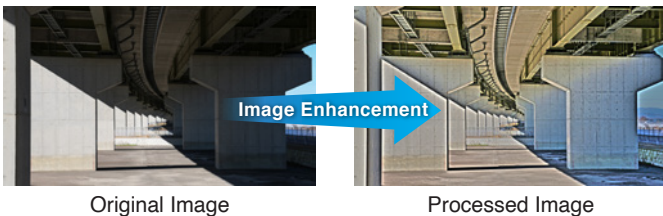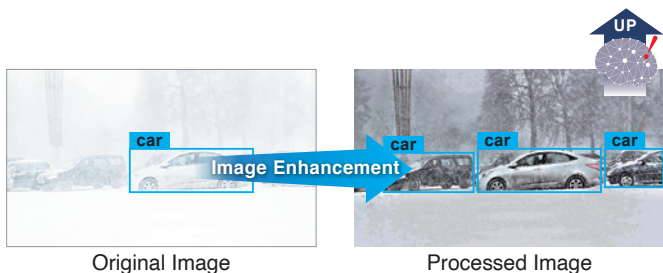# VisionCore™ FCS
Image Optimization Software

Image Optimization Software for Enhanced Visibility for Critical Visual Inspection

Image Optimization Software

Clear visibility in captured video is crucial for applications centered on visual inspection. VisionCore FCS software enhances difficult-to-see areas, making them clearer and easier to interpret during human-centric inspections, such as video surveillance.

Original Image   Image Enhancement   Processed Image

This image enhancement also boosts detection rates in AI-enhanced systems, ensuring more accurate and efficient video analysis.

Original Image   Image Enhancement   Processed Image

Enhance Low-Visibility Images

VisionCore FCS enhances low visibility in captured video, such as dark or bright regions, fog, haze, or other visual obstructions, by analyzing and adjusting each pixel. This results in images with greater visibility than what the naked eye can perceive, facilitating streamlined inspection processes in environments that require high visual clarity.

Japan patent no. 6749510

Image processing is carried out based on the Retinex theory, where pixels are individually optimized.

Enhance High-Resolution Images

VisionCore FCS is resolution agnostic, allowing it to process video files at any resolution, including high-resolution.

Applications

• Infrastructure Inspection

Enhance the clarity of captured images to effectively monitor infrastructure for any deficiencies.

• Post-Incident Investigation

Enhance the clarity of footage from surveillance cameras for use in post-incident investigation.
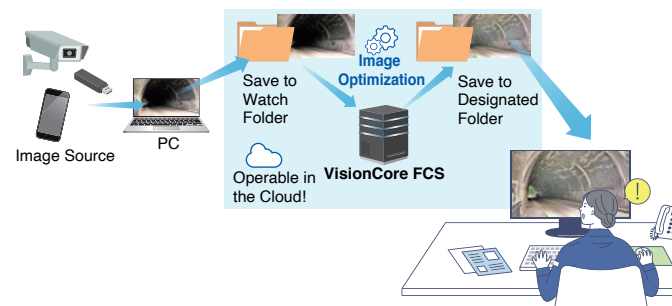
VisionCore™ FCS

Supports Various Input/Output Formats

The software supports file input and output for H.264, MPEG2, and HEVC formats, enabling users to convert file formats, as well as framerates and aspect ratios.

High-Speed Conversion Processing

Using GPU (graphics processing unit) acceleration, the software delivers high-speed conversion processing.

Automated Processing Integrated with External Systems

The software's watch folder function enables automatic processing of images in conjunction with external systems. It continuously monitors user-specified folders, automatically performing encoding and image enhancement when files are added. The processed files are then saved to the designated folder or FTP server. Users can assign multiple encoding settings, allowing various formats to be created from a single video source without altering the original data.

Specifications

VisionCore FCS

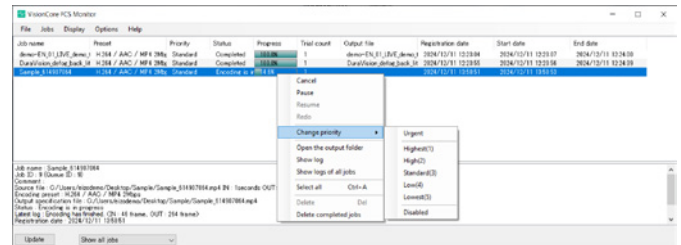|	
Supported OS	Windows 11 / Windows 10 (64-bit), Windows Server 2019 / 2016
License Authentication	USB dongle
CPU	Intel® Core™ processor (The 7th generation or later)
GPU	When using acceleration: NVIDIA® GeForce® 9xx / NVIDIA® Quadro® Mxxxx / NVIDIA® Tesla® K20 or later, Driver ver.418.96 or later (NVIDIA® CUDA® 10.1 / Compute Capability 3.5)
Memory	8 GB or more

VisionCore FCS Viewer

Supported OS	Windows 11 / Windows 10 (64-bit)
License Authentication	License key file
CPU	Intel Core processor (The 10th generation or later)
Memory	8 GB or more

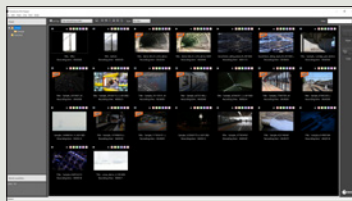*See the EIZO global website for supported formats.*

Monitor Processing Progress

You can monitor the progress of encoding and pause or stop the process as needed. When multiple jobs are registered, you can set the encoding priority across five levels, ensuring urgent jobs are executed with the highest priority. In environments with multiple conversion servers, you can also track the status of each server.
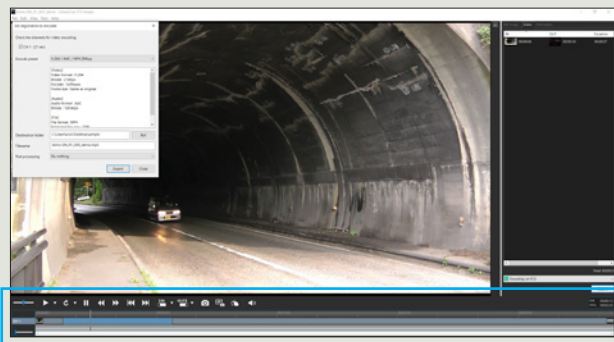

Web API

The VisionCore FCS API is available for integrating its functions with external software or systems.
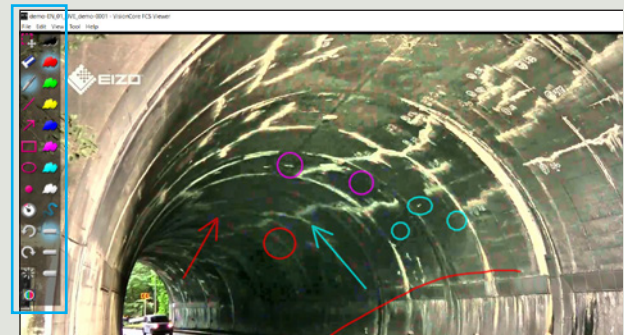
VisionCore™ FCS Viewer
Imaging Viewer and Edit Software

The separate VisionCore FCS Viewer software is integrated with VisionCore FCS, so you can play back, edit, and perform image enhancement all on one screen.

Select a portion of the video to apply image enhancement from the timeline

Add notations or labels for comprehensive analysis