

Software Solutions

BUSINESS CENTER – HCE™ Powered by Trimble

Business Center - Heavy Construction Edition (HCE) from Trimble is the only office software you need to manage, analyze and process site and highway construction data.

Summary

Powerful tools help manage the exchange of data between the office and the field. You can easily combine and manage data from multiple sources to generate accurate, integrated results, and then share these results with the entire project team. Business Center - HCE can help you make better decisions, decrease costly mistakes, and increase productivity in the office and on the construction job site.

The Core Product for field data management, data transfer, and many fundamental applications, is available as a free download from <http://www.trimble.com/powerofsoftware>. Add-on modules extend the functionality of the Core Product and are available for purchase from your local dealer. A free 30-day trial of all the add-on modules is available so you can experience the full functionality of Business Center - HCE.



Description

The easy-to-use, graphical Business Center – HCE is ideal for the preparation and management of data for heavy and highway construction projects.

- Field data management with Trimble grade control, paving control and site positioning field systems
- Data preparation for machine control and site positioning systems
- Quantities takeoff and cost estimating
- Construction planning using site and corridor mass haul
- 3D visualization using multiple surfaces, corridors, textures and images
- Adobe® PDF importing and onscreen digitization
- Integration with Connected Community facilitates file sharing and data visualization

Business Center – HCE is available in the following add-on modules.

- Surface Tools
- Image Manager
- Data Prep
- Takeoff Basic
- Takeoff Intermediate
- Takeoff
- Road Takeoff Tools
- Site Mass Haul
- Corridor Mass Haul
- Corridor Tunneling
- Total Station Processing
- Total Station and GNSS Processing

Your Construction Technology Provider



Software Solutions

Functionality

- Seamlessly manage data between the office, the Trimble® SCS900 Site Controller Software and Trimble machine control technology.
- Select, create, and edit graphical and numerical data, as well as generate reports and plots, or publish information.
- Ensure data is clean, up-to-date and delivered in the right format to get the job done.
- Prepare detailed and accurate site earthworks and construction material quantity takeoffs quickly.
- Build road models from digital CAD cross-sections.
- Rapidly extract cross-section information from Adobe® PDF vector files and quickly see locations and quantities of materials for road takeoff.

Features and Benefits

FEATURE	BENEFIT
Core Product <ul style="list-style-type: none">• Supports most digital data imports and exports• Supports Trimble SCS900 Site Controller Software and machine control technology• Create road and rail corridor models• Create and process data• See data in plan, profile, cross-section, 3D and spreadsheet views• Generate numerous reports• Manipulate point cloud data quickly and easily	More effectively manage data transfer between the office and the field.
Surface Tools module <ul style="list-style-type: none">• Automate surface edge breakline formation• Create surface boundaries - holes and islands• Create surface densification of corridors• Create alignment-based surface models• Tie sideslopes to surfaces• Create uncompacted surface models for paving• Create material texturing of surfaces• Show 3D drive throughs for alignments and sites• Create superelevations and subgrades for corridor models• Merge surface models• Drape lines over surfaces• Create symbols to scale on points imported from SCS900	Save time and create more accurate surface models.
Image Manager module <ul style="list-style-type: none">• Import raster files or Adobe® PDF vector files and layers	Save time, reduce rework and increase accuracy.

Software Solutions

FEATURE	BENEFIT
<ul style="list-style-type: none"> • Georeference or place image files using scale and rotation • Rapidly extract line work data from Adobe PDF vector files • Provide a background for heads up digitizing of plans • Drape image over surface for checking digitization • Publish to Google Earth™ and Connected Community 	
<p>Data Prep module</p> <ul style="list-style-type: none"> • Clean up imported CAD data • Use CAD tools to trim, extend, clip and offset lines • Elevate contours, pads, lines and points with high productivity elevation assignment tools • Create an earthworks model for grading • Use advanced surface modeling and editing tools for site projects 	<p>Ensure data is clean and up-to-date to reduce errors and save money.</p>
<p>Takeoff Basic module</p> <ul style="list-style-type: none"> • Generate simple area, length and count reports from imported CAD files 	<p>Provides a lower cost and simplified approach for basic takeoff needs.</p>
<p>Takeoff Intermediate module</p> <ul style="list-style-type: none"> • Generate simple reports incorporating area, length, count and subgrade adjustment quantities from imported CAD files • Use finished grades and subgrades for concrete and asphalt 	<p>A more advanced toolkit to execute takeoffs accounting for subgrade materials for users who need more functionality than Takeoff Basic.</p>
<p>Takeoff module</p> <ul style="list-style-type: none"> • Create a materials and site improvements library • Perform heads up digitizing from raster images or digitize from paper plans • View multiple images with edge matching tools • Assign site improvements, topsoil stripping and replacement areas • Create subsurface strata definitions and enter drillhole data for subsurface earthen material strata models • Account for overexcavation • Create of Areas of Interest • Rapidly map imported CAD or vector Adobe PDF data to your standardized layer naming system • Balance site earthworks • Create takeoff reports that include all material volumes • Quickly verify that area-based site improvements are assigned correctly 	<p>Create accurate bids of both construction and earthworks materials in less time with more detailed accounting and reporting.</p>
<p>Road Takeoff Tools module</p> <ul style="list-style-type: none"> • Digitize cross-sections from a raster image or an Adobe PDF vector file • Convert cross-sections into a 3D model automatically • Store cross-section objects in association with an alignment object • Map original ground, finished design and multiple material layers (subgrades) to stored cross-sections distinguished by layer • Easily extract required surface from complex CAD cross-sections • Generate average end area earthwork reports 	<p>Create more accurate road project bids in less time.</p>

Software Solutions

FEATURE	BENEFIT
Site Mass Haul module <ul style="list-style-type: none"> • Define haul zones, haul roads and associated hauling costs • Compute borrow and waste requirements • Assign haul and material costs for earthworks bidding • Compute mass haul for the site 	Optimize site earthworks to reduce cost.
Corridor Mass Haul module <ul style="list-style-type: none"> • Perform comprehensive mass haul analysis • Find the best borrow and waste sites to use for the lowest cost • See graphical representations and geographic location of borrow pits, waste sites and haul roads • Place barriers to mass haul along the alignment and optimize to haul around barriers • Assign import or export locations with cost analysis and volumes • Define multiple haul ranges and balance haul at stations • Create mass haul diagrams with multiple charts to see mass haul and instantaneous cuts and fills in relation to the design profile 	Optimize corridor earthworks to reduce cost.
Corridor Tunneling module <ul style="list-style-type: none"> • Enter multiple tunnels on a single alignment with multiple layers for each tunnel • Expand tunnel design for drilling and blasting • Build a tunnel model and export to SCS900 • Create a tunnel surface model from point cloud data 	Accurately model tunnels using sophisticated tools and then send up-to-date designs to the field wirelessly.
Total Station and GNSS Processing modules <ul style="list-style-type: none"> • Full management of digital level, total station and GNSS / GPS data • Calculate least squares network adjustments • Supports geodetic transformations • Compute integrated optical, GNSS and digital level networks 	Accurately create a 3D control network for a road or site project.

Special Offers

- Download the Core Product for free at <http://www.trimble.com/powerofsoftware>
- Try all the Business Center – HCE add-on modules free for 30 days

Technical Information

System recommendations

- Operating systems - Microsoft® Windows® XP (32-bit with Service Pack 3; 64-bit with SP2), Windows Vista (with SP1) and Windows 7
- Processor - Dual-Core 1.80 GHz
- RAM - 2 GB or greater
- Hard disc space - 5 GB

Software Solutions

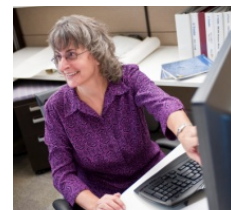
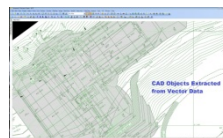
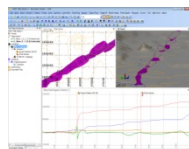
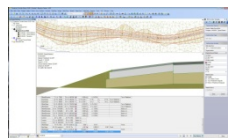
- Graphics card - Mid-range, discrete graphics card with minimum 256 MB and support for DirectX® 9.0 (avoid integrated graphics if possible)
- Screen resolution - 1024 x 768 or higher resolution with 256 colors This assumes that your DPI setting is Normal (96 DPI) and that your font size is also set to Normal.
- I/O ports - USB 2.0 port for synchronizing data on a controller
- Other - Internet access is required for licensing, the Check for Updates command, and the Internet Download command.
- Windows Installer 3.1 and Windows XP SP2 for .NET 3.5.
- DVD-ROM drive to install the program if access to the downloadable installation on the Internet is not available.

Note: The program runs as a 32-bit program, even if the operating system is 64-bit.

Supported languages

- English (US and UK), French, German, Spanish, Italian, Swedish, Chinese (simplified), Portuguese, Japanese, Dutch and Russian.

Graphics



For More Information

Learn how contractors around the world are leveraging Trimble construction technology at:

www.Trimble-Productivity.com

The experienced construction professionals at your local SITECH® Technology Dealership can advise you on the appropriate solutions for your projects. Visit your local SITECH dealer today!

www.SITECH-locator.com

Your Construction Technology Provider

