Abstract
This document describes the different ways in which existing licenses can be used to work from home.

Important Notice
The content of this FAQ is without obligation, it simply describes the situation at the time of revision of this document using the current program versions CadnaA 2020 MR1 and CadnaR 2020 MR1. There is no statement whatsoever about the compatibility of a specific hardware or software component with the rest of your system or company network. Please contact the corresponding manufacturer, system vendor or network administrator for compatibility questions.

Disclaimer of liability
DataKustik GmbH is not responsible for the use of specific hardware or software components or thereby caused damage and provides no further support regarding home office questions apart from this document. It is the personal responsibility of the user to provide a suitable computer and operating system (as well as a suitable secure network connection to their own company network if needed) for the use of CadnaA or CadnaR.

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1. **Dongle types for CadnaA and CadnaR**

   There are two types of dongles available for CadnaA and CadnaR:

   1. **Local HASP dongles**
      - black USB dongle
      - number of licenses: 1
      - license type: full
      - license access: local

      Please note that a CadnaA/CadnaR license on a local HASP dongle will only work in the local user session of the computer - running CadnaA/CadnaR in a remote desktop session (RDP) will not work.

   2. **Network HASP dongles**
      - red USB dongle
      - number of licenses: 1 or more
      - license type (CadnaA): full or CALC
      - license type (CadnaR): full
      - license access: local, network, RDP

      Please note that all CadnaA/CadnaR licenses on a network HASP dongle must have the same license type and the same configuration options.

2. **License types for CadnaA**

   There are two types of licenses available for CadnaA:

   1. **Full license**
      - interactive work with project files using CadnaA
      - passive calculation of existing project files using CadnaA Batch

   2. **CALC license**
      - passive calculation of existing project files using CadnaA Batch

      Please note that a CALC license cannot be used to start the normal CadnaA - only CadnaA Batch will work.
3. **Possible scenarios for home office**

Basically, there are three possible scenarios how to use licenses for CadnaA/CadnaR when working in the home office:

1. **Direct use of a USB HASP dongle at the physical workstation in the home office:**
   - physical workstation (e.g. laptop from work) with CadnaA/CadnaR at home
   - Local HASP dongle at home, connected via USB to workstation
   - License access directly (requires neither VPN nor Internet)
   - If necessary, a private computer can be used (after installation of CadnaA/CadnaR and the HASP dongle driver)
   - Works in principle also with a network HASP dongle connected via USB (only makes sense if there is only one license on the dongle or only one person is supposed to work with it)

2. **Use of a license of a network HASP dongle located in the company via VPN on a physical work computer in the home office:**
   - physical work computer (e.g. laptop from work) with CadnaA/CadnaR at home
   - Network HASP dongle plugged into dongle server in company
   - License access via VPN over the Internet
   - Requires stable Internet connections both at work and at home (sessions on the dongle may become invalid if the connection is temporarily lost)
   - Requires little bandwidth (when using project files stored locally on the workstation)
   - Requires a correctly configured VPN (assign IP address from the same subnet as in the company if possible)
   - Any firewalls must allow communication via port 1947 for TCP and UDP
   - The name or IP address of the dongle server must be entered in the HASP Admin Control Center of the workstation (Options -> Configuration -> Access to Remote License Managers -> Remote License Search Parameters, http://localhost:1947/_int_/config_to.html)
- Local resources of the physical workstation are fully usable (e.g. hardware acceleration of the 3D graphics card in OpenGL representation, use of CUDA in CadnaR)

- Does not work with a local HASP dongle

3. Use of a license of a network HASP dongle located in the company on a physical workstation also located in the company, which is remotely controlled from another computer located in the home office via Remote Desktop Session over a VPN connection:

   - Network HASP dongle is plugged into a dongle server in the company
   - Physical workstation with CadnaA/CadnaR in company
   - License access regular via company network
   - Remote control of the work computer via RDP over VPN
   - Requires fast Internet connections both in the company and at home for fluent working (transfer of screen contents)
   - Requires a correctly configured VPN
   - Firewalls, if present, must allow RDP communication (by default via port 3389 for TCP and UDP)
   - further explicit settings in the operating system of the workstation or in the domain may be necessary to allow remote access via RDP
   - Low hardware requirements for the computer in the home office, as it only must process and transmit the screen output and the keyboard and mouse inputs for remote control of the work computer
   - File access in the company network at full speed
   - Calculation speed of the workstation can be used completely (with CadnaR also for CUDA calculations)
   - 3D representation with OpenGL only possible without hardware acceleration and therefore slow
   - Does not work with a local HASP dongle