

INFORMATION/TECHNOLOGY/DISTRIBUTION

by Ron Gaj, ISHC

The Ritz-Carlton Hotel Company was dealing with a situation whereby all of their hotels were taking requests from guests and meeting planners for an ever-increasing amount of telecommunications services. It was reaching far beyond the typical request for a single line telephone, fax line, or modem connection. The magnitude of this increased demand was comprised of multiples of each type of facility and advanced high-speed services. Initially, this was an issue which just pertained to the meeting rooms, and pre-function areas. However, soon a noticeable increase of requests for special services was being made for the guestrooms as well.

Obtaining services from the various telephone companies and special carriers was not the problem. With a little coordination and advance planning the desired facilities were delivered to the property and ready for use. The most significant problem was distribution. Once the service was delivered to the Point Of Presence (POP), how was it to be distributed to the desired location(s)? This brought on two distinct challenges. First, there had to be enough quantity in the inside cable plant to handle all of the distribution, and secondly it needed to be of such quality that it would support the speed (bandwidth) and performance that the customers were requesting.

It became obviously clear that the inside cable plant of the hotels would have to be upgraded and expanded. What was not very clear was how the new network was to be designed so that it would accommodate what was thought to be the widest range of services. The trick here is not to be captivated by any one vendor or service provider who wants the hotel to be their customer forever. If a form of universal distribution can be achieved, it will serve many applications and systems for now and well into the future.

Working with the client, a distribution scheme was developed. Each guestroom would be treated with two (2) 4-pair Category 5 cables. Each cable has the bandwidth of 100Mbps or 100,000,000 bits of data per second. One cable is used strictly for the two line telephones at the bedside and the desk, and the single line telephone in the bathroom. Since the two line telephones were only using two of the four pairs of wire in this cable, there are two pairs left over for expansion or other services. At the distant end the cable was terminated in the telephone equipment room on the Main Distribution Frame (MDF) associated with the telephone system. The second cable in the guestroom was terminated at the desk and then extended down to a patch panel in the

telephone equipment room. Because of the flexibility available via the patch panel and the quality of the cable, any type of service can be connected to this cable ranging from a simple telephone line to a video conference service.

The meeting rooms, ballrooms, and pre-function areas were all treated with Category 5 cables numbering from two (2) to twenty-five (25), depending on the size of the area. All cables were extended back to the patch panel, again providing universal distribution, with virtually no limitation of bandwidth. Also, the ballroom and larger meeting rooms were equipped with a fiber optic cable for future requirements.

The final phase was the distribution within the administrative areas. By installing the Category 5 cable to every necessary location and terminating the cable on a patch panel, this time located in the computer room, the hotel has the flexibility to move terminals and printers around at will without calling in a computer company to do the same work.

In one case a hotel is reporting an increase in annual telecommunications revenue, just from resale of services via the patch panel at \$183,000. This is as a result of an investment of \$246,000.

The cabling scheme described here is now a company wide standard.

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