

Trimble® Business Center Software Makes Processing GNSS Survey Data Effortless

Trimble Business Center software is powerful surveying office software designed to put the power of Trimble R-Track™ satellite-receiving technology on your desktop. With Trimble Business Center software you can effortlessly transfer GNSS and optical field data into the office for data processing. After processing, simply export your data to the third-party design software of choice.

With its powerful design, Trimble Business Center software is the surveying office software for the 21st Century. Surveyors and engineers who work with GNSS data will appreciate the software's power and ease of use. With numerous innovative and unique features, Trimble Business Center software is exceptionally easy to use, intuitive, and flexible. Visualization tools such as Plan views, 3D views, time-based data views, and session editors help you "see" the data in the context of the whole project. And powerful spatial data management capabilities bring a new level of productivity and efficiency to the surveying and civil engineering office.

COMPLETE SURVEY DATA PROCESSING

Trimble Business Center software takes land survey office software into the future by integrating common tasks into a single, unified package—tasks such as:

- GNSS and optical data import and export
- Processing of GNSS survey data, including GLONASS signals
- Quality assurance and quality control of data (QA/QC)
- Extremely fast GNSS baseline processing
- Least Squares survey network adjustment for GNSS data
- Surface modeling, quick contours and 3D visualization
- Advanced COGO functions
- Datum transformation and projections
- Creation of ground coordinate systems and site definitions based on hundreds of published coordinate systems from around the world
- Site calibrations
- Reporting



AN IMPORTANT COMPONENT OF THE CONNECTED SITE

Trimble field and office software work together to form the engine of the Connected Site. Providing unequalled Integrated Surveying™ technology, the complete Trimble software solution provides seamless dataflow, which is the thread that ties together your surveying tools and techniques, your services, and your business relationships.



AN INTUITIVE, EASY-TO-USE AND CUSTOMIZABLE INTERFACE

Trimble Business Center software offers a modern and customizable user interface. Its flexibility and user-friendliness let you work the way you want:

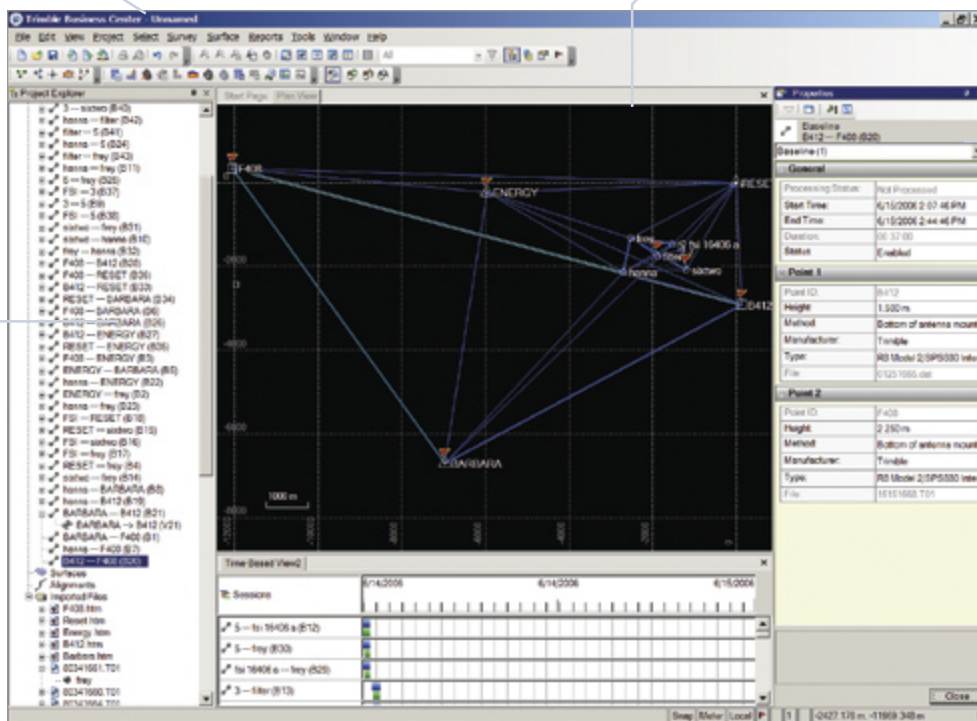
- A Project Explorer “tree view” lets you locate and visualize your data.
- A consistent Properties pane for all data types displays the details of any data.
- Windows display in an easy-to-use “tabbed” layout, so you can easily see multiple views at once, or select the view you want.
- Windows can also be placed into the familiar Windows mode, where each window can be easily minimized, resized or positioned.
- Spreadsheets can be “floated” away from the tabbed view layout. Surveyors with a dual monitor computer can take full advantage of all of that screen space.
- All toolbars and menus are fully customizable, using configuration tools that are familiar to all Microsoft® Office users.
- Powerful spreadsheet views are available for point and vector data. Familiar spreadsheet tools allow you to sort and view the data.
- A 3D view can display any data in a project. Data can be selected from the 3D view, making it easy to quickly find and fix problems.

Put commands right where you need them for easy access with customizable menus and toolbars.

Easily and quickly tab between windows.

Quickly navigate through your data with the Project Explorer.

View the details of any object in the Properties pane.



Customize the way you view data in the Time-based view.



TRIMBLE BUSINESS CENTER SOFTWARE: TOTAL CONTROL OF YOUR SURVEY DATA FROM START TO FINISH

BRING IN DATA

Importing survey data into office software has never been easier. That's because Trimble Business Center automatically imports GNSS and optical data in the correct file format.

To import data into Trimble Business Center, simply navigate to the appropriate file on your computer, where the smart Trimble Business Center software analyzes the file to determine its type and how it needs to be processed.

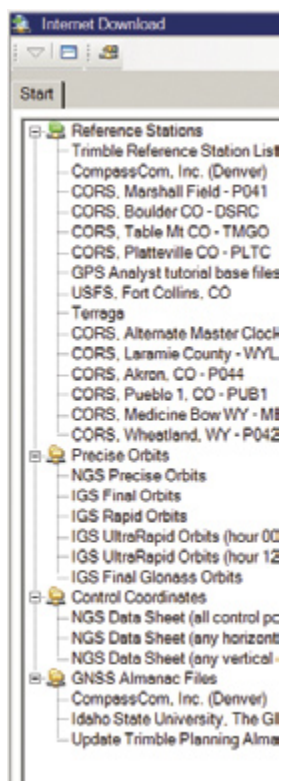
This exceptionally easy-to-use automated system also lets you drag-and-drop files from your directory directly into an open Trimble Business Center project. After a few seconds your data is available.

DOWNLOAD DATA FROM THE INTERNET

Another way to import survey data into Trimble Business Center is via the Internet. This capability lets you import base station, precise ephemeris or NGS datasheet data in one easy step.

Trimble Business Center can be configured so that the data you need is just a few clicks away: the software is smart enough to select the appropriate data, then unzip and import it all in one step. No more locating the data yourself and determining for which times you need the data before import.

Internet download lets you keep a list of your reference stations within easy reach.



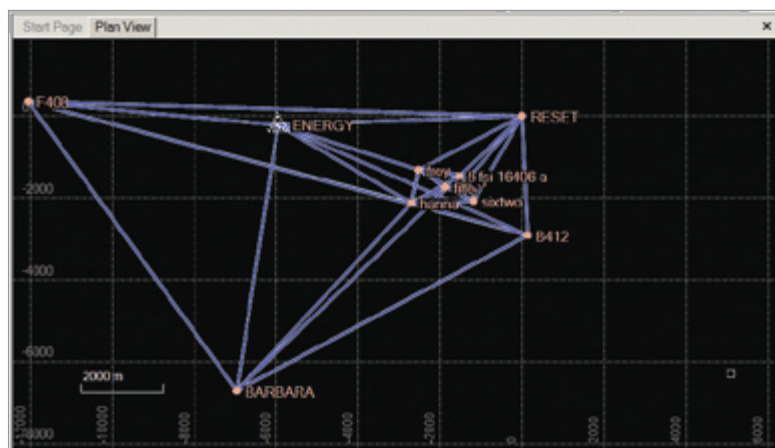
PERFORM A NETWORK ADJUSTMENT

In Trimble Business Center software the least-squares Network Adjustment module is powerful and extremely fast, but also very easy to use. With just a mouse-click you can:

- Include or exclude vectors from a network adjustment
- Query or disable observations graphically

Fixing control points for the network adjustment enables you to achieve the high quality results you need...faster than ever before.

After network adjustment, each station's horizontal and vertical error ellipses are displayed in two locations: the Plan view and the results pane of the Network Adjustment command. You can thus quickly and easily inspect the network's quality.



Vectors and baselines are easily viewed in the Trimble Business Center window.

PROCESS BASELINES

With the Trimble Business Center software, GNSS baseline processing and network adjustment are as simple or advanced as you want them to be.

THE RIGHT ANSWERS, RIGHT NOW

In the Trimble Business Center software, baseline processing and network adjustment are designed to give you the information you need immediately. Intelligent default parameter values ensure that users who need to see the right answers quickly can do exactly that.

MORE CONTROL WHEN YOU NEED IT

If you desire more control over your GNSS data processing, the baseline processing and network adjustment functions offer advanced commands. Of course, this task need only be completed once before your enhanced control is automated once more—the Trimble Business Center software allows you to save your advanced commands as a "style" for easy and immediate access in the future.

QUALITY ASSURANCE AND CONTROL

The Trimble Business Center software features extensive QC tools for fast and accurate assessment of data quality.

ADVANCED COGO (COORDINATE GEOMETRY) FEATURES

Any time Trimble Business Center prompts you for a coordinate, advanced COGO functions, the software also provides all the tools you need to compute the coordinate. These advanced COGO functions are only a mouse-click away whenever you need them. Available COGO functions include Bearing – Bearing Intersection, Bearing – Distance Intersection, and Distance – Distance Intersection.

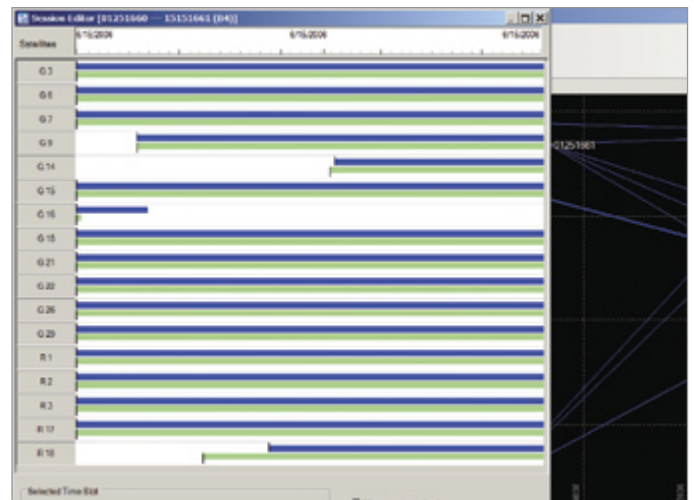
ENSURE QUALITY ASSURANCE AND QUALITY CONTROL

Quality control of survey data is vital. That's why Trimble Business Center offers outstanding QA/QC capabilities to ensure your results always meet the high standards you and your clients expect.

Trimble Business Center is full of features to help you maintain the highest standards of quality and quickly spot problem data:

- In the Plan view, red flags are automatically displayed to alert you to out-of-tolerance data or other potential problems.
- The Flags pane lists all warnings in one convenient list. Selecting a warning from the Flags pane takes you directly to the information you need to understand and resolve the problem, for example, a processed GNSS vector that does not meet the tolerance criteria set in the processing settings.
- The Timeline window graphically displays observed data over time. Thus in one view you can see how your occupations fit together in time, plus the sessions that the Trimble Business Center software has created from these occupations.
- To check the quality of a postprocessed network, simply use the Loop Closures report. Trimble Business Center can either report on the entire network or on a selected portion.

- For each session a Session Editor view displays the data from each satellite. This view enables you to determine whether both of your occupations in a session were seeing the same satellites. It also allows you to identify if during the session either occupation experienced any lapses in satellite data.



View satellite details using the Session Editor.

Point ID	Point Name	Station Type	Status	H Precision (m)	V Precision (m)	E	N	S	Z	Vector Length	Point Height	True Height
001	001	Control	Enabled	0.01	0.01	1000.000	1000.000	1000.000	1000.000	0.000	0.000	0.000
002	002	Control	Enabled	0.01	0.01	1000.000	1000.000	1000.000	1000.000	0.000	0.000	0.000
003	003	Control	Enabled	0.01	0.01	1000.000	1000.000	1000.000	1000.000	0.000	0.000	0.000
004	004	Control	Enabled	0.01	0.01	1000.000	1000.000	1000.000	1000.000	0.000	0.000	0.000
005	005	Control	Enabled	0.01	0.01	1000.000	1000.000	1000.000	1000.000	0.000	0.000	0.000
006	006	Control	Enabled	0.01	0.01	1000.000	1000.000	1000.000	1000.000	0.000	0.000	0.000
007	007	Control	Enabled	0.01	0.01	1000.000	1000.000	1000.000	1000.000	0.000	0.000	0.000
008	008	Control	Enabled	0.01	0.01	1000.000	1000.000	1000.000	1000.000	0.000	0.000	0.000
009	009	Control	Enabled	0.01	0.01	1000.000	1000.000	1000.000	1000.000	0.000	0.000	0.000
010	010	Control	Enabled	0.01	0.01	1000.000	1000.000	1000.000	1000.000	0.000	0.000	0.000
011	011	Control	Enabled	0.01	0.01	1000.000	1000.000	1000.000	1000.000	0.000	0.000	0.000
012	012	Control	Enabled	0.01	0.01	1000.000	1000.000	1000.000	1000.000	0.000	0.000	0.000
013	013	Control	Enabled	0.01	0.01	1000.000	1000.000	1000.000	1000.000	0.000	0.000	0.000
014	014	Control	Enabled	0.01	0.01	1000.000	1000.000	1000.000	1000.000	0.000	0.000	0.000
015	015	Control	Enabled	0.01	0.01	1000.000	1000.000	1000.000	1000.000	0.000	0.000	0.000
016	016	Control	Enabled	0.01	0.01	1000.000	1000.000	1000.000	1000.000	0.000	0.000	0.000
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018	018	Control	Enabled	0.01	0.01	1000.000	1000.000	1000.000	1000.000	0.000	0.000	0.000
019	019	Control	Enabled	0.01	0.01	1000.000	1000.000	1000.000	1000.000	0.000	0.000	0.000
020	020	Control	Enabled	0.01	0.01	1000.000	1000.000	1000.000	1000.000	0.000	0.000	0.000

Sort and find data quickly using spreadsheet views.

CALIBRATE A SITE

If you need to perform a site calibration, it does not matter where you are: Calibrate the site in your Trimble field software or in Trimble Business Center office software—you can seamlessly transfer the calibration between the two. This flexible convenience means anyone can perform the calibration...anywhere.

When performing a site calibration in Trimble Business Center it is easy to assign pairs of GNSS coordinates to grid coordinates for each point you want to use to calibrate. After calibration is computed, the results of how each point varies from the solution are displayed both graphically and numerically, so you can easily see which points may not fit the calibration. You can then remove any point from the calibration to improve the solution.

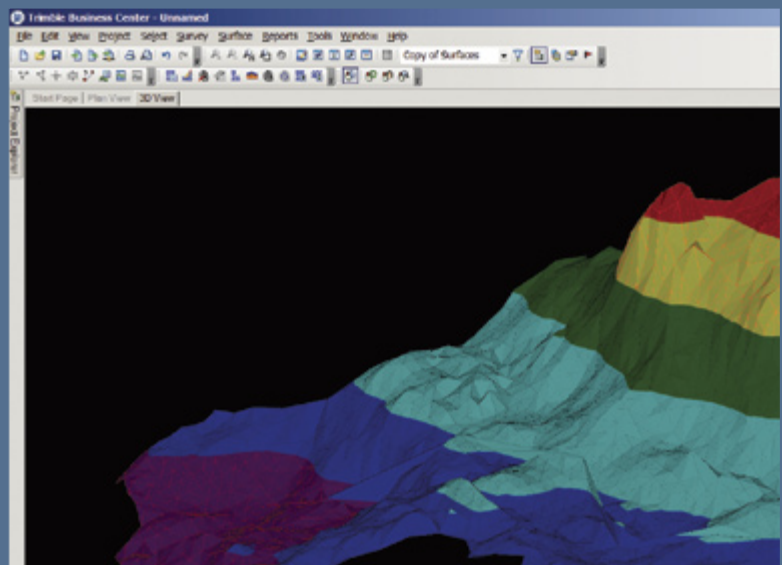
TRIMBLE BUSINESS CENTER PACKAGES

Feature	Trimble Business Center software – without a dongle	Trimble Business Center software – Survey Standard	Trimble Business Center software – Survey Advanced
Import data for postprocessing	Yes	Yes	Yes
Edit raw data for postprocessing	Yes	Yes	Yes
Import RTK data	Yes	Yes	Yes
Edit RTK vectors	No	Yes	Yes
Import Total Station data	Yes	Yes	Yes
Edit Total Station data	No	Yes	Yes
Import DiNi® Level data	Yes	Yes	Yes
Edit DiNi Level data	No	Yes	Yes
Postprocess 'L1-only' satellite data	No	Yes	Yes
Postprocess GNSS satellite data	No	No	Yes
Loop Closure on 'L1-only' satellite data	No	Yes	Yes
Loop Closure on GNSS satellite data	No	No	No
Least Squares Network Adjustment of 'L1-only' satellite data	No	Yes	Yes
Least Squares Network Adjustment of GNSS satellite data	No	No	Yes
Least Squares Network Adjustment of Total Station data	No	No	Yes
Least Squares Network Adjustment of DiNi Level data	No	No	Yes
Level Loop Adjustment of DiNi Level data	No	Yes	Yes
Feature Code processing	No	Yes	Yes
Event Marker processing and Export	No	No	Yes

SURFACE MODELING AND 3D VISUALIZATION

Surface modeling of data enables you to visually identify problems using graphics rather than rows of numbers. So Trimble Business Center features surface modeling for quality assurance.

You can take any 3D GNSS field data, or any CAD data with 3D information, and select it to form a surface. Once complete, you can view the surface in a 3D view, or see the contours of the surface on the screen.



View your data from any angle in 3D view. Elevation variances are easily visible.



GENERATE REPORTS

Deliver your surveys to clients with professionally presented and easy-to-read reports. Trimble Business Center software generates reports in an HTML format that is easily displayed in word processing and Web browsing software.

The reports you need are just a mouse-click away. They include:

- Baseline Processing
- Loop Closure
- Network Adjustment
- Point Derivation
- Project Computation
- Site Calibration

Trimble Business Center reports contain hyperlinks back to the data being reported. If you are reviewing a report and wish to view the actual data, just click the link and you will be immediately taken to the data in the open project. This feature lets you quickly and easily review exactly the information you need.

CONCLUSION

Finish your survey jobs faster and deliver your clients data they can trust. Trimble Business Center software is advanced survey office software that takes the effort out of GNSS survey data processing. When you need immediate, hassle-free job completion and complete confidence in your results, Trimble Business Center software delivers.

RECOMMENDED HARDWARE REQUIREMENTS

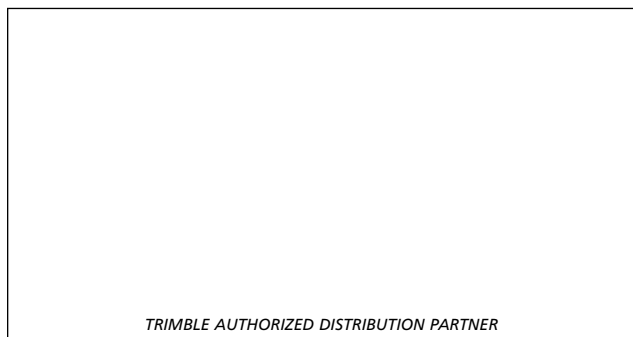
The recommended requirements for the computer running the Trimble Business Center software are:

- Pentium IV-based computer, 2.8 GHz or faster with 1 GB RAM
- A graphics card with 256 MB RAM will improve 3D graphics
- Some commands in 3D view are more accessible with a 3-button mouse

SYSTEM REQUIREMENTS

- Operating system: Any of these operating systems: Microsoft Windows® 2000 Professional, Windows XP Home, Windows XP Professional or Windows Server 2003
- Processor: Pentium III 450 MHz minimum; Pentium IV 2.8 GHz recommended
- Random access memory (RAM): Pentium III 450 MHz minimum; Pentium IV 2.8 GHz recommended
- Hard disk capacity: 1 GB available hard-disk space prior to installation
- Graphics: For 3D View: DirectX 9 (or higher) compatible graphics card with 32 MB memory minimum; 256 MB or greater recommended
- Monitor: 1024 x 768 or higher resolution with 256 colors (at 96 DPI)
- I/O ports: USB port for data synchronization with field devices
- Internet access: Internet access is required for the Internet Download command when running the program

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