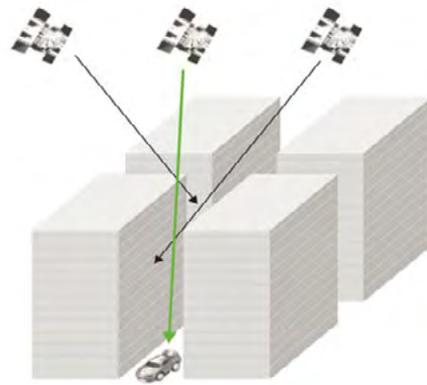# AssistNow Services
Quick Start guide

Introduction

AssistNow Online and AssistNow Offline are u-blox' free, MS-based A-GNSS services that provide GNSS aiding data (such as ephemeris, time, coarse position) for a faster Time To First Fix (TTFF). AssistNow Online requires direct internet access, and AssistNow Offline works with occasional internet connections.

u-blox maintains a world-wide network of GNSS monitoring stations, collects measurements, and distributes aiding information derived from these measurements over an Internet-connected server. The information includes ephemeris, almanac and time. This information provides u-blox GNSS receivers with a faster Time To First Fix (TTFF) in situations where the receiver has difficulty collecting required data, and where internet connectivity is available. u-blox provides AssistNow services free of charge. Those services are provided on a best-effort basis, and do not assure a defined service level regarding availability, bandwidth, latency or correctness of data.

This document gives a quick description on how a user can access AssistNow Online and AssistNow Offline for evaluation and demonstration purposes using u-center.

> The setup described here is for evaluation and testing purposes only. For more information see the *Multi-GNSS Assistance User Guide*.

AssistNow account registration

Register for AssistNow Online & Offline service at: www.u-blox.com/en/services-form.html

The registration process requires the following information:

• Name, company name and address, phone numbers, etc.
• Agreement to General Terms and Conditions of Sales

The account will be activated shortly after registration is completed.

AssistNow with u-center

u-blox' powerful GNSS evaluation tool, u-center, is available on our website (www.u-blox.com/en/evaluation-software/u-center.html). u-center submits A-GNSS requests to and receives aiding data from the u-blox AssistNow Server, transfers data directly into the GNSS receiver, and initiates aided startups.
The AssistNow services require that the PC has an internet connection (AssistNow Online: direct internet access; AssistNow Offline: occasional internet access), regardless of whether a wired or wireless connection is established.

### AssistNow Online, AssistNow Offline – Evaluation Setup
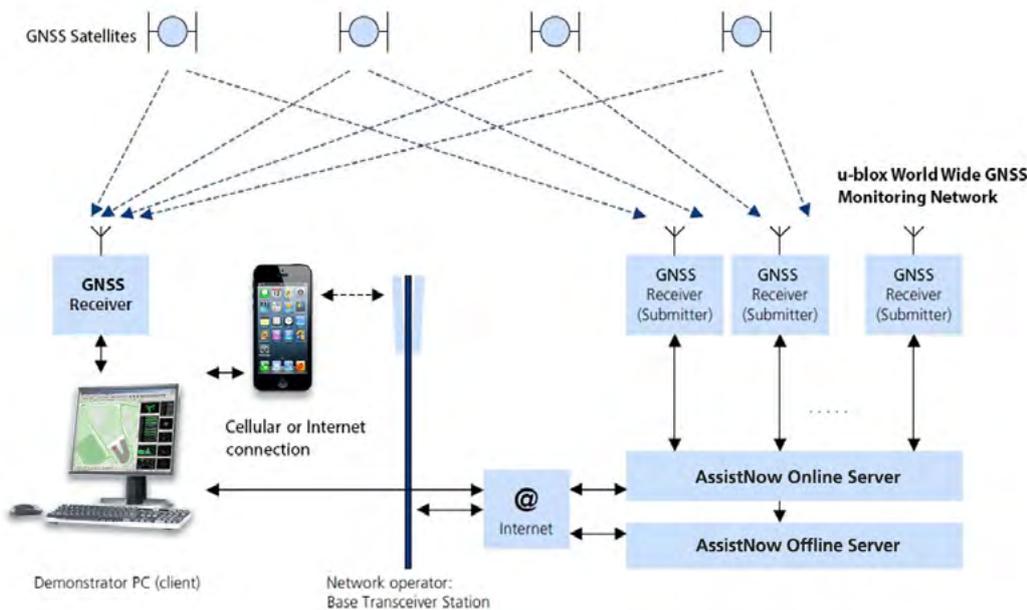
Running AssistNow Online with u-center

Open the AssistNow Online dialog from the Tools > AssistNow Online menu in u-center. Select either **AssistNow Online, GPS only** for u-blox 5 - 7 receivers, or **AssistNow Online, GNSS** for u-blox 8 and u-blox M8 receivers.
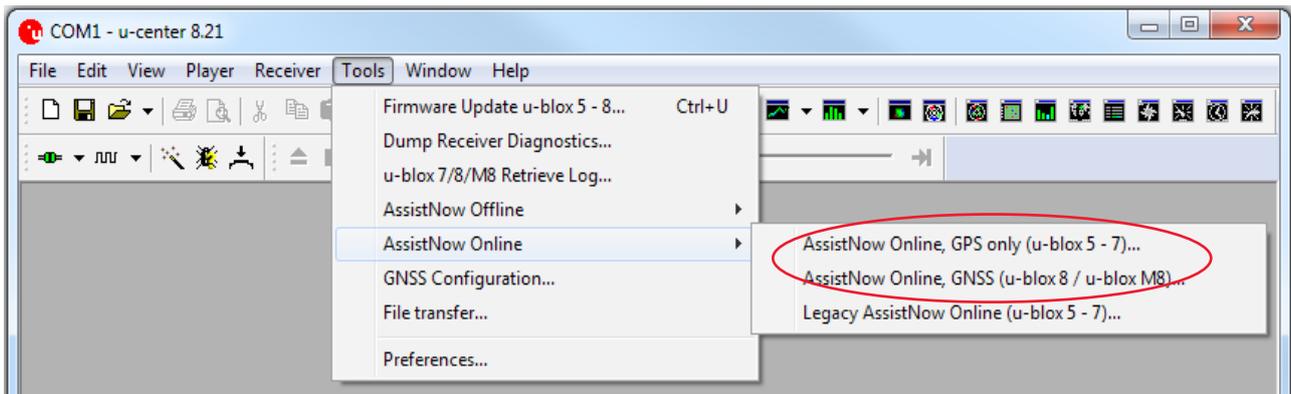
Invoking aided cold starts

1. Connect a u-blox GNSS receiver to u-center and make sure that the communication between u-center and the GNSS receiver is working (i.e. messages from the GNSS receiver are visible in u-center).

2. Open the AssistNow Offline dialog from the Tools menu as shown above. The "Multiple GNSS AssistNow Online" window appears.
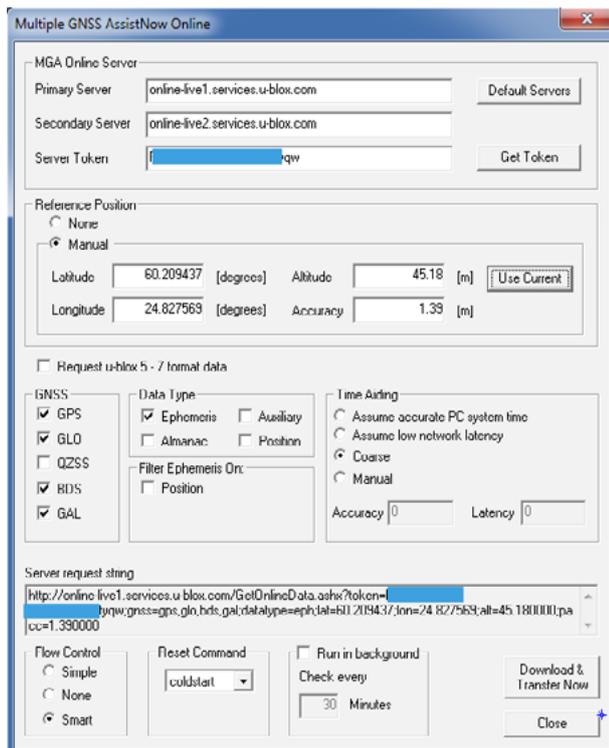
3. When using AssistNow for the first time, press the "Get Token" button. This will launch the browser with the URL: http://www.u-blox.com/services-form.html. Fill in the form to request a token. After receiving the token, enter it into the "Server Token" field on the dialog. This will allow access to the servers.

4. The TTFF performance depends on the distance to the last known position (= Reference Position) and the accuracy figure. Specify the last known position or estimated position and accuracy estimation.

5. Select what type of data (ephemeris, almanac etc) you want to download, for which satellite systems (GPS, GLONASS, etc.), and how the GNSS receiver will be reset.

6. Click on Download & Transfer to start the download.

7. The GNSS receiver will be restarted, and downloaded assistance data will be forwarded to the GNSS receiver immediately.

8. On u-center, observe the acquisition performance by viewing satellite signal levels and the "Data" docking window. This docking window displays the actual TTFF after a first position fix has been made.

> The "Accuracy" figure must contain a realistic value. For example, if the distance from the last known position is less than 30 km, then specify 30,000.00 m. Entering an unreasonably high accuracy figure (e.g. 9,999,999.99), or wrong reference position coordinates (e.g. Latitude = 0°, Longitude = 0°) will not provide the benefits of faster TTFF, and may even degrade performance.

Additional Information

To learn more about the Multiple GNSS AssistNow Online service, contact u-blox Customer Support for more information and documentation. Request the *Multi-GNSS Assistance User Guide* (document number UBX-13004360), which provides a technical and functional overview of the AssistNow Online service protocol and implementation instructions.
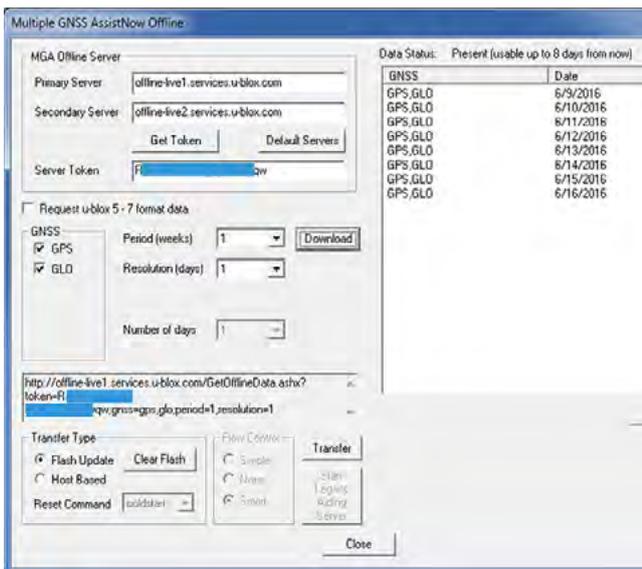
Running AssistNow Offline with u-center

Open the AssistNow Offline dialog from the Tools > AssistNow Offline menu in u-center. Select either **AssistNow Offline, GPS only** for u-blox 5 - 7 receivers, or **AssistNow Offline, GNSS** for u-blox 8 and u-blox M8 receivers.
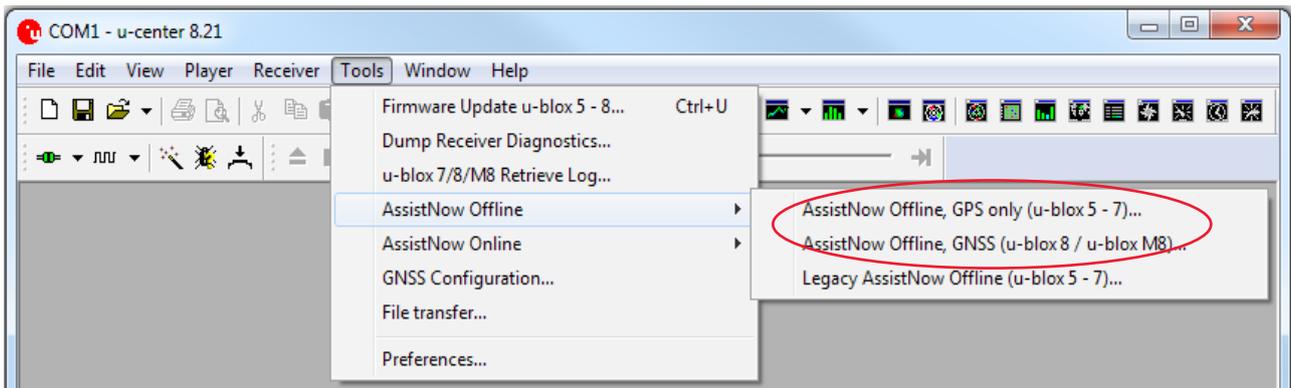
Invoking aided cold starts

1. Connect a u-blox GNSS receiver to u-center and make sure that the communication between u-center and the GNSS receiver is working (i.e. messages from the GNSS receiver are visible in u-center).

2. Open the AssistNow Offline dialog from the Tools menu as shown above. The "Multiple GNSS AssistNow Offline" window appears.

3. When using AssistNow Offline for the first time, press the "Get Token" button. This will launch the browser with the URL: http://www.u-blox.com/services-form.html. Fill in the form to request a token. After receiving the token, enter it into the "Server Token" field on the dialog. This will allow access to the servers.

4. Select the period of time and the resolution you would like the requested offline data from the server to be valid for (accuracy vs. amount of data).

5. Select which GNSS systems (GPS, GLONASS) you would like the requested offline data from the server to be valid for.

6. Click on the "Download" button to start the download. When downloaded, the view on the right side shows the days and which GNSS systems the downloaded data is valid for.

7. With the offline data now on the PC, it can be transferred in one of two ways to the receiver. You need to select which:
   - "Flash Update": Transfer all offline data to the receiver's flash memory. Only available for receivers with Flash.
   - "Host Based": u-center makes the choice and only sends the data of "today" to the receiver. This operation should be carried out at each start-up of the receiver.

8. Select how the GNSS receiver will be reset.

9. Select the transfer button to either transfer the entire offline assistance data to the receiver's flash, or only "today's" data.

10. On u-center, observe the acquisition performance by viewing satellite signal levels and the "Data" docking window. This docking window displays the actual TTFF after a first position fix has been made.

Additional Information

To learn more about the Multiple GNSS AssistNow Offline service, contact u-blox Customer Support for more information and documentation. Request the *Multi-GNSS Assistance User Guide* (document number: UBX-13004360), which provides a technical and functional overview of the AssistNow Offline service protocol and implementation instructions.

Contact us

For contact information, see www.u-blox.com/contact-us.