



# Print Solutions from Atac

Newsletter for Asia Pacific Region

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## Bluecrest Releases Output Manager (Emtex) 3.2

This release provides the following new features:

**New Adobe PDF Library (APDFL) flattener** - A substantial change has been made in processing documents with transparent objects using Datalogics Adobe PDF Library (APDFL). Colour processing is improved, especially where the input file has an ICC profile, and native colour processing can now be used in RGB colour spaces. APDFL works in a similar way to Adobe Acrobat, which has a positive effect on results, especially in complicated scenarios with fonts, annotations and non-standard behaviour in PDF files. A small increase in performance is an added benefit.

The new flattener is enabled with three new commands. By default, the old flattener is used.

**Improved Reposition window** - Output Manager's User Interface's Reposition feature has been enhanced to allow the reposition of jobs both during normal printing and during printing with reversed side order.

**Digital signatures support** - Digital Signatures can now be added to PDF documents to authenticate the integrity of a document's content. Many businesses choose to take the electronic document route as often as possible, which makes sense, as electronic documents reduce printing costs by eliminating the need for paper, power and toner/ink. In addition, document storage becomes much more manageable since they reside on a hard drive rather than in a filing cabinet or box. With digital signatures, you can now protect PDF files against editing by third parties and ensure authenticity.

With PDF 2.0 the Digital Signature module in the PDF specification has been extensively modified. PDF 2.0 processors should support digital signatures based on the Cryptographic Message Syntax (CMS) and CAdES (CMS Advanced Electronic Signatures). Adding a digital signature to the PDF documents is PDF 2.0 compliant.

**Windows Server 2019 support** - Windows Server 2019 support has been added to Output Manager. This is the latest version of the server operating system by Microsoft, part of the Windows NT family of operating systems.

**Amazon Corretto 8** - Following Oracle Java licensing changes, Output Manager now uses Amazon Corretto Open Java Development Kit (OpenJDK).

**IJPDS Output supports new resolution** - A resolution of 1200x300 has been added to IJPDS Output.

**PostScript Input supports new Document Structuring Conventions (DSC) comment** - The PostScript Input client now supports %%ViewingOrientation DSC comment, which allows information about document rotation to be stored internally. The printing of PostScript files with portrait and landscape orientations combined in the same document is also supported.

**User Interface improvements** - During Output Manager launch, if there are many jobs in the Job Queue, a new message is displayed stating that Output Manager is starting and the job queue database is being rebuilt. This prevents signing in to Output Manager when the User Interface is displayed but is not responding to incoming commands. The sign in window is displayed after a successful rebuild of the queue.

When there are many jobs in the Job Queue, switching tabs in the Job Queue Manager could take longer than expected. The performance of this operation has been improved to be more efficient and faster.

Contact Atac today to obtain your free Output Manager (Emtex) 3.2 upgrade.

## Barr LPR/LPD Transfers

The LPR/LPD protocol has been around for many years now and was one of the first ways for university students to send print jobs to expensive shared university printers via TCP/IP. It was unheard of for a student to actually own their own printer!

The student software would issue a Line Print Request (LPR) which was sent to the TCP/IP address where the Line Print Daemon (LPD) software was running (usually a print room computer), for approval or rejection. The LPR header record sent included the print file size in bytes as well as the desired printer queue and print data type being sent. Additional, optional information included the sending user, department, banner page name, job id, host etc.

Data Types include ASCII, ASCII with ASA, FORTRAN, troff, Verbatim, Plot, DVI, Dittorf and pr. Barr Systems have extended the recognised Data Types with support for Barr Archive and Barr/DOS format files.

It is perfectly acceptable for an LPD to reject a print job and one of the most common reasons was because the print file size was larger than available local storage. How times have changed! Today, the LPR is more likely to be rejected for security reasons such as unknown user or print queue. The Barr software automatically reschedules any rejected job and tries again after five minutes, repeatedly until a transmission is successful.

BHCS' LPD setup allows the definition of named queues and data types for each. BHCS allows for a queue called <default>, which is automatically used if the requested queue does not exist. If the requested queue does not exist and the <default> queue does not exist, the job is rejected by the LPD.

In a similar fashion, each named queue has one or more data types defined. BHCS allows for a data type called <default> which is used if the requested data type does not exist. If the requested data type does not exist for a queue and the <default> data type does not exist, the job is rejected by the LPD.

So, for a high-security system with no <default> queue and no <default> data type, a sender must know the correct TCP/IP address, queue name and data type in order to successfully print a file. Conversely, an LPD with a <default> queue, which has a <default> data type, will accept almost any LPR job and try to print it.

When a BHCS LPR is formed, the job is first written to the local %TEMP% folder with any Overlays and Banners added in order to ascertain the correct filesize for the LPR Header record. (In some cases any inserted Overlays and/or Banner page(s) can add significantly to the file size.) Care should be taken to ensure the %TEMP% location does not become full, or further LPR transmissions are unable to complete.

Similarly, when a BHCS LPD receives a print job, it is first written to the %TEMP% location and only moved to Spool if/once it has been fully received. Again, a full %TEMP% folder will inhibit reception of transmitted files.

BHCS is designed to run as a set of Services, independent of whether a user is logged in or not. If the Services do not interact with any LAN locations or printers, they can be set to use LOCAL SYSTEM credentials and %TEMP% will be pointing at %WINDIR%\TEMP.

However, if the BHCS Services do interact with LAN locations or printers, they'll need actual user credentials (login name & password) and appropriate permissions assigned to that user. In this case, %TEMP% will be pointing at \\Users\%Username%\AppData\Local\Temp.

So if you're checking to ensure the TEMP location is not full, first examine the credentials for the BHCS Spool Core Service in order to ascertain the correct %TEMP% location.

Contact Atac for assistance with BHCS setup and operations.

### More information at...

<https://www.atac.com.au>

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# Barr Host Communications Server – Licensing & Activation

BHCS requires no hardware device for security. Instead BHCS uses a software license which is tied to the machine and requires renewing annually for BHCS to continue to function.

Following installation, the license must be activated within ten days.

You use License Manager when:

1. You first install the BHCS software. At the conclusion of the BHCS install, the License Manager window pops up for you to Install and Activate the license. This is usually done at the same time.
2. You want to move BHCS to a new machine. You Uninstall and De-Activate the license on the old machine, then install BHCS and Install and Activate the license on the new machine. Finally, run SETUP on the old machine to Uninstall the BHCS software and remove all traces (CLEAN).
3. You renew the license annually following payment. You Uninstall and De-Activate the (old) license, then Install and Activate the new license.
4. You want to move the license from machine to machine. Uninstall and De-Activate on the old machine, then Install and Activate on the new machine.
5. You've finished using BHCS and want to remove all traces from the PC. Uninstall and De-Activate the license, then run SETUP and UNINSTALL BHCS, choosing to CLEAN the PC, removing all traces of BHCS.
6. You are about to make hardware changes to the PC where BHCS is installed. It's safest to Uninstall/De-Activate the license before making any changes, then Install and Activate it afterwards. This is because the license is tied to the machine's configuration, with many hardware features taken into account.

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It's useful to think of the license as a TOKEN which is either present on the BHCS machine or at barrcentral.com. When you initially purchase BHCS, you are given a code to allow you to download the license from barrcentral and Activate it on your BHCS PC.

Once this has been done, the license (token) is present on the BHCS PC and it is no longer present at barrcentral.com.

To move the license to another PC, it's necessary to first put the license (token) back on barrcentral.com by License Manager's Uninstall and De-Activate option. You can then go to the new PC and load the license (token) to the new machine from barrcentral.com.

To renew the license after payment has been made for the BHCS Annual License Agreement (ALA), you must Uninstall & De-Activate the old license (token), putting it back on barrcentral.com. You can then Install and Activate the license (token), putting an updated version back on your BHCS PC. This updates the expiry date.

If your BHCS PC is Internet connected to barrcentral.com, the Install / Activate / Uninstall & De-Activate processes are done in seconds with just a few clicks of "Next".

If your BHCS PC is not Internet connected to barrcentral.com, you will be given a code to enter at a PC which is Internet connected to barrcentral.com. Barrcentral.com will then give you back a new code, to key in at the BHCS PC, to complete the process. This is necessary for both Installation & Activation, as well as Uninstallation & De-Activation, so the license (token) ends up in the right place.

If you don't Uninstall and De-Activate the license (token) properly, the token is lost and Barr must manually reset the license before you can Install it again.

Contact Atac if you have any upgrade or licensing queries.

## Q & A

**Q.** One of our Output Manager jobs has a profile entry IMAGE\_FRONT\_2=ABC-GD032\_6857, BACKGROUND. What does this do?

**A.** Whenever FEED is set to 2, ABC-GD032\_6857(.vdi) will automatically be placed in the background on every FRONT side. This is simulating a multi-bin printer with different stationery in each bin. So, when bin 2 is selected, one type of stationery is used and when bin 1 is selected another type is used. The .vdi file is usually a full page image of the stationery side being simulated; if IMAGE\_BACK\_2 is used as well, a stationery back image is applied to the BACK side of any FEED 2 pages.

**Q.** How are the SYSTEMPATH: and USERPATH: variables used in Output Manager?

**A.** GENERIC.CFG is where SYSTEMPATH: and USERPATH: are defined.

The syntax is:

MAP=SYSTEMPATH: , C:\MGR3.2

MAP=USERPATH: , C:\MGRUSER3.2

So SYSTEMPATH: expands to C:\MGR3.2 and USERPATH: expands to C:\MGRUSER3.2. These are the two locations chosen when you installed Output Manager. By referencing SYSTEMPATH: and USERPATH: variables in your profiles and set files, you have the ability to move either to a completely different location and you only have to change the one setting in GENERIC.CFG.

**Q.** We have noticed a warning message while opening the Spool Window of BHCS, where it complains about disk space.

**A.** From the Spool window, choose Tools | Configuration | Spool & Retain (TAB) | Disk Settings. Here you can set the thresholds for the Soft Limit (default is 20GB) and Hard Limit (default is 10GB). If disk space is less than the soft limit, when Spool is opened you'll see the warning message. If disk space is less than the hard limit, Spool activity is paused until more space is made available. Both settings are fairly conservative and can be reduced to say 1GB for the hard limit and 2GB for the soft limit.

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