

TELENIUM^{IP} Benefits

Concern **What about reliability?**

Impact

Systems from some other vendors run on a PC-based server with a Windows operating system. Users of these systems face the risk that a Windows crash or even a PC virus can impact their system uptime.

**TELENIUM^{IP}
Solution**

TELENIUM^{IP} is not a PC. Instead, Vodavi offers the reliability of an operating system purpose-built to be a phone switch. Other benefits include embedded processors, Flash ROM based memory (no hard drives) and a system boot-up time measured in seconds.

Sales Benefit

TELENIUM^{IP} components are not susceptible to disk drive failure, Windows crashes or other reliability issues associated with applications running on a PC.

Concern **We've heard that IP phone systems are difficult to configure.**

Impact

This might cause one to expect a long and difficult installation which translates to higher installation and maintenance costs for customers.

**TELENIUM^{IP}
Solution**

The TELENIUM^{IP} system is programmable via a Web-based interface and through the traditional keyset programming methods.

Sales Benefit

TELENIUM^{IP} dealers do prove their competency with data networking as well as certify their skill on TELENIUM^{IP} systems. However, the TELENIUM^{IP} system is designed as a telephone system, not a complicated set of network equipment. As such, it is no more complicated to program than a traditional PBX.

Concern **Don't IP-based systems require a lot of administration and advanced training?**

Impact

If a system requires highly specialized skills and complicated procedures to expand or upgrade, you might expect to pay more for its maintenance.

**TELENIUM^{IP}
Solution**

TELENIUM^{IP} parts, including keysets, can be upgraded and programmed from the network. A technician with basic Vodavi TELENIUM^{IP} Product Certification can perform these upgrades fairly quickly.

Sales Benefit

Upgrades and programming changes are quickly made by the administrator and would only be required when new features or applications are needed by the customer.

Concern **Powering IP phones**

Impact

We've seen IP phones that have to plug into wall AC outlets as well as their network connections. This makes them cumbersome and less desirable than regular digital phones.

**TELENIUM^{IP}
Solution**

TELENIUM^{IP} phones can be powered through the network wiring, just like standard digital phones.

Sales Benefit

There is no need to worry about running an extra power adaptor to each desktop. Wire the phones to a powered LAN switch supporting PoE, and the network jack provides both power and LAN connection.



TELENIUM^{IP} Benefits

Concern **Distance limitations for Ethernet-type connections**

Impact

Ethernet connections are limited to 100 meters. My building is longer than that. Won't I need expensive repeaters to overcome this?

**TELENIUM^{IP}
Solution**

An Ethernet or Fast Ethernet switch can be used to extend the useable distance.

TELENIUM^{IP}'s POE8 module is actually a 10/100 Mbps switch. Simply locate an additional POE8 module at a point less than 100 meters from the main TELENIUM^{IP} switch to gain an additional 100 meters.

Sales Benefit

Any Ethernet/Fast Ethernet switch can be used to extend the network signal for another 100 meters. TELENIUM^{IP}'s POE8 is an effective solution because it can power the TELENIUM^{IP} phones.

Concern **IP telephony sound quality is worse than digital PBX's, right?**

Impact

IP Phones don't sound as good as traditional phones. I don't think I'll be happy with the voice quality.

**TELENIUM^{IP}
Solution**

The first wave of IP telephony solutions released several years ago in the industry suffered from voice quality problems. The technology used to convert spoken voice sound to digital network signals has been dramatically improved.

Sales Benefit

TELENIUM^{IP} systems provide an equal voice quality experience when compared to traditional digital PBXs, provided that the system is on a managed network supporting prioritization for voice packets.

Concern **I doubt my LAN has enough spare bandwidth to support IP phones.**

Impact

There is a common perception that a lot of network bandwidth is required for IP phones to work.

**TELENIUM^{IP}
Solution**

Consider that there are two types of VOIP calls: Intercom calls, and calls inbound or outbound to another location. In the case of intercom calls, the amount of bandwidth used between stations is slightly less than 100Kbps at the TELENIUM^{IP}'s default compression setting. TELENIUM^{IP} phones are designed to connect at 100 Mbps. It would take over *one thousand* simultaneous calls converging on the same LAN switch to use up the bandwidth. Also, a higher-compression codec (G.723.1) can be used to ensure that voice traffic consumes even less bandwidth.

Inter-site calls are different consideration. You will need to plan carefully to provide enough bandwidth over the WAN for the number of calls anticipated.

Sales Benefit

A few dozen simultaneous calls uses only a small fraction of the available bandwidth of the LAN wiring. Generally, there is little impact to the customer's network.



TELENIUM^{IP} Benefits

Summary of key advantages with TELENIUM^{IP}:

- Voice quality on the handset and speakerphone is outstanding.
- Modular design makes the system extremely flexible.
- The entire system is programmable from a Web interface.
- System programming and station programming database can be backed up to a file from any PC.
- Basic Voice Mail is included.
- Auto-Attendant is included.
- ACD features are included.
- Networking between systems is included.
- Simplified M-A-C (Moves, Adds, and Changes). No special network training is required to add a phone to the system. Simply plug the new phone into the network, and administer the extension and options through the Web-based administrator screens.
- Easily expandable. The system's modules are self-contained; they are not cards which must be installed in a chassis. This makes adding new gateways simple, even if you've run out of room in the cabinet.
- Not PC-based: Some other systems run on a PC/server with a Windows operating system. Vodavi offers the reliability of an operating system purpose-built to be a telephone switch. Other benefits include embedded processors and a system boot-up time measured in seconds. TELENIUM^{IP} components are not susceptible to disk drive failure, Windows crashes or other reliability issues associated with applications running on a PC.
- Distributed Architecture: The gateways that make up a TeleniumIP system use the Local Area Network (LAN) as the communications backplane. This provides for great flexibility in placing the system parts wherever in the LAN they are needed
- Software-upgradeable equipment: TELENIUM^{IP} parts can be upgraded from the network. These means that as new features are added and sold to the customer, the dealer can install them without opening up the equipment.
- Interoperability with other voice mail systems. TELENIUM^{IP} can work with other analog voice messaging systems, not only Vodavi's. This sets it apart from some other IP-based PBX's, which often use proprietary signaling not interoperable with standard voice messaging systems.

