Panasonic MP4 Integrity Verifier
Instruction manual

Version 1.0.0.0

July, 2014

Please read this manual carefully, and use "Panasonic MP4 Integrity Verifier" properly.

Index

1 Outline

"Panasonic MP4 Integrity Verifier" is the software which runs the integrity check of video files (MP4 format) which are recorded in SD memory card of Panasonic network camera.

1.1 Compatible devices

Panasonic network camera supporting the function of alteration detection

1.2 About video files (MP4 format)

The video files created using the alteration detection function of Panasonic network camera are based on the specification "ONVIF Export File Format v1.0 August, 2013". This software runs the integrity check based on ONVIF standard.

Important

When files are restored after abnormalities occurred in the video files for the reason of a blackout etc., the information of the alteration detection is not added to the files. These files are outside the targets for checking integrity.

1.3 System requirements

OS	:	Microsoft® Windows® 8 Pro 32-bit/64-bit *1
		Microsoft® Windows® 7 Professional 32-bit/64-bit *1
CPU	:	Intel® Pentium® 4 3.0 GHz or faster
Memory	:	1 GB or more
Required hard disk space	:	1 MB of disk space is necessary for installation of this software.
Monitor	:	1024 x 768 pixels or more
		24-bit True color or better
Network interface	:	10/100 Mbps Network interface card must be installed*2
Others	:	Microsoft® .NET Framework 3.0 is required to run this software.

*1: This software is designed based on the default style or the font size of Microsoft® Windows® 7. It is not recommended to change the display style or the font size from the default. When the display style or the font size is changed from the default, it may be possible that the layout of this software collapses.

*2: The network settings on the PC must meet those of the network environment where the PC is connected.

1.4 Installation

Please download this software from the download site, and decompress the file. When double-clicking "MP4IntegrityVerifier.exe", this software is run.

Download URL　　　　　:　http://security.panasonic.com/pss/security/support/info.html

1.5 Uninstallation

Delete the contents of the folder of this software.

2 Operation guide

2.1 Get data necessary for the alteration detection

The certificate used to add the information of the alteration detection and the video file which was added to this information are required in checking the verification of the video file correctly by this software. Please refer to the instruction manual of Panasonic network camera about the data acquisition method from the camera.
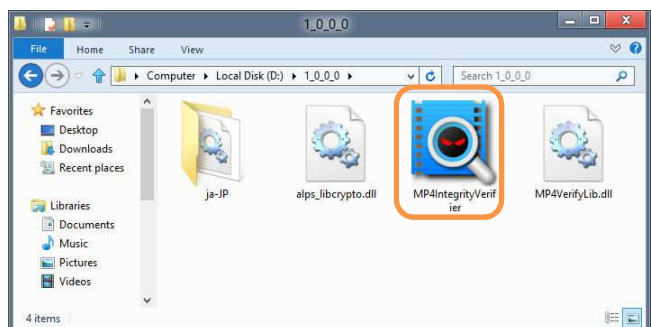

Important

When needing to update the certificate of the camera for reasons of the expired one, please keep the one before the update to PCs separately.
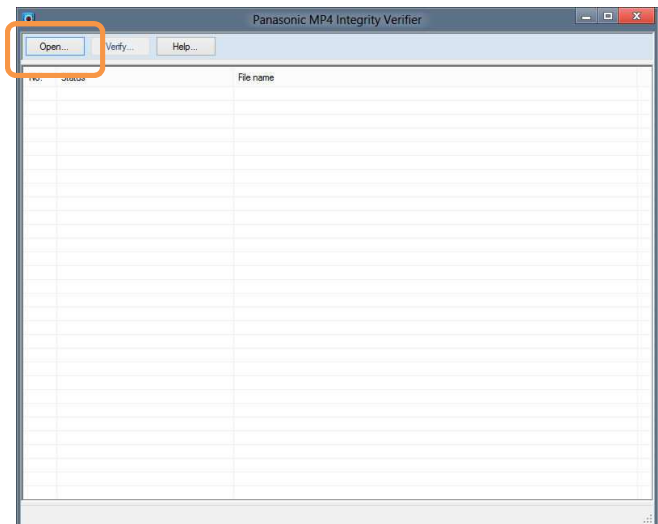

2.2 Detect alterations from video files

(1) Double-click "MP4IntegrityVerifier.exe".
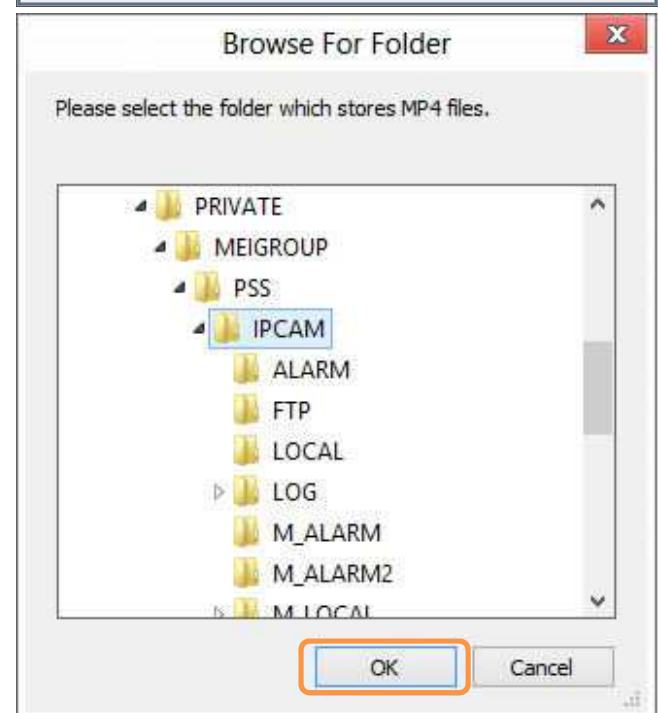
The main screen is displayed.

(2) Click the [Open...] button and select a folder that contains video files.


(3) Click the [OK] button.

When you click the [OK] button, this software displays, the search of video files included in the folder and the subfolder is started.

Browse For Folder

Please select the folder which stores MP4 files.

- PRIVATE
  - MEIGROUP
    - PSS
      - IPCAM
        - ALARM
        - FTP
        - LOCAL
        - LOG
        - M_ALARM
        - M_ALARM2
        - M_LOCAL

OK   Cancel

(4) Please wait until search of video files are completed.

The searched video files are displayed on the list of the main screen.

Searching MP4 files

D:\MP4Data\PRIVATE\MEIGROUP\PSS\IPCAM\PULL

Cancel

4
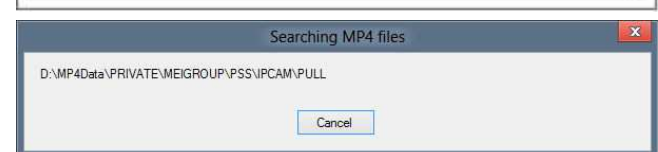
(5) Click the [Verify...] button

The screen selecting the certificate which is used to adding an alteration detecting information is displayed.



(6) Click the [Browse certificate...] button

The dialogue which can select the certificate file (.der) is displayed.

(7) Select the certification file and click the [Open] button.

The selected certificate file is decrypted, and this information is displayed on the "Input certificate file for integrity check" screen.
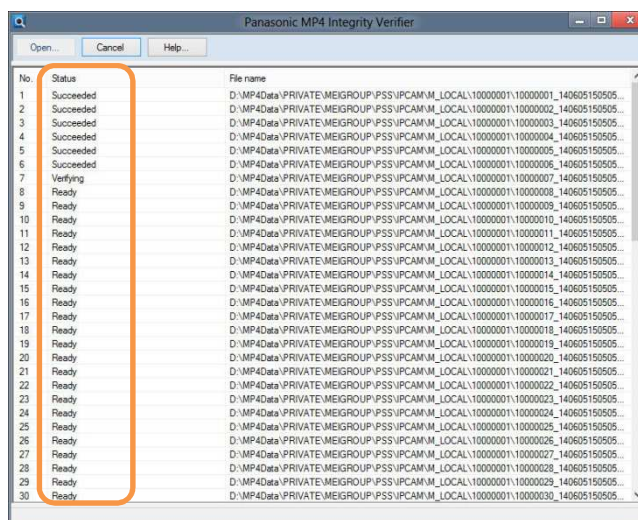

(8) Confirm the contents of the certificate file and click the [OK] button.

The integrity check is initiated.
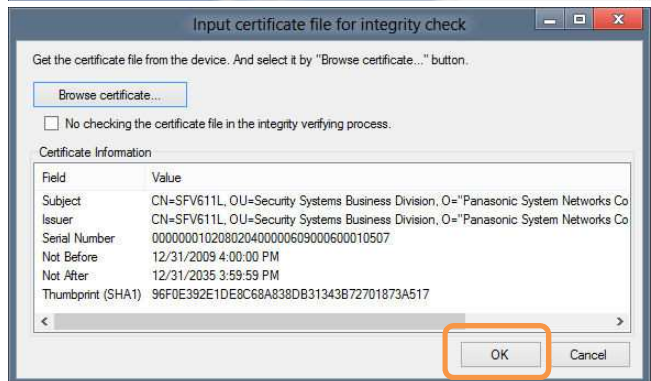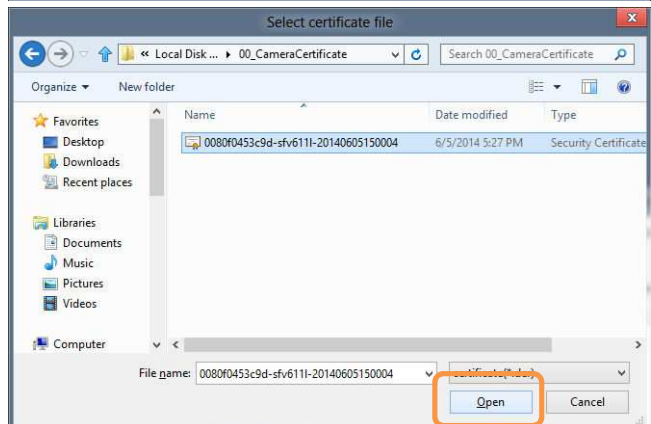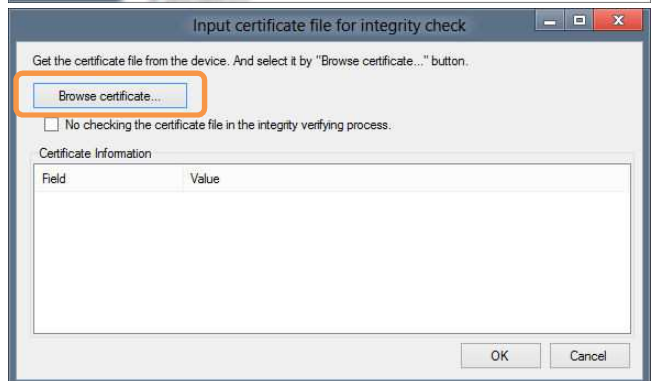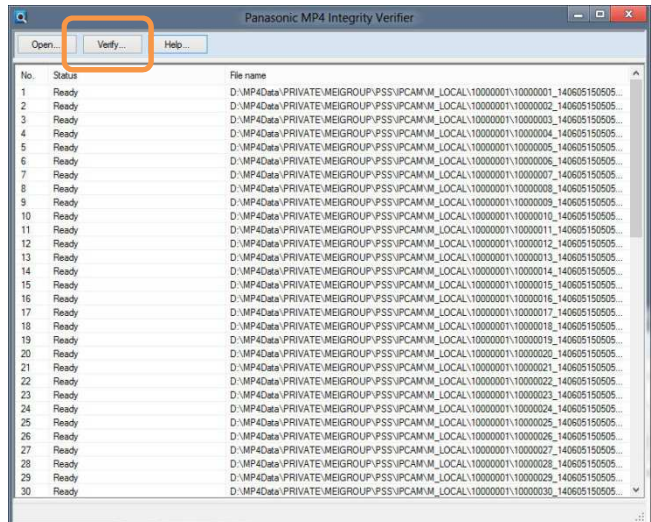
(9) Wait for the termination of the integrity check.

The integrity check runs by the order that the video file is displayed on the screen. Please check the result of the integrity check in the "Status" column.


Status	Description
Ready	This software is ready for execute the integrity check of a target file.
Verifying	This software is executing the integrity check for the target file.
Succeeded	This software ended the integrity check for the target file. The file has not been altered.
Integrity check error	The software ended the integrity check for the target file. The file has been altered. *1
Not supported file format	The software ended the integrity check for the target file. This file format is not supported by this software.
Canceled	The integrity check of the target file was stopped by operator during checking the file.
Error	The software ended the integrity check for the target file. It failed on the check of the target file.
Not applicable to restored file	The software ended the integrity check for the target file. The file is outside the target for checking, since it is a corrected video file.
Analyze file error	The software failed in the check of the target file.

*1: Also when the certificate used in order to add the information of the alteration detection differs from the one selected by this software, it is displayed as "Integrity check error".

(10) Confirm the result of the Integrity check.

When ending the integrity check, the result is displayed on the pop-up screen as "the number of files which was judged an error / the number of the checked files".
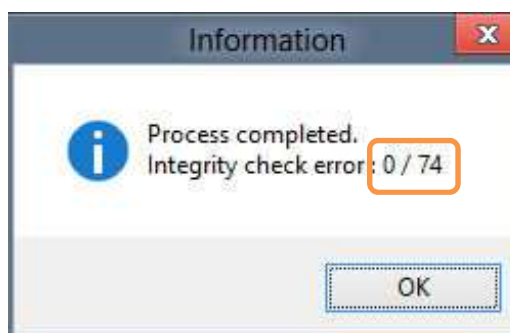
> **Important**
>
> The number of the files which was judged an error is the number that added the number of the files which was judged an "Analyze file error" or an "Error" or an "Integrity check error". This is not including the number of the files which was judged a "Not supported file format" or a "Not applicable to restored file".

3 Trademarks and registered trademarks

- Microsoft, Windows, .NET Framework are trademarks or registered trademarks of Microsoft Corporation in the U.S. and/or other countries.
- Intel, Pentium are trademarks or registered trademarks of Intel Corporation or its subsidiaries in the United States and other countries.
- Other names of companies and products contained in these operating instructions may be trademarks or registered trademarks of their respective owners.
- ONVIF is trademarks of ONVIF Inc.