HEIDELBERG

Product Information
Prinect CR System Requirements

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Prinect Production Manager

System configuration and minimum requirements

- The full scope of Prinect performance cannot be guaranteed for hardware and software platforms that only meet the minimum requirements. The recommended requirements must be used especially for operation in virtual environments. In principle, exceptions and deviations from the system requirements due to individual customer environments cannot be ruled out.
- The Prinect Maintenance Center from Prinect CR should be connected to the HEIDELBERG Customer Portal in order to establish the connection to the cloud and thus have access to the cloud functionalities. The customer is guided through the steps required for the connection in a user-friendly way. During this process, you will be asked to create a user-specific HEIDELBERG Account, which is required for each user to log in to the HEIDELBERG Customer Portal.

System requirements Hardware

Recommended:

- Current Intel® Xeon® SP Silver Class processor, at least 10 cores and at least 2 GHz clock
- Memory: at least 64 GByte RAM
- SSD RAID1 system drive
- 4 x 1.2 TByte SAS 10k hard disk drive (RAID 5)
- 2 x Network connection (10 Gbit/s)
- Redundant Power supply

Minimum:

- Current Intel® Xeon® E series, at least. 4 cores
- Memory: 64 GByte RAM
- RAID Controller with RAID 5 and 1
- 4 x 600 GByte SAS 10k hard disk drive (RAID 5)
- 1 x Network connection (1 Gbit/s)

System requirements Software

Please check the current operating system overview at Prinect Qualified Hardware Server List, Software and Hardware system Overview

We strongly recommend that you check whether sufficient access licenses (CALs) are available for the Windows operating system. Please refer to the "General Information for Licensing Microsoft Operating Systems" in the appendix.

Other Software:

- Internet / Intranet connection with the operating system associated browser
- Adobe Acrobat DC Professional (recommended).

The system requirements for the Prinect Production Cockpit - which is in scope of delivery - can be found here: Prinect Production Cockpit.

The system requirements for the Prinect Shooter 2 – which is in scope of delivery – can be found here: Prinect Shooter 2.

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Recommended Production Manager hardware from the Prinect Qualified Hardware list:
Rack Server R450-R46 or Tower Server T550-S46

Depending on the workflow demands, additional hard drives can be necessary to increase the disk storage area. The T550-S46 can hold up to 16 hard drives. The R450-R46 can hold up to 8 hard drives.

Recommended hardware for Prinect Shooter 2 from the Prinect Qualified Hardware list:
Tower Server T160-S14 or Workstation T3680-C14

If the hardware or software platform does not meet the above-mentioned specifications, we cannot guarantee that the full scope of functions and performance will be available.

Prinect Production Manager (One Box)

System configuration and minimum requirements

- The full scope of Prinect performance cannot be guaranteed for hardware and software platforms that only meet the minimum requirements. The recommended requirements must be used especially for operation in virtual environments. In principle, exceptions and deviations from the system requirements due to individual customer environments cannot be ruled out.
- The Prinect Maintenance Center from Prinect CR should be connected to the HEIDELBERG Customer Portal in order to establish the connection to the cloud and thus have access to the cloud functionalities. The customer is guided through the steps required for the connection in a user-friendly way. During this process, you will be asked to create a user-specific HEIDELBERG Account, which is required for each user to log in to the HEIDELBERG Customer Portal.
- To guarantee the proper functioning of a direct exposure, the entire system including buffer disk must meet the speed requirements of the connected image setter. This can only be guaranteed with a qualification test. We therefore recommend only our qualified systems for the direct connection of an image setter.
- "One Box" refers to a Prinect production configuration on a dedicated hardware server with built-in renderer and CtP direct port. Additional infrastructure functions, such as Prinect Maintenance Center or network services such as DNS functions require additional hardware.

System requirements for an "One Box" Prinect Production Manager inclusive a direct connection of a Suprasetter

Recommended:

- Current Intel® Xeon® SP Silver Class processor, at least 10 core and at least 2 GHz clock
- Memory: at least 64 GByte RAM
- SSD RAID1 system drive
- 4 x 1.2 TByte SAS 10k hard disk drive (RAID 5)
- 2 x Network connection (10 Gbit/s)
- Redundant power supply

Minimum:

- Current Intel® Xeon® E series, at least. 4 Cores
- Memory: 64 GByte RAM
- RAID Controller with RAID 5 and 1
- 4 x 600 GByte SAS 10k hard disk drive (RAID 5)
- 1 x Network connection (1 Gbit/s)
- 2 x PCIe-X2 slots for network and Speedway cards to connect an image setter
  Note: If the motherboard does not provide onboard Ethernet ports or graphics, additional slots must be considered.

System requirements Software

Please check the current operating system overview at Prinect Qualified Hardware Server List, Software and Hardware system Overview

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We strongly recommend that you check whether sufficient access licenses (CALs) are available for the Windows operating system. Please refer to the "General Information for Licensing Microsoft Operating Systems" in the appendix.

Other Software:
- Internet / Intranet connection with the operating system associated browser
- Adobe Acrobat DC Professional (recommended).

The system requirements for the Prinect Production Cockpit - which is in scope of delivery - can be found here: Prinect Production Cockpit.

Notes

Recommended hardware from the Prinect Qualified Hardware list:
Tower Server T360-S22

Depending on the workflow demands additional hard drives can be necessary to increase the disk storage area. The T360-S22 can hold up to 8 hard drives.

If the hardware or software platform does not meet the above-mentioned specifications, we cannot guarantee that the full scope of functions and performance will be available.

Prinect Production Press

System configuration and minimum requirements

- The full scope of Prinect performance cannot be guaranteed for hardware and software platforms that only meet the minimum requirements. The recommended requirements must be used especially for operation in virtual environments. In principle, exceptions and deviations from the system requirements due to individual customer environments cannot be ruled out.
- The Prinect Maintenance Center from Prinect CR should be connected to the HEIDELBERG Customer Portal in order to establish the connection to the cloud and thus have access to the cloud functionalities. The customer is guided through the steps required for the connection in a user-friendly way. During this process, you will be asked to create a user-specific HEIDELBERG Account, which is required for each user to log in to the HEIDELBERG Customer Portal.
- Prinect Pressroom Manager permits the connection of printing presses of the selected format. To ensure seamless communication with the Prinect Production Press, the presses connected online must be equipped with the latest software versions of CP2000 Center / Print Center, Press Center / Press Center Compact, Press Center 2 / XL 2 and Press Center 3/ XL 3.
- If the function "Inspection Control Report" should be used with Analyze Point, the storage capacity of memory must be at least 32 GByte.
- If the Automatic Paper Stretch Compensation function is to be used, it must be installed on separate hardware. The system requirements for this are described in the section "Prinect Automatic Paper Stretch Compensation (stand-alone)".
- In the case of an upgrade to Prinect Production Manager, extended system requirements apply as described in the section "Prinect Production Manager". To ensure the performance of the upgraded system, a hardware replacement may be mandatory.

System requirements Hardware

Recommended:

- Current Intel® Xeon® SP Silver Class processor, at least 10 cores and at least 2 GHz clock
- Memory: at least 64 GByte RAM
- SSD RAID1 system drive
- 4 x 1.2 TByte SAS 10k hard disk drive (RAID 5)
- 2 x Network connection (10 Gbit/s)
- Redundant power supply

Minimum:

- Current Intel® Xeon® E series, at least 4 cores
- Memery: 64 GByte RAM
- RAID Controller with RAID 5 and 1
- 4 x 600 GByte SAS 10k hard disk drive (RAID 5)
- 1 x Network connection (1 Gbit/s)

System requirements Software

Please check the current operating system overview at Prinect Qualified Hardware Server List, Software and Hardware system Overview

Product Information

We strongly recommend that you check whether sufficient access licenses (CALs) are available for the Windows operating system. Please refer to the "General Information for Licensing Microsoft Operating Systems" in the appendix.

Prinect Software:
- Prinect Production Cockpit
- Prinect Integration Manager

Other Software:
- Internet / Intranet connection with the operating system associated browser

Notes

Recommended hardware from the Prinect Qualified Hardware list:
Server T160-S14 or Server T360-S22 or Server R360-R22

If the hardware or software platform does not meet the above-mentioned specifications, we cannot guarantee that the full scope of functions and performance will be available.

Prinect Business Manager

System configuration and minimum requirements

- The full scope of Prinect performance cannot be guaranteed for hardware and software platforms that only meet the minimum requirements. The recommended requirements must be used especially for operation in virtual environments. In principle, exceptions and deviations from the system requirements due to individual customer environments cannot be ruled out.
- The Business Manager Server software and the required Microsoft SQL database is to be installed on a server platform. The client software is installed on the user PC.
- Depending on the performance requirements it may be necessary to exchange the MS SQL Express database – which is in scope of delivery - to a more powerful edition. We recommend using the Prinect Data Center.

System requirements Hardware (Server)
Recommended:
- Current Intel® Xeon® E series, at least 4 Cores
- Memory: at least 16 GByte RAM
- 2 x Network connection (1 Gbit/s)
- Redundant power supply

Minimum:
- Current Intel® Xeon® E series, at least 4 Cores
- Memory: at least 8 GByte RAM
- Disk drive system: RAID 5 with 3 hard disk drive: System, Data, Backup
- 1 x Network connection (1 Gbit/s)

System requirements Software (Server)
Please check the current operating system overview at Prinect Qualified Hardware Server List, Software and Hardware system Overview

We strongly recommend that you check whether sufficient access licenses (CALs) are available for the Windows operating system. Please refer to the "General Information for Licensing Microsoft Operating Systems" in the appendix.

Database software:
- Prinect Data Center (optionally available)
- Officially released Microsoft SQL Database version

System requirements Hardware (Client)
- We recommend current PCs with at least 8 GByte RAM
- Monitor resolution: 1280 x 1024
- 1 x Network connection (1Gbit/s)

System requirements Software (Client)
Please check the current operating system overview at Prinect Qualified Hardware Server List, Software and Hardware system Overview

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We strongly recommend that you check whether sufficient access licenses (CALs) are available for the Windows operating system. Please refer to the "General Information for Licensing Microsoft Operating Systems" in the appendix.

Other Software:
- Internet / Intranet connection with the operating system associated browser
- Acrobat Reader 10 (or higher)
- Microsoft Office installation if an office connection to the Prinect Business Manager is desired.
- An eMail Client (Outlook, or others, …)
  Note: Direct sending mail via SMTP is also possible.

Notes

Recommended hardware from the Prinect Qualified DELL Systems List (Server):
Rack Server R360-R22 or Tower Server T360-S22

Recommended hardware from the Prinect Qualified DELL Systems List (Client):
Workstation XE4-C34

If the hardware or software platform does not meet the above-mentioned specifications, we cannot guarantee that the full scope of functions and performance will be available.

Prinect Production Cockpit

System configuration and minimum requirements
- The full scope of Prinect performance cannot be guaranteed for hardware and software platforms that only meet the minimum requirements. The recommended requirements must be used especially for operation in virtual environments. In principle, exceptions and deviations from the system requirements due to individual customer environments cannot be ruled out.

System requirements Hardware (Mac / PC)
Recommended:
- PC with a current CPU i5-Series or i3-Series at least 3 GHz Clock
- Mac computer: with current Intel CPU or Apple Silicon CPU technology (dependent on macOS)
- Memory: at least 16 GByte RAM

Minimum:
- PC with a current CPU i5-Series or i3-Series at least 2.0 GHz Clock
- Mac computer: with current Intel CPU or Apple Silicon CPU technology (dependent on macOS)
- Memory: at least 8 GByte RAM
- Hard disk drive: at least 1 TByte
- Resolution: 1280 x 1024 and 24 Bit Color depth
- 1 x Network connection (1Gbit/s)

System requirements Software
Please check the current operating system overview at Prinect Qualified Hardware Server List, Software and Hardware system Overview

We strongly recommend that you check whether sufficient access licenses (CALs) are available for the Windows operating system. Please refer to the "General Information for Licensing Microsoft Operating Systems" in the appendix.

Other Software:
- Internet / Intranet connection with the operating system associated browser
- Adobe Acrobat DC Professional (recommended).

Notes
Recommended hardware from the Prinect Qualified Hardware list:
Workstation XE4-C34 or Workstation T3680-C14

If the hardware or software platform does not meet the above-mentioned specifications, we cannot guarantee that the full scope of functions and performance will be available.

Prinect Data Terminal

System configuration and minimum requirements

- The full scope of Prinect performance cannot be guaranteed for hardware and software platforms that only meet the minimum requirements. The recommended requirements must be used especially for operation in virtual environments. In principle, exceptions and deviations from the system requirements due to individual customer environments cannot be ruled out.

System requirements Hardware (Mac / PC)

Recommended:

- Touch Screen with integrated PC with a current CPU i3-Series at least 2 GHz Clock
- Standard PC / Mac with separate Touch Screen Monitor

Minimum:

- PC with a current CPU i3-Series at least 2.0 GHz Clock
- Mac computer: with current Intel CPU or Apple Silicon CPU technology (dependent on macOS)
- Memory: at least 4 GByte RAM
- Hard disk drive: at least 256 GByte
- 15" Monitor with 1280 x 1024 Pixels and 24 Bit Color depth
- 1 x Network connection (1Gbit/s)

System requirements Software

Please check the current operating system overview at Prinect Qualified Hardware Server List, Software and Hardware system Overview

Other Software:

- Internet / Intranet connection with the operating system associated browser
- Adobe Acrobat DC Professional (recommended).

Notes

Recommended hardware from the Prinect Qualified Hardware list:
Workstation XE4-C34

If the hardware or software platform does not meet the above-mentioned specifications, we cannot guarantee that the full scope of functions and performance will be available.

Prinect Portal

System configuration and minimum requirements
- The full scope of Prinect performance cannot be guaranteed for hardware and software platforms that only meet the minimum requirements. The recommended requirements must be used especially for operation in virtual environments. In principle, exceptions and deviations from the system requirements due to individual customer environments cannot be ruled out.

Fundamental to the Prinect Portal Infrastructure
Portal usage via Intranet, only
In this case, the Prinect Portal is automatically installed on the Prinect production server.

Portal usage via Internet
In this case the Prinect Portal must be installed on a dedicated Portal Server (System requirements see below). Furthermore required: An Internet infrastructure as described in the "Prinect Portal Presales Checklist (available inside Easy Sales Portal) and a customer suppled SSL certificate.

Prinect Portal Application Modules
Prepress Portal Service
- Requires Prinect Prepress Manager with PDF Automation Pack. (Note: The Prinect Portal cannot be operated with a possibly still existing Prepress Manager P.)
- The "pixel-based soft proofing" function requires or a Prinect Renderer with the "Color Proof Pro" option.

System requirements Prinect Portal Client Software
The following browsers are supported for the following operating systems (each in the latest version):
- Chrome (Windows, macOS, Android*, iOS*)
- Firefox (Windows, macOS, Android*, iOS*)
- Safari (macOS, iOS*)
- MS Edge Chromium (Windows)

*Note: Not all functions support touch operation

Some Portal functionality is available in the Prinect Production Cockpit, see the system requirements linked here.

System requirements Prinect Portal Server Hardware
Recommended:
- Current Intel® Xeon® E series, at least 4 Cores, at least 3GHz
- Memory: at least 16 GByte RAM
- 2 x Network connection (10 Gbit/s)
- Redundant power supply

Minimum:
- Current Intel® Xeon® E series, at least 4 Cores, at least 3 GHz
- Memory: at least 8 GByte RAM
- Hard disk drive: RAID 5 with 3 Hard disk drive: System, Daten, Backup
- 1 x Network connection (1 Gbit/s)

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System requirements Prinect Portal Server Software

Please check the current operating system overview at <u>Prinect Qualified Hardware Server List, Software and Hardware system Overview</u>

Prinect Software:
- Prinect Integration Manager with at least one Prinect Manager

Browser:
- Internet / Intranet connection with the operating system associated browser

Notes

Some functionalities of the Prinect Portal are available in the Prinect Production Cockpit, whose system requirements are linked <u>here</u>.

The available Internet bandwidth, the performance of the Prinect Server / Prinect Portal Server and the performance of Prinect overall system must be adapted to the number of concurrent users and the operation. The above-mentioned minimum requirements may be insufficient for the concrete use case.

We strongly recommend that you check whether sufficient access licenses (CALs) are available for the Windows operating system on which the portal web server is running. Depending on the application, additional access licenses and / or a "Windows Server External Connector" license may become necessary. Please refer to the "General Information for Licensing Microsoft Operating Systems" in the appendix.

Recommended server hardware from the Prinect Qualified Hardware list:
Rack Server R360-R22 or Tower Server T360-S22

Recommended workstation hardware from the Prinect Qualified Hardware list:
Workstation XE4-C34

If the hardware or software platform does not meet the above-mentioned specifications, we cannot guarantee that the full scope of functions and performance will be available.

Prinect Signa Station

System configuration and minimum requirements

- The full scope of Prinect performance cannot be guaranteed for hardware and software platforms that only meet the minimum requirements. The recommended requirements must be used especially for operation in virtual environments. In principle, exceptions and deviations from the system requirements due to individual customer environments cannot be ruled out.

System requirements Hardware

Recommended:

- PC with a current CPU i5-Series or i3-Series at least 3 GHz Clock
- Mac computer: with current Intel CPU or Apple Silicon CPU technology (dependent on macOS)
- Memory: 16 GByte RAM
- Hard disk drive: at least 256 GByte

Minimum:

- PC with a currentCPU i5-Series or i3-Series at least 2 GHz Clock
- Mac computer: with current Intel CPU or Apple Silicon CPU technology (dependent on macOS)
- Memory: at least 8 GByte RAM
- Hard disk drive: at least 5 GB for program and application data
- Resolution: 1280 x 1024 and 24 Bit Color depth
- 1 x Network connection (1Gbit/s)

System requirements Software

Please check the current operating system overview at Prinect Qualified Hardware Server List, Software and Hardware system Overview

We strongly recommend that you check whether sufficient access licenses (CALs) are available for the Windows operating system. Please refer to the "General Information for Licensing Microsoft Operating Systems" in the appendix.

Mac Operating Systems:
Connection to a Windows PC with the licensing software/maintenance center required also for Mac environments!

Other Software:

- Internet / Intranet connection with the operating system associated browser
- For Prinect Signa Station a PDF viewer is required
- Acrobat Distiller (version 10 or higher) is required for Prinect Signa Station
  if the user wants to work with PostScript documents
  or the user wants to import EPS or DCS2 marks
- Adobe Acrobat DC Professional (recommended).

Notes

Recommended hardware from the Prinect Qualified Hardware list:
Workstation XE4-C34 or Workstation T3680-C14

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If the hardware or software platform does not meet the above-mentioned specifications, we cannot guarantee that the full scope of functions and performance will be available.

Prinect Versafire DFE

System configuration and minimum requirements

- The Prinect Maintenance Center from Prinect CR should be connected to the HEIDELBERG Customer Portal in order to establish the connection to the cloud and thus have access to the cloud functionalities. The customer is guided through the steps required for the connection in a user-friendly way. During this process, you will be asked to create a user-specific HEIDELBERG Account, which is required for each user to log in to the HEIDELBERG Customer Portal.
- The Prinect Digital frontend is shipped pre-installed on its own hardware.
  Monitor, mouse and keyboard are not part of the delivery and must be procured.

Prinect Digital Print Manager

System configuration and minimum requirements
- The full scope of Prinect performance cannot be guaranteed for hardware and software platforms that only meet the minimum requirements. The recommended requirements must be used especially for operation in virtual environments. In principle, exceptions and deviations from the system requirements due to individual customer environments cannot be ruled out.
- This description does not apply to new installations, since new installations are made exclusively with Prinect Production Manager, but only to systems that have already been installed and are now to be upgraded or renewed on the software and/or hardware side.
- At least the Prinect Prepress Manager (same Prinect release version) has to be available.
- At least one Prinect Production Cockpit has to be available.

System requirements Hardware
- The existing Prinect Server must be capable to carry the additional workload added by the Prinect Digital Print Manager.

System requirements Software
- Prinect Integration Manager, for the system requirements look <u>here</u>.
- Prinect Prepress Manager, for the system requirements look <u>here</u>.
- Prinect Production Cockpit, for the system requirements look <u>here</u>.

Notes
Recommended hardware from the Prinect Qualified DELL Systems list (Prinect Integration):
Rack Server R450-R46 or Rack Server R360-R22 or Tower Server T550-S46 or Tower Server T360-S22

Depending on the workflow demands additional hard drives can be necessary to increase the disk storage area. The T550-S46 can hold up to 16 hard drives. The R450-R46 can hold up to 8 hard drives.

If the hardware or software platform does not meet the above-mentioned specifications, we cannot guarantee that the full scope of functions and performance will be available.

Prinect Gallus One DFE (Base Pack)

The Prinect Gallus One DFE software package is specifically designed to meet the needs of Gallus One digital printing machine. This specific software package provides the optimal workflow for maximum productivity.

The Gallus One specific Prinect features are essentially derived from the following Prinect products:
- Prinect Digital Frontend for Gallus One
- Prinect Production Cockpit, Prinect PDF Toolbox, Prinect PDF Assistant
- Prinect Archiver, Prinect Color Proof Pro, Prinect Signa Station

therefore, the corresponding software system requirements of these Prinect products apply in principle.

System configuration and minimum requirements
- System requirements for Prinect Production Cockpit.
- Maximum 1 Gallus One machines per base pack.

System requirement Server Hardware
Minimum:
- Current Intel® Xeon® E series, at least 4 Cores, at least 3,4 GHz
- Memory: at least 64 GByte RAM
- 4 x 600 GByte SAS 10k Hard disk drive (RAID 5)
- 2 x Network connection (1 Gbit/s)
- Redundant power supply

System requirements Software
Please check the current operating system overview at Prinect Qualified Hardware Server List, Software and Hardware system Overview

We strongly recommend that you check whether sufficient access licenses (CALs) are available for the Windows operating system. Please refer to the "General Information for Licensing Microsoft Operating Systems" in the appendix.

Prinect Software
- Prinect Production Cockpit, the system requirements can be found here.
- Prinect Color Toolbox (Color Center for substrate qualification), the system requirements can be found here.

Other Software:
- Internet / Intranet connection with the operating system associated browser
- Adobe Acrobat DC Professional (recommended).

Notes
Recommended hardware from the Prinect Qualified Hardware list:
Rack Server R360-R22 or Tower Server T360-S22

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Depending on the workflow demands additional hard drives can be necessary to increase the disk storage area. The T360-S22 can hold up to 8 hard drives. The R360-R22 can hold up to 8 hard drives.

If the hardware or software platform does not meet the above-mentioned specifications, we cannot guarantee that the full scope of functions and performance will be available.

Prinect Labelfire DFE (Base Pack)

The Prinect Labelfire DFE software package is specifically designed to meet the needs of Gallus Labelfire 340 digital printing machine. This specific software package provides the optimal workflow for maximum productivity.

The Labelfire specific Prinect features are essentially derived from the following Prinect products:
- Prinect Digital Frontend for Labelfire, Prinect Integration Manager and Prinect Production Manager
- Prinect Production Cockpit, Prinect PDF Toolbox, Prinect PDF Assistant
- Prinect Archiver, Prinect Color Proof Pro, Prinect Signa Station

therefore, the corresponding software system requirements of these Prinect products apply in principle.

System configuration and minimum requirements
- System requirements for Prinect Production Cockpit.
- Additional Labelfire machines require an additional Prinect Labelfire renderer, which must be installed on its own hardware. Find the system requirements of the additional Prinect Labelfire Renderer here.
- Maximum 4 Labelfire machines per base pack.

System requirement Server Hardware
Minimum:
- Current Intel® Xeon® SP Silver Class Processor, at least 2.1 GHz and 12 Cores
- Memory: at least 128 GByte RAM
- Hard disk drive with RAID 1 for operating system and 5 x 1,2TB Hard disk drive RAID 5 with SAS 10k hot-plug Hard disk drive
- 2 x Network connection (1 Gbit/s)
- Redundant power supply

System requirements Software
Please check the current operating system overview at Prinect Qualified Hardware Server List, Software and Hardware system Overview

We strongly recommend that you check whether sufficient access licenses (CALs) are available for the Windows operating system. Please refer to the "General Information for Licensing Microsoft Operating Systems" in the appendix.

Prinect Software
- Prinect Production Cockpit, the system requirements can be found here.
- Prinect Color Toolbox (Color Center for substrate qualification), the system requirements can be found here.

Other Software:
- Internet / Intranet connection with the operating system associated browser
- Adobe Acrobat DC Professional (recommended).

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Notes

Recommended hardware from the Prinect Qualified Hardware list:
Rack Server R450-PR70 or Tower Server T550-PR71

Depending on the workflow demands additional hard drives can be necessary to increase the disk storage area. The T550-PR71 can hold up to 16 hard drives. The R450-PR70 can hold up to 8 hard drives.

If the hardware or software platform does not meet the above-mentioned specifications, we cannot guarantee that the full scope of functions and performance will be available.

Prinect Labelfire Renderer (for multiple machines on one server)

System configuration and minimum requirements
- Maximum one Prinect Labelfire Renderer per Labelfire machine

System requirement Server Hardware
Recommended:
- Current Intel® Xeon® E series, at least 4 Cores, at least 3GHz Clock (Server Hardware)
- Memory: at least 64 GByte RAM

Minimum:
- Current Intel® Xeon® E series, at least 4 Cores and at least 3 GHz (Server Hardware)
- Current Workstation CPU i7-Series at least 3.0 GHz Clock (Workstation Hardware)
- Memory: at least 32 GByte RAM
- Hard disk drive with at least 500 GByte freier Kapazität
- 1 x Network connection (1 Gbit/s)

System requirements Software
Please check the current operating system overview at Prinect Qualified Hardware Server List, Software and Hardware system Overview

We strongly recommend that you check whether sufficient access licenses (CALs) are available for the Windows operating system. Please refer to the "General Information for Licensing Microsoft Operating Systems" in the appendix.

Prinect Software:
- Prinect Labelfire (Base Pack), for system requirements look here.

Notes
Recommended hardware from the Prinect Qualified Hardware list:
Workstation T3680-C14 or Tower Server T160-S14

If the hardware or software platform does not meet the above-mentioned specifications, we cannot guarantee that the full scope of functions and performance will be available.

Prinect Labelfire DFE (Base Pack) with Performance Plus Option

The Prinect Labelfire software package can be extended to up to 8 Worker (add. renderer processes) for better performance with variable data printing or very many short runs with the Performance Plus option.

The Labelfire specific Prinect features are essentially derived from the following Prinect products:
- Prinect Digital Frontend for Labelfire, Prinect Integration Manager and Prinect Production Manager
- Prinect Production Cockpit, Prinect PDF Toolbox, Prinect PDF Assistant
- Prinect Archiver, Prinect Color Proof Pro, Prinect Signa Station

therefore, the corresponding software system requirements of these Prinect products apply in principle.

System configuration and minimum requirements
- System requirements for Prinect Production Cockpit.
- Additional Labelfire machines on one server require an additional Prinect Labelfire renderer, which must be installed on its own hardware. Find the system requirements of the additional Prinect Labelfire Renderer here.
- Maximum 4 Labelfire machines per base pack.

System requirement Hardware
Minimum:
- Current Intel® Xeon® SP Silver Class Processor, at least 2,1 GHz and 12 Cores
- Memory: at least 128 GByte RAM
- Hard disk drive with RAID 1 for operating system and 5 x 1,2TB Hard disk drive RAID 5 with SAS 10k hot-plug Hard disk drive
- 2 x Network connection (10 Gbit/s)
- 2 x Network connection (1 Gbit/s)
- Redundant power supply

System requirements Software
Please check the current operating system overview at Prinect Qualified Hardware Server List, Software and Hardware system Overview

We strongly recommend that you check whether sufficient access licenses (CALs) are available for the Windows operating system. Please refer to the "General Information for Licensing Microsoft Operating Systems" in the appendix.

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Prinect Software
- Prinect Production Cockpit, the system requirements can be found here.
- Prinect Color Toolbox (color center for substrate qualification), the system requirements can be found here.

Other Software:
- Internet / Intranet connection with the operating system associated browser
- Adobe Acrobat DC Professional (recommended).

Notes

Recommended hardware from the Prinect Qualified Hardware list:
Rack Server R450-PR70 or Tower Server T550-PR71

Depending on the workflow demands additional hard drives can be necessary to increase the disk storage area. The T550-PR71 can hold up to 16 hard drives. The R450-PR70 can hold up to 8 hard drives.

If the hardware or software platform does not meet the above-mentioned specifications, we cannot guarantee that the full scope of functions and performance will be available.

Prinect Labelfire Renderer with Performance Plus Option

The Prinect Labelfire software package can be extended to up to 8 Worker (add. renderer processes) for better performance with variable data printing or very many short runs with the Performance Plus option.

System configuration and minimum requirements
- One Prinect Labelfire Renderer with Performance Plus Option per Labelfire.

System requirement Hardware
Minimum:
- Current Intel® Xeon® SP Silver Class Processor, at least 2,1 GHz and 12 Cores
- Memory: at least 128 GByte RAM
- Hard disk drive with RAID 1 for operating system and 5 x 1,2TB Hard disk drive RAID 5 with SAS 10k hot-plug Hard disk drive
- 2 x Network connection (10 Gbit/s)
- 2 x Network connection (1 Gbit/s)
- Redundant power supply

System requirements Software
Please check the current operating system overview at Prinect Qualified Hardware Server List, Software and Hardware system Overview

We strongly recommend that you check whether sufficient access licenses (CALs) are available for the Windows operating system. Please refer to the "General Information for Licensing Microsoft Operating Systems" in the appendix.

Prinect Software
- Prinect Labelfire 340 DFE Performance Plus – 8

Notes
Recommended hardware from the Prinect Qualified Hardware list:
Rack Server R450-PR70 or Tower Server T550-PR71

If the hardware or software platform does not meet the above-mentioned specifications, we cannot guarantee that the full scope of functions and performance will be available.

Prinect Labelfire Renderer for full variable Data Printing

System requirement Hardware

- Current Intel® Xeon® SP Silver Class Processor, at least 2,1 GHz and 12 Cores
- Memory: at least 128 GByte RAM
- SSD RAID1 system drive
- 5 x 1,2TB Hard disk drive RAID 5 with SAS 10k hot-plug Hard disk drive
- 2 x Network connection (10 Gbit/s)
- 2 x Network connection (1 Gbit/s)
- Redundant power supply

System requirements Software

Please check the current operating system overview at Prinect Qualified Hardware Server List, Software and Hardware system Overview

We strongly recommend that you check whether sufficient access licenses (CALs) are available for the Windows operating system. Please refer to the "General Information for Licensing Microsoft Operating Systems" in the appendix.

Prinect Software

- Prinect Labelfire DFE Performance Plus -63

Notes

If the hardware or software platform does not exactly meet the above-mentioned specifications, we cannot guarantee that the full scope of functions and performance will be available.

Prinect Integration Manager

System configuration and minimum requirements

- The full scope of Prinect performance cannot be guaranteed for hardware and software platforms that only meet the minimum requirements. The recommended requirements must be used especially for operation in virtual environments. In principle, exceptions and deviations from the system requirements due to individual customer environments cannot be ruled out.
- The Prinect Maintenance Center from Prinect CR should be connected to the HEIDELBERG Customer Portal in order to establish the connection to the cloud and thus have access to the cloud functionalities. The customer is guided through the steps required for the connection in a user-friendly way. During this process, you will be asked to create a user-specific HEIDELBERG Account, which is required for each user to log in to the HEIDELBERG Customer Portal.
- This description does not apply to new installations, since new installations are made exclusively with Prinect Production Manager, but only to systems that have already been installed and are now to be upgraded or renewed on the software and/or hardware side.
- To be able to use Prinect Integration, the customer must license coordinated software versions of Prinect Prepress Manager, Prinect Digital Print Manager, Prinect Pressroom Manager and/or Prinect Postpress Manager.
- Prinect Integration Manager with at least one Prinect Cockpit is the base of the Prinect system and it either connects all of these systems or Prepress Manager + Pressroom Manager / Pressroom Manager + Postpress Manager, respectively one of these systems with an MIS or Web-to-Print system via the respective options.

Recommended hardware for a fully equipped Prinect Integration Manager Server with Prinect Version CR (depends on Prinect Components used in Prepress, Press, and Postpress).

System requirements Hardware
Recommended:
- Current Intel® Xeon® SP Silver Class Processor, at least 10 Cores and at least 2 GHz Clock
- Memory: at least 64 GByte RAM
- SSD RAID1 for system drive
- 4 x 1.2 TByte SAS 10k hard disk drives (RAID 5)
- 2 x Network connection (1 Gbit/s)
- Redundant power supply

Minimum:
- Current Intel® Xeon® SP E series, at least 8 Cores and at least 2 GHz Clock
- Memory: at least 32 GByte RAM
- RAID Controller with RAID 5 and 1
- 2 x 600 GByte SAS 10k Hard disk drive (RAID 1)
- 3 x 1.2 TByte SAS 10k Hard disk drive (RAID 5)
- 1 x Network connection (1 Gbit/s)

System requirements Software
Please check the current operating system overview at Prinect Qualified Hardware Server List, Software and Hardware system Overview

Product Information

We strongly recommend that you check whether sufficient access licenses (CALs) are available for the Windows operating system. Please refer to the "General Information for Licensing Microsoft Operating Systems" in the appendix.

Prinect Software:
- Prinect Production Cockpit

Other Software:
Internet / Intranet connection with the operating system associated browser

Notes
Recommended hardware from the Prinect Qualified Hardware list:
Rack Server R450-R46 or Tower Server T550-S46

Depending on the workflow demands, additional hard drives can be necessary to increase the disk storage area. The T550-S46 can hold up to 16 hard drives. The R450-R46 can hold up to 8 hard drives.

If the hardware or software platform does not meet the above-mentioned specifications, we cannot guarantee that the full scope of functions and performance will be available.

Prinect Pressroom Manager

System configuration and minimum requirements

- The full scope of Prinect performance cannot be guaranteed for hardware and software platforms that only meet the minimum requirements. The recommended requirements must be used especially for operation in virtual environments. In principle, exceptions and deviations from the system requirements due to individual customer environments cannot be ruled out.
- The Prinect Maintenance Center from Prinect CR should be connected to the HEIDELBERG Customer Portal in order to establish the connection to the cloud and thus have access to the cloud functionalities. The customer is guided through the steps required for the connection in a user-friendly way. During this process, you will be asked to create a user-specific HEIDELBERG Account, which is required for each user to log in to the HEIDELBERG Customer Portal.
- This description does not apply to new installations, since new installations are made exclusively with Prinect Production Manager, but only to systems that have already been installed and are now to be upgraded or renewed on the software and/or hardware side.
- Prinect Pressroom Manager permits the connection of printing presses of the selected format. To ensure seamless communication with the Pressroom Manager, the presses connected online must be equipped with the latest software versions of CP2000 Center / Print Center, Press Center / Press Center Compact, Press Center 2 / XL 2 and Press Center 3/ XL 3.
- If the function "Inspection Control Report" should be used with Analyze Point, the storage capacity of memory must be at least 32 GByte.

System requirements Hardware

Recommended:
- Current Intel® Xeon® E series, at least 4 Cores, at least 3GHz Clock
- Memory: at least 32 GByte RAM
- 2 x Network connection (1 Gbit/s)
- Redundant power supply

Minimum:
- Current Intel® Xeon® E series, at least 4 Cores and at least 3 GHz
- Memory: at least 16 GByte RAM
- Hard disk drive: at least 1 TByte
- 1 x Network connection (1 Gbit/s)

System requirements Software

Please check the current operating system overview at Prinect Qualified Hardware Server List, Software and Hardware system Overview

We strongly recommend that you check whether sufficient access licenses (CALs) are available for the Windows operating system. Please refer to the "General Information for Licensing Microsoft Operating Systems" in the appendix.

Prinect Software:
- Prinect Production Cockpit
- Prinect Integration Manager

Product Information

Other Software:
- Internet / Intranet connection with the operating system associated browser

Notes

Recommended hardware from the Prinect Qualified Hardware list:

Server T160-S14 or Server T360-S22 or Server R360-R22

If the hardware or software platform does not meet the above-mentioned specifications, we cannot guarantee that the full scope of functions and performance will be available.

Prinect Pressroom Manager (Workstation)

The Prinect Pressroom Manager without MIS connection and Scheduler can be run on a workstation.

System configuration and minimum requirements

- The full scope of Prinect performance cannot be guaranteed for hardware and software platforms that only meet the minimum requirements. The recommended requirements must be used especially for operation in virtual environments. In principle, exceptions and deviations from the system requirements due to individual customer environments cannot be ruled out.
- The Prinect Maintenance Center from Prinect CR should be connected to the HEIDELBERG Customer Portal in order to establish the connection to the cloud and thus have access to the cloud functionalities. The customer is guided through the steps required for the connection in a user-friendly way. During this process, you will be asked to create a user-specific HEIDELBERG Account, which is required for each user to log in to the HEIDELBERG Customer Portal.
- This description does not apply to new installations, since new installations are made exclusively with Prinect Production Manager, but only to systems that have already been installed and are now to be upgraded or renewed on the software and/or hardware side.
- Prinect Pressroom Manager permits the connection of printing presses of the selected format. To ensure seamless communication with the Pressroom Manager, the presses connected online must be equipped with the latest software versions of CP2000 Center / Print Center, Press Center / Press Center Compact, Press Center 2 / XL 2 and Press Center 3/ XL 3.
- If the function "Inspection Control Report" should be used with Analyze Point, the storage capacity of memory must be at least 32 GByte.

System requirements Hardware
Minimum:

- Current Workstation CPU i7-Series at least 3.0 GHz Clock
- Memory: at least 16 GByte RAM
- Hard disk drive with at least 1 TByte Kapazität
- 1 x Network connection (1 Gbit/s)

System requirements Software
Please check the current operating system overview at Prinect Qualified Hardware Server List, Software and Hardware system Overview

Prinect Software:
- Prinect Production Cockpit
- Prinect Integration Manager

Other Software:
- Internet / Intranet connection with the operating system associated browser

Product Information

Notes

Recommended hardware from the Prinect Qualified Hardware list:

Workstation T3680-C14

If the hardware or software platform does not meet the above-mentioned specifications, we cannot guarantee that the full scope of functions and performance will be available.

Prinect Prepress Manager

System configuration and minimum requirements

- The full scope of Prinect performance cannot be guaranteed for hardware and software platforms that only meet the minimum requirements. The recommended requirements must be used especially for operation in virtual environments. In principle, exceptions and deviations from the system requirements due to individual customer environments cannot be ruled out.
- The Prinect Maintenance Center from Prinect CR should be connected to the HEIDELBERG Customer Portal in order to establish the connection to the cloud and thus have access to the cloud functionalities. The customer is guided through the steps required for the connection in a user-friendly way. During this process, you will be asked to create a user-specific HEIDELBERG Account, which is required for each user to log in to the HEIDELBERG Customer Portal.
- This description does not apply to new installations, since new installations are made exclusively with Prinect Production Manager, but only to systems that have already been installed and are now to be upgraded or renewed on the software and/or hardware side.
- The import and export of jobs from older versions of the Prinect Prepress Manager system may only be possible within certain limits. That is why the function is not suitable for archiving jobs.
- The included Contone Soft Proof function requires Prinect Renderer.
- The included Halftone Soft Proof function requires Prinect Renderer with a licensed TIFF-B export option.
- The "Imposition - Automatic Scheme Extension" function requires the optional "PDF Automation Pack"
- The included "PDF Approval Mail" function requires Adobe Acrobat Professional.
  Adobe Acrobat DC Professional (recommended).
  For a detailed compatibility list, see the "Adobe Acrobat, PDF Toolbox, and Prinect" section.
- If Prinect Cockpits with MS Windows are run via Bootcamp on Apple Macintosh computers, this will cause network problems.
- If the integrated database is used with the Archiver, the maximum number of jobs that can be archived is defined by the maximum database size (10 GB). Up to 15,000 jobs with an average number of job elements can be archived.
- The Apple AFP (Apple Filing Protocol) network protocol is not supported.
- Prinect Prepress Manager supports the connection of Prinect Renderer and Prinect Signa Station.

System requirements Hardware

Recommended:
- Current Intel® Xeon® E series, at least 4 Cores, at least 3GHz Clock
- Memory: at least 64 GByte RAM
- Hard disk drive RAID 5 or RAID 1,5 with SAS 10k hot-plug Hard disk drive
- 2 x Network connection (1 Gbit/s)
- Redundant power supply

Minimum:
- Current Intel® Xeon® E series, at least 4 Cores and at least 3 GHz
- Memory: at least 32 GByte RAM
- Hard disk drive: RAID 5 with Hard disk drive for programm and application data
- 1 x Network connection (1 Gbit/s)

Product Information

System requirements Software

Please check the current operating system overview at <u>Prinect Qualified Hardware Server List, Software and Hardware system Overview</u>

We strongly recommend that you check whether sufficient access licenses (CALs) are available for the Windows operating system. Please refer to the "<u>General Information for Licensing Microsoft Operating Systems</u>" in the appendix.

Prinect Software:

- Prinect Production Cockpit, the system requirements can be found <u>here</u>.

Other Software:

- Internet / Intranet connection with the operating system associated browser
- Adobe Acrobat DC Professional (recommended).

Notes

Recommended hardware from the Prinect Qualified Hardware list:
Rack Server R360-R22 or Tower Server T360-S22

Depending on the workflow demands additional hard drives can be necessary to increase the disk storage area. The T360-S22 as well as the R360-R22 can hold up to 8 hard drives.

If the hardware or software platform does not meet the above-mentioned specifications, we cannot guarantee that the full scope of functions and performance will be available.

Prinect Renderer

Only in combination with a Prepress Manager or Production Manager that runs on a separate server!

System configuration and minimum requirements

- The full scope of Prinect performance cannot be guaranteed for hardware and software platforms that only meet the minimum requirements. The recommended requirements must be used especially for operation in virtual environments. In principle, exceptions and deviations from the system requirements due to individual customer environments cannot be ruled out.
- Prinect Renderer can be installed in conjunction with a Prinect Shooter 2 or for direct connection of a CtP platesetter.
- Prinect Renderer can be installed on both a server and workstation platform. Direct online connection of the platesetter is possible in both cases.
- Only Suprasetter A106 or smaller CtP platesetters can be directly connected. A Prinect Shooter 2 must be configured for larger models.
- The maximum length for direct connection of a CtP platesetter via Speedway Interface is 15 meters.
- If a CtP platesetter is connected directly, the PCIe Speedway Interface Board must be able to be inserted into the server or workstation. As a rule, this is only possible with tower versions.
- The direct connection of a CtP plate setter using a workstation is only permitted for the Suprasetter A52, A75 and A106.
- Please note that actual computer systems do not support old PCI and PCI-X Speedway cards. A PCIe Speedway card is required to use the platesetter.

The following Suprasetters are released for Windows 10/11 Professional as well as for Windows Server 2016 Standard Edition, Windows Server 2019 Standard Edition and Windows Server 2022 Standard Edition:

- Suprasetter A52/75 Gen V with container software>= 11.12 / 11.13
- Suprasetter A106 106 Gen V with container software>= 37.03
- Suprasetter 145 / 162 / 190 with container software>= 3.12
- Suprasetter A52, A74, A75 Gen I and II with container software>= 4.11
- Suprasetter A52 A75 Gen III with container software >=s/w 7.19 / 7.20
- Suprasetter A105 105 A106 106 Gen I with container software>= 9.77
- Suprasetter A105 105 A106 106 Gen IV with container software>= 22.18

The following Suprasetter are released for Windows Server 2016 Standard Edition:

- Suprasetter A52, A74, A75 Gen I and II with container software<=4.05
- Suprasetter A52/75 Gen III with container software< 7.17
- Suprasetter A52/75 Gen V with container software< 11.04
- Suprasetter A105 105 A106 106 Gen I with container software< 9.75
- Suprasetter A105 105 A106 106 Gen IV with container software<= 22.16
- Suprasetter A105 105 A106 106 Gen V with container software< 36.02
- Suprasetter A105 105 A106 106 Gen IV with container Software <= 22.16
- Suprasetter A105 105 A106 106 Gen V with container Software < 36.02

System requirements Hardware
Recommended:
- Memory: at least 16 GByte RAM

Product Information

Minimum:
- Current Intel® Xeon® E series, at least 4 Cores and at least 3 GHz (Server Hardware)
- Current Workstation CPU i7-Series at least 3.0 GHz Clock (Workstation Hardware)
- Memory: at least 8 GByte RAM
- Hard disk drive with at least 1 TByte
- Additional fast hard disk with at least 256 GByte for direct connection of a CtP recorder
- 1 x Network connection (1 Gbit/s) (w/o direct connection of a CtP recorder) or
- 2 x Network connections (1 Gbit/s) (with direct connection of a CtP recorder)
- 2 x PCIe-X2 slots
  Note: If the motherboard does not provide onboard Ethernet ports or graphics, these additional slots must be provided.

System requirements Software

Please check the current operating system overview at Prinect Qualified Hardware Server List, Software and Hardware system Overview

We strongly recommend that you check whether sufficient access licenses (CALs) are available for the Windows operating system. Please refer to the "General Information for Licensing Microsoft Operating Systems" in the appendix.

Other Software:
- Internet / Intranet connection with the operating system associated browser

Notes

Recommended hardware from the Prinect Qualified Hardware list:
Workstation T3680-C14 or Tower Server T160-S14

If the hardware or software platform does not meet the above-mentioned specifications, we cannot guarantee that the full scope of functions and performance will be available.

Prinect Shooter 2

System configuration and minimum requirements

- With the end of support of Windows XP, it may be necessary to replace the interface card for older platesetters. Older interface cards (PCI 5V) can only be operated with a 32-bit operating system and can therefore no longer be used with Prinect 2018 or later.
- Please note that actual computer systems do not support old PCI and PCI-X Speedway cards. A PCIe Speedway card is required to use the platesetter.

Folgende Suprasetter are released for Windows 10/11 Professional as well as Windows Server 2016 Standard Edition, Windows Server 2019 Standard Edition and Windows Server 2022 Standard Edition:

- Suprasetter A52/75 Gen V with container software>= 11.12 / 11.13
- Suprasetter A106 106 Gen V with container software>= 37.03
- Suprasetter 145 / 162 / 190 with container software>= 3.12
- Suprasetter A52, A74, A75 Gen I and II with container software>=4.11
- Suprasetter A52 A75 Gen III with container software >=s/w 7.19 / 7.20
- Suprasetter A105 105 A106 106 Gen I with container software>= 9.77
- Suprasetter A105 105 A106 106 Gen IV with container software>= 22.18

The following Suprasetter are released for Windows Server 2016 Standard Edition:

- Suprasetter A52, A74, A75 Gen I and II with container software<=4.05
- Suprasetter A52/75 Gen III with container software< 7.17
- Suprasetter A52/75 Gen V with container software< 11.04
- Suprasetter A105 105 A106 106 Gen I with container software< 9.75
- Suprasetter A105 105 A106 106 Gen IV with container software<= 22.16
- Suprasetter A105 105 A106 106 Gen V with container software< 36.02
- Suprasetter A105 105 A106 106 Gen IV with container Software <= 22.16
- Suprasetter A105 105 A106 106 Gen V with container Software < 36.02

System requirements Hardware

Recommended:

- Memory: at least 16 GByte RAM

Minimum:

- Current Intel® Xeon® E series, at least 4 Cores and at least 3 GHz (Server Hardware)
- Current Workstation CPU i7-Series at least 3.0 GHz Clock (Workstation Hardware)
- Memory: at least 8 GByte RAM
- Hard disk drive with at least 500 GByte
- Additional fast hard disk with at least 256 GByte for direct connection of a CtP recorder
- 2 x Network connections (1 Gbit/s)
- 1 x PCIe-X2 slots
  Note: If the motherboard does not provide onboard Ethernet ports or graphics, these additional slots must be provided.

Product Information

System requirements Software

Please check the current operating system overview at <u>Prinect Qualified Hardware Server List, Software and Hardware system Overview</u>

We strongly recommend that you check whether sufficient access licenses (CALs) are available for the Windows operating system. Please refer to the "<u>General Information for Licensing Microsoft Operating Systems</u>" in the appendix.

Other Software:
- Internet / Intranet connection with the operating system associated browser

Notes

Recommended hardware from the Prinect Qualified Hardware list:
Workstation T3680-C14 or Tower Server T160-S14

If the hardware or software platform does not meet the above-mentioned specifications, we cannot guarantee that the full scope of functions and performance will be available.

Product Information

Prinect PDF Toolbox

System configuration and minimum requirements
-   The full scope of Prinect performance cannot be guaranteed for hardware and software platforms that only meet the minimum requirements. The recommended requirements must be used especially for operation in virtual environments. In principle, exceptions and deviations from the system requirements due to individual customer environments cannot be ruled out.
-   Prinect PDF Toolbox is enabled as floating license via the central license server.
-   The software can be used on a PC or Macintosh PC

System requirements Hardware
Recommended:
-   PC with a current Workstation CPU i3-Series at least 3 GHz Clock
-   Mac computer: with a current Intel CPU or Apple Silicon CPU technology (dependent on macOS)
-   Memory: 16 GByte RAM
-   Hard disk drive: at least 256 GByte
-   1 x Network connection (1Gbit/s)

Minimum:
-   PC with a current Workstation CPU i3-Series at least 2.0 GHz Clock
-   Mac computer: with a current Intel CPU or Apple Silicon CPU technology (dependent on macOS)
-   Memory: at least 4 GByte RAM
-   Hard disk drive: at least 256 GByte
-   1 x Network connection (100Mbit/s)

System requirements Software
Please check the current operating system overview at Prinect Qualified Hardware Server List, Software and Hardware system Overview

Mac operating systems:
Connection to a Windows PC with the licensing software/maintenance center required also for Mac environments!

Other Software:
-   Internet / Intranet connection with the operating system associated browser
-   Prinect PDF Toolbox consists of Adobe Acrobat plug-ins, tested and approved for Adobe Acrobat Professional. Adobe Acrobat DC Professional (recommended).

Notes
Prinect PDF Toolbox can only be installed completely. The individual products (except for the Screening Selector) are enabled via license keys. The central license server requires a Windows PC.

Recommended workstation hardware from the Prinect Qualified Hardware list:
Workstation XE4-C34

If the hardware or software platform does not meet the above-mentioned specifications, we cannot guarantee that the full scope of functions and performance will be available.

Product Information

Prinect Color Toolbox

System configuration and minimum requirements
- The product is not released for workstations with Mac OS.

System requirements Hardware
Minimum:
- PC with a current Workstation CPU i3-Series and with at least 2 GHz clock
- Memory: at least 4 GByte RAM
- Hard disk space: with at least 512 GByte
- 1 x Network connection (100Mbit/s)
- 2 x USB Slot or serial port for connecting color measuring devices.

System requirements Software
Please check the current operating system overview at Prinect Qualified Hardware Server List, Software and Hardware system Overview

We strongly recommend that you check whether sufficient access licenses (CALs) are available for the Windows operating system. Please refer to the "General Information for Licensing Microsoft Operating Systems" in the appendix.

Other Software:
- Internet / Intranet connection with the operating system associated browser

Recommended workstation hardware from the Prinect Qualified Hardware list:
Workstation XE4-C34

Notes
If the hardware or software platform does not meet the above-mentioned specifications, we cannot guarantee that the full scope of functions and performance will be available.

Prinect Multicolor Toolset

System configuration and minimum requirements

- The product is not released for workstations with Mac OS.

System requirements Hardware

Minimum:

- PC with a current Workstation CPU i3-Series and with at least 2 GHz clock
- Memory: at least 4 GByte RAM
- Hard disk space: with at least 512 GByte
- 1 x Network connection (1Gbit/s)
- 2 x USB Slot or serial port for connecting color measuring devices.

System requirements Software

Please check the current operating system overview at Prinect Qualified Hardware Server List, Software and Hardware system Overview

We strongly recommend that you check whether sufficient access licenses (CALs) are available for the Windows operating system. Please refer to the "General Information for Licensing Microsoft Operating Systems" in the appendix.

Other Software:

- Internet / Intranet connection with the operating system associated browser

Recommended workstation hardware from the Prinect Qualified Hardware list:
Workstation XE4-C34

Notes

If the hardware or software platform does not meet the above-mentioned specifications, we cannot guarantee that the full scope of functions and performance will be available.

Prinect Inspection Toolbox

System configuration and minimum requirements
- The product is not released for workstations with Mac OS.

System requirements Hardware Workstation (1 Press)
Recommended:
- PC with a current Workstation CPU i7-Series with at least 3 GHz clock
- Memory: at least 16 GByte RAM

Minimum:
- PC with a current Workstation CPU i3-Series and with at least 2 GHz clock
- Memory: at least 8 GByte RAM
- Hard disk space: with at least 512 GByte
- 1 x Network connection (1Gbit/s)

System requirements Hardware Server (>= 2 Presses)
Recommended:
- Current Intel® Xeon® E series, at least 4 Cores, at least 3GHz Clock
- Memory: 64 GByte RAM
- Hard disk system RAID 5 or RAID 1,5 with SAS 10k hot-plug hard drives
- 2 x Network connections (1 Gbit/s)
- Redundant power supply

Minimum:
- Current Intel® Xeon® E series, at least 4 Cores and at least 3 GHz
- Memory: at least 32 GByte RAM
- Hard disk system: RAID 5 with 3 disks for system and data
- 1 x Network connection (1 Gbit/s)

System requirements Software
Please check the current operating system overview at Prinect Qualified Hardware Server List, Software and Hardware system Overview

We strongly recommend that you check whether sufficient access licenses (CALs) are available for the Windows operating system. Please refer to the "General Information for Licensing Microsoft Operating Systems" in the appendix.

Prinect Software:
- Press Center Option: PDF Verification
- Press Center Option: Preset Inspect

Other Software:
- Internet / Intranet connection with the operating system associated browser

Recommended workstation hardware from the Prinect Qualified Hardware list:

Product Information

Workstation T3680-C14 or Workstation XE4-C34

Recommended server hardware from the Prinect Qualified Hardware list:
Tower Server T360-S22 or Rack Server R360-R22 or Tower Server T160-S14

Notes
If the hardware or software platform does not meet the above-mentioned specifications, we cannot guarantee that the full scope of functions and performance will be available.

Prinect Data Center

System configuration and minimum requirements

- The full scope of Prinect performance cannot be guaranteed for hardware and software platforms that only meet the minimum requirements. The recommended requirements must be used especially for operation in virtual environments. In principle, exceptions and deviations from the system requirements due to individual customer environments cannot be ruled out.
- The operation and use of Prinect Data Center is based on the use of the Microsoft Core license model. Operation and use based on a server CAL license model is not intended. HEIDELBERG also advises against the server CAL license model for licensing reasons.
- All cores inside a hardware server must be licensed (minimum 4 cores per CPU). In case the hardware server has more than 4 cores additional cores licenses must be purchased.
- For legal reasons only Prinect applications are allowed to use the database engine.
- License mobility within virtual environments is not allowed due to licensing reasons.
- The EULA (End-User-License-Agreement) which documents the number of cores licensed, and which is provided together with the license key is part of the Prinect System documentation and has to be filed.
- We strongly recommend purchasing the maintenance contract "SUA Prinect Data Center" in conjunction with the "Prinect Data Center" license.
  This maintenance contract entitles the purchaser to a free upgrade to the next version of Prinect Data Center.
  If the maintenance contract is not acquired directly and in conjunction with the Prinect Data Center license and renewed on a rotational basis one is not entitled to a free upgrade and new licenses must be purchased.
- It's recommended to operate the Prinect Data Center on a dedicated server. Operation on the production server is not intended.

System requirements Hardware

Recommended:

- Current Intel® Xeon® E series, 4 Cores and at least 3 GHz
- Memory: with at least 16 GByte RAM
- Hard disk system: RAID 5, 4 x 600GB SAS 10K hard disk drives
- 2 x Network connections (1 Gbit/s)
- Redundant power supply

Minimum:

- Current Intel® Xeon® E series, 4 Cores and at least 3 GHz
- Memory: with at least 8 GByte RAM
- Hard disk system: RAID 5, 500 GByte (minimum)
- 1 x Network connection (1 Gbit/s)

System requirements Software

Please check the current operating system overview at Prinect Qualified Hardware Server List, Software and Hardware system Overview

We strongly recommend that you check whether sufficient access licenses (CALs) are available for the Windows operating system. Please refer to the "General Information for Licensing Microsoft Operating Systems" in the appendix.

Product Information

Microsoft SQL Server:
- Officially release Microsoft SQL Database version

Other Software:
- Intranet connection with the operating system associated browser

Notes

Recommended hardware from the Prinect Qualified Hardware list:
Rack Server R360-R22 or Tower Server T360-S22

Depending on the workflow demands additional hard drives can be necessary to increase the disk storage area. The T360-S22 can hold up to 8 hard drives. The R360-R22 can hold up to 8 hard drives.

Due to the restrictive deadline at ordering a Microsoft maintenance contract, we ask for a message if **no** Microsoft maintenance contract is desired. Otherwise, we assume that the Microsoft maintenance contract is desired and activate the Microsoft maintenance contract.

If the hardware or software platform does not meet the above-mentioned specifications, we cannot guarantee that the full scope of functions and performance will be available.

Prinect Postpress Manager

System configuration and minimum requirements

- The full scope of Prinect performance cannot be guaranteed for hardware and software platforms that only meet the minimum requirements. The recommended requirements must be used especially for operation in virtual environments. In principle, exceptions and deviations from the system requirements due to individual customer environments cannot be ruled out.
- The Prinect Maintenance Center from Prinect CR should be connected to the HEIDELBERG Customer Portal in order to establish the connection to the cloud and thus have access to the cloud functionalities. The customer is guided through the steps required for the connection in a user-friendly way. During this process, you will be asked to create a user-specific HEIDELBERG Account, which is required for each user to log in to the HEIDELBERG Customer Portal.
- This description does not apply to new installations, since new installations are made exclusively with Prinect Production Manager, but only to systems that have already been installed and are now to be upgraded or renewed on the software and/or hardware side.
- The Prinect Postpress Manager allows you to connect Stahlfolder machines and Data Terminals
- Prinect fully integration (Prepress, Pressroom, and Postpress Manager) is required with or without MIS connectivity or a Prinect Pressroom Manager with Prinect Postpress Manager and with qualified MIS software. The respective systems run together on a license server dongle.
- For a smooth communication with the Prinect Postpress Manager, the software of the online connected Stahlfolder machines should be updated to the latest software version.

System requirements Hardware
Recommended:
- Current Intel® Xeon® E series, at least 4 Cores, at least 3GHz Clock
- Memory: with at least 64 GByte RAM
- 2 x Network connections (1 Gbit/s)
- Redundant power supply

Minimum:
- Current Intel® Xeon® E series, at least 4 Cores and at least 3 GHz
- Memory: with at least 32 GByte RAM
- RAID Controller with RAID 5 and 1
- 2 x 600 GB SAS 10k hard disk drives (RAID 1)
- 3 x 1.2 TB SAS 10k hard disk drives (RAID 5)
- 1 x Network connection (1Gbit/s)

System requirements Software
Please check the current operating system overview at Prinect Qualified Hardware Server List, Software and Hardware system Overview

We strongly recommend that you check whether sufficient access licenses (CALs) are available for the Windows operating system. Please refer to the "General Information for Licensing Microsoft Operating Systems" in the appendix.

Product Information

Prinect Software:
- Prinect Production Cockpit
- Prinect Integration Manager

Other Software:
- Internet / Intranet connection with the operating system associated browser
- Qualified MIS Software

Notes

Recommended hardware from the Prinect Qualified Hardware list:
Rack Server R450-R46 or Tower Server T550-S46

Depending on the workflow demands, additional hard drives can be necessary to increase the disk storage area. The T550-S46 can hold up to 16 hard drives. The R450-R46 can hold up to 8 hard drives.

If the hardware or software platform does not meet the above-mentioned specifications, we cannot guarantee that the full scope of functions and performance will be available.

Prinect Remote Proof Station

System configuration and minimum requirements

- The full scope of Prinect performance cannot be guaranteed for hardware and software platforms that only meet the minimum requirements. The recommended requirements must be used especially for operation in virtual environments. In principle, exceptions and deviations from the system requirements due to individual customer environments cannot be ruled out.
- This description does not apply to new installations, since new installations are made exclusively with Prinect Production Manager, but only to systems that have already been installed and are now to be upgraded or renewed on the software and/or hardware side.
- The highest supported Renderer resolution of the Prinect Standalone Proof Station is 1440 dpi.
- A maximum of 3 Prinect Production cockpits are allowed to be connected to a Prinect Remote Proof station.

System requirements Hardware

Recommended:

- Current Intel® Xeon® E series, at least 4 Cores, at least 3GHz Clock
- Current Workstation CPU i7-Series at least 3 GHz Clock
- Memory: at least 32 GByte RAM
- Hard disk drive with 1 TByte
- 1 x Network connection (1 Gbit/s)

Minimum:

- Current Intel® Xeon® E series, at least 4 cores and at least 3 GHz clock (Server hardware)
- Current Workstation CPU i7 class with at least 3 GHz clock (Workstation hardware)
- Memory: with at least 16 GByte RAM
- Hard disk with 300 Gbyte
- 1 x Network connection (1 Gbit/s)

System requirements Software

Please check the current operating system overview at <u>Prinect Qualified Hardware Server List, Software and Hardware system Overview</u>

We strongly recommend that you check whether sufficient access licenses (CALs) are available for the Windows operating system. Please refer to the "<u>General Information for Licensing Microsoft Operating Systems</u>" in the appendix.

Prinect Software:

- Prinect Production Cockpit, for system requirements look <u>here</u>.

Other Software:

- Internet / Intranet connection with the operating system associated browser

Notes

Recommended hardware from the Prinect Qualified Hardware list:

Workstation T3680-C14 or Tower Server T160-S14

Product Information

If the hardware or software platform does not meet the above-mentioned specifications, we cannot guarantee that the full scope of functions and performance will be available.

Prinect Package Designer

System configuration and minimum requirements
-   Prinect Package Designer can only be used on Windows PC and not on Mac OS.

System requirements Hardware
Recommended:
-   Current Workstation CPU i5-Series with at least 3 GHz clock
-   Memory: 16 GByte RAM
-   Hard disk: with at least 256 GByte
-   Monitor resolution: 3840 x 2160, 4K

Minimum:
-   Workstation CPU i5-Series with at least 2 GHz clock
-   Memory: with at least 4 GByte RAM
-   Hard disk space: with at least 5 GB free for program and user data
-   Monitor resolution: 1920 x 1080 at 32-bit color depth
-   1 x Network connection (1Gbit/s)

System requirements Software
Please check the current operating system overview at Prinect Qualified Hardware Server List, Software and Hardware system Overview

We strongly recommend that you check whether sufficient access licenses (CALs) are available for the Windows operating system. Please refer to the "General Information for Licensing Microsoft Operating Systems" in the appendix.

Other Software:
-   Adobe Illustrator CS6 and CC to support the Illustrator Connect plug-in
-   Internet / Intranet connection with the operating system associated browser

Notes
Recommended hardware from the Prinect Qualified Hardware list: Workstation XE4-C34

If the hardware or software platform does not meet the above-mentioned specifications, we cannot guarantee that the full scope of functions and performance will be available.

Prinect Automatic Paper Stretch Compensation (integrated)

System configuration and minimum requirements

- In the following, the abbreviation "APSCi" is used for "Automatic Paper Stretch Compensation (integrated)".

Workflow configuration

- Prinect APSCi requires a Prinect Renderer, as well as a Prinect Shooter or Prinect Shooter 2 or a 3rd Party Tiff-B-Downloader to control a platesetter.
- Prinect APSCi cannot be operated in parallel with the Prinect PSC (Paper Stretch Compensation Option for Prinect Renderer). If ordering the migration option from PSC to ASPCi the PSC option on the renderer will be shut off.
- Prinect APSCi runs on the central Prinect server. For systems with an integrated renderer (One Box), the renderer can be swapped out to a separate hardware if power effects become noticeable.

- Since Prinect APSCi also runs on the Prinect server, the number of plates compensated via APSC also determines the performance of the server.
- The performance depends on the hardware used. The overall load on the Prinect server is also a determining factor.
- Our internal tests under laboratory conditions with only jobs with 8 separations have shown the following limits:

Type of workflow regarding exposure	Maximum number of plate sets * per hour
with exposure via Suprasetter (with shooter)	32
With exposure via other imagesetters (no suprasetter)	22

* A set of plates consists of 8 plates measuring 106 cm x 75 cm, which belong to one order.

System requirements

- Please find information under Prinect Production Manager.

Prinect Software:

- Prinect Integration Manager CR
- Prinect Renderer CR
- Prinect Shooter 2

Product Information

Notes

Register deviations need to be measured in order to set up characteristic curves. Such deviations can be measured either visually or by help of a microscope camera with the following specification:
A microscope camera with a resolution of minimum 1280 x 1024 Pixel, polarizing filter and USB connection. We recommend Dino-Lite AF4515ZT or AM4515ZT (attention: not version „ZTL"). It can be purchased via internet. We also recommend a rack or mount for the camera in order to measure calmly and with constant distance to the sheet. The camera can record register deviations of up to 8 colors and send them automatically to the Measurement Data Editor of Prinect APSC.

If the hardware or software platform does not meet the above-mentioned specifications, we cannot guarantee that the full scope of functions and performance will be available.

Prinect Automatic Paper Stretch Compensation (stand-alone)

Prinect APSC (standalone) is running when used with an external prepress workflow as a separate software application on an own hardware. Following conditions must be met with:

System configuration and minimum requirements

Workflow configuration
- There must be a Prinect license server- / online dongle.
- The workflow system must control the exposure via hot folders and create 1 bit TIFF files. The file name must include at least one color name and the sheet side information.
- An essential prerequisite for the prepress system is the ability to output TIFF-B data. In many cases, such as with Kodak and Agfa systems, an option must be purchased for it.

Input data format
- Screened 1-bit-Tiff data

Output data format
- Screened 1-bit-Tiff data

Hardware
- Prinect APSC standalone in third-party workflows can be run both on a server hardware and on a workstation hardware. For high availability server hardware is recommended.

System requirements Hardware
Recommended workstation:
- Current Workstation CPU i7-Series with at least 3.1 GHz clock (Workstation hardware)
- Memory: with at least 16GByte RAM
- Hard disk system: with at least 1 TByte for application and operating system
- 1 x Network connection (1 Gbit/s)

Minimum workstation:
- Current Workstation CPU i7-Series with at least 3.1 GHz clock (Workstation hardware)
- Memory: with at least 8 GByte RAM
- Hard disk system: with at least 500 GByte for application and operating system
- 1 x Network connection (1 Gbit/s)

Recommended server:
- Current Intel® Xeon® E series, at least 4 cores, at least 3GHz clock (Server hardware)
- Memory: with at least 16 GByte RAM
- Hard disk system with at least 1 TByte
- 2 x Network connections (1 Gbit/s)

Product Information

- Redundant power supply

System requirements Software

Please check the current operating system overview at <u>Prinect Qualified Hardware Server List, Software and Hardware system Overview</u>

We strongly recommend that you check whether sufficient access licenses (CALs) are available for the Windows operating system. Please refer to the "<u>General Information for Licensing Microsoft Operating Systems</u>" in the appendix.

Prinect Software:
- Prinect License Server Software including Online Dongle
- Prinect APSC Software incl. license

Notes

Register deviations need to be measured in order to set up characteristic curves. Such deviations can be measured either visually or by help of a microscope camera with the following specification:
A microscope camera with a resolution of minimum 1280 x 1024 Pixel, polarizing filter and USB connection. We recommend Dino-Lite AF4515ZT or AM4515ZT (attention: not version „ZTL"). It can be purchased via internet. We also recommend a rack or mount for the camera in order to measure calmly and with constant distance to the sheet. The camera can record register deviations of up to 8 colors and send them automatically to the Measurement Data Editor of Prinect APSC.

Recommended hardware from the Prinect Qualified Hardware list:
Rack Server R360-R22 or Tower Server T360-S22.

If the hardware or software platform does not meet the above-mentioned specifications, we cannot guarantee that the full scope of functions and performance will be available.

Notes on the use of Terminal Servers

If your Heidelberg press features a wall screen, you can extend its functionality by using Remote Desktop. Once set, applications (e.g. Prinect Cockpit, widgets from Prinect Portal, etc.) that you run within a Remote Desktop session will appear on the wall screen of the press. This can be used to improve the efficiency and convenience of your workflow. Using Remote Desktop from a Heidelberg press requires the following:

- Microsoft Remote Desktop Services (RDS) Server and associated licensing
- Microsoft Active Directory Services (ADS)

If you plan to implement Microsoft Remote Desktop Services, dedicated server hardware is recommended. Below are recommended system requirements to establish a Microsoft Remote Desktop Services server.

System configuration and minimum requirements

- Dedicated and exclusive Terminal Server hardware
- Remote Desktop Client Access License

System requirements Hardware

Recommended:

- Current Intel® Xeon® E processors, at least 4 cores / 8 threads, at least 3GHz base clock
- Main memory: from 32 GByte RAM
- Hard disk system RAID 1 with 2TB capacity.
- Network connection (1 Gbit/s)
- Redundant power supply

System requirements Software

Please check the current operating system overview at Prinect Qualified Hardware Server List, Software and Hardware system Overview

Note

Recommended hardware from the Prinect Qualified Hardware List:
Rack Server R360-WR9
Tower Server T360-WT9

We strongly recommend that you check whether there are enough access licenses (CALs) for the Windows operating system and for the Remote Desktop connections. Please refer to the appendix "General Information for Licensing Microsoft Operating Systems

The recommended Terminal Servers R360-WR9 and T360-WT9 come with 5 Windows Server Standard Edition User CALs and 5 Windows Server Standard Edition Remote Desktop Services User CALs.

For hardware/software platforms that do not comply with the above-mentioned specifications, the scope of services or functionality cannot be bindingly promised.

General notes on the licensing of Microsoft operating systems

Microsoft server operating systems typically use the "Server / CAL" – licensing model. This means that for the usage of the functions of the server a license must be present and for the use of that functions on a client an access license; the so-called "Client Access License" (CAL). Microsoft distinguishes between two types of client access to a server: the access of a device (Device CAL) and the access of a person (User CAL).

Example:
A file server is running on a Microsoft server operating system. For the file server, a Microsoft server license must be present. If an employee of the customer likes to access the file server from a workstation, there must be either a Device CAL for the workstation or a User CAL for the employee available.

The example clearly shows that the company structure or operation of the user decides which type of CAL is best suited for the use of the server or servers.

Towards Microsoft the user is basically responsible for the proper licensing. Since the license models and offers from Microsoft are varied and complex, and also subjected to constant change, we recommend the user to ask a certified Microsoft license consultant on the proper use of Microsoft Software.

General notes on the use of virus scanners

The Prinect systems installed by HEIDELBERG with HEIDELBERG Deployment tool use the "Windows Defender" virus scanner functionality contained in the Windows operating system as a default and with the configuration preseted by the Microsoft default anti-virus parameters. HEIDELBERG also tests the functionality of a Prinect system in this configuration.

However, due to differing customer requirements and customer IT regulations, HEIDELBERG cannot accept any responsibility for the operation and mode of operation of a virus scanner and the resulting possible effects on the operation of a Prinect system.

Nevertheless, HEIDELBERG offers support if the Prinect operation in a system environment with virus scanners is problematic. Service and support for virus scanners are not covered by HEIDELBERG maintenance contracts. If HEIDELBERG is commissioned to analyze errors whose cause is related to a virus scanner, HEIDELBERG shall invoice this service, irrespective of existing contracts.

Warning Notice:
In principle, virus scanners can cause performance losses or cause problems up to system downtime due to quarantined files.

Prinect Qualified Hardware Server List, Software and Hardware system Overview

In general, all approved software versions, operating systems and recommended hardware systems can be viewed on the following page: HEIDELBERG Prinect System requirements - Overview

- **Operating system overview** – Overview of Prinect components and release software and hardware systems

- **System Requirements / Systemvoraussetzungen** – System requirements for Prinect products

Servers that are ordered via HEIDLEBERG are provided with an OEM license for the corresponding Microsoft server operating system. In addition, the package includes 5 User CALs for the corresponding server OS.

Workstations that are ordered via HEIDLEBERG are provided with an OEM license for the corresponding Microsoft desktop operating system.

To select a suitable server or workstation system, please get in touch with your HEIDELBERG contact person. They will be happy to help you.

General information to System Requirements

Recommended System Requirements

Hardware and software platforms that meet the recommended requirements offer the best price/performance ratio as well as a perspective for optional extensions, thus enabling optimum use of the Prinect software components.

Minimum System Requitements

Hardware and software platforms that meet the minimum requirements allow the use of the Prinect software components but do not necessarily offer the best possible use.
Suitable for small compact applications where later expansion is not considered.

System Requirements for virtual environments

Prinect systems should always be used within a virtual environment with the recommended system requirements.