Production

PrintKit

Production PrintKit software

provides effective solutions for

high volume, strategic printing

applications for OpenVMS

systems.

Northlake™
printing solutions

Effective production printing that conforms to OpenVMS standards and practices

The PrintKit Production Printing Interface software provides networked client/server access to production printing resources for documents composed using the page description languages and job specifications that are standard to OpenVMS. Northlake Software has worked closely with leading printer vendors to validate Production PrintKit with selected high end printing configurations. This collaboration, as well as the capabilities of the software itself, can provide you with a planned transition to an effective production printing solution, protect your existing investments, and open a path for your future printing needs.

The Production PrintKit software consists of a print symbiont that is integrated with the OpenVMS printing services, and an accompanying management utility.

Production PrintKit is based on technology refined in Northlake's PrintKit Network Printing Interface for "open architecture" mid-range printing, a product with over five years of customer use. Its design also reflects knowledge gained from Northlake's long experience delivering production printing solutions to OpenVMS customers.

Production PrintKit is designed to work with printers in standard network configurations using TCP/IP based protocols. This "off the shelf" technology offers fewer points of failure than solutions based on specialized hardware interfaces and is easier to trouble-shoot when problems do occur.

The product's support plan is tailored to the demanding requirements of production environments. It provides guaranteed response time and well defined procedures for problem prioritization and escalation. 7x24 hour coverage is available for customers with extended hours of operation or time-critical applications.

Northlake™
printing solutions

Our volume was simply more than our mid-range printers could handle, and it made scheduling a headache. With Production PrintKit, we are using printers that are right for the job, and we didn't have to reengineer our applications.

Standard, compatible printing services

Production PrintKit provides an upward extension of the OpenVMS printing architecture that is compatible with DECprint services for mid-range printing. It matches the DECprint user and application interfaces, including the full parameter set and ANSI-PPL3 (LN03) emulation. This allows migration of applications to higher capacity printers to meet production requirements, and it allows applications to use a single, consistent printing model, whether generating low or high volume output. It also means users can continue to use familiar printing operations.

Where Production PrintKit extends the DECprint model, the new features are consistent with the ISO 10175 (Document Printing Application) standard on which the DECprint interface is also based.

Effective printer controls

At a basic level, production PrintKit matches the DECprint job specification model, which provides a full set of controls for general purpose mid-range printing. In two key areas where production printing differs from general purpose printing (in addition to sheer volume), media selection and document finishing, PrintKit extends the job model. A full attribute-based media handling model includes multiple selections within a document, media substitution, and electronic forms overlays (a "just in time" replacement for preprinted forms). Multi-step finishing specifications provide final document assembly.

Administration and operations

The printer management and job processing performed by Production PrintKit are inherently complicated – complexity you shouldn't have to see. The processing itself takes place behind

Northlake™
printing solutions

It seems like every printer sets up differently – anything that helps reduce the guesswork is a big help to me. With PrintKit, I don't have to worry about special hardware, and I like the interactive software configuration.

the scenes, but configuration (at least what can't be determined automatically) requires human interaction. Production PrintKit manages this with an inter-active administration utility, KITCP.

KITCP lets you define, modify and display queue configurations. To make this task easier, much of the configuration information is pre-loaded (for instance, a typical queue configuration requires that you select the queue name, and the printer's address and model – the software determines details such as communication requirements and printer feature set from its configuration database).

KITCP provides similar capabilities for managing job specifications (document format, media selection, imposition specifications, finishing controls). For production jobs in particular, these can become quite complex. Advance definition of job specifications simplifies the printing process and makes it more reliable.

For printing today – and tomorrow

Support for stock printer configurations and standard networking protocols, interoperability with the standard Digital printing interface, compatibility with a range of production printers, and the ability to "plug in" new printer models as they become available – these capabilities contribute to Production PrintKit's practical flexibility.

The Production PrintKit software enables you to assemble a printing configuration that meets your business needs. And as your needs change, your printing services will be able to keep up.

Northlake™
printing solutions

Product Description
Version 2.3, November 2009

The Production PrintKit software functions as a symbiont process, managed by the OpenVMS Job Control Program. It can be accessed through the DCL PRINT command, DECwindows PRINT FileView Widget, and standard applications print interfaces.

User Interface

Full DECprint parameter set
BORDERS, DATA_TYPE, FONTS_USED, INPUT_TRAY, LAYUP_DEFINITION, MESSAGES, NUMBER_UP, OUTPUT_TRAY, PAGE_LIMIT, PAGE_ORIENTATION, PAGE_SIZE, ROUTE, SHEET_COUNT, SHEET_SIZE, SIDES, TAB

Includes advanced LAYUP_DEFINITION controls [1]
ALTERNATE, BORDERS, FIRSTPAGE, GRID, MARGINS, PAGEORDER, PAGESPERSHEET

Media handling parameter set
DEFAULT_MEDIUM, MEDIUM_SUBSTITUTION, PAGE_MEDIA_SELECT

Finishing parameter set
FINISHING, FINISHING_INCLUDES_DOCUMENT

Document specification parameter
INITIAL_VALUE_DOCUMENT

Default job parameter configuration using generic or logical queues

Multiple device control libraries, each with associated data type

Administration utility

Defines, modifies and displays PrintKit queues and configuration database definitions
DCL command line and interactive interfaces

Configuration database

Printer model definitions
/DEFAULT (COMMUNICATIONS, EMULATIONS, JOB_CONTROL, OPTIONS), /INPUT_TRAY_SUBSTITUTION, /JOB_CONTROL (AIS, PJL, POSTSCRIPT), /OUTPUT_TRAY_SUBSTITUTION, /PPD, /VERSION
Adobe PostScript Printer Description (PPD) files used for configuration

Queue definitions (attributes supplement OpenVMS queue definitions)
/AUTOSTART_ON, /BASE_PRIORITY, /BLOCK_LIMIT, /CHARACTERISTICS, /COMMUNICATIONS (protocol, ADDRESS, PORT, LOCAL_ADDRESS, LOCAL_PORT, GATEWAY, OPTIONS), /DEFAULT (BURST, DOCUMENT, FEED, FLAG, FORM, SHEET_SIZE, TRAILER), /DESCRIPTION, /ENABLE_GENERIC, /FORM_MOUNTED, /GENERIC, /LIBRARY, /NOTIFY (DEFAULT, PRINTER, QUEUE), /ON, /OWNER_UIC, /PRINTER (EMULATIONS, JOB_CONTROL, MODEL, OPTIONS), /PROCESSOR, /PROTECTION, /PROTOCOL, /RETAIN, /SCHEDULE, /SEPARATE (BURST, FLAG, TRAILER, SHEET_PACKAGE)

Document specifications
/DATA_TYPE, /DEFAULT_MEDIUM, /DESCRIPTION, /FINISHING, /FIN_INCL_DOC_SHEET, /FONTS_USED, /INPUT-TRAY, /LAYUP_DEFINITION, /MEDIUM_SUBSTITUTION, /MESSAGES, /NUMBER_UP, /OUTPUT_TRAY, /PG_LIMIT, /PG_MEDIA_SELECT, /PG-ORIENTATION, /PG-SIZE, /SHEET_COUNT, /SIDES, /TAB, /VERSION

Medium specifications
/COLOR, /DESCRIPTION, /OVERLAYS, /SIZE, /TYPE, /WEIGHT, /VERSION

Imposition (layup) specifications
/ALTERNATE, /BORDERS, /DESCRIPTION, /FIRSTPAGE, /GRID, /MARGINS, /PG_ORDER, /PAGES_PER_SHEET, /SIGNATURE, /VERSION

Finishing specifications
/DESCRIPTION, /SPECIFICATION (STITCHING, BINDING ,FOLDING), /VERSION

Sheet package specifications
/DESCRIPTION, /SHEETS, /VERSION

Document data types

Automatic document data type sensing, based on document content

PostScript (printer based) [2]

PCL/HPGL (printer based) [3]

ANSI-PPL3 (translated to PostScript) [2]
Complete implementation
Sixel graphics, soft fonts, color operators, paper selection, duplexing

Forms overlays

Electronic forms overlays [1, 2]

Uses PostScript Forms Resources to define forms

Front and back sheet sides

See current Forms Design Software list for compatible forms creation packages

Production

PrintKit

Printer emulations

PostScript, PCL 4/5
Automatic emulation switching as required by
document data types

Printer job control

PostScript
Hewlett-Packard Printer Job Language (PJL)
PostScript or PJL based accounting 4
Error handling and reporting 4

Communications interfaces

TCP/IP Socket (HP LaserJet JetDirect protocol)
    Compatible with all commercial TCP/IP
    interfaces for OpenVMS
    If no TCP/IP interface is configured, uses self-
    contained TCP/IP services (Northlake Software
    PEP, lightweight TCP/IP services for printer
    communications)
lpr/lpd
    Same TCP/IP interfaces as TCP/IP Socket
    Compatible with UNIX, Windows NT print
    servers
LAT
    Internal interface card or separate server
    Bidirectional or unidirectional interface
Serial
    Bidirectional or unidirectional interface

Print job status and logging

Job log file
    Job specification, errors and completion status
    Job-generated messages from printer 4
Job status, printer attention messages directed to
user terminal
Printer attention messages directed to operator
terminal

Printer compatibility

See current Supported Configurations list for
printer models and communications interfaces

Selected application compatibility

PATHWORKS, DQS, ALL-IN-1, WordPerfect, Interleaf,
MASS-11

Installation and configuration

VMSINSTAL installation
Interactive configuration utility, configuration
checklists

Documentation

User Manual
VMS HELP facility supplement

Prerequisites

VMS 5.4 or later, License Management Facility
16K blocks disk space

1. ANSI-PPL3 and PostScript only   2. requires Level
1 or 2 PostScript emulation on printer   3. requires
PCL emulation on printer   4. requires bidirectional
communications interface