



# Broward County Solicitation BLD2123540P1

Building Automation Systems Services - County Facilities  
Evaluation Meeting

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June 9<sup>th</sup> 2022

Presented by:

Joshua Bohorquez

John Garnecki

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# Ability of Professional Personnel

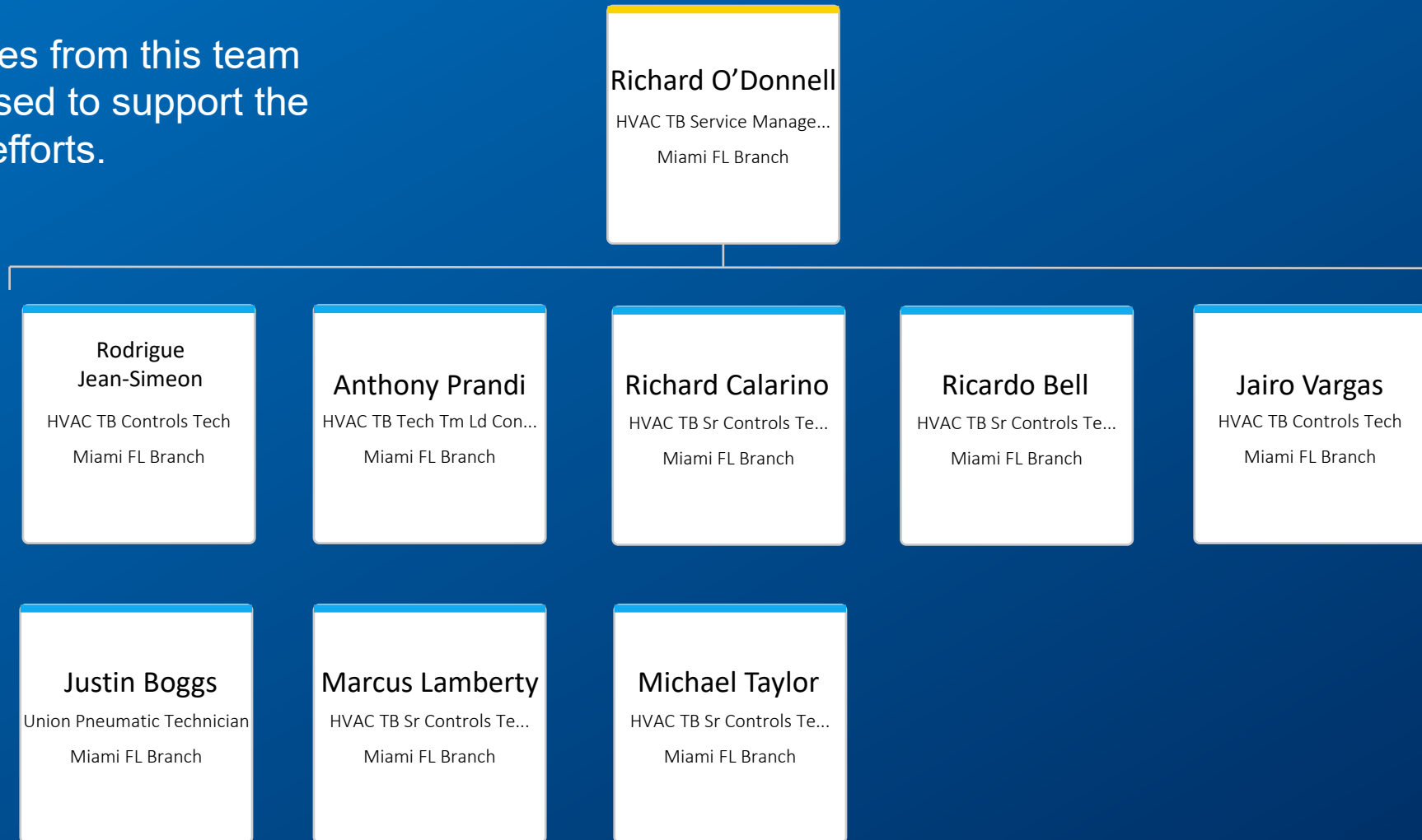
**Introducing the Johnson Controls Service Team**

The power behind **your mission**



# Factory Trained Controls Service Team

Resources from this team will be used to support the service efforts.



# Factory Trained Controls Retrofit/Upgrade Team

Resources from this team will be used to support the retrofit/upgrade efforts.



# Ability of Professional Personnel



The technician team has an average tenure with JCI of 16 years. Several of the team members have in-depth knowledge of the County buildings, personnel, and critical systems, having formerly worked at these locations under a previous contract.

The Team assigned to this project will be comprised of a Project Manager and a team of JCI factory trained Metasys technicians. Additionally, there will be back-office support for dispatching, scheduling, etc.

Staffing highlights include but not limited to the following:

**Richard O'Donnell**, Project Manager, has been an employee of JCI for over seven years, working exclusively with Metasys. Previous to joining JCI, Richard was a Property Manager which gives him an understanding of the challenges a building owner/operator faces with maintaining occupant comfort and reducing energy spend.

**Richard Calarino**, Senior Controls Technician, has 30 years with JCI and is well versed in all generations of Metasys products. Moreover, Richard was the lead technician working within the county facilities when JCI was a partner to the County prior to the current service provider.

**Ricardo Bell**, Controls Technician, has 5 years with JCI and 10 years controls industry experience.

**Marcus Lamberty**, Controls Technician, although new to Johnson Controls, previously worked for Siemens, giving JCI the ability to support the Siemens product.

**John Garnecki**, Branch Service Manager, has extensive experience in the building automation industry having worked for Siemens for 26 years and JCI for the past 6 years. The Miami branch of JCI also employs two former employees of Siemens, both of whom, at different times, managed the Broward County automation contract for Siemens giving JCI a wealth of institutional knowledge to draw upon.

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# Project Approach

**Leverage Johnson Controls industry leading expertise**

The power behind **your mission**



# Project Approach



**The majority of the equipment covered under this solicitation is JCI/Metasys. Being the OEM, we feel we are best suited to deliver superior service and support for this equipment. JCI has identified local vendors with expertise in Siemens and other systems for purposes of supporting those systems as the need arises.**

Johnson Controls will utilize their industry leading products, experienced manpower and expertise to partner with the County to achieve their goals as outlined in the bid solicitation.

- Provide repairs as needed to restore uptime of BAS system and limit impact to building occupants
- Execute prescribed planned maintenance of the existing system to protect County's BAS assets
- Provide continuous oversight of BAS system and make recommendations for upgrades and improvements that would benefit the County by improving system reliability and/or reducing energy spend.
- Execute optional hardware upgrades/retrofits/expansions utilizing team of trained professionals

# Project Approach



The majority of the equipment covered under this solicitation is JCI/Metasys. Being the OEM, we feel we are best suited to deliver superior service and support for this equipment. JCI has identified local vendors with expertise in Siemens and other systems for purposes of supporting those systems as the need arises.

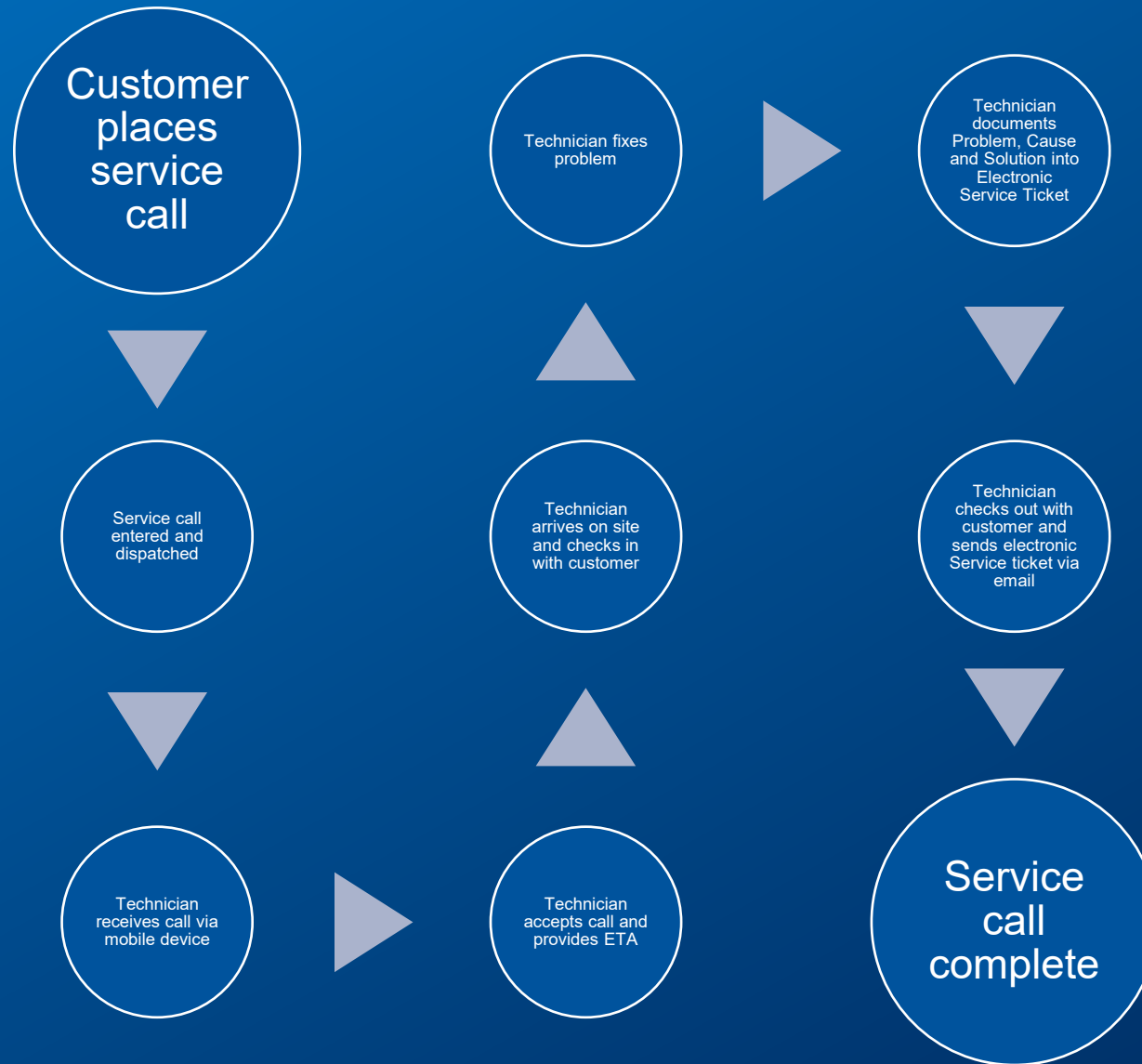
First and foremost, JCI demonstrates a culture of safety. A pre-job checklist will be completed prior to the start of each unique task. This checklist is electronic and tracked in real-time. Each technician is also audited for compliance.

## **Reactive service**

Utilizing our Oracle based scheduling and dispatching software, JCI will enter all assets covered under the scope of work of the agreement into the Oracle database for purposes of scheduling the prescribed maintenance.

During normal business hours, service calls may be placed via a toll-free number to our local dispatch center in Miramar, FL. JCI maintains a Remote Operations Center (ROC) for after hours service. The ROC is manned by JCI employees who have access to the Oracle database. This provides for seamless hand off between the local dispatch team and the ROC.

# Service Delivery Overview – Reactive service



# Project Approach



The majority of the equipment covered under this solicitation is JCI/Metasys. Being the OEM, we feel we are best suited to deliver superior service and support for this equipment. JCI has identified local vendors with expertise in Siemens and other systems for purposes of supporting those systems as the need arises.

## Scheduled service

Leveraging our Metasys Performance Verification Tool, JCI will provide the County with a robust scheduled maintenance plan that provides detailed value reporting.

- System benchmarking – current status of system and opportunities for corrective action
- System specific tasking that allows for capturing data relative to maintenance activities
- On-going summary of maintenance progress for use in regularly scheduled meeting with County personnel.
- Capture recommendations for operational and system improvements

# Service Delivery - Metasys Performance Verification Tool



Metasys® Performance Verification Assessment

Johnson Controls

4/28/2017 4:13:28 PM

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Since the majority (80%+) of the building automation equipment covered under this solicitation is Metasys, JCI will leverage their Metasys Performance Verification Tool to demonstrate value with site health reports and optimization recommendation reporting. 3<sup>rd</sup> party, BACnet connected devices are also included in scan.

## Key components of PVT

- Performance scan
- Inventory Scan
- Tasking report



Customer Facing Report

Johnson Controls

PVT - Inventory

PREPARED FOR :  
Valued Customer (BRANCH NAME)

PREPARED BY :  
Service Technician

PREPARED ON :  
1/24/2017 12:26:53 PM



METASYS

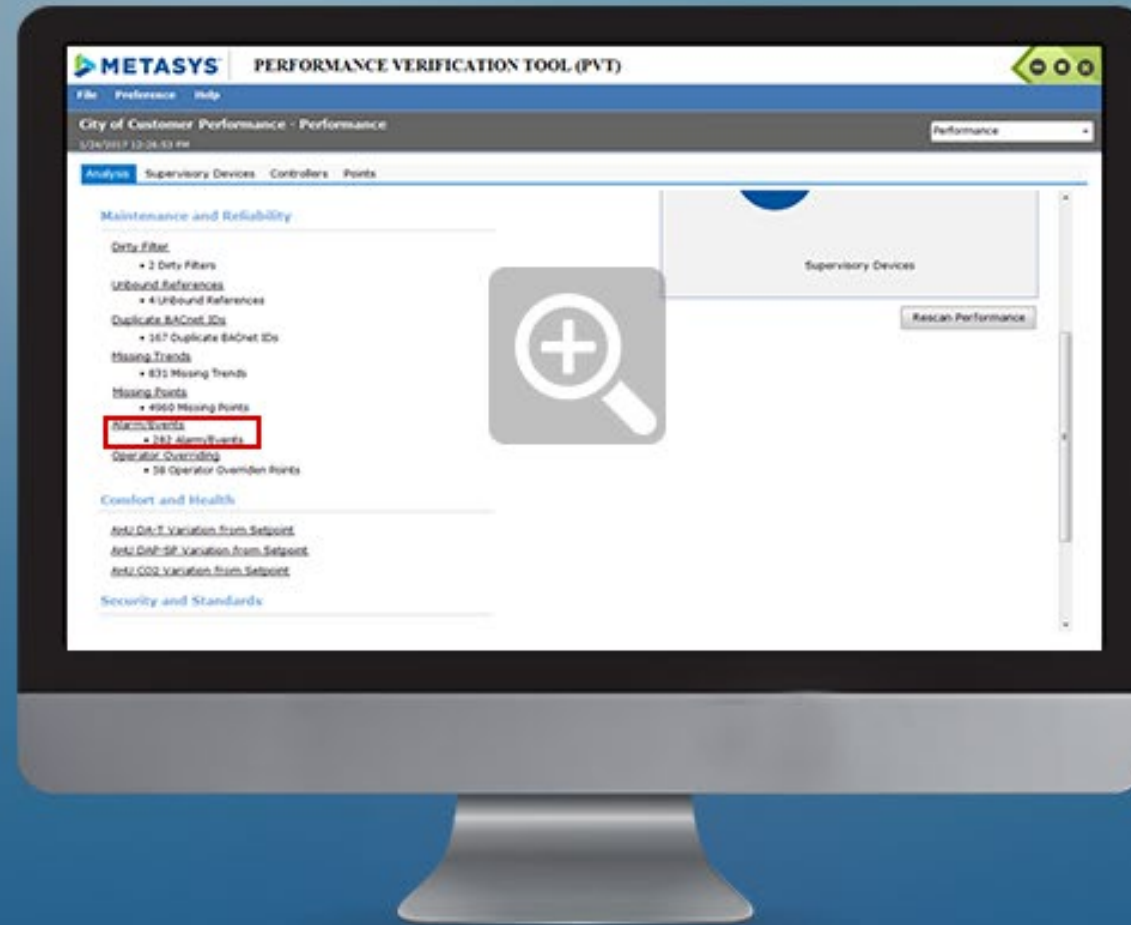
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# Metasys Performance Verification Tool – Performance Scan

The Performance Scan identifies the abnormal device conditions for the service technician.



# Metasys Performance Verification Tool – Performance Scan

The screenshot displays the Metasys Performance Verification Tool (PVT) interface. At the top left is the METASYS logo. The title bar reads "PERFORMANCE VERIFICATION TOOL (PVT)". A menu bar includes "File", "Preference", and "Help". The main header area shows "City of Customer Performance - Performance" and a date/time stamp "1/24/2017 12:26:53 PM". A dropdown menu is set to "Performance". Below this is a navigation bar with tabs for "Analysis", "Supervisory Devices", "Controllers", and "Points".

The main content area is divided into two columns. The left column lists various performance issues under the heading "Maintenance and Reliability":

- Dirty Filter
  - 2 Dirty Filters
- Unbound References
  - 4 Unbound References
- Duplicate BACnet IDs
  - 167 Duplicate BACnet IDs
- Missing Trends
  - 831 Missing Trends
- Missing Points
  - 4960 Missing Points
- Alarm/Events**
  - 282 Alarm/Events
- Operator Overriding
  - 58 Operator Overriden Points

The right column features a large grey box labeled "Supervisory Devices" and a "Rescan Performance" button. The "Alarm/Events" item in the left column is highlighted with a red rectangular box.

Below the "Maintenance and Reliability" section are two more sections: "Comfort and Health" and "Security and Standards".

Under "Comfort and Health":

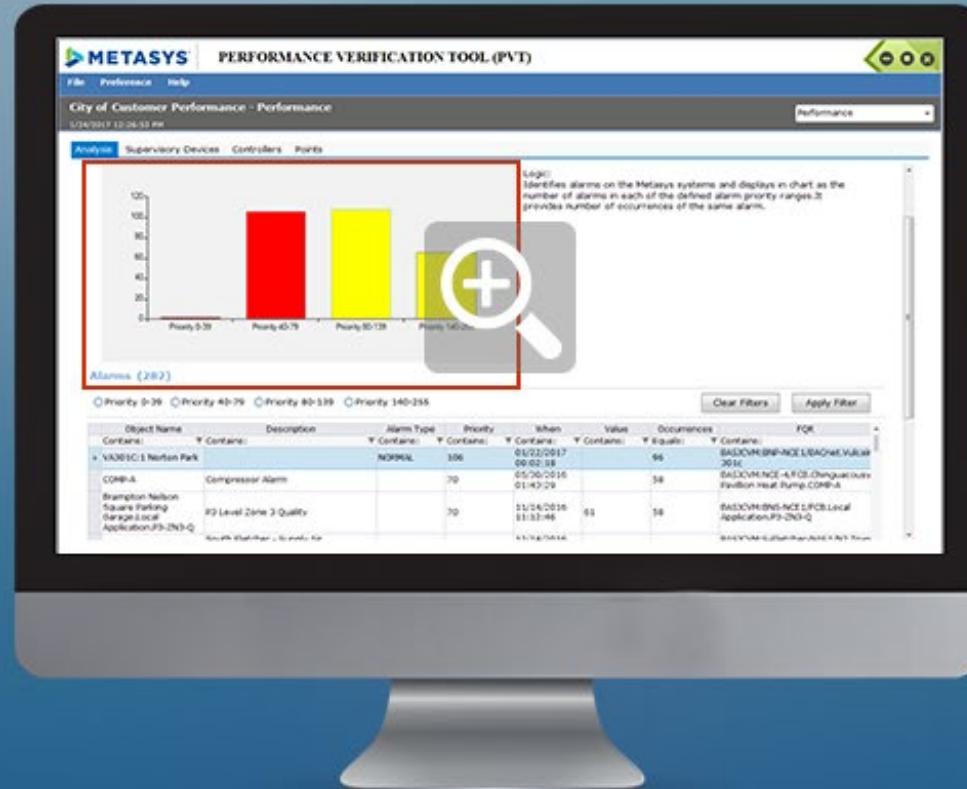
- AHU DA-T Variation from Setpoint
- AHU DAP-SP Variation from Setpoint
- AHU CO2 Variation from Setpoint

Under "Security and Standards":

-

# Metasys Performance Verification Tool – Performance Scan

The Performance Scan identifies abnormal device condition for the service technician.



- o Performance Scan highlights high number of Alarms.
- o Service technician can further analyze the alarms as part of scheduled service visit to determine devices that need attention.
- o The service technician can further use the customer report to discuss potential issues with the customer for a proactive approach to service maintenance.

# Metasys Performance Verification Tool – Performance Scan



## PERFORMANCE VERIFICATION TOOL (PVT)



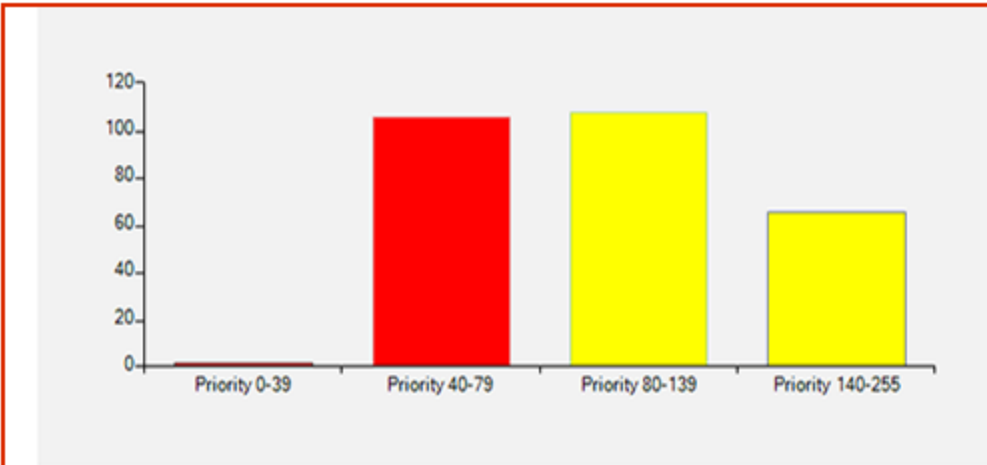
File Preference Help

City of Customer Performance - Performance

Performance

1/24/2017 12:26:53 PM

Analysis Supervisory Devices Controllers Points



Logic:  
Identifies alarms on the Metasys systems and displays in chart as the number of alarms in each of the defined alarm priority ranges. It provides number of occurrences of the same alarm.

Alarms (282)

Priority 0-39  Priority 40-79  Priority 80-139  Priority 140-255

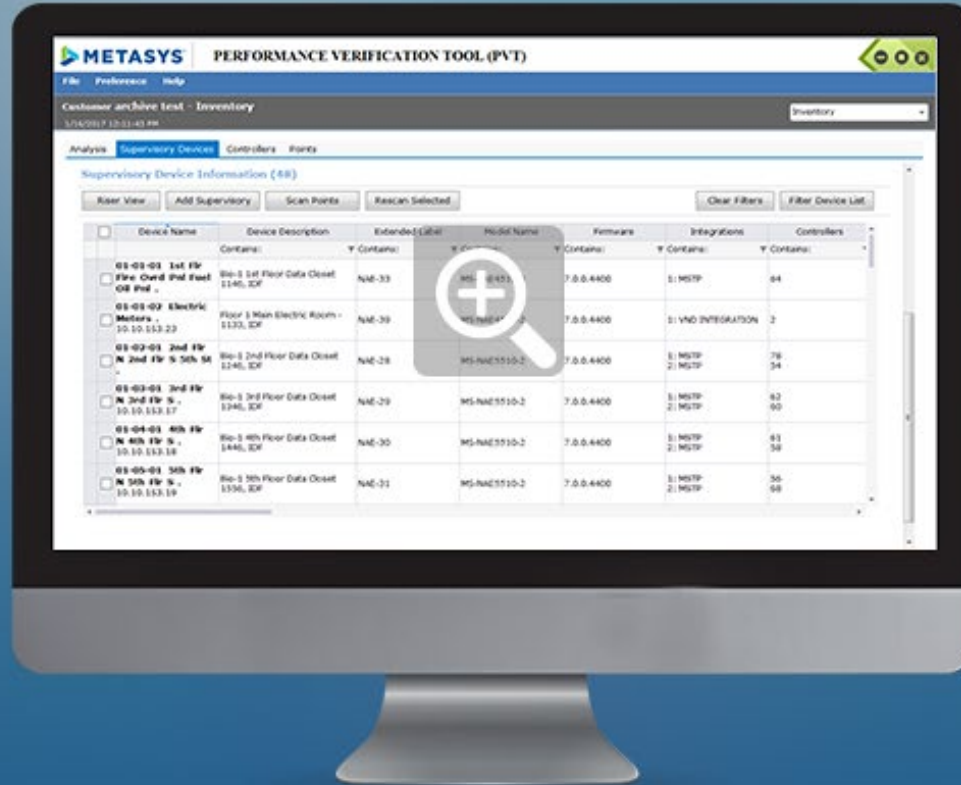
Clear Filters

Apply Filter

Object Name	Description	Alarm Type	Priority	When	Value	Occurrences	FQR
Contains: ▼	Contains: ▼	Contains: ▼	Contains: ▼	Contains: ▼	Contains: ▼	Equals: ▼	Contains: ▼
▶ VA301C:1 Norton Park		NORMAL	106	01/22/2017 00:02:18		96	BASJCVM:BNP-NCE1/BACnet.Vulcair 301c
COMP-A	Compressor Alarm		70	05/30/2016 01:43:29		58	BASJCVM:NCE-4/FCB.Chinguacousy Pavillion Heat Pump.COMP-A
Brampton Nelson Square Parking Garage.Local Application.P3-ZN3-Q	P3 Level Zone 3 Quality		70	11/14/2016 11:12:46	61	58	BASJCVM:BNS-NCE1/FCB.Local Application.P3-ZN3-Q
	South Fletcher - Supply Air			12/14/2016			BASJCVM:S.Fletcher.NAE1/N2 Trun

# Metasys Performance Verification Tool – Inventory Scan

A technician runs the Inventory Scan feature. The record of an Inventory Scan helps baseline the site.



- Complete an Inventory Scan to see what has been installed before signing off on the site.
- Use an Inventory Scan and a Performance Scan as a baseline after every *Metasys* Installation.

# Metasys Performance Verification Tool – Inventory Scan



## Supervisory Device Information (48)

<input type="checkbox"/>	Device Name	Device Description	Extended Label	Model Name	Firmware	Integrations	Controllers
		Contains:	Contains:	Contains:	Contains:	Contains:	Contains:
<input type="checkbox"/>	01-01-01 1st Flr Fire Ovrdr Pnl Fuel Oil Pnl .	Bio-1 1st Floor Data Closet 1146, IDF	NAE-33	MS-NAE4510-2	7.0.0.4400	1: MSTP	64
<input type="checkbox"/>	01-01-02 Electric Meters . 10.10.153.23	Floor 1 Main Electric Room - 1133, IDF	NAE-39	MS-NAE4510-2	7.0.0.4400	1: VND INTEGRATION	2
<input type="checkbox"/>	01-02-01 2nd Flr N 2nd Flr S 5th St .	Bio-1 2nd Floor Data Closet 1246, IDF	NAE-28	MS-NAE5510-2	7.0.0.4400	1: MSTP 2: MSTP	78 54
<input type="checkbox"/>	01-03-01 3rd Flr N 3rd Flr S . 10.10.153.17	Bio-1 3rd Floor Data Closet 1346, IDF	NAE-29	MS-NAE5510-2	7.0.0.4400	1: MSTP 2: MSTP	62 60
<input type="checkbox"/>	01-04-01 4th Flr N 4th Flr S . 10.10.153.18	Bio-1 4th Floor Data Closet 1446, IDF	NAE-30	MS-NAE5510-2	7.0.0.4400	1: MSTP 2: MSTP	61 58
<input type="checkbox"/>	01-05-01 5th Flr N 5th Flr S . 10.10.153.19	Bio-1 5th Floor Data Closet 1556, IDF	NAE-31	MS-NAE5510-2	7.0.0.4400	1: MSTP 2: MSTP	56 68

# Metasys Performance Verification Tool - Metasys Tasking Report

FLL-T2-NAE1/N2-1.2-1-VFD-SA							
Description of Task	Verify/Check	Verify at 0%	Verify at 100%	Check PID Loop	Calibration Offset	Building Automation System Reading	Actual Reading
<b>Sensors:</b>							
VFD Actual Current	<input type="text"/>						
VFD Actual Frequency	<input type="text"/>						
VFD Internal Temp	<input type="text"/>						
VFD Actual kW	<input type="text"/>						
VFD Actual RPM	<input type="text"/>						
<b>Status:</b>							
VFD Run Status	<input type="text"/>						
VFD Fault Status	<input type="text"/>						
<b>Commands:</b>							
None							
<b>Analog Output:</b>							
None							
<b>Operational Checks:</b>							
Check Sequence of Operation	<input type="text"/>						
<b>Control Panel:</b>							
Check Enclosure for Problems	<input type="text"/>						
Check Enclosure for Air Leaks	<input type="text"/>						
Check Battery	<input type="text"/>						
<b>Database:</b>							
Backup Database	<input type="text"/>						
<b>Final Completion:</b>							
Complete Report	Passed						

Generated directly from the Inventory scan, the Metasys Tasking Report is a living document used to track scheduled service task completion. System specific tabs are auto-created and these tabs contain system specific tasking. The service technician inputs information specific to each point of “system” operation.

FLL-T1-NAE2/N2-1.AC-A106							
Description of Task	Verify/Check	Verify at 0%	Verify at 100%	Check PID Loop	Calibration Offset	Building Automation System Reading	Actual Reading
<b>Description of Task</b>							
<b>Sensors:</b>							
Zone Temperature	<input type="text"/>						
<b>Status:</b>							
Drain Pan Status	<input type="text"/>						
Supply Fan Status	<input type="text"/>						
<b>Commands:</b>							
AC Start/Stop	<input type="text"/>						
Reversing Valve	<input type="text"/>						
Compressor Command	<input type="text"/>						
<b>Analog Output:</b>							
Zone Cooling Setpoint		<input type="text"/>	<input type="text"/>				
Zone Heating Setpoint		<input type="text"/>	<input type="text"/>				
<b>Operational Checks:</b>							
Check Sequence of Operation	<input type="text"/>		<input type="text"/>				
<b>Control Panel:</b>							
Check Enclosure for Problems	<input type="text"/>						
Check Enclosure for Air Leaks	<input type="text"/>						
Check Battery	<input type="text"/>						
<b>Database:</b>							
Backup Database	<input type="text"/>						
<b>Final Completion:</b>							
Complete Report	<input type="text"/>						

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## Past Performance:

**Current satisfied customers within the South Florida Area**

The power behind **your mission**



## Past Performance:



**Johnson Controls currently provides preventative Building Automation Services for Florida Atlantic University (FAU), Florida International University (FIU), and Telemundo Miami, among many other customers throughout the South Florida Area.**

Johnson Controls provides BAS preventative maintenance to FAU, with contract start dates from 2018. We service 6 different FAU campuses from Fort Pierce to Davie Florida on a quarterly basis. This includes sensor calibrations, system diagnostic reports and customer consultation regarding their Metasys performance. Johnson Controls also provides insight on possible enhancements using our BAS expertise, Metasys Performance Verification Tool, and our constantly evolving Metasys software.

Johnson Controls provides BAS preventative maintenance to FIU, with contract start dates from 2016. We service over 40 different locations within the FIU Campuses, with all the sites containing Metasys hardware. Alongside the annual preventative maintenance on the Metasys hardware, we provide annual updates of their Metasys software and help identify energy saving opportunities through our Performance Verification Tool.

Johnson Controls provides BAS preventative maintenance to the Telemundo Miami, with contract start dates from 2018. We provide monthly preventative maintenance on their Metasys BAS, including integrations from 3<sup>rd</sup> party devices such as lighting panels and energy meters. Johnson Controls also provides annual updates of their Metasys software through this service contract.

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## Workload of the Firm:

**Johnson Controls is a globally recognized BAS service provider**

The power behind **your mission**



## Workload of the Firm



**We have a dedicated service team that handles service calls 24/7 with on-call technicians available at all times. Johnson Controls has the capacity to provide BAS service per this bid solicitation in tandem with our other service contracts.**

JCI regularly monitors the manpower needs based off both backlog and forelog workload expectations and hires new technicians accordingly.

Johnson Controls has a robust recruiting system that helps identify both experienced and entry level technician candidates. In addition, the JCI Miramar office maintains relationships with both Miami Lakes Technical College and Miami Dade College's Building Automation Technical Program.

Johnson Controls also has 100+ corporate owned branch offices with five (5) located in Florida. This allows for access to additional factory trained manpower if the need arises, i.e. disaster relief.

Questions?

Thank you!

