

XCAST team report

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1. RFC5058 issued on Nov 2007.
 - “Explicit Multicast (Xcast) Concepts and Options” issued.”
 - What we’ve achieve, at last?
2. Next step
 - XCAST as a building block of SAM
 - XCAST 2.0

RFC5058

What we've achieved, at last?

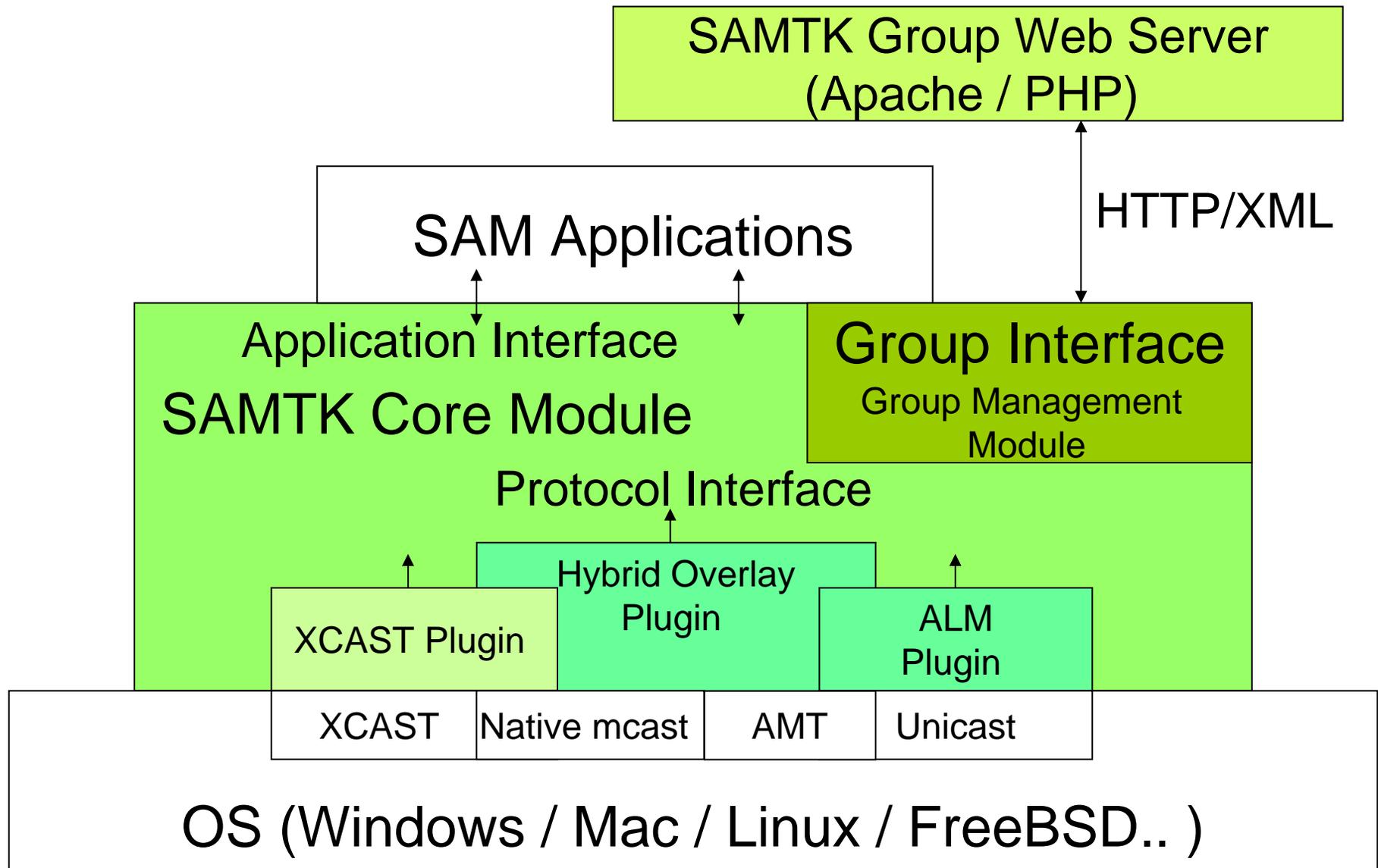
- Not achieved
 - Good usage, applications
 - Industrial products & services
 - Broad deployment
- Achievement
 - During discussion in SAM-RG
 - There are requirements, XCAST will not solve solely.
 - Get rough consensus discussing w/ RFC-editors & IESG
 - This is excellent and potentially very useful work. However, I would like to discuss how to move forward with regards to the proposed allocation of ... [ID-tracker, June 2007]
 - Design became old style for modern hardware routers. [RFC-editorial board]

XCAST as a building block of SAM

Pros. & Cons.

- XCAST isn't good
 - No built-in signaling
 - No bridging for other mcast variations, yet.
 - No traffic adaptation mechanism
- XCAST is good
 - Keeping very huge number of group
 - Transmitter can select arbitrary sub-set of the group members of individual datagram
 - providing basic communication mechanisms necessary to realize ALM, OLM.

XCAST in SAMTK Architecture



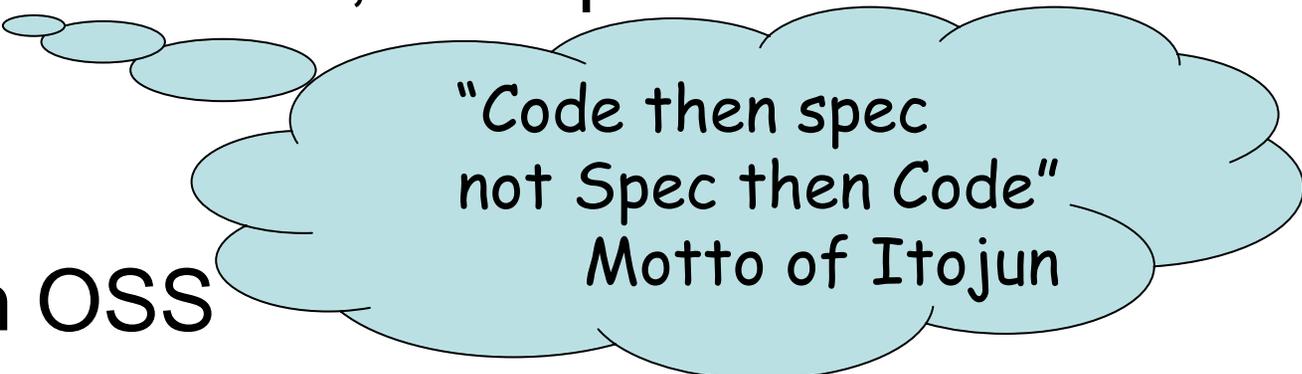
XCAST 2.0

<draft-ug-xcast20-protocol-spec-00.txt >

- XCAST6 (version 2.0) Protocol Specification, Feb 2008
 - Submitted after RFC5058 issued
 - Modified points
 - i. Move semi-permeable tunnel info from Hop-by-hop option to DSCP field of IPv6
 - Option header becomes performance neck w/ modern hardware routes.
 - ii. Fixed length list of destination
 - iii. Describe to clarify the detailed info for interoperation more than RFC5058.
 - Requirement for additional functions to support Hybrid Overlay framework is welcome!

XCAST 2.0 Implementation

- Operate system first, not spec first!!



"Code then spec
not Spec then Code"
Motto of Itojun

- Firstly, with OSS
 - FreeBSD 6.X, Linux 2.6.XX
 - XCAST fan club will change the base from XCAST6-1.0 to 2.0, soon.
- XCAST 2.0 code will release integrated with SAM-TK