

#### Key Features

- Designed for mass usage - no problem with lots of parallel requests.
- Supports Ntrip 2.0 (better handling of proxy servers, firewalls, etc.).
- UDP support.
- User-friendly web interface with multiple access levels.
- Nearest base station auto selection.
- Rebroadcasting of data from other casters with user NMEA forwarding.
- Geofencing (user access control based on geographical location).
- Virtual casters - support of multiple ports, sourcetables and domains.
- Low system requirements, minimal latency times.
- TLS encryption of data streams.
- Real-time export of user connection information to SQL database.
- Configurable without connection aborts.



#### System Description

The Alberding Ntrip Caster provides an independent, high-quality solution for those planning to quickly set up and operate a real-time GNSS correction service over the Internet. It is a professional GNSS data broadcasting software that collects real-time data streams from a number of GNSS reference stations and transmits RTK corrections or other derived data products to simultaneously listening clients via the Internet. Unlike other Ntrip caster applications on the market, the Alberding Ntrip Caster has been designed for mass usage. It can easily handle hundreds of reference stations and thousands of client connections. The Alberding Ntrip Caster is a scalable software application. One can start with a single reference station and gradually increase the number of stations and users in the network. There is no need for a significant initial investment, the software licence can be flexibly extended at any time. Our Ntrip Caster software is suitable for those operating local, regional or even global GNSS networks. We also offer the Alberding Ntrip Caster software as a service.

#### Web Interface

The Alberding Ntrip Caster has a number of advanced features to help service operators get the most out of their GNSS infrastructure. The software has a web-based graphical user interface for convenient system administration and monitoring. You do not have to be an IT expert to operate the Alberding Ntrip Caster. Adding new users, groups or Ntrip mountpoints is just a few mouse clicks away on the user-friendly interface. The current position of connected clients can be monitored in real time on the map view. In addition, the clients' RTK fixing status is also shown with colour codes. The software assists service operators in troubleshooting client-side performance issues (low number of satellites, mobile Internet connectivity problems, etc.). Colour-coded user tracks can be displayed on the map or downloaded in KML format for detailed analysis.

#### Advantages

The Alberding Ntrip Caster is a next generation Ntrip broadcaster software.

Support of the **Ntrip 2.0** protocol reduces existing troubles with proxy servers and firewalls. Many additional use cases that rely on mobile Internet connection become more reliable.

Support of **multiple ports** and **different domain names** allows to handle different applications and user groups using only one software installation. The administration efforts for providers and configuration efforts on the user side will be reduced.

The Alberding Ntrip Caster offers many possibilities to **control** and **restrict user access**. For real-time monitoring of the caster a **web interface** is included.

**High performance** and **stability** as well as **low system requirements** are the key features of our Ntrip caster.



#### Nearest Station Auto Selection

The "nearest base" feature of the Alberding Ntrip Caster will automatically select the nearest active reference station to the connected client. If the user moves from station A towards station B the caster will automatically switch the user to station B when passing a so called overlap zone. For details see the nearest base info sheet.

#### Multiple Access Levels

The Alberding Ntrip Caster offers three access levels to the web interface: Admin, Subadmin and Basic. Admins have full access to all menu items and configuration options. Subadmins get limited access and can only add and manage their own stations and users without having access to other Subadmins' data. Basic accounts give view-only access to the interface for end users. All access levels can be configured flexibly. The software supports multiple ports and sourcetables to separate different correction service types for different user groups.

#### Real-Time Data Conversion

Sometimes it is a problem that some reference station receivers can output correction data in only one specific format. Normally RTK service operators would like to support all kinds of user receivers and data formats. With the help of the Alberding DataConv software it is possible to overcome this burden. We can convert between many different standard and proprietary GNSS streaming formats. With our help you will be able to support all your customers, no matter what colour their receiver is.