Product Description

Prinergy Publish is a flexible page-preparation system that enables publishers and trade shops to create reliable, secure print-production-ready files. Prinergy Publish converts input files into production-ready format to be used by a workflow such as Prinergy Connect, iMPAct, Brisque, or third-party workflow and RIP solutions. Prinergy Publish supports a wide variety of input formats, including PostScript, PDF, EPS, CT/LW, and TIFF/IT P1. Input files are automatically processed to PDF Digital Masters, providing enhanced control over the content-preparation workflow, with a powerful, streamlined trapping, color-management, and proofing solution. Pages can be published as PDF, PDF/X-1a, Vector DCS2, and PostScript Level 2 and 3.

Features And Benefits

- Enhances publisher control over content preparation workflow, enabling the creation of production-ready files.
- Provides an automated file trapping, color management, and proofing solution.
- Supports a wide variety of input formats,including PostScript, PDF, EPS, CT/LW, and TIFF/IT P1, and multiple file publish options, including PDFand PDF/x-1a.
- Supports Prinergy's JDF-based Job Export in an hub-and-spoke enviroment.
- Oracle® database enables workflow management, job tracking, reporting, and archiving (optional),
- Synapse InSite can be installed in a fully functional mode for unlimited internal clients, or as a temporary evaluation license.

Prerequisites

Prinergy Publish is intended as a page preparation station only.

Prepress Workflow:

- Customers must have (or have access to by way of supplier) to a compatible downstream workflow system for final imaging to plate. Compatible systems include Prinergy Connect, iMPAct, Brisque, or a third-party solution.

IT Network:

- Customer networks must meet the requirements outlined in the *Systems Solutions Guide*

Macintosh or Windows hardware for running the Prinergy Client Software:

- The Macintosh client must be running:
  - Windows 2000, Windows XP, or NT 4.0 for Windows Client hardware
- TheWindows client must be running:

• OS 9.1 or later (including Mac OS X) for Mac Client hardware

• Prinergy Client Software requires a minimum of 256 MB available memory for the client software and Adobe Acrobat.

If other applications are running, they will require additional memory resources.

• Recommended minimum CPU speed for running the Prinergy Client Software is 300 MHz.

Recommended prerequisites:

• Internet access & firewall security measures

• Modem line

Product Version

2.2

Available Configurations

The Prinergy Publish configuration includes both hardware and software, and is based on a 2-CPU Hyper-threading Prinergy server.

Components

Standard Hardware

See the current Prinergy server specifications on TechPlanet for details (http://techplanet.creo.com), or contact your Creo representative.

Standard Software

Identical to the Connect EL software package, except that the high-resolution rendering JTP is not licensed.

Publish package includes:

- Prinergy server license (see details below)
- 1 Single Normalizer
- 1 basic Color Management Engine (see Color Mapping section)
- 1 basic CopyDot JTP
- 1 Import/Export JTP
- 1 Creo Batch Trapping JTP
- 1 Low-Resolution Rendering JTP
- Harmony license
- 1 Prinergy PrePress Workshop client (see details below)
- Proofing Connectivity (Class 1 and 2 site license, see proofing connectivity specification for details)
- Vector Output JTP
    - Provides the ability to output Prinergy Publish pages to three possible

vector-based file formats (single pages, not imposed):

- DCS2 (single or multi-file)
- Separated PostScript Level 2 (single or multi-file)
- PDF (automated Publish PDF feature)

Prinergy Client Macintosh or Windows (1 English version included), includes:

- Prinergy PrePress Workshop localized in the following languages:
  - English
  - German
  - French
  - Spanish
  - Japanese
- Chinese (Simplified)
- Virtual Proofing System
- Adobe Acrobat
- Prinergy Process Plan Editor
- Adobe Acrobat plug-ins
  - Trap Viewer for checking traps created by Prinergy
  - Geometry Editor for correcting bleed and trim boxes
  - Separation Viewer to preview separations of PDF composite files
  - Separation Repair tool
  - View Accelerator

Documentation Included

- Prinergy Workshop Online Help for Connect
- Prinergy Connect Quick Start Guide
- Prinergy System Administration Guide
- Prinergy Upgrade Guide
- Prinergy 2.2 Release Notes
- Creo PDF Trapper Release Notes
- Creo Color Matcher Release Notes
- Virtual Proofing System User Guide
- Prinergy Publish User Guide

Not full document set is available in Chinese.

Training Included

Prinergy Publish core software includes:

- 5 days Prinergy foundation training for oneoperator in the Creo training facilities

Onsite training is available at additional cost.
Prinergy Startup Assistance 2 days on site is mandatory and must be ordered with a new system. Please refer to the Prinergy Customer Support Specifications.

Options

Optional Hardware

See the Prinergy server specifications, available on the TechPlanet, for details http://techplanet.creo.com or contact your Creo representative.

Optional Software

- Synapse Link (please refer to *Synapse Link Product Specification*)
- Advanced Color Management Engine (see Color Management section)
- CreoTrapEditor: Adobe Acrobat plug-in for interactive editing of traps
- Staccato FM screening
- PrintLink for Prinergy
- Online System Backup (see the Online System Backup specification)
- Additional Creo Trapping JTPs
- Additional Dual Normalizer JTPs
- Additional Low-Resolution Rendering JTPs
- Secondary server distribution licenses
- Additional Prinergy clients
- Regional versioning
- APA (Automatic Production Automation)
- CT/LW and TIFF/IT input
- PDF/X-1a output (see *Vector File Output* section)
- Font outlining (see *Vector File Output* section)
- CopyDot JTP descreen & resample (see *CopyDot File Handling* section)
- CopyDot JTP tonal calibration (see *CopyDot File Handling* section)
- Basic and Traditional Chinese font support
- Basic and Full Japanese font support
- Korean font support

Input

Prinergy supports the following input file formats:

- PDF 1.2, 1.3,1.4 (PDF 1.4 flattener is integrated into the Normalizer) and 1.5 generated by Adobe Acrobat 3.0.x, 4.0.x, 5.0.x and 6.0.x (PDF 1.2 is subject to known limitations)
- PDF/X-1a
- PDF/X-3
- PostScript Level 1, 2 and 3
- EPS
- DCS 1 & 2
- CopyDot files
- JDF export from Synapse Prepare/Page Assigner
- JDF imposition plans generated by Preps
- Job Tickets (imposition plans) generated by Preps 3.6.1, 3.7 & 4.1 or later and Signastation 6.0 or later
- CT/LW
- TIFF/IT P1
- Prinergy job import/export files

Output

The following output formats are available:

Vector Formats:

- PDF 1.3 (automated or manual, single pages)
- PDF/X-1a:2001 (automated or manual, single pages)
- PostScript Level 3 (Single pages or flat based)
- PostScript Level 2 (Single pages, separated)
- Vector DCS (Single pages)
- Prinergy job import/export files

Raster Formats:

- Raster DCS
- Raster EPS
- VPS
- TIFF
- CT
- HPRTL
- Epson 5000
- Epson 9000
- Kodak Approval TIFF
- Kodak Approval EPS
- JPEG
- BMP
- IPRF (for Veris connectivity)

The following levels of output device connectivity are available:

- Prinergy supports a wide variety of proofing devices. Please refer to Prinergy proofing connectivity specification for more information on supported proofing devices.

General Functions

Prepress production management, including:

- Job management, page management, imposition management, queue management

Job processing, including:

- Job import/export, job processing control, digital master creation, CEPS conversion, color management, image merging for PostScript & PDF (OPI), trapping, virtual page & imposition proofing (on-screen), page & imposition proofing, final file format output.

Administration and configuration, including:

- Configurable automation, load balancing, distribution, system administration, archiving administration, error handling

Specific Functions

Prepress Production Management

Job Management

- Create job group
- Create pre-job with standard settings
- Create job: User specifies job group, job name, and location
- When creating job, users can copy image search path, hot folder settings, job toolbars, APA settings, and font search paths from existing jobs
- When creating jobs, users can specify if access via SynapseInSite (Internet interface) is allowed
- Register input files to job, with automatic execution of process plans or workflow plans (see *Automation*)
- Create, save, edit process plans for refining and file output
- Monitor job progress and job history
- Job history logs time and user name for every recorded action
- System history to view recorded actions for multiple jobs
- Search for jobs in Job Finder and rename jobs
- Destroy job completely to remove job from system
- Prinergy system exchange jobs using the job import/export functions.

  This mechanism collects job pages and imposition job ticket information, and exports a JDF file that can be recognized and imported into job context by other Prinergy systems

Page Management

- Automatically assign pages to page positions in multiple page sets after refine and apply Page Geometry settings using APA (optional)
- Displays page processing status to user
- View and edit pages with Adobe Acrobat and other 3rd party plug-ins
- View page thumbnails
- Approve page for output
- Manually publish independent PDF files into a single PDF file via the UI
- Automatically publish independent PDF files into single PDF file using a process plan

Imposition Management

- In general, customers are expected to use their existing workflow to do imposition.
- Prinergy Publish in the current revisionincludes standard Prinergy imposition capability (required imposition software is optional) as part of Prinergy Workshop.

Process & Queue Management

- Provides status update of processing for a job (for example, refining, output, archiving)
- Record status in history log for review
- Highlight errors and warnings for processes
- Change priority of processes in queue
- View the queues for each JTP
- Monitor system processing including percentage complete and error/warning notification
- Generate standard reports using information in database
- Generate customized reports with CDBR (optional)

Job Processing

Job Processing Control & Automation

- Users execute & automate processing steps using process plans
- Prinergy Process Plan Editor is used to create or modify execution parameters within process plans
- Process plans can be chained using workflow plans for advanced automation
- Users choose elements (for example, pages, signatures, surfaces, job) and select the applicable process plan to initiate job processing (for example, refining, proofing, archiving)
- User defined toolbar for initiating processes (workflow toolbar)
- PDF digital master creation
    - Generates production-ready PDF from input files
    - Embeds all images and fonts referenced by input file (configurable search paths per job)
    - Utilizes Adobe Multiple Master technology for font substitution, if selected
    - Utilizes Prinergy Image Replacement to perform OPI on PostScript and PDF input files
    - User chooses whether missing images or fonts are errors or warnings
    - Optimizes contone and monochrome images
- Generates alternate images of images for faster viewing in Adobe Acrobat and for publishing to low-resolution PDF
- Optionally generates thumbnail previews for assistance with page assignment, viewable in the Prepress Workshop
- Advanced Production Automation (APA) can be used to automatically apply page geometry settings to input files, based on a naming convention APA can be also used to assign the pages to a page set or an imposition and to automate regional versioning (optional)
- Support for populated job tickets requires APA functionality
- Optional use of PDF/X-1a:2001 as the PDF digital master format

Job Creation

Using a pre-set template job as a basis, the operator creates a job in Prinergy Publish. There are three possible strategies:

Create a Prinergy Publish job for each production job:

- Input is separated according to job.
- Enables multiple operators to work on a single job.
- Output files are delivered to individual Prinergy job folders.

Create one Prinergy Publish job for each operator:

- Input is separated according to operator.
- Enables operators to process jobs without using Prinergy Workshop for each job.
- Output delivered to operator-specific Prinergy job folders.

Use a single job for all Prinergy Publish work:

- Appropriate for a low-volume environment.
- All output is delivered to a single folder.

Separated & Composite File Handling

- Input files may be either separated or composite
- Retains files as separated or composite until final output
- Supports mixing separated and composite pages in the same job, signature, and surface
- Individual separations (for example, CMYK and spot colors) can be output for each surface (regardless of whether the pages included on the surface are all composite, all separated or a mixture of both).
- Composite pages can be viewed using Adobe Acrobat
- Separated pages can be viewed using Adobe Acrobat (each separation must be viewed separately)
- Handle duotone and tritones in composite or separated workflow (Adobe Photoshop 5.02 and later)
- Some features (for example, trapping and color management) are limited to composite pages

Copydot File Handling

- Prinergy supports efficient Copydot file handling using the Basic Copydot JTP to perform re-formatting or re-tiling of Copydot data to improve Copydot processing performance
- Prinergy supports descreen & resample of Copydot files to match the resolution of the output format or allow image manipulation (optional)
- Prinergy supports tonal calibration of Copydot files (optional)

Supported Font Formats

- PostScript fonts stored in Macintosh or Windows binary format
- TrueType fonts stored in Macintosh or Windows binary format
- TrueType fonts stored in PFA formats
- Installation of fonts from a Prinergy client (Windows client only)
- Standard font set includes more than 135 base PostScript 3 typefaces
- CID fonts (for example, Chinese, Japanese, Korean)

Prinergy Image Replacement (OPI) [Part of Refining]

- Insertion of hi-res images and replacement of existing image samples referenced from PostScript or PDF
- Configurable image search paths per job
- Supported image references in PostScript inputs: OPI version 1.3, OPI version 2.0, Imagemanager Pro “.lay”, Scitex APR “.e”, Helios “.lay”, ColorCentral “.samp”.
- Supported image formats: EPS, TIFF 6.0 Baseline and CMYK and LZW Extensions, DCS Version 1.0, DCS 2.0, Scitex CT Grayscale and CMYK Color
- Supports automatic recombining of Photoshop and Copydot DCS during the OPI process

Trapping

- Vector PDF-to-PDF trapping engine
- Interactive trap viewing application (Adobe Acrobat plug-in)
- Edit individual traps using optional interactive trapping application (Adobe Acrobat TrapEditor plug-in)
- Trap parameters set for entire page via UI for trapper plug-in or via process plan parameters for trapper JTP
- Ability to re-trap individual pages

- Spot color inks can be handled specially according to ink densities and opacity
- Can specify special treatment for metallic or other opaque inks
- Trapping not available on separated input

Color Conversion

- Map spot colors to process
- Set 100% black to overprint
- Set colors to knockout
- Set Overprint CMYK White to Knockout
- Enable Gray Overprint
- Convert RGB to CMYK (see also *Basic Color Management*)
- Pantone library support

BasicColor Management

- Based on ICC standard for defining color spaces and their respective transformation to device independent colors
- User can specify different profiles for different page element types (for example, RGB images, CMYK graphics)
- ICC profiles within PDF input files are automatically regarded
- Color management used within refining process to color match the data with respect to the output device
- Color management not available on pre-separated data or for spot colors
- Can convert color input pages to monochrome gray PDF digital masters

Advanced Color Management (optional)

- Based on ICC standard for defining color spaces and their respective transformation to device independent colors
- Used within the proofing process to transform the already refined data simulating the final output conditions on the proofing device
- Support for 6 color files conversion

Color Combiner

- Allows for the reproduction of spot colors when outputting on CMYK devices
- Color Combiner uses the spot color's process color information stored in the color database, or from the original file if not in the database, to create the CMYK output.

Spot Color Handling

- Automatically determines custom colors present in page files during refining
- Displays custom colors that are present on each surface
- Allows color reduction during refining by allowing the user to control (for composite input) whether each spot color is:
    - Converted to process
    - Retained as a spot color
    - Mapped to another spot color or a process color
- Allows user to selectively control for each surface and each color whether it is:
    - Converted to process (composite only)
    - Retained as a spot color

    - Mapped to another spot color
    - Ignored on output
- Allows to Auto-Resolve spot color names
- Color database defines unique color names' alternative color space values and trapping parameters and screening angle
- A unique color name's database parameter can be overridden on a job-by-job basis
- Output to devices that don't support spot colors handled by user controllable conversion of spots to process. The spots are combined to process after rasterization to allow support for overprinting transparent spot colors.
- Pantone, CMYK, & LAB libraries can be loaded & unloaded into the Prinergy color database

Proofing Output (on-screen viewing, print spooling, file folder output)

- View pages to verify content via Adobe Acrobat
- View separations using Adobe Acrobat plug-in
- View imposed flats to verify registration, back-up, trims and bleeds via Virtual Proofing System
- Print loose pages (via print spooling or file folder output) to supported output devices (Refer to *Prinergy Output Device Connectivity Specification* for more information)
- Loose page output has auto-arrange function. User can specify *n*-up or request best fit of pages to media. User has full control of gutters and margins.
- Loose page output allows user to specify a PDF file containing marks (both static and variable). One file with sheet mark and one with marks for each page.
- Loose page output allows user to optionally enable the printing of trim and bleed marks on proof.
- Print imposed flats via print spooling or file folder output to supported output devices (Refer to *Prinergy Output Device Connectivity Specification* for more information)
- Variable mark replacement for imposed proofs (marks defined in imposition plan)
- Optional color matching for proofing
- Output formats include: 1-bit TIFF, HP-RTL, Scitex CT, EPS Level 2, VPS-TIFF, JPEG, Screened DCS, BMP, IPRF (for Veris connectivity)
- For high-resolution proofing refer to the *Prinergy Output Device Connectivity Specification*
- User configures the process plan to select the proofing device, dot-gain calibration and screening (if applicable)
- Staccato FM screening and Solid Screening available for low-res output (<1000 dpi)
- Selection and application of the appropriate Harmony dot gain calibration curves as specified by the user

Vector File Output

- Prinergy can output several vector based file formats for file exchange with 3rd party workflows and RIPs
- Vector output formats include: PDF 1.3 (automated or manual, single pages), PDF/X-1a:2001 (automated or manual, single pages), PostScript 3

(Single page or flat based), Postscript Level 2 (Single pages, separated,optional), Vector DCS (Single pages, optional)
- PDF 1.3 and PDF/X-1a output options (Remove Traps, Trim Page, Honor Page Geometry Settings)
- Prinergy supports font outlining, which replaces the font information with vector information, for PDF, PostScript Level 2, and Vector DCS output (optional)

Hi-Res Renderer to File Features (optional)

Prinergy Publish cannot be ordered with a Direct HiRes Renderer and a CTP Device Control Kit.

- Screening setting overrides at the RIP:
  - Screen system
  - Dot shape
  - Nominal screen ruling (AM) or feature size (FM)
- Supported screen systems:
  - Creosettes (only available on Creo devices)
  - Staccato second-order FM screening (optional)
- Supported dot shapes (not all dot shapes are available on all screen systems):
  - Round
  - RoundSquare (Euclidean)
  - Elliptical
  - Heavy Elliptical
  - Light Elliptical
  - EllipticalP
  - SmoothElliptical
  - Checker
  - Line
  - Line1
  - Square
  - Square1
- Creosettes employs rational tangent supercell technology with enhancements to preserve smoothness in vignettes and to ensure tightly controlled rosette formation without screen artifacts
- Full control of screening page and element level via PostScript or PDF input
- Full control of screening page and element level on PDF using DotShop (optional)
- Mixed assignment of stochastic and conventional screens among separations (only available with Staccato)
- Prinergy supports web growth compensation (optional)
- Prinergy supports flat rotation to prevent a ghosting effect on press (optional)

Archival and Retrieval (optional)

- Provides archiving in job context
- User may archive selected/specific files
- User may archive all registered PostScript and PDF files in the home job folder, and may optionally include any unregistered files in the job home folder and/or any registered files that exist outside the job home folder

- Archives may be performed incrementally (for example,archive any files that have not been archived or which may have changed since they were last archived)
- Users may retrieve selected/specific files
- Users may retrieve all the files necessary to output a signature
- Users may retrieve all files archived from the job home folder and/or registered files archived from outside the job home folder
- Users may purge/delete files within the home job folder that have been archived
- Archives can be written to multiple media pools for redundant archiving

Administration and Configuration

Automation

- Automated processing available through hot folders
- Create, save, edit and re-use process plans among jobs
- Just-in-time imposition during output
- Workflow plans enable execution of a sequence of process plans (for examplerefineand loose page proof)
- Full automation possible with hot folder input to a import/register/refine/output workflow plan
- Advanced Production Automation (APA) provides powerful pattern matching for automatic assignment of pages to page positions via intuitive User Interface

Distribution

- Processing such as normalizing, trapping, color management, rendering, and archiving can be distributed among Prinergy primary and secondary servers
- Processing can be pooled to allow automatic ~Round Robin~ load sharing between distributed (multiple servers) or non-distributed (single server) processing engines
- Prepress input files can reside on any server viewable on the network from the job home server
- A job's home server can be any Prinergy or Windows Tertiary server in the network. The home server stores system created files.
- Multiple clients can have the same job open regardless of the job's home server. Each client can have multiple jobs open regardless of the job's home server.

Administration

- Installation wizard leads user through installation process
- Mac and Windows Client Installer for installing Prinergy client software on customer machines
- Distribution of which Prinergy servers can initiate trapping engines, or refining engines, etc., provided by administrative UI
- Start, stop, and monitor server processing
- User defined preferences for user-selectable options

Process Tracking & Error Handling

- Processing summary and errors from all activities (refine, output, archive)

available in history log
- History log available in job context
- History log sorted by time or type of activity
- Access to history log from any user's desktop
- The state of each element (for example, error status of individual pages) is captured and displayed on the user's desktop
- System history

Job Cleanup

- Once a job has been processed through Prinergy Publish, an operator should use Windows Explorer to remove the input files from the Prinergy Publish hot folders.
- Once output files have been moved, the operator should use Prinergy Workshop (Job Manager) to remove the intermediate PDF files from the Prinergy job folder.
- This should be done on a regular basis to preserve disk space and keep the system operating at an optimum capacity.

Job Destruction

- Once jobs have been completed and optionally archived, an operator should destroy related Prinergy jobs, using Prinergy Workshop.

Performance

Refer to the *Systems Solution Guide* for recommended configurations and representative performance benchmarks.