



GDS Page Description Language Specification v1.0

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About This Document

This document defines the GDS Page Description Language, developed for the gaming industry's printing requirements. The GDS Page Description Language is used to describe the output of a page, such as a gaming voucher. The output is defined in terms of regions that contain particular types of content—that is, text, graphics, or barcode—and in terms of templates that define the locations of defined regions.

The GDS PDL data is sent to a printer through GDS Printer Communication Protocol reports.

The focus of this specification is more to the semantics of the GDS Page Description Language, with some description of the syntax.

GDS (Gaming Device Standards)

GSA's Gaming Device Standards controls the flow of information between a slot machine and the array of peripheral devices operating inside it, such as bill validators, coin acceptors and ticket printers.

For more details about GSA, visit the Web site: <http://www.gamingstandards.com>

Conventions

The GDS PDL is a tag-based language. The format of the commands conforms to XML convention. Tags generally appear in start/end pairs, but self closing tags are also used.

- `<tag>content</tag>` and `<tag attribute="value"/>` are both acceptable.
- `<tag></tag>` and `<tag/>` both indicate no data in the element.

Attribute and element components in a command are detailed in separate tables in the following order:

- Attributes of the command element
- Child elements of the command element
- Attributes of child elements in the order the child elements are presented.
- Content of elements.

All commands are in ASCII, thus one character/digit equals one byte.

Terms

Page Description Language (PDL)	A method to describe the output of a page, such as a gaming voucher, to a printer. In this document, the PDL referred to is defined by GDS.
Print Job	The instruction to print given data with a specified printable template.
Printable Region	An area (content block) on the printed output that is self described by the syntax of the PDL and takes on the printed form of text, barcodes or graphics.
Printable Template (template)	A defined page format for printer output, consisting of associations of one or more defined printable regions.

Related Documents

See also the GDS Printer Communication Protocol document which describes the USB-based commands and events used in communications between the printer and its host device.

In addition, GDS will approve and publish pre-defined templates assigned GDS identifiers. These templates may be used by any manufacturer to dependably print documents using GDS printers, regardless of printer or host manufacturer.

Acknowledgements

The Gaming Standards Association would like to express its appreciation to all members of the GDS committee, past and present, for their significant contribution and dedication to the creation of this standard.

Revision History

The following table lists the changes made this document.

Version	Changes
1.0 2006/03/24	Standard approved by membership.
0.13 (draft) 2005/12/12	In the command chapter, specified the number of instances of the D element are required in the DPR and PT commands.
0.12 (draft) 2005/11/30	Made the following corrections: <ol style="list-style-type: none"> 1. Changed image in Figure 2.1 so that printable regions 2 and 3 are shown identically in the top and bottom pages. 2. Changed image in Figure 3.1 so that it is clear that the text is shown to be rotated and not the printable region. 3. PT command: Changed description of element D to make it clear that the characters “LR” and “CR” are not character representations of line feed and carriage return.
0.11 (draft) 2005/11/26	Changed capitalization in elements and attributes, so that elements are all capitalized and attributes are all lower case, or at least first letter of attribute is lower case and first letter of next ‘word’ is capitalized.
0.10 (draft) 2005/11/25	Converted to GSA format.
r1 – r9	Initial draft developed by the GDS committee, authored by John Hilbert.

1 Introduction

This document defines the GDS Page Description Language, developed for the gaming industry's printing requirements and is intended to be used within the GDS Printer Communication Protocol. Implementing a PDL is useful in reducing the printing time for documents that are printed repeatedly.

The GDS Page Description Language is a tag-based language used to describe the output of a page, such as a gaming voucher. The output is defined in terms of regions that contain particular types of content—that is, text, graphics, or barcode—and in terms of templates that define the locations of the defined regions to be used.

The GDS PDL data is sent to a printer through GDS Printer Communication Protocol reports.

1.1 Operating System Independent

This PDL considers the host from the perspective of the printer driver, whether in Microsoft® Windows® or an embedded real-time operating system (RTOS). It therefore uses ASCII content and tags to frame the content. The intent of this approach is to minimize the complexity of the parser required to deal with the syntax of the proposed language.

1.2 Content Blocks, Predefined or Downloaded

The GDS PDL makes use of a printer's capability to recognize defined content blocks, areas on the printed output that are self described by the syntax of the PDL and take on the printed form of text, barcodes, or graphics.

The printer can generate an output without the need for the EGM to send bulky bit mapped data to the printer. The content blocks can be downloaded or predefined and stored in the printer NVM. Either choice reduces the burden and level of complexity from the EGM's viewpoint, and provides a versatile and more expedient printer implementation.

1.3 Error Correction

The GDS PDL is to be used as part of a payload layer with respect to USB protocol and does not include error correction. The implementer has the responsibility of fault detection, retransmission, and other error condition handling that are part of the USB transport layer.

1.4 Extensibility

This PDL supports extensibility not only to allow for some differences in current printer suppliers and command sets, but also to allow for innovation and other evolutionary activity in the future. The GDS PDL provides the Hardware Extraction Layer that will export a common interface to the EGM. Thus, leaving the implementation below the Hardware Abstraction Layer completely open to the imagination and innovation of the printer supplier.

2 GDS PDL Component Overview

The GDS PDL uses three commands (detailed in chapter 3) to describe the output of a GDS printing device. These commands correspond to the three components of printer output: **Printable region** locations and content types are defined. **Templates** are then defined to include one or more defined regions. Finally, **print jobs** are defined which specify a template to use and the content to be printed using the template.

The following section provides an overview of these three components and their relationship to each other. Section 2.2 graphically describes their relationships.

2.1 Regions, Templates, and Print Jobs

2.1.1 Printable Region

Printer output is defined in terms of printable regions, or content blocks. Each printable region has certain required properties that describe its uniqueness. Examples of printable region properties are:

- X location

- Y location

- X size in dots

- Y size in dots

- degree of rotation: 0, 90, 180 or 270

Printable regions are stored in the printer and may be downloaded or fixed in memory.

2.1.2 Printable Template

One or more printable regions are associated with a printable template (template hereafter) to form a complete printed output of a particular type.

For example, a template may include text regions for a name and location, the current date and expiration, a validation number, and a currency value. A template may also include a barcode region and graphic regions.

Templates may be downloaded or fixed in memory, and are stored in the printer.

2.1.3 Print Job

A print job is the instruction to print content using a specified template. A print job will contain a reference to the template and the content (data) to be printed in each printable region.

In the GDS PDL, there are **three types of content** possible in the output of a printer:

- Text: font

- Graphics: type of graphics

- Barcode: symbology and sizing information

2.2 Printable Regions and Templates: Associations and Relationship

Figure 2.1 illustrates the relationship of templates and printable regions:

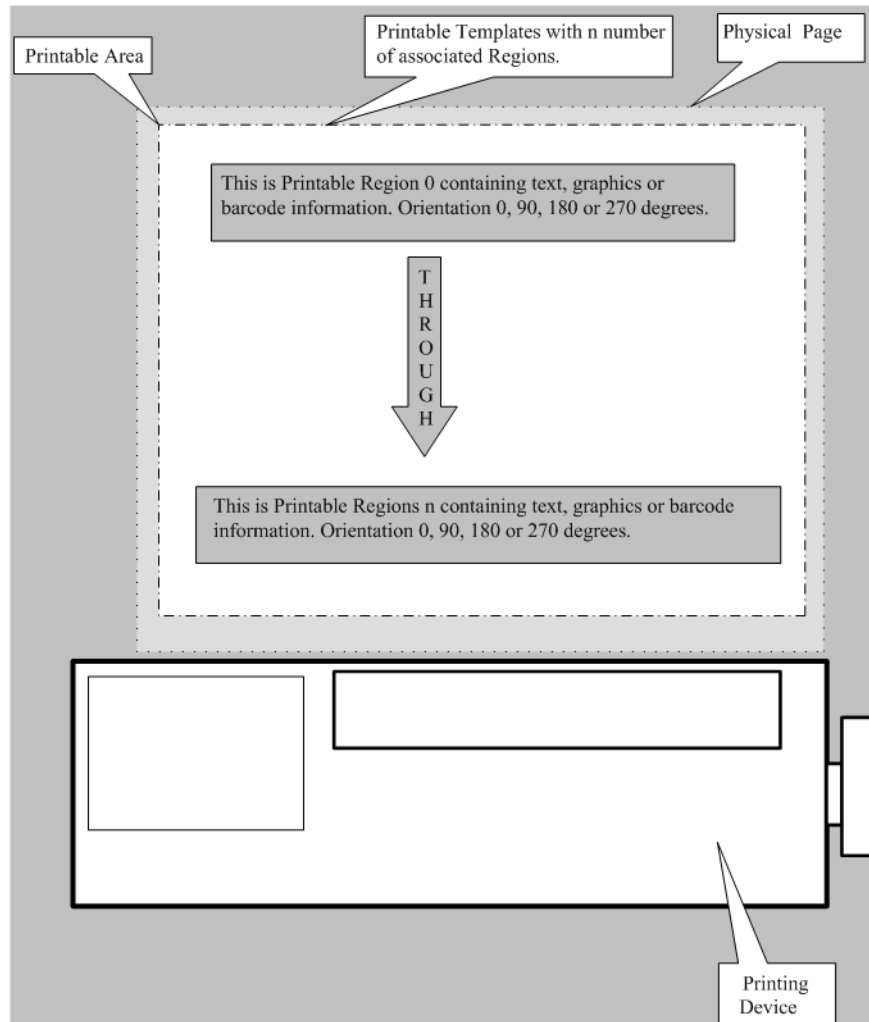


Figure 2.1 Templates and Printable Regions Relationship

The following graphic illustrates the associations between printable regions and templates:

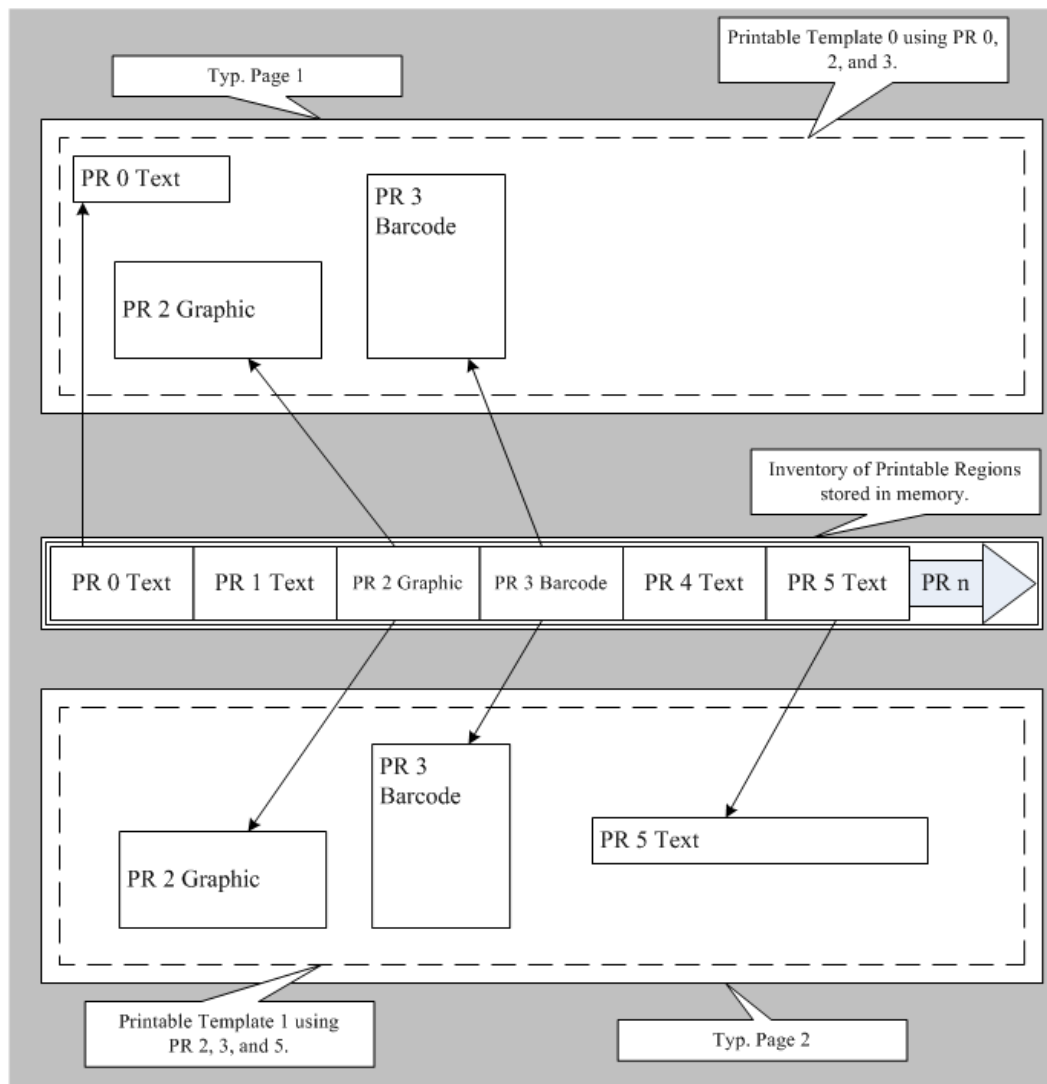


Figure 2.2 Associations between Printable Regions and Templates

3 Command Descriptions

The following table lists the GDS PDL commands:

Command	Tags	Description	Details
DPR	<DPR></DPR>	Define Printable Region 000 – 099: reserved for pre-defined 100 – 999: downloadable	page 6
DPT	<DPT></DPT>	Define Printable Template 000 – 099: reserved for pre-defined 100 – 999: downloadable	page 11
PT	<PT></PT>	Print Template	page 12

The following section detail the structure and use of the commands listed above. See [page iii](#) for conventions used in the GDS PDL.

3.1 DPR Command: Define a Printable Region

The **DPR**, Define Printable Region, command defines the properties of a content block, which may contain text, a barcode, or graphics.

3.1.1 Structure

The following is the structure of the **DPR** command. ("value" would be replaced with the appropriate property value).

```
<DPR id="value" x="value" y="value" dx="value" dy="value" rot="value"
    jst="value" type="value" m1="value" m2="value" attr="value">
    <D>value</D>
</DPR>
```

3.1.2 DPR Command Attributes

See section 3.1.3 for description of the **d** (data) element.

Attribute	Values	Description
id	000 – 999	Three-digit printable region identifier. 000 – 099 are reserved for predefined regions. 100 – 999 reserved for downloadable use.
x	00000 – 65536	Five-digit X (dot) axis start position in dots.
y	00000 – 65536	Five-digit Y (paper) axis start position in dots.
dx	00000 – 65536	Five-digit X (dot) axis length of the printable region in dots. Note that x + dx must not overflow the width of the print head in dots; else, the content block will be rejected and a printable region truncation error will result.
dy	00000 – 65536	Five-digit Y (paper) axis length of printable region in dots. Note that the y + dy may not exceed printable area in dots. If this is the case, the printable region will be rejected and a printable region truncation error will result.
rot	1 – 4	One-digit rotation of strings or data within printable region. See Figure 3.1 for an illustration. 1 = 0° 2 = 90° 3 = 180° 4 = 270°

Attribute	Values	Description
jst	1 - 3	<p>One-digit justification identifier. Defines justification of data within printable region with respect to top of printable region. See Figure 3.2 for an illustration.</p> <p>1 = left justification 2 = center justification 3 = right justification</p> <p><u>Text:</u> May be applied to any text Printable Region. <u>Barcodes & graphics:</u> Ignored.</p>
type	<p>(3-part value)</p> <p>1st part: F, G, or B</p> <p>2nd part: = (equal sign)</p> <p>3rd part: 000 - 999</p>	<p>Three-part printable region identifier, comprised of a letter, an equal sign, and three-digit value that points to an element in the data structure of Printer Metrics (refer to the GDS Printer Communication Protocol). Format defined below.</p> <p>This is the print object (barcode, font or graphic) used to format the data from the command to define the template. Tag is one byte ASCII.</p> <p>Format:</p> <p>1st part, tag, a letter F, G, or B, where: F, font: Used when the printable region holds text. G, graphics: Used when printable region holds graphics. B, barcode. Used when printable region holds barcode.</p> <p>2nd part, an '=' (equal) sign. Must be followed by a three digit number.</p> <p>3rd part, a three-digit number. Points to an element in font, graphic, or barcode data structure of Printer Metrics.</p> <p>If the tag is F, the element in the data structure of Printer Metrics will be a font type.</p> <p>If the tag is B, the element in the data structure will be a barcode standard.</p> <p>If the tag is G, the element in the data structure will be an actual graphics file that needs to be imaged.</p> <p>Examples:</p> <p>F=005 // Points to Font [5] in data structure. G=105 // Points to Graphic [105] in data structure. B=015 // Points to Barcode Symbology [015] in data structure.</p>

Attribute	Values	Description
m1	text or barcode: 1 - 6 graphic: 0	One-digit print object multiplier 1: <u>Text</u> : font width multiplier. Range 1 digit: '1'-'6'. <u>Barcode</u> : narrow bar width or modulo bar width. Range 1 digit: '1'-'6'. <u>Graphic</u> : always '0'.
m2	text: 1 - 6 barcode: 0 or 2 - 24 graphic: 0	Print object multiplier 2: <u>Text</u> : Font height multiplier. One-digit value. Range 1 - 6 <u>Barcode</u> : wide bar width. One or two-digit value. 0 for modulo width barcodes, or 2 - 24 <u>Graphic</u> : always 0.
attr	text: 001 or 002 barcode: 048 or 406 graphic: 000	Three digit object printing attribute. This contains special instructions on how to treat the print objects within the printable region: <u>Text</u> : 001 = normal 002 = inverse print <u>Barcode</u> : height of barcode in dots. 048 - 406 <u>Graphic</u> : always 000

The figure below demonstrates the various orientations for the given rotational field, and the location of the origin reference points x and y relative to the printable region box for each orientation.

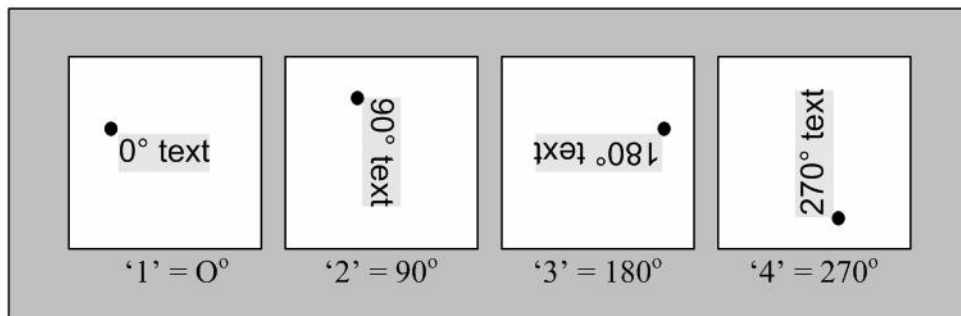


Figure 3.1 Printable Region Orientation and (0,0) Origin Reference Points

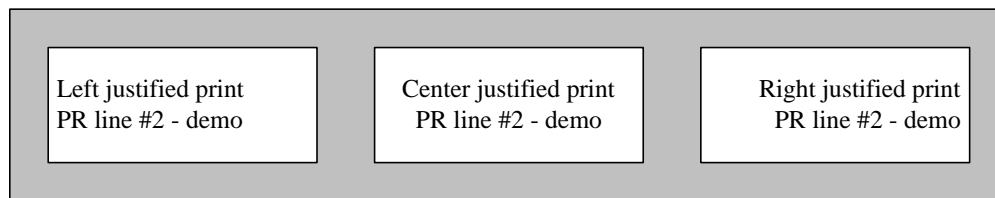


Figure 3.2 Text May Be Justified in a Printable Region

3.1.3 DPR Command Elements

Element	Value	Description
D	[variable]	<p>Data to be printed. This element is required. Only one instance of this element can be included in the DPR command.</p> <p>Default data can be stored in flash. If the default data is not modified, the default data will be printed.</p> <p>(no data): Entering no data in this field will cause the default data to be printed. Both <D></D> and the self closing tag <D/> indicates no data. Note that there must be no data in this field if the type tag is G.</p> <p>" " (a space): Entering a space, i.e. SP, causes the field to be blank.</p> <p>"ABC": Entering these letters will cause a new value of 'ABC' to be printed in this field.</p>

3.1.4 DPR Command Example: using Font Number 008

```
<DPR id="103" x="00122" y="00520" dx="00031" dy="00520" rot="4"
  jst="1" type="F=008" m1="1" m2="1" attr="001">
  <D></D>
</DPR>
```

3.1.5 DPR Command Example: using Font Number 008 with Self Closing Tag

```
<DPR id="103" x="00122" y="00520" dx="00031" dy="00520" rot="4"
  jst="1" type="F=008" m1="1" m2="1" attr="001">
  <D/>
</DPR>
```

3.1.6 DPR Command Example: using Font Number 003 with Default Text

```
<DPR id="104" x="00208" y="01027" dx="00089" dy="01020" rot="4"
  jst="2" type="F=003" m1="2" m2="2" attr="001">
  <D>CASHOUT TICKET</D>
</DPR>
```

3.1.7 DPR Command Example: using Font Number 008

```
<DPR id="144" x="00125" y="00008" dx="00370" dy="00031" rot="1"
  jst="1" type="F=008" m1="1" m2="1" attr="001">
  <D></D>
</DPR>
```

3.1.8 DPR Command Example: using Graphic Number 008

```
<DPR id="104" x="00208" y="01027" dx="00089" dy="01020" rot="4"
  jst="0" type="G=008" m1="0" m2="0" attr="001">
  <D></D>
</DPR>
```

3.1.9 DPR Command Example: using Barcode Symbology Number 003

```
<DPR id="135" x="00202" y="00263" dx="00108" dy="00624" rot="4"
  jst="0" type="B=003" m1="4" m2="8" attr="108">
  <D></D>
</DPR>
```

3.2 DPT Command: Define a Printable Template

The **DPT**, Define Printable Template, command defines a printable template and the defined printable regions associated with the template.

Note: **DPT** definitions are always loaded into RAM. The size of the template is defined by the Printer Metric Table and is fixed.

3.2.1 Structure

The following is the structure of the **DPT** command.

```
<DPT id="TemplateId">idvalue1 idvalue2 ... idvaluen</DPT>
```

"TemplateId" would be replaced with the appropriate printable template identifier, and "idvalue" values would be replaced with the associated printable region identifiers.

3.2.2 DPT Command Attribute

Element	Value	Description
id	000 – 999	Three-digit printable template identifier. 000 – 099 are reserved for predefined regions. 100 – 999 reserved for downloadable use.

3.2.3 DPT Command Content

Content	Value	Description
idvalue1 ...idvaluen	000 – 999	Three-digit resident printable region identifiers used in the format of this ticket. These fields are the method by which all printable regions used on a ticket are linked together to define the Printable Template. The order of the printable region in this list is important because print data sent with the DPT command must be in the order of printable region identifiers in this list. The printable regions with identifiers used to define a given template must have been already defined via appropriate DPR command. If the DPT command contains unknown printable regions identifiers, the printer will report an error.

3.3 PT Command: Print Template

The **PT** command is the instruction to print a page using the defined printable template and the content provided in the defined printable regions.

3.3.1 Structure

The following is the structure of the **PT** command. This structure also illustrates the use of start/end tags or a self closing tag for elements with no data. ("value" would be replaced with the appropriate values, such as identifiers or content.)

```
<PT id="value">
  <D pRoI="value" clr="1">value</D>
  ...
  ...
  <D clr="1">value</D>
  <D></D>
  <D clr="1"/>
</PT>
```

3.3.2 PT Command Attribute

Attribute	Value	Description
id	000 – 999	Three digit printable template identifier.

3.3.3 PT Command Element

Element	Value	Description
D	[variable]	<p>Printable region data in an order matching the template list of the selected template definition. One or more instances of this element must be included in the PT command.</p> <p><u>Text</u>: For a printable region containing text, a carriage return (0x0D), line feed (0x0A), or a combination of the two (0x0D 0x0A) results in a new line. If this combination is seen immediately following the ‘>’ or ‘<’ field divider character, this will be interpreted as an editor line break, and not a new line in the printable region. This can be helpful when building the DPT commands in a word processor. If a blank line is desired as the first text line in a printable region, then a space character must proceed the carriage return/line feed combination so that it will not be interpreted as a line break.</p> <p><u>(No data)</u>: Including no data, <D/> or <D></D>, defines an empty data field for the corresponding printable region. Default data will be printed.</p>

3.3.4 D Element Attributes

Attribute	Value	Description
pRoI	1 – 3	<p>Optional one-digit printable region of Interest indicator. Defines the printable region as a field of interest for tracking purposes. The printer will report back to the EGM after this printable region is printed, as determined by the printer.</p> <p>Values outside the range will cause the printer to report an error to the EGM.</p> <p>This attribute can be applied to up to three data fields. The printer has the responsibility of reporting back to the EGM when the pRoI is completed. This attribute is optional and may be changed at will by the EGM.</p>
clr	(variable, color name)	<p>Optional one-digit indicator of a color printable region. If this attribute is not included, the printer will default to black color. The printed color depends on the used paper. The printer does not guarantee colored regions.</p> <p>Note: Color is dependent on the chemistry of the printer paper.</p> <p><u>Barcode</u> regions: must be black. Using this attribute in a barcode region is meaningless.</p>

Appendix A PDL Syntax and Sample Tickets

The first section, [A.1](#), in this appendix shows sample tickets that use predefined templates along with the corresponding GDS PDL **PT** commands.

The second section, [A.2](#), shows a dynamic ticket along with the **DPR**, **DPT**, and **PT** commands that define the printable regions, assign them to a template, and then print the ticket.

A.1 Sample Predefined Tickets

Summary of pre-defined tickets stored in printer flash and not changeable.

Predefined Template ID	Ticket Description	Validator Scannable	Potential Function	Page
000	Cashout Ticket	YES	Standard cashout ticket	15
001	Jackpot Ticket	YES	Over limit ticket	16
002	Demo Ticket	YES	Demonstration purposes	17
003	Void Ticket	NO	Void ticket for diagnostic and testing purposes	18
004	Jackpot Receipt	NO	Over limit ticket, handpay only	19
005	Voided Demo Ticket	NO	Void ticket for demonstration purposes	20
006	Voiding Ticket	NO	To void a partially completed ticket due to a power hit, etc.	21
007	Cashout Receipt	YES	Handpay cashout receipt which is game recognizable	22
008	Cashout Receipt	NO	Handpay cashout receipt which is not recognizable by a validator	23
009	Generic Ticket	YES	Standard ticket format, all data is sent dynamically to the printer	24
010	Offset Generic Ticket	NO	Standard offset barcode format, all data is dynamic	24
011	Generic "Voiding" Ticket	NO	Same format as the Voiding Ticket, except all phrases are dynamic	24

A.1.1 000: Predefined Cashout Ticket

Validator scannable. Standard cashout ticket.

Predefined template 000 is the standard cashout ticket used for regular payout. Its barcode is positioned to allow bill validator acceptance. A sample of the cashout ticket is shown below.



To print this ticket, issue the **PT** command shown below.

```
<PT id="000">
  <D pRoI="1">00-0000-0000-5366-8153</D>      // PProfInterest
  <D>YOUR ESTABLISHMENT</D>
  <D>YOUR LOCATION</D>
  <D>CITY / STATE / ZIP</D>
  <D></D>                                     // empty tag indicating default data
  <D/>                                       // self closing tag indicating default data
  <D>00-0000-0000-5366-8153</D>
  <D>01/01/1991</D>
  <D>00:02:21</D>
  <D>TICKET # 0010</D>
  <D>FIFTY DOLLARS AND NO CENTS</D>
  <D></D>
  <D>$50.00</D>
  <D></D>
  <D>30 days</D>
  <D>MACHINE# 0</D>
  <D>000000000053668153</D>
</PT>
```

A.1.2 001: Predefined Jackpot Ticket

Validator scannable. Over limit ticket.

Predefined template 001 is the Jackpot Ticket. The barcode is positioned to allow bill validator scanning. This ticket can be used for a large denomination cash out.



To print this ticket, issue the **PT** command shown below.

```
<PT id="001">
  <D pRoI="1">00-0000-0000-2209-3617</D>    // PProfInterest
  <D>YOUR ESTABLISHMENT</D>
  <D>YOUR LOCATION</D>
  <D>CITY / STATE / ZIP</D>
  <D></D>
  <D>00-0000-0000-2209-3617</D>
  <D>01/01/1991</D>
  <D>00:02:31</D>
  <D>TICKET # 0011</D>
  <D>TWENTY FIVE DOLLARSS AND NO CENTS</D>
  <D></D>
  <D>$25.00</D>
  <D>30 days</D>
  <D>MACHINE# 0</D>
  <D>000000000022093617</D>
</PT>
```


A.1.3 002: Predefined Demo Ticket

Validator scannable. Ticket for demonstration purposes.

Predefined template 002 is the Demo Ticket shown below. It has the barcode positioned to allow bill validator scanning. This ticket can be used for testing and demonstration purposes.



To print this ticket, issue the **PT** command shown below.

```
<PT id="002">
  <D pRoI="1">00-0000-0000-7375-1872</D>      // PRefInterest
  <D>YOUR ESTABLISHMENT</D>
  <D>YOUR LOCATION</D>
  <D>CITY / STATE / ZIP</D>
  <D></D>
  <D></D>
  <D>00-0000-0000-7375-1872</D>
  <D>01/01/1991</D>
  <D>0:02:40</D>
  <D>TICKET # 0012</D>
  <D>TWENTY FIVE DOLLARS AND NO CENTS</D>
  <D></D>
  <D>$25.00</D>
  <D></D>
  <D>30 days</D>
  <D>MACHINE# 0</D>
  <D>000000000073751872</D>
</PT>
```

A.1.4 003: Predefined Void Ticket

Not validator scannable. Void ticket for diagnostic and testing purposes.

Predefined template 003 is the Void Ticket shown below. It has the barcode positioned to prevent bill validator scanning. This ticket can be used for printing sample hand pay style tickets.



To print this ticket, issue the **PT** command shown below.

```
<PT id="003">
  <D>YOUR ESTABLISHMENT</D>
  <D>YOUR LOCATION</D>
  <D>CITY / STATE / ZIP</D>
  <D>$25.00</D>
  <D>TWENTY FIVE DOLLARS AND NO CENTS</D>
  <D></D>
  <D>01/01/1991</D>
  <D>00:02:49</D>
  <D>TICKET # 0013</D>
  <D></D>
  <D>00-0000-0000-2474-6825</D>
  <D><D/>
  <D>30 days</D>
  <D>MACHINE#0</D>
  <D>000000000024746825</D>
</PT>
```

A.1.5 004: Predefined Jackpot Receipt

Not validator scannable. Over limit ticket, handpay only.

Predefined template 004 is the Jackpot Receipt shown below. It has the barcode positioned to prevent bill validator scanning. This ticket can be used as a receipt for a large denomination hand pay cash out.



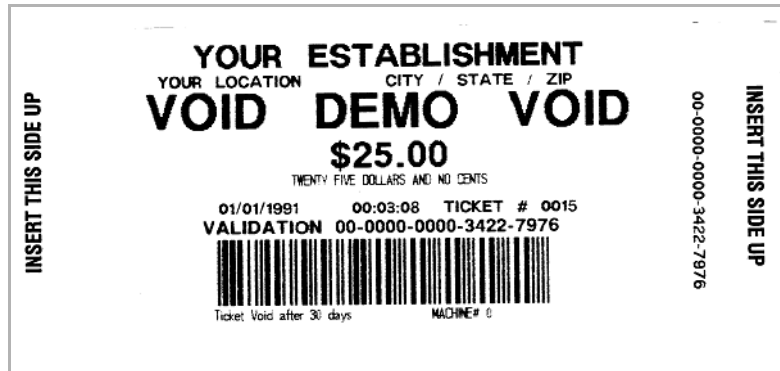
To print this ticket, issue the **PT** command shown below.

```
<PT id="004">
  <D pRoI="1">00-0000-0000-7640-5080</D>      // PProfInterest
  <D>YOUR ESTABLISHMENT</D>
  <D>YOUR LOCATION</D>
  <D>CITY / STATE / ZIP</d>
  <D></D>
  <D>$25.00</D>
  <D>TWENTY FIVE DOLLARS AND NO CENTS</D>
  <D></D>
  <D>01/01/1991</D>
  <D>00:02:58</D>
  <D>TICKET # 0014</D>
  <D></D>
  <D>00-0000-0000-7640-5080</D>
  <D></D>
  <D>30 days</D>
  <D>MACHINE# 0</D>
  <D>000000000076405080</D>
</PT>
```

A.1.6 005: Predefined Voided Demo Ticket

Not validator scannable. Void ticket for demonstration purposes.

Predefined template 005 is the Voided Demo Ticket shown below. It has the barcode positioned to prevent bill validator scanning. This ticket can be used for printing samples and testing of hand pay style receipt tickets.



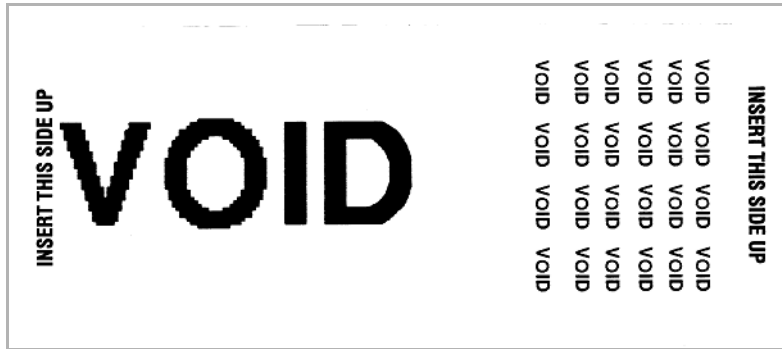
To print this ticket, issue the **PT** command shown below.

```
<PT id="005">
  <D pRoI="1">00-0000-0000-3422-7976</D>      // PProfInterest
  <D>YOUR ESTABLISHMENT</D>
  <D>YOUR LOCATION</D>
  <D>CITY / STATE / ZIP</D>
  <D></D>
  <D>$25.00</D>
  <D>TWENTY FIVE DOLLARS AND NO CENTS</D>
  <D></D>
  <D>01/01/1991</D>
  <D>00:03:08</D>
  <D>TICKET # 0015</D>
  <D></D>
  <D>00-0000-0000-3422-7976</D>
  <D></D>
  <D>30 days</D>
  <D>MACHINE# 0</D>
  <D>000000000034227976</D>
</PT>
```

A.1.7 006: Predefined Voiding Ticket

Not validator scannable. Voids a partially completed ticket due to a power failure, etc.

Predefined template 006 is the Static Voiding Ticket shown below. It has all "Void" content resident in the printer and is used to void a partially printed ticket (as could be the case during a power hit).



To print this ticket, issue the **PT** command shown below.

```
<PT id="006">
  <D></D>
  <D></D>
  <D></D>
</PT>
```

A.1.8 007: Predefined Cashout Receipt

Validator scannable. Handpay cashout receipt that is game recognizable.

Predefined template 007 is the Cashout Receipt shown below. It has the barcode positioned to allow bill validator scanning. This ticket can be used as a hand pay ticket and can be recognized by the game as a hand pay ticket.



To print this ticket, issue the **PT** command shown below.

```
<PT id="007">
  <D pRoI="1">00-0000-0000-3754-4486</D>      // PProfInterest
  <D>YOUR ESTABLISHMENT</D>
  <D>YOUR LOCATION</D>
  <D>CITY / STATE / ZIP</D>
  <D></D>
  <D>00-0000-0000-3754-4486</D>
  <D>01/01/1991</D>
  <D>00:03:25</D>
  <D>TICKET # 0017</D>
  <D>TWENTY FIVE DOLLARS AND NO CENTS</D>
  <D></D>
  <D>$25.00</D>
  <D></D>
  <D>30 days</D>
  <D>MACHINE# 0</D>
  <D>000000000037544486</D>
</PT>
```

A.1.9 008: Predefined Cashout Receipt

Not validator scannable. Handpay cashout receipt that is not recognizable by a validator.

Predefined template 008 is the Handpay Cashout Receipt shown below. It has the barcode positioned to prevent bill validator scanning. This ticket can be used as a regular limit handpay ticket.



To print this ticket, issue the **PT** command shown below.

```
<PT id="008">
  <D pRoI="1">00-0000-0000-8920-2741</D>      // PProfInterest
  <D>YOUR ESTABLISHMENT</D>
  <D>YOUR LOCATION</D>
  <D>CITY / STATE / ZIP</D>
  <D></D>
  <D>$25.00</D>
  <D>TWENTY FIVE DOLLARS AND NO CENTS</D>
  <D></D>
  <D>01/01/1991</D>
  <D>00:03:35</D>
  <D>TICKET # 0018</D>
  <D></D>
  <D>00-0000-0000-8920-2741</D>
  <D></D>
  <D>30 days</D>
  <D>MACHINE# 0</D>
  <D>000000000089202741</D>
</PT>
```

A.1.10 009: Predefined Generic Ticket

Validator scannable. Standard ticket format. All data is sent dynamically to the printer.

Predefined template 009 is the Generic Ticket. Its format is identical to the Cashout Ticket, predefined template 000, except all information on the ticket is sent dynamically by the host.

In the case of the predefined template 000 Cashout Ticket, the phrases "Cashout Ticket" and "Validation", and the sentence "Ticket void after 30 days" which appear on the ticket are all stored on the printer as part of the predefined 000 ticket.

In the case of this predefined template 009, Generic Ticket, the content of these fields must be sent by the host in the **PT** command string.

This ticket has its barcode positioned to allow bill validator scanning.

A.1.11 010: Predefined Offset Generic Ticket

Not validator scannable. Standard offset barcode format. All data is dynamic.

Predefined template 010 is the Offset Generic Ticket. Its format is identical to the Handpay Cashout Receipt, predefined template 008, except all information on the ticket is sent dynamically by the host.

In the case of the predefined template 008 Handpay Cashout Receipt, the phrases "Cashout Receipt" and "Validation", and the sentence "Ticket void after 30 days" which appear on the ticket are all stored in the printer as part of the template.

In the case of this predefined template 010 ticket, the content of these fields must be sent by the host in the **PT** command string.

This ticket has its barcode positioned to prevent bill validator scanning.

A.1.12 011: Predefined Generic "Voiding" Ticket

Not validator scannable. Same format as the Voiding Ticket, except all phrases are dynamic.

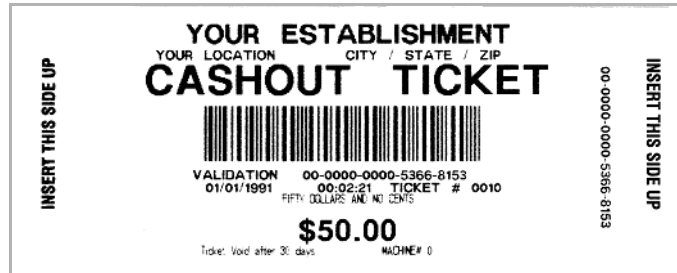
Predefined template 011 is the Generic Voiding Ticket. Its format is identical to the Voiding Ticket, predefined template 006, except all information on the ticket is sent dynamically by the host.

In the case of the predefined template 008 ticket, all words "Void" appearing on the ticket are stored in the printer as part of the template.

In the case of this predefined template 011 ticket, the content of all the fields (between the "<>" delimiters of the **PT** string for template 006) must be sent by the host in the **PT** command string.

A.2 100: Dynamic Cashout Ticket

Validator scannable. Standard cashout ticket. The following is an example of a dynamic definition and print command for a cashout ticket.



To print the ticket shown above, you must issue the **DPR**, **DPT**, and **PT** commands defined in the following sections.

A.2.1 Define Printable Regions

The following **DPR** commands define the printable regions for the Cashout Ticket shown above.

```
<DPR id="144" x="00125" y="00008" dx="00370" dy="00031" rot="1" jst="1"
type="F=008" m1="1" m2="1" attr="001">
  <D></D>
</DPR>

<DPR id="101" x="00104" y="01027" dx="00065" dy="01020" rot="4" jst="2"
type="F=008" m1="2" m2="2" attr="001">
  <D></D>
</DPR>

<DPR id="102" x="00122" y="01027" dx="00031" dy="00502" rot="4" jst="2"
type="F=008" m1="1" m2="1" attr="001">
  <D></D>
</DPR>

<DPR id="103" x="00122" y="00520" dx="00031" dy="00520" rot="4" jst="1"
type="F=008" m1="1" m2="1" attr="001">
  <D></D>
</DPR>

<DPR id="104" x="00208" y="01027" dx="00089" dy="01020" rot="4" jst="2"
type="F=003" m1="2" m2="2" attr="001">
  <D>CASHOUT TICKET</D>
</DPR>

<DPR id="110" x="00358" y="00822" dx="00031" dy="00210" rot="4" jst="1"
type="F=008" m1="1" m2="1" attr="001">
  <D>VALIDATION</D>
</DPR>

<DPR id="111" x="00358" y="00607" dx="00031" dy="00607" rot="4" jst="1"
type="F=008" m1="1" m2="1" attr="001">
  <D></D>
</DPR>
```

```
<DPR id="112" x="00383" y="00841" dx="00031" dy="00220" rot="4" jst="2"
type="F=008" m1="1" m2="1" attr="001">
  <D></D>
</DPR>

<DPR id="113" x="00383" y="00616" dx="00031" dy="00180" rot="4" jst="2"
type="F=008" m1="1" m2="1" attr="001">
  <D></D>
</DPR>

<DPR id="114" x="00383" y="00435" dx="00031" dy="00434" rot="4" jst="1"
type="F=008" m1="1" m2="1" attr="001">
  <D></D>
</DPR>

<DPR id="115" x="00398" y="01027" dx="00024" dy="01020" rot="4" jst="2"
type="F=007" m1="1" m2="1" attr="001">
  <D></D>
</DPR>

<DPR id="116" x="00419" y="01027" dx="00024" dy="01020" rot="4" jst="2"
type="F=007" m1="1" m2="1" attr="001">
  <D></D>
</DPR>

<DPR id="118" x="00491" y="01027" dx="00069" dy="01020" rot="4" jst="2"
type="F=005" m1="2" m2="2" attr="001">
  <D></D>
</DPR>

<DPR id="119" x="00500" y="00987" dx="00024" dy="00327" rot="4" jst="3"
type="F=007" m1="1" m2="1" attr="001">
  <D> Ticket Void after </D>
</DPR>

<DPR id="120" x="00500" y="00650" dx="00024" dy="00193" rot="4" jst="1"
type="F=007" m1="1" m2="1" attr="001">
  <D></D>
</DPR>

<DPR id="121" x="00500" y="00452" dx="00024" dy="00366" rot="4" jst="1"
type="F=007" m1="1" m2="1" attr="001">
  <D> Ticket Void after </D>
</DPR>

<DPR id="135" x="00202" y="00263" dx="00108" dy="00624" rot="4" jst="2"
type="B=003" m1="4" m2="8" attr="108">
  <D></D>
</DPR>
```

A.2.2 Define Printable Template

The following **DPT** command defines template 100, associating with it the printable regions defined in the **DPR** commands from the previous section.

```
<DPT id="100">100 144 101 102 103 104 110 111 112 113 114 115 116 118 119
120 121 135 </DPT>
```

A.2.3 Print Template

The following **PT** command is the instruction to print a ticket with the data specified using dynamic template 100.

```
<PT id="100">
  <D pRoI="1">00-0000-0000-5366-8153 </D>    // Print Region of Interest
  <D>YOUR ESTABLISHMENT</D>
  <D>YOUR LOCATION</D>
  <D>CITY / STATE / ZIP</D>
  <D></D>
  <D></D>
  <D>00-0000-0000-5366-8153</D>
  <D>01/01/1991</D>
  <D>00:02:21</D>
  <D pRoI="2">TICKET # 0010</D>                // Print Region of Interest
  <D>FIFTY DOLLARS AND NO CENTS</D>
  <D></D>
  <D></D>
  <D>$50.00</D>
  <D></D>
  <D>30 days</D>
  <D pRoI="3">MACHINE# 0</D>                    // Print Region of Interest
  <D>000000000053668153</D>
</PT>
```

END OF DOCUMENT

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