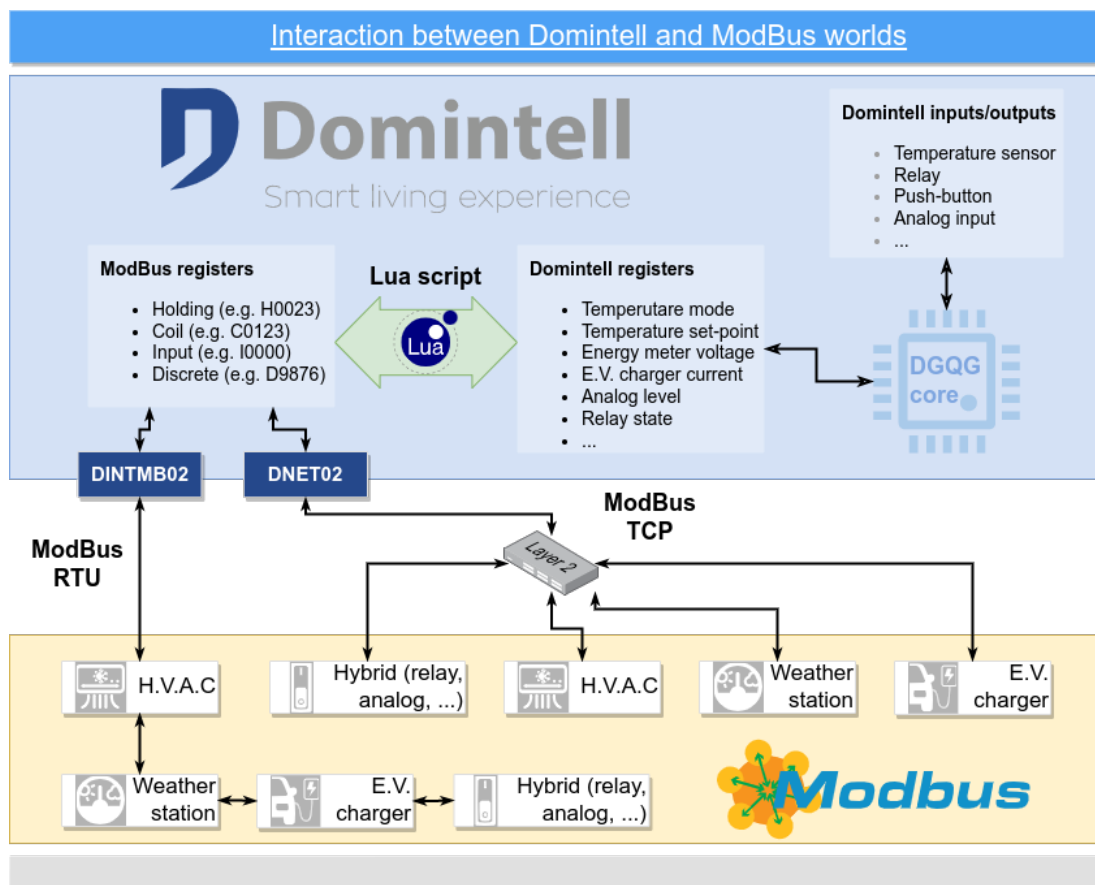


## ModBus integration

### Overview

Modules DINTMB02 (for ModBus RTU) and DNET02 (for ModBus TCP) allow to connect ModBus devices to the Domintell system. A large variety of devices can be interfaced with the Domintell system thanks to a high-level abstraction using Lua scripts :

- Heating, ventilation, and air conditioning (H.V.A.C),
- Controlled mechanical ventilation or continuous mandatory ventilation (C.M.V.),
- Energy meter,
- Electric vehicle charger,
- Weather station,
- ORP/Ph controller for water of swimming pool,
- Generic analog input/output,
- Generic digital input/output,
- and a lot more.



### Specifications/Limitations

- **GoldenGate version 20.3.0** or higher is required.
- A NewGen DGQG is required (DGQG02, DGQG04, ...).
- A **DINTMB02** is required for ModBus RTU.

- The **DINTMB02** has the following **limitations**:
  - Maximum **64 ModBus slave devices**.
  - Maximum **96 Domintell registers** (temperature mode, temperature set-point, analog level, fan speed, ...)
  - Maximum **5 ModBus 16-bit registers per Domintell register**.
- A **DNET02** is required for ModBus TCP (not yet implemented).
- There is no special limitation about manufacturer or type of ModBus device except the type of handled inputs/outputs (see below).
- Domintell inputs/outputs ported to ModBus :
  - temperature sensor
  - analog input (raw value and percentage)
  - relay
  - fan
  - energy meter
  - ... more to come
- New Domintell inputs/outputs specially created to support a wider range of ModBus devices :
  - vanes
  - status
  - ... more to come
- The DINTMB01 module is not compatible/can not be used. It can only be used with DGQG01.

## Global configuration

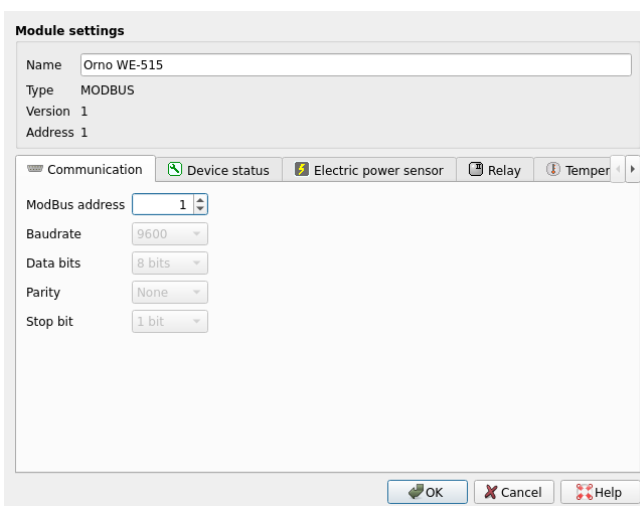


Figure 1: Serial configuration for RTU devices

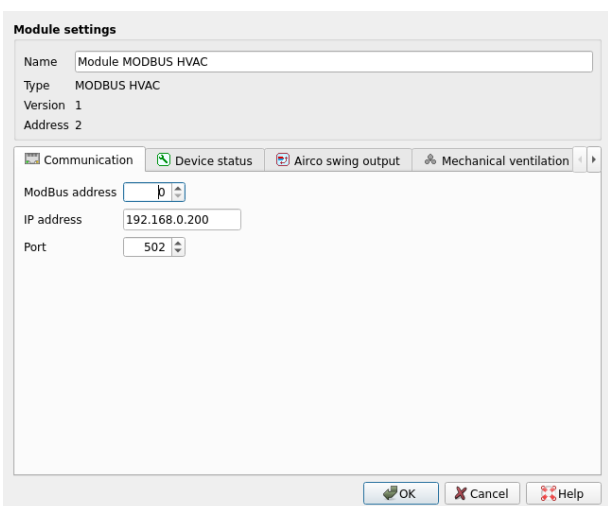


Figure 2: IP configuration for TCP devices

For ModBus RTU devices linked to a DINTMB02, serial configuration can not be modified. The serial configuration of the DINTMB02 will be used.

For ModBus TCP devices, IP address and port (usually 502 by default) must be set. ModBus

address is generally ignored but the datasheet of ModBus devices must be checked to have which slave address must be used.

## Add an ModBus IO

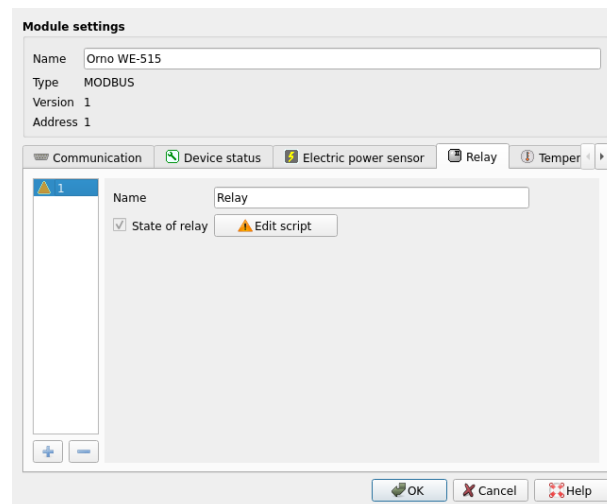





Figure 3: Add a new IO

Select the tab with the IO type that you want to add. When clicking on , you can add an IO.

A warning sign () will be shown when ModBus registers or Lua scripts are not correctly configured.

When the type of IO only has one Domintell register (e.g. "State of relay" for a relay output), it will not be possible to disable the script. At least one Domintell register must enabled to have a valid IO ModBus.

To be able to remove an IO () , the IO must not be used anywhere in the application. If the IO is used, the button will be disabled.

## Edit Lua script

To convert Domintell value from/to ModBus 16-bit value, a Lua script is used.

When clicking on *Edit* button, the editor for the Lua script will be opened. To be able to edit the Lua script, at least one ModBus register must be defined. If no ModBus register exists, the configuration dialog for ModBus registers will be opened.

For more information about the Lua editor and how to use it and write scripts, please read modbus\_lua-tech\_note-revX-en.pdf at

[https://pro.mydomintell.com/share/manual/brief\\_sheets](https://pro.mydomintell.com/share/manual/brief_sheets)

## Document history

Version	Date	Author	Description
1	2024/02/01	G.C.	- Initial version
2	2025/09/03	G.C.	- Add limitations for the DINTMB02 in Specifications/Limitations.