



Spotlight on ROPES™ Features

ROPES is application-oriented print spooling and transmission software for mainframe systems running CICS®. It provides complete facilities for generating, retrieving, browsing, distributing and printing reports from online transactions, batch jobs, or the operating system spool. Following is a brief overview of key ROPES features.

TCP/IP Printing Support

The ROPES TCP/IP LPR Remote Print Feature provides an interface to remote Line Printer Daemons (LPDs) via the Internet or intranet to print ROPES reports. LPD support permits printing to OS/390, z/OS, Windows, OS/2 or Unix print servers as well as LPD equipped printers

The ROPES TCP/IP Direct Socket Print Feature provides an interface to remote IP attached printers via the Internet or intranet to print ROPES reports. Direct printing to a socket support will permit printing to OS/390, z/OS, Windows or Unix print servers as well as IP attached printers that support such connections (port 9100 connections).

Extended Device Controls

The Extended Device Controls Feature, available for TCP/IP LPR and Direct Socket Printing Remote printers, permits large streams of Printer Control Language (PCL) device codes to be sent to a ROPES printer. PCL code sequences can be unlimited in size, and any number of sequences may be established during device initialization, reset or termination.

E-Mail Interface

The ROPES E-mail interface provides a mechanism for routing ROPES report output to Internet or intranet e-mail destinations. E-mail destinations are only limited by the TCP/IP and SMTP mail server configurations currently installed. The SMTP server can be z/OS, OS/390, Windows or UNIX based.

The ROPES E-mail Interface supports the attachment of plain text, Adobe® Acrobat® PDF, and HTML documents to e-mail destinations.

Controlling ROPES Printers

The ROPES Operator Command Menu contains prompting information for every command to be entered and shows the type of data required, maximum size of the data fields, and purpose of the command. The operator selects the desired command and enters the variable data in order to validate and perform the desired function.

Commands may also be entered directly from a clear screen using an abbreviated command format or may be executed by application programs. Response messages are sent to the terminal or returned to the application program for processing.

Displaying Status and Information

Operator displays are provided to monitor the activity, configuration and status of all aspects of ROPES online operation, including the overall status of ROPES and its reports, the Alternate Facility, the Spool Transfer Utility, and any or all printers in the network. The business logic and display logic are separated, so non-mainframe applications can receive and process the data through CICS containers.

JES Retrieval

ROPES, through its integrated Spool Transfer Utility (RSTU), provides a comprehensive, menu-driven facility for the retrieval of data spooled to the operating system spool queue. Data may be selected using various criteria, including job name, job number, output class and remote or user destination.

Several features, including pre-definition of transfer requests, automatic start up and shutdown, and continuous or demand monitoring, make RSTU the most flexible and efficient Spool retrieval and printing facility available.

Browsing Reports

The ROPES report browse facility allows users to examine any report at their own terminals. Users can search for a character string and find its first, last, next or previous occurrence. All or part of a report can be copied into another report for immediate printing or to produce a condensed or summary report.

Utility Programs

Several utility programs are provided to assist in performing common functions, such as copying reports from the ROPES queue to a SYSOUT or other data set; transferring data from batch jobs to ROPES; and generating screen images for printing and distribution over the printer network.

In addition, a Report Distribution utility allows users to distribute components of a large report to one or more ROPES printers. The source report may be stored in the ROPES queue or in an extra-partition transient data set.

Archiving Report Data

The online queue reorganization function will write a copy of all print data deleted from the queue to a transient data destination specified by the users' installation. This data set may be saved as an archive of all ROPES report data. This facility is controlled from the system information maintenance menu and may be changed at any time.

Archived data may be reloaded to the ROPES queue at any time, and may be printed on a batch printer directly from the archive data set. The data retrieved or printed from the archive may be selected by name and creation date and time.

Auditing and Accounting

ROPES provides a complete audit trail of all commands issued, all response messages from the command processor, all online maintenance activities, and all control operator and master terminal operator messages generated, even if they are not displayed. This log is defined on the system information maintenance menu and is a transient data destination that you may assign as an intra- or extra-partition data set. Accounting data, including specific report printing detail, is sent to a user-defined transient data destination. This data is provided in EBCDIC for either machine or manual processing.

Security

In addition to the normal security provided by CICS and external security packages at a transaction, program or file level, ROPES provides two levels of security for operator commands (printer and supervisory operators) and user exits in the application program service module, the command menu processor module, the report browse processor, the Spool transfer control processor, and the Spool transfer data retrieval processor.

Many exit programs and transaction front-end capabilities are also provided to allow dynamic control of a variety of ROPES activities. Users can easily interface ROPES transactions and programs to their own application programs and menus.

Some facilities, such as the Job Submission Facility, have a user exit to interface directly with various external security packages, such as RACF and any other package with a RACF compatible API.

Command Level Programming

A wide range of easy-to-use commands can be incorporated into application programs by copying or generating the required command sequence from the language support libraries provided. No special preprocessing is required. COBOL, PL/1 and Assembler language command level programming is supported, using the standard command level data areas and techniques.

Concurrent Batch and Online Operations

The Alternate Facility allows batch applications to write data to ROPES reports while ROPES is running online. This function is transparent to user applications and does not require the use of the operating system Spool or SVCs. The Alternate Facility data is stored on a special ROPES queue, and the online Alternate Facility processor automatically transfers the stored data to the normal ROPES queue. A Stand By facility is also available to allow applications to continue to perform ROPES related activities even if ROPES has been stopped for maintenance.