MongoDB Remote Hosting Guide

Version 1.0

This is a guide to install MongoDB in a PC which then could be accessible by CV-Temperature-Data-Collector-App in another PC within the same network.
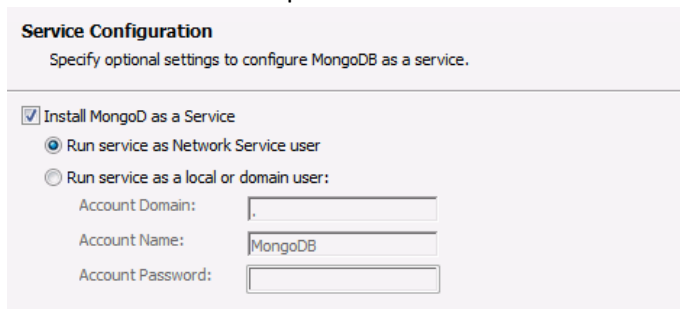
Requirements:

- Different PCs that will host MongoDB and CV-Temperature-Data-Collector-App App must be in the same network.

We will refer the PC where MongoDB is installed as Mongo PC.

We will refer the PC where CV-Temperature-Data-Collector-App is installed as Collector PC.

In Mongo PC:

1. MongoDB Community Server must be installed to get the MongoDB database.
   Windows msi can be downloaded here: https://www.mongodb.com/try/download/community
   Please make sure this option below is selected

   Run the msi, and do the following:
   - Choose "Complete" Setup type.
   - Keep on continuing the installation using the default selected configurations
2. Open "mongod.cfg" file which should be in your MongoDB installation folder.
   For example: C:\Program Files\MongoDB\Server\5.0\bin\
   In the example above, the number 5.0 is the Mongo Server version number so you might see a different number.

   In "mongod.cfg", please replace the highlighted in red below with 0.0.0.0


   IMPORTANT:
   When you tried to save the change, you might be prompted that you don't have enough permission to do it. Make sure you save it with administrator privilege.

3. Next, we will need to configure the Firewall Inbound rule so that Collector PC could connect to this MongoDB.
   Below is the instruction on how-to configure it if you're using "Windows Defender Firewall with Advance Security" app.
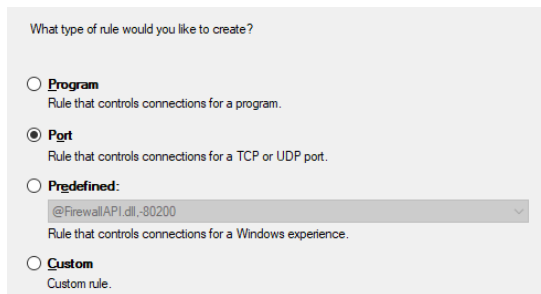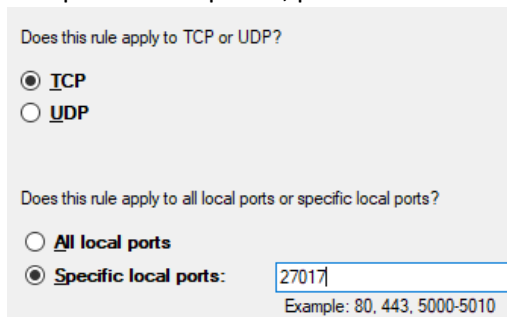   1. Select "Inbound Rules"
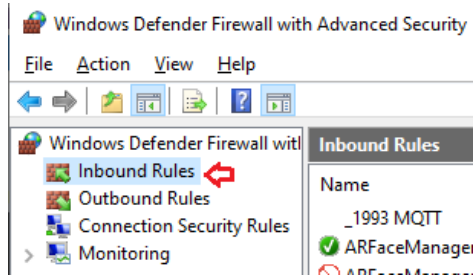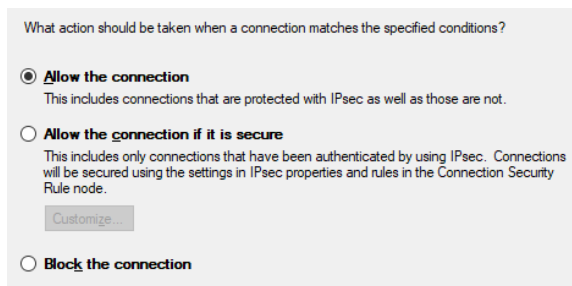

   2. Select "New Rule"

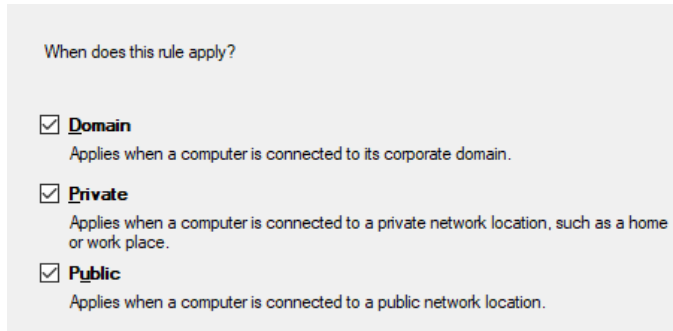   3. Select "Port" then hit "Next"

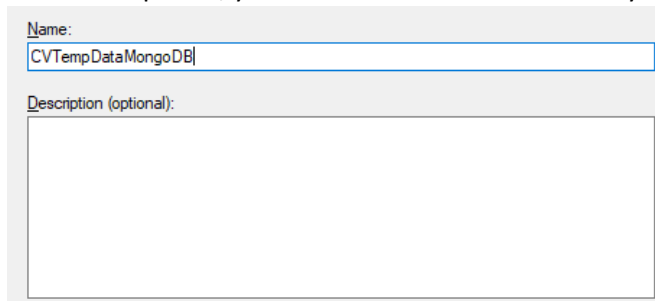   4. In "Specific local ports", put 27017 then hit "Next"

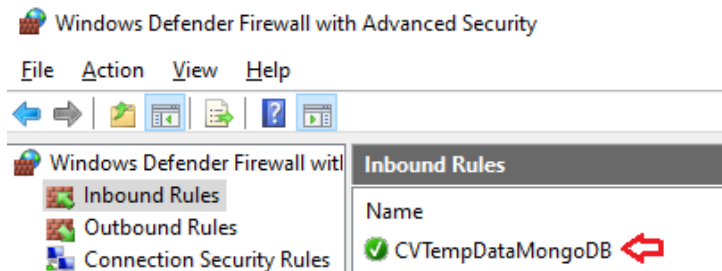   5. Select "Allow the connection" then hit "Next"

6. Here you can specify which domain you want this rule to be applied.
   You can leave them as it is and change it later if you want it to be more restricted.
   Hit "Next"

   When does this rule apply?

   ☑ **Domain**
   Applies when a computer is connected to its corporate domain.

   ☑ **Private**
   Applies when a computer is connected to a private network location, such as a home or work place.

   ☑ **Public**
   Applies when a computer is connected to a public network location.

7. The last step here, you can name the rule whatever you want and then hit "Finish."

   Name:
   CVTempDataMongoDB

   Description (optional):

   If the rule creation is successful, you should see like this screenshot below:

   Windows Defender Firewall with Advanced Security

   File   Action   View   Help

   Windows Defender Firewall witl   **Inbound Rules**
       Inbound Rules   Name
       Outbound Rules   ✅ CVTempDataMongoDB ⬅
   Connection Security Rules

TIPS:

If you would like MongoDB to only accessible by authorized remote IPs, please do the following:

   o   Right click the new created MongoDB Inbound rule, and choose "Properties"
   In the Properties window, select "Scope" tab then in "Remote IP address" section select
   "These IP addresses:" to add any authorized remote IPs.
   Make sure to hit "Apply."

   Remote IP address
       ○ Any IP address
       ◉ These IP addresses:

       192.168.4.33   Add...
                               Edit...
                               Remove
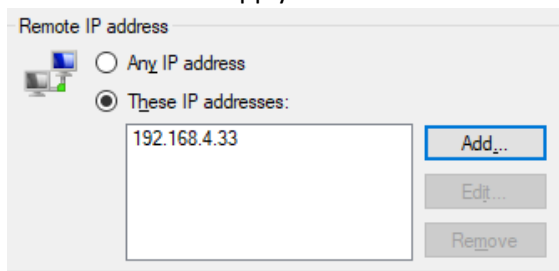
4. Open the "Services" window by searching "services" in Windows and hit "Services" app. Find "MongoDB Server" service, select it (**1**), and then Restart (**2**).
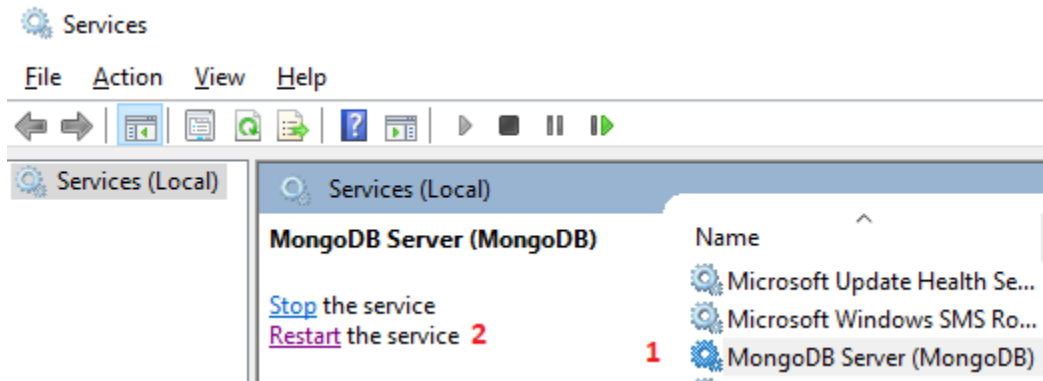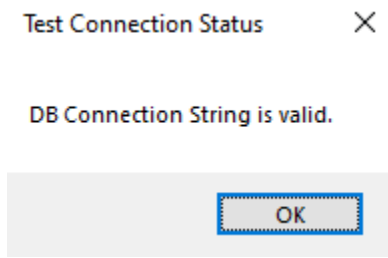

In Collector PC:

1. Open CV-Temperature-Data-Collector-App and go to "Settings" tab
2. Update the "DB Name" input with the following format:
   mongodb://<MongoPC IP>:27017
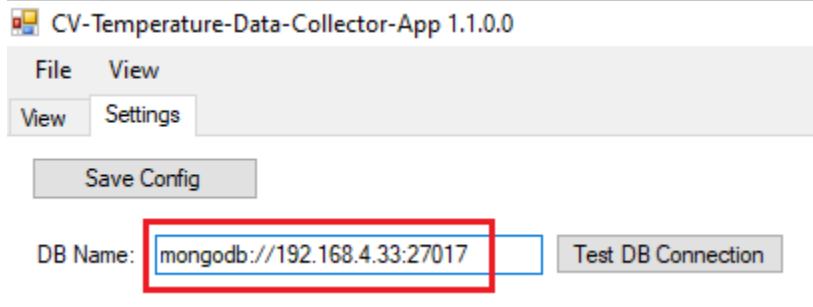
3. Hit "Test DB Connection" to ensure the DB connection could be established. Here's a successful connection message:

TIPS:

If you already followed the above steps but kept on getting "DB Connection String is invalid", please close and then reopen CV-Temperature-Data-Collector-App.