RELEASE NOTES

Trimble® Pivot Platform GNSS Infrastructure Software (Version 2.1)

Introduction Applications running on version 2.1

New features
- App View
- Alarm manager
- Automatic UI logout
- ITRF 2008 support
- User management
- Web application
- Open Layers support
- License Activator and licenses

Trimble Pivot platform Apps: New features and enhancements
- Trimble Instrument Configurator (TIC)
- Trimble Ephemeris Download (TED)
- Trimble Streaming Manager (TSM)
- Trimble Dynamic Control (TDC)
- Trimble SparseVRS (sVRS)
- Trimble VRS³Net (VRS³Net)
- Trimble Transformation Generator (TTG)
- Trimble NTRIP Caster (TNC)
- Trimble Accounting (TAC)
- Trimble Data Shop (TDS)
- Trimble iScope (iScope)
- Trimble Integrity Manager (TIM)
- Trimble RTX (RTX)
- Trimble RTX-PP (RTX-PP)
- Trimble Rover Integrity (TRI)
- Trimble Atmosphere (Atmo)

Supported operating systems and SQL Server

Trimble Pivot platform software: Update guide
- Updating VRS³Net software on a single server system
- Updating VRS³Net sofware on a distributed server system
- Updating Trimble Dynamic Control software
- Updating Trimble Integrity Manager
- Updating VRS³Net Web Application Advanced on a distributed server system
- Updating VRS³Net Web Application Basic on a distributed server system

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Legal Notices

Release Notice

This is the July 2012 release (Revision A) of the *Trimble Pivot Platform GNSS Infrastructure Software Release Notes*. It applies to version 2.1 of the Trimble's GNSS Trimble Pivot platform software.

Product Warranty Information

For applicable product warranty information, please refer to the Warranty Card included with this Trimble product, or consult your Trimble dealer.

Introduction

The Trimble® Pivot platform GNSS infrastructure software version 2.1 is a new software release in the Trimble Infrastructure Portfolio. The following existing products are now moved to the Pivot platform:

- Trimble Dynamic Control application ("App")

- Trimble VRS³Net™ App

- Trimble Atmosphere App

- Trimble Integrity Manager™ App

More Apps are available on the platform and you can now combine all available Apps on this one common platform.

The seamless update process updates all your existing data and configurations into the new Pivot platform software. For more information on upgrading existing products to the Trimble Pivot platform, see Trimble Pivot platform software: Update guide, page 18.

The Pivot (Progressive Infrastructure via Overlaid Technology) concept uses a common platform to improve performance, simplify configuration, and maintain version consistency across multiple applications. Using the Pivot platform software, you can update shared components across multiple applications, removing constraints on the time and effort to install multiple updates to individual software suites. In turn, this facilitates faster development time frames that allow for more detailed enhancements. Also, the Pivot platform software virtually eliminates all concerns for version compatibility issues.

These release notes describe new or changed features in the Trimble Pivot platform when compared to version 1.4 of the Trimble VRS³Net, Atmosphere, and Dynamic Control Apps. This is an important software release with added new features and capabilities, including solutions to many end-user requests.

Before you upgrade the software, Trimble recommends that you back up any user files in the existing installation. For more information on the update process, see Trimble Pivot platform software: Update guide, page 18.

Applications running on version 2.1

The following Apps can run on version 2.1 of the Trimble Pivot platform software:

App	Description
Trimble Ephemeris Download (TED)	Manages the polling of all relevant orbit information data and makes it available to all other applications based on the Pivot platform.
Trimble NTRIP Caster (TNC)	Manages the administration of multiple NTRIP Casters. An overview of status information of users "connected" to the Pivot platform is also available.
Trimble Streaming Manager (TSM)	Controls and manages various incoming and outgoing data streams.
Trimble Transformation Generator (TTG)	Enables you to add transformation parameters and grid files to the correction data stream based on the RTCM standard.
Trimble Accounting (TAC)	Provides relevant account information such as the number of registered users, contracts, and subscriptions.
Trimble Instrument Configurator (TIC)	Controls high precision instruments, such as GNSS receivers. It also performs firmware updates through the software.
Trimble Dynamic Control (TDC)	Monitors and controls all receiver connections through multiple device managers. Also streams single station corrections to the end customer.
Trimble VRS³Net (VRS³Net)	Generates correction data for centimeter accurate positioning solutions in a dense network. An overview status information of all network processors is also available.
Trimble SparseVRS (sVRS)	Generates correction data for sub-decimeter level (4 inch) accurate positioning solutions in a sparse network.
Trimble iScope (iScope)	Provides an overview of iScope rovers presented on the iScope map to allow you to administrate the connected rovers. You can also review survey sessions.
Trimble Data Shop (TDS)	Includes the *Reference Data Shop* module that you can use to generate and download correction data for a CORS or a VRS for a given period.
Trimble Atmosphere (Atmo)	Calculates IPWV and TEC values from gathered GNSS data including weather information from various data sources.
Trimble Rover Integrity (TRI)	Analyzes the performance of permanent rovers in a network based on incoming NMEA strings.
Trimble Integrity Manager (TIM)	Provides real-time and postprocessing engines to monitor GNSS reference stations.
Trimble RTX™ (RTX)	Performs absolute position integrity monitoring in real-time mode based on the RTX technology.
Trimble RTX-PP (RTX-PP)	Performs absolute position integrity monitoring in post-processing mode, based on the RTX technology.

Some of these applications work together or depend on others. For an overview of all the applications, see Trimble Pivot platform Apps: New features and enhancements, page 10.

The following graphic shows the structure of the new software release with all the applications that are currently available and their dependencies:
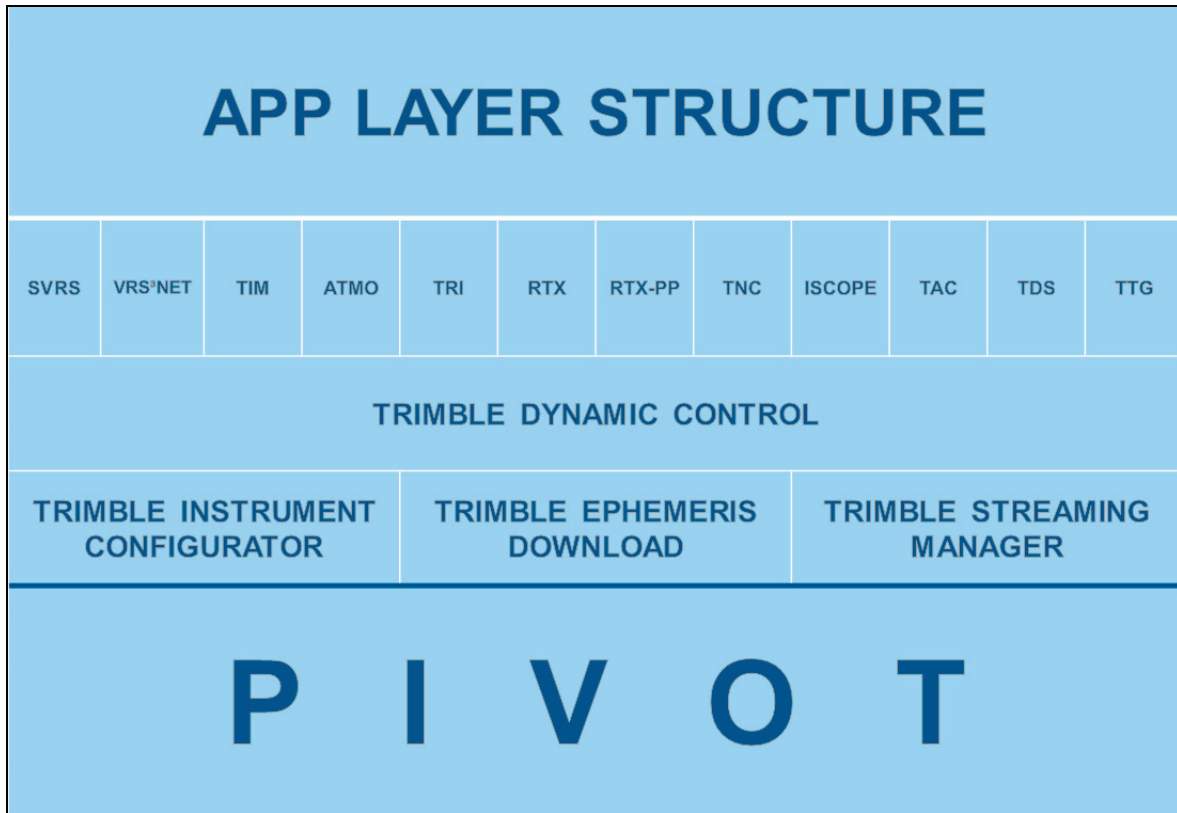
Depending on the market you are working in, the Pivot platform software allows you to select the applications you require:
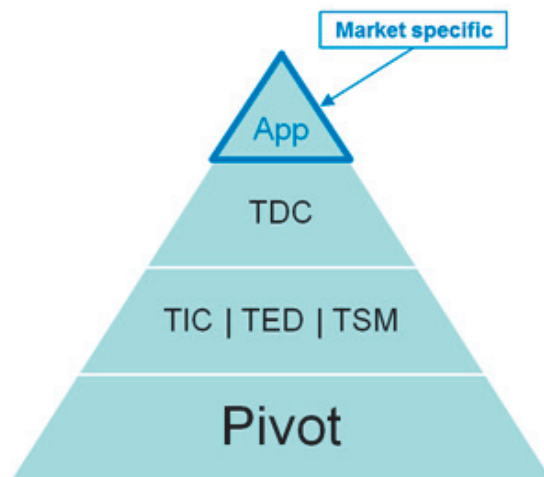
New features

App View

The Trimble Pivot platform software has a new *App View* feature, which provides application health status information for all currently activated Apps.

Each App has its own individual health status conditions—available from the online help section. The conditions differ, depending on the functionality. To activate the App View, click the App View icon in the toolbar. The view that appears allows you to switch between the different Apps for control.

The *Trimble Pivot Platform* software's main screen shows a summary of the App functionality and some health status information:

Each *App View* displays a brief overview of the App functionality and a list of important counters. Below the counters, a table provides additional information. This view is interactive. To go directly to a module in the tree view, double-click the required entry in the table.

More information on counters and the details view for individual Apps is included in

Alarm manager

The icon color for the alarm manager has changed and the color now represents the current status of the alarm module.

The following alarms have been added:

- Expected real-time orbits / clocks missing

- No RTX solution

- RTX fix lost

Alarms with the condition status *condition disappears* are now sent only if the alarm has actually been issued.

The module groups setting of the Alarm Manager is now part of the system properties.

You can now go directly from the Alarm Manager Status view to the module that raised an alarm. Select *Go to module* in the context menu of an active alarm job.

Note – *You must redefine the Alarm jobs and Module groups.*

Automatic UI logout

Within the system properties you can configure the software to close automatically if an operator has not performed any actions in the user interface for a selected time interval. This functionality is deactivated by default.

ITRF 2008 support

Trimble Pivot platform now offers ITRF2008 as an additional reference frame. ITRF2008 is now also used internally as the reference frame for the transformation from the selected reference frame into ITRF current epoch.

User management

Access the *User Management* view from the tool bar. It lists all configured user accounts with their current login status.

- You can now log in to the user interface with different user accounts, based on different access levels. The Pivot platform software now allows you to define the user logins through the user interface. The user account information is stored in new database tables.

- Existing accounts, previously stored in the administrator table, are automatically transferred to the new tables once the software is updated.

Web application

The Trimble Pivot platform software includes a basic Web installation. Some Apps have their own web pages. These web pages are visible only if the App is licensed. The following table lists the Apps' web page information:

Software / Apps	Web page
Trimble Pivot platform software	Basic User Management
	Language Management
	Redundancy Management
	Services Management
Trimble Accounting app	Active Subscriptions
	Advanced User Management
	Register User
	Status Messages
	Regions
	Organization Management
	Role management
	Sessions
Trimble Data Shop app	Reference Data Shop
	Redundancy management: Reference Data Shop
Trimble Atmosphere app	Atmospheric Conditions
	IPWV Map
	Station Chart
	Condition Chart
	IPWV Contour Map
	IPWV Surface Map
	IPWV Surface Map Animation
	TEC Contour Map
	TEC Surface Map
	TEC Surface Map Animation
	Atmospheric Conditions Management
Trimble Dynamic Control app	Sensor Map
	Map Management
	Position Scatter Plot
	Scatter Plot Management
Trimble VRS³Net / SparseVRS app	Network Information
Trimble iScope app	iScope
	iScope Live!

Note – As the iScope Live! web page in the Administration section showed exactly the same information as the iScope Live! page in the Main section, the duplicated web page was removed. The iScope Live! page now shows different contents, based on the login privileges of the current user.

Open Layers support

Open Layers provides numerous interfaces to various map sources/providers. Within the installation, the following providers are supported:

- Google Maps

- Microsoft® Bing® Maps

- Open Street Map

- Web Map Services (WMS)

- Static Images

Note – Map providers may require a license to enable you to use the map services. Make sure that you purchase the correct license from the respective map provider.

To configure a map provider, a configuration page has been added to the map management area in the navigation tree of the web application.

To correctly show the different map sources in *Open Layers*, the EPSG:900913 projection (a spherical Mercator projection) is currently applied.

Note – If the WMS service does not offer this projection, the system cannot use the data.

Open Layers and its maps are used within the following web sites:

- Sensor Map

- Reference Data Shop

- IPWV Map

- iScope and iScope Live!

License Activator and licenses

Based on the new Apps concept, the licensing of the software has been re-organized. Every core functionality is individually assigned to certain Apps.

- The licenses are now stored on a server that you can access directly through the License Activator.

- Licenses are no longer provided as *.tkey files; instead, you can download them directly from the license server. The License Activator has two modes for the license update:

  - Offline

  - Online

It is strongly recommended that you select the Online mode to update your license key.

- Access to the license server is password protected—each customer receives login credentials separately.

- With the re-organization of the licenses Trimble introduces a new terminology:

    - *License Pool*: The overall collection of all purchased functionality for one system

    - *License*: A subset of functionality that is activated for one dongle key

Most customers will have one single license pool with one or more licenses, depending on the current system setup.

The License Activator reflects the terminology changes and provides a new *License Status* overview. This allows you to select the License Pool and the License as long as those are not yet bound to a specific dongle. Once a license is bound to a dongle, those fields provide the information and only the license belonging to a specific hardware can be uploaded to the dongle.

Trimble Pivot platform Apps: New features and enhancements

This section describes the available Apps that are based on the Trimble Pivot platform software. It provides information on new features and enhancements for individual Apps.

Trimble Instrument Configurator (TIC)

- ***TIC App View:*** Provides status information on firmware updates.

- ***Automated firmware upload for Trimble receivers***: TIC allows you to upload firmware automatically to installed Trimble receivers, based on receiver model. The update for multiple receivers of the same type can be initiated at the same time.

Trimble Ephemeris Download (TED)

- ***TED App View***: Provides an overview of configured downloads for Orbit and DCB files in the Ephemeris Download module.

- ***Trimble DCB file download***: Trimble computes daily DCB (differential code biases) files based on a worldwide, established, and precise GNSS station network. You can now access Trimble DCB files in TED. In addition, Trimble offers DCB files from both Trimble and CODE, so that the processor can work with either data source and can check for the best available solution.

Note – Trimble strongly recommends that you change the download settings for the DCB File provider to "Both" to ensure that the processor has access to the DCB files from both sources.The download option "Both" generates two sub-folders, Trimble and Code.

Trimble Streaming Manager (TSM)

- **TSM App View**: Provides an overview of all router managers and routers in the software, as well as information about routers that are not streaming data or that are running on backup lines.

Trimble Dynamic Control (TDC)

- **TDC App View**: Provides an overview of all installed device managers in the system, and health status information for the connected receivers, single station RTO modules, and storage modules.

- **GNSS receiver module, R7 GNSS interface adaptation**: The interface to a Trimble R7 GNSS receiver has been changed to now also request GLONASS data from this receiver in active mode.

- **GNSS receiver module, direct receiver control:** The GNSS receiver module in TDC now allows for the opening of the receiver web user interface directly from the software. The receiver properties have been extended to store the connection details information (including logon credentials), while the context menu offers a new entry to connect to the receiver web UI.

- **GNSS receiver module, support of SPS855 receiver:** TDC now supports the new SPS855 receiver type. This construction receiver can only run in passive mode and does not support storage integrity functionality.

- **RINEX storage module**: The RINEX storage module now supports RINEX version 3.02 instead of 3.0. RINEX version 3.02 supports QZSS and Compass observables.

  In addition, the functionality *Append to file* was added to allow for writing observables into the same file of a session if an interruption occurred.

  A new property has been added to the RINEX storage; *Change Station Code*. This enables you to enter a new station code. The new station code will be used for the RINEX naming convention as well as for the *Marker Name* in the RINEX header.

- **Raw Data Analysis**: The raw data analysis in the GNSS receiver module has been improved to contain an analysis for ionosphere scintillation.

  The raw data analysis has been adapted to also process QZSS and Galileo satellites.

- **BINEX decoder**: The BINEX decoder for Trimble reference stations has been modified to adapt to the latest changes in the NetR9™ firmware.

- **COMPASS / BEIDOU support for NetR9 receivers**: TDC now allows for tracking, displaying, and storing COMPASS signals received from NetR9 receivers.

- **RTO Single / Multi Station Module, QZSS and Galileo Support**: The RTO Module has been adapted to allow the streaming of QZSS and Galileo single station correction data. The correction data is available in the Trimble proprietary CMRx format.

- **Ephemeris Manager**: The *Export to RINEX* property in the ephemeris manager module now supports RINEX 3.02 and RINEX 2.3.

Trimble SparseVRS (sVRS)

- **sVRS App View**: This provides an overview of the sVRS, the performance of available sparse network processors, and the number of rovers connected to the network. I95, IRIM, and GRIM™ values are provided for the respective network processor.

- **sVRS Network Processor**: The network processor in the sVRS App provides the sparse processing mode, which offers optimized settings for a Trimble reference station network with higher inter-station distances. For the specifications of the SparseVRS App, email Infrastructure_Support@Trimble.com.

Trimble VRS³Net (VRS³Net)

- **VRS³Net App View**: Provides an overview of the VRS³Net system the performance of available sparse network processors, and the number of rovers connected to the network. I95, IRIM, and GRIM values are provided for the respective network processor.

- **QZSS support**: VRS³Net now supports QZSS data processing in the network processor and provides VRS correction data streams including QZSS in CMRx format.

- **RTO Net module, Multithreading Support**: This offers multi-threading. Multi-threading allows the spreading of the load for generating correction data over multiple cores of your server hardware, which improves the performance of the RTO Net module when providing correction data streams and allows more simultaneous user connections The default value of threads is 4.

  Note – *The value of worker threads must be configured depending on the number of CPUs available on your machine. The value should always be smaller than the overall number of available CPUs.*

  When updating from the VSR³Net application, version 1.4.4 or earlier, to the Trimble Pivot platform software, multi-threading is automatically activated on the RTO module. The number of worker threads is set to 4. If your system has 4 or fewer CPUs (as shown in the Windows® Task Manager), remove the RTO module, reinsert it and then change the value for *Number of Worker Threads* in accordance with your hardware.

- **RTO Net Module - Check of data delay**: In addition to the multi-threading, the RTO module also offers a property to check the delay of the data compared to the server time. In case of a delay bigger than the threshold, the RTO module indicates a bad module health status.

- **FKP support based on RTCM 3.1**: With the released expansion of the RTCM 3.1 Amendment 4, the RTCM committee has retired the existing standard and has released a new standard for FKP, which now supports GLONASS messages. VRS³Net now supports the new standard providing FKP corrections including GLONASS.

Trimble Transformation Generator (TTG)

- **TTG App View**: The TTG App view provides the information about the transformation generators loaded in the software as well as the information about successful or failed requests.

Trimble NTRIP Caster (TNC)

- **TNC App View**: Provides an overview on all NTRIP Caster modules inserted into the TDE and the number of mountpoints and connected input sources. It also shows the number of rejections (last hour) and active users.

- **SSL Support for NTRIP Caster Mountpoint**: The NTRIP Caster now supports SSL (Secure Socket Layer or TLS [Transport Layer Security]) for the NTRIP Caster port for higher security. SSL needs to be activated in the NTRIP TCP Port configuration.

- **Keep Alive Settings for incoming connections**: The NTRIP Caster module now offers a Keep-Alive mechanism based on incoming data packages. The *Mountpoint Property* dialog has a new setting, *Disconnect inactive clients*. You can now select different time intervals selections from the drop-down list, ranging from *Never* (the default) to *90 sec*. If the NTRIP caster does not receive any data package (for example, a NMEA string) back from the rover within the defined time interval, the client is automatically disconnected from the system.

- **Improved Control Line Handling for Mountpoints**: The NTRIP Caster has been modified to now allow you to connect to four different data sources through a control line running in the same Pivot distributed environment.

Trimble Accounting (TAC)

- **TAC App View**: Provides relevant account information, for example, the number of registered users, contracts, and subscriptions.

  To update the information in the Accounting App View click the Refresh button below the traffic light.

- **New Accounting Reports available in Report Generator**: The following reports are now available:

  - *Accounting.txt Post Processing:* Summarizes the accounting information for sessions from the reference data shop.

  - *Costs per login report*: Provides the sum of costs for all measured sessions over the selected time period. For contract items with a flat rate, the full flat rate amount is shown; for contract items with epoch to epoch based accounting, the report shows the sum over the measured epochs.

  The accounting.txt report has been modified to show the full configuration name of the RTO module.

- **Handling of redundant network setup in accounting reports**: Some of the accounting reports depend on information stored in the technical (VRS³Net) database and not in the accounting database. In a redundant system, one accounting database works with two different technical databases. The Report Generator now allows you to define two different technical databases to read the information for the following accounting reports:

  - Accounting.txt for real-time and post processing

  - RTO Details report

- **Regions support in contracts:** The contracts within the Accounting App now allows you to define regions for your correction data. For more information on how to define this new feature in your existing contracts, email Infrastructure_Support@trimble.com.

Trimble Data Shop (TDS)

- **TDS App View**: Provides the information of the scanning progress of the Reference Data Shop module as well as status information about pending orders in the queue.

- **Scanning Process in Reference Data Shop Module:** Improved file scanning process leads to better performance. File scanning now consists of two coactive modes: Full mode and Quick mode.

  - In Full mode, the module scans the whole folder tree recursively, starting at the root folders that are configured in the module properties. The Full mode scan is performed nightly.

- In Quick mode, the module scans only active folders (folders in which files have been created during the last 48 hours). The Quick mode scan is performed in regular intervals during the day and takes only a few minutes to complete. To configure the interval, use the module property *Time to wait between scans*.

- **RINEX 2.10 and 3.02 Support:** The *Reference Data Shop* site within the web application now offers RINEX 2.10 and 3.02 as data format for download.

- **Open Layers support for Reference Data Shop**: The *Reference Data Shop* now enables you to select the station directly from the map, which is offered through open layers. For the virtual reference station generation, a position picker is available that allows you to click on the map and use that position for VRS™ file generation.

Trimble iScope (iScope)

- **iScope App View**: Provides an overview on iScope subscriptions, available iScope sessions, and connected iScope rovers.

Note – *To update the information in the Accounting App View click the Refresh button below the traffic light.*

- **iScope and iScope Live! Map**: The display performance of iScope and iScope Live! has now been improved to handle a larger number of users more quickly.

Trimble Integrity Manager (TIM)

- **TIM App View**: Provides an overview of all monitoring engines available in the system and their health status. It also provides the number of current available warnings or alarms.

- **RTK Engine**: Can now process data including QZSS satellites. In VRS mode, the RTK engine now also supports CMRx as an input data format.

Trimble RTX (RTX)

- **RTX App View:** Provides an overview of all RTX modules loaded in the Pivot distributed environment and the health status information of the modules.

- **RTX Processor**: A real-time processor based on Trimble RTX technology. It provides an absolute position result in real time. The processor connects to the Trimble RTX™ real-time correction data stream to receive clock and orbit information.

Note – *To run the RTX Engine, a permanent Internet connection is required.*

For more information on the RTX technology, email Infrastructure_Support@trimble.com.

Trimble RTX-PP (RTX-PP)

- **RTX-PP App View**: Provides a status overview about the configured RTX-PP Engines with respective Integrity Modules, as well as current pending warnings or alerts.

- **RTX-PP Processor**: The RTX processor is a post-processor based on the Trimble RTX technology. The RTX-PP processor connects to a server hosted by Trimble and uploads the files to this server for processing. The engine receives back the calculated coordinates, which are then provided to the Integrity Monitor Module for visualization.

Note – *To run the RTX-PP engine, a permanent Internet connection is required.*

The RTX-PP engine only supports processing data files from Trimble receivers.

The RTX-PP engine allows processing of static and kinematic files.

To receive more information on the RTX technology, email Infrastructure_Support@trimble.com.

Trimble Rover Integrity (TRI)

- **TRI App View**: Provides the information about all available Rover Integrity Modules installed in the Pivot distributed environment and some information about the configuration of the different modules.

Trimble Atmosphere (Atmo)

- **Atmo App View**: Provides an overview about the Atmosphere Watch processors in the network and available weather condition modules. The *Details* view provides the settings on the different modules as well TEC (Total Electron Content) and IPWV (Integrated Precipitable Water Vapor) results.

- **Atmosphere Watch - Wet Slant Delay calculation**: The Weather Condition module now offers to also calculate the wet slant delay. To calculate the Wet Slant Delay, use *Tropospheric Gradient* as the *Troposphere Output* type in the properties of the parent Atmosphere Watch module.

- **Network Processor Storage Module - BUFR Storage capability**: BURF (Binary Universal Form for the Presentation of meteorological data) is a data format defined and maintained by the World Meteorological Organization (WMO). This data format offers a number of templates for different purposes. The Atmosphere App now offers to store IPWV data based on the IPWV template for BUFR defined by the WMO. The network processor storage for BUFR can be inserted below the weather condition module.

Supported operating systems and SQL Server

The Trimble Pivot platform software, version 2.1, now supports the following operating systems:

- Windows Server® 2003x86

- Windows Server 2008 x64

- Windows Server 2008 R2

- Windows 7 Professional x64

- Windows Server 2008 R2, Chinese Simplified

Note – Trimble Pivot platform is currently designed as a 32-bit service that can also run on 64-bit operating systems. Trimble plans to change the services into real 64-bit services in an upcoming release to make full use of the 64-bit technology. Once this is done, the software will no longer operate on 32-bit operating systems (that is, on Windows Server 2003, x86). Please consider this when updating your server hardware.

Note – The Web Application requires Microsoft IIS (Internet Information Services). The software supports IIS 6.0 or later.

The installation DVD now includes installation files for the Microsoft SQL Server® 2008 R2 Express. Microsoft SQL Server 2005 Express and Microsoft SQL Server 2008 Express are also supported.

Note – If you are using Windows SQL Server 2008 R2 on the Windows Server 2003, x86 operating system, you must install .Net 3.5 SP1 and Power Shell for Windows Server 2003 prior to installing the SQL Server. If you do not do this, the SQL Server installation will terminate without completing.

If you are already running a system with Microsoft SQL Server 2005, you can retain this database.

If you consider building a bigger network with more processing engines, Trimble highly recommends upgrading from the SQL Express version to a full SQL installation (versions 2005 SP1 and higher are supported).

For a new installation of the Microsoft SQL Server 2008 R2 Express, refer to the *User Guide* on the installation DVD.

If you want to update your existing Microsoft SQL Server 2005 Express to the Microsoft SQL Server 2008 R2 Express, you can migrate the databases. For more information, email Infrastructure_Support@Trimble.com.

Note – Trimble strongly recommends the use of a 64-bit operating system to achieve maximum software operating potential.

Trimble Pivot platform software: Update guide

Updating VRS³Net software on a single server system

Trimble VRS³Net sofware version 1.4 to Trimble Pivot platform sofware version 2.1

1. Create a backup of all important system data and all files that have been edited manually, for example:

    –   Registry of VRS³Net installation

    –   Data base

    –   DBServer.exe.config

    –   Contracts.xml

    –   Customized emails *(<Install Directory Trimble VRSNet>/ DBServer / Email)*.

    Note – Existing emails are not changed, new emails are added to the system

    –   Customized Reports (*<Install Directory Trimble VRSNet> / DBServer / Reports*)

2. Select *Control Panel / Programs and Features* and remove the Trimble VRS³Net sofware. Click **Yes** when the software prompts you to keep the data base.

    Note – You must uninstall the product using the Programs and Features dialog, as the Trimble Pivot platform installation cannot uninstall the previous VRS³Net installation.

3. Open Windows Explorer and make sure that any DLLs that have been manually added to the installation have also been removed. If not, please delete them manually.

4. Run the Installation Wizard for the VRS³Net App, starting from the splash screen.

    The installation process automatically updates the database and applies structural changes where necessary.

5. At the end of the installation, you are prompted to start the services now—click **No**.

6. Make the necessary changes to the DBServer.config.exe (*Section <App settings>*); do not copy the old file across as the content of this file has changed.

7. Update the license on the dongle with the Trimble License Activator tool—go to *Start / All Programs / Trimble Infrastructure / Trimble Pivot Platform*. Use the login credentials provided to you by email to access your license file.

8. Start the Trimble Pivot platform services in the Task Manager—the last used configuration will start automatically.

9. Start the user interface and reactivate the Tree View, App View, and Status Message view.

10. If you have changed the installation folder (for example, if you are using the default folder), copy the following files to the new installation folder:

    –   Contracts.xml

    –   Multipath files

11. Restart the DBServer once you have copied the new file into the folder.

Note – Check the properties of your atmosphere watch module. The properties have been reorganized, which may require you to reconfigure the module settings.

Updating VRS³Net sofware on a distributed server system

Trimble VRS³Net sofware version 1.4 to Trimble Pivot platform sofware version 2.1

In principle, updating a distributed server system follows the same rules as described in the previous section.

1. Complete Step 1 through Step 5 from Updating VRS³Net software on a single server system on each of the servers used in the distributed environment. You must create a registry backup for each server, as the configuration details are distributed on the different registries on each server.

2. Make the necessary changes to the DBServer.config.exe; do not copy the old file across as the content of this file has changed.

3. Update the license on the dongle with the Trimble License Activator tool—go to *Start / All Programs / Trimble Infrastructure / Trimble Pivot Platform*.

4. Starting with the master server, start the Trimble Pivot platform services in the Trimble Service Administrator on each server. The last used configuration starts automatically.

5. Start the user interface and reactivate the Tree View, App View, and Status Message view.

Updating Trimble Dynamic Control software

Trimble Dynamic Control software version 1.4 to Trimble Pivot platform software version 2.1

The installation routine of Trimble Pivot platform software provides an automated update process to check for VRS³Net software version 1.4 and Trimble Dynamic Control software version 1.4. To update Trimble Dynamic Control, use the procedure described in Updating VRS³Net software on a single server system.

Updating Trimble Integrity Manager

Trimble Integrity Manager software version 2.0 to Trimble Pivot platform software 2.1

The installation routine of the Trimble Pivot platform software does not support importing system configurations from TIM software. Make sure that you know the structure of your old system configurations and the configuration of the Alarm Manager.

To update the Trimble Integrity Manager, use the procedure described in Updating VRS³Net software on a single server system. Once you have installed the software, start the UI and set up the system configuration again. The configurations of single modules are still available, with the exception of the Alarm Manager. You must reconfigure Alarm Manager, reload the required modules, and then save this as a new System Configuration.

Updating VRS³Net Web Application Advanced on a distributed server system

Trimble VRS³Net Web Application Advanced version 1.4 to Trimble Pivot Web Application 2.1

This update requires you to carry out some manual changes—there is no automated process to apply changes that the system administrator may have added manually to the system.

1. Backup the complete installation directory of the current Web Application Advanced.

2. Select *Control Panel / Control Panel / Add or remove programs / Trimble Web Application Advanced.*

3. Open Windows Explorer and make sure that any manually edited files have been removed. If not, please delete them manually.

4. Run the Installation Wizard for the Trimble Pivot Web software, starting from the splash screen.

5. When prompted, restart the DBServer service through the Trimble Service Administrator to correctly apply all changes.

6. Navigate to the installation directory of the Web Application Advanced and reapply any customizations you had earlier. Manual changes could have been done in any of the following files

   – Layout.css

   – *.sitemap and site.master

   – AppSettingsAdvanced.config

   – Resource files

⚠ **CAUTION –** Do not simply copy any file back from the previous installation as this might result in an inconsistent web installation. If you need help with the manual adaptation, email infrastructure_support@trimble.com.

7. Start the Web Application to check the final installation.

8. Navigate to the newly added administration pages to configure the map provider for the different maps used in the Web Application.

Updating VRS³Net Web Application Basic on a distributed server system

Trimble VRS³Net Web Application Basic version 1.4 to Trimble Pivot Web Application version 2.1

To update Web Application basic, follow the instructions in Updating VRS³Net Web Application Advanced on a distributed server system.

It is likely that you did not apply any changes to the slide master or the layout of the web site. You will therefore only need to check the file AppSettingsBasic.config once the installation is complete.