CANSCAN MILESTONE PROTOCOL

INTEGRATION PROCESS

milestone canscan

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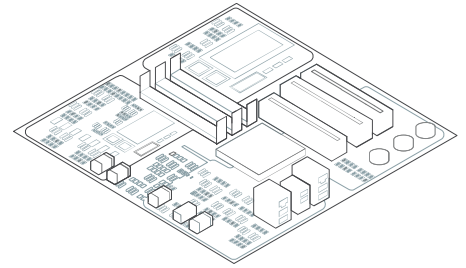# 1. Requirements

1.1 Hardware

Canscan's stack requires the use of a strong GPU for improved inference speeds.
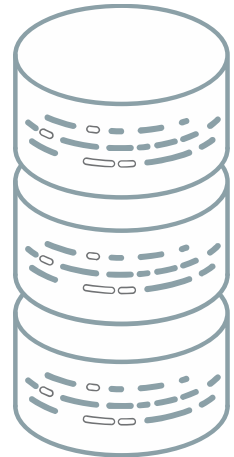
- Memory: 16 GB minimum, 64 GB recommended
- CPU: 8 Cores or more
- GPU: Nvidia P100 or better (GPU Inference, Recommended), 3584 CUDA Cores or more

1.2 Software

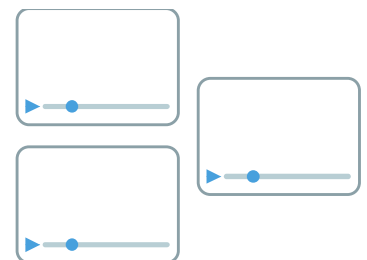There are certain requirements to have the Canscan Stack running on your hardware.

- Linux Operating System (Ubuntu 18.04 recommended)
- Docker
- CUDA supporting drivers
- nvidia-docker

1.3 Milestone Setup

For integration it is required to have Milestone ONVIF Bridge installed. Furthermore a basic user should be setup that is allowed to Read the Camera List and to connect to the RTSP stream for all the cameras. This user will be needed for the coming steps.

To receive events from the Canscan stack it is required to enable the Analytics Event XML Service on port 9090. With these Analytic events, the administrator can create Alarms and other Events trigger based on any events from Canscan.
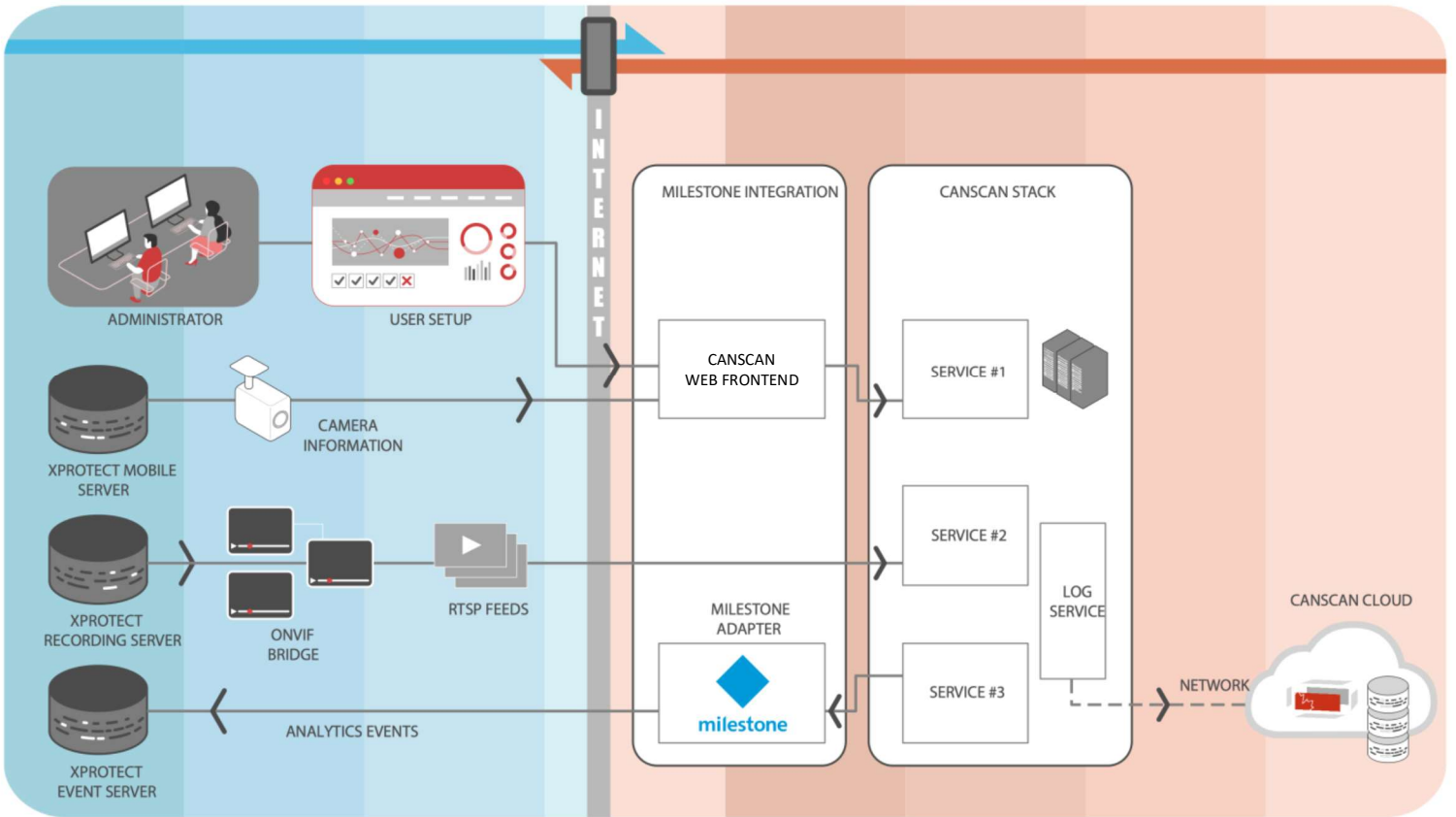
2. Introduction

Figure 1: Architecture Diagram

The Canscan System is split into modules that work together in conjunction to deliver a robust and modular system. Each module is responsible for a single task and each service is a module. During the installation process the user will be provided with scripts to handle the setup of all theses modules.

3. Installation & Setup

3.1 Installation

The installation process for the stack is rather simple. Once the computer administrator is confident that the software and hardware requirements are met, the client will be provided with a customized shell script that would handle the installation of the required components of the integration.

The shell script can be simply run by typing the following command:

sh canscan-setup.sh

This command will setup the basic running environment for the Canscan stack to run. This includes our Logging Service, Database Service, and Messaging Service. All these services will be needed for regular operations of our stack.

Furthermore the command will setup the user environment, with credentials required to access the Canscan Stack in the cloud and register the machine.

For more info about shell scripts please refer to:
http://linuxcommand.org/lc3_writing_shell_scripts.php

3.2 Setup

The setup process will be primarily done with the script that will be provided to you by Canscan. This script will include credentials that will be used for authentication with Canscan servers and permit the user to fetch the services that the client has been authorized for.

sh milestone-integration-setup.sh

Our services are distributed in Docker containers that will hold in it all the packages required for module functionality. So the administrator would need to require manage any dependencies other than what is mentioned in the requirements section.

During the setup process these services will register themselves with the Milestone integration system. And wait for the configuration of each service which will com in the next step.
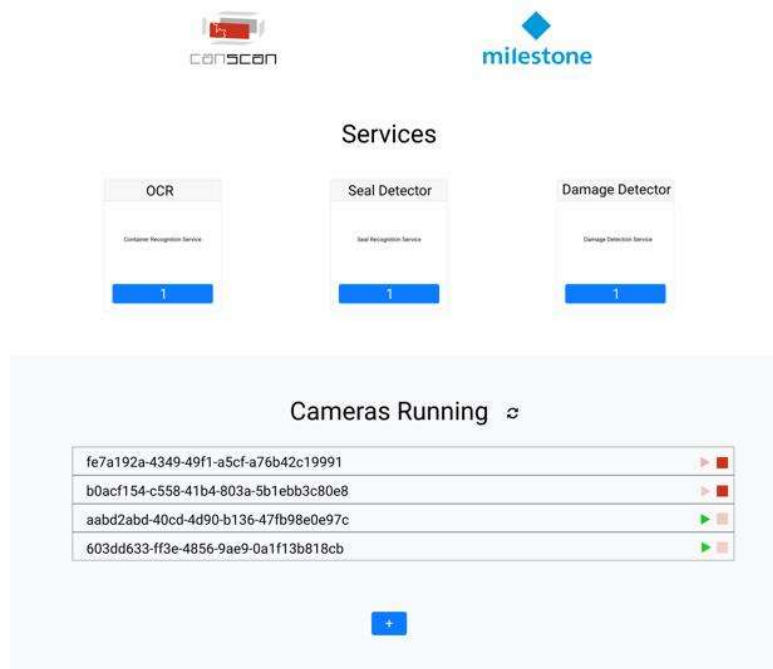
4. Operation

Figure 2: Dashboard

After the setup has been complete we can start configuring our integration. Here an administrator can add cameras to each of the services running with the number denoted beneath each how many are running.

To add a service a user must first click on the refresh button next to the Cameras Running title. This will open a popup that will allow you to put your credentials to login into the Milestone System.

Note that this requires that the Milestone Mobile Server be available.

You will need to fill out the following pieces of information:

• Host: the ip or hostname of the location of the Mobile Server
• Port: the port of the Mobile Server
• Username: the username assigned to the Canscan account
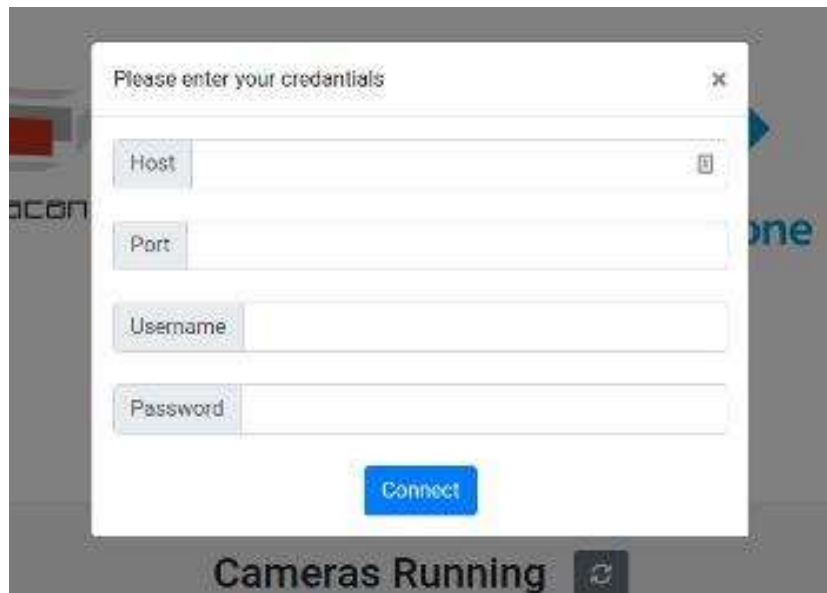• Password: the password assigned to the Canscan account

Figure 3: Refresh Window

After this point a list of all cameras available to the Canscan account appear below it and would be available to be connect to services. By clicking the [▶] button the service will initialized to this camera. In the same vain you can click the [■] button to stop the service on the camera.
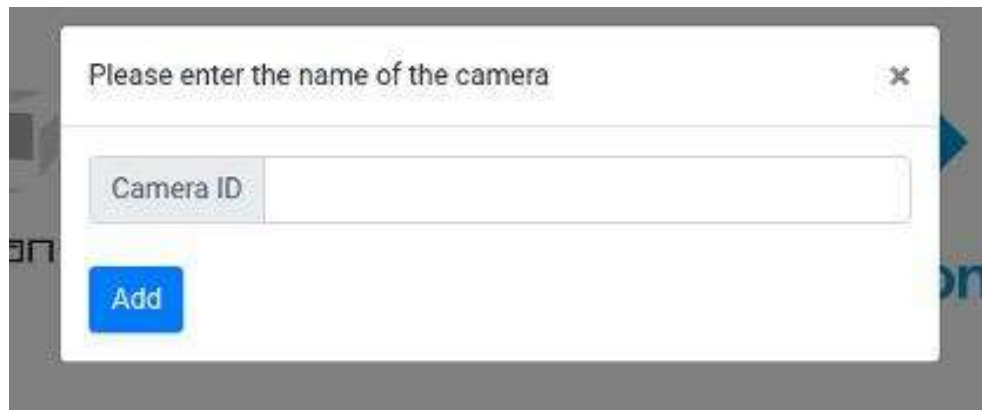

Figure 4: Manual Camera addition

If by chance the camera does not appear then it can be added manually by clicking on the [+] button below the camera list. The camera ID will we be needed to proceed, which can be found in the Milestone Administration Application. Note this will require you to have gone through the Refresh Process first so we will have the credentials for the camera available.

If there are issues with operating this system you can reach out to your representative at Canscan to help with any setup issues.