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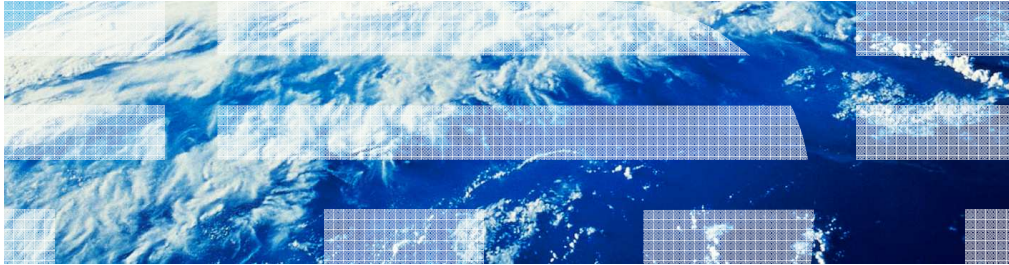
z/OS V1R13

zFS: Internal restart

Session objectives

- zFS internal restart
  - An availability improvement for zFS internal failures
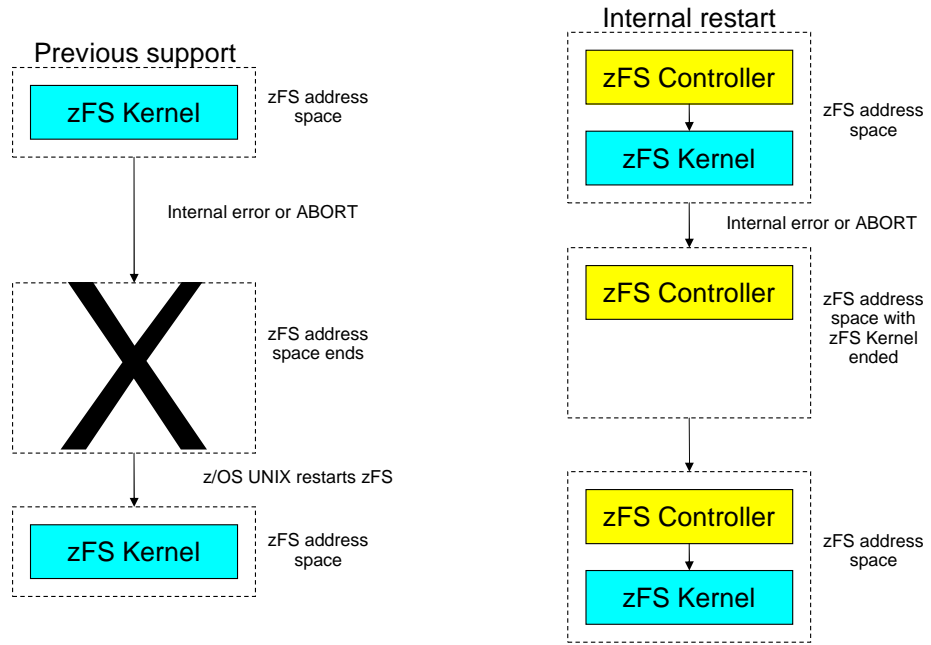
zFS: Internal restart

Overview

- zFS internal restart
- Problem statement / need addressed
  - Some zFS internal failures require aborting zFS and having z/OS® UNIX® restart zFS. This clears the failure but can cause some file systems to be unmounted.
- Solution
  - Restructure zFS so that internally, a controller task attaches the zFS kernel task. When an internal failure occurs in the zFS kernel, the zFS controller task can stop and restart the zFS kernel and internally remount the zFS file systems.
- Benefit / value
  - zFS can recover from internal failures without losing mounts
  - zFS time to recovery is improved

zFS: Internal restart

Usage and invocation

- zFS internal restart
  - zFS internal restart occurs automatically if zFS detects an internal failure
  - zFS ownership of zFS sysplex-aware file systems can change during internal restart
  - As before, applications may see failures as a result of zFS restart
  - As in previous releases, zFS restart can be explicitly invoked to resolve hangs involving zFS by way of the operator command MODIFY ZFS,ABORT. But now in R13, it will attempt an internal restart.
  - You can query the number of zFS internal restarts that have occurred since zFS was started by using the MODIFY ZFS,QUERY,STATUS command

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Usage and invocation: zFS internal restart

Previous support

Internal restart

Interactions and dependencies

- Software dependencies
  - None
- Hardware dependencies
  - None
- Exploiters
  - Any users of zFS in R13

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Migration and coexistence considerations

- None

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Installation

- Changes in zFS installation
  - None
- Commands changed
  - MODIFY ZFS,HANGBREAK now does MODIFY ZFS,ABORT

Session summary

- zFS internal restart
  – An availability improvement for zFS internal failures

zFS: Internal restart

Appendix - References

- Publications
  - z/OS Distributed File Service zSeries® File System Administration (SC24-5989)
  - z/OS Distributed File Service Messages and Codes (SC24-5917)

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