The IEEE 802.1ag standard is a set of protocols for Ethernet OAM (Operations, Administration, and Management). The dot1ag-utils software package is an Open Source (new BSD License) implementation of the IEEE 802.1ag protocol and is supported on Linux, FreeBSD and MacOSX servers. The package implements Loopback Messages (L2 ping), Link Trace Messages (L2 trace) and Continuity Check Message (reachability).

donder# l2ping -i eth5 -v 123 -c 3 00:1b:c0:97:38:c6
CFM LBM to 00:1b:00:97:38:c6
64 bytes from 00:1b:00:97:38:c6, sequence 423844328, 0.934 ms
64 bytes from 00:1b:00:97:38:c6, sequence 423844329, 0.714 ms
64 bytes from 00:1b:00:97:38:c6, sequence 423844330, 0.825 ms
donder#

Release Schedule
Beta release planned for May 2011
First release planned for Summer 2011
New BSD License
Supported on Linux, FreeBSD and MacOSX
Implements LBM, LBR, LTM, LTR and CC
Implemented as user space programs
Looking for beta testers
Contact: rvdp@sara.nl

IEEE 802.1ag Fuctionality
Continuity Check (CC)
- Periodic hello messages
- Detect loss of connectivity
- Multicast sent by MEP, no replies sent
- Processed by MIP/MEP

Loopback Message/Reply (LBM/LBR)
- L2 ping sent manually from CLI
- Unicast sent by MEP, unicast reply by MIP/MEP

Link Trace Message/Reply (LTM/LTR)
- L2 traceroute sent manually from CLI
- Multicast sent by MEP, unicast replies by MIP/MEP
- LTM is forwarded until TTL is zero
- LTM is forwarded until target MIP/MEP is reached

http://nrg.sara.nl/dot1ag-utils