

Console Consolidation System

CCS 2074™

The Console Consolidation System makes consolidating mainframe consoles onto both UNIX and Windows workstations easier and more affordable than ever before. When used in conjunction with the IBM 2074 Control Unit the Console Consolidation System (CCS) adds unique and valuable functions for consolidating console sessions onto operator's UNIX workstations or PCs.

CCS software allows multiple operators to access and work in the same console session, simultaneously. Authentication tools ensure only authorized users are granted access to consoles. Autoreconnect options keep console sessions controlled by CCS for added security. CCS console sessions can be moved from workstation to workstation with ease, without varying the console off and on each time.

Additional security is provided when a 2074 is run on a private network (figure 1). Installing the CCS Server on a workstation with 2 NIC cards, one connected to the private network and the other connected to the public network, access to 2074 console sessions can only be achieved through CCS 2074. All sessions can no be protected with CCS 2074s authentication methods, ensuring only authorized users are granted access to consoles. Without CCS 2074, any user with a TN3270E emulator can access console sessions.

CCS monitors show who is accessing a particular console, and CCS viewers can be defined as read/write or read only, making it possible to have console images which are strictly used for monitoring, and other consoles images which are used to enter commands.

The Console Consolidation System includes a Perl or C/C++ API programming language, to provide access to the console sessions. Each mainframe console session can be displayed in a standard 3270 CCS client window, or it can be accessed using the CCS API.

Console Consolidation Software

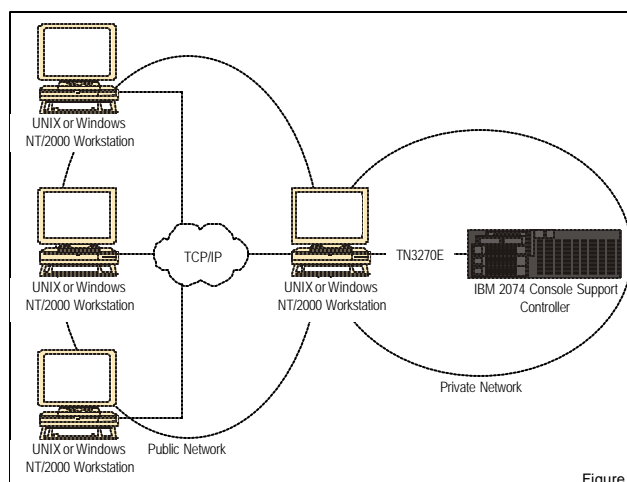


Figure 1

The Console Consolidation System is a client/server application. A CCS server running on a UNIX or Windows workstation maintains a connection to a mainframe console session across TCP/IP through the IBM 2074. The CCS server passes the console session's information to one or more CCS viewers running anywhere on a TCP/IP network.

CCS provides the unique ability for more than one console operator to access and work in each console session. An operators typing is buffered in the CCS viewer until an AID key, like Enter, is pressed. The command is then sent to

the console session. This prevents console operators from overwriting each others commands.

An authentication program or a user/password file, ensures only authorized users are granted access to consoles, increasing security of console sessions. There are no authentication methods available using only the IBM 2074.

A console consolidation monitor provides information about the state of each console session and console session image. All CCS servers can point to the same monitor giving an administrator an overall picture of mainframe console use, or each CCS server can have it's own monitor.

Running the Console Consolidation Software

The CCS server is run on a UNIX or Windows workstation (figure 2). This server starts a terminal emulation client, which can be either visible or invisible. The CCS client then establishes a TN3270E connection to the IBM 2074 Console Support Controller. Once the CCS server is running the mainframe console session is varied active.

Console consolidation viewers can now be run on the same workstation or on other PCs or UNIX workstations on a TCP/IP network. When the CCS viewer is run, it starts up a 3270 terminal emulator. This 3270 client can be a visible interactive client, or an invisible client controlled by the CCS API software.

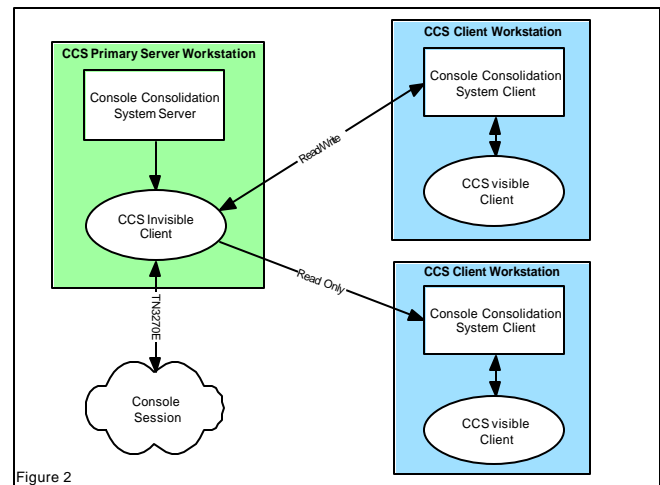


Figure 2

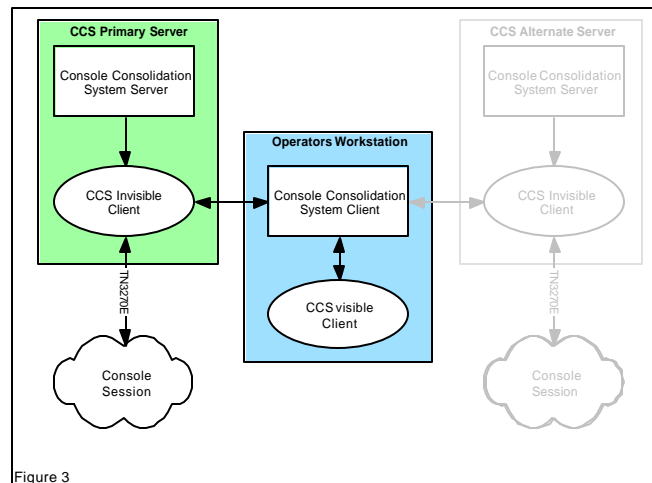


Figure 3

One or more CCS viewers can run against each CCS server session, allowing one or more operators to work with a console session. Each console consolidation client can be configured as a read/write session or as a read only session. This allows some operators to use interactive sessions, while others monitor sessions.

A "failover" option in the CCS viewer allows the viewer to switch to a backup CCS server if its primary server session goes down for any reason (figure 3). The CCS Monitor is updated to reflect that the CCS viewer has switched to the backup server if this occurs.

Console Consolidation System API

Console Consolidation System APIs are written in Perl or C/C++ and can interact with mainframe

console sessions. A program written with the API can interface with console sessions or the Console Consolidation monitor.

Console Consolidation System Viewer Software

The Console Consolidation System viewer software appears when a CCS client starts a visible client. The 3270 client software can also be used independently of the console consolidation system. The CCS client provides the look and feel of an IBM 3278/3279 terminal. The client software supports default 4-color and full 8-color modes, as well as the full range of color and highlighting used by IBM applications with the Extended Attribute Byte. The client software contains many features designed to increase productivity and ease operators work loads.

Console Consolidation At A Glance

- Multiple operators can access and work in console sessions simultaneously
- Authentication programs or password files ensure only authorized users are granted console access
- Autoreconnect options keep console sessions controlled by CCS for added security.
- Perl and C/C++ API provided for easy interface to the Console Consolidation System
- Supports UNIX platforms and Windows NT/95/98/2000
- Failover clients ensure high availability of critical applications
- Operator sessions can be defined as read/write or read-only for administrative flexibility
- CCS Monitors provide console session information for administrative control, anywhere on a TCP/IP network