



# Reality Check

*Is your data center infrastructure ready to handle your next big IT project? How do you know?*

So the current state of the economy has dipped into your IT budget and put new initiatives on hold. You've worked hard to tighten the reins, reduce costs, and basically do more with less. However, you and your IT organization still have long-term plans, strategies and goals that need to be met. You're ready to hit the gas pedal the second that budget light turns green again. But is your data center ready to race forward with you? Do you have enough power, space and cooling to support the next IT project or the one that follows it? How do you know?

Gaining control over the physical data center infrastructure can be a daunting task for any IT organization. However, being able to properly house, power and cool the equipment that is part of any IT project is extremely important to successful implementation and the business value that the project delivers. Poor planning in the data center can quickly lead to delays and unanticipated costs, which affect the overall success of a project and lengthen the ROI realization timeframe. The good news is that the newest generation of data center monitoring and resource management tools makes it much easier to tame the data center beast so that you can make sure your data center is ready for the future.

Maybe you already have some type of monitoring system or systems in place. Maybe you already get alerts when a UPS fails or when a CRAC unit fails. Maybe you can remotely access data like UPS load percentage or CRAC system status. But do you know how much rack space is available in each rack within your data center or how much power each rack is consuming? Do you know how much airflow is provided to each rack or the temperature in each rack? Do you know how much floor space is available in the data center? Do you have enough power or cooling capacity? Do you know if you have breaker space available in your PDU or the right receptacles available on your power strips? The fact is that you have to be able to answer questions like these to effectively manage a data center and accurately plan for future changes.



## **From Data to Information**

Monitoring is certainly the first step toward improving data center performance and improving planning accuracy. After all, you can't manage or improve what you can't measure right? The catch is that in order to improve planning and data center management you need to be able to easily access and organize all that monitored data so you can use it to make informed decisions quickly. That need is the driving force behind newer technologies that provide a single holistic view of the physical data center and all the layers within it. If you take the time to do some research on this subject you'll find that there are multiple options available. Some are built for large enterprise data centers and some are built for small to midsize data centers. You'll see that some offer more features and functionality than others. Most importantly, considering the current economy, you'll find that your options will vary greatly in cost.

So let's get back to the question at hand. Is your data center ready for the future? Were you able to answer the questions above? If you're thinking it's a good idea to start looking for a solution that will improve your capabilities for data center management and planning there are some important things to do before you get started. First, get your facilities group on board and make them an integral part of the team. The right solution will be one that is utilized by both your IT group and your facilities group. If you leave your facilities team out of the process, you risk implementing a solution that they will not use or get any value from.

Second, take the time to clearly identify the devices, data points and information you need for day-to-day planning and management. Third, identify the remote monitoring capabilities and communication protocol options of each device to be monitored. Fourth, investigate the cost to make any devices "monitor-able" if necessary (i.e. Web management cards, LAN connections, protocol converters, etc.). Finally, outline your growth requirements for the foreseeable future. Having the items above clearly defined up front will help you when evaluating solutions as well as help you avoid unanticipated installation or project costs.



## All Things Considered

Once you're ready to begin evaluating potential solutions there are multiple items you should consider. The first thing to look for is an open source solution that will work with all of your hardware and provide intelligent alarm capabilities. You should verify that the solution is easy to use and provides a visual view of the entire data center facility including detailed rack elevations. Also, look for the ability to quickly view device status and critical data through dashboards, reporting and trend charts. Be wary of any solution that has multiple modules and complex pricing as that tends to lead to complex installation requirements and confusion. Be sure to inquire about the ability to add equipment or additional locations in the future and what the related costs would be. Finally, consider the value of the additional features that some solutions offer such as energy cost and utilization analysis, port or relationship mapping, asset tracking, documentation management, and maintenance management.

As you can see, there are many things to consider and it takes a good deal of effort to find the right data center monitoring and resource management application. Perhaps that's why so many organizations choose to continue to use spreadsheets and multiple disparate systems to try to manage their data center resources and plan for the future. However, considering the fact that the right solution will help prevent downtime, improve planning accuracy, improve capacity management, streamline operations, track energy utilization, speed up deployments, and put all the critical data you need at your fingertips, you might agree that its time to implement a real data center monitoring and resource management solution.

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### **About Optimum Path Systems**

*Optimum Path Systems is an innovative and growing software development company with a reputation for building reliable and scalable applications for SMB, Enterprise and Carrier scale companies. Visual Data Center ([www.visualdatacenter.com](http://www.visualdatacenter.com)) is Optimum Path's flagship product and is a data center monitoring and resource management application that offers a unique blend of features, functionality and value.*