reliable and robust solution: Creolink has used it to support its DNS services for over seven years.

As its requirements have grown, the ISP has been able to extend the solution to facilitate business expansion with modest incremental investment: "Creolink are happy with their **DNSBOX** solution because at each point in time, they've just had to pay for what they needed, without limiting future options," says Ross.