



Application Note

Cisco IOS IPv6 Releases and Deprecation of IP6.INT

Last Updated: April 2006

INTRODUCTION

RFC 1886—DNS Extensions to support IP version 6, published in December 1995, defined the IP6.INT domain to provide a way of mapping an IPv6 address to a host name.

RFC 3152—Delegation of IP6.ARPA, based on IAB recommendations that the ARPA top level domain be used for technical infrastructure sub-domains when possible, was released in August 2001. It resulted in the creation of the IP6.ARPA domain for address to DNS name mapping for the IPv6 address space, deprecating the usage of IP6.INT as documented in RFC 4159, *Deprecation of "ip6.int,"* August 2005.

As a result, all Regional Internet Registries (RIRs) will stop the maintenance of the IP6.INT domain on June 1st 2006.

Reminder: The experimental 6bone infrastructure will be phased out on June 6th 2006 as documented in RFC 3701; the 6bone (IPv6 Testing Address Allocation) phase out took place in March 2004.

EVALUATING THE IMPACT ON CISCO IOS IPV6 DEVICES

Initial releases of Cisco IPv6 products do support IP6.INT for the DNS Resolver feature. Following the publication of RFC 3152, the implementation has been updated to also support IP6.ARPA.

The minimum software releases to run for IP6.ARPA support are:

- Cisco IOS Software 12.3(12)
- Release 12.3(11)T
- Release 12.4(1)
- Release 12.4(2)T
- Release 12.2(28)SB
- Release 12.2(18)SXE on the Cisco Catalyst 6500 Series Switch and Cisco 7600 Series Router
- Release 12.2(25)EWA on the Cisco Catalyst 4500 Series Switch
- Cisco Catalyst 3560 and 3750 Series Switches—Release 12.2(25)SED
- Release 12.0(32)S2 for Cisco 10720 and 12000 Series Routers
- Cisco IOS-XR Software Release 3.0

CONCLUSION

The update of Cisco IPv6 products to one of the above release before June 2006, when IPv6 and DNS Resolution for IPv6 are configured on a given device, is strongly recommended.

REFERENCES

RFC 1886: <http://www.ietf.org/rfc/rfc1886.txt>

RFC 3152: <http://www.ietf.org/rfc/rfc3152.txt>

RFC 3701: <http://www.ietf.org/rfc/rfc3701.txt>

RFC 4159: <http://www.ietf.org/rfc/rfc4159.txt>



Corporate Headquarters

Cisco Systems, Inc.
170 West Tasman Drive
San Jose, CA 95134-1706
USA
www.cisco.com
Tel: 408 526-4000
800 553-NETS (6387)
Fax: 408 526-4100

European Headquarters

Cisco Systems International BV
Haarlerbergpark
Haarlerbergweg 13-19
1101 CH Amsterdam
The Netherlands
www-europe.cisco.com
Tel: 31 0 20 357 1000
Fax: 31 0 20 357 1100

Americas Headquarters

Cisco Systems, Inc.
170 West Tasman Drive
San Jose, CA 95134-1706
USA
www.cisco.com
Tel: 408 526-7660
Fax: 408 527-0883

Asia Pacific Headquarters

Cisco Systems, Inc.
168 Robinson Road
#28-01 Capital Tower
Singapore 068912
www.cisco.com
Tel: +65 6317 7777
Fax: +65 6317 7799

Cisco Systems has more than 200 offices in the following countries and regions. Addresses, phone numbers, and fax numbers are listed on **the Cisco Website at www.cisco.com/go/offices.**

Argentina • Australia • Austria • Belgium • Brazil • Bulgaria • Canada • Chile • China PRC • Colombia • Costa Rica • Croatia • Cyprus
Czech Republic • Denmark • Dubai, UAE • Finland • France • Germany • Greece • Hong Kong SAR • Hungary • India • Indonesia • Ireland • Israel
Italy • Japan • Korea • Luxembourg • Malaysia • Mexico • The Netherlands • New Zealand • Norway • Peru • Philippines • Poland • Portugal
Puerto Rico • Romania • Russia • Saudi Arabia • Scotland • Singapore • Slovakia • Slovenia • South Africa • Spain • Sweden • Switzerland • Taiwan
Thailand • Turkey • Ukraine • United Kingdom • United States • Venezuela • Vietnam • Zimbabwe

Copyright © 2006 Cisco Systems, Inc. All rights reserved. CCSP, CCVP, the Cisco Square Bridge logo, Follow Me Browsing, and StackWise are trademarks of Cisco Systems, Inc.; Changing the Way We Work, Live, Play, and Learn, and iQuick Study are service marks of Cisco Systems, Inc.; and Access Registrar, Aironet, BPX, Catalyst, CCDA, CCDP, CCIE, CCIIP, CCNA, CCNP, Cisco, the Cisco Certified Internetwork Expert logo, Cisco IOS, Cisco Press, Cisco Systems, Cisco Systems Capital, the Cisco Systems logo, Cisco Unity, Enterprise/Solver, EtherChannel, EtherFast, EtherSwitch, Fast Step, FormShare, GigaDrive, GigaStack, HomeLink, Internet Quotient, IOS, IP/TV, iQ Expertise, the iQ logo, iQ Net Readiness Scorecard, LightStream, Linksys, MeetingPlace, MGX, the Networkers logo, Networking Academy, Network Registrar, *Packet*, PIX, Post-Routing, Pre-Routing, ProConnect, RateMUX, ScriptShare, SlideCast, SMARTnet, The Fastest Way to Increase Your Internet Quotient, and TransPath are registered trademarks of Cisco Systems, Inc. and/or its affiliates in the United States and certain other countries.

All other trademarks mentioned in this document or Website are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (0601R)

