



National Bank of Abu Dhabi (NBAD) Investing in Greater Data Center Performance and Control

Company

National Bank of Abu Dhabi (NBAD)

Industry

Banking

Location

Abu Dhabi, United Arab Emirates

Business Needs

Gain greater manageability and visibility of data center systems, power consumption, planning and processes.

Solution

Avocent® DSView™ 3 Management Software

Avocent KVM Appliances

Avocent Power Distribution Units

Avocent Service Process Managers

Avocent Data Center Planner™

Business Benefits

- Enjoyed centralized vision and remote management of all data center systems
- Increased system availability by 20 percent
- Reduced power consumption while improving cooling by two degrees during extreme conditions
- Increased lifespan of data center systems
- Delivered faster and more effective response on strategic projects
- Eliminated the accommodation and employment cost for four engineers for two to three months of design and planning of a new data center at a remote location

Ranked as one of the top 50 safest banks in the world and the best bank in the United Arab Emirates (UAE), the National Bank of Abu Dhabi (NBAD) has more than 100 branches and more than 450 ATMs in the UAE. The NBAD overseas network stretches across Hong Kong, Oman, Kuwait, Bahrain, Jordan, Egypt, Sudan, France, Switzerland, the United Kingdom and the United States. An award-winning leader in the UAE and GCC, NBAD provides its corporate and consumer customers a wide variety of financial services, including fund management, brokerage, leasing, property management and private banking. With NBAD's data center powering those financial services, it's the data center management and planning solutions from Avocent (An Emerson Network Power company) that enable the bank to achieve greater levels of availability, efficiency and performance.

“Avocent has given us greater manageability, control and visibility into our data center and processes. It has enabled us to work more proactively and rapidly on strategic projects. The Avocent products have performed some real miracles for us and our data center.”

– Ayman Al-Qudsi, Data Center Group Leader,
National Bank of Abu Dhabi

Centralized, Simplified Vision into Data Center Management

FTo simplify, secure and optimize management of its data center, NBAD leverages a full range of Avocent products and solutions, including DSView 3 management software for data center and power management; Avocent Data Center Planner software for instant and visual insights into data center assets and utilization; KVM appliances for remote access and control of data center systems; power distribution units (PDUs) for intelligent power measurement and control; Service Processor Managers for proactive monitoring and maintenance of server health; and more.

“Avocent delivers all the data center management tools and features we need in a unified solution,” says Ayman Al-Qudsi, Data Center Group Leader for the National Bank of Abu Dhabi. “Avocent provides a centralized vision of data center management, including power management, remote access, security, data center design and planning. Having that all-in-one solution enables us to be more efficient and effective, while eliminating the headaches associated with having to manage, maintain and learn multiple products.”



Intelligent, Efficient Power and Cooling Management

The DSView 3 management software from Avocent gives NBAD secure, out-of-band, centralized management of all its connected data center devices. Using this single-management interface in conjunction with the Avocent KVM appliances, service processor gateways and PDUs, the system administrators at NBAD can remotely access, monitor and control those from anywhere outside the data center at any time. One of the most notable areas where this has benefited the bank is in the area of power management.

“Avocent gives me a better understanding of our power and cooling issues,” Al-Qudsi says. “I can look at power consumption at the server level and the rack level. I can tell you which power socket is connected to which power supply in a server. I can even lock down power sockets to keep people from plugging something into one that they shouldn’t, which helps prevent a lot of costly overload mistakes.”

That detailed insight into power consumption and cooling comes as a result of leveraging PDUs from Avocent. With the PDUs, NBAD has an effective way of preventing circuit overloads during heavy use periods or when adding new servers to a rack. Now, NBAD knows exactly how much load each PDU has, as well as the load that each server puts on a PDU. As a result, it can prevent the detrimental consequences associated with tripped circuit breakers.

“NBAD’s reputation depends on IT availability and in just the past four months since we implemented Avocent PDUs, we have improved system availability by at least 20%,” says Al-Qudsi. “We don’t experience nearly as many power issues as before. And if there is a power issue, we can use DSView 3 software to quickly diagnose what socket has the issue and resolve it quickly. And in addition to reducing downtime, it has also allowed us to improve the lifespan of our CPUs, power supplies, fans and motherboards.”

That increase in lifespan is also due in part to NBAD’s ability to leverage the Avocent PDUs to improve data center cooling. Computing processing levels rise significantly during end-of-month periods at the bank. The Avocent solutions have allowed NBAD to see which servers consume the most power during those times. Consequently, that has also enabled it to determine which servers generate the most heat. That knowledge, combined with DSView 3 software reports on temperature, the humidity and airflow, has allowed the bank to identify data center hot spots and then redistribute servers in a way that takes the best advantage of the data center cooling system.

“By positioning racks in the right spots in the data center, we’ve been able to be more efficient in our power consumption and cooling,” says Al-Qudsi. “Even though we’re now entering the hot summer season of the Middle East, the temperature in our data center is two degrees colder than it was during the cooler season four months ago before we took advantage of Avocent.”

Empowered Growth

The continued success and growth of NBAD as a financial institution has a direct effect on the growth of its data center too, which has resulted in about a 25 percent annual increase in the number of its systems. Effectively managing such rapid growth can be extremely difficult for most organizations, but Avocent Data Center Planner software has greatly simplified that effort for the bank.

“Instead of going blindly into new projects, Data Center Planner lets me quickly envision them with a project plan and insight into available rack space and proper power and cooling,” Al-Qudsi says. “If a manager wants to commission a new project that requires more machines, it only takes a minute for me to tell him how soon I can accommodate his project. Data Center Planner gives me a template and project plan that covers every little detail and every little task that needs to be assigned and how long they will take to complete. It allows me to reserve needed rack space and then publish the plan to the entire team, so we avoid any miscommunications. In essence, Data Center Planner lets us respond faster and more effectively in delivering key projects for the bank.”

Avocent Data Center Planner has also been extremely instrumental in helping NBAD open up a new data center at a site about one hundred miles away from the bank headquarters.

“Using Data Center Planner, we’ve been able to plan and layout most everything for our new data center without having to send engineers onsite,” Al-Qudsi says. “Avocent Data Center Planner lets us visualize and lay down the complete infrastructure for our new data center. We can see all the connectivity. We can double click on a rack and see all of its servers, the ports’ network connections and the power socket connections. It makes it really easy for our whole team to picture and plan the data center without actually going onsite.”

Al-Qudsi adds, “Without that ability, we would have had to hire some engineers to live in that city and pay for their hotel accommodations while they worked on the new site’s planning efforts. So, that’s been a savings for us.”

Manageability, Visibility and Control

The Avocent solutions have brought an array of other benefits to NBAD, including the ability to reduce needed physical access to the data center, improve provisioning, strengthen security, enhance communication and free up more time to work on strategic projects for the bank.

“Since implementing Avocent, our data center team has been able to work with more confidence and efficiency than ever before,” Al-Qudsi adds. “Avocent has given us greater manageability, control and visibility into our data center and processes. It has enabled us to work more proactively and rapidly on strategic projects. The Avocent products have performed some real miracles for us and our data center.”