

DATACENTER MANAGEMENT & ENERGY-EFFICIENCY SOFTWARE

Monitoring and managing the 'green' datacenter

As power prices and consumption continue rising and regulators are increasingly concerned with climate change and energy security, datacenter managers are investing in technology to track and reduce their energy use.

ECO-EFFICIENT IT

4 FINDINGS

- Datacenter efficiency software is a nascent market, still unquantified in terms of revenues and lacking an agreed taxonomy or widely adopted architecture. **PAGE 3**
- The number of suppliers offering products for datacenter monitoring, measurement and reporting has grown rapidly since 2007. Consolidation is to be expected. **PAGE 2**
- The collection and aggregation of data in the datacenter is surprisingly difficult and expensive. But systems will become cheaper, easier to install and more open. **PAGE 10**
- There are at least nine discrete categories of software in this area, demonstrating the diversity of approaches to monitoring and managing the datacenter. **PAGE 16**

5 IMPLICATIONS

- A complete datacenter infrastructure management system spans planning; asset, capacity, change and configuration management; monitoring; alerting; and automated management and control. **PAGE 13**
- No single supplier is currently able to provide a complete datacenter infrastructure management system. Integrators and partnerships will be key to success. **PAGE 13**
- A 1MW US datacenter that uses management software to reduce energy consumption by 10% could save \$433,500 over five years. **PAGE 6**
- The role of the classic IT systems management frameworks is currently limited in the datacenter, but they will begin to play a more important role. **PAGE 20**
- Managers will consider ITIL-type approaches to increase efficiency and reliability in their datacenters. **PAGE 21**

1 BOTTOM LINE

- Datacenter management software provides many benefits, suggesting a solid return on investment. Managers, especially those in larger datacenters, will increasingly invest in this technology.

REPORT SNAPSHOT

TITLE	Datacenter Management & Energy-Efficiency Software
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ABOUT THIS REPORT

Around the world, datacenter managers are investing in technology to track and reduce their energy consumption. Power prices and power consumption are both rising, power availability is limited in several geographies, and regulators concerned with climate change and energy security have become aware of wasteful or inefficient use of energy in datacenters. Managing energy use effectively is not easy; it requires a solid understanding of IT, power distribution and cooling, as well as an awareness of the rapidly evolving technology and thinking in this area. There is no quick fix.

It is clear, however, that the most effectively managed eco-efficient datacenters will be those where managers have up-to-date, detailed and meaningful information about their datacenter's applications, equipment, configurations, power use and environmental data. They can use this information for planning, forecasting and management, as well as real-time decision-making and, if practical, to inform and drive automated systems. They can also use this information for compliance and commercial purposes.

This report outlines the market drivers for datacenter reporting and management tools, categorizes the main types of products, and identifies over 30 suppliers offering more than 50 tools that are substantially or entirely concerned with monitoring, analyzing, managing and reducing datacenter energy use. We include in this group a number of innovative companies that have developed power management technology for servers.

TABLE OF CONTENTS

- SECTION 1: EXECUTIVE OVERVIEW** **1**
 - 1.1 INTRODUCTION 1
 - 1.2 KEY FINDINGS 2
 - 1.3 SCOPE OF THIS REPORT 3
 - Figure 1: Eco-Efficiency Focus Areas* 4
 - 1.4 METHODOLOGY 5

- SECTION 2: GREENER DATACENTERS: THE ECCOE MODEL** **6**
 - 2.1 GREEN DATACENTERS IN CONTEXT 6
 - 2.2 ECONOMICS 6
 - Figure 2: Efficiency Improvement Annual Cost Savings for Various Loads (US)* 7
 - 2.3 COMPLIANCE 7
 - 2.4 CSR 8
 - 2.5 OPERATIONAL 8
 - 2.6 ENTERPRISE AND INNOVATION 9

- SECTION 3: TOWARD A TAXONOMY: MONITORING, MAPPING AND CONTROL** **10**
 - 3.1 MONITORING, MEASUREMENT AND ALERTING 10
 - 3.1.1 Measurement Points* 11
 - Figure 3: Datacenter Energy Measurement Points* 11
 - 3.2 DECISION SUPPORT AND INFORMATION MANAGEMENT 13
 - 3.3 MANAGEMENT AND CONTROL 13
 - 3.4 ALL TOGETHER 13
 - Figure 4: Datacenter and IT Management Software* 14
 - 3.4.1 Benefits* 14
 - Figure 5: Before and After: The Benefits of Datacenter Efficiency Software* . . 15

- SECTION 4: TYPES OF SOFTWARE PRODUCTS** **16**
 - Figure 6: Main Categories of Datacenter Efficiency Software* 17
 - 4.1 IT POWER MANAGEMENT 18

4.2 IT SYSTEMS AND NETWORK MANAGEMENT 20
Figure 7: Systems Management Unifies Underlying Systems 21
 4.3 DATACENTER CONFIGURATION, CAPACITY AND CHANGE MANAGEMENT 21
 4.4 STAND-ALONE CARBON/ENERGY MANAGEMENT
 AND SIMULATION 22
 4.5 INDEPENDENT ENERGY USE MONITORING AND ANALYTICS 23
 4.6 INTEGRATED MONITORING, REPORTING AND ANALYTICS 24
 4.7 INTELLIGENT POWER DISTRIBUTION UNITS (AND BRANCH CIRCUIT MONI-
 TORING) 24
 4.8 SUBSYSTEM POWER ANALYTICS 25
 4.9 REMOTE SENSORS AND DATA COLLECTION 26

SECTION 5: SUPPLIERS IN SUMMARY 27

5.1 1E 27
 5.2 AD INFINITUM MULTIMEDIA 28
 5.3 ALPIRON 28
 5.4 ARCH ROCK 29
 5.5 AVOCENT 30
 5.6 CA/CASSATT 30
 5.7 CITRIX 31
 5.8 CSRWARE 32
 5.9 US DEPARTMENT OF ENERGY (DC PRO) 32
 5.10 EATON 33
 5.11 EDSA 34
 5.12 EMERSON NETWORK POWER/APERTURE 34
 5.12 ENERGYWARE 35
 5.13 GDCM 36
 5.14 HEWLETT-PACKARD 36
 5.15 IBM 37
 5.16 LUMINA DECISION SYSTEMS 39
 5.17 LEANSERVER 39
 5.18 MICROSOFT 39
 5.19 MISERWARE 40
 5.20 MODIUS 41
 5.21 KNOWLEDGE FLOW CORP 42

5.22 OSISOFT 42

5.23 SUN MICROSYSTEMS/PACIFIC CONTROLS 43

5.24 POWER ASSURE 43

5.25 RACKWISE 44

5.26 RARITAN 45

5.27 ROMONET 45

5.28 SCHNEIDER ELECTRIC/APC 46

5.29 SENTILLA 47

5.30 SYNAPSENSE 48

5.31 VIRIDITY 48

5.32 VMWARE 48

SECTION 6: OTHER SOFTWARE AFFECTING DATACENTER ENERGY MANAGEMENT 50

Figure 8: Other Categories of Software Affecting Datacenter

Energy Management 51

6.1 BUILDING MANAGEMENT SYSTEMS. 52

6.2 SERVICE MANAGEMENT, OPERATIONS MANAGEMENT,
DATACENTER AUTOMATION 52

6.3 ENTERPRISE ENERGY MANAGEMENT AND MONITORING. 52

6.4 BRANCH CIRCUIT MONITORING 52

SECTION 7: OUTLOOK AND CONCLUSIONS 53

APPENDICES AND NOTES 54

APPENDIX 1: EFFICIENCY METRICS – PUE IS KING 54

Power Usage Effectiveness Levels 54

APPENDIX 2: OTHER SUPPLIERS AND PRODUCTS 55

INDEX OF COMPANIES AND ORGANIZATIONS 57

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