IPv6 Ready Logo Program

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Acknowledgement

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Document Change History

Version	Date	Change Description	Author
Draft1	10/05/2007	Initial Version	Yanick Pouffary
Draft2	10/08/2007	More text	Yanick Pouffary & Erica Johnson
Draft3	10/09/2007	More text Comments	Yanick Pouffary & Erica Johnson Jim Bound
Draft4	10/15/2007	Comments	Hiroshi MIYATA
Draft5	10/16/2007	Comments	Hiroshi Esaki, Jim Bound, Latif Ladid Cesar Viho
Draft6	10/19/2007	Comments	Chin-Chou Chen
Draft7	10/21/2007	Comments	Hiroshi MIYATA
Draft8/9	10/22/2007	Updates from face to face meeting	Yanick Pouffary
Draft10	10/23/2007	Pre-Release Document	Yanick Pouffary
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1. Executive Summary

The main objective of this present document is to describe the IPv6 Forum (http://www.ipv6forum.com) IPv6 Ready Logo Program, to describe the IPv6 Ready Test Specifications and IPv6 Ready Logo Phase Series and to provide a FAQ.

The IPv6 Ready (http://www.ipv6ready.org/) Logo Program provides conformance and interoperability test specifications based on open standards to support IPv6 deployment across the globe. Effective testing of IPv6 products is of critical importance in ensuring the deployment, interoperability, security and reliability of the IPv6 infrastructure.

2. IPv6 Ready Logo Program

The IPv6 Forum (http://www.ipv6forum.com), a world-wide consortium, with a key focus to provide technical guidance for the deployment of IPv6, launched a single world-wide IPv6 Ready Logo Program (conformance and interoperability testing).

The IPv6 Ready Logo Program is a conformance and interoperability testing program intended to increase user confidence by demonstrating that IPv6 is available now and ready to be used.

The IPv6 Forum has created the **IPv6 Logo Committee (v6LC)**, to manage the IPv6 Ready Logo Program. It comprises representatives from equipment vendors, service providers, academic institutions, IPv6 organizations, members from the TAHI project (Japan), the University of New Hampshire Interoperability Testing Lab (USA), IRISA/INRIA (France), ETSI IPv6 Plugtests (Europe), TTA (Korea), BII (China) and CHT-TL (Taiwan).

The IPv6 Ready Logo Committee mission is to define the test specifications for IPv6 conformance and interoperability testing, to provide access to self-test tools and to deliver the IPv6 Ready Logo.

The key objective and benefits of the IPv6 Ready Program are to:

- Verify protocol implementation and validate interoperability of IPv6 products.

- Provide access to self-testing tools.

- Provide IPv6 Ready Logo testing laboratories across the globe.

The IPv6 Ready Logo Committee is structured as follows:

- IPv6 Forum President, Latif Ladid and IPv6 Forum Chief Technology Officer, Jim Bound

- IPv6 Ready Logo Committee Chairperson ,Hiroshi Esaki @ WIDE/IPv6-PC

   o Market; Hiroshi Esaki @ WIDE/IPv6-PC

   o Legal: Philippe Cousin @ ETSI

   o Operational: Cesar Viho @ IRISA

   o Technical: Hiroshi Miyata @ TAHI Project

- IPv6 Ready Logo Regional Officers:

   o Cesar Viho @ IRISA (Europe)

   o Erica Johnson @ UNH-IOL (North America)

   o Hiroshi Miyata @ TAHI (Asia)

The members of the Administrative Committee are responsible for:

- Defining procedures and steps for the Logo Program.

- Administering the right to use the IPv6 Ready Logos for products.

The IPv6 Ready Logo ID data base and the IPv6 Ready Logo Web site are administered by members of the TAHI project.

The members of the Technical Committee are responsible for:

- Defining Test specifications

- Submitting those specifications to the members of the Administrative Committee for public review.

- Updating Test specifications according to its published "Document update policy". http://www.ipv6ready.org/pdf/IPv6-LC_maintenancev100.pdf

- Technical examination of Vendors Applications.

Future IPv6 Ready Logo tests development are recommended by IPv6 Ready Logo technical members. Final approval of new work is done by the IPv6 Ready Logo Committee Chairperson, the IPv6 Forum President and IPv6 Forum Chief Technology Officer.

3. IPv6 Ready Test Specifications

The IPv6 Ready Logo test specifications are the result of technical consensus between the IPv6 Ready Logo Program Committee members and industry review.

The series of tests defined as part of the IPv6 Ready Logo test specifications suite can be divided into two types of tests: conformance and interoperability.
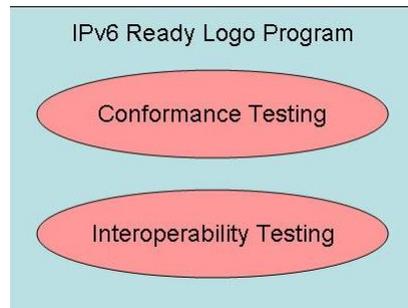
The conformance test aims at validating a product to IETF RFCs (a conformance test for a protocol may deal with several RFCs). This is accomplished through specific tools, which emulates an environment of reference for the tested product. The protocol for a test is analyzed for each of the specifications functional assertions and the conformance test verifies the implementation profile reference of the protocol.

The interoperability test is realized in a lab environment, and the tested product is interconnected with other products (routers, hosts, etc.) supporting typical configurations. The developed scenarios aim at verifying if the product is able to interact with other products of different origins.

The IPv6 Ready Logo test specifications are developed by the following technical labs:

- TAHI – Japan – http://www.tahi.org/

- UNH – IOL – University of New Hampshire InterOperability Lab - IPv6 http://www.iol.unh.edu/services/testing/ipv6/

- IRISA – France – European Laboratory for Interoperability testing Internet protocols and supporting the IPv6 Ready Logo program http://www.irisa.fr/tipi/

- CHT-TL - Taiwan – IPv6 Testing Lab - ChungHwa Telecom Labs. http://interop.ipv6.org.tw/

- BII – China – IPv6 Ready Logo testing - http://www.ipv6ready.org.cn/

- TTA - Korea - Telecommunication Technology Association - IPv6 http://www.tta.or.kr/English/new/main/index.htm

The test specifications are then published and distributed for public review and updated accordingly. Updates to the IPv6 Ready Logo program test specifications (and corresponding test tools) are done according to the IPv6 Ready Logo Program "Document update policy". The document introduces the concept of "major version", "major revision" and "minor revision". "Major version" update occurs when an RFC has been revised or when additional tests coverage are introduced that changes the compatibility with the previous version, "Major revision" update occurs when an RFC has been revised or when additional tests coverage are introduced without changing compatibility with a previous version, and "Minor revision" update can be related to normal maintenance of the document (bug fixes for example). If there are no urgent releases required updates to the document occur in May and November of each year (every 6 months). "Major version" updates are released as needed.

Please refer to http://www.ipv6ready.org/pdf/IPv6-LC_maintenancev100.pdf

The IPv6 Ready Logo self test specifications are free of charge and available for download at http://www.ipv6ready.org. The IPv6 Ready Logo self tests suite, based on the IPv6 Ready Logo test specifications, is provided by TAHI project and is free of charge and available for download at http://www.tahi.org/logo/phase2-core/

The IPv6 Ready Logo testing laboratories are:

- TTA (KOREA)
- BII (CHINA)
- CHT-TL (TAIWAN)
- IRISA (EUROPE)
- UNH-IOL (US)

There may be a fee associated with this testing service.

The industry organized the following Interoperability testing events where IPv6 interoperability can be validated:

- Moonv6/UNH-IOL (http://www.monv6.org/)
- PLUGTEST/ETSI (http://www.etsi.org/Website/OurServices/Plugtests/home.aspx)
- TAHI interoperability testing (http://www.tahi.org/)

4.   IPv6 Ready Logo Phase Series - Phase-1, Phase-2 and Phase-3

The IPv6 Ready Logo series of tests were progressively enriched, from a minimum coverage with Phase-1 to a more complete coverage with the Phase-2 and later on with Phase-3.

The image below describes the scope for Phase-1 and Phase-2 of the IPv6 Ready Logo Program.
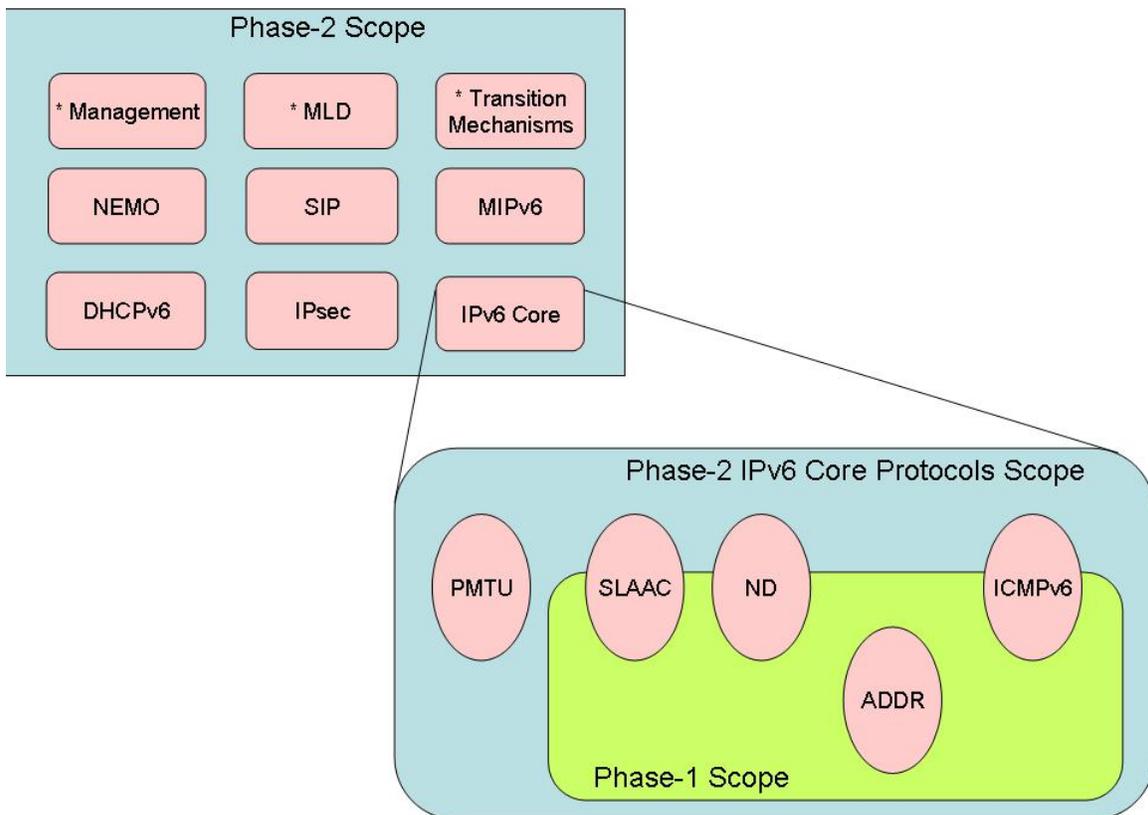
4.1. *Phase-1 (Silver) Logo*

The Phase-1 Logo focuses on "core IPv6 protocols". Its objective is to verify minimum IPv6 support. The logo background color is silver.

The test coverage is approximately 170 tests as specified on page 14 of the IPv6 Core Protocols Test specification

http://www.ipv6ready.org/pdf/IPv6_Ready_Test_Specification_Core_Protocolsv3_8_10.pdf

This Phase-1 logo has been available since September 1 2003.

More information can be found at http://www.ipv6ready.org/about_phase1.html

4.2. *Phase-2 (Gold) Logo*

The Phase-2 logo expands the "core IPv6 protocols" test coverage to approximately 450 tests and adds new extended test categories. The logo background color is gold.

- Test specification for IPv6 Core Protocols:

  http://www.ipv6ready.org/pdf/IPv6_Ready_Test_Specification_Core_Protocolsv3_8_10.pdf

- Test interoperability specification base document

  http://www.ipv6ready.org/pdf/IPv6Ready_PhaseII_Base_Interop_version_2_8_4.pdf

- Test interoperability specification appendix

http://www.ipv6ready.org/pdf/IPv6Ready_P2_interop_1-8.pdf

- Test tools for self-test (TAHI Project)

  http://www.tahi.org/logo/phase2-core/

The Phase-2 logo extended test categories are:

- IPsec

- MIPv6

- NEMO

- DHCPv6

- SIP

- Management (under development)

- MLD (under development)

- Transition Mechanisms (under development).

Obtaining the Phase-2 IPv6 Ready Core Logo is a prerequisite before obtaining extended test categories. You cannot obtain the Phase-2 logo for extended protocol features just by meeting the requirements of that extended test category.

The Phase-2 logo test and extended test specifications, the interoperability test specifications documents and self test tools are available at http://www.ipv6ready.org/about_phase2_test.html.

IPsec

- Test specification http://www.ipv6ready.org/pdf/IPsec_1_8_0.pdf

- Test interoperability specification http://www.ipv6ready.org/pdf/IPsec_scenario-1_5_1.pdf

- Test tools for self-test (IPv6PC/TAHI Project) http://www.tahi.org/logo/ipsec/ and Technical Information http://www.ipv6ready.org/phase2_techinfo_ipsec.htm

MIPv6

- Phase-2 Policy http://www.ipv6ready.org/pdf/phase2_mipv6_policy_r1_1_0.pdf

- Phase-2 Policy Appendix
  http://www.ipv6ready.org/pdf/phase2_mipv6_policy_appendix_r1_1_0.pdf

- Test Specification Profile

  http://www.ipv6ready.org/pdf/phase2_mipv6_profile_r3_4_0.pdf

- Test Specification Correspondent Node (CN)

  http://www.ipv6ready.org/pdf/phase2_mipv6_self_cn_r3_2_0.pdf

- Test Specification Home Agent (HA)

  http://www.ipv6ready.org/pdf/phase2_mipv6_self_ha_r3_2_0.pdf

- Test Specification Mobile Node (MN)

  http://www.ipv6ready.org/pdf/phase2_mipv6_self_mn_r3_2_0.pdf

- Interoperability test Specification

  http://www.ipv6ready.org/pdf/phase2_mipv6_scenario_r1_5_0.pdf

- Test tools for self-test (IPv6PC/TAHI Project) http://www.tahi.org/mipv6/phase2/

NEMO

- Phase-2 Policy http://www.ipv6ready.org/pdf/phase2_nemo_policy_r1_0_1.pdf

- Phase-2 Policy Appendix

  http://www.ipv6ready.org/pdf/phase2_nemo_policy_appendix_r1_0_1.pdf

- Test Specification Profile

  http://www.ipv6ready.org/pdf/phase2_nemo_profile_r1_0_1.pdf

- Test Specification Home Agent (HA)

  http://www.ipv6ready.org/pdf/phase2_nemo_self_ha_r1_0_1.pdf

- Test Specification Mobile Router (MR)

  http://www.ipv6ready.org/pdf/phase2_nemo_self_mr_r1_0_1.pdf

- Interoperability Test Specification

  http://www.ipv6ready.org/pdf/phase2_nemo_scenario_r1_0_1.pdf

- Test tools for self-test (IPv6PC/TAHI Project)

  http://cert.v6pc.jp/nemo/phase2/index.html

DHCPv6

- Test specification

  http://www.ipv6ready.org/pdf/IPv6Ready_PhaseII_DHCPv6_version_1_0_2.pdf

- Test interoperability specification

  http://www.ipv6ready.org/pdf/IPv6Ready_DHCP_Interopv1_0_1.pdf

- Test tools for self-test (IPv6PC/TAHI Project) http://www.tahi.org/logo/dhcpv6

The following bulleted list describes examples of possible IPv6 Ready Phase-2 logo combinations:

- IPv6 Core Protocols

- IPv6 Core Protocols + IPsec

- IPv6 Core Protocols + MIPv6

- IPv6 Core Protocols + IPsec + MIPv6

- IPv6 Core Protocols + DHCPv6 + MIPv6

The following bulleted list describes examples of when you **cannot** obtain the Phase-2 logo:

- IPsec only

- MIPv6 only

- DHCPv6 only

- IPsec + MIPv6 only

This Phase-2 logo has been available since February 16th 2005,

More information can be found at http://www.ipv6ready.org/about_phase2.html

4.3.   *Phase 3 Logo*

The Phase-3 Logo, being planned now, will be the same as the Phase 2 Logo in terms of content, except that the extended test category for IPsec will be mandatory.

Phase-3 start date is TBD.

4.4.   *Phase-1* *vs Phase-2* *Logo*

The IPv6 Forum strongly encourages vendors to obtain the IPv6 Ready Logo Phase-2 (Gold logo).

The Phase-2 Gold logo verifies optimum compliance because of the complete series of tests including the "MUST" and the recommended "SHOULD" for the IETF specifications tested.

The Phase-1 Silver Logo tests include only the "MUST" requirements in the IETF specification and are less extensive.

4.5. *Obtaining IPv6 Ready Logo*

The process for obtaining the IPv6 Ready Logo (Phase-1 or Phase-2) is basically the same. The tested product needs to pass 100% each of the appropriate conformance and interoperability test assertions.

1. Download the test specifications from the IPv6 Ready Logo web site.

2. Either download the self-testing tools and interoperability test scenarios and execute them against your product; or submit your product to one of the IPv6 Ready Logo testing laboratories for testing.

3. Gather the complete test result log from either 1) the self-testing tool and interoperability test you conducted or 2) an IPv6 Ready testing laboratory. (If you are a participant of an interoperability test event, you can use the event test logs at the event for as the interoperability test log[1])

4. Fill out the Application Form:

    *   Application Form (IPv6CoreProtocols)

        http://www.ipv6ready.org/application/app_form_Core.txt

    *   Application Form (IPsec)

        http://www.ipv6ready.org/application/app_form_Phase2_IPsec.txt

    *   Application Form (MIPv6 CN)

        http://www.ipv6ready.org/application/app_form_Phase2_MIPv6_CN.txt

    *   Application Form (MIPv6 HA)

        http://www.ipv6ready.org/application/app_form_Phase2_MIPv6_HA.txt

    *   Application Form (MIPv6 MN)

        http://www.ipv6ready.org/application/app_form_Phase2_MIPv6_MN.txt

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[1] The participation to Interoperability event is not mandatory.

- Application Form (NEMO HA)

    http://www.ipv6ready.org/application/app_form_Phase2_NEMO_HA.txt

- Application Form (NEMO MR)

    http://www.ipv6ready.org/application/app_form_Phase2_NEMO_MR.txt

- Application Form (DHCPv6)

    http://www.ipv6ready.org/application/app_form_Phase2_DHCPv6.txt

- Application Form (SIP Server)

    http://www.ipv6ready.org/application/app_form_Phase2_SIP-IPv6_Server.txt

5. Submit the Application Form and the test log[2] to v6-appli@ipv6ready.org by e-mail[3]

6. You will receive an Application ID for an acknowledgement and a URL of the Usage Agreement Confirmation page.

7. You must complete the Usage Agreement http://www.ipv6ready.org/application/Phase2_logo_usage_agreement.pdf on this page by filling out the entry information and pressing the "apply button" to show your intention of agreement.[4]

8. The Local Interface Person on the Logo Committee will contact you in order to guide the examination process of your application.

9. Examination will be started by the technical officers. If the applicant does not get any response within 1 month (2 weeks for Phase-1), please send mail to ipv6ready-info@ipv6ready.org.

10. If the result of examination is judged approved, you will get the IPv6 Ready Logo and associated Logo ID.

11. Approved information of this application will be put on the approval website.

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[2] The test evidence should include the following items: Configuration, Command result, Test result, Packet dump file and Others (If required)

[3] You can also send the test log via the web page, if your log is too big to be via e-mail. http://www.ipv6ready.org/application/app_files.php

[4] If you don't agree with this Usage Agreement, we can't approve your usage of the IPv6 Ready Logo.

Each applicant will receive a Logo ID to identify their approved Logo. The Logo ID includes: Serial Number, Version number for testing specification, and, approved functional component(s).

If a new product version changes the networking IPv6 stack, the IPv6 Ready Logo Committee requires that the applicant reruns and resubmits both conformance and interoperability tests logs.

If the new product version does not change the network stack, vendor can update the registered version by submitting an application.

If a series of products contain identical networking stack, that product series will be accepted with one application, on condition that the identical nature of the networking stack is clearly stated in the application form.

If a vendor uses an OEM product which already holds an IPv6 Ready Logo ID, each vendor using this OEM product must register its IPv6 Ready Logo usage.

The lists of products approved for the IPv6 Ready Logo are published on the IPv6 Ready Logo Web page.

http://www.ipv6ready.org/logo_db/approved_list.php

On August 1 2006: 246 products with IPv6 Ready Logo Phase-1.

On November 12 2007: 321 products with IPv6 Ready Logo Phase-1.

http://www.ipv6ready.org/logo_db/approved_list_p2.php

On August 1 2006: 46 products with the IPv6 Ready Logo Phase-2.

On November 12 2007: 129 products with the IPv6 Ready Logo Phase-2.

5.   IPv6 Ready Logo Program FAQ

5.1.   *What is the IPv6 Ready Logo Program?*

The IPv6 Ready Logo program is an international testing program intended to increase user confidence by demonstrating that IPv6 is currently available for today's deployment and use.

The key objective and benefit of the IPv6 Ready Logo program is three fold;

- Verify protocol implementation and validate interoperability of IPv6 products.
- Provide access to free self-testing tools.
- Provide IPv6 Ready Logo testing laboratories across the globe dedicated to provide testing assistance or services.

5.2.   *What is the IPv6 Forum's role?*

The IPv6 Forum plays a major role to bring together industrial actors, to develop and deploy the new generation of IP protocols, IPv6. The IPv6 Forum created the IPv6 Ready Logo Committee in 2002 to manage this globally unique logo program.

There is no membership requirement for obtaining the IPv6 Ready Logo since the IPv6 Forum is an open, international Forum of IPv6 experts.

5.3. *Who's on the IPv6 Ready Logo Committee? What are their roles?*

The IPv6 Ready Logo Committee is structured as follows:

- IPv6 Forum President, Latif Ladid and IPv6 Forum Chief Technology Officer, Jim Bound

- IPv6 Ready Logo Committee Chairperson ,Hiroshi Esaki @ WIDE/IPv6-PC

    o Market; Hiroshi Esaki @ WIDE/IPv6-PC

    o Legal: Philippe Cousin @ ETSI

    o Operational: Cesar Viho @ IRISA

    o Technical: Hiroshi Miyata @ TAHI Project

- IPv6 Ready Logo Regional Officers:

    o Cesar Viho @ IRISA (Europe)

    o Erica Johnson @ UNH-IOL (North America)

    o Hiroshi Miyata @ TAHI (Asia)

- Administrative Committee members. The IPv6 Ready Logo ID data base and the IPv6 Ready Logo Web site are administered by members of the TAHI project.

- Technical Committee members - representatives from equipment vendors, service providers, academic institutions, IPv6 organizations, members from the TAHI project (Japan), the University of New Hampshire Interoperability Testing Lab (USA), IRISA/INRIA (France), ETSI IPv6 Plugtests (Europe), TTA (Korea), BII (China) and CHT-TL (Taiwan).

- IPv6 Ready Logo testing laboratories:

    o TTA (Korea) http://www.tta.or.kr/English/new/main/index.htm

    o BII (China) http://www.ipv6ready.org.cn/

    o CHT-TL (Taiwan) http://interop.ipv6.org.tw/

    o IRISA (Europe) http://www.irisa.fr/tipi/

    o UNH-IOL (US) http://www.iol.unh.edu/services/testing/ipv6/

5.4.   *Are there different Phases of the IPv6 Ready Logo Program?*

The IPv6 Ready Logo series of tests were progressively enriched, from a minimum coverage with Phase-1 to a more complete coverage with the Phase-2 and in the future with Phase-3.

The Phase-1 Silver Logo (since September 1, 2003) Indicates that a product includes IPv6 mandatory core protocols and can interoperate with other IPv6 implementations. The Phase-1 core protocols include IPv6 Specification, Neighbor Discovery, Address Auto-configuration and Internet Control Message Protocol (ICMPv6). The Phase-1 test coverage includes approximately 170 tests. More information can be found at http://www.ipv6ready.org/about_phase1.html

The Phase-2 Gold Logo (since February 15, 2005) indicates that a product has successfully satisfied strong requirements as stated by the IPv6 Logo Committee (v6LC). These tests cover the MUSTs and SHOULDs in the IETF RFC tested. The Phase-2 IPv6 core test coverage includes approximately 450 tests. More information can be found at http://www.ipv6ready.org/about_phase2.html

The Phase-3 Logo (not started yet) will have the same requirements, as the Phase-2 Logo with the extended test category for IPsec being mandatory. The Phase-3 Logo is to be determined.

NOTE: The IPv6 Forum **strongly encourages** vendors to obtain the IPv6 Ready Logo Phase-2. The Phase-2 Logo verifies optimum compliance because of the complete series of tests including the "MUST" and the recommended "SHOULD" for the IETF specifications tested.

5.5. *What are the current testing programs?*

The Phase-2 IPv6 Ready Logo testing programs are:

- IPv6 Core Protocols testing

- IPv6 extended test categories:

    o IPsec testing

    o MIPv6 testing

    o NEMO testing

    o DHCPv6 testing

    o SIP testing

Obtaining the Phase-2 IPv6 ready Core Logo is a prerequisite before obtaining extended test categories.

The Phase-1 IPv6 Ready Logo testing programs are:

- IPv6 Core Protocols testing

At this moment the target devices defined for IPv6 Ready Logo program are as follow:

- IPv6 Ready core protocols: HOST and ROUTER.

- IPsec: End-Node and Security Gateway

- MIPv6: Correspondent Node, Home Agent and Mobile Node

- NEMO: Home Agent and Mobile Router

- DHCPv6: Client, Server and Relay Agent

- SIP: SIP Server and SIP UA

The terminology used above for target devices is from the IETF specifications.

For Phase-1 only we added a special device target category. Devices in this category are only capable of being configured manually or DHCPv6 configured. These devices omit some auto-configuration functions, Prefix discovery and router discovery.

5.6. *What RFCs are covered?*

IPv6 Core Protocols

- RFC 4291 (Phase-1, Phase-2)

- RFC 4861 (Phase-1, Phase-2)

- RFC 4862 (Phase-1, Phase-2)

- RFC 4443 (Phase-1, Phase-2)

- RFC 1981 (Phase-2)

IPsec

- RFC 2404

- RFC 2410

- RFC 2451

- RFC 3603

- RFC 3566

- RFC 3686

- RFC 4301

- RFC 4303

- RFC 4305

MIPv6

- RFC 3775

- RFC 3776

NEMO

- RFC 3963

- RFC 3775

DHCPv6

- RFC 3315

- RFC 3646

- RFC 3736

SIP

- RFC 3261

- RFC 3264

- RFC 4566

- RFC 2617

- RFC 3665

5.7. *Who writes the test specifications?*

The IPv6 Ready Logo test specifications are developed by the following organizations:

- TAHI Project – Japan (http://www.tahi.org/)

- UNH-IOL (University of New Hampshire InterOperability Laboratory)– US (http://www.iol.unh.edu/services/testing/ipv6)

- IRISA – France – European Laboratory for Interoperability testing Internet protocols (http://www.irisa.fr/tipi/)

- CHT-TL – Taiwan – IPv6 Ready Logo Testing Lab – ChungHwa Telecom Labs (http://interop.ipv6.org.tw/)

- BII – China – IPv6 Ready Logo Testing (http://www.ipv6ready.org.cn/)

- TTA – Korea – Telecommunication Technology Association IPv6 (http://www.tta.or.kr/English/new/main/index.htm)

5.8. *How often do these test documents change?*

Updates to the IPv6 Ready Logo program test specifications and test tools are done according to the IPv6 Ready Logo Program "Document update policy". The document introduces the concept of "Major version", "Major revision" and "Minor revision". "Major version" updates occurs when an RFC has been revised or when additional tests

coverage are introduced that changes the compatibility with the previous version, "major revision" updates occurs when an RFC has been revised or when additional tests coverage are introduced without changing compatibility with previous version, and "minor revision" updates can be assimilated to normal maintenance of the document (bug fixes for example). If there are no urgent releases required, updates to the document occur in May and November of each year (every 6 months). "Major version" updates are released as needed.

Please refer to http://www.ipv6ready.org/pdf/IPv6-LC_maintenancev100.pdf

5.9. *What is the process to obtain the IPv6 Ready Logo?*

The target product must pass 100% conformance and 100% interoperability.

1. Download the test specifications from the IPv6 Ready Logo web site.

2. Either download the self-testing tools and execute them against your product or submit your product to one of the IPv6 Ready Logo testing laboratories for testing.

3. Gather the complete test result log from either 1) the self-testing tool and interoperability test you conducted or 2) an IPv6 Ready testing laboratory. (If you are a participant of a interoperability test event, you can use the event logs for the interoperability[5])

4. Fill out the Application Form:

    - Application Form (IPv6CoreProtocols)

        http://www.ipv6ready.org/application/app_form_Core.txt

    - Application Form (IPsec)

        http://www.ipv6ready.org/application/app_form_Phase2_IPsec.txt

    - Application Form (MIPv6 CN)

        http://www.ipv6ready.org/application/app_form_Phase2_MIPv6_CN.txt

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[5] The participation to Interoperability event is not mandatory.

- Application Form (MIPv6 HA)

    http://www.ipv6ready.org/application/app_form_Phase2_MIPv6_HA.txt

- Application Form (MIPv6 MN)

    http://www.ipv6ready.org/application/app_form_Phase2_MIPv6_MN.txt

- Application Form (NEMO HA)

    http://www.ipv6ready.org/application/app_form_Phase2_NEMO_HA.txt

- Application Form (NEMO MR)

    http://www.ipv6ready.org/application/app_form_Phase2_NEMO_MR.txt

- Application Form (DHCPv6)

    http://www.ipv6ready.org/application/app_form_Phase2_DHCPv6.txt

- Application Form (SIP Server)

    http://www.ipv6ready.org/application/app_form_Phase2_SIP-IPv6_Server.txt

5. Submit the Application Form and the test log[6] to v6-appli@ipv6ready.org by e-mail[7]

6. You will receive an Application ID for an acknowledgement and a URL of the Usage Agreement Confirmation page.

7. You   must   the   Usage   Agreement http://www.ipv6ready.org/application/Phase2_logo_usage_agreement.pdf on this page by filling out the entry information and pressing the "apply button" to show your intention of agreement.[8]

8. The Local Interface Person on the Logo Committee will contact you in order to guide the examination process of your application.

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[6] The test evidence should include the following items: Configuration, Command result, Test result, Packet dump file and Others (If required)

[7] You can also send the test log via the web page, if your log is too big to be via e-mail. http://www.ipv6ready.org/application/app_files.php

[8] If you don't agree with this Usage Agreement, we can't approve your usage of the IPv6 Ready Logo.

9. Examination will by started by the technical officers. If the applicant does not get any response within 1 month (2 weeks for Phase-1), please send mail to ipv6ready-info@ipv6ready.org.

10. If the result of examination is judged successful, you will get the IPv6 Ready Logo and associated Logo ID.

11. Approved information of this application will be put on the approval website.

If you need to update information of approved product (i.e. version no.) refer to the section which describes the process.

If you need to update the information of an approved product (i.e. version no.), please send the information below to the address of v6-appli@ipv6ready.org.

- Vender name

- Product name

- Newest product information that you want to change

- Logo ID

For the security reason, we will contact your original contact person (contact on original application form) for confirmation. The new information will be subscribed to the database, only when the confirmation is granted.

5.10. *What is the format of IPv6 Ready Logo ID?*

The Phase-1 Logo ID format is as follow:

{Phase(2digits)}-{serial_number(6digits)}

Phase: "01"

serial_number: World wide unique serial number (6 digits)

Example: Phase-1 Logo ID: "01-000123"

The Phase-2 Logo ID format is as follow:

{Phase(2digits))}-{[additional_info]}-{serial_number(6digits)}

Phase: "02"

additional_info: Variable length.

                    Each character indicates an extended test category.

                    Each character can be combined.

                    C: for IPv6 Core Protocol

                    S: for IPsec

                    M: for MIPv6

                    N: for NENO

                    D: for DHCPv6

                    P: for SIP

serial_number :   World wide unique serial number (6 digits)

Examples:

Phase-2 Logo ID for core 02-C-000123.

Phase-2 Logo ID for core, IPsec MIPv6 02-CSM-000123"

5.11. *Do I have to re-test after my product after a software/hardware version update?*

Yes, if a new product version changes the networking IPv6 stack, the IPv6 Ready Logo Committee requires that the applicant reruns and resubmits both conformance and interoperability tests logs.

No, if the new product version does not change the network stack. Vendor can update the registered version by submitting application.

5.12. *Can I get the Logo for a series of products?*

Yes, when a series of products contain identical networking stack. A product series of this nature will be accepted with one application, on condition that the identical nature of the networking stack is clearly stated in the application form.

5.13. *Do I need to re-test when my product uses an all ready approved OEM product?*

If a vendor uses an OEM product which already holds an IPv6 Ready Logo ID, each vendor using this OEM product must register its IPv6 Ready Logo usage.

5.14. *Where can I find the test specifications/tools?*

All of the Phase-2 test specifications and self-test tools can be found on the following page: http://www.ipv6ready.org/about_phase2_test.html

All of the Phase-1 test specifications and self-test tools can be found on the following page: http://www.ipv6ready.org/about_phase1_test.html

5.15. *Who can I contact if I need help testing?*

Please send all IPv6 Ready Logo inquiries to the ipv6ready-info@ipv6ready.org mailing list.

Please send all TAHI self test tool inquiries to the contact@tahi.org mailing list.

5.16. *Does it cost anything to apply for the Logo?*

No. There is no fee associated with acquiring the IPv6 Ready Logo.

If you choose to use the testing service of an IPv6 Ready Logo approved laboratory there may be fees associated with that service.

5.17. *Are there testing events?*

The industry organized the following Interoperability testing events where IPv6 Interoperability can be validated:

- Moonv6/UNH-IOL http://www.moonv6.org/
- PLUGTEST/ETSI http://www.etsi.org/Website/OurServices/Plugtests/home.aspx
- TAHI Interoperability test event http://www.tahi.org/inop/

5.18. *Where can I get the list of IPv6 Ready Logo Approved Products?*

The lists of products approved for the IPv6 Ready Logo are published on the IPv6 Ready Logo Web page.

http://www.ipv6ready.org/logo_db/approved_list.php

On August 1 2006: 246 products with IPv6 Ready Logo Phase-1.

On November 12 2007: 321 products with IPv6 Ready Logo Phase-1.

http://www.ipv6ready.org/logo_db/approved_list_p2.php

On August 1 2006: 46 products with the IPv6 Ready Logo Phase-2.

On November 12 2007: 129 products with the IPv6 Ready Logo Phase-2.

6. IPv6 Ready Logo History

The picture below describes the IPv6 Ready Logo development history