## **Global ICT in Tuam**

Transitions Optical is the company that bring you photochromic lenses that change from clear to dark in response to UV intensity and vice versa when you go indoors. Headquartered in Florida where the company also has manufacturing and R&D facilities, Transitions Optical has an Irish operation in Tuam and manufacturing facilities in the Philippines, Brazil & Thailand. The Irish plant supports the EMEA region from a manufacturing, distribution and commercial basis.

In Florida during the hurricane season the chances of being hit by an extended power outage or flooding or suffer structural damage is unlikely in a single season. Extend that to three or four successive seasons and the chance of a hit becomes more probable. Operating a global IT infrastructure hub in this environment is a challenge as the availability needs of the business steadily increase. Midway through 2007, Transition's Vice President with responsibility for IT Franck Carlier sat down to consider his options. Among the contributors to the review was Eugene Burke - EMEA IT Director.

Today's high-availability IT requirements are driven by business need supported by well designed infrastructure. Determining the availability level of the business is the first step in designing ICT infrastructure. There are well established models – *Tier Classifications* – used to help identify the correct infrastructure for businesses. Dublin based *E-TEC Power Management* are expert in this field and were called on as Tuam was selected as the site for Transition's EMEA hub and global disaster recovery (DR) site. Implementation of the plan was shared between Eugene Burke and his EMEA based team with the support of Tony Denisco who heads Transition's Global Infrastructure team.

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Technology Analyst Michael Coyne in the new datacentre

E-TEC, an APC Gold Partner with 25 years experience in the ICT environment in Ireland and across Europe, was well positioned to design and deliver a best-in-class ICT support infrastructure for Transitions Optical. E-TEC delivered the design package complete with a 3-D 'fly through' model which facilitated real-time global input as the design options were considered. An ability to see the design in it's future home helped the team optimise layouts for both day-one and future requirements. The 3-D approach to integrated power, cooling and distribution design led to cost savings and a shorter than usual design cycle.



Eugene Burke - EMEA IT Director, Transitions Optical

"We now have the ability to double our capacity without any downtime."

With cabinet power densities now hitting 4-5kW and trending upward, cooling is as much of a problem as power continuity. Good air flow management within the datacentre delivers significant savings in operational costs. Integrated power, cooling and system management tools are becoming the industry norms

The final design consisted of an 80kW N+1 power solution with an initial day-one power level of 40kW, a 120kW N+1 cooling solution in an initial 60kW 2N configuration, and 160kW 7x24 of generator backup. E-TEC Power Management had the internal engineering and implementation team to provide the necessary depth of experience on the design and delivery of the project.

Within three months of the green light being given the site went live ahead of the approaching 2008 hurricane season. The completed facility in Tuam has enterprise-wide visibility enabling the U.S. IT team to monitor performance, traffic, and loading in real-time. State-of-the-art cooling and air handling deliver industry-leading efficiencies.

From an IT perspective Tuam is now considered a key resource within Transitions Optical organisation and has started to play a role in corporate IT process development & support. Eugene Burke acknowledges the role played by the Tuam team. "They have designed and built a datacentre where we have an ability to almost double our capacity - without any downtime."

The design has set an enterprise benchmark for IT implementations within Transitions Optical and will provide the levels of availability required of a modern datacentre into the future.

Let the winds blow.