

## The all-in-one z/OS® printing and conversion solution

### Full scale Mainframe output management solution

Enterprise Print Manager®, EPM is a full scale z/OS® software solution for mainframe output management. EPM delivers a single focal point for operation, control and administration of output from z/OS® applications.

EPM integrates with office printers and production printers as well as other applications residing both inside and outside the mainframe environment. By converting output to standard printers EPM makes dedicated AFP printers redundant.

All output is sent to Enterprise Print Manager in the native z/OS® format (AFP, Line data, etc). Enterprise Print Manager receives jobs and performs real time conversion of documents into the preferred output formats always maintaining the original look and feel. Documents are automatically routed to the next step in the document work flow.

### Mainframe output to any printer

EPM is the all-in-one tool that handles multiple input and output formats. EPM transforms AFP and line data output into PCL, PostScript, PDF or ICDS (an internal compressed data format). In addition, SCS may be transformed into ASCII text for non-AFP applications. The print job is formatted and routed to the printer specified for the given job.

Input data from the JES and IMS/CICS is spooled via VTAM. Using the integrated Upload-and-Print function PC/UNIX data can also be managed and printed. EPM prints via VTAM and TCP/IP and thus offers an easier VTAM to TCP/IP migration.

### AFP to PDF conversion

In addition to physical output to printers EPM also handles digital output as it converts AFP and other mainframe native formats to PDF and PDF/A. The PDF format provides easy access to mainframe output for non-mainframe users and applications both off-line and on-line.

AFP to PDF conversion enables mainframe generated web-ready files (PDF) for Internet Servers. EPM either stores the PDF output in a mainframe data set or initiates a direct e-mail output.

PDF creation is performed independently of your existing applications, thereby providing new options for web-enabled output delivery.

### Key features

- ✓ Print to standard office printers.
- ✓ Compliant with all z/OS® levels
- ✓ AFP, XML and SCS printing
- ✓ AFP2PDF and PDF/A conversion
- ✓ Prepared for AFP/Archive (AFP/A) ISO standard
- ✓ JES and VTAM input
- ✓ PCL and PostScript output
- ✓ E-mail and PDF output
- ✓ Outline font support
- ✓ Full colour support
- ✓ TCP/IP and SNA printing
- ✓ Upload-and-Print
- ✓ Full screen user interface

## Easy and central administration

Full screen ISPF, VTAM 3270 and GUI user interfaces allow for a flexible, easy-to-use operation. User access is centrally controlled, defining user groups with different authorizations, fully integrated with RACF (or similar).

A comprehensive HELP system lets new users exploit the many features of EPM more quickly.

Administration is simplified significantly using the user interfaces and features such as printer types (models), defining almost everything about a certain type of printer. All printers are defined only once in EPM. Even JES printer definitions are not required.

## Full colour support

Full colour support allows you to print full colour output using low cost PCL5c and PostScript printers, or create PDF output. Additionally, EPM enables you to enhance the appearance and quality of existing application data using full colour images, combined with coloured text, graphics, bar codes, boxes and rulers.

## Performance and control

Several features ensure high performance and throughput, such as caching of AFP resources in virtual storage and use the resident fonts on PostScript printers. End2end control is provided using TCP/IP port 9100 and PJL.

## Integrate host, workstation and server environments

EPM can be used as a print server for Windows, Linux or UNIX output. The integration of LAN and mainframe printing is enabled by the Upload-and-Print facility. Thus EPM provides centralized print management and control of all printer devices, providing a single point of control for host as well as LAN printing.

## Ready for AFP/Archive (AFP/A) ISO standard

Enterprise Print Manager is prepared to support the new AFP/Archive (AFP/A) standard. ISO 18565:2015 specifies the AFP document architecture by defining a subset appropriate for long-term preservation and retrieval of documents and resources. The subset assures page independence and eliminates the use of resolution dependent fonts and images, device default fonts and external resources.

## Minimizing CPU and network load

Significant off-load of the mainframe and the network may be achieved by combining EPM with the DocOut Server Software. EPM handles the AFP processing and provides the print management functionality as usual.

DocOut handles the resources and final conversion into PCL5, PostScript or PDF. DocOut operates with remote AFP resources, thus allowing fonts, overlays and page segments to be stored on the server.

EPM and DocOut perform an automatic resource checking, including versioning (time stamp). This ensures, that the correct AFP resources are always used. The EPM - DocOut combination supports SNA as well as TCP/IP.

## Technical details

### Input Data Streams

- JES spool input: Line data, AFP and XML
- VTAM Application input: SCS, DSC, GDDM-IPDS
- Workstation and UNIX/Linux platforms for upload and printing:
- TCP/IP LPD upload

### Output Data Streams

- HP PCL 4, 5e, 5c
- PostScript (Adobe PostScript Level 2)
- ASCII
- 3270 (SCS or DCS)
- PDF (Adobe Portable Document Format) including PDF/A

### Communications

- TCP/IP: LPD, 9100, IPP, PPD/PPR using DocOut
- SNA: LU\_0, LU\_1, LU\_3, LU\_6.2 (using DocOutTM)
- Transparent printing
- e-mail
- File output (MVS data set and Hierarchical File System output)

### System Requirements

- JES2 on all supported z/OS® levels
- JES3 on all supported z/OS® levels

### User Interfaces Available

- TSO/ISPF
- VTAM Application (3270)

# Enterprise print management explained

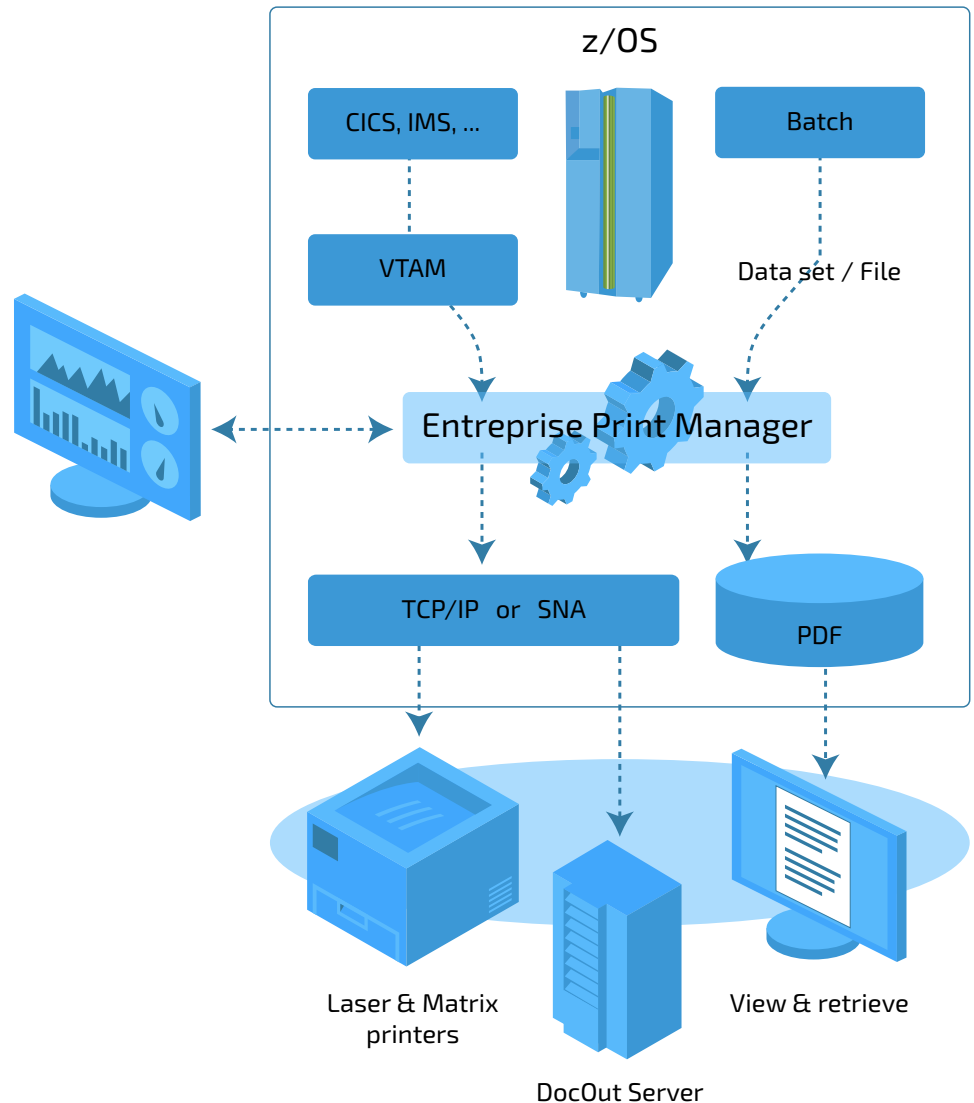
Enterprise Print Manager is a natural part of the document work flow between the mainframe and distributed servers.

EPM receives all output from mainframe applications and performs the assigned conversion task real time.

Depending on the task EPM will route the document to the next step whether it is a printer, another application or digital storage.

## Other features

- ✓ Application Programming Interface provides application with features such as directly selecting the printer based on availability and features (e.g. colour, duplex).
- ✓ Migrate legacy host applications from SNA to TCP/IP devices with EPM without requiring changes to the VTAM applications. Support of both SNA and TCP/IP attached printer means that a smooth migration can be performed.
- ✓ Offer support for a wide variety of platforms for user control of printers and print output. A standard system security interface such as RACF or compatible, ensures that users have controlled access of EPM printer devices. An extensive, field sensitive HELP menu eases implementation and training.



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D16117-009 December 2015

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