User and Transaction Security for CICS
What is CICS/SignOn?

CICS/SignOn gives you back the benefits of the familiar internal security (DFHSNT) which has been removed in the new CICS releases. You do not have to be forced down the path to external security with all of its hassles and overhead... you now have a choice.

CICS/SignOn provides security for CICS transactions, terminals, and users; complete signon/signoff functions for users; and transparent support for programs executing EXEC CICS INQUIRE/ASSIGN commands for Userid and Operator ID.
Is CICS/SignOn a solution looking for a problem?

Hardly. Here’s why.....
CICS internal security has been removed in all new releases of CICS for MVS and VSE. As you face CICS version upgrades, you will be forced to address several issues:

- Do we purchase a full-blown external security package? If so, how much will it cost?
- How much re-training will we have to do?
- How much time will it take to install and administer the package?
- What if we don’t want/need the additional security levels of a full-blown security package?
- If internal CICS security is removed, how do we secure our CICS transactions? Without external security or CICS/Signon, CICS transactions are no longer secured.
- Will we have to change CICS programs retrieving USERID and OPID from EXEC CICS INQUIRE and ASSIGN commands?
- How will CICS users be uniquely identified without being able to sign on?
- We use CICS terminal autoinstall, so user security can’t be based on terminal ids. What do we do?
The solution for all these issues? CICS/SignOn!

MacKinney Systems CICS/SignOn provides seamless integration of user signon/signoff into current CICS releases including those, which have internal security, removed.

- CICS/SignOn is for CICS installations that wish to upgrade to new releases of CICS but do not want full-blown external security packages. CICS/SignOn provides signon/signoff for users, transaction security, terminal security, user security, and transparent support for programs to continue doing EXEC CICS INQUIRE TERMINAL and EXEC CICS ASSIGN commands for USERID and OPID.

- CICS/SignOn gives your users the ability to signon/signoff of CICS with the same look and feel of the former CICS internal security. Users do not have to be retrained, and applications do not need to be changed.

- CICS/SignOn replaces your old CICS internal security without changes to your existing code. It supports the commands your programs use to determine user identification. Transparently! For example, all programs executing the CICS commands “EXEC CICS INQUIRE TERMINAL USERID/OPERID” or “EXEC CICS ASSIGN USERID/OPERID” will automatically and transparently have the correct userid and operid returned by CICS/SignOn. No changes, assemblies, or compiles are required to your programs.

- CICS/SignOn replaces your old CICS security without a time-consuming conversion. Installation time is minimized because the migration to CICS/SignOn is a simple, one step process that takes just a few short minutes. During this process, our migration utilities import your existing transaction, user, and terminal internal security, while reporting progress and statistics to your administrator. This migration process takes only minutes!

- CICS/SignOn provides user password expiration. CICS/SignOn provides the ability to require users to change their password after an administrator-specified number of days.

- CICS/SignOn fully supports multi-region operation (MRO) installations. Your application owning region (AOR) programs will be supplied with the security the users qualified for when they originally signed on to the terminal owning region (TOR).
• CICS/SignOn results in a much more secure CICS environment. Unlike the old internal DFHSNT (table-based) security, your users can change their own passwords without systems programmer intervention and without bringing the CICS region down. More importantly, no one knows the password but the user. The old macro-based security was not secure because systems programmers had to know every password, including the payroll systems password, in order to build signon tables. Worse yet, those passwords were in an assembler source member that someone could read. **CICS/SignOn passwords and definitions are encrypted for protection from unauthorized access.**

• With CICS/SignOn, your administrators can determine who is signed on to a particular terminal. The old DFHSNT (table/macro-based) internal security allowed that only with a third party product (like our CICS/TIMEOUT product).

• CICS/SignOn provides easy to use, online administration of users, transactions, and terminals rather than DFHSNT (table/macro-based) internal security that requires scanning source members by hand/eye. You can manage user, terminal, and transaction security directly from a terminal in the desired region.

• CICS/SignOn can secure CICS transactions with up to 64 keys. CICS/SignOn has the ability to define CICS transaction security with multiple keys alleviating much of the need to expand past 64 CICS keys and saving considerable administration time.

• CICS/SignOn is centrally controlled. Help desk personnel or an authorized system administrator may reset passwords. When a user's password is reset, CICS/SignOn requires that the user change the password the next time the user signs on.

• CICS/SignOn monitors your security. Had a security breach? A complete audit log of signons, signoffs, and changes is maintained so you can find the perpetrator and eliminate the problem.

• **CICS/SignOn is ONLY for CICS.** Other security packages affect performance and administration of your entire system even if you only wish to secure CICS. CICS/SignOn is able to take advantage of many performance and usability enhancements because it is designed specifically and entirely for CICS.

• CICS/SignOn includes an Application Programming Interface allowing you to call CICS/SignOn from your programs.
Sign-on

Type your userid and password, then press ENTER:

Userid ==> BWHITE
Password ==> _
New Password ==> 

Enter=Signon PF1=Help PF3=Exit

Just as you would expect from your current CICS security, you get a short message indicating you have successfully signed-on to CICS.

Sign-off

User decides to signoff and logoff of CICS.

In that fleeting moment after sign-off but before the terminal is disconnected from CICS and returned to the control of VTAM, CICS/SignOn displays a pair of messages saying the user has been signed-off and is in the process of being logged off (disconnected from CICS).
After executing the CICS/SignOn “export” transaction in an old CICS with internal security, the user now starts the import process in the target CICS. The “import” function updates the screen constantly with migration status information.

A summary report documents all the work that has been performed.

The entire “export” and “import” process takes only minutes for each function!

**SNTE150**—IMPORT MIGRATION PROCESS STARTING

NOTE=> YOU CAN TERMINATE THE PROCESS AT ANY TIME BY PRESSING THE "ATTENTION" KEY. THE IMPORT PROCESS CAN BE RESTARTED AT ANY POINT.

**SNTE154**—SUMMARY OF PREVIOUS EXPORT MIGRATION

NUMBER OF EXPORTED USERS 00020
NUMBER OF EXPORTED TRANSACTIONS 00394
NUMBER OF EXPORTED TERMINALS 00005
APPLID OF EXPORTED CICS CICSTEST

**SNTE166**—IMPORT OF TRANSACTION PROFILES BEGINNING

SNTE167—EACH "." REPRESENTS TRANSACTION PROFILES IMPORTED

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**SNTE168**—IMPORT OF TERMINAL PROFILES BEGINNING

SNTE167—EACH "." REPRESENTS TERMINAL PROFILES IMPORTED.

**SNTE163**—IMPORT OF USER PROFILES BEGINNING

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SUMMARY

**SNTE165**—USER PROFILES SUCCESSFULLY IMPORTED. USERS IMPORTED=00020!
DUPLICATES IGNORED=00000

**SNTE168**—TRANSACTION PROFILES SUCCESSFULLY IMPORTED. TRANSACTIONS IMPORTED=00399!
DUPLICATES IGNORED=00000

**SNTE172**—TERMINAL PROFILES SUCCESSFULLY IMPORTED. TERMINALS IMPORTED=00009!
DUPLICATES IGNORED=00000

**SNTE189**—IMPORT MIGRATION COMPLETE.

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**SNTE191**—PRESS THE "PF3" KEY NOW TO EXIT
CICS/SignOn Administration

CICS/SignOn has several options intended to offer flexibility to the administrator. Security should be as invisible as possible. These options help administrators customize CICS/SignOn according to the needs of their organization.

CICS/SignOn installation options allow great flexibility for site customization.
Rather than keeping userid and password information in source code form where anyone can read it, CICS/SignOn provides a VSAM-based online system for maintaining this information. Best of all, this information is encrypted and secure.

You can reset a password, update the user description, assign security keys, etc.

This user has access to all CICS transactions since all security keys have been specified.
Updating Transactions

CICS/SignOn offers transaction security. Here is a list of transactions that were migrated from our ADHOC product. Next we'll see the screen where one of these transactions is secured.

The old CICS internal security allowed only 1 key specified for each CICS transaction. CICS/SignOn will let you define multiple keys for a single CICS transaction. This gives you additional flexibility in the assignment of your security keys. For example, you have a new CICS transaction “INQA” which is used by the PAYROLL department and the SALES department. The PAYROLL department users have a user security key of 5 and the SALES department users have security key of 20. CICS/SignOn will let you define the “INQA” transaction with a security key of 5 AND 20. Without the ability to assign multiple keys to a CICS transaction, you would have to define a new security key (64 for example) and add key ‘64’ to all the PAYROLL department users, the SALES department users, and the “INQA” transaction. In addition to the extra work, you would eventually use up all your keys. With CICS/SignOn’s ability to define multiple keys to a transaction, you simply define the “INQA” transaction with keys “5” and “20” and you are done. No need to change the PAYROLL or SALES department’s userids. You not only saved extra work, but you didn’t need to use any of your limited number of available keys.
CICS/SignOn allows you to force a terminal to use a particular userid, just as DFHSNT-based security did. A list of terminals is shown here, each of which was migrated from the TCT. On the screen following this one, you can see how the terminal's use is restricted to one userid.

CICS/SignOn offers backward compatibility to the old DFHSNT-based security. Here the user is viewing the default userid setting for this terminal.
Who is on terminal xxxx?

Now you can see which user is signed-on to a particular terminal.
Enter option “7” and termid “TRM1”.

Message SNTE012 displays the userid and operator id signed on to terminal TRM1.
Resetting Passwords

The SNTR transaction allows help desk personnel to change a user's password.

Help desk personnel or system administrators can reset a user's password. Unlike the old internal CICS security, the user is forced to change this password with its first usage.

SNTR

SNTRMS03 CICS/SIGNON APPLID: TEST410
User Password Reset function

This function is intended to reset a user's password to a new password. The user is then able to logon with the new password and will be required to change the password when first used.

USERID ==> __________ -OR- USER NAME ==> ____________________

NEW PASSWORD ==> The new password to be given to the user

VERIFY PASSWORD ==> Enter the new password again for verification

ENTER=Reset User's Password  PF1=Help  PF3=Exit
FREE 30 DAY TRIAL

Call (417) 882-8012 for a FREE 30-day trial. CICS/SignOn has a simple 1-2 hour installation.

OPERATING SYSTEMS

**MVS**: CICS 3.1 OR higher, including all releases of CICS Transaction Server.
**VSE**: CICS 2.2 OR higher, including all releases of CICS Transaction Server.

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