M.A.C. SOLUTIONS

PROCESSVUE

Multi-Collector System

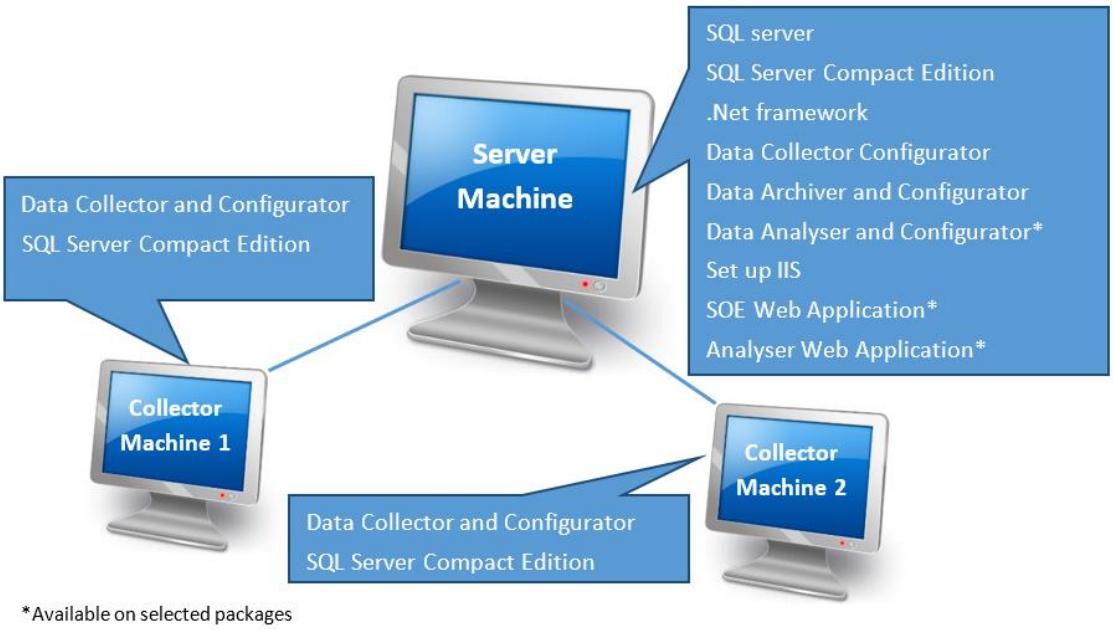
Abstract

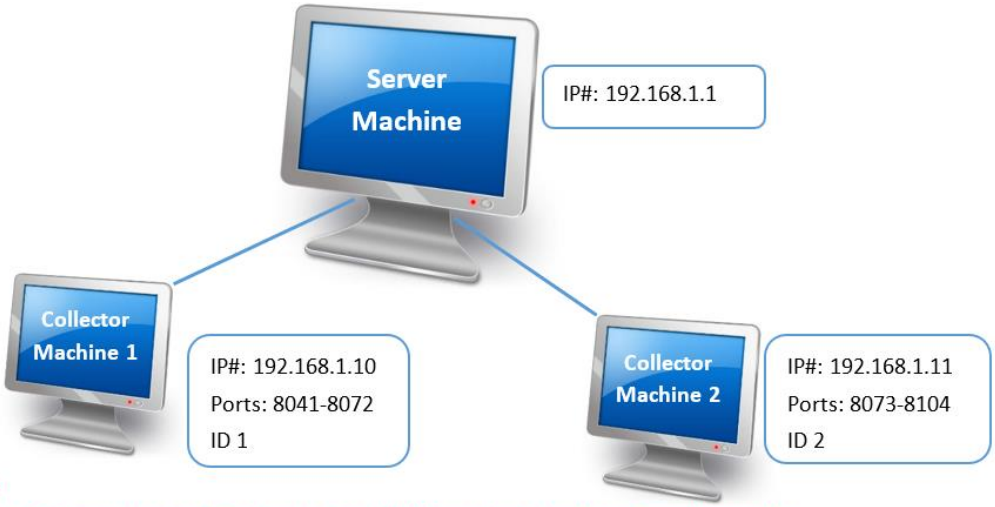
How to install a Multi-Collector system and how to deal with a Multi-Collector system which contains four or more Data Collectors

Installing a Multi-Collector System

The following section of the guide covers the installation of ProcessVue across multiple machines. As an example, the section will explain how ProcessVue is setup on **One Server** and **Two Remote Collector Machines**. The figure below illustrates the system hierarchy and the software that needs to be installed that is required for each machine.

The image below illustrates the communication hierarchy. Each machine will need to have its own fixed IP Address. *The IP Addresses used below are for example purposes only.*



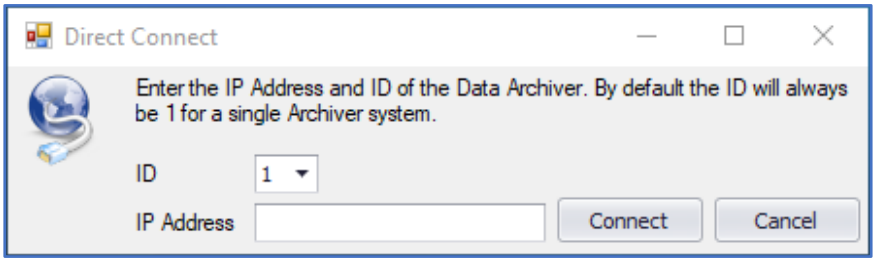


Note:

1. Each machine needs to have a fixed IP address for the system to work correctly.
2. Collectors need to be assigned with different IDs

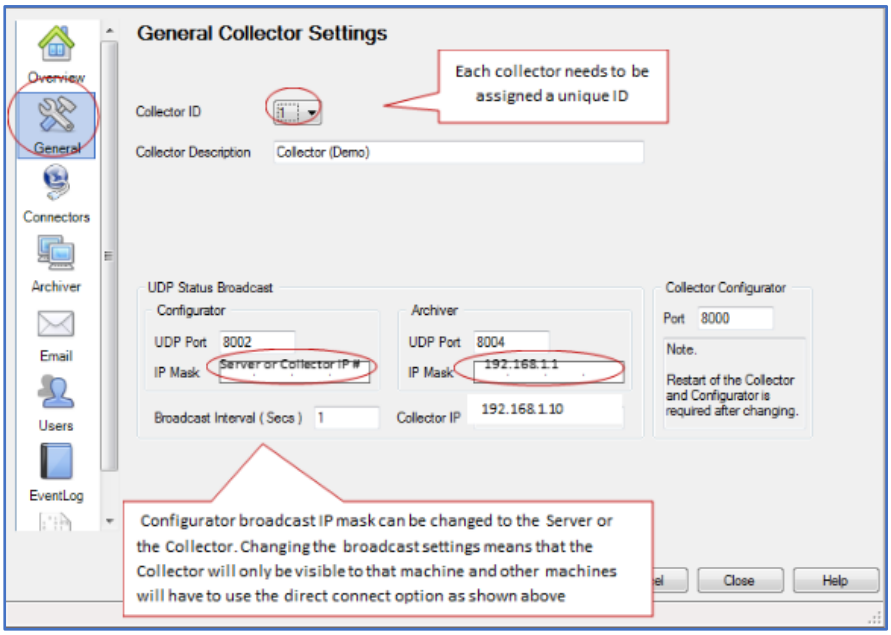
The Data Collector Configurator can be installed on each of the Collector Machines and on the Server Machine depending on preference. Installing the Collector Configurator on all of the machines means that any machine can be used to configure the Collector and the different Collectors can be accessed from the Server Machine.

Configuring the Data Collector/s



Data Collectors broadcast settings need to be changed to reference the machine which is hosting the Data Archiver *(The Server Machine).* Collector settings can be accessed on the individual machines or via the Direct Connect option within the Collector Configurator using the machines IP address. E.g., to connect to Collector 1, we select ID 1 and use 192.168.1.10 IP Address. *(Direct Connect will use Port No. 8000 to access the Collector and this Port will need to be opened on the Firewall).*

Once connected, on the settings page, click **General** and change the broadcast IP mask for the Archiver to broadcast to the servers IP Address *(In this example it is 192.168.1.1).*

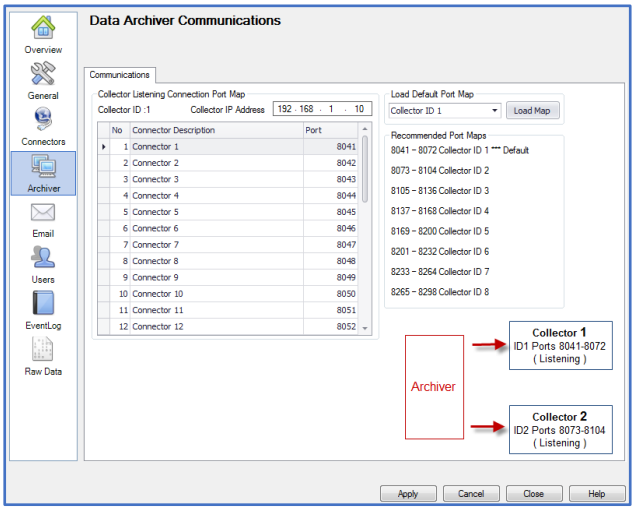


Each Data Collector needs to be assigned a unique ID so that the Data Archiver can allocate unique Port Numbers for each of the inputs/connectors.

Configuring the Ports in the Data Collector

First, click on the Archiver Icon and then this display will allow the user to configure the ports used to transfer data between the Data Collector and Data Archiver. Inputs/connector ports can be assigned manually by changing the ports number to the left for each Connector or using the Default Port Map via the map loader. The Default Port Map is preloaded with port ranges for each possible

collector up to the maximum of 8. To use the map load, select which collector default map you want to load and click the Load Map button, followed by the Apply button. In our example, we loaded Collector ID 1 for Collector 1 (IP 192.168.1.10) and Collector ID 2 for Collector 2 (IP 192.168.1.11)

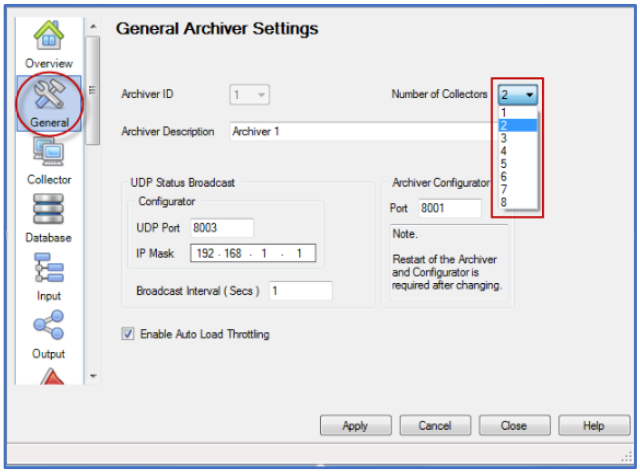


The default Port ranges are as follows:

Collector	Default Port Numbers
ID 1	8041 – 8072
ID 2	8073 – 8104
ID 3	8105 – 8136
ID 4	8137 – 8168
ID 5	8169 – 8200
ID 6	8201 – 8232
ID 7	8233 – 8264
ID 8	8265 – 8298

Configure the Ports in the Data Archiver

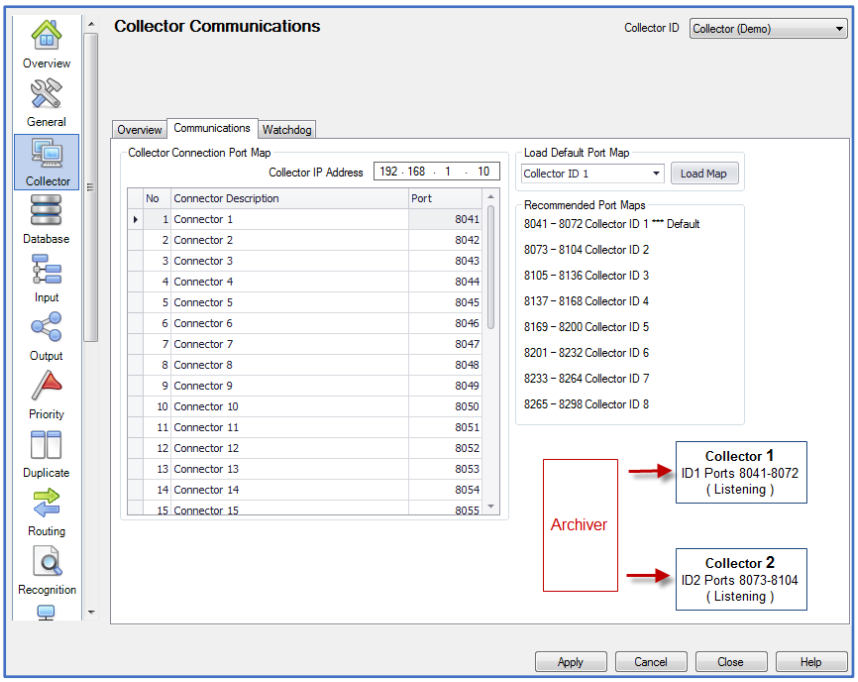
The number of Data Collectors will need to be configured before configuring the ports, on the Server Machine open and log into the Archiver Configurator. Once logged in select the general page and select the number of collectors from the drop-down list and click Apply.



To configure the ports, click the Collector icon and select the Communications Tab. Firstly, you will need to select the Collector to change from the Collector ID dropdown list and similarly to the Collector Configuration. Inputs/Connectors ports can be assigned manually by changing the port numbers to the left or using the Map Loader.

To use the Map Loader, enter the IP Address of the Collector Machine in the Collector IP Address Box and select which Collector default map you want to load and click the Load Map button followed by the apply button. *Repeat these steps to configure the second Collector making sure to change the Collector IP Address. In this example, Collector ID 1 for Collector 1 (IP 192.168.1.10) and Collector ID 2 for Collector 2 (IP 192.168.1.11).*

IMPORTANT! – Ports will need to be opened for all enabled Connectors in the Firewall if a Firewall is in use. It is possible you may need to contact your IT department on getting this setup and for any additional information.

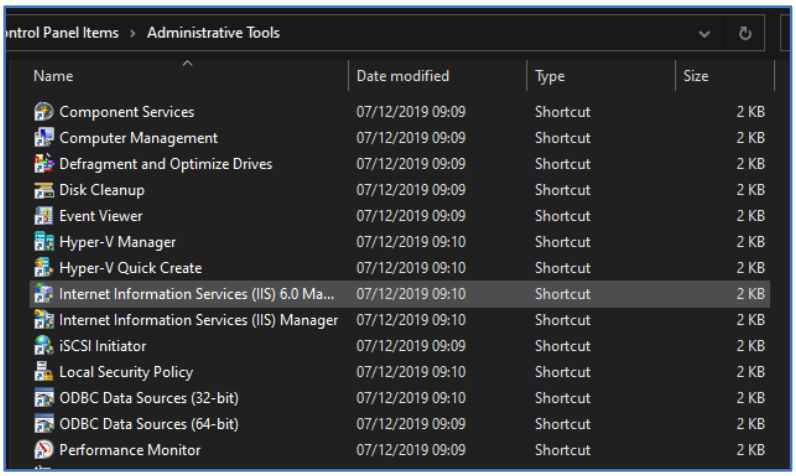


Systems which contain more than Four Collectors

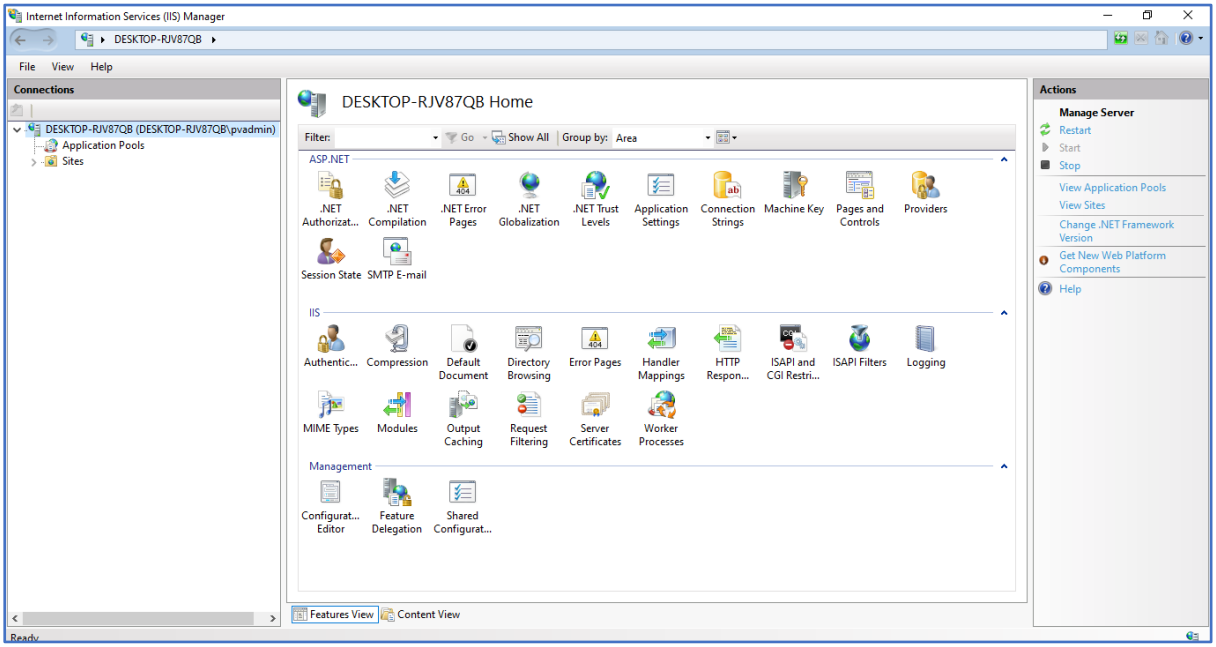
For ProcessVue systems which contain four or more Collectors the IIS will need to be restarted for this to work correctly. The ProcessVue application is designed to cache views for up to Four Collectors out of the box initially, meaning that any additional views for additional Collectors will not function correctly. Therefore, the SOE Overview and Zoom Historical screens will not update for Collector Five onwards meaning that no data for Collectors Five and onwards can be selected and viewed. The resolution to this issue is a restart of the IIS Worker Service, by doing this it will re-cache for the correct number of views based on the number of Collectors configured on the system.

To restart the IIS –

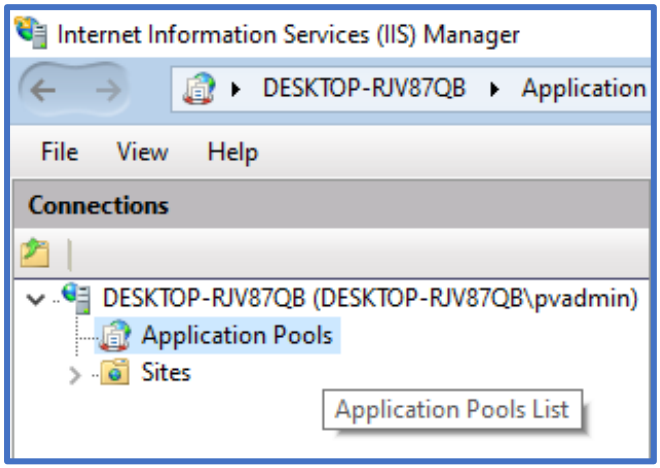
1. Open the Control Panel by typing in Control Panel into the Search bar or by selecting your Windows Start Menu and searching for the Control Panel
2. Select Windows Administrative Tools



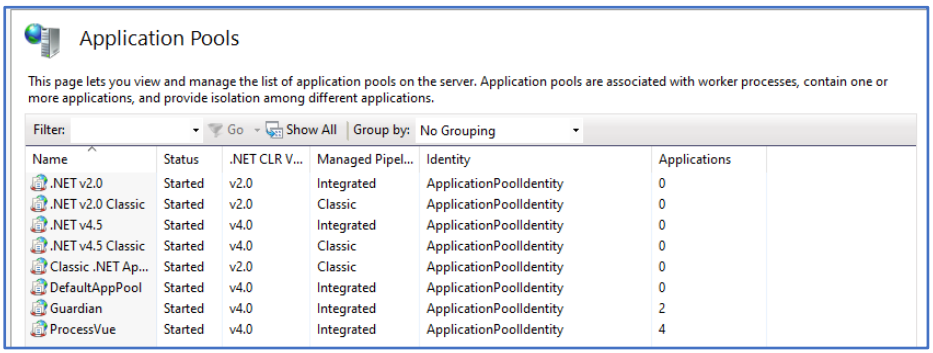
3. Select Internet Information Services (IIS) Manager



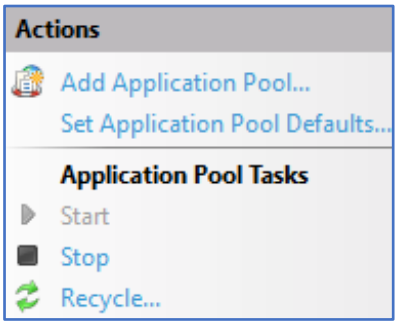
4. Select Application Pools in the left-hand pane



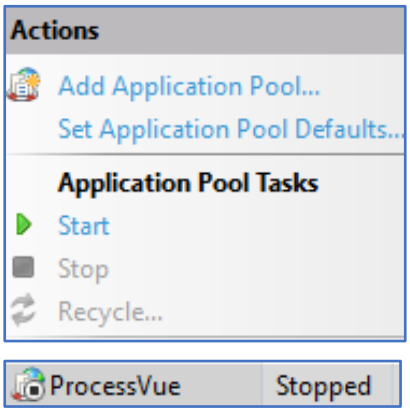
5. In the central pane, select ProcessVue under Application Pools



6. On the right-hand pane, select Stop

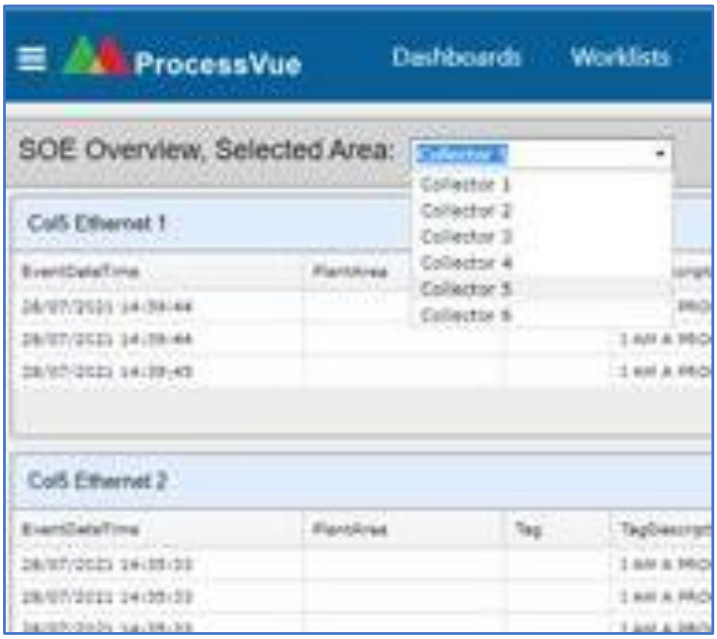


7. When the Application Pool has stopped, click Start to restart the ProcessVue system.



8. Navigate to the ProcessVue Web Application.

9. Login to the Web App and navigate to the SOE Overview screen

10. Navigate to the SOE Overview screen and select the dropdown arrow next to Area selection

11. Now switching Areas (effectively different Collectors) you will now be able to view Collectors Five and onwards.