



# Print Solutions from Atac

Newsletter for Asia Pacific Region

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## Encrypted NJE/IP Input Module

Barr Systems announce the release of the Encrypted NJE/IP Input Module (Encrypted Network Job Entry over IP). This module adds on to the Barr Host Communications Suite (BHCS). Encrypted NJE/IP connects to IBM mainframes and provides a powerful way to exchange print and job data sets between host and network.

The BHCS system initiates the session to the mainframe via Transport Layer Security (TLS). The mainframe sends BHCS a security certificate; BHCS accepts the certificate and replies. All subsequent communications are encrypted using the cipher provided by the mainframe. Should a network or other disruption to the connection occur, BHCS attempts to reconnect every 2 minutes and then reinitiates the encrypted connection.

The combination of BHCS and Encrypted NJE/IP provides many features and benefits:

- No VTAM configuration is needed on the mainframe.
- Support for TLS 1.2 or later.
- Data privacy, integrity, server, and client authentication are Public Key Infrastructure (PKI) based.
- Support for the highest level cipher provided by the mainframe.
- Auto recovery feature: will continue to try to reconnect on outages and alert specific personnel.
- NJE transmission speed up to 5 times faster than Enterprise Extender.
- Increased security over socket-based communication.
- Supports Virtual and Cloud environments.
- Cost savings by eliminating the need for SNA networks.
- Reduced expenses on hardware costs, maintenance and other fees.

Barr Systems has over 50,000 product installations worldwide, with a strong reputation for providing world-class products to companies of all sizes.

Atac has distributed and supported Barr Systems' products throughout the region for over 40 years.

Contact Atac to discuss your encrypted NJE requirements.

### More information at...

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

Email David Kirk

or call +61 (419) 962 386

# Bluecrest releases Output Manager & Output Enhancement Version 3.3

This release provides the following new features:

**PDF Bookmarks support** – Support for bookmarks has been added to PDF Input and PDF Output clients. It is now possible to preserve simple bookmarks in a PDF-to-PDF workflow.

**PDF Text Annotation support in Output Enhancement** – Support of PDF text annotations has been added to Output Enhancement. It is now possible to extract PDF text annotations in Output Enhancement.

## **Finishing support in Output Enhancement\Manager**

- Finishing commands are now preserved in AFP Input only.
- Output Enhancement has a new feature which allows you to add finishing commands. Output Enhancement supports corner stapling and edge stitch finishing operations.
- Finishing commands are preserved in AFP Output and can be executed on an IPDS printer with finisher.

**PDF Input preprocessor** – A new command has been added to PDF Input that can repair some issues in pdf input data. For example, incorrect object references or errors in cross reference table. The new command PDFIN\_PREPROCESSOR=TRYFIX runs this additional repair mechanism.

**PDF RIP2 multithreading** – Multithreaded processing has been introduced for PDF Input in RIP2 mode to speed up file processing. The number of threads can be controlled by the PDFIN\_PDF\_RIP\_CONCURRENCY command.

**Decoupling the RESOLUTION command for FOCA raster font and logical page in AFP – and IPDS Output** – A new set of RESOLUTION commands have been added for AFP Output which set specific resolution for logical pages and outline fonts to be converted to FOCA raster fonts. If they are present in the Profile, they take precedence over the RESOLUTION command. In addition, new values were added to specify the best logical page resolution depending on the logical page size. The new commands are:

For AFP Output:

- AFPOUT\_RESOLUTION
- AFPOUT\_PAGE\_RESOLUTION
- AFPOUT\_FOCA\_RASTER\_FONT\_RESOLUTION

For IPDS Output:

- IPDSOUT\_FOCA\_RASTER\_FONT\_RESOLUTION
- IPDSOUT\_PAGE\_RESOLUTION

**Support for Medium Orientation Triplet X'86'** – Support for Medium Orientation Triplet X'86' has been added to AFP Output. Now, the value of the Medium Orientation X'86' Triplet on Medium Descriptor (MDD) records in the Form Definition are preserved in an AFP Input to AFP Output workflow. New command is AFPOUT\_KEEP\_MEDIUM\_ORIENTATION.

**Improved support of AFPC Subset TIFF in Object Containers** – AFPC Subset TIFF image objects with an associated alpha channel can now be rendered correctly in output clients that do not support AFP Object Containers.

**Windows Server 2022 support** – Microsoft Windows Server 2022 support has been added for Output Manager. It is the latest version of the server operating system.

**JAWS has been removed** – Previously, the JAWS library was used to flatten PDFs containing transparencies or JBIG2 compressed images and convert AFP PDF object containers to images in PDF RIP2. The JAWS library has been replaced by the APDFL library. The JAWS library is not available in Output Manager 3.3.

**TLS 1.2 required for EngageOne Vault connection** – From Output Manager Maintenance Release 3.3.5, TLS 1.2 is the minimum required protocol version to communicate with the EngageOne Vault system.

If you are under maintenance, this upgrade is free; contact Atac for details.

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# BHCS Job Attributes

As print jobs arrive into the Barr Host Communications Suite (BHCS) Spool, you'll notice various attributes alongside each. A complete list of attributes is visible by right-clicking the job and choosing Properties.

What are all the various sections and where do the attributes get populated?

Sections include:

**Data Set Header** – includes General, RCCS, 3800, Output, Security, RSCS and Power sections. This info usually comes from mainframes and includes CLASS, FORM, UCS, JobName etc., info which applies to the entire Dataset (can comprise multiple print jobs).

**Data Set Header User Custom Section/LPD** – this info usually comes from a Unix HOST via LPR/LPD and includes LPD Queue, Host, Host IP, LPD Font, Username etc.

**Job Header** – includes General, Schedule, Security, Accounting, JES2 and Power sections. This info usually comes from mainframes and is per-job info.

**Job Trailer** – includes General and Accounting sections. These may include Start and Stop times, Total Lines of print, Execution Class etc.

As jobs arrive to specific BHCS destinations, any local hard-coded attributes you have setup are applied. For example, all LPD jobs could have the FORM changed to "LPD". All RJE jobs could have Class "J" applied. Any jobs polled in from disk might be set to print to a particular printer. These assignments are setup and applied on the BHCS PC; they don't come from the sending machine.

Finally, as jobs are fed into the Spool, each job is passed through the Override Table (OT). The OT comprises rules which have CONDITIONS and ACTIONS. Rules are evaluated from top to bottom of the OT; any Conditions which are true will cause the associated Actions to occur. Conditions can be complex, like (FORM="A" and CLASS="FRED") or if there are no Conditions, the Actions are executed UnConditionally.

Actions can reference other field attribute values or hard-coded values. For example:

CONDITION

NDHGCLAS="A" and NDHGFORM="FRED"

ACTION

NDHBPDEST="Xerox Nuvera" and NJHGFORM=NDHGFORM

Here if the Data Set Header Class = "A" and the Data Set Header Formname = "FRED", then the printer destination is set to "Xerox Nuvera" and the Job Header Form is set to the Data Set Header Form value.

Setting up BHCS involves defining source connectors for data arriving into BHCS, examining attributes which arrive with each job and then maybe further conditioning the job by a hard-coded or OT rule assignment. Attributes sent with the job may be changed by any hard-coded assignments and finally by matching OT rules.

The main object is to pre-assign jobs to printers by making job attributes match printer attributes. Jobs can be set to arrive into Spool in a HELD or READY state. Any READY jobs with attributes matching a READY printer will route to that printer.

Contact Atac for help automating your BHCS job reception, attribute assignment and job disposition.

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## Q & A

**Q.** We're trying to Activate our BHCS License manually, but it keeps saying "Invalid Activation Code".

**A.** When you Activate Manually, you open the License Wizard and choose Activate | Manually. You are given a License Key, a Version and a HW Code. You must take these three items to an Internet connected PC and enter them at the barrcentral.com site. You're given an Activation Code, which you must take back to the Barr PC and enter it to Activate.

The issue arises when you close the License Wizard panel, go and get the Activation Code, then re-open the License Wizard panel and enter the Activation Code. This won't work. Every time you open the License Manager window, a new HW code is generated, so you must LEAVE the License Manager window OPEN. Go and get the Activation Code and bring it back to enter into the STILL OPEN License Manager panel.

**Q.** Our usual print jobs from the mainframe are stuck in the BHJCS Spool and won't move. The usual printer to which they print has Class "U", but all the jobs are Class "H". Mainframe people say they have made no changes.

**A.** Further examination revealed that the banner page had, in fact, changed to a standard JES banner from the custom banner which had been in use. The Class was actually being extracted from the custom banner and the standard JES banner didn't have the Class in the expected position. The jobs were not assigned the correct Class and simply didn't route to any printers from Spool.

When somebody says "Nothing has changed", yet you are seeing something different happening, be sceptical! 😊

**Q.** Can we renew our Barr Annual License Agreement (ALA) for six months only?

**A.** It's an ANNUAL License Agreement and is only sold by Barr Systems in Annual increments. You can buy multiple years of ALA at today's prices, locking the price in and hedging against future price rises.

Barr Systems does not offer refunds for unused ALA.

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