

# CCTAB - Printer Escape Sequence Definition

This Natural profile parameter is used to set up a table of printer-control sequences, which is used for printing additional reports and hardcopies. It corresponds to the NTCCTAB macro in the Natural parameter module NATPARM.

- It is possible to either translate Natural field attributes into escape sequences or specify special characters to be translated into escape sequences.
- In addition, strings can be specified which are always sent as the first output record after an open operation or as the last output record before a close operation.
- This means that by using the right profile name, you can activate your printout either in portrait mode or in landscape. Then you can use all print features of this device by using simple attributes in Natural. This makes even bar-code printing or double-height printing possible.
- CCTAB defines tables which are used to recognize special characters in output fields and replace them with the defined control sequences. The parameter also defines the Natural attributes which are used to insert the defined control sequences.

<b>Possible settings</b>	See <i>CCTAB Parameter Syntax</i> below.	
<b>Default setting</b>	As specified within the macro NTCCTAB in NATCONFIG.	
<b>Dynamic specification</b>	yes	This parameter can only be specified dynamically. In the Natural parameter module NATPARM, the macro NTCCTAB must be used instead.
<b>Specification within session</b>	no	

The following topics are covered below:

- CCTAB Parameter Syntax
- NTCCTAB Macro Syntax
- String Syntax for OPN, CLS, CODE, CS, CSS or CSE
- Proportional Fonts
- Examples of NTCCTAB Macros
- Examples of CCTAB Parameter

## CCTAB Parameter Syntax

For each profile, a separate CCTAB must be specified. The CCTAB parameter can be specified in three variants:

## 1st Variant

```
CCTAB=(name, OPN='xxxxx', CLS='yyyyy')
```

Where

*name* is the name of the profile form, that is, the `DEFINE PRINTER (n) OUTPUT 'nnnnn' PROFILE 'name'`, which is required and which has a maximum length of 8 bytes.

`OPN='xxxxx'` is optional and defines a data string (up to 250 bytes) which is sent to the printer with each open operation.

`CLS='yyyyy'` is optional and defines a data string (up to 250 bytes) which is sent to the printer before each close operation.

`OPN` and `CLS` can be specified in any sequence.

## 2nd Variant

```
CCTAB=(name, CODE='n', CS='xxxx')
```

Where

`CODE='n'` is a character which is recognized by Natural once it appears in the output string.

`CS='xxxx'` is the string to replace the `CODE` character.

The `CS` subparameter must follow the `CODE` subparameter.

## 3rd Variant

```
CCTAB=(name, ATR=nnnn, CSS='xxxx', CSE='yyyy')
```

Where

`ATR='nnnn'` is the Natural internal field attribute. The name is defined by the macro `NAMATTR`.

`CSS='xxxx'` is the string (up to 20 bytes) which is inserted before the field. `CSS` is mandatory.

`CSE='yyyy'` is the string (up to 20 bytes) which is inserted after the field. `CSE` is mandatory.

The `CSS` and `CSE` subparameters must follow the `ATR` subparameter.

# NTCCTAB Macro Syntax

The NTCCTAB macro can be specified in three variants:

## 1st Variant

```
NTCCTAB name,OPN='xxxxx',CLS='yyyyy'
```

For details, refer to the CCTAB parameter syntax, *1st Variant*.

## 2nd Variant

```
NTCCTAB name,CODE='n',CS='xxxx'
```

For details, refer to the CCTAB parameter syntax, *2nd Variant*.

## 3rd Variant

```
NTCCTAB name,ATR=nnnn,CSS='xxxx',CSE='yyy'
```

For details, refer to the CCTAB parameter syntax, *3rd Variant*.

## String Syntax for OPN, CLS, CODE, CS, CSS or CSE

You specify character strings either as characters (enclosed in apostrophes) or as the corresponding hexadecimal representation of the characters (without apostrophes).

## Proportional Fonts

If you use proportional fonts, be sure to return to a fixed-spacing font before using tables where you need correct positioning.

## Examples of NTCCTAB Macros

```
NTCCTAB DBCST
NTCCTAB CODE=OE,CS=400E
NTCCTAB CODE=OF,CS=0F40<
NTCCTAB ATR=P5DBCS,CSS=OE,CSE=OF

NTCCTAB TEST,OPN=27C5274DA2F1F188275093F0D6,CLS='LAST LINE'
NTCCTAB CODE='<',CS=' B(SOB'
NTCCTAB CODE='>',CS='B(S3B '
NTCCTAB CODE='( ',CS=' B(S1S'
NTCCTAB CODE=' )',CS='B(SOS '
NTCCTAB ATR=P2UL,CSS=' B&&DD',CSE='B&&DS'
NTCCTAB ATR=P2UL,CSS=405FF1C25084C4,CSE=5FF1C250847C
NTCCTAB ATR=P2ITAL,CSS=' B(S1S',CSE='B(SOS'
NTCCTAB ATR=P1HIGH,CSS=' B(S3B',CSE='B(SOB'
NTCCTAB ATR=P2RVID,CSS=' B(S-3B',CSE='B(SOB'
```

## Examples of CCTAB Parameter

```
CCTAB=(DBCST,CODE=OE,CS=400E,CODE=OF,CS=0F40,ATR=P5DBCS,CSS=OE,CSE=OF)
```

```
CCTAB=(OPN=27C5274DA2F1F188275093F0D6,CLS='LAST LINE')
```