

## Valid Page Area (VPA) in relation to the IAPS

**Intermate A/S**

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If you experience a VPA exception and you are not sure what provoked it, try to suppress VPA exceptions in Configuration > Services > Emulator Setup: Reporting Suppression and print the page again. The printout will now be processed and the output result may give you a hint of what may have caused the VPA Exception.

The Intermate Advanced Print Server (IAPS) gives you a number of possibilities in Configuration > Services > Emulator Setup: Valid Printable Area (VPA) to compensate for exceptions, without having to re-master the document.

### 1. VPA exception mechanisms.

1. The host sends a page element, that, when processed by the IPDS printer, exceeds the page border
2. The Printer sends a VPA exception to the host.
3. The host chooses to override the VPA and continue printing.
4. The printer must then process the element according to IPDS specifications. E.g. a barcode must be removed entirely, since missing bars may result in wrong readings, while text will be truncated and image will be clipped.

### 2. VPA Terms Explained.

#### Physical Page Size:

The paper dimensions of the physical page, aka. Media Presentation Space.

#### Logical Page:

The definition of the page on the host job (e.g. defined in a Printer File). This may often be defined as an arbitrary area, which the programmer has chosen to work on as a desktop area.

#### Printable Area PA:

The printable area defined in the printer, which is reported to the host along with the Physical page. The IAPS has a set of proprietary settings for VPA for supporting legacy printers and applications.

#### Valid Printable Area (VPA):

The common denominator, between the logical Page and the Printable Area.

#### VPA exception:

An exception sent by the printer to the host when printed elements exceeds the VPA

#### VPA exception suppression:

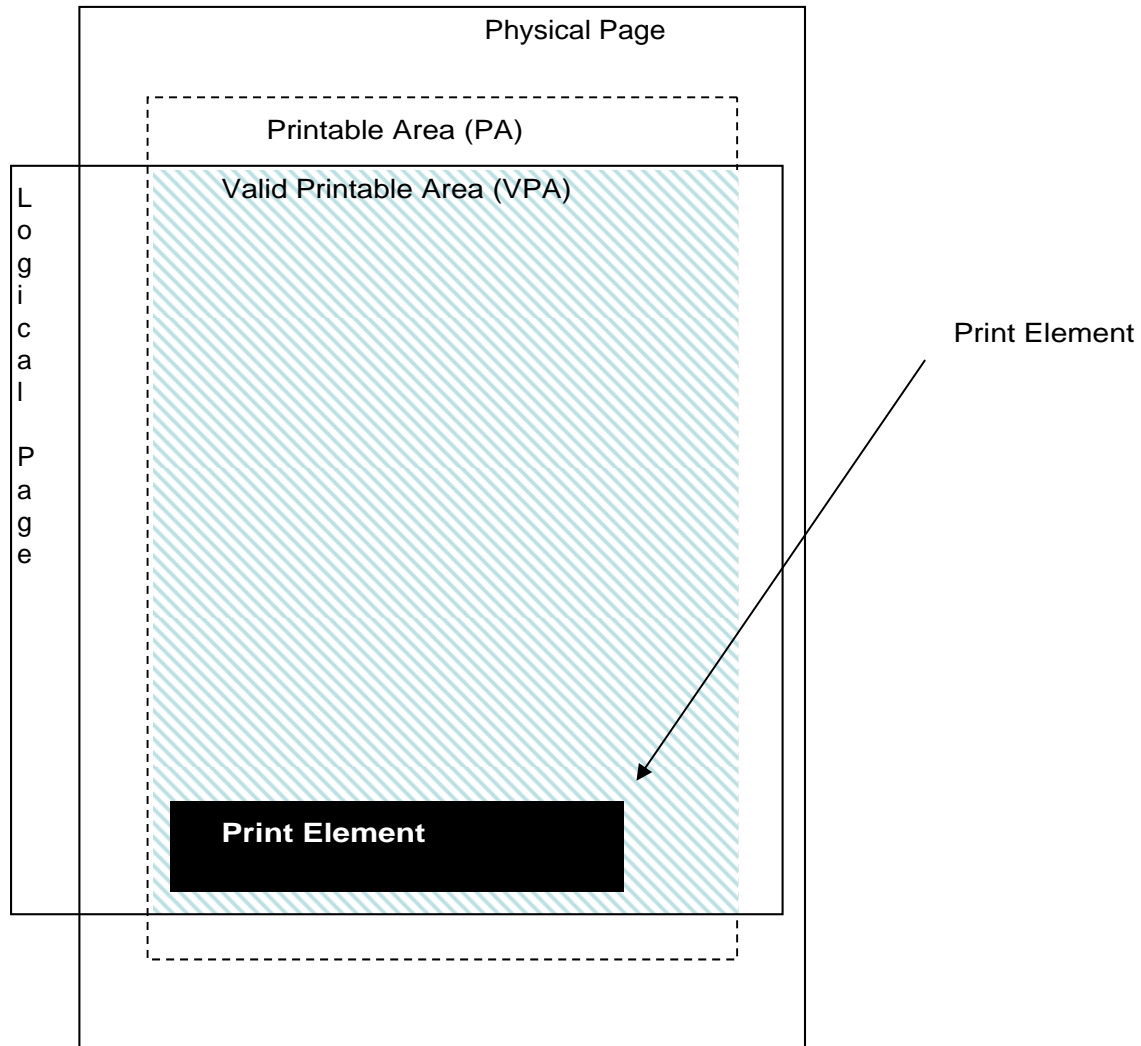
An option in the printer to suppress reporting of printing outside the VPA, which typically result in clipping or removal of the element exceeding the page.

#### Offset:

A proprietary adjustment of all printed elements, used for supporting legacy printers and applications. The offset has no effect on any of the above, but resembles moving the tractor feeder in a fanfold printer.

### 3. Border (Whole Page).

This setting is the default setting. It is also referred to as the **4028** or **Whole Page** setting. If the Print- Element exceeds the Valid Printable Area, a VPA Exception is reported to the host.

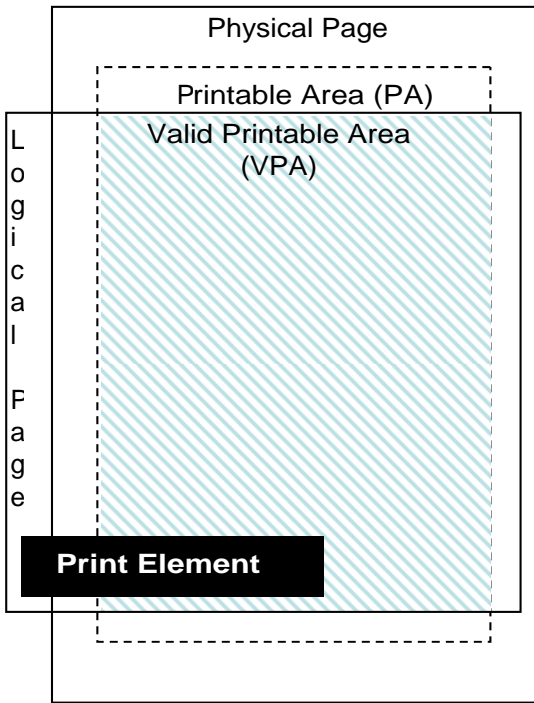


VPA = 4028/Whole Page  
Print element is within VPA  
No exception is generated.

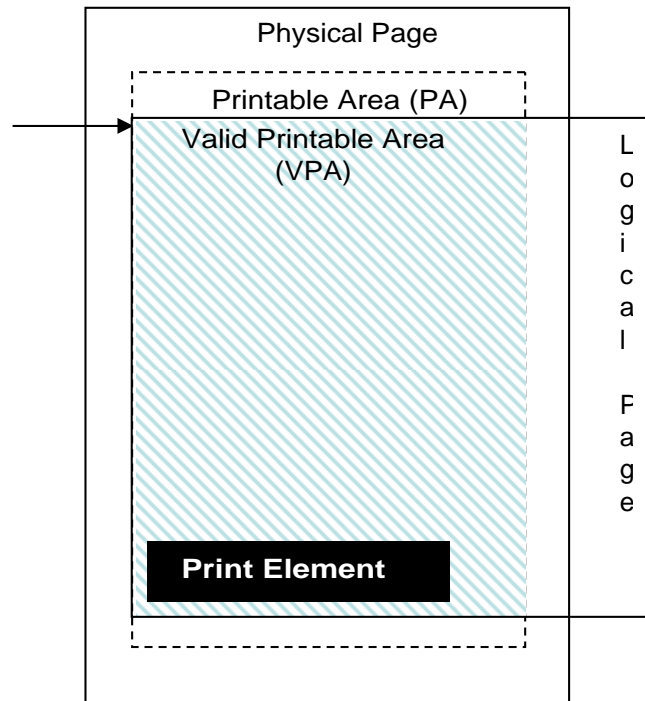
#### 4. Move (Print Page).

This setting is also referred to as the **Print Page** setting. If one or more VPA exception is generated, this setting moves the Logical Page inside the VPA. This is done by aligning the upper left corner (Origo) of the Logical Page to the top- and/or left edge of the Printable Area. VPA Exceptions are reported to the host.

#### Example 1:

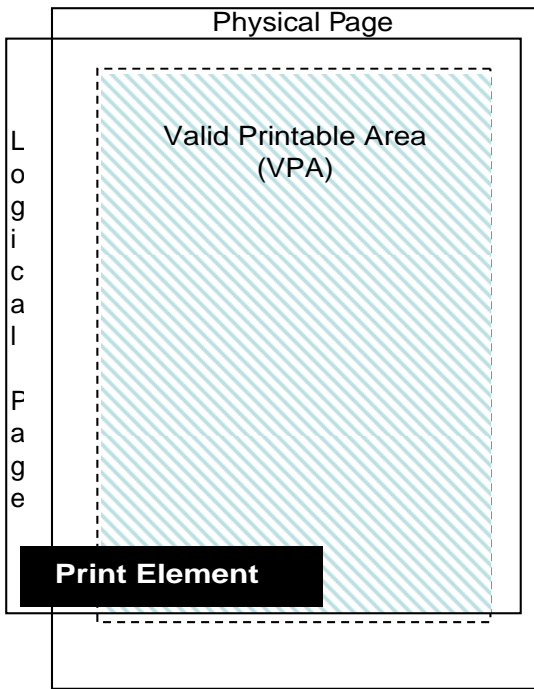


VPA = 4028/Whole Page  
VPA exception is generated

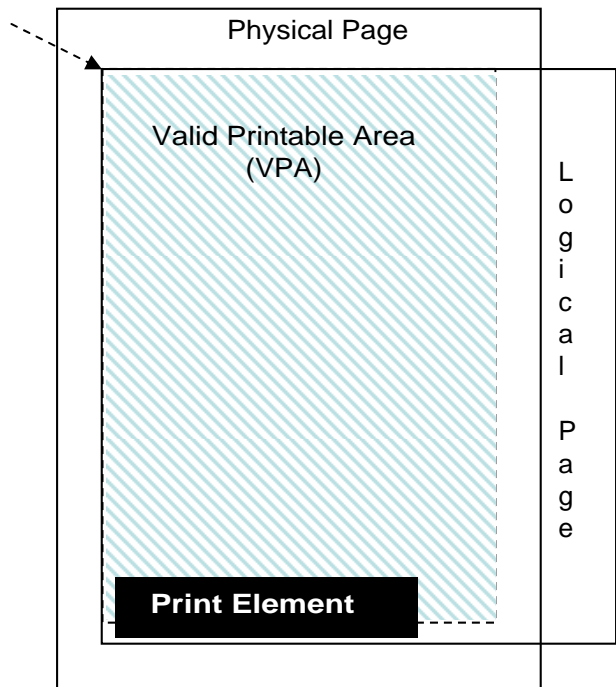


VPA option set to **Move**.  
Logical Page moved horizontal.  
Print element is within VPA

Example 2:



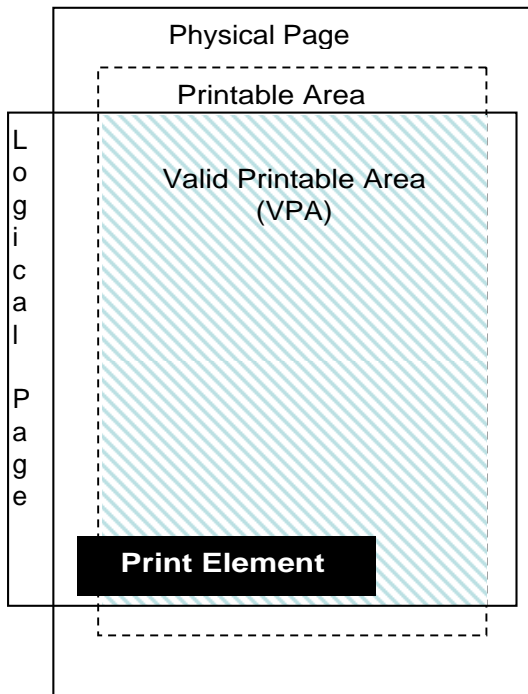
VPA = 4028/Whole Page  
VPA exception is generated



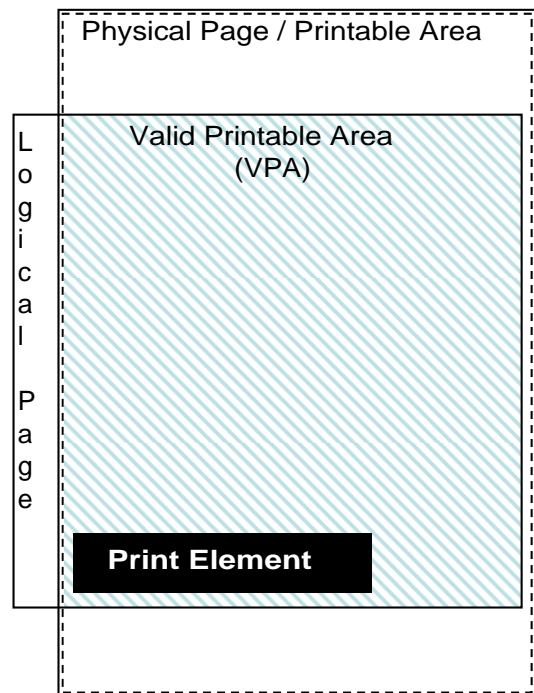
VPA option set to **Move**.  
Logical Page moved horizontal **and** vertical.  
Print element moved outside VPA  
VPA Exception is generated

**5. Edge (Physical Page).**

This setting is also referred to as the **Physical Page** setting. If one or more VPA exception is generated, the VPA is extended to cover all of the Physical Page by reporting a border of zero to the host. No VPA Exceptions are reported to the host.



VPA = 4028/Whole Page  
VPA exception is generated



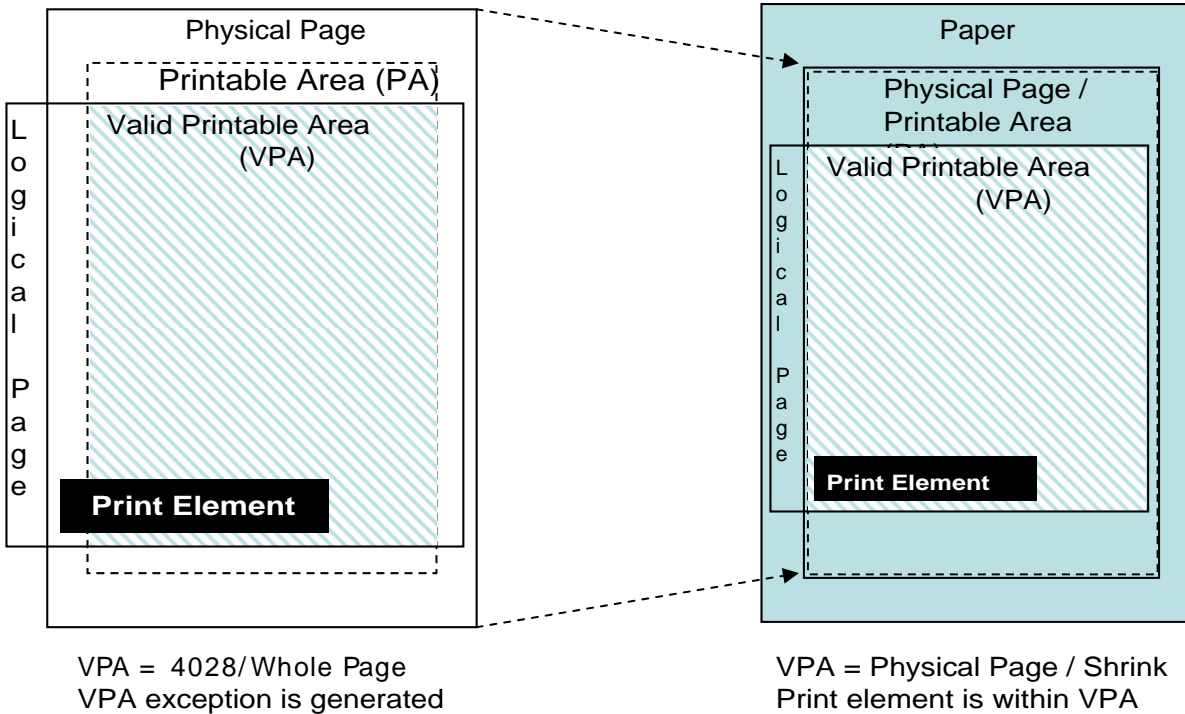
VPA = Physical Page  
Print element is within VPA

**NOTE:** This setting Requires Edge-to-edge printing capabilities of the printer.

**6. Fit (Full Page).**

This setting is also referred to as the **Full Page** setting. If one or more VPA exception is generated, the VPA is extended to cover all of the Physical Page by reporting a border of zero to the host. Besides this, the Physical Page, The VPA and the Logical Page are shrunk to enable the Print Element to fit within the VPA.

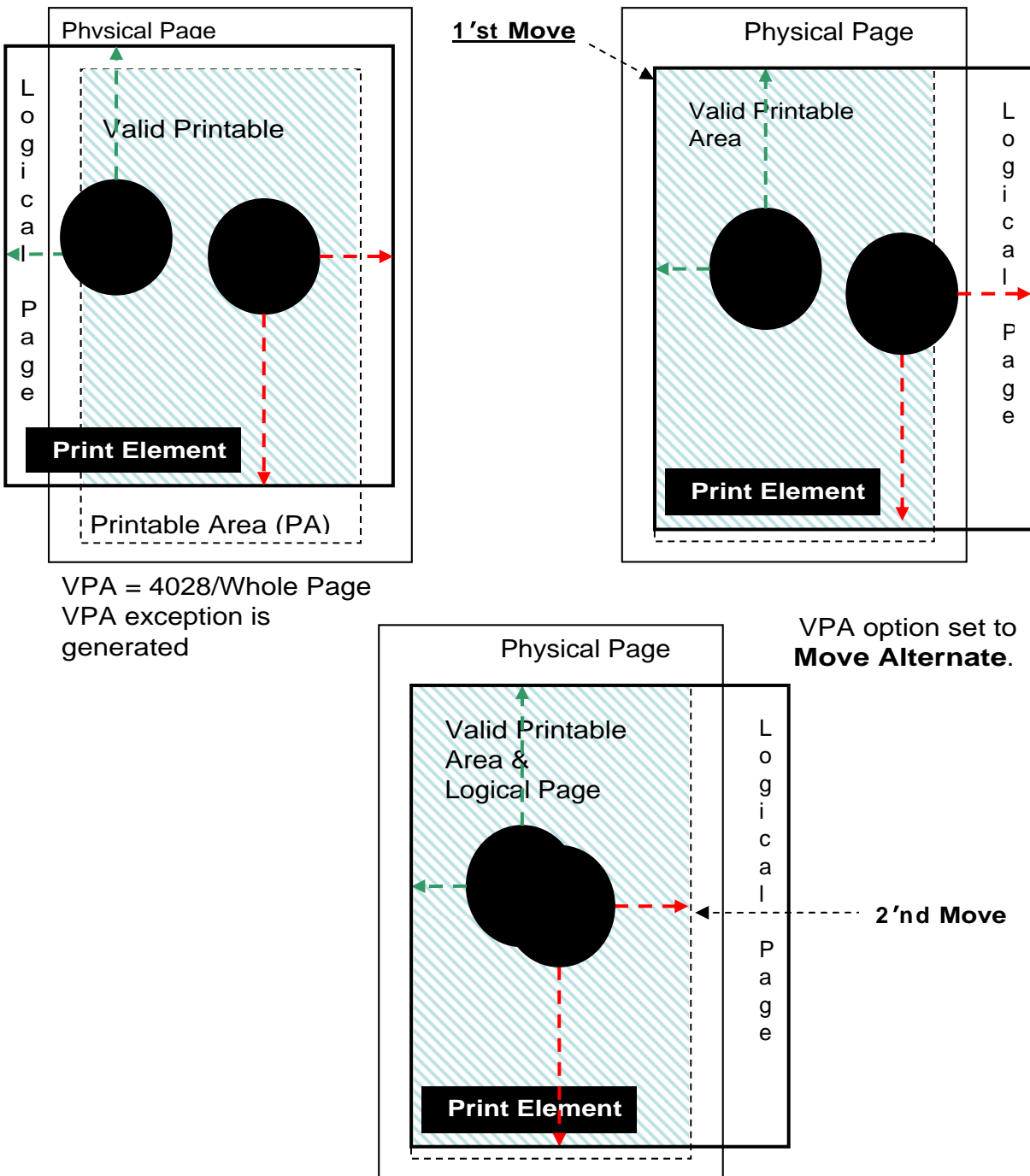
This setting distorts the height- and width ratio.



**NOTE:** Requires shrinking capabilities of the Backend.  
 The host still assumes page size as in the Edge setting

**7. Move Alternate (Print).**

This setting is also referred to as the **Print** Setting in the IBM Infoprint™ 24 series. If one or more VPA exception is generated, this setting - like the move setting - moves the upper left corner (Origo) of the Logical Page to the top- and/or left edge of the Printable Area. If a new VPA exception occurs and the offending Print Elements relates to the Right- or Bottom edge of the Logical Page, they are moved Leftwards and/or Upwards to fit inside the VPA. This setting maintains the Print Elements height- and width ratio, but distorts the Logical Page. This setting is often used in relation to overlays with rotated text, relative to the right and/or bottom edge.

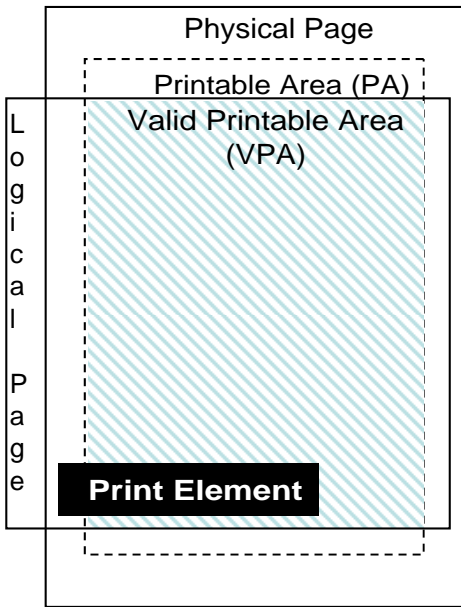


VPA = 4028/Whole Page  
VPA exception is generated

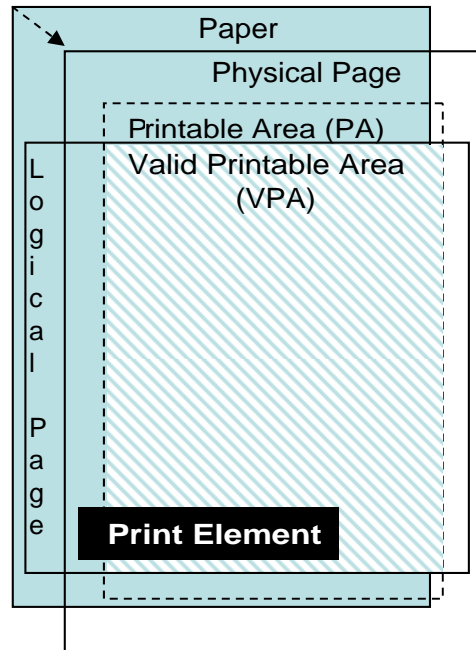
VPA option set to **Move Alternate.**

**8. Don't use Tray Offset to VPA exceptions.**

The tray offset is used to move the VPA in relation to the Paper, and thus has a different usage. Where the above settings manipulated the Logical-, Physical Page and the VPA in relation to each other, this kind of manipulation operates on the Logical-, Physical Page and the VPA – as a whole - in relation to the Paper (also called the Sheet or Physical Media), and subsequently cannot be used to avoid a VPA Exception.



VPA = 4028/Whole Page  
VPA exception is generated



VPA = 4028/Whole Page  
VPA exception is generated

**NOTE:** Resembles moving the tractor feeder in a fanfold printer

**9. IBM Emulations in relation to VPA**

The IAPS can emulate the following IBM Printer Types:

Type	Max Resolution	Print Area
4322	600 dpi	
4317	600 dpi	
4028	300 dpi	Printable Area is less than Paper Size
3812	240 dpi	Capable of Edge to Edge Print – Only enabled in the Postscript Backend.

For more information about these issues, please refer to the online help or consult your printer/finisher manual and IPDS Finishing literature. One good place to look is IBM's Redbook Series about Data Stream and Object Architectures: "Intelligent Printer Data Stream Reference" (S544-3417-06).