

Resolute for FIN Framework

Powerful and affordable building-performance analytics that can be connected, configured, and used all in a single day.



Automated configuration

Real-time fault detection & alerts

Deep-dive equipment & energy analytics

On-demand performance reports

Root-cause analysis & prescriptive solutions

Prioritized action items & tasks

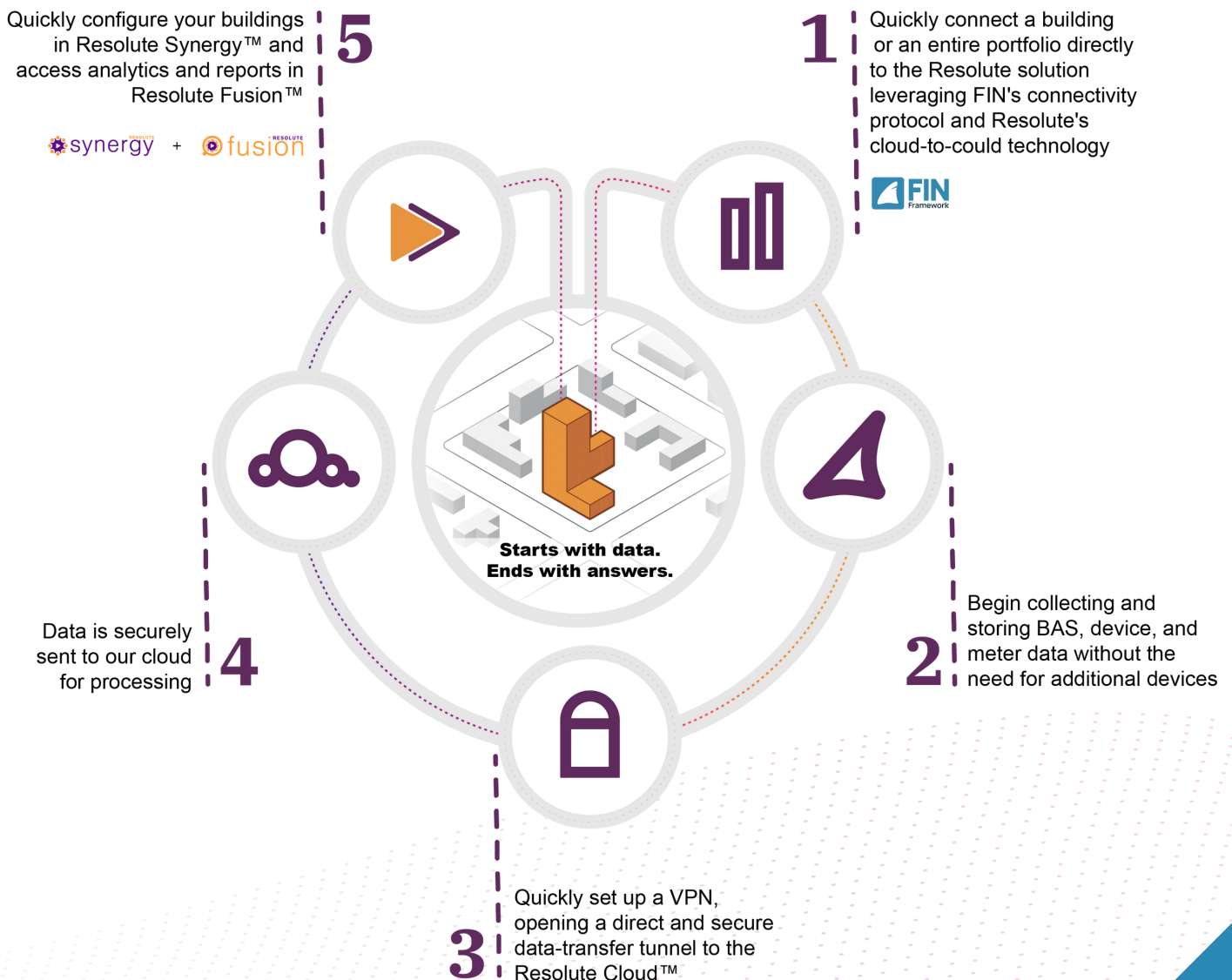
Analytics in an Instant

Resolute & the J2 Innovations FIN Framework

Our building-analytics software integrates seamlessly with J2 Innovations' FIN Framework, enabling you to quickly and reliably use real-time data, analytics-driven insights, and on-demand reports to better manage buildings and deliver quantifiable results. Leveraging FIN's connectivity protocol, our solution allows you to connect directly to the Resolute Cloud™ from your FIN-enabled automation software without the need for additional devices, lowering costs, minimizing integration complexity, and accelerating time-to-value.

This direct connection capability combined with the standardized and structured tagging scheme inherent in the FIN Framework and Resolute's patented integration automation functionality means you can connect your building in minutes, map and tag all equipment and points in a couple of hours, and begin using analytics-powered answers to improve your building's performance by day's end.

HOW IT WORKS



Turning confusing data into actionable answers

Answers on demand

Our software takes performance reporting to new heights by compiling, aggregating, and organizing the immense amounts of equipment performance data produced by our analytics, turning that data into concise, actionable, and prioritized answers, and inserting these answers into easy-to-understand reports and scorecards ready to be accessed when you need them.



Answers in hours

What good is a building-performance package if it takes you weeks or months to implement and even longer to use it effectively? With Resolute's patented, automated integration technology, you can quickly connect and configure your building in hours and begin using analytics-driven insights and performance reports the very same day.

Answers to action

Answers are critical in improving performance but knowing what to do is only half the battle. As with anything, nothing gets done without action and follow through. Action Center ensures progress doesn't end at good intentions by providing the means to create and assign tasks, prioritize activities, and track to completion.



You shouldn't have to write the rules that make the analytics work. **That's our job.**

Quickly map the following key points into Resolute Synergy™—our patented building configuration tool—and apply our library of hundreds of pre-defined analytics rules (based on **ASHRAE 90.1** and **ASHRAE High Performance standards**) to thousands of pieces of equipment in just a few clicks.

Change the variables for any rule to suit your specific requirements

AHU / RTU

Building Static Pressure
Cooling Command
Damper Position
Discharge Fan Command (single or common)
Discharge Fan Frequency (single or common)
Discharge Fan Speed (single or common)
Discharge Fan Status (single or common)
Discharge Air Flow
Discharge Humidity
Discharge Pressure
Discharge Pressure Setpoint
Discharge Air Temperature
Discharge Temp Setpoint
Exhaust Air Flow
Heating Command
Mixed Air Temp
Occupied Cooling Setpoint
Occupied Heating Setpoint
Occupied Mode
Outside Air Damper Command (open/closed)
Outside Air Damper Min. Pos. Setpoint
Outside Air Flow
Outside Air Flow Min. Setpoint
Outside Air Humidity
Outside Air Temperature
Return Air Flow
Return Air Humidity
Return Air Pressure
Return Air Temp
Zone Humidity
Zone Pressure
Zone Temperature

Boiler

Boiler Command
Boiler Leaving Setpoint
Boiler Status
Entering Water Temperature
Heating Command
Leaving Water Temperature

Chilled Water

Chiller Command
Chiller Status
Chilled Water Setpoint
Chilled Water Entering Temperature
Chilled Water Leaving Temperature
Condenser Water Entering Temperature
Condenser Water Leaving Temperature
Enable Command
Sump Temperature

Cooling Tower

Condenser Water Circ. Pump Status
Condenser Water Entering Temperature
Condenser Water Leaving Temperature
Enable Command
Sump Temperature

FCU

Cooling Command
Heating Command

Meters

Domestic Water Vol. Tot. (accum.)
Energy Tot. (accum.)
Gas Volume Tot. (accum.)

VAV

Damper Position
Discharge Air Fan Status
Discharge Air Flow
Discharge Air Flow Setpoint
Discharge Air Temperature
Occupied Cooling Setpoint
Occupied Heating Setpoint
Occupied Mode
Reheat Command
Return Air Flow
Zone Humidity
Zone Temperature
Zone Temperature Deviation

Our rules feed the reports that help you get important things done

Jarvis Associates
High Demand Zones

RESOLUTE
BUILDING INTELLIGENCE

February 2020

Equipment	Score	Bad	Okay	Good
Total	Average	Total	Total	Total
498	86	57	17	416

Total%: Total time % with a request
Pressure Requests: Pressure Request-Hours Accumulator

Temp Requests: Temp Request-Hours Accumulator
Pressure Req%: Pressure Cumulative-Request-Hours

Temp Req%: Temp Cumulative-Request-Hours
* Req%: Max = 300% Min = 0%

Rank	Equipment (Parent)	Score	Temp Requests				Pressure Requests			
			Total%	ReqHrs	Req%	Score	ReqHrs	Req%	Score	
1	Fir_1 LibZone14 (AHU_06)	0	100%	2,085	300%	0	0	0%	100	

Reports that help you get important things done

AHU Operations

Scores air handling units (AHU) based on the equipment's ability to maintain discharge air temperature and static pressure setpoints and identifies potential root causes

IAQ Scorecard

Evaluates all zones served by variable air volume (VAV) boxes based on the most recent ASHRAE and CDC guidelines for Indoor Air Quality, including total zone airflow, outside airflow, zone temperature, humidity, and CO2

AHU Controller Performance

Evaluates air handling unit (AHU) cooling valve, heating valve, and outside air damper commands based on total actuator movement and oscillations over time to identify poor control or hunting

VAV Controller Performance

Evaluates variable air volume (VAV) box airflow damper and reheat valve commands based on total actuator movement and oscillations over time to identify poor control or hunting

AHU Economizer Performance

Evaluates air handling unit (AHU) economizer operation and outside airflow, provides a score based on operational efficiency, and indicates a relative cost due to inefficient operation

VAV Scorecard

Scores variable air volume (VAV) boxes based on their ability to maintain zone temperature and airflow setpoints and identifies potential root causes

AHU Schedule

Identifies air handling units (AHU) not following the predefined building occupancy schedule set by the user in Resolute Synergy™

OR Scorecard

Evaluates hospital operating rooms (OR) based on the zone humidity, pressure, and airflow requirements defined in ANSI/ASHRAE/ASHE Standard 170-2017 Ventilation of Health Care Facilities

High Demand Zones

Identifies the most demanding variable air volume (VAV) boxes that will drive reset control strategies, based on ASHRAE Energy Standard 90.1 and Guideline 36 – High Performance Sequences of Operation for HVAC Systems

OR Performance

Evaluates hospital operating rooms (OR) based on energy efficient operation and identifies opportunities for cost savings

Affordable and flexible points-based pricing

All plans are based on an annual subscription

Plan	Small	Base	Medium	Large
Points	Up to 1,500	Up to 3,000	Up to 5,000	Up to 10,000
Price	\$1,500	\$3,000	\$5,000	\$7,000

Contact us for implementations greater than 10,000 points

What's Included



Building-configuration app



Root-cause analysis & prescriptive solutions



On-demand performance reports



Fault detection & real-time alerts



Action-items creation, prioritization & tracking



Interactive performance graphs



Equipment & energy analytics



Real-time utility data



Portfolio overview dashboard



Energy usage dashboards



Energy performance comparisons



Custom branding & colors

Solving real-world, everyday building problems with real-time, actionable answers.

SOC-2 Compliant



The Gold Standard of Data Security

Resolute was founded by tech-industry veterans with extensive experience developing big-data, cloud-based software solutions for large enterprise customers across multiple verticals such as real estate, banking, transportation, manufacturing, and others. Many of our team members are former employees of Compuware Corporation, a \$2B+ enterprise software company that pioneered the use and analysis of data to build, test, and manage business-critical applications for 90+ percent of the Global 100.

Big Data, Software, & Building Experts

The Resolute technology team includes highly skilled software developers, energy engineers, system integrators, and analytics experts. This unique blend of talent comprises the core competencies, skills, and experience needed to build an innovative and intuitive analytics solution powerful enough to competently address today's complex building-performance challenges.

Resolute Building Intelligence LLC

35 W. Huron Street
Suite 1000
Pontiac, MI 48343

(888) 798-6699
hello@resolutebi.com
www.resolutebi.com