

Multicast token ring over IP V4

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What is the perceived problem

- ◆ RFC 1469 IP Multicast over token ring LAN's addresses the issues ?
- ◆ Implementations are using this method to allow ip multicast support.
- ◆ Does RFC 1469 resolve issue?
- ◆ 802.1P/Q functionality issues for multicast registration.

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Can Token ring achieve full IP V4 multicast group address function.

- ◆ As new adapters evolve, ensure additional registers to allow for multicast selection.
- ◆ Stop using the LAI when setting group address on adapters ?
- ◆ Allow ease of migration for unix derivatives.

Goal and Objective

- ◆ Full interoperability using multicast 23bit mask for ip.
- ◆ Allow ip multicast(class d) hardware switching.
- ◆ Only use RFC 1469 Functional addresses for compatibility and registration.

Today's Situation

- ◆ Most NIC Vendors set Group address of x'C000' by default and this has interoperability implications since group address is not used correctly as per existing addressing conventions.
- ◆ Cannot listen to multiple group addresses .
- ◆ Often we're seeing flooding of Broadcast address by end systems .

How Did We Get Here?

- ◆ Old implementation does not support group address correctly.
- ◆ LAI is set .

Available Options

- ◆ Full support for new nics of group address
- ◆ Use group address as currently implemented and add new function to support ip multicast.

Recommendation

- ◆ New NIC's should include correct group address support
- ◆ Multicast is a very large market and cannot afford stations broadcasting/flooding the networks .
- ◆ Look at initiating 802.5 Working Group to address/resolve multicast issues.
- ◆ With the advent of 4/16/100 adapters ensure we include