

# FasBAC for Energy Enterprise Edition

## Facts:

- *Utility bills are based on peak demand*
- *Heating, Cooling and Lighting typically make up more than 80% of a building's energy bill*

## Question:

« *Can we really afford an increase to our utility bill from operating non-essential equipment during peak demand periods?* »



Advise • formulate • deliver

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*FasBAC for Energy - Enterprise Edition* is designed to collect energy data from the Carma Industries METER MANAGER™ system and store it in an enterprise database—making the data available for advanced analysis and long term archiving.

The Carma Industries METER MANAGER™ system is an electronic energy monitoring and data collection system. By bringing meter data into an enterprise database, you are able to take charge of energy usage.

The METER MANAGER™ system is Measurement Canada approved for sub-metering and tenant billing.

*FasBAC for Energy - Enterprise Edition* is an enhanced version of AFDtek's proven *FasBAC for Energy* BACnet interface for the METER MANAGER™ system. FasBAC integrates with the Carma system's data logging features to ensure the reliable collection and storage of data. FasBAC will detect interruptions to data collection or storage and will automatically retrieve data of the interruption period and bring the database up to date.

*FasBAC for Energy - Enterprise Edition* stores data in a format compatible with the requirements of an E-VEE: Electric Validation and Editing Engine.

The BACnet interface continues to be available for its traditional role, that of real-time integration of energy meters into a BACnet Building Automation System (BAS). In addition, it provides the capability, through the BAS, to alert the enterprise to interruptions to data collection.

<b>Features and Benefits</b>	
<b>Features</b>	<b>Benefits</b>
<ul style="list-style-type: none"> <li>• Provides support for Microsoft SQL and Oracle databases—the choice is made at installation time</li> <li>• Uses stored procedures to interact with the enterprise database</li> <li>• Delivered with pre-configured “empty” SQL and Oracle databases</li> <li>• Integrates with the Carma METER MANAGER™ system’s data logging features</li> <li>• Integrates with BACnet Building Automation Systems (BAS)</li> <li>• Powerful, yet affordable; suitable for any size of facility</li> </ul>	<ul style="list-style-type: none"> <li>• Providing the user with the choice of support for either of the two most commonly used enterprise databases will, in most applications, permit FasBAC to utilize an existing enterprise database server</li> <li>• The use of stored procedures isolates FasBAC from the details of the database architecture, enabling the enterprise to store the data in a schema of their choice</li> <li>• FasBAC is ready to go, right out of the box—simply attach a copy of the empty data base to an existing database server</li> <li>• Leverages the data storage features of the Carma data gathering panel to ensure reliable delivery of data to the enterprise</li> <li>• Enables the Building Automation System to monitor energy usage in real-time and enables real-time monitoring of the integrity of the enterprise data collection through the BAS event management features</li> <li>• The system is equally suitable for a single site application with a single meter or an enterprise comprising hundreds of buildings and meters</li> </ul>
<b>Theory of Operation</b>	
<ol style="list-style-type: none"> <li>1. FasBAC reads energy data from the Carma system and writes the data to the enterprise database.</li> <li>2. FasBAC verifies data is successfully written to the enterprise database.</li> <li>3. FasBAC tracks the time stamp of the data last successfully written to the database and compares it to the timestamp of current data. If there is a gap, FasBAC will automatically retrieve older data and fill in the gap.</li> <li>4. Use of the BACnet interface is optional. The reading and writing of data for the enterprise is independent of whether the BACnet interface is used.</li> <li>5. FasBAC for Energy - Enterprise Edition uses both the Windows Application Event Log and the objects of the BACnet interface to record and report the status of communications to the Carma system and the enterprise database.</li> </ol>	
<b>Platform Requirements</b>	
<b>Software Platform</b>	<b>Minimum Hardware Platform Resources</b>
Windows 7, Windows 10, Windows Server 2008 or 2012 32-bit and 64-bit Windows operating systems are supported.	2 GHz processor, or minimum required for the operating system
FasBAC for Energy software may be installed on:	2 GB memory, or minimum required for the operating system
<ul style="list-style-type: none"> <li>• The Carma Meter Manager workstation computer, or</li> </ul>	20 GB free disk space
<ul style="list-style-type: none"> <li>• If the Carma network does not include a Carma Meter Manager workstation, any computer on the network that is not already a BACnet device</li> </ul>	Network connectivity
<b>Supported Database Servers</b>	
Microsoft SQL Server 2008 or newer	