

# ImageStation 2014

## Release Notes



2014

December 2013

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Intergraph Corporation  
P.O. Box 240000  
Huntsville, AL 35813

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# About this Release

This document describes ImageStation 2014. Although the information in this document is current as of the product release, see the [Intergraph Support website](#) for the most current version.

This document is only an overview and does not provide all of the details about the product's capabilities. See the online help and other documents provided with ImageStation for more information.

## New Technology

### New Dodging and Dehazing Algorithms

New dodging (Spatially adaptive brightness correction) and dehazing (Spatially adaptive contrast enhancement) algorithms for aerial and satellite imagery are introduced. The algorithms work automatically by computing calibration parameter from the overviews and applying it to the full resolution image.

The algorithms can be run on the fly as part of the rectification in ISOP in fully automatic mode or as a standalone DodgePlusCmd executable accepting user-defined parameters.

### Multithreaded Rectification

Rectification has been multi-threaded to take advantage of modern multi-core, high memory machines. By making it multi-threaded, a very significant performance improvement is achieved.

### ImageStation Image Formatter (ISIF)

A new utility, ImageStation Image Formatter (ISIF) is introduced. With support for batching and distributed processing, ISIF provides customers an efficient way to reformat large number of images and generate overviews.

## Enhancements to Condor for Intergraph

Several enhancements have been added to Condor for Intergraph when processing ImageStation jobs:

- Jobs only get submitted to machines that have the appropriate software installed
- Jobs specify their computing requirements and Condor submits jobs to machines that satisfy these requirements.
- Condor detects job failures, either by lack of license or some other reasons, and optionally resubmits jobs according to a job resubmission policy.
- An option to avoid submitting a job to machine(s) it has previously failed on is added.
- An option to remove hung up jobs based on a maximum execution time and/or minimum CPU usage.

## TopoMouse Support

Support for the TopoMouse as a digitizing device is extended to ISPM and ISAT providing you with an additional input device choice (Support for ISSG and ISSD was added in 13.00.0100).

TopoMouse is an advanced, ergonomic free-hand device for moving the cursor in the XYZ directions on digital photogrammetric workstations, and for carrying out frequent photogrammetric operations rapidly and efficiently. It can be purchased directly from Pacific GeoProducts, Inc. For more information, please refer to [www.Pac-Geo.com](http://www.Pac-Geo.com)

## FPV shows control point withheld status (ISPM)

The Footprint Viewer has been modified to show control points with a box around them if they have a withheld status in the control file.

## “Go to” option in Satellite photo Measurement (ISAT)

A capability to go to a selected control/check point location in satellite Multi Photo measurement environment has been added.

## Option to withhold points (ISAT)

An option to withhold points in the Photo-T stats tab of the Photo Triangulation dialog is added. The capability is accessed from a pop up menu accessed by right clicking on a point.



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## Edit Block footprint viewer shows on/offline status (ISAT)

The footprint viewer in the Edit block dialog is modified to easily distinguish online/offline status of photos. Offline photos are now shown in red colors.

## 9X9 Grid for Thinning Options (ISAT)

A 9x9 grid has been added for thinning command in Thinning and Weak Area analysis Dialog.

## IMG file format support

Read support is added to images in IMG format in ISSG, ISSD and ISAE

## Processing logs sent to a file (ISAE-Ext)

The Processing log information from SGM that used to be send to the command prompt are now redirected and saved are now sent to a log file.

## Generate Quality Statistics of a surface (ISDQ)

An operator for generating Quality Statistics of a surface is added in ISDQ. The operator takes a surface and an ASCII control file and generates a quality metrics that shows the Z similarity/ discrepancy of the surface from the points in the control file as well as an overall statistical report.

## Option to apply LUT to existing overviews (ISPQ)

When running Apply LUT in ISPQ, an option is added to copy overviews from the original image and apply the LUT to these overviews. This increases efficiency since new overviews are not generated.

## Monotonic Capture Mode (ISFC)

A monotonic capture Mode that ensures the Z values of points in a feature are continually increasing or decreasing. This is especially helpful when collecting features such as streams whose Z values are should always decrease in the flow direction.

## Place Perpendicular Command (ISFC)

A new key-in command (fc perpendicular on/off/toggle) that allows users to snap elements perpendicular to/from an existing element is added. The command is available when placing features in Line String Point mode, Curve Point mode, Orthogonal Line mode or Place Shape mode.

## Blend Feature uses Element Elevation (ISFC)

When using the FC BLEND FEATURE tool in a normal MicroStation view the elevation of the points being digitized are now recorded at the elevation of the attachment point instead the active elevation.

## FC PLACE LINE STRING POINT tool improved (ISFC)

The PLACE LINE STRING POINT tool has been improved to behave similar to MicroStation V8's Place SmartLine tool when a user digitizing a line string (type 4) ends the line by snapping back to the starting point of the line. The element now automatically turns into a shape (type 6).

## Dynamic coordinate readout dialog status (ISSG)

The status of the coordinate readout dialog is persisted and will be remembered when ISSG is restarted.

## Sleep state suppressed during Roaming (ISSG)

Sleep state (powering off the monitors and/or hard disks) is suppressed when digitizing in roam mode using the Z/I Mouse.