1 New Features in NovAtel Connect™ 1.2.0

1.1 Profile Manager

Connect version 1.2.0 contains a new Profile Manager feature to support the OEM FW 6.200 Release.

This feature is accessible via the Tools Menu in Connect:

Using this feature, a user can manage profiles on their PC and then push them on to receivers with FW version 6.200 or later. This will allow a user to manage a library of profiles that a user can select from. Several example default profiles have been provided in Connect. These profiles can be cloned and edited to make variations.

Review the Profile Manager section under Help for detailed information on how to best utilize this new tool.
1.2 GALILEO and QZSS Tracking Status Support

*Connect* version 1.2.0 has added support for viewing the GALILEO and QZSS tracking status information. The displays are similar to those already existing for GLONASS and GPS and are available via the View Menu in *Connect*.

![GALILEO Tracking Channel Status](image)

Please note that at this time Galileo satellites will not be shown in the Constellation window.

1.3 Constellation Updates

In addition to the GALILEO and QZSS Tracking Status windows, the existing windows for GPS and GLONASS have been updated to provide support for all signals currently supported on the OEM6™ family of receivers. In the GPS Tracking Channel Status window you can now view GPS L1-C/A, L2-P(Y), L2C, and L5 data as well as SBAS L1/L5. In the GLONASS Tracking Channel Status window you can now view GLONASS L1, L2P, and L2C data.

These can be accessed via the View Menu in *Connect* in either the Tracking Status windows or in the Advanced Tracking window.

1.4 Position Mode Wizard Update

The L-Band setup section in the Position Mode Wizard has been updated to include the new frequency bands supported by OmniSTAR.

1.5 Support for Non-Administration Mode Users

*Connect* users who do not have administrative privileges can now run *Connect* with partial functionality. The following functions are not available without administrative rights:

- Logging Control window
- NovAtel Explorer
- Run Log Definition Update
- SPAN Alignment Wizard
1.6 SPAN® Support

The NovAtel 6.210 Firmware release incorporates SPAN functionality onto the OEM6 family of receivers. Connect supports this new functionality through the same Wizards as previously available for the OEMV® family of receivers.

2 Bug Fixes

2.1 Connect can now be launched by users without Admin rights

Installation still requires administrative rights, but once installed users are no longer required to have admin privileges to run Connect.

Note: Non-administrative users do not have access to the following features: Logging Control Window, NovAtel Explorer, Run Log Definition Update, and SPAN Alignment Wizard.

2.2 IP Config information was incorrectly being deleted when using FRESET <parameter>

This issue has been fixed.

2.3 Connect is unable to keep up at lower baud rates

A onetime warning message is displayed when users select a baud rate less than 115200 in the New Connection dialog box.

2.4 Connect/Convert Loglist has been updated & Log Definition Update fixed

All logs supported in 6.200 should now be available in Connect/Convert.

2.5 Position Mode wizard loses connection when configuring with Differential/RTCA

This issue has been fixed.

2.6 NovAtel Explorer did not work correctly with SPAN-SE & DL-V3 receivers

Data from the Port Settings is now displayed.

2.7 Passive Serial port connections have been fixed

A Passive Connection will connect at the specified baud rate, any logging on the port will continue.

Note: A Passive Connection has also been added for USB ports.

2.8 Graphics Driver warning added

Using older Graphics drivers may cause unwanted behavior in Connect and can lead to the application freezing. A warning box will be displayed to users if the graphics driver is more than 1 year old.

2.9 Workspace saving using non-ANSI characters was not working

Only ANSI characters are allowed when saving workspaces. An error will be returned to the user now if using invalid characters.

2.10 Installation procedure updated to automatically replace previous versions

Users no longer need to manually uninstall previous versions of Connect. Choosing to keep previous settings will launch the Connection Import Tool.
3 Known Issues and Guidance

3.1 SPAN Alignment Wizard, Dual Antenna option

The checkbox for selecting a dual antenna solution in the Receiver Details and Options page of the SPAN Alignment Wizard should only be available when the connection is through USB. The receiver automatically handles this when using COM1 and COM2.

3.2 Time shown in Connect is GPS Time

In the Clock and Position windows the displayed time (GMT and Local) is in GPS time, not UTC time as is implied by the field names.

To view the UTC to GPS offset, use the Console window and send the command “LOG time”. The returned log will show the offset along with the UTC time:

<TIME USB1 0 75.0 FINESTEERING 1701 260976.000 00000008 9924 10797
< VALID -7.842162625e-10 1.096588308e-09 -16.00000000000 2012 8 15 0 29 20000 VALID

Alternatively, you can log from the Console window a GPZDA log using the command “LOG GPZDA”. The returned log will provide the UTC Time:

$GPZDA,003512.00,15,08,2012,,*6E

3.3 NovAtel Connect on Windows 7

The display works best with setting the Text size to small. With any other text size setting the entire text will not be scaled and displayed correctly.

The display window for the INS Window does not work correctly at all font sizes/resolutions. It is recommended that you use a resolution of 1920 x 1080 for 22” monitors and 1366 x 768 for 19” monitors.
3.4 BDE Database Installation

During installation of the Connect application, always click OK in the Borland Database Engine Installation/Upgrade dialog box as shown below:

Clicking the Cancel button will cause an error which will prevent proper installation of the Connect application.

3.5 Bluetooth Modem Adapter Operation

Connect uses the standard Microsoft Bluetooth Generic Driver. It has been found that some Bluetooth serial adapters (USB-to-BT adapters) will not communicate properly with Connect due to a baud rate configuration issue. You will need to qualify your adaptor with your application and hardware to confirm its operation with NovAtel Connect.

This issue is under investigation and will be resolved in a future release. A suggested work around is to use a Bluetooth adapter that is compatible with the Microsoft Generic Bluetooth Driver. An example of such an adapter is the Belkin F8T016.

3.6 Logging Data to SD Card on SPAN-SE

The option to log data to the SPAN-SE SD Card by selecting the SD option from the Port pull down menu from within the Logging Control window, is currently not supported on this version of Connect. The feature will be fully implemented in a future release.

If a user wants to log data to the SD Card, they can do so using the following steps to issue commands to the receiver via the Console window in Connect:

1. Set up the receiver and IMU with as per the instructions in the installation manual.

2. The user must first create a GPS file on the SD Card before logging using the following command syntax:

   logfile open <FileName.ext>

   (Note: logfile is a single word and <FileName.ext> is the name of the log file where the file extension .ext must be either: .GPS, .LOG or .DAT)
An example showing how to create the file name MyLog.GPS is shown below:

```
logfile open MyLOG.GPS
```

3. After creating the file, you can **start logging** the desired data to the file by entering the standard logging commands using the **log file** (two words) command syntax as shown in the example below:

```
log file bestposb ontime 1
log file rangeb ontime 1
log file rawimub onnew

log file inspvasb onnew
```

As each log is requested, the data will be logged to the file (e.g., MyLOG.GPS) on the SD Card.

To **stop logging** the data, you must enter the command:

```
logfile close
```

This will close the GPS file and save the logged data to the SD Card.

Please note that you cannot specify the data logging duration using this method.