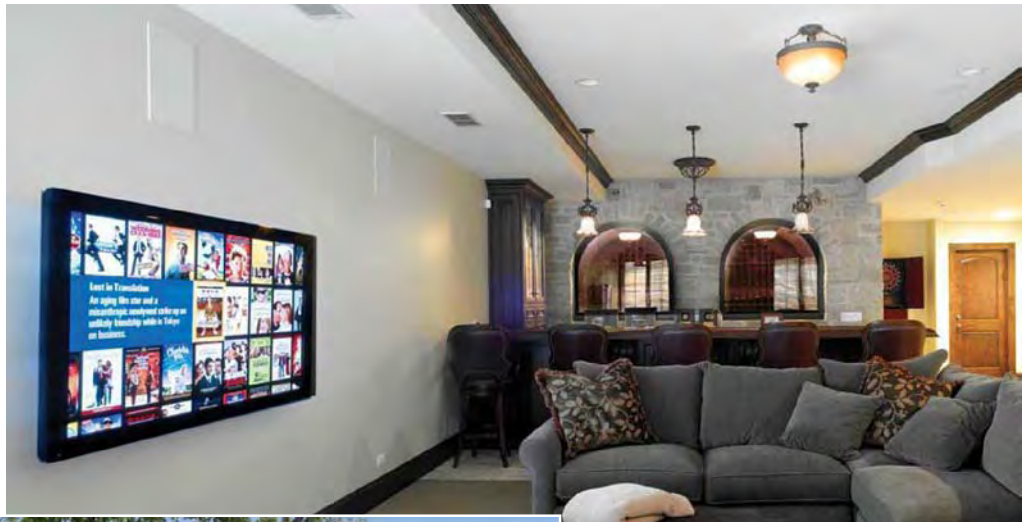
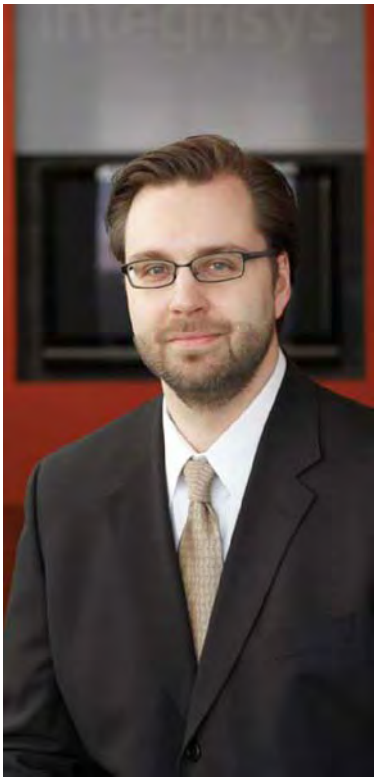
BY KAREN SUSSMAN





Before Eric Wolfram (above right) and his company, Integrisys, took over the project, the plan had been to create a very simple way for a family to control video and 5.1 audio in their main-floor family room and lower-level recreation room, and to get their iPods to play throughout the new 7,000-square-foot, three-story, home. Fixing design flaws in the project's first design provided Integrisys with its first opportunity to integrate Kaleidescape with Control4.

Righting A Wrong

INTEGRISYS FIXES A BOTCHED INSTALL AND REGAINS CLIENT'S TRUST IN ESCS

Shoddy integration work is just plain bad for the CEDIA channel. It's a bad reflection on the technology, bad for the reputation of integrators who take pride in their work, and most importantly bad for homeowners who are paying a lot of money for their systems.

Being brought in to clean up a botched install is not unique. Many reputable electronic systems contractors (ESCs) have been forced to salvage the reputation of the CEDIA channel after a client was left dissatisfied by the work of another integrator. But being sensitive to the concerns of a frustrated client can help turn him or her from a skeptic to one of your biggest advocates.

That's exactly what happened for Chicago-based Integrisys, after being referred by a long-time client to a homeowner with horror stories of a project that didn't seem to have a wrap up-date because nothing ever really worked.

THE ORIGINAL OBJECTIVE

Before Integrisys took over the project, the plan had been to create a very simple way for a family to control video and 5.1 audio in their main-floor family room and lower-level recreation room, and to get their iPods to play throughout the new 7,000-square-foot, three-story, home.

After an assessment of the first ESC's work, Eric Wolfram, principal and chief technology officer of Integrisys , was confident that his company could provide a working system with additional features, including video distribution, two iPod docking stations, and two Kaleidescape media servers. The system then was installed, programmed, and tested within six weeks.

"The homeowner's attempts to get the original

integrator to come out to fix and complete the system often went unanswered," Wolfram explained. "When the company did come out, they often broke something that had worked before. We were pretty taken aback by the visibly shoddy work displayed throughout the installation."

REBUILDING THE SYSTEM

One of the client's biggest complaints about their original system design, Wolfram said, was that they had separate DVRs for each room on the system and could not watch shows from one DVR in another room.

The homeowners were delighted when they learned Integrisys could easily add HD video matrix switching to the system allowing for "His," "Hers,' and "Kids" Comcast cablebox DVRs to be available to any TV on the system. And while the clients had wanted a Kaleidescape media server all along, the prior integrator could not get it for them. Integrisys , on the other hand, was able to integrate Kaleidescape into the HD video distribution system. It became one of the client's favorite system features.

INTEGRATING 'LEGACY' GEAR

For the most part, the Integrisys team worked with major components that already had been installed in the home, such as a Sonance multichannel amplifier, Pioneer Elite 60-inch plasma

>WHY THE ORIGINAL DESIGN DIDN'T WORK

Integrisys ' Eric Wolfram said that it was evident that the system the original integrator was trying to install suffered from several design defects that would have never resulted in a system that met the homeowner's needs. For example, the system was using RTI remote controls for two media rooms, connected to a small Control4 processor via IR for control of a few lights. There was a Niles touchscreen that was only set to control outdoor speakers and was attempting to use the second zone of an AV receiver to do so, even though the receiver was controlled by RTI. Wolfram explained that this convoluted design seemed to require programming in three different software tools and relied on everything being in sync. It never was. His firm got the sense that the previous integrator had been trying to unload extra inventory.

Righting A Wrong

The Control4 HC1000 is the master controller for entire system. The HC500 is used primarily for digital audio storage and streaming audio, and the HC300 controllers generate on-screen user interfaces for TVs throughout the house.

display in the basement media room, Pioneer Elite 50-inch plasma display in the study, a Sharp 42-inch plasma display, and two Denon AVR3080 receivers. Some Control4 lighting dimmers and keypads had already been installed, as well, so Wolfram and his team added dimmers, switches, and keypads to complete the design.

"We frequently slot the Control4 solution into projects like this, and it was a happy coincidence that the prior integrator had already installed some Control4 lighting, because it made an easy jumping-off point for the system," Wolfram said. "We see Control4 as the go-to solution in small-to-medium-sized projects, where the clients' needs are first and foremost media integration and simplification."

The Control4 controllers perform various duties in the system, Wolfram explained. For example, the HC1000 is the master controller that runs the entire system. The HC500 is used primarily for digital audio storage and streaming audio, and the HC300 controllers generate on-screen user interfaces for TVs throughout the house.

WHY CONTROL4

According to Wolfram, Control4's on-screen user interface and simple remote controls are a good fit for a client who doesn't require a lot of customization. Going past media rooms to add video switching, distributed audio, lighting and climate is relatively straightforward using the manufacturer's Zigbee implementation, he said.

"Since there is no customization of the user interface, and the control system is programmed in a more drag-and-drop manner means we can get a system up and running sooner and with a larger pool of technicians instead of relying on our programmer staff," Wolfram said.

The Control4 Audio Matrix Switch 16 was used for the home's distributed audio system, routing audio sources (radio, XM, streaming audio, and iPod docks) to different rooms—the outputs of the matrix switch go to the multizone amplifier to drive speakers in multiple rooms.

A NEW OPPORTUNITY

This project did provide the Integrisys team with its first opportunity to implement Kaleidescape with Control4. "We usually see Kaleidescape going into larger projects that necessitate the need for an AMX- or Crestron-level control system," Wolfram said. "We did some tests to confirm the client would have a good experience and were pleasantly surprised with the results. With the advent of Kaleidescape's mini system, we will likely include this option on some of our larger Control4 projects going forward."

Wolfram said that "much like AMX or Crestron systems" that use multiple processors, all of the Control4 processors (HC1000, 500, and 300) work together to form the whole system. "You usually add another controller when you need additional IR or serial ports or additional functionality but they all work together as one large system," he said. "In that respect, it's not so important to the system how the Kaleidescape system is connected, since different remote controls, touchpanels and on-screen navigators can all access it no matter where it's connected (to an IR port on the HC 500 in this case)."

Once completed, the system functioned together as one complete integrated system, allowing the homeowner to control any part of the house from any room.

REGAINING THE CLIENT'S TRUST

The most important, yet subtle, challenge that Integrisys faced was regaining their client's trust in technology. "Although they fully vetted us through visits to our experience center and discussions with other clients, their prior experience left them with a bad feeling," he said.

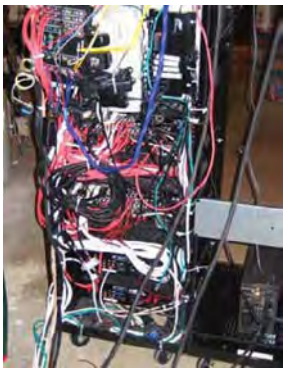
To overcome this obstacle, the Integrisys project manager who oversaw the installation took extra steps to communicate what was going on with the system at all times, explaining each step of the process and what to expect next. When the installation was finished, Integrisys conducted a user training session with the homeowner, and presented a printed and bound set of all relevant documents, such as drawings, specs and user manuals to the homeowner.

These extra steps went a long way in reassuring the homeowner while round two of the installation was underway. But this effort also helped in sweetening the sour feelings toward the industry that the homeowner originally felt.

"My equipment rack was transformed from an unorganized mess to logical, labeled layout," the homeowner stated. "The suggestions for equipment to augment my overall system were great choices. The system is user friendly and achieves all the goals we set. I would be happy to recommend Integrisys to anyone seeking home automation/entertainment systems."

Karen Sussman is a freelance writer in Carmel, Indiana.

>REBUILDING RACKS AND A CLIENT'S TRUST



Integrisys transformed its client's Middle Atlantic Products equipment rack from an unorganized mess to a logical, labeled layout.

When Eric Wolfram and his Integrisys team began sorting out the mess left by their client's previous integrator, wiring in the existing racks was not labeled, so a lot of time was spent tracing, documenting, and labeling each one. Also, because the system was partially installed, Integrisys needed to build-out the home's Middle Atlantic Products AV racks onsite. "As a rule, we always completely build, connect, and test our systems in-house and ship them to the site as fully tested units," Wolfram explained. "We had to do all the testing onsite, which added time to the project."