



DM Software Application For Physical and Virtual Environments

Overview

This document provides the server requirements and base functionality of DM software application. The software is available for physical, virtual and cloud based installations to include Cellular and Starlink remote installations.

Permissions

- **The DM software is installed and configured by Pythia Technologies' authorized personnel.**
- **The DM software is installed to the PTI directory on the local C: drive. Ex: C:\PTI.**
- **The software requires a local account which is a member of the "Local Administrators" group.**

The software provides a web-based interface and does not require any software to be installed on the users' systems to include PC, Phone, Tablet, etc.

The base DM system provides:

- HTTP/HTTPS Web interface. A HTTPS self signed certificate is provided. Trusted Certificates are provided by the customer at time of installation.
- Alarm Email/Text/SNMP Trap Notifications.
- Trending of multiple data points.
- Support for manufacturer agnostic equipment via Modbus, SNMP and BACnet standard. Optional protocols available.
- XML and JSON interfaces provided for external reporting and custom web interfaces.
- Modbus/TCP for Building Management System Interface.
- SNMP for Network Management System

Server Requirements

The physical or virtual machine must meet the minimum requirements:

Requirement	Minimum
Operating System	Windows Server 2019
Memory	4GB
Disk Space	80GB including OS
Network Interface	1
Static IP Address	1

Standard Protocols

The following network protocols/ports will be used for user and monitored equipment network communications.

Port	Protocol	Description
80	TCP	Inbound HTTP requests from users
443	TCP	Inbound HTTPS requests from users
161/162	UDP	SNMP to monitored devices; Traps outbound for notifications
47808	UDP	BACnet to monitored devices
502	TCP	Modbus to monitored devices
10001	TCP	IGM/TCP to monitored devices