

TBC Resources

Updated July 2025



How to use this document

The TBC Resources document has been sorted by platform and topic.

On the platform and topic index pages, click on the underlined items to learn more.

[Click here to navigate by platform.](#)

[Click here to navigate by topic.](#)



Trimble Business Center

Complete Survey +
Construction Office
Software Enabling Field to
Finish Workflows with
Confidence in Every Click

The logo graphic for Trimble Business Center, featuring a stylized white cube icon with a blue and orange outline, is positioned to the left of the text.

Trimble Business Center

TBC Resources - Sorted By Platform





TBC Resources - Sorted By Platform Index

Click on the underlined item to navigate to the slide and learn more.

- [Home Page](#)
- [Tutorials](#)
- [YouTube Channel](#)
- [Power Hours](#)
- [Tips](#)
- [Community](#)
- [Community - Macros](#)
- [eLearning](#)
- [Sample Data](#)
- [News + Check for Updates](#)
- [Geospatial Help Portal](#)

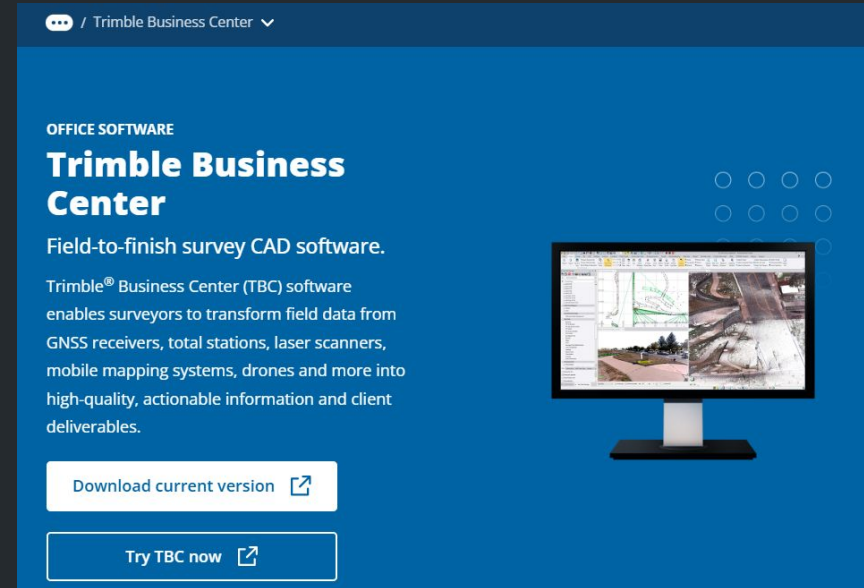
To jump to Topic Index, click [here](#).



TBC Geospatial Webpage

Click [here](#) to view the TBC Geospatial Webpage.

- Focus on product information for prospective customers + educational resources for current customers
- Latest Tech Notes for v2024.10 - [English](#)
- Use for:
 - latest version download
 - what's new in the latest version
 - bulletins, white papers, + support notes
 - tutorials + links to webinars, eLearning, sample datasets
 - request TBC training
 - help for licensing + installation

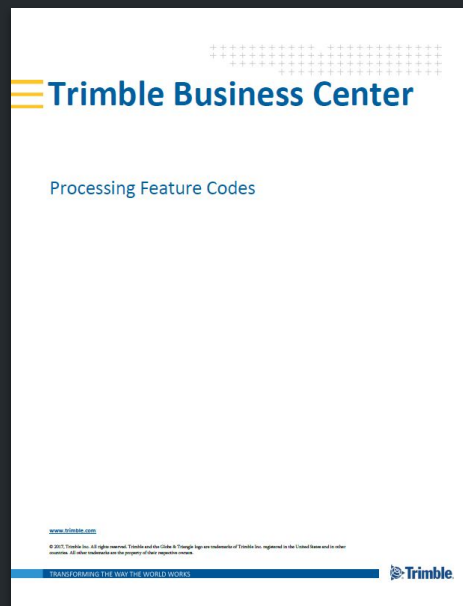




TBC Tutorials

Click [here](#) to view TBC Tutorials.

- 50+ TBC tutorials
- Tutorials include PDF instructions + sample data
- Use for:
 - learning major survey + constructions TBC workflows
 - learning new TBC workflows - tutorials are constantly being added + updated!
 - use as sample workflow + data for training sessions



Trimble Business Center Tutorials

Instructions:

Click the Download link for any of the tutorials below to download a ZIP file containing the tutorial package. When you extract the ZIP file to the location of your choice, a new tutorial folder is created containing tutorial instructions in a PDF document and, as applicable, a VCE project file, a project folder, and a data folder. Just open the PDF tutorial document and follow the instructions.

Download all tutorials

- **All tutorials** — Download a single ZIP file containing all of the available tutorials. Note that the ZIP file is quite large and, depending on your Internet connection, may take a while to download. Alternatively, download any of the individual tutorial ZIP files listed below. [Download](#)

Getting familiar with Trimble Business Center

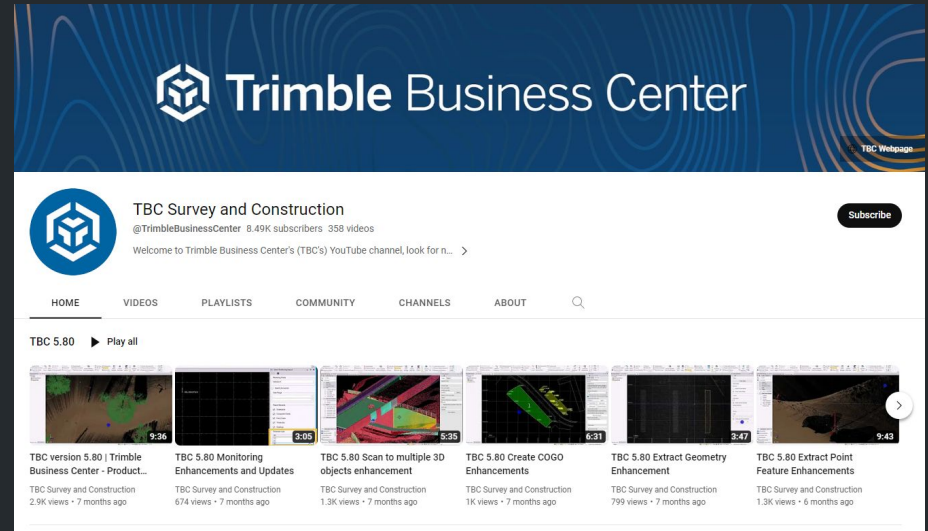
- **Setting Up a New Project** — Set up a new project, select various project settings, and save the project as a template that can be used for other new projects. [Download](#)
- **Using Spreadsheets, Selection Sets, and COGO Controls** — View spreadsheets, create a selection set, and work with COGO controls. [Download](#)



TBC YouTube Channel

Click [here](#) to view the TBC YouTube Channel.

- TBC Survey and Construction channel
- Use for:
 - learning commands or routines in TBC via short (3 - 10 minute) videos
 - explore 30+ workflow-based playlists made up of 340+ videos
 - Latest release - v2024.10 - has videos detailing new functionality





TBC Monthly Power Hours

Click [here](#) to view TBC Monthly Power Hours.

- Free live demo or workflow in TBC from a Trimble or industry professional with a Q+A session
- New sessions typically every last Wednesday of the month. Visit this [page](#) to sign up for upcoming webinars
- All Sessions are archived + available on-demand for free on the [Geospatial Webinar page](#) or via the [TBC Community's Power Hour Vault](#)
- Use for:
 - learning a complete TBC workflows
 - practical information on what others are doing in TBC
 - connecting with industry or Trimble leaders

The screenshot displays the Trimble Business Center (TBC) website interface. At the top, there are three filter tabs: 'Solution' (set to 'All'), 'Product' (set to 'Trimble Business Center', highlighted with a red box), and 'Language' (set to 'All'). Below the filters is a grid of six video thumbnails. The first row contains three thumbnails: 'Update on Trimble Mobile Mapping Office Software Portfolio' (labeled 'Upcoming Webinar'), 'TBC Power Hour: Introduction to Trimble Business Center...' (labeled 'Upcoming Webinar'), and 'TBC Power Hour: Creating a Corridor/Surface from...' (labeled 'On-Demand Webinar'). The second row contains three thumbnails: 'TBC Power Hour: Synchronizing Trimble Access and Trimble...' (labeled 'On-Demand Webinar'), 'TBC Power Hour: Ask the TBC Team - Holiday Edition' (labeled 'On-Demand Webinar'), and 'TBC Power Hour: Aerial Photogrammetry Solution for Surveyors' (labeled 'On-Demand Webinar'). Each thumbnail includes a play button icon, a title, and a duration or date. The 'Trimble Geospatial' logo is visible in the top left corner of the first thumbnail.



TBC Tips

Click [here](#) to view TBC Tips.

- Short tip, trick, or command demonstration + documentation
- Part of the TBC Community page
- Organized by category + date, easy to find
- 200+ Tips + counting!
- Use for:
 - exposure to unique features + helpful commands that could be missed or unknown by beginners
 - efficiency gains within TBC
 - great way to learn tools quickly

Field Data

[#4 - Spreadsheets - February 2017](#)

[#5 - Process Panorama - March 2017](#)

[#18 - Visualizing Survey Data in Google Earth - July 2017](#)

[#19 - Investigating Data with Point Derivation Reports - August 2017](#)

[#27 - "Sunny" Level Editing - February 2018](#)

[#33 - Easy *.job to *.xml File Conversion - March 2018](#)

[#43 - New GNSS Planning Online Tool - June 2018](#)

[#62 - Observation Vector Arrows - December 2018](#)

[#82 - Lock Leveled Scan Data for Registration and Geo referencing Purposes - August 2019](#)

[#101 - Understanding the Session Editor - March 2020](#)

[#115 - The Job Converter - July 2020](#)

Adjustment & COGO

[#1 - Coordinate Controls - January 2017](#)

[#9 - Bearing/Azimuth Angle Controls - May 2017](#)

[#22 - Transform Survey Points - January 2018](#)

[#29 - Sources of Default Standard Errors - February 2018](#)

[#34 - The Power of the Comp Engine and Point Derivation Report - March 2018](#)

[#47 - Network Adjustment North/East Components - June 2018](#)

[#58 - Average Points vs Merge Points Command - September 2018](#)

[#65 - OPUS Alternatives—Post Process Static Data from TBC - January 2019](#)

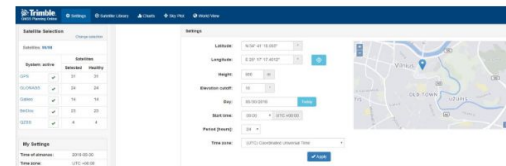
Tip of the Week #43 - New GNSS Planning Online Tool

Blog Post created by Joe Blecha on May 30, 2018

Like • 5 Comment • 5

Believe it or not, Trimble is not just a provider of world-class field-to-finish survey CAD office software, we make industry-leading GNSS units too, among others! And, we help the broad geospatial community by publishing a new HTML, JavaScript-based GNSS Planning Online tool. Check it out at: <http://www.gnssplanningonline.com/>

Set your position graphically or with Lat/Longs, enter height, elevation cutoff mask, day and time parameters, along with a constellation toggle to set the satellites you wish to use.

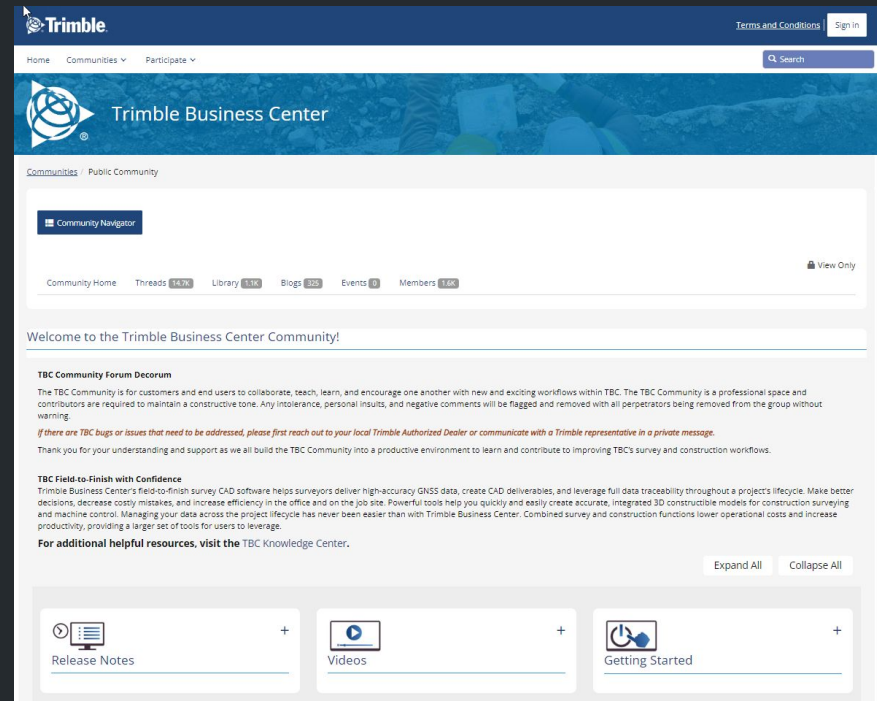




TBC Community

Click [here](#) to view the TBC Community.

- Joint geospatial + construction public blog for news, questions, + forum topics
- Monitored by TBC team, answers from TBC/Trimble + end users
- Use for:
 - Events + training session announcements
 - Connect with the TBC product team + other users
 - Ask a question or search for existing questions
 - TBC Tips + TBC Power Hour Vault pages

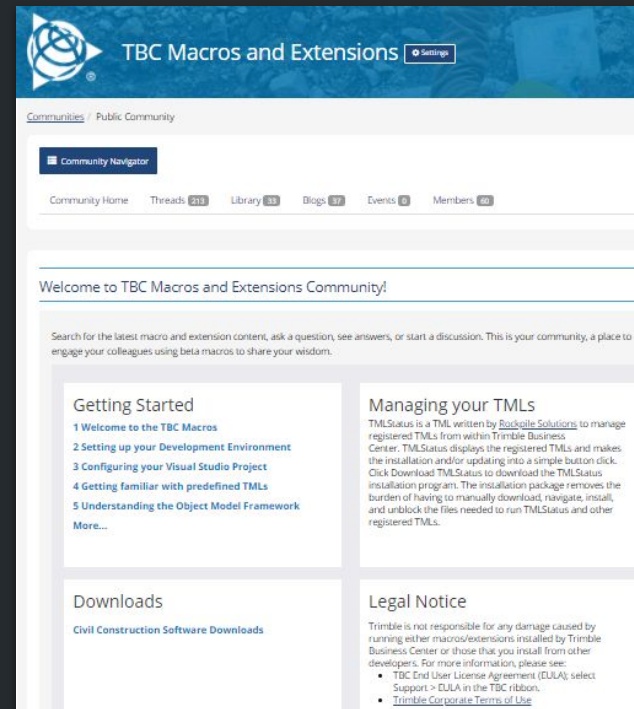




TBC Macros Community

Click [here](#) to view the TBC Macros Community.

- Community forum focused on building + using Macros
- Remember - TBC Advanced perpetual or any TBC subscription license is needed to read the Macros
- Use for:
 - learning a complete TBC workflows
 - asking questions + learning how write Macros in the Trimble Macro Language (TML)
 - post your macros for distribution + feedback
 - download sample macros from the TBC team + learn about the TBC objects + IronPython scripting

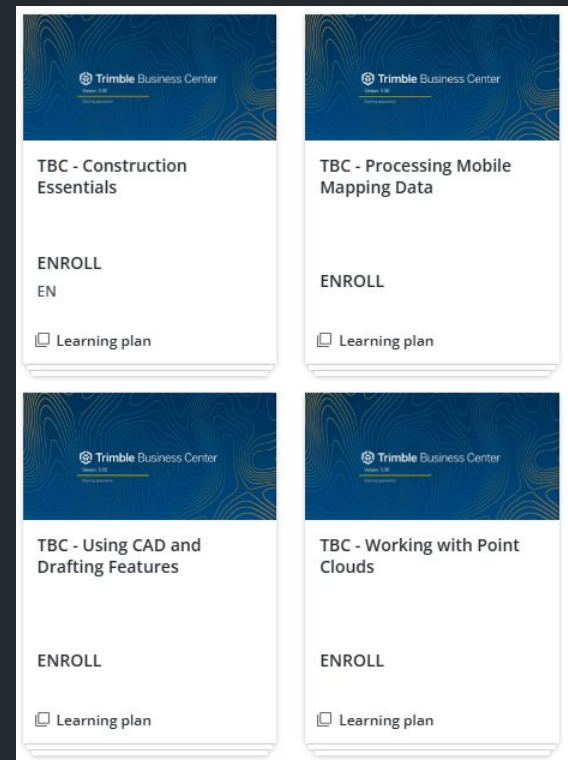




TBC eLearning

Click [here](#) to view TBC eLearning courses.

- Self-paced online workflow-based courses through [Learn.Trimble.com](https://learn.trimble.com)
 - Lesson plans - Geospatial Essentials, Construction Essentials, Field Data Processing, + Aerial Photogrammetry
 - 50+ courses available across geospatial + construction workflows
- Features a variety of content - watch, read, interact
 - Consolidates existing + new resources in one place
 - Learn by doing in the interactive TBC software simulations
 - Complete workflow without needing a TBC license
 - Get helpful instructions + tips on-demand
- Certificate awarded once completed - display + track your progress
- No cost - create a free account through Learn.Trimble + access the complete portfolio of TBC coursework





TBC Sample Datasets

Click [here](#) to view TBC Sample Datasets.

- View + download real-world datasets from a variety of workflows + applications
 - Point clouds, station-based images, GNSS, optical, digital level data + more
 - Tunneling, aerial photogrammetry, monitoring, mobile mapping, drafting, topo applications + more
- Use in your TBC to discover new tools + capabilities
 - Can contact your local Trimble Distribution Partner for a demo licensee

VIEW DATA SET

TBC Aerial Photogrammetry

Five GCPs with no high-precision GNSS

This is a DJI Phantom 4 data set from an aerial photogrammetry project in a rural area with a construction site and stockpiles. Import into Trimble Business Center to explore the TBC Aerial Photogrammetry module workflow capabilities.

Download dataset 





TBC News + Check for Updates

- Feed in the TBC Start Page with links to updates, announcements, webinars, + more
- Use for:
 - the latest up-to-the minute product news
 - download updates to TBC + supported utilities like
 - Coordinate System Manager

Note - internet connection required for TBC News + Check for Updates

The screenshot shows the TBC Business Center interface. A red box highlights the 'Check for Updates' dialog box, which lists available updates. Another red box highlights the 'News' panel on the right side of the interface, which contains information about the latest TBC version 5.21.

Updates available:

Product Name	Version	Installed Version	Size
☐ Trimble Feature Definition Manager (64bit)	2.30	67.0	380,984 KB
☐ Trimble Coordinate System Database Federatable (64bit)	89.0		531,014 KB

☐ Show all updates

Update description:
Select this to install the latest Feature Definition Manager, which fixes a number of known issues

Install status:

☒ Check for updates on startup
☐ Save update before installing

News

Bulletin: Keep working in TBC (and Trimble RealWorks), no matter where you call your office home...
April 1, 2020

If you cannot access your TBC or TRW license, contact your local Trimble Partner or SITECH dealer for a free trial license through June 30, 2020. For more information, check out this [Sales Bulletin](#).

Version update: Trimble Business Center version 5.21 now available
March 24, 2020

You can update to the new TBC version 5.21 by clicking the Check for Updates link located above this News frame.

TBC v5.21 includes the following new features and enhancements:

- Generate POSpac Position Fixes in Mobile Mapping - POSpac Position Fixes (PFIX) is a method of improving the trajectory of a mission in Applanix's POSpac MMS software with position information that is determined externally to the Applanix POS-System using surveyed ground control points (GCPs).
- Spectra SP85 GNSS receiver support - TBC fully supports the processing of data collected with the new Spectra SP85 GNSS receiver, which is optimized for tracking and processing signals from all GNSS constellations in challenging environments.
- WorkManager Field Data Workflow and VCL Design Exchange Format - This version of TBC introduces a simplified office-to-field and field-to-office data exchange between TBC, WorkManager, Siteworks, and Earthworks. The connections and data flow between office, cloud, and field systems have never been easier.

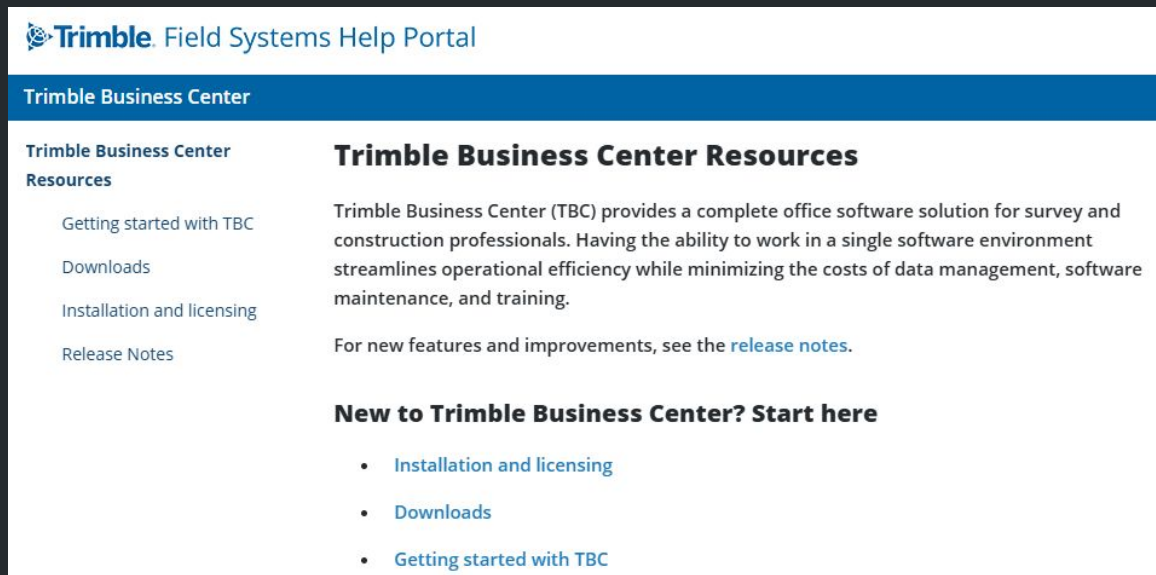
TBC v5.21 also resolves a number of known issues. See the [TBC v5.21 Release Notes](#) for complete details.



Trimble Geospatial Help Portal

Click [here](#) to view the TBC Geospatial Help Portal.

- Gateway to a variety of Trimble Geospatial products
 - TBC, Trimble Access, Trimble Sync Manager, others
- Use for:
 - starting point for all TBC or other products
 - perfect homepage or bookmark!



The screenshot displays the 'Trimble Field Systems Help Portal' with a focus on the 'Trimble Business Center' section. The page has a white header with the Trimble logo and title, followed by a blue navigation bar. The main content area is white and divided into two columns. The left column, titled 'Trimble Business Center Resources', lists links for 'Getting started with TBC', 'Downloads', 'Installation and licensing', and 'Release Notes'. The right column, titled 'Trimble Business Center Resources', contains a paragraph describing TBC as a complete office software solution, a link to 'release notes', and a section 'New to Trimble Business Center? Start here' with bullet points for 'Installation and licensing', 'Downloads', and 'Getting started with TBC'.

Trimble Field Systems Help Portal

Trimble Business Center

Trimble Business Center Resources

- Getting started with TBC
- Downloads
- Installation and licensing
- Release Notes

Trimble Business Center Resources

Trimble Business Center (TBC) provides a complete office software solution for survey and construction professionals. Having the ability to work in a single software environment streamlines operational efficiency while minimizing the costs of data management, software maintenance, and training.

For new features and improvements, see the [release notes](#).

New to Trimble Business Center? Start here

- [Installation and licensing](#)
- [Downloads](#)
- [Getting started with TBC](#)

TBC Resources - Sorted By Topic





TBC Resources - Sorted By Platform Index

Click on the underlined item to navigate to the slide and learn more.

- [GNSS + Baseline Processing](#)
- [Level Data](#)
- [Total Station - Traverse](#)
- [Network Adjustment](#)
- [Grid-Ground Relationships](#)
- [Feature Coding](#)
- [Sync Manager & SiteVision](#)
- [Point Cloud](#)
 - [General; Registration; Feature Extraction](#)
- [Surfaces + Volumes](#)
- [Corridor](#)
- [CAD + Drafting](#)
- [Aerial Photogrammetry + UASMaster](#)
- [Mobile Mapping](#)
- [GIS Workflows](#)
- [Custom Report](#)
- [Data Prep](#)
- [Tunneling](#)
- [Cadastral + COGO](#)
- [Monitoring](#)
- [Construction](#)
- [Mining](#)
- [General + Platform](#)
- [Subscription Licensing](#)

To jump to Platform Index, click [platform](#).



GNSS Data - RTK + Baselines

Explore each section by clicking on the hyperlinks below.

- **Tutorials:**

- [Importing GNSS Data](#)
- [Processing GNSS Baselines](#)

- **Power Hours:**

- [2015.10 - How to Integrate Total Station, Level, + GNSS Data](#)
- [2016.03 - Integrating RTK, Total Station, Level, + User-entered Data](#)
- [2016.09 - Baseline Processing Workflows](#)
- [2017.06 - Field to Finish with Confidence](#)
- [2020.04 Static GNSS and Baseline Processing](#)
- [2020.03 - Find and Correct Common Field Data Errors](#)
- [2021.01 - Untethered Surveying with CenterPoint RTX and TA + TBC](#)
- [2022.02 - Identifying and Resolving Common Field Blunders in TBC](#)

- **YouTube Videos:**

- [GNSS Playlist](#)
- [Enhanced Baseline Processing with RTX Corrections](#)

- **Tips:**

- [RTX-PP](#)
- [GNSS Planning Tool](#)
- [Import .zip](#)
- [Understanding the session editor](#)
- [Utilizing the Import Pane](#)
- [An Alternative to OPUS in TBC](#)
- [New GNSS Planning Online Tool](#)
- [Enhanced Baseline Processing with RTX Corrections](#)
- [Edit Multiple Antenna Heights](#)

- **Documentation:**

- [New GNSS Baseline Processor White Paper](#)
- [New Baseline Engine Product Bulletin](#)
- [CenterPoint RTX Corrections](#)
 - [White Paper](#) + [Product Bulletin](#)



Level Data

Explore each section by clicking on the hyperlinks below.

- **Tutorials:**

- [Importing Digital Level Data](#)

- **Power Hours:**

- [2015.10 - How to Integrate Total Station, Level, + GNSS Data](#)
- [2016.03 - Integrating RTK, Total Station, Level, + User-entered Data](#)
- [2020.09 - Utilizing TBC Level Editor - Features, Functions, Workflows](#)

- **YouTube Videos:**

- [Trimble DiNi Level Import + Process](#)
- [Import Digital Level Data](#)
- [Import Custom CSV Level Data to TBC](#)
- [Leica GSI Level Data Import](#)
- [Keying in Level Data](#)

- **Tips:**

- ["Sunny" Level Editing](#)



Total Station Data + Traverse Adjustment

Explore each section by clicking on the hyperlinks below.

- **Tutorials:**

- [Importing Total Station Data](#)
- [Adjusting Traverses](#)

- **Power Hours:**

- [2015.10 - How to Integrate Total Station, Level, + GNSS Data](#)
- [2016.03 - Integrating RTK, Total Station, Level, + User-entered Data](#)
- [2017.08 - Traverse Adjustment vs. Network Adjustment](#)
- [2020.03 - Find and Correct Common Field Data Errors](#)
- [2020.04 - TBC Recap: Working with Total Station Data](#)
- [2022.02 - Traverse Adjustments and Optical Workflows in TBC](#)

- **YouTube Videos:**

- [Total Station Editor](#)
- [Changing Setup Type in TBC](#)
- [Create + Configure Optical Spreadsheet](#)

- **Tips:**

- [Vector Arrow](#)



Network Adjustment

Explore each section by clicking on the hyperlinks below.

- **Tutorials:**

- [Adjusting the Network](#)

- **Power Hours:**

- [2016.05 - Network Adjustment Workflow and Best Practice](#)
- [2020.05 - TBC Recap: Network Adjustment Workflow and Best Practice](#)
- [2017.08 - Traverse Adjustment vs. Network Adjustment](#)
- [2019.05 - Relative Positional Precisions](#)
- [2020.10 - Combined Network Adjustments with Multi-Sensor Data](#)
- [2022.03 - Network Adjustment Workflows in TBC](#)

- **YouTube Videos:**

- [Network Adjustments](#)
- [Enhanced Baseline Processing with RTX Corrections](#)

- **Tips:**

- [Default Standard Errors](#)
- [North/East Components](#)
- [Investigating Data with Point Derivation Reports](#)
- [Comp Engine and the Point Derivation Report](#)
- [Sources of Default Standard Errors](#)



Grid-Ground Relationships

Explore each section by clicking on the hyperlinks below.

- **Tutorials:**

- [Calibrating a Site](#)

- **Power Hours:**

- [2017.06 - Field to Finish with Confidence](#)
- [2017.07 - Grid + Ground Coordinates](#)
- [2017.11 - Site Calibrations + Local Site Settings](#)
- [2020.03 - Find and Correct Common Field Data Errors](#)
- [2020.04 - NGS 2022 Spatial Reference Framework Modernization](#)
- [2020.07 - Point Cloud Scale Factors](#)

- **YouTube Videos:**

- [Snake Grid Projections](#)
- [Ground Scale Factor + Ground Distances](#)

- **Tips:**

- [Visualizing Survey Data in Google Earth](#)

- **Documentation**

- [Scale Factors in Scanning Workflows in TBC](#)



Feature Coding

Explore each section by clicking on the hyperlinks below.

- **Tutorials:**

- [Working with Feature Definitions](#)
- [Processing Feature Codes](#)

- **Power Hours:**

- [2015.09 - Survey Feature Coding + Attribution](#)
- [2017.06 - Field to Finish with Confidence](#)
- [2018.10 - Autodesk Interoperability + Feature Coding](#)
- [2020.06 - Utilize CAD Command Line to Maximize Productivity](#)

- **YouTube Videos:**

- [Feature Coding Playlist](#)
- [CAD Command Line](#)
- [Measure Codes in the Office](#)

- **Tips:**

- [Locking Manual Edits to Feature Coded Geometry](#)
- [TBC Point Symbols in AutoCAD](#)
- [Export Feature Attributes Command](#)



Sync Manager, SiteVision, Clarity

Explore each section by clicking on the hyperlinks below.

- **Tutorials:**

- [Exporting Data for Visualization in Trimble SiteVision](#)
- [Sharing 3D Data Using Trimble Clarity](#)

- **Power Hours:**

- [2018.09 - Office to Field Workflows using Trimble Sync Manager](#)
- [2019.11 - Visualizing Point Clouds Online with Trimble Clarity](#)
- [2020.02 - Augmented Reality Workflows with SiteVision](#)
- [2023.01 - Synchronizing Trimble Access and Trimble Business Center](#)
- [2023.06 - SiteVision & Trimble Business Center for Seamless Connectivity from Office to Field](#)

- **YouTube Videos:**

- [Data Synchronization in TBC - Trimble Sync Manager](#)
- [Trimble Sync Manager in Two Minutes](#)
- [Trimble Sync Manager Introduction Webinar](#)
- [Publish Geospatial Data from TBC to Clarity](#)
- [Trimble Clarity Playlist](#)

- **Documentation:**

- [Trimble Sync Manager website](#)
- [Trimble SiteVision website](#)
- [Trimble Clarity website](#)
- [Publish to Clarity Troubleshooting Bulletin](#)

- **Tips:**

- [Exporting to SiteVision Straight from TBC](#)



Point Cloud - General

Explore each section by clicking on the hyperlinks below.

- **Power Hours:**

- [2016.10 - Topographic Map Creation Using Trimble SX10](#)
- [2016.11 - Trimble SX10 Roading + Corridor Workflows](#)
- [2018.01 - Working with Point Clouds in TBC](#)
- [2019.01 - Using SX10 + Sonarmite Data Together in TBC](#)
- [2019.04 - Scanning Workflows for Street Topo + Structural Facades](#)
- [2019.10 - Introducing the X7 Scanning Solution with TBC](#)
- [2019.11 - Visualizing Point Clouds Online with Trimble Clarity](#)
- [2021.03 - Complete Field to Finish Workflow in TBC: Session 1](#)
- [2021.04 - Complete Field to Finish Workflow in TBC: Session 2](#)
- [2021.07 - Combining Multiple Source Data Sets](#)
- [2023.11 Training of Custom 3D Deep Learning Models & Advanced Point Cloud Filtering](#)
- [2022.09 From the Point Cloud to Customizable CAD Building Drawings with TBC Buildings Plug-in](#)

- **Tutorials:**

- [Working with Point Clouds](#)
- [Working with Planes](#)
- [Working with Trimble X7 Data](#)
- [Filtering a Point Cloud by Elevation](#)
- [Training Classification Models](#)

- **Webinars:**

- [Comparing TBC + TRW for Scanning Workflows](#)

- **YouTube Videos:**

- [Point Clouds Playlist](#)
- [TBC - TRW Comparisons for Scanning Workflows](#)
- [TBC 2024.00 Advanced Point Cloud Filtering](#)



Point Cloud - General

Explore each section by clicking on the hyperlinks below.

- **Documentation:**

- [Scale Factors in Scanning Workflows in TBC](#)
- [Comparing TBC + TRW for Scanning Workflows](#)
- [White Paper - Guide to Getting the Best Performance with Large Data Sets](#)
- [White Paper - Deep Dive into Trimble X-Drive Technology](#)
- [White Paper - Auto-Calibration with Trimble X7 Eliminates the Guesswork](#)

- **Tips:**

- [Maximize your PC's RAM for Improved Point Cloud Rendering](#)
- [Point Cloud Ambient Shading](#)
- [Making CAD objects and points using Virtual DR](#)
- [Creating Scan Stations from Total Station scans](#)

- **Tips (continued):**

- [Extract Ground or Classify Regions?](#)
- [TBC or TRW? Which software package best suits your needs?](#)
- [The Keep In / Keep Out Commands](#)
- [The Add to Region Command](#)
- [Setting a Limit Box](#)
- [Filter Station Scan Points](#)
- [Batch Import of Point Cloud Files](#)
- [Extract Classified Interior Point Cloud Regions](#)
- [Scan Inspections](#)
- [Scan Inspection Report](#)
- [Create High/Low Point Command](#)
- [Point Cloud Rendering Options](#)
- [The Measure Distance Command](#)
- [Advanced Point Cloud Filtering](#)
- [Training Custom Classification Models](#)



Point Cloud - Registration

Explore each section by clicking on the hyperlinks below.

- **Tutorials:**

- [Processing Trimble SX10 Data](#)
- [Performing a Plane-Based Registration](#)
- [Working with Trimble X7 Data](#)

- **Power Hours:**

- [2018.01 - Working with Point Clouds in TBC](#)
- [2019.04 - Scanning Workflows for Street Topo + Structural Facades](#)
- [2021.03 - Complete Field to Finish Workflow in TBC: Session 1](#)
- [2021.04 - Complete Field to Finish Workflow in TBC: Session 2](#)
- [2021.07 - Combining Multiple Source Data Sets](#)

- **Tips:**

- [Lock leveled scan data for registration and georeferencing purposes](#)
- [Maximize your PC's RAM for Improved Point Cloud Rendering](#)
- [Scan registration QA using cutting plane view](#)
- [Using 'measure point' tool to identify scans](#)
- [More efficiency with scan registration](#)
- [Creating Scan Stations from Total Station scans](#)

- **Documentation:**

- [Product Bulletin - Working with Point Clouds](#)

- **YouTube Videos:**

- [Point Clouds Playlist](#)



Point Cloud - Feature Extraction

Explore each section by clicking on the hyperlinks below.

- **Tutorials:**

- [Extracting Point Features](#)
- [Extract Line Features](#)
- [Working with Linestrings](#)
- [Extracting Curb and Gutter Line Features](#)
- [Extracting Lane Line Features](#)
- [Extracting Stockpile Features](#)
- [Extracting Geometry](#)

- **YouTube Videos:**

- [Point Clouds Playlist](#)
- [Intergeo 2020: Turning Cloud Data into Survey Topo Deliverables](#)
- [TBC 5.50 Linear Feature Extraction Enhancements](#)

- **LinkedIn Live Demo:**

- [AI functionality inside TBC: Manhole Extraction](#)

- **Power Hours:**

- [2016.10 - Topographic Map Creation Using Trimble SX10](#)
- [2016.11 - Trimble SX10 Roding + Corridor Workflows](#)
- [2018.01 - Working with Point Clouds in TBC](#)
- [2019.01 - Using SX10 + Sonarmite Data Together in TBC](#)
- [2019.04 - Scanning Workflows for Street Topo + Structural Facades](#)
- [2020.11 - Virtual Surveying with Scanning Data - A Case Study of an Intersection](#)
- [2021.03 - Complete Field to Finish Workflow in TBC: Session 1](#)
- [2021.04 - Complete Field to Finish Workflow in TBC: Session 2](#)
- [2021.07 - Combining Multiple Source Data Sets](#)
- [2021.11 - Combining Aerial and Point Cloud Data for High Accuracy 2D/3D Deliverables in TBC](#)
- [2024.03 Pavement Condition Inspection](#)
- [2023.07 Deep Learning-Based Point Cloud Classification](#)
- [2023.08 Stockpile Extraction](#)
- [2024.07 Feature Extraction in TBC v2024.00](#)



Point Cloud - Feature Extraction

Explore each section by clicking on the hyperlinks below.

- **Tips:**

- [Maximize your PC's RAM for Improved Point Cloud Rendering](#)
- [Point Cloud by Boundary](#)
- [See Inside Point Clouds](#)
- [Using 'measure point' tool to identify scans](#)
- [Making CAD objects and points using Virtual DR](#)
- [Pole Batch Feature Extraction](#)
- [Measure Vertical Clearance Command](#)
- [Exporting a Feature Extraction Attribute Map](#)
- [TBC 5.50 Linear Feature Extraction Enhancements](#)
- [How to Extract Multiple Lines at the Same Time](#)
- [How to Extract Multiple Lines at the Same Time \(Cont.\)](#)
- [Solid Single Lane Lines](#)
- [Solid Double Lane Lines](#)
- [Dashed Lane Lines](#)
- [Sign Inclination](#)

- **Tips (continued):**

- [Simplified Stockpile Extraction](#)
- [Feature Extraction Tree](#)
- [Manhole Extraction](#)
- [Automatic Lane Line Extraction](#)

- **Documentation:**

- [Product Bulletin - Working with Point Clouds](#)
- [Feature extraction capabilities in Trimble Business Center v2024.00](#)
- [Technical Notes - AI-Powered Feature Extraction](#)
- [Leveraging AI for advanced feature extraction](#)



Surfaces + Volumes

Explore each section by clicking on the hyperlinks below.

- **Tutorials:**

- [Working with Point Clouds](#)
- [Creating Projected Surfaces](#)
- [Working with Surfaces](#)
- [Creating an Overexcavation Surface](#)
- [Creating a Composite Surface](#)
- [Creating and Editing Side Slopes](#)
- [Creating and Editing Vertical Designs](#)

- **Power Hours:**

- [2018.06 - Going Vertical in TBC with Projected Surfaces](#)
- [2023.05 Creating Corridor/Surface from DOT Plan Set](#)
- [2023.03 Working with Surfaces & Contours](#)

- **YouTube Videos:**

- [Surfaces Playlist](#)
- [Projected Surfaces Playlist](#)

- **Tips:**

- [Breakline Tolerances for Surfaces](#)
- ["Draping" Ortho Images on Surfaces](#)
- [Staking Cut/Fill Data](#)
- [Reproject Surface to a New Plane Definition](#)
- [Offsetting a Surface](#)
- [Vertical Exaggeration in 3D View](#)
- [Speed up Surface Volume Calculations](#)
- [Donut Surfaces \(Multiple Surface Boundaries\)](#)
- [Setting maximum edge length to trim surface edges](#)
- [Flatten Surface Command](#)
- [Create Surface Intersection Lines](#)
- [Creating Contour Lines Over a Surface](#)
- [The Surface Slicer View](#)
- [The 3D Drive View](#)



Surfaces + Volumes

Explore each section by clicking on the hyperlinks below.

- **Tips (continued):**
 - [The Points to Surface Command](#)
 - [Create a Surface Elevation Grid](#)
 - [Sample Point Cloud Region](#)
 - [Create a Surface and Surface Info Report](#)
 - [Contours Continued](#)
 - [Constraining Surface Meshes with Surface Boundaries](#)
 - [Editing Surfaces with Segment Length Override](#)
 - [Editing Surfaces to Adjust Flat Triangles](#)



Corridor

Explore each section by clicking on the hyperlinks below.

- **Tutorials:**

- [Working with Corridors](#)
- [Working with Superelevations](#)

- **Power Hours:**

- [2016.11 - SX10 Roding Workflows in Trimble Access + TBC](#)
- [2018.04 - WYDOT Presents Roding Workflows in TBC](#)
- [2019.07 - CorridorDesign Workflows in TBC](#)
- [2023.05 Creating Corridor/Surface from DOT Plan Set](#)
- [2024.09 Corridor Design From PDF Cross-section Data](#)

- **Documentation:**

- [Product Bulletin - Strings Export](#)

- **YouTube Videos:**

- [Multi-slice Cutting Plane](#)
- [v5.10 What's New for Construction Workflows](#)
- [Create a Corridor](#)
- [Create a 3D Alignment](#)
- [Road Export](#)

- **Tips:**

- [Measuring Clearances with SX10 Data](#)
- [Using the Explore Object Command](#)
- [Re-using Road Corridor Templates](#)
- [Undefined in Corridor Template Instruction](#)
- [Visualizing and Quality Control](#)
- [Save Linework Enhancement to Create Individual Linestrings](#)



CAD + Drafting

Explore each section by clicking on the hyperlinks below.

- **Tutorials:**

- [Working with Linestrings](#)
- [Creating Labels](#)
- [Working with Advanced Drafting](#)
- [Creating COGO Collections and Parcels](#)
- [Working with IFC Data](#)
- [CAD Command Line](#)
- [Extracting Geometry](#)
- [Creating SketchUp Models from Trimble Vision Images](#)

- **Power Hours:**

- [2016.06 - Advanced Drafting Workflows](#)
- [2016.10 - Topographic Map Creation Using Trimble SX10](#)
- [2017.03 - Streamlining using Templates, Styles, + Libraries](#)
- [2020.06 - Utilize CAD Command Line to Maximize Productivity](#)
- [2021.03 - Complete Field to Finish Workflow in TBC: Session 1](#)
- [2021.04 - Complete Field to Finish Workflow in TBC: Session 2](#)

- **YouTube Videos:**

- [Advanced Drafting Overview](#)
- [Plotting Plan Sheets with Fixed Scale](#)
- [Create + Edit a Plotbox](#)

- **Documentation:**

- [Drafting Webinar Materials](#)

- **Tips:**

- [Layer Manager](#)
- [Project Cleanup](#)
- [Using View Filters](#)
- [Using the Best-Fit Line Command to Draft Catenary Lines](#)
- [Using Selection Sets for Time Saving](#)
- [Label Style Previews](#)
- [Hiding the Dynaview Frame](#)



CAD + Drafting

Explore each section by clicking on the hyperlinks below.

- **Tips (continued):**

- [Customize Drafting Templates](#)
- [TBC Point Symbols in AutoCAD](#)
- [Creating Arcs with Polylines](#)
- [Ortho Snap Modes](#)
- [Object Snaps](#)
- [Creating a Point On-Line Between Two 3D Points](#)
- [Smart Text in Plan Set Templates](#)
- [Consistent Drafted Deliverables](#)
- [Referencing to object attributes and creating smart text](#)
- [Naming Bounding Geometries using 'Name from Inside Text'](#)
- [Link a Reference File to a Project](#)
- [Create a Surface from a Reference File](#)
- [Update Reference Data in Your Project](#)
- [Understanding the horizontal and vertical components of a linestring](#)
- [Understanding '?' line elevations](#)
- [Making CAD objects and points using Virtual DR](#)
- [Create Fillets & Chamfers with the CAD Command Line](#)
- [Vector PDF to CAD](#)
- [Breaking apart objects using the explode command](#)
- [Processing Panorama](#)
- [Drape Geometry Enhancement](#)
- [Right-Click Additionsings](#)



Aerial Photogrammetry + UASMaster

Explore each section by clicking on the hyperlinks below.

● Tutorials:

- [Processing Aerial Survey Data without a Trajectory](#)
- [Processing Aerial Survey Data with a Trajectory](#)
- [Processing Aerial 3D Photogrammetry Data](#)
- [Processing Trimble UX5 HP Aerial Survey Data](#)
- [Measuring Points Using Photogrammetry](#)
- [Creating an Orthomosaic from a Facade](#)

● Power Hours:

- [2016.12 - UAS Processing using TBC/UASMaster Workflows](#)
- [2018.08 - Processing Delair UX11 Aerial Data in TBC](#)
- [2020.03 - Processing WingtraOne Drone Imagery](#)
- [2021.06 - UAS Field to Finish Workflows in TBC](#)
- [2023.02 A Simple Fly to Finish with Trimble's Photogrammetry Engine](#)
- [2022.10 Aerial Photogrammetry Solution for Surveyors](#)
- [2023.06 TBC Version 5.90 Aerial Photogrammetry](#)
- [2024.01 Introduction to Photogrammetry for Civil Contractors](#)
- [2024.08 3D Oblique Imagery & Aerial Photogrammetry in TBC 2024.00](#)

● Documentation:

- [UASMaster website](#)
- [Advanced UAS Workflow + Best Practices](#)
- [TBC Aerial Photogrammetry Concepts + Workflows](#)
- [Workflow Bulletin - Working with Aerial Point Cloud Data in TBC](#)

● YouTube Videos:

- [Aerial Photogrammetry Playlist](#)
- [Intergeo 2020: Streamline DJI Phantom Workflow](#)
- [TBC 2024.10 Create Orthomosaic from a Facade](#)

● Webinars:

- [Aerial Photogrammetry Workflow with the Phase One P5 Camera](#)



Aerial Photogrammetry + UASMaster

Explore each section by clicking on the hyperlinks below.

- **Tips:**
 - [Creating Orthorectified Image for Facade Reconstruction - Using Multiple Stations](#)
 - [Quick + Clean Facade Segmentation for Orthophotos](#)
 - [Removing parallax from station view](#)
 - [The Capture Image Command](#)
 - [Updated TBC Photogrammetry Ribbon](#)
 - [Determine the Coordinate System of an Aerial Photogrammetry Dataset](#)
 - [Point Cloud Generation from Imagery](#)
 - [Orthomosaic from Facades Command](#)
 - [Validate Drone Data with Background Maps](#)
 - [Baseline Processing Reports and the Session Editor](#)



Mobile Mapping

Explore each section by clicking on the hyperlinks below.

- **Tutorials:**

- [Inspecting Pavement Condition](#)
- [Processing Trimble MX9 Mobile Mapping Data](#)
- [Extracting Lane Line Features](#)

- **Power Hours:**

- [2019.02 - MX9 Mobile Mapping Workflows in TBC](#)
- [2020.01 - New v5.20 Mobile Mapping Features](#)
- [2021.05 - MX9 Workflows + Corridor Design](#)
- [2021.08 - Intro to the MX50 in TBC: Asset Management](#)
- [2022.05 - MX9 Processing and Data Preparation for Corridor Deliverables](#)
- [2024.02 - Introduction to the New Trimble MX90 Mobile Mapping Solution](#)
- [2024.07 - What's New in Trimble Business Center 2024.00 for Mobile Mapping](#)

- **Documentation:**

- [Product Bulletin - MX9 Best Practices v3](#)
- [Mobile Mapping Solutions Website](#)
- [Connect TBC and PostgreSQL Database for Mobile Mapping Applications](#)
- [Technical Bulletin - Best Practices for Ideal Trajectory Processing, from the Field to the Office using a Trimble MX60 and MX90 systems](#)
- [Ortho Lane for Mobile Mapping Workflows](#)
- [IRI Report in Trimble Business Center Using Mobile Mapping Data](#)



Mobile Mapping

Explore each section by clicking on the hyperlinks below.

- **YouTube Videos:**

- [Mobile Mapping Playlist](#)
- [Mobile Mapping Channel](#)

- **Mobile Mapping Webinars:**

- [Mobile Mapping Webinar Center](#)
- [What's New in Trimble Business Center 5.60: Mobile Mapping Module](#)
- [Update on Trimble Mobile Mapping Office Software Portfolio](#)
- [What's New in Trimble Business Center 2024.00 for Mobile Mapping](#)
- [Mobile Mapping Essentials: MX9 Data Processing and Deliverables in TBC](#)
- [What's new with mobile mapping office software in TBC 2024.10](#)

- **Tips:**

- [Measuring Clearances with SX10 Data](#)
- [Mobile Mapping Point Cloud Classification Trick](#)
- [Go To a Mobile Mapping Station Position](#)
- [Create an IRI Report](#)
- [Shoulder Drop Off Analysis](#)
- [Ortho Lane Command](#)
- [Batch Processing Mobile Mapping Data](#)
- [Creating a Mask for Scan Colorization](#)



GIS Workflows

Explore each section by clicking on the hyperlinks below.

- **Tutorials:**

- [Working with Feature Definitions](#)
- [Processing Feature Codes](#)
- [Integrating Survey + GIS Data](#)
- [Processing TerraSync SSF Data](#)
- [Integrating GIS Data Using an Enterprise Geodatabase](#)

- **Power Hours:**

- [2015.09 - Survey Feature Coding and Attribution](#)
- [2015.11 - How to seamlessly integrate Survey data with GIS data](#)
- [2020.08 - TBC GIS Module, where Surveying and GIS Intertwine](#)

- **Documentation**

- [Trimble Business Center GIS: Connecting Field Data to an Esri ArcGIS Feature Service](#)

- **YouTube:**

- [GIS Playlist](#)

- **Tips:**

- [Export Feature Attributes Command](#)
- [Create and Edit Feature Definitions](#)
- [Work with GIS Data Sources in TBC](#)
- [Manage GIS Connections](#)
- [Download \(Get\) a GIS Schema & Export it to a FXL File](#)
- [Upload \(Write\) Processed Features to a GIS Data Source](#)
- [Download \(Read\) Features from a GIS Data Source](#)
- [Map GIS Metadata](#)

- **Blog Posts:**

- [Level up your Trimble Business Center skills with GIS connections and databases](#)
- [TBC Does That: Integrate Survey and ArcGIS Data](#)
- [TBC Does That: Sync GIS Data with ArcGIS Geodatabase](#)
- [Unleashing the power of TBC GIS: a comprehensive overview](#)



Custom Reporting

Explore each section by clicking on the hyperlinks below.

- **Tutorials:**

- [Creating Custom Reports](#)

- **Power Hours:**

- [2017.02 - Data Traceability using Customized Reports](#)
- [2022.04 - Working with Custom Reports in TBC](#)

- **YouTube Videos:**

- [Job Report Generator](#)
- [Adobe PDF Reports](#)
- [Volumetric Reports](#)
- [Area Count Length Report](#)

- **Tips:**

- [Report Options](#)
- [Generating Predefined Reports](#)



Data Prep

Explore each section by clicking on the hyperlinks below.

- **Tutorials:**

- [Importing As-Staked Points](#)
- [Performing Data Prep](#)
- [Working with Field Data for SCS + GCS](#)

- **Power Hours:**

- [2018.11 - Three Construction Survey Workflows in TBC](#)
- [2019.06 - Site Modeling in TBC](#)
- [2020.08 - Working with the Create Vertical Design Tool in TBC](#)
- [2024.02 Intermediate Site Takeoff & Data Preparation](#)
- [2025.05 - Back to Basics - Data Prep](#)

- **YouTube Videos:**

- [Data Prep Workflows](#)
- [IFC Models Prep for Stakeout](#)

- **Tips:**

- [Auto-Advance](#)
- [Doing Math in TBC](#)
- [Image Georeferencing](#)
- [Create Linestring by Station + Offset](#)
- [Exporting to Sitevision Straight from TBC](#)
- [Specify As-Staked Point Tolerances](#)
- [Change Coordinate System](#)



Tunneling

Explore each section by clicking on the hyperlinks below.

- **Tutorials:**

- [Creating a Tunnel Design](#)
- [Working with Tunnel As-Built Points](#)
- [Performing a Tunnel Inspection](#)
- [Monitoring Tunnel Convergence](#)

- **Power Hours:**

- [Tunneling Webinar Home Page](#)
- [2018.05 - Going Underground in TBC... with Tunnels](#)
- [2020.05 - Tunneling Workflows in TBC](#)
- [2021.02 - Tunneling Surveying, Improved: Digging into the SX12, TA and TBC](#)
- [2021.09 - Tunnel Convergence Monitoring Workflows](#)
- [2022.06 - How to Streamline Tunnel Data Capture with TBC and Trimble Access](#)
- [2022.11 Tunneling - New Design & Reporting Tools in TBC and Trimble Access](#)

- **YouTube Videos:**

- [Tunneling Playlist](#)

- **Website:**

- [Trimble Tunneling Solutions](#)
- [Tunnel Construction Blog](#)



Cadastral + COGO

Explore each section by clicking on the hyperlinks below.

- **Tutorials:**

- [Using Spreadsheets, Selection Sets, + COGO Controls](#)
- [Creating COGO Collections + Parcels](#)
- [CAD Command Line](#)

- **Power Hours:**

- [2017.10 - Legal Description Writer + Map Closures](#)
- [2018.03 - COGO Routines](#)
- [2018.07 - TBC Cadastral Workflows](#)

- **YouTube Videos:**

- [Cadastral Playlist](#)

- **Tips:**

- [Coordinate Controls](#)
- [Bearing/Azimuth Angle Controls](#)
- [Transform Survey Points](#)
- [Average Points vs Merge Points Command](#)
- [Use the Single Proportioning Command to Re-establish a Corner](#)



Monitoring

Explore each section by clicking on the hyperlinks below.

- **Power Hours:**

- [Monitoring Webinar Home Page](#)
- [2020.11 - Manual Monitoring with TBC](#)
- [2022.08 Determine the Best Field and Office Tools for Your Campaign Monitoring Toolkit](#)
- [2022.12 Introduction to the T4D Rail Module](#)
- [2023.01 Easily Connect to Webcams & Sensor Data with the Settop M1](#)
- [2023.03 Monitoring Principles and Best Practices Series \(Part 1—Total Stations\)](#)
- [2023.04 Monitoring Principles and Best Practices Series \(Part 2—GNSS\)](#)
- [2023.05 Monitoring Principles and Best Practices Series \(Part 3—Geotechnical Sensors\)](#)
- [2024.01 What You Need To Know Before Your Next Rail Monitoring Project](#)
- [2021.02 TBC and TA Monitoring: Automated Field Data Collection and Displacement Reporting](#)

- **Tutorials:**

- [Monitoring Point Movement](#)
- [Monitoring Tunnel Convergence](#)

- **YouTube Videos:**

- [Monitoring Playlist](#)

- **Website:**

- [Trimble Monitoring Solutions](#)



Construction

Explore each section by clicking on the hyperlinks below.

- **Tutorials:**

- [Working with Field Data for SCS and GCS](#)
- [Exporting Data for Visualization in Trimble SiteVision](#)
- [Calculating Takeoff Volumes for a Simple Site](#)
- [Analyzing Mass Haul for a Simple Site](#)
- [Extracting Stockpile Features](#)
- [Calculating Site Takeoff Volumes from a PDF](#)
- [Calculating Site Takeoff Volumes from a Vector PDF](#)

- **Power Hours:**

- [2019.06 - Site Modeling](#)
- [2019.09 - IFC Workflows between TBC + Trimble Access](#)
- [2019.12 - Vectorized PDF - Importing PDF Based Section Conversion](#)
- [2020.02 - Augmented Reality Workflows with SiteVision](#)
- [2020.02 - WorksManager Integration in TBC](#)
- [2020.08 - Working with the Create Vertical Design Tool in TBC](#)
- [2020.09 - Using TBC and WorksManager/WorksOS to create the Landfill Solution](#)
- [2020.10 - Using Machine Data to Create a Subsurface As-Built](#)
- [2022.09 - Constructible Road Corridors in TBC and Trimble Access](#)
- [2023.08 Introduction to Site Take-Off and Data Preparation for Civil Contractors](#)
- [2025.05 - Back to Basics - Takeoff](#)



Mining

Explore each section by clicking on the hyperlinks below.

- **Tutorials:**

- [Extracting Breaklines and Running a Mining Slope Conformance Report](#)

- **Power Hours:**

- [2021.09 - Automated Movement Detection for Mining Applications](#)

- **Webinars:**

- [Trimble Mine Surveying ... Unearth Your Potential](#)
- [Underground Mine Surveying Productivity Workflow Optimization Using Trimble](#)
- [Harnessing the power of Trimble Business Center for mining](#)

- **YouTube Videos:**

- [Trimble Mining Playlist](#)

- **Documentation:**

- [Improve Mine Survey & Monitoring Tasks with Trimble Access Mines v2021.20](#)
- [What's New with Trimble Mining Solutions?](#)
- [Unlocking new depths: software enhancements for underground tunnel & mining surveyors](#)
- [How Trimble mining solutions connect and elevate workflows for mining professionals](#)

- **Website:**

- [Trimble Mining](#)

- **Tips:**

- [Vertical Shaft As-Built Verification](#)
- [What's New in the TBC Mining Subscription](#)
- [Automatic Mining Breakline Extraction](#)
- [Slope Conformance Report](#)



TBC General + Platform

Explore each section by clicking on the hyperlinks below.

● Power Hours:

- [2020.12 - What's New in TBC v5.40](#)
- [2021.03 - Complete Field to Finish Workflow in TBC: Session 1](#)
- [2021.11 - Back to the Basics - Customizing TBC to Simplify Field Finish Workflows](#)
- [2022.06 - What's New in TBC v5.70 & Trimble Access v2022.00](#)
- [2022.10 What's New in TBC v5.80](#)
- [2022.12 Ask the TBC Team - Holiday Edition 2022](#)
- [2023.10 What's New in Version 2023.1](#)
- [2023.12 Holiday Edition - December 2023](#)
- [2024.05 Connected Workflow](#)
- [2023.05 Introduction to Trimble Business Center v5.90](#)
- [2021.09 - TBC and ArcPro: Sync Your Survey Data to an Enterprise Geodatabase](#)
- [2024.10 - What's New in TBC v2024.10](#)
- [2024.11 - A Workflow for Every Surveyor](#)
- [2024.12 - Ask the TBC team holiday edition 2024](#)
- [2025.01 - TBC and the Trimble Reality Capture Platform System](#)
- [2025.02 - Back to Basics](#)
- [2025.04 - Back to Basics - Part 2](#)

● YouTube Videos:

- [Introduction to eLearning on Learn.Trimble](#)
- [TBC 2024.10 Product Overview](#)

● Tutorials:

- [Setting Up a New Project](#)
- [Using Spreadsheets, Selection Sets, and COGO Controls](#)

● Tips:

- [Your New Home Page...](#)
- [Version Upgrade Eligibility](#)
- [Available License Servers](#)
- [Graphic Selection Methods](#)
- [Quick Zoom Extents](#)
- [Save Reminders](#)
- [Context Menu Customization](#)



TBC General + Platform

Explore each section by clicking on the hyperlinks below.

- **Tips (continued):**

- [Freehand \(Lasso\) Selection](#)
- [View Filter Manager Shortcuts](#)
- [Background Map to Verify Data](#)
- [Dock the Properties](#)
- [Guided Workflows Directly from TBC Help](#)
- [Drag and Drop Data Import](#)
- [Selection Box in Commands](#)
- [Make Objects Unselectable](#)
- [Customizing the Ribbon Tabs](#)
- [Even More Granular Visibility with Selection Sets](#)
- [How the Geoid affects Height and Elevation computations](#)
- [Adding to layer using plan view](#)
- [Creating different viewpoints using the 'Defined Views' command](#)
- [Easy navigation to commands using the 'command pane'](#)
- [Presentation of your data using TBC](#)
- [Modify your selections using Advanced Select](#)
- [Help getting started with major workflows instructions](#)
- [Finding points in the graphical views](#)
- [Expanding functionality using TML's](#)
- [Understanding coordinate quality symbols](#)
- [Keeping track of your work using the 'History Log'](#)
- [Changing the display settings of image files](#)
- [Understanding the different icons in the Project Explorer](#)
- [Utilizing the Import Pane](#)
- [Right Clicking in the Command Pane](#)
- [Release Notes Shortcut](#)
- [The Edit Shortcut](#)
- [Unzipping & Zipping a VCE File](#)
- [Create a 3D PDF](#)
- [Disabling a Laptop Integrated Graphics Card](#)
- [TBC eLearning](#)
- [Importing a Newer VCE File into an Older TBC Version](#)
- [TBC Sample Datasets](#)



TBC General + Platform

Explore each section by clicking on the hyperlinks below.

- **Tips (continued):**

- [Spreadsheets](#)
- [Easy *.job to *.jxl File Conversion](#)
- [The Job Converter](#)
- [A Surveyor's Glossary](#)
- [Time-Dependent Transformation Enhancement in TBC v5.40](#)
- [TBC Subscription Licensing](#)
- [The Add Legend Command](#)
- [Work with GIS Data Sources in TBC](#)
- [Manage GIS Connections](#)
- [Download \(Get\) a GIS Schema & Export it to a FXL File](#)
- [How to Change the Quality of Multiple Points at Once](#)
- [Upload \(Write\) Processed Features to a GIS Data Source](#)
- [Rotate Your Data in Plan View](#)
- [Display Alternate Distance Unit](#)
- [Navigating the View: Mouse Controls in TBC](#)
- [Display Alternate Units for Velocity and Area](#)
- [Assign Media File to a Point](#)
- [Change Project Settings \(Transparency of Imported PDFs and Point Color\)](#)
- [New User Profile Capabilities](#)
- [View Spreadsheets](#)
- [Top Tips to Get Started in TBC](#)
- [Sort Imported Files by Filename or Import Order](#)
- [Select Similar Objects](#)
- [Review Objects by Layer Using the View Filter Manager](#)
- [Run Previous Commands](#)
- [Set the Pick Aperture](#)
- [Copying Spreadsheets from TBC](#)
- [Coordinate System Manager Help](#)
- [Defining & Customizing Command Shortcuts](#)
- [Updating Trimble Business Center](#)
- [Visual & Auditory Learning & Support \[YouTube & Power Hours\]](#)
- [User Profile Manager](#)



TBC General + Platform

Explore each section by clicking on the hyperlinks below.

- **Tips (continued):**

- [TBC Filter Manager](#)
- [Repeating Previously Executed Commands](#)
- [Customizing Displacement Vectors](#)
- [An Introduction to Macros](#)
- [Trimble Business Center v2024.10 Release](#)
- [Keyboard Shortcuts](#)
- [Background Maps](#)
- [Terminology and Symbols](#)
- [File Types](#)
- [Customized Keyboard Shortcuts, Ribbons, + the Quick Access Toolbar](#)
- [Tricks and Right-Clicks](#)
- [Tips and Zips \(Importing a .zip file\)](#)
- [TBC Help is Closer than You Think](#)
- [Where are all the TBC Report Settings at?](#)
- [Tagging Imported Files to Group Relevant Files](#)

- **Website:**

- [Geodetic Library Blog](#)

- **Documentation:**

- [TBC 2024.10 Release Notes](#)
- [Introducing TBC v2024.10: efficiency and integration across diverse workflows](#)
- [TBC 2024.10 Read Me](#)
- [Trimble Office Cleanup Utility](#)



Subscription Licensing

Explore each section by clicking on the hyperlinks below.

- **YouTube Videos:**

- [Subscription License Workflow - Complete Workflow](#)
- [Subscription License Workflow - Part 1 - Trimble License Manager](#)
- [Subscription License Workflow - Part 2 - TBC](#)

- **Documentation:**

- [Perpetual to Subscription License Mapping](#)
- [Subscription Workflow Matrix](#)
- [Subscription Command Matrix](#)