H323 Call Fails Checklist

- ✓ **Check if the call setup mode is set to Gatekeeper or Direct**

  - • **If the mode is set to Direct, make sure the call is made using the IP address of the far end.**

  - • **If the mode is Gatekeeper, make sure that the Gatekeeper address is present.**

  - • **If there is no Gatekeeper address, check if the Gatekeeper Discovery is set to Auto and the VCS is set to be listening on Port 1718.**

- ✓ **Isolate if you are not able to make calls to public network or within your network.**

- ✓ **Calls within your own network should work fine, in case if that's not working, check to make calls to any other device and not testing with just one far end device. The problem might lie with the far end.**

- ✓ **Calls failing to the public network could have number of reasons; check if the endpoint is using a private IP address, and if that's the case make sure it is being natted and the H323 NAT mode should be set to appropriate (On or Auto) according to the requirements. Keeping the mode to Auto, the decision to NAT or not will be based upon if the call is made to the internal network or to the public network.**

- ✓ **NAT address should be specified on the endpoint and same must be configured in the router's NAT translation list to be allowed to NAT.**

- ✓ **Check if the appropriate ports are open on the firewall so that the call can go through. It is also important to educate the customer that in order to have a firewall traversal call, he should be having a VCS Expressway.**

- ✓ **For the ports, it would be helpful to use the Tandberg Port tester to see if the required ports are open.**

- ✓ **Enable H323 call debugging and identify the step at which the call fails. It is critical for you to know the H323 call flow process. Just to give you a short description, here's the brief call flow:**
  1. **H.225 RAS Messaging**
  2. **Q.931 Call Setup**
  3. **H.245 (Master/Slave Determination, Capabilities Exchange, Open/Close Logical Channels).**

- ✓ **Once you know the call fails at which step, it becomes easy to isolate the issue. Here are the detailed steps of the call :**
    1. **AdmissionRequest (ARQ)**
    2. **LocationRequest (LRQ)**
    3. **LocationConfirm (LCF)**
    4. **AdmissionConfirm (ACF)**
    5. **Q.931 Setup**
    6. **AdmissionRequest (ARQ)**
    7. **AdmissionConfirm (ACF)**
    8. **Q.931 Connect**
    9. **Capability Exchange**
    10. **Master/Slave Determination**
    11. **OpenLogicalChannel**
    12. **OpenLogicalChannelAck**