

GnssCaster

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Release-Info GnssCasterV1.071c 2020-06-09

```
C:\Programme\GnssCaster\gnsssurf.par
! Program-Start GnssCasterV1.071c-free -->
start Date: 05.06.2020 12:09:55

(c) SenStadtWohn, Ref.IIIB (geodaetische Referenzsysteme), May 2020
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press Ctrl+'h' for help

curr. Date: 2020.06.05 12:10:24
```

1.1 Control of the program

The following key combinations are possible:

- Ctrl + s (stop) stop the current GnssCaster-Job
- Ctrl + r (run) start your GnssCaster-Job
- Ctrl + o oder i (Input/Output-Settings) set or edit your settings
- Ctrl + l (load) load your settings of parameter file (Standard: „gnsssurf.par“)
- Ctrl + w (write) write your settings in parameter file (Standard: „gnsssurf.par“)
- Ctrl + t (timer) start timer job
- Ctrl + a (abort) stop timer job
- Ctrl + p (print) display of current log-file (see Log-File settings)
- Ctrl + h (help) help for key commands

The program can also be installed as a service using the "RunAsSvc.exe" utility (recommended).

The above platform is then only used for setting / changing the settings.

The service settings (Start / Stop / System etc.) are then set in the service management platform provided by Windows.

1.2 Administration

The following files are required to administer the software:

In the main directory **d: \ Program Files \ GnssCaster** and there in file **gnsssurf.par** all settings of the program are stored here

Mountpoint and user administration in the directory: **d: \ Program Files \ GnssCaster \ SourceUser**

Servers.csv Sourcetable des Casters
LoginUser.csv Central user access data
LoginAdminUser.csv administrator access data

Position forwarding administration in the directory: **d: \ Program Files \ GnssCaster \ SourceUser**

AdV-Lines.txt file contains all border points of the AdV caster area, which have been combined into border lines.
AdV-Rings.txt file contains all border lines of the AdV-Caster area, which have been combined into areas (countries, areas, ...).
ChangeMP-Table.csv Assignment of the AdV-Caster target mount points to the countries

KeyTable administration in the directory: **d: \ Program Files \ GnssCaster \ SourceUser (encryption)**

EquipData.txt File with the equipment manufacturer, model and serial number and the path / name of the equipment key files depending on the KeyCount (key number).

UserData.txt File with information about equipment user and service information depending on the KeyCount (not fully implemented).

ProviderUserData.txt File with provider manufacture, software and software version, the path / name of the provider key files and the saved equipment user information depending on the KeyCount.

ProviderData.txt File with provider service information depending on the KeyCount (not fully implemented).

KeyFiles syntax:

YY = year; MM = month, DD = day; hh = hour; mm = minute; ss = second; xx = KeyCount (based on time of origin and selected KeyCount)

YYMMDD-hhmmss-xx.epk Equipment-Public-Key (for automatic and manual key registration)

YYMMDD-hhmmss-xx.esk Equipment Secure Key (for automatic and manual key registration)

YYMMDD-hhmmss-xx.ppk Provider public key (for automatic and manual key registration)

YYMMDD-hhmmss-xx.psk Provider-Secure-Key (for automatic and manual key registration)

YYMMDD-hhmmss-xx.erq Equipment request file (only for manual key registration)

YYMMDD-hhmmss-xx.prs Provider Response File (only for manual key registration)

YYMMDD-hhmmss-xx.srq Service request file (only for manual key registration)

YYMMDD-hhmmss-xx.srs service response file (only for manual key registration)

Example files

Servers.csv:

```
CAS;www.sapos.geonord.de;2101;SAPOS-SH;LVA-Schleswig-Holstein;1;DEU;54.3;10.12;www.sapos-ni-ntrip.de;2101
CAS;www.sapos.geonord.de;2101;SAPOS-HH;LVA-Hamburg;1;DEU;53.50;10.00;www.sapos-ni-ntrip.de;2101;02;LVA-
CAS;www.sapos-ni-ntrip.de;2101;SAPOS-NI;LGLN_Niedersachsen;1;DEU;52.40;9.75;www.sapos-ni-ntrip.de;2101;
CAS;www.sapos-nrw-ntrip.de;2101;SAPOS-NW;LVA-Nordrhein-Westfalen;1;DEU;51.35;7.48;www.sapos-ni-ntrip.de;2
CAS;www.sapos-he-ntrip.de;2101;SAPOS-HE;LVA-Hessen;1;DEU;50.10;8.06;www.sapos-ni-ntrip.de;2101;06;LVA-He
CAS;www.sapos-ntrip.rlp.de;2101;SAPOS-RP;LVA-Rheinland-Pfalz;1;DEU;50.28;7.57;www.sapos-ni-ntrip.de;2101;
CAS;www.sapos-bw-ntrip.de;2101;SAPOS-BW;LVA-Baden-Wuerttemberg;1;DEU;48.79;9.18;www.sapos-ni-ntrip.de;210
CAS;www.sapos-by-ntrip.de;2101;SAPOS-BY;LVA-Bayern;1;DEU;48.50;11.50;www.sapos-ni-ntrip.de;2101;09;LVA-B
CAS;www.sapos-sl-ntrip.de;2101;SAPOS-SL;LVA-Saarland;1;DEU;49.25;6.99;www.sapos-ni-ntrip.de;2101;10;LVA-S
CAS;www.sapos-be-ntrip.de;2101;SAPOS-BE;SenStadtUm_Berlin;1;DEU;52.48;13.30;www.sapos-ni-ntrip.de;2101;
CAS;www.sapos-bb-ntrip.de;2101;SAPOS-BB;LVA-Brandenburg;1;DEU;52.41;12.00;www.sapos-ni-ntrip.de;2101;
CAS;www.sapos-mv-ntrip.de;2101;SAPOS-MV;LVA-Mecklenburg-Vorpommern;1;DEU;53.65;11.39;www.sapos-ni-ntrip.de
CAS;www.ntrip.sachsen.de;2101;SAPOS-SN;LVA-Sachsen;1;DEU;51.04;13.45;www.sapos-ni-ntrip.de;2101;14;LVA-Sa
CAS;www.sapos-lsa-ntrip.de;2101;SAPOS-LSA;LVA-Sachsen-Anhalt;1;DEU;52.13;11.64;www.sapos-ni-ntrip.de;2101;
CAS;www.sapos-th-ntrip.de;2101;SAPOS-TH;LVA-Thueringen;1;DEU;51.01;11.03;www.sapos-ni-ntrip.de;2101;
NET;SAPOS-AdV;SAPOS-AdV;B;Y;www.sapos.de;www.sapos-ntrip.de;2101;www.sapos.de;none
STR;EPS;SAPOS-EPS;RTCM 2.3;1(1), 3, 14, 16, 31(1), 23;0;GPS+GLO;SAPOS-AdV;DEU;52.48;13.30;1;1;SAPOS;none
STR;FKP_2;SAPOS_FKP_2;RTCM 2.3;1(1), 3, 14, 16, 20(1), 21(1), 23, 31(1), 37, 59(10);2;GPS+GLO;SAPOS-AdV;
STR;VRS_2;SAPOS_VRS_2;RTCM 2.3;1(1), 3, 14, 16, (18(1), 19(1)) oder (20(1), 21(1)), 23, 24, 31(1), 37;2;
STR;VRS_3_2G;SAPOS_VRS_3;RTCM 3.1;1004(1), 1005/1006, 1007/1008, 1012(1), 1021, 1023, 1025, 1030, 1031,
STR;MAC_3_2G;SAPOS_MAC_3;RTCM 3.1;1004(1), 1005/1006, 1007/1008, 1012(1), 1014(10), 1015/1016/1017(10),
STR;FKP_3_2G;SAPOS_FKP_3;RTCM 3.1;1004(1), 1005/1006, 1007/1008, 1012(1), 1021, 1023, 1025, 1030, 1031,
```

Example Mountpoints are:

```
EPS
FKP_2
VRS_2
VRS_3_2G
MAC_3_2G
FKP_3_2G
```

User-Data *LoginUser.csv*:

```
# Example of LoginUser-Table
# Company_of_customer;User;Passwd;Kind_of_Service;Local_description
Company-01;User-01:Passwd-01;Kind_of_Service-01;de
Company-02;User-02:Passwd-02;Kind_of_Service-02;de
Company-03;User-03:Passwd-03;Kind_of_Service-03;de
Company-04;User-04:Passwd-04;Kind_of_Service-04;de
Company-05;User-05:Passwd-05;Kind_of_Service-05;de
Company-06;User-06:Passwd-06;Kind_of_Service-06;de
Company-07;User-07:Passwd-07;Kind_of_Service-07;de
```

The fields are: user; User; Password ; SAPOS; ... Assignment for NTRIP-Clients-User only

User-Data *LoginAdminUser.csv*:

```
# Example of LoginAdminUser-Table for a example provider company
# Department;Admin-User;Admin-Passwd;Kind_of_Service;Local_description
# Example NTRIP-Server Users for NTRIP2.0
Department-01;AdminUser-01:AdminPasswd-01;Kind_of_Service-01;de
Department-02;AdminUser-02:AdminPasswd-02;Kind_of_Service-02;de
Department-03;AdminUser-03:AdminPasswd-03;Kind_of_Service-03;de
# Example NTRIP-Server Users for NTRIP1.0
Department-04;SOURCE:AdminPasswd-04;Kind_of_Service-04;de
Department-05;SOURCE:AdminPasswd-05;Kind_of_Service-05;de
Department-06;SOURCE:AdminPasswd-06;Kind_of_Service-06;de
Department-07;SOURCE:AdminPasswd-07;Kind_of_Service-07;de
```

The fields are: user; User; Password ; SAPOS; ... Assignment for NTRIP-Server-User and access for Admin-Sites in Web-Interface only

Note: The User of NTRIP-Server-User for NTRIP1.0 is always „SOURCE“

Assignment of Country-Mountpoints in **ChangeMP-Table.csv**:

```
-1;FKP_2;VRS_2;VRS_3_2G;MAC_3_2G;EPS;  
01;FKP_2_HH-SH;VRS_2_HH-SH;VRS_3_2G_HH-SH;MAC_3_2G_HH-SH;EPS_HH-SH;  
02;FKP_2_HH-SH;VRS_2_HH-SH;VRS_3_2G_HH-SH;MAC_3_2G_HH-SH;EPS_HH-SH;  
03;FKP_2_1G_NI;VRS_2_1G_NI;VRS_3_2G_NI;MAC_3_2G_NI;EPS_NI;  
05;;;VRS_3_2G_NW;MAC_3_2G_NW;EPS_NW-VRS;  
06;;VRS_2_1G_HE;VRS_3_2G_HE;MAC_3_2G_HE;EPS_HE;  
07;FKP_2_1G_RP;VRS_2_1G_RP;VRS_3_2G_RP;MAC_3_2G_RP;EPS_RP;  
08;;VRS_BW;VRS_3_2G_BW;MAC_3_2G_BW;EPS_BW;  
09;;VRS_BY;VRS_3_2G_BY;MAC_3_2G_BY;EPS_BY;  
10;FKP_2_2G_SL;VRS_2_2G_SL;VRS_3_2G_SL;MAC_3_2G_SL;EPS_SL;  
11;FKP_2_2G_BE;VRS_2_2G_BE;VRS_3_2G_BE;MAC_3_2G_BE;EPS_BE;  
12;FKP_2_1G_BB;VRS_2_1G_BB;VRS_3_2G_BB;MAC_3_2G_BB;EPS_BB;  
13;FKP_MV;VRS_MV;VRS_3_MV;MAC_3_NI;EPS_MV;  
14;FKP_SN;VRS_SN;VRS_3_2G_SN;MAC_3_2G_SN;EPS_SN;  
15;FKP_2_1G_ST;VRS_2_1G_ST;VRS_3_2G_ST;MAC_3_2G_ST;EPS_ST;  
16;;VRS_TH;VRS_3_2G_TH;MAC_3_2G_TH;EPS_TH;
```

Here the countries are assigned to the country borders in Adv-Rings.txt. Likewise the assignment of the Adv-Caster mount points to the country mount points.

The fields are:

ID country (see below); FKP_2 mount point; VRS_2 mount point; VRS_3_2G mount point; MAC_3_2G mount point; EPS mountpoint;

Country-ID (examples from Germany):

01 Schleswig-Holstein
02 Hamburg
03 Niedersachsen
04 Bremen
05 Nordrhein-Westfalen
06 Hessen
07 Rheinland-Pfalz
08 Baden-Württemberg
09 Bayern
10 Saarland
11 Berlin
12 Brandenburg
13 Mecklenburg-Vorpommern
14 Sachsen
15 Sachsen-Anhalt
16 Thüringen

Assignment of boundary points to a boundary line in the file (example): **Adv-Lines.txt**

```
...  
BEGIN_LINE: NAME: ALL-065  
53.6124372778 6.5431126333 0  
53.7053015083 6.3038400278 0  
53.9602698528 6.1173095583 0  
54.1708313611 5.9729270778 0  
54.5937232778 4.9746184472 0  
54.9835263500 4.9604747944 0  
55.7564913500 3.3272936944 0  
55.9364741250 3.3051792750 0  
55.7867767250 4.2651792028 0  
55.6356128528 4.4854416917 0  
55.4383558083 4.7592012528 0  
55.2800182750 5.1513201778 0  
55.2947527028 5.4000832750 0  
55.5395529639 5.7301301528 0  
55.1016351556 8.0271898278 0  
:END_LINE  
...
```

Assignment of boundary lines to a ring in the file (example): *Adv-Rings.txt*

```
...
BEGIN_RING: NAME: Niedersachsen-Ueb,26,0,03
ALL-051,0,-1;ALL-064,0,-1;ALL-053,-1,0;ALL-052,-1,0;ALL-000,0,-1;ALL-001,-1,0;ALL-015,0,-1;
:END_RING

BEGIN_RING: NAME: Wasserzone,27,0,03
ALL-053,0,-1;ALL-065,0,-1;ALL-054,-1,0;
:END_RING

BEGIN_RING: NAME: Schleswig-Holstein-Ueb,28,0,01
ALL-052,0,-1;ALL-054,0,-1;ALL-066,0,-1;ALL-042,-1,0;ALL-009,0,-1;
:END_RING
...
```

The two file sections show the creation of the "ALL-065" line and its use in the ring "Wasserzone". The parameters ", 0, -1;" indicate the direction in which the line is used (from index 0 to the last index of the limit points). The limit points are geogr in the system WGS84 / ETRS89. specify. The ring parameters ", 27,0,03" indicate the ring number (country number), the outer ring number and the alias ring number (area assignment). At the moment, max. 200 lines with 50,000 points each and max. 50 rings are possible.

Assignment of provider user data in the file (example): *ProviderUserData.txt*

```
# Semi-Data-Base for PSEC-KEM Communication
# created by GnssSurferV1.10 at 2015/03/09 17:00:00 (PC-Time)

# Equip-Data
EQ_KEYC="1";EQ_MAN="Adv ZS-Sapos";EQ_MOD="GnssCasterV1.07";EQ_SER="";
EQ_PUBKEY="C:\Programme\GnssCaster\SourceUser\141204-171521-01.epk";
EQ_PRIVKEY="C:\Programme\GnssCaster\SourceUser\141204-171528-01.ppk";
EQ_SECKEY="C:\Programme\GnssCaster\SourceUser\141204-171528-01.psk";
EQ_IMP="";EQ_EXP="";EQ_ENDKEY="";
NEXT_EQ;
EQ_KEYC="2";EQ_MAN="SenStadtUm Berlin";EQ_MOD="GnssSurferV1.10";EQ_SER="";
EQ_PUBKEY="C:\Programme\GnssCaster\SourceUser\141204-171521-02.epk";
EQ_PRIVKEY="C:\Programme\GnssCaster\SourceUser\141204-171528-02.ppk";
EQ_SECKEY="C:\Programme\GnssCaster\SourceUser\141204-171528-02.psk";
EQ_IMP="";EQ_EXP="";EQ_ENDKEY="";
NEXT_EQ;

# User-Data
USER_KEYC="1";USER_NAME="Hans-Juergen Goldan";
USER_AG="LGLN Hannover";
USER_EMAIL="hans-juergen.goldan@lgl.niedersachsen.de";
USER_ADDR="Podbielskistrasse 331, 30634 Hannover, Germany";
USER_ADDINF="Tel. +49(0)511/64609-477";
NEXT_USER;
USER_KEYC="2";USER_NAME="Juergen Siebert IIIB13";
USER_AG="SenStadtUm Berlin";
USER_EMAIL="juergen.siebert@senstadtum.berlin.de";
USER_ADDR="Referat IIIB, Fehrbelliner Platz 1, 10707 Berlin, Germany";
USER_ADDINF="Tel. +49(0)30/90139-5373 Fax. 030/90139-5361";
NEXT_USER;
```

In principle, the data is used to generate the keys. The data is encapsulated in the registration keys (YYMMDD-hhmmss-xx.ppk or YYMMDD-hhmmss-xx.epk).

The format for the user data file (*EquipData.txt* or *UserData.txt*) on the client side is the same as the *ProviderUserData* file.

1.2 Description of sourcetable for GnssCaster

Caster-Table (CAS):

Standard specifications of the NTRIP protocol 2.0 are used up to field 11 of the caster information (**CAS**). Starting with field 12, specifications of GnssCasterV1.07 are used:

Feld 12 (Forwarding-Area-Nummer) → Number of the area defined in the ring file of the position forwarding (country number).

Feld 13 (Name of positions forwarding area)

Feld 14 (Mountpoint-Suffix) → is used if no MP change table is to be used (simplifies target mount point determination in the case of MP standardization)

Stream-Table (STR):

Up to field 18 of the streams (**STR**), standard specifications of the NTRIP protocol 2.0 are used. from field 19, the specifications of GnssCasterV1.07 are used:

Stream-Types:

Field 19 (Forwarding-Types): possible Values → **NTRIP, TCP, INTERN, NTRIP-POOL, TCP-POOL**

Field 19 (Post-Types): possible Values → **POST, FILE**

NTRIP-Modus: Enables the GnssCaster's NTRIP proxy and position forwarding functionality (see further fields).

TCP-Modus: Enables the GnssCaster's TCP client proxy and forwarding functionality

INTERN-Modus: Allows MP access from DataStreams provided by the GnssCaster's input device.

NTRIP-POOL-Modus: similar like **NTRIP-Modus**, but the first access to NTRIP-Target will be established for all NTRIP-Clients on this Mountpoint

TCP-POOL-Modus: similar like **TCP-Modus**, but the first access to TCP-Target will be established for all NTRIP-Clients on this Mountpoint

POST-Modus: Allows the provision of MP whose data is provided externally by an NTRIP server.

FILE-Modus: Allows remote maintenance of GnssCaster configuration files via security MP access.

Forwarding Attributes:

Field 20 (Forwarding-Target-Address): possible Values → **IP-Adresse, URL(NTRIP)**

Field 21 (Forwarding IP-Port): possible Values → **TCP-Port XXXXX**

Field 22 (Forwarding-Target-Mountpoint) e.g. **VRS_3_2G_BY (NTRIP)**

(In connection with position forwarding, the mountpoint change table replaces this mountpoint with the mountpoint of the MP change table (see MP change table).)

Field 23 (Forwarding-UserPasswd) **User:Passwd** für NTRIP Forwarding Connection
(User: Passwd of the Ntrip rover dial-in are forwarded during position forwarding!)

Field 24 (Positions-Forwarding-Flag) possible Value → **0** (no Pos-Forward.), **1** (Pos-Forward. is established)

Additional Attributes:

Field 25 (hidden Mountpoint) possible Value → **0** (MP is in Sourcetable visible), **1** (Stream is in Sourcetable hidden)

Field 26 (reserved)

Backup Parameters:

Field 27 (Backup Flag)) possible Value → **TRUE** (Backup will be used), **FALSE** (no Backup)

Field 28 (StreamTypeBackup) similar like Field 19, but it's possible only NTRIP or TCP

Field 29 (Backup Target-Address): possible Values → **IP-Adresse, URL(NTRIP)**

Field 30 (Backup IP-Port): possible Values → **TCP-Port XXXXX**

Field 31 (Backup-Mountpoint) e.g. **VRS_3_2G_BY (NTRIP)**

Field 32 (Backup-UserPasswd) **User:Passwd** für NTRIP-Client Connection

Field 33 (reserved)

Description of sourcetable for ClientCaster of GnssCaster:

The assignment of the fields is almost the same as with the normal NTRIP caster, only that the stream types "POST", "TCP-POOL", "NTRIP-Pool" and "FILE" do not exist.

The fields for the backup stream are used for the right part of the client connection. The fields for the positions forwarding are not used.

Here, too, only "NTRIP" or "TCP" is provided as the stream type.

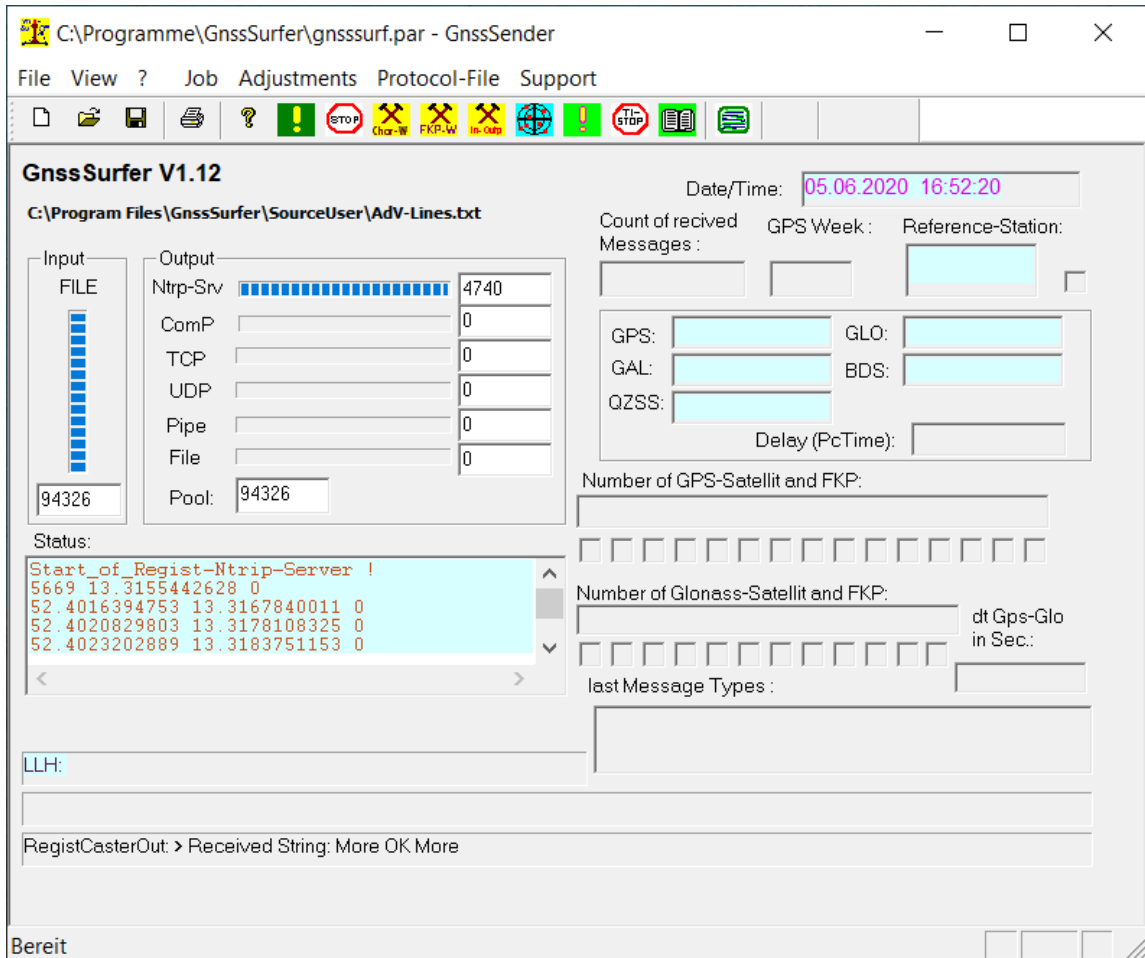
The use of the client caster is also briefly described in the GnssCaster overview.

Network-Table (NET):

The network table is used and displayed in GnssCasterV1.071 according to the standard of the NTRIP protocol 2.0.

2 File transfer with GnssSurfer to GnssCaster

The GnssSurfer program (V1.12, May 2020) is used for remote maintenance of the GnssCaster. The above csv files can be backed up and encrypted and transferred to the caster from the outside. If the transfer is successful, the old files are immediately overwritten with the new data received..





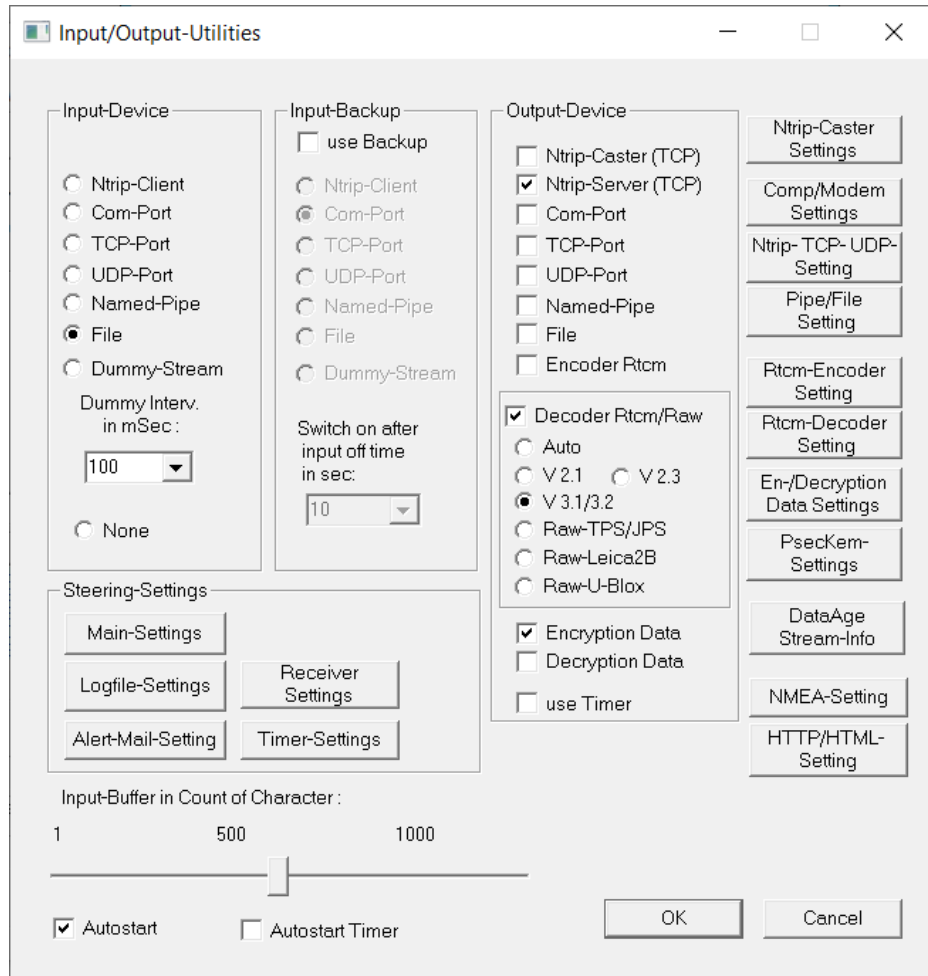
The GnssCaster has mountpoints that are not visible from the outside:

SOURCETABLE	for SourceUser\Servers.csv
MPCHANGETABLE	for SourceUser\ChangeMP-Table.csv
USERTABLE	for SourceUser>LoginUser.csv
USERADMINTABLE	for SourceUser>LoginAdminUser.csv
CLIENTCASTERSOURCETABLE	for SourceUser\ClientServers.csv
TESTFILE	for TestFile.txt (Connection test)

The transmission of a file can only be sent to the selected configuration file via these mountpoints. The path / name of the respective configuration file is defined in the "gnsssurf.par" parameter file of the AdV-Caster.

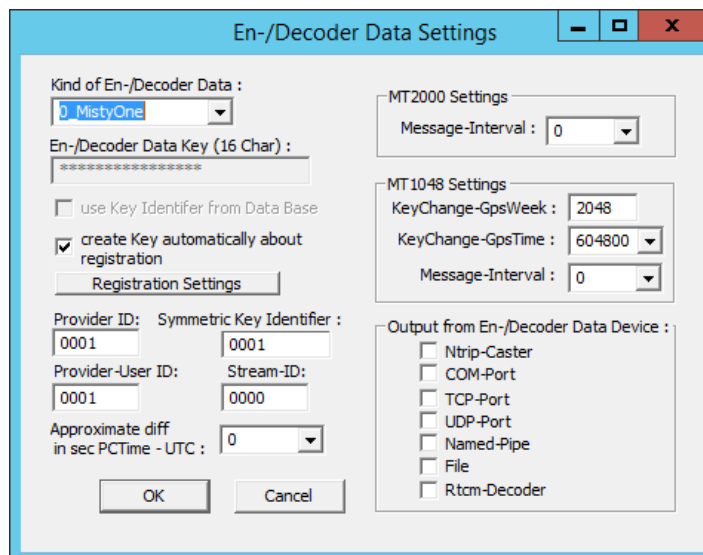
2.1 Configuration of GnssSurfer

First stop of GnssSurfers by Button  , then by Button  to Input/Output Configuration.



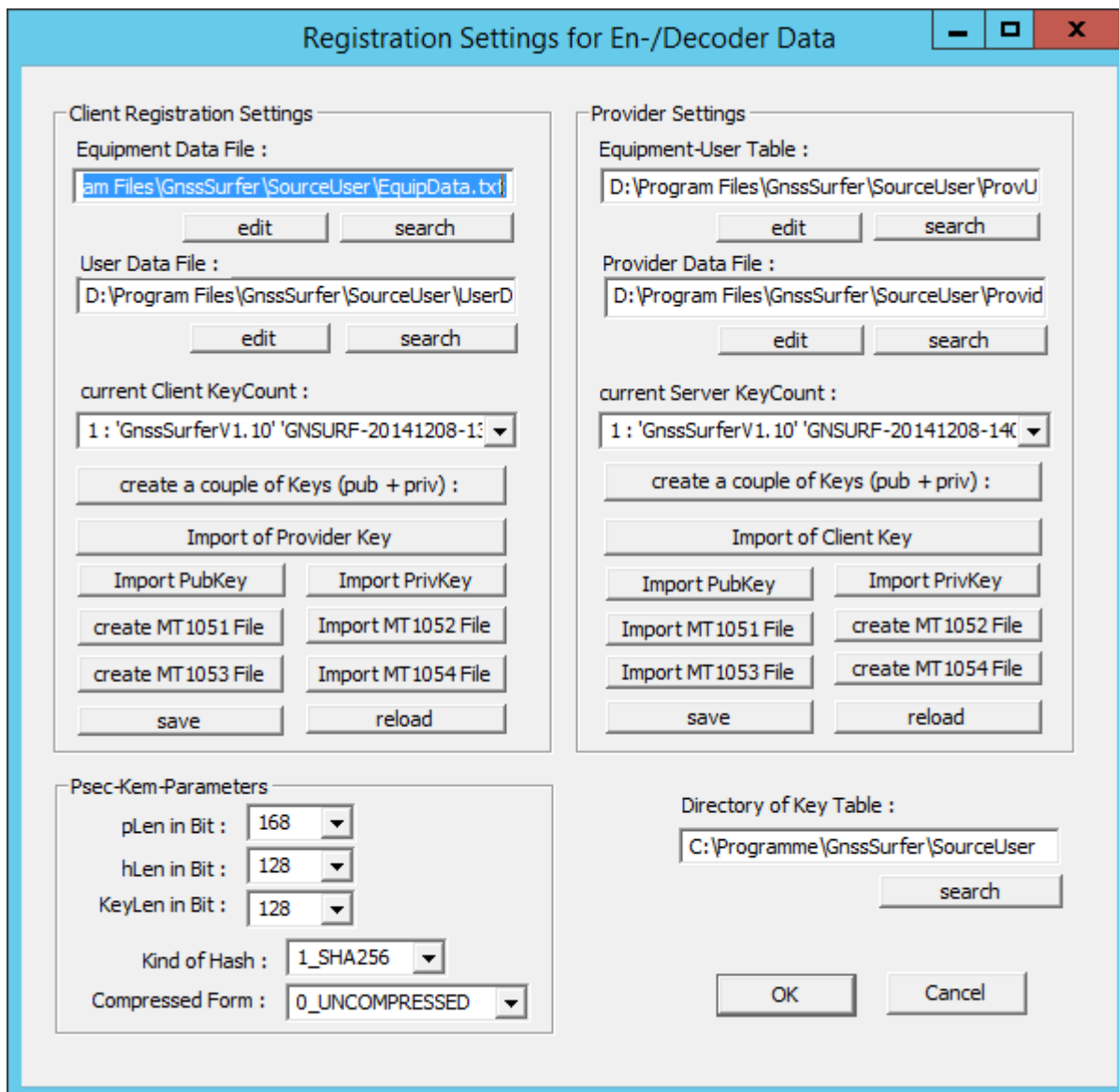
Encryption

with the button "En- / Decryption Data Settings" to the settings. These must be as follows:



Important: The same time zone must be set on both communication sides (GnssSurfer and GnssCaster). Otherwise there is no encrypted communication (see Button „Main-Settings“ in „Input/Output-Settings“-Window.

In a subsequent dialog using the "Registration Settings" button (also accessible directly via the "PsecKem Settings" button), the keys can be read in (once).



There are two areas here: Client Settings and Provider Settings. Client settings are the settings for the GnssSurfer, provider settings are made in the GnssCaster. The dialogs in the GnssCaster are identical! And must be done accordingly (see above GnssCaster).

One-Time Procedure:

- „Import of Provider Key“ read the file SourceUser\YYMMDD-HHMMSS-01.ppk
- „Import PubKey“ read the file SourceUser YYMMDD-HHMMSS-01.epk
- „Import PrivKey“ read the file SourceUser\ YYMMDD-HHMMSS-01.esk
- Button „reload“, (Pull down menu must be filled „current Client KeyCount“)
- Select of „Equipment Data File“ to SourceUser\EquipData.txt
- Select of „User Data File“ to SourceUser\UserData.txt
- Button „save“ in Client Area
- Button OK

The „Equipment data file“ and the „User data file“ must be set up beforehand.

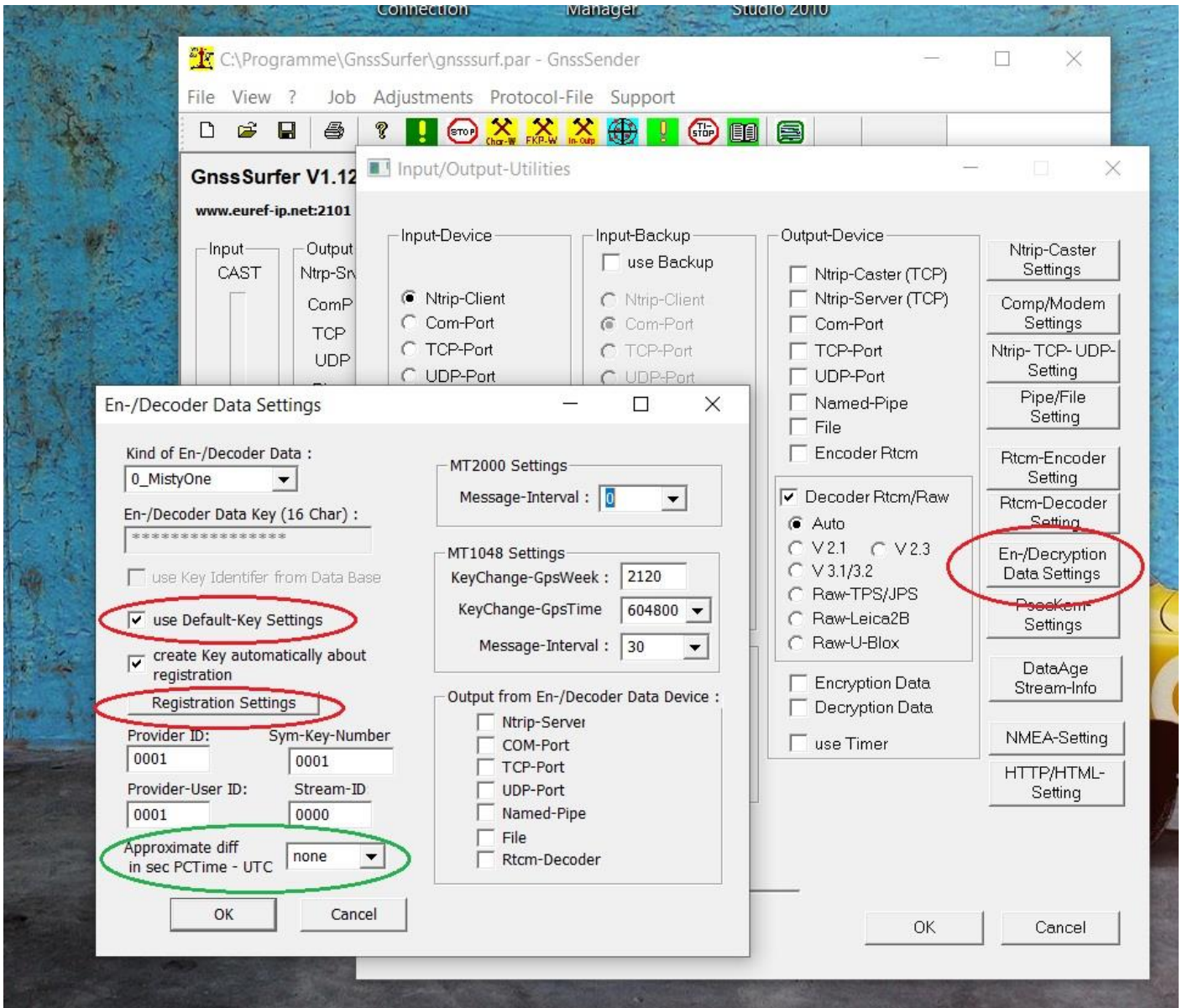
Back to the main program and saving all settings via the menu:

Job → save Job-File → File gnsssurf.par: lay down in installation directory.

Fast variant without provider user data and without equipment user data

This method uses the GnsSurfer's internal ID data. All steps can also be carried out with the GnsCaster.

1. Step: „use Default-Key-Settings“



Only set the "Approximate diff in sec PCTime-UTC" to „none“ if you have set the correct time difference in the main settings, else set your own time diff (see pull-down-menu).

All encrypted data is encrypted with private RTCM messages. These include the Rtcn3 message types MT1047 - MT1056.

2. Step: use the „Registration Settings“

Default-Key Settings for En-/Decoder Data

Client Registration Settings

ClientProvPublicKey File : search

ClientEquipPublicKey File : search

ClientEquipSecureKey File : search

2. create Client-Keys

create a couple of Keys (pub + priv) :

Directory of Key Table

C:\Program Files\GnssSurfer\SourceUse search

1. choose your Directory

Provider Settings

ServerEquipPublicKey File search

ServerProvPublicKey File search

ServerProvSecureKey File : search

3. create Provider-Keys

create a couple of Keys (pub + priv) :

OK Cancel

Choose your Key-Table directory and press the buttons „create a couple of Keys...“ for client and provider. The keys are generated and automatically stored in the key table directory.

3. Step: The result files

Default-Key Settings for En-/Decoder Data

Client Registration Settings

ClientProvPublicKey File : search

ClientEquipPublicKey File : search

ClientEquipSecureKey File : search

create a couple of Keys (pub + priv) :

Directory of Key Table

C:\Program Files\GnssSurfer\SourceUse search

Provider Settings

ServerEquipPublicKey File search

ServerProvPublicKey File search

ServerProvSecureKey File : search

create a couple of Keys (pub + priv) :

OK Cancel

By press of OK button the settings will be store in the preliminary GnssSurfer settings. The final settings are saved with the menu item "safe Job-File". In the end, the relevant key files must be sent to the provider via a secure connection.

2.2 File transfer

The file transfer is set up again via the Input / Output Utilities dialog (see above). Here is as

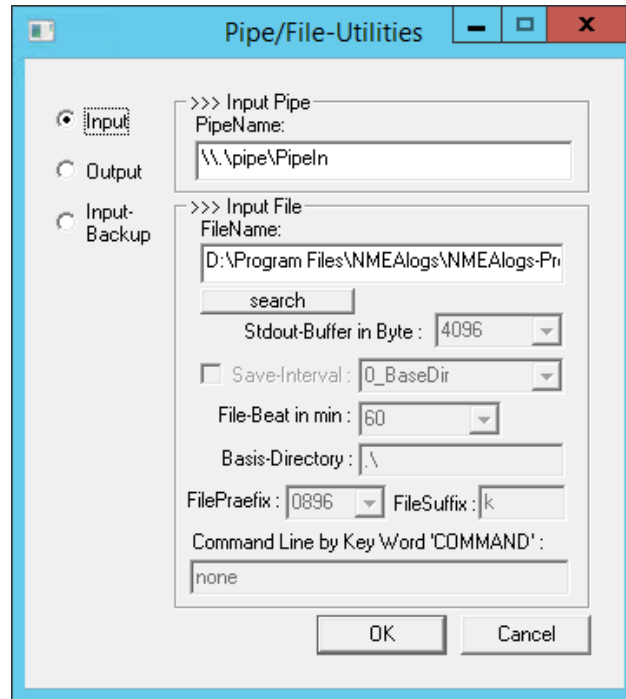
Input-Device → choose a file
Output-Device → NTRIP-Server (TCP)
Encryption Data as TRUE


with Button “Ntrip- TCP- UDP- Settings” set your target.

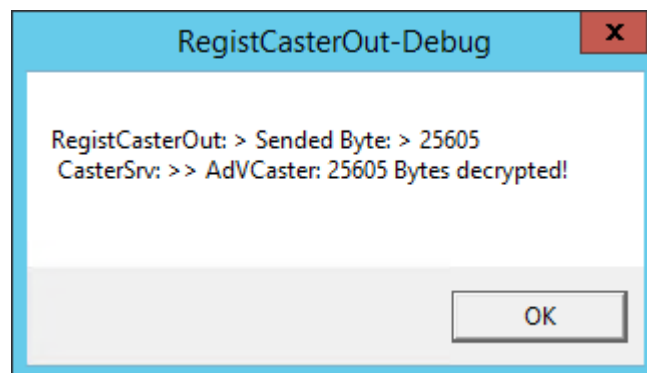
The screenshot shows the 'TCP/udp-Adjustment' dialog box. It has three radio buttons on the left: 'Input', 'Output' (selected), and 'Input-Backup'. The main area is divided into three sections: 'to Ntrip-BroadCaster (TCP-Client) Output >>>', 'TCP Output >>>', and 'UDP Output >>>'. The 'to Ntrip-BroadCaster' section includes fields for IP-Address/URL (127.0.0.1), Port (2103), attempt Reconnect on ms (300), Mountpoint (TESTFILE), a search Mountpoint button, a checked 'use Ntrip-Protocol 2.0' checkbox, User-ID (Admin), Password (Admin), a 'use Proxy-Server' checkbox, Proxy-Server IP-Address/URL (0.0.0.0), and Proxy-Server Port (8080). The 'TCP Output' section includes IP-Address (127.0.0.1), Port (4000), a checked 'TCP-Server' checkbox, and Count of Server (20). The 'UDP Output' section includes local IP-Address (127.0.0.1), local Port (10714), a 'UDP-Server' checkbox, remote IP-Address (127.0.0.1), remote Port (10713), and Count of Server (20). There are 'OK' and 'Cancel' buttons at the bottom left.

- Choose your target.
- Address and Port is your GnsCaster (e.g. 127.0.0.1:2103).
- You have to know your Target-File-Mountpoint (File-Mountpoint are always hidden). Set „Use Ntrip-Protocol 2.0“ on TRUE
- Set User-ID and Passwort (located in File **LoginAdminUser.csv** on GnsCaster-Side)
- Button „OK“

With Button „Pipe/File Settings“ choose your file for file transfer.



If necessary, save the settings as a job again. The transfer can now be started with  in the main program. In this example, an NMEA Log file is transferred to TestFile.txt. After a successful transfer, the following dialog should appear:



The transfer was only successful when the number of bytes sent and decoded matched. Otherwise the process must be repeated or incorrect settings must be changed.

The job file could be saved separately for each file type (LoginUser, Sourcetable, etc.).

The developer assumes no liability for any damage that occurs or occurs as a result of or during the use of GnssSurferV1.12 or GnssCasterV1.071c. The use of the GnssSurferV1.12 and GnssCasterV1.071c happens at your own risk.

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