

There are a number of aspects of modern domestic and commercial monitoring, control and automation technologies which on the one hand inhibit users from realizing their full potential, and on the other, impede installers from accelerating their penetration into this market.

We see the following as key requirements which need to be fulfilled easily, to enable a more rapid expansion of the client base:

1. A consistent and convergent approach to system deployments - whether the project be small or large, whether a premises is pre-existing or newly built, and whether or not the deployment includes outdoor areas.
2. Once a system is deployed, there is a continuous need to retrofit new features and expand existing capabilities, such as with more granular remote monitoring tools, more advanced lighting controls, additional environmental sensors (e.g. for energy consumption, temperature or humidity monitoring). This integration should be simple to perform, despite the diversity of devices, manufacturers and protocols. Users also have an ongoing need to create, modify, optimize and fine tune automation scenarios that are based on time or sensor inputs, and various sets of conditions.
3. A common user interface which provides a consistent and cohesive user experience, again, despite the diversity of devices and technologies in a user's installation. Such an interface should not only be universal across modern internet browsing enabled devices, it should also easily allow the setup and configuration of various [HVAC and SCADA controllers](#), [security controllers](#), [lighting controllers](#), [energy efficiency management and monitoring devices](#) etc into a single logically connected framework without the need to program or script out anything. Furthermore it should provide a simple way to manage user groups and access privileges, and to access interaction and system events logs.
4. Lower cost of ownership through delivery of capability via small footprint embedded computing solutions, or as "monitoring, automation and control as a service" via virtualization and "cloud" based deployments.

To date these requirements have not been easily met, which in turn has led to multiple integration challenges, such as installer skill shortages, increased costs, and inability to expand or retrofit systems.

The [iMCA Server™](#) and [iMCA Controller™](#) (which is based on the [iMCA Server™](#)) by [IKS Automation](#), effectively address all of the aforementioned needs. What distinguishes the [iMCA System](#) is firstly that it does not focus on any particular automation protocol or deployment methodology, but rather supports an ever-increasing list of domestic and industrial controllers as well as CCTV DVRs, NVRs and cameras as they come onto the market. Secondly, the architecture of this system allows for a virtually unlimited number of automation or sensing devices and controllers from different vendors to be natively integrated with each other and seamlessly operate within residential and commercial environments, and across indoor and outdoor applications.

Quite simply, the [iMCA Server™](#) gives the user (*installer, system integrator, automation technology savvy enthusiast*) unmatched flexibility in mixing, matching and combining different automation devices and standards, and delivering cross-technology, rapidly deployable and comparatively lower cost, fit-for-purpose monitoring, control and automation solutions.

