# pivotAxis

# Deployment Guide

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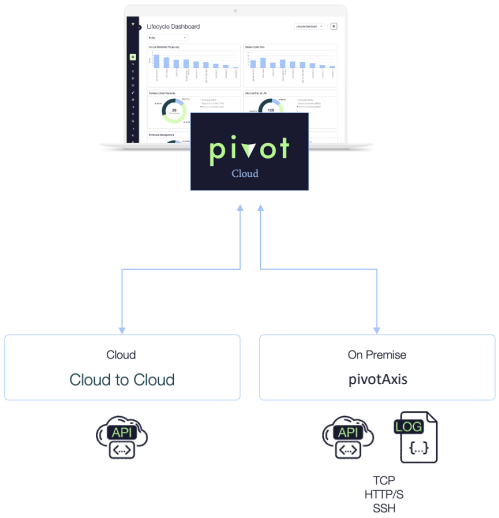
# Overview

## Introduction

The pivot AV System Management platform is a cloud native application that leverages integrations with the UC Platform, AV Network Switches, and AV Devices to bring together diagnostics data for a complete view into the health of the AV systems user experience.

This Deployment Guide provides an overview of the deployment process for the pivotAxis, audio-visual edge collector, to collect diagnostic data for on-premise devices.



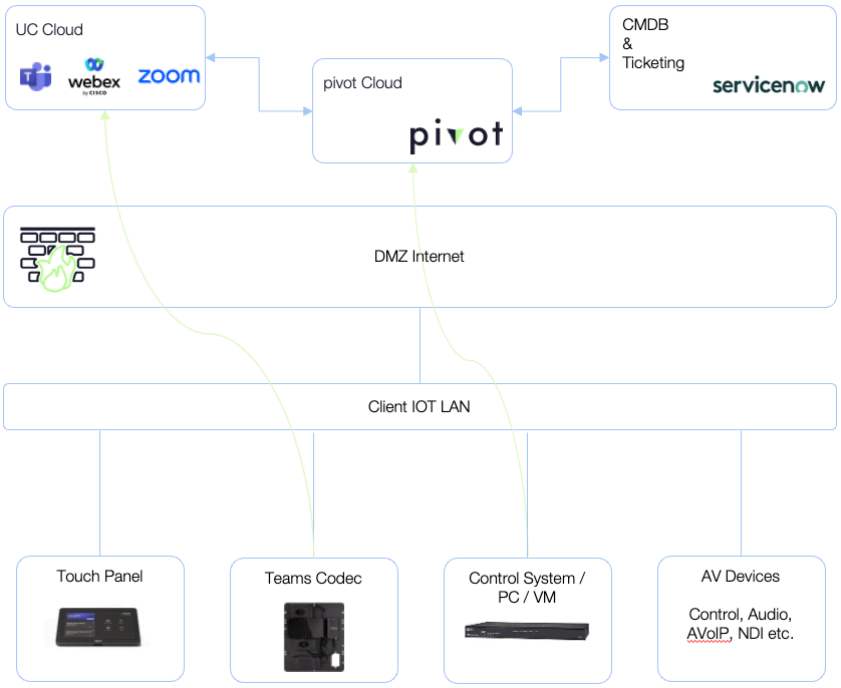

## Deployment Architecture

pivot's flexible architecture is designed to support data acquisition based on the deployment model of the AV system. The pivotAxis is a SaaS application that runs on:

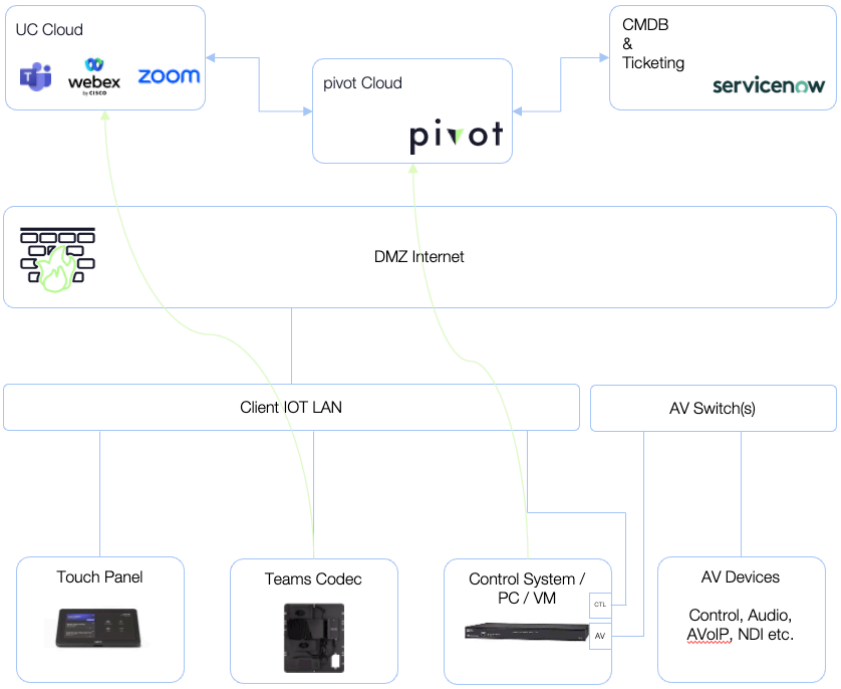
- Crestron control system
- Windows OS computer

Multiple pivotAxis collectors can be deployed to gather data from all devices in the AV system. Here are a few examples of data collection deployment options:

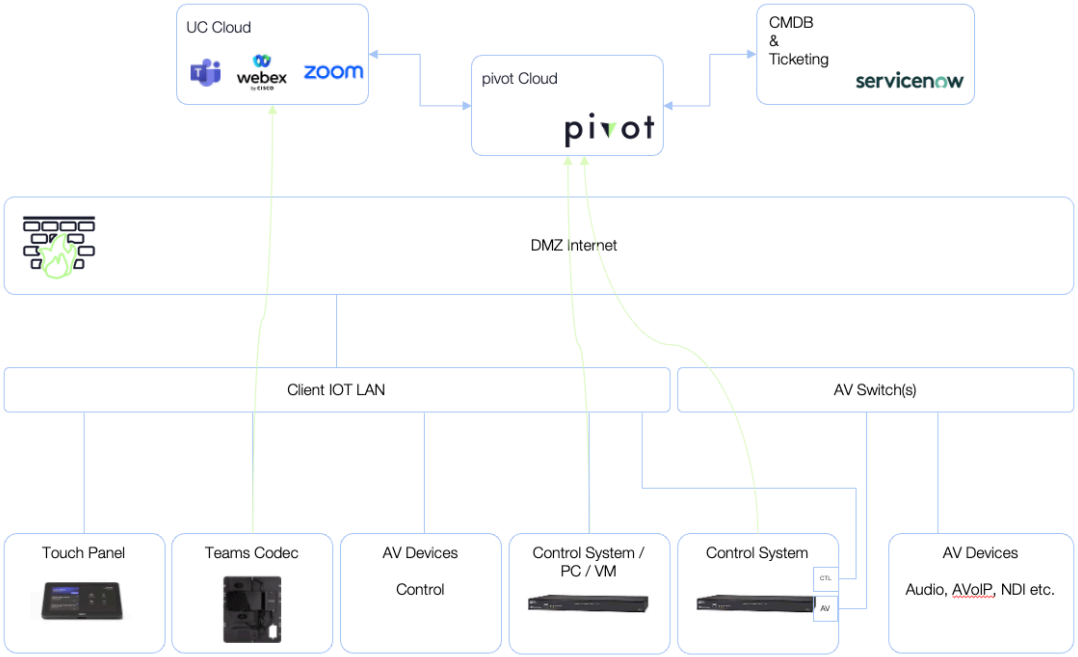
## Flat Network Design




## Segmented Network Design, Single pivotAxis collector



## Segmented Network Design, Multi pivotAxis collector




## Hardware

The pivotAxis collector is designed to run on the following supported hardware:

| **Hardware Platform** | **Hardware Specs** | **Requirements** | **Max Device Capacity per Collector** |
|---|---|---|---|
| Crestron<br>4 Series Only | 4 Series Only<br>RMC4<br>CP4<br>CP4N | 1 program slot dedicate for the pivotAxis collector | 100 devices |
| Windows PC<br>Or<br>Windows VM | PC<br>I3 or higher<br>16GB RAM<br>10GB Hard drive | .Net Runtime 8 installed prior to deployment<br>https://dotnet.microsoft.com/en-us/download/dotnet/8.0 | 1000 devices |

## Firewall Requirements

The pivot platform is securely architected for one-way and two-way communication from the pivotAxis collector to the pivot cloud.

The pivotAxis collector utilizes https PUT & GET requests, on port 443, to initiate outbound traffic from the host hardware to the pivot cloud.

A block of static IPs must be allocated for the system or MAC reservations. Gateway access to the following URLs are required from the processor/compute/Virtual Machine:

https://mlibrary.app.pivotnow.io

https://pivotaxis-v2-dlls-prod.s3.amazonaws.com

https://pivotaxis-v2-commands-prod.s3.amazonaws.com

https://pivotaxis-v2-cpz-prod.s3.amazonaws.com

https://pivot-logfiles-prod.s3.amazonaws.com

This includes either a DNS server that can resolve AWS's domain or access to the Google DNS.

# pivotAxis: Windows Deployment

### Initial Setup

To start with the pivotAxis Integration, you must first ensure you have a room with a Windows 11/VM computer added, ensure that a compatible computer part number is selected for your device.

In the room view of where your device is stored, you can navigate to the device card and download the most up to date version of pivotAxis there.

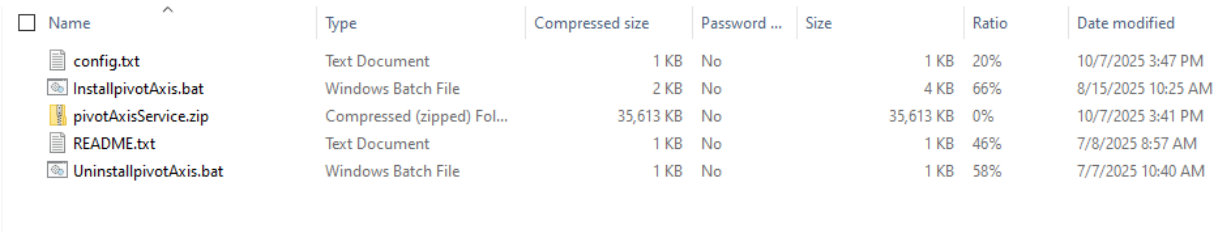
### Installing .NET 8.0

The Windows 11/VM computer will need to have .NET Runtime 8 installed prior to running the service at this time. You can find the installation files for the .Net 8 here:

- x64: https://dotnet.microsoft.com/en-us/download/dotnet/thank-you/runtime-8.0.20-windows-x64-installer
- x86: https://dotnet.microsoft.com/en-us/download/dotnet/thank-you/runtime-8.0.20-windows-x86-installer

### Downloading the pivotAxis Installation file

Once you have the installation file provided and downloaded to the computer you will be installing the service on, you will need to unzip the folder.



| Name | Type | Compressed size | Password ... | Size | Ratio | Date modified |
|---|---|---|---|---|---|---|
| config.txt | Text Document | 1 KB | No | 1 KB | 20% | 10/7/2025 3:47 PM |
| InstallpivotAxis.bat | Windows Batch File | 2 KB | No | 4 KB | 66% | 8/15/2025 10:25 AM |
| pivotAxisService.zip | Compressed (zipped) Fol... | 35,613 KB | No | 35,613 KB | 0% | 10/7/2025 3:41 PM |
| README.txt | Text Document | 1 KB | No | 1 KB | 46% | 7/8/2025 8:57 AM |
| UninstallpivotAxis.bat | Windows Batch File | 1 KB | No | 1 KB | 58% | 7/7/2025 10:40 AM |

Once unzipped, you will see the following files:

- config.txt
- InstallpivotAxis.bat
- pivotAxisService.zip
- README.txt

- UninstallpivotAxis.bat

Run the InstallpivotAxis.bat file as administrator. You will see a command terminal pop up to show progress.

When it’s done installing, you will start receiving signals into pivot within 5-10 minutes of the setup.

# pivotAxis: Crestron Deployment

### Initial Setup

To start with the pivotAxis Integration, you must first ensure you have a room with a Crestron 4 Series created and we recommend having at least one device configured to be reportable. Simply ensure that the Crestron 4 Series Processor that you are planning to install the pivotAxis on has the following details:

- "IP Address"
- "Monitoring By" should have its own self selected
- "Username" – if applicable
- "Password" – if applicable

Performing this configuration prior will allow you to confirm successful installation of the pivotAxis by refreshing the room to view the signals reporting from the Crestron 4 Series Processor

### Downloading the pivotAxis CPZ file

Once you have a device card with the Crestron 4 Series Processor made, navigate to the room where the Crestron 4 Series Processor is located, and click on **“Download CPZ File"** from its device card.


*Example of a Crestron 4 Series Processor Device Card (pivot, 2025)*

Once downloaded, unzip the files you will have three files:

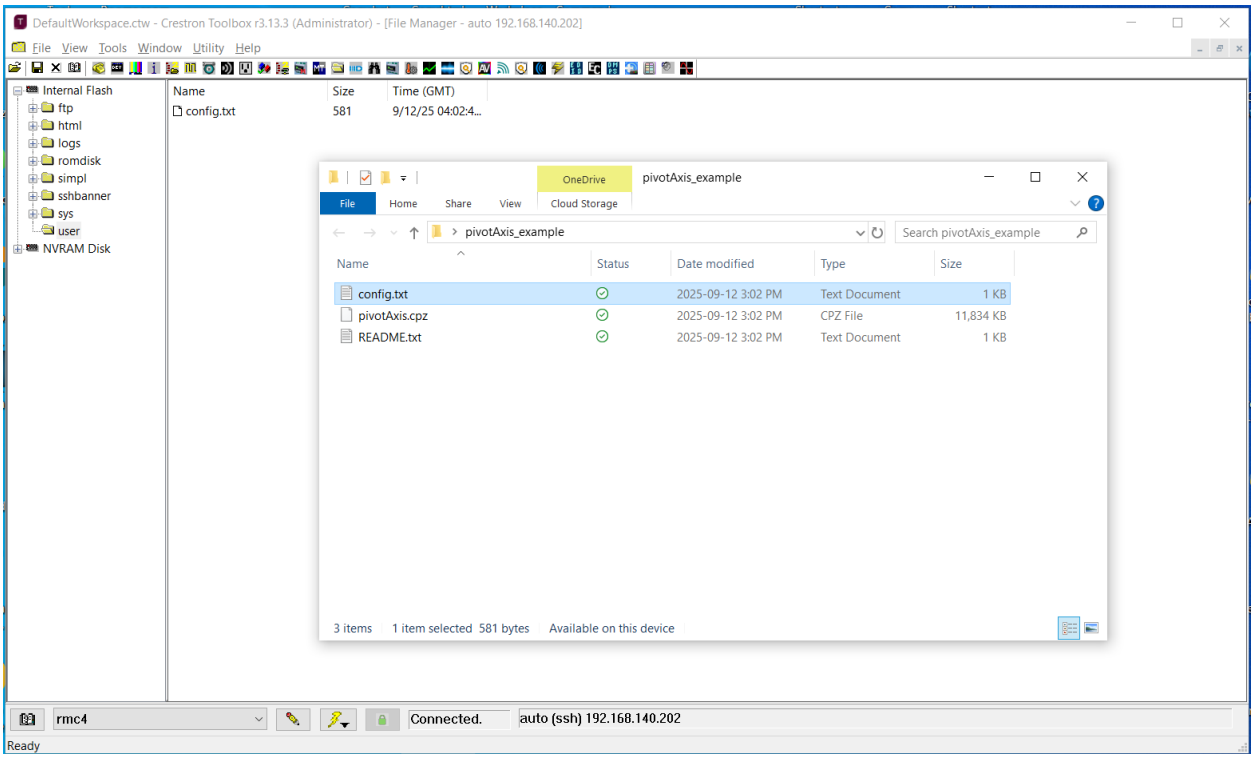
- config.txt
- pivotAxis.cpz
- README.txt

## Loading pivotAxis onto a Crestron 4 Series Processor

Here we will be going through the two steps you need to follow to install the CPZ file you have downloaded for the Crestron 4 Series Processor. These steps will use an RMC4 as an example, but can be used with other Crestron 4 Series Processors.

### 1. Setting the Configuration File

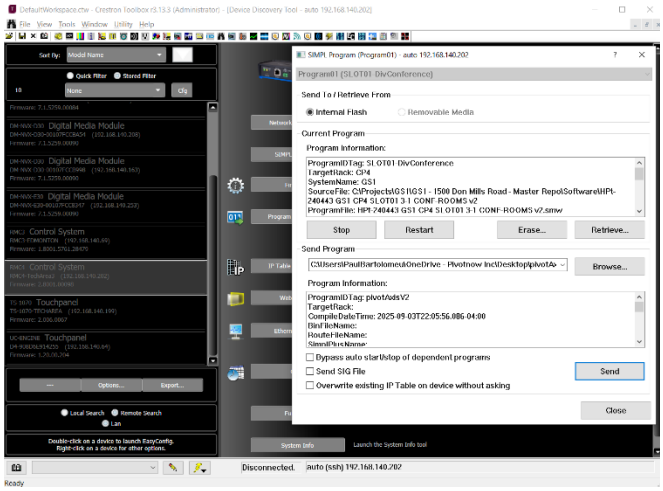
Using the Crestron Toolbox File Manager, connect to the Processor you will be installing the CPZ, and upload the config file into the user folder found in the Internal Flash of the device. This can be done by dragging and dropping into the folder, as shown below.



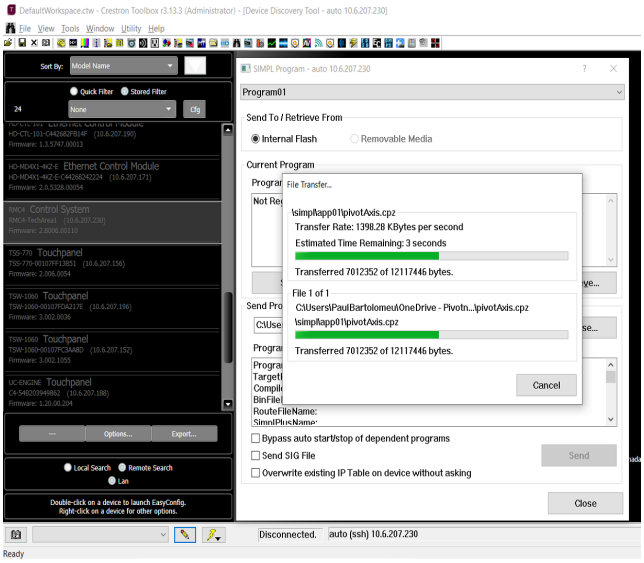

### 2. Loading the pivotAxis CPZ Program

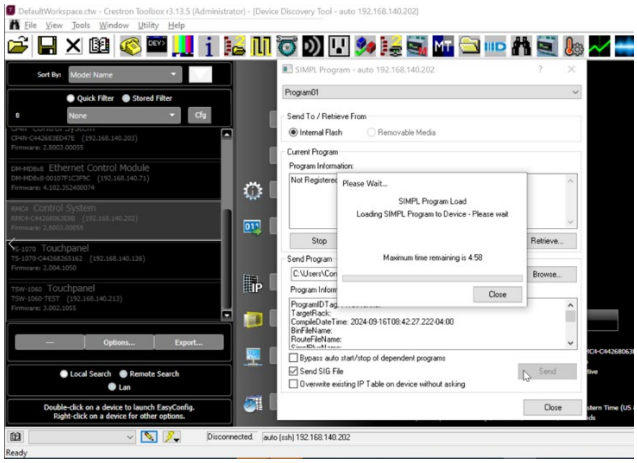
Using the Crestron Toolbox Device Discovery Tool, Locate and open the Processor you will be installing the CPZ and loading the program to an empty slot.


Select Program, in this case there are no programs loaded in the RMC4 at this time, but if you already have a program loaded, select the drop down at the top of the popup window to select a different drop down. This can also be done in the Status page of the device.

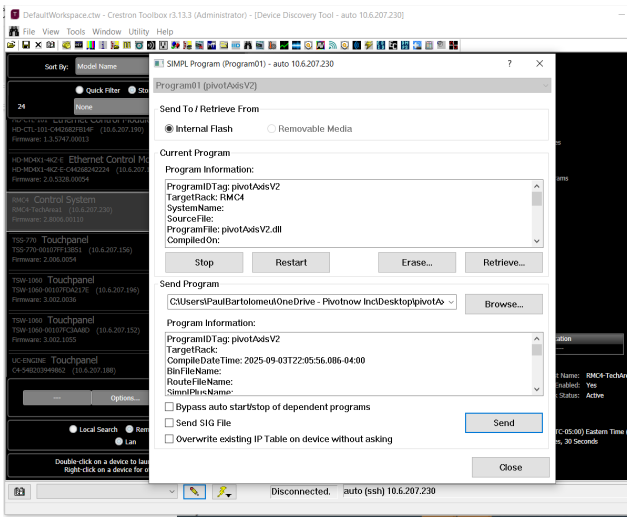



Browse and select the CPZ file you had downloaded, and hit Send




Once it's completed and the pop-up windows close you will have the SIMPL Program page to upload again in your forefront window.




Select Close, and you should see the signals start coming into pivot within 5-10 minutes.

## Troubleshooting:

If you are not seeing any signals coming into pivot, there can be a few things to check to get the integration functioning.

### Test 1:

Check over devices' IP Address, Monitored By, Username and Password are all accurate to any of the devices in question. Focus on just the Control System (Crestron 4 Series Processor) and ensure that all 4 of these fields are filled out

### Test 2:

Using the Crestron Toolbox Text Console, connect to the Control System's IP and run the command "err". A healthy err log is shown below. If there are any errors or challenges the pivotAxis encounters, it will be present in the error log.