# Workflow Matrix

# **Trimble Business Center v5.90 Software**

# **Editions**

Each Trimble® Business Center (TBC) Edition is designed to support a set of related workflows:

## · Viewer (Unlicensed):

Import + review field data, view projects, + export to Trimble field devices + software.

### · Field Data Edition:

Export third-party field data, perform basic CAD functions, complete data quality control, + work with level data.

### Surface Modeling Edition:

Basic point cloud management, create + edit surfaces + alignments, cut/fill maps, + earthwork reports.

### Survey Intermediate Edition:

GNSS post-processing, network + traverse adjustments, site calibrations; work with background images, labels, + dimensions.

### Survey Advanced Edition:

Work with Trimble VISION™ data, create plan sets, process cadastral data, leverage full COGO + corridor routines.

# Site Modeling Edition:

Convert + elevate 2D geometry into 3D for field operations; cleanup project data.

### Site Construction Edition:

Compute site mass haul + site takeoff computations, linear quantities, layer depths, + material volumes.

## Infrastructure Construction Edition:

Parametric intersection, interchange, + ramp designs with corridor mass haul quantities + volumes.















Workflow / Feature	Viewer	Field Data	Surface Modeling	Survey Intermediate	Survey Advanced	Site Modeling	Site Construction	Infrastruc- ture Con- struction
12D Import + Export	х	х	х	х	х	х	х	х
Calibrate Laser Scanners	x	x	х	х	х	X	х	х
Coordinate System Management	×	х	х	х	х	х	х	x
Create WorksOS Project	×	Х	х	х	x	X	х	x
Feature Definition Manager	×	х	х	х	х	х	х	х
Feature Library Creation, Editing, + Export	×	Х	х	х	х	X	х	x
GNSS Online Planning	×	х	х	х	х	х	х	х
Overexcavation Template Manager	x	х	x	x	x	X	x	x
Publish Designs to WorksManager	×	х	х	х	х	х	х	х
Publish to WorksOS	х	Х	х	х	х	Х	х	х
Quadri Connector	х	х	х	х	х	х	х	х
Reference File View Filter Manager	x	x	х	х	x	X	x	x
Selection Sets + Selection Explorer	х	х	х	х	х	х	х	х
Trimble Clarity Publishing	×	Х	х	х	x	X	х	x
Trimble Field Data Import + Export	х	х	х	х	х	х	х	х
Trimble SiteVision Export	×	Х	х	х	x	Х	х	x
Trimble SketchUp Import + Export	×	х	х	х	х	х	х	x
Trimble Sync Manager	×	Х	х	х	x	X	х	x
Trimble VisionLink Import + Export	x	х	х	х	х	х	х	х
View Survey + Construction Raw Data	х	Х	х	Х	Х	Х	х	х
Web Feature Service	x	х	х	х	x	x	x	x
Web Map Service	x	Х	х	Х	Х	Х	х	х
WorksManager Work Order	х	х	х	х	х	х	х	х
WorksOS	×	Х	х	х	x	Х	х	x
Basic CAD + COGO Tools		х	х	х	х	х	х	x
Data Spreadsheets		х	x	х	x	х	х	х
Detect Crossing Geometry		х	х	х	х	х	х	x
ESRI Shapefiles Import + Export		Х	х	х	x	X	х	x
Feature Code Processing		х	х	х	х	х	х	x
Google Earth Export		Х	х	х	x	X	х	x
IFC Georeference + Export		х	х	х	х	х	х	x
Integrate Points into Geometry		x	x	x	x	x	x	x
Level Data Import + Adjustment		х	х	х	х	х	х	х
Local Site Creation + Settings		Х	x	x	x	X	х	х
Optical Data Processing		х	х	х	х	х	х	x
Site Calibration + Reporting		Х	Х	х	x	х	х	х
Third-Party Data Exports		х	х	х	х	х	х	х
TopoDOT Export - Terrestrial Scan Data		Х	Х	Х	Х	х	х	х
Total Station Editor		х	х	х	х	х	х	х
Alignment Creation + Editing			х	х	Х	х	х	х
Create + Edit Composite Surface					х	х	x	х
Earthwork Reports			x	х	x	X	х	x







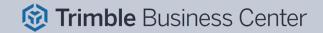








Workflow / Feature	Viewer	Field Data	Surface Modeling	Survey Intermediate	Survey Advanced	Site Modeling	Site Construction	Infrastruc- ture Con- struction
Point Cloud Viewing + Sampling			х	х	Х	х	х	х
Points from CAD Creation			x	х	х	х	х	х
Surface + Stored Cross-Section Reports			х	х	Х	х	х	х
Surface Contour Creation			х	Х	х	х	х	х
Surface Creation + Editing			х	Х	Х	Х	х	х
Add Reference File				х	х	х	х	х
ALTA Relative Precision Report				х	Х	х	х	х
Background Maps Display				х	х	х	х	х
Create Points at Station Offset				х	х	x	x	x
Customized Reports				Х	Х	х	х	х
Dimensions + Annotations				Х	Х	х	х	х
Divide Area				x	x	x	х	x
Dynamic Label + Table Creation				х	х	х	х	х
Export .GVX files to NGS' OPUS Projects				Х	Х	х	х	х
Georeference PDFs				х	Х	х	х	х
GNSS Baseline Processing				Х	Х	х	х	х
Grid + Ground Distance Labels				х	х	х	х	х
Image Tools				X	Х	х	х	х
Network Adjustments				х	Х	х	х	х
Traverse Adjustments				X	Х	х	х	х
Trimble RTX GNSS PP Service				х	х	х	х	х
3D PDFs Creation					Х	х	х	х
Automated Cross-Section Plots					х	х	х	х
Create Sub-Template					Х	х	х	х
Create Surface From Reference File					х	х	х	х
COGO + Survey CAD Commands					Х	х	х	х
Corridor Design Tools					х	х	х	х
Cutting Plane View + Plane Manager					Х	х	х	х
Dynamic Scale Bars					х	х	х	х
Dynaview Links to Model Space					Х	х	х	х
History Log View					х	х	х	х
Legal Description Writer					Х	х	х	х
Macros Creation + Application					х	х	х	х
Manual Camera Calibration					Х	х	х	х
Merge Survey Projects					х	х	х	х
Mobile Mapping Data Import					Х	х	х	х
Parcel + Map Check Routines					х	х	х	х
Plan + Sheet Sets Creation					Х	х	х	х
Projected, Radial, + Vertical Surfaces					х	х	х	х
Rectified Image Creation					Х	x	x	х
Side Slope Creation					х	х	х	х
Single + Double Proportioning					Х	Х	х	х

















Workflow / Feature	Viewer	Field Data	Surface Modeling	Survey Intermediate	Survey Advanced	Site Modeling	Site Construction	Infrastruc- ture Con- struction
Subplanes Along a Path Creation					х	х	х	х
Superelevation Diagrams					Х	х	х	х
TopoDOT Export - Mobile Mapping Data					х	х	х	х
Trimble VISION Support					Х	х	х	х
Virtual DR					х	х	х	х
Data Prep Tools						х	х	х
Elevate Contours, Pads, + Lines						х	х	х
Machine Data Tools						х	х	х
Map Layers						х	х	х
Project Cleanup Tools						х	х	х
Surface Site Improvements						х	х	х
Variable Offset Lines						х	х	х
Vertical Design Tools						х	х	х
Corridor Boring Creation							х	х
Custom Takeoff Reports							х	х
Digitize + Extract Contours, Lines, + Pads							х	х
Digitize + Extract Cross-sections							х	х
Earthwork Summary							х	х
Identify Site Regions							Х	х
Site Boring Creation							Х	х
Site Mass Haul Creation + Analysis							Х	х
Station / Offset View							х	х
Strata + Topsoil Area Tools							х	х
Validate Site Improvements							х	х
Corridor Mass Haul Creation + Analysis								х
Corridor Mass Haul Import + Export								х
Intersection Template Creation								х
Mass Haul to TILOS Export								х
Parametric Corridor Design Tools								х

# Workflow Matrix

# **Trimble Business Center v5.90 Software**

# **Modules**

Each Trimble Business Center (TBC) Module is designed to support a group of workflows around a single topic. The modules are add-ons to an edition.

- **Aerial Photogrammetry Module:** Process + create deliverables with Trimble + third-party UAS data in TBC + UASMaster.
- **ANZ Toolbox:** Use a variety of commands that support 12d Model and Australian Asset Design and As Constructed (ADAC) workflows.
- **Drilling Piling Dynamic Compaction Module:** Create drill plans + reports for Trimble DPS900 Machine Control Systems.
- **GIS Module:** Seamlessly integrate GIS data from Trimble Access<sup>™</sup> + TerraSync<sup>™</sup> software into TBC + connect to external GIS databases.
- **Mobile Mapping Module:** Process, register, + manage MX9 Mobile Mapping data: work with MX hardware calibrations.
- **MM MX9 Laser Correction Module:** Account + adjust for multiple-time around (MTA) laser effects in the MX9 Mobile Mapping hardware.
- **Monitoring Module:** Define movement alarms, visualize displacements in 3D, and create monitoring reports from any survey data.
- **Scanning Module:** Register + colorize SX10 + X7 data; classify regions, extract features, + create deliverables from SX10, X7, + 3rd party point clouds.
- **Tunneling Module:** Create + edit tunnel models for Trimble Access Tunnels + create customized as-built + geometry reports.
- **Utility Modeling Module:** Generate + visualize gravity, pressurized, + other utility runs in parametrical constrained trenches.



















Workflow / Feature	Aerial Photo- grammetry	ANZ Toolbox	Drilling Piling Dynamic Compaction	GIS	Mobile Mapping	MM MX9 Laser Correction	Monitoring	Scanning	Tunneling	Utility Modeling
Advanced UAS Adjustment	х									
Aerial Photo Station Adjustment	х									
Delair UX11 Support	x									
Extract Ground	x									
Hardware Agnostic Support in UASMaster	x									
Import UAS Data	х									
Orthomosaic, Point Cloud, + DSM Creation	x									
Point Cloud Ground Extraction	x									
senseFly eBee SODA Support	х									
UASMaster v9.x	х									
3D Object From Polygon & Surface		x								
12da File Import & Export		х								
ADAC Import & Export		х								
ANZ Conformance Reports		х								
ANZ Surface Tools		х								
ANZ Data Investigation & Editing Tools		х								
ANZ Convert to Linestring		x								
ANZ Footing Adjust		x								
ANZ Insert Legend Table		х								
ANZ Inspect 3D Objects & Line Nodes		x								
ANZ Measure Geometry		x								
ANZ Set Point Description		x								
Compaction Plan + Report Creation			х							
DPS900 Import + Export			х							
Drill Plan + Report Creation			х							
Pile Plan + Report with Custom Pile Creation			х							
COR + SSF Data Suport + Post-processing				х						
File Geodatabase Import + Export				х						
GIS Data Source Upload				х						
Map Metadata to Geodatabase				x						
Read Features from GIS				x						
Read GIS Data from Data Sources				х						
Schema into Feature Library Extraction				х						
New & Execute Batch Project					x					
New Batch Parameters					х					
Mobile Mapping Batch Report					x					
Extract Classified Point Cloud Regions					х			x		











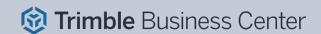








Workflow / Feature	Aerial Photo- grammetry	ANZ Toolbox	Drilling Piling Dynamic Compaction	GIS	Mobile Mapping	MM MX9 Laser Correction	Monitoring	Scanning	Tunneling	Utility Modeling
Generate PFIX					х					
Hardware Calibration Export					х					
LAS Export with Colorized Timestamp					х					
Mobile Mapping Point Clouds Creation					x					
MX50 Mobile Mapping Data Import and Registration					x					
MX9 Mobile Mapping Data Import and Registration					х					
POSPas SBET GNSS Trajectories Support					x					
Process Raw Trajectory Data					x					
Report on MX9 Mission + Registration					х					
Split MX9 Run					х					
Adjust MTA for MX9 Laser						x				
Assign Monitoring Project							x			
Create Monitoring Points							x			
Import + Manage Monitoring Epochs							х			
Monitoring Points Spreadsheet							x			
Show Monitoring Chart							x			
Show Monitoring Report							x			
Sync Monitoring Project							x			
CAD Points from Scan Points Creation								x		
Drape Object on Point Cloud								x		
Extract Cross-sections From Point Cloud								x		
Extract Geometry								x		
Extract Point + Line Features From Point Cloud								x		
Extract Stockpile								x		
FARO Scan Data Import								x		
Filter Point Cloud								x		
Georeference Scan Data								x		
Orthophoto Images Creation								x		
Point Cloud Region Classification								x		
Point Features Extraction								x		
Scan Inspection								x		
TZF (Trimble TX6 + TX8) Data Import								x		
Assign Tunnel Convergence Points									х	
Create CAD Tunnel Cross-Sections									x	
Create Tunnel Inspection Map									х	





















	Aerial		Drilling Piling			MM MX9				
Workflow / Feature	Photo- grammetry	ANZ Toolbox	Dynamic Compaction	GIS	Mobile Mapping	Laser Correction	Monitoring	Scanning	Tunneling	Utility Modeling
Create Tunnel Inspection Points									х	
Custom As-Built Tunnel Reports									х	
Design + As-Built Tunnel Mesh Creation									х	
Extract Classified Tunnel Regions									х	
Plan Sets with Tunnel Geometry Drafting									x	
Point Cloud to Tunnel As-Built Assignment									х	
Rebuild As-Built Tunnel Mesh									х	
Select Tunnel Points									х	
Setout Point Creation									x	
Trimble Access Tunnels Import + Export									х	
Tunnel As-Built Report (best-fit circle)									x	
Tunnel Convergence Report									х	
Tunnel Corridors Creation + Editing									х	
Tunnel Geometry Reports									х	
Tunnel Inspection Report									х	
Tunnel Inspection Report w/ Geological Overprofile									x	
Tunnel Inspection View									х	
Tunnel Set Outs As-Built Report									х	
Pipe + Utility Network Creation										х
Trench Templates + Surfaces Creation										х
Trench Template Manager										х
Utility Node Creation										x
Utility Shapes Customization										х
Utility Takeoff Reports										х

Disclaimer: Trimble reserves the right to change the licensing or make corrections to the program at any time through an update to Trimble Business Center and or a correction to this list.

No guarantees are implied and you should confirm licensing details with your Distribution Partner before purchasing.

