

ImageStation® PixelQue



Image courtesy of Ordnance Survey of Great Britain, Southampton, United Kingdom.

The Intergraph® ImageStation® PixelQue is a unique application that addresses three key needs in the orthophoto production pipeline: to systematically inspect/quality control images, perform raster edits, and enhance orthophoto images and mosaic tiles. Combining all these finishing tools into one package and tailoring them for production results in a streamlined orthophoto finishing process. ImageStation PixelQue increases the throughput and efficiency of orthophoto production by using an efficient, semi-automatic quality assurance/quality control (QA/QC) review and edit process, thus reducing the time and cost factors of a project.

With its flexible band display capabilities, ImageStation PixelQue allows you to work with four-band data without stripping apart the image or losing the georeferencing. This lets you modify the bands you want while also improving turnaround time.

ImageStation PixelQue works with either georeferenced or non-georeferenced images to let you apply image edits or enhancements at any point in the orthophoto production process, allowing a more flexible workflow. External georeferencing can be embedded into the image file, eliminating the need to keep up with a world file, and creating more intelligent images for transportability.

User time tracking and reporting options allow you to improve project estimations with better metrics for cost estimates. The ability for multiple users to review and edit projects simultaneously saves time and eliminates data redundancy.

IMAGESTATION PIXELQUE TOOLSET

ImageStation PixelQue includes the following tools:

- **Image Inspection and Review** – Provides systematic and efficient QA/QC of images and orthophotos, which saves time and operational costs
- **Structured Inspection and Review** – Provides guides for you to inspect all parts of the orthophoto in a structured manner
- **Mark-up Problem Areas** – Allows you to mark problems found during inspection and add comments to indicate the type of problem for later correction
- **Review Problem Markers and Queued Editing Functions** – Drives you to marked problem areas for correction, and allows comments to indicate resolution
- **Image Editing** – Enables you to correct blemishes and other problems, so you can easily produce a more geometrically correct image without visible seamlines
 - **Select Area** – Defines which pixels of a raster are to be used as the source and/or target for any given edit
 - **Pixel Clone** – Provides dynamic interactive raster copying
 - **Local Warp** – Lets you correct perspective distortions using real-time raster dynamics
 - **Raster Splice** – Lets you copy raster data from one image to another
 - **Raster Fill** – Allows you to fill an area of the raster with a solid color
 - **Undo/Redo** – Provides the ability to undo raster editing commands that may have given undesired results, and redo an operation that has been undone
 - **Undo Brush** – Clones from the last saved image state
 - **Image Revert** – Returns an edited image to its last saved state
- **Image Enhancement** – Provides a range of functions to adjust the radiometry of either a single image or group of selected images/orthophotos, letting you adjust brightness and color to produce a more visually appealing end product
- **Collect and Display Histogram** – Collects and displays single (cumulative) or separate image histograms

- **Linear and Linear Percent Clip** – Enhances images linearly by stretching the image histogram with selected values or a percentage
- **Equalize** – Improves images by equalizing the histogram with an input weight
- **Gamma** – Enhances images in a non-linear manner
- **Look up Table (LUT) Generator** – Edits image LUT(s) graphically
- **Match Images** – Matches selected images with a reference image to make them consistent
- **Look Up Table** – Enables you to remap intensity values from external files definition(s), creating radiometrically homogenous images
 - **Load LUT** – Loads LUT(s) and updates image display
 - **Save LUT** – Saves a stretched image's LUT(s) to external file(s)
 - **Reset LUT** – Sets an image's LUT(s) back to original LUT
 - **Apply LUT** – Applies LUT(s) to selected images to create new images

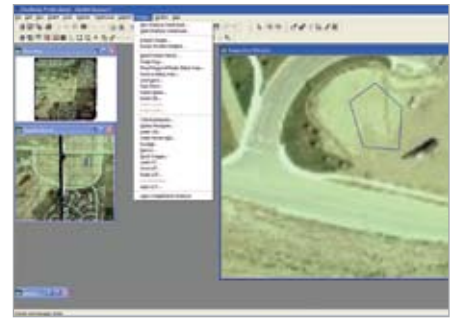


Figure 1: ImageStation PixelQue Commands and Structured Inspection Guide

REQUIREMENTS

- GeoMedia or GeoMedia Professional 6.0 or later (ImageStation PixelQue version 5.2 requires GeoMedia 6.0. Later versions require GeoMedia 6.1.)
- Microsoft® Windows® XP Professional SP2

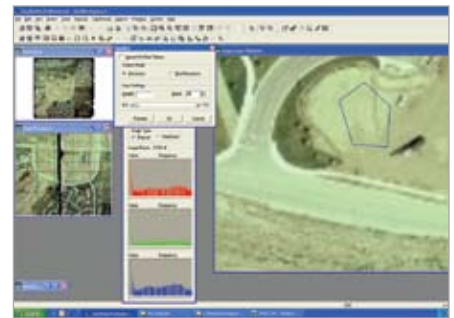


Figure 2: Image Enhancement Stretching Tools – Equalize option



Figure 3: Image Editing Tools – Local Warp option

ABOUT INTERGRAPH

Intergraph Corporation is the leading global provider of spatial information management (SIM) software. Security organizations, businesses and governments in more than 60 countries rely on the company's spatial technology and services to make better and faster operational decisions. Intergraph's customers organize vast amounts of complex data into understandable visual representations, creating intelligent maps, managing assets, building and operating better plants and ships, and protecting critical infrastructure and millions of people around the world.

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