



# IPv6 Ready Logo Program

## - Proceeding into the Phase 2 -

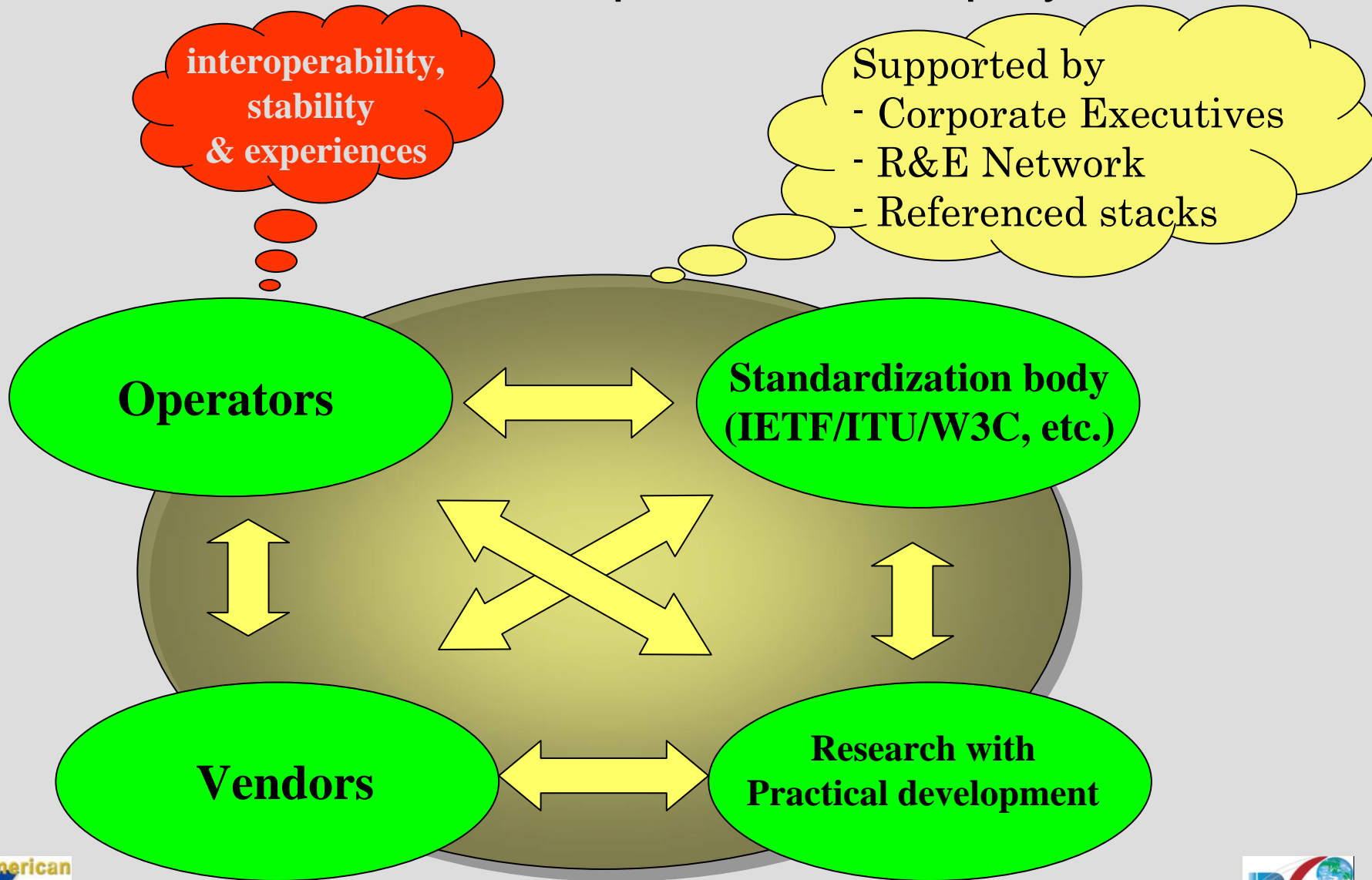


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IPv6 Ready Logo Committee, IPv6 Forum



# Community interaction in the Internet industry for research, development and deployment



# Steps to Establish Interoperability

- Technical Standardization
  - IETF
- Referenced Implementation
  - e.g., ISC(bind), KAME(BSD), USAGI(Linux)
- Conformance testing
  - e.g., TAHI
- Interoperability testing
  - e.g., Moonv6/ UNH-IOL, PLUGTEST, Connectathon, TAHI
- Testbed operation
  - e.g., Abilene, 6NET/EURO6IX/GEANT, JGN/WIDE, APAN

# IPv6 Ready Logo Program run by IPv6 Forum

<<http://www.ipv6ready.org>>



**Phase I ; Started September 1, 2003**  
**Phase II ; preparing Tech. Spec.**

## Contacts:

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# Structure of Program

- Board of IPv6 Forum
  - Chairperson : Latif Ladid
  - Technical Directorate Chairperson : Jim Bound @HP
- IPv6 Ready Logo Program
  - Chairperson
    - Hiroshi Esaki @ WIDE/IPv6-PC
  - Technical Officers
    - Cesar Viho @ IRISA
    - Benjamin Schultz / Rob Wolff @ UNH-IOL
    - Hiroshi Miyata @ TAHI / Yokogawa

(\*) special thanks to Philippe Cousin (ETSI) and to Laurent Toutain (IRISA) for boot strap phase of program and for continuous supporting and contribution

# Responsibilities

Chair  
Hiroshi ESAKI

Technical

Hiroshi MIYATA  
(TAHI/IPv6-PC)

Market

Ben Shultz  
(UNH-IOL)

Administrative

Cesar Viho  
(IRISA)

Legal

Philippe Cousin  
(ETSI)

# Face-to-Face Meetings

- 1<sup>st</sup> Meeting
  - 14th May, 2003 @ Madrid
- 2<sup>nd</sup> Meeting
  - 21st July @ ETSI Sophia Antipolis
- 3<sup>rd</sup> Meeting
  - 22nd September @ Brussels
- 4<sup>th</sup> Meeting
  - 8<sup>th</sup> December @ Arlington
- 5<sup>th</sup> Meeting
  - 14<sup>th</sup> June @ Santa Monica

# Objectives

- Phase 1, i.e., minimum requirements
  - Encourage every organizations that will deploy IPv6
  - Inform ordinary people of equipment and service interoperability and conformance for equipments and services
- Phase 2, i.e., complete requirements
  - Check and ensure the equipment and service interoperability and conformance according to the IPv6 technical standards.
- Phase 3
  - Mandate IPsec for certification

# Notes

- Phase I program runs, even after the release of Phase II
- Logo Design
  - Logo of Phase I and II can be distinguished
    - Phase I : Silver background
    - Phase II / III : Gold background
  - Logo ID includes
    - Serial Number
    - Version number for testing specification
    - Approved functional component(s)
- List of products approved for the IPv6 Ready Logo is published on the Web.

# Notes (Cont')

- Co-operation with other programs

- Interoperability Laboratories

- UNH-IOL(at USA), NICI(at Taiwan)

- Interoperability events

- Connectathon, PLUGTEST, UNH-IOL, TAHI
- Moonv6

Moonv6 is a superset of IPv6 Ready Logo, since the Moonv6 does cover the advanced and other functional check than IPv6 Ready does. Moonv6 is Focusing on complex/complete interoperability against advanced functions, e.g., routing protocol.

# Notes (Cont')

- For software version up

We are not require the re-submission of application with the result of re-testing the product with any software release version up.

The applicant should and want to inform to the logo committee which version(s) is(are) newly included in the corresponding (logo approved) product.

The logo committee expects and believe that the applicant provides the same quality as the previous version does, with our credibility to the applicant. And, the logo committee would expect that the applicant re-runs the test, when the product experiences the software version up, in order that the product satisfies the Phase I and Phase II test specification.

# Products for Phase I Logo

- Host equipment
- Router equipment
- Operating System (e.g., Linux)
- IPv6 Protocol Stack (e.g., VxWorks)
- Embedded System (Under discussion)

(\* ) Application (e.g., mail server) and service (e.g., ISP) is for further study

# Application Procedure

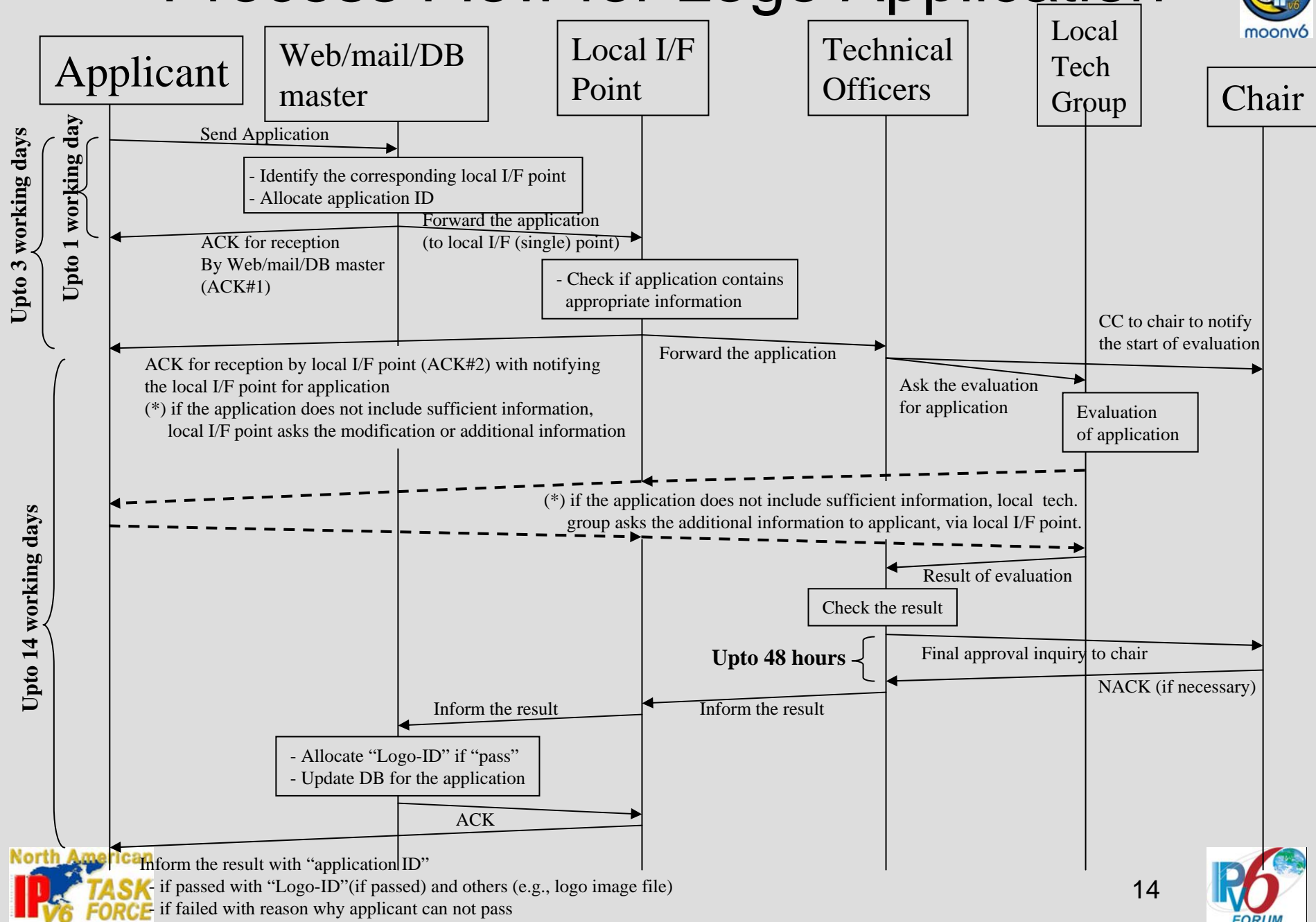
1. Conformance testing by Self-test
2. Interoperability testing with two Routers and two Host
3. Fill out application form and send to the following e-mail address with the test log

< v6-apply@v6pc.jp >

4. Agree the logo license agreement

(\* ) Self-test base and Interoperability test event base are essentially based on the same testing criteria, which is Phase 1 test specification.

# Process Flow for Logo Application



# Notes

- Contact for application

- Web <http://www.ipv6ready.org>
- Mail [<v6-apply@v6pc.jp>](mailto:v6-apply@v6pc.jp)

- Application ID

{local I/F}-{date(yyymmdd)}-{serial\_number(6digits)}

(\*) serial number is global unique

[example] “KR-20031013-000111”

- Logo ID

{Phase(2digits)}{[additional\_infor]}-{serial\_number(6digits)}

[example] “01-000123” (stating from “01-000111”)

(\*) for Phase 2, [additional information] shall indicates conformed items (e.g., IPsec, MIPv6), something like TCP’s control bits.

“01101101”(binary) → “6E” (digit)

# Procedure of Application



1. mail will be sent to <v6-apply@v6pc.jp>  
v6-apply@v6pc.jp will be destined to DB master. DB master will forward this to the appropriate country/regional I/F point
    - \* country / region must be described in the subject line
    - \* For the web interface, check the country/regional dot
  2. reception ack message with Application ID is sent from <v6-apply@v6pc.jp> within 1 working day.
    - \* application is forwarded to local I/F point
    - \* In the web case, web system return the ack and application ID, and forward the application to Local I/F point directly
  3. local I/F point will return the ack to confirm the start of application processing, within 3 working days and check if the application includes complete information
    - \* if not, then {contact with applicant}
    - \* if yes, then, {forward to Tech Officers for examination}
  4. Tech officer exams application
    - \* if information is not sufficient, then {return to Local I/F point}
    - \* if result is Good, then {the result will forward to Chair for final approval}
      - ➔ Chair will give negative ack only if he reject the judge within 48 hours
  5. Tech officer will return the result to Local I/F point and Web master
  6. Web master will register Logo ID, then, notify the Local I/F point the Logo ID registration has been done
  7. Local I/F point will return the results
  8. Applicant can start use Logo right away
- \*\* Total procedure will be done in 2 weeks  
\*\* all questions from applicants go to Local I/F point

# Phase I Approved Products



<< As of June 01, 2004 >>

## North America

- Elmic Systems
- Treck
- Hexago
- Prockets
- Hewlett-Packerd
- IBM
- Microsoft
- Cisco Systems
- Extreme
- Foundary Networks



# Phase I Approved Products

<< As of June 01, 2004 >>

## Europe

- 6WIND
- Ericsson-Telebit



# Phase I Approved Products

<< As of June 01, 2004 >>

## Asia

- iBIT Technology
- Samsung Advanced Institute of technology
- Samsung Electronics
- KAME
- NEC
- Panasonic
- Chunghwa Telecom
- Hitachi
- III (Institute for Information Indust
- Intel
- Alpha Networks



# Phase I Approved Products

<< As of June 01, 2004 >>

## Asia (cont')

- ETRI
- DrayTek
- Fujitsu Devices
- CEC
- USAGI
- IIJ(Internet Initiative Japan)
- NTT
- Acme Technologies
- Yokogawa Electric
- Fujitsu Access
- TOA





# Coverage and Primary Responsibility for Phase II

|           |         |             |             |           |
|-----------|---------|-------------|-------------|-----------|
| IPv6 Core | MLD     | MIPv6       | IPsec       | Migration |
| UNH/IOL   | UNH/IOL | IPv6PC/TAHI | IPv6PC/TAHI | IRISA     |

June 2004    July 2004    Aug.2004    July 2004    Aug.2004

[Due for the first draft test specification]

(\* ) Self-test suites ; Targeting 4Q of 2004.



# Policy of Phase II Logo

- Our assumption is ;  
that the vendor will apply core and MLD, first.  
Then, they add IPSec, MIPv6 and migration.
- From this perspective, core and MLD is basic  
and IPSec/MIPv6/Migration is an optional.  
However, in Phase II, we will mandate the  
IPSec for logo approval
- We give a logo, when the product passes at  
least one component.
- Which component(s) the product passes is  
represented by Logo-ID.  
(\* ) it would be like a control flag in TCP header.



# Summary

- IPv6 Forum “IPv6 Ready Logo Program”
  - Global unique test specification/criteria
  - Global collaboration
  - Encourage the deployment of IPv6 technology
  - Encourage the establishment of high quality local labs
- Contact for application
  - Web <http://www.ipv6ready.org>
  - Mail [<v6-apply@v6pc.jp>](mailto:v6-apply@v6pc.jp)
  - Chair Hiroshi Esaki [<hiroshi@wide.ad.jp>](mailto:hiroshi@wide.ad.jp)