The PRINTLINE/LAYOUT command changes
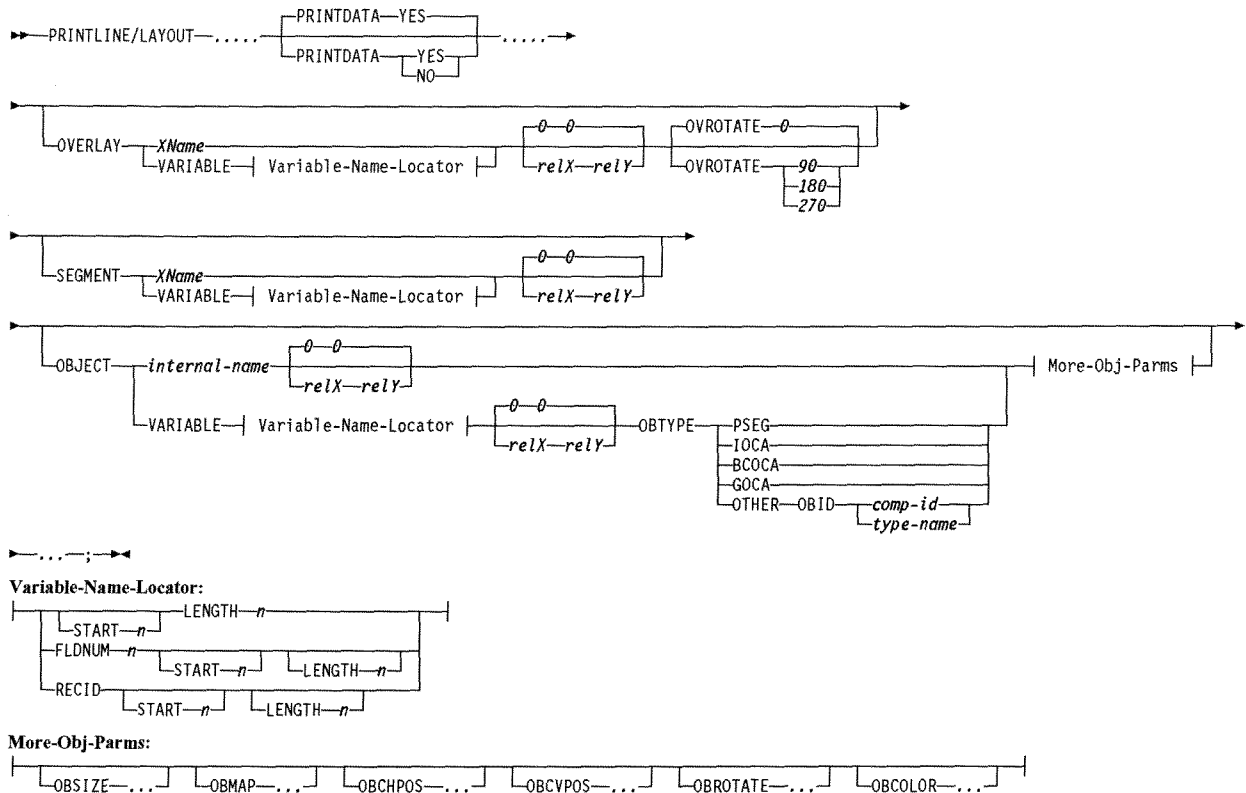
```
                              ┌─PRINTDATA─YES─────┐
►►─PRINTLINE/LAYOUT─.....─────┤                   ├─.....─►
                              └─PRINTDATA─┬─YES─┐ ┘
                                          └─NO──┘
```

```
►──────────────────────────────────────────────────────────────────────────►
   └─OVERLAY─┬─XName──────────────────────┬─┬────────┬─┬─OVROTATE─0──────┐
             └─VARIABLE─┤ Variable-Name-Locator ├─┘  │ 0─0    │ └─OVROTATE─┬─90──┤
                                                     └─relX─relY┘          ├─180─┤
                                                                           └─270─┘
```

```
►────────────────────────────────────────────────────────────────►
   └─SEGMENT─┬─XName──────────────────────┬─┬────────┬─┐
             └─VARIABLE─┤ Variable-Name-Locator ├─┘  │ 0─0    │
                                                     └─relX─relY┘
```

```
►──────────────────────────────────────────────────────────────────────────────────────────►
   └─OBJECT─┬─internal-name─┬────────┬──────────────────────────────────────────┬─ More-Obj-Parms ┤
            │               │ 0─0    │                                          │
            │               └─relX─relY┘                                         │
            └─VARIABLE─┤ Variable-Name-Locator ├─┬────────┬─OBTYPE─┬─PSEG────────┤
                                                 │ 0─0    │        ├─IOCA────────┤
                                                 └─relX─relY┘       ├─BCOCA───────┤
                                                                   ├─GOCA────────┤
                                                                   └─OTHER─OBID─┬─comp-id───┬─┘
                                                                                └─type-name─┘
```

```
►──...─;─►◄
```

Variable-Name-Locator:

```
├─┬──────────────────┬─LENGTH─n────────────┤
  └─START─n─┘
  ├─FLDNUM─n─┬──────────┬─┬──────────┐
  │         └─START─n─┘  └─LENGTH─n─┘
  └─RECID─┬──────────┬─┬──────────┐
          └─START─n─┘  └─LENGTH─n─┘
```

More-Obj-Parms:

```
├─┬─────────┬─┬────────┬─┬──────────┬─┬──────────┬─┬──────────┬─┬──────────┤
  └─OBSIZE─...─┘ └─OBMAP─...,─┘ └─OBCHPOS─...─┘ └─OBCVPOS─...─┘ └─OBROTATE─...─┘ └─OBCOLOR─...─┘
```

Figure 1. syntax of modified PRINTLINE and LAYOUT commands

Notes:

1. If you code a (PRINTLINE/LAYOUT) with variable resource names for a SEGMENT, OVERLAY, or OBJECT and have no FIELD commands associated with it, the variable resource names will print as if you had coded a normal PRINTLINE or LAYOUT command. If you do not want the names to print, either code one or more FIELD commands or the subcommand PRINTDATA NO.

2. These changes are for the PRINTLINE and LAYOUT commands only. You cannot code variable resource names on an XLAYOUT.

OVERLAY Specifies the placement of an overlay relative to the location specified in the (PRINTLINE) command in which the OVERLAY subcommand was named. The PAGEFORMAT OVERLAY command may contain the named overlays. The maximum number of overlays specified for a PAGEFORMAT including the (PRINTLINE) OVERLAY subcommand is 254.

The OVERLAY can be identified by specifying a name (XName) or by getting the name from the input data record (use VARIABLE Variable-Name-Locator).

XName This is the user-access name (ie external name) It can be unquoted or quoted with descriptor tags, indicating the data type (ASCII for example) of the data in the field.

unquoted-name An unquoted external name can be up to 6 characters. It will be folded to upper case, have an "O1" prefix added to it, and translated to EBCDIC codepage 500 if necessary.

quoted-name with no data tag A quoted external name can be up to 8 characters. No translation will be done. It will be of the data type (EBCDIC or ASCII) as dictated by the system platform. If not 8 bytes long, it will be padded on the right with EBCDIC or ASCII blanks.

C'quoted-name' This quoted external name can be up to 8 characters. No translation will be done. It will be of the data type (EBCDIC or ASCII) as dictated by the system platform. If not 8 bytes long, it will be padded on the right with EBCDIC or ASCII blanks.

E'quoted-name' This quoted external name can be up to 8 characters. It will be translated (if necessary) to EBCDIC and padded with EBCDIC blanks if it it isn't 8 bytes long.

A'quoted-name' This quoted external name can be up to 8 characters. It will be translated (if necessary) to ASCII and padded with ASCII blanks if it it isn't 8 bytes long.

X'hex-digit-pairs' This quoted external name can be up to 8 characters (16 hex digits). No translation will be done. If less than 8 characters are coded the name will be padded on the right with blanks of the platform type where the page definition was generated (ASCII on AIX & NT, EBCDIC otherwise). The user can avoid the padding by coding all 16 hex digits.

VARIABLE Indicates that the user-access name for this overlay is to be gotten from the data. The "Variable-Name-Locator" field will dictate where in the data to get the name.

Variable-Name-Locator Describes where in the data the overlay name is located.

START n The starting position in the data record to get the overlay name. The first data byte position of the input record is 1. If START is not coded 1 is assumed.

LENGTH n Length of field. Specifies the number (n) of bytes to process from the data record, beginning with the position specified in START.

FLDNUM n START n LENGTH n Field number (Record Layout and XML Pagedefs only). This is the same as in the FIELD command. The overlay name is taken from the "n"th field of the input data record. START n and LENGTH n describe which portion of the "n"th field is used. If omitted the entire field is used to form the overlay name.

RECID   Get the name from the record id (Record Layout and XML Pagedefs only) This is the same as in the FIELD command. Use START n and LENGTH n to use only a portion of the record id, or leave them out to use the entire record id.

SEGMENT Specifies the placement of a segment relative to the location specified in the (PRINTLINE) command in which the SEGMENT subcommand was named. The PAGEFORMAT SEGMENT command may contain the named segments. The maximum number of segments specified for a PAGEFORMAT including the (PRINTLINE) SEGMENT subcommand is 127.

The SEGMEMT can be identified by specifying a name (use XName) or by getting the name from the input data record (use VARIABLE Variable-Name-Locator).

XName   This is the user-access name (ie external name) of the segment. It can be unquoted or quoted with descriptor tags, indicating the data type of the data in the field.

unquoted-name   An unquoted external name can be up to 6 characters. It will be folded to upper case, have an "O1" prefix added to it, and translated to EBCDIC codepage 500 if necessary.

quoted-name with no data tag A quoted external name can be up to 8 characters. No translation will be done. It will be of the data type (EBCDIC or ASCII) as dictated by the system platform. If not 8 bytes long, it will be padded on the right with EBCDIC or ASCII blanks.

C'quoted-name'   This quoted external name can be up to 8 characters. No translation will be done. It will be of the data type (EBCDIC or ASCII) as dictated by the system platform. If not 8 bytes long, it will be padded on the right with EBCDIC or ASCII blanks.

E'quoted-name'   This quoted external name can be up to 8 characters. It will be translated (if necessary) to EBCDIC and padded with EBCDIC blanks if it it isn't 8 bytes long.

A'quoted-name'   This quoted external name can be up to 8 characters. It will be translated (if necessary) to ASCII and padded with ASCII blanks if it it isn't 8 bytes long.

X'hex-digit-pairs'   This quoted external name can be up to 8 characters (16 hex digits). No translation will be done. If less than 8 characters are coded the name will be padded on the right with blanks of the platform type where the page definition was generated (ASCII on AIX & NT, EBCDIC otherwise). The user can avoid the padding by coding all 16 hex digits.

VARIABLE Indicates that the user-access name for this segment is to be gotten from the data. The "Variable-Name-Locator" field will dictate where in the data to get the name.

Variable-Name-Locator Describes where in the data the segment name is located.

> **START n** The starting position in the data record to get the segment name. The first data byte position of the input record is 1. If START is not coded 1 is assumed.
>
> **LENGTH n** Length of field. Specifies the number (n) of bytes to process from the data record, beginning with the position specified in START.
>
> **FLDNUM n START n LENGTH n** Field number (Record Layout and XML Pagedefs only). This is the same as in the FIELD command. The segment name is taken from the "n"th field of the input data record. START n and LENGTH n describe which portion of the "n"th field is used. If omitted the entire field is used to form the segment name.
>
> **RECID** Get the name from the record id (Record Layout and XML Pagedefs only) This is the same as in the FIELD command. Use START n and LENGTH n to use only a portion of the record id, or leave them out to use the entire record id.

OBJECT Specifies the placement of a resource object. If an internal- name is coded, this is a known object defined by an OBJECT command. Otherwise, the object is a variable named object whose name is extracted from fields in the line data as described by the parameters START,LENGTH,FLDNUM, and/or RECID. Also since there is no OBJECT command for these objects, the OBTYPE and OBID parameters must be specified here.

Note: All of the OBJECT parameters are to be treated as positional parameters, and as always, all positional parameters (if coded) must be coded in the exact position and order as specified by the syntax diagram.

internal-name same as in the current documentation

relX relY same as in the current documentation.

VARIABLE Indicates that the name for this object is to be gotten from the data. The "Variable-Name-Locator" field will dictate where in the data to get the name.

Variable-Name-Locator Describes where in the data the object name is located.

> **START n** The starting position in the data record to get the object name. The first data byte position of the input record is 1. If START is not coded 1 is assumed.
>
> **LENGTH n** Length of field. Specifies the number (n) of bytes to process from the data record, beginning with the position specified in START.

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FLDNUM n START n LENGTH n Field number (Record Layout and XML Pagedefs only). This is the same as in the FIELD command. The object name is taken from the "n"th field of the input data record. START n and LENGTH n describe which portion of the "n"th field is used. If omitted the entire field is used to form the object name.

RECID Get the name from the record id (Record Layout and XML Pagedefs only) This is the same as in the FIELD command. Use START n and LENGTH n to use only a portion of the record id, or leave them out to use the entire record id.

OBTYPE Object Type. This is the same as on the OBJECT command.

Note: OBTYPE and OBID are new parameters for the OBJECT placement subcommand on the PRINTLINE or LAYOUT command. They are required for variable named resources and not allowed otherwise. Before, they were only allowed on the OBJECT definition command.

OBID Object identifier for "OTHER" Object Types. This is the same as on the OBJECT command.