



Release Guide

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## **Release Guide**

PRO600 2020 CONNECT Edition

Version 16.6.2

10 December 2020

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## About This Release

This document describes the enhancements for PRO600 2020 CONNECT Edition (v16.6.2). Although the information in this document is current as of the product release, see the Hexagon Geospatial Support website for the most current version.

This document is only an overview and does not provide all the details about the product's capabilities. See the online help and other documents provided with PRO600 for more information.

## New Platforms

### Bentley Connect Edition

PRO600 2020 CONNECT Edition supports the following Bentley products:

- MicroStation CONNECT Edition Update 14 (10.14.00.109)
- OpenCities Map Advanced (OpenCities Map CONNECT Edition Update 6)
- OpenCities Map Ultimate (OpenCities Map Enterprise CONNECT Edition Update 6)

### ERDAS IMAGINE 2020 64-bit

ERDAS IMAGINE 2020 is now available as both a true 64-bit application and a 32-bit application. Consequently, there are two separate installers: one in which the entire suite runs as 32-bit applications, and one in which the entire suite runs as 64-bit.

PRO600 2020 CONNECT Edition is a 64-bit application and hence is compatible only with the 64-bit version of ERDAS IMAGINE 2020 Update 2.

### Licensing

It is strongly recommended that customers upgrade to the newest version of Hexagon Geospatial Licensing 2020. If in doubt, refer to Microsoft Windows' Add or Remove Programs utility to determine the currently installed version.

The appropriate download can be found in the [Downloads](#) section of the Hexagon Geospatial website.

# New Technology

## 64-bit Support

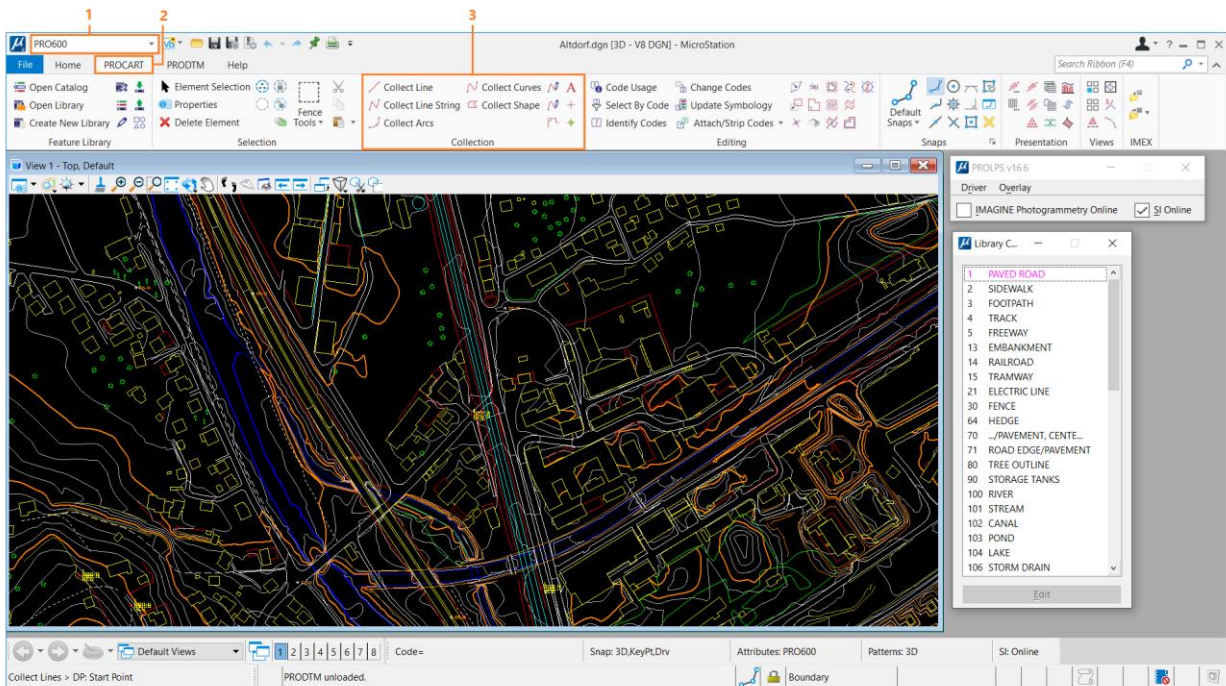
PRO600 2020 CONNECT Edition is a 64-bit application. This allows resource intensive applications to leverage 64-bit environments for increased memory access and processing speed.

## Ribbon User Interface

The ribbon design is an industry-standard layout for a user interface that is used by many applications, including Microsoft Office, ERDAS IMAGINE, and many more.

With the CONNECT Edition, Bentley has changed the task-based interface with a ribbon style interface based upon “workflows” that incorporate existing and new tools and capabilities. The ribbon tabs are organized by workflow. Each workflow has a set of tabs and tools within it pertaining to a common work environment.

PRO600 2020 CONNECT Edition adds a new “PRO600” workflow to the list of available workflows. The PRO600 workflow contains all the tools and capabilities that were previously available under the PRO600 dropdown menu in the old MicroStation User Interface.



PRO600 2020 CONNECT Edition User Interface

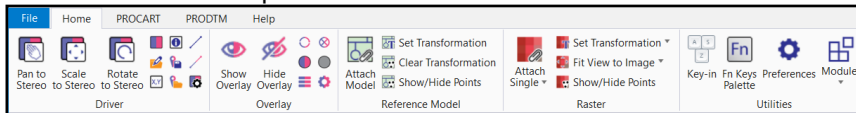
1. A workflow dropdown list for selecting workflows. Workflows contain a set of tabs and tools within them pertaining to a common work environment. PRO600 2020 CONNECT Edition adds a “PRO600” workflow to the list. After starting PRO600, select the PRO600 workflow from the list to access the PRO600 tabs and tools.

2. The PROCART tab provides the tools needed for data collection, editing, and visualization. In addition to the PROCART tab, the workflow includes Home, PRODTM, and Help tabs.
3. The Collection group in the PROCART tab has tools used for photogrammetric data collection. Tools in tabs are organized in groups based on tasks.

PRO600 adds the following four tabs to the PRO600 workflow:

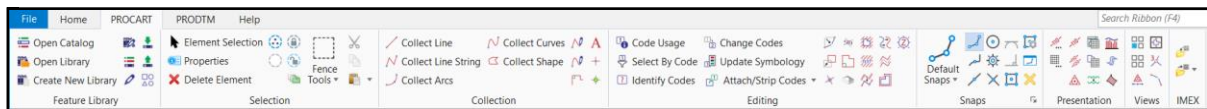
### Home Tab

The Home tab contains tools that may be used to access the functionality and settings that control the behavior of the PROLPS driver, attach reference design and raster data, open the PROFKEY graphical palette, and start the PRO600 Preferences dialog box. All the functionalities that used to be accessed from the PROLPS window are ported to this tab.



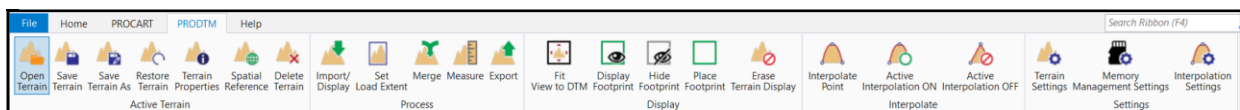
### PROCART Tab

The PROCART tab contains tools that are used for photogrammetric data collection and editing. These include tools for defining feature libraries and various tools for data collection, editing, and presentation. Most of the functionalities that used to be accessed from the PRO600 dropdown menu are ported to this tab.



### PRODTM Tab

The PRODTM tab contains tools that allow you to access all the functionality of PRODTM from a single location. This tab contains all the functionalities that used to be accessed from the Active DTM window.



### HELP Tab

The Help tab mainly provides access to the PRO600 online documentation. Reference materials, such as User Guides for all the PRO600 modules and the Release Guide, can be easily accessed from this tab.



# Deprecated Technology

## Stereo Display Drivers

PRO600 comes with stereo display drivers, which link the stereo viewers (of the Photogrammetric application) to the MicroStation viewer. The driver also transfers measurements made in the stereo viewer to the MicroStation viewer.

PRODPW and PROSD, which are the stereo display drivers for SOCET SET Digital Photogrammetric Workstation and analytical stereo plotters, respectively, are deprecated in this release. Hence, PRO600 no longer supports SOCET SET Digital Photogrammetric Workstation and analytical stereo plotters.

## SOCET SET Interfaces

PRO600 provides several interfaces for performing different tasks when used in conjunction with SOCET SET. These are:

- PROFDB, which supports import and export of SOCET SET Feature Databases.
- PROGEO, which provides access to SOCET SET project files to support use of geographic coordinate systems.
- PROSAFE, which provides access to SOCET SET's semi-automatic feature extraction tools within MicroStation.

These SOCET SET interfaces are deprecated in this release.

## Translators

PRO600 provides several translators to import/export a handful of third-party data formats. These include:

- PROGFO, which imports and exports Laser-Scan GISfoundation (GFO) format data. It also performs various data attribution and integrity testing functions during the data editing process.
- UNLDST, which performs import and export of Sysdeco DST data.
- KERNCAM, which performs import and export of data from the Kern PRO software.

These translators are deprecated in this release.

# System Requirements

## PRO600

Computer/ Processor	64-bit: Intel 64 (EM64T), AMD 64, or equivalent (Multi-core processors are strongly recommended)
Memory (RAM)	16 GB or more strongly recommended
Disk Space	<ul style="list-style-type: none"> <li>• 6 GB for software</li> <li>• 1 GB for example data</li> <li>• Data storage requirements vary by mapping project<sup>1</sup></li> </ul>
Operating Systems <sup>2,3</sup>	<ul style="list-style-type: none"> <li>• Windows 10 Pro (64-bit)</li> </ul>
Software	<ul style="list-style-type: none"> <li>• ERDAS IMAGINE 2020 64-bit</li> <li>• One of the following:             <ul style="list-style-type: none"> <li>◦ MicroStation CONNECT Edition Update 14 (10.14.00.109)</li> <li>◦ OpenCities Map Advanced (OpenCities Map CONNECT Edition Update 6)</li> <li>◦ OpenCities Map Ultimate (OpenCities Map Enterprise CONNECT Edition Update 6)</li> </ul> </li> <li>• OpenGL 2.1 or higher (this typically comes with supported graphics cards<sup>2</sup>)</li> <li>• Microsoft DirectX<sup>®</sup> 9c or higher</li> <li>• .NET Framework 4.0</li> </ul>
Recommended Graphics Cards for Stereo Display	<ul style="list-style-type: none"> <li>• NVIDIA<sup>®</sup> Quadro<sup>®</sup> P6000, P5000, P4000, P2000</li> <li>• NVIDIA<sup>®</sup> Quadro<sup>®</sup> M6000, M5000, M4000, M2000</li> <li>• NVIDIA<sup>®</sup> Quadro<sup>®</sup> K5200, K5000, K4200, K4000, K2200, K600, K420</li> </ul>
Recommended Stereo Display Monitors	<ul style="list-style-type: none"> <li>• 120 Hz (or above) LCD Monitors with NVIDIA 3D Vision<sup>™</sup> Kit, or <a href="#">3D PluraView</a> system from Schneider Digital<sup>3</sup></li> </ul>
Peripherals	<p>All software installations require:</p> <ul style="list-style-type: none"> <li>• One Windows-compatible mouse with scroll wheel or equivalent input device</li> <li>• Printing requires Windows-supported hardcopy devices<sup>3</sup></li> </ul> <p>Software security (Hexagon Geospatial Licensing 2020) requires one of the following:</p> <ul style="list-style-type: none"> <li>• Ethernet card</li> <li>• One USB port for hardware key</li> </ul> <p>Advanced data collection requires one of the following hand controllers:</p> <ul style="list-style-type: none"> <li>• TopoMouse<sup>™</sup> or TopoMouse USB<sup>™</sup></li> <li>• Immersion 3D mouse</li> <li>• Stealth 3D (Immersion), S3D-E type, serial port</li> <li>• Stealth Z, S2-Z model, USB version</li> <li>• Stealth V, S3-V type (add as a serial device)</li> <li>• 3Dconnexion SpaceMouse Pro</li> <li>• 3Dconnexion SpaceExplorer mouse</li> <li>• EK2000 Hand Wheels</li> <li>• EMSEN Hand Wheels</li> <li>• Z/I mouse</li> </ul>

#### System Requirements Notes

<sup>1</sup> Disk I/O is usually the slowest task in geospatial data processing. Faster hard disks improve productivity. Reading data from one disk, writing temporary data to a second disk, and writing data to a third disk improves performance. Disk arrays improve productivity, but some RAID options slow performance. Network disk drives are subject to network limitations.

<sup>2</sup> Windows provides a generic OpenGL driver for all supported graphics cards. However, an OpenGL-optimized graphics card and driver are recommended for these applications.

<sup>3</sup> HP-RTL drivers are recommended. Windows 64-bit print servers require 64-bit print drivers.

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Our technologies are shaping urban and production ecosystems to become increasingly connected and autonomous — ensuring a scalable, sustainable future.

Hexagon's Geospatial division creates solutions that deliver a 5D smart digital reality with insight into what was, what is, what could be, what should be, and ultimately, what will be.

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