Geode Connect Android 2.1 – Product Update

A brief summary that was published on the Google Play store:

Whats New: version 2.1.2

• UI updated to improve usability and more closely follow design guidelines.
• Persistent Location Service - Mock Location Provider service runs in the background when app is closed.
• Help & Feedback - We have provided an easy way to send us feedback as well as emailing us for help.
• New Field - There is a "Correction Type" indicator on the home screen to help know the current correction being requested and applied.
• Background Service Notification - It is easier to close background services.

More details:

A new version for a new year – Geode Connect for Android version 2.1 has been released. Geode Connect for Android includes many exciting new features and improvements designed to support users of our Geode real-time sub-meter GNSS receiver

1. New User Interface, Refreshed Design

While the overall workflows and product design is still the same, the design has been updated to be more compliant with the Google Material Design concept. These changes to the look and feel of the software helps to increase viewability and to simplify user workflows.

- The color scheme and outlines have been 'flattened' to make it easier to identify where users can interface with the application.
- Important content has been simplified and made larger.
- The Geode Connection button has been changed to an animated graphic to quickly see the connection status.
- The Receiver Settings button was moved to the tabs at the bottom of the screen, so it can be accessed from any menu.
- The App Settings menu was simplified and moved to the top right of the screen.

Previous Version   New Version 2.1
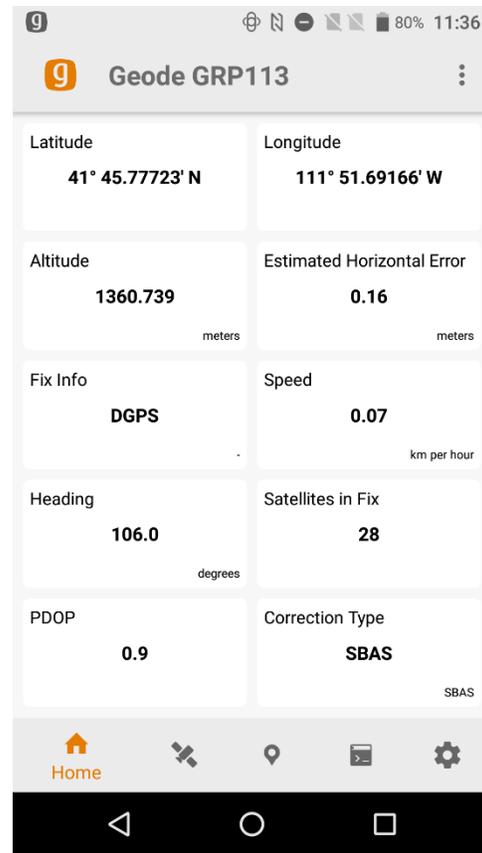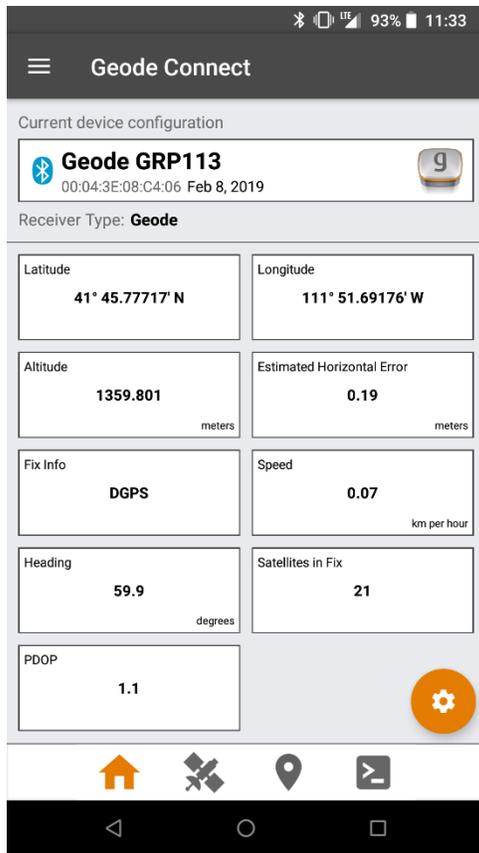
2. New Simplified Graphic Controls

The controls for the Point Capture Demonstrator and Terminal screens have been updated to follow Google Material Design conventions seen in most modern apps. A simple "Pop-up" control button has been added to make workflows easier and more logical.

The Terminal Screen has a new feature; users can log a raw NMEA file when the receiver is running, then share that file using the various share methods in the operating system. When a log file is opened, a time counter displays at the top of the terminal screen showing data is being logged.

New Point Screen   New Terminal Screen

3. Location Service made Persistent

One of the most powerful features of Geode Connect is to function as a "Mock Location Provider" for the Android Operating System. The newest version of Geode Connect for Android splits out the Location Service and allows it to run continuously in the background even when the Geode Connect app is closed.

Image of the Location Service Notification
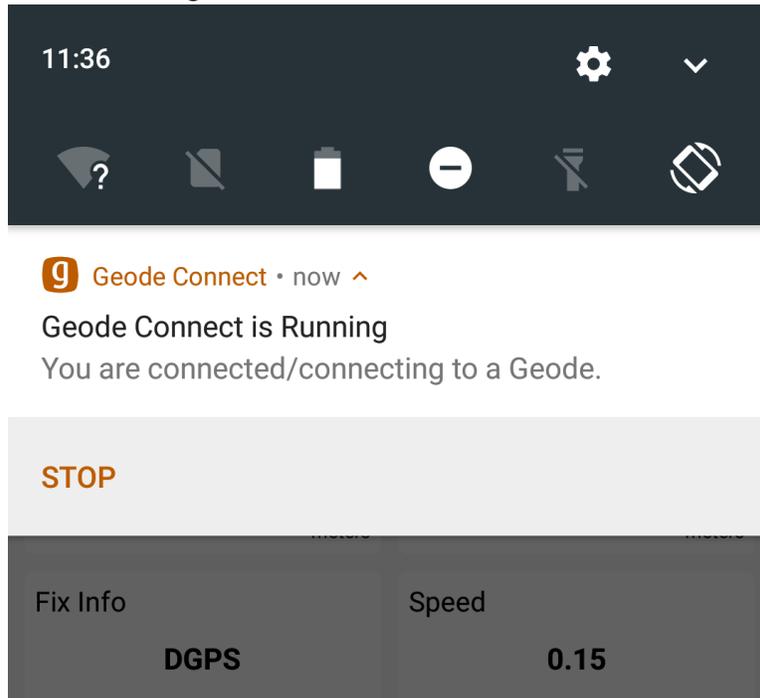
 Modern applications can work with external data sources in two ways: Direct Connection – this is where an application has been written to directly interpret messages from an external data sources, such as NMEA-0183 message strings from a GNSS receiver like the Geode. The second method is to rely on a "service" from the operating system: This is where the Operating System on a device received data directly, or from an app (a "provider") and delivers that data to any app that wants to use the data. This has the advantage of allowing multiple applications to use data from a single source, or 'port'. Geode Connect can function as a Mock Location Provider. Newest versions of Android have changed the way they manage power resources and will turn off apps or services running in the background to save power. This can be a problem for an application that relies on another app such as Geode Connect to be the location provider. The latest version of Geode Connect addresses this by allowing the Location Service and the NTRIP Service to function separate from the app. When enabled, they will continue to run in the background even when the Geode Connect app is closed. The benefit is your app will continue to receive the higher accuracy position info even when Geode Connect isn't running. When you are finished using your app, you can stop the location service directly, or simply turn off the Geode and the service will shut itself off.

## 4. New Correction Type Field Added to Home Screen

As part of the update to the user interface, the Receiver Settings button was moved off the Home screen and to the bottom tab menu. A new window named "Correction Type" was added to the home screen. This new window shows the correction method being actively applied to the receiver in large text. In the lower right of the window, the correction method selected for use is displayed.

New Correction Type Window
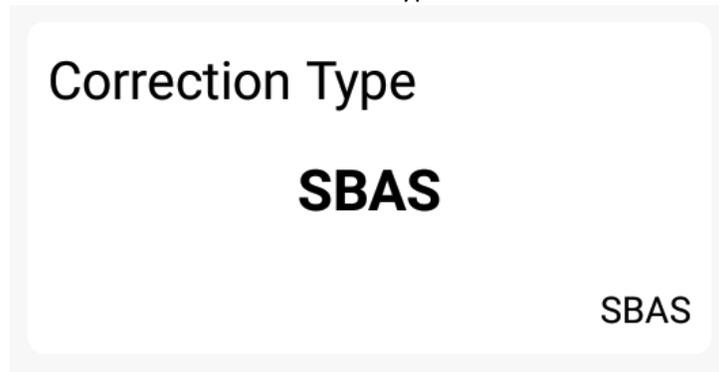
5. Help & Feedback Tool Added

To assist users who may be interested in a receiver upgrade, or need technical Support, a Help & Feedback button has been added to the Application Menu. When you select "Help & Feedback", a file is created that can be shared as an email, saved as a file, etc. When an email provider is selected, a new email is created. This email contains receiver info necessary to provide when a feature upgrade is needed. The email also contains the receiver settings which will help a support technician quickly diagnose any settings errors. The email is preformatted with Juniper Systems' Support help desk email address. Of course, the email can be edited by the user to include any comments or additional info.

New Help & Feedback (email view)
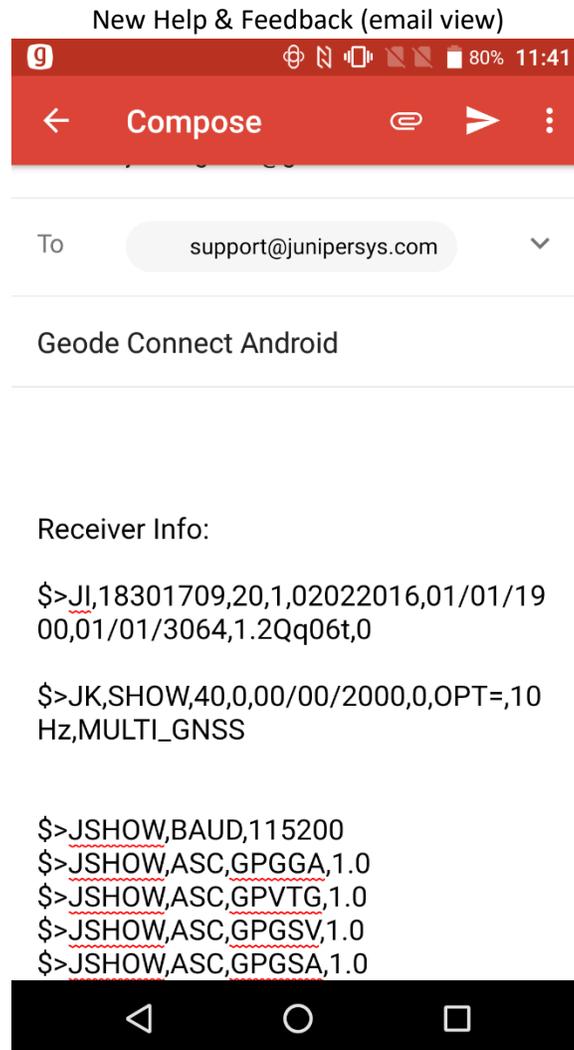
6. Additional Improvements "Under the Hood"

Along with the major new changes mentioned above, several minor bug fixes and feature enhancements have been added throughout the app to improve the user experience and product quality and reliability. As user adoption of the Geode product grows, the number of new devices that Geode Connect runs on increases. This newest version has been tested on Android operating systems from versions 4.2 through version 9 and is intended to support the thousands of devices already in the field.

7. The Job Comes First

As an ISO9001 certified company, Juniper Systems applies the concepts of "Continuous Improvement" throughout the company, and this includes our product development. As we continue to improve this support utility for the Geode receiver, we look forward to your suggestions for ways to make your job easier by making our products better. We appreciate all improvement suggestions and look forward to continuing to work with you.