

# Gateways.NET

## Software Requirements

Programming languages: C#  
Framework: ASP.NET / ASP.NET Core  
Database: MSSQL or in-memory  
Automated build: Solution of choice  
UI: Angular

## Description

This sample project is managing gateways - master devices that control multiple peripheral devices. Your task is to **create a REST service** (JSON/HTTP) for storing information about these gateways and their associated devices. This information must be stored in the database. When storing a gateway, any field marked as “to be validated” must be validated and an error returned if it is invalid. Also, no more than 10 peripheral devices are allowed for a gateway. The service must also offer an operation for displaying information about all stored gateways (and their devices) and an operation for displaying details for a single gateway. Finally, it must be possible to add and remove a device from a gateway.

Each gateway has:

- a unique serial number (string),
- human-readable name (string),
- IPv4 address (to be validated),
- multiple associated peripheral devices.

Each peripheral device has:

- a UID (number),
- vendor (string),
- date created,
- status - online/offline.

## Other considerations

Please, provide

- Basic UI - recommended or (providing test data for Postman (or other rest client) if you do not have enough time.
- Meaningful Unit tests.
- Readme file with installation guides.
- An automated build.