

What's New in The Control Editor (TCE)

The Control Editor (TCE) is a z/OS System Utility that enhances the TSO/ISPF experience for z/OS System Programmers by fully automating, step-by-step, the individual tasks that lead us all towards compliance with the Best z/OS System Programming practices. The following describes certain new features and functions.

The Dataset Sentry

Privileged Instructions and You! Privileged instructions are intended for use by privileged users, users whose credentials give them access rights authorized by management and backed up by the control boundaries enforced by z/OS and the ESM. Programs must reside in authorized libraries, i.e. APFLST datasets, LNKLST datasets, LPALST datasets, SYS1.NUCLEUS, to be used for privileged purposes such as modifying system settings or accessing restricted storage. Access to such Libraries is tightly guarded to prevent unauthorized individuals from injecting a library with ransomware or viruses, or authorized individuals from accidentally uncataloging, deleting, or renaming datasets. Either of these can cause great harm to the integrity of z/OS.

While the ESM keeps watch over these libraries, such legacy security processes always overlook one important control point. Only an engaged z/OS system programmer would know for certain, in real-time, if an access denial to a library could mark the beginning of a malicious event, intended or not. In an effort to enrich existing ESM boundaries and provide a proven method for strengthening z/OS defenses, The Dataset Sentry will notify the responsible, accountable system programmer(s), with an SMS or e-mail, of an attempted dataset read or update that resulted in



an access denial by the ESM. This highly flexible dataset monitor automatically discovers the target libraries, logs authorization failures, and creates log data for periodic or on-demand audit reporting. These Active Measures (AM) are done proactively, in real time while the access attempts are in progress.

Journal Fast-Path

Configuration History at your fingertips! Users of The Control Editor (TCE) have long known that configuration backups and configuration changes can be automatically stored in the TCE Control Journal (Blockchain) reflecting the complete history of any given controlled component – member, dataset, library, sequential dataset, or UNIX file. With Journal Fast-Path, the complete TCE Control Journal history is available from the ICE Command Line or from any panel within the ICE Environment.

Journal Fast-Path offers much quicker access to "What's Changed?" information. Simple Command Line commands or panel options can deliver a complete history of the all journal entries that match the member, dataset, or UNIX file entry being processed. Using the worksheet, you can filter by dataset, controlled category, last update date and time, or userld. This allows for rapid isolation of the specific member or file of interest. Select and drill-down to all versions of your target and compare the member your working with against any prior version. All interactively, in seconds.

Compare and HistList

TCE and ISPF Compare! The Control Editor now fully integrates and supports the ISPF COMPARE function. The functions you appreciate in ISPF COMPARE you'll appreciate even more as they are now available to a typical TCE Edit session. There's more! Since TCE has a complete history of a controlled component, TCE COMPARE can be used to interface with information in the TCE Control Journal.

In an Edit Session, entering COMPARE HISTLIST on the command line will generate a complete list of journal entry possible compare targets. Select one and upon return to the edit window, the compare operation will be completed against the selected target. Is this the compare-point you're looking for? If not, go again until you find the proper target. Standard Control Editor options exist throughout the process, including the ability to document your edits using the unique descriptor panel or abandoning a possible update by canceling out, as necessary; all of which is captured and recorded in the TCE Control Journal.



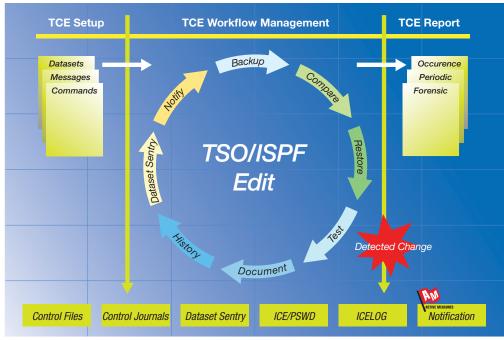
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What is The Control Editor (TCE)?

The Control Editor is a "Compensating Control" that provides a layer of non-invasive security over the z/OS configuration components housed in defined sets of partitioned datasets. TCE significantly enhances the level of security provided by the site's External Security Manager (ESM). In addi-



tion, TCE can be customized to identify and take action on the occurrence of specific System, Health Checker and External Security Manager Messages and record Change Events detected by the NewEra Family of Supplemental Change Detectors.

Five Real World Examples of How TCE Improves z/OS Integrity

- 1. "Our system audit reviews are done as part of our financial audit process. We have been written up several times for not having adequate documentation of actual changes. We do a good job of documenting what we are going to do but not what we actually did. The Control Editor filled this hole in our change management process by requiring users to provide descriptive information, documenting each change at the point of the change using standard TSO/ISPF. No more negative audit findings."
- 2. "...everyone knows that submitting JCL during a TSO/ISPF Edit session can open a big hole in z/OS system security. JCL can be edited and submitted, even by those without UPDATE authority, and then the Edit session cancelled. No one is the wiser and generally RACF, ACF2 and Top Secret are totally bypassed. This has been an open audit finding in our environment for some time. The Control Editor closed this hole for us. No more undocumented changes to or submission of our JCL."
- 3."...we have contractors coming in and out of here all the time. We give them pretty much the same access we give to our own system programming staff. Until we began using The Control Editor we had no idea what they were actually doing, what changes they were making. The TCE reporting and query functions resolved this completely. I now know who did what, to what and when."
- 4. "...I cannot tell you how many times I have had to get involved in a system security dispute between my Security Officer and System Programming Manager. Both are well intended, one wants more security of z/OS system changes; the other says no way. The Control Editor resolved this for me, for us. It was easy to set up and since it enhances ISPF it was a snap to learn. Security guy has lots of reports and the System guys are now on "Friendly Terms" with a compensating control. Everyone is happy."
- 5, "...we're in the insurance industry, lots of regulation, lots of compliance issues: SAS70, SOX and NAIC. Our CFO studied them all and concluded that what we needed was one approach to change management that satisfied all requirements, generally stated as: what changed, who changed it and on what authority. After an extensive evaluation of available software tools, we selected The Control Editor for three specific reasons: lowest total cost of ownership, seamless integration into our change process and its full set of compliance reporting tools. Regulations satisfied, CEO happy."



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