Specification
for
Definition of ASCII Files in Superlock II

Table of Content

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Intro

This file will describe how to set up the ASCII files in the Superlock II

The file format is based on tags, sections and comments.

These tags, section and comments always start with an escape sequence that is \\ followed by more characters, depending of the tag type, comment or section

Comments

The comments are ignored by the file parser (or maybe they could be handled as a help or information if there is any kind of file generator in the future).

All the comments are single line.

They start with the escape sequence \\\ and it does not have an escape ending.

Example

\\\ This is a comment line

In general, the attribute names, values, etc are not case sensitive

Sections

It is possible to have up to 4 Sections in each file

1) Metadata

2) General

3) Header

4) Record

1) Metadata Section

This section is used for writing information about the file that can be seen by the user.

This section is mandatory, so it must be in the file.

The section starts with the escape \\<:METADATA and it finishes, some lines below with \\>

Inside the section, there is one line per Attribute or Tag.

Each tag starts with the escape \\# and the name of the attribute, for example \\#:NAME followed by the value of the attribute between "" (quotation marks).

Example

\\#:NAME "Order file for A2 Machine"

These tags do not have any closing escape sequence.

The following attributes are allowed in the metadata section, but not all of them are required.

\\#:NAME

This defines the name or the purpose of the file definition. This attribute is mandatory.

\\#:FORMAT

This attribute is not optional, and it must be defined.

The possible values are:

- "ASCII" for an ASCII file.
- "Excel" for an Excel file.

\\#:TYPE

This attribute is mandatory, and it must be defined.

The possible values are:

- "Keys" for generating a file for a key cutting or stamping machine.
- "Cylinders" for generating a file for a cylinder pinning or stamping machine.

\\#:DESCRIPTION

This attribute is used for creating a description and notes for the file.

\\#:CREATOR

Information about who or which company has created this file.

\\#:VERSION

The version of the file definition.

\\#:TAG

This is a special attribute that is defined by a key value pair. It can be used for any kind of purpose. It is possible to have more than one Tag attribute in the metadata section.

Example

```
\\#:TAG "Instructions" "This is file is created Silca v2.0 machines"
\\#:TAG "Tag Name 2" "Tag Value 2"
\\#:TAG "Tag Name n" "Tag Value n"
```

Example of a METADATA Section

```
\\<:METADATA
        \\#:NAME "Silca v.2.0 - Order"
        \\#:FORMAT "ASCII"
        \\#:TYPE "Keys"
        \\#:DESCRIPTION "This is a file definition for a Silca v.2.0 cutting machine"
        \\#:CREATOR "A2 Software"
        \\#:VERSION "1.0"
        \\#:TAG "Tag Name 1" "Tag Value 1"
        \\#:TAG "Tag Name 2" "Tag Value 2"
        \\#:TAG "Instructions" "This file is created for Silca v.2.0 cutting machines. \{13} \{10} This
file will generate....."
\\>
```

2) General

This section is mandatory.

It is used for defining some general information to handle when the resulting data file is generated.

The section starts with the escape \\<:GENERAL and it finishes, some lines below with \\>.

The following attributes are required to be defined in this section.

\\#:FIELDTYPE

This attribute defines how the fields will be separated. This attribute must be defined.
The possible values are:

- "Fixed Width" The fields are fixed length.
- "Delimited" the fields are separated by a delimiter.

\\#:ENCODING

This attribute is used for defining the encoding used for the file. This attribute is mandatory.
The possible values are:

- "DOS" DOS encoding
- "Windows" Windows encoding

\\#:DEFAULT_PICKLIST

This attribute defines if, by default, the picked elements will be selected when generating the data from the file.

\\#:DEFAULT_ORDER

This attribute defines which elements will be selected when generating the file. This attribute is mandatory.

The possible values are:

- "Ordered" For elements that are ordered but not delivered yet.
- "Delivered" For elements that have been delivered.
- "Total" For counting both ordered and delivered elements.

\\#:RECORD_SEPARATOR

This attribute defines the separator that will be used between one record and the next one one. This attribute is mandatory.

The possible values are:

- "None" No separator is used between records.
- "Space" One space is added to separate records.
- "Tab" A tab character is used to separate records.

- "Comma" A comma is used to separate records.

- "CR/LF" A Carriage return and a line feed are used to separate the records.

- "CR" A Carriage return is used to separate records.

- "LF" A Line feed is used to separate records.

- "\{xxx}" An ASCII character is used to separate records. xxx is an ASCII character code. In general, in text fields and text values, this notation can be used to introduce special characters. See the instructions tag above to see an example of integrating special characters inside a text.

\\#:FIELD_SEPARATOR

This attribute defines the separator that will be used between fields in a record. This attribute is mandatory. The possible values are the same as described in the RECORD_SEPARATOR Attribute above.

\\#:SUBSECTION_ORDER

This attribute defines the order used to process a subsection (keys that open a cylinder, cylinders that are opened by a key). Typically by column='Field' or row='Record'

Example of a General Section

```
\\<:GENERAL
        \\#:FIELDTYPE "Fixed Width"
        \\#:ENCODING "Windows"
        \\#:DEFAULT_PICKLIST "False"
        \\#:DEFAULT_ORDER "Ordered"
        \\#:RECORD_SEPARATOR "CR/LF"
        \\#:FIELD_SEPARATOR "\{9}" → tab character as a field separator
        \\#:SUBSECTION_ORDER "Record"  → By Default
\\>
```

3) Header

It is used to define the fields or pieces of information that will be included in the output file.

This section is only generated once per file.

The section starts with the escape \\<:HEADER and it finishes, some lines below with \\>.

Inside this section, there is a collection of field definitions. These fields have a collection of possible key value pairs as described below.

ASCII files can also be generated without a defined header section.

\\#:FIELD .....

After the FIELD attribute, the sub attributes allowed are the following ones:

\\#:FIELD TYPE "xxx"

This defines if the field is just a fixed text or a field from the database.

The possible values are:

- "Text" It is a fixed text.
- "Data" It is a value extracted from the database.

\\#:FIELD VALUE "xxx"

This defines the specific value of the text field specified when the Type is "Text".

Example

VALUE "This is my value"

\\#:FIELD ID "xxx"

This defines the specific field that will be written to the data file when generated. The list of will be described in a future iteration of this document.

Example

ID "CardNumber1"

\\#:FIELD WIDTH "xxx"

This defines the length of the field.

Fields can also be defined without adding a width. On that case this field with be exactly the number of characters needed.

\\#:FIELD ALIGNMENT "xxx"

This defines how the content of the field is aligned.

The possible values are:

- "Right" The content is aligned to the right.

- "Left" The content is aligned to the left.

\\#:FIELD FILLCHARACTER "xxx"

This defines how the field will be filled when the content does not totally fill out the specified width. The possible values are the same ones defined above in, for example, the RECORD_SEPARATOR attribute.

An example of a Header Section

```
\\<:HEADER
        \\#:FIELD TYPE "Text" VALUE "6"
        \\#:FIELD TYPE "Data" ID "CardNumber1" WIDTH "20" ALIGNMENT "Left" FILLCHARACTER "Space"
        \\#:FIELD TYPE "Data" ID "SystemNumber" WIDTH "20" ALIGNMENT "Left" FILLCHARACTER "Space"
        \\#:FIELD TYPE "Data" ID "CustomerName" WIDTH "20" ALIGNMENT "Left" FILLCHARACTER "Space"
        \\#:FIELD TYPE "Data" ID "PinRange" WIDTH "10" ALIGNMENT "Right" FILLCHARACTER "\{48}"
        \\#:FIELD TYPE "Data" ID "LongestPin" WIDTH "10" ALIGNMENT "Left" FILLCHARACTER "Space"
        \\#:FIELD TYPE "Data" ID "KeyDirection" WIDTH "10" ALIGNMENT "Left" FILLCHARACTER "None"
\\>
```

4) Record

This section is used for defining the fields or pieces of information that will be included in the output file for each record of keys or cylinders.

The section starts with the escape \\<:RECORD and it finishes, some lines below with \\> .

Inside this section, there is a collection of field definitions, as defined in the Header section above.

On the main record section of the ASCII file (key record in key ASCII file or cylinder record for cylinder ASCII file) header fields can also be defined.

Available Fields

This is the collection of fields for keys, cylinders or not specific that can be used in the program.

Please note that in a key record section, it is possible to include any of the cylinder fields because in this case, the program will, for each of one the keys that are included in the output file, show the cylinder information for those who are opened by the key in a nested list.

In the same way, in a cylinder record section, it is possible to include any of the key fields. As described for key record section, the information of each key field that opens the cylinder will be included as a nested list under each cylinder.

The way how the program decides if the key opens the cylinder is based on the accesses defined in the lock chart of the lock system.

Fields available for the header section

ExportFileName	Name of the file that has been used for generating the file
ComputerDateTime	Date and time of the computer when the file is generated
ComputerDate	Date of the computer when the file is generated
TodaysDateTime	Date and time of the computer when the file is generated in the format “YYYY-MM-DD HH:MM:SS”
TodaysDate	Date of the computer when the file is generated in the format “YYYY-MM-DD”

CompanyName	Name of the company specified in the Superlock Company Data information
CompanyAddress1	First address of the company specified in the Superlock Company Data information

CompanyAddress2	Second address of the company specified in the Superlock Company Data information
CompanyZip	Zip code of the company specified in the Superlock Company Data information
CompanyCity	City of the company specified in the Superlock Company Data information
CompanyPhone	Phone of the company specified in the Superlock Company Data information

CustomerName	Name of the lock system customer
CustomerNumber	Number of the lock system customer
CustomerAddress1	First address of the lock system customer
CustomerAddress2	Second address of the lock system customer
CustomerZip	Zip code of the lock system customer
CustomerCity	City of the lock system customer

ContactPersonName	Name of the lock system contact person
ContactPersonPhone	Phone of the lock system contact person

ResponsibleName	Name of the lock system responsible
ResponsibleAddress1	First address of the lock system responsible
ResponsibleAddress2	Second address of the lock system responsible
ResposibleZip	Zip code of the lock system responsible
ResposibleCity	City of the lock system responsible

SystemNumber	System number of the lock system
Project	Project name of the lock system
CaseNumber	Case number of the lock system
Area	Area where the lock system is located

SecurityStep	Security level of the lock system
OriginalDateTime	Date and time when the lock system was created
OriginalDate	Date when the lock system was created
LastCorrectionDateTime	Date and time of the last change done in the lock system
LastCorrectionDate	Date of the last change done in the lock system
DeliveryDateTime	Date and time when the lock system should be delivered
DeliveryDate	Date when the lock system should be delivered
Index1	Content of the first index field found in the administration section of the lock system
Index2	Content of the second index field found in the administration section of the lock system
Initials	Initials of the user who created the system

AdditionalFieldxx	Value of the field with index ‘xx’ that can be found in the additional fields section of the of the lock system administration information (‘xx’ from 1 to 20)

LockType	LockType value defined in the lock technical information of the lock system
ProfileSet	Profile set defined in the lock technical information of the lock system
MasterCode	Master key code defined in the lock technical information of the lock system
CardNumber1	First card number field defined in the lock technical information of the lock system
CardNumber2	Second card number field defined in the lock technical information of the lock system
PinRange	Pin range in the format "low - high" defined in the lock technical information of the lock system
LongestPin	Pin value that is used as the longest pin in the lock technical information of the lock system
KeyDirection	Value indicating the direction of the key (Bow-Tip = 0), (Tip-Bow = 1)

SystemType	Value of the field system type that is defined in the lock technical information of the lock system
PinQty	Number of pins that the cylinder used for the lock system has. This field is defined in the lock technical information of the lock system
FillerRange	Pin range in the format "low - high" defined in the lock technical information of the lock system
MaxNeighbourJump	Maximum jump between neighbor cuts in the key defined in the lock technical information of the lock system
MaxAlikeRow	Maximum number of consecutive identical cuts in the key code defined in the lock technical information of the lock system
MaxAlikeTotal	Maximum number of identical cuts in the key code defined in the lock technical information of the lock system
DeepCutCheck	Value that specified if a deep cut check will be done for the key codes. This value is defined in the lock technical information of the lock system
GroupAscending	Value defined in the lock technical information of the lock system that specified if the codes for the group pins will go from lower pins to higher pins or vice versa
SingleAscending	Value defined in the lock technical information of the lock system that specified if the codes for the single pins will go from lower pins to higher pins or vice versa
GroupCodeJump	Difference between cuts in the group pins of the keys. This value is defined in the lock technical information of the lock system
SingleCodeJump	Difference between cuts in the single pins of the keys. This value is defined in the lock technical information of the lock system
ProfileCalculation	Value of the field defined in the lock technical information of the lock system that specified if the profiles will be used during the calculation process
MasterKeyProfile	Key profile that is used by the master key. This field is defined in the lock technical information of the lock system
MasterCodexx	Value of one of the cuts ‘xx’ of the master key code defined in the lock technical information in the lock system (‘xx’ from 1 to 16)
ICSTrackX	ICS lock type key track ‘X’ (where ‘X’ range from 2 to 4)

Fields available for the keys record section

KeyPosition	Position of the key in the key list
KeyID	Unique Identifier of the key in the lock system
KeyStatus	Status of the key. " " for None "/" for Abandoned Key "+" for Expected Extension "N" for Recoding "-" for Repeated Key Code "X" for Subsequent Extension Key
KeyType	Type of the key. " " for None "G" for Group Key "M" for Master key "S" for Single Key "C" for Single Compressed Key
KeyName	Name of the key in the lock system
KeyMarking	Marking of the key in the lock system
KeyDeliveredAmount	Amount of real keys delivered for one key line in the lock system
KeyOrderedAmount	Amount of real keys ordered and not yet delivered for one key line in the lock system
KeyTotalAmount	Amount of real keys ordered and delivered for one of the key lines in the lock system
KeyProfileShortName	Short name of the profile assigned to the key
KeyProfileLongName	Name of the profile assigned to the key
KeyCalculatedType	Status of the key regarding the calculation state. " " for None "M" for manual code "C" for Automatically calculated

	"N" for Recording key "X" for Extension Key
KeyCode	The code of the key in the lock system
KeyComment	Comment used in each key
KeyCVT	CVT of the key in the lock system
CSVKeyCode	The code of the key in the lock system in comma separated values format
KeyAltMarking	Alternative marking of the key in the lock system
KeyTransCode	Key code using the values defined in the translation codes defined in the lock technical section of the lock system
KeyCutxx	Any of the individual cuts ('xx' from 1 to 16) of the key code
VariableKeyAmount	Amount of the key line of the lock system based on the generation options selected by the user when generating the file (ordered, delivered or total)
VariableKeySeriesAmount	Like VariableKeyAmount but using a serie notation
ASSAP600KeyCode	Code of the key formatted for the ASSA P600 cylinder type
KeyMarkSeriesNumber	Range of the marking numbers used for the real keys that belong to a key line in the lock system

Fields available for the cylinder record section

CylinderPosition	Position of the cylinder in the cylinder list
CylinderID	Unique Identifier of the cylinder in the lock system
CylinderStatus	Status of the cylinder. " " for None "/" for Abandoned Cylinder "+" for Expected Extension "-" for Repeated Cylinder Code "X" for Subsequent Extension Cylinder

CylinderType	Type of the cylinder. " " for None "C" for Central Cylinder "S" for Single Cylinder "B" for Blind Cylinder
CylinderName	Name of the cylinder in the lock system
CylinderMarking	Marking of the cylinder in the lock system
CylinderTypeName	Cylinder Type Name of the cylinder in the lock system
CylinderLockType	LockType of the cylinder in the lock system
CylinderSide	Side of the cylinder in the lock system
CylinderDesignation	Color/Material of the cylinder in the lock system
CylinderDeliveredAmount	Amount of real cylinders delivered for one cylinder line in the lock system
CylinderOrderedAmount	Amount of real cylinders ordered and not yet delivered for one cylinder line in the lock system
CylinderTotalAmount	Amount of real cylinders ordered and delivered for one of the cylinder lines in the lock system
CylinderProfileShortName	Short name of the profile assigned to the cylinder
CylinderProfileLongName	Name of the profile assigned to the cylinder
CylinderMarkSeriesNumber	Range of the marking numbers used for the real cylinders that belong to a cylinder line in the lock system
CylinderAltMarking	Alternative marking of the cylinder in the lock system
CylinderLengthIn	The length in value of the cylinder in the lock system
CylinderLengthOut	The length out value of the cylinder in the lock system
VariableCylinderAmount	Amount of the cylinder line of the lock system based on the generation options selected by the user when generating the file (ordered, delivered or total)
VariableCylinderSeriesAmount	Like VariableCylinderAmount but using a serie notation
CylinderBuildUp	The codes of the cylinder in the lock system. Depending of the value of the longest pin and the file generation parameters (Key Codes or Pin + fillers) the output will be different
CylinderComment	Comment used in each cylinder

CylinderCSVPinCode	The codes of the cylinder in the lock system using the SCV (comma separated values) format. Depending of the value of the longest pin and the file generation parameters (Key Codes or Pin + fillers) the output will be different
CylinderMushroomPins	Mushroom pins of the cylinder codes using the values defined for the mushroom pins in the lock technical section of the lock system
CylinderASSAP600BuildUp	The codes of the cylinder in the lock system for the ASSA P600 cylinder type. Depending of the value of the longest pin and the file generation parameters (Key Codes or Pin + fillers) the output will be different
CylinderASSAP600BuildUpFile	The codes of the cylinder in the lock system for the ASSA P600 cylinder type using the File method representation. Depending of the value of the longest pin and the file generation parameters (Key Codes or Pin + fillers) the output will be different
CylinderASSAP600TopPinFile	The Top Pins of the cylinder in the lock system for the ASSA P600 cylinder type
CylinderASSAP600CylinderType	The cylinder type value of the cylinder in the lock system for the ASSA P600 cylinder type
CylinderASSAP600Amount	Amount of the cylinder line of the lock system based on the generation options selected by the user when generating the file (ordered, delivered or total) but using the rules and format for the ASSA P600 cylinder type
ICSCylCode	The codes of the cylinder in the lock system for the ICS cylinder type.
KS3CylCode	The codes of the cylinder in the lock system for the 3KS cylinder type.