

## The future is now!

### **GBots, a revolutionary intelligent system, all set to give a boost to the concept of 'smart city'**

**Patrick Michael**

DUBAI - The future, it seems, is already here. Dubai-headquartered Pacific Controls, an outfit that provides total automation solutions worldwide, recently announced an innovation that has, literally, electrified the automation services industry.

The company has pioneered a technology - Gbots - that will transform energy to enable end consumers completely remote manage their networks using distributed intelligent systems on wired and wireless networks. The revolutionary GBots is all set to give a boost to the concept of "smart city".

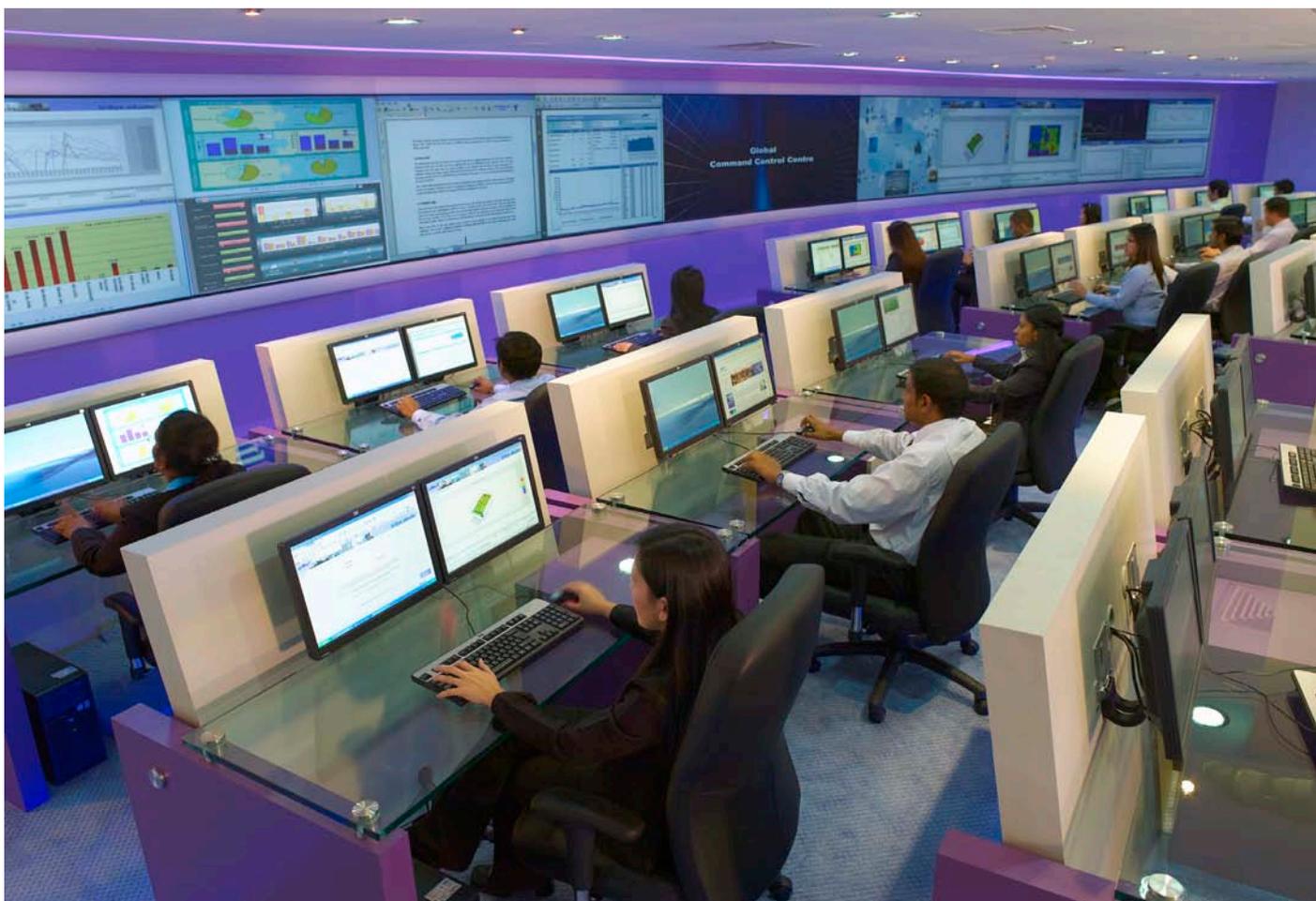
According to Dilip Rahulan, Chairman and CEO, Pacific Controls, "GBots are the new paradigm for the virtualization of managed services. The intelligent, autonomous, self-learning software agents will be deployed across networks for diverse automated services. This ground breaking remote infrastructure and energy management technology can save as much as 50 per cent in energy costs."



**The concept of an intelligent home or office need no longer be in some distant future, says Dilip Rahulan, Chairman and CEO, Pacific Controls. – KT photo by Juidin Bernarrd**

Rahulan elaborates that the concept of an intelligent home or office need no longer be in some distant future. Pacific Controls, whose headquarters is the only Platinum rated Green Building in the Middle East region accredited by the US Green Building Council, developed GBots as part of the evolution of "Galaxy", the world's first enterprise platform for management of citywide services ecosystem.

Pacific Control GBots, or smart service agents, will thus give customers unobtrusive, even invisible portals into networked customer support services, adds Rahulan. "The service will eventually connect utilities like electricity, water, air conditioning and lifts, and at a later stage perhaps even TVs and phones to facilitate a fully automated building."



**Pacific Controls has beaten many established industry players by seamlessly linking Dubai's 22,000 buildings, including the world's largest mall and the tallest building in the world, to a state-of-the-art Command Control Center built by Pacific Controls in its premises.**

In the not so distant future, perhaps the device may even check the utilities' efficiency. Or whether there is a need to switch from air-conditioning to heating for instance if the weather changes, and most important, if something is amiss. "GBots technology will actually send out a message to the technician to set things right, leading to a reduction in down time," Rahulan points out.

This is possible, he elaborates, because GBots or small patches of artificial intelligence (AI) can actually self-learn, auto-diagnose and resolve problems, eliminating human intervention. GBots will run on Pacific Controls' Galaxy, an end-to-end platform and managed service that proactively monitors assets, providing transparency into how the facility performs, where critical faults lie and where opportunities exist to significantly lower operating costs.

Harbor Research Inc, which examined Pacific Controls' first prototype GBots, said that its ultimate value is its ability to automatically learn from history and detect hard- to-discern patterns from installed equipment data that supports the development of algorithms and automates equipment repair and support.

Pacific Controls has beaten many established industry players by seamlessly linking Dubai's 22,000 buildings, including the world's largest mall and the tallest building in the world, to a cloud-based platform connected remotely. The buildings are seamlessly connected to a state-of-the-art command control centre built by Pacific Controls in its premises. The command centre is immediately notified as and when fire or water valve or lift alarms is triggered.

"Presently we have some 22,000 buildings in

Dubai connected through the Galaxy software, and are on track to delivering on our aim of wiring 60,000 buildings in five years. This is part of the National Live Safety Programme implemented by the Dubai Civil Defence,” adds Rahulan.

“We’re also implementing the concept of Smart Cities in Saudi Arabia, and indeed even in the US, where we are working with some 300 buildings, including the Bank of America.”

To carry out its projects seamlessly, Pacific Controls has partnered with etisalat to launch the Emirates Energy Star initiative. The project will improve energy efficiency in existing buildings across the UAE, thereby reducing carbon footprint. The project will also leverage on the transformational Machine to Machine (M2M) technology to deliver cost effective, real-time managed energy services.

Rahulan reiterates that the Emirates Energy Star programme will help building owners identify

potential Energy Conservation Measures (ECMs). The programme will help establish minimum costs; calculate the maximum energy savings; implement the project parameters as contractor; provide on-going monitoring and identification of project performance after completion; and carry out measurement and verification of carbon footprint of the building in real time.

“Energy savings and changes in controls etc, are a given, which would eventually translate into a greener planet,” sums up the head honcho.

As a part of a pilot study, the company is giving away 100 GBots free to end-users in return for feedback. In addition, 20-odd buildings are being fitted with GBots machinery at minimal cost to gauge energy consumption patterns.