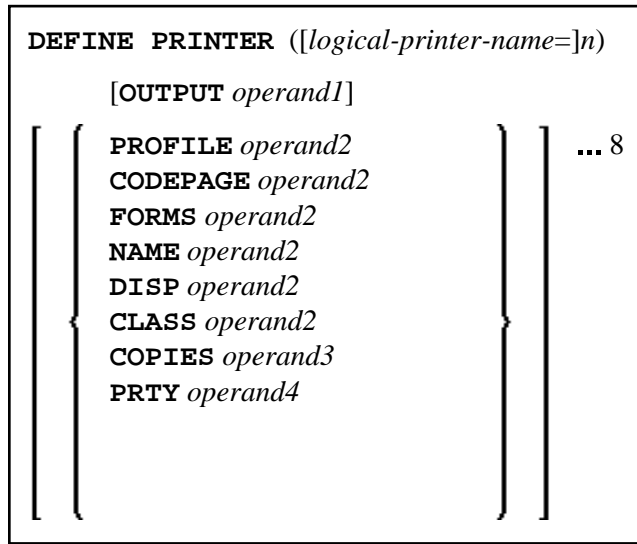


DEFINE PRINTER



This chapter covers the following topics:

- Function
- Syntax Description
- Printer Name under z/OS Batch, TSO and Server
- Printer Name under z/VSE Batch
- Printer Name under VM/CMS
- Printer Name under BS2000/OSD Batch and TIAM
- Printer Name under CICS
- Printer Name under Com-plete
- Printer Name under Com-plete/SMARTS
- Printer Names under Natural Advanced Facilities
- Printer Name for Additional Reports
- Examples

For an explanation of the symbols used in the syntax diagram, see *Syntax Symbols*.

Related Statements: AT END OF PAGE | AT TOP OF PAGE | CLOSE PRINTER | DISPLAY | EJECT |
 FORMAT | NEWPAGE | PRINT | SKIP | SUSPEND IDENTICAL SUPPRESS | WRITE | WRITE TITLE
 | WRITE TRAILER

<i>logical-printer-name</i>	Logical Printer Name: Optionally you can assign a logical name <i>logical-printer-name</i> to printer <i>n</i> . This name can be used for the <i>rep</i> notation in a DISPLAY / WRITE statement. Naming conventions for <i>logical-printer-name</i> are the same as for user-defined variables. Multiple logical names may be assigned to the same printer number. Unlike the value of the OUTPUT operand (see below), <i>logical-printer-name</i> is evaluated at compilation time and therefore independent of the program control flow.
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<p>OUTPUT <i>operand1</i></p>	<p>Printer Name:</p> <p>As <i>operand1</i> you can specify the printer name within the online spooling system or the print file name to be assigned to the printer number or the name of an additional printer, see <i>Printer Name for Additional Reports</i> below. The 8-byte logical printer name can be defined initially by subparameter DEST of profile parameter PRINT. Its default value depends on the access method type and may be overwritten by <i>operand1</i>.</p> <p><i>operand1</i> can be 1 to 253 characters long. If <i>operand1</i> is a variable, its length must be at least 8 bytes. You can specify either a printer or a logical or physical dataset name. The possible format depends on the operating system environment and the access method defined by subparameter AM of profile parameter PRINT for this printer number.</p> <p>If the specified name is already defined for a different printer number and this printer is unused; that is, in closed state, the print output will be routed to this printer if subparameter ROUTE=ON of profile parameter PRINT was specified for the specified printer number. If no printer name matches with <i>operand1</i>, the unused printer with the highest number is used and its name will be overwritten by <i>operand1</i>. Print routing is not visible to the user by means of the SYSPFILE command.</p> <p>Information on operating-system- or TP-monitor-dependent printer naming conventions is included in the following sections:</p> <ul style="list-style-type: none"> ● Printer Name under z/OS Batch, TSO and Server ● Printer Name under z/VSE Batch ● Printer Name under VM/CMS ● Printer Name under BS2000/OSD Batch and TIAM ● Printer Name under CICS ● Printer Name under Com-plete ● Printer Name under Com-plete/SMARTS ● Printer Name under Natural Advanced Facilities ● Printer Name for Additional Reports <p>With the following clauses, you can provide printing control information to be interpreted by the spooling system of the TP monitor or operating system respectively. You can specify one or more of these clauses, but each of them only once.</p>
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PROFILE <i>operand2</i>	<p>Name of Printer Control Characters Table:</p> <p>With the PROFILE clause, you specify as <i>operand2</i> the name of a printer control characters table. The maximum length allowed for <i>operand2</i> is 8 bytes.</p> <p>You define the printer control characters table by the profile parameter CCTAB (Printer Escape Sequence Definition).</p> <p>Note: With Natural Advanced Facilities, the printer control characters table table can be maintained online (as described in the <i>Natural Advanced Facilities</i> documentation).</p>
CODEPAGE <i>operand2</i>	<p>Name of Codepage:</p> <p>CODEPAGE denotes the name (format/length: A64) of a codepage as specified in the NATCONFIG module.</p> <p>CODEPAGE is ignored if it does not apply to the respective OUTPUT destination.</p>

Spooling System Parameters

With the following clauses, you can provide values for parameters of the TP monitor's spooling system. The default value of these clauses can be set with the corresponding subparameters of profile parameter PRINT (see *PRINT Keyword Subparameters for DEFINE PRINTER Statement*).

When a printer is closed, all options are reset to their default values. If the definitions are not clear in a Natural environment, Software AG recommends to set them in each module using DEFINE PRINTER statement.

FORMS <i>operand2</i>	Form: Maximum length of operand: 8 bytes. The default value of this clause can be set with subparameter FORMS of profile parameter PRINT.
NAME <i>operand2</i>	Listname: Maximum length of operand: 8 bytes. The default value of this clause can be set with subparameter NAME of profile parameter PRINT.
DISP <i>operand2</i>	Disposition: Maximum length of operand: 4 bytes. For the DISP clause, the possible values for <i>operand2</i> are DEL, HOLD, KEEP and LEAV. The default value of this clause can be set with subparameter DISP of profile parameter PRINT. If the DISP clause is omitted (or incorrectly specified), DEL applies by default.
CLASS <i>operand2</i>	Spool Class: Maximum length of operand: 1 byte. The default value of this clause can be set with subparameter CLASS of profile parameter PRINT.
COPIES <i>operand3</i>	Number of Copies: <i>operand3</i> must be an integer value. The default value of this clause can be set with subparameter COPIES of profile parameter PRINT.
PRTY <i>operand4</i>	Listing Priority: Possible values: 1 - 255. <i>operand4</i> must be an integer value. The default value of this clause can be set with subparameter PRTY of profile parameter PRINT.

Printer Name under z/OS Batch, TSO and Server

This section covers the following topics:

- Logical Dataset Names
- Physical Dataset Names
- HFS File
- JES Spool File Class
- NULLFILE
- Allocation and De-Allocation of Datasets
- Print Files in Server Environments

For a printer number that is defined with access method AM=STD, you can use *operand1* to specify a logical or a physical dataset name to be assigned to that printer number.

operand1 can be 1 to 253 characters long and can be one of the following:

- a logical dataset name (DD name, 1 to 8 characters);
- a physical dataset name of a cataloged dataset (1 to 44 characters), or a physical dataset member name (1 to 44 characters for the dataset name, plus 1 to 8 characters in parentheses for the member name);
- a path name and member name of an HFS file (1 to 253 characters) in an MVS UNIX Services environment;
- a JES spool file class;
- NULLFILE (to indicate a dummy dataset).

Logical Dataset Names

For example:

```
DEFINE PRINTER (21) OUTPUT 'SYSPRINT'
```

The specified dataset with DD-name SYSPRINT must have been allocated before the DEFINE PRINTER statement is executed. For more information, see *Allocation and De-Allocation of Datasets* below.

The allocation can be done via JCL, CLIST (TSO) or dynamic allocation (SVC 99). For dynamic allocation you can use the application programming interface USR2021N in library SYSEXT.

The dataset name specified in the DEFINE PRINTER statement overrides the name specified with the subparameter DEST of profile parameter PRINT.

Optionally, the dataset name may be prefixed by DDN= to indicate that it is a DD-name and to avoid name conflicts with additional reports. For example:

```
DEFINE PRINTER (22) OUTPUT 'DDN=SOURCE'
```

Physical Dataset Names

For example:

```
DEFINE PRINTER (23) OUTPUT 'TEST.PRINT.FILE'
```

The specified dataset must exist in cataloged form. When the DEFINE PRINTER statement is executed, the dataset is allocated dynamically by SVC 99 with the current DD-name and option DISP=SHR. For more information, see *Allocation and De-Allocation of Datasets* below.

If the dataset name is 8 characters or shorter and does not contain a period (.), it might be misinterpreted as a DD-name. To avoid this, prefix the name with DSN=. For example:

```
DEFINE PRINTER (22) OUTPUT 'DSN=PRINTXYZ'
```

If the dataset is a PDS member, you specify the PDS member name (1 to 8 characters) in parentheses after the dataset name (1 to 44 characters). For example:

```
DEFINE PRINTER (4) OUTPUT 'TEST.PRINT.PDS(TEST1)'
```

If the specified member does not exist, a new member of that name will be created.

HFS File

For example:

```
DEFINE PRINTER (14) OUTPUT '/u/nat/rec/test.txt'
```

The specified path name must exist. When the `DEFINE PRINTER` statement is executed, the HFS file is allocated dynamically. If the specified member does not exist, a new member of that name will be created.

For the dynamic allocation of the dataset, the following z/OS path options are used:

```
PATHOPTS=(OCREAT,OTRUNC,ORDWR)
PATHMODE=(SIRUSR,SIWUSR,SIRGRP,SIWGRP)
FILEDATA=TEXT
```

When an HFS file is closed, it is automatically de-allocated by z/OS (regardless of the setting of the subparameter `FREE` of profile parameter `PRINT`).

JES Spool File Class

To create a JES spool dataset, you specify `SYSOUT=x` (where *x* is the desired spool file class). For the default spool file class, you specify `SYSOUT=*`.

Examples:

```
DEFINE PRINTER (10) OUTPUT 'SYSOUT=A'
DEFINE PRINTER (12) OUTPUT 'SYSOUT=*
```

To specify additional parameters for the dynamic allocation, use application programming interface `USR2021N` in library `SYSEXT` instead of the `DEFINE PRINTER` statement.

NULLFILE

To allocate a dummy dataset, you specify `NULLFILE` as *operand1*:

```
DEFINE PRINTER (n) OUTPUT 'NULLFILE
```

This corresponds to the JCL definition:

```
// DD-name DD DUMMY
```

Allocation and De-Allocation of Datasets

When the `DEFINE PRINTER` statement is executed and a physical dataset name, HFS file, spool file class or dummy dataset has been specified, the corresponding dataset is allocated dynamically. If the logical print file is already open, it will be closed automatically, except when the subparameter `CLOSE=FIN` (Time of Closure) of profile parameter `PRINT` has been specified, in which case an error will be issued. Moreover, an existing dataset allocated with the same current DD-name is automatically de-allocated before the new dataset is allocated.

To avoid unnecessary overhead by unsuccessful premature opening of print files not yet allocated at the start of the program, print files should be defined with the subparameter OPEN=ACC (open at first access) of profile parameter PRINT.

In the case of an HFS file, or a print file defined with the subparameter FREE=ON of profile parameter PRINT, the print file is automatically de-allocated as soon as it has been closed.

As an alternative for the dynamic allocation and de-allocation of datasets, the application programming interface USR2021N in library SYSEXT is provided. This API also allows you to specify additional parameters for dynamic allocation.

Print Files in Server Environments

In server environments, errors may occur if multiple Natural sessions attempt to allocate or open a dataset with the same DD-name. To avoid this, you either specify the print file with subparameter DEST=* of profile parameter PRINT, or you specify OUTPUT '*' in the DEFINE PRINTER statement; Natural then generates a unique DD-name at the physical dataset allocation when the first DEFINE PRINTER statement for that print file is executed.

All print files whose DD-names begin with CM are shared by all sessions in a server environment. A shared print file is opened by the first session, and is physically closed when the server is terminated. For further information, see the section *Natural as a Server* in the *Operations* documentation.

Printer Name under z/VSE Batch

For a printer number that is defined with the access method AM=STD, *operand1* can be:

- a logical dataset name (DD-name, 1 to 7 characters);
- NULLFILE (to indicate a dummy dataset).

Logical Dataset Names

Example:

```
DEFINE PRINTER (2) OUTPUT 'SYSOUT1'
```

The specified dataset SYSOUT1 must have been defined in the JCL or in the z/VSE standard or partition labels.

The dataset name specified in the DEFINE PRINTER statement overrides the name specified with the subparameter DEST of the PRINT profile parameter.

Optionally, the dataset name may be prefixed by DDN= to indicate that it is a DD-name. For example:

```
DEFINE PRINTER (5) OUTPUT 'DDN=MYPRINT'
```

NULLFILE

To allocate a dummy dataset, you specify NULLFILE as *operand1*:

```
DEFINE PRINTER (n) OUTPUT 'NULLFILE'
```

Printer Name under VM/CMS

For a printer number that is defined with the access method AM=STD, you can use *operand1* to specify a logical or a physical dataset name to be assigned to that printer number.

For this, the same applies as under z/OS (see *Printer Name under z/OS Batch, TSO and Server*), but with the following differences:

- Instead of dynamic allocation via MVS SVC 99, the CMS command FILEDEF is used to define a dataset.
- HFS files are not supported.
- JES spool classes are not supported.
- In addition, the following syntax is used:

```
DEFINE PRINTER (n) OUTPUT ('fname ftype fmode(options)')
```

This generates the CMS command:

```
FILEDEF ddname-n DISK fname ftype fmode (options)
```

- Moreover, the following syntax is allowed:

```
DEFINE PRINTER (n) OUTPUT ('FILEDEF=filedef-parameters')
```

This generates the CMS command:

```
FILEDEF ddname-n =filedef-parameters
```

Printer Name under BS2000/OSD Batch and TIAM

For a printer number that is defined with the access method AM=STD, you can use *operand1* to specify a file name, link name or system file that is allocated to this printer number.

In this case, *operand1* can have a length of from 1 to 253 characters and one of the following meanings:

- Link Name
- File Name
- Generic File Name
- File Name and Link Name
- Generic File Name and Link Name
- System File SYSOUT

- System File SYSLST
- System File SYSLSTnn - nn=01,...,99
- System File SYSLSTnn with Implicit Allocation
- *DUMMY

The following rules apply:

1. File name and link name can be specified as positional parameters or keyword parameters. The corresponding keywords are FILE= and LINK=. Mixing positional and keyword parameters is allowed but not recommended.
2. A string with a length of 1 to 8 characters without commas is interpreted as a link name. This notation is compatible with earlier versions of Natural. Example:

```
DEFINE PRINTER (1) OUTPUT 'P01'
```

The corresponding definition with a keyword parameter is:

```
DEFINE PRINTER (1) OUTPUT 'LINK=P01'
```

3. A string of of 9 to 54 characters without commas is interpreted as a file name. Example:

```
DEFINE PRINTER (2) OUTPUT 'NATURAL31.TEST.PRINTER02'
```

The corresponding definition with a keyword parameter is:

```
DEFINE PRINTER (2) OUTPUT 'FILE=NATURAL31.TEST.PRINTER02'
```

4. The following input is interpreted without considering the length and therefore forms exceptions to Rules 2 and 3:
 - keyword input: LINK=, FILE=
 - *DUMMY
 - NULLFILE (equivalent to *DUMMY)
 - *
 - *,*
 - SYSOUT
 - SYSLST or SYSLST(*nn*)

Example: DEFINE PRINTER (7) OUTPUT 'FILE=Y' is a valid file allocation and not a link name, although the string of characters contains fewer than 9 characters.

5. Generic file names are formed as follows:

pnn.userid.tsn.date.time.number

where

<i>nn</i>	is a report number
<i>userid</i>	is a Natural user-ID, 8 characters
<i>tsn</i>	is the BS2000/OSD TSN of the current task, 4 digits
<i>date</i>	is DDMMYYYY
<i>time</i>	is HHIISS
<i>number</i>	is a sequential number, 5 digits

- Generic link names are formed as follows:

NPFnnnnn

where *nnnnn* is a 5-digit number that is increased by one after every generation of a dynamic link name.

- Changing the file allocation for a printer number causes an implicit CLOSE of the print file allocated so far.

You are strongly recommended, in all cases except when you only specify a link name (for example: P01), to work with keyword parameters. This avoids conflicts of names with additional reports and is essential for file names with fewer than 9 characters.

Examples:

```
DEFINE PRINTER (1) OUTPUT 'LINK=SOURCE'
DEFINE PRINTER (1) OUTPUT 'FILE=SOURCE'
DEFINE PRINTER (1) OUTPUT 'SOURCE'
```

Link Name

Example:

```
DEFINE PRINTER (1) OUTPUT 'LINKP01'
```

means the same as

```
DEFINE PRINTER (1) OUTPUT 'LINK=LINKP01'
```

A file with the LINK LINKP01 must exist at runtime. This can be created either using JCL before starting Natural or by dynamic allocation from the current application. For dynamic allocation, the application programming interface USR2029 in the library can be used. If, before execution, the link was active as a destination to another file, for example: P01, this will be released or retained depending on the value of the subparameter FREE of profile parameter PRINT (possible values are ON and OFF). Release is done via an explicit RELEASE call to the BS2000/OSD command processor.

File Name

Example:

```
DEFINE PRINTER (2) OUTPUT 'NATURAL31.TEST.PRINTER02'
```

means the same as

```
DEFINE PRINTER (2) OUTPUT 'FILE=NATURAL31.TEST.PRINTER02'
```

The file specified in *operand1* is set up using a FILE macro call and inherits the link name that was valid for the corresponding print file before execution of the DEFINE PRINTER statement.

Generic File Name

Example:

```
DEFINE PRINTER (21) OUTPUT '**'
```

means the same as

```
DEFINE PRINTER (21) OUTPUT 'FILE=*'
```

A file with a name created according to Rule 4 is set up using a FILE macro call and inherits the link name that was valid for the corresponding print file before execution of the DEFINE PRINTER statement.

```
DEFINE PRINTER (22) OUTPUT 'FILE=*,LINK=GENFLK22'
```

A file with a name created according to Rule 4 is set up with the specified link name using a FILE macro call.

File Name and Link Name

Example:

```
DEFINE PRINTER (11) OUTPUT 'NATURAL31.TEST.PRINTER11,LNKP11'
```

means the same as

```
DEFINE PRINTER (11) OUTPUT 'FILE=NATURAL31.TEST.PRINTER11,LINK=LNKP11'
```

which means the same as

```
DEFINE PRINTER (11) OUTPUT 'FILE=NATURAL31.TEST.PRINTER11,LNKP11'
```

The file specified in *operand1* is set up with the specified link name using a FILE macro call and allocated to the corresponding printer number.

Generic File Name and Link Name

Example:

```
DEFINE PRINTER (27) OUTPUT '*,*'
```

means the same as

```
DEFINE PRINTER (27) OUTPUT 'FILE=*,LINK=*'
```

A file with a file name and link name created according to Rule 4 and Rule 5 is set up using a FILE macro call and allocated to the specified printer number (27).

Note:

When file name and link name are specified, the previous link name is not released, regardless of the value of subparameter FREE of profile parameter PRINT.

System File SYSOUT

Example:

```
DEFINE PRINTER (14) OUTPUT 'SYSOUT'
```

Report 14 is written to SYSOUT.

Under TIAM: SYSOUT is by default output on the screen.

System File SYSLST

Example:

```
DEFINE PRINTER (15) OUTPUT 'SYSLST'
```

Report 15 is written to the system file SYSLST.

System File SYSLST nn - $nn=01, \dots, 99$

Example:

```
DEFINE PRINTER (16) OUTPUT 'SYSLST16'
```

Report 16 is written to the system file SYSLST16.

System File SYSLST nn with Implicit Allocation

Examples:

```
DEFINE PRINTER (11) OUTPUT 'SYSLST=LST.PRINTER11'
```

The system file SYSLST is allocated to the file LST.PRINTER11; Report 11 is written to the system file SYSLST.

```
DEFINE PRINTER (13) OUTPUT 'SYSLST13=LST.PRINTER13'
```

The system file SYSLST13 is allocated to the file LST.PRINTER13; Report 13 is written to the system file SYSLST13.

```
DEFINE PRINTER (19) OUTPUT 'SYSLST19=*
```

The system file SYSLST19 is allocated to a file with a name generated according to Rule 4; Report 19 is written to the system file SYSLST19.

Printer Name under CICS

For a printer number defined with the access method AM=CICS, *operand1* can be a transient data or temporary storage queue name (1 to 8 characters), depending on subparameter TYPE of profile parameter PRINT for the printer. For TYPE=TD (transient data), only the first 4 characters of *operand1* are honoured and the transient data destination must be predefined to CICS.

For further information, see also *Natural Print and Work Files under CICS* (in the *TP Monitor Interfaces* documentation).

Printer Name under Com-plete

With AM=COMP, a valid printer number (TID) or a logical printer name can be assigned. For example:

```
DEFINE PRINTER (1) OUTPUT '11'
DEFINE PRINTER (2) OUTPUT 'P102'
```

Printer Name under Com-plete/SMARTS

With AM=SMARTS, any printer name can be assigned. For example:

```
DEFINE PRINTER (14) OUTPUT '/nat/path/printer'
DEFINE PRINTER (14) OUTPUT '/nat/path/printer/file/'
DEFINE PRINTER (14) OUTPUT 'printer'
```

It depends on the MOUNT_FS parameter of SMARTS whether the file is located on a SMARTS portable file system or on the native file system. The first element of the path (/nat /) determines the target file system.

If the string is terminated with a slash (/), the last element is taken as the name of the print file. Otherwise, the name of the file is generated from the UserID and a sequence number. If the string does not start with a slash, the path of the file is taken from the environment variable \$NAT_PRINT_ROOT.

The specified path name must exist. When the DEFINE PRINTER statement is executed, the file is allocated dynamically. If the specified member does not exist, a new member of that name will be created.

Printer Names under Natural Advanced Facilities

For Natural Advanced Facilities users, the name of any predefined logical printer profile can be specified. This logical printer profile need not belong to the currently active user profile. It may be any logical printer profile defined on the NATSPOOL file. It will be active only for the duration of the Natural program which contains the DEFINE PRINTER statement. For more information, see the *Natural Advanced Facilities* documentation.

Printer Name for Additional Reports

Additional reports can be assigned for default with the following names:

Report	Function
BROADCAST	Output message line to a TP monitor terminal. Same function as MESSAGE (see below), except that under Com-plete, the message is not sent to the desired terminal until no transactions are active on that terminal.
CCONTROL	CCONTROL is the name of a special printer control table associated to the printer <i>n-1</i> ; it must not be modified. For further information, refer to <i>Printer-Advance Control Characters</i> (in the <i>Operations</i> documentation).
CONNECT	Output into a Con-nect folder. Note for Natural installation: The NATPCNT module of Natural must be linked to the Natural nucleus.
DUMMY	Output to be deleted.
HARDCOPY	Output to the current hardcopy device.
INCORE	Output into the NSPF incore database.
INFOLINE	Output to the Natural infoline. For details on the infoline, see the Natural terminal command %X.
MESSAGE	Output message line to a TP monitor terminal. The first 8 bytes of a message must contain the target terminal ID. TSO and CMS require the user ID instead of the terminal ID. An example program MSGSW is supplied in the library SYSEXTP.
SOURCE	Output to the Natural source area.
WORKPOOL	Output into the Natural ISPF workpool.

Examples

- Example 1 - Printer Name Definition for Com-plete
- Example 2 - Printer Name Definition for Batch Environment
- Example 3 - Print Output to Infoline
- Example 4 - Using a Session with Predefined Printer

Example 1 - Printer Name Definition for Com-plete

```

/* PRINTER NAME DEFINITION FOR COM-LETE
*
DEFINE PRINTER (1) OUTPUT 'TID100'
WRITE (1) 'PRINTED ON PRINTER TID100'
END

```


Example 2 - Printer Name Definition for Batch Environment

```

/* OUTPUT ON 'SYSPRINT' (FOR BATCH ENVIRONMENTS)
*
DEFINE PRINTER (REPORT1 = 1) OUTPUT 'SYSPRINT'
WRITE (REPORT1) 'REPORT 1 PRINTED ON PRINTER SYSPRINT'
*
/* OUTPUT TO DEFAULT PRINTER DESTINATION
/* DEFINED WITH PROFILE PARAMETER 'PRINT', SUBPARAMETER 'DEST'
*
DEFINE PRINTER (REPORT2 = 2)
WRITE (REPORT2) 'REPORT PRINTED TO DESTINATION'

```

Example 3 - Print Output to Infoline

```

** Example 'DPIEX1': DEFINE PRINTER
*****
*
SET CONTROL 'XI+'          /* SWITCH INFOLINE MODE ON
SET CONTROL 'XT'          /* INFOLINE TOP
*
DEFINE PRINTER (1) OUTPUT 'INFOLINE'
WRITE (1) 'EXECUTING' *PROGRAM 'BY' *INIT-USER
WRITE 'TEST OUTPUT'
EJECT                      /* FORCE PHYSICAL I/O
*
SET CONTROL 'X'           /* SWITCH BACK TO NORMAL
*
END

```

Output of Program DPIEX1:

```

EXECUTING DPIEX1   BY HTR
Page      1
TEST OUTPUT
                                05-01-13  14:54:33

```

Example 4 - Using a Session with Predefined Printer

```

** Example 'DPREX1': DEFINE PRINTER
*****
DEFINE DATA LOCAL
1 EMPL-VIEW VIEW OF EMPLOYEES
  2 NAME
END-DEFINE
*
* USE SESSION WITH DEFINED PRINTER 1
*
DEFINE PRINTER (INVOICE-LIST=1) OUTPUT 'OUTQ1'
LIMIT 5
READ EMPL-VIEW BY NAME
  WRITE (INVOICE-LIST) NAME
END-READ
*
END

```