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::Communications as a Service

Providing VoIP Communications as an Outsourced Service for Law Firms

Obtaining an ideal communications system can present challenges for any law firm. Voice over Internet Protocol (VoIP) systems can deliver everything that PBX or key systems do and more, but building and maintaining a VoIP communications system is a complex and expensive endeavor. As a result, an increasing number of firms are outsourcing their communications services to Technology Service Providers (TSPs).

In the outsourcing model, firms lease communications services and equipment from TSPs, avoiding capital expenses as well as ongoing maintenance and management responsibility. The outsourced solutions that TSPs offer range from hosted VoIP products that deliver limited functionality over public Internet lines to full Communications as a Service (CaaS) solutions. CaaS extends hosted VoIP with dedicated voice networks, 24/7 monitoring and integrated unified communications functionality.

VoIP Trends

In the past decade, VoIP has become a viable alternative to traditional Time Division Multiplexing (TDM) phone service. VoIP is becoming increasingly popular because it offers benefits that TDM phone service cannot deliver such as increased productivity and efficiencies through integration with business applications. Law firms seeking to transition to VoIP or new firms that want to start with the latest technology have several options:

Do-It-Yourself. Purchase your own IP PBX equipment and commit the resources to build, operate, and maintain the equipment and network. This approach is capital-intensive as you buy everything and absorb all the risk. With a do-it-yourself approach, you have all the complexities of installing and managing a new PBX, managing Quality of Service and installing, integrating and managing video streaming, collaboration and unified messaging applications and servers. By doing it yourself, you'll have multiple suppliers to manage and integrate. And unless you invest significant dollars with redundant networks and systems, business

continuity will be limited as the do-it-yourself approach is a premises-based system.

Hosted IP PBX. With a hosted IP PBX approach, you can choose a premises-based or nonpremises-based approach to the IP PBX, but either way, you'll outsource the day-to-day management responsibilities of the IP PBX. The management of your data and voice network is still handled by you and your staff, and it will fall to you to procure, manage and integrate numerous separate services for a full unified communications implementation. The hosted IP PBX approach is generally expensive and typically not available to firms with less than 1,000 employees.

Hosted VoIP. Hosted VoIP services remove the equipment from the law firm site and, like IP PBX, the day-to-day management responsibilities are handled by the vendor. Where hosted VoIP generally falls short is in the features. Generic hosted VoIP applications usually require expensive add-ons to achieve a complete unified communications solution. Unified messaging, chat, presence, video and other advanced applications are typically not included in a basic hosted VoIP service.

CaaS. Similar in concept to Software as a Service or SaaS, CaaS represents the virtualization of the PBX. Like other hosted models, users outsource the day-to-day management responsibilities and pay for usage, not ownership. The newest and most innovative of the hosted applications, CaaS includes a full complement of unified communications functionality. In the CaaS model, the PBX is located in the IP "cloud" instead of residing at the user premises.

The Challenges of Building a VoIP Solution

The obstacles to building a VoIP system are steep. VoIP systems:

- are more complex than the traditional TDM PBX systems
- require a very significant up-front capital investment
- demand high ongoing costs for maintenance, operations and upgrades

Building and maintaining a VoIP network requires a large investment in experienced IT staff who can deal with the different technologies and complicated interactions of a VoIP system. You must manage multiple vendors and suppliers. The process is time-consuming, and if the enterprise intends to include unified communications, the complexity and associated costs only increase.

Ongoing maintenance will become costly over time as technology components face a short shelf life. They can become outdated in as few as three years, forcing the enterprise to reinvest to stay current or else be stuck with an obsolete system.

These issues are too great an obstacle for most small- to mid-sized law firms, driving many to choose CaaS as an alternative solution.

Communications as a Service

CaaS goes beyond traditional VoIP offerings by delivering a fully-hosted VoIP and unified communications solution. Instead of paying to own and operate a communications system, you pay a recurring fee to use the communication services provided by a single vendor. The vendor offers this functionality from one or more remote, secure and fully redundant data centers.

CaaS allows you to obtain enterprise-class communication services without the complexity and time required to build a premises-based solution and without the capital investment. Bundled services usually include voice and data access, long distance and local voice services, telephone handsets, voice mail, Web-based account management and advanced unified communications functionality such as video calling, Web collaboration, chat, real-time presence and unified messaging.

Fully Hosted and Managed Solution

Unlike services that you obtain from specialist providers, CaaS delivers a complete VoIP and unified communications solution that is entirely managed by a single vendor. Integration of core PBX features with advanced UC functionality is managed by one vendor who is responsible for the complex integration and service set delivered to your users. The service provider is not tied to a single vendor investment and can leverage best-of-breed providers like Cisco, Microsoft and Nortel much more economically than a single enterprise.

From the phone and PC soft client on each person's desk to the private IP backbone and all points in between, every component in the CaaS solution is managed 24/7 by the vendor. In a CaaS implementation, the expense of managing a carrier-grade data center is equally shared across the vendor's customer base, making it more economical for your law firm to implement CaaS than to build your own VoIP network. Plus, by using a hosted approach, you can reassign valuable IT personnel and capital resources to where they will create the most business growth.

No Capital Expense Implementation

When you outsource your communications to a CaaS vendor, the vendor provides everything you need for a UC solution: the network, switches, routers, IP phones, soft clients and the inherent CaaS functionality. There's no purchase of equipment and no capital outlay. Ongoing maintenance and upgrade costs are also bundled into the offering.

A good CaaS vendor can eliminate costs for transitioning to CaaS by:

- removing the old phones from the desks
- installing the new IP phones at the desks of your users
- training your staff in the use of the new phones and phone service

Customer Service Levels Meet or Exceed Current Levels

If you pay for the required infrastructure and dedicate skilled staff resources to ensure that problems are addressed rapidly and quality remains high, you can manage your own IP communications system and network. However, you can obtain the same or better levels of service with CaaS because vendors can use their enterprise-grade equipment and 24/7 monitoring capabilities to meet or exceed your current response times and Quality of Service (QoS). You can specify Service License Agreements (SLAs) in your service contract, shifting the responsibility for providing those services to the vendor.

Fully Integrated Enterprise-Class UC

With CaaS, a single service provider is responsible for all of the complexities of managing the unified communications service. The vendor provides voice and data access and manages your LAN and WAN, security, routers, e-mail, voice mail and data storage.

By managing the LAN/WAN, the vendor can guarantee consistent QoS from the desktop across the VoIP backbone and back again. Advanced unified communications features such as Outlook integration, soft phones, real-time presence, chat, multimedia conferencing, video calling, unified messaging and mobility are also part of a standard CaaS deployment.

And with CaaS, the feature set can continue to evolve. Development and introduction of new features and applications are faster, easier and more economical because the service provider is doing the work for multiple end users across a scalable platform.

Flexible Network Configuration and Management

CaaS providers can tailor your solution to fit your law firm. A CaaS service provider can:

- Provide complete voice and data network LAN/WAN and management of that network.
- Provide and manage a separate voice network. You continue to manage your own data network.
- Manage the data network up to your law firm's LAN switch, then coordinate with your IT staff when actions will impact the switch. You maintain control of and responsibility for your LAN.
- Manage the voice network all the way to the phone (remotely).
- Implement upgrades as they become available. This removes the time and costs associated with monitoring the availability of upgrades and evaluating, purchasing and implementing them.
- Provide automatic failover from data to voice network or from the voice to the data network.

Flexible Capacity and Feature Set

When outsourcing communications services to a CaaS provider that offers a scalable communications platform, you pay for the bandwidth and features that you need, when you need them. Your service provider is able to spread the cost of feature development and delivery across a broad customer base, making feature functionality more economical for you to implement. Economies of scale also mean that the service provider is not tied to a single vendor investment.

No Risk of Obsolescence

While technology innovation brings many positives to the table, rapid technology advances bring about product obsolescence in a short amount of time. Average life cycles of older PBXs and key systems could range anywhere from seven, eight or even twelve years. With the advent of the PC, cell phone, video and many other new technologies, technology products typically face much shorter life cycles. The CaaS vendor absorbs this burden for the user by continuously upgrading the equipment in the CaaS solution and offering the latest in VoIP and unified communications functionality to its customers.

Increased Energy and Resource Efficiency

Your CaaS provider hosts the VoIP and unified communications equipment, eliminating the need for you to provide space and facilities for an onsite data center. There's no switch room rent to pay, no special heating or air conditioning requirement and no extra expense for the constant power consumption that such a facility would demand.

Many companies today are turning to server virtualization to reduce drastically the number of power-consuming servers they use. CaaS essentially offers a virtualized communications solution. With CaaS, you typically receive the benefit of multiple carrier-grade data centers with full geographic redundancy.

With regard to power consumption, even small issues such as the backlights used on IP phone displays can add up to significant power consumption. But the better IP phone models can be set to turn off the backlight automatically after a few seconds of inactivity.

Smart Call Routing and Alternatives to Desktop Phones

At the user level, calls can be routed to cell or home phones. Inherent collaboration and mobility features ensure business continuity for each employee. People call your office number and reach you no matter where you are. If a power failure disables the desktop IP phone, your employees can still make and receive calls using the soft phones running on their laptops.

Business Continuity

If you experienced a communications outage, how significantly would it impact your firm? If it's a simple problem like a power outage or temporary evacuation caused by a burst water main, you might not feel a pinch. But what if something more catastrophic occurs at your physical location, such as a hurricane or fire? How long could your law firm survive? For most law firms, the answer is "not long."

Most companies don't contemplate voice continuity. Unlike data continuity, eliminating single points of failure for a voice network is usually cost-prohibitive because of the large scale and management

complexity of the project. A CaaS vendor can provide services that would be difficult or impossible for a single organization to obtain: redundant telecommunications equipment, network and circuit diversity, and backup power systems at a fraction of the cost of a specialized disaster recovery plan.

A CaaS solution includes network, POP and circuit diversity, CPE redundancy and WAN failover that specifically address the needs of each of your office locations. Redundant switching and network elements are located throughout its hosted platform, and all VoIP transport components are located in geographically diverse data centers for high availability and survivability.

Instant Failover

For most companies, each call and e-mail message is very valuable. A CaaS solution can provide a mechanism to switch to a redundant network in the case of a failure very quickly, so that no call or e-mail is lost in the process.

Typical professional services law firms maintain two data networks, a primary and a secondary failover network. By providing a separate IP network for voice calls, CaaS removes the need for – and the cost associated with – a secondary failover data network. A good CaaS vendor can even provide automatic failover from your existing data network to the vendor's IP network and vice versa.

A Viable Solution

While CaaS may not be the answer for every firm, it is certainly a solution worth considering when implementing a unified communications strategy.

ILTA's Core Values

- :: Maximize the value of technology in support of the legal profession
- :: Provide quality, independent, unbiased and accurate information to our members about technology and the practice of law
- :: Maintain vendor independence
- :: Provide quality educational opportunities for our members and ongoing learning for navigating through change
- :: Foster, rely on and celebrate volunteers for their real-world experience and their value as a resource for colleagues
- :: Recruit and retain the highest caliber of professional staff
- :: Act as a vehicle for meaningful peer networking
- :: Respect our colleagues
- :: Commit to the highest standard of professionalism
- :: Maintain a financially sound organization that provides full value for the members' investments
- :: Promote member advocacy with vendors regarding product development and support
- :: Recognize that ILTA is a volunteer-governed organization managed by a professional staff