Kodak NexPress Developer's Interface Guide

For System 14.0

Guide Specification

Version 14.0

April 2012

DOCKET ALARM

Find authenticated court documents without watermarks at docketalarm.com.

LEGAL

All rights reserved. No part of this work may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or by any information storage or retrieval system, without the prior written permission of the copyright owner.

The information contained in this document and the accompanying written materials is provided "as is" without warranty of any kind, expressed or implied. Eastman Kodak Company specifically disclaims the warranties of fitness for a particular purpose and merchantability.

Eastman Kodak Company believes that the information contained within this document and the accompanying material to be correct. However, Eastman Kodak Company does not make any warranties of any kind, either express or implied, as to the correctness of this document or the accompanying material. Eastman Kodak Company specifically reserves the right to make any changes to the material contained in this document or the accompanying material without notice.

The information contained in this document and the accompanying material shall not by oral or written information or advice given by publisher, its dealers, distributors, agents, or employees create a warranty and you may not rely upon such information provided in this document and the accompanying material alone or in combination with advise given by Eastman Kodak Company related to the information provided in this document and the accompanying material to create any such warranty.

NEITHER EASTMAN KODAK COMPANY NOR ANYONE ELSE WHO HAS BEEN INVOLVED IN THE CREATION, PRODUCTION OR DELIVERY OF THIS DOCUMENT AND ACCOMPANYING DOCUMENTS SHALL BE LIABLE FOR ANY DIRECT, INDIRECT, CONSEQUENTIAL, OR INCIDENTAL DAMAGE (INCLUDING DAMAGE FOR LOSS OF BUSINESS PROFIT, BUSINESS INTERRUPTION, LOSS OF DATA, AND THE LIKE) ARISING OUT OF THE USE OF OR INABILITY TO USE THE INFORMATION CONTAINED IN THIS DOCUMENT AND ACCOMPANYING DOCUMENTS EVEN IF EASTMAN KODAK COMPANY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Trademarked names may appear in this document. Rather than use a trademark symbol with every occurrence of a trademarked name, we use the names only in an editorial fashion and to the benefit of the trademark owner, with no intention of infringement of the trademark.

Eastman Kodak Company
2600 Manitou Road
Rochester, NY 14653 USA

© Kodak, 2006-2012. Kodak, NexPress, and NexTreme are trademarks of Kodak.

DOCKET ALARM
Find authenticated court documents without watermarks at docketalarm.com.

Table of Contents

1 Introduction 5
1.1 Scope 5
1.2 Glossary of Terms and Abbreviations 5
1.3 Document Conventions 9
1.4 Constraints 9
1.5 References 9
2 Differences between Software Releases 11
2.1 Changes in System 14.0 11
2.2 Changes between System 12.0 and System 12.1 11
2.3 Changes between System 11.2 and System 12.0 11
2.4 Changes between System 11.0/11.1 and System 11.2 11
2.4.1 JDF 11
2.5 Changes between System 10.1 and 11.0/11.1 11
2.5.1 JDF 11
2.6 Changes between System 10.1 and System 10.2 11
2.6.1 JDF 11
2.7 Changes between System 10.0 and System 10.1 11
2.7.1 JDF 11
2.8 Changes between System 9.0 and System 10.0 12
2.9 Changes between System 8.5 and System 9.0 12
2.10 Changes between System 8.4 and System 8.5 13
3 NexPress Workflow 14
3.1 Client Application 14
3.1.1 Kodak Imposition Viewer 15
3.1.2 Kodak SmartBoard Document Mastering Software 15
3.2 Workflow Controller 16
3.2.1 Hybrid Workflow Controller 16
3.3 PPML/VDX Content File Repository 16
3.4 NexPress front end 17
3.4.1 Job Flow 17
3.4.2 NexPress Client 18
3.4.3 Job Submission Interface 18
3.4.3.1 Virtual Printer Hot Folder Job Submission Interface (V) 18
3.4.3.2 JDF Portal Job Submission Interface (J) 18
3.4.3.3 JDF Portal Hot Folder 19
3.4.3.4 JDF Portal HTTP JMF Interface 19
3.4.4 Job and Press management Interface 19
3.4.4.1 Device Capabilities File (C) 20
3.4.4.2 JMF Management Interface (M) 20
3.4.4.3 JDF Portal Communications Log 20
3.4.5 NexPress Processing 20
3.4.5.1 Imposition Support 21
3.4.5.2 RIP Caching 21
3.4.5.3 Multiple Substrate Support 21
4 Supported Page Content Formats 22
4.1 Adobe® Portable Document Format (PDF) 22
4.1.1 Specifying Media Using PDF Stamp Annotations 22
4.2 ANSI CGATS.20 – PPML/VDX 22
4.2.1 Single-File PPML/VDX instances 23
4.2.2 Multiple-file PPML/VDX instances 24
4.3 PDF/VT 24
4.4 Adobe® Postscript 24
4.5 NexPress Portable Digital Master (PDM) 24
5 Press Management 25

DOCKET ALARM
Find authenticated court documents without watermarks at docketalarm.com.

5.1 Configuring a Virtual Printer Job Ticket Template 25
5.2 Managing Press Capabilities 25
5.2.1 Obtaining a list of KnownMessages 25
5.2.2 Querying Supported Submission Methods 26
5.2.3 Querying for the Device Capabilities File 26
5.3 Accessing press status 27
5.3.1 Retrieving press status 27
5.3.2 Subscribing to press status 28
5.3.3 Unsubscribing to press status 29
6 Job Submission 30
6.1 Submitting to the Virtual Printer Hot Folder 30
6.1.1 PDF & PDF/VT 30
6.1.2 PDF & PDF/VT with Stamp Annotations 31
6.1.3 PostScript 31
6.1.4 Single/Multiple-File PPML/VDX 31
6.1.5 Single/Multiple-File PPML/VDX with JDF MediaIntent 32
6.2 Submitting to the JDF Portal Interface 33
6.2.1 The JDF Portal JMF Interface 34
6.2.2 The JDF Portal Hot Folder 34
6.2.3 Locating Content Files 35
6.2.3.1 Auto-Deletion of Content Files 35
6.2.4 Media Selection 35
6.2.4.1 Media/Location/@LocationName 35
6.2.4.2 DigitalPrintingParams/@SheetIndex 36
6.2.4.3 DigitalPrintingParams/@RunTags 36
6.2.4.4 Media/@SheetIndex and Media/@RunTags 37
6.2.5 Single/Multiple PPML/VDX with JDF Process 38
6.2.6 Identifying a JDF Portal job after submission 39
6.2.7 Accessing completed JDF Portal Job detail 40
7 Job Management 41
7.1 JDF Portal Job Queue Management 41
7.1.1 Closing the JDF Portal Job Queue 42
7.1.2 Opening the JDF Portal Job Queue 42
7.1.3 Holding the JDF Portal Job Queue 42
7.1.4 Resuming the JDF Portal Job Queue 42
7.1.5 Querying the JDF Portal Job Queue status 42
7.2 JDF Portal Job Entry Management 43
7.2.1 Aborting a JDF Portal Job Entry 43
7.2.2 Removing a JDF Portal Job Entry 44
7.2.3 Holding a JDF Portal Job Entry 44
7.2.4 Suspending a JDF Portal Job Entry 44
7.2.5 Resuming a JDF Portal Job Entry 44
7.2.6 Retrieving status of a JDF Portal Job Entry 44

DOCKET ALARM
Find authenticated court documents without watermarks at docketalarm.com.

1 Introduction

The NexPress digital production color press is designed to handle a wide range of applications from short-run and quick turnaround, to variable data printing. It uses an open and standards-compliant architecture to integrate existing software applications. The NexPress digital production color press is driven by the NexPress front end controller. The NexPress front end is a scalable and open PDF-based product. It supports hot folder and JDF/JMF-based job submission and JMF-based job and press management.

Some of the key features of the NexPress front end are:

- Built upon Adobe® PDF-based workflow architecture
- Scalable hardware
- Accepts Job Definition Format (JDF) Job Tickets
- Supports hot folder submission
- Supports common static page description language (PDL) formats including Adobe® PDF, Adobe® PostScript.
- Provides JDF/JMF interface for Job Ticket submission, queue management, and status messaging. (Submission of a JDF Job Ticket can reference either PDF or Postscript content.)
- Supports variable data printing using ANSI Standard PPML/VDX.

1.1 Scope

This document is one of two used by third party software developers who design software controllers and output drivers that target the NexPress family of digital production color presses. The complete set of documents is:

- Kodak NexPress Developer's Interface Guide [KNDIG] (This document)
- Kodak NexPress Developer's Interface Reference [KNDIR]

The **Kodak NexPress Developer's Interface Guide** is the main user document. It references the [KNDIR], and provides user description of the various job submission, job management and press management operations for the NexPress front end. This guide also identifies the various content formats for the NexPress products, and describes the job submission methods and control interfaces using these content formats. Detail on the specific formats is provided in the [KNDIR].

The **Kodak NexPress Developer's Interface Reference** provides technical detail on interfaces used in JDF and PPML/VDX submission and in control of the JDF portal. This technical companion document to the [KNDIG] is intended as a reference. The syntax and semantics of Device Capabilities, JDF Intent, JDF Process, JMF and PPML/VDX used by the NexPress front end is provided within this reference document.

These documents do not describe the interface between the NexPress front end and print engine. This interface is not intended to be accessible to third-party workflow tool developers.

It is assumed that readers of this document have a working understanding of the Job Definition Format (i.e. JDF), the Adobe® Portable Document Format (i.e. PDF), and the PPML/VDX standard.

1.2 Glossary of Terms and Abbreviations

The table below explains terms and concepts used throughout this document, which may or may not be unique to the system environment described in this document.

Term	Definition
CGATS	Committee for Graphic Arts Technologies Standards – an ANSI accredited standards body that develops technical standards for the graphic arts industry. http://www.NPES.org
CIP4	International Cooperation for Integration of Processes in Prepress, Press, and Postpress. The consortium responsible for creating and maintaining the JDF Specifications. http://www.CIP4.org

DOCKET ALARM
Find authenticated court documents without watermarks at docketalarm.com.

DOCKET ALARM

Explore Litigation Insights

Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

Real-Time Litigation Alerts

Keep your litigation team up-to-date with **real-time alerts** and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

Advanced Docket Research

With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

Analytics At Your Fingertips

Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

LAW FIRMS
Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

FINANCIAL INSTITUTIONS
Litigation and bankruptcy checks for companies and debtors.

E-DISCOVERY AND LEGAL VENDORS
Sync your system to PACER to automate legal marketing.