

# Loki



Automated, configurable, and flexible workflows, for the world's most powerful image processing toolset.

## Introducing Loki

Loki is the ultimate solution for file based image processing tasks, combining over 25 years of research and development into a cost-effective, versatile and scalable software solution.

Loki provides the world's best suite of image processing algorithms that can be easily configured to create broadcast, post production and archive workflow solutions such as standards conversion, format conversion, noise reduction, digital camera image repair, restoration and more. With over 20 advanced tools to choose from, the workflow possibilities are endless...

Digital Vision's award winning DVO image processing toolset has set the standard around the world for excellence in image quality. Loki now unleashes this unique and unparalleled toolset into fully configurable and automated workflows to allow you to attain the highest image quality for your media whatever your need or market sector.

Conceived from the outset as a fully scalable architecture, Loki is the perfect solution for standalone systems as well as larger enterprise installations.

## Integrates into your existing infrastructure and fits into your preferred working practices with ease

Loki's versatility offers multiple configurable watch folders as well as an API to provide 3rd party control.

### Scalability

Expandable from one to many nodes to increase throughput and performance without compromise. Loki is upgradable without limit to meet your technical challenges and grow with your business requirements.

### Wide range of supported file formats

Whatever your requirements Loki provides file I/O compatibility familiar to your existing workflows.

### Industry leading standards conversion

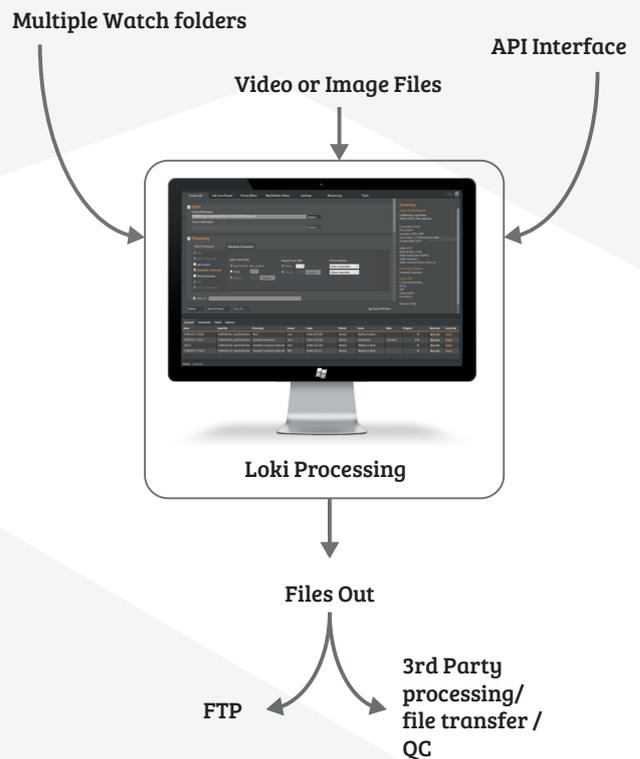
Developed over 25 years, Digital Vision's motion compensated technology provides the finest image quality when converting to and from any frame rate.

### Superior up conversion

The highest quality algorithm available for any resolution including 4K and above!

### Clarity noise/grain reduction

Not all noise reduction systems are equal. Let Loki unlock for you, Digital Vision's legendary noise and grain reduction system. The name's Clarity, DVO Clarity!



## Features at a glance

### Watch folders

Set up drop folders for automated processing to one or more outputs.

### Configurable presets

Create presets for use in different workflows. Presets are created and shared across all nodes across the network.

### Preview effects

See a video preview of the resulting images before committing to the export.

### Audio pass-through and export

Whether pass-through or retime, import and export a range of audio formats including WAV, MXF audio, and Quicktime Audio.

### Burn in capability

Comprehensive options for text, timecode, and logo burn in.

### Job scheduling

Loki's advanced control allows for scheduled start times and prioritisation of jobs to maximise usage efficiency of network bandwidth, processor power and storage capacity.

### Pre-export file analysis

Metadata and analytics to assist processing decisions prior to export.

### Email alerting

Detailed email reporting to multiple addresses upon job completion.

### FTP upload

Automatic upload of completed exports to FTP.

### Network node capability

Loki seamlessly and easily scales over the power of multiple nodes to increase throughput and speed of exports.

### Usage reporting

Export job details in CSV and TXT file formats to assist in technical analysis and billing.

### Support of RAW camera formats

Loki accepts an extensive range of camera RAW formats and takes advantage of the optional and unique de-bayer enhancement tools.

### Combine multiple files

Choose multiple input video files and combine them into a single exported file.

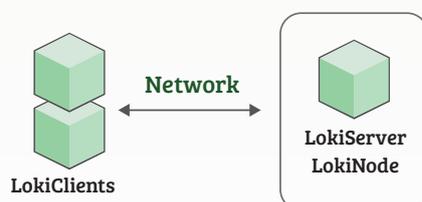
## Intelligent Client - Server- Node architecture

Deployment of Loki is incredibly easy whether installing on a single system or over an enterprise network setup. Thanks to its SOA (Service Orientated Architecture), jobs can be created and monitored on any system on the network, providing multiple users access to the tools they need, anywhere and at any time in the facility.

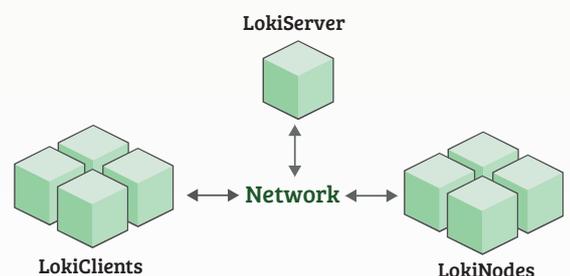
### Standalone Installation



### Minimal Network Installation



### Multi-node Network installation



## Software only or turnkey solution?

Specifically designed for ease of installation and operation, Loki is the perfect software only solution for you to be operational quickly and without complication on existing or new commodity hardware either single or multi node. Alternatively Digital Vision offers complete turnkey solutions to meet your needs.



## Need more speed? Render Nodes or THOR hardware acceleration?

Loki can easily integrate into existing multiple render node infrastructures and distribute and manage multiple jobs without the need for operator intervention.

Alternatively Digital Vision's unique PCIe accelerator hardware card THOR, brings a vast increase in processing power to a single node and at a fraction of the power consumption of multiple render nodes. 4 times faster than real-time at HD and 2K, the combination of LOKI and THOR make the daunting task of processing UHDTV and full aperture 4k predictable, simple and real-time.



## Wide range of processing tools as standard

- GoPro Lens distort correction
- Colour Conversions and transforms
- Apply LUTs
- Legalising
- Test Pattern Generator
- Blanking
- Cropping
- Scaling
- Interlacing tools
- Retiming

## Customise your workflow with the Loki DVO plug-ins

Decide on the number of clients and render nodes needed and then simply choose your tools from the extensive range of DVO plug-ins below to complete your Loki workflow.

LOKI plug-in	LOKI Plug-in Description
DVO Twister	Superior standards conversion suitable for any field/frame rate to all field/frame rates.
DVO 3:2	3:2 pulldown including automatic broken cadence detection and repair.
DVO Up-Convert	The ultimate resolution independent upconverter.
DVO Clarity	The legendary automatic noise reduction and grain management.
DVO De-interlace	The highest quality motion compensated de-interlacer maintaining full vertical resolution and fluid motion.
DVO Dropout	A fully automatic and highly accurate video drop-out removal system.
DVO Cross Colour	Seamlessly removes Cross Colour (Chroma Crawling), common on legacy PAL/NTSC video formats.
DVO LineSync	Eliminates line jitter from analogue video tape sourced material.
DVO Brickwall	Psychovisual redundant spectrum filtering to maximise compression efficiency and remove unwanted image artefacts.
DVO Chroma	Reduces undesirable colour artefacts on film and video caused by lens aberations, VT colour bleed and digital de-bayering.
DVO Alias	Cure image 'twitter' by reducing out-of-band vertical frequencies.
DVO Flicker	Perfect for removing all types of flicker from film and video material whether caused by faded film or bad lighting.
DVO Dust	Motion compensated detect and repair dust removal.
DVO Scratch	Auto-detection and seamless concealment of vertical scratches.
DVO Print align	Fully automatic sub-pixel accurate RGB separation print alignment.
DVO Re-grain	Adds natural grain for that organic cinematographic look and feel.
DVO Sharpen	Object adpative image detail sharpening with noise and grain rejection and no ringing on edges..
DVO Aperture	High frequency detail enhancement ideal for sharpening film scans while maintaining the integrity of film.
DVO Grain	The colourist's choice for over a decade for management of film grain without loss of the filmic look.
DVO Steady	Ideal for automatically stabilising film weave and general image instability.
DVO Warp	Fully automated correction of image warping caused by film shrinkage and splice joins.
DVO Pixel	Automatically seeks and destroys dead/zombie pixels restoring them back to life.

Powered by DVO , the Industry standard image processing tools for film, video and digital media from Digital Vision.

