

# TECHNICAL NOTES

## TRIMBLE BUSINESS CENTER SOFTWARE



### A POWERFUL SURVEY DATA OFFICE SOFTWARE SUITE

DESIGNED FOR TODAY'S FAST-PACED SURVEYING OFFICE, TRIMBLE BUSINESS CENTER SOFTWARE UNLOCKS THE POTENTIAL OF OPTICAL, GNSS, AND IMAGING SURVEY DATA. AS THE DESKTOP COMPONENT OF TRIMBLE'S SUITE OF SURVEY SOLUTIONS, TRIMBLE BUSINESS CENTER PROVIDES YOU WITH THE CAPABILITY TO EFFICIENTLY EDIT, PROCESS, AND ADJUST YOUR SURVEY DATA WITH CONFIDENCE.

### WHAT IS TRIMBLE BUSINESS CENTER?

The Trimble® Business Center office software suite is a desktop application for processing and managing optical, GNSS, and imaging survey data. With unique capabilities, such as GNSS data processing and integrated photogrammetry, Trimble Business Center allows surveyors to bring their data straight from the field and begin working with it immediately. Using Trimble Business Center, users can quickly and easily edit RTK and total station data, and interface with design, drafting, and GIS systems.



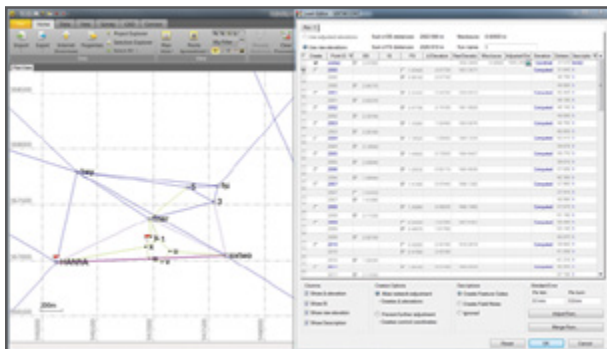
# SUPPORTED WORKFLOWS

TRIMBLE BUSINESS CENTER SUPPORTS A BROAD RANGE OF WORKFLOWS SO YOU CAN EDIT, PROCESS, AND ADJUST DATA COLLECTED WITH YOUR TRIMBLE SURVEYING INSTRUMENTS WITH EFFICIENCY AND CONFIDENCE.

## CONTROL SURVEYING

CONFIDENTLY PRODUCE RELIABLE CONTROL COORDINATES FOR THE SPAN OF THE ENTIRE PROJECT.

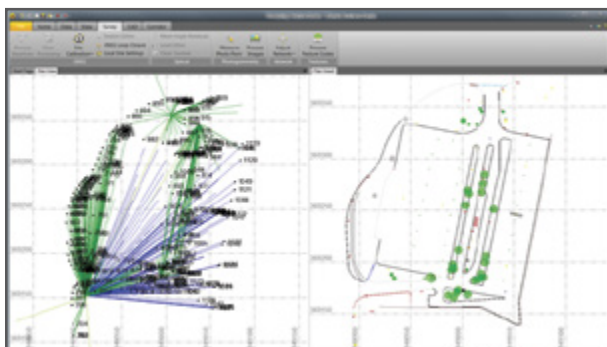
- Create projects with a wide selection of coordinate systems and geoid models.
- Post process static GNSS data with Trimble's HD-GNSS processing engine for more reliable positions.
- Review and edit total station observations and rounds.
- Seamlessly import and edit digital leveling observations from a Trimble DiNi® Digital Level.
- Adjust networks containing GNSS, total station, and leveling observations with least squares.



## FIELD TO FINISH

EASILY CREATE CAD-READY DELIVERABLES DIRECTLY FROM SURVEY DATA.

- Import topographic and as-built survey data collected with Trimble Access™ field software.
- Assure the quality and reliability of RTK and total station observations.
- Process feature codes to automatically draw symbols and lines resulting in saved time.
- Create surfaces and contours from points and break-lines to accurately model terrain.
- Export the completed survey to a variety of CAD file formats including SketchUp Pro (.skp).



## TRIMBLE HD-GNSS PROCESSING ENGINE

### A NEW GENERATION OF CORE POSITIONING TECHNOLOGY

Trimble's Real-Time Kinematic (RTK) and postprocessed systems now use the latest and most advanced processing engine: Trimble HD-GNSS.

The Trimble HD-GNSS processing engine transcends traditional fixed/float techniques to provide a more accurate assessment of error estimates than traditional GNSS processing engines. In postprocessed applications, experience faster processing with a simplified workflow that typically does not require raw GNSS data filtering before processing.

### COMPARED TO OLDER PROCESSING ENGINES, TRIMBLE HD-GNSS:

- Produces more reliable positions in poor GNSS areas
- Reduces the time required to converge on a solution
- Improves the consistency of precision reporting

### SUPPORTED CONSTELLATIONS:

- GPS
- GLONASS
- Galileo
- QZSS
- BeiDou

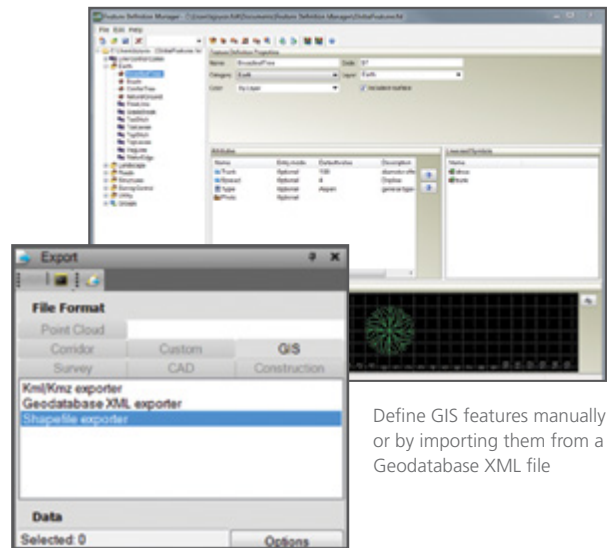


# SUPPORTED WORKFLOWS

## GIS FEATURE COLLECTION

EXPAND THE THE UTILIZATION OF YOUR SURVEY SYSTEMS BY CREATING GIS DELIVERABLES FOR YOUR CLIENTS.

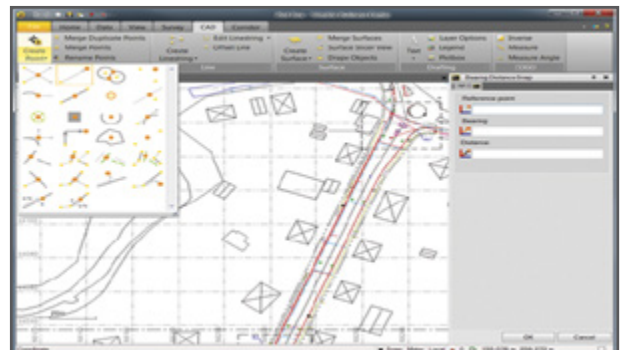
- Create and manage rich feature libraries.
- Collect points with feature codes and attributes using Trimble Access.
- Import Trimble Access jobs with collected feature data.
- Assure the quality and reliability RTK and total station observations.
- Process feature codes to automatically draw point, line, and polygon features.
- Export features to a variety file formats including Esri Shape and Geodatabase XML files.
- Export the completed survey to a variety of CAD formats including SketchUp Pro (.skp).



## CONSTRUCTION STAKING

ASSURE THAT YOUR STAKING PROJECTS ARE PERFORMED CORRECTLY AND RECORDED FOR VERIFICATION.

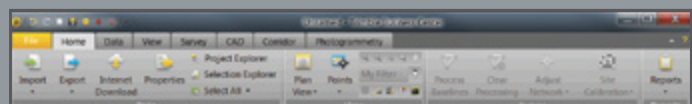
- Import road and site designs directly from CAD.
- Create points, lines, alignments, surfaces, and corridors to stakeout with Trimble Access.
- Import as-staked data from Trimble Access for increased quality assurance.
- Archive staking jobs, including original field data for future reference and ease of mind.



## CUSTOMIZABLE USER INTERFACE

A CUSTOMIZABLE USER INTERFACE ENHANCES THE TRIMBLE BUSINESS CENTER EXPERIENCE. FOR USERS WHO WISH TO MAXIMIZE THEIR EFFICIENCY, THE TRIMBLE BUSINESS CENTER RIBBON INTERFACE MAKES FUNCTIONS EASY TO FIND AND UNDERSTAND.

- Add frequently used functions to the Quick Access Toolbar.
- Create ribbon tabs with streamlined workflows.
- Specify any website as the Start Page.



## TRIMBLE VISION: MEASURE WITH SPEED AND SAFETY

Trimble VISION™ technology integrates calibrated digital cameras with Trimble S6 and S8 total stations, as well as the Trimble VX™ Spatial Station. These instruments have the ability to collect survey data, stream video from the perspective of the instrument, and capture panoramic still images.

Combine visual information with field measurements and design data to obtain comprehensive, detailed data on project conditions and features. Using Trimble Business Center, surveyors can document surveyed features by overlaying survey data on the captured panoramic still images.

Trimble Business Center also enables the surveyor to make terrestrial photogrammetric observations and compute point coordinates using the Trimble VISION images. Points which were previously time-consuming, dangerous, or impossible to collect using other techniques can now be precisely measured using Trimble VISION photogrammetry capabilities in conjunction with Trimble Business Center.

Learn more about Trimble VISION technology at:  
<http://www.trimble.com/trimblevision>



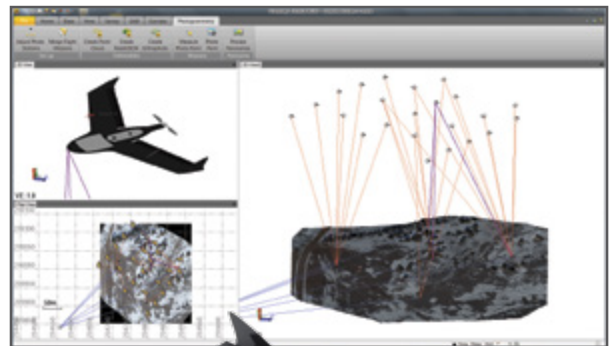
## SUPPORTED WORKFLOWS

### INTEGRATED AERIAL AND TERRESTRIAL PHOTOGRAMMETRY

BASED ON STATE-OF-THE-ART TECHNOLOGY FROM INPHO, THE TRIMBLE BUSINESS CENTER PHOTOGRAMMETRY MODULE MAKES IT POSSIBLE TO PROCESS COMPLETE MAPPING PROJECTS, INCLUDING AERIAL IMAGERY, TRIMBLE VISION IMAGERY, AND GNSS AND TOTAL STATION OBSERVATIONS.

WITH AUTOMATIC PHOTOGRAMMETRY FUNCTIONALITY, OFFICE SURVEYORS WILL SAVE TIME AND INCREASE VALUE OF DELIVERABLES FOR CLIENTS.

- Import and view images from Trimble VISION instruments and Gatewing Unmanned Aerial Systems.
- Easily align aerial imagery with automatically generated tie-points and surveyed ground control points.
- Visualize survey data superimposed on aligned imagery.
- Measure discrete points, such as building corners and tree-tops, photogrammetrically using a “virtual telescope”.
- Automatically create point clouds, ortho-rectified image mosaics, and raster DEMs from aerial images.





# HANDS-ON LEARNING

BUILT-IN TUTORIALS GUIDE YOU STEP-BY-STEP THROUGH COMMON TASKS INCLUDING:

- What's New
- Setting up a New Project
- Importing GNSS Data
- Processing GNSS Baselines
- Importing Digital Level Data
- Importing Total Station Data
- Adjusting the Network
- Processing Feature Codes
- Using Spreadsheets, Selection Sets, and Cogo Controls
- Working with Trimble VX Data
- Working with Corridors
- Working with Superelevations
- Calibrating a site
- Working with 3D Data
- Importing As-Staked Points
- Measuring Photogrammetry Points
- Processing Aerial Survey Data



## TRIMBLE ACCESS SERVICES: CONNECT THE OFFICE TO THE FIELD

Trimble Access Services (available to all Trimble Access subscribers with a valid software maintenance agreement) allows users to easily share information for faster delivery from the field and last minute changes from the office. The Trimble Connected Community™ portal enables the entire team to securely collaborate throughout the duration of the job.

- Upload files to TCC to share within the office or send to the field.
- Send raw GNSS data to processing services such as Trimble RTX-PP, AUSPOS, and OPUS.
- Forecast GNSS satellite visibility for a given site and time span.
- Convert older job and jxl file versions to newer ones.
- Retrieve information about your registered devices such as Trimble Access controllers.

# SYSTEM RECOMMENDATIONS

## OPERATING SYSTEM

- Microsoft Windows® 7 (64-bit versions)
- Microsoft Windows 8 (64-bit)

## PROCESSOR

Recommended . . . . . Intel® Pentium® Dual-Core E2160  
(1.80 GHz, 1 MB L2 Cache, 800 FSB)

## RANDOM ACCESS MEMORY (RAM)

Recommended . . . . . 2 GB or more

## HARD DISK

Recommended . . . . . 5 GB or more

Graphics . . . . . DirectX 9 (or higher) compatible graphics card  
with 512 MB memory or more

Monitor . . . . . 1280x1024 or higher resolution  
with 256 or more colors (at 96 DPI)

I/O Ports . . . . . USB 2.0 port

# FLEXIBLE LICENSING OPTIONS FOR WORKSTATIONS AND ENTERPRISES

WHETHER YOUR BUSINESS REQUIRES A SINGLE LICENSE OR A MULTI-USER ENTERPRISE LICENSE, TRIMBLE BUSINESS CENTER OFFERS FLEXIBLE LICENSING OPTIONS TO MEET YOUR REQUIREMENTS.

- Scalable functionality for desired efficiency and budget
- USB hardware licenses for individual workstations
- Software code licenses for individual workstations and network servers

# SUPPORTED LANGUAGES

- Chinese Simplified
- English UK
- Italian
- Portuguese
- Czech
- Finnish
- Japanese
- Russian
- Dutch
- French
- Korean
- Spanish
- English US
- German
- Norwegian
- Swedish



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