Release Notice

Xprint V8.0B10

Microsoft Windows 2000 /2003 Server

Version date: January 2008

1 General

This file contains important information - not included in the manuals - on the use of Xprint and the Domain Monitor GUI.

The navigation in this document is done by hyperlinks. The links in the table of contents will guide you to the corresponding item. If you want to go back to the table of contents, click on the section header.

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1.1 Ordering

For the use of Xprint you will need software licenses. The data media has always to be ordered separately.

This product is subject to the general terms and conditions of the software product use and service agreement.

The delivery unit is a licensed product and may only be used on the computer for which it has been purchased.

The basic local license contains 32 printers, special additional printer licenses have to be purchased.

If you want to work on a network basis you need at least two Server licences or one Server licence and one Net-Client licence. The Server license includes the gateway and the administration. The graphical interface Mercator is integrated into the basic local or network license. For further informations please refer to

User's and Administrator's Guide (chapter 8.5) oder section 3.5.1 in this release notice.

Up to	already installed	Number of possible printers
Xprint-UG8	Xprint-UG7	8193 - UNLIMITED
Xprint-UG7	Xprint-UG6	4097 - 8192
Xprint-UG6	Xprint-UG5	2049 - 4096
Xprint-UG5	Xprint-UG4	1025-2048
Xprint-UG4	Xprint-UG3	513 - 1024
Xprint-UG3	Xprint-UG2	257 - 512
Xprint-UG2	Xprint-UGM	129 - 256
Xprint-UGM	Xprint-NET or Xprint or Xprint-UG1	33 -128
Xprint-NET/Xprint/Xprint-UG1	---	32

With XPRINT V8 you have now the web-based graphical user interface DMG GUI.
In the Basic-/Net license of XPRINT two concurrent user windows are already included.

Further user windows you can purchase additionally.

1.2 Delivery

Xprint for Windows (tm) is delivered as a component of the CD-ROM data volume called Xprint-NT-CD (U11436-C176).
The following components are included in this Xprint distribution. (N.A stands for "not available"):

Xprint-	NT
Basic Software	X
Graphical Interface	X
XPG/3 Emulation	X
Message catalogues	N.A
Compatibility Libraries	N.A
Inter domain Interoperability	X
Development Tool kit	X

Manual Pages	N.A
Xprint R/3 Kit	X
SNMP Agent	X
Domain Monitoring GUI Anchor	X
Domain Monitoring GUI Relay	X
Domain Monitoring GUI Server	X
EKS/Patch XPW80B102	X

- Xprint-NT means Xprint for Microsoft Windows Server

The activation of each component depends upon the purchased license. Please see section 3.1 for the specific components of the Xprint distribution.

You will find the files for the DomainMonitoringGUI Open UNIX in the directory <cdrom>/DMG-8.0B10-03-OPEN-Win.

Current EKS:

In the directory XPW80B102 you will find the EKS XPW80B102 for Xprint (Windows). These correction packages are meant for Xprint 8.0B10. This correction solves some problems in the licence mechanism. Please install it befor you start Xprint.

1.3 Documentation

To install and operate Xprint you need the documentation.

2 Software extensions, new functions

Beside the below specific hints, the reader should also consult the sections prerequisite and installation included in the Xprint 8.0B Add-on manual.

New features	Explanation
Diagnose file collection within the DOMAIN MONITORING GUI	The purpose of the Diagnose File Collection is to allow the product operators to centraly collect all the product log & debug files produced by the various product processes within the product domain. This collection is performed from a web interface that is part of the existing Domain Monitoring GUI Server. The collected files are "viewable" and "downloadable" from the DFC. Moreover, the user may decide to create an archive file (tar or zip) in order to send it to the support departement.
Support of active directory information (through LDAP)	The purpose of this feature is to demonstrate the ability of the product to interact with an LDAP server. An LDAP server is a server process that works with the LDAP protocol. **OpenLDAP server and Active directory will be referred further as LDAP Server in this document**. The example of interaction that has been designed in the version 8 of the product consists in taking a default printer for any job submitted with no explicit destination. The default printer is to be found in the user profile defined in the LDAP configuration. If the job originator provided an explicit destination, the LDAP interoperability will have no impact. If there is no default printer defined in the LDAP configuration, the usual product processing will take place at the job submission.

DMG view/filter management tool	The purpose of this feature is to facilitate system administrators to distribute existing DMG filters and DMG views to other DMG operators.
Accounting file enhancement	The accounting has been enriched with new fields to give the administrator possibilities to produce more accurate accounting reports.
Interface Windows - Linux / UNIX using SMB protocol	The purpose of this feature is to demonstrate how to share a product device to windows clients via Samba. The device resource is only defined on the samba server and the printer driver must be shared too. The windows clients must be able to use those printers without any extra installation/configuration tasks. As a pre-requisite, samba should already be up and running within the user environment. **The scope of this feature is restricted to the samba/Product interaction.**
Support of Accelio	JetForm (Accelio) is a tool that enables the formatting of documents to be printed. It takes as input a plain ASCII document and produces as output a PostScript , PCL or PDF documents. The support of Accelio inside this product is performed by means of a specific slow filter creation.
Dedicated File Server inside an Xprint domain	The goal of this feature is to offer the possiblity to define in the product domain one or several dedicated server where the input job data file will be stored and where the slow filter program will be installed and executed.
Event notification FILE method with timestamp	When a user requires notifications (job, device) via the FILE method, the timestamp is never put in the event message. The goal of this feature is to provide this time information in the event file.
Custom header- trailer pages	Customers need to print header, trailer pages containing specific information according to a specific layout (big characters, special logo, etc.). This feature offers this possibility.
DMG Application for open Web server environment	The DMG Web application can be integrated within an existing Apache/PHP5/SSL Web server environment. Note that the DMG application formerly delivered as an integrated "black box" package remains available for unattended installation in an intranet environment.

Xprint 8.0B10:	
Device creation	Automatic creation of Servers and Supervisors (see 3.7)
SNMP	No automatic activation ot the SNMP component (see 3.7)
other changes	Xprint 8.0B10 introduces no new major functional changes. The only major changes between Xprint 8.0B00 and Xprint 8.0B10 are the bug fix corrections.

3 Technical information

3.1 Resource requirements

The required disk storage capacity depends directly on how the software is packaged and installed. Currently, Xprint is packaged in three different ways according to the platform. These values have been measured before the DB initialisation.

3.1.1 Required disk storage

The required disk storage capacity directly depends on how the software is installed. Xprint is distributed as a setup package containing the entire product. During the wizard execution, three kinds of installations are proposed:
- Typical: represents the installation of the Basic Software, the Inter domain and the XPG/3 emulation components.
- Compact: gathers the installation of the Basic Software and the Inter domain components.
- Custom: this installation type allows a free choice between the available components.

The following table illustrates the amount of space required, once installed on the disk (prior to database initialization):

	KB
Basic Software	10312
Inter domain	692
XPG/3 Emulation	88
Development Tool Kit	348
Xprint R/3 Client	648
Xprint R/3 Server	200
SNMP agent	304
Domain Monitoring GUI Anchor	200
	12792

Important:

In addition to these given sizes, the total free disk space needed is 35 MB for the complete installation of all components. The reason is the space needed by the MKS runtime and the installation files.
Moreover, space must be added to these initial figures for the storage of print data, temporary files and configuration files (database), which may vary widely according to the configuration and the usage model. 20 MB for these files is a minimum.

3.1.2 Virtual Memory consumption

The following table shows the approximate consumption of the Xprint processes in Kb. (in task manager)

Entity	Memory usage size (KBytes)
Standby	12120
Server	7076
Supervisor	2856
Printing	6556
Gateway	9112
R/3 Kit Server	12712
SNMP Agent	6472

The Standby size is required as soon as Xprint is active. The server and supervisor sizes must be multiplied by the actual number of active servers and supervisors defined on the system.

The printing size is required by each job, during the time it is actually being printed.
Be careful to configure a sufficient virtual swap memory on the Windows system.
The product could become unstable if there is a low virtual memory message.

3.2 Hardware requirements / support

Please refer to the chapter 7.1 of the reference manual for information about supported printers.

3.3 Software configuration

3.3.1 Operating system

Before installing Xprint, be sure that all previous EKS (Xprint correction packages) are removed from the system.

This product is dedicated to **Microsoft Windows 2003 Server (tm)** and to **Microsoft Windows 2000 Server** (tm) with service pack >= 2. It is not allowed to run the server part of the product on a machine with more than 2 processors maximum.

You may not install this product on Microsoft Windows XP or Microsoft Windows 2000 Professional versions due to the built-in limitations of these platforms. Some severe instabilities can occur in this product if you have installed it on Windows XP or Windows 2000 Professional systems. This product is **only** supported and maintained on **Microsoft Windows Servers**.

Xprint is based on the runtimes of MKS Platform Components 4.3 from Mortice Kern Systems. These runtimes and the corresponding service are automatically installed and configured during the Xprint setup.
The MKS Platform Components product is not a part of the Xprint product.

On Windows 2003 and Windows 2000 server, the SNMP agent requires the Microsoft SNMP service.

3.3.2 Several Xprint Versions in one Domain

Xprint 8.0 can only run in a domain with Xprint 5.2 or later.

An EKS has to be installed on each host running a former Xprint version (<6.0A) and where a PJL device (HP printer supporting the PJL language) is configured (in other words the supervisor of this device runs on the host). The EKS names are listed in a table, which you will find in chapter 3.7.

3.4 Product installation/configuration

3.4.1 General

An introduction to installation and instructions is provided in chapter 9 of the Xprint 8.0 User's and Administrator's Guide.
To simplify matters use also the Appendix information and worksheets in chapter 10.

3.4.2 Installation

3.4.2.1 Installation

The Xprint installation automatically updates the Windows services file (real name is %SystemRoot% \system32\drivers\etc\services) in order to create the Xprint_db entry. The port number is requested during the setup wizard execution.

Xprint must be installed on a local hard drive. The network shared drives are not supported.

Be careful that temporary files will be stored in the selected installation path.

Indeed, the files to be printed are temporary stored in some installation subdirectories.

It is also recommended for performance improvement to install Wprint on the same drive as Xprint.

If you did choose to install the SNMP agent, please make sure that the SNMP service is installed on the host.

3.4.2.2 Domain with older Xprint versions

If you install Xprint V8.0 in a domain containing hosts running older Xprint versions, be sure that only hosts running the latest version are defined as POT_MASTER. To avoid problems, define the hosts running older versions as SLAVE. When installing the first Xprint V8.0 host (H1) in a lower version domain, H1 will have to take the mastery of the domain. So, after having imported the DB (through DBinstall), you will have to start Xprint using the control panel - services and setting the startup parameters to '-fv' (fv means 'force version') in order to allow it to take the mastery from an older version.

3.4.2.3 Integration with Wprint

The Wprint 4.x product is the Windows integrated client for Xprint. This product provides a very easy way to print from the Windows applications to your favourite Xprint printers and also a powerful management of your print jobs submitted to Xprint. This is the major reason why Wprint 4.x is delivered on the same media as Xprint for Windows.
Just remind that for better performance, it is adviced to install Wprint and Xprint on the same drive.

Concerning the integration for the Wprint configuration, the reader is referred to the Graphical interface for administration (Mercator) guide and the description of this specific Windows functionality. If the Wprint is installed on a Xprint Windows system, it is recommended to use the local gateway as entry point in Xprint.

3.4.2.4 Database backup

During an update installation a backup of the current DB is stored in the (default) C:\WINDOWS\Program files\Xprint\DB\DB.backup directory.

On all platforms, the backup of the current DB will be restored automatically at the end of the installation process.

In case of problems during DB recovery, the DB can be restored manually after the installation. Just copy the (default:) C:\WINDOWS\Program files\Xprint\DB\DB.backup to C:\WINDOWS\Program files\Xprint\DB. In all cases, do not forget the objects defined by the Xprint administrator (filters, PCLs, recovery rules, …) requiring a file at the definition or at the usage: if these files are located in the Xprint tree, they will be lost during the update installation.

It is also possible to do this with the command xpdbls. This script shows your Xprint configuration. You must redirect the output to a file.

Example:

```
C:\WINDOWS\Programme\Xprint\cmd\xpdbls.bat > Xprint.config
```

3.4.2.5 Gateways

At the end of the first installation, two GIP2 gateways are created (a LOCAL and a PARTNER one) to allow the access from a Wprint 4.x client.

Activation

Please refer to the FAQ.

Maximum number of partner gateways in Xprint

Please refer to the FAQ. (unlimited from Xprint)

3.4.2.6 How to configure an Xprint domain

Please refer to the FAQ.

3.4.2.7 How must the Xprint Pot-Masters be rebooted

Please refer to the FAQ.

3.4.2.8 Local Xprint administrator

This kind of user is called a "subroot" user by Xprint.
You can declare subroot users on a host when you create this host, or by modifying an existent host,

with the " -sr" option.

For instance, if you want that the user "usname" becomes subroot on host "OSL" you can type

"xpmod -hos OSL -sr usname".

3.4.2.9 Maximum number of devices per supervisor / servers objects

The old settings are described in chapter 5.4.3 in the XPRINT User's and Administrator's Guide.

For Xprint 8.0B10 are new default settings introduced.

These defaults settings can be changed by means of 2 environment variables:

	1.	XP_SPV_BY_DFTSRV	
	.	Description:	maximum number of supervisors by default server
		Initialisation time:	before xpadd -dev
		Possible values:	from 1 to 20
		Behaviour if unspecified:	20 is used
		Behaviour if a value larger than 20 is specified	20 is used

	2.	XP_DEV_BY_DFTSPV	
	.	Description:	maximum number of device by default superviso
		Initialisation time:	before xpadd -dev
		Possible values:	from 1 to 50
		Behaviour if unspecified:	50 is used
		Behaviour if a value larger than 50 is specified	50 is used

However, it is not recommended to associate more than 30 printers to a single supervisor, and more than 15 supervisors to a single server. The quantity of objects is also related to their usage model.
For example, you will not associate so many production devices to a supervisor than desktop printers.

3.4.2.10 Installation of additional components of Xprint

Xprint components	Standard Installation
Basic Software	X
Graphical Interface	X
XPG3 Emulation	

Message catalogues	N.A
Compatibility Libraries	N.A
Inter domain Interoperability	X
Development Tool kit	
Manual Pages	N.A
Xprint R/3 Kit	
SNMP Agent	
Domain Monitoring GUI Anchor	X
Domain Monitoring GUI Relay	S
Domain Monitoring GUI Server	S
EKS/Patch XPW80B102	S

If you select the standard installation you will get the components marked with X in the table above.

If you want to install other parts of Xprint you must choose a "user" defined installation. Then you can install the R/3 Kit (Server, Client), SNMP agent, XPG3 emulation and the development kit.

The parts which are marked with **S** have their own installation procedures. You have to install these parts separately. This is mentioned later in this document.

3.4.3 Migration aspects when upgrading from former Xprint versions

When an installation of the version 8.0 is foreseen, two cases may occur:

- all the systems are migrated at once (for example, there is only one Xprint installation in stand-alone).
- some systems are updated to the new version while other ones still run a former Xprint version.

In any case, the first step is to be sure that a valid license key for Xprint 8.0 is available.

From Xprint 5.2 or 6.0

At once:

For the migration from Xprint 6.0 or 5.2 to the new version "at once", there is some specific actions to perform before installing the new version:

On Windows (XPRINT-NT), Xprint 5.2A and Nutcracker must be removed before installing Xprint 8.0. Be careful that in this case all jobs and the configuration database must be saved manually or will be lost after the remove of the packages.

Execute the following steps :

o Backup the V5.2 database directories (DB,SP,GW) in the Xprint's root folder (default: "C:\Program Files \Xprint") if you wish to migrate your existing V5.2 database

o Backup DB.local, SV, TMP in the Xprint's root folder if you wish to migrate your existing jobs

o Backup your resources and PCL directories in the Xprint's root folder if you have specified custom PCLs and/ or custom resources

o Uninstall the version 5.2 (control pannel->add/remove programs)

o Uninstall the MKS Platform Components 7.x

o Install the new version in the same path as the former one

o Install the licence key(s) 8.0

o Restore your backed up directories into the current Xprint's root directory

o In the "bin" directory of Xprint (default: "C:\Program Files\Xprint\bin"), execute the command "DBmigrate -I" to migrate your backed up database

o start Xprint
o perform the command " xpmod -pcl -fi xpterm "

Coexistence:

When version 5.2 will have to coexist with 8.0 in the same Xprint domain, an EKS (correction package) must be installed on the systems that remain in the former version. This correction package is in fact required on a former version when a printer is defined with a PJL pcl on the system. The list of correction packages is described in chapter 3.7. The following procedure can help you to get a successful migration:

1. Install the correction packages on the systems remaining in version 5.2.
2. Install each upgrading system to the new version by starting with the highest POT_MASTER hosts (see xpshow -hos -diH) according to the procedure described in the 'at once' case.

To avoid problems, define the hosts running older versions as SLAVE. When installing the first Xprint 6.0 host (H1) in a lower version domain, H1 will have to take the mastery of the domain. So, after having imported the DB (through DBinstall), you will have to start Xprint using 'xpstart -fv' (fv means 'force version') in order to allow it to take the mastery from an older version. In case of migration from earlier version, it is suggested to take a backup of the current DB before starting the installation.

Migration aspects when upgrading from former Xprint V7.0 to V8.0

There is no difference between the Xprint V.7 database and Xprint V.8. Therefore, it is quite easy to migrate from version 7 to version 8 on most platforms.

Microsoft Windows Server:

However, the migration on Windows platforms is a bit different than the others. To be able to produce a smooth and successful migration, you must follow these steps:

- Backup the V7 database directory (DB) if you wish to to migrate your existing V7 database
- Backup DB.local, SV, TMP if you wish to migrate your existing jobs
- Backup your resources and PCL directories if you have specified custom PCLs and/or custom resources
- Uninstall the version 7 (control panel->add/remove programs)
- Uninstall the MKS Platform Components 7.x
- Install the new Xprint 8.0B10
- Restore your backed up directories into the current Xprint's root directory.
- Start Xprint

Compatibility of shell scripts that use Xprint commands

The variable XP_VR is offered to guarantee the compatibility of existing shell scripts with the current Xprint version. This variable defines the version number that is used when generating the display. The form of the display was different in earlier versions of Xprint. Consequently, shell scripts or applications that use the output from an earlier version may not be compatible with the current version. XP_VR can have the following values: 04.2A00, 04.2B00, 05.0A00, 06.0A00, 07.0A00, 08.0A00 or 08.0B00. The format of the installed version is used.

R/3Kit

If you use the R3-Kit, please save also the files for the R3 Kit configuration. These files are listed in the Xprint Reference Guide chapter 7.15.6. The files are stored in the directory $OMSPATH which is by default /var/spool/Xprint/config/mgt/SAP.

3.4.4 SNMP

On Windows 2003 and Windows 2000 server, the SNMP agent requires the Microsoft SNMP service.

3.4.5 Domain Monitoring GUI Relay

3.4.5.1 Installation under Microsoft Windows(*):

- Launch "SETUP.EXE"
- Select Next
- Read and accept License Agreement.
- Select a "Complete" installation.
- Click on "Install"
  - Setup install services
- Setup ask you a port number for the "Request Distributor" (default:9301)
  - Enter one new, or leave the one by default
- Setup ask you a port number for the "Callback Collector" (default:9300)
  - Enter one new, or leave the one by default
- Setup asks you to reboot your computer: accept.

  NB: Xprint V8 must be already installed on your system.

3.4.5.2 Uninstallation under Microsoft Windows(*):

- Launch "SETUP.EXE"
- Select "Remove"
- Confirm your choice
- SETUP performs some maintenance procedure.
- SETUP asks you to reboot your computer: accept.

Silent installation under Microsoft Windows(*) is not possible

3.4.5.3 Domain Monitoring GUI communication settings

As most of the components involved in the DMG architecture have to communicate with each other, several connection parameter settings apply. These are achieved by two means:

- by mean of a special Xprint hidden object of type lrs named _XP_COLLECTOR_MANAGER (see the description of the tools DMG_Conf the Xprint V8 Reference Manual which help configuring this special object)

- by mean of entries in the services configuration file of the involved machines (%WINDIR%\system32\drivers\etc\services on the Windows platforms)

The following table summarizes the connection settings for each component:

Setting	LRS _XP_COLLECTOR_MANAGER	Services entry
DMG Server		
host address	GUISRV_HOST=<host_address> ex: machine01 or 192.168.1.1	

port number	GUISRV_PORT=<port_number> ex: 80	
callback entry point	GUISRV_PATH=<entry_point> standard: /CALLBACK/xpCallback.php	
DMG Relay		
Callback Collector host address	COLLECTOR_HOST=<host_address> ex: machine02 or 192.168.1.2	
Callback Collector port number	COLLECTOR_PORT=<port_number> ex: 55003	DomMonGui_Collector - Callback Collector host
Request Distributor host address	DISTRIBUTOR_HOST=<host_address> ex: machine02 or 192.168.1.2	
Request Distributor port number		DomMonGui_Distributor - Request Distributor host - DMG Server host
Request Processor		
Request processor port number		DomMonGui_Processor - Xprint host - Request Distributor host

This hidden lrs object can be created and modified using the "DMG_Conf" graphical tool .

During the installation of the DMG Relay package, the entries DomMonGui_Collector and DomMonGui_Distributor are automatically created in the ..\etc\services file.

Important:

The entry DomMonGui_Processor must be created manually.

After adding this LRS , Xprint must be restarted in order to be taken into account by the callback's library.

For more information, see the [XPRINT V8.0 Domain Monitoring GUI](#) manual.

3.4.5.4 Activating the Event Collection feature

The callback collector can save all the information about the received Xprint events in 'Event Collection' files.
To activate this feature, a dedicated valid license must be installed. The license file must be named
'Event_license' and saved in the C:\Programme\DomMonGui\Relay\OSL_LICENCE directory.
The generation of the files is ruled by means of a configuration file.

Callback Collector configuration file for the event collection files:

Below is an example of the definitions required in the configuration file:
At installation a configuration file called 'config' is created in the
C:\Programme\DomMonGui\Relay directory with the here below definitions. These settings can be modified
according to the customer needs.

```
LOGFNAME="C:\Program Files\DomMonGui\EventCollection"
LOGFSIZE="1000"
LOGFNBR="10"
LOGFCURRENT="5"
```

where :

LOGFNAME is the fully qualified base name of the event collection files. This definition is mandatory and the related directory must exist. The complete name of an event collection file is created by suffixing this base name with a 'nnnnn.xml' string where nnnnn is a 6 digit index (e.g. EventCollection000005.xml)

LOGFSIZE is the file size limit in KB for the event collection file, when exceeded, the current file is closed and a new one is created with an incremented index. The maximum file size is limited to 2Gb. If this parameter is not defined or equal to 0, then the effective value of 2Gb is applied.

LOGFNBR is the maximum number of event collection files to be created. Once the index of the currently generated event collection file has reached this limit, the next file will be created with an index starting at 1 (note that if the a collection with that index still exist, it will be overwritten). If this parameter is not defined or equal to 0, then the effective value of 999999 is applied.

LOGFCURRENT is the index of the currently written event collector file. This definition is updated by the Callback Collector each time a new collection file is created and should therefore not be edited.

* Microsoft Windows is a registered trademark Microsoft

3.4.6 Domain Monitoring GUI Server

3.4.6.1 Installation under Microsoft Windows:

- Launch SETUP.EXE.
- Click "Next".
- Read, and accept the license agreement.
- Select a "COMPLETE" installation.
- Click on "Install".
  - Files are copied on your system
- A DOS dialog window appears to configure the SSL certificate, answer to the questions. If you don't know what to answer, keep the default propositions. Keeping defaults will just generate one extra warning for the certificate.
  - SSL certificate is installed on your system
- Enter the full qualified Domain name of your machine (SPIDERMAN.OSL.NET)
  - Services are configured and started
- If the Request Distributor port number is already configured, a message box will inform you. If not, you will be invited to enter the Request Distributor Port Number.
- A popup informs you that the installation has successfully completed.
- Click on the "Finish" button.

  Now, use Mozilla/Firefox and browse to http://localhost to make sure that the GUI has been correctly installed on your system.

NB: The Domain Monitoring GUI Server will only perform correctly if the Xprint domain and the Domain Monitoring GUI Relay are correctly installed, configured and running.

3.4.6.2 Uninstallation under Microsoft Windows (tm) :

- Launch SETUP.EXE
- Select "Remove"
- Confirm your choice.
  - The uninstallation is performed.
- Click on Finish.
  - The product is uninstalled

3.4.6.3 Silent installation under Microsoft Windows :

Is not possible.

3.4.6.4 Domain Monitoring GUI communication settings

Is described in detail in the [XPRINT V8.0 Domain Monitoring GUI](#) manual and in section [3.4.5.3.](#)

3.4.6.5 Domain Monitoring GUI installation

By default the installation depends on your language environment. For English your path is C:\Program Files, for German C:\Programme. But you can choose another installation path.

3.4.6.5.1 `C:\Program Files\Apache Group\Apache`

• bin/apachectl Script for start/stop apache use parameter #startssl# to start, and 'stop' to stop 'conf/httpd.conf' Configuration file for apache.

      o Directive 'User', 'Group' are used for setting user rights of apache's connected user.

.
• conf/ssl.key Contain SSL certificate
• conf/ssl.crt Contain SSL certificate
• logs/access.log Contain historic about each connect to APACHE
• logs/error.log Contain all errors/warning that could appear on APACHE

3.4.6.5.2 `C:\Program Files\openssl`

• generate.sh Ask some information to generate a new SSL key for apache
• bin/openssl openssl binary
• ssl/openssl.cnf File that contains translated messages about generating a new SSL key.

3.4.6.5.3 C:\Program Files\php
• php files

3.4.6.5.4 C:\Program Files\DomMonGui\Server

• DB Contains the Domain Monitoring GUI Server databases
• IMAGES Contains the images of the GUI
• INI/xpIni.ini Contains all the necessary directives for the GUI
• LOG Contains the log files

3.4.6.6 Configuration

The Domain Monitoring GUI requires the below conditions to work properly.

- The directory C:\Program Files\Apache Group\Apache\logs must be accessible in reading/writing by the user/group defined in httpd.conf
- The directory C:\Program Files\DomMonGui\Server\LOG must be accessible in reading/writing by the user/group defined in httpd.conf
- A correct User/Group must be defined in httpd.conf

For information, below is a summary of the main options used with our installation.

1. Apache configuration (conf\httpd.conf)

Keyword	Working

ServerRoot	Apache root directory between quotes
Listen	Port that apache listen to. You cannot change port for SSL (443).
ServerAdmin	eMail of the Administrator (optional)
ServerName	Full name of the server (with DNS extension)
DocumentRoot	Path where the DomainMonitoringGUI is.
LoadModule	Somewhere in the file, is this line: LoadModule php5_module "C:\PHP\php5apache.dll" Edit it with the path to PHP.
<VirtualHost x:443>	This section describes how apache must handle HTTPS. Edit the SSLCertificateFile, and SSLCertificateKeyFile with apache relative's path.
User	That's the user that apache will use to access files on hard disk.
Group	That's the user group that apache will use to access files on hard disk.
CustomLog	Commenting this directive will have for effect to disable access logging (not recommended)
ErrorLog	Commenting this directive will have to effect to disable error logging (not recommended)

All paths must respect the UNIX like format, always use slashes instead of backslashes on both Unix and Windows platforms.
To apply your changes, you need to stop and restart apache manually.
On Windows: Stop and start apache service.

2. DomainMonitoringGUI (INI/xpIni.ini)

Keyword	Working
root	Physical root directory of DMG
wwwroot	Web URL to DMG
includeDir	Root directory of the include files
langDir	Root directory of the lang files
logDir	Root directory of the log files
tmpDir	Root directory of the DMG temporary files
dbDir	Root directory of the databases
imagesDir	Root directory of DMG's images.
session_expire_timeout	Inactive session lifetime
debug	Enables the debugging when set to 'true' and disables it when set to 'false'
imagesAlias	Web relative URL for DMG's images.
javaScriptAlias	Web relative URL for DMG's JavaScript codes.
xpRefreshAlias	Web relative URL for DMG's selective refresh mechanism.
helpAlias	Web relative URL for DMG's help.
displayShowXXX	Accepts the standard Xprint flags according to the Xprint object
displayStatDEV	Parameters for the 'xpShow' command line. Can only be 'diS' or 'diL'. Anything other will cause an error
defaultLanguage	The language suffix code for default (en, de,...)
DetailedMonitoringRefreshTime	The refresh interval default value on detailed monitoring

NB: don't forget to replace the existing CALLBACK\xpIni.ini by the INI/xpIni.ini file.
Your changes will take effect as soon as you'll reconnect to the GUI.

3.4.6.7 Maintenance

3.4.6.7.1 Log Files
Apache logs much information into its log files. Therefore, from time to time, it is necessary to purge those log files to avoid a full file system.
Here is how you can clean Apache's log files

• Open the Service Control Manager.
• Stop the Apache service.
• Go to the apache directory.
• Erase the logs files.
• Start the Apache service again.

If you want to disable Apache logging, simply add a comment character in front of the the following directives in httpd.conf : CustomLog & ErrorLog (refer to the configuration section of this manual to know where these files are located.)
Domain Monitoring GUI stores much information too, especially if the debugging is enabled. To remove the Domain Monitoring GUI server log files, simply erase all logs files present under DMG/Logs. There is no need to stop, restart any service/daemon. When you proceed to these cleaning operations, try to find a timeframe where the GUI's activity is relatively low.

3.4.6.7.2 DMG DB Backup

An hourly backup of the custom filters and custom views defined by the users is done alternatively against two databases (DMG_BCK001 & DMG_BCK002). An empty database (DMG_EMPTY.db) containing the whole structure becomes the new active database in case of recovery and the filters & views data is retrieved from either `DMG_BCK001` or `DMG_BCK002`.

3.4.6.7.3 DMG DB Recovery mechanism

If you need to restore the backup, follow theses steps:
Before applying the recovery procedure, you have to stop the services (windows) that are currently querying the database.

> • Open the Service Control Manager.
> • stop the services named DMG Callbacks, DMG Monitoring and Apache.
> • Open a command line box.
> • Move to `C:\Program Files\DomMonGui\Server\GOODIES`.
> • There, type in `C:\Program files\php\php.exe dmg_recover.ph`
> • Restart the services.

3.4.6.8 DMG Server: Installation problems

The installation packages should install the Domain Monitoring GUI without problems

The operating systems Windows Server 2000/2003 already contain the required libraries

Daemons

You can just try to register the daemons again.
Go to C:\Program Files\DomMonGui\DAEMONS.
Execute:
" "C:\Program Files\php/php.exe xpGarbage.php -remove"
" "C:\Program Files\php/php.exe xpGarbage.php -install"
" "C:Program Files\php/php.exe callBackDaemon.php -remove"

" "C:\Program Files\php/php.exe callBackDaemon.php -install"

3.4.7 Migration procedure when upgrading from a former DMG version (8.0A to 8.0B)

The migration procedure consists in deleting the former version before installing the new one. So to upgrade the DMG, you have only to execute the uninstallation procedure and afterwards the installation procedure. However if you want to preserve your view and filter definitions in the new version, you have to follow the procedure below.

- Take a backup of the files DMG_BCK001 and DMG_BCK002 in the directory DB

    (default: C:\Program Files\DomMonGui\Server\DB).

- Execute the uninstallation procedure for windows.
- Execute the installation procedure for windows.
- Restore both files (DMG_BCK001 and DMG_BCK002) in the DB directory.
- Restore the definition of your filters and your views by executing the command below:
    - Open a windows command prompt
    - Go to the "goodies" directory (default: C:\Program Files\DomMonGui\Server\GOODIES).
    - Execute the following command:

            C:\Program Files\PHP\php.exe dmg_recover.php

    - The message "Restore done!" should appear

3.5 Product use

3.5.1 Xprint License

3.5.1.1 Licensing

The section 8.5.2 in the XPRINT User's and Administrator's Guide describes how to install a Xprint license key.
The license controls the permission to use Xprint in either Local or Distributed mode, the use of SAP, the use of SNMP agent as well as the maximum number of devices allowed in the configuration. These license keys are delivered on right to use papers. You must enter your key manually.
Without any license, Xprint can be used in Demo mode for a maximum of four weeks. This period should be sufficient to get a definitive key from the product distributor. Demo mode automatically provides Xprint Net Server. In a Xprint-demo mode (without any license key) you can run DBinstall only once. License keys may be installed before or after the Xprint intallation procedure.

Enter the license with xpkey:

On the Right of use/licence sheet you will get one or two lines, which represents the complete licence string.

xpkey -i "First line:second line:"

Example:

xpkey -i "oo Dt xx Y4 UR vW 64 Up Hy 96 Qr Lz 9U TQ:m9 Rm Ez Wt BW 0b ?V p? cD:"

No blank between the second line and the first line.

Important information:

The same license key cannot be installed more than once in a Xprint domain. Several installations of the same key will lead to "`No valid license`" messages at start-up. Therefore, if you have already installed the same key for 'local' mode on several host, please remove them before installing 'network' license key.

The installation procedure should only be influenced by the order of operations in case of Local use of Xprint. If a local key is found before the installation procedure, any initialization of the Xprint database will be done in silent mode.

When several keys concerning the control of devices are found in a domain, Xprint will use the largest value. Restricting existing features is thus not possible. In a Xprint-Demo mode you can run DBinstall only once.

3.5.1.2 Licensing procedure

Each key has to be entered separately with the command xpkey "xpkey -l". With the option "xpkey -l" already installed keys can be seen. Basic privileges as Local / Net Client / Net Server are granted at Xprint start-up. Any failure due to missing privileges will lead the start-up to be aborted with the message:

"XP000259: No valid license available."

A more detailed information can be found in the Xprint.log file located in the Xprint root directory.

Reasons may be :

Unrecognised license : no license was found or it can not be used for the current version of Xprint

Service needs Server license : The host is defined as POT_MASTER while only Xprint Net Client key is available.

The activation of entities during start-up will be ignored on Xprint Net Client hosts. They will be rejected if the administrator requests activation during an Xprint session. Similarly, adding or duplicating Xprint printer objects will be rejected when the maximum number of logical printers is reached.

When several keys concerning the control of devices are found in a domain, Xprint will use the largest value. Restricting existing features is thus not possible. In a Xprint-Demo mode you can run DBinstall only once.

3.5.1.3 Domain Monitoring GUI Server

A licensing mechanism checks the number of concurrent GUI sessions allowed on your installation. Any monitoring window is considered as a session. The license file must be stored in the DomainMonitoringGUI root path. In case no license file is available, you are granted a number of 2 concurrent sessions maximum. Default path of the DomainMonitoringGUI license keys for Microsoft Windows(tm):

`C:\Program Files\DomMonGui\Server\guiMsg`

3.5.1.4 Xprint License Update

On the basis of your conditions of the software product use and service agreement you must possess for every Xprint license a corresponding Xprint update license of the following version.

Per machine or domain, you must enter every corresponding update license key with the command "xpkey -i" .

3.5.2 Renaming the hostname in an Xprint domain

Is described in chapter 6.2.1 in the Xprint 8.0 User's and Administrator's Guide and in the Xprint 8.0 Reference manual, chapter 'xppatch'.

3.5.3 Bsd filter port options

Two specific options (PI and PA) exist for bsd filters. These options define the port range the remote BSD client must use for sending jobs to the local gateway or receiving jobs from it. These options are defined for the administrator comment field of the device using the filter.

Example:

xpadd -dev ... -ca "host= ... queue= ... PI=0 PA=1023

The default values are "PI=721 PA=731" or "PI=512 PA=1023" when the "--compatible" mode is set.
Jobs sent to printer with bsd fast filter remain ACTIVE forever.

This behaviour results from a deadlock between fast filter and backend processing. The solution consists of modifying the definition of each PCL used with a bsd fast filter (the path of PCL file is opt/Xprint/PCL/xpterm).

The option to be adapted is "itfpo" and the new value is the following one:

itfpo= "JOB_ID *=*" "DEBUG *=*" "PCL *=*" "COMMENT *=-w"

Then you have to perform 'xpmod -pcl <PCL name> -fi xpterm' for each PCL used by a bsd fast filter device.

3.5.4 Test of the printer device address

This is described in the Xprint 8.0 Reference manual, chapter 3.2.

3.5.5 Device selection

The smart device selection processing is applied when jobs are submitted without explicit device destination. In this case, either no device destination or a device group name is given.

If you do not specify a specific printer (group) for your print job, Xprint will select a suitable printer according to the options specified for the print job (e.g. double sided printing, landscape format).

In order to print the job on a printer corresponding to the print job options, a first devices list is established by Xprint:

- If no device destination is given, Xprint creates a first destination list from the destinations in the local domain preset in the XP_DESTIN shell variable. If this variable is not filled, Xprint searches if there is printers or printer group attached to the concerned host (at xpadd –hos definition, the Xprint administrator may define the name of a printer or a printer group to be used for a job if no alternative destination is specified as part of the xpadd –job command submitted from this host)

- If a device group is given, Xprint establishes a first devices list corresponding to the devices pertaining to this device group. It takes first in account the shell variable XP_DLPRIO that defines the priority order within the device group. If XP_DLPRIO variable is empty, the shell variable XP_LOCALPRIO (which is the priority to a local destination in a candidate devices list) is then taken into account

In this created devices lists, some servers are configured.

Xprint will choose the active server where the job will be executed following the load level of the servers.

The print is then directed to one device of the less loaded server

However, the print job will be rejected if none of the specified printers supports the additional options for the print job that are contained in the command line.

3.5.6 Logging

When a same logging message is send many times consecutively, the message is written one time in the logging file and for each occurrence of this message, a '.' is written in the logging file. When a different message has to be written in the logging file, before this new message, the previous one is written again with its number of occurrence: "The log message <MESSAGE> have been sent <X> times."

3.5.7 xp_alert

xp_alert is the binary executed when a logging message is generated or when a message is send to the user. This binary receives the following arguments as input:

argv[1] .....The entity type

argv[2] .....The date & time of the logging/user message

argv[3] .....The logging/user message key

argv[4] .....The message

argv[5] .....The name of the entity which has generated the message

argv[6] .....The name of the function which has generated the message

argv[7] .....For logging only, the message occurrence number

A separator or a new line does not follow those arguments.

3.5.8 Clean up of directories at the start up

The first activation of a gateway, a server or a supervisor creates a sub-directory with the name of the activated entity respectively under the directory "<XPRINT_PATH>/GW" resp. ".../SV" or ".../SP", on the host where the entity is defined. This sub-directory is normally removed when the entity is deleted, if the host is active at deletion time. If the host is not active when the entity is deleted, the sub-directory is removed at the next start up of Xprint on that host.

3.5.9 Gateway options

Security options

o In order to make the security more flexible and authentication checks performed by the gateways, two options can be specified in the "op" flag of the LOCAL gateways:

o "CHECK_DST=NO":

This value disables the check ensuring that the request is well intended to the receiver gateway. So, the name of the receiver is no longer relevant, and then its network address remains the only identification of the gateway. This option applied to GIP2 gateways provides an easier configuration way.

o "CHECK_SRC=NO":

This value disables the check verifying that the sender is well known and authorized to submit the request. In other words, all requests are accepted even if the sender is not defined in the database as PARTNER gateway. In the latter case, the gateway partner name is set to empty (f.i. job originator is in the form "!<user>host>"). This option is very interesting for intra-network or specific usage models (like in HV cluster environment) but aware that this leads to a serious security lack (any domain knowing the receiver definition may send requests).

3.5.10 Standard entries

If no supervisor or server is specified when a device is set up, Xprint automatically generates a server and a supervisor, both under the host name. The Xprint system comprises various entities, including servers and supervisors. The server controls the job database. The server also controls the supervisor. A supervisor controls a number of devices. Among other things, the supervisor is responsible for retrieving all data required for printing a job. In previous versions, a server had to be specified in the definition of a supervisor, and a supervisor had to be specified in the definition of a device.

These specifications have become optional in Xprint V5.x. Standard entries are generated when the option concerned is not specified and no entry exists. Standard entries are always given the main name of the host as their ID. Please note that names may be truncated to 14 characters if you are using an ATT type of operating system.

Each entry that is identified by the main name of the host is treated like a standard entry that has been generated to replace default values.

3.5.11 Notification event

Setting the job into INTERRUPTED can now also be trapped as job notification event. The key word INTERRUPTED can be used for that purpose. This event is automatically selected when ALL is specified within xpadd -job -ne.

3.5.12 Requesting the job states with the APIs

The Xp_job structure returned by shw_job_cli() includes a state field which stands for the job state as known by the server. This field is no longer relevant once the job becomes ACTIVE. The job may indeed run into DEVICE_ERROR. The shw_job_cli() function should only be used in order to return static information concerning the job. The sta_job_cli() should rather be preferred in order to collect the job state.

3.5.13 Page context

Computing the page context may be a very complex task for documents having their resources embedded in the data to be printed. As result, any print with page selection may not give the expected result. The repositioning may be correct but the fonts to be used as any background layer is not guaranteed. In a similar way, any repositioning with the xpchange -dev -rf may print the page to be recovered with wrong settings if the printer fault has caused a cleanup of its memory.

3.5.14 Inter-domain notification

The job notification is now supported by the inter-domain printing (by usage of gateways). The only specific requirement is that all the involved systems run at least the version 6.0A00. Moreover, if you select the COMMAND notification method and that you would like to use parameter values gathering spaces, you have to use the \" (backslash double-quote) as separator to encapsulate these values.

3.5.15 Goodies

There is no warranty for using the goodis. The "C:\Program files\Xprint\goodies\tools directory ("C:\Program Files\Xprint" is the default installation path) contains some useful tools with which you can, for example, easily search for log files, clean up the "config" directory, etc. The "goodies\samples" directory contains some examples of API use.

3.5.16 Job id limit

In Xprint versions prior to V8.0A10, the maximum number of job submitted per host was limited to 32.767 at a time. Now, this limit has been increased up to 999.999. However, in order to keep compatibility with older versions, the limit is still 32767 as soon as one or more servers of older versions are detected in the domain. Moreover, the job IDs between 32768 and 999999 are returned as zero by clients of older versions working through a gateway, and by the API functions of compatibility libraries

3.5.17 Mercator Viewing

When trying to view a job, if the data file is no more accessible, an error message appears in Mercator.

3.5.18 Options order

There is difference of the behaviour of Xprint for options order in extended or simple options. When the same option but with different values is repeated in a list of extended options (-ex) and this option is 'known' by the product to tune a functionality, then only the first occurrence in the list is taken into account. On the contrary, when the same option but with different values is repeated in a list of options (-op), the last one is kept.

3.5.19 Cooperation with Wprint 4.0

When jobs are issued from Wprint 4.0 to Xprint V8.0A10, the job extended option field 'P_PAGE_NBR' is filled in with the number of pages of the printed document.

3.5.20 Which PCL is recommended according to a printer

Please refer to the FAQ.

3.5.21 Interoperability with LDAP

A special callback library has been built-up to allow accessing information stored in a LDAP directory.
A usage example has been developed to identify in LDAP a default destination for a given Xprint user when executing a job submission.

The below schema represents the process flow for a new job submission when the callback library has been activated
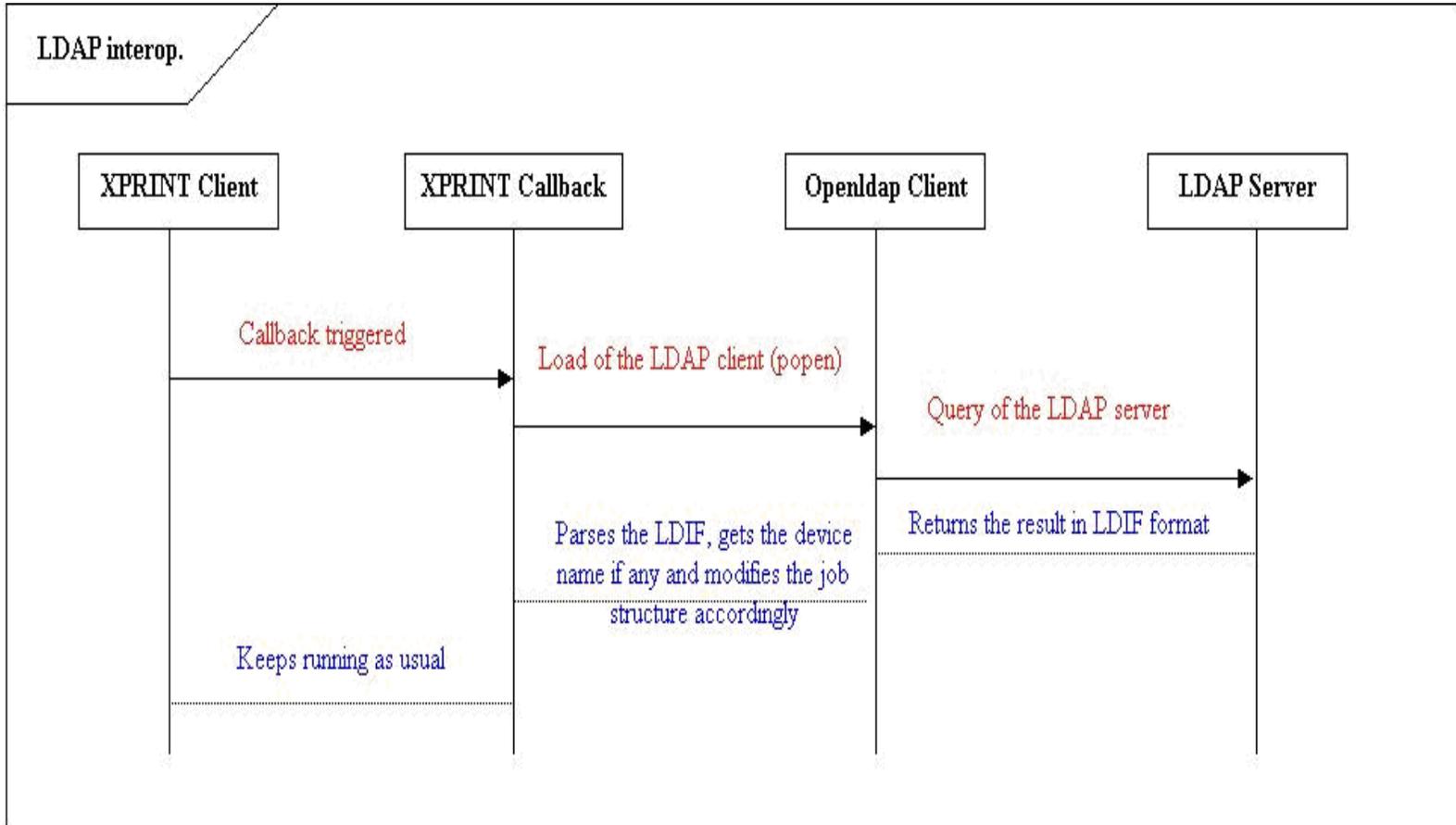
When a new job submission occurs, the callback library will query the LDAP server to check whether a default device destination was defined for the current job originator if no explicit destination was specified by the originator. If it finds out a destination, the job will be automatically directed to this destination, otherwise, the usual process will take place.

This operation is transparent for the job originator. If the default destination returned by LDAP is invalid or not matching the job requirements, an error message will be thrown by the xpadd - job command.

3.5.21.1 Configuration

3.5.21.1.1 Configuration file

A configuration file stored in the Xprint system directory must contain the necessary information to query the LDAP server. Here is an example showing how the configuration file should look like

```
#This file contains the parameters allowing XPRINT to perform the LDAP query.
#"command" is the path trough the ldapseach command
# "rootdn" is the location where ldapsearch must start searching
#An anonymous authentication is required.

command=c:\openldap\ldapsearch.exe
ldapserver=d241peys
rootdn=dc=osl,dc=oce,dc=net
```
As you can see, three variables must be provided.

- command is the path of the ldapsearch command
- ldapserver is the hostname on which the LDAP server is running
- rootdn is the typical LDAP information indicating where the ldapsearch command is to start searching.

3.5.21.1.2 Activating the callback library

To enable the LDAP interoperability, you must rename the file _CL_callbacks.cfg to CL_callbacks.cfg and you have to restart Xprint to make the activation effective.

The example provided with Xprint 8.0 has been tested using the OpenLDAP software providing an LDAP server and a few LDAP client commands.

3.5.21.1.3 Example of a job submission using the LDAP interoperability

When you have been through the two above steps, you can add a job the following way

```
xpadd -dr <file_to_print> -<any job option except -de>
```
If you specify a destination with the '-de' flag, no LDAP query will be done.

3.6 Obsolete functions

-/-

3.7 Incompatibilities

- The SNMP component is not activated anymore after the installation. If you want use it, you have to activate it manually by adding an entry referencing the libCacheMan library in the following files:

    - ..\Xprint\addons\BE_callbacks.cfg
    - ..\Xprint\addons\DA_callbacks.cfg
    - ..\Xprint\addons/DB_callbacks.cfg
    - ..\Xprint\addons/SP_callbacks.cfg
    - ..\Xprint\addons/SV_callbacks.cfg

For Windows , you will have to ensure that the entry below is present in the above files:

- libCacheMan.dll

- When a user requires notifications (job, device) via the FILE method, a timestamp is now added at the beginning of the message. However, you can erase this timestamp by setting the environment variable XP_NOTIF_TIMESTAMP to NONE.

- In a domain with different versions of Xprint, only the components of the version 8.0 get their status correctly reported in Domain Monitoring GUI.

- In heterogeneous networks, using several versions of the product, only the last major release can have the role of MASTER.

- As the former library versions (Xprint version < 5.0A) are no longer released, the application linked with these old libraries must be recompiled with at least the version 5.0A Xprint development kit in order to run with the current version. The resulting application must run with the set-uid-bit set on the binary with owner BIN.

3.8 Restrictions

3.8.1 Maintenance scope

Guarantee is not provided for PCLs, filters and back- ends that you have modified or written yourself.
The two-printer license has only the status of an evaluattion license. This evaluation license does not include any maintenance and warranty rights. Support, update, maintenance and warranty rights are only available with purchased licenses.

3.8.2 Installation

- In the context of an upgrade, or any re-installation, the Xprint installer does not automatically stop the Xprint R/3 Kit server service, if it is running. This service has to be stopped manually before installation.

3.8.3 The database

Xprint does not represent "error-tolerant" software: It relies on the integrity of some files to save the configuration or job information in the database or job control files. If one of these files is destroyed for some reason (e.g. during a system crash), you may lose some of your data and, under certain circumstances, no longer be able to restart Xprint. In the case of distributed configurations, a database copy can be restored from a remote host via "DBinstall". On local installations, it is highly recommendable to save the "\Program Files\Xprint\DB.local" directory on a regular basis to avoid such problems, although they are exceptional.

3.8.4 Xprint fax and mail support

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3.8.5 Jobs sent to a remote domain

When a job is sent to a remote domain with a requested notification (-na, -ev or -nm specified), it will be no more possible to modify these attributes. The modification of the job will be rejected with the message XP000146: Request refused by the server.

A job submitted via gateway to another domain can not be modified anymore (xpmod…) from the original host if this job was submitted with notification.

3.8.6 Interrupted job on a PJL printer

When a job is interrupted on a PJL printer, the number of printed page displayed in the job status is the number of sent pages.

3.8.7 Wprint 4.0

Wprint 4.0 can now print on Xprint redirected printers to another domain but no job management is available for this kind of printing submission.

3.8.8 SNMP

- SNMP agent does not monitor remote objects
- On an insufficient hardware configuration for the number of Xprint objects (please consult configuration advices in chapter "Virtual Memory consumption"), SNMP agent can present some instability risks. If such a situation occurs, the use of the host extended option that disables the monitoring of jobs via the SNMP agent (see "List of extended options keywords" in appendix A) will certainly improve the SNMP agent behaviour.

3.8.9 Mercator

When a list of devices is activated from Mercator, depending on the speed of the hardware and the number of devices, some error messages could report some activation problems on some devices in the list. After the end of the processing, The devices that remained not activated should be re-activated again.

3.8.10 Firewall

When using firewall, it is not recommended to have this one configured inside an Xprint domain because Xprint allocates dynamically port number at entity activation. So, the port kept opened by the firewall should be too important and this tool should not be useful.

3.8.11 Dprint

In the context of the interoperability with the DPRINT product, it is not possible for DPRINT users to display more than two Xprint jobs at a time.

3.8.12 Page selection for ASCII files on POSTSCRIPT

The page selection for ASCII files on a POSTSCRIPT printer is always printing the first page of the document (in addition to the selected pages).

3.8.13 On Microsoft Windows

- The notification method MAIL is emulated by using the Windows messenger service.
- Hardware with max. 2 processors is supported.
- The option FTU of the command xpsetuser does not work. The command set_FTuser is still available.

See chapter 9.4 in the XPRINT User's and Administrator's Guide for a complete description of limitations specific to Xprint for Windows.

3.8.14 Domain Monitoring GUI (DMG) Server

- The behaviour of the filters and views involving numeric comparisons might lead to unexpected results. This is due to the fact that the lower (<) and greater (>) operators are performed on character strings instead of numeric values.

- In the DMG interface, the user filter must have a unique name for all the objects. It is not possible to have a user filter named "FLT1" for the device object and a user filter name "FLT1" for the job object f.i.

- In Xprint domain, when an anarchy is present, this is not, at this time, automatically detected by the Domain Monitoring GUI

3.8.15 Domain Monitoring GUI (DMG) Server installation

The installation procedure of the DMG Server does not configure automatically the port number (http and https) on

which the apache web server will run.
If the customer needs to have our DMG Web application running on different ports than the standard ones (for instance he might need to keep another existing Web server running on the same host with the standard http and https ports), then some manual operations are required after the installation of the DMG.

Here is a description of the procedure:

o Stop the DMG Web application by executing the following command :

- /var/spool/Xprint/DomMonGui/apache/bin/apachectl stop

o Modify the content of the file /var/spool/Xprint/DomMonGui/apache/conf/httpd.conf :

- Replace "Listen 80" by "Listen 8080" (or another port of your choice).
- Replace "Listen 443" by "Listen 8443" (or another port of your choice).
- Search for all the occurrences of 443 and replace them by 8443.
- One of these occurrences should be within a "virtualhost" block. Make sure that this block is followed by the name of the machine. For instance "<VirtualHost server-name:8443>".

o Modify the content of the two files xpIni.ini that are located in /var/spool/Xprint/DomMonGui/Server/INI and /var/spool/Xprint/DomMonGui/Server/CALLBACK :

You have to add the new port numbers in both URL entries for http_root and https_root:

- http_root="http://server-name:8080/"
- https_root="https://server-name:8443/"

o Make sure the new http port number (in this example 8080) is well defined in the Xprint LRS object _XP_COLLECTOR_MANAGER (for further details, see the description in the section "Overview of the connection settings" in the chapter 3 of the DMG manual)

o Restart our DMG Web application by executing the following command :

- /var/spool/Xprint/DomMonGui/apache/bin/apachectl startssl

o When connecting to the DMG server, specify in the Web browser the URL with the new port number (ie: http://server-name:8080/ or https://server-name:8443/).
o In the browser, consider bypassing the proxy for your server.

3.8.16 Using the options -fc and -rw with PCL POSTSCRIPT

You have device that was defined with the PCL POSTSCRIPT. When you start a job using the options *-fc* <number> and *-rw* the device may refuse to print the correct number of copies. In this case please change the PCL of the device into another (example: HP-Laserjet).

3.9 Procedure in the event of errors

If an error occurs, a detailed description of the error condition, indicating whether and how the error can be reproduced, will be required for diagnostic purposes. This will give your customer service organisation ways to speed up problem fixing and provide you with appropriate and high quality support.

1. Problem description

Please describe the problem, its context and the command(s) that cause the problem, and write down the accurate and complete error message and any error number.
If a core file was created in any subdirectory, please send it with the binary which created it

Please also mention the platform, OS version.

Send the Xprint accurate version (with installed EKS)

If the problem is about printing, the print file that is at the origin of the problem can help to detect the location of problem.

2. Logging

Each time something wrong happens, an entry is recorded in the Event Viewer.

3. Debugging

If the problem can be reproduced please recall the command with the option " **-dg DBG_CL_SIM**".
*.dbg files will be created in different subdirectories under (default:) C:\WINDOWS\Program files\Xprint.
These files will also be very useful and have also to transmitted to your customer service.

Please attach these files to your email or use the new Diagnose File Collection (DFC) within the Domain Monitoring GUI and attach the archive file to your email.

4. Xprint configuration

In C:\Program Files\Xprint\cmd, there is a .bat file xpdbls.bat. Execute this script, and redirect the output in a file.

Of course, it still remains possible that the customer service will ask you for further information.

4 Errata for documents and manuals

List of extended options keywords:

Some keywords can be used to change the Xprint behaviour:	
XP_FORCE_SILENT_PRINTING=1	is a job extended option keyword that can be used to force the silent printing to be activated in the context of printing a selection of pages. Pay attention to the fact that it is only valid if the selection is done in only one range. Ex: ps 12,11-13,10-25 (only one range: 10-25) ps 10-15,30-35 (2 ranges)
XP_FORCE_PRINTING=1	is a job extended option keyword that can be used in multi-document jobs to ignore missing documents. Without this option, a job is put in state SUSPEND if a data file is not available at printing time. With this option, missing files are ignored (the available files are printed) and if a trailer page has been requested, an error message is printed on it.
XP_CUSTOMER_HEADER=n	is a form extended option keyword that force the call to a customer header page build by the executable "n". By default, if no full path name is given, the binary / script "n" will be taken from the product resources directory, otherwise, the full path name is taken into account.
XP_CUSTOMER_TRAILER=n	is a form extended option keyword that force the call to a customer trailer page build by the executable "n". By default, if no full path name is given, the binary / script "n" will be taken from the product resources directory, otherwise, the full path name is taken into account.