

IBM Education Assistance for z/OS V2R1

Item: TFS Enhancements

Element/Component: z/OS UNIX System Services



Agenda

- Trademarks
- Presentation Objectives
- Overview
- Usage & Invocation
- Installation
- Presentation Summary
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Trademarks

- See url <http://www.ibm.com/legal/copytrade.shtml> for a list of trademarks.
- Additional trademarks:
 - None.



Presentation Objectives

- Describe enhancements to the TFS file system
 - FSFULL monitoring
 - Increase the size of a TFS file system
 - Manually
 - Automatically
 - Produce unique reason codes with bpxmtext support



Overview

- Problem Statement / Need Addressed
 - Space management for TFS file systems can be difficult because there are no warnings when space is critical and no capability to dynamically increase the size
 - TFS does not produce reason codes for error conditions
- Solution
 - TFS will issue messages similar to HFS and ZFS as space becomes critical.
 - TFS can be configured to increase in size
 - TFS will produce unique reason codes for error conditions
- Benefit / Value
 - Simplify management of TFS file systems



Usage & Invocation

- TFS global defaults can be specified in the FILESYSTYPE PARM
 - FILESYSTYPE TYPE(TFS) ENTRYPOINT(BPXTFS)
ASNAME(TFS,'SUB=MSTR')
PARM('-FSFULL(80,5) -EA 10 -EM 10')
- Use MODIFY to change global defaults or manually grow a file system (one parameter per modify command)
 - F tfs,fsfull(80,5)
 - F tfs,grow dev
- Limited diagnostic query via MODIFY: F TFS,Q
- TFS file system specific defaults can be specified on the mount parm
 - MOUNT FILESYSTEM(DEV) TYPE(TFS) MOUNTPOINT('/dev')
PARM('-s100 -fsfull(80,5) -ea 10 -em 10')



Usage & Invocation

- New and Changed Messages
 - BPXTF107I *filesystem* SIZE=*size* MAX FILE SIZE=*size2*
FSFULL(*threshold,increment*) EA=*growa* EM=*growm*
 - Issued after a successful mount
 - This replaces BPXT007I
 - FSFULL Monitoring
 - BPXTF009E FILESYSTEM EXCEEDS *percent%* FULL: *name*
 - BPXTF010E FILESYSTEM IS FULL: *name*
 - BPXTF011I FILESYSTEM IS NOW BELOW *percent%* FULL: *name*
 - MODIFY Responses
 - BPXTF012I GLOBAL SETTINGS: fsfull(*threshold,increcmet*) ea
growa em *growm*
 - BPXTF014I FILESYSTEM EXTENDED ea count em count2 *name*
 - BPXTF015I MANUAL EXTENDS EXCEEDED FOR *name*



Installation

- FILESYSTYPE statement for TFS in your BPXPRMxx member
- For Modify support run TFS in a colony



Presentation Summary

- TFS will now issue space critical messages
- TFS will allow for the file system to be expanded
- TFS will issue reason codes for error conditions
- Modify support for default changes and limited query



Appendix

- Pubs: Unix System Services Planning GA22-7800

