Installer “INF” File Specification

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CASIO COMPUTER CO., LTD.

Revision log

Version No.	Date of revision	Details of revision
1.00	2001/07/23	First version
1.01	2001/10/11	Copy/Delete File add max size. Subkey, Value-name add message.

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1 “INF” File Formats

Tasks such as the copying of files and logging of registries, performed when adding and uninstalling applications or downloading data, are carried out on the basis of information described in “INF” files. “INF” files are made up of the sections shown below.

[App Information]	Describes the basic registry items for the added application.
[Uninstall Information]	Describes information relating to the application being uninstalled.
[Make Dirs]	Lists the names of newly created directories.
[Delete Dirs]	Lists the names of deleted directories.
[Copy Files]	Describes information on files to be copied.
[Delete Files]	Lists the names of files to be deleted.
[Add Registry]	Describes the registry information to be recorded.
[Delete Registry]	Lists the registry keys and registry items to be deleted.
[Ex-Install Information]	Describes information on the program to be executed in the case of an ex-install pattern.

《Control items, other》

- “INF” files must be rendered as ASCII text files.
- File names (directory names) used in “INF” files must be no more than 255 bytes.
- The [App Information] and [Uninstall Information] sections must not be present simultaneously in an “INF” file.
- The [App Information] and [Uninstall Information] sections are required to be at the head of the file.
- The sections are processed in sequence starting from the head of the file.

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2 App Information

The items in the “App Information” section are recorded in the registry as the basic information about the application. (See “Common registry structures for added applications”).
This section is required to be present at the head of the file in installation information files.

[App Information]
Maker = *maker-name*
Program = *program-name*
Version = *major-ver.minor-ver*
InstallDir = *install-dir-name*
ExeFile = *filename.exe*
Destination = *install-place*
Unload = *Unload-Number*
Uninstall = *filename.inf*
Caption = *app-caption*
[CommandLine = *cmnd-line-string*]

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maker-name

A character string of a maximum of 64 bytes indicating the name of the maker.

The same string as that featured in the [Uninstall Information] section is set.

program-name

The same string as that featured in the [Uninstall Information] section is set.

major-ver, minor-ver

Numeric values indicating major version or minor version.

install-dir-name

Installation directory name.

It is not possible to create **multi-level** directories.

filename.exe

The execute form file name of the application.

Assumed to be the file directly below the installation directory if the path is not specified.

install-place

Information on the install destination.

Describes the locations to which installation is possible.

(UNIT: STORAGE_ONLY / CARD: MAINMEM_ONLY / UNIT & CARD: ALTERNATIVE)

Unload-Number

Uninstallable information.

Describes whether the application is uninstallable or not. (Uninstallable: 1 / non-uninstallable: 0)

filename.inf

Uninstall information file name

Assumed to be the file directly below the installation directory if the path is not specified.

icon-file

Application icon (bmp) file name. Optional.

Assumed to be the file directly below the installation directory if the path is not specified.

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app-caption

A character string of no more than 255 bytes indicating the name of the application.

cmnd-line-string

A character string of no more than 255 bytes indicating the arguments on starting the program. Optional.

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3 Uninstall Information

Information specifying the application to be uninstalled is described in the “Uninstall Information” section.
This section is required to be present at the head of the file in uninstall information files.

[Uninstall Information]
Maker = *maker-name*
Program = *program-name*

maker-name

A character string of a maximum of 64 bytes indicating the name of the maker.
The same string as that featured in the [App Information] section is set.

program-name

A character string of a maximum of 64 bytes indicating the name of the program.
The same string as that featured in the [App Information] section is set.

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4 Make Dirs

The directories to be newly created are listed in the “Make Dirs” section.
This section is essentially used when creating a directory other than the installation directory.
It is not possible to create **multi-level** directories at one time.

[Make Dirs]
dir-name
[*dir-name*]
.
.
.

dir-name

The name of the directory to be created.

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5 Delete Dirs

The directories to be deleted are listed in the “Delete Dirs” section.

[Delete Dirs]
dir-name
[*dir-name*]
.
.
.

dir-name

The names of the directories to be deleted.

<Important>

Configure the settings here when deleting the “installation directory” created during the installation.

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6 Copy Files

The files to be copied to the specified directory are listed in the “Copy Files” section.

[Copy Files]
destination-file-name, [*source-file-name*], [*flag*]
[*destination-file-name*, [*source-file-name*], [*flag*]]

destination-file-name

Destination file name.

Assumed to be a file in the installation directory (defined in the “App Information” section) if the path is not specified.

source-file-name

Source file name. Path specifications are ignored.

This item is optional if the source and destination file names are the same.

flag

One of the key words below is set as a rule for copying.

Optional (the default value is “COPYFLG_NO_OVERWRITE”).

COPYFLG_NO_OVERWRITE

The file is not copied if the destination file already exists.

COPYFLG_REPLACEONLY

The file is copied even if the destination file already exists.

<Important> A maximum of 256 files are possible.

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7 Delete Files

The files to be deleted are listed in the “Delete Files” section.

[Delete Files]
file-name
[*file-name*]

file-name
A file name specified with an absolute path.

≪Comments≫
The path specification may be omitted only if the “App Information” section has been recorded in the registry.
If omitted, the path name is taken as the (“InstallDir” in “App Information”) installation directory.

<Important> A maximum of 256 files are possible.

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8 Add Registry

The values for generating or configuring the registry key are described in the “Add Registry” section.

[Add Registry]
reg-root-string, [*subkey*], [*value-name*], [*data-type*], [*flag*], [*value*] …
[*reg-root-string*, [*subkey*], [*value-name*], [*data-type*], [*flag*], [*value*] …]

reg-root-string

Root registry name. One of the key words below is set.

HKEY_CLASSES_ROOT
HKEY_CURRENT_USER
HEKY_LOCAL_MACHINE
HKEY_USERS
APP_REG_ROOT … The root registry of the application.
(See “Common registry structures for added applications”).

subkey

Subkey name. Optional (“value name” is required if omitted).

However, when it omits, the item is created directly under the keyword which was specified by "reg-root-string" .

value-name

Registry item name. Optional (“subkey” is required if omitted).

However, when it omits, the item is created directly under the keyword which was specified by "reg-root-string" .

data-type

Data type. One of the key words below is set.

Optional (the default value is “REG_SZ”).

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REG_BINARY : Binary data

REG_DWORD : 32 bit value

REG_SZ : Character string

REG_ MULTI_SZ : List of character strings

flag

One of the options below is selected as a rule when adding to the registry.

Optional (the default value is “FLG_ADDREG_NOCLOBBER”).

FLG_ADDREG_NOCLOBBER

The value is not recorded if the registry item already exists.

FLG_ADDREG_REPLACEONLY

The value is overwritten if the registry item already exists.

value

The value set for the registry item.

When recording binary data, 1 byte is expressed as 2 half-size characters (hexadecimal notation, front 0 aligned), with the number of bytes recorded (maximum 32 bytes, 64 characters) described in series.

When recording character string data (REG_SZ), values are placed between ” marks and the data is described using no more than 255 bytes.

When recording character string list data (REG_MULTI_SZ), each string is placed between ” marks and listed with comma separators. There is a maximum of 255 pieces of data.

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9 Delete Registry

Registry keys or items to be deleted are described in the Delete Registry section.

[Delete Registry]
reg-root-string, [*subkey*], [*value-name*]
[*reg-root-string*, [*subkey*], [*value-name*]]
.
.
.

reg-root-string

Root registry name. One of the key words below is set.

HKEY_CLASSES_ROOT
HKEY_CURRENT_USER
HEKY_LOCAL_MACHINE
HKEY_USERS

subkey

Subkey name. Optional (“value name” is required if omitted).

However, when it omits, the item is created directly under the keyword which was specified by "reg-root-string" .

value-name

Registry item name. Optional (“subkey” is required if omitted).

However, when it omits, the item is created directly under the keyword which was specified by "reg-root-string" .

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10 Ex-Install Information

The file names of the program to be run in the case of an ex-install (uninstall) pattern are described in the “Ex-Install Information” section.

[Ex-Install Information]
Program = *file-name*
TimeOut = *timeout_interval*

file-name

The file name (EXE) of the program. The installation generates an error unless the termination code of the program is 0.

Assumed to be a file in the installation directory (defined in the “App Information” section) if the path is not specified.

timeout_interval

Sets as a numeric value the wait time (in milliseconds) until the ex-install program being executed is interrupted.

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11 Other formats

; (semi-colon)

Comment delimiter. A character string after a ";" is treated as a comment (on the same line).

Environment variables

The following can be used as environment variables.

%WORK_DIR%	Replaced with the current (archive file extraction) directory character string. Invalid when uninstalling.
%INSTALL_DIR%	Replaced with the installation directory (defined in the "App Information" section) character string.
?Drive?	When installing / uninstalling, the installation destination is replaced as follows. Replaced with the system directory (※1) character string if (on the unit: INST_MAIN) is selected, and the card directory (※2) character string if (on the card : INST_CARD) is selected.

(※1) Obtained using the Cassiopeia library (GetSystemDisk).

(※2) Obtained using the Cassiopeia library (FindFirstFlashCard).

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12 Common registry structures for added applications

Here we explain about registries generated on the basis of the App Information section.

First of all, the registry key below is created as the root of the added application.

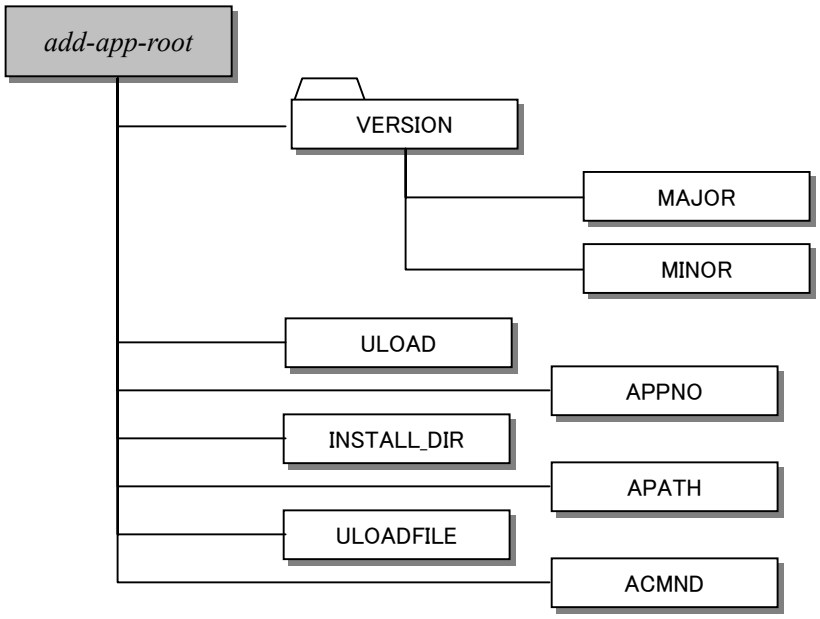
HKEY_LOCAL_MACHINE¥SOFTWARE¥MENU¥*add-app-root*

add-app-root

A character string made up of the maker name and program name “maker-name + space + program-name”.

This registry key is applied when the “APP_REG_ROOT” keyword is set in the “Add Registry” section.

The registries created under the added application root registry are shown below.



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Key		Corresponding item	Data type	Explanation
VERSION	MAJOR	Major-ver	Numeric value	Major version
	MINOR	Minor-ver	Numeric value	Minor version
ULOAD		Unload-Number	Numeric value	Sets as uninstallable or non-uninstallable
APPNO		None	Numeric value	Fixed at (99)
INSTALL_DIR		Install-dir-name	Character string	Installation directory name
APATH		Filename.exe	Character string	Application file name
ULOADFILE		Filename.inf	Character string	Uninstall information file name
ANAME		App-caption	Character string	Application name
ACMND		Cmnd-line-string	Character string	Command line character string

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13 Other items of note

(1) “Installation information files” stored in the archive file have the fixed designation “install.inf”.

(2) The “INF” file designation for “Uninstall information files” stored in the archive file may be chosen freely.

(3) If an error occurs during installation, the application is uninstalled automatically using the information in the uninstall “INF” file. When this happens, any application that was already installed is also deleted if attempting to install the application by overwriting.

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