C\Trek
Fine tune your performance

ZCubed
Mainframe Technologies Future
www.zcubedtech.com

The **C\TREK™ expert CICS performance tuner™** is a tool used by mainframe system programmers to optimize CICS system performance in a fraction of the time required when using more traditional CICS monitors.

By automating the analysis of vast amounts of CICS data, isolating performance problems and making expert recommendations for corrective action, it enables IBM data centers to save valuable staff time, delay system upgrades, and transition to a more proactive approach to CICS system performance management.

Learn More about **C\TREK** ZCubed's Premier Performance Software.

What is C\TREK?

C\TREK is a performance and problem determination tool

- It should not be confused with current performance monitors
- C\TREK does not replace any of these products

C\TREK works in a real-time online environment

- C\TREK performs an in-depth analysis of the data being displayed and highlights any fields that require attention

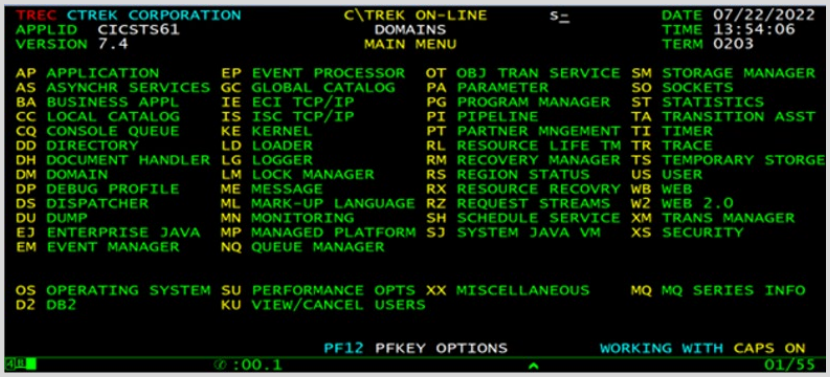
C\TREK performs a complete Health Check of the CICS TS system in a matter of seconds

- Over 400 items are reviewed in a CICS z/OS system
- Currently, there are currently 169 in the VSE version with another 146 being added for a total of 315
- C\TREK has over 1400 different displays in the z/OS version and around 1000 in the z/VSE version which provides a significant picture of your CICS system

C\TREK applies formulas and Rules of Thumb (ROT) in its analysis of the data within a CICS region to identify potential performance issues and provides recommendations to optimize system performance

- There are many hidden issues that traditional performance monitors do not analyze

C\TREK Main Display



This is the main display that presents the different CICS domains in the CICS Transaction Server. You can get more detailed information about each individual domain by selecting it. At the bottom of the display, you will find several additional options to help you analyze your CICS TS system.

- **D2 –** Obtain information about the DB2 connection to CICS TS
- **SU –** Submenu that is important in optimizing your CICS TS system
- **MQ –** Information about your MQ connection to CICS TS
- **OS –** Information about certain important areas that can affect your CICS TS performance
- **XX –** Additional information that is of use when analyzing your CICS TS system such as the abend handler information

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Why should you use C\TREK?

C\TREK has a proven record of being able to recover resources in CICS TS systems

Clients who have used C\TREK have been able to recover CPU utilization by up to 20%

Clients have not only been able to recover CPU cycles but have also improved transaction response times, provided better look-aside hit ratios for files, improved disk utilization, recovered disk space, and improved virtual/real storage utilization

As a secondary benefit, system programmers have learned how to perform performance tuning and problem determination

C\TREK was developed by a series of professionals that performed CICS performance tuning and problem determination for over 30 years

You have limited CICS system programming resources and in many cases only perform tuning when a problem occurs

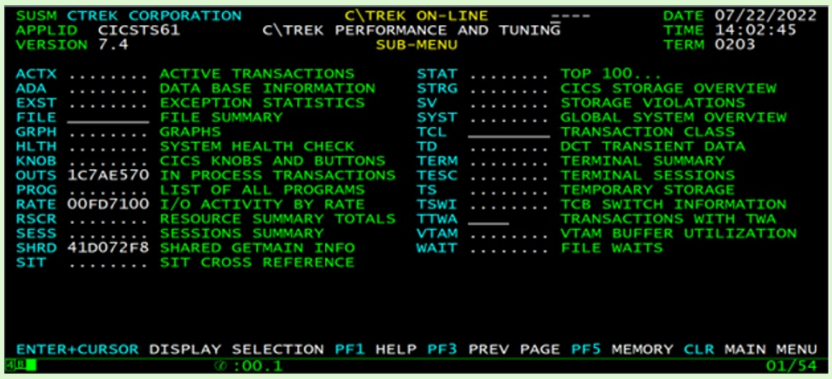
- Using C\TREK you can be proactive to conditions that can affect the performance of the CICS system

You can recover resources such as up to 20% in CPU cycles as experienced by other users

- Recover disk space
- Recover virtual/real storage
- Improve the transaction response times

As a result of using C\TREK, clients have been able to extend the life of their system deferring costly hardware and software upgrades

C\TREK Performance Optimization Menu



An important internal CICS TS resources can be analyzed using the optimization options. Probably the initial point to tuning the system lies in executing the **Health (HLTH) option** where C\TREK checks for over **400 possible errors or problems**. This gives you an idea of the areas that must be reviewed in detail. Resources such as Programs, Temporary Storage, Storage Manager, Transient Data, System Initialization Table parameters, and File information can be analyzed in more detail.

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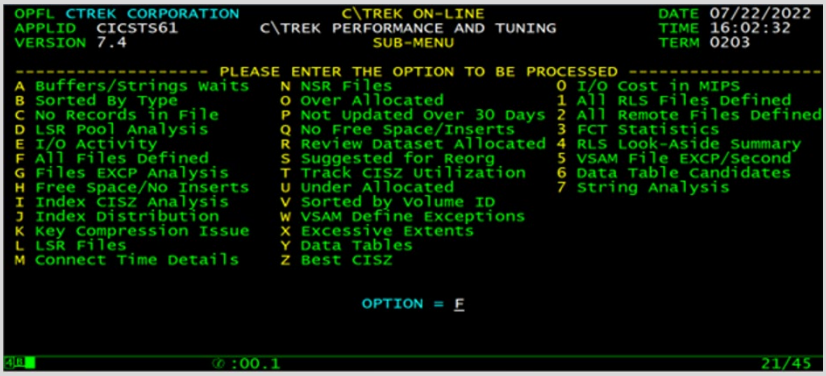
C\TREK File Submenu



The file submenu provides a complete analysis of all **VSAM activities**. Other performance monitors when analyzing VSAM files would take time since they usually perform their functions on one file at a time. C\TREK on the other hand will analyze all of the files at one time and provide a display with the results. C\TREK can also provide information regarding **LSR buffer usage** by identifying how many buffers each file is using out of the pool. This makes it easy to see if any file is monopolizing the buffer in the pool. Some of the new features include being able to identify which files are doing physical I/O operations and at what rate. Also, the information provided by C\TREK for RLS files is more complete than many other performance monitors. In C\TREK, another display demonstrates the look-aside hit ratio for each file including NSR files which are not provided by CICS TS or many other monitors. C\TREK will calculate the look-aside hit ratio for the LSR files as the percent provided by VSAM which is an average of all the files that use that buffer.

What are the advantages of using C\TREK?

Using C\TREK you can identify the areas that require the attention of even the most complex systems in a matter of an hour or two

- C\TREK identifies potential areas where resources such as the CPU can be recovered
- C\TREK identifies potential problem areas that can have a negative effect on your system's performance
- C\TREK highlights fields that require attention in yellow or red making it easy for the system programmer to spot areas requiring attention
- C\TREK provides recommendations on how to improve the system

C\TREK serves as an educational tool for new and experienced CICS system programmers on learning CICS internals, performance tuning, and problem determination

DB2 Submenu

Information regarding how well the DB2 connection is working within CICS TS is available. An analysis of the DB2ENTRY definitions is made and includes a recommendation if the number of threads should be increased. One can view how the L8 TCBs are working and whether they are currently connected to DB2.

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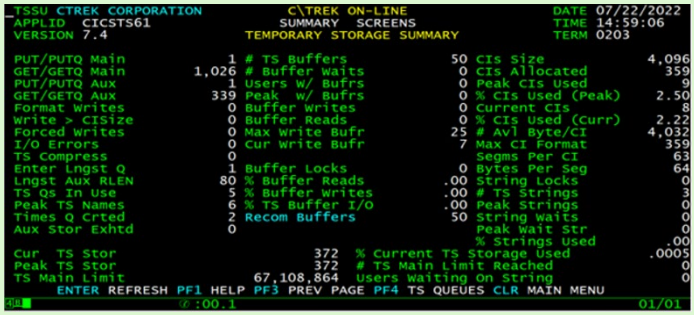
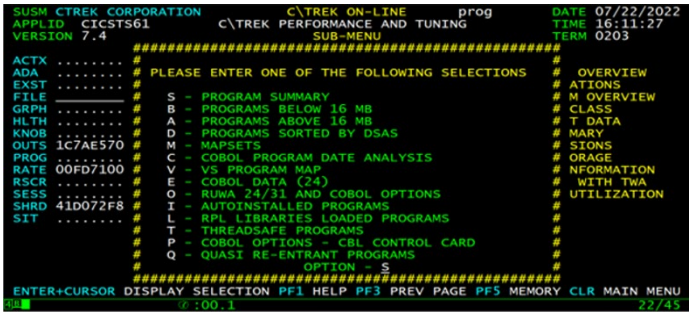
Temporary Storage Summary



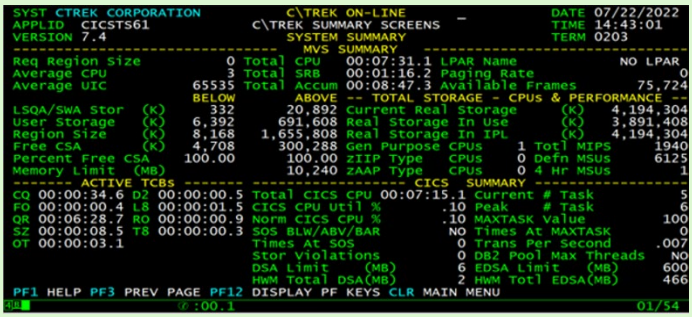
Temporary Storage can also be analyzed including how well the string and buffers assigned are working.

C\TREK Program Submenu



C\TREK also provides information regarding the programs in use. One particular option would be listing all the COBOL programs in order of their last change date which is one of the features in C\TREK. One can view the CBL control card options used for each COBOL program. This can be quite important where you may be running short of virtual storage below the line because even if the program was linked above the line, it may still be acquiring its working storage below the line because of the use of the DATA(24) CBL option. Another feature of C\TREK is listings of the threadsafe programs and those still pending conversion.

C\TREK Summary



The C\TREK system provides an overview of how CICS TS is working providing combined information not only from CICS but from the operating system. This provides the user with a quick glance at any issues such as virtual storage, max tasks, CPU utilization, real storage, SOS conditions, and DB2 maximum threads. Therefore, providing a quick overview of how the system is working. C\TREK provides additional information from this screen such as the amount of CPU used by the different address spaces.

Complimentary 30-Day Trial Available

- A consultant onsite for 2 days who will install C\TREK™
- C\TREK™ performance education for you and your staff
- Tune your CICS environment using C\TREK™
- 30 days complimentary
- **Request Your Trial**

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