

SAMI
SAMple Management for IARC:
Barcodes

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1 - Introduction

This document explains how to implement automatic samples and containers barcoding for a Zebra Eltron barcode printer: a file is created on the database server, then sent to the barcode printer using a shell script.

2 - Database package and directory

2.1 - Package SAMIP BARCODES

```
create or replace  
PACKAGE BODY SAMIP_BARCODES AS
```

--First procedure creates the text file that will be sent to the barcode printer

```
PROCEDURE create_eltron_barcode(object_id IN VARCHAR2) IS  
  Fout  UTL_FILE.FILE_TYPE;  
  file_name VARCHAR2(256);  
  
BEGIN  
  
  file_name := object_id||'.EXT';  
  Fout := UTL_FILE.FOPEN('BARCODES_ELTRON', file_name, 'W');  
  
  UTL_FILE.PUT_LINE(Fout, '.');  
  UTL_FILE.PUT_LINE(Fout, '');  
  UTL_FILE.PUT_LINE(Fout, 'N');  
  UTL_FILE.PUT_LINE(Fout, 'q812');  
  UTL_FILE.PUT_LINE(Fout, 'S2');  
  UTL_FILE.PUT_LINE(Fout, 'B215,0,0,1,2,1,25,N," || object_id ||"');  
  UTL_FILE.PUT_LINE(Fout, 'A480,10,0,1,1,1,N," || object_id ||"');  
  UTL_FILE.PUT_LINE(Fout, 'P1');  
  UTL_FILE.PUT_LINE(Fout, '.');  
  
  UTL_FILE.FCLOSE(Fout);  
  
  print_eltron_barcode(file_name,1);  
  
END create_eltron_barcode;
```

-- Second procedure launches the sending of the file

```
PROCEDURE print_eltron_barcode(barcode_file_name IN VARCHAR2,
NB_TO_PRINT IN INTEGER) IS
BEGIN

    FOR i IN 1..NB_TO_PRINT LOOP
        SAMIP_Utils.exec_shell('copy_barcodeELTRON.sh '||barcode_file_name);
    END LOOP;

END print_eltron_barcode;

END SAMIP_BARCODES;
```

2.2 - Database directory

An Oracle directory named 'barcode' has been created to store the files sent to the barcode printer.

3 - Files stored on database server

The files have to be stored in a folder included in the PATH of the oracle user.

3.1 - copy_barcodeELTRON.sh

```
#!/bin/bash

# -----
# Copy barcodes files on distant directory
# -----

source /home/oracle/bin/.barcodeELTRON.conf

file=$1
echo file=$file
echo samba_copy.sh $srcDir $destDir $user $file
samba_copy.sh $srcDir $destDir $user $file
echo END.
```

3.2 - **.barcodeELTRON.conf**

```
#!/bin/bash

# -----
# Config file for printing barcodes on Eltron printer
# -----

srcDir="<$ORACLE_DIRECTORY> "
destDir="//<ip_address>/EltronTL"
user=barcode_user%barcode_password
```

3.3 - **samba copy.sh**

```
#!/bin/bash

# -----
# Copy a file on a distant machine through samba
# -----

# -----
usage(){
    echo "Usage : `basename $0` <srcDir> <destDir> <user for destDir> <file
to copy>"
}
# -----
if [ $# -lt 4 ];
then
    usage
    exit 0
fi
# -----

ICI=`pwd`
echo "samba_copy"
cd "$1"

smbclient "$2" -U $3 -c "put $4"

# result=0 => copy ok, result=1 => copy nok
echo "result ="$?

cd $ICI
```

4 - File sent to the barcode printer

/* File "Barcode.ext" that is sent to the barcode printer and that launches printing */

/******

.

N

q812

S2

B215,0,0,1,2,1,25,N,"Barcode"

A480,10,0,1,1,1,N,"Barcode"

P1

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