SENSTAR™

Safe Spaces for Symphony Server

7.6.x

User Guide

Contents

Safe Spaces

The Safe Spaces is a collection of video analytics for the Symphony Server that help organizations meet public health requirements, while keeping employees, customers, and the general public safe.

The Safe Spaces includes the following video analytics.

Face Mask Detection video analytic

The Face Mask Detection video analytic can detect whether individuals are wearing face masks, and then trigger events and generate alarms on the Symphony Server.

Aggregated people counter video analytic

The aggregated people counter video analytic can combine the people counts from multiple cameras to provide a comprehensive occupancy count for an area. The aggregated people counter video analytic can display an HTML page with instructions for your customers.

Installation

Requirements

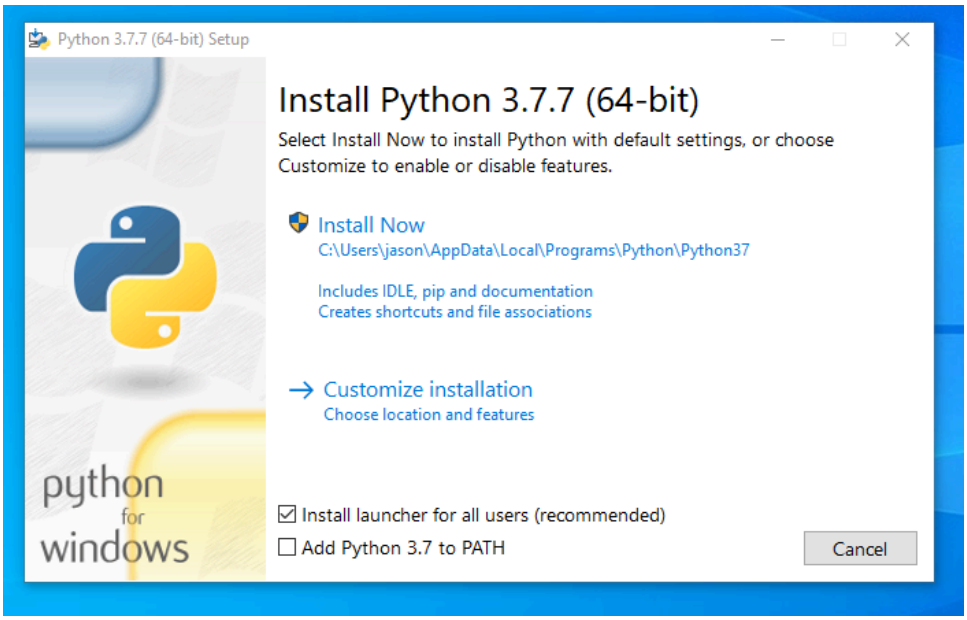
The requirements for the Safe Spaces are in addition to the requirements for the Symphony Server.

Component	Requirements
Software	• Symphony Server 7.3.5.1 or later • Symphony Analytics Pack 7.3.5.1 or later • Python 3.7.7 (64-bit)
License	Core Analytics V7 (AIM-SYM-VA-10)

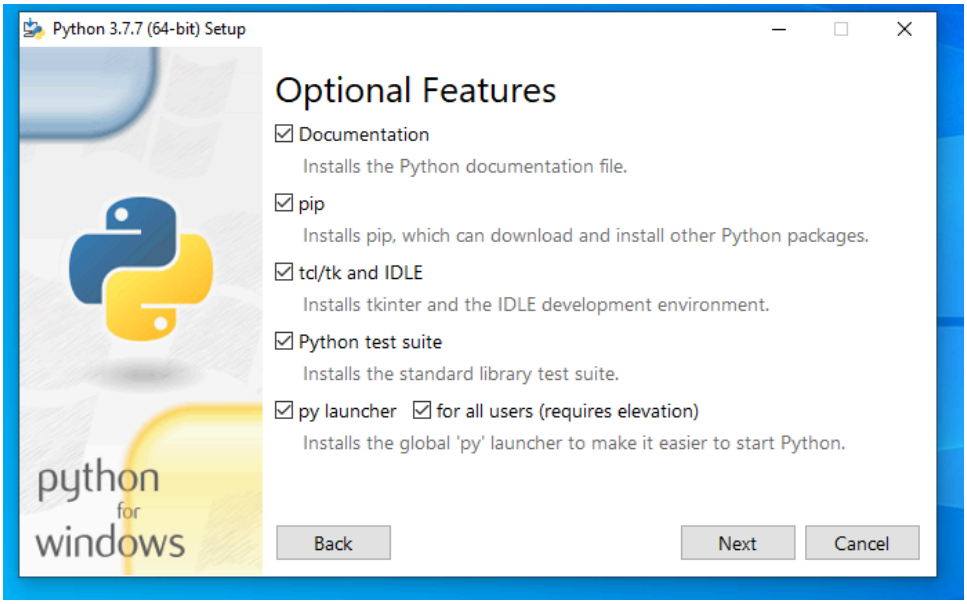
Install Python

Install Python 3.7.7 (64-bit) on the computer that hosts the Symphony Server.

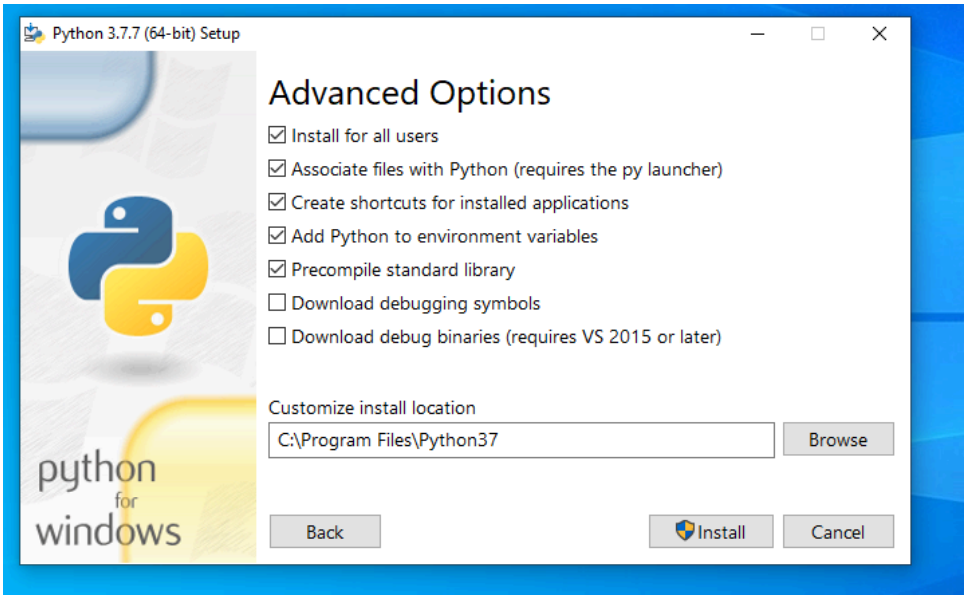
1. Download the Python 3.7.7 (64-bit) executable installer.
   https://www.python.org/ftp/python/3.7.7/python-3.7.7-amd64.exe
2. Run the Python 3.7.7 executable installer.
3. Click **Customize installation**.



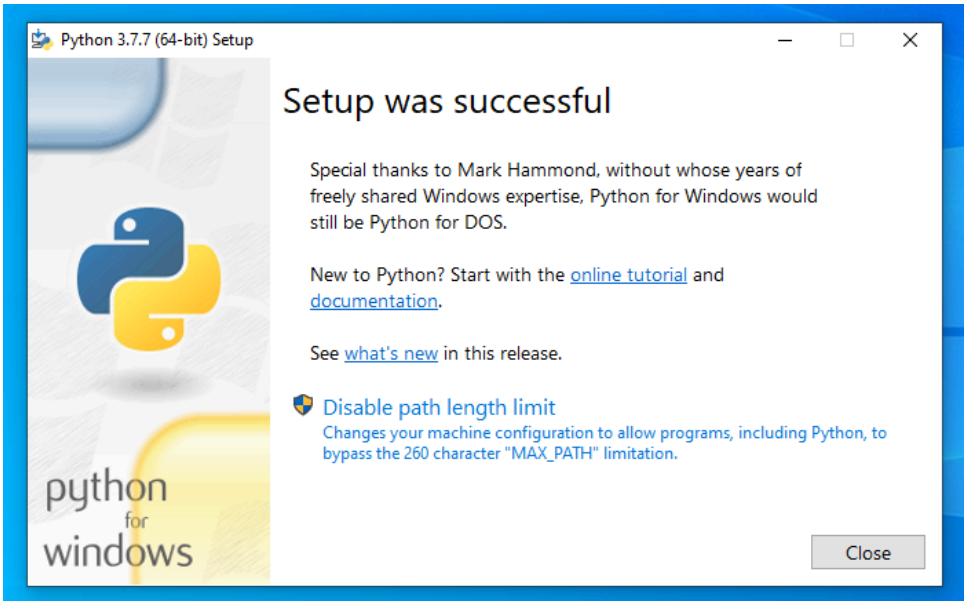
4. Click **Next**.



5. On the **Advanced Options** page, perform the following tasks:
   a) Select **Install for all users**.
   b) Select **Add Python to environment variables**.
   c) Click **Install**.



6. When the setup is complete, click **Close**.

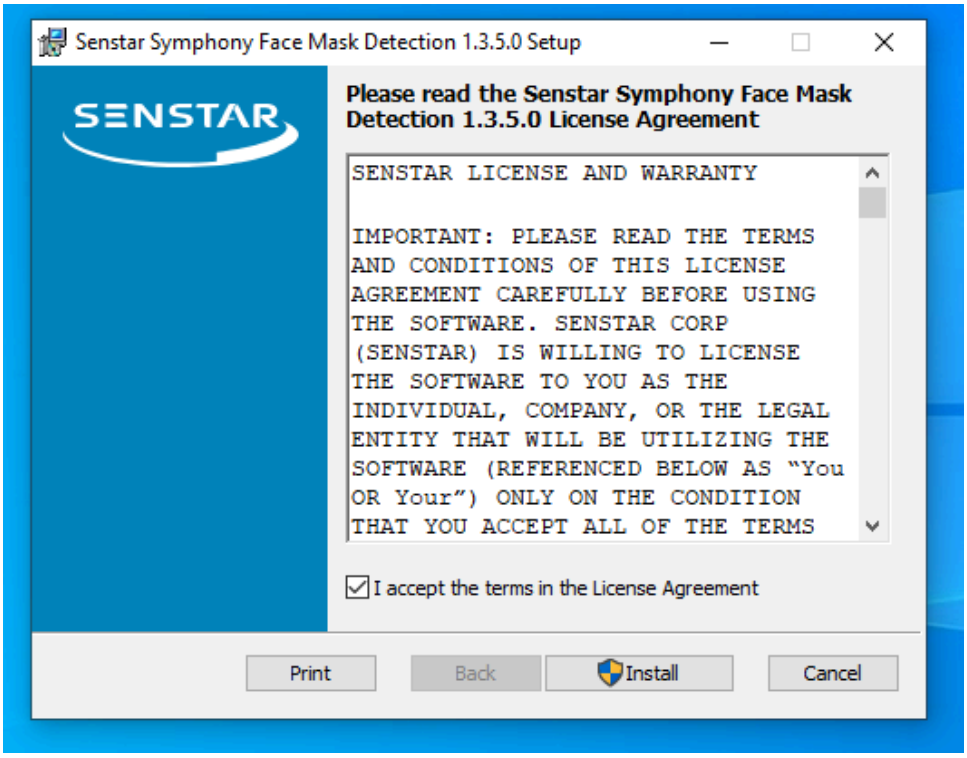


7. Restart the computer.

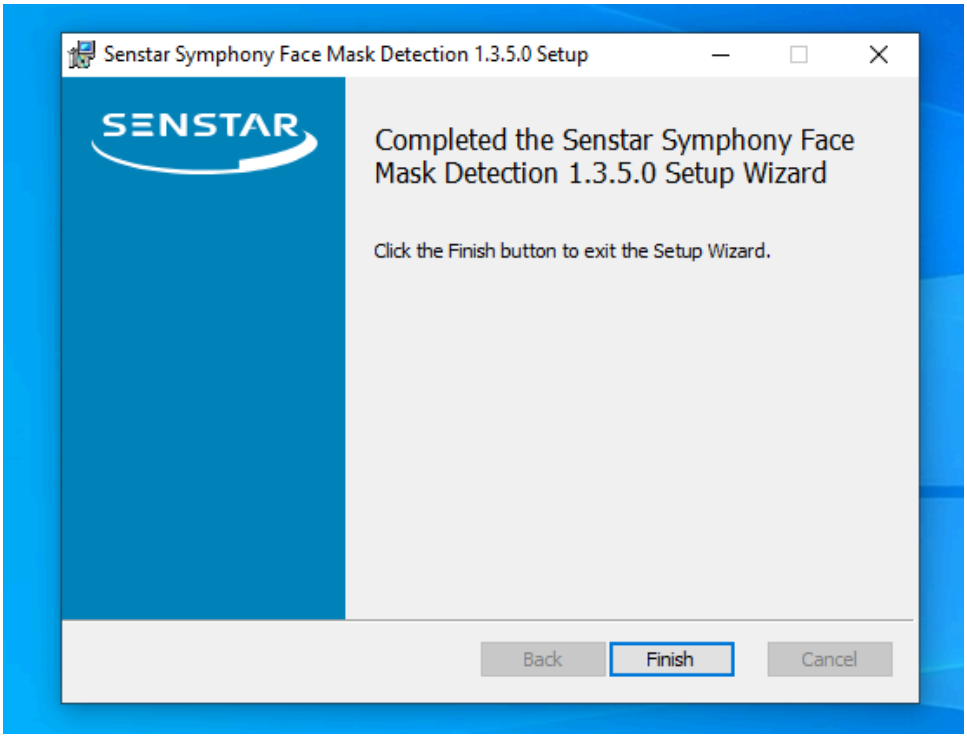
Install Face Mask Detection

Install the Face Mask Detection video analytic on the computer that hosts the Symphony Server.

1. Download the Face Mask Detection installer.
2. Run the Face Mask Detection installer.
3. Read and accept the terms of the license agreement.
4. Click **Install**.



5. Click **Finish**.



Configuration

Configure Face Mask Detection

Configure the Face Mask Detection video analytic in the Symphony Server configuration interface.

1. In the Symphony Server configuration interface, click **Devices** > **Camera**.
2. Select the camera and click **Edit**.
3. In the **Add-Ons** list, turn Face Mask Detection on and click **Configure**.
4. In the **Overview** section, configure Face Mask Detection.

5. Click **OK**.
6. Click **Save**.

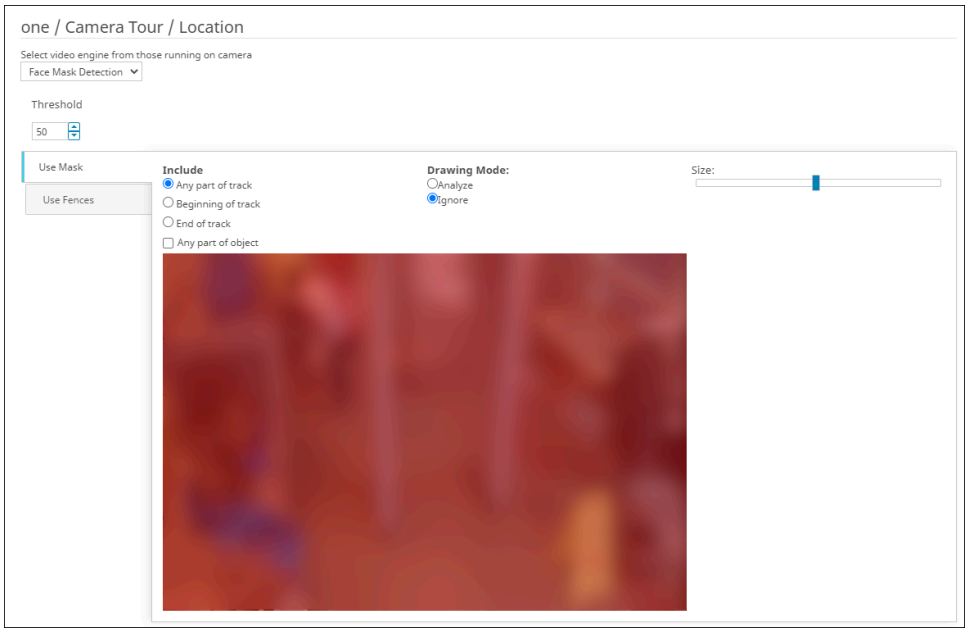
Face Mask Detection settings

Overview

Setting	Description
Analysis Resolution	Set the resolution for the camera on which the Face Mask Detection video analytic is active.
Analysis FPS	Set the frames per second for the camera on which the Face Mask Detection video analytic is active.
Show confidence	Select whether the Face Mask Detection video analytic displays the confidence value decoration in the Symphony Client.

Face Mask Detection event settings

The Face Mask Detection event settings are visible when you select the Face Mask Detection video analytic as the video engine.



Setting	Description
Threshold	Set how confident the Face Mask Detection video analytic must be that an individual is not wearing a face mask to generate an event that can trigger an alarm.
Use Mask	Use a mask to generate an event that can trigger an alarm when the Face Mask Detection video analytic detects an individual without a face mask moving through an area (mask) that you draw in the scene.
Use Fences	Use fences to generate an event that can trigger an alarm when the Face Mask Detection video analytic detects an individual without a face mask moving across a line (fence) that you draw in the scene.

Indoor People Tracking event settings

The event settings for Indoor People Tracking are visible when you select it as the video engine for an event.

Behavior

Setting	Description
Moving for at least	Select to trigger a rule when an object moves for a specific time (seconds). You can use a mask or fences to detect motion.
Loitering for at least	Select to trigger a rule when an object remains stationary for a specific time (seconds). You use a mask to detect loitering.
Not loitering for at least	Select to trigger a rule when an object does not remain stationary for a specific time (seconds). You use a mask to detect the absence of loitering.
Count threshold	Select to use a count threshold to trigger a rule. You use the count to configure the threshold.

Mask

Setting	Description
Any part of track	Select which part of the object movement can whether an object moving for a time or loitering for a time triggers the rule, and set the time.
Drawing Mode	Select whether to include (Analyze) or exclude (Ignore) motion through the area of the scene covered by the mask. Use the size slider to set the size of the mask paintbrush.
Any part of object	Select whether to trigger rules when an object crosses any of the fences or when an object crosses all of the fences.

Fences

Setting	Description
Include	Select whether to trigger a rule when an object crosses any fence (only one fence can trigger a rule) or when an object crosses all of the fences.
Instructions	Click the Instructions button to view instructions for drawing a fence.

Count

Setting	Description
Single Camera In	Select to trigger a rule when a camera detects a number of objects crossing the counting line in the In direction
Single Camera Out	Select to trigger a rule when a camera detects that the number of objects crossing the counting line in the Out direction exceeds a specific value.
Single Camera In - Out	Select to trigger a rule when a camera detects that the number of objects crossing the counting line in the In direction minus the number of objects crossing the counting line in the Out direction exceeds a specific value.
Single Camera Out - In	Select to trigger a rule when a camera detects that the number of objects crossing the counting line in the Out direction minus the number of objects crossing the counting line in the IN direction exceeds a specific value.
Total In	Select to trigger a rule when all of the cameras in the aggregate to which the camera belongs detects that the total number of objects crossing the counting line in the In direction exceeds a specific value.
Total Out	Select to trigger a rule when all of the cameras in the aggregate to which the camera belongs detects that the total number of objects crossing the counting line in the Out direction exceeds a specific value.
Total In - Out	Select to trigger a rule when all of the cameras in the aggregate to which the camera belongs detects that the total number of objects crossing the counting line in the In direction minus the number of objects crossing the counting line in the Out direction exceeds a specific value.
Total Out - In	Select to trigger a rule when all of the cameras in the aggregate to which the camera belongs detects that the total number of objects crossing the counting line in the Out direction minus the number of objects crossing the counting line in the In direction exceeds a specific value.
Exceeds	Set the value that the count must exceed to trigger a rule.

Aggregates

An aggregate is a collection of cameras that can combine the people count from all of the cameras and present that information on an HTML page.

You can use aggregates to provide comprehensive occupancy counts and instructions to customers.

Add an aggregate

Configure the aggregated people counter video analytic in the Symphony Server configuration interface.

A camera must be running the Indoor People Tracking video analytic to be visible in the **Available Cameras on Servers** list.

1. In the Symphony Server configuration interface, click **Settings** > **Aggregates**.
2. Click **Add Aggregate**.
3. In the **Name** field, type a meaningful name for the aggregate count.
4. In the **Reset count at** list, select the time at which the aggregate count resets.
5. In the **Available Cameras on Servers** list, select the cameras that you want to include in the aggregate count and click **Add Selected**.
6. Click **Save**.

After you add an aggregate, the Symphony Server creates an HTML page that you can use to display occupancy information and instructions. To open the HTML, click the link at the bottom of the **Aggregates** page.

Modify the aggregated people counter HTML

You can modify the HTML page that the aggregated people counter video analytic uses to display occupancy counts and instructions to customers.

You can also copy an existing HTML file to create multiple HTML files to display different occupancy counts and instructions for other aggregates or situations.

1. On the computer that hosts the Symphony Server, navigate to `_bin\assets-bundled`.
2. Open the HTML file with a text editor.
3. To change the occupancy thresholds, modify the following code:

```
var thresholdYellow = 50;
var thresholdRed = 75;
```

4. To change the messages, modify the following code:

```
function showGreen(difference) {
          document.getElementById("message").innerHTML = "LIMITED STORE<br />CAPACITY";
```

```
            document.getElementById("instructions").innerHTML = "PLEASE PROCEED WITH
 CAUTION";
```

```
function showYellow(difference) {
            document.getElementById("message").innerHTML = "LIMITED STORE<br />CAPACITY";
            document.getElementById("instructions").innerHTML = "PLEASE MAINTAIN SOCIAL
 DISTANCING";
```

```
function showRed(difference) {
            document.getElementById("message").innerHTML = "MAXIMUM<br />CAPACITY";
            document.getElementById("instructions").innerHTML = "PLEASE WAIT FOR
 ASSISTANCE";
```

```
<div style="padding-top: 2vw; font-size: 1.5vw; ">CURRENT NUMBER<br />OF PEOPLE</div>
```

```
<div style="padding-top: 2vw; font-size: 1.5vw; ">MAXIMUM NUMBER<br />OF PEOPLE ALLOWED</
div>
```

5. Save and close the HTML file.

Legal information

third-party attributions

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Boost Software	Copyright © 1998-2005 Beman Dawes, David Abrahams. Copyright © 2004-2007 Rene Rivera. Boost is licensed under the Boost Software License.
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