



# Print Spooling and Transmission

*As your IT infrastructure continues to change, generating and distributing your business documents is an ongoing challenge. There's one solution that's been the choice for the most adaptable, manageable and cost effective report print distribution software.*

**ROPES™**, the Remote Online Print Executive System, is application-oriented print spooling and transmission software for IBM® mainframe systems running CICS®. ROPES provides complete facilities for generating, retrieving, browsing, distributing and printing reports from online transactions, batch jobs, or the operating system spool.

ROPES has been in use around the world for more than three decades, meeting the report printing and distribution needs of the CICS user community. Since its release, ROPES has evolved to address the continually changing IT infrastructure so that users can maximize the benefits they receive while effectively using their associated platforms.

ROPES provides a versatile set of capabilities that allow users to place report data on the ROPES queue concurrent with online and batch printing operations. A comprehensive command structure allows any authorized terminal operator to effectively control ROPES, eliminating the need for dedicated control terminals or consoles. Easy-to-use application interfaces are provided, minimizing the programming effort required to get a printing application "on the air."

As our customers' needs change, ROPES continues to evolve and improve. Examples of key enhancements include:

- Ability to format report data as Adobe® Acrobat® compatible PDF or HTML files
- Support of a wide variety of printers and related devices, including virtually all devices supported by CICS
- Use of CICS BTS containers as additional methods for passing ROPES information between the Product and user applications, regardless of platform

## How ROPES Works

ROPES provides online and batch application programmers with extensive functionality required for the management and delivery of critical business documents:

- Report generation using ANSI printer carriage controls
- User-written error processing routines
- Enables the application program to discard unwanted output
- Directs the system to checkpoint the ROPES control information at user-defined sync points
- Provides command and macro level support for COBOL, PL/1 and assembler
- Supports blocked report generation and retrieval
- Provides a program interface to the ROPES command processor so that applications can issue ROPES commands in conjunction with their other processing; also enables the implementation of “super” commands to meet the needs of your installation

## Control of Output Devices

Control of a printer may be assigned to a particular terminal, a group of terminals, or determined dynamically. If unassigned, the control terminal will be the first terminal from which an operator command is issued for the printer. Once a control terminal is linked to a printer, operator commands for that printer may be entered from that terminal only. Supervisory commands, also defined on the Operator Menu, may be entered from any terminal, provided that an authorized operator is signed on. All diagnostic messages for a printer are directed to its control terminal and to the ROPES master terminal (if defined). The control terminal is not dedicated to ROPES and may be used for any other purpose.

During CICS operations, ROPES manages the storage of report data on the ROPES queue concurrent with data retrieval and transmission to printers. ROPES also manages:

- transfer of data from the operating system spool (JES2 or JES3) to the ROPES queue
- transfer of data produced by batch applications into the online queue
- full online, menu-controlled maintenance of the ROPES control information

Batch and online applications pass the report name and text to a ROPES service module. ROPES automatically handles the buffering, blocking, unblocking and device dependencies, stores the data, and returns control to the application task. When a printer is started, ROPES prints the reports assigned to the printer based on the class and priority of the reports.

The text of a report may be automatically deleted after printing or may be retained on queue for reprinting. A comprehensive online queue reorganization and archiving facility is included and may be set up to run automatically.

## Devices Supported

ROPES supports a wide variety of printers and related devices. Virtually all devices supported by CICS are supported by ROPES, including PCs with a variety of 3270 emulation options or print servers. ROPES batch printing uses the operating system spool subsystem, so all devices supported by JES are supported by ROPES. ROPES reports may also be transmitted by e-mail (SMTP and CICS IP Sockets are required) and by IP (CICS IP Sockets is required). SMTP messages may include the ROPES reports as embedded text, attached text, attached PDF files, or attached HTML files.

