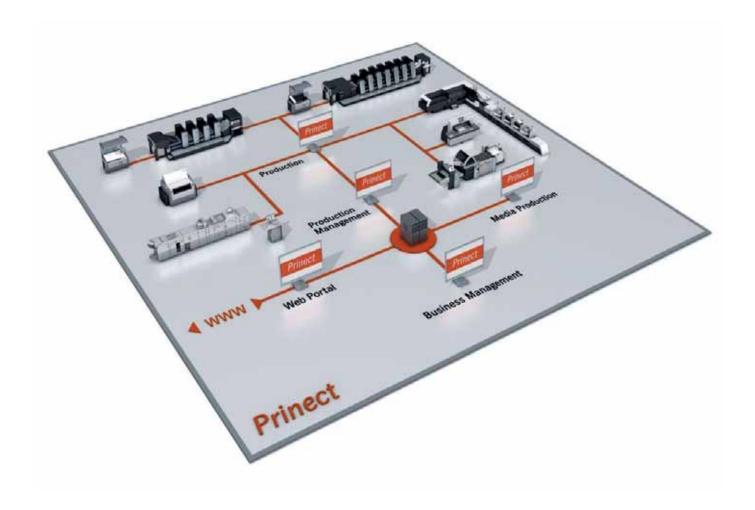


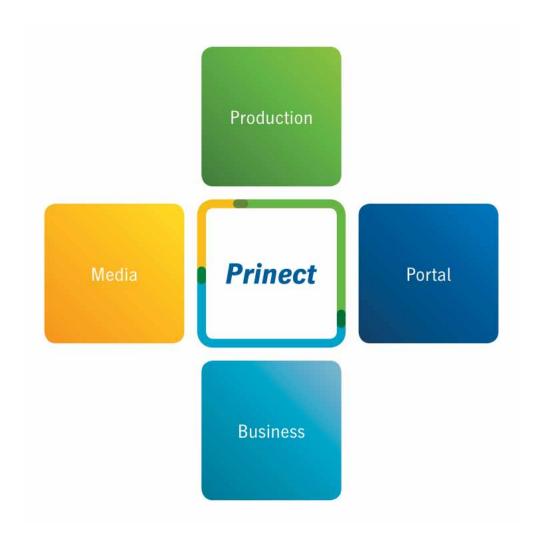
## International Prinect User Days 2014











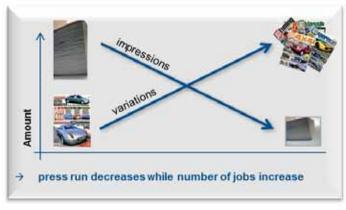


## The shifting demand forced printing industry to change

- → Strong demand for fast and efficient production workflows
- → Massive pressure on production cost, flexibility and turnaround time
- → Competition from W2P forces customer towards web-based customer integration



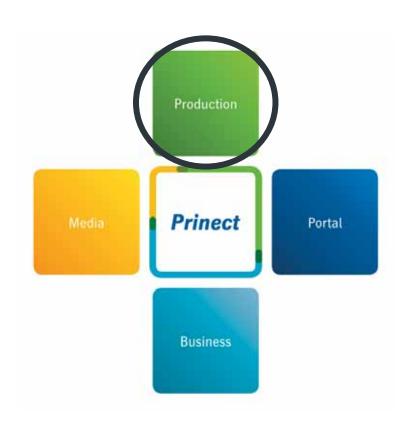






## Prinect organization at your service





- 1. More than 500 people working in Prinect at Heidelberg worldwide
- 2. Close to 200 in R&D, largest workflow R&D group in the industry
- 3. Appr. 240 in 1. & 2<sup>nd</sup> level support
- 4. Appr. 80 in Sales and Product Management
- 5. 80% of R&D personal is working on production and integration topics



## Prinect 2016 – What's new in the Production?



- 1. Prinect Cockpit: Multiple view options for quick access and smooth working
- 2. PDF Toolbox with new trapping, PDF VT & PDF Compare
- 3. New Signa Station User Interface
- 4. Smart Integration with Automation, Versioning and Ganging Workflow, Scheduling
- 5. Prinect DFE now shipping, integration via Digital Print Manager
- 6. Pressroom Manager, Postpress Manager with new automation and integration features



## Cockpit with multiple views for fast access and work

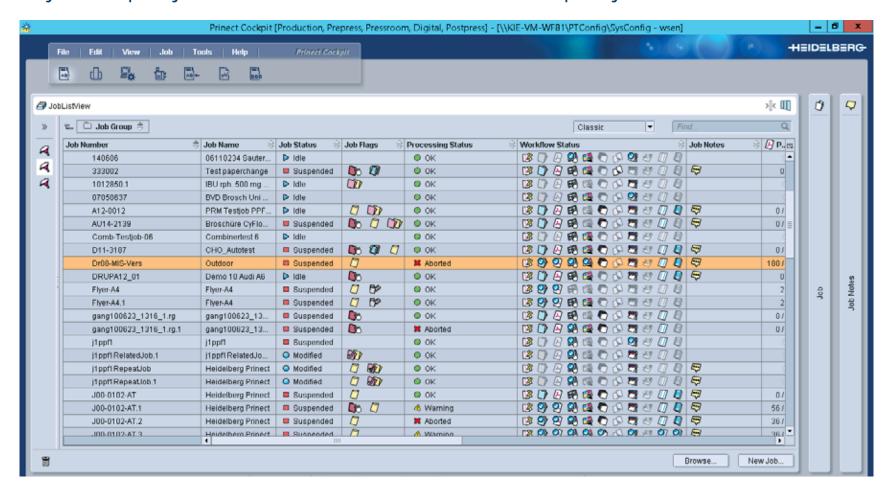
→ Job list for selection of job, job and job notes open in same window





## Cockpit with multiple views for fast access and work

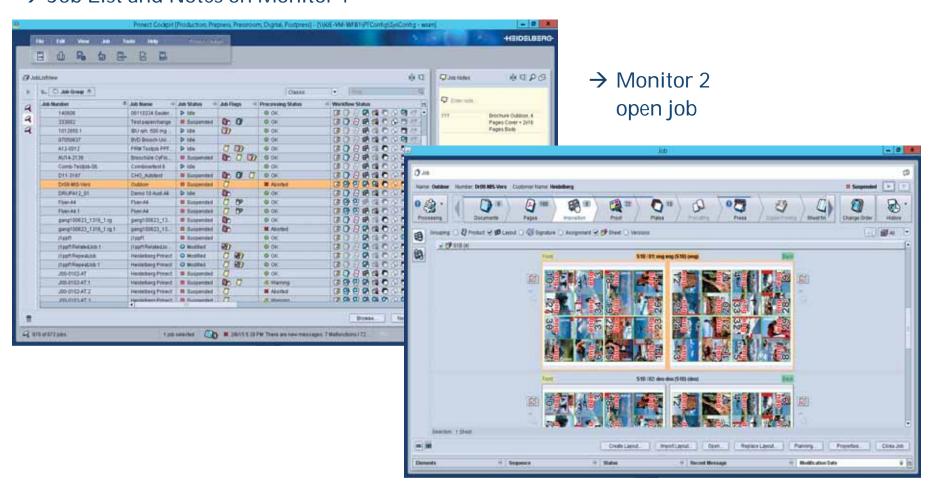
→ job list open, job and Notes minimized – double click opens job





## Cockpit on two Monitors – for utmost space

→ Job List and Notes on Monitor 1





Plug-Ins for

for PC and Mac

Acrobat 9,10, 11, and DC

# Prinect PDF Toolbox 2016 Powerful tools to check and prepare PDFs for print

### → Trap Editor

Trapping and trap processing – greatly improved in Prinect 2016 (Transparency trapping)

#### → Color Editor

Color Management, spot color handling

#### → Coating Editor

Generation of varnish layers

#### → PDF Assistant

PDF Report, Geometry Control, Separation Control, View Acceleration, Show Layout Pages, Page Assembly, Register Control

### → Imposition Editor

Impositioning up to 8up format

#### → Barcode & VDP Editor

Generate and replace bar codes – and (new in 2016) PDF VT documents

#### → Object Editor

Editing of individual objects in PDF

#### **→ PDF Compare**

Compare two different versions of a PDF file (in bundle with PDF Assistant)

## $\blacksquare$

## New Prepress Manager functions in the sequences

#### Normalizer

→ Processing of "PDF Portfolios"

### **Preflighter**

- → Noticeable faster preflight of PDF/VT documents
- → Automatic E-Mail submission of preflight reports to recipients assigned to the resp. print buyer 's profile
- → Colors now displayed for each individual page
- → Optional reduction of the preflight report 's content
- → Checking for "too thin lines"
- → Checking for minimum space between page objects and trim
- → Checking the PDF document 's complexity (number of pivot points, objects, vignettes, ...)



## New Prepress Manager Functions



### **Prepare**

→ Standard sequence to generate B/W pages

#### **Color Carver**

→ Various modifications to avoid wrong parametrization

### **Trapper**

- → Complete rework of trapping algorithm for transparency
- → Trapping of "white" versus colors

### ImposePDF/SendBookletPDF/BookletProof

→ Output of the page area that will be visible in the finished product only (trimmed format minus creep)

#### **AssemblePDF**

→ Possible reduction of the PDF file sizes

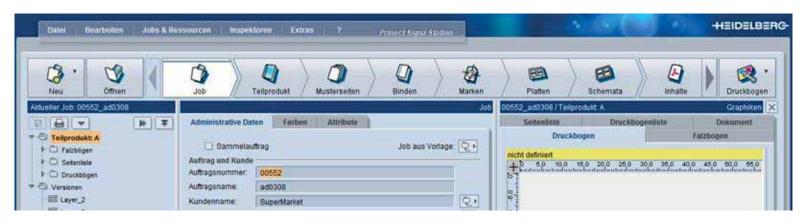




## Prinect Signa Station 2016 New interface & gang job optimization!

- → Task oriented user interface like in Cockpit
- → New marks and control elements
- → Optimations for gang jobs
  - → Simplified and more clear
  - → Dedicated features for
    - → Commercial
    - → Folding box
    - → Label

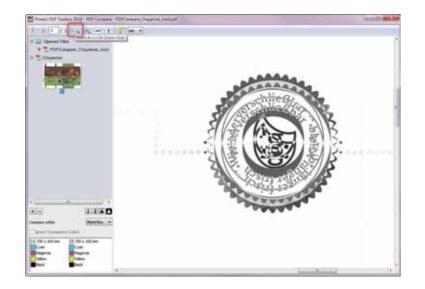






# Progress for Prinect Packaging Highlights for folding box & label production

- → Dedicated ganging features for
  - → Cut
  - → Cut&stack
  - → Diecutting save production costs
- → More reliable production
  - → PDF Compare
  - → Trapping optimizations
  - → New marks
  - **→** ...

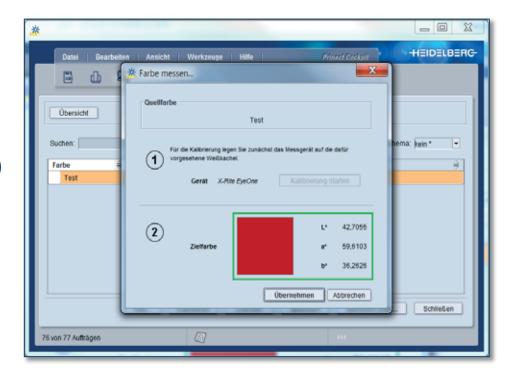


- → Save time with Prinect Package Designer
  - → Automated design & layout creation with exact data for estimation
  - → Optimizations in layout and one-up modification

## $\blacksquare$

## Renderer: Spectral measurement of spot color samples

- → The conversion of spot colors into process color (e.g. CMYK) equivalents can be done on an spectral base.
- → Now possible to measure spot color samples (e.g. brought by the customer) using the X-Rite EyeOne spectral measurement device.
- → This spectral method results in a very precise match between spot and process colors



→ What else is new :

Actual Adobe PDF Print Engine version 3.5 Selection of the Offset ISO paper type for proofing Cut marks for page proofs

## New functions in Color Proof Pro



#### **New Color Proof Pro version 6**

- → For installs with Renderer only (CPPro 6 is 64 bit only)
- → MetaDimension installs: Color Proof Pro 5.1

### Support of new devices (CPPro 6 and 5.1.)

- → Canon iPF6400S (8 colors, format up to DIN A1 / 609,6 mm)
- → Canon iPF8400S (8 colors, format up to DIN B0 / 44")

Profiles for the new Saphira2 proof paper (CPPro 6 and 5.1.)

Customizable certification standards (CPPro 6)

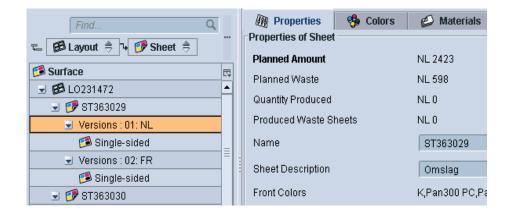
→ By simply editing XML Files



## Versioning Improvements



- → Prinect 2016 mainly got 'topped off' to make working with versioned jobs smoother
- → Much better display of the versioned sheet properties for information 'at a glance'



→ Autocreate Product Parts in Cockpit for Versioning Composite





## Prinect Remote Access: No more need for Java

### HTML5 based Web approval tool to replace the Java based "Pixel Proof Viewer"

- → Comparable except for very few detailed features
- → Any degree of zoom is possible
- → Integrated into the Remote Access UI, therefore customizable
- → Runs on Tablets and iPads





## Prinect Remote Access Extended possibilities through product simulation

### 3D simulation of print products using different folding schemes





## Scheduler

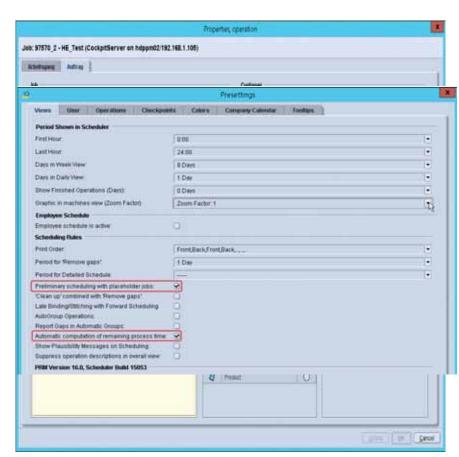
### Job Properties with editing functions

- Change due date
- 2. Read and enter comments
- 3. Display and set milestones

without opening another window and browsing

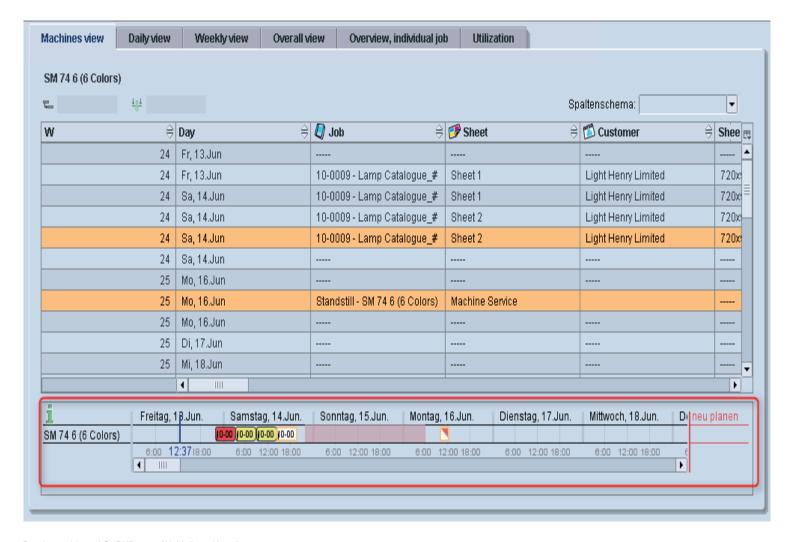
New possibilities in preferences

- Choose the Zoom factor for the Timeline display
- 2. (De-)Select:
- Automatically calculate and display the remaining production time of an operation.
- 4. Use of placeholders





# Scheduler – better overview in Machine View with Timeline display



## **News for Prinect API**



### Additional parameters can be retrieved

- → Version 2016: additional parameters for job, operation and material available
- → Version 2017: employee's activity data available

#### **Benefit**

### **Programming of applications possible for:**

- → Tracking of job processing and monitoring of the production process
- → Creating employee's daily sheets



Name	Type	Description
jobs	List	List of all known jobs
jobs[].dueDate	String	Delivery data of the job
jobs[].creationDate	String	Creation date of the job
jobs[].lastModified	String	Date of the last modification
jobs[].id	String	ID of the job
jobs[].name	String	Name of the job
jobs[] deliveryAmount	Int	Delivery amount
jobs[].numberPlannedPa ges	Int	Number of planned pages
jobs[] priority	Int	Priority of the job between 0 (min priority) and 100 (max priority)



## Prinect DFE - One system for all products

→ Common Platform for all Heidelberg Digital Printing Systems



## HEIDELBERG today has a fit rate of 90% with its own DFE





- → Integration:
  - → One central workflow driving Heidelberg digital and offset presses
- → Flexibility:
  - → PDF Tools to manage complex documents
- → Make Ready:
  - → Automation of labour intensive document preparation
- → Heidelberg Color Management:
  - → Guarantees consistent and reliable colour reproduction



#### **STRATEGY:**

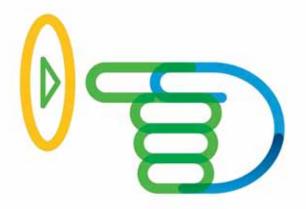
Prinect DFE positioned to become the new standard for industrialized digital printing

Consequently Heidelberg will open integration of 3<sup>rd</sup> party digital production equipment into Prinect Management and Production Workflow on base of Prinect Digital technology



## Prinect Pressroom Manager Output of pallet sheets made easy

- 1. Automatically with pile change
- 2. With the push of one button at the press
- → Easier identification of pallets in Postpress area or intermediate stock
- → Less searching and questioning efforts
- → Individual customizing possible





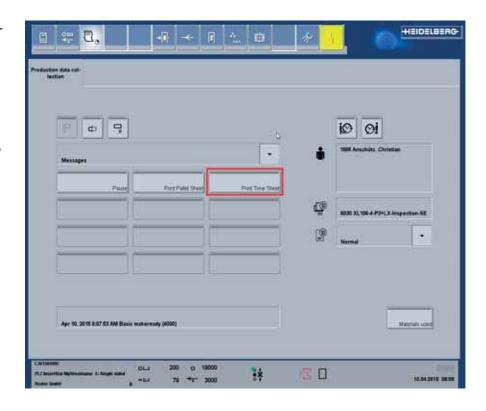


## Activate time sheet print-out at the press

- 1. Automatically with log-off by the operator
- 2. By pressing a button at the Prinect Press Center
- → Shop floor data collection to be checked by the operator at the press
- → No Cockpit access necessary!

Pre-requiste: licensed Analyze Point







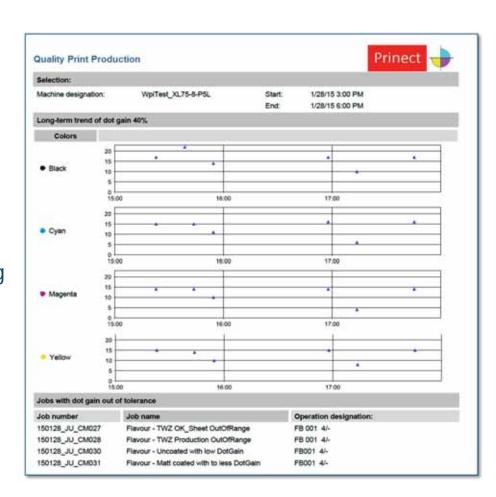
## Long Term Report on "Machine Color Quality"

## Long term analysis of print production quality

→ Showing dot gain for a specific press as tendency for up to several months

#### **Benefit**

- → Control tool for measuring the core competence: high quality printing
- → This enables the user to assess the printing process and to see if it remains steady in the longer term.





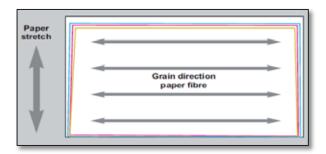
## What is happening in the Finishing integration?

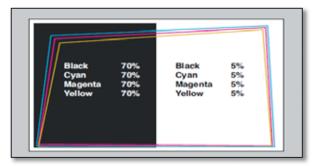


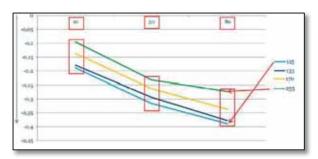
## **Automatic Paper Stretch Compensation**



- → The stretching behavior of paper types is described in a complex software model depending on paper, color, ink, ink coverage, press, etc.
- → This model is used to simulate the effects of paper stretching for each plate before imaging
- → The results of this calculation allow to modify plate imaging data accordingly before imaging
- → As a result, the imaged plates compensate paper stretching
- → Simulating printing conditions leads to better print quality in shorter time more consistently and with less plates to image







## $\mathbf{H}$

## How has paper stretching been compensated up to now?

Make ready times and waste

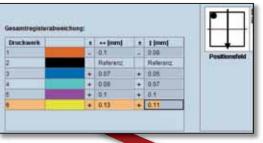
#### **Mechanical adjustment**

of plates to compensate stretching



#### **Paper Stretch Compensation:**

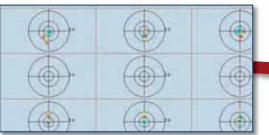
Manual correction of imaging data to image compensated plate collection



## **Automatic Paper Stretch Compensation:**

Simulation of stretching

- + compensation by using software simulation model
- + imaging compensated plates



IPUD 2015 "Heidelberg News"

© Heidelberger Druckmaschinen AG



# Customer benefits of Automatic Paper Stretch Compensation

→ Saving of printing plate sets by avoiding at least one set of plates per compensated job





→ Saves make ready times by avoiding manual adjustment of register or manual compensation





→ Saves waste by compensating before the first sheet is printed

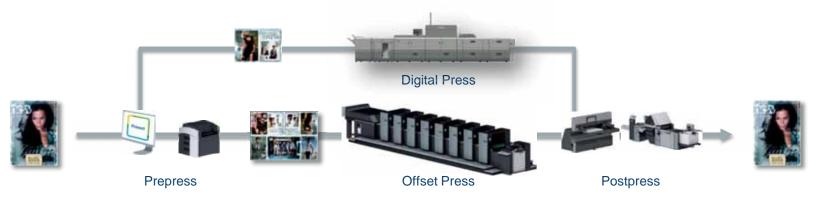




# Prinect Smart Automation autonomously selects the appropriate printing process



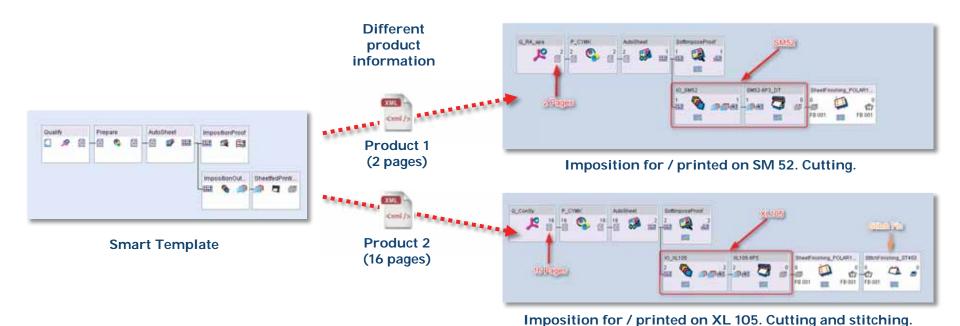
- → Selection of print process and processing of order data depends on product information:
  - → Number of printed copies
  - → Number of pages
  - → Print-Colors
  - → Format
  - $\rightarrow$  .....





# Depending on production requirements, smart templates turn into different process nets and imposition layouts

- → Smart Templates comprise all processing sequences required
- → The processing sequences are connected
- → Depending on the respective product information,
  - a Smart Processing Template turns into the final process nets
  - a Smart Signa Template turns into the final imposition layouts



## Prinect Archiver Pro



New Prinect Archiver Pro will enhance the basic archiving functions of Prinect.

- → Archiving of any kind of content data or assets together with the related print job
- → For fast and easy re-use via a web based GUI to navigate, find and view data.
- → Therefore it's the perfect extension to the basic archiving functions of Prinect.
- → The ideal replacement for Prinect Content System. (V2017 last version of the Content System)



## Main Benefits at a Glance



- → Full integration into the Prinect workflow avoids manual work steps and interface problems
- → Automated extraction of metadata from content data files provides extended information without manual labor
- → Automated monitoring of all files generated throughout the entire print production process save administrative efforts and time
- → Fast find of files and fast retrieval from archives saves time and avoids errors when re-using files





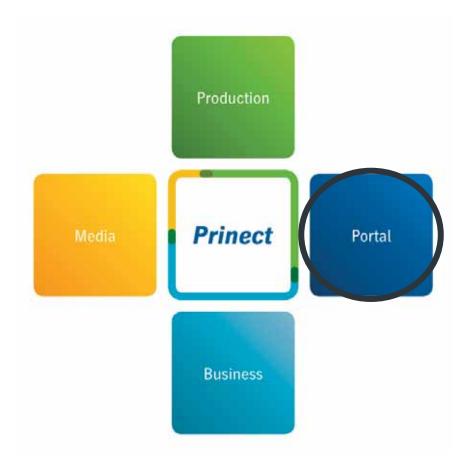
## Prinect Archiver Pro and Prinect Content System

Functions	Details	Basic Prinect archiving functions	Prinect Archiver Pro	Content System
Data Area	Production Data	Yes	Yes	Yes
	Content Data	No	Yes	Yes
Data Area	Archiv	Yes	Ves	Yes
(for Searching)	Online File System	No	Yes	Yes
Management / Operating Functions	Auto Setup Content Folder	No	Yes	Yes
	Hotfolder	No	Yes	Yes
	Direct Link to Content from Cockpit	No	Yes	Yes
	Copy / Paste (Archive / File System)	No	Yes	Yes
	JetBase Data	No	Yes	Yes
	Global / User Link	No	No	Yes
	Content Data archiving, only	No	No	Yes
	PlugIns (Quark, InDesign)	No	No	(Yes)
Search Functions	by Prinect Job critierias (ID, Name, Color Space, Fonts,)	(No)	Yes	Yes
	by object element critierias (Name, Type)	(No)	Yes	Yes
	by Meta Data (XMP, EXIF, IPTC,)	No	Yes	Yes
View / Navigation Functions	Navigate through entire Job Context	No	Yes	Yes
	Standard Views (List, Flip, Grid, Details,)	No	Yes (no Cover view)	Yes



#### Prinect Portal connects print buyers to the print shops

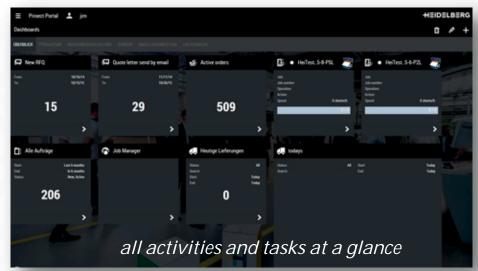
- → Print buyer are connected to the print shop through the internet
- → Prinect portal apps with comprehensive functionality for the pint buyers allow full order handling including appropriate production management
- → New Prinect Webshop for the automated sales of print products



## Prinect Portal – the new browser-based tool to handle and manage print orders



- → New browser-based tool for all
- → workflow steps:
  - → Request for Quote, ordering, stock withdrawal, job tracking
  - → Create quote and estimate
  - → Approval workflow of content layout
  - → View detailed production status
  - → Get delivery, invoice and analysis
  - → Keep customer and project overview



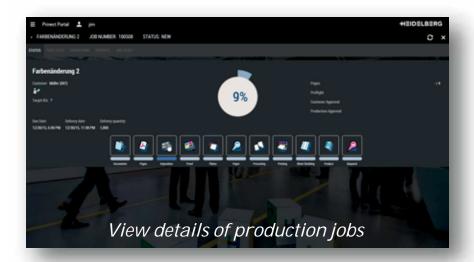
Roles and rights control for all functions

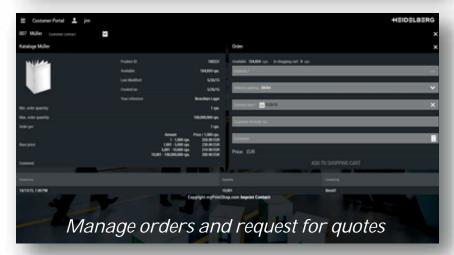
→ Print Buyer, Sales Rep, Order Manager, Production Operator, other



## Prinect Portal: Full order handling including production management

- → Benefits for the printing house
  - → Views exactly matched to roles
  - → Full online access with Tablet/Smart Phone
- → Benefits for the print buyer
  - → Individually customized portal
  - → Everything around the order at a glance

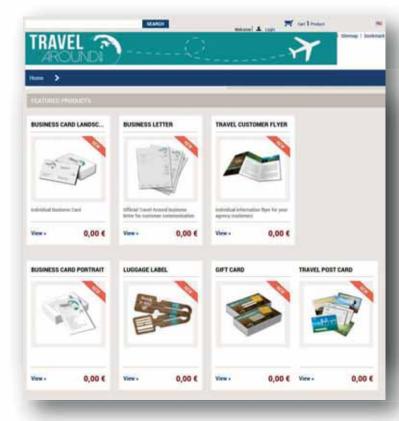




#### Prinect Webshop

- → For the immediate start
- → For standard products and processes
- → SaaS solution
- → Integration into Prinect workflow, fully automated order management and production





#### Improvements W2P Connectivity



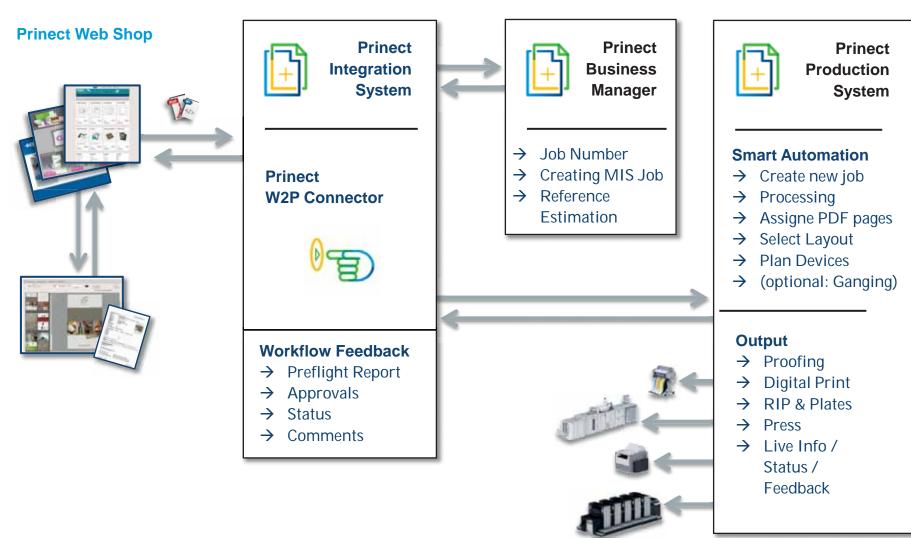
- → Prinect Web-to-Print Manager 2016 compatible
  - automatically places orders in the Prinect Production
  - get handled with a high degree of automation (Smart Automation, Ganging)
  - gets feedback
- → 3rd Party W2P-Systems can be connected on project base

→ Canceled orders can be displayed to distinguish finished orders and those canceled by the customer



#### Prinect Web-to-Print workflow integration

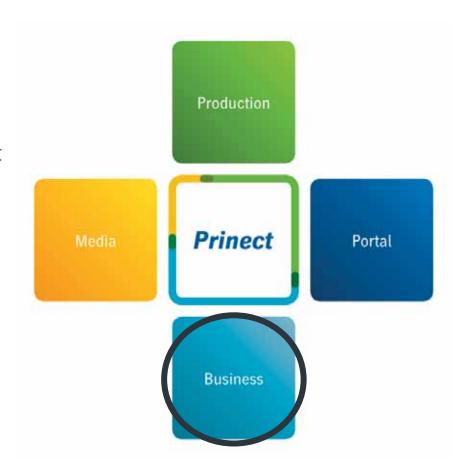




#### **Prinect Business**



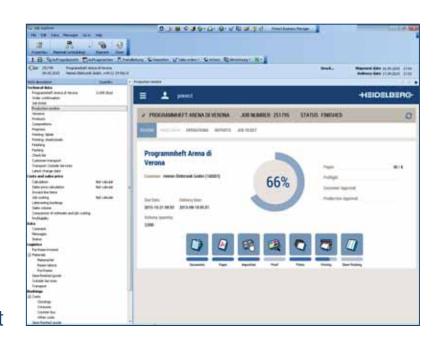
- → Number of quotes is constantly rising, success rates often very low (10 %)
- → Time to quote has to be very short to get the order from the print buyer
- → Order manager with less time to issue a quote and prepare jobs for production
- → Even sales reps should be enabled to define requests and quotes out on the road





#### Prinect Business Manager 2016 (v 7.13 and v 7.14)

- → Improvements and extensions in Speed Estimator and Prinect Portal
- → Extended estimating model for digital print (e.g. click model, inline Finishing)
- → Additional parameters for higher precision in calculation of Finishing processes
- → Further extensions of Production Monitor (with Prinect 2016)
- → Integrated ganging solution together with Prinect production workflow

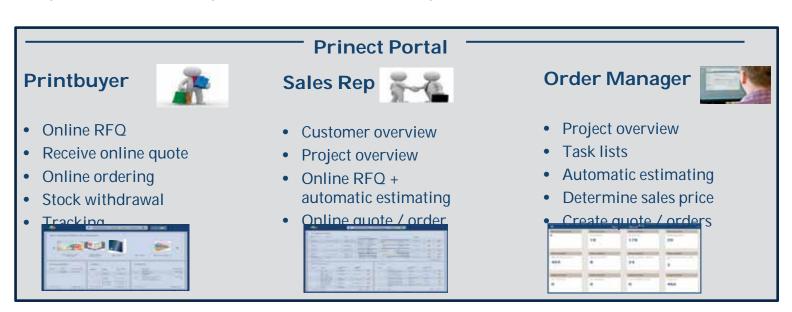


## PUD 2015 "Heidelberg News"

## Extended automated quote and order workflow with Speed Estimator and Prinect Portal



- → Improved automatic calculation with comparison of all production paths
- → Now complete RFQ, calculation, <u>quote sending</u> and ordering available in the portals
- → Production Monitor and Scheduler capacity view in the portal for the sales reps
- → Outlook: Dispatch portal and standardized online interface to logistic supplier currently in development → extend portal solution with shipment functionalities

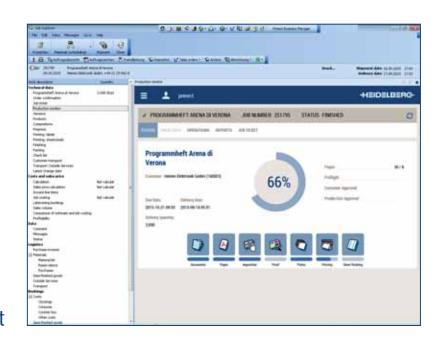


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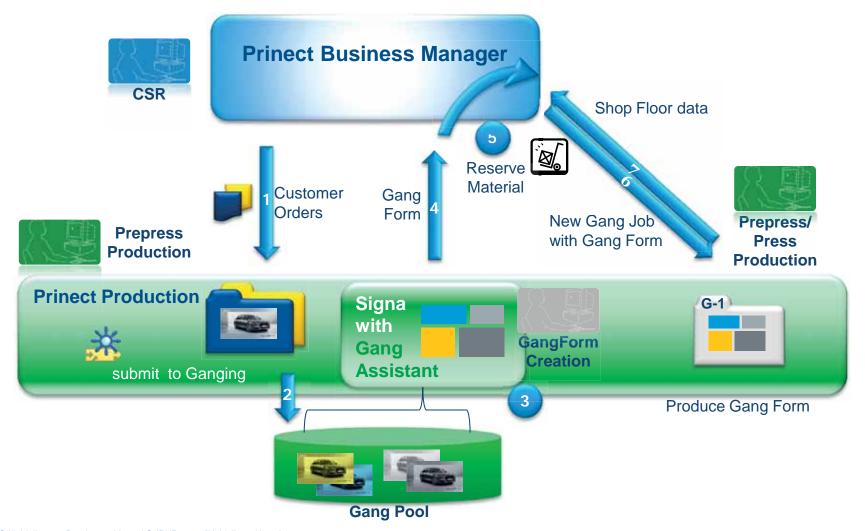
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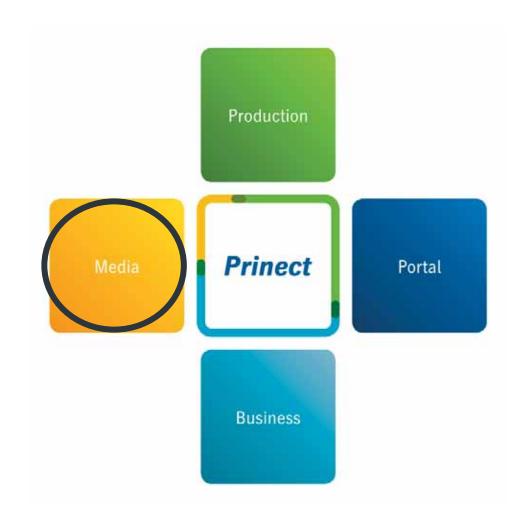


## Business Manager and Production stand out in the Prinect Ganging Workflow











## Prinect Media Manager - Business models and possible use cases for your business

#### **Business models**

→ Variant 1: Start as a database management provider

→ Variant 2: Print shop becomes a media service supplier

→ Variant 3: Growth by distributing of data

# Printer Printer Printer Printer Printer Customer Agency | Agency | Agency | Agency | Digital Agency | Agency | Digital

#### **The Prinect Media Manager**

- → Reduces the pressure on your traditional business.
- → Generates more value for you and your customers.
- → Permanently improves profitability.
- → From printer to a holistic media supplying communication center— A continuous process!



#### Business Models Prinect Media Manager: Success Stories

#### Printing Company BVD Druck+Verlag AG, Schaan, Liechtenstein



- → Looking for new business model to access new customer segments and to increase profitability
- → New image: experts in communication,
  - → Communication online a must
  - → Print is not enough
- → Project example: food trade customer
  - → Monthly brochures in various languages, also to be published online
  - → Basis: millions of food articles
- → Prinect Media Manager as an access to new and existing customers

## Printing Company CGS printing house Ltd., Mrowino, Poland



- → Developed new business model for Cross Media
  - → Adapted to various customer bases
    - → From agency to industrial customer
  - → Adapted to the local market
- → Promoting the new service:
  - → Printing is only part of the whole chain of needs.
  - → The rest is cross media, the web, mobile devices...
- → Prinect Media Manager as a tool to extend business models and services beyond print



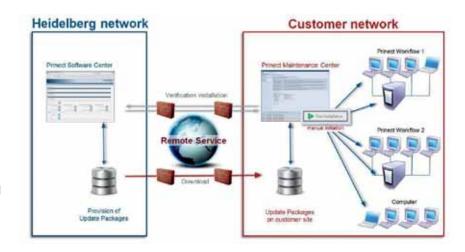
#### Remote Upgrade with Prinect Maintenance Center 2016

Since Prinect 2012: Remote Update
Online distribution and installation of
updates and patches for complete Prinect
workflow

Today approx. 2.200 PMC/Remote Update users

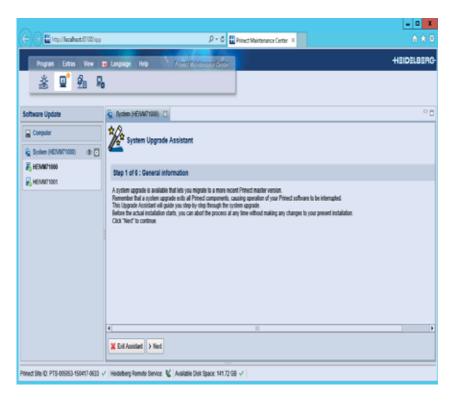
### New with Prinect 2016: Remote Upgrade

Online distribution and installation of version upgrades (P2015 -> P2016) for complete Prinect workflow, including all servers and clients





#### Remote Upgrade with Prinect Maintenance Center 2016



- → Quick and easy upgrade installation supported by the new PMC upgrade assistant
- → Reduction of installation time up to 80%
- → Standardized and stable installation
- → Heidelberg service can focus on training the new features

New license database "Prinect License Center"

→ Automatic distribution of license keys for upgrades via Prinect Maintenance Center to customer



## Thoughts for the Prinect Maintenance Center 2017 Web portal for Prinect users

#### Our vision:

Web portal could possibly consist of different modules covering different tasks

→ Startpage

→ e-Call

→ e-Asset Management

→ e-Marketing

→ e-Documentation

→ e-Selfhelp

(Latest news and information from all modules)

(Service request to Heidelberg service organization)

(Installed and licensed products, contracts, consumptions)

(Product news, special campaigns)

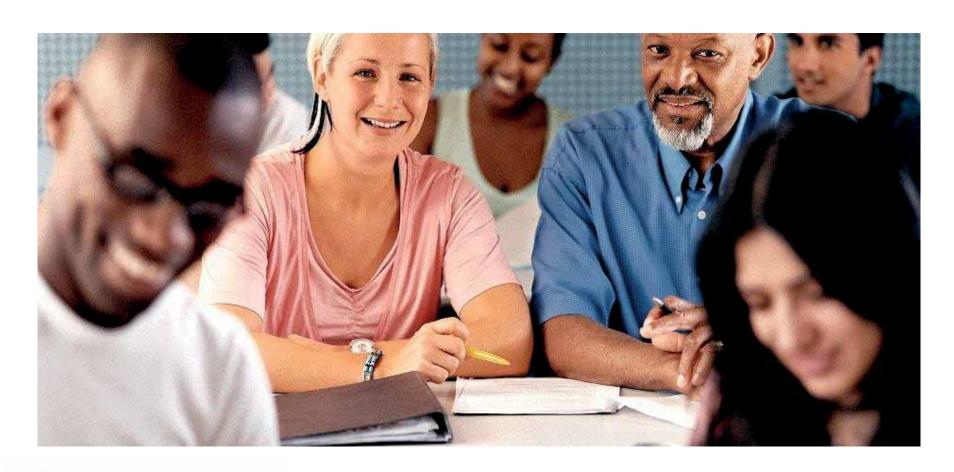
(Product documentation, training material)

(FAQ and Tips & Tricks material)



#### Prinect Certified Specialist







#### Prinect Certified Specialist



Well-trained employees become more and more important in this business.

Our answer is the Prinect Certified Specialist.

- → Targeted to all experienced Prinect users & specialists with good knowledge of the complete production workflow
- → Consists of dedicated Prinect production and integration training, according to the Prinect user needs.
- → 10-days classroom training (2 or 3 modules, possibly incl. Saturday)
- → Price 5.900 EUR

## 10 days classroom training

5 days special Prinect Integration Training

5 days advanced training Prepress, Press, Postpress & Digital



#### Prinect - the smart integration for any print shop

