



ABOUT THE COMPANY

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, France, Switzerland, the United Kingdom and the United States.

"Since implementing Avocent, our data center team has been able to work with more confidence and efficiency than ever before. Avocent has given us greater manageability, control, and visibility into our data center and process. 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**

Background

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 Avocent® data center management and planning solutions that enable the bank to achieve greater levels of availability, efficiency and performance.

Case Summary

Location: Abu Dhabi, UAE

Vertiv Solution:

- Avocent DSView™ management software
- Data Center Planner software
- Avocent KVM switch
- Rack power distribution units (PDUs)
- Service processor managers

Critical Need: As NBAD's IT network expanded and became more complex, the bank needed a unified and centralized data center management solution with remote management capabilities that would allow the company to be more efficient and effective, while eliminating the headaches associated with having to manage, maintain and learn multiple products.

Results:

- 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
- Enabled 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

Solution

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

"I can look at power consumption at the server and rack level," Al-Qudsi said. 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 when they shouldn't, which helps prevent costly overload mistakes."

That detailed insight into power and cooling comes as a result of leveraging PDUs, which gives NBAD an effective way of preventing circuit overloads during heavy use periods or when adding new servers to a rack. Administrators know exactly how much load each PDU has, as well as the load that each server puts on a PDU.

"NBAD's reputation depends on IT availability and since we implemented PDUs, we have improved system availability by at least 20 percent," Al-Qudsi said. "We don't experience nearly as many power issues. And if there is a power issue, we can use DSView software to quickly diagnose what socket has the issue and resolve it quickly. In addition to reducing downtime, it has also allowed us to improve the lifespan of our CPUs, power supplies, fans and motherboards."

Computing processing levels rise significantly during end-of-month periods at the bank, and Avocent solutions have allowed NBAD to see which servers consume the most power during those times. Consequently, it can determine which servers generate the most heat. That knowledge, combined with DSView software reports on temperature, humidity and airflow has allowed the bank to identify data center hot spots and redistribute servers to take full advantage of the data center cooling system.

"By positioning racks in the right spots, we've been more efficient in our power consumption and cooling," Al-Qudsi said. "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."

The continued success of NBAD has a direct effect on the growth of its data center, which has approximately 25 percent annual increase in number of systems. Effectively managing such rapid growth can be extremely difficult, but the Vertiv Data Center Planner software has greatly simplified that effort.

"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," Al-Qudsi said. "Data Center Planner gives me a template and project plan that covers every little detail and 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 to key projects for the bank."

Data Center Planner has also been instrumental in helping NBAD open up a new data center about 100 miles away from its headquarters.

"Using Data Center Planner, we've been able to plan most everything for our new data center without sending engineers on site," Al-Qudsi said. "Data Center Planner lets us visualize the complete infrastructure and 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 without actually going on site. Without that ability, we would have had to hire engineers to live in that city and pay for their accommodations while they worked on planning efforts, so that's been a savings."

The Avocent solutions have brought an array of other benefits to NBAD including the ability to reduce 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.