FUJITSU

P2WW-3030-12ENZ0

ScanSnap

Interface Guide

Introduction

Software bundled with ScanSnap (ScanSnap Manager, ScanSnap Organizer, and CardMinder) provides an interface to enable the linkage with a user application.
This manual explains how to link a user application with software bundled with ScanSnap.
This manual is written for software developers. This manual requires some expertise in software.

Be sure to read this manual thoroughly before using the ScanSnap to ensure correct use.
We hope that this manual will provide you with useful information in order to utilize the ScanSnap.

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Manufacturer

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Disclaimer

Samples that are supplied with the product

Samples that are supplied with the product are supplementary materials for this manual. The samples can be used as they are or with some changes to check the operation of the product.
Note that samples are not fully examined for errors. It is the responsibility of the customer if an errors occurs when using a sample.

Use in High-Safety Applications

This product has been designed and manufactured on the assumption that it will be used in office, personal, domestic, regular industrial, and general-purpose applications. It has not been designed and manufactured for use in applications (simply called "high-safety applications" from here on) that directly involve danger to life and health when a high degree of safety is required, for example, in the control of nuclear reactions at nuclear power facilities, automatic flight control of aircraft, air traffic control, operation control in mass-transport systems, medical equipment for sustaining life, and missile firing control in weapons systems, and when provisionally the safety in question is not ensured. The user should use this product with adopting measures for ensuring safety in such high-safety applications. PFU LIMITED assumes no liability whatsoever for damages arising from use of this product by the user in high-safety applications, and for any claims or compensation for damages by the user or a third party.

Manuals

Read the following manuals as needed when using the ScanSnap.

Manual	Description
ScanSnap Interface Guide (this manual)	This manual explains how to link a user application with the software that is bundled with ScanSnap.
ScanSnap Operator's Guide/ ScanSnap Basic Operation Guide	Read this manual for information about the basic operations of the ScanSnap, software installation, scanning methods, various settings, and handling of the ScanSnap.
Windows ScanSnap Organizer User's Guide/ ScanSnap Basic Operation Guide	Read this manual when you need more information in general, on product features and operating environment.
CardMinder User's Guide/ ScanSnap Basic Operation Guide	Read this manual when you need more information in general, on product features and operating environment.
ScanSnap Manager Help	Read this Help file when questions or problems regarding operations (e.g. when setting items) arise. This Help file explains about scanner operations, operational troubles and their resolution, windows and messages.
Windows ScanSnap Organizer Help	Read this Help file when questions or problems regarding operations (e.g. when setting items) arise. This provides explanations for operations, screens and messages.
CardMinder Help	Read this Help file when questions or problems regarding operations (e.g. when setting items) arise. This provides explanations for operations, screens and messages.

Structure of This Manual

This manual consists of the following:

Overview

This section explains the overview of linking a user application with software bundled with ScanSnap.

Linking with Quick Menu<For Windows Users><For Mac OS Users>

This section explains how to link ScanSnap Manager Quick Menu with a user application.

Linking with ScanSnap Organizer<For Windows Users>

This section explains how to link ScanSnap Organizer with a user application.

Linking with CardMinder<For Windows Users><For Mac OS Users>

This section explains how to link CardMinder with a user application.

Scanning from a user application<For Windows Users><For Mac OS Users>

This section explains the linking method to scan documents from a user application.

Describing Linkage Setting File<For Windows Users><For Mac OS Users>

This section explains how to describe the linkage setting file.

Contents of Output File<For Windows Users><For Mac OS Users>

This section explains the files that are output by the software bundled with ScanSnap and passed to a user application.

ScanSnap Manager Control Command<For Windows Users>
ScanSnap Manager Control Event<For Mac OS Users>

This section explains the commands/events to control ScanSnap Manager from a user application.

How to Check the Status of and Operate ScanSnap Manager
<For Windows Users><For Mac OS Users>

This section explains how to check the status of and how to start/exit ScanSnap Manager.

Sandbox Support<For Mac OS Users>

This section explains points to note when your application supports sandbox.

Read all of the applicable sections for Windows/Mac OS in order to understand how to link a user application with the software that is bundled with ScanSnap.

Symbols Used in This Manual

The following symbols are used in this manual.

Symbol	Description
Windows	This symbol indicates operations using Windows.
Mac OS	This symbol indicates operations using Mac OS.

Arrow Symbols in This Manual

Right-arrow symbols [→] are used to connect icons or menu options you should select in succession.
Example: Select [Start] menu → [Computer].

Sample Application Names Used in This Manual

The following sample application names are used as examples for windows and other items in this manual.

- For ScanSnap Manager/ScanSnap Organizer
  Image Connections
- For CardMinder
  Card Connections

Screen Examples in This Manual

Windows screen

Microsoft product screenshots are reprinted with permission from Microsoft Corporation.
The screenshots used in this manual are of Windows 7.
The actual windows and operations may differ depending on the operating system.

Mac OS screen

The screenshots used in this manual are of Mac OS X v10.7.
The actual windows and operations may differ depending on the operating system.

The screen examples in this manual are subject to change without notice in the interest of product development.
If the actual screen differs from the screen examples in this manual, operate by following the actual displayed screen.

Abbreviations Used in This Manual

The following abbreviations are used in this manual:

Abbreviation Used	Designation
Windows 7	Windows® 7 Starter operating system, English Version Windows® 7 Home Premium operating system, English Version Windows® 7 Professional operating system, English Version Windows® 7 Enterprise operating system, English Version Windows® 7 Ultimate operating system, English Version
Windows	Windows® 10 Home operating system, English Version Windows® 10 Pro operating system, English Version Windows® 10 Enterprise operating system, English Version Windows® 10 Education operating system, English Version Windows® 8.1 operating system, English Version Windows® 8.1 Pro operating system, English Version Windows® 8.1 Enterprise operating system, English Version Windows® 8 operating system, English Version Windows® 8 Pro operating system, English Version Windows® 8 Enterprise operating system, English Version Windows 7 Windows Vista® Home Basic operating system, English Version Windows Vista® Home Premium operating system, English Version Windows Vista® Business operating system, English Version Windows Vista® Enterprise operating system, English Version Windows Vista® Ultimate operating system, English Version Windows® XP Home Edition operating system, English Version Windows® XP Professional operating system, English Version
Microsoft Visual C++	Microsoft® Visual C++®
Microsoft Visual C#	Microsoft® Visual C#®
Microsoft Visual Studio	Microsoft® Visual Studio®
.NET Framework	Microsoft® .NET Framework
Mac OS	OS X v10.11, OS X v10.10, OS X v10.9, OS X v10.8, Mac OS X v10.7, or Mac OS X v10.6
Adobe Acrobat	Adobe® Acrobat®
ScanSnap	Color Image Scanner ScanSnap (*)

* : The ScanSnap N1800 series is not included.

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ScanSnap Interface Overview

This chapter explains important items you should know before linking a user application with software bundled with ScanSnap.

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Overview

This section explains the overview of linking a user application with software bundled with ScanSnap.

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Features

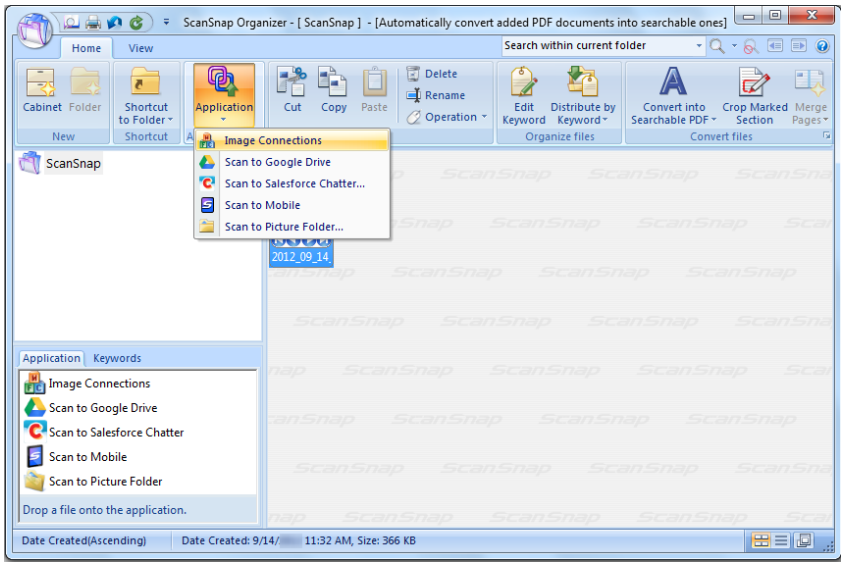
Software bundled with ScanSnap (ScanSnap Manager, ScanSnap Organizer, and CardMinder) provides an interface to enable the following linkage with a user application.

- You can add a user application icon to ScanSnap Manager Quick Menu so that the icon can be used to link ScanSnap Manager with the user application. Windows Mac OS
  Starting the user application from the Quick Menu enables receiving image data (PDF and JPEG) scanned with ScanSnap.

Windows

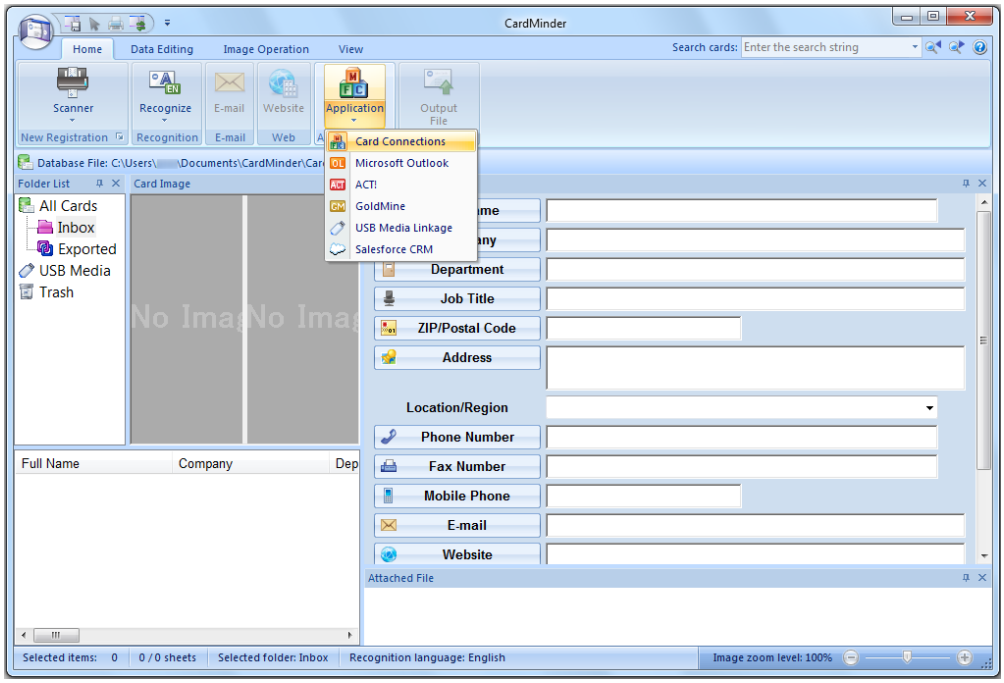
Mac OS

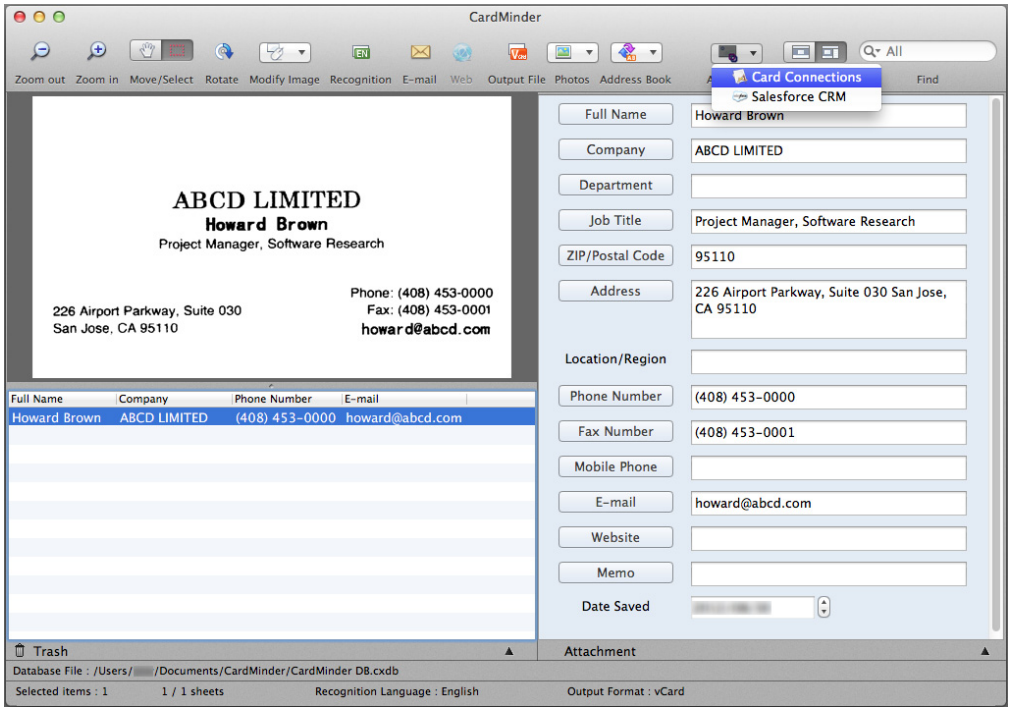
- You can add a user application icon to the [Application] tab of ScanSnap Organizer so that the icon can be used to link ScanSnap Organizer with the user application. Windows
  Starting the user application from ScanSnap Organizer enables receiving the files (PDF, JPEG, and other formats) displayed in the file list.



- You can add a user application icon to the [Home] tab of CardMinder so that the icon can be used to link CardMinder with the user application. Windows
  You can add an application name to a submenu in [Application] of CardMinder so that the name can be used to link CardMinder with the application. Mac OS
  Starting the user application from CardMinder enables receiving card data files (ContactXML format or vCard format).

Windows





- You can scan documents from a user application. Windows Mac OS
  The user application can receive the scanned image data for use.

Prerequisites

This interface can be used with the following versions:

- ScanSnap Manager: V6.0L10 or later
- ScanSnap Organizer: V5.0L10 or later
- CardMinder: V5.0L10 or later

Development Environment

It has been confirmed that each interface of the software that is bundled with ScanSnap can be linked with applications that are created under the following development environments:

Windows

- Microsoft Visual C++ 2005
- Microsoft Visual C++ 2008
- Microsoft Visual C++ 2010
- Microsoft Visual C# 2005
- Microsoft Visual C# 2008
- Microsoft Visual C# 2010

Mac OS

- Xcode 4.5

For Windows Users

This chapter explains how to link a user application with software bundled with ScanSnap (for Windows users).

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Linking with Quick Menu

This section explains how to link ScanSnap Manager Quick Menu with a user application.

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Linkage Method

To link ScanSnap Manager Quick Menu with a user application, perform the following operations:

1. **Creating a user application (→ page 23)**
2. **Creating an application for a settings window (→ page 25)**
3. **Preparing linkage setting files required for linking with an application (→ page 26)**
4. **Registering to a registry (→ page 27)**

Creating a User Application

The following sections explain the key points regarding the specifications of user applications.

- Command line
- Operation specification summary
- Waiting for a user application
- Handling errors that occur during a user application call

Command line

The argument shown below calls a user application from ScanSnap Manager.

Application	Argument
User application	Full path to the result file

Operation specification summary

Analyze the result file and open the image data file.
For details about the result file, refer to "Contents of Output File" (page 101).
After importing the image data file, delete the result file and the image data file before the user application exits. The files are not deleted by the Quick Menu (ScanSnap Manager).

ATTENTION

ScanSnap Manager starts the specified application regardless of whether the specified application is running or not. As a result, an appropriate resolution is required on the application side to prevent any errors that are caused by starting multiple processes of the application.
Note that when the linkage setting file (.ini) is set so that the application is not launched (when the value for the [WithoutLaunch] key in the [Launch] section is "1"), the application is not launched even after scanning.

Waiting for a user application

When the value for the [Wait] key in the [Application] section in the linkage setting file is set to "1", ScanSnap Manager waits for the user application to exit.
ScanSnap Manager determines whether a process of the user application is launched to wait for the process to exit.

When creating a user application that ScanSnap Manager waits for to exit, note the following points:

- Set the user application to exit immediately after it launches the target application.
- Set the user application not to be launched concurrently with one that has already been launched (the setting to enable linkage when a user application is already launched)

Handling errors that occur during a user application call

The following messages may appear when an error occurs during a user application call:

Message	Failed to launch the selected application.
Cause	The selected application might have been uninstalled.
Resolution	Check whether the selected application is properly installed.

Creating an Application for a Settings Window

The following section explains the key points regarding the specifications of the application for a settings window that is created by the user.
Creating an application for a settings window is optional. To change the settings for the user application, create an application for a settings window. To start the application for a settings window, click in the user application that is displayed in the Quick Menu.

- Command line
- Operation specification summary
- Waiting for an application for a settings window

Command line

The argument shown below calls the application for a settings window created by the user from ScanSnap Manager.

Application	Argument
Application for a settings window	/s Full path to the save setting file for the user application

Operation specification summary

To save the settings that are specified with the application for a settings window as a file, output the settings to the save setting file that is passed with an argument from ScanSnap Manager.
The save setting file is used by the application for a settings window created by the user.
Any content can be output to the file.
The settings can be saved as the dedicated settings when called from the Quick Menu.

ATTENTION

- Install the application for a settings window and the user application in the same folder.
- If no application for a settings window (the [SettingExe] key in the [Application] section) is specified in the linkage setting file, the user application is called, regarded as the application for a settings window.

Waiting for an application for a settings window

ScanSnap Manager waits for the application for a settings window that is created by the user to exit.
ScanSnap Manager determines whether a process of the application for a settings window is launched to wait for the process to exit.
When the setup is complete, exit the application for a settings window that is created by the user.

Preparing Linkage Setting Files Required for Linking with an Application

Prepare the linkage setting files required for linking with an application.
The linkage setting file is an INI file. This file defines the information that is related to the user application, the display name of the user application, the availability of linkage settings, and the scanning restrictions.
For details about the linkage setting file, refer to "Linkage Setting File" (page 61).
The following table shows the major items required for linking from the Quick Menu.

Section	Key	Value	Description
Info	IFVersion	1	Specification for the version of the ScanSnap interface that is supported by the user application
Launch	Label	Specified	Character string displayed as the application name
	QuickMenu	1	Whether to display the application in the Quick Menu
	QuickMenuDescription	Specified if required	Character string to describe the user application displayed in the Quick Menu
	QuickMenuLabel	Specified if required	Character string of the application name displayed in the Quick Menu
	RecommendBusinessCard	Specified if required	Whether to have a function that is specific to business cards
	RecommendReceipt	Specified if required	Whether to have a function that is specific to receipts
	RecommendBook	Specified if required	Whether to have a function that is specific to double-page spread documents such as books and magazines
	SupportFileFormat	Specified if required	Specification for the file format that is supported by the application
Application (*)	AppSetting	1	Whether to support the application for a settings window
	ClassName	Specified if required	Window class name of the application for a settings window
	SettingExe	Specified	exe file name of the application for a settings window

* : When the settings window is specified

ATTENTION
To renew the application name and information displayed in [Detail] in the Quick Menu, you must register a newer version number and then restart ScanSnap Manager.

Registering to a Registry

Registering the deployment location of an application

When registered to the defined registry shown below, a user application is automatically recognized as the linked application of ScanSnap Manager.

- For 32-bit
  HKEY_LOCAL_MACHINE\SOFTWARE\PFU\ScanSnap Extension\
- For 64-bit
  HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\PFU\ScanSnap Extension\

Under this key, create the user application key and register the items shown below.
HKEY_LOCAL_MACHINE\SOFTWARE\PFU\ScanSnap Extension*XXX*
("*XXX*" indicates any user application key.)

ATTENTION

Create the user application key with a unique name such as "company name_application name" so that it does not conflict with the third-party application keys.

The following table shows the registry setting items.

Registry value name	Type	Meaning
(Default)	REG_SZ	Full path to the user application
Config	REG_SZ	Full path to the linkage setting file
Path	REG_SZ	Installation folder of the user application

ATTENTION

- Register the user application key during installation of the user application. The user application key may not be registered by the user application itself due to access restrictions or other reasons.
- Delete the user application key during uninstallation of the user application.
- When the "ScanSnap Extension" key does not exist, create the key using the installer of the user application. Note that during uninstallation, a user application that was created by another user may have been registered. In this case, delete only the keys under the user application key that you created.

The following is an example of registering "ImageConnections (ImageConnections.exe)" as a user application.

HKEY_LOCAL_MACHINE\SOFTWARE\PFU\ScanSnap Extension**ImageConnections**
(Default) : C:\Program Files\PFU\ImageConnections\ImageConnections.exe
Config : C:\Program Files\PFU\ImageConnections\ImageConnections.ini
Path : C:\Program Files\PFU\ImageConnections

Registering the version of an application

Register a version number of the user application in the registry shown below.

- For 32-bit
  HKEY_LOCAL_MACHINE\SOFTWARE\PFU\ScanSnap Software\
- For 64-bit
  HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\PFU\ScanSnap Software\

Under this key, create the user application key and register the items shown below.
HKEY_LOCAL_MACHINE\SOFTWARE\PFU\ScanSnap Software*XXX*
("*XXX*" indicates the same key as in "Registering the deployment location of an application".)

ATTENTION

- Create the "ScanSnap Software" key if not created. In this case, do not delete the "ScanSnap Software" key itself during uninstallation of the application.
- To renew the application name and information displayed in [Detail] in the Quick Menu, you must register a newer version number and then restart ScanSnap Manager.
  To manually renew the application name and information displayed in [Detail] in the Quick Menu, call the [Applications to Show/Hide] window from the Quick Menu, and then click the [Reset] button in [Reset Display].

The following table shows the registry setting items.

Registry value name	Type	Meaning
Version	REG_SZ	Version number of the user application The following format is used (4 sets of 3 digits): xxx.xxx.xxx.xxx

Sample Program

This section explains how to use sample programs linked from the Quick Menu.

- Development environment (→ page 29)
- Operation procedure (→ page 30)
- Sample window (→ page 31)

Development Environment

Sample programs are created under the following development environment:

- Microsoft Visual C++ 2005
- Microsoft Visual C# 2005

Sample applications are deployed as follows:

- \win\ScanSnapSample\bin\Manager_Organizer\VC2005\ImageConnections.exe
- \win\ScanSnapSample\bin\Manager_Organizer\VC2005\ImageSettings.exe
- \win\ScanSnapSample\bin\Manager_Organizer\VC#2005\ImageConnections.exe
- \win\ScanSnapSample\bin\Manager_Organizer\VC#2005\ImageSettings.exe
- \win\ScanSnapSample\ini\Manager\ImageConnections.ini

ATTENTION

- To execute a Microsoft Visual C# 2005 sample application, .NET Framework 2.0 must be installed on your computer.
  .NET Framework 2.0 is also included in .NET Framework versions 3.0 to 3.5 (SP1).
- When using a development environment other than Microsoft Visual Studio 2005, use the sample project file for build.

Operation Procedure

This section describes the operation procedure for the sample applications.

1. Preparation

Install ScanSnap Manager.

2. Deployment

Deploy the following applications in the folder:

- Sample user application (ImageConnections.exe)
  Any local folder
- Sample application for a settings window (ImageSettings.exe)
  The same folder as with the sample user application
- Linkage setting file (ImageConnections.ini)
  Any local folder

3. Registering to a registry

Specify the full path and the version number for the sample user application and the linkage setting file according to the registration examples in "Registering to a Registry" (page 27).

ATTENTION
Specify the name for the user application key under the "ScanSnap Extension" key in the registry as "ImageConnections".

4. Settings for using the Quick Menu

Right-click the ScanSnap Manager icon and click [Scan Button Settings] to display the ScanSnap setup window.
In the ScanSnap setup window, select the [Use Quick Menu] check box and click the [OK] or [Apply] button.

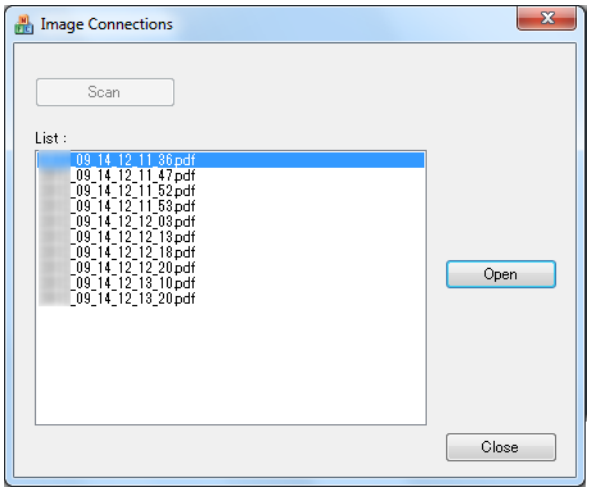
5. Execution

Turn on the ScanSnap and load a document.
Press the [Scan] button on the ScanSnap.
The Quick Menu displays a sample application icon.

The settings window can be started from on the icon.
Click the icon to start the sample application.

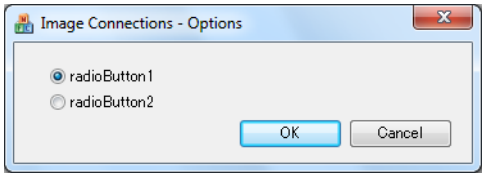
Sample Window

When the sample application is started from the Quick Menu, the received data file is displayed in the output file list.



- List and [Open] button
  Select a data file from the list and click the [Open] button to start the output file using the OS default application.
  Multiple data files in the list cannot be selected.
- [Close] button
  Click the button to exit the sample window.

Settings window



Linking with ScanSnap Organizer

This section explains how to link ScanSnap Organizer with a user application.

Linkage Method **33**
Sample Program **38**

Linkage Method

To link ScanSnap Organizer with a user application, perform the following operations:

1. **Creating a user application (→ page 33)**
2. **Creating an application for a settings window (→ page 34)**
3. **Preparing linkage setting files required for linking with an application (→ page 35)**
4. **Registering to a registry (→ page 36)**

Creating a User Application

The following sections explain the key points regarding the specifications of user applications.

- Command line
- Operation specification summary
- Handling errors that occur during a user application call

Command line

The argument shown below calls a user application from ScanSnap Organizer.

Application	Argument
User application	Full path to the result file (linkage file list)

Operation specification summary

Analyze the result file and open the image data file.
For details about the result file, refer to "Contents of Output File" (page 101).
Delete the result file before the user application exits. The file is not deleted by ScanSnap Organizer.

ATTENTION

- ScanSnap Organizer starts the specified application regardless of whether the specified application is running or not. As a result, an appropriate resolution is required on the application side to prevent any errors that are caused by starting multiple processes of the application.
- Do not delete image data files because these files are managed by ScanSnap Organizer.

Handling errors that occur during a user application call

The following messages may appear when an error occurs during a user application call:

Message	Operation failed (Running associated application).
Cause	The specified application might have been uninstalled.
Resolution	Check whether the specified application is properly installed.

Creating an Application for a Settings Window

The following section explains the key points regarding the specifications of the application for a settings window that is created by a user.
Creating an application for a settings window is optional. To change the settings for the user application, create an application for a settings window. To start the application for a settings window, select a user application program in the [Option] window of ScanSnap Organizer, and then click the [Settings] button.

- Command line
- Operation specification summary

Command line

The argument shown below calls the application for a settings window created by the user from ScanSnap Organizer.

Application	Argument
Application for a settings window	/s

Operation specification summary

The information of the settings window can be saved to any location in any file format.

ATTENTION

- Install the application for a settings window and the user application in the same folder.
- If no application for a settings window (the [SettingExe] key in the [Application] section) is specified in the linkage setting file, the user application is called, regarded as the application for a settings window.
- ScanSnap Organizer starts the specified application regardless of whether the specified application is running or not. As a result, an appropriate resolution is required on the application side to prevent any errors that are caused by starting multiple processes of the application.

Preparing Linkage Setting Files Required for Linking with an Application

Prepare the linkage setting files required for linking with an application.
The linkage setting file is an INI file. This file defines the information that is related to the user application, the display name of the user application, the availability of linkage settings, and the file format.
For details about the linkage setting file, refer to "Linkage Setting File" (page 61).
The following table shows the major items required for linking from ScanSnap Organizer.

Section	Key	Value	Description
Info	IFVersion	1	Specification for the version of the ScanSnap interface that is supported by the user application
Launch	Description	Specified if required	Character string to describe the user application
	Label	Specified	Character string displayed as the application name
Application (*)	AppSetting	1	Whether to support the application for a settings window
	SettingExe	Specified	exe file name of the application for a settings window

* : When the settings window is specified

Registering to a Registry

Registering the deployment location of an application

When registered to the defined registry shown below, a user application is automatically recognized as the linked application of ScanSnap Organizer.

- For 32-bit
  HKEY_LOCAL_MACHINE\SOFTWARE\PFU\ScanSnap Organizer\
  ScanSnap Extension\
- For 64-bit
  HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\PFU\
  ScanSnap Organizer\ScanSnap Extension\

Under this key, create the user application key and register the items shown below.
HKEY_LOCAL_MACHINE\SOFTWARE\PFU\ScanSnap Organizer\
ScanSnap Extension*XXX* ("*XXX*" indicates a desired user application key.)

ATTENTION

Create a user application key with a unique name such as "company name_application name" so that it does not conflict with any third-party application keys.

The following table shows the registry setting items.

Registry value name	Type	Meaning
(Default)	REG_SZ	Full path to the user application
Config	REG_SZ	Full path to the linkage setting file
Path	REG_SZ	Installation folder of the user application

ATTENTION

- Register the user application key during installation of the user application. The user application key may not be registered by the user application itself due to access restrictions or other reasons.
- Delete the user application key during uninstallation of the user application.
- When the "ScanSnap Extension" key does not exist, create the key using the installer of the user application. Note that during uninstallation, a user application that was created by another user may have been registered. In this case, delete only the keys under the user application key that you created.

The following is an example of registering "ImageConnections (ImageConnections.exe)" as a user application.

HKEY_LOCAL_MACHINE\SOFTWARE\PFU\ScanSnap Organizer\
ScanSnap Extension**ImageConnections**
(Default) : C:\Program Files\PFU\ImageConnections\ImageConnections.exe
Config : C:\Program Files\PFU\ImageConnections\ImageConnections.ini
Path : C:\Program Files\PFU\ImageConnections

Sample Program

This section explains how to use sample programs linked from ScanSnap Organizer.

- Development environment (→ page 38)
- Operation procedure (→ page 39)
- Sample window (→ page 40)

Development Environment

Sample programs are created under the following development environment:

- Microsoft Visual C++ 2005
- Microsoft Visual C# 2005

Sample applications are deployed as follows:

- \win\ScanSnapSample\bin\Manager_Organizer\VC2005\ImageConnections.exe
- \win\ScanSnapSample\bin\Manager_Organizer\VC2005\ImageSettings.exe
- \win\ScanSnapSample\bin\Manager_Organizer\VC#2005\ImageConnections.exe
- \win\ScanSnapSample\bin\Manager_Organizer\VC#2005\ImageSettings.exe
- \win\ScanSnapSample\ini\Organizer\ImageConnections.ini

ATTENTION

- To execute a Microsoft Visual C# 2005 sample application, .NET Framework 2.0 must be installed on your computer.
  .NET Framework 2.0 is also included in .NET Framework versions 3.0 to 3.5 (SP1).
- When using a development environment other than Microsoft Visual Studio 2005, use the sample project file for build.

Operation Procedure

This section describes the operation procedure for sample applications.

1. Preparation

Install ScanSnap Organizer.

2. Deployment

Deploy the following applications in the folder:

- Sample user application (ImageConnections.exe)
  Any local folder
- Sample application for a settings window (ImageSettings.exe)
  The same folder as with the sample user application
- Linkage setting file (ImageConnections.ini)
  Any local folder

3. Registering to a registry

Specify the full path to the sample user application and the linkage setting file according to the registration examples in "Registering to a Registry" (page 36).

ATTENTION
Specify the name for the user application key under the "ScanSnap Extension" key in the registry as "ImageConnections".

4. Execution

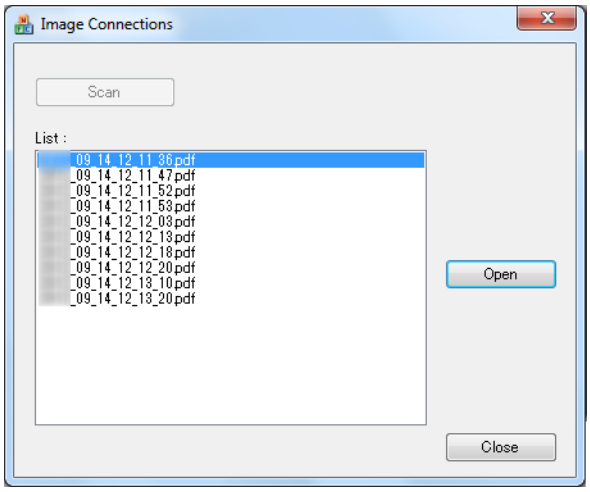
Start ScanSnap Organizer. If it has already been started since before registration to the registry, restart it.
A sample application is shown in the application list on the main window and the list that is displayed by clicking the [Application] button on the [Home] tab in the ribbon menu. Select the sample application from the list to start.

Starting the application for a settings window

Click the [Settings] button on the [Option] window of ScanSnap Organizer to start the settings window for the sample application.
For details about the operation procedures, refer to the ScanSnap Organizer Help.

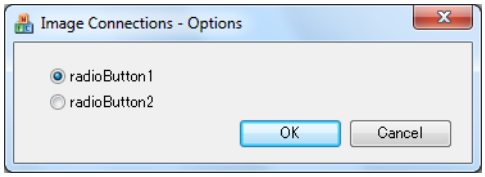
Sample Window

When the sample application is started from ScanSnap Organizer, the received data file is displayed in the output file list.



- List and [Open] button
  Select a data file from the list and click the [Open] button to start the output file using the OS default application.
  Multiple data files in the list cannot be selected.
- [Close] button
  Click the button to exit the sample window.

Settings window



Linking with CardMinder

This section explains how to link CardMinder with a user application.

Linkage Method **42**
Sample Program **48**

Linkage Method

To link CardMinder with a user application, perform the following operations:

1. **Creating a user application (→ page 42)**
2. **Creating an application for a settings window (→ page 45)**
3. **Preparing linkage setting files required for linking with an application (→ page 46)**
4. **Registering to a registry (→ page 47)**

Creating a User Application

The following explains the key points regarding the specifications of user applications.

- Command line
- Operation specification summary
- Handling errors that occur during call of user application

Command line

The argument shown below calls a user application from CardMinder.

Application	Argument
User application	Full path to the result file

Operation specification summary

Analyze the result file and open the data file.
For details about the result file and the data file, refer to "Contents of Output File" (page 101).
The folder described below must be deleted by the user application.

- CardMinder creates a unique result file folder in the user's temporary folder (%temp%) every time it calls the user application. In the created folder, the result file, the card data file and the card image file are stored.
  The folder containing these files is not deleted by CardMinder and must be deleted by the user application.

ATTENTION
CardMinder starts the specified application regardless of whether the specified application is running or not. As a result, an appropriate resolution is required on the application side to prevent any errors that are caused by starting multiple processes of the application.

Handling errors that occur during call of user application

CardMinder deletes a result file folder that is created in the user's temporary folder when one of the errors shown below occurs during the user application call.
The following messages may appear during a call:

1	**Message**	The application does not exist. Verify the environment and try again.
	Cause	The application that is to be linked with does not exist.
	Resolution	Check whether the specified application exists in the environment, and then try again. When the application does not exist, install the application if necessary.
2	**Message**	Failed to export to the application. Check the application you selected.
	Cause	Failed to link with the specified application. (Under the occurrence conditions other than those for message No.1)
	Resolution	Take the following actions, and then perform the process again. ● Check whether the specified application is installed. Install the application if it is not installed. ● Check whether the specified application has properly started and is active. If not active, activate the specified application according to the manual for the application.
3	**Message**	Failed to output the file. Check if the file path specified by the TMP/TEMP environment variable is correct.
	Cause	Failed to obtain the path to the temporary folder during linking.
	Resolution	Check whether the path specified by the TMP/TEMP environment variable is correct, and try again.

4	**Message**	Failed to output the file. Possible causes are: ● You do not have a write authority for the folder specified by the TMP/TEMP environment variable. ● The file is opened in read-only mode.
	Cause	Possible causes are as follows: ● You do not have a write privilege for the temporary folder. ● The linkage file already exists and is opened in read-only mode.
	Resolution	Take either of the following actions, and then perform the process again: ● Set a write privilege for the temporary folder. ● Close the linkage file if it is open.
5	**Message**	Failed to output the file. Restart CardMinder, and then try again.
	Cause	An error occurred during creation of the linkage file for linkage. (Under the occurrence conditions other than those for messages No.3 and No.4)
	Resolution	Restart CardMinder, and then try again.

Creating an Application for a Settings Window

The following explains the key points regarding the specifications of the application for a settings window that is created by the user.
Creating an application for a settings window is optional. To change the settings for the user application, create an application for a settings window. To start the application for a settings window, select a user application program in the [CardMinder Options] window of CardMinder, and then click the [Settings] button.

- Command line
- Operation specification summary

Command line

The argument shown below calls the application for a settings window created by the user from CardMinder.

Application	Argument
Application for a settings window	/s

Operation specification summary

The information of the settings window can be saved to any location in any file format.

ATTENTION

- Install the application for a settings window and the user application in the same folder.
- If no application for a settings window (the [SettingExe] key in the [Application] section) is specified in the linkage setting file, the user application is called, which is regarded as being the application for a settings window.

Preparing Linkage Setting Files Required for Linking with an Application

Prepare the linkage setting files required for linking with an application.
The linkage setting file is an INI file. This file defines the information that is related to the user application, the display name of the user application, the availability of linkage settings, and the file format.
For details about the linkage setting file, refer to "Linkage Setting File" (page 61).
The following table shows the major items required for linking from CardMinder.

Section	Key	Value	Description
Info	IFVersion	1	Specification for the version of the ScanSnap interface that is supported by the user application
Launch	CardDataFileFormat	Specified if required	Setting the card data file format that is received by the user application
	CardDataFileOption	Specified if required	Setting the options for a card data file that is received by the user application
	CardImageFileFormat	Specified if required	Setting the card image file format that is required for the user application
	Description	Specified if required	Character string to describe the user application
	Label	Specified	Character string displayed as the application name
Application (*)	AppSetting	1	Whether to support the application for a settings window
	SettingExe	Specified	The exe file name of the application for a settings window

* : When the settings window is specified

Registering to a Registry

Registering the deployment location of an application

When registered to the defined registry shown below, a user application is automatically recognized as the linked application of CardMinder.

- For 32-bit
  HKEY_LOCAL_MACHINE\SOFTWARE\PFU\CardMinder\ScanSnap Extension\
- For 64-bit
  HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\PFU\CardMinder\
  ScanSnap Extension\

Under this key, create the user application key and register the items shown below.
HKEY_LOCAL_MACHINE\SOFTWARE\PFU\CardMinder\ScanSnap Extension*XXX*
("*XXX*" indicates any user application key.)

ATTENTION
Create a user application key with a unique name such as "company name_application name" so that it does not conflict with any third-party application keys.

The following table shows the registry setting items.

Registry value name	Type	Meaning
(Default)	REG_SZ	Full path to the user application
Config	REG_SZ	Full path to the linkage setting file
Path	REG_SZ	Installation folder of the user application

ATTENTION
- Register the user application key during installation of the user application. The user application key may not be registered by the user application itself due to access restrictions or other reasons.
- Delete the user application key during uninstallation of the user application.
- When the "ScanSnap Extension" key does not exist, create the key using the installer of the user application. Note that during uninstallation, a user application that was created by another user may have been registered. In this case, delete only the keys under the user application key that you created.

The following is an example of registering "CardConnections (CardConnections.exe)" as a user application.

HKEY_LOCAL_MACHINE\SOFTWARE\PFU\CardMinder\
ScanSnap Extension**CardConnections**
(Default) : C:\Program Files\PFU\CardConnections\CardConnections.exe
Config : C:\Program Files\PFU\CardConnections\CardConnections.ini
Path : C:\Program Files\PFU\CardConnections

Sample Program

This section explains how to use sample programs linked from CardMinder.

- Development environment (→ page 48)
- Operation procedure (→ page 49)
- Sample window (→ page 50)

Development Environment

Sample programs are created under the following development environment:

- Microsoft Visual C++ 2005
- Microsoft Visual C# 2005

Sample applications are deployed as follows:

- \win\ScanSnapSample\bin\CardMinder\VC2005\CardConnections.exe
- \win\ScanSnapSample\bin\CardMinder\VC2005\CardSettings.exe
- \win\ScanSnapSample\bin\CardMinder\VC#2005\CardConnections.exe
- \win\ScanSnapSample\bin\CardMinder\VC#2005\CardSettings.exe
- \win\ScanSnapSample\ini\CardMinder\CardConnections.ini

ATTENTION

- To execute a Microsoft Visual C# 2005 sample application, .NET Framework 2.0 must be installed on your computer.
  .NET Framework 2.0 is also included in .NET Framework versions 3.0 to 3.5 (SP1).
- When using a development environment other than Microsoft Visual Studio 2005, use the sample project file for build.

Operation Procedure

This section describes the operation procedure for sample applications.

1. Preparation

Install CardMinder.

2. Deployment

Deploy the following applications in the folder:

- Sample user application (CardConnections.exe)
  Any local folder
- Sample application for a settings window (CardSettings.exe)
  The same folder as with the sample user application
- Linkage setting file (CardConnections.ini)
  Any local folder

3. Registering to a registry

Specify the full path to the sample user application and the linkage setting file according to the registration examples in "Registering to a Registry" (page 47).

ATTENTION
Specify the name for the user application key under the "ScanSnap Extension" key in the registry as "CardConnections".

4. Execution

Start CardMinder. If it has already been started since before registration to the registry, restart it.

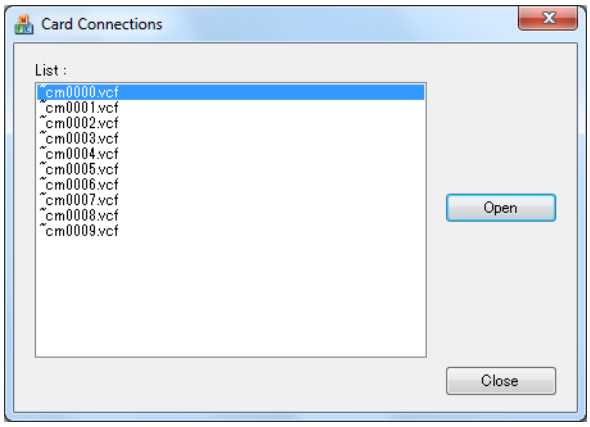
The sample application is shown in the list that is displayed by clicking the "▼" mark in the [Application] button on the [Home] tab in the ribbon menu of the CardMinder window.
When a sample application is selected from the list, the mark is changed to the sample application icon. Click on the icon to start the sample application.

Starting the application for a settings window

Click the [Settings] button on the [CardMinder Options] window of CardMinder to start the settings window for the sample application.
For details about the operation procedures, refer to the CardMinder Help.

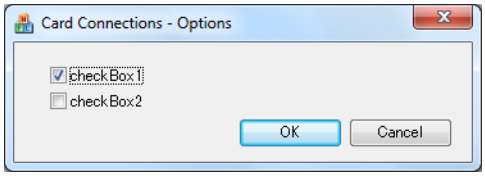
Sample Window

When the sample application is started from CardMinder, the received data file is displayed in the output file list.



- List and [Open] button
  Select a data file from the list and click the [Open] button to start the output file using the OS default application.
  Multiple data files in the list cannot be selected.
- [Close] button
  Click the button to exit the sample window.

Settings window



Scanning from a User Application

This section explains the linkage method to scan documents from a user application.

Linkage Method **52**

Sample Program **57**

Linkage Method

To scan documents from a user application, perform the following operations:

1. **Creating a user application (→ page 52)**
2. **Creating an application for a settings window (→ page 54)**
3. **Preparing linkage setting files required for linking with an application (→ page 55)**
4. **Registering to a registry (→ page 56)**

Creating a User Application

The following sections explain the key points regarding the specifications of user applications.

- [Scan] button
- Command line
- Operation specification summary
- Waiting for a user application
- Handling errors that occur during a user application call

[Scan] button

Functions such as the [Scan] button and the menu items to perform scanning with ScanSnap must be provided for the user application.
When the [Scan] button is pressed, the user application sends messages to the reserve ScanSnap to perform scanning with ScanSnap and to release ScanSnap.
For details, refer to "ScanSnap Manager Control Command" (page 127).

Command line

The argument shown below calls a user application from ScanSnap Manager after scanning with ScanSnap.

Application	Argument
User application	Full path to the result file

Operation specification summary

Implementing a process to instruct ScanSnap Manager to perform scanning ("[Scan] button" (page 52)) and a process to analyze the result file and obtain the image data file is required.
The process performed after scanning is different from the process to instruct scanning.
When data need to be passed, implement a process for this purpose.

For analysis of the result file, use the same procedure as with the user application linked form the Quick Menu.
For details about the result file, refer to "Contents of Output File" (page 101).
After importing the image data file, delete the result file and the image data file before the user application exits. The files are not deleted by ScanSnap Manager.

ATTENTION

ScanSnap Manager starts the specified application regardless of whether the specified application is running or not. As a result, an appropriate resolution is required on the application side to prevent any errors that are caused by starting multiple processes of the application.
Note that when the linkage setting file (.ini) is set so that the application is not launched (when the value for the [WithoutLaunch] key in the [Launch] section is "1"), the application is not launched even after scanning.

Waiting for a user application

When the value for the [Wait] key in the [Application] section in the linkage setting file is set to "1", ScanSnap Manager waits for the user application to exit.
ScanSnap Manager determines whether a process of the user application is launched to wait for the process to exit.

When creating a user application that ScanSnap Manager waits for to exit, note the following points:

- Set the user application to exit immediately after it launches the target application.
- Set the user application not to be launched at the same time as one that has already been launched (the setting to enable linkage when a user application is already launched)

Handling errors that occur during a user application call

The following messages may appear when an error occurs during a user application call:

Message	Failed to launch the selected application.
Cause	The selected application might have been uninstalled.
Resolution	Check whether the selected application is properly installed.

Creating an Application for a Settings Window

The following section explains the key points regarding the specifications of the application for a settings window that is created by the user.
Creating an application for a settings window is optional. To change the settings for the user application, create an application for a settings window. To start the application for a settings window, select a user application program in the [Application] tab of ScanSnap Manager, and then click the [Application Settings] button.

- Command line
- Operation specification summary
- Waiting for an application for a settings window

Command line

The argument shown below calls the application for a settings window created by the user from ScanSnap Manager.

Application	Argument
Application for a settings window	/s Full path to the save setting file for the user application

Operation specification summary

To save the settings that are specified with the application for a settings window as a file, output the settings to the save setting file that is passed with an argument from ScanSnap Manager.
The save setting file is used by the application for a settings window created by the user. Any content can be output to the file.
The settings can be saved as the dedicated settings different from the settings called from the Quick Menu.

ATTENTION

- Install the application for a settings window and the user application in the same folder.
- If no application for a settings window (the [SettingExe] key in the [Application] section) is specified in the linkage setting file, the user application is called, which is regarded as being the application for a settings window.

Waiting for an application for a settings window

ScanSnap Manager waits for the application for a settings window that is created by the user to exit.
ScanSnap Manager determines whether a process of the application for a settings window is launched to wait for the process to exit.
When the setup is complete, exit the application for the user created settings window.

Preparing Linkage Setting Files Required for Linking with an Application

Prepare the linkage setting files required for linking with an application.
The linkage setting file is an INI file. This file defines the information that is related to the user application, the display name of the user application, the availability of linkage settings, and the scanning restrictions.
For details about the linkage setting file, refer to "Linkage Setting File" (page 61).
The following table shows the major items required for scanning documents from the user application.

Section	Key	Value	Description
Info	IFVersion	1	Specification for the version of the ScanSnap interface that is supported by the user application
Launch	Description	Specified if required	Character string to describe the user application
	Label	Specified	Character string displayed as the application name
Application (*)	AppSetting	1	Whether to support the application for a settings window
	ClassName	Specified if required	Window class name of the application for a settings window
	SettingExe	Specified	exe file name of the application for a settings window

* : When the settings window is specified

The [Application Settings] button is enabled when a user application program is selected on the [Application] tab of ScanSnap Manager.
ScanSnap Manager calls the application for a settings window when the [Application Settings] button is clicked.

Registering to a Registry

Registering the deployment location of an application

When registered to the defined registry shown below, a user application is automatically recognized as the linked application of ScanSnap Manager.

- For 32-bit
  HKEY_LOCAL_MACHINE\SOFTWARE\PFU\ScanSnap Extension\
- For 64-bit
  HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\PFU\ScanSnap Extension\

Under this key, create the user application key and register the items shown below.
HKEY_LOCAL_MACHINE\SOFTWARE\PFU\ScanSnap Extension*XXX*
("*XXX*" indicates any user application key.)

ATTENTION

Create a user application key with a unique name such as "company name_application name" so that it does not conflict with any third-party application keys.

The following table shows the registry setting items.

Registry value name	Type	Meaning
(Default)	REG_SZ	Full path to the user application
Config	REG_SZ	Full path to the linkage setting file
Path	REG_SZ	Installation folder of the user application

ATTENTION

- Register the user application key during installation of the user application. The user application key may not be registered by the user application itself due to access restrictions or other reasons.
- Delete the user application key during uninstallation of the user application.
- When the "ScanSnap Extension" key does not exist, create the key using the installer of the user application. Note that during uninstallation, a user application that was created by another user may have been registered. In this case, delete only the keys under the user application key that you created.

The following is an example of registering "ImageConnections (ImageConnections.exe)" as a user application.

HKEY_LOCAL_MACHINE\SOFTWARE\PFU\ScanSnap Extension**ImageConnections**
(Default) : C:\Program Files\PFU\ImageConnections\ImageConnections.exe
Config : C:\Program Files\PFU\ImageConnections\ImageConnections.ini
Path : C:\Program Files\PFU\ImageConnections

Sample Program

This section explains how to use sample programs to scan documents.
In this sample, the application to scan documents and the application called from ScanSnap Manager are the same module.

- Development environment (→ page 57)
- Operation procedure (→ page 58)
- Sample window (→ page 59)

Development Environment

Sample programs are created under the following development environment:

- Microsoft Visual C++ 2005
- Microsoft Visual C# 2005

Sample applications are deployed as follows:

- \win\ScanSnapSample\bin\Manager_Organizer\VC2005\ImageConnections.exe
- \win\ScanSnapSample\bin\Manager_Organizer\VC2005\ImageSettings.exe
- \win\ScanSnapSample\bin\Manager_Organizer\VC#2005\ImageConnections.exe
- \win\ScanSnapSample\bin\Manager_Organizer\VC#2005\ImageSettings.exe
- \win\ScanSnapSample\ini\Manager\ImageConnections.ini

ATTENTION

- To execute a Microsoft Visual C# 2005 sample application, .NET Framework 2.0 must be installed on your computer.
  .NET Framework 2.0 is also included in .NET Framework versions 3.0 to 3.5 (SP1).
- When using a development environment other than Microsoft Visual Studio 2005, use the sample project file for build.

Operation Procedure

This section describes the operation procedure for the sample applications.

1. Preparation

Install ScanSnap Manager.

2. Deployment

Deploy the following applications in the folder:

- Sample user application (ImageConnections.exe)
  Any local folder
- Sample application for a settings window (ImageSettings.exe)
  The same folder as with the sample user application
- Linkage setting file (ImageConnections.ini)
  Any local folder

3. Registering to a registry

Specify the full path to the sample user application and the linkage setting file according to the registration examples in "Registering to a Registry" (page 56).

ATTENTION
Specify the name for the user application key under the "ScanSnap Extension" key in the registry as "ImageConnections".

4. Execution

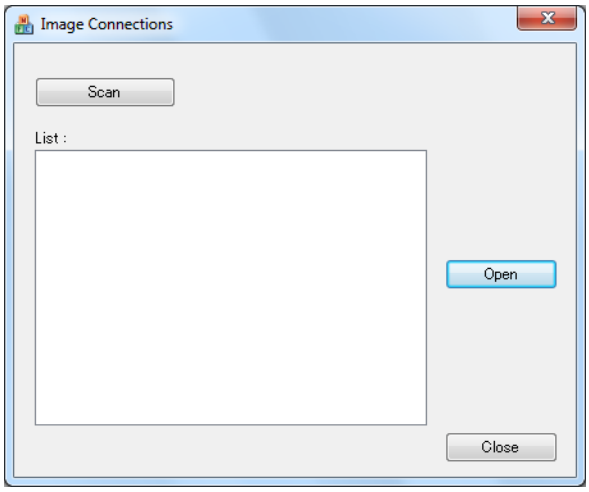
Start ScanSnap Manager. If it has already been started since before registration to the registry, restart it.
Turn on the ScanSnap and load a document.
Execute the sample user application without arguments.
From the sample user application window, press the [Scan] button to start scanning documents with ScanSnap.

Starting the application for a settings window

Right-click the ScanSnap Manager icon and click [Scan Button Settings] to display the ScanSnap setup window.
In the ScanSnap setup window, clear the [Use Quick Menu] check box and click the [Application] tab.
From the application selection list, select [Image Connections] and click the [Application Settings] button.

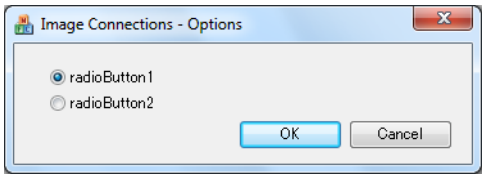
Sample Window

If the sample application is started without arguments, only the [Scan] button and the [Close] button are enabled in the initial display.



- [Scan] button
  Click the button to call Reserve, Scan, and Release with the control command.
- List and [Open] button
  Select a data file from the list and click the [Open] button to start the output file using the OS default application.
  Multiple data files in the list cannot be selected.
- [Close] button
  Click the button to exit the sample window.

Settings window



Describing Linkage Setting File

This section explains how to describe the linkage setting file.

Linkage Setting File 61

Linkage Setting File

The linkage setting file is an INI file. This file defines the information that is related to the user application, the display name of the user application, the availability of linkage settings, and the scanning restrictions.
This file is deployed during installation of the user application.

The linkage setting file can be classified as follows:

- Basic settings (→ page 61)
  - Version management (→ page 61)
  - Application name and description (→ page 62)
  - Application icon (→ page 63)
  - Linkage with applications (→ page 64)
- Automatic linkage (→ page 65)
- Restrictions in scanning in scanning profile mode (→ page 66)
  - [Save] tab (→ page 66)
  - [Scanning] tab (→ page 66)
  - [File option] tab (→ page 68)
  - [Paper] tab (→ page 69)
  - [Compression] tab (→ page 69)
  - Scanned image quality (→ page 69)

The keys for the linkage setting file are listed below.
M: ScanSnap Manager
O: ScanSnap Organizer
C: CardMinder
R: Supported key (required)
P: Supported key (optional)
-: Unsupported key

Basic settings

Version management

Section	Key	Type	Description	M	O	C
Info	IFVersion	String	Specification for the version of the ScanSnap interface that is supported by the user application	R	R	R

Application name and description

Section	Key	Type	Description	M	O	C
Launch	Description	String	Character string to describe the user application	P	P	P
	Label	String	Character string displayed as the application name	R	R	R
	QuickMenuDescription	String	Character string to describe the user application displayed in the Quick Menu	P	-	-
	QuickMenuLabel	String	Character string of the application name displayed in the Quick Menu (When this key does not exist, "Label" is used.)	P	-	-
0x**** (Language section) (*)	Description	String	Character string to describe the user application (has a higher priority than the "Launch" section)	P	P	P
	Label	String	Character string displayed as the application name (has a higher priority than the "Launch" section)	P	P	P
	QuickMenuDescription	String	Character string to describe the user application displayed in the Quick Menu (has a higher priority than the "Launch" section)	P	-	-
	QuickMenuLabel	String	Character string of the application name displayed in the Quick Menu (has a higher priority than the "Launch" section)	P	-	-

* : Section name of the language section
The language ID that is selected in [Standards and formats] on the [Regional Options] tab in [Regional and Language Options] in [Control Panel] (the language ID that is obtained when the GetUserDefaultLangID function in Win32 API is executed) is used.
Language ID:

Language	Section name
Japanese (Japan)	0x0411
English (United States)	0x0409
French (France)	0x040C
German (Germany)	0x0407
Italian (Italy)	0x0410
Spanish (Spain)	0x0C0A
Chinese (China) (simplified)	0x0804

Language	Section name
Chinese (Taiwan) (traditional)	0x0404
Korean (Korea)	0x0412
Russian (Russia)	0x0419
Portuguese (Brazil)	0x0416

Example:
[Launch]
Label=Save
[0x040C]
Label=Sauvegarder
In the above example, [Sauvegarder] in the language section "0x040C" is displayed in the French environment and [Save] in the "Launch" section is displayed in other language environments.

Application icon

Section	Key	Type	Description	M	O	C
Launch	Icon	String	The icon file name that is used to display the user application	P	P	P

Linkage with applications

Section	Key	Type	Description	M	O	C
Launch	CardDataFileFormat	Int	Setting the card data file format that is received by the user application	-	-	P
	CardDataFileOption	Int	Setting the options for a card data file that is received by the user application	-	-	P
	CardImageFileFormat	Int	Setting the card image file format that is required for the user application	-	-	P
	HideAppList	Bool	Whether to display the application in the [Application] list box	P	-	-
	QuickMenu	Bool	Whether to display the application in the Quick Menu	P	-	-
	RecommendBook	Int	Whether to enable a function specialized for double-page spread documents (books/magazines)	P	-	-
	RecommendBusinessCard	Int	Whether to enable a function specialized for business cards	P	-	-
	RecommendReceipt	Int	Whether to enable a function specialized for receipts	P	-	-
	SupportFileFormat	Int	Setting the file format supported by the application	P	P	-
	WithoutLaunch	Bool	Setting the mode in which the application is not launched	P	-	-
Application	AppSetting	Bool	Whether to support the application for a settings window	P	P	P
	ClassName	String	Window class name of the application for a settings window	P	-	-
	SettingExe	String	Exe file name of the application for a settings window	P	P	P
	Wait	Bool	Setting whether to wait for a user application to exit	P	-	-
	IgnoreScanButton	Bool	Setting the mode to disable scanning that can be started with the Scan button on the ScanSnap	P	-	-

Automatic linkage

Section	Key	Type	Description	M	O	C
Launch	AlwaysAutoConnect	Bool	Whether to enable automatic linkage (always in linked status)	P	-	-
	AlwaysAutoConnectExe* (*)	String	Executable file name of the application used for automatic linkage (always in linked status)	P	-	-
	AutoConnect	Bool	Whether to enable automatic linkage (in active status)	P	-	-
	AutoConnectExe* (*)	String	Executable file name of the application used for automatic linkage (in active status)	P	-	-
	AutoConnectWndClass* (*)	String	Window class name of the application used for automatic linkage (in active status)	P	-	-

* : For "*", up to 10 numbers (no number, 2, 3, 4, 5, 6, 7, 8, 9 and 10) can be specified. ("1" cannot be specified.)
Automatic linkage is enabled when the executable file name of the active window exists in the specified executable file names of 1 to XXX.
When "AutoConnectWndClass" is specified, the window class name is also used for search (after the search with the window class name is complete, a search with the executable file name is performed).
Example:
[Launch]
AutoConnectExe=ImageConnections1.exe
AutoConnectExe2=ImageConnections2.exe
AutoConnectExe3=ImageConnections3.exe
AutoConnectExe4=ImageConnections4.exe
AutoConnectExe5=ImageConnections5.exe

There are two modes of automatic linkage as follows:

- Link when one of the above applications is active (recommended): default
- Always link when one of the above applications is running

Switch the modes in the [ScanSnap Manager - Preferences] window.

Restrictions in scanning in scanning profile mode

[Save] tab

Section	Key	Type	Description	M	O	C
Scanning	FileCounterDigits	Int	Restrictions in setting serial number digits of image file name	P	-	-
	FileName	String	Restrictions in setting the first character string of image file name	P	-	-
	FileNameFormat	Int	Restrictions in setting the format of image file name	P	-	-
	Rename	Int	Restrictions in renaming a file after scanning	P	-	-
	SaveFolder	String	Restrictions in setting the destination folder	P	-	-

[Scanning] tab

Section	Key	Type	Description	M	O	C
Scanning	AutoComposite	Bool	Setting whether to enable/disable the function to automatically merge the front and back side of the images	P	-	-
	BlankPageSkip	Bool	Restrictions in setting whether to enable/disable the blank page removing function	P	-	-
	BWBrightness	Int	Restrictions in setting the brightness for scanning in the black & white mode	P	-	-
	ColorMode	Int	Restrictions in setting the color mode	P	-	-
	ContentCorrection	Int	Setting whether to correct skewed text	P	-	-
	ContinueScan	Bool	Restrictions in setting continuous scanning	P	-	-
	ContinueScanMode	Int	Setting the condition for starting the next scan	P	-	-
	DarkMode	Bool	Setting whether to enable/disable the function to darken color images	P	-	-
	Deskew	Bool	Restrictions in setting whether to enable/disable the deskew function	P	-	-
	FaceUp	Bool	Setting whether to scan a document face-side up	P	-	-

Section	Key	Type	Description	M	O	C
Scanning	HighCompression	Bool	Setting whether to enable/disable the high compression function	P	-	-
	HighQualityImage	Bool	Setting whether to reduce fluorescent lamp flicker	P	-	-
	ReduceBleedThrough	Int	Restrictions in setting whether to reduce image bleed-through	P	-	-
	Rotation	Bool	Setting the rotation function	P	-	-
	ScanMode	Int	Restrictions in setting the image quality mode	P	-	-
	ScanningSide	Int	Restrictions in setting the scanning side	P	-	-
	StartScanTime	Int	Setting the waiting time (seconds) to start a scan	P	-	-
	TextOnlyDocument	Bool	Restrictions in setting whether to enable/disable the setting for increasing text contrast	P	-	-
	TimerScanTime	Int	Setting the scanning interval time (seconds) for [Timed interval (Timed mode)]	P	-	-

[File option] tab

Section	Key	Type	Description	M	O	C
Scanning	Format	Int	Restrictions in setting the file format	P	-	-
	MarkerIndex	Int	Setting whether to enable/disable the function to set the marked text as a keyword for the PDF file	P	-	-
	MarkerIndexResult	Bool	Setting whether to output the keyword set for the PDF file from the marked text to an external file	P	-	-
	OcrPage	Int	Restrictions for the pages that are applied to the function to convert an extracted text to a searchable PDF and the pages that are applied to the function to set the marked text as a keyword for the PDF files	P	-	-
	Password	Bool	Setting whether to enable/disable the password setting function	P	-	-
	PDFA	Bool	Restrictions in setting whether to output in a format conforming to PDF/A	P	-	-
	PDFPageDivide	Int	Restrictions in setting whether to enable/disable division into multiple PDF pages and in setting the number of divided pages	P	-	-
	Searchable	Int	Restrictions in converting an extracted text to a searchable PDF	P	-	-
	SearchableLang	Int	Restrictions in setting the language that is used to convert an extracted text to a searchable PDF and to set the marked text as a keyword for the PDF files	P	-	-

[Paper] tab

Section	Key	Type	Description	M	O	C
Scanning	BookDivideType	Int	Setting save option for double-page spread documents	P	-	-
	BookPreCorrection	Bool	Setting whether to preview images after scanning (for books/ magazines)	P	-	-
	CarrierSheetMode	Int	Restrictions in setting [Save as] when using a Carrier Sheet for scanning	P	-	-
	CarrierSheetSeparatePaperSize	Int	Restrictions in setting [Paper size] with [two separate images (front and back)] specified	P	-	-
	CarrierSheetSpreadPaperSize	Int	Restrictions in setting [Paper size] with [one double-page spread image] specified	P	-	-
	MultiCrop	Bool	Setting whether to detect multiple documents	P	-	-
	MultiFeedControl	Int	Restrictions in setting multifeed detection	P	-	-
	MultiPreCorrection	Bool	Setting whether to preview images after scanning (for flat documents)	P	-	-
	PaperSize	Int	Restrictions in setting the paper size	P	-	-
	PaperType	Int	Setting the document type	P	-	-

[Compression] tab

Section	Key	Type	Description	M	O	C
Scanning	Compression	Int	Restrictions in setting the compression rate	P	-	-

Scanned image quality

Section	Key	Type	Description	M	O	C
Scanning	LinearScan	Bool	Setting scanning in linear image quality (gamma 1.0)	P	-	-

Explanation of the Keys for the Linkage Setting File

The keys for the linkage setting file are described below.

- Info section (→ page 70)
- Launch section (→ page 70)
- Language section (→ page 79)
- Application section (→ page 79)
- Scanning section (→ page 81)

ATTENTION

- Operation is not guaranteed if a value out of the specified range is specified.
- Operation is not guaranteed if you use multiples of the same key in a section.

Info section

Key name	IFVersion (Info section)
Summary	Specification for the version of the ScanSnap interface that is supported by the user application
Supported model	S1xxx series, iXxxx series, SV600
Required/ Optional	Required
Value	1
Explanation	Sets the version of the ScanSnap interface that is supported by the user application. "Version" refers to the version of this manual. Used to maintain compatibility so that user applications can continue operating without requiring any changes even if a function is added to the ScanSnap interface at a future date. When this key is not specified, operations may be different depending on the version of the software bundled with ScanSnap.

Launch section

Key name	AlwaysAutoConnect (Launch section)
Summary	Whether to enable automatic linkage (always in linked status)

Supported model	S1xxx series, iXxxx series, SV600
Required/ Optional	Optional
Value	0 - Disable (default) 1 - Enable
Explanation	Sets whether to start automatic linkage when the Scan button is pressed while the application is running even if the application is not selected in the [Application]. The setting for this key is disabled when [Always link when one of the above applications is running] is not selected in [Linkage Method] on the [Automatic Linkage] tab of the [ScanSnap Manager - Preferences] window. It is necessary to call the command described in ""Notifying automatic linkage" command" (page 136).

Key name	AlwaysAutoConnectExe* (Launch section)
Summary	Executable file name of the application used for automatic linkage (always in linked status)
Supported model	S1xxx series, iXxxx series, SV600
Required/ Optional	Optional
Value	Executable file name used for automatic linkage
Explanation	Sets all the executable file names of the application used for automatic linkage. For "*", up to 10 numbers (no number, 2, 3, 4, 5, 6, 7, 8, 9 and 10) can be specified. ("1" cannot be specified.) This key is used when message notification is unavailable because linkage is performed basically with message notification when "Always link when the application is running" is specified.

Key name	AutoConnect (Launch section)
Summary	Whether to enable automatic linkage (in active status)
Supported model	S1xxx series, iXxxx series, SV600
Required/ Optional	Optional
Value	0 - Disable (default) 1 - Enable

Explanation	Sets whether to enable automatic linkage when the Scan button is pressed while the application window is active even if the application is not selected in the [Application]. The setting for this key is disabled when [Link when one of the above applications is active (recommended)] is not selected in [Condition] on the [Automatic Linkage] tab of the [ScanSnap Manager - Preferences] window.

Key name	AutoConnectExe* (Launch section)
Summary	Executable file name of the application used for automatic linkage (in active status)
Supported model	S1xxx series, iXxxx series, SV600
Required/ Optional	Optional
Value	Executable file name used for automatic linkage
Explanation	Sets all the executable file names of the application used for automatic linkage. For "*", up to 10 numbers (no number, 2, 3, 4, 5, 6, 7, 8, 9 and 10) can be specified. ("1" cannot be specified.) The applications are automatically switched and linked when one of the windows for the specified executable file names is active. When the "AutoConnectWndClass" key is specified, the window class name is also used for search and the applications are automatically switched and linked while the relevant window is active.

Key name	AutoConnectWndClass* (Launch section)
Summary	Window class name of the application used for automatic linkage (in active status)
Supported model	S1xxx series, iXxxx series, SV600
Required/ Optional	Optional (Required when AutoConnect=1)
Value	Window class name used for automatic linkage
Explanation	Sets all the window class names of the application used for automatic linkage. For "*", up to 10 numbers (no number, 2, 3, 4, 5, 6, 7, 8, 9 and 10) can be specified. ("1" cannot be specified.) The applications are automatically switched and linked when one of the windows for the specified window class names is active.

Key name	CardDataFileFormat (Launch section)
Summary	Setting the card data file format that is received by the user application

Supported model	S1xxx series, iXxxx series, SV600
Required/ Optional	Optional
Value	1 - ContactXML 1.1 (Card data only. Card image is optional.) 2 - vCard 3.0 (Card data only. Card image is optional.) (default) 3 - vCard 3.0 (UTF-16) (Card data only. Card image is optional.) -1 - Card image only
Explanation	Sets the card data file type that can be received by the user application. Specify whether a card image file exists and the format of the file by using the "CardImageFileFormat" key. * When the key is not specified or a value other than the defined value is specified, the default value is used.

Key name	CardDataFileOption (Launch section)
Summary	Setting the options for a card data file that is received by the user application
Supported model	S1xxx series, iXxxx series, SV600
Required/ Optional	Optional
Value	0 - Pass the data of multiple cards in a card data file. (default) 1 - Pass the card data in card data files on a file-per-card basis.
Explanation	Sets whether to receive the card data of multiple business cards that are combined in a card data file or to receive card data in a separate card data file on a file-per-card basis. * If "Card image only (-1)" is specified for the "CardDataFileFormat" key, this key is ignored. * When the key is not specified or a value other than the defined value is specified, the default value is used.

Key name	CardImageFileFormat (Launch section)
Summary	Setting the card image file format that is required for the user application
Supported model	S1xxx series, iXxxx series, SV600
Required/ Optional	Optional
Value	0 - No image files (When no card image file is required) 1 - PDF (default) 2 - JPEG

Explanation	Sets the file type to be received when the user application requires a card image file. * When the key is not specified or a value other than the defined value is specified, the default value is used. * If "Card image only (-1)" is specified for the "CardDataFileFormat" key and "No image files (0)" is specified for this key, no image files are passed when the user application starts up. In other words, the "FileCount" key value in the "FILES" section in the result file becomes "0".

Key name	Description (Launch section)
Summary	Character string to describe the user application
Supported model	S1xxx series, iXxxx series, SV600
Required/ Optional	Optional
Value	A character string of up to 256 characters (256 bytes)
Explanation	Sets the character string to describe the user application. ● ScanSnap Manager If the "QuickMenuDescription" key is omitted, this key is displayed in the details of the Quick Menu. ● ScanSnap Organizer/CardMinder Displayed as a tooltip of the application menu. This key can be specified also in the language section. Priority is given to the "Description" key value in the language section.

Key name	HideAppList (Launch section)
Summary	Whether to display the application in the [Application] list box
Supported model	S1xxx series, iXxxx series, SV600
Required/ Optional	Optional
Value	0 - Display (default) 1 - Do not display
Explanation	Sets whether to display the application in the [Application] list box.

Key name	Icon (Launch section)
Summary	The icon file name that is used to display the user application
Supported model	S1xxx series, iXxxx series, SV600

Required/ Optional	Optional
Value	Setting the icon file name or the full path to the icon file (up to 255 bytes)
Explanation	Specify this key to display an icon other than the application icon. ● ScanSnap Manager The [Application] list box, the Profile menu and the Quick Menu ● ScanSnap Organizer The application menu and the application list ● CardMinder The application menu When this key does not exist, the default icon specified as the executable file is used. A multi-icon containing images of 48 x 48 pixels and 96 x 96 pixels is recommended to be specified. This makes the displayed icon sharper. To specify the icon file name, place the icon file in the same folder as the user application program.

Key name	Label (Launch section)
Summary	Character string displayed as the application name
Supported model	S1xxx series, iXxxx series, SV600
Required/ Optional	Required (Optional when it exists in the language section)
Value	A character string of up to 62 characters (62 bytes)
Explanation	Sets the character string of the user application name. ● ScanSnap Manager The character string is displayed in [Application] in the following order of priority: 1. Language section - Language key/Language ID - "Label" key Specify this to localize the application name. 2. "Launch" section - "Label" key ● ScanSnap Organizer/CardMinder The character string is displayed as an application menu name in the following order of priority: 1. Language section - Language key/Language ID - "Label" key Specify this to localize the application name. 2. "Launch" section - "Label" key

Key name	QuickMenu (Launch section)
Summary	Whether to display the application in the Quick Menu
Supported model	S1xxx series, iXxxx series, SV600

Required/ Optional	Optional
Value	0 - Do not display (default) 1 - Display
Explanation	Sets whether to display the application in the Quick Menu. In scanning with the Quick Menu, all the restrictions in scanning specified in the "Scanning" section are ignored. If a file format unsupported by the application is linked, it is required to display a message notifying the user that the file format is not supported by the application.

Key name	QuickMenuDescription (Launch section)
Summary	Character string to describe the user application displayed in the Quick Menu
Supported model	S1xxx series, iXxxx series, SV600
Required/ Optional	Optional
Value	A character string of up to 256 characters (256 bytes)
Explanation	Sets the character string to describe the user application displayed in the Quick Menu. The character string is displayed when "1" is specified for "QuicMenu" key. If the string does not fit in a line, a line break is automatically inserted. To explicitly insert a line break, specify "\n" (for up to 3 lines). This key can be specified also in the language section. Priority is given to the "QuickMenuDescription" key value in the language section.

Key name	QuickMenuLabel (Launch section)
Summary	Character string of the application name displayed in the Quick Menu
Supported model	S1xxx series, iXxxx series, SV600
Required/ Optional	Optional
Value	A character string of up to 62 characters (62 bytes)

Explanation	Sets the character string of the application name displayed in the Quick Menu. The character string is displayed when "1" is specified for the "QuickMenu" key. To insert a line break, specify "\n" (for up to 2 lines). Example: QuickMenuLabel=Scan to \n XXXXXXXXXX Scan to XXXXXXXXXX This key can be specified also in the language section. Priority is given to the "QuickMenuLabel" key value in the language section. When this key does not exist, the character string is obtained from the "Label" key. * When the specified character string is actually displayed in the window, one or more characters might be missing. When specifying the character string, check whether it is properly displayed on the Quick Menu.

Key name	RecommendBook (Launch section)
Summary	Whether to enable a function specialized for double-page spread documents (books/magazines)
Supported version	ScanSnap Manager V6.2L10 or later
Supported model	SV600
Required/ Optional	Optional
Value	0 - Treat double-page spread documents (books/magazines) and other documents equally. (default) 1 - Enable a function that is specialized for double-page spread documents (books/magazines).
Explanation	Sets whether to enable a function that is specialized for double-page spread documents (books/magazines).

Key name	RecommendBusinessCard (Launch section)
Summary	Whether to enable a function specialized for business cards
Supported model	S1xxx series, iXxxx series, SV600
Required/ Optional	Optional
Value	0 - Treat business cards and other documents equally. (default) 1 - Enable a function that is specialized for business cards.
Explanation	Sets whether to enable a function that is specialized for business cards.

Key name	RecommendReceipt (Launch section)
Summary	Whether to enable a function specialized for receipts
Supported model	S1xxx series, iXxxx series, SV600
Required/ Optional	Optional
Value	0 - Treat receipts and other documents equally. (default) 1 - Enable a function that is specialized for receipts.
Explanation	Sets whether to enable a function that is specialized for receipts.

Key name	SupportFileFormat (Launch section)
Summary	Setting the file format supported by the application
Supported model	S1xxx series, iXxxx series, SV600
Required/ Optional	Optional
Value	0 - All files (default) 1 - PDF 2 - JPEG 3 - PDF and JPEG
Explanation	● ScanSnap Manager Sets the file format that can be received by the application from the Quick Menu. If this key is omitted, the file format that is specified with the "Format" key in the "Scanning" section is applied. When a file format that cannot be received from the application is linked, a message is displayed. ● ScanSnap Organizer Sets the file format supported by the application.

Key name	WithoutLaunch (Launch section)
Summary	Setting the mode in which the application is not launched
Supported model	S1xxx series, iXxxx series, SV600
Required/ Optional	Optional
Value	0 - Launch (default) 1 - Do not launch

Explanation	Sets the mode in which the application is not launched. If "1 - Do not launch" is specified, the application is not launched for all of the following scanning operations: ● Scanning from the [Scan] button on the ScanSnap ● Simplex/duplex scanning from the right-click menu ● Scanning from the control command ("StartScan" command) ● Selecting an application from the Quick Menu after scanning

Language section

The explanation for the keys in the Languages section is the same as the keys in the Launch section.
For details, refer to "Launch section" (page 70).

Application section

Key name	AppSetting (Application section)
Summary	Whether to support the application for a settings window
Supported model	S1xxx series, iXxxx series, SV600
Required/ Optional	Optional
Value	0 - Do not support (default) 1 - Support
Explanation	Sets whether to support the application for a settings window. When supporting the application for a settings window, start the application from ScanSnap Manager (or ScanSnap Organizer or CardMinder). ScanSnap Manager can save the settings specific to the user application in the save setting file and separate settings for each ScanSnap Manager setting. Because ScanSnap Manager waits for the process to exit when calling the settings, set the process to exit when the settings window is closed. When "0" is specified, the application for a settings window is not started from ScanSnap Manager. (The Settings button is not displayed.)

Key name	ClassName (Application section)
Summary	Window class name of the application for a settings window
Supported model	S1xxx series, iXxxx series, SV600
Required/ Optional	Optional

Value	A character string of up to 62 characters (62 bytes)
Explanation	The window class name of the application for a settings window that is used when the "AppSetting" key is set to "1". Registering this key displays the settings window above the ScanSnap Manager setup window. If this key is not registered, the settings window might be hidden behind the Quick Menu when called from the Quick Menu.

Key name	SettingExe (Application section)
Summary	Exe file name of the application for a settings window
Supported model	S1xxx series, iXxxx series, SV600
Required/ Optional	Optional
Value	File name of the program to be started
Explanation	Sets the exe file name of the application for a settings window. When this exe file name is valid, the settings are called by using this file name. The application for a settings window must be in the same folder as the application to be started. When this exe file name is not specified, the settings are called by using the exe file name of the user application.

Key name	Wait (Application section)
Summary	Setting whether to wait for a user application to exit
Supported model	S1xxx series, iXxxx series, SV600
Required/ Optional	Optional
Value	0 - Do not wait (default) 1 - Wait
Explanation	Sets whether to wait for the launched user application to exit. ScanSnap Manager determines whether a process that is launched waits for the process to exit. * To set ScanSnap Manager to wait for an application for which multiple processes are not launched to exit, appropriate actions, such as exiting a process, are required after a link with the ScanSnap is established. * When ScanSnap Manager calls the application for a settings window, it waits regardless of this key.

Key name	IgnoreScanButton (Application section)
Summary	Setting the mode to disable scanning that can be started with the Scan button on the ScanSnap
Supported version	ScanSnap Manager V6.3L24 or later
Supported model	S1xxx series, iXxxx series, SV600
Required/ Optional	Optional
Value	0 - Enable the Scan button (default) 1 - Disable the Scan button
Explanation	This key sets whether to disable scanning that can be started with the Scan button on the ScanSnap. When "1" is specified, the following operations are disabled while the control privileges for the ScanSnap are put on reserve for the user application. - Scanning with the Scan button on the ScanSnap - Scanning with the shortcut keys (SV600) The following operations are enabled even if "1" is specified. - Stopping scanning with the Stop button on the ScanSnap - Stopping scanning with the shortcut keys (SV600) - Consecutive scanning with the Scan button on the ScanSnap during scanning (SV600)

Scanning section

You can specify a parameter to be fixed out of Profile for each setting.
The scan settings can be changed freely from the ScanSnap Manager settings window if the settings are not specified or an invalid value is specified in the settings.
If the settings are not specified in the "Scanning" section, users can change all of the settings freely from the ScanSnap Manager setup window.

ATTENTION

- In scanning with the Quick Menu, the keys in the "Scanning" section are disabled.
  To add a user application to the Quick Menu, the user application must support the data formats output by ScanSnap such as file formats (PDF and JPEG) and color formats (color, gray and black & white).
- If a key in the "Scanning" section is enabled, the ScanSnap Manager setup window can be fixed (grayed out) with the specified value.

Key name	AutoComposite (Scanning section)
Summary	Setting whether to enable/disable the function to automatically merge the front side image and the back side image

Supported version	ScanSnap Manager V6.3L20 or later
Supported model	iX100, S1100i
Required/ Optional	Optional
Value	0 - Disable 1 - Enable
Explanation	Sets whether to enable/disable the function to automatically merge the front side image and the back side image. When a value other than "0" is set for the "PaperSize" key, or when an item other than [Automatic detection] is selected for [Paper size], restriction for this key is ignored.

Key name	BlankPageSkip (Scanning section)
Summary	Restrictions in setting whether to enable/disable the blank page removing function
Supported model	S1xxx series, iXxxx series
Required/ Optional	Optional
Value	0 - Disable 1 - Enable
Explanation	Sets whether to enable/disable the blank page removing function.

Key name	BookDivideType (Scanning section)
Summary	Setting save option for double-page spread documents
Supported version	ScanSnap Manager V6.2L10 or later
Supported model	SV600
Required/ Optional	Optional
Value	0 - Save as single-page image 1 - Save as double-page spread image (left to right) 2 - Save as double-page spread image (right to left)

Explanation	This key sets a save option for double-page spread documents when [Select later] or [Double-page spread (Book/Magazine)] is selected for [Document type]. When "0" is specified for the "PaperType" key, a value other than "0" or "10" is selected for the "PaperSize" key, or when [Flat document] is selected for [Document type], restrictions for this key are ignored.

Key name	BookPreCorrection (Scanning section)
Summary	Setting whether to preview images after scanning (for double-page spread documents (books/magazines))
Supported version	ScanSnap Manager V6.2L10 or later
Supported model	SV600
Required/ Optional	Optional
Value	0 - Do not preview 1 - Preview
Explanation	This key sets [Preview images after scanning] when [Double-page spread (Book/Magazine)] is selected for [Document type]. When "0" is specified for the "PaperType" key or [Select later]/[Flat document] is selected for [Document type], restrictions for this key are ignored. When a value other than "0" or "10" is selected for the "PaperSize" key, or when a value other than [Automatic detection (Maximum)] or [Automatic detection (A4/Letter landscape)] is selected for [Paper size], restrictions for this key are ignored.

Key name	BWBrightness (Scanning section)
Summary	Restrictions in setting the brightness for scanning in the black & white mode
Supported model	S1xxx series, iXxxx series, SV600
Required/ Optional	Optional
Value	-5 to 5 - -5 (pale) to 5 (deep) (0: standard)
Explanation	Sets the brightness for scanning in the black & white mode. When "2" is specified for the "Format" key or when [JPEG] is selected for [File format], restrictions for this key are ignored. When "2", "4" or "5" is specified for the "ColorMode" key or when [Color], [Gray] or [Color high compression] is selected for [Color mode], restrictions for this key are ignored.

Key name	CarrierSheetMode (Scanning section)

Summary	Restrictions in setting [Save as] when using a Carrier Sheet for scanning
Supported version	ScanSnap Manager V6.5L30 or later
Supported model	S1500, S1100, S1100i, iX500, iX100
Required/ Optional	Optional
Value	1 - one double-page spread image 2 - two separate images (front and back)
Explanation	Sets the mode to save scanned images when using a Carrier Sheet for scanning.

Key name	CarrierSheetSeparatePaperSize (Scanning section)
Summary	Restrictions in setting [Paper size] with [two separate images (front and back)] specified
Supported version	ScanSnap Manager V6.5L30 or later
Supported model	S1500, S1100, S1100i, iX500, iX100
Required/ Optional	Optional
Value	0 - Automatic detection 1 - Carrier Sheet Size (216 × 297 mm) 2 - A4 (210 × 297 mm) 3 - A5 (148 × 210 mm) 4 - A6 (105 × 148 mm) 5 - Post card (100 × 148 mm) 6 - B5(JIS) (182 × 257 mm) 7 - B6(JIS) (128 × 182 mm) 8 - Letter (8.5 × 11 in. (216 × 279.4 mm)) 9 - Business card portrait (55 × 90 mm) 10 - Business card landscape (90 × 55 mm)
Explanation	Sets the size of an image to be saved.

Key name	CarrierSheetSpreadPaperSize (Scanning section)
Summary	Restrictions in setting [Paper size] with [one double-page spread image] specified
Supported version	ScanSnap Manager V6.5L30 or later

Supported model	S1500, S1100, S1100i, iX500, iX100
Required/ Optional	Optional
Value	0 - Automatic detection 1 - A3 (297 × 420 mm) 2 - B4(JIS) (257 × 364 mm) 3 - 11 × 17 in. (279.4 × 431.8 mm)
Explanation	Sets the size of an image to be saved.

Key name	ColorMode (Scanning section)
Summary	Restrictions in setting the color mode
Supported model	S1xxx series, iXxxx series, SV600
Required/ Optional	Optional
Value	1 - Color/gray/black & white auto detection (For JPEG files, color/gray auto detection) 2 - Color 3 - Black & white (valid for PDF files) 4 - Color high compression (valid for PDF files) 5 - Gray
Explanation	Sets the color mode. When "2" is specified for the "Format" key and "3" or "4" is specified for this key, restrictions for this key are ignored. Specifying "1" for the "HighCompression" key makes [Color high compression] fixed for [Color mode] (the same result as specifying "4" for this key). When "4" is specified for the "ScanMode" key and "4" is specified for this key, restrictions for this key are ignored.

Key name	Compression (Scanning section)
Summary	Restrictions in setting the compression rate
Supported model	S1xxx series, iXxxx series, SV600
Required/ Optional	Optional
Value	1 - Low compression rate to 5 - High compression rate
Explanation	Sets the compression rate. When "3" is specified for the "ColorMode" key or when [B&W] is specified for [Color mode], restrictions for this key are ignored.

Key name	ContentCorrection (Scanning section)
Summary	Setting whether to correct skewed text
Supported version	ScanSnap Manager V6.3L20 or later
Supported model	SV600
Required/ Optional	Optional
Value	0 - Disable 1 - Flat document 2 - Double-page spread 3 - Flat document and double-page spread
Explanation	Sets whether to correct skewed text

Key name	ContinueScan (Scanning section)
Summary	Restrictions in setting continuous scanning
Supported model	S1xxx series, iXxxx series, SV600
Required/ Optional	Optional
Value	0 - Disable 1 - Enable
Explanation	Sets whether to enable continuous scanning. * To create an application that enables continuous scanning when a single-sided scanner is used, do not set "0 - Disable" for this key.

Key name	ContinueScanMode (Scanning section)
Summary	Setting the condition for starting the next scan
Supported version	ScanSnap Manager V6.3L20 or later
Supported model	SV600
Required/ Optional	Optional

Value	0 - None 1 - Timed interval (Timed mode) 2 - Page turning detection mode
Explanation	Sets the condition for starting the next scan. This key is enabled only for continual scanning.

Key name	DarkMode (Scanning section)
Summary	Setting whether to enable/disable the function to darken color images
Supported version	ScanSnap Manager V6.3L20 or later
Supported model	SV600
Required/ Optional	Optional
Value	0 - Disable 1 - Enable
Explanation	Sets whether to enable/disable the function to darken color images. This key is enabled when "2" is specified for the "ColorMode" key or when [Color] is selected for [Color mode].

Key name	Deskew (Scanning section)
Summary	Restrictions in setting whether to enable/disable the deskew function
Supported model	S1xxx series, iXxxx series, SV600
Required/ Optional	Optional
Value	0 - Disable 1 - Enable
Explanation	Sets whether to enable/disable the deskew function.

Key name	FaceUp (Scanning section)
Summary	Setting whether to scan a document face-side up
Supported model	S1xxx series (S1100i and S1100 not supported), iXxxx series (iX100 not supported)
Required/ Optional	Optional

Value	0 - Disable 1 - Enable
Explanation	Sets whether to scan the document face-side up. When "2", "3", "4", "5", "6", or "7" is set for the "Rotation" key, or when [Rotate 90° CW], [Rotate 180°], or [Rotate 90° CCW] is selected for [Image rotation], restriction for this key is ignored.

Key name	FileCounterDigits (Scanning section)
Summary	Restrictions in setting serial number digits of image file name
Supported model	S1xxx series, iXxxx series, SV600
Required/ Optional	Optional
Value	0 - 0 digit 1 - 1 digit 2 - 2 digits 3 - 3 digits 4 - 4 digits 5 - 5 digits 6 - 6 digits
Explanation	Sets serial number digits of image file name. The serial number digits are applied when "2 - The name is specified by the user." is specified for the file name format (FileNameFormat) key.

Key name	FileName (Scanning section)
Summary	Restrictions in setting the first character string of image file name
Supported model	S1xxx series, iXxxx series, SV600
Required/ Optional	Optional
Value	The first character string of image file name
Explanation	Sets the first character string of image file name. The first character string is applied when "2 - The name is specified by the user." is specified for the file name format (FileNameFormat) key. Pay careful attention when specifying this key. If a wrong file name is specified, the validity check for the path is not performed during setup and the settings are grayed out (cannot be changed). * Check the following when specifying this key: ● Whether valid characters for file names are used ● Whether the character string length is within the limit (up to 30 characters) When no value (NULL string) is specified, this key is ignored. When the limit for the character string length is exceeded, this key is ignored.

Key name	FileNameFormat (Scanning section)
Summary	Restrictions in setting the format of image file name
Supported model	S1xxx series, iXxxx series, SV600
Required/ Optional	Optional
Value	0 - yyyy_MM_dd_HH_mm_ss 1 - yyyyMMddHHmmss 2 - The name is specified by the user. 3 - yyyy-MM-dd-HH-mm-ss
Explanation	Sets the format of image file name.

Key name	Format (Scanning section)
Summary	Restrictions in setting the file format
Supported model	S1xxx series, iXxxx series, SV600
Required/ Optional	Optional
Value	1 - PDF 2 - JPEG
Explanation	Sets the file format.

Key name	HighCompression (Scanning section)
Summary	Setting whether to enable/disable the high compression function
Supported model	S1xxx series, iXxxx series, SV600
Required/ Optional	Optional
Value	0 - Disable 1 - Enable

Explanation	Sets whether to enable/disable the color high compression function. When the file format is not PDF, this key is ignored. Specifying "0" disables selection (display) of [Color high compression] for [Color mode]. Specifying "1" makes [Color high compression] fixed for [Color mode] (the same result as specifying "ColorMode=4"). When "4" is specified for the "ScanMode" key and "1" is specified for this key, restrictions for this key are ignored.

Key name	HighQualityImage (Scanning section)
Summary	Setting whether to reduce fluorescent lamp flicker
Supported version	ScanSnap Manager V6.2L10 or later
Supported model	SV600
Required/ Optional	Optional
Value	0 - Disable 1 - Enable
Explanation	Sets whether to reduce fluorescent lamp flicker.

Key name	LinearScan (Scanning section)
Summary	Setting scanning in linear image quality (gamma 1.0)
Supported model	S1xxx series, iXxxx series, SV600
Required/ Optional	Optional
Value	0 - Do not scan in linear image quality (gamma 1.0) 1 - Scan in linear image quality (gamma 1.0)
Explanation	Scans in linear image quality (gamma 1.0).

Key name	MarkerIndex (Scanning section)
Summary	Setting whether to enable/disable the function to set the marked text as a keyword for the PDF file
Supported model	S1xxx series, iXxxx series, SV600

Required/ Optional	Optional
Value	0 - Disable 1 - Enable (the first marked section) 2 - Enable (all of the marked sections)
Explanation	Sets whether to enable/disable the function to set the marked text as a keyword for the PDF file and Sets the range to be marked. When "3", "4" or "5" is specified for the "ColorMode" key or when [Gray], [B&W] or [Color high compression] is selected for [Color mode], restrictions for this key are ignored. When "2" is specified for the "Format" key or when [JPEG] is selected for [File format], restrictions for this key are ignored.

Key name	MarkerIndexResult (Scanning section)
Summary	Setting whether to output the keyword set for the PDF file from the marked text to an external file
Supported model	S1xxx series, iXxxx series, SV600
Required/ Optional	Optional
Value	0 - Do not output to an external file (default) 1 - Output to an external file
Explanation	Sets whether to output the result of setting the marked text as the keyword for the PDF file to an external file. For details, refer to "Result File" (page 102). If the keyword is output to an external file by specifying this key, delete the file from the user application.

Key name	MultiCrop (Scanning section)
Summary	Setting whether to detect multiple documents
Supported version	ScanSnap Manager V6.2L10 or later
Supported model	SV600
Required/ Optional	Optional
Value	0 - Disable 1 - Enable

Explanation	Sets whether to detect multiple documents. When "1" is specified for the "PaperType" key or when [Double-page spread (Book/Magazine)] is selected for [Document type], restrictions for this key are ignored. When a value other than "0" or "10" is selected for the "PaperSize" key, or when a value other than [Automatic detection (Maximum)] or [Automatic detection (A4/Letter landscape)] is selected for [Paper size], restrictions for this key are ignored.

Key name	MultiFeedControl (Scanning section)
Summary	Restrictions in setting multifeed detection
Supported model	S1xxx series (S1100i and S1100 not supported), iXxxx series (iX100 not supported)
Required/ Optional	Optional
Value	0 - Disable multifeed detection 1 - Enable multifeed detection (Check length) 2 - Enable multifeed detection (Ultrasonic) (only for models that support ultrasound)
Explanation	Sets whether to enable multifeed detection. When "2" is specified for this key and a model not supporting ultrasound is connected, the system operates as if this key is not specified.

Key name	MultiPreCorrection (Scanning section)
Summary	Setting whether to preview images after scanning (for flat documents)
Supported version	ScanSnap Manager V6.2L10 or later
Supported model	SV600
Required/ Optional	Optional
Value	0 - Do not preview 1 - Preview
Explanation	This key sets [Preview images after scanning] when [Flat document] is selected for [Document type]. When "1" is specified for the "PaperType" key or [Select later]/[Double-page spread (Book/Magazine)] is selected for [Document type], restrictions for this key are ignored. When a value other than "0" or "10" is selected for the "PaperSize" key, or when a value other than [Automatic detection (Maximum)] or [Automatic detection (A4/Letter landscape)] is selected for [Paper size], restrictions for this key are ignored.

Key name	OcrPage (Scanning section)
Summary	Restrictions for the pages that are applied to the function to convert an extracted text to a searchable PDF and the pages that are applied to the function to set the marked text as a keyword for the PDF files
Supported model	S1xxx series, iXxxx series, SV600
Required/ Optional	Optional
Value	0 - First page 1 - All pages
Explanation	Sets the pages that are applied to the function to convert an extracted text to a searchable PDF and the pages that are applied to the function to set the marked text as a keyword for the PDF files. When "2" is specified for the "Format" key or when [JPEG] is selected for [File format], restrictions for this key are ignored.

Key name	PaperSize (Scanning section)
Summary	Restrictions in setting the paper size
Supported model	S1xxx series, iXxxx series, SV600
Required/ Optional	Optional

Value	● When connecting a ScanSnap other than the SV600 0 - Automatic detection 1 - A4 (210 × 297 mm) 2 - A5 (148 × 210 mm) 3 - A6 (105 × 148 mm) 4 - B5 (JIS) (182 × 257 mm) 5 - B6 (JIS) (128 × 182 mm) 6 - Post card (100 × 148 mm) 7 - Business card (90 × 55 mm, 55 × 90 mm) 8 - Letter (8.5 × 11 in. (216 × 279.4 mm)) 9 - Legal (8.5 × 14 in. (216 × 355.6 mm)) ● When connecting the SV600 0 - Automatic detection (Maximum) 1 - A4L (297 × 210 mm) 2 - A5L (210 × 148 mm) 3 - A6L (148 × 105 mm) 4 - B5L(JIS) (257 × 182mm) 5 - B6L(JIS) (182 × 128mm) 6 - Post cardL (148 × 100mm) 7 - Business card (90 × 55mm) 8 - LetterL (11 × 8.5 in. (279.4 × 216mm)) 9 - LegalL (14 × 8.5 in. (355.6 × 216mm)) 10 - Automatic detection (A4/Letter landscape) 11 - A3L (420 × 297 mm) 12 - B4L(JIS) (364 × 257mm) 13 - 17 × 11 in. (431.8 × 279.4 mm)
Explanation	Sets the paper size.

Key name	PaperType (Scanning section)
Summary	Setting the document type
Supported version	ScanSnap Manager V6.2L10 or later
Supported model	SV600
Required/ Optional	Optional
Value	0 - Flat document 1 - Double-page spread (Book/Magazine)
Explanation	Sets [Document type].

Key name	Password (Scanning section)
Summary	Setting whether to enable/disable the password setting function

Supported model	S1xxx series, iXxxx series, SV600
Required/ Optional	Optional
Value	0 - Disable 1 - Enable
Explanation	Sets whether to set the password. If "1" is specified for the "PDFA" key, restrictions for this key are ignored. When "2" is specified for the "Format" key or when [JPEG] is selected for [File format], restrictions for this key are ignored.

Key name	PDFA (Scanning section)
Summary	Restrictions in setting whether to output in a format conforming to PDF/A
Supported model	S1xxx series, iXxxx series, SV600
Required/ Optional	Optional
Value	0 - Do not conform to PDF/A (output as a normal PDF) (default) 1 - Conform to PDF/A
Explanation	Sets whether to output in a format conforming to PDF/A. When "2" is specified for the "Format" key or when [JPEG] is selected for [File format], restrictions for this key are ignored.

Key name	PDFPageDivide (Scanning section)
Summary	Restrictions in setting whether to enable/disable division into multiple PDF pages and in setting the number of divided pages
Supported model	S1xxx series, iXxxx series, SV600
Required/ Optional	Optional
Value	0 - Do not divide 1 to 999 - The number of pages to be divided
Explanation	Sets whether to enable division into multiple PDF pages and the number of divided pages. When "2" is specified for the "Format" key or when [JPEG] is selected for [File format], restrictions for this key are ignored.

Key name	ReduceBleedThrough (Scanning section)
Summary	Restrictions in setting whether to reduce image bleed-through

Supported model	S1xxx series, iXxxx series, SV600
Required/ Optional	Optional
Value	0 - Do not reduce image bleed-through 1 - Reduce image bleed-through
Explanation	Sets whether to reduce image bleed-through. For SV600, restriction for this key is ignored when "2" is set for the "ColorMode" key and "1" is set for the "DarkMode" key or when [Color] is selected for [Color mode] and [Thicken color images] is selected.

Key name	Rename (Scanning section)
Summary	Restrictions in renaming a file after scanning
Supported model	S1xxx series, iXxxx series, SV600
Required/ Optional	Optional
Value	0 - Disable 1 - Enable
Explanation	Sets whether to rename a file after scanning.

Key name	Rotation (Scanning section)
Summary	Setting the rotation function
Supported version	Value "2", "3", and "4" can be used with ScanSnap Manager V6.3L20 or later. Value "5", "6", and "7" can be used with ScanSnap Manager V6.3L24 or later.
Supported model	S1xxx series, iXxxx series, SV600
Required/ Optional	Optional
Value	0 - Do not rotate 1 - Automatic 2 - Rotate 90° CW (horizontal bound) 3 - Rotate 180° (vertical bound) 4 - Rotate 90° CCW (horizontal bound) 5 - Rotate 90° CW (vertical bound) 6 - Rotate 180° (horizontal bound) 7 - Rotate 90° CCW (vertical bound)

Explanation	Sets the rotation function For the SV600, when "1" is specified for the "PaperType" key, or when [Double-page spread (Book/Magazine)] is selected for [Document type], restrictions for this key are ignored.

Key name	SaveFolder (Scanning section)
Summary	Restrictions in setting the destination folder
Supported model	S1xxx series, iXxxx series, SV600
Required/ Optional	Optional
Value	Setting the folder to save the file
Explanation	Sets the folder to save the file. The folder path can include "%USERPROFILE%". Example: %USERPROFILE%\Pictures Pay careful attention when specifying this key. If a wrong path is specified, the validity check for the path is not performed during setup and the settings are grayed out (cannot be changed). * Before specifying this key, check if the specified folder exists in the environment to be used. When no value (NULL string) is specified, this key is ignored.

Key name	ScanMode (Scanning section)
Summary	Restrictions in setting the image quality mode
Supported model	S1xxx series, iXxxx series, SV600
Required/ Optional	Optional
Value	1 - Normal 2 - Better 3 - Best 4 - Excellent 99 - Auto
Explanation	Sets the image quality mode.

Key name	ScanningSide (Scanning section)
Summary	Restrictions in setting the scanning side
Supported model	S1xxx series, iXxxx series, SV600

Required/ Optional	Optional
Value	0 - Duplex scan 1 - Simplex scan
Explanation	Sets the scanning side. Depending on the specified value, the corresponding right-click menu item ([Duplex Scan]/[Simplex Scan]) is also grayed out. * When using this interface to connect an application to both a double-sided and a single-sided ScanSnap and to scan with the default setting for each model (duplex scan for the double-sided scanner and simplex scan for the single-sided scanner), do not specify this key.

Key name	Searchable (Scanning section)
Summary	Restrictions in converting an extracted text to a searchable PDF
Supported model	S1xxx series, iXxxx series, SV600
Required/ Optional	Optional
Value	0 - Disable 1 - Enable
Explanation	Sets whether to convert an extracted text to a searchable PDF. When "2" is specified for the "Format" key or when [JPEG] is selected for [File format], restrictions for this key are ignored. To use this key, specify a language for the "SearchableLang" key. If the "SearchableLang" key is not specified or if it is ignored, the language setting in ScanSnap Manager is used instead.

Key name	SearchableLang (Scanning section)
Summary	Restrictions in setting the language that is used to convert an extracted text to a searchable PDF and to set the marked text as a keyword for the PDF files
Supported version	Values from "11" to "25" can be used with ScanSnap Manager V6.5L40 or later.
Supported model	S1xxx series, iXxxx series, SV600
Required/ Optional	Optional

Value	0 - Japanese 1 - English 2 - French 3 - German 4 - Italian 5 - Spanish 6 - Chinese (simplified) 7 - Chinese (traditional) 8 - Korean 9 - Russian 10 - Portuguese 11 - Arabic 12 - Indonesian 13 - Thai 14 - Vietnamese 15 - Czech 16 - Danish 17 - Dutch 18 - Finnish 19 - Greek 20 - Hungarian 21 - Norwegian 22 - Polish 23 - Romanian 24 - Swedish 25 - Turkish
Explanation	Sets the language that is used to convert an extracted text to a searchable PDF and to set the marked text as a keyword for the PDF files. Values from "0" to "10" are available for ScanSnap Manager versions that are earlier than V6.5L40. All values are available for ScanSnap Manager V6.5 L40 or later. Note that it is necessary to install the appropriate OCR pack, which is a set of languages that can be used to recognize text, depending on the language that you want. If the OCR Pack with the language that you want is not installed, restrictions for this key are ignored. For languages that are included in the OCR Pack, refer to the following: http://www.fujitsu.com/global/support/products/computing/peripheral/scanners/scansnap/software/ocrpack-setup.html When "2" is specified for the "Format" key or when [JPEG] is selected for [File format], restrictions for this key are ignored.

Key name	StartScanTime (Scanning section)
Summary	Setting the waiting time (seconds) to start a scan
Supported version	ScanSnap Manager V6.3L20 or later
Supported model	SV600

Required/ Optional	Optional
Value	0 - None 1 to 10 - Set waiting time (seconds)
Explanation	Sets the waiting time (seconds) to start a scan.

Key name	TextOnlyDocument (Scanning section)
Summary	Restrictions in setting whether to enable/disable the setting for increasing text contrast
Supported model	S1xxx series, iXxxx series, SV600
Required/ Optional	Optional
Value	0 - Disable 1 - Enable
Explanation	Sets whether to enable/disable the setting for increasing text contrast. For SV600, restriction for this key is ignored when "2" is set for the "ColorMode" key and "1" is set for the "DarkMode" key or when [Color] is selected for [Color mode] and [Thicken color images] is selected.

Key name	TimerScanTime (Scanning section)
Summary	Setting the scanning interval time (seconds) for [Timed interval (Timed mode)]
Supported version	ScanSnap Manager V6.3L20 or later
Supported model	SV600
Required/ Optional	Optional
Value	0 to 10 - Set scanning interval time (seconds)
Explanation	Sets the scanning interval time (seconds) for [Timed interval (Timed mode)]. This key is enabled when [Timed interval (Timed mode)] is set for setting the condition for starting the next scan.

Contents of Output File

This section explains the files that are output by the software bundled with ScanSnap and passed to a user application.

Result File 102

Marked Section Keyword Result File 115

Data File 116

Result File

The result file is an INI file. The file describes information such as the full path to the data file to be passed to the user application.
The file is automatically created by ScanSnap Manager after scanning.
The file is automatically created by ScanSnap Organizer/CardMinder when the linked application starts up.

The keys for the result file are listed below.
M: ScanSnap Manager
O: ScanSnap Organizer
C: CardMinder
P: Supported key
-: Unsupported keythe front side image and the back side image

Section	Key	Type	Description	M	O	C
INFO	FileDesc	String	Character string to indicate that the file is the result file	P	P	P
	Version	String	Character string to indicate the version of the result file format	P	P	P
	Application	String	Character string to indicate the caller application name	P	P	P
	AppSetting	String	Full path to the save setting file	P	-	-
	LaunchMode	Int	ScanSnap Manager call mode	P	-	-
	ScannerName	String	Model name of the ScanSnap	P	-	-
	ScannerType	Int	Device type of the ScanSnap	P	-	-
FILES	FileCount	Int	Total number of the data files to be passed to the user application	P	P	P
	File*	String	Full path to the data file	P	P	P
	KeywordFile	String	Full path to the file to which the keyword set for the PDF file from the marked text is output	P	-	-
	TotalPageCount	Int	Total number of output pages	P	-	-
	File*_PageCount	Int	Total number of pages in the file	P	-	-

Section	Key	Type	Description	M	O	C
SCAN	Duplex	Int	Scanning side	P	-	-
	ScanMode	Int	Image quality mode	P	-	-
	ColorMode	Int	Color mode	P	-	-
	PaperSize	Int	Paper size	P	-	-
	FaceUp	Int	Scanning the document set with its face up	P	-	-
	Book	Int	Document type	P	-	-
	MultiCrop	Int	Detecting multiple documents	P	-	-
	ColorConv	Int	Text	P	-	-
	FileFormat	Int	File format	P	-	-
	MonoBrightness	Int	Brightness (B&W)	P	-	-
	ContentsDeskew	Int	Deskewing character strings	P	-	-
	BlankCheck	Int	Skipping blank page	P	-	-
	DirCorrection	Int	Image rotation	P	-	-
	ReduceBT	Int	Reducing bleed-through	P	-	-
	FileSize	Int	Compression rate	P	-	-
	BookDivideType	Int	Save option for double-page spread documents	P	-	-
	AutoComposite	Int	Merging the front side image and the back side image	P	-	-
	ContentCorrection	Int	Correcting skewed text	P	-	-
	DarkMode	Int	Mode to darken color images	P	-	-

Explanation of the keys for the result file

The keys for the result file are described below.

- INFO section (→ page 104)
- FILES section (→ page 106)
- SCAN section (→ page 107)

INFO section

Key name	FileDesc (INFO section)
Summary	Character string to indicate that the file is the result file
Supported model	S1xxx series, iXxxx series, SV600
Value	"PFUFILELISTFORMAT" is always set.
Explanation	Information used to check if the file is the result file.

Key name	Version (INFO section)
Summary	Character string to indicate the version of the result file format
Supported model	S1xxx series, iXxxx series, SV600
Value	"1.0" is set.
Explanation	The information to maintain compatibility for the result file format.

Key name	Application (INFO section)
Summary	Character string to indicate the caller application name
Supported model	S1xxx series, iXxxx series, SV600
Value	● When the caller is ScanSnap Manager, "ScanSnap Manager" is set. ● When the caller is ScanSnap Organizer, "ScanSnap Organizer" is set. ● When the caller is CardMinder, "CardMinder" is set.
Explanation	Information used to identify the caller application (such as titles).

Key name	AppSetting (INFO section)
Summary	Full path to the save setting file
Supported model	S1xxx series, iXxxx series, SV600
Value	Full path to the file to store the information of the application for a settings window
Explanation	The file name is automatically created by ScanSnap Manager. This file stores the settings specified by the user application. The settings conform to the specifications of the user application.

Key name	LaunchMode (INFO section)
Summary	ScanSnap Manager call mode
Supported model	S1xxx series, iXxxx series, SV600
Value	0 - Left-click menu mode 1 - Quick Menu mode
Explanation	Indicates the mode in which the application is started. ● Left-click menu mode The mode to indicate that the application is started directly from ScanSnap Manager ● Quick Menu mode The mode to indicate that the application is started by operation from the Quick Menu

Key name	ScannerName (INFO section)
Summary	Model name of the ScanSnap
Supported model	S1xxx series, iXxxx series, SV600
Value	ScanSnap iX500 - For scanning with ScanSnap iX500 ScanSnap iX100 - For scanning with ScanSnap iX100 ScanSnap S1500 - For scanning with ScanSnap S1500 ScanSnap S1300i - For scanning with ScanSnap S1300i ScanSnap S1300 - For scanning with ScanSnap S1300 ScanSnap S1100i - For scanning with ScanSnap S1100i ScanSnap S1100 - For scanning with ScanSnap S1100 ScanSnap SV600 - For scanning with ScanSnap SV600
Explanation	Indicates the model name of the ScanSnap.

Key name	ScannerType (INFO section)
Summary	Device type of the ScanSnap
Supported version	ScanSnap Manager V6.2L10 or later
Supported model	S1xxx series, iXxxx series, SV600
Value	1 - ADF duplex 2 - ADF simplex 3 - Overhead scanner
Explanation	Indicates the device type of the ScanSnap.

FILES section

Key name	FileCount (FILES section)
Summary	Total number of the data files to be passed to the user application
Supported model	S1xxx series, iXxxx series, SV600
Value	1 or higher integer
Explanation	Information of the total number of the data files to be passed to the user application.

Key name	File* (FILES section)
Summary	Full path to the data file
Supported model	S1xxx series, iXxxx series, SV600
Value	Full path to the data file
Explanation	Indicates the full path to the data file. "*" represents a value from "1" to "FileCount".

Key name	KeywordFile (FILES section)
Summary	Full path to the file to which the keyword set for the PDF file from the marked text is output
Supported model	S1xxx series, iXxxx series, SV600

Value	Full path to the file to which the keyword set for the PDF file from the marked text is output
Explanation	Indicates the full path to the file to which the keyword set for the PDF file from the marked text is output.

Key name	TotalPageCount (FILES section)
Summary	Total number of output pages
Supported version	ScanSnap Manager V6.2L10 or later
Supported model	S1xxx series, iXxxx series, SV600
Value	1 or higher integer
Explanation	The total number of pages in all scanned files.

Key name	File*_PageCount (FILES section)
Summary	Total number of pages in the file
Supported version	ScanSnap Manager V6.2L10 or later
Supported model	S1xxx series, iXxxx series, SV600
Value	1 or higher integer
Explanation	Total number of pages in the scanned file. * represents a value from "1" to "FileCount".

SCAN section

Key name	Duplex (SCAN section)
Summary	Scanning side
Supported model	S1xxx series, iXxxx series, SV600
Value	0 - Simplex scan 1 - Duplex scan
Explanation	Indicates the scanning side.

Key name	ScanMode (SCAN section)
Summary	Image quality mode
Supported model	S1xxx series, iXxxx series, SV600
Value	1 - Normal 2 - Better 3 - Best 4 - Excellent 99 - Auto
Explanation	Indicates the image quality mode.

Key name	ColorMode (SCAN section)
Summary	Color mode
Supported model	S1xxx series, iXxxx series, SV600
Value	1 - Color/black & white/gray auto detection 2 - Color 3 - B&W 4 - Color high compression 5 - Gray
Explanation	Indicates the color mode.

Key name	PaperSize (SCAN section)
Summary	Paper size
Supported model	S1xxx series, iXxxx series, SV600

Value	● When connecting a ScanSnap other than the SV600 1 - Automatic detection 2 - A4 (210 × 297 mm) 3 - A5 (148 × 210 mm) 4 - A6 (105 × 148 mm) 5 - B5 (JIS) (182 × 257 mm) 6 - B6 (JIS) (128 × 182 mm) 7 - Post card (100 × 148 mm) 8 - Business card (90 × 55 mm, 55 × 90 mm) 9 - Letter (8.5 × 11 in. (216 × 279.4 mm)) 10 - Legal (8.5 × 14 in. (216 × 355.6 mm)) 99 - Custom size ● When connecting the SV600 1 - Automatic detection (Maximum) 2 - A4L (297 × 210 mm) 3 - A5L (210 × 148 mm) 4 - A6L (148 × 105 mm) 5 - B5L(JIS) (257 × 182mm) 6 - B6L(JIS) (182 × 128mm) 7 - Post cardL (148 × 100mm) 8 - Business card (90 × 55mm) 9 - LetterL (11 × 8.5 in. (279.4 × 216mm)) 10 - LegalL (14 × 8.5 in. (355.6 × 216mm)) 11 - Automatic detection (A4/Letter landscape) 12 - A3L (420 × 297 mm) 13 - B4L(JIS) (364 × 257mm) 14 - 17 × 11 in. (431.8 × 279.4 mm) 99 - Custom size
Explanation	Indicates the paper size.

Key name	FaceUp (SCAN section)
Summary	Scanning the document set with its face up
Supported model	S1xxx series, iXxxx series, SV600
Value	0 - Disable [Set the document with its face up] 1 - Enable [Set the document with its face up]
Explanation	Indicates whether to enable [Set the document with its face up].

Key name	Book (SCAN section)
Summary	Document type
Supported version	ScanSnap Manager V6.2L10 or later

Supported model	SV600
Value	0 - Scan with [Flat document] selected 1 - Scan with [Double-page spread] selected 2 - Scan with [Select later] selected (Output as [Flat document]) 3 - Scan with [Select later] selected (Output as [Double-page spread])
Explanation	Indicates the option specified for [Document type].

Key name	MultiCrop (SCAN section)
Summary	Detecting multiple documents
Supported version	ScanSnap Manager V6.2L10 or later
Supported model	SV600
Value	0 - Disable [Detect multiple documents] 1 - Enable [Detect multiple documents]
Explanation	Indicates whether to enable [Detect multiple documents].

Key name	ColorConv (SCAN section)
Summary	Text
Supported version	ScanSnap Manager V6.2L10 or later
Supported model	S1xxx series, iXxxx series, SV600
Value	0 - Disable [Increase text contrast] 1 - Enable [Increase text contrast]
Explanation	Indicates whether to enable [Increase text contrast].

Key name	FileFormat (SCAN section)
Summary	File format
Supported version	ScanSnap Manager V6.2L10 or later
Supported model	S1xxx series, iXxxx series, SV600
Value	0 - JPEG 1 - PDF
Explanation	Indicates the file format.

Key name	MonoBrightness (SCAN section)
Summary	Brightness (B&W)
Supported version	ScanSnap Manager V6.2L10 or later
Supported model	S1xxx series, iXxxx series, SV600
Value	-5 to 5
Explanation	Indicates the brightness (B&W).

Key name	ContentsDeskew (SCAN section)
Summary	Deskewing character strings
Supported version	ScanSnap Manager V6.2L10 or later
Supported model	S1xxx series, iXxxx series, SV600
Value	0 - OFF 1 - ON
Explanation	Indicates whether to enable [Deskew by text on document].

Key name	BlankCheck (SCAN section)
Summary	Skipping blank page
Supported version	ScanSnap Manager V6.2L10 or later

Supported model	S1xxx series, iXxxx series, SV600
Value	0 - OFF 1 - ON
Explanation	Indicates whether to enable [Blank page removal].

Key name	DirCorrection (SCAN section)
Summary	Image rotation
Supported version	Value "2", "3", and "4" can be used with ScanSnap Manager V6.3L20 or later Value "5", "6", and "7" can be used with ScanSnap Manager V6.3L24 or later
Supported model	S1xxx series, iXxxx series, SV600
Value	0 - Do not rotate 1 - Automatic 2 - Rotate 90° CW (horizontal bound) 3 - Rotate 180° (vertical bound) 4 - Rotate 90° CCW (horizontal bound) 5 - Rotate 90° CW (vertical bound) 6 - Rotate 180° (horizontal bound) 7 - Rotate 90° CCW (vertical bound)
Explanation	Indicates the value that is set for [Image rotation].

Key name	ReduceBT (SCAN section)
Summary	Reducing bleed-through
Supported version	ScanSnap Manager V6.2L10 or later
Supported model	S1xxx series, iXxxx series, SV600
Value	0 - OFF 1 - ON
Explanation	Indicates whether to enable [Reduce bleed-through].

Key name	FileSize (SCAN section)
Summary	Compression rate
Supported version	ScanSnap Manager V6.2L10 or later

Supported model	S1xxx series, iXxxx series, SV600
Value	1 to 5
Explanation	Indicates the compression rate.

Key name	BookDivideType (SCAN section)
Summary	Save option for double-page spread documents
Supported version	ScanSnap Manager V6.2L10 or later
Supported model	SV600
Value	0 - Save as single-page image 1 - Save as double-page spread image (left to right) 2 - Save as double-page spread image (right to left)
Explanation	Indicates the option specified for save option for double-page spread documents.

Key name	AutoComposite (SCAN section)
Summary	Merging the front side image and the back side image
Supported version	ScanSnap Manager V6.3L20 or later
Supported model	iX100, S1100i
Value	0 - OFF 1 - ON
Explanation	Indicates whether to enable [Merge both side images].

Key name	ContentCorrection (SCAN section)
Summary	Correcting skewed text
Supported version	ScanSnap Manager V6.3L20 or later
Supported model	SV600
Value	0 - OFF 1 - ON
Explanation	Indicates whether to enable [Correct skewed text of the following document type(s)].

Key name	DarkMode (SCAN section)
Summary	Mode to darken color images
Supported version	ScanSnap Manager V6.3L20 or later
Supported model	SV600
Value	0 - OFF 1 - ON
Explanation	Indicates whether to enable [Thicken color images].

Marked Section Keyword Result File

The marked section keyword result file is an INI file that is passed to the user application.
This file describes the detected results for the marked section set as a keyword.
The file is automatically created by ScanSnap Manager after scanning.

The key for the marked section result file is listed below.

Section	Key	Type	Description
FILES*	keyword***	String	Detected results for the marked section set as a keyword

The section name, FILES*, is equivalent to File* for the scanning result file.

Attention
Delete the marked section keyword result file from the user application. (Do not delete it from ScanSnap Manager.)

Explanation of the Key for the Marked Section Keyword Result File

The key for the marked section keyword result file is described below.

FILES* section

Key name	keyword*** (FILES* section)
Summary	Detected results for the marked section set as a keyword
Supported model	S1xxx series, iXxxx series, SV600
Value	Detected results for the marked section set as a keyword
Explanation	All of the detected results for the marked section set as a keyword are output. *** indicates the number of detected results. It ranges from 001 to 999 (maximum).

Data File

ScanSnap Manager data file

A ScanSnap Manager data file is data (PDF or JPEG) that is scanned with the ScanSnap.

ScanSnap Organizer data file

A ScanSnap Organizer data file is a file (PDF, JPEG, or other formats) that is displayed in the ScanSnap Organizer file list.

CardMinder card data file

CardMinder passes card data files to the user application in the following two formats:

- ContactXML format
- vCard format

The file format can be set in the linkage setting file. The file output unit (multiple business cards in a file or a business card in a file) can also be set.

Attention

The following items among CardMinder items are only applied to Japanese and Chinese.

- Phonetic Characters Attached to Chinese Characters in Full Name
- Phonetic Characters Attached to Chinese Characters in Company Name

Output specification

The specifications of each format for the files that are output by CardMinder are as shown below.

ContactXML format

The output specifications for the ContactXML format are as follows:

Version	1.1
Encoding	UTF-16
Creator information	Windows creator="http://www.pfu.fujitsu.com/wcard-app/xml/contact/(version of CardMinder)" Mac OS creator="http://www.pfu.fujitsu.com/mcard-app/xml/contact/(version of CardMinder)"
Item to be output	All items managed by CardMinder (including card image)
Remarks	● For the xml:lang attribute value, the language tag defined in XML1.0 or IETF RFC 1766 is used in according to the OS language, regardless of the data contents.For languages unsupported by ScanSnap, English is used. (*) ● Output conditions depending on whether the item contains data or not - When the item contains data: Tags (or attributes) and contents are output. - When the item contains no data: Only tags (or attributes) are output. The contents are empty. ● Output conditions depending on whether card image exists or not - When card image exists: Tags are output. - When no card image exists: Tags are not output.

* : OS language and the language tags defined in XML1.0 or IETF RFC 1766 are mapped as follows:

OS language	Language tag
Japanese	ja-JP
English	en
German	de
French	fr
Italian	it
Spanish	es
Chinese (simplified)	zh-CN
Chinese (traditional)	zh-TW
Korean	ko
Russian	ru
Portuguese	pt
Languages other than the above (languages not supported by ScanSnap)	en

XML declaration and root element of ContactXML are as follows:

```
<?xml version="1.0" encoding="UTF-16" ?>
<ContactXML version="1.1"
        creator="http://www.pfu.fujitsu.com/wcard-app/xml/contact/5.0"
        xmlns="http://www.xmlns.org/2002/ContactXML">
        •
        •
</ContactXML>
```

vCard format

The output specifications for the vCard format are as follows:

Version	3.0
Encoding	Windows OS default or UTF-16 Mac OS UTF-8
Creator information	PRODID:-//PFU//CardMinder Version (version of CardMinder)//EN
Item to be output	All items managed by CardMinder (including card image) Note that "Phonetic Characters Attached to Chinese Characters in Company Name" is not output because it is not supported by vCard.
Remarks	● Output conditions depending on whether the item contains data or not - When the item contains no data: Only type name is output. - When the item contains data: Type name and contents are output. ● Output conditions depending on whether card image exists or not - When card image exists: Type name and contents are output. - When no card image exists: Type name is not output.

The vCard configuration is as follows:

```
BEGIN:VCARD
VERSION:3.0
PRODID:-//PFU//CardMinder Version 5.0//EN
        •
        •
END:VCARD
BEGIN:VCARD
VERSION:3.0
PRODID:-//PFU//CardMinder Version 5.0//EN
        •
        •
END:VCARD
```

Mapping with CardMinder items

CardMinder items and items for each format are mapped as shown below.

ContactXML format

CardMinder items and ContactXML items are mapped as follows:
The output order of items and other tags conform to ContactXML.

No	CardMinder item		ContactXML	
			Item	Value corresponding to the item
1	Full Name (*1)	-	Full Name	Text value of <FullName> element
		Only the last name of the full name	Last Name	Text value of <LastName> element
		Only the middle name of the full name	Middle Name	Text value of <MiddleName> element
		Only the first name of the full name	First Name	Text value of <FirstName> element
2	Phonetic Characters Attached to Chinese Characters in Full Name (*1) (*2)	-	Name Pronunciation	pronunciation attribute value of <FullName> element
		Only the phonetic characters for the last name	Last Name Pronunciation	pronunciation attribute value of <LastName> element
		Only the phonetic characters for the middle name	Middle Name Pronunciation	pronunciation attribute value of <MiddleName> element
		Only the phonetic characters for the first name	First Name Pronunciation	pronunciation attribute value of <FirstName> element
3	Company		Organization Name	Text value of <OrganizationName> element
4	Phonetic Characters Attached to Chinese Characters in Company Name (*2)		Organization Name Pronunciation	pronunciation attribute value of <OrganizationName> element
5	Department		Department	Text value of <Department> element
6	Job Title		Job Title	Text value of <JobTitle> element
7	ZIP/Postal Code		ZIP/Postal Code	Text value of <AddressCode codeDomain="ZIP"> element

No	CardMinder item	ContactXML	
		Item	Value corresponding to the item
8	Address (*1)	Prefecture	Text value of <AddressLine xml:lang="en" addressLineType="Prefecture"> element (*3)
		City	Text value of <AddressLine xml:lang="en" addressLineType="City"> element (*3)
		Number	Text value of <AddressLine xml:lang="en" addressLineType="Number"> element (*3)
9	Location/Region	Country	Text value of <AddressLine xml:lang="en" addressLineType="Country"> element (*3)
10	Phone Number	Phone	Text value of <PhoneItem usage="Official" phoneDevice="Phone"> element
11	Fax Number	FAX	Text value of <PhoneItem usage="Official" phoneDevice="Fax"> element
12	Mobile Phone	Mobile Phone	Text value of <PhoneItem usage="Official" phoneDevice="Cellular"> element
13	E-mail	E-mail	Text value of <EmailItem usage="Official" emailDevice="Unknown"> element
14	Website	Website	Text value of <WebItem usage="Official"> element
15	Memo	Memo	Text value of <ExtensionItem xml:lang="en" extensionType="Common" name="Memo"> element (*3)
16	Windows Save Date Mac OS Date Saved	Modified Date	lastModifiedDate attribute value of <ContactXMLItem> element * This value is output in the form "YYYY-MM-DD". Example: lastModifiedDate="2012-09-15"

No	CardMinder item	ContactXML	
		Item	Value corresponding to the item
17	Path to image file * This item is not displayed in a window.	Card Image	● When PDF files are specified: Windows A PDF file of the front image and a PDF file of the back image are output. <ImageItem imageSemantics="Others" url="{PDF file path of the front side}"/> <ImageItem imageSemantics="Others" url="{PDF file path of the back side}"/> macOS A PDF file that contains the front image and the back image is output. <ImageItem imageSemantics="Others" url="{PDF file path of the front/back side}"/> ● When JPEG files are specified: A JPEG file of the front image and a JPEG file of the back image are output. <ImageItem imageSemantics="Others" contentType="image/jpeg" url="{JPEG file path of the front side}"/> <ImageItem imageSemantics="Others" contentType="image/jpeg" url="{JPEG file path of the back side}"/>

*1 : How to split "Full Name", "Phonetic Characters Attached to Chinese Characters in Full Name" and "Address"
The name splitting logic and address splitting logic specific to CardMinder are applied.

*2 : "Phonetic Characters Attached to Chinese Characters in Full Name" and "Phonetic Characters Attached to Chinese Characters in Company Name"
According to the specifications for ContactXML, the entered Japanese text is output in full-width katakana. Note that CardMinder outputs the actual Japanese text that the user entered without converting it into full-width katakana because CardMinder gives priority to the Japanese text that the user entered.

*3 : The value set for "xml:lang" differs depending on the OS language.

vCard format

CardMinder items and vCard items are mapped in the following output order:
Other items conform to vCard.

Output order	Mapping between CardMinder items and vCard items * Italic characters indicate CardMinder items.	Note
1	N: *Only the last name of the full name*;*Only the first name of the full name*	*Last Name*: First field of the type name N *First Name*: Second field of the type name N (*)
2	FN:*Full Name*	
3	SORT-STRING: *Phonetic Characters Attached to Chinese Characters in Full Name*	
4	X-PHONETIC-FIRST-NAME: *Only the phonetic characters for the first name*	(*)
5	X-PHONETIC-LAST-NAME: *Only the phonetic characters for the last name*	(*)
6	ORG: *Company*;*Department*	*Company*: First field of the ORG type name *Department*: Second field of the ORG type name
7	TITLE: *Job Title*	
8	TEL;type=WORK;type=VOICE;type=pref:*Phone Number*	
9	TEL;type=WORK;type=FAX:*Fax Number*	
10	TEL;type=CELL;type=VOICE:*Mobile Phone*	

Output order	Mapping between CardMinder items and vCard items * Italic characters indicate CardMinder items.	Note
11	ADR;type=WORK;type=pref:;;*Address*; *ZIP/Postal Code*;*Location/Region*	The output for Address is divided as follows: (*) ADR;type=WORK;type=pref:;; Number;City;Prefecture; *ZIP/Postal Code*; *Location/Region* Number: Third field of the type name ADR City: Fourth field of the type name ADR Prefecture: Fifth field of the type name ADR *ZIP/Postal Code:* Sixth field of the type name ADR *Location/Region*: Seventh field of the type name ADR
12	URL;type=WORK;type=pref:*Website*	
13	EMAIL;type=INTERNET;type=WORK;type=pref:*E-mail*	
14	NOTE:*Memo*	
15	PHOTO;VALUE=URL:*Path to image file*	*Path to image file* * This item is not displayed in a CardMinder window. ● When PDF files are specified: Windows A PDF file of the front image and a PDF file of the back image are output. Mac OS A PDF file that contains the front image and the back image is output. ● When JPEG files are specified: A JPEG file of the front image and a JPEG file of the back image are output.

Output order	Mapping between CardMinder items and vCard items * Italic characters indicate CardMinder items.	Note
16	Windows REV:*Save Date* Mac OS REV:*Date Saved*	This value is output in the form "YYYY-MM-DD".

* : How to split "Full Name", "Phonetic Characters Attached to Chinese Characters in Full Name" and "Address
The name splitting logic and address splitting logic specific to CardMinder are applied.

Maximum number of characters for each item

The following table shows the maximum number of characters for each item.

No	CardMinder item	ContactXML/vCard item	Max. characters
1	Full Name	Last name, Middle name, First name	64 characters
2	Phonetic Characters Attached to Chinese Characters in Full Name	Last Name Pronunciation, Middle Name Pronunciation, First Name Pronunciation	64 characters
3	Company	Organization Name	128 characters
4	Phonetic Characters Attached to Chinese Characters in Company Name (*)	Organization Name Pronunciation	128 characters
5	Department	Department	128 characters
6	Job Title	Job Title	128 characters
7	ZIP/Postal Code	ZIP/Postal Code	40 characters
8	Address	Prefecture, City, Number	255 characters
9	Location/Region	Country	32 characters
10	Phone Number	Phone	40 characters
11	Fax Number	FAX	40 characters
12	Mobile Phone	Mobile Phone	40 characters
13	E-mail	E-mail	128 characters
14	Website	Website	128 characters
15	Memo	Memo	256 characters
16	Windows Save Date Mac OS Date Saved	Modified Date	10 characters
17	Full path to image file	Card Image	Windows 260 characters Mac OS 1023 characters

* : "Phonetic Characters Attached to Chinese Characters in Company Name" is not output to vCard.

Output example

Below is an output example.

ContactXML format

```
<?xml version="1.0" encoding="UTF-16"?>
<ContactXML version="1.1" creator="http://www.pfu.fujitsu.com/wcard-app/xml/contact/5.0" xmlns="http://www.xmlns.org/2002/ContactXML">
  <ContactXMLItem lastModifiedDate="2012-06-23">
    <PersonName>
      <PersonNameItem xml:lang="en">
        <FullName pronunciation="Howard Brown">Howard Brown</FullName>
        <FirstName pronunciation="Howard">Howard</FirstName>
        <MiddleName pronunciation=""></MiddleName>
        <LastName pronunciation="Brown">Brown</LastName>
      </PersonNameItem>
    </PersonName>
    <Address>
      <AddressItem locationType="Office">
        <AddressCode codeDomain="ZIP7">95110</AddressCode>
        <FullAddress xml:lang="en">226 Airport Parkway, Suite 030 San JOSE, CA 95110</FullAddress>
        <AddressLine xml:lang="en" addressLineType="Country">United States</AddressLine>
        <AddressLine xml:lang="en" addressLineType="Prefecture">CA</AddressLine>
        <AddressLine xml:lang="en" addressLineType="City">San JOSE</AddressLine>
        <AddressLine xml:lang="en" addressLineType="Number">226 Airport Parkway, Suite 030</AddressLine>
      </AddressItem>
    </Address>
    <Occupation>
      <OccupationItem xml:lang="en">
        <OrganizationName pronunciation="ABCD LIMITED">ABCD LIMITED</OrganizationName>
        <Department>Software Research</Department>
        <JobTitle>Project Manager</JobTitle>
      </OccupationItem>
    </Occupation>
    <Phone>
      <PhoneItem usage="Official" phoneDevice="Phone">(408) 453-0000</PhoneItem>
      <PhoneItem usage="Official" phoneDevice="Fax">(408) 453-0001</PhoneItem>
      <PhoneItem usage="Official" phoneDevice="Cellular"></PhoneItem>
    </Phone>
    <Email>
      <EmailItem usage="Official" emailDevice="Unknown">howard@abcd.com</EmailItem>
    </Email>
    <Web>
      <WebItem usage="Official">www.abcd.com</WebItem>
    </Web>
```

```
   <Image>
    <ImageItem imageSemantics="Others" url="file:///
C:\Users\username\AppData\Local\Temp\~cm0000\11_N1.pdf"/>
   </Image>
   <Extension>
    <ExtensionItem xml:lang="en" extensionType="Common" name="Memo"></ExtensionItem>
   </Extension>
  </ContactXMLItem>
</ContactXML>
```

vCard format

```
BEGIN:VCARD
VERSION:3.0
PRODID:-//PFU//CardMinder Version 5.0//EN
N:Brown;Howard;;;
FN:Howard Brown
SORT-STRING:Howard Brown
X-PHONETIC-FIRST-NAME:Howard
X-PHONETIC-LAST-NAME:Brown
ORG:ABCD LIMITED;Software Research
TITLE:Project Manager
TEL;type=WORK;type=VOICE;type=pref:(408) 453-0000
TEL;type=WORK;type=FAX:(408) 453-0001
TEL;type=CELL;type=VOICE:
ADR;type=WORK;type=pref:;;226 Airport Parkway, Suite 030;San JOSE;CA;95110;United States
URL;type=WORK;type=pref:www.abcd.com
EMAIL;type=INTERNET;type=WORK;type=pref:howard@abcd.com
NOTE:
PHOTO;VALUE=URL:file:///C:\Users\username\AppData\Local\Temp\~cm0000\17_N1.pdf
PHOTO;VALUE=URL:file:///C:\Users\username\AppData\Local\Temp\~cm0000\17_N2.pdf
REV:2012-09-21
END:VCARD
```

ScanSnap Manager Control Command

This section explains the commands to control ScanSnap Manager from a user application.

ScanSnap Manager Control Command 128

ScanSnap Manager Control Command

ScanSnap Manager control commands are used to control ScanSnap Manager from a user application.

To call the commands, use the SendMessage function (Win32 API).

The parameters shown below are passed to the SendMessage function (Win32 API).

Type	Name	Value
HWND	hwnd	Value obtained with FindWindow ("ScanSnap Manager MainWndClass", NULL)
UINT	MSG	WM_COPYDATA
WPARAM	wParam	NULL
LPARAM	lParam	Pointer to the COPYDATASTRUCT structure containing the data to be passed

ScanSnap Manager control command list

Command name	Summary
Reserving control privileges (Reserve)	Reserves the user application control. This command is used to suppress switching to another application and enable linkage with only the target user application.
Releasing control privileges (Release)	Releases the user application control. This command is used to release the status in which control privileges are reserved.
Starting scanning (StartScan)	Starts scanning. This command is used to start scanning.
Notifying automatic linkage	Notifies the start or end of the application. This command is used to change the automatic linkage status during automatic linkage (always in linked status).
Obtaining connected device information (GetScannerInfo)	Outputs the information of the connected scanner. This command is used to write the information of the connected scanner into the set ini file.
Obtaining the installation state of text recognition language (GetSearchableLangInfo)	Checks whether the specified language is installed and whether it is ready to use OCR. This command is used to obtain information on the availability of the text recognition language that you specify.

ATTENTION

- Do not leave the "Reserve" command always in called status with the user application.
  Try to reduce calling the "Reserve" command as much as possible (limit to the time such as immediately before scanning) and call the "Release" command immediately after scanning is finished.
- Note the following point when both the "Reserve" command and the "Notifying automatic linkage" command are used by the user application.
  If the user application issues the "Release" command, the automatic linkage status is changed to end notification status.
  In this case, issue the "Notifying automatic linkage" command (Start notification) again.

User application command flow

Command flow	When to call the command	Process in ScanSnap Manager
Reserving control privileges (Reserve)	For example, the time immediately before scanning	Switches to the specified user application and suppresses switching to another application.
↓		
Obtaining connected device information (GetScannerInfo)	For example, the time when you need to obtain the information of the connected scanner	Writes the information of the connected scanner into the set ini file.
↓		
Obtaining the installation state of text recognition language (GetSearchableLangInfo)	For example, the time when you specify a text recognition language in an application	Returns information on the availability of the text recognition language that you specify.
↓		
Starting scanning (StartScan)		Starts scanning on the specified scanning side.
↓		
Releasing control privileges (Release)	For example, the time after scanning	Stops the suppression process of switching to another application.
Notifying automatic linkage (Start)	For example, the time when the application is started	Switches to the specified user application and suppresses switching to another application.
↓		
Notifying automatic linkage (End)	For example, the time when the application exits	Stops the suppression process of switching to another application.

Reserve command

Upon receiving this message, ScanSnap Manager switches to the applicable user application and suppresses switching to another application.

After this command is received, the following operations (functions) are disabled:

- Selecting an application
- Switching profiles
- Switching Quick Menu modes (the Quick Menu mode is always off)
- Automatic linkage with applications
- Profile management (adding/changing/deleting)
- Scanning with CardMinder
- ScanSnap Folder function

To release the reserved control privileges, the following operations are required:

- Issuing the "Release" command (The application that issues this command must be the same application that reserved the control privileges).
- Restarting ScanSnap Manager (including system restart).

Command specifications

COPYDATASTRUCT structure (structure with Win32 API defined)

Value	Type	Description
dwData	ULONG_PTR	Set "2".
cbData	DWORD	SS_NOTIFY structure size (sizeof (SS_NOTIFY)) Set a 4 byte alignment.
lpData	PVOID	Set the pointer to the SS_NOTIFY structure.

SS_NOTIFY structure

```
typedef  struct  tag SS_NOTIFY
{
    DWORD   Mode;
    char        AppName[255];
} SS_NOTIFY,  * PSS_NOTIFY;
```

Description

Value	Type	Description
Mode	DWORD	0: Reserving control privileges (Reserve)
AppName	char [255]	User application key (NULL is specified at the end) Specify the key name of the application that is registered to a registry. Example: When the application is registered for linkage as "HKLM\Software\PFU\ScanSnap Extension\ImageConnections", set "ImageConnections".

Return value of this command

0	Command succeeded	
Other than "0"	Error	
	1	Scanning or showing the ScanSnap Manager window
	2	Invalid AppName was specified.
	3	"Reserve" command has been received.
	5	Parameter error

Note

After calling this command, be sure to call the "Release" command.
The "Reserve" command fails in the following cases:

- When ScanSnap Manager is not running
- When control privileges of ScanSnap Manager are reserved by another user application
- During scanning
- While showing the ScanSnap Manager window

Release command

Upon receiving this message, ScanSnap Manager releases the reserved control privileges of the user application to enable the user to switch the application to another application and restores the profile to the status that it was before the "Reserve" command was issued.

HINT
For the parameter for profiles of the applicable user application, the value changed by the user is applied.

The "Release" command must be issued from the same application as the application that reserved the control privileges.
Control privileges are also released by restarting ScanSnap Manager (system restart).

Command specifications

COPYDATASTRUCT structure (structure with Win32 API defined)

Value	Type	Description
dwData	ULONG_PTR	Set "2".
cbData	DWORD	SS_NOTIFY structure size (sizeof (SS_NOTIFY)) Set a 4 byte alignment.
lpData	PVOID	Set the pointer to the SS_NOTIFY structure.

S_NOTIFY structure

```
typedef  struct  tag SS_NOTIFY
{
    DWORD   Mode;
    char        AppName[255];
} SS_NOTIFY,  * PSS_NOTIFY;
```

Description

Value	Type	Description
Mode	DWORD	1: Release control privileges (Release) 2: Force to release control privileges
AppName	char [255]	User application key (NULL is specified at the end) Specify the key name of the application that is registered to a registry. Example: When the application is registered for linkage as "HKLM\Software\PFU\ScanSnap Extension\ImageConnections", set "ImageConnections".

[Releasing control privileges (Release)]

Return value of this command

0	Command succeeded	
Other than "0"	Error	
	1	Scanning or showing the ScanSnap Manager window
	2	Invalid AppName was specified, or AppName different from the "Reserve" command was passed.
	4	Control privileges have been released. (The command was issued while control privileges were not reserved.)
	5	Parameter error

Note

The "Release" command fails in the following cases:

- When ScanSnap Manager is not running
- When control privileges are reserved by another user application
- During scanning
- While showing the ScanSnap Manager window

[Forcing to release control privileges]

Return value of this command

0	Command succeeded	
1	Reservation for releasing control privileges is accepted.	
Other than "0" and "1"	Error	
	2	Invalid AppName was specified, or AppName different from the "Reserve" command was passed.
	4	Control privileges have been released. (The command was issued while control privileges were not reserved.)
	5	Parameter error

Note

If the "Release" command is issued while the ScanSnap Manager window is displayed or during scanning, the releasing process starts when each process is finished. If the command is issued during scanning, the releasing process starts after scanning is finished. The "Release" command fails in the following cases:

- When ScanSnap Manager is not running
- When control privileges are reserved by another user application

StartScan command

Upon receiving this message, ScanSnap Manager starts scanning on the specified scanning side.

HINT
The same result is obtained as [Duplex Scan]/[Simplex Scan]/[Scan] in the right-click menu.

If the restrictions are set for the scanning side in the linkage setting file (the "ScanningSide" key in the "Scanning" section is set), make sure that the scanning side is the same with this command. If the scanning side is different, correct operation of ScanSnap Manager cannot be guaranteed.
This command restores control after the scanning process is complete (after the application is linked).

Command specifications

COPYDATASTRUCT structure (structure with Win32 API defined)

Value	Type	Description
dwData	ULONG_PTR	Set "3".
cbData	DWORD	SS_SCAN structure size (sizeof (SS_SCAN)) Set a 4 byte alignment.
lpData	PVOID	Set the pointer to the SS_SCAN structure.

SS_SCAN structure

```
typedef  struct  tag SS_SCAN
{
    DWORD   Mode;
    BOOL      ScanningSide;
} SS_SCAN,  * PSS_SCAN;
```

Description

Value	Type	Description
Mode	DWORD	0: Starting scanning
ScanningSide	BOOL	0: Duplex scan (Simplex scan for the single-sided scanner) 1: Simplex scan

Return value of this command

0	Command succeeded Returns after the scanning process is complete. (Returns after the linked application is started.)	
Other than "0"	Error	
	1	Scanning or showing the ScanSnap Manager window
	5	Parameter error
	6	A status in which scanning is not possible (such as when the ScanSnap is not connected or when the ScanSnap is in use with a mobile device)

Note

Before this command, issue the "Reserve" command.
If the "Reserve" command is not issued, the application that is specified in [Application] is linked.
The "StartScan" command fails in the following cases:

- When ScanSnap Manager is not running
- When ScanSnap is not connected
- During scanning
- While showing the ScanSnap Manager window

Scanning is not possible when [Duplex Scan]/[Simplex Scan]/[Scan] in the right-click menu are disabled.

"Notifying automatic linkage" command

If ScanSnap Manager receives this message while automatic linkage (always in liked status) is specified in the linkage setting file, the automatic linkage status is changed.

Command specifications

COPYDATASTRUCT structure (structure with Win32 API defined)

Value	Type	Description
dwData	ULONG_PTR	Set "1".
cbData	DWORD	SS_NOTIFY_AUTOCONNECT structure size (sizeof (SS_NOTIFY_AUTOCONNECT)) Set a 4 byte alignment.
lpData	PVOID	Set the pointer to the SS_NOTIFY_AUTOCONNECT structure.

SS_NOTIFY_AUTOCONNECT structure

```
typedef  struct  tagSS_NOTIFY_AUTOCONNECT
{
    DWORD   Mode;
    char        AppName[255];
    char        ExeName[255];
}SS_NOTIFY_AUTOCONNECT,  *PSS_NOTIFY_AUTOCONNECT;
```

Description

Value	Type	Description
Mode	DWORD	0: Start notification 1: End notification
AppName	char [255]	User application key (NULL is specified at the end) Specify the key name of the application that is registered to a registry. Example: When the application is registered for linkage as "HKLM\Software\PFU\ScanSnap Extension\ImageConnections", set "ImageConnections".
ExeName	char [255]	Specify the name of the executable file to notify this message. (Specify NULL the end.)

GetScannerInfo command

This command is available for the following version:

- ScanSnap Manager V6.3L20 or later

Upon receiving this message, ScanSnap Manager writes the information of the scanner that is connected at the time into the set ini file.
This command releases the control privileges after writing is complete.

Command specifications

COPYDATASTRUCT structure (structure with Win32 API defined)

Value	Type	Description
dwData	ULONG_PTR	Set "5".
cbData	DWORD	SS_GETINFO structure size (sizeof (SS_GETINFO)) Set a 4 byte alignment.
lpData	PVOID	Set the pointer to the SS_GETINFO structure.

SS_GETINFO structure

```
typedef  struct  tag SS_GETINFO
{
    DWORD   Mode;
    char        FileName[MAX_PATH];
}SS_GETINFO,  *PSS_GETINFO;                    *The structure alignment is set to 4 bytes.
```

Description

Value	Type	Description
Mode	DWORD	0: Obtaining the information of the connected devices
FileName	char [MAX_PATH]	Set the output file name of the device information by using the full path (NULL is specified at the end)

Return value of this command

0	Command succeeded Returns after the writing is complete
Other than "0"	Error
	1 Scanning or showing the ScanSnap Manager window
	5 Parameter error
	6 A status in which scanning is not possible (such as when the ScanSnap is not connected or when the ScanSnap is in use with a mobile device)

Note

If the file name that is set for FileName already exists, the existing file is overwritten.
The "GetScannerInfo" command fails in the following cases:

- When ScanSnap Manager is not running
- When ScanSnap is not connected
- During scanning
- While showing the ScanSnap Manager window

Output file specifications for connected device information

Section name	Key name	Type	Description
INFO	ScannerCount	Int	The number of connected devices
	ManagerVersion	String	ScanSnap Manager version
SCANNER*** *** will be 1 to ScannerCount.	ScannerName	String	Device name
	ScannerIcon	String	Path for the icon of the device
	Duplex	Int	Duplex scan supported model
	CarrierSheet	Int	Carrier Sheet supported model
	A3Size	Int	A3 size supported model
	Book	Int	Book scanning supported model
	Wifi	Int	Wi-Fi supported model
	PageCount	Int	Total page count
	RollerSetCount	Int	Roller set count/pick roller count
	PadAssy	Int	Pad ASSY count
	SerialNo	String	Serial number
	FirmVersion	String	Firmware version

Explanation of the Keys for the Output File of Connected Device Information

Section name	INFO
Key name	ScannerCount
Summary	The number of connected devices
Supported version	ScanSnap Manager V6.3L20 or later
Value	1- One device is connected 2- Two devices are connected
Explanation	Indicates the number of connected devices.

Section name	INFO
Key name	ManagerVersion
Summary	Version of ScanSnap Manager
Supported version	ScanSnap Manager V6.3L24 or later
Value	Version of ScanSnap Manager
Explanation	Indicates the version of ScanSnap Manager.

Section name	SCANNER***
Key name	ScannerName
Summary	Device name
Supported version	ScanSnap Manager V6.3L20 or later
Value	ScanSnap iX500 - For connecting to ScanSnap iX500 ScanSnap iX100 - For connecting to ScanSnap iX100 ScanSnap S1500 - For connecting to ScanSnap S1500 ScanSnap S1300i - For connecting to ScanSnap S1300i ScanSnap S1300 - For connecting to ScanSnap S1300 ScanSnap S1100i - For connecting to ScanSnap S1100i ScanSnap S1100 - For connecting to ScanSnap S1100 ScanSnap SV600 - For connecting to ScanSnap SV600
Explanation	Indicates the device name such as "ScanSnap iX500".

Section name	SCANNER***
Key name	ScannerIcon
Summary	Full path for the icon of the device

Supported version	ScanSnap Manager V6.3L20 or later
Value	Full path for the icon of the device
Explanation	Indicates the full path for the icon of the device.

Section name	SCANNER***
Key name	Duplex
Summary	Indicating whether the scanner is a model that supports duplex scanning
Supported version	ScanSnap Manager V6.3L20 or later
Value	0 - Simplex model 1 - Duplex model
Explanation	Indicates whether the scanner is a model that supports duplex scanning.

Section name	SCANNER***
Key name	CarrierSheet
Summary	Indicating whether the scanner is a model that supports a Carrier Sheet
Supported version	ScanSnap Manager V6.3L20 or later
Value	0 - Model that does not support a Carrier Sheet 1 - Model that supports a Carrier Sheet
Explanation	Indicates whether the scanner is a model that supports a Carrier Sheet.

Section name	SCANNER***
Key name	A3Size
Summary	Indicating whether the scanner is a model that supports A3 size documents
Supported version	ScanSnap Manager V6.3L20 or later
Value	0 - A3 size is not supported (legal size is supported) 1 - A3 size is supported (double letter size is supported)
Explanation	Indicates whether the scanner is a model that supports A3 size documents.

Section name	SCANNER***
Key name	Book
Summary	Indicating whether the scanner is a model that supports book scanning
Supported version	ScanSnap Manager V6.3L20 or later

Value	0 - Model that does not support book scanning 1 - Model that supports book scanning
Explanation	Indicates whether the scanner is a model that supports book scanning.

Section name	SCANNER***
Key name	Wifi
Summary	Indicating whether the scanner is a model that supports Wi-Fi
Supported version	ScanSnap Manager V6.3L20 or later
Value	0 - Model that does not support Wi-Fi 1 - Model that supports Wi-Fi
Explanation	Indicates whether the scanner is a model that supports Wi-Fi.

Section name	SCANNER***
Key name	PageCount
Summary	Total page count
Supported version	ScanSnap Manager V6.3L20 or later
Value	Total page count
Explanation	Indicates the total page count.

Section name	SCANNER***
Key name	RollerSetCount
Summary	Roller set count/pick roller count
Supported version	ScanSnap Manager V6.3L20 or later
Value	Roller set count/pick roller count
Explanation	Indicates the roller set count/pick roller count. When ScanSnap iX100, ScanSnap S1100i, ScanSnap S1100, or ScanSnap SV600 is connected, this key is not output.

Section name	SCANNER***
Key name	PadAssy
Summary	Pad ASSY count
Supported version	ScanSnap Manager V6.3L20 or later

Value	Pad ASSY count
Explanation	Indicates the pad ASSY count. When ScanSnap iX100, ScanSnap S1100i, ScanSnap S1100, or ScanSnap SV600 is connected, this key is not output.

Section name	SCANNER***
Key name	SerialNo
Summary	Serial number
Supported version	ScanSnap Manager V6.3L24 or later
Value	Serial number
Explanation	Indicates the serial number of the ScanSnap. When ScanSnap iX500 is connected via Wi-Fi, this key is not output.

Section name	SCANNER***
Key name	FirmVersion
Summary	Firmware version
Supported version	ScanSnap Manager V6.3L24 or later
Value	Firmware version
Explanation	Indicates the firmware version of the ScanSnap.

GetSearchableLangInfo command

This command is available for the following version:

- ScanSnap Manager V6.5L40 or later

Upon receiving this message, ScanSnap Manager returns information on the availability of the text recognition language that you specify.

Command specifications

COPYDATASTRUCT structure (structure with Win32 API defined)

Value	Type	Description
dwData	ULONG_PTR	Set "7".
cbData	DWORD	SS_GETSLANGINFO structure size (sizeof (SS_GETSLANGINFO)) Set a 4 byte alignment.
lpData	PVOID	Set the pointer to the SS_GETSLANGINFO structure.

SS_GETSLANGINFO structure

```
typedef struct tag SS_GETSLANGINFO
{
    DWORD Mode;
    DWORD Lang;
}SS_GETSLANGINFO, * PSS_GETSLANGINFO;
```

Description

Value	Type	Description
Mode	DWORD	0: Obtaining the installation state of text recognition language
Lang	DWORD	The language that you want to obtain the installation state for Specify the SearchableLang key value

Return value of this command

0	Command succeeded	
Other than "0"	Error	
	1	Scanning or showing the ScanSnap Manager window
	5	Parameter error
	9	A status in which using this command is not possible (such as when a specified text recognition language is not installed or when the version is old and an update is required)

Note

The "GetSearchableLangInfo" command fails in the following cases:

- When ScanSnap Manager is not running
- During scanning
- While showing the ScanSnap Manager window

How to Check the Status of and Operate ScanSnap Related Software

This section explains how to check the status of and how to start/exit ScanSnap related software.

Installation Check **146**
Startup Check **146**
Version Check **146**
How to Start **147**
How to Exit **148**

Installation Check

To check whether ScanSnap Manager is installed or not, obtain the default value of the following registry key and check if the file exists.

Key:
HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows\CurrentVersion\
App Paths\PfuSsMon.exe

Startup Check

To check whether ScanSnap Manager has started or not, check if the window handle (the return value of the function) of ScanSnap Manager can be obtained (whether the value is "NULL").

HWND hSsWnd = FindWindow("ScanSnap Manager MainWndClass", NULL) ;
When "hSsWnd" is not NULL: ScanSnap Manager has started.
When "hSsWnd" is NULL: ScanSnap Manager has not started.

Version Check

ScanSnap Manager

To check the version of ScanSnap Manager, obtain the VERSION key value that is under the [COMMON] section in PfuSsMonVL.ini that is located in the installation folder of ScanSnap Manager. Open the file in read-only mode.
To check the location of the installation folder of ScanSnap Manager, obtain the [Path] value that is for the following registry key:

Key:
HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows\CurrentVersion\App Paths\PfuSsMon.exe

ScanSnap Organizer

To check the version of ScanSnap Organizer, obtain the [Version] value that is for the following registry key:

Key:
HKEY_LOCAL_MACHINE\SOFTWARE\PFU\ScanSnap Organizer

CardMinder

To check the version of CardMinder, check the file version of CardLauncher.exe.

For the deployment location where CardLauncher.exe exists, refer to the [Path] value that is for the following registry key:

Key:
HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows\CurrentVersion\App Paths\CardLauncher.exe

How to Start

To start ScanSnap Manager, use a function such as the CreateProcess() function and ShellExecute() function. For the argument, specify the file path obtained in "Installation Check" (page 146).

ATTENTION

- Use the logon user's privileges to start ScanSnap Manager. If ScanSnap Manager is started using any privileges for a user other than a login user, it does not communicate with other applications properly.
- Startup from the service is not supported.

How to Exit

To exit ScanSnap Manager, post the message shown below. For the argument, specify the window handle of ScanSnap Manager obtained in "Startup Check" (page 146).

```
for (;;) {
    HWND hSsWnd = FindWindow("ScanSnap Manager MainWndClass", NULL) ;
    if (hSsWnd) {
        PostMessage(hSsWnd, WM_CLOSE, 0, 0);
        sleep(500);
    }
    else {
        break;
    }
}
```

ScanSnap Manager cannot be exited during the following processes:

- During scanning
- While showing a window

ScanSnap Manager cannot be exited while [Exit] in the right-click menu is disabled.

For Mac OS Users

This chapter explains how to link a user application with software bundled with ScanSnap (for Mac OS users).

Linking with Quick Menu **150**
Linking with CardMinder **160**
Scanning from a User Application **170**
Describing Linkage Setting File **180**
Contents of Output File **214**
ScanSnap Manager Control Event **220**
How to Check the Status of and Operate ScanSnap Related Software **235**
Sandbox Support **238**

Linking with Quick Menu

This section explains how to link ScanSnap Manager Quick Menu with a user application.

Linkage Method **151**

Sample Program **157**

Linkage Method

To link ScanSnap Manager Quick Menu with a user application, perform the following operations:

1. **Creating a user application (→ page 151)**
2. **Creating an application for a settings window (→ page 153)**
3. **Preparing linkage setting files required for linking with an application (→ page 154)**
4. **Deploying the linkage setting file (→ page 156)**

Creating a User Application

The following sections explain the key points regarding the specifications of user applications.

- How to receive a file from ScanSnap Manager
- Handling errors that occur during a user application call

How to receive a file from ScanSnap Manager

To enable a user application to receive a file from ScanSnap Manager, implement the OS-standard file receiving method (the "application:openFiles:" method of the "NSApplicationDelegate" protocol or the "readFromURL:ofType:error" method of the "NSDocument" class).

- When the value for the "ResultFileType" key of the "Launch" key in the linkage setting file is "0", a scanned PDF or JPEG file is received.
- When the value for the "ResultFileType" key of the "Launch" key in the linkage setting file is "1", a result file that describes the name of the scanned PDF or JPEG file is received. The result file is created under the "~/Library/Caches/TemporaryItems/PFU/ScanSnap/ScanSnap Manager/Extension/temp/" folder. (For details, refer to "Contents of Output File" (page 214).)
  When the result file is no longer necessary, delete it from the user application. The file is not deleted by ScanSnap Manager.
- When the scanned PDF or JPEG file is no longer necessary, delete it from the user application. The file is not deleted by ScanSnap Manager.

Handling errors that occur during a user application call

The following messages may appear when an error occurs during a user application call:

Message	Failed to launch the selected application.
Cause	The selected application might have been uninstalled.
Resolution	Check whether the selected application is properly installed.

Creating an Application for a Settings Window

The following section explains the key points regarding the specifications of the application for a settings window that is created by the user.
Creating an application for a settings window is optional. To change the settings for the user application, create an application for a settings window. To start the application for a settings window, click in the user application that is displayed in the Quick Menu.

- How to receive the save setting file from ScanSnap Manager
- Waiting for an application for a settings window

How to receive the save setting file from ScanSnap Manager

To enable an application for a settings window that is created by a user to receive the save setting file from ScanSnap Manager, implement the OS-standard file receiving method (the "application:openFiles:" method of the "NSApplicationDelegate" protocol or the "readFromURL:ofType:error" method of the "NSDocument" class).

To save the settings that are specified with the application for a settings window as a file, output the settings to the save setting file before exiting the application.
The save setting file is a plist file used by the application for a settings window created by the user.
The settings can be saved as the dedicated settings when called from the Quick Menu.

To save the settings in a file unique to the user application, no file receiving method needs to be implemented.

Waiting for an application for a settings window

ScanSnap Manager waits for the application for a settings window that is created by the user to exit.
ScanSnap Manager determines whether a process of the application for a settings window is launched to wait for the process to exit.
When the setup is complete, exit the application for a settings window that is created by the user.

Preparing Linkage Setting Files Required for Linking with an Application

Prepare the linkage setting files required for linking with an application.
The linkage setting file is a plist file in XML format. This file defines the information that is related to the user application, the display name of the user application, the availability of linkage settings, and the scanning restrictions.
Name the linkage setting file in the format of "*Bundle identifier.XXX*.plist". (Specify the Bundle identifier of the user application for "*Bundle identifier*" and any name for "*XXX*".)
For details about the linkage setting file, refer to "Linkage Setting File" (page 181).
The following table shows the major items required for linking from the Quick Menu.

Key		Value	Description
Info	FileVersion	1	Setting the version of the linkage setting file
	IFVersion	1	Specification for the version of the ScanSnap interface that is supported by the user application
Launch	AppPath	Specified if required	Full path to "app" of the user application
	Label	Specified	Character string displayed as the application name
	QuickMenu	1	Whether to display the application in the Quick Menu
	QuickMenuDescription	Specified if required	Character string to describe the user application displayed in the Quick Menu
	QuickMenuLabel	Specified if required	Character string of the application name displayed in the Quick Menu
	ResultFileType	Specified	Setting how to receive the data file
	SaveFolderMode	Specified if required	Setting the mode for the image saving folder that is used when the application is linked with the Quick Menu
Application (*)	AppSetting	1	Whether to support the application for a settings window
	SettingExe	Specified	Full path to "app" of the application for a settings window
	UseAppSetting	Specified	Setting how to save the application settings
Scanning	Save Folder	Specified if required	Restrictions in setting the destination folder

* : When the settings window is specified

The specified values for the "UseAppSetting" key are described below.

- When the value for the "UseAppSetting" key of the "Application" key is "1", the settings are called with the save setting file that is dedicated to the Quick Menu (for Profile menu, the save setting file that is dedicated to each Profile) specified.
  When specifying "1" for the "UseAppSetting" key, specify "1" for the "ResultFileType" key of the "Launch" key.
- When the value for the "UseAppSetting" key of the "Application" key is "0" or when the key does not exist, the application for a settings window is called without the save setting file being specified.

The following example shows a settings call that is supported by a user application.

```
<key>Info</key>
<dict>
        <key>FileVersion</key>
        <integer>1</integer>
        <key>IFVersion</key>
        <integer>1</integer>
</dict>
<key>Launch</key>
<dict>
        <key>AppPath</key>
        <string>/Applications/ImageConnections.app</string>
        <key>Label</key>
        <string>Image Connections</string>
        <key>QuickMenu</key>
        <integer>1</integer>
        <key>QuickMenuDescription</key>
        <string>Description of  application program</string>
        <key>QuickMenuLabel</key>
        <string>Image Connections</string>
        <key>ResultFileType</key>
        <integer>1</integer>
        <key>SaveFolderMode</key>
        <integer>1</integer>
</dict>
<key>Application</key>
<dict>
        <key>AppSetting</key>
        <integer>1</integer>
        <key>SettingExe</key>
        <string>/Applications/ImageConnections.app/Contents/Resources/ImageSettings.app</string>
        <key>UseAppSetting</key>
        <integer>1</integer>
</dict>
```

```
<key>Scanning</key>
<dict>
        <key>SaveFolder</key>
        <string>~/Pictures</string>
</dict>
```

Deploying the linkage setting file

Deployment of the linkage setting file

When deployed in the defined folder shown below, the linkage setting file created by the user is automatically registered as the linked application of ScanSnap Manager.

- Deployment location 1
  ~/Library/Application Support/PFU/ScanSnap/ScanSnap Manager/Extension/
- Deployment location 2
  /Library/Application Support/PFU/ScanSnap/ScanSnap Manager/Extension/

[Recognition conditions that are applied when linkage setting files with the same Bundle identifier exist]

- When linkage setting files with the same Bundle identifier exist in deployment locations 1 and 2, deployment location 1 is applied.
- When linkage setting files with the same Bundle identifier exist in deployment location 1 (or deployment location 2), the linkage setting file with a higher version that is described in the "FileVersion" key of the "Info" key is applied.

ATTENTION

- Deploy the linkage setting file during installation of the user application or the initial startup of the application.
- Delete the linkage setting file during uninstallation of the user application.
- When the user application is not found, ScanSnap Manager deletes the linkage setting file in deployment location 1 (the linkage setting file in deployment location 2 is not deleted).
- When there is no folder that is used to deploy the linkage setting file, create this folder during installation of the user application or the initial startup of the application. Note that during uninstallation, the linkage setting file for a user application that is created by another user may be deployed. In this case, delete only the linkage setting file that you created.

Sample Program

This section explains how to use sample programs linked from the Quick Menu.

- Development environment (→ page 157)
- Operation procedure (→ page 158)
- Sample window (→ page 159)

Development Environment

Sample programs are created under the following development environment:

- Xcode 4.5

Sample applications are deployed as follows:

- /mac/ScanSnapSample/app/Manager/Xcode4.5/ImageConnections.app

Operation Procedure

This section describes the operation procedure for the sample applications.

1. Preparation

Install ScanSnap Manager.

2. Deployment

Deploy the following applications in the folder:

- Sample user application (ImageConnections.app)
  /Applications/
- Linkage setting file (jp.co.pfu.ImageConnections.ScanSnapInfo.plist)
  Start the sample user application once, and then exit it.
  When the sample user application is started, it copies the linkage setting file under the [Content/Resources] folder to the deployment location.
  To manually change the values for the keys in the linkage setting file, update the linkage setting file in the sample user application.

3. Settings for using the Quick Menu

While pressing the [control] key on the keyboard, click the ScanSnap Manager icon in the Dock and click [Settings] to display the ScanSnap setup window.
In the ScanSnap setup window, select the [Use Quick Menu] checkbox and click the [Apply] button.

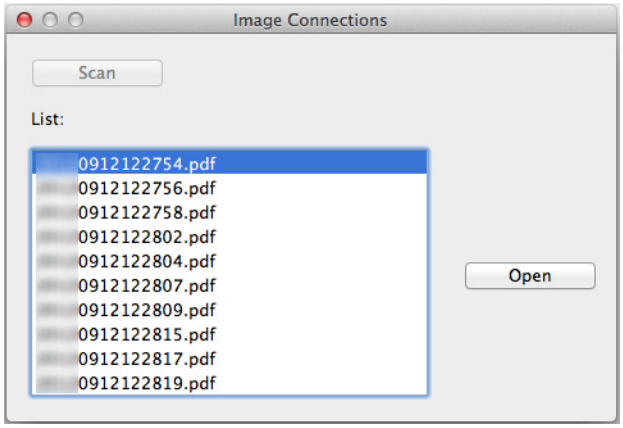
4. Execution

Turn on the ScanSnap and load a document.
Press the [Scan] button on the ScanSnap.
The Quick Menu displays a sample application icon.

The settings window can be started from on the icon.
Click the icon to start the sample application.

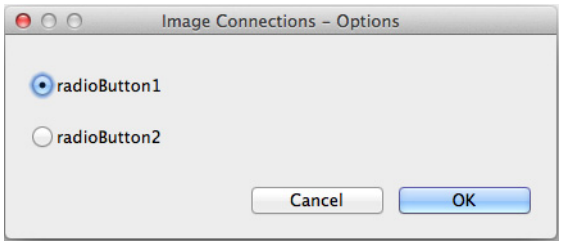
Sample Window

When the sample application is started from the Quick Menu, the received data file is displayed in the output file list.



- List and [Open] button
  Select a data file from the list and click the [Open] button to start the output file using the OS default application.
  Multiple data files in the list cannot be selected.
- button
  Click the button to exit the sample window.

Settings window



Linking with CardMinder

This section explains how to link CardMinder with a user application.

Linkage Method **161**
Sample Program **167**

Linkage Method

To link CardMinder with a user application, perform the following operations:

1. **Creating a user application (→ page 161)**
2. **Creating an application for a settings window (→ page 164)**
3. **Preparing linkage setting files required for linking with an application (→ page 165)**
4. **Deploying the linkage setting file (→ page 166)**

Creating a User Application

The following sections explain the key points regarding the specifications of user applications.

- How to call a user application
- Operation specification summary
- Waiting for a user application
- Handling errors that occur during a user application call

How to call a user application

The argument shown below calls a user application from CardMinder.

"User application" "Full path to the result file"

Example:

"/Application/App.app" "/Users/(user name)/Library/Caches/TemporaryItems/PFU/ScanSnap/CardMinder/Extension/temp/0000/ExportResult.plist"

Operation specification summary

Analyze the result file and open the data file.
For details about the result file and the data file, refer to "Contents of Output File" (page 214).
The folder described below must be deleted by the user application.
Result file folder:

~/Library/Caches/TemporaryItems/PFU/ScanSnap/CardMinder/Extension/temp/*XXX*

- CardMinder creates a unique result file folder in the user's temporary folder every time it calls the user application. In the created folder, the result file, the card data file and the card image file are stored.
  The folder containing these files is not deleted by CardMinder and must be deleted by the user application.
- The result file folder is a folder under the Caches folder. Result and data files that have not been deleted are moved to Trash when you log out and then back into the system, or when you restart the system.

ATTENTION
CardMinder starts the specified application regardless of whether the specified application is running or not. As a result, an appropriate resolution is required on the application side to prevent any errors that are caused by starting multiple processes of the application.

Waiting for a user application

CardMinder does not wait for the user application to exit.

Handling errors that occur during a user application call

CardMinder deletes a result file folder that is created in the user's temporary folder when one of the errors shown below occurs during the user application call.
The following messages may appear during a call:

1	**Message**	The application does not exist. Check the settings, and try again.
	Cause	The application that is to be linked with does not exist.
	Resolution	Check whether the specified application exists in the environment, and then try again. When the application does not exist, install the application if necessary.
2	**Message**	Failed to output the file. Check the disk space, memory usage, and the permissions set for the specified destination folder.
	Cause	Failed to link with an application due to a problem such as insufficient disk space and lack of privileges.
	Resolution	Ensure that the destination disk has enough space and then perform the process again. Check that "read/write" is set for the access privileges of the destination disk and that the destination disk is not locked, and then perform the process again.
3	**Message**	Failed to link with the application. Check the selected application.
	Cause	Failed to link with the specified application. (Under the occurrence conditions other than those for messages No.1 and No.2)
	Resolution	Take the following actions, and then perform the process again. ● Check whether the specified application is installed. Install the application if it is not installed. ● Check whether the specified application has properly started and is active. If not active, activate the specified application according to the manual for the application.

Creating an Application for a Settings Window

The following section explains the key points regarding the specifications of the application for a settings window that is created by a user.
Creating an application for a settings window is optional. To change the settings for the user application, create an application for a settings window. To start the application for a settings window, select a user application program in the [Application] window of CardMinder, click , and then select [Application Settings].

- How to call an application for a settings window
- Operation specification summary

How to call an application for a settings window

The application for a settings window that is created by the user is called from CardMinder with the following specification:

"Application for a settings window"

Example:

"/Application/CardSettings.app"

Operation specification summary

The information of the settings window can be saved to any location in any file format.

ATTENTION

The settings window is called from on the [Preferences]/[Application] window.

When all of the conditions shown below are met, is enabled so that the settings window can be called.

- When the "AppSetting" key of the "Application" key in the linkage setting file is "TRUE"
- When the full path to the application for a settings window is correctly set for the "SettingExe" key of the "Application" key
- When the application for a settings window that is specified for the "SettingExe" key of the "Application" key exists

Preparing Linkage Setting Files Required for Linking with an Application

Prepare the linkage setting files required for linking with an application.
The linkage setting file is a plist file in XML format. This file defines the information that is related to the user application, the display name of the user application, and the availability of linkage settings.
Name the linkage setting file in the format of "*Bundle identifier.XXX*.plist". (Specify the Bundle identifier of the user application for "*Bundle identifier*" and any name for "*XXX*".)
For details about the linkage setting file, refer to "Linkage Setting File" (page 181).
The following table shows the major items required for linking from CardMinder.

Key		Value	Description
Info	FileVersion	1	Setting the version of the linkage setting file
	IFVersion	1	Specification for the version of the ScanSnap interface that is supported by the user application
Launch	AppPath	Specified if required	Full path to "app" of the user application
	CardDataFileFormat	Specified if required	Setting the card data file format that is received by the user application
	CardDataFileOption	Specified if required	Setting the options for a card data file that is received by the user application
	CardImageFileFormat	Specified if required	Setting the card image file format that is required for the user application
	Description	Specified if required	Character string to describe the user application
	Label	Specified	Character string displayed as the application name
Application (*)	AppSetting	1	Whether to support the application for a settings window
	SettingExe	Specified	Full path to "app" of the application for a settings window

* : When the settings window is specified

Deploying the linkage setting file

Deployment of the linkage setting file

When deployed in the defined folder shown below, the linkage setting file created by the user is automatically registered as the linked application of CardMinder.

- Deployment location 1
  ~/Library/Application Support/PFU/ScanSnap/CardMinder/Extension/
- Deployment location 2
  /Library/Application Support/PFU/ScanSnap/CardMinder/Extension/

The user application is recognized when CardMinder is started. If the user application is installed after CardMinder is started, restart CardMinder to make the user application recognized.

[Recognition conditions applied when linkage setting files with the same Bundle identifier exist]

- When linkage setting files with the same Bundle identifier exist in deployment locations 1 and 2, deployment location 1 is applied.
- When linkage setting files with the same Bundle identifier exist in deployment location 1 (or deployment location 2), the linkage setting file with a higher version that is described in the "FileVersion" key of the "Info" key is applied.

ATTENTION

- Deploy the linkage setting file during installation of the user application or the initial startup of the application.
- Delete the linkage setting file during uninstallation of the user application.
- When the user application is not found, CardMinder deletes the linkage setting file in deployment location 1 (the linkage setting file in deployment location 2 is not deleted).
- When there is no folder that is used to deploy the linkage setting file, create this folder during installation of the user application or the initial startup of the application. Note that during uninstallation, the linkage setting file for a user application that is created by another user may be deployed. In this case, delete only the linkage setting file that you created.
- To link with a user application, CardMinder V5.0L10 or later is required.
  The CardMinder version can be checked in the window that is displayed by selecting the [CardMinder] menu → [About CardMinder].

Sample Program

This section explains how to use sample programs linked from CardMinder.

- Development environment (→ page 167)
- Operation procedure (→ page 168)
- Sample window (→ page 169)

Development Environment

Sample programs are created under the following development environment:

- Xcode 4.5

Sample applications are deployed as follows:

- /mac/ScanSnapSample/app/CardMinder/Xcode4.5/CardConnections.app

Operation Procedure

This section describes the operation procedure for sample applications.

1. Preparation

Install CardMinder.

2. Deployment

Deploy the following applications in the folder:

- Sample user application (CardConnections.app)
  /Applications/
- Linkage setting file (com.fujitsu.pfu.CardConnections.CardMinderInfo.plist)
  Start the sample user application once, and then exit it.
  When the sample user application is started, it copies the linkage setting file under the [Content/Resources] folder to the deployment location.
  To manually change the values for the keys in the linkage setting file, update the linkage setting file in the sample user application.

3. Execution

Start CardMinder.
From the CardMinder window, select the [File] menu → [Application] to display the submenu that contains the sample application.
Select the sample application from the submenu to start.

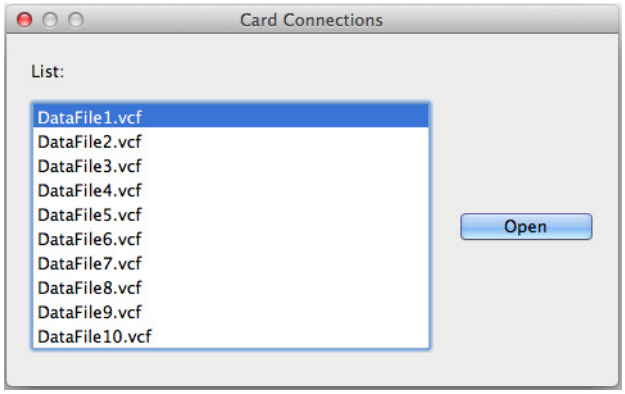
Starting the application for a settings window

Click the [CardMinder] menu → [Preferences] to display the [General] window. Click the [Application] button to display the [Application] window, where the sample application is displayed in the application list.

Select the application from the application list, click under the list, and then select [Application Settings] to display the application settings window.

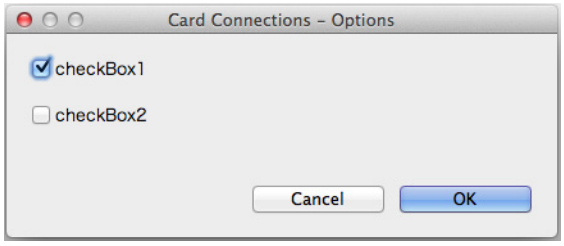
Sample Window

When the sample application is started from CardMinder, the received data file is displayed in the output file list.



- List and [Open] button
  Select a data file from the list and click the [Open] button to start the output file using the OS default application.
  Multiple data files in the list cannot be selected.
- button
  Click the button to exit the sample window.

Settings window



Scanning from a User Application

This section explains the linkage method to scan documents from a user application.

Linkage Method **171**

Sample Program **177**

Linkage Method

To scan documents from a user application, perform the following operations:

1. **Creating a user application (→ page 171)**
2. **Creating an application for a settings window (→ page 173)**
3. **Preparing linkage setting files required for linking with an application (→ page 174)**
4. **Deploying the linkage setting file (→ page 176)**

Creating a User Application

The following sections explain the key points regarding the specifications of user applications.

- [Scan] button
- How to receive a file from ScanSnap Manager
- Handling errors that occur during a user application call

[Scan] button

Functions such as the [Scan] button and the menu items to perform scanning with ScanSnap must be provided for the user application.
When the [Scan] button is pressed, the user application sends an Apple event to reserve ScanSnap, to perform scanning with ScanSnap, and to release ScanSnap.
For details, refer to "ScanSnap Manager Control Event" (page 220).

How to receive a file from ScanSnap Manager

To enable a user application to receive a file from ScanSnap Manager after scanning with ScanSnap, implement the OS-standard file receiving method (the "application:openFiles:" method of the "NSApplicationDelegate" protocol or the "readFromURL:ofType:error" method of the "NSDocument" class).

- When the value for the "ResultFileType" key of the "Launch" key in the linkage setting file is "0", the scanned PDF or JPEG file is received.
- When the value for the "ResultFileType" key of the "Launch" key in the linkage setting file is "1", a result file that describes the name of the scanned PDF or JPEG file is received. The result file is created under the "~/Library/Caches/TemporaryItems/PFU/ScanSnap/ScanSnap Manager/Extension/temp/" folder. (For details, refer to "Contents of Output File" (page 214).)
  When the result file is no longer necessary, delete it from the user application. The file is not deleted by ScanSnap Manager.
- When the scanned PDF or JPEG file is no longer necessary, delete it from the user application. The file is not deleted by ScanSnap Manager.

Handling errors that occur during a user application call

The following messages may appear when an error occurs during a user application call:

Message	Failed to launch the selected application.
Cause	The selected application might have been uninstalled.
Resolution	Check whether the selected application is properly installed.

Creating an Application for a Settings Window

The following section explains the key points regarding the specifications of the application for a settings window that is created by the user.
Creating an application for a settings window is optional. To change the settings for the user application, create an application for a settings window. To start the application for a settings window, select a user application program in the [Application] tab of ScanSnap Manager, and then click the [Application Settings] button.

- How to receive the save setting file from ScanSnap Manager
- Waiting for an application for a settings window

How to receive the save setting file from ScanSnap Manager

To enable the application for a settings window that is created by the user to receive the save setting file from ScanSnap Manager, implement the OS-standard file receiving method (the "application:openFiles:" method of "NSApplicationDelegate" protocol or the "readFromURL:ofType:error" method of the "NSDocument" class).

To save the settings that are specified with the application for a settings window as a file, output the settings to the save setting file before exiting the application.
The save setting file is a plist file used by the application for a settings window created by the user.
The settings can be saved as the dedicated settings different from the settings called from the Quick Menu.

To save the settings in a file unique to the user application, no file receiving method needs to be implemented.

Waiting for an application for a settings window

ScanSnap Manager waits for the application for a settings window that is created by the user to exit.
ScanSnap Manager determines whether a process of the application for a settings window is launched to wait for the process to exit.
When the setup is complete, exit the application for a settings window that is created by the user.

Preparing Linkage Setting Files Required for Linking with an Application

Prepare the linkage setting files required for linking with an application.
The linkage setting file is a plist file in XML format. This file defines the information that is related to the user application, the display name of the user application, the availability of linkage settings, and the scanning restrictions.
Name the linkage setting file in the format of "*Bundle identifier.XXX*.plist". (Specify the Bundle identifier of the user application for "*Bundle identifier*" and any name for "*XXX*".)
For details about the linkage setting file, refer to "Linkage Setting File" (page 181).
The following table shows the major items required for scanning documents from the user application.

Key		Value	Description
Info	FileVersion	1	Setting the version of the linkage setting file
	IFVersion	1	Specification for the version of the ScanSnap interface that is supported by the user application
Launch	AppPath	Specified if required	Full path to "app" of the user application
	Label	Specified	Character string displayed as the application name
	ResultFileType	Specified	Setting how to receive the data file
Application (*)	AppSetting	1	Whether to support the application for a settings window
	SettingExe	Specified	Full path to "app" of the application for a settings window
	UseAppSetting	Specified	Setting how to save the application settings
Scanning	Save Folder	Specified if required	Restrictions in setting the destination folder

* : When the settings window is specified

The [Application Settings] button is enabled when a user application program is selected on the [Application] tab of ScanSnap Manager.
ScanSnap Manager calls the application for a settings window when the [Application Settings] button is clicked.

The specified values for the "UseAppSetting" key are described below.

- When the value for the "UseAppSetting" key of the "Application" key is "1", the settings are called with the save setting file that is dedicated to the Profile specified.
  When specifying "1" for the "UseAppSetting" key, specify "1" for the "ResultFileType" key of the "Launch" key.
- When the value for the "UseAppSetting" key of the "Application" key is "0" or when the key does not exist, the application for a settings window is called without the save setting file being specified.

The following example shows a settings call that is supported by a user application.

```
<key>Info</key>
<dict>
        <key>FileVersion</key>
        <integer>1</integer>
        <key>IFVersion</key>
        <integer>1</integer>
</dict>
<key>Launch</key>
<dict>
        <key>AppPath</key>
        <string>/Applications/ImageConnections.app</string>
        <key>Label</key>
        <string>Image Connections</string>
        <key>ResultFileType</key>
        <integer>1</integer>
</dict>
<key>Application</key>
<dict>
        <key>AppSetting</key>
        <integer>1</integer>
        <key>SettingExe</key>
        <string>/Applications/ImageConnections.app/Contents/Resources/ImageSettings.app</string>
        <key>UseAppSetting</key>
        <integer>1</integer>
</dict>
<key>Scanning</key>
<dict>
        <key>SaveFolder</key>
        <string>~/Pictures</string>
</dict>
```

Deploying the linkage setting file

Deployment of the linkage setting file

When deployed in the defined folder shown below, the linkage setting file created by the user is automatically registered as the linked application of ScanSnap Manager.

- Deployment location 1
  ~/Library/Application Support/PFU/ScanSnap/ScanSnap Manager/Extension/
- Deployment location 2
  /Library/Application Support/PFU/ScanSnap/ScanSnap Manager/Extension/

[Recognition conditions applied when linkage setting files with the same Bundle identifier exist]

- When linkage setting files with the same Bundle identifier exist in deployment locations 1 and 2, deployment location 1 is applied.
- When linkage setting files with the same Bundle identifier exist in deployment location 1 (or deployment location 2), the linkage setting file with a higher version that is described in the "FileVersion" key of the "Info" key is applied.

ATTENTION

- Deploy the linkage setting file during installation of the user application or the initial startup of the application.
- Delete the linkage setting file during uninstallation of the user application.
- When the user application is not found, ScanSnap Manager deletes the linkage setting file in deployment location 1 (the linkage setting file in deployment location 2 is not deleted).
- When there is no folder that is used to deploy the linkage setting file, create this folder during installation of the user application or the initial startup of the application. Note that during uninstallation, a linkage setting file for a user application that is created by another user may be deployed. In this case, delete only the linkage setting file that you created.

Sample Program

This section explains how to use sample programs to scan documents.
In this sample, the application to scan documents and the application called from ScanSnap Manager are the same module.

- Development environment (→ page 177)
- Operation procedure (→ page 178)
- Sample window (→ page 179)

Development Environment

Sample programs are created under the following development environment:

- Xcode 4.5

Sample applications are deployed as follows:

- /mac/ScanSnapSample/app/Manager/Xcode4.5/ImageConnections.app

Operation Procedure

This section describes the operation procedure for the sample applications.

1. Preparation

Install ScanSnap Manager.

2. Deployment

Deploy the following applications in the folder:

- Sample user application (ImageConnections.app)
  /Applications/
- Linkage setting file (jp.co.pfu.ImageConnections.ScanSnapInfo.plist)
  The linkage setting file is automatically deployed.
  When the sample user application is started, it copies the linkage setting file under the [Content/Resources] folder to the deployment location.
  To manually change the values for the keys in the linkage setting file, update the linkage setting file in the sample user application.

3. Execution

Start ScanSnap Manager. If it has already been started since before the linkage setting file is deployed, restart it.
Turn on the ScanSnap and load a document.
Start the sample user application.
From the sample user application window, press the [Scan] button to start scanning documents with the ScanSnap.

Starting the application for a settings window

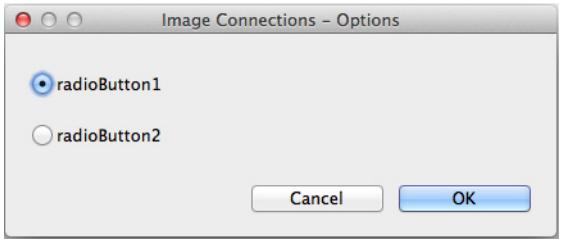
While pressing the [control] key on the keyboard, click the ScanSnap Manager icon in the Dock and click [Settings] to display the ScanSnap setup window.
In the ScanSnap setup window, clear the [Use Quick Menu] checkbox and click the [Application] tab.
From the application selection list, select [Image Connections] and click the [Application Settings] button.

Sample Window

When the sample application is started and no result file or data file to be received exists, only the [Scan] button is enabled in the initial display.

- [Scan] button
  Click the button to call Reserve, Scan, and Release with the control event.
- List and [Open] button
  Select a data file from the list and click the [Open] button to start the output file using the OS default application.
  Multiple data files in the list cannot be selected.
- button
  Click the button to exit the sample window.

Settings window



Describing Linkage Setting File

This section explains how to describe the linkage setting file.

Linkage Setting File 181

Linkage Setting File

The linkage setting file is a plist file in XML format. This file defines the information that is related to the user application, the display name of the user application, the availability of linkage settings, and the scanning restrictions.
Deploy the file during installation of the user application or the initial startup of the user application.

The linkage setting file can be classified as follows:

- Basic settings (→ page 181)
  - Version management (→ page 181)
  - Application name and description (→ page 182)
  - Application icon (→ page 183)
  - Linkage with applications (→ page 183)
- Automatic linkage (→ page 184)
- Restrictions in scanning in scanning profile mode (→ page 184)
  - [Save] tab (→ page 184)
  - [Scanning] tab (→ page 185)
  - [File option] tab (→ page 186)
  - [Paper] tab (→ page 187)
  - [Compression] tab (→ page 187)

The keys for the linkage setting file are listed below.
M: ScanSnap Manager
C: CardMinder
R: Supported key (required)
P: Supported key (optional)
-: Unsupported key

Basic settings

Version management

Key		Type	Description	M	C
Info	FileVersion	Number	Setting the version of the linkage setting file	R	R
	IFVersion	Number	Specification for the version of the ScanSnap interface that is supported by the user application	R	R

Application name and description

Key			Type	Description	M	C
Launch	Description		String	Character string to describe the user application	P	P
	Label		String	Character string displayed as the application name	P	P
	QuickMenuDescription		String	Character string to describe the user application displayed in the Quick Menu	P	-
	QuickMenuLabel		String	Character string of the application name displayed in the Quick Menu (When this key does not exist, "Label" is used.)	P	-
Languages	Japanese English French German Italian Spanish zh_CN zh_TW Korean Russian Portuguese (*)	Description	String	Character string to describe the user application (has a higher priority than the "Launch" key)	-	P
		Label	String	Character string displayed as the application name (has a higher priority than the "Launch" key)	P	P
		QuickMenu Description	String	Character string to describe the user application displayed in the Quick Menu (has a higher priority than the "Launch" key)	P	-
		QuickMenuLabel	String	Character string of the application name displayed in the Quick Menu (has a higher priority than the "Launch" key)	P	-

* : Languages for each key

Language	Key name
Japanese (Japan)	Japanese
English (United States)	English
French (France)	French
German (Germany)	German
Italian (Italy)	Italian
Spanish (Spain)	Spanish
Chinese (China) (simplified)	zh_CN
Chinese (Taiwan) (traditional)	zh_TW
Korean (Korea)	Korean
Russian (Russia)	Russian
Portuguese (Brazil)	Portuguese

Application icon

Key		Type	Description	M	C
Launch	Icon	String	The icon file name that is used to display the user application	P	P

Linkage with applications

Key		Type	Description	M	C
Launch	AppPath	String	Full path to "app" of the user application	P	P
	CardDataFileFormat	Number	Setting the card data file format that is received by the user application	-	P
	CardDataFileOption	Number	Setting the options for a card data file that is received by the user application	-	P
	CardImageFileFormat	Number	Setting the card image file format that is required for the user application	-	P
	HideAppList	Number	Whether to display the application in the [Application] list box	P	-
	QuickMenu	Number	Whether to display the application in the Quick Menu	P	-
	RecommendBook	Number	Whether to enable a function specialized for double-page spread documents (books/magazines)	P	-
	RecommendBusinessCard	Number	Whether to enable a function specialized for business cards	P	-
	RecommendReceipt	Number	Whether to enable a function specialized for receipts	P	-
	ResultFileType	Number	Setting how to receive the data file	P	-
	SaveFolderMode	Number	Setting the mode for the image saving folder that is used when the application is linked with the Quick Menu	P	-
	SupportFileFormat	Number	Setting the file format supported by the application	P	-
	WithoutLaunch	Number	Setting the mode in which the application is not launched	P	-

Key		Type	Description	M	C
Application	AppSetting	Number	Whether to support the application for a settings window	P	P
	SettingExe	String	Full path to "app" of the application for a settings window	P	P
	UseAppSetting	Number	Setting how to save the application settings	P	-
	IgnoreScanButton	Number	Setting the mode to disable scanning that can be started with the Scan button on the ScanSnap	P	-

Automatic linkage

Key		Type	Description	M	C
Launch	AutoConnect	Number	Whether to enable automatic linkage (in active status)	P	-

Restrictions in scanning in scanning profile mode

[Save] tab

Key		Type	Description	M	C
Scanning	FileCounterDigits	Number	Restrictions in setting serial number digits of image file name	P	-
	FileName	String	Restrictions in setting the first character string of image file name	P	-
	FileNameFormat	Number	Restrictions in setting the format of image file name	P	-
	Rename	Number	Restrictions in renaming a file after scanning	P	-
	SaveFolder	String	Restrictions in setting the destination folder	P	-

[Scanning] tab

Key		Type	Description	M	C
Scanning	AutoComposite	Number	Setting whether to enable/disable the function to automatically merge the front side image and the back side image	P	-
	BlankPageSkip	Number	Restrictions in setting whether to enable/disable the blank page removing function	P	-
	BWBrightness	Number	Restrictions in setting the brightness for scanning in the black & white mode	P	-
	ColorMode	Number	Restrictions in setting the color mode	P	-
	ContentCorrection	Number	Setting whether to correct skewed text	P	-
	ContinueScan	Number	Restrictions in setting continuous scanning	P	-
	ContinueScanMode	Number	Setting the condition for starting the next scan	P	-
	DarkMode	Number	Setting whether to enable/disable the function to darken color images	P	-
	Deskew	Number	Restrictions in setting whether to enable/disable the deskew function	P	-
	HighQualityImage	Number	Setting whether to reduce fluorescent lamp flicker	P	-
	ReduceBleedThrough	Number	Restrictions in setting whether to reduce image bleed-through	P	-
	Rotation	Number	Setting the rotation function	P	-
	ScanMode	Number	Restrictions in setting the image quality mode	P	-
	ScanningSide	Number	Restrictions in setting the scanning side	P	-
	StartScanTime	Number	Setting the waiting time (seconds) to start a scan	P	-
	TextOnlyDocument	Number	Restrictions in setting whether to enable/disable the setting for increasing text contrast	P	-
	TimerScanTime	Number	Setting the scanning interval time (seconds) for [Timed interval (Timed mode)]	P	-

[File option] tab

Key		Type	Description	M	C
Scanning	Format	Number	Restrictions in setting the file format	P	-
	MarkerIndex	Number	Setting whether to enable/disable the function to set the marked text as a keyword for the PDF file	P	-
	OcrPage	Number	Restrictions for the pages that are applied to the function to convert an extracted text to a searchable PDF and the pages that are applied to the function to set the marked text as a keyword for the PDF files	P	-
	PDFPageDivide	Number	Restrictions in setting whether to enable/disable division into multiple PDF pages and in setting the number of divided pages	P	-
	Searchable	Number	Restrictions in converting an extracted text to a searchable PDF	P	-
	SearchableLang	Number	Restrictions in setting the language that is used to convert an extracted text to a searchable PDF and to set the marked text as a keyword for the PDF files	P	-

[Paper] tab

Key		Type	Description	M	C
Scanning	BookDivideType	Number	Setting save option for double-page spread documents	P	-
	BookPreCorrection	Number	Setting whether to preview images after scanning (for books/magazines)	P	-
	CarrierSheetMode	Number	Restrictions in setting [Save as] when using a Carrier Sheet for scanning	P	-
	CarrierSheetSeparatePaperSize	Number	Restrictions in setting [Paper size] with [two separate images (front and back)] specified	P	-
	CarrierSheetSpreadPaperSize	Number	Restrictions in setting [Paper size] with [one double-page spread image] specified	P	-
	MultiCrop	Number	Setting whether to detect multiple documents	P	-
	MultiFeedControl	Number	Setting whether to detect multiple documents	P	-
	MultiPreCorrection	Number	Setting whether to preview images after scanning (for flat documents)	P	-
	PaperSize	Number	Restrictions in setting the paper size	P	-
	PaperType	Number	Setting the document type	P	-

[Compression] tab

Key		Type	Description	M	C
Scanning	Compression	Number	Restrictions in setting the compression rate	P	-

Explanation of the Keys for the Linkage Setting File

The keys for the linkage setting file are described below.

- Info key (→ page 188)
- Launch key (→ page 189)
- Languages key (→ page 196)
- Application key (→ page 197)
- Scanning key (→ page 198)

ATTENTION

- Operation is not guaranteed if a value out of the specified range is specified.
- Operation is not guaranteed if you use multiples of the same key described in each of the tables below.

Info key

Key name	FileVersion (Info key)
Summary	Setting the version of the linkage setting file
Required/ Optional	Required
Value	Setting a numerical value Example: "1" for the first version
Explanation	Sets the version of the linkage setting file. The numeric value is increased to "2", "3", or a higher value each time the linkage setting file is updated. When linkage setting files with the same Bundle identifier exist, the linkage setting file with a higher value in this key is applied. * When the key does not exist or no value is specified, the value is treated as "0".

Key name	IFVersion (Info key)
Summary	Specification for the version of the ScanSnap interface that is supported by the user application
Required/ Optional	Required
Value	1
Explanation	Sets the version of the ScanSnap interface that is supported by the user application. "Version" refers to the version of this manual. Used to maintain compatibility so that user applications can continue operating without requiring any changes even if a function is added to the ScanSnap interface at a future date. When this key is not specified, operations may be different depending on the version of the software bundled with ScanSnap.

Launch key

Key name	AppPath (Launch key)
Summary	Full path to "app" of the user application
Required/ Optional	Optional
Value	Setting the full path to "app" of the user application
Explanation	Sets the full path to "app" of the user application. When specifying this key, be sure to match Bundle identifier of the specified application and Bundle identifier part of the linkage setting file name. If not, the application does not operate properly. When this key is not specified, an application that matches the Bundle identifier in the linkage setting file name is started.

Key name	AutoConnect (Launch key)
Summary	Whether to enable automatic linkage (in active status)
Required/ Optional	Optional
Value	0 - Disable (default) 1 - Enable
Explanation	Sets whether to enable automatic linkage when the Scan button is pressed while the application window is active even if the application is not selected in the [Application]. The setting for this key is disabled when [Link automatically (recommended)] is not selected in [Condition] on the [Automatic Linkage] tab of the [ScanSnap Manager - Preferences] window.

Key name	CardDataFileFormat (Launch key)
Summary	Setting the card data file format that is received by the user application
Required/ Optional	Optional
Value	1 - ContactXML 1.1 (Card data only. Card image is optional.) 2 - vCard 3.0 (Card data only. Card image is optional.) (default) -1 - Card image only
Explanation	Sets the card data file type that can be received by the user application. Specify whether a card image file exists and the format of the file by using the "CardImageFileFormat" key. * When the key is not specified or a value other than the defined value is specified, the default value is used.

Key name	CardDataFileOption (Launch key)
Summary	Setting the options for a card data file that is received by the user application
Required/ Optional	Optional
Value	0 - Pass the data of multiple cards in a card data file. (default) 1 - Pass the card data in card data files on a file-per-card basis.
Explanation	Sets whether to receive the card data of multiple business cards that are combined in a card data file or to receive card data in a separate card data file on a file-per-card basis. * If "Card image only (-1)" is specified for the "CardDataFileFormat" key, this key is ignored. * When the key is not specified or a value other than the defined value is specified, the default value is used.

Key name	CardImageFileFormat (Launch key)
Summary	Setting the card image file format that is required for the user application
Required/ Optional	Optional
Value	0 - No image files (When no card image file is required) 1 - PDF (default) 2 - JPEG
Explanation	Sets the file type to be received when the user application requires a card image file. * When the key is not specified or a value other than the defined value is specified, the default value is used. * If "Card image only (-1)" is specified for the "CardDataFileFormat" key and "No image files (0)" is specified for this key, no image files are passed when the user application starts up. In other words, the "FileCount" key value in the "FILES" key in the result file becomes "0".

Key name	Description (Launch key)
Summary	Character string to describe the user application
Required/ Optional	Optional
Value	A character string of up to 128 characters
Explanation	Sets the character string to describe the user application. ● ScanSnap Manager If the "QuickMenuDescription" key is omitted, this key is displayed in the details of the Quick Menu. ● CardMinder The character string is displayed as a tooltip of the application menu in the following order of priority: 1. "Languages" key - Language key - "Description" key Specify this to localize the description. 2. "Launch" key - "Description" key

Key name	HideAppList (Launch key)
Summary	Whether to display the application in the [Application] list box
Required/ Optional	Optional
Value	0 - Display (default) 1 - Do not display
Explanation	Sets whether to display the application in the [Application] list box.

Key name	Icon (Launch key)
Summary	The icon file name that is used to display the user application
Required/ Optional	Optional
Value	Setting the icon file name
Explanation	Specify this key to display an icon other than the application icon. ● ScanSnap Manager The [Application] list box, the Profile menu, and the Quick Menu ● CardMinder The application menu and the application list in [Preferences] Locate the icons file under the Resources folder of the user application, and specify only the file name for this key. The icon is displayed in the following order of priority: 1. "Launch" key - "Icon" key 2. Icon specified for CFBundleIconFile of Info.plist 3. Default application icon For the icon size, 128 x 128 pixels or higher is recommended.

Key name	Label (Launch key)
Summary	Character string displayed as the application name
Required/ Optional	Optional
Value	A character string of up to 62 characters
Explanation	Sets the character string of the user application name. ● ScanSnap Manager The character string is displayed in [Application] in the following order of priority: 1. "Languages" key - Language key - "Label" key Specify this to localize the application name. 2. "Launch" key - "Label" key 3. User application name ● CardMinder The character string is displayed as an application menu name in the following order of priority: 1. "Languages" key - Language key - "Label" key Specify this to localize the application name. 2. "Launch" key - "Label" key 3. User application name

Key name	QuickMenu (Launch key)
Summary	Whether to display the application in the Quick Menu
Required/ Optional	Optional
Value	0 - Do not display (default) 1 - Display
Explanation	Sets whether to display the application in the Quick Menu. In scanning with the Quick Menu, all the restrictions in scanning specified in the "Scanning" key are ignored.

Key name	QuickMenuDescription (Launch key)
Summary	Character string to describe the user application displayed in the Quick Menu
Required/ Optional	Optional
Value	A character string of up to 128 characters
Explanation	Sets the character string to describe the user application displayed in the Quick Menu. The character string is displayed in the Quick Menu in the following order of priority: 1. "Languages" key - Language key - "QuickMenuDescription" key Specify this to localize the application name. 2. "Launch" key - "QuickMenuDescription" key 3. "Launch" key - "Description" key

Key name	QuickMenuLabel (Launch key)
Summary	Character string of the application name displayed in the Quick Menu
Required/ Optional	Optional
Value	A character string of up to 62 characters
Explanation	Sets the character string of the application name displayed in the Quick Menu. The character string is displayed in the Quick Menu in the following order of priority: 1. "Languages" key - Language key - "QuickMenuLabel" key Specify this to display a different application name from the one that is selected in [Application] and to localize the application name. 2. "Launch" key - "QuickMenuLabel" key Specify this to display a different application name from the one that is selected in [Application]. 3. "Languages" key - Language key - "Label" key Specify this to localize the application name. 4. "Launch" key - "Label" key 5. User application name

Key name	RecommendBook (Launch key)
Summary	Whether to enable a function specialized for double-page spread documents (books/magazines)
Required/ Optional	Optional
Value	0 - Treat double-page spread documents (books/magazines) and other documents equally. (default) 1 - Enable a function that is specialized for double-page spread documents (books/magazines).
Explanation	Sets whether to enable a function that is specialized for double-page spread documents (books/magazines). *This key can be used with ScanSnap Manager V6.2L10 or later.

Key name	RecommendBusinessCard (Launch key)
Summary	Whether to enable a function specialized for business cards
Required/ Optional	Optional
Value	0 - Treat business cards and other documents equally. (default) 1 - Enable a function that is specialized for business cards.
Explanation	Sets whether to enable a function that is specialized for business cards.

Key name	RecommendReceipt (Launch key)
Summary	Whether to enable a function specialized for receipts
Required/ Optional	Optional
Value	0 - Treat receipts and other documents equally. (default) 1 - Enable a function that is specialized for receipts.
Explanation	Sets whether to enable a function that is specialized for receipts.

Key name	ResultFileType (Launch key)
Summary	Setting how to receive the data file
Required/ Optional	Optional
Value	0 - Receive the data file. (default) 1 - Receive the result file that describes the data file name.
Explanation	Sets how to receive the data file. When "1" is specified for the "UseAppSetting" key of the "Application" key, specify "1" for this key.

Key name	SaveFolderMode (Launch key)
Summary	Setting the mode for the image saving folder that is used when the application is linked with the Quick Menu
Required/ Optional	Optional
Value	0 - Save the file in the folder that is specified for [Image saving folder] in the Quick Menu 1 - Save the file in the folder that is specified for the "SaveFolder" Key of the "Scanning" key even when the application is linked with the Quick Menu
Explanation	Sets the mode for the image saving folder when the application is linked with the Quick Menu. If "1" is specified for the "ResultFileType" key of the "Launch" key when the user application supports sandbox, specify "1" for this key so that the data files which are output into the "FILES" key of the result file can be accessed, and specify the existing folder that is accessible to the user application for the "SaveFolder" key of the "Scanning" key.

Key name	SupportFileFormat (Launch key)
Summary	Setting the file format supported by the application
Required/ Optional	Optional
Value	0 - All files (default) 1 - PDF 2 - JPEG 3 - PDF and JPEG
Explanation	Sets the file format that can be received by the application from the Quick Menu. If this key is omitted, the file format that is specified with the "Format" key in the "Scanning" key is applied. When a file format that cannot be received from the application is linked, a message is displayed.

Key name	WithoutLaunch (Launch key)
Summary	Setting the mode in which the application is not launched
Required/ Optional	Optional
Value	0 - Launch (default) 1 - Do not launch
Explanation	Sets the mode in which the application is not launched. If "1 - Do not launch" is specified, the application is not launched for all of the following scanning operations: ● Scanning from the [Scan] button on the ScanSnap ● Simplex/duplex scanning from the ScanSnap Manager menu ● Scanning from the control event ("StartScan" event) ● Selecting an application from the Quick Menu after scanning

Languages key

The explanation for the keys in the Languages key is the same as the keys in the Launch key.
For details, refer to "Launch key" (page 189).

Application key

Key name	AppSetting (Application key)
Summary	Whether to support the application for a settings window
Required/ Optional	Optional
Value	0 - Do not support (default) 1 - Support
Explanation	Sets whether to support the application for a settings window. When supporting the application for a settings window, start the application from ScanSnap Manager (or CardMinder). ScanSnap Manager can save the settings specific to the user application in the save setting file and separate settings for each ScanSnap Manager setting. Because ScanSnap Manager waits for the process to exit when calling the settings, set the process to exit when the settings window is closed. When "0" is specified, the application for a settings window is not started from ScanSnap Manager. (The Settings button is not displayed.)

Key name	SettingExe (Application key)
Summary	Full path to "app" of the application for a settings window
Required/ Optional	Optional
Value	Full path to "app" of the application for a settings window
Explanation	Sets the full path to "app" of the application for a settings window. ScanSnap Manager can save the settings that are specific to the user application in the save setting file, saving separate settings for each ScanSnap Manager setting. If this key does not exist, the settings are not called from ScanSnap Manager.

Key name	UseAppSetting (Application key)
Summary	Setting how to save the application settings
Required/ Optional	Optional
Value	0 - Save the settings in a file unique to the user application. (default) 1 - Save the settings for each caller (the Quick Menu or each Profile).
Explanation	Sets how to save the application settings. When specifying "1" for this key, specify "1" for the "ResultFileType" key of the "Launch" key.

Key name	IgnoreScanButton (Application key)
Summary	Setting the mode to disable scanning that can be started with the Scan button on the ScanSnap
Required/ Optional	Optional
Value	0 - Enable the button (default) 1 - Disable the button
Explanation	This key sets whether to disable scanning that can be started with the Scan button on the ScanSnap. When "1" is specified, the following operations are disabled while the control privileges for the ScanSnap are put on reserve for the user application. - Scanning with the Scan button on the ScanSnap - Scanning with the shortcut keys (SV600) The following operations are enabled even if "1" is specified. - Stopping scanning with the Stop button on the ScanSnap - Stopping scanning with the shortcut keys (SV600) - Consecutive scanning with the Scan button on the ScanSnap during scanning (SV600) *This key can be used with ScanSnap Manager V6.3L24 or later.

Scanning key

You can specify a parameter to be fixed out of Profile for each setting.
The scan settings can be changed freely from the ScanSnap Manager setup window if the settings are not specified or an invalid value is specified in the settings.
If the settings are not specified in the "Scanning" key, users can change all of the settings freely from the ScanSnap Manager setup window.

ATTENTION

- In scanning with the Quick Menu, the keys in the "Scanning" key are disabled.
  To add a user application to the Quick Menu, the user application must support the data formats output by ScanSnap such as color formats (color, gray and black & white) and image quality mode (Normal, Better, Best and Excellent).
- If a key in the "Scanning" key is enabled, the ScanSnap Manager setup window can be fixed (grayed out) with the specified value.

Key name	AutoComposite (Scanning key)
Summary	Setting whether to enable/disable the function to automatically merge the front side image and the back side image
Required/ Optional	Optional
Value	0 - Disable 1 - Enable
Explanation	Sets whether to merge the front side image and the back side image automatically. When a value other than "0" is set for the "PaperSize" key, or when an item other than [Automatic detection] is selected for [Paper size], restriction for this key is ignored. *This key can be used with ScanSnap Manager V6.3L20 or later.

Key name	BlankPageSkip (Scanning key)
Summary	Restrictions in setting whether to enable/disable the blank page removing function
Required/ Optional	Optional
Value	0 - Disable 1 - Enable
Explanation	Sets whether to enable/disable the blank page removing function.

Key name	BookDivideType (Scanning key)
Summary	Setting save option for double-page spread documents
Required/ Optional	Optional
Value	0 - Save as single-page image 1 - Save as double-page spread image (left to right) 2 - Save as double-page spread image (right to left)
Explanation	This key sets a save option for double-page spread documents when [Select later] or [Double-page spread (Book/Magazine)] is selected for [Document type]. When "0" is specified for the "PaperType" key, a value other than "0" or "10" is selected for the "PaperSize" key, or when [Flat document] is selected for [Document type], restrictions for this key are ignored. *This key can be used with ScanSnap Manager V6.2L10 or later.

Key name	BookPreCorrection (Scanning key)
Summary	Setting whether to preview images after scanning (for double-page spread documents (books/magazines))
Required/ Optional	Optional
Value	0 - Do not preview 1 - Preview
Explanation	This key sets [Preview images after scanning] when [Double-page spread (Book/ Magazine)] is selected for [Document type]. When "0" is specified for the "PaperType" key or [Select later]/[Flat document] is selected for [Document type], restrictions for this key are ignored. When a value other than "0" or "10" is selected for the "PaperSize" key, or when a value other than [Automatic detection (Maximum)] or [Automatic detection (A4/ Letter landscape)] is selected for [Paper size], restrictions for this key are ignored. *This key can be used with ScanSnap Manager V6.2L10 or later.

Key name	BWBrightness (Scanning key)
Summary	Restrictions in setting the brightness for scanning in the black & white mode
Required/ Optional	Optional
Value	-5 to 5 - -5 (pale) to 5 (deep) (0: standard)
Explanation	Sets the brightness for scanning in the black & white mode. When "2" is specified for the "Format" key or when [JPEG] is selected for [File format], restrictions for this key are ignored. When "2" or "5" is specified for the "ColorMode" key or when [Color] or [Gray] is selected for [Color mode], restrictions for this key are ignored.

Key name	CarrierSheetMode (Scanning key)
Summary	Restrictions in setting [Save as] when using a Carrier Sheet for scanning
Supported model	S1500M, S1100, S1100i, iX500, iX100
Required/ Optional	Optional
Value	1 - one double-page spread image 2 - two separate images (front and back)
Explanation	Sets the mode to save scanned images when using a Carrier Sheet for scanning. *This key can be used with ScanSnap Manager V6.3L40 or later.

Key name	CarrierSheetSeparatePaperSize (Scanning key)
Summary	Restrictions in setting [Paper size] with [two separate images (front and back)] specified
Supported model	S1500M, S1100, S1100i, iX500, iX100
Required/ Optional	Optional
Value	0 - Automatic detection 1 - Carrier Sheet Size (216 × 297 mm) 2 - A4 (210 × 297 mm) 3 - A5 (148 × 210 mm) 4 - A6 (105 × 148 mm) 5 - Post card (100 × 148 mm) 6 - B5(JIS) (182 × 257 mm) 7 - B6(JIS) (128 × 182 mm) 8 - Letter (8.5 × 11 in. (216 × 279.4 mm)) 9 - Business card portrait (55 × 90 mm) 10 - Business card landscape (90 × 55 mm)
Explanation	Sets the size of an image to be saved. *This key can be used with ScanSnap Manager V6.3L40 or later.

Key name	CarrierSheetSpreadPaperSize (Scanning key)
Summary	Restrictions in setting [Paper size] with [one double-page spread image] specified
Supported model	S1500M, S1100, S1100i, iX500, iX100
Required/ Optional	Optional
Value	0 - Automatic detection 1 - A3 (297 × 420 mm) 2 - B4(JIS) (257 × 364 mm) 3 - 11 × 17 in. (279.4 × 431.8 mm)
Explanation	Sets the size of an image to be saved. *This key can be used with ScanSnap Manager V6.3L40 or later.

Key name	ColorMode (Scanning key)
Summary	Restrictions in setting the color mode
Required/ Optional	Optional

Value	1 - Color/gray/black & white auto detection (For JPEG files, color/gray auto detection) 2 - Color 3 - Black & white (valid for PDF files) 5 - Gray
Explanation	Sets the color mode. If "3" is specified for this key when "2" is specified for the "Format" key or when [JPEG] is selected for [File format], restrictions for this key are ignored.

Key name	Compression (Scanning key)
Summary	Restrictions in setting the compression rate
Required/ Optional	Optional
Value	1 - Low compression rate to 5 - High compression rate
Explanation	Sets the compression rate. When "3" is specified for the "ColorMode" key or when [B&W] is specified for [Color mode], restrictions for this key are ignored.

Key name	ContentCorrection (Scanning key)
Summary	Setting whether to correct skewed text
Required/ Optional	Optional
Value	0 - Disable 1 - Flat document 2 - Double-page spread 3 - Flat document and double-page spread
Explanation	Sets whether to correct skewed text. *This key can be used with ScanSnap Manager V6.3L20 or later.

Key name	ContinueScan (Scanning key)
Summary	Restrictions in setting continuous scanning
Required/ Optional	Optional
Value	0 - Disable 1 - Enable
Explanation	Sets whether to enable continuous scanning. * To create an application that enables continuous scanning when a single-sided scanner is used, do not set "0 - Disable" for this key.

Key name	ContinueScanMode (Scanning key)
Summary	Setting the condition for starting the next scan
Required/ Optional	Optional
Value	0 - None 1 - Timed interval (Timed mode) 2 - Page turning detection mode
Explanation	Sets the condition for starting the next scan. This key is enabled only for continual scanning. *This key can be used with ScanSnap Manager V6.3L20 or later.

Key name	DarkMode (Scanning key)
Summary	Setting whether to enable/disable the function to darken color images
Required/ Optional	Optional
Value	0 - Disable 1 - Enable
Explanation	Sets whether to darken color images. This key is enabled when "2" is specified for the "ColorMode" key or when [Color] is selected for [Color mode]. *This key can be used with ScanSnap Manager V6.3L20 or later.

Key name	Deskew (Scanning key)
Summary	Restrictions in setting whether to enable/disable the deskew function
Required/ Optional	Optional
Value	0 - Disable 1 - Enable
Explanation	Sets whether to enable/disable the deskew function.

Key name	FileCounterDigits (Scanning key)
Summary	Restrictions in setting serial number digits of image file name
Required/ Optional	Optional
Value	0 - 0 digit 1 - 1 digit 2 - 2 digits 3 - 3 digits 4 - 4 digits 5 - 5 digits 6 - 6 digits
Explanation	Sets serial number digits of image file name.

Key name	FileName (Scanning key)
Summary	Restrictions in setting the first character string of image file name
Required/ Optional	Optional
Value	The first character string of image file name
Explanation	Sets the first character string of image file name. The first character string is applied when "Custom File Name" is specified in the file name setting window or when "2 - The name is specified by the user." is specified for the file name format (FileNameFormat) key. If a wrong file name is specified, this key is ignored. * Check the following when specifying this key: ● Whether valid characters for file names are used ● Whether the character string length is within the limit (up to 50 characters)

Key name	FileNameFormat (Scanning key)
Summary	Restrictions in setting the format of image file name
Required/ Optional	Optional
Value	0 - yyyy_MM_dd_HH_mm_ss 1 - yyyyMMddHHmmss 2 - The name is specified by the user. 3 - yyyy-MM-dd-HH-mm-ss
Explanation	Sets the format of image file name.

Key name	Format (Scanning key)
Summary	Restrictions in setting the file format
Required/ Optional	Optional
Value	1 - PDF 2 - JPEG
Explanation	Sets the file format.

Key name	HighQualityImage (Scanning key)
Summary	Setting whether to reduce fluorescent lamp flicker
Required/ Optional	Optional
Value	0 - Disable 1 - Enable
Explanation	Sets whether to reduce fluorescent lamp flicker. *This key can be used with ScanSnap Manager V6.2L10 or later.

Key name	MarkerIndex (Scanning key)
Summary	Setting whether to enable/disable the function to set the marked text as a keyword for the PDF file
Required/ Optional	Optional
Value	0 - Disable 1 - Enable (the first marked section) 2 - Enable (all of the marked sections)
Explanation	Sets whether to enable/disable the function to set the marked text as a keyword for the PDF file and sets the range to be marked. When "3" or "5" is specified for the "ColorMode" key or when [B&W] or [Gray] is selected for [Color mode], restrictions for this key are ignored. When "2" is specified for the "Format" key or when [JPEG] is selected for [File format], restrictions for this key are ignored.

Key name	MultiCrop (Scanning key)
Summary	Setting whether to detect multiple documents
Required/ Optional	Optional
Value	0 - Disable 1 - Enable
Explanation	Sets whether to detect multiple documents. When "1" is specified for the "PaperType" key or when [Double-page spread (Book/Magazine)] is selected for [Document type], restrictions for this key are ignored. When a value other than "0" or "10" is selected for the "PaperSize" key, or when a value other than [Automatic detection (Maximum)] or [Automatic detection (A4/ Letter landscape)] is selected for [Paper size], restrictions for this key are ignored. *This key can be used with ScanSnap Manager V6.2L10 or later.

Key name	MultiFeedControl (Scanning key)
Summary	Restrictions in setting multifeed detection
Required/ Optional	Optional
Value	0 - Disable multifeed detection 1 - Enable multifeed detection (Check length) 2 - Enable multifeed detection (Ultrasonic) (only for models that support ultrasound)
Explanation	Sets whether to enable multifeed detection. When "2" is specified for this key and a model not supporting ultrasound is connected, the system operates as if this key is not specified.

Key name	MultiPreCorrection (Scanning key)
Summary	Setting whether to preview images after scanning (for flat documents)
Required/ Optional	Optional
Value	0 - Do not preview 1 - Preview
Explanation	This key sets [Preview images after scanning] when [Flat document] is selected for [Document type]. When "1" is specified for the "PaperType" key or [Select later]/[Double-page spread (Book/Magazine)] is selected for [Document type], restrictions for this key are ignored. When a value other than "0" or "10" is selected for the "PaperSize" key, or when a value other than [Automatic detection (Maximum)] or [Automatic detection (A4/ Letter landscape)] is selected for [Paper size], restrictions for this key are ignored. *This key can be used with ScanSnap Manager V6.2L10 or later.

Key name	OcrPage (Scanning key)
Summary	Restrictions for the pages that are applied to the function to convert an extracted text to a searchable PDF and the pages that are applied to the function to set the marked text as a keyword for the PDF files
Required/ Optional	Optional
Value	0 - First page 1 - All pages
Explanation	Sets the pages that are applied to the function to convert an extracted text to a searchable PDF and the pages that are applied to the function to set the marked text as a keyword for the PDF files. When "2" is specified for the "Format" key or when [JPEG] is selected for [File format], restrictions for this key are ignored.

Key name	PaperSize (Scanning key)
Summary	Restrictions in setting the paper size
Required/ Optional	Optional

Value	● When connecting a ScanSnap other than the SV600 0 - Automatic detection 1 - A4 (210 × 297 mm) 2 - A5 (148 × 210 mm) 3 - A6 (105 × 148 mm) 4 - B5 (JIS) (182 × 257 mm) 5 - B6 (JIS) (128 × 182 mm) 6 - Post card (100 × 148 mm) 7 - Business card (90 × 55 mm, 55 × 90 mm) 8 - Letter (8.5 × 11 in. (216 × 279.4 mm)) 9 - Legal (8.5 × 14 in. (216 × 355.6 mm)) ● When connecting the SV600 0 - Automatic detection (Maximum) 1 - A4L (297 × 210 mm) 2 - A5L (210 × 148 mm) 3 - A6L (148 × 105 mm) 4 - B5L(JIS) (257 × 182mm) 5 - B6L(JIS) (182 × 128mm) 6 - Post cardL (148 × 100mm) 7 - Business card (90 × 55mm) 8 - LetterL (11 × 8.5 in. (279.4 × 216mm)) 9 - LegalL (14 × 8.5 in. (355.6 × 216mm)) 10 - Automatic detection (A4/Letter landscape) 11 - A3L (420 × 297 mm) 12 - B4L(JIS) (364 × 257mm) 13 - 17 × 11 in. (431.8 × 279.4 mm)
Explanation	Sets the paper size.

Key name	PaperType (Scanning key)
Summary	Setting the document type
Required/ Optional	Optional
Value	0 - Flat document 1 - Double-page spread (Book/Magazine)
Explanation	Sets [Document type]. *This key can be used with ScanSnap Manager V6.2L10 or later.

Key name	PDFPageDivide (Scanning key)
Summary	Restrictions in setting whether to enable/disable division into multiple PDF pages and in setting the number of divided pages
Required/ Optional	Optional
Value	0 - Do not divide 1 to 999 - The number of pages to be divided
Explanation	Sets whether to enable division into multiple PDF pages and the number of divided pages. When "2" is specified for the "Format" key or when [JPEG] is selected for [File format], restrictions for this key are ignored.

Key name	ReduceBleedThrough (Scanning key)
Summary	Restrictions in setting whether to reduce image bleed-through
Required/ Optional	Optional
Value	0 - Do not reduce image bleed-through 1 - Reduce image bleed-through
Explanation	Sets whether to reduce image bleed-through. For SV600, restriction for this key is ignored when "2" is set for the "ColorMode" key and "1" is set for the "DarkMode" key or when [Color] is selected for [Color mode] and [Thicken color images] is selected.

Key name	Rename (Scanning key)
Summary	Restrictions in renaming a file after scanning
Required/ Optional	Optional
Value	0 - Disable 1 - Enable
Explanation	Sets whether to rename a file after scanning.

Key name	Rotation (Scanning key)
Summary	Setting the rotation function
Required/ Optional	Optional

Value	0 - Do not rotate 1 - Automatic 2 - Rotate 90° CW (horizontal bound) 3 - Rotate 180° (vertical bound) 4 - Rotate 90° CCW (horizontal bound) 5 - Rotate 90° CW (vertical bound) 6 - Rotate 180° (horizontal bound) 7 - Rotate 90° CCW (vertical bound)
Explanation	Sets the rotation function. For SV600, when "1" is specified for the "PaperType" key or when [Double-page spread (Book/Magazine)] is selected for [Document type], restrictions for this key are ignored. * Value "2", "3", and "4" can be used with ScanSnap Manager V6.3L20 or later. * Value "5", "6", and "7" can be used with ScanSnap Manager V6.3L24 or later.

Key name	SaveFolder (Scanning key)
Summary	Restrictions in setting the destination folder
Required/ Optional	Optional
Value	Setting the folder to save the file
Explanation	Sets the folder to save the file. The folder path can include "~" (home folder). Example: ~/Pictures Pay careful attention when specifying this key. If a wrong path is specified, the validity check for the path is not performed during setup and the settings are grayed out (cannot be changed). * Before specifying this key, check if the specified folder exists in the environment to be used.

Key name	ScanMode (Scanning key)
Summary	Restrictions in setting the image quality mode
Required/ Optional	Optional
Value	1 - Normal 2 - Better 3 - Best 4 - Excellent 99 - Auto
Explanation	Sets the image quality mode.

Key name	ScanningSide (Scanning key)
Summary	Restrictions in setting the scanning side
Required/ Optional	Optional
Value	0 - Duplex scan 1 - Simplex scan
Explanation	Sets the scanning side. Depending on the specified value, the corresponding ScanSnap Manager menu item ([Duplex Scan]/[Simplex Scan]) is also grayed out. * When using this interface to connect an application to both a double-sided and a single-sided ScanSnap and to scan with the default setting for each model (duplex scan for the double-sided scanner and simplex scan for the single-sided scanner), do not specify this key.

Key name	Searchable (Scanning key)
Summary	Restrictions in converting an extracted text to a searchable PDF
Required/ Optional	Optional
Value	0 - Disable 1 - Enable
Explanation	Sets whether to convert an extracted text to a searchable PDF. When "2" is specified for the "Format" key or when [JPEG] is selected for [File format], restrictions for this key are ignored. To use this key, specify a language for the "SearchableLang" key. If the "SearchableLang" key is not specified or if it is ignored, the language setting in ScanSnap Manager is used instead.

Key name	SearchableLang (Scanning key)
Summary	Restrictions in setting the language that is used to convert an extracted text to a searchable PDF and to set the marked text as a keyword for the PDF files
Required/ Optional	Optional
Value	0 - Japanese 1 - English 2 - French 3 - German 4 - Italian 5 - Spanish 6 - Chinese (simplified) 7 - Chinese (traditional) 8 - Korean 9 - Russian 10 - Portuguese 11 - Arabic 12 - Indonesian 13 - Thai 14 - Vietnamese 15 - Czech 16 - Danish 17 - Dutch 18 - Finnish 19 - Greek 20 - Hungarian 21 - Norwegian 22 - Polish 23 - Romanian 24 - Swedish 25 - Turkish
Explanation	Sets the language that is used to convert an extracted text to a searchable PDF and to set the marked text as a keyword for the PDF files. Values from "0" to "10" are available for ScanSnap Manager versions that are earlier than V6.3L50. All values are available for ScanSnap Manager V6.3L50 or later. Note that it is necessary to install the appropriate OCR pack, which is a set of languages that can be used to recognize text, depending on the language that you want. If the OCR Pack with the language that you want is not installed, restrictions for this key are ignored. For languages that are included in the OCR Pack, refer to the following: http://www.fujitsu.com/global/support/products/computing/peripheral/scanners/scansnap/software/ocrpack-setup.html When "2" is specified for the "Format" key or when [JPEG] is selected for [File format], restrictions for this key are ignored.

Key name	StartScanTime (Scanning key)

Summary	Setting the waiting time (seconds) to start a scan
Required/ Optional	Optional
Value	0 - None 1 to 10 - Set waiting time (seconds)
Explanation	Sets the waiting time (seconds) to start a scan. *This key can be used with ScanSnap Manager V6.3L20 or later.

Key name	TextOnlyDocument (Scanning key)
Summary	Restrictions in setting whether to enable/disable the setting for increasing text contrast
Required/ Optional	Optional
Value	0 - Disable 1 - Enable
Explanation	Sets whether to enable/disable the setting for increasing text contrast. For SV600, restriction for this key is ignored when "2" is specified for the "ColorMode" key and "1" is specified for the "DarkMode" key or when [Color] is selected for [Color mode] and [Thicken color images] is selected.

Key name	TimerScanTime (Scanning key)
Summary	Setting the scanning interval time (seconds) for [Timed interval (Timed mode)]
Required/ Optional	Optional
Value	0 to 10 - Set scanning interval time (seconds)
Explanation	Sets the scanning interval time (seconds) for [Timed interval (Timed mode)]. This key is enabled when [Timed interval (Timed mode)] is set for setting the condition for starting the next scan. *This key can be used with ScanSnap Manager V6.3L20 or later.

Contents of Output File

This section explains the files that are output by the software bundled with ScanSnap and passed to a user application.

Result File **215**

Data File **219**

Result File

The result file is a plist file in XML format. The file describes information such as the full path to the data file to be passed to the user application.
The file is automatically created by ScanSnap Manager after scanning.
The file is automatically created by CardMinder when the linked application starts up.

ATTENTION

- For ScanSnap Manager
  Delete the result file from the user application.
- For CardMinder
  Delete the result file from the user application by deleting each folder that contains the result file.

The keys for the result file are listed below.
M: ScanSnap Manager
C: CardMinder
P: Supported key
-: Unsupported key

Key		Type	Description	M	C
INFO	FileDesc	String	Character string to indicate that the file is the result file	P	P
	Version	String	Character string to indicate the version of the result file format	P	P
	Application	String	Character string to indicate the caller application name	P	P
	AppSetting	String	Full path to the save setting file	P	-
	LaunchMode	Number	ScanSnap Manager call mode	P	-
	ScannerName	String	Model name of the ScanSnap	P	-
FILES	-	Array	Array of the full path to the data file	P	P
SCAN	Duplex	Number	Scanning side	P	-
	ScanMode	Number	Image quality mode	P	-
	ColorMode	Number	Color mode	P	-
	PaperSize	Number	Paper size	P	-

Explanation of the keys for the result file

The keys for the result file are described below.

- INFO key (→ page 216)
- FILES key (→ page 217)
- SCAN key (→ page 217)

INFO key

Key name	FileDesc (INFO key)
Summary	Character string to indicate that the file is the result file
Value	"PFUFILELISTFORMAT" is always set.
Explanation	Information used to check if the file is the result file.

Key name	Version (INFO key)
Summary	Character string to indicate the version of the result file format
Value	"1.0" is set.
Explanation	The information to maintain compatibility for the result file format.

Key name	Application (INFO key)
Summary	Character string to indicate the caller application name
Value	● When the caller is ScanSnap Manager, "ScanSnap Manager" is set. ● When the caller is CardMinder, "CardMinder" is set.
Explanation	Information used to identify the caller application (such as titles).

Key name	AppSetting (INFO key)
Summary	Full path to the save setting file
Value	Full path to the file to store the information of the application for a settings window
Explanation	The file name is automatically created by ScanSnap Manager. This file stores the settings specified by the user application. The settings conform to the specifications of the user application.

Key name	LaunchMode (INFO key)
Summary	ScanSnap Manager call mode
Value	0 - Scanning profile mode 1 - Quick Menu mode
Explanation	Indicates the mode in which the application is started. ● Scanning profile mode The mode to indicate that the application is started directly from ScanSnap Manager ● Quick Menu mode The mode to indicate that the application is started by operation from the Quick Menu

Key name	ScannerName (INFO key)
Summary	Model name of the ScanSnap
Value	iX500 - For scanning with ScanSnap iX500 iX100 - For scanning with ScanSnap iX100 S1500 - For scanning with ScanSnap S1500 S1300i - For scanning with ScanSnap S1300i S1300 - For scanning with ScanSnap S1300 S1100i - For scanning with ScanSnap S1100i S1100 - For scanning with ScanSnap S1100 SV600 - For scanning with ScanSnap SV600
Explanation	Indicates the model name of the ScanSnap.

FILES key

Key name	- (FILES key)
Summary	Array of the full path to the data file
Value	Array of the full path to the data file
Explanation	Indicates the array of the full path to the data file. This indicates the full path to the card data file when the user application is linked from CardMinder.

SCAN key

Key name	Duplex (SCAN key)
Summary	Scanning side
Value	0 - Simplex scan 1 - Duplex scan

Explanation	Indicates the scanning side.

Key name	ScanMode (SCAN key)
Summary	Image quality mode
Value	1 - Normal 2 - Better 3 - Best 4 - Excellent 99 - Auto
Explanation	Indicates the image quality mode.

Key name	ColorMode (SCAN key)
Summary	Color mode
Value	1 - Color/black & white/gray auto detection 2 - Color 3 - B&W 5 - Gray
Explanation	Indicates the color mode.

Key name	PaperSize (SCAN key)
Summary	Paper size
Value	0 - Automatic detection 1 - A4 (210 × 297 mm) 2 - A5 (148 × 210 mm) 3 - A6 (105 × 148 mm) 4 - B5 (JIS) (182 × 257 mm) 5 - B6 (JIS) (128 × 182 mm) 6 - Post card (100 × 148 mm) 7 - Business card (90 × 55 mm, 55 × 90 mm) 8 - Letter (8.5 × 11 in. (216 × 279.4 mm)) 9 - Legal (8.5 × 14 in. (216 × 355.6 mm)) 99 - Custom size
Explanation	Indicates the paper size.

Data File

Contents of the data file are the same as with Windows, with some exceptions.
The following table shows the items different from those for Windows.

Format	Item
ContactXML format	Creator information
vCard format	Encoding

For details about the data file, refer to "Data File" (page 116).

ScanSnap Manager Control Event

This section explains the events to control ScanSnap Manager from a user application.

ScanSnap Manager Control Event.....221
Apple Event Structure.....231
Return Value 233

ScanSnap Manager Control Event

ScanSnap Manager control events are used to control ScanSnap Manager from a user application.

ScanSnap Manager control event list

Event name	Summary
Reserving control privileges (Reserve)	Reserves the user application control. This event is used to suppress switching to another application and enable linkage with only the target user application.
Releasing control privileges (Release)	Releases the user application control. This event is used to release the status in which control privileges are reserved.
Starting scanning (StartScan)	Starts scanning. This event is used to start scanning.
Obtaining connected device information (GetScannerInfo)	Outputs the information of the connected scanner. This event is used to write the information of the connected scanner into the set plist file.
Obtaining the installation state of text recognition language (GetSearchableLangInfo)	Checks whether the specified language is installed and whether it is ready to use OCR. This command is used to obtain information on the availability of the text recognition language that you specify.

ATTENTION

Do not leave the "Reserve" event always in called status with the user application.
Try to reduce calling a "Reserve" event as much as possible (limit to the time such as immediately before scanning) and call the "Release" event immediately after scanning is finished.

User application event flow

Event flow	When to call the event	Process in ScanSnap Manager
Reserving control privileges (Reserve)	For example, the time immediately before scanning	Switches to the specified user application and suppresses switching to another application.
↓		
Obtaining connected device information (GetScannerInfo)	For example, the time when you need to obtain the information of the connected scanner	Writes the information of the connected scanner into the set plist file.
↓		

Event flow	When to call the event	Process in ScanSnap Manager
Obtaining the installation state of text recognition language (GetSearchableLangInfo)	For example, the time when you specify a text recognition language in an application	Return the information on the availability of the text recognition language that you specify.
↓		
Starting scanning (StartScan)		Starts scanning on the specified scanning side.
↓		
Releasing control privileges (Release)	For example, the time after scanning	Stops the suppression process of switching to another application.

Reserve Event

Upon receiving this event, ScanSnap Manager switches to the applicable user application and suppresses switching to another application.

After this event is received, the following operations (functions) are disabled:

- Selecting an application
- Switching profiles
- Switching Quick Menu modes (the Quick Menu mode is always off)
- Automatic linkage with applications
- Profile management (adding/changing/deleting)

To release the reserved control privileges, the following operations are required:

- Sending the "Release" event (The application that sends this event must be the same application as the application that reserved the control privileges).
- Restarting ScanSnap Manager (including system restart).

After calling this event, be sure to call the "Release" event.
The "Reserve" event fails in the following cases:

- When ScanSnap Manager is not running
- When control privileges of ScanSnap Manager are reserved by another user application
- During scanning
- While showing the ScanSnap Manager window

Release Event

Upon receiving this event, ScanSnap Manager releases the reserved control privileges of the user application to enable the user to switch the application to another application and restores the profile to the status that it was before the "Reserve" event was sent.

HINT
For the parameter for profiles of the applicable user application, the value changed by the user is applied.

The "Release" event must be sent from the same application as the application that reserved the control privileges.
Control privileges are also released by restarting ScanSnap Manager (system restart).

The "Release" event fails in the following cases:

- When ScanSnap Manager is not running
- When control privileges are reserved by another user application
- While showing the ScanSnap Manager window

If the "Release" event is called during scanning, ScanSnap Manager terminates scanning, links with the user application, and then releases the control privileges.

StartScan Event

Upon receiving this event, ScanSnap Manager starts scanning on the specified scanning side.

HINT

The same result is obtained as [Duplex Scan]/[Simplex Scan]/[Scan] in the ScanSnap Manager menu.

If the restrictions are set for the scanning side in the linkage setting file (the "ScanningSide" key of the "Scanning" key is set), make sure that the scanning side is the same with this event. If the scanning side is different, correct operation of ScanSnap Manager cannot be guaranteed.

Before this event, send the "Reserve" event.
If the "Reserve" event is not sent, the application currently specified is not linked.
The "StartScan" event fails in the following cases:

- When ScanSnap Manager is not running
- When ScanSnap is not connected
- During scanning
- While showing the ScanSnap Manager window

Scanning is not possible when [Duplex Scan]/[Simplex Scan]/[Scan] in the ScanSnap Manager menu are disabled.

GetScannerInfo Event

This event can be used with the following versions:

- ScanSnap Manager: V6.3L20 or later

Upon receiving this event, ScanSnap Manager writes the information of the scanner that is connected at the time into the set plist file.
This event releases the control privileges after writing is complete.

The GetScannerInfo event fails in the following cases:

- When ScanSnap Manager is not running
- When ScanSnap is not connected
- During scanning
- While showing the ScanSnap Manager window

Output file settings for connected device information

Key name		Type	Description
INFO	ScannerCount	Number	The number of connected devices
	ManagerVersion	String	Version of ScanSnap Manager
SCANNER* * will be 1 to ScannerCount.	ScannerName	String	Device name
	ScannerIcon	String	Path for the icon of the device
	Duplex	Number	Duplex scan supported model
	CarrierSheet	Number	Carrier Sheet supported model
	A3Size	Number	A3 size supported model
	Book	Number	Book scanning supported model
	Wifi	Number	Wi-Fi supported model
	PageCount	Number	Total page count
	RollerSetCount	Number	Roller set count/pick roller count
	PadAssy	Number	Pad ASSY count
	SerialNo	String	Serial number
	FirmVersion	String	Firmware version

Explanation of the Keys for the Output File of Connected Device Information

Key name	INFO
	ScannerCount
Summary	The number of connected devices
Supported version	ScanSnap Manager V6.3L20 or later
Value	1- One device is connected 2- Two devices are connected
Explanation	Indicates the number of connected devices.

Key name	INFO
	ManagerVersion
Summary	Version of ScanSnap Manager
Supported version	ScanSnap Manager V6.3L24 or later
Value	ScanSnap Manager version
Explanation	Indicates the version of ScanSnap Manager.

Key name	SCANNER*
	ScannerName
Summary	Device name
Supported version	ScanSnap Manager V6.3L20 or later
Value	ScanSnap iX500 - For connecting to ScanSnap iX500 ScanSnap iX100 - For connecting to ScanSnap iX100 ScanSnap S1500M - For connecting to ScanSnap S1500M ScanSnap S1300i - For connecting to ScanSnap S1300i ScanSnap S1300 - For connecting to ScanSnap S1300 ScanSnap S1100i - For connecting to ScanSnap S1100i ScanSnap S1100 - For connecting to ScanSnap S1100 ScanSnap SV600 - For connecting to ScanSnap SV600
Explanation	Indicates the device name such as "ScanSnap iX500".

Key name	SCANNER*
	ScannerIcon
Summary	Full path for the icon of the device
Supported version	ScanSnap Manager V6.3L20 or later

Value	Full path for the icon of the device
Explanation	Indicates the full path for the icon of the device.

Key name	SCANNER*
	Duplex
Summary	Indicating whether the scanner is a model that supports duplex scanning
Supported version	ScanSnap Manager V6.3L20 or later
Value	0 - Simplex model 1 - Duplex model
Explanation	Indicates whether the scanner is a model that supports duplex scanning.

Key name	SCANNER*
	CarrierSheet
Summary	Indicating whether the scanner is a model that supports a Carrier Sheet
Supported version	ScanSnap Manager V6.3L20 or later
Value	0 - Model that does not support a Carrier Sheet 1 - Model that supports a Carrier Sheet
Explanation	Indicates whether the scanner is a model that supports a Carrier Sheet.

Key name	SCANNER*
	A3Size
Summary	Indicating whether the scanner is a model that supports A3 size documents
Supported version	ScanSnap Manager V6.3L20 or later
Value	0 - A3 size is not supported (legal size is supported) 1- A3 size is supported (double letter size is supported)
Explanation	Indicates whether the scanner is a model that supports A3 size documents.

Key name	SCANNER*
	Book
Summary	Indicating whether the scanner is a model that supports book scanning
Supported version	ScanSnap Manager V6.3L20 or later
Value	0 - Model that does not support book scanning 1 - Model that supports book scanning
Explanation	Indicates whether the scanner is a model that supports book scanning.

Key name	SCANNER*
	Wifi
Summary	Indicating whether the scanner is a model that supports Wi-Fi
Supported version	ScanSnap Manager V6.3L20 or later
Value	0 - Model that does not support Wi-Fi 1 - Model that supports Wi-Fi
Explanation	Indicates whether the scanner is a model that supports Wi-Fi.

Key name	SCANNER*
	PageCount
Summary	Total page count
Supported version	ScanSnap Manager V6.3L20 or later
Value	Total page count
Explanation	Indicates the total page count.

Key name	SCANNER*
	RollerSetCount
Summary	Roller set count/pick roller count
Supported version	ScanSnap Manager V6.3L20 or later
Value	Roller set count/pick roller count
Explanation	Indicates the roller set count/pick roller count. When ScanSnap iX100, ScanSnap S1100i, ScanSnap S1100, or ScanSnap SV600 is connected, this key is not output.

Key name	SCANNER*
	PadAssy
Summary	Pad ASSY count
Supported version	ScanSnap Manager V6.3L20 or later
Value	Pad ASSY count
Explanation	Indicates the pad ASSY count. When ScanSnap iX100, ScanSnap S1100i, ScanSnap S1100, or ScanSnap SV600 is connected, this key is not output.

Key name	SCANNER*
	SerialNo
Summary	Serial number
Supported version	ScanSnap Manager V6.3L24 or later
Value	Serial number
Explanation	Indicates the serial number of the ScanSnap. When ScanSnap iX500 is connected via Wi-Fi, this key is not output.

Key name	SCANNER*
	FirmVersion
Summary	Firmware version
Supported version	ScanSnap Manager V6.3L24 or later
Value	Firmware version
Explanation	Indicates the firmware version of the ScanSnap.

GetSearchableLangInfo Event

This event can be used with the following versions:

- ScanSnap Manager: V6.3L50 or later

Upon receiving this event, ScanSnap Manager returns information on the availability of the text recognition language that you specify.

The "GetSearchableLangInfo" event fails in the following cases:

- When ScanSnap Manager is not running
- During scanning
- While showing the ScanSnap Manager window

Apple Event Structure

The following Apple event attributes are supported for the Reserve, Release, and StartScan event.

Apple Event Attributes		Content
Event Class		"ssec"
Event ID		"ssid"
Attribute of the target application's descriptor	Descriptor type	TypeApplSignature
	Application signature	"SCSN"
Apple Event parameters	Parameter key	"aapk"
	Parameter type	SSAssociatedAPPParam
Reply Apple Event parameters	Parameter key	"rcpk"
	Parameter type	UInt32

SSAssociatedAPPParam structure

```
typedef struct _SSAssociatedAPPParam
{
    UInt32    Mode;
    UInt32    ScanningSide;
} SSAssociatedAPPParam, *PSSAssociatedAPPParam;
```

Description

Value	Type	Description
Mode	UInt32	0x00000100: Reserving control privileges 0x00000200: Releasing control privileges 0x00000300: Starting scanning
ScanningSide	UInt32	0: Duplex scan (Simplex scan for the single-sided scanner) 1: Simplex scan Can be specified when scanning is started.

The following Apple event attributes are supported for the GetScannerInfo event.

Apple Event Attributes		Content
Event Class		‘ssec’
Event ID		‘ssid’
Attribute of the target application's descriptor	Descriptor type	TypeApplSignature
	Application signature	‘SCSN’
Apple Event parameters	Parameter key	‘sipk’
	Parameter type	String (*)
Reply Apple Event parameters	Parameter key	‘rcpk’
	Parameter type	UInt32

* : Set the path to plist where the information of the connected devices is output.

The following Apple event attributes are supported for the GetSearchableLangInfo event.

Apple Event Attributes		Content
Event Class		‘ssec’
Event ID		‘ssid’
Attribute of the target application's descriptor	Descriptor type	TypeApplSignature
	Application signature	‘SCSN’
Apple Event parameters	Parameter key	‘oipk’
	Parameter type	UInt32 (*)
Reply Apple Event parameters	Parameter key	‘rcpk’
	Parameter type	UInt32

* : This is a value of the language that you want to obtain the installation state for. Specify the SearchableLang key value.

Return Value

The following return values can be obtained in reply of an Apple event:

When reserving control privileges

0x00000000	Event succeeded	
Other than "0x00000000"	Error	
	0x00000001	Scanning or showing the ScanSnap Manager window
	0x00000002	Received the event from the application with an unregistered Bundle identifier.
	0x00000003	Control privileges have been reserved by the user application.
	0x00000005	Parameter error
	0x00000007	Control privileges have been reserved by another application.
	0x00000099	System error

When releasing control privileges

0x00000000	Event succeeded	
Other than "0x00000000"	Error	
	0x00000001	Showing the ScanSnap Manager window
	0x00000002	Received the event from the application with an unregistered Bundle identifier.
	0x00000004	Control privileges have been released. (The event was sent while control privileges were not reserved.)
	0x00000005	Parameter error
	0x00000099	System error

When scanning is started

0x00000000	Event succeeded * Including when a scanning error occurs	
Other than "0x00000000"	Error	
	0x00000001	Scanning or showing the ScanSnap Manager window
	0x00000004	Control privileges have not been reserved.
	0x00000005	Parameter error
	0x00000006	A status in which scanning is not possible (such as when the ScanSnap is not connected or when the ScanSnap is in use with a mobile device)
	0x00000099	System error

When obtaining information of connected devices

0x00000000	Event succeeded	
Other than "0x00000000"	Error	
	0x00000001	Scanning or showing the ScanSnap Manager window
	0x00000005	Parameter error
	0x00000006	The ScanSnap is not connected
	0x00000099	System error

When obtaining the installation state of text recognition language

0x00000000	Event succeeded	
Other than "0x00000000"	Error	
	0x00000001	Scanning or showing the ScanSnap Manager window
	0x00000005	Parameter error
	0x00000009	A status in which using this command is not possible (such as when the specified text recognition language is not installed or when the version is old and an update is required)
	0x00000099	System error

How to Check the Status of and Operate ScanSnap Related Software

This section explains how to check the status of and how to start/exit ScanSnap related software.

Installation Check **236**
Startup Check **236**
Version Check **236**
How to Start **236**
How to Exit **237**

Installation Check

To check whether ScanSnap Manager is installed or not, check both of the following:

- Whether "/Applications/ScanSnap/ScanSnap Manager.app" exists
- Whether CFBundleShortVersionString in the Info.plist of an application whose Bundle identifier is jp.co.pfu.ScanSnap.V10L10 (which means ScanSnap Manager) is 6.0.10 or higher.

Startup Check

To check whether ScanSnap Manager has started or not, obtain the information list of the running application using the runningApplications method of the NSWorkspace class and check if "ScanSnap Manager" is included in the list.

Version Check

ScanSnap Manager

To check the version of ScanSnap Manager, obtain the CFBundleShortVersionString value that is in Info.plist in which Bundle identifier is jp.co.pfu.ScanSnap.V10L10 (which means ScanSnap Manager).

CardMinder

To check the version of CardMinder, obtain the CFBundleShortVersionString value that is in the following file:

File:
/Applications/CardMinder/CardMinder.app/Contents/version.plist

How to Start

To start ScanSnap Manager, use the launchApplication method of the NSWorkspace class or a function such as the LSOpenApplication() function. For the argument, specify the path "/Applications/ScanSnap/ScanSnap Manager.app".

ATTENTION

Use the login user's privileges to start ScanSnap Manager. If ScanSnap Manager is started using any privileges for a user other than a login user, it does not communicate with other applications properly.

How to Exit

To exit ScanSnap Manager, send an Apple event to exit the OS-standard application or use the terminate method of NSRunngingApplication. Obtain the process information of ScanSnap Manager from the information list of the running application obtained in "Startup Check" (page 236).

ScanSnap Manager cannot be exited during the following processes:

- During scanning
- While showing a window

ScanSnap Manager cannot be exited while [Quit] in the ScanSnap Manager menu is disabled.

Sandbox Support

This section explains points to note when your application supports sandbox.

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Points to Note when Your Application Supports Sandbox

This section explains the points to note when your application supports sandbox.

File Access

Deploying the Linkage Setting File

ScanSnap Manager/CardMinder

When your application supports sandbox, accessing the destination folder in which the linkage setting file is to be stored or copying files to the folder is not allowed directly from your application.
Therefore, pass the linkage setting file to ScanSnap Manager.app or CarMinder.app by using "openFiles:filenames:" method in the "NSApplication" class.
ScanSnap Manager.app or CarMinder.app copies your linkage setting file to the destination folder in which the linkage setting file is to be stored.

- ScanSnap Manager
  ~/Library/Application Support/PFU/ScanSnap/ScanSnap Manager/Extension/
- CardMinder
  ~/Library/Application Support/PFU/ScanSnap/CardMinder/Extension/

Note that the linkage setting file which is copied to the destination folder is deleted by ScanSnap Manager or CardMinder when your application is deleted.

Specifying the Destination Folder

ScanSnap Manager

When "1" is specified for the "ResultFileType" key of the "Launch" key in the linkage setting file, specify the following keys to make sure that data files that are output in the "FILES" key in the result file can be accessed.

- The "SaveFolderMode" key of the "Launch" key
  Specify "1".
- The "SaveFolder" key of the "Scanning" key
  Specify the name of the existing folder that is accessible to your application.

If the keys are not specified, data files might be output into the folder that is not accessible to your application.

Settings for accessing the setting file

ScanSnap Manager

When "1" is specified for both the "UseAppSetting" key of the "Application" key and the "ResultFileType" key of the "Launch" key in the linkage setting file, add the following description in the Entitlements file for the project so that the setting file becomes accessible for your application when it is linked with ScanSnap Manager.

```
<key>com.apple.security.temporary-exception.files.home-relative-path.read-write</key>
<array>
        <string>/Library/Application Support/PFU/ScanSnap/ScanSnap Manager/AppSettings/</string>
</array>
```

Settings for accessing the result file and the data files

CardMinder

When CardMinder is linked with your application, it stores the result file and the data files in your temporary folder.Add the following description in Entitlements file so that these files become accessible.

```
<key>com.apple.security.temporary-exception.files.home-relative-path.read-write</key>
<array>
        <string>/Library/Caches/TemporaryItems/PFU/ScanSnap/CardMinder/Extension/temp/</string>
</array>
```

ScanSnap Manager Control Event

Settings for using an Apple event

ScanSnap Manager

Add the following description to the Entitlements file so that an Apple event is sent to ScanSnap Manager.

```
<key>com.apple.security.temporary-exception.apple-events</key>
<array>
        <string>jp.co.pfu.ScanSnap.V10L10</string>
</array>
```

Settings for accessing the plist file that is set in the GetScannerInfo event

ScanSnap Manager

For the path of plist that is set in the GetScannerInfo event, set the path where the user's application can be accessed.

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