

# **Installation Manual for BKG Ntrip Client (BNC) Software on SuperMicro Computer**

**Station:**

EDA Office

**SuperMicro:**

SuperServer 5019C-L

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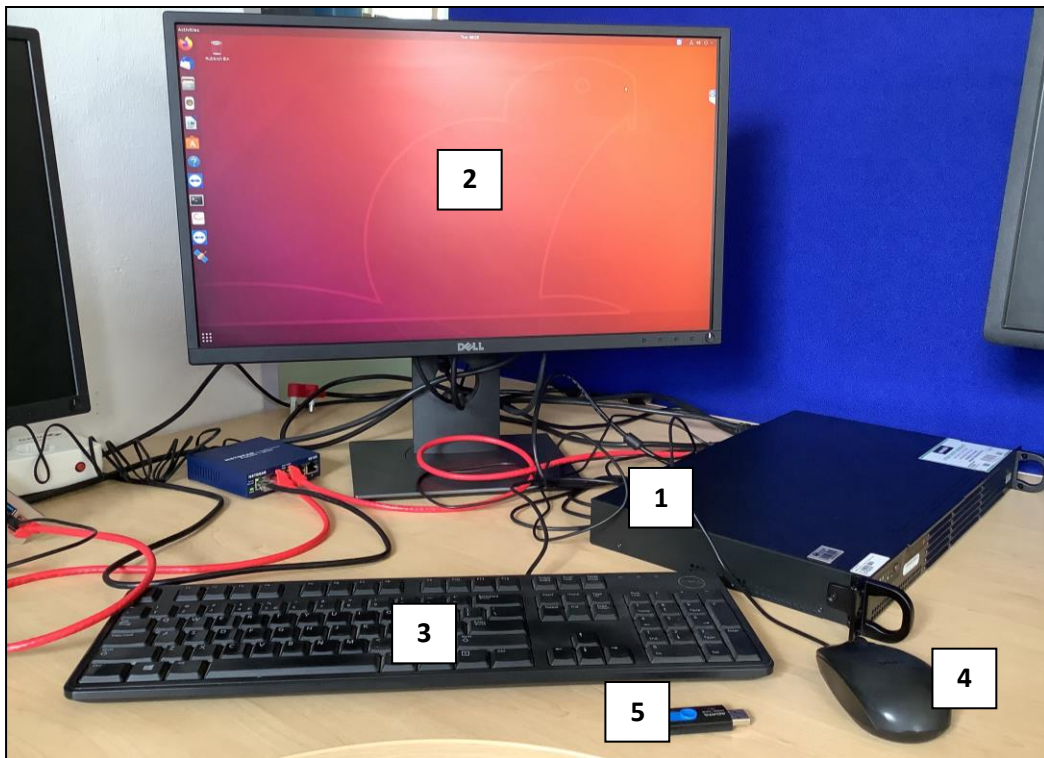
## Table of Contents

Overview .....	3
Hardware Connections .....	4
GNSS Data Stream Software Installation .....	5

## Overview

This manual will serve as a guide to the set-up and installation of GNSS data stream computers. The hardware used in this manual includes:

1. SuperMicro SuperServer 5019C-L
2. Computer Monitor
3. Keyboard
4. Mouse
5. USB Flash drive



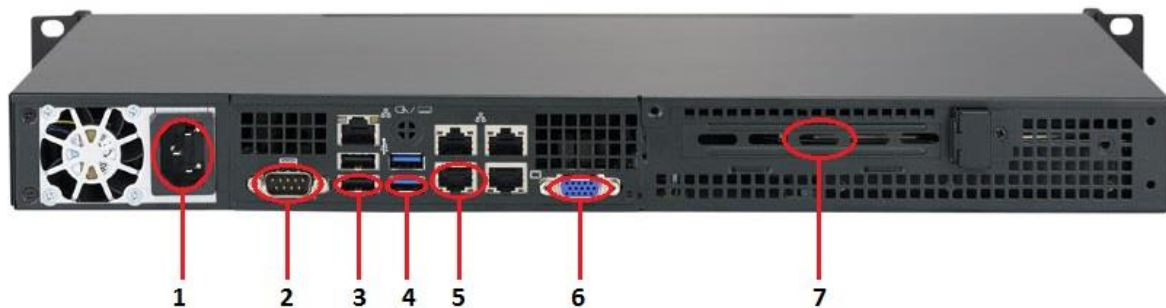
The software used in this manual includes:

1. Ubuntu Desktop 18.04 Installer loaded onto a flash drive.
2. BKG Ntrip Client (BNC) – real-time GNSS data stream.

## Hardware Connections

Below are images of the backside of the SuperMicro SuperServer currently being used by SANSA.

SuperMicro SuperServer 5019C-L:



The connections are made as follows:

1. Power
2. Keyboard and mouse in port above
3. Flashdrive with software i.e. Ubuntu 18.04
4. eth0 (Ethernet)
5. VGA (Monitor)

## GNSS Data Stream Software Installation

1. Install Ubuntu 18.04 Desktop version to your preference with time zone set to UTC/GMT.
2. Open a new terminal and type the following commands:
  - a. `sudo apt-get update && sudo apt-get upgrade`
  - b. `sudo apt install build-essential`
  - c. `sudo apt-get install qt4-default`
  - d. `sudo apt-get install libqtwebkit4`
  - e. `sudo apt-get install libssl1.0-dev`
  - f. `sudo apt install subversion`
  - g. `cd ~` \*make sure you are in the root directory
  - h. `svn checkout - -username guest - -password guest https://software.rtcn-ntrip.org/svn/trunk/BNC`
  - i. `cd BNC`
  - j. `qmake bnc.pro`
  - k. `make`
  - l. `sudo apt-get install libcanberra-gtk-module`
  - m. \*Installation done\*
  - n. \*Launch BNC\*
  - o. `./BNC`

3. The following screen should then display of BKG Ntrip Client (BNC)

BKG Ntrip Client (BNC) Version 2.13.0

File Help

Network General RINEX Observations RINEX Ephemeris RINEX Editing & QC SP3 Comparison Broadcast Corrections Feed Engine Serial Output

Settings for proxy in protected networks and for SSL authorization, leave boxes blank if none.

Proxy host

Proxy port

Path to SSL certificates  Default: /home/gps/.config/BKG

Ignore SSL authorization errors ☐

Streams:	resource loader / mountpoint	decoder	lat	long	nmea	ntrip	bytes

Log Throughput Latency PPP Plot

Add Stream Delete Stream Map Start Stop Help?=Shift+F1