



Oportunidades y Desafíos que abre el nuevo Protocolo IPv6 en el Mercado Latinoamericano



Abril 16, 2013



What is DDI & IPAM?



What is DDI?



DNS, DHCP, IP Address Management

What is DDI?

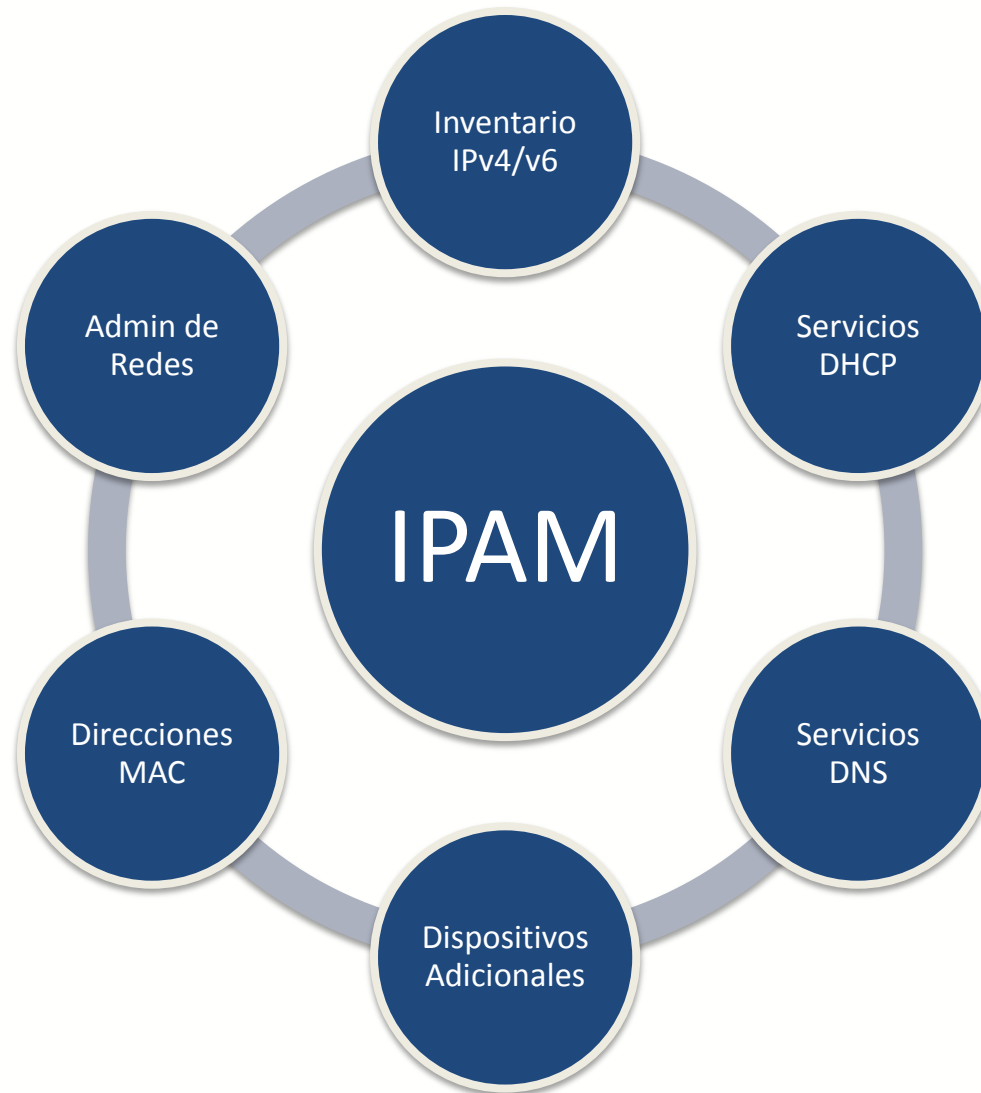


DNS, DHCP, IP Address Management

It's about the management of your name and address infrastructure

- DHCP provides management of dynamic IP addresses
- DNS maps names to addresses

What is IPAM?





IPv6



IPv4 Background



- Protocol is ancient (early 1970s)
- Designed to support killer apps of the time
 - FTP (1971)
 - TELNET (1972)
 - SMTP (1981)
 - HTTP (1991)
- IPv4 address space is limited - about 4B total addresses

Welcome IPv6



- IPv4 is exhausted: IPv6 is finally here
- Game changing event – The largest network changeover in the history of the Internet
- Panic has not set in yet
- Organizations are/will recognize the need for change
- Global concern
- Single largest driver for IPAM

How Long Will it Last?



ARIN

June 2014

APNIC

Apr. 2011

RIPE NCC

Mar. 2012

LACNIC

Mar. 2014

AFRINIC

May 2014



IPv6

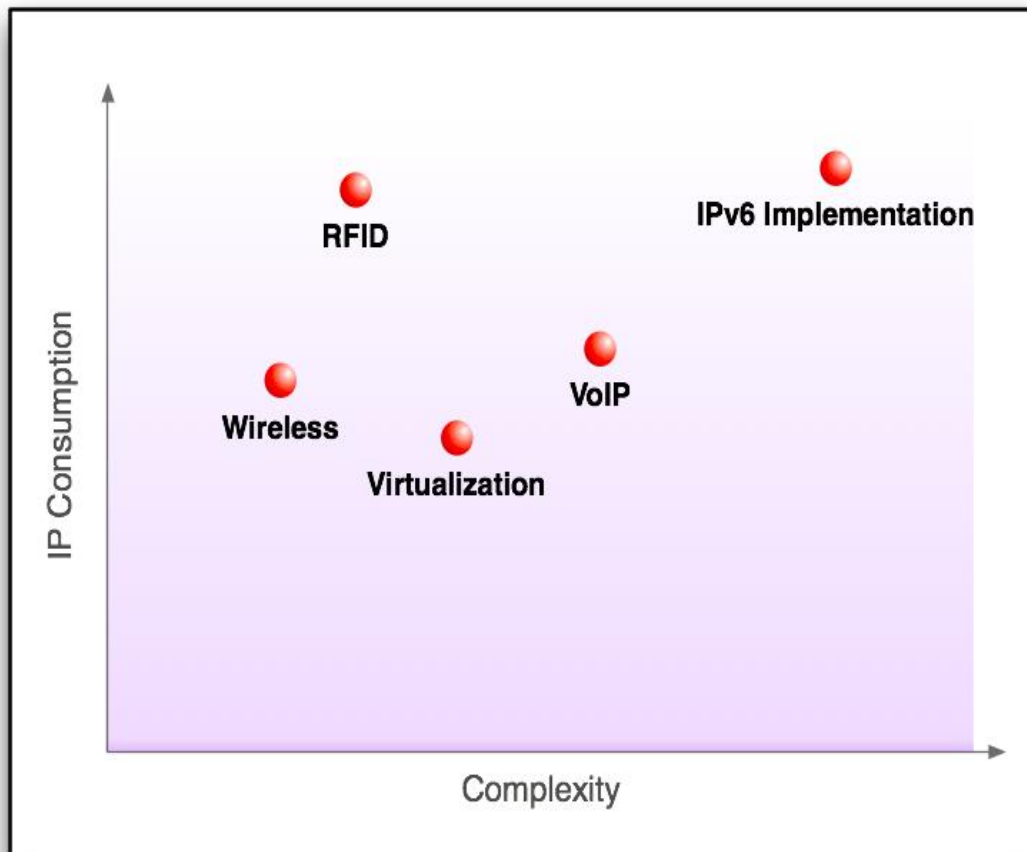
“By 2015, 17% of global Internet users will be IPv6, with 28% of new Internet connections running the protocol.”

Gartner, Dec 2010

Mundo es IP-Dependiente



Consumo acelerado de Direcciones IP debido a:



- Crecimiento de infraestructura
- Aplicaciones
- Virtualización
- Planeación de desastres
- MS DNS/ DHCP – Sin IPAM
- Hojas de cálculo – Nada Viables
- Visibilidad y cumplimiento
- Necesidad – Determinar quién está en la red

IPv6 – How Many IP Addresses?

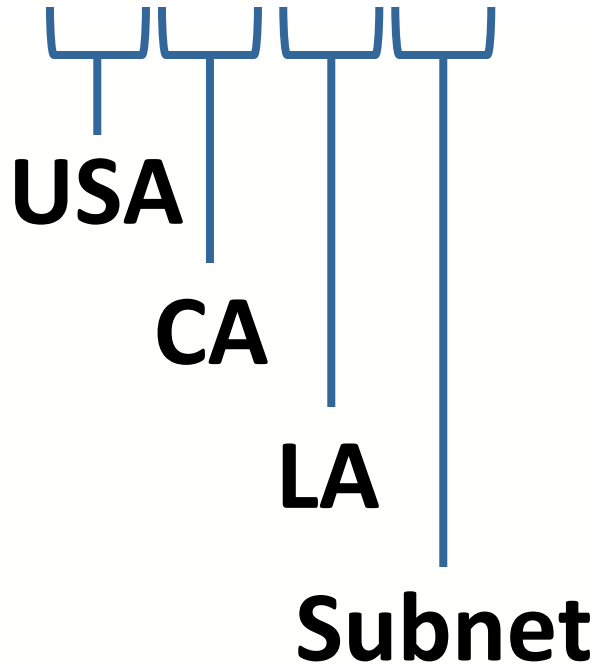


Dissecting the IPv6 Address



Use IPv6 allocation to understand IP address

2001:0DB8:**001A:0F14**:BC:F78:9045:C102





How good is
your
memory?





10.4.83.72

IP6



10.4.83.72

IP6

IP6

2001:fece:ba23:cd1f:dcb1:1010:9234:4088

IP6

IP6

2001:fece:ba23:cd1f:dcb1:1010:9234:4088

Needle in a Hay Stack



dcd1:1010:9234:4088

dcb1:1010:9234:5088

dcb1:1010:9234:4088

dcb1:1010:9234:408b

dbc1:1010:9234:4088

dcb7:1010:9234:4088

dcb1:1010:9234:4a88

dcb1:101a:9234:4088

dcb1:1010:8234:4088

dcb1:7010:9234:4088

dcb1:1011:9234:4088

Needle in a Hay Stack

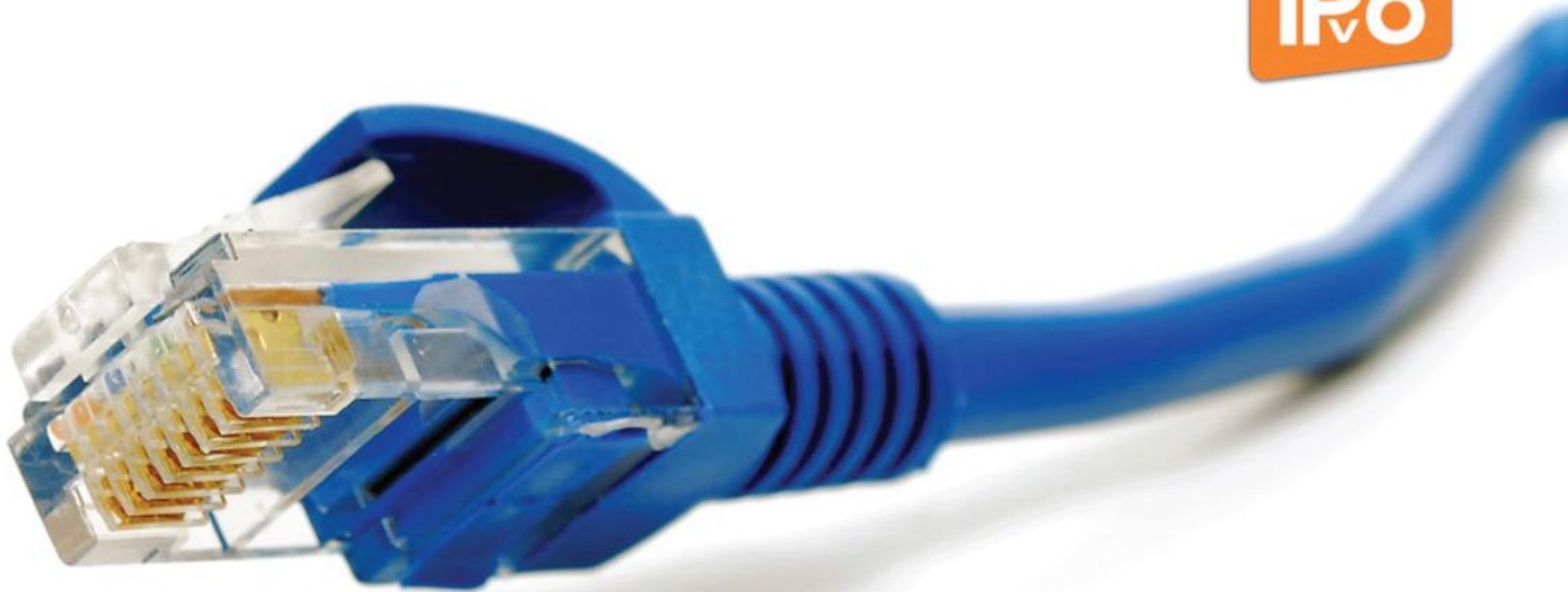


dcb1:1010:9234:4088



Why do I need to Change?





Staying connected is
the rule for successful
businesses



IPv6

Cloud applications
require more addresses



IPv4 will move into legacy status



Networks will
become more flexible

The background of the slide is a dense, multi-colored field of small, round candy beads, similar to M&M's or Skittles, in various colors including red, blue, green, yellow, pink, and white. In the top right corner, there is an orange rounded square containing the text 'IPv6' in white.

IPv6

Addresses will
no longer be a
scarce resource



Management is the Key





Addresses are
not human
friendly



IPv6

DNS will become
more important.



Security will be
different



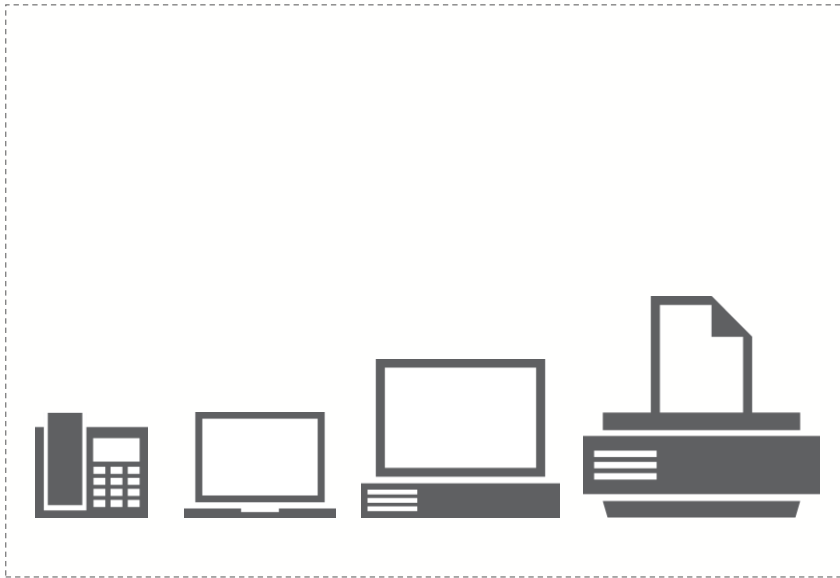
IP_v6

IP Address
Management
Software is Key

The Corporate Office - Yesterday



Wired IP Devices



Physical Data Center

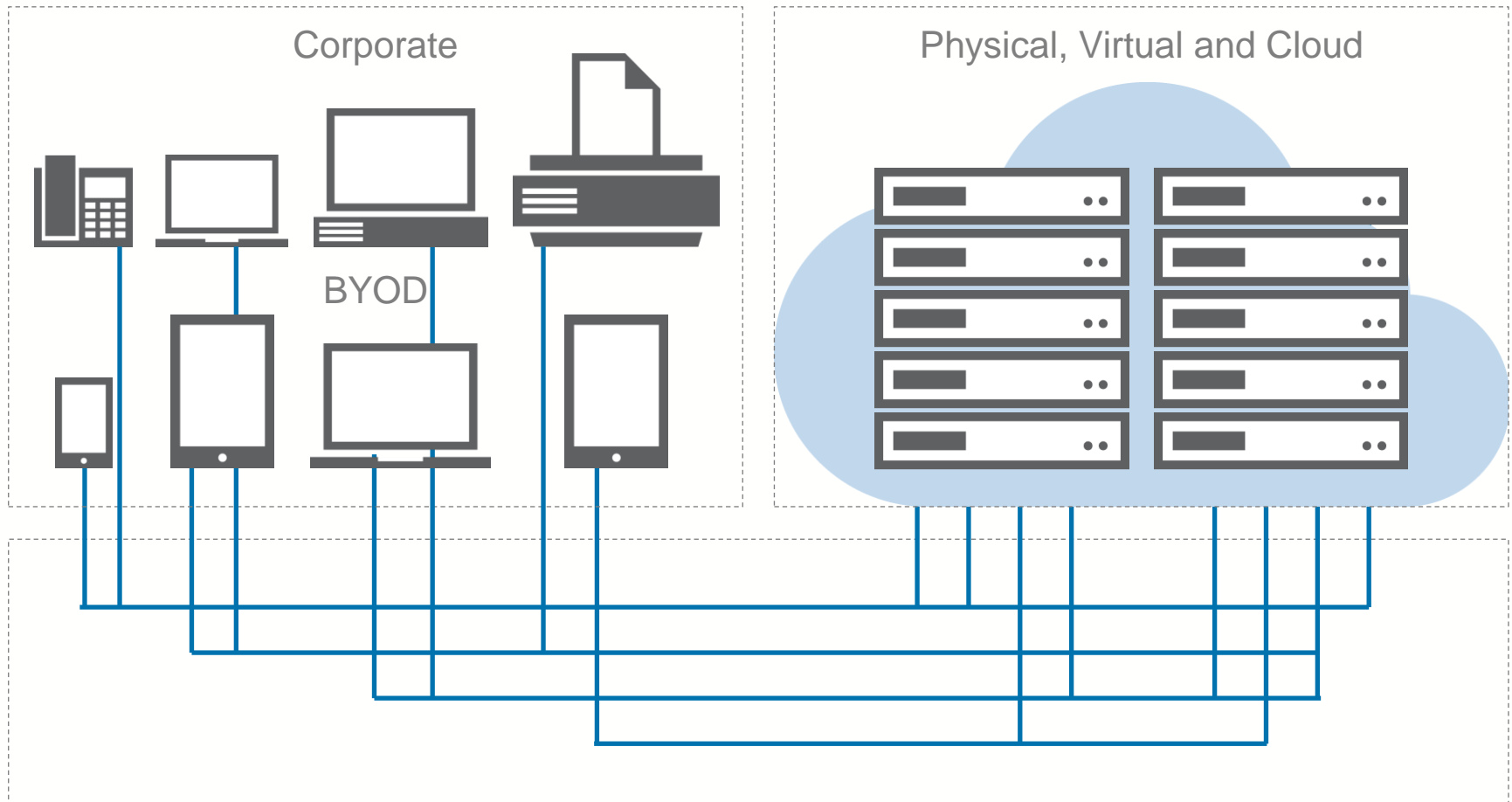


Mobile and Cloud are Changing IT



Your Offices

Your Datacenters



Your Network



Why BlueCat ?



Datos Relevantes



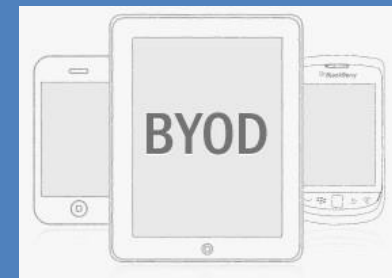
11 Años
Mercado DDI

+1800
Clientes

+120
Partners



IPv4 / IPv6



BlueCat's IPAM Portfolio brings Network Intelligence



Your Offices

BlueCat Mobile Security

Protect the network from unsecured devices
Limit access to sensitive applications
Integrate with Mobile Device Management

Visibility and Control

Your Datacenters

BlueCat Automation and Self-Service

Provision any device automatically
Delegate critical tasks with confidence
Connect existing systems and processes

Reduce Errors and Costs

Manage all network addressing centrally
Connect users, devices, location, applications and activity
Deliver value through architecture, scale and multi-tenancy

BlueCat Address Management

Ensure Always-On Connectivity

Your Network

BlueCat Networks recibió la clasificación más alta "**Strong Positive**" en el MarketScope 2012 por segundo año consecutivo. Un "**Strong Positive**" es visto como un proveedor de productos, servicios o soluciones que las organizaciones deben considerar como una excelente opción para invertir estratégicamente

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Gartner.

MarketScope for DNS, DHCP and IP Address Management

4 April 2012 ID:G00229075

Analyst(s): Lawrence Orans

VIEW SUMMARY

DNS, DHCP and IP address management solutions help improve network manageability and reliability. IPAM and the requirement to improve DNS and/or DHCP stability are the two most common drivers for these solutions.

What You Need to Know

Domain Name System (DNS), Dynamic Host Configuration Protocol (DHCP) and IP address management (IPAM) solutions tend to be "sticky." Enterprises don't change vendors often because of the mission-critical nature of DNS and the operational workflow that organizations build around their IPAM tools. When adopting new solutions, large enterprises should plan for a five- to 10-year time horizon. Small and midsize businesses (SMBs) have more flexibility — mainly because their requirements are less complex.

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MarketScope

Gartner estimates that IPAM is the primary driver in more than 60% of DNS, DHCP and IPAM (DDI) projects. Many enterprise networks are still managing their IP address space manually via spreadsheets (approximately 75%), via homegrown applications or a combination of the two.³ IPAM solutions enable network administrators to work more efficiently. Key capabilities include automating workflow processes, highlighting shortages and potential issues with IP address space inventory, and enabling tiered administration (senior-level administrators delegate tasks and sign off on changes performed by lower-level administrators).

In nearly 40% of enterprises, improving the stability of DNS and/or DHCP is the primary driver for purchasing DDI solutions.³ Many organizations use a DDI project to consolidate a heterogeneous DNS name server environment (for example, Windows DNS and Bind) into a common DNS name server platform. The same approach applies to DHCP, where multiple servers (for example, Windows DHCP and router-based DHCP) can be consolidated into a common DHCP server. Dedicated DNS/DHCP appliances (or dedicated software appliances) create a more stable environment, because other software services are not sharing the platform. DDI solutions also enhance network stability when they are deployed in overlay mode (see the Market/Market Segment Description section) to unify management and administrative functions across heterogeneous DNS and DHCP servers.

IPv6 support continues to be heavily marketed by several vendors, particularly BlueCat Networks and Infoblox, although it is not a significant driver for DDI sales in today's market. The main benefit of DDI solutions comes from their implementation in internal networks; however, IPv6 is not being deployed internally, with the exception of U.S. federal government agencies and military organizations (see "Internet Protocol Version 6: It's Time for (Limited) Action"). In fact, Gartner's position is that enterprises should IPv6-enable their Web presence first, before migrating their internal networks to IPv6. DDI vendors need to add IPv6 support and compete to be recognized as leaders in this area, because there is demand in some verticals, as well as in the carrier and Internet service provider (ISP) markets. However, mainstream enterprises are at least five years away from requiring IPv6 support in DDI solutions.

Domain Name System Security Extensions (DNSSEC) is another advanced feature that all vendors support (it is not marketed as heavily as IPv6), but is also not a significant driver for DDI (see "DNS Root Zone Signing Users in the Era of DNSSEC"). DNSSEC adoption is driven by government mandates and some verticals (for example, financial), but it is rarely mentioned by Gartner clients as a driver for purchasing a DDI solution. Gartner expects that most enterprises are at least three to four years away from requiring DNSSEC support in DDI solutions (although a high-profile cache poisoning attack would dramatically accelerate DNSSEC adoption).

EVIDENCE

³ Based on online surveys conducted from 2010 to 2012 with a sample size of 75.

NOTE 1 RESOLUTION OF LITIGATION BETWEEN BLUECAT AND INFOBLOX

Under the terms of an agreement settled in December 2011, BlueCat and Infoblox agreed to dismiss their pending patent and other litigation. The companies also agreed not to commence patent litigation against each other on any other patents for at least five years.

VENDORS ADDED OR DROPPED

We review and adjust our inclusion criteria for Magic Quadrants and MarketScopes as markets change. As a result of these adjustments, the mix of vendors in any Magic Quadrant or MarketScope may change over time. A vendor appearing in a Magic Quadrant or MarketScope one year and not the next does not necessarily indicate that we have changed our opinion of that vendor. This may be a reflection of a change in the market and, therefore, changed evaluation criteria, or a change of focus by a vendor.

GARTNER MARKET SCOPE DEFINED

Gartner's MarketScope provides specific guidance for users who are deploying, or have deployed, products or services. A Gartner MarketScope rating does not imply that the vendor meets all, few or none of the evaluation criteria. The Gartner MarketScope evaluation is based on a weighted evaluation of a vendor's products in comparison with the evaluation criteria. Consider Gartner's criteria as they apply to your specific requirements. Contact Gartner to discuss how this evaluation may affect your specific needs.

We define the various ratings below.

Market Scope Rating Framework

Strong Positive
Is viewed as a provider of strategic products, services or solutions:

- Customers: Continue with planned investments.
- Potential customers: Consider this vendor a strong choice for strategic investment.

Positive
Demonstrates strength in specific areas, but execution in one or more areas may still be developing or inconsistent with other areas of performance:

Clientes en México & Latinoamérica



Telecomunicaciones



Financiero



Gobierno



Retail



Educación / Otros



Caso de Éxito



About Apple

- > 380 retail stores worldwide
- DHCP for employees and customers

Key Objective

- Optimal use of IP address space (result: 20min DHCP leases)

About their Deployment

- 2 Proteus 5000
 - Centralized IPAM
- 760+ Adonis XMBs
 - 2 XMBs per store with DHCP failover





¡Gracias!

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The IPAM Intelligence Company