PosterShop X10 Installation for LightJet

Overview - Reference Material

- LightJet 6.5 Users Manual – available on Océ DGS website: www.dgs.oce.com

Operating Systems Supported

- Windows XP Pro with Service Pack 3 is the most current OS supported for the RIP and Spooler Computers. NT Workstation is also supported.
- Windows 7 and Vista are **not** supported on either the Spooler or RIP PC.

ONYX PosterShop PC

- Current specifications are posted on ONYX website: www.onyxgfx.com (exception: Recommended OS is Windows XP SP3).

- Dedicated 100BASE-T (minimum) or 1000BASE-T (optimal) NIC for TCP/IP communications with Spooler PC.

Spooler PC

IMPORTANT: If you are upgrading ONYX PosterShop to X10 there is no need to replace Spooler PC with a new computer.

Original Specifications from 2003

- Intel CPU, 2 GHz or higher w/512MB RAM
- Windows NT (SP5 or greater), or Windows XP Pro
- 40 GB, 7200 RPM hard drive (for applications)\
- 36 GB Ultra 160 SCSI, 10000 RPM hard drive (for storage & print spooling)
- Adaptec 19160 SCSI controller (for the LightJet and the SCSI storage drive)
- 100 Base -T network interface card

Recommended Replacement Specifications

- Intel Pentium 3 GHz / Core2 Duo 2 GHz processor or faster
- 4 GB RAM or more
- 40 GB or more, SATA, SATA2 or SATA3 7200 RPM hard drive (for applications)
- 1000 Base -T network interface card
- TCP/IP network connection 1000Mbit - 1000BASE-T NIC
- Adaptec 19160 SCSI controller (for the LightJet and SCSI storage drive {if a SCSI storage drive is used})
- Windows XP Pro SP3
- Storage Hard Drive - A LightJet scan line needs to be sent to the LightJet in < 25 msec so it is very important to have a fast storage drive. The original specifications from 2003 above were sufficient for the storage drive but technology has advanced and other options may yield even better performance, none of the following options have been tested by Océ but they may be worth trying:
    - SS HD- Solid State drive; no moving objects so rpm is not an issue, seek time usually in the .1ms range. They are much cheaper than SAS drives. Requires a compatible controller.
    - SAS HD Serial Attached SCSI drive, successor to the original SCSI drives. A separate SCSI controller is required (not compatible with the Adaptec 19160). RPM can be 15000 or higher
    - 10000 RPM fast SATA2 or SATA3 drive

Dongle/ONYX USB Key Requirements

- Spooler key – working key does not require an update, key can either be a parallel or USB key.
  NOTE: The ONYX utility "What's on my key" (Winkey) does not recognize a Spooler key.
- RIP key – updated USB key for PosterShop or Production House X10 and contains appropriate LightJet model key bit

Software Requirements

- X10 PosterShop or Production House software (use version supported by RIP key) Software – ONYX X10 Installation DVD or download from ONYX website: www.onyxgfx.com

LightJet Spooler/Server software: Current version is available on the ONYX X10 DVD or available for download from the Océ DGS website – details below. Note: The terms LightJet Spooler and LightJet Server are interchangeable i.e. they mean the same thing. ONYX calls the software LightJet Server but the icon for application is called LightJet Spooler.

- LightJet FE software: On Océ DGS website – details below
- X10 ONYX LightJet printer installation file (driver) – download from ONYX website: www.onyxgfx.com
- NetBEUI network communications protocol (optional) – On Windows XP CD/DVD.

Networks Communication Protocols Supported

Either NetBEUI or TCP/IP can be used for LAN communication between the ONYX PosterShop PC and the Spooler PC. NetBEUI is a faster, simpler protocol than TCP/IP but requires additional effort to configure. For some older PC/network hardware the PC may not be able to send scan lines to the LightJet in time when printing many small images due to the overhead of the TCP/IP network. With newer faster hardware this may not be an issue. So the current recommendation is to use what is currently installed. If doing a new installation try using TCP/IP and only install NetBEUI if required.

NOTE: A good idea before installing NetBEUI would be to upgrade the network NIC cards (if drivers are available for the installed OS's) from 100 mbit to 1000 mbit (gigabit ethernet), this could eliminate the need to install NetBEUI.

Upgrade Installation

1. **IMPORTANT:** Skip this step (step 1) if upgrading from PosterShop 6.0 or higher. Remove Spooler software and Microsoft SQL database server on spooler PC, and install and configure the current version.
2. Install ONYX X10 and LightJet driver on RIP computer
3. Link LightJet FE Calibrations to ONYX PosterShop Media Type
4. Link ONYX PosterShop Media to a Media Type
5. Create a Quickset
6. Launch the LightJet Spooler on the Spooler PC
7. Launch LightJet Spooler Controller (Frame Print Controller – FPC) on the ONYX RIP PC
8. Open test job in ONYX PosterShop and print
9. Send the print job from the LightJet Spooler Controller to the LightJet Spooler
10. Print the job on the LightJet

New Installation or Complete Re-installation

1. Install the Adaptec 19160 SCSI controller in Spooler PC, if not already installed.
2. If available, backup LightJet FE calibration data.
3. If not already installed, install LightJet FE on spooler computer.
4. Configure LightJet shares and output folder.
5. Perform calibrations and/or install good known calibrations on spooler computer.
6. Install spooler software on spooler computer
7. Configure and launch LightJet Spooler
8. Install ONYX X10 and LightJet driver on RIP computer.
9. Link LightJet FE Calibrations to ONYX PosterShop Media Type.
10. Link ONYX PosterShop Media to a Media Type
11. Create a Quickset
11. Launch the LightJet Spooler on the Spooler PC
12. Launch LightJet Spooler Controller (Frame Print Controller – FPC) on the ONYX RIP PC
13. Open test job in ONYX PosterShop and print.
14. Send the print job from the LightJet Spooler Controller to the LightJet Spooler
15. Print the job on the LightJet
16. Install NetBEUI (only if required - optional).

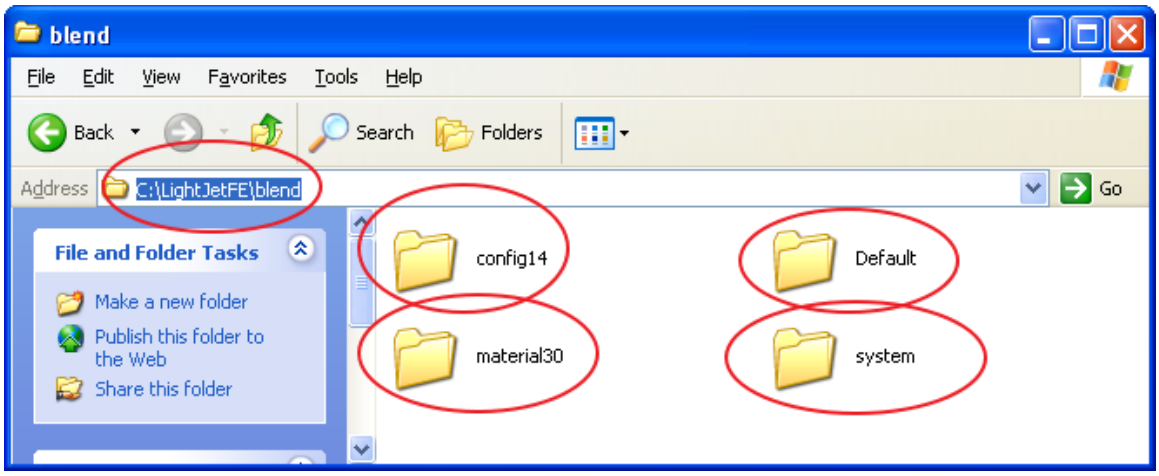
Software Installation/Upgrade Details

Follow either the “Upgrade Installation” or the “New Installation or Complete Re-installation” procedures above and follow the detailed steps below as required.

LightJet FE (Fusion) Backup Calibration Data

If possible the LightJet FE calibration data should be backed up prior to re-installing LightJet FE.

1. Backup all the folders under the LightJetFE/blend folder e.g.,



LightJet FE (Fusion) Installation

Reference Material

Océ LightJet FE Open Interface User Guide – LightJet FE User Guide Rev C (Available on DGS website www.dgs.oce.com)

Only required for new or complete re-installation: not required when upgrading the ONYX software.

1. Obtain a copy of LightJet FE Version 3.1.01 – Can be downloaded from Service LightJet page on the DGS website: www.dgs.oce.com from the Software Tools page.
2. Install the Lightjet FE software by executing LightJetFE3101.exe, when prompted for the destination folder for LightJetFE make sure to use the root folder of the drive (e.g. D:\lightJetFE). When prompted for setup type choose Typical.
3. If you were able to backup the LightJetFE calibration data copy/merge the backed up folders under the backed up LightJetFE/blend folder with the same folders of the new installation and skip steps 4-6 below
4. If no backup calibration data available perform calibrations (Reference – “Océ LightJet FE Open Interface User Guide”.
5. If no backup calibration data available obtain a copy of the lightjet_known_good_calibrations.zip file, it can also be downloaded from the DGS website from the Software Tools page.

6. If no backup calibration data available unzip the lightjet_known_good_calibrations.zip file, merge the files in the unzipped LightJetFE folder with the LightJetFE root folder by copying the unzipped LighJetFE folder to the root of the drive containing the system LightJetFE folder.
7. Share the LightjetFE folder, you can use default share name LightJetFE and set the permissions to allow everyone full control. Depending on whether your network is using a workgroup or domain you will also need to ensure that the user account on the ONYX PosterShop PC that is going to access the LightJetFE share on the Spooler PC has access to this share. You may have to create the corresponding user account on the Spooler PC and verify it has access to the LightJetFE share. (See test in next step to verify the connection).
8. **IMPORTANT TEST:** From the ONYX PosterShop PC add a network place for the LightJetFE share on the spooler PC. Note: This is not required for the software to work, but this way you are sure the Onyx PosterShop user has the required windows permissions!
9. Create an output folder (e.g. D:\LightJetOutput). This is the location where the Spooler saves the files created for the LightJet FE on the storage drive).

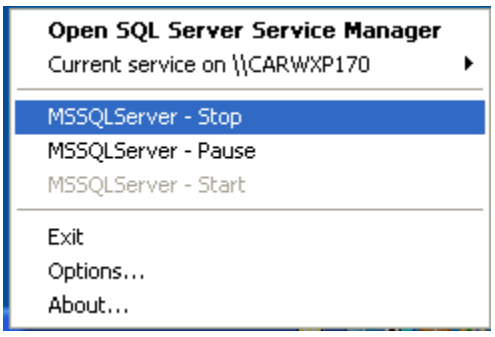
LightJet Spooler/Server & SQL Database Server Software Removal

IMPORTANT! Only required if installed Spooler software is running with ONYX PosterShop lower than version 6.0 or if for some other reason the Spooler software needs to be re-installed e.g. corrupted software.

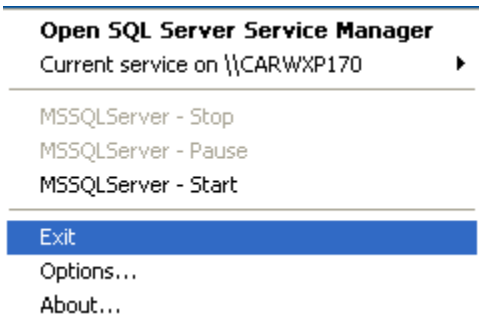
Before re-installing the LightJet Spooler/Server software it is very important to completely de-install the current version of spooler software and Microsoft SQL Database Server.

On the LightJet Spooler Computer:

1. Stop the LightJet Spooler software if it is currently running.
2. Locate the SQL server icon in the system tray, right-click and select Stop.



3. After confirming to stop the MSSQLServer, select Exit.



4. The SQL server can now be uninstalled by going to the Control Panel > Add or Remove Programs > Microsoft SQL Server Desktop Engine and select Remove.
5. Also remove the LightJet Spooler software via Control Panel > Add or Remove Programs > LightJet Spooler NOTE: Do not uninstall LightJet FE.
6. Delete the LightJet Spooler folder e.g. C:\Program Files\Onyx Graphics\LightJet Spooler.
7. Delete the SQL server folder e.g. C\:Program Files\Microsoft SQL Server.
8. Reboot and proceed to LightJet Spooler/Server Software Installation.

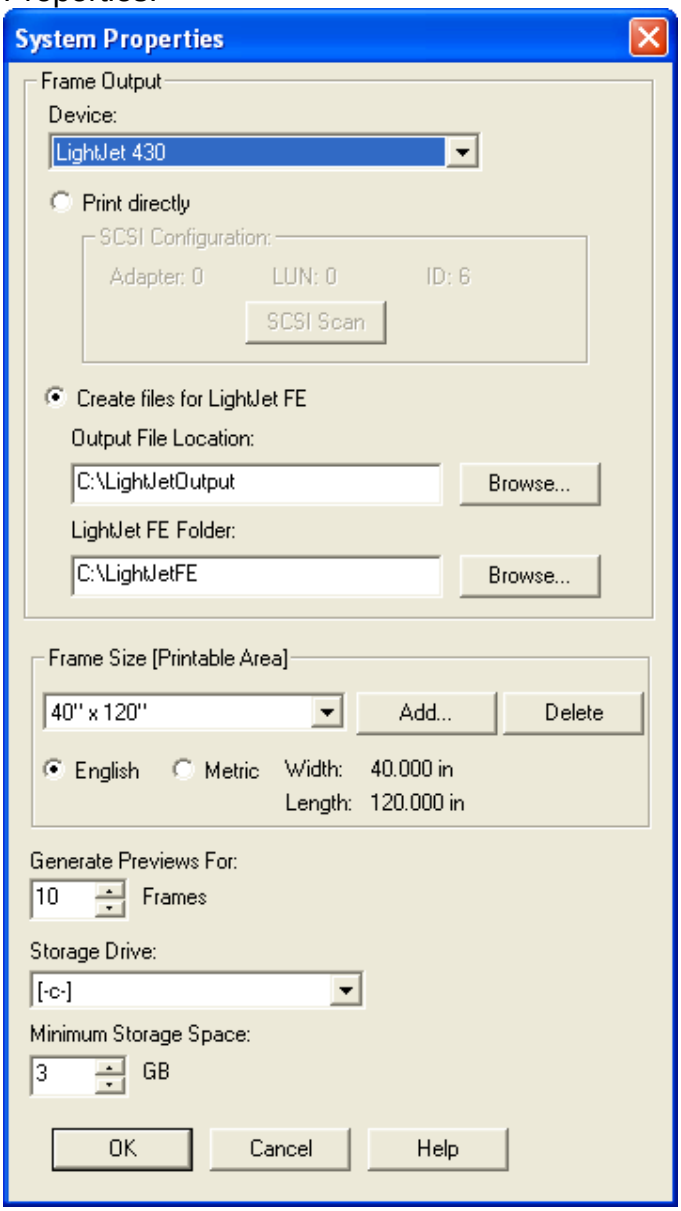
LightJet Spooler/Server Software Installation & Configuration

IMPORTANT! Only required if installed Spooler Software is running with ONYX PosterShop lower than version 6.0 or for a new installation.

NOTE: The Microsoft SQL Database Server is automatically installed during the installation of the LightJet Spooler software and no additional configuration is required. However, if the SQL server was previously installed it must be removed as per the procedure prior to installing or re-installing LightJet Spooler software.

1. Attach the ONYX spooler key/dongle to the spooler computer
2. The LightJet Spooler software is on ONYX X10 installation DVD 1 of 2 (path: \Extras\LightJet Server) or download and unzip from the LightJet Software Tools page on the DGS website: www.dgs.oce.com
3. Create a LightJet output folder on the storage drive (e.g. D:\LightJet Output).
4. Install the spooler software by executing setup.exe, when prompted by the installer (you can use the default or choose another folder for the spooler software location).
5. Reboot and then launch the spooler.
6. Configure the spooler (reference – see page 12 of the Océ LightJet User Guide for RIP-Queue 6.5)

a. Configure the spooler, In the spooler main dialog select System, then Properties.



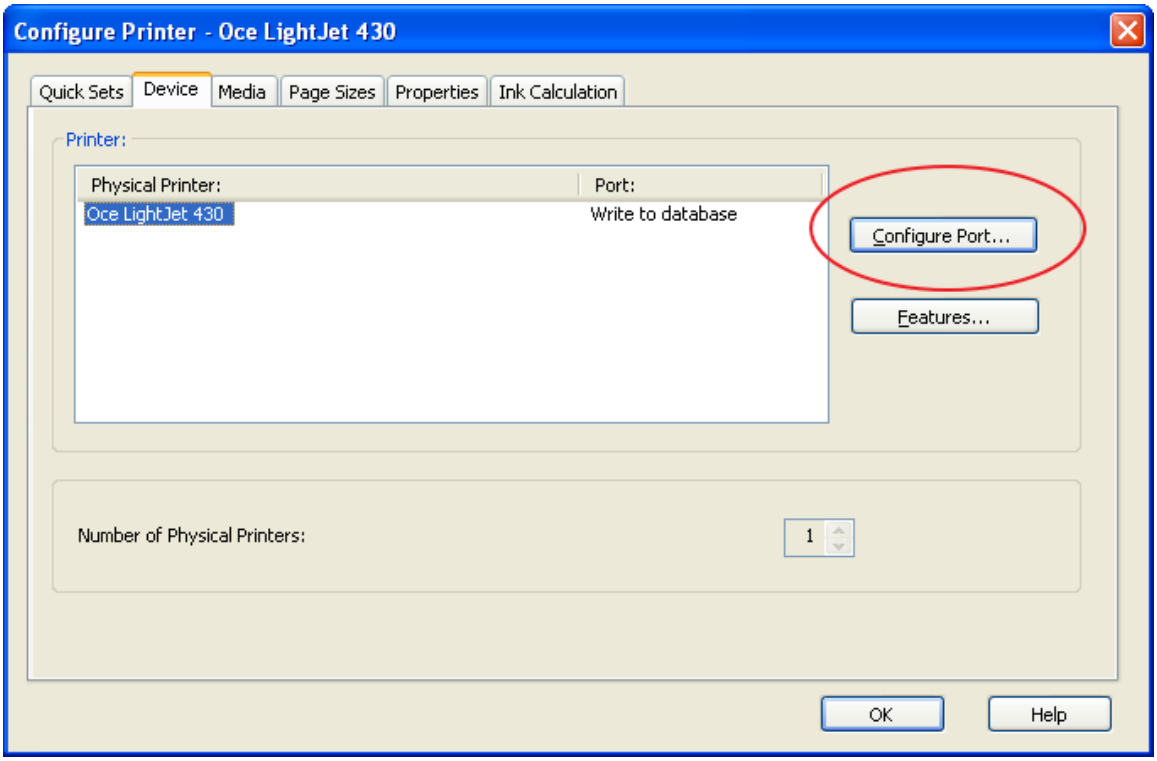
i. Select to print to disk (“Create files for LightJet FE” for testing, instead of using the SCSI adapter (“Print directly”).
ii. Ignore the SCSI (aspi) error message in case of testing, since we are printing to file only.
iii. Select the LightjetFE folder
iv. Select the output folder (created when LightJet FE was installed) NOTE: See LightJet FE installation for more details).
v. Select the largest frame size
vi. Select a hard drive with a lot of free space for storage.
vii. Set the Minimum Storage Space to an appropriate value for the size of the hard drive (default 3 GB is fine).

ONYX X10 Software & LightJet Printer Installation File Installation

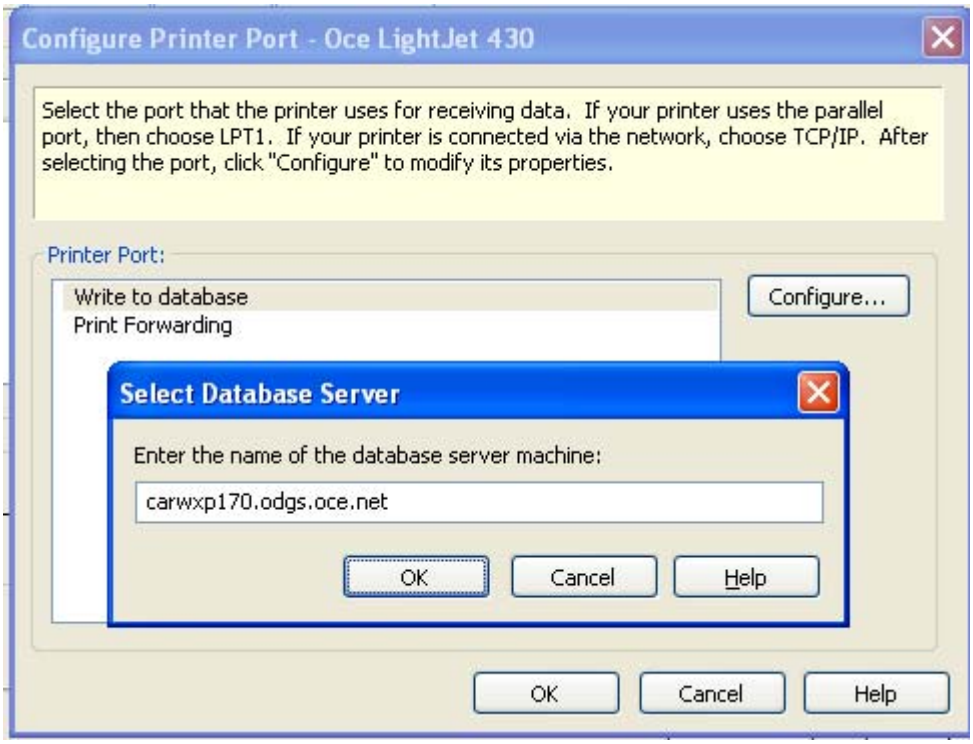
Note: the page numbers referenced in the steps below are page numbers of the LightJet 6.5 Users Manual.

Before starting, ensure that both computers can see each other via the network and that a Fusion Calibration has been completed on the LJFE (Spooler) PC.

1. Connect an ONYX USB key updated for X10 to the ONYX PosterShop PC
2. Install ONYX X10 (if not already installed) NOTE: The X10 software can coexist with older ONYX PosterShop software since it is installed in a different base folder, so no need to de-install a previous version of ONYX RIP.
3. Download the LightJet printer installation file for the X10 and the appropriate LightJet model from the ONYX website www.onyxgfx.com using the “ONYX Printer & Profile Download Manager” Utility (this utility is also available for download from the ONYX website).
4. Install the X10 LightJet printer installation file by double-clicking on it. NOTE: The LightJet printer installation file also contains the LightJet Spooler Controller (Frame Print Controller - fpc.exe) and it is installed when the LightJet printer driver is installed.
5. Configure the port (configure printer icon in Rip-Queue -> Device- Configure Port – Write to database - Configure),



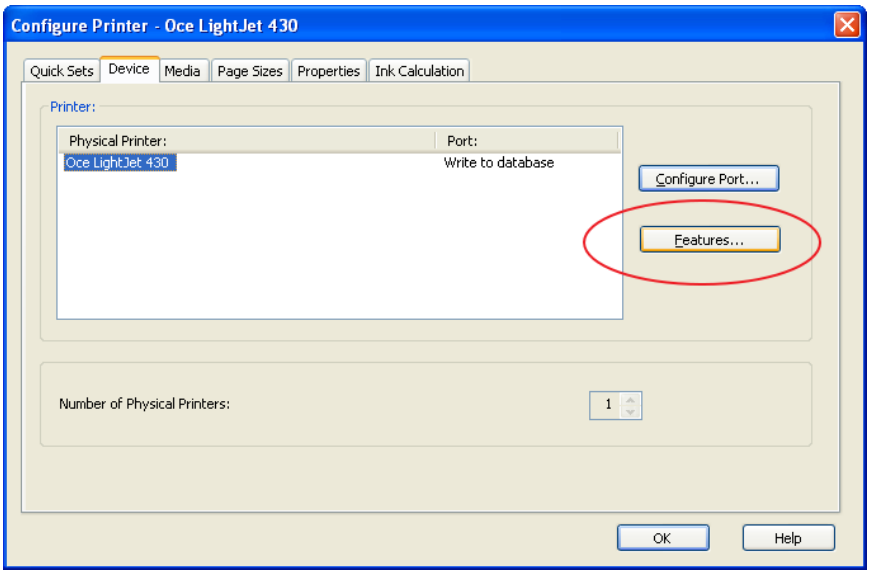
then enter the name of the database server machine which is the LightJet spooler/server PC network name. (See page 16). NOTE: Ignore NetBEUI remarks if they appear.

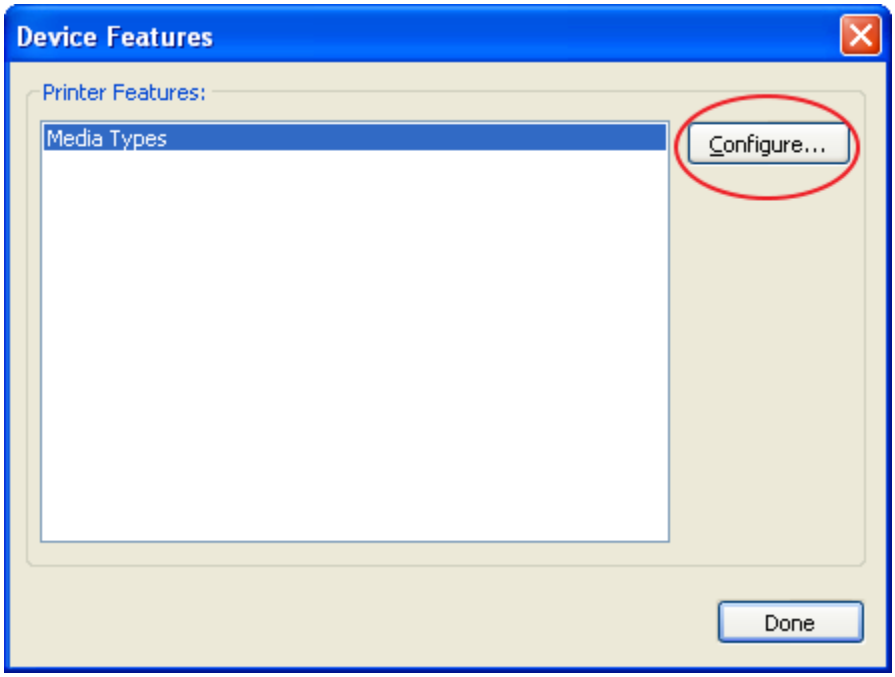


6. Continue with Linking Fusion calibrations to PosterShop Media Types (next procedure)

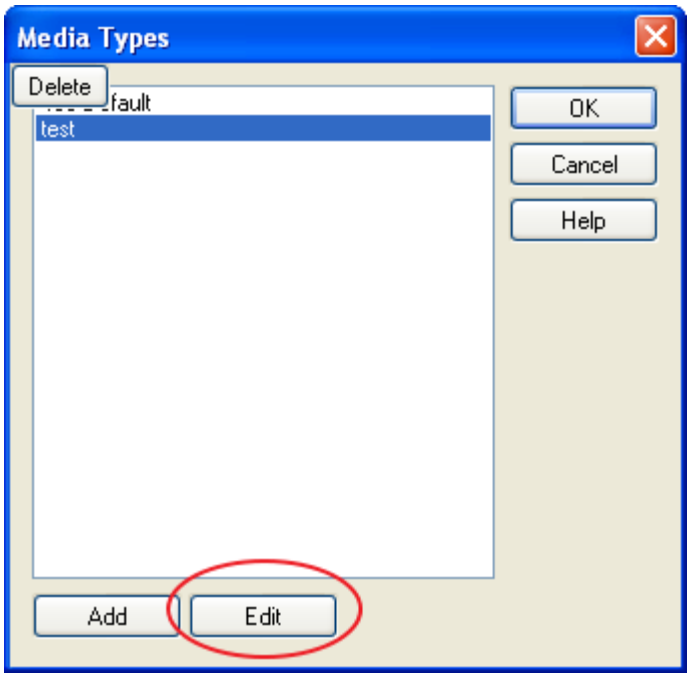
Link Fusion calibrations to the PosterShop Media Types

1. Link Fusion calibrations to the PosterShop Media Types (configure printer button in rip-queue -> features button > select Media Types > Configure),

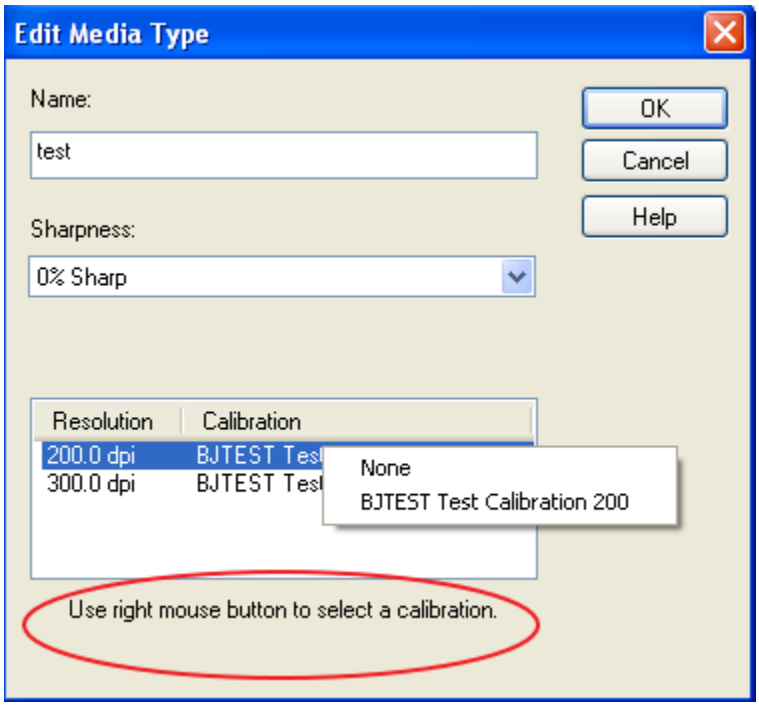




NOTE: When the Configure button is selected communication is established with the LJFE/Spooler PC via the Microsoft SQL Database Server. The PosterShop software wait at this point until successful communications is established.



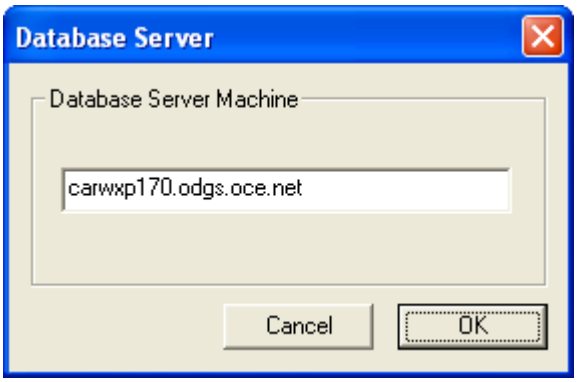
Select a calibration for each media. Hint: move the mouse pointer to the location to add the calibration and use the right mouse button to select a calibration



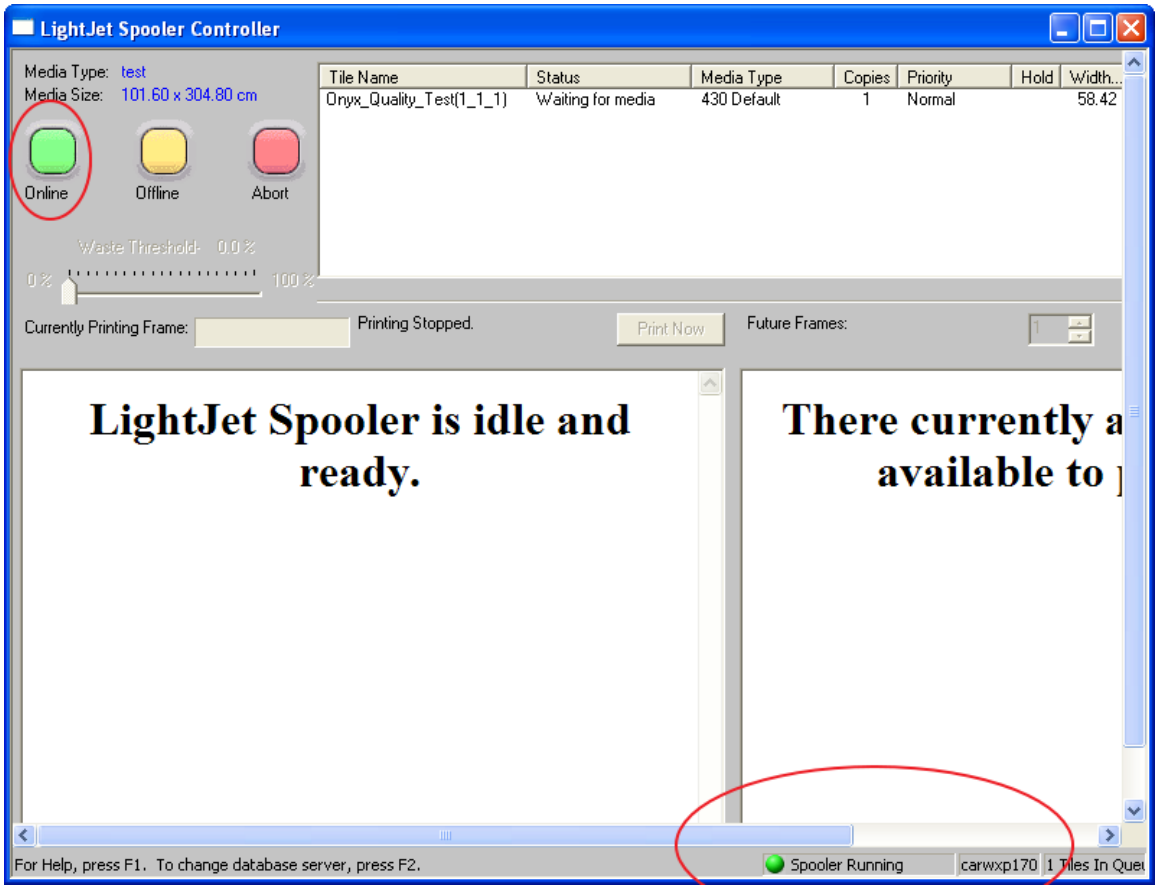
NOTE: Whenever a calibration can be selected, this points to a connection with the spooler server. This implies the database server is operational.

2. Start the LightJet Spooler Controller (select icon on ONYX PosterShop computer which was installed on the desktop when the LightJet printer installation file was installed).
   IMPORTANT NOTE: The first time the spooler controller can take a very long time e.g. up to 10 minutes. See page 21 for details.

   a. When promoted enter the name of the "Database Server Machine" which is the network name of the LightJet Spooler PC, (same name as entered when configuring the printer port in PosterShop).



Use the online button to put the spooler online.



Confirmation of the connection can be seen in the LightJet Spooler log (on the Spooler PC).

Link ONYX PosterShop LightJet Media Types To LightJet Media

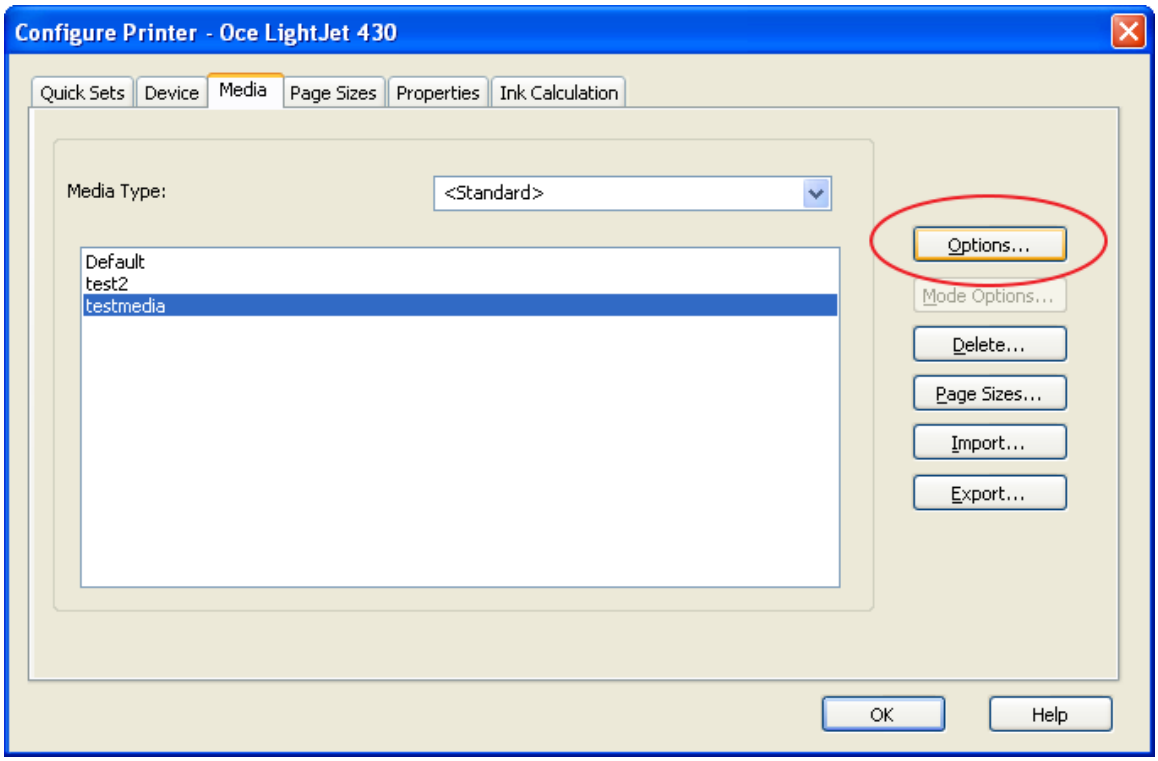
Fusion calibrations are linked to PosterShop Media Types (configured during "ONYX X10 Software and LightJet Printer Installation File Installation and Configuration" above), and those Media Types are linked to PosterShop Media. No actual calibration data is applied to image (job) data. The job is simply submitted to the Spooler with instructions to use the appropriate Fusion calibration at print time.

To link a media type to a media you can either edit the media in RIP Queue or the Media Manager. Before starting ensure that both computers can see each other via the network and that a Fusion Calibration has been completed on the LJFE (Spooler) computer.

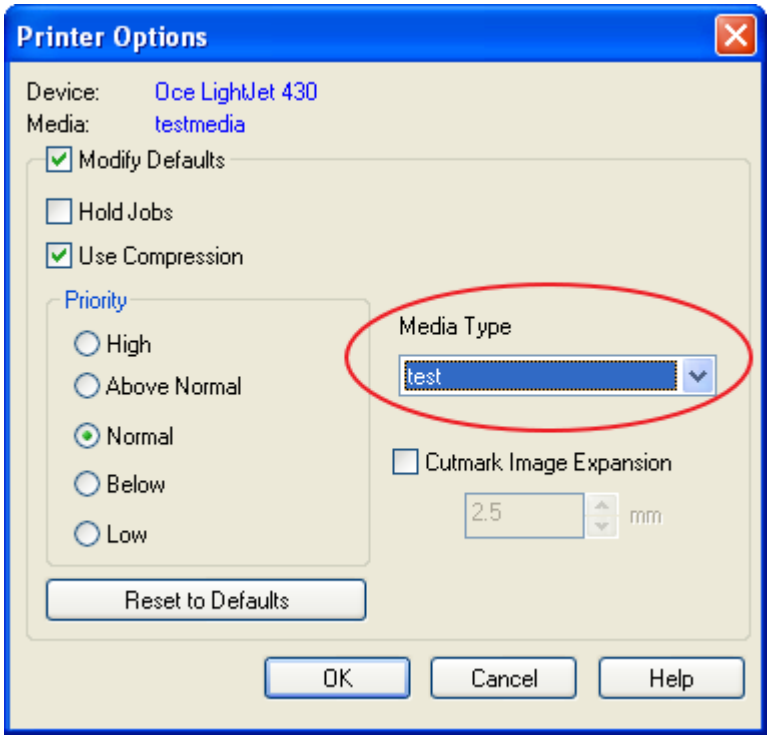
After linking the media to the media type, jobs can be processed using the desired media.

Link Media Type to Media Via Rip Queue

1. From ONYX RIP Queue select Configure Printer icon, then Media tab, then select the media to link to a media type Options:

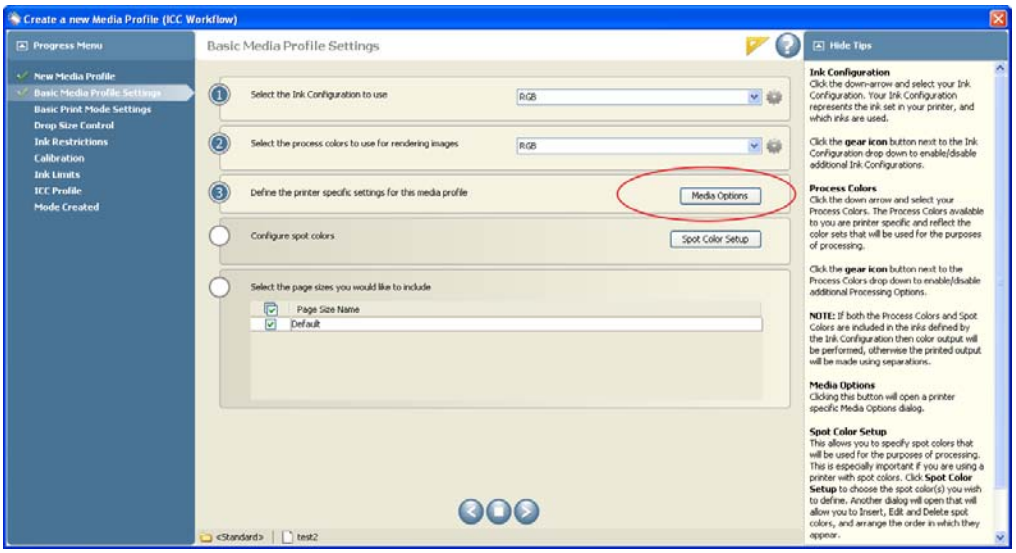


2. Select the media type to link to the chosen media:

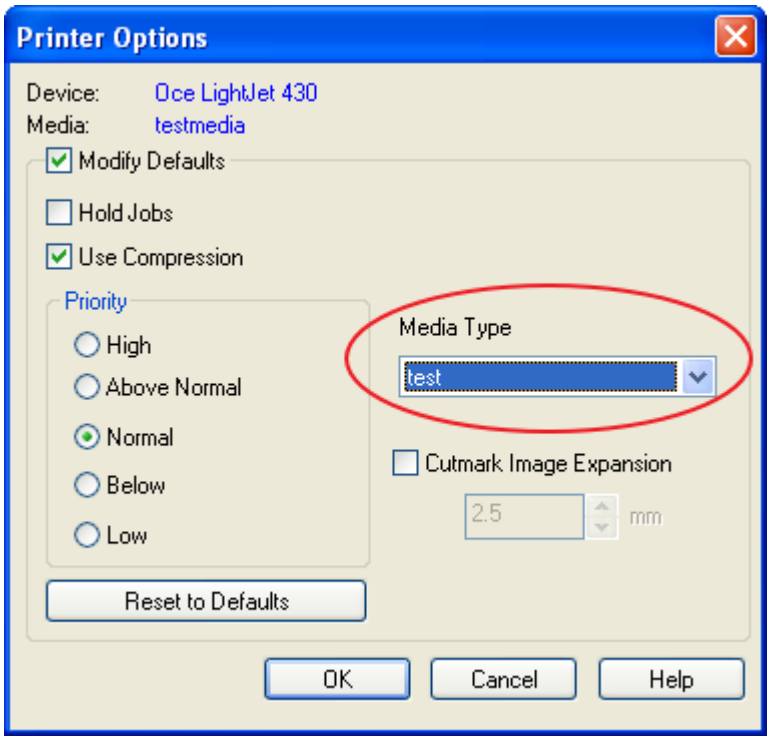


Link Media Type to Media Via ONYX PosterShop Media Manager

1. Edit the desired media from using the Media Manage and Select Media Options



2. Select the media type to link to the chosen.



Installing NetBEUI on Windows XP (Optional)

Either NetBEUI or TCP/IP can be used for LAN communication between the RIP Frame Spooler Controller PC and the Spooler PC. NetBEUI is a faster, simpler protocol than TCP/IP but requires additional effort to configure. With some older PC/network hardware the PC may not be able to send scan lines to the LightJet in time when printing many small images due to the overhead of the TCP/IP network. With newer faster hardware this may not be an issue. So the current recommendation is to use what is currently installed. If doing a new installation try using TCP/IP and only install NetBEUI if required. NOTE: A good idea before installing NetBEUI would be to upgrade the network NIC cards (if drivers are available for the installed OS's) from 100 mbit to 1000 mbit (gigabit ethernet), this could eliminate the need to install NetBEUI.

Microsoft NETBEUI installation information can be found here:

http://support.microsoft.com/kb/301041

Alternatively LightJet Service Bulletin #42 also contains NETBEUI installation instructions. Here are the contents of this bulletin edited slightly.

Installing NetBEUI on Windows XP
Microsoft has discontinued support for the NetBIOS Extended User Interface (NetBEUI) network protocol in Windows XP. It is a faster, simpler protocol than TCP/IP. The installation must be done manually.

To install NetBEUI follow these steps:

1. Insert the Windows XP CD-ROM and locate the VALUEADD directory.
2. Go to the subdirectory Valueadd\MSFT\Net\NetBEUI folder.
3. Copy **Nbf.sys** to the C:\Windows\System32\Drivers directory.
4. Copy **Netnbf.inf** to the C:\Windows\Inf hidden directory***.**
5. Click START>CONTROL PANEL and then double-click Network Connections.
6. Right-click the adapter you wish to add the NetBEUI protocol to, and then click Properties.
7. On the General tab, click Install.
8. Click Protocol, and then click Add.
9. In the list select NetBEUI and then click OK.
10. Reboot the computer after installation is complete.

The protocol should now be installed and working.

***** To make hidden folders visible do the following:

1. Click START>RUN, type Explorer and press Enter
2. Click Tools, then Folder Options and then select the View tab
3. Under Advanced Settings, click Show hidden files & folders under the Hidden Files & Folders folder.