Polycom VV310 Goes Offline Because of Failed Time/Date Mismatch

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Situation: Zerowait's remote office in Texas experienced several internet outages, one morning in particular. In early afternoon that day, the Polycom VV310 phone on an employee's desk would not boot properly or connect. The phone's LED showed a time/date mismatch error message and also indicated that the phone was un-provisioned. Changing cables and switch ports, and rebooting didn't help. Engineering also verified phones were showing offline within ZOOM's website admin page under the phones and devices section. Physical connectivity checks revealed phones had IP addresses and were online but weren't functioning properly for phone service. Web interface access confirmed phones were responsive, attempted remote/onsite reset and reboots with no success. Provisioning configuration was verified as correct, but phones remained offline.

Downed Phones!

Task: Find out what was causing this and fix it! Turns out this was not the only phone at our company with this issue and their being down made a significant communications impact.

Action:

- **Check Provisioning Scripts:** A time server synchronization error identified in system logs was the primary issue. Engineering experienced a similar issue with other time server problems which helped guide initial troubleshooting. Certificate validation failure occurred when time synchronization failed, causing phones to go offline. The Texas location was attempting to connect to external NTP servers but was experiencing connection problems.

- **Check the Time Server and Certificate Validation:** The phones had lost the ability to connect reliably with the time server as it currently existed, which interfered with certificate validation and thus made the phones

- **Create Time Server on DHCP**: We added a time server to the TX local DHCP server and this allowed provisioning to complete the certificate validation and the phones came back online.

Result:

- A hard-coded time server IP address was added to DHCP options for reliable time synchronization. Engineering also removed the UNIX time server and configured DC16 (Windows domain controller) as secondary time server with DC18 remaining as primary.

Physical Phone reboots after time server configuration changes successfully restored connectivity

- Polycom VV310 VOIP desk phones were brought back online after failing time/server matching and certificate provisioning. Via creating a new time server local to the remote office, we were able to succeed in both time/server match and certificate provisioning.

- **Lessons Learned:** A contributor to the mismatch was continual instability in the internet lines that morning. Further, research indicates that our VOIP provider Zoom may no longer keep these on their compatible phones list and therefore support from them might not be available in the future.

Contact Zerowait for your IT challenges: *Store more and worry less!* Email us at sales@zerowait.com or call our team at (302) 996-9408 to schedule a consultation.