## Installation

## Install Kubernetes Windows (Install Chocolatey First Included)

- · Open PowerShell in ADMIN Mode (Mandatory)
  - Run the following (Install Chocolatey):
    - Set-ExecutionPolicy Bypass -Scope Process -Force;
      [System.Net.ServicePointManager]::SecurityProtocol =
      [System.Net.ServicePointManager]::SecurityProtocol -bor 3072; iex ((New-Object System.Net.WebClient).DownloadString('https://community.chocolatey.org/install.ps1'))
      - Installs Chocolatey Windows installer on cmd
    - choco install minikube
      - · Installs kubernetes client
    - minikube start --driver=docker
      - · Defines driver for minikube
    - choco install kubernetes-cli
      - · Installs kubernetes-cli
    - kubectl version --client
      - (Verifies version of kubectl)
- Install Lens IDE:
  - o https://k8slens.dev/
  - Login with account (nm.beites)
- Create or import config to this folder C:\Users\nunob\.kube (default path on windows)
  - New clean config in minikube (default config with minikube installation (config file already there))
  - Run in powershell or lens terminal
    - minikube stop minikube delete
    - minikube start --nodes 2 --cpus 4 --memory 8192 --disk-size 60g --driver=docker minikube node add --cpus=2 --memory=4096 --disk-size=30g
      - Sometimes depending on machine specifications of cpu and ram etc, deleting PV even after deleting PVC can give some problems. This configuration works in a 5700X Ryzen and 32Gb of RAM
    - kubectl create namespace local-namespace

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- (1 control node and 2 slave nodes) This command creates automatically new config file inside .kube
- minikube status (VERY IMPORTANT)
  - If not running : minikube start
    - EVERYTIME THAT PC STARTS, THIS COMMAND HAS TO BE RUN IN POWERSHEEL IN ADMIN MODE
- Exposing Minikube to an External IP (Might solve some issues connection Lens to localhost minikube and from services to the ouside)
  - minikube tunnel
- Access minikube host environment:
  - · minikube ssh

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