EFT HA can use Reliable Multicast and MSMQ to communicate between nodes

THE INFORMATION IN THIS ARTICLE APPLIES TO:

- EFT v7 and later
- In version 7.4.2 and later, unicast is available (in addition to multicast). Refer to the help documentation for more information.

DISCUSSION

EFT active-active, High Availability (HA) cluster configuration prior to version 7.4.2 uses Reliable Multicast and MSMQ to communicate between nodes to achieve HA.

Refer to the **High Availability** tab in the EFT administration interface. The nodes will show "unknown" respectively when on each server between the two nodes.

Wireshark can be used to help verify the root cause of issues,

If a Cisco UCS or Nexus 1K/5K is being used, refer to this KB article to help resolve the issue on that hardware:http://www.cisco.com/c/en/us/support/docs/servers-unified-computing/unified-computing-syst
Contact Globalscape support to assist in the verification and testing of the environment.

Two nodes in HA communicate via multicast. **EFT does *not* require PGM support at the l2 switch level**, because that is handled by the Windows "reliable multicast" drivers. EFT just needs multicast to work on the VLAN that interconnects the two host machines. For Cisco switches (any of them), this means enabling both "**igmp snoop**" and "**igmp querier**" for the VLAN that connects the two host machines.

If you do not want multicast turned on for other nodes, you should create a new VLAN for EFT communications.

If there are still issues, have your network team double check that the switch doesn't have any filtering/acl rules that drop IP packets that have protocol #113 (PGM). This is a different packet descriptor than UDP and TCP. (This type of filtering is usually *not* on.)

For any non-Cisco hardware switches, make sure the network team has multicast (igmpv2 or higher) working properly on the switch. Usually still called **igmp snooping**, but sometimes the "querier" part differs from Cisco.

EFT HA can use Reliable Multicast and MSMQ to communicate between nodes

Both are required for proper multicast support.

Globalscape's HA solution requires that the network between the two (or more) EFT nodes supports multicast of packets between all participating nodes, where the packet type is PGM (not TCP nor UDP). L2 interconnects between physical locations might be problematic for Multicast of PGM packets, **although we do NOT need PGM support at the switch layer in order for our HA solution to work**; EFT needs to ensure that PGM packets properly flow between the two Windows Host machines, and that Multicast properly works on the switch interconnecting those nodes. The Windows network drivers take care of all PGM protocol stuff; they just need the packets delivered to the machines in the multicast group. But in the case of an L2 interconnect between data centers, there might be some MPLS or VPN stuff going on; if this is the case, multicast does not work out of the box and **you likely need to enable GRE**, which encapsulates the multicast traffic and makes it work between the two data centers (or similar).

GlobalSCAPE Knowledge Base
https://kb.globalscape.com/Knowledgebase/11221/EFT-HA-can-use-Reliable-Mult...