

## City of West Allis 2011 Phone System Selection

After reviewing the RFP responses and meeting with the three finalists, I am recommending the city select the Mitel solution from TIG. While any of the three solutions would have work for the city, I felt the TIG solution provides us with the best technology, best phones and the most resilient and reliable system. We received all positive feedback from their supplied references and check of Google also did not turn up any outstanding issues.

The key piece of equipment that made TIG and its IP Phones my finalist was a switch called Phybridge. Phybridge is a new technology that lets us use our older cabling (cat 3) within our building with the newer IP based type phones, which requires cat 5 cabling. This allows us to purchase state of the art phones without the cost of upgrading our cabling. TIG was the only company to specify this equipment in its design. These Phybridge units will also allow us to centralize needs all the power for the IP Phones located around the city to just a few locations. This eliminates the need for UPS power system in all of our phone closets around the city. Each of these Phybridge switch locations will already have generators at them for extended runtime in case of a power failure. This eliminates my power concerns in regards to IP based phones systems.

All three systems were within less than 10% of each other and price was not the deciding factor. The following are the reason for my recommendation.

### *Resiliency*

I consider this to be the most important feature any system we selected. The system must operate at all time during the worst of times. Communications is important to our operations. I feel the TIG group designed with the most foolproof system.

- Each IP can phone can operate independently and just needs to link to any one of the two Mitel 3300 devices located within the city. The phones have the ability to connect to another Mitel 3300 unit in different location automatically without dropping the phone call. This was the only system that would not lose a call if the phone switch developed problems.
  - The IP Phones are powered from the Phybridge switches located in just three locations in the city; city hall, fire station 2, and the police department. All 3 of these locations have generators located at them, which will supply power to all the phones. The only point of failure in the TIG design is this Phybridge device. A spare Phybridge will be located within the city for quicker replacement in case a failure. These Phybridge's switches are 'plug and place' with no configuration, just unplug the old one and plug in the new one.
  - IP Phones, and 3300 switches, Phybridge switches, and the voice mail system will reside on it own network, independent of the city data (computer) network. This separate secure network will not have internet access to prevent any viruses infecting the phone system. In any rare event the voice network would go down, simply plugging the phones into the data network would allow a phone to continue to operate until the voice network is back up.
  - Other than some common network equipment, this solution consists of only 3 types of equipment, which included the IP Phones, the Phybridge switches, and 2 Mitel 3300 servers. This will make the system very easy to debug and have fewer parts to maintain.
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### *New Technology*

The addition of the Phybridge switches has met all my concerns about using the new IP Phone technologies. My major concerns about the phone requirements of each phone around the city in case of a power outage have been resolved knowing that only these three devices need power for all the phones to work. This device also eliminates the need to replace out Cat3 cabling in most of our buildings.

### *IP Phones*

- On screen programming eliminates the need for the printing of paper overlays for each phone when the phones programming changes for the higher level phones.
- Wireless handsets eliminate the need for the cord that runs between the phones cradle and the phones itself. This allows the phone to become a 'wireless' handset that can work within several hundred feet from the phone itself.
- We can buy these new technology phones for about the same price as the 10-year-old digital phones of the digital Mitel vendor.

### *Has a fully client side Voice Recording Solution*

It was determine that our current ComLog voice recorder at the police department was superior to any voice recording system proposed. TIG is working with our voice recorder vendor to fully integrate their system into our Comlog Recorder. Some licenses will be required to be purchased at a cost of around \$10,000.

The other venders could either record only the calls entering and leaving the city (no internal calls could be recorded) or required special adaptors to be placed on every handset that was to be recorded. The price to modify our current system to record only inbound/outbound calls would be around \$10,000.

### *Temporary Remote Phones within the City.*

We can place a phone any where within the city. All that is needed is a wireless connection or access to the city network. For example, during the WI State Fair, we can just plug in a phone into the wireless network that is setup for the temp fire station located at the fair. It will have a 302 extension just like a city phone and have the same features that city employees will already familiar with.

### *Other considerations*

Phybridge unit failure rate is unknown  
Illinois location of the phone vender  
Didn't integrate into Outlook as well as iWatsu  
Didn't have the direct battery connect as iWatsu  
Didn't have the OS or quality, mean life failure as iWatsu  
Lacking some of the features of iWatsu – whisper mode, remote relays, bells

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