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External File, Guide

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Revision History

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1. General

Clock in and out events can be recorded in special files or databases. Only events from readers that are set to Clock-in or Clock-out are recorded in to these files.

The files are created using the directory and FileName as set in the file setting in the menu set-up/external system link/external file. To prevent semaphore problems, the file is renamed to _FileName, errors ignored (e.g. does not exist, already exists, locked, etc). If _FileName does not exist, it is created. Data is appended and _FileName is renamed to FileName, errors ignored (e.g. already exists).

If the file name is based on the date (i.e. a file per day is automatically created when a card clocks, if not existing), data DDMMYY in brackets { } is replaced with date and time. For example: C:\clock\Cf{YYMMDD}.txt becomes C:\clock\Cf030131.txt (for 2003-01-31). C:\clock\AB{DD-MM-YYYY}cd.txt becomes C:\clock\AB31-01-2003-cd.txt (for 2003-01-31).

The format of these files or databases depends on the Type selected, the available options are listed below (more types could be coded – please contact Softcon):

2. Types

- a. **Access2000**. The data is store in a flat ASCII text file, one transaction per clock (31 characters, ending in CR LF). The fields are:

Employee number (8 digits, filled with leading zeros).

Space

Date (10 characters DD/MM/YYYY).

Space

Time (5 characters HH:mm)

Space

In / Out (1 letter I=clock-in, O=clock-out).

Space

Sync (3 digits 000)

Typically:

```
00000001 25/12/2005 15:37 I 000
```

- b. **ClockWatch**. The data is store in a flat ASCII text file, one transaction per clock (ending in CR LF). The fields are separated by commas. The length of the variable length fields is the length of the field, until null character or until 2 consecutive spaces are read – which ever if the shortest (spaces at the end are not included).

Employee number (variable number of characters).

Date (10 characters DD-MM- YYYY).

Time (8 characters hh-mm-ss)In / Out (1 letter I=clock-in, O=clock-out).

Reader name

Surname (variable number of characters).

First name (variable number of characters).

Typically:

```
12,10-08-2002,07-01-00I,Clock In,Smith,John
```

```
123,10-08-2002,07-01-34O,Clock Out,van der Merwe,Koos
```

- c. **Eds.** The data is store in a flat ASCII text file, one transactions per clock (55 characters, ending in CR LF). The fields are separated by space. The fields in the file are:

Date (10 characters, YYYY-MM-DD).
Time (8 digits, hh:mm:ss).
Reader number (4 digits 0001 to 9999).
Event code (1 letter I=clock-in, O=clock-out).
Employee number (8 characters, filled with leading spaces).
Card reference number (5 digits, filled with leading zeros).
Card ID number (13 digits, filled with leading zeros).

Typically:

```
2000-01-31 09:02:01 0012 I 123456 01234 5506025123089
2000-01-31 09:10:32 0012 O P0123456 01234 5506025123089
```

- d. **Lavie.** The data is store in a flat ASCII text file, one transactions per clock (30 characters, ending in CR LF). The fields are:

Reader number (2 digits 01 to 63).
Length indicator (1 digit, always 1).
Employee number (10 digits, filled with spaces at the end).
Filler (1 digit, always 0).
Date (8 characters, DD-MM-YY).
Error code (1 digit, always 0).
Transaction code (2 digits, always 01).
Time (4 digits, hhmm).
Event code (1 letter B=clock-in, E=clock-out).

Typically:

```
2310000123456012-07-020010745B
0610000654321012-07-020010750E
```

- e. **SAP.** The data is store in a flat ASCII text file containing a header line (ending in CR LF) and one transaction per clock (ending in CR LF). The header fields are:

Message type (30 characters) "EDI_DC40 0000000000000000".
Message code, not applicable (3 spaces).
Message function (3 characters) " 2".
Test, not applicable (3 spaces).
Type (30 characters) " HRCC1UPTEVEN01 ".
Extension, not applicable (30 spaces).
Serialization (20 characters) " HRCC1UPTEVEN01 ".
Override, not applicable (1 space).
Filler (20 spaces).
System (10 characters) "Softcon ".
Filler (3 characters) "LSL".
System (10 characters) "Softcon ".
Filler (363 spaces).
Record count, lines below filled with zeros in front (20 digits).
The clock fields are:
Segment name (30 characters) "E2BPCC1UPTEVEN000 ".
SAP client ID, not applicable (3 zeros).
IDOC number, not applicable (16 zeros).

Segment (record) number (6 digits, filled with zeros in front).
 Previous segment, not applicable (6 zeros).
 Hierarchy level, not applicable (2 zeros).
 System (10 characters) "Softcon".
 Clock type (3 characters) "P10" – Clock in, "P20" – Clock out.
 Reader reference (4 digits).
 Date of clock transaction (8 digits) YYYYMMDD.
 Time of clock transaction (6 digits) hhmmss.
 Date written to file (8 digits) YYYYMMDD.
 Time written to file (6 digits) hhmmss.
 Clock System's old employee nr (8 digits) Field Spare PD1.
 Employee nr (8 digits).
 Absence/attend, not applicable (4 spaces).
 Object type, not applicable (2 spaces).
 Object ID, not applicable (8 spaces).
 Comp code, not applicable (4 spaces).
 Cost centre, not applicable (10 spaces).
 Order, not applicable (12 spaces).
 WBS element, not applicable (24 spaces).
 Custom field 1, not applicable (20 spaces).
 Custom field 2, not applicable (40 spaces).
 Custom field 3, not applicable (50 spaces).
 Custom field 4, not applicable (10 spaces).

- f. **Sentri / Softcon.** The data is store in a flat ASCII text file, one transaction per clock (43 characters – Sentry, 48 characters - Softcon, ending in CR LF). The fields are:

Start (3 digits 010).
 2 spaces
 Sentri - Employee number (8 digits, filled with leading zeros)
 Softcon - ID number (13 digits, filled with leading zeros)
 Sync (1 digit 0).
 Date (10 characters YYYY:MM:DD).
 Time (5 characters HHhmm)
 Space
 In / Out (1 letter I=clock-in, O=clock-out).
 Space
 Sync (2 digits 00)
 Space (version 1.01.48 and later)
 HH:mm:ss (version 1.01.48 and later)
 Typically:
 010 000000102000:06:13 15h37 I 00 15:37:23

- g. **Supertime.** The data is store in a flat ASCII text file, one transaction per clock (43 characters, ending in CR LF). The fields are:

Reader reference (3 digits, filled with leading zeros).
 4 spaces
 Card reference number (6 digits, filled with leading zeros)
 Sync (3 digits 000).
 Date (8 characters YY:MM:DD).
 1 space
 Time (5 characters HHhmm)

Space

In / Out (1 letter I=clock-in, O=clock-out).

Typically:

010 01234500008:06:13 15h37 I

- h. **ECO**. The data is store in a flat ASCII text file, one transaction per clock. The fields are separated by comma, a transaction ends in CR LF. The field maximum lengths are:

Record type (1 character C for clock).

Site (4 characters), usually blank.

Card number (10 digits).

Employee number (10 digits).

Date (10 characters DD/MM/YYYY).

Time (8 characters hh:mm:ss).

In / Out (1 letter I=clock-in, O=clock-out).

Reader name (8 characters).

Typically:

C,,123,Emp123,22/06/2004,08:55:05,I,Main Entrance

3. Setup

- a. Click Setup, External System link.
- b. Select the External file TAB
 - i. Under Type: select the correct External Type (See section titled Types Above)
 - ii. File: Enter the file path and file name. this must include the Extension. The file will be a ASCII text file that will open with note pad. Typical Extension are: .txt , or .DAT.
 - 1. If the file name is based on the date (i.e. a file per day is automatically created when a card clocks, if not existing), data DDMMYY in brackets { } is replaced with date and time. For example:
 - 2. C:\clock\Cf{YYMMDD}.txt becomes C:\clock\Cf030131.txt (for 2003-01-31).
 - 3. C:\clock\AB{DD-MM-YYYY}cd.txt becomes C:\clock\AB31-01-2003-cd.txt (for 2003-01-31).