

# Pathian<sup>®</sup> Appliance

Leveraging open platforms

Pathian's<sup>®</sup> proprietary building controls and analytics empower engineers, contractors, and in-house HVAC staff to deliver instant energy savings, increased occupant comfort, and healthier environments to their customers. We give you 30 years of experience and patented technology that you can use to deliver your own solutions to your customers.

## Overview

Pathian delivers its software capabilities and cloud services through the open Tridium Niagara framework. The Pathian Appliance for Niagara greatly simplifies site configuration and provides easy access to analytics data from the Pathian cloud. It also automatically creates Pathian's proprietary system logic for running pre-engineered HVAC equipment optimization and airborne infectious disease mitigation applications. The Pathian Appliance makes it easy for any experienced HVAC controls technician to quickly engineer and commission best in class solutions.

powered by

**niagara**  
framework<sup>®</sup>

## Features

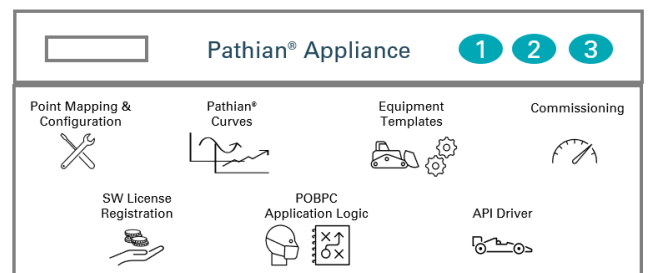
- Site discovery
- Site configuration
- Plug & play Haystack tagging
- Application logic execution
- Application commissioning
- Pathian cloud gateway

## Components

The Pathian Appliance includes everything you need to engineer, commission, and run Pathian applications in your Niagara building automation system. Every solution is engineered in **3 easy steps**:

1. **Equipment and point selection** – User guided selection tree leverages Haystack tagging.
2. **Application generation** – Sequences of operation are automatically created to guide reprogramming of HVAC equipment.
3. **Commissioning** – Automatic generation of test plans. Commissioning progress is tracked and documented.

After the project is complete, Pathian analytics and curves can be displayed right within the building automation system's user interface. We provide default dashboards and UI templates to make it easy to get started.



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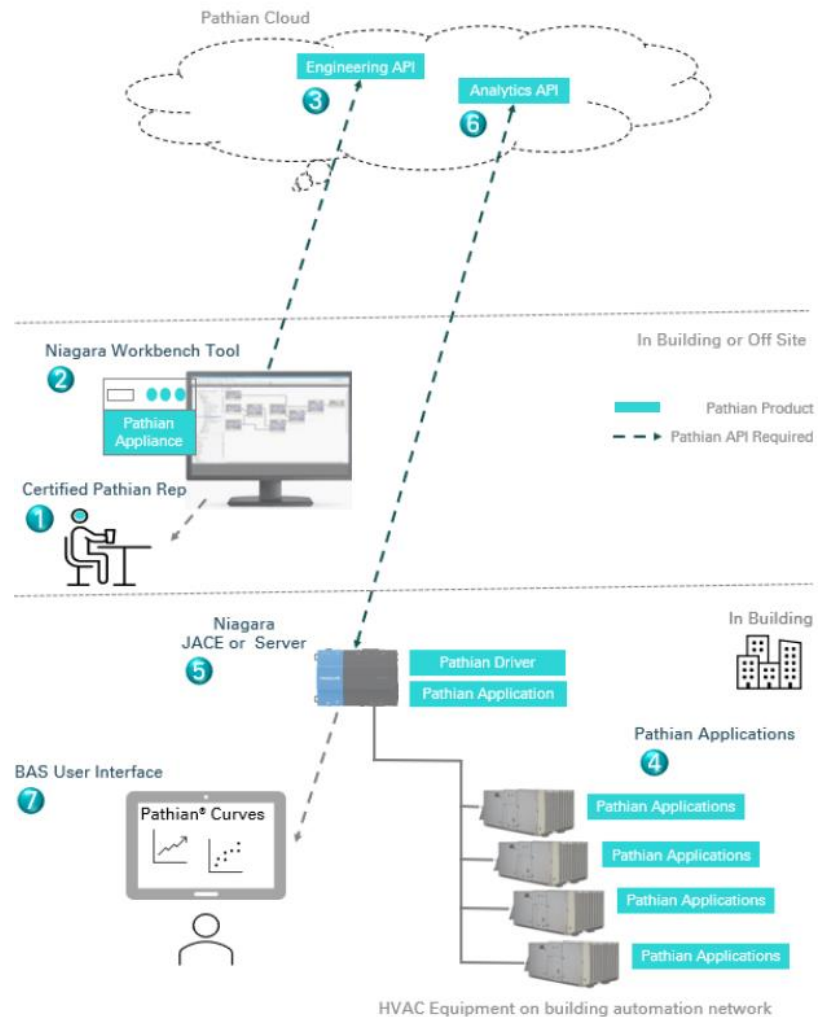
BAS controls and analytics in your hands

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## System Architecture

- 1 Certification - Pathian offers certification for controls sales, engineers, and technicians. Certification is required for all Pathian resellers.
- 2 Niagara Appliance - Every Pathian enabled site requires at least one Pathian Appliance. The appliance works within the Niagara Workbench tool for site configuration & commissioning. The Pathian Appliance runtime requires a Tridium based server and at least one JACE.
- 3 Pathian Engineering API - The Pathian Appliance communicates to the Pathian cloud engineering portal during the engineering phase of each job.
- 4 Pathian Equipment Applications - During the engineering phase of the job, new sequences of operation are generated for each piece of equipment using the Pathian Appliance. The new equipment applications are then programmed using vendor specific programming tools.
- 5 Pathian System Logic - System level logic for Pathian applications runs within on-premise JACE controllers. The Pathian Appliance is used to automatically generate and configure the system control sequences.
- 6 Pathian Analytics API - The Pathian appliance acts as an embedded gateway that connects to the Pathian analytics API for serving analytics and curves to the building automation system.



- 7 BAS User Interface - The Pathian Appliance exposes Pathian analytics and curves to the Niagara framework. Users can create their own reports, dashboards, or map the data wherever its needed within their own BAS environment.