Gotcha: Convert z/OS HFS files to zFS

- CICS TS V3.2 default install uses zFS instead of HFS, for z/OS Unix files. We started with HFS, and decided to convert to zFS.

- IBM supplies "very nice" exec BPXWH2Z to do the HFS to zFS conversion. (Thanks, IBM!)

- BPXWH2Z was returning error messages for long HFS dataset names, such as: 'OMVS.CICSTS.USR.LPP.CICSTS.CICSTS32'
  - /usr/lpp/cicsts/cicsts32/ is our R/O "production" path.
  - /CICSTS/usr/lpp/cicsts/cicsts32/ is our R/W SMP/E "test" path.
  - /local/cics/cicsts32/ is our R/W "production" (local customization) path.
Gotcha: Convert z/OS HFS files to zFS

- IBM initially wanted to close our ETR/PMR with "MR" - Marketing Request. We wanted to see the BPXWH2Z exec updated to better handle long dataset names.
- IBM opened APAR OA22483, which is now closed. For z/OS 1.7, the PTF is UA38552.
- Thanks again, IBM!
Gotcha: IPCCONN and LINKAUTH(SECUSER)

- CICS TS V3.2 adds support for IPCCONN definitions for DPL
- LINKAUTH can be SECUSER or CERTUSER
- If using SECUSER, "Specifies that the user ID specified in SECURITYNAME is used to establish link security."
- "If you do not specify a value for SECURITYNAME, CICS uses the default user ID."
- Your sites CICS default userid may be insufficient to successfully acquire the connection(s)
- Review the IPCCONN attributes in the CICS Information Center, and the appropriate security considerations at your site
Gotcha: CICS WS Requester and https - TCPIPSERVICE required?

- New/reused CICS application(s) with EXEC CICS INVOKE WEBSERVICE with URI(https://...)

- No CICS Web Support or other TCPIPSERVICE definition requirements in CICS - the above INVOKE fails w/o a "dummy" TCPIPSERVICE definition with SSL specified

- After a bit of research and experimentation...
Gotcha: CICS WS Requester and https - TCPIPSERVICE required?

• Activating SSL for a TCPIPSERVICE:

"To activate SSL support for a given connection, you must set the value of the SSL attribute on the connection’s TCPIPSERVICE definition to one of the following:

YES - If you set the value to YES, CICS will send a server certificate to the client.

CLIENTAUTH - If you set the value to CLIENTAUTH, CICS will send a server certificate to the client and the client must send a client certificate to CICS."

• CICS needs the SSL infrastructure built in the region to successfully send https requests - a TCPIPSERVICE definition with SSL (or CLIENTAUTH) is needed, based upon our experience
Gotcha: CICS WS - Fun with CICS and Web Services!

• CICS COMMAREA based Web Service defined in all CICS regions that support CICS WS - should return info. about the target CICS region.

• CICS WS test transaction with EXEC CICS INVOKE CICS WEBSERVICE command and target URI (hostname:port, etc.) only returns info. from the local CICS region, instead of the INVOKE WEBSERVICE target region, unless program is defined as remote. Local and target regions have different ports assigned in the TCPIPSERVICE definition. Eclipse Web Services Explorer testing confirms CICS WS working in all local CICS regions.

• Hint: Remember that CICS can be a WS provider and/or requester.
Gotcha: CICS WS - Fun with CICS and Web Services!

- Need two PIPELINE definitions - one with a config. for provider, and one with a config. for requester.
- Test transaction needs to specify the requester WS.
- CICS is finding the local WEBSERVICE name on the INVOKE CICS WEBSERVICE command, and is using it *before* looking at the remote URI.
- WAD - Working As Designed!