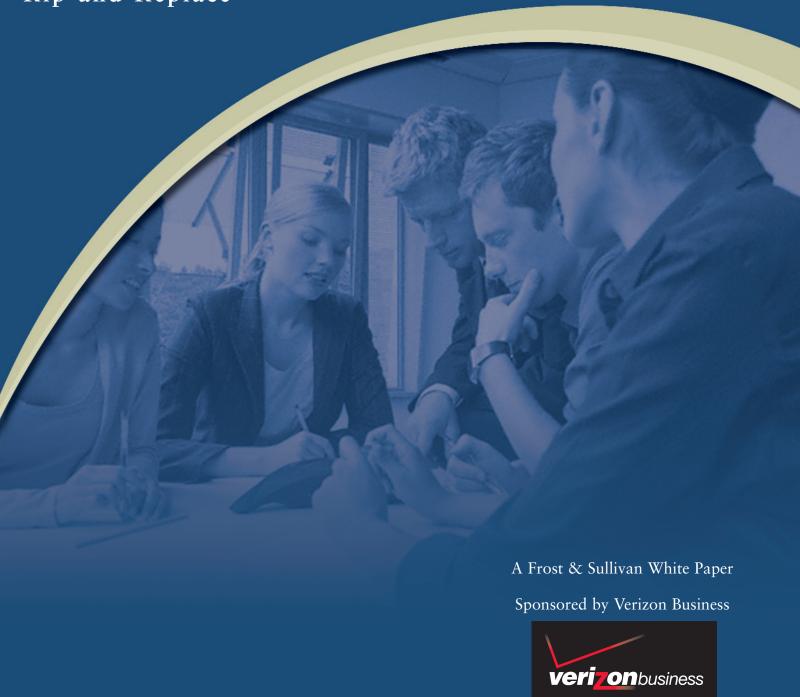
## THE SMART PATH TO ENTERPRISE IP MIGRATION

Leveraging Hosted Network Solutions without the pain of 'Rip-and-Replace'



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## **SECTION 1: INTRODUCTION AND PURPOSE**

Enterprises today are insisting that customer service become an organization-wide priority, while at the same time, pushing for reduced costs and better utilization of limited resources. Market dynamics and recent technical innovations bring new advances, functionality and complexity to the underlying contact center infrastructure. The key is to stay 'ahead of the curve' in understanding how a hosted network-based solution can streamline the path to IP migration and accelerate business growth, while bringing additional benefits to the organization.

## A Paradigm Shift

The sudden expansion of enterprise assets, including agents and technology, into the virtual realm begins to set traditional decision-making on its head and begs a number of important new questions:

- How does one make sense of the myriad of next-generation applications, models and technologies including SIP, speech recognition, IP IVR, unified IP-based suites, remote/home-based agent deployment, voice portals, managed services and hosted solutions?
- How can this colossal transformation be accomplished without upsetting the delicate balance of competitive advantage, risk aversion and cost containment?
- Where can a large organization turn to get direction, advice and help from a trusted partner?

Enterprises with expansive care, billing and sales agents really do understand just how important an asset the contact center has become. It is a critical conduit by which the company can grow the business, retain customers and protect the brand.

This white paper is aimed squarely at the large enterprise executive whose organization has made the decision to embrace hosted contact center services, is considering a migration from traditional time division multiplexing (TDM) technology to Internet Protocol (IP) based services, or a combination thereof. The reader will be able to better understand how hosting can facilitate the move to IP by protecting existing TDM investments while moving toward powerful converged IP infrastructures.

## SECTION 2: TRENDS, FINDINGS AND MARKET INSIGHTS - AN ANALYST'S PERSPECTIVE

## **Emerging Trends**

Frost & Sullivan recognizes that there are two complementary, yet separate technology trends in the current market:

- I. The rapid adoption of hosted contact center technology to complement or even replace premise-based equipment purchases
- 2. The shift from older TDM environments to full IP convergence

Frost & Sullivan believes that capitalizing on an already established hosted environment or making these two shifts in tandem, allows the enterprise to realize the multiplicative effect of improved efficiencies.

## **Findings**

A recent Frost & Sullivan contact center customer survey revealed that 27% of the decision-makers polled reported utilizing a hosted contact center infrastructure. Among companies that do not use a hosted contact center, greater than 40% of companies were considering adopting the hosted model within the next two years, indicating a rapid surge in interest in the on-demand model. Below is a list of the types of enterprises that are the best candidates for a hosted solution:

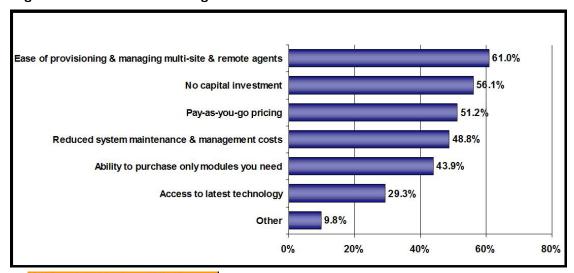
- Multi-site enterprises
- Enterprises with remote agents
- Emergency response organizations
- Businesses needing a disaster recovery plan
- · Enterprises with limited capital budget or IT resources for upgrades/expansions
- Organizations requiring an interim solution while evaluating long-term capital alternatives
- · Businesses needing to rapidly expand and contract for peak seasons/traffic/campaigns
- Enterprises growing through merger and acquisition activity
- · Organizations considering best-of-breed customer enablement management tools

## Hosted Contact Center Growth

Frost & Sullivan defines a Hosted Contact Center as a network-based service in which a service provider owns and operates a contact center technology platform and leases its services and features to end-users for a monthly or usage-based fee. The hosted contact center market is experiencing rapid growth rates as a greater number of enterprise users deploy hosted contact center solutions. Our current market forecast indicates a compound average growth rate (CAGR), through 2014, of 32.1%. In addition, as noted in

Figure 1.0 below, recently conducted surveys show overwhelmingly that, ease of provisioning & managing multi-site & remote agents (61%), no capital investment (56.1%) and pay-as-you go pricing (51.2%) are among the top motivating factors for organizations that have selected hosted solutions.

Figure 1.0: Factors for Using Hosted Solutions



Note: % Multiple Mentions

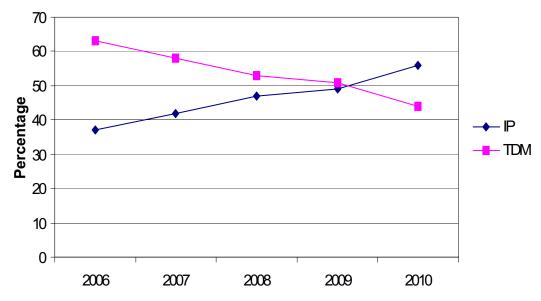
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### TDM to IP Growth

Frost & Sullivan research shows that in the past two years, the market for IP contact center solutions grew significantly and in 2007 represented 42 percent of the total of North American Inbound Contact Routing shipments. Chart 2.0 below provides a forecast of the percent of IP-based contact center seats versus TDM seats for the North American inbound contact routing market, from 2006 through 2010. By 2010, more than half of the contact center seats (57%) in North America will be running on IP. This growth will be spurred by greater adoption of IP in the market and the ACD replacement cycle that began in 2005. In addition, the multiple benefits of VoIP in the contact center will help drive the growth of IP-based systems.

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Figure 2.0: Inbound Contact Routing Market: Percent of IP-Based Contact Center Seats Versus TDM Seats (North America), 2006-2010



All figures are rounded; the base year is 2007. Source: Frost & Sullivan

Insight: IP Delivers Enterprise Flexibility

Furthermore, Frost & Sullivan's recent analysis shows that the market is witnessing a fundamental shift in the contact center agent population from a fixed brick and mortar environment to one that is distributed geographically and more flexible. This is facilitated by the shift to IP mentioned earlier, enabling a mix of numerous brick and mortar sites, multiple outsourced call centers, branch offices, and an increasing number of work athome agent (WAHA) seats.

Beyond the advanced capabilities of customer-centric contact routing, IP/Session Initiation Protocol (SIP) technology delivers additional benefits and cost savings opportunities to the organization. SIP-based solutions enable the enterprise to turn contact centers into a competitive advantage by helping to improve agent productivity and virtualizing resources through consolidation of agents across the agent types and locations mentioned above, as well as the incorporation of presence-based communications which enable agents, employees and customers to communicate across multiple devices and through multiple media types (video, email, VoIP, wireless, etc.) Further, the transition to IP can reduce difficult-to-manage, distributed call center infrastructure and control associated maintenance, support, and IT overhead costs, delivering tangible return on investment (ROI) benefits. Meanwhile, the enterprise's IT department is relieved of the low-value-add burden of maintaining and supporting additional technology.

Ultimately, SIP-based solutions allow enterprises to minimize contact center challenges while optimizing the customer experience. IP allows the enterprise to serve customers with flexibility, agility and responsiveness by allowing more optimal and cost-effective utilization of agent resources.

## Market Leadership

Recent primary interviews with end-users in the enterprise indicate that it is clearly a matter of engaging the right partner with the technology, capacity and experience to ensure a smooth, successful transition to IP.

To illustrate how a large enterprise can begin to take full advantage of these important emerging trends, Frost & Sullivan examines the capabilities of its 2008 North American Hosted Contact Center Market Leadership award winner, Verizon Business. The two-time recipient (2007 and 2008) of this award, Verizon Business, demonstrates how its market-leading performance, carrier-grade capabilities and broad domain expertise can be leveraged to deliver the benefits of both hosted and IP services to drive meaningful business results for its clients.

## **SECTION 3: SEAMLESS MIGRATION FROM HYBRID TO FULL IP**

## Supporting Hybrid Environments

Frost & Sullivan recognizes that the move to IP, for most companies, is more of a journey than an overnight forklift transformation. Historically the only option when migrating from a traditional TDM-switched communications environment to a converged IP platform for the enterprise, has been the 'rip and replace' of legacy equipment. Verizon's Contact Center Solutions (CCS) continues to offer a better alternative, by supporting hybrid environments within its vast network in several ways:

- I. Verizon Business has placed gateways in the *network* so that enterprise clients do not have to purchase and maintain premise gateways to manage the conversion between TDM and IP traffic.
- 2. Calls can be delivered to enterprise contact centers in TDM or IP format. Verizon Business can pass data between its TDM-based service control point (SCP) and its SIP service controller. The SCP delivers comprehensive call information enabling contact centers to seamlessly terminate calls to either SIP or TDM end points, or to overflow from one to the other.
- 3. Verizon's hosted Interactive Voice Response (IVR) platform includes advanced call routing and processing capabilities and can terminate incoming calls to both TDM and IP endpoints.

Verizon Business has placed gateways in the *network* so that enterprise clients do not have to purchase and maintain premise gateways to manage the conversion between TDM and IP traffic.

The hosted environment facilitates the move to IP because it opens the door to IP investment while supporting the current enterprise TDM investment as well. That said, enterprises can now determine the pace that is suitable for their migration to IP without the need to completely overhaul existing infrastructure.

Fact: Hosted Facilitates the Path to IP

Undoubtedly, the flexibility, scalability and cost-savings opportunities that come with a hosted model are taken to the next level with IP. As stated earlier, a hosted model has proven to greatly facilitate a geographically distributed enterprise environment, and this flexibility is even more enhanced with the adoption of IP-based technology. Multiple sites and agent locations can be provisioned and managed centrally from the service provider's facility with considerable ease. Verizon Business was among the first providers to IP-enable its network-based contact center solutions. IP-enabling a call center allows the enterprise to put its agents outside of the traditional contact center environment via a thin-client Web browser. Devices are automatically registered on the Verizon Business network from the agent's location, leveraging SIP to indicate "presence" and facilitating efficient contact routing. The immediate benefits include a centralized, 'global view' of the contact center along with greater user control, enterprise-wide agent optimization, and a marked reduction in administrative tasks. Why does this matter? With IP you have a shared infrastructure — a single network for voice, video and data. This translates into reduced maintenance and less overhead and can help lower your total cost of ownership.

Verizon Business' hosted contact center services are IP-enabled within its global IP network, driving out greater center efficiency by supporting multiple-contact media, including voice traffic, chat and e-mail. Verizon Business IP-Enabled Contact Center is a portfolio of interaction services that provides Voice Over IP (VoIP) conversion in the network for reliable termination to Session Initiation Protocol (SIP) devices at the agent's location, as well as an IP IVR platform that supports hybrid TDM and SIP terminations. The SIP protocol is used to route calls from a Service Controller located in the network to a premises termination or an IP IVR script. The call is ultimately received by an agent using either a traditional TDM endpoint or a certified device such as a SIP phone or an IP-PBX/ACD. Contact center agents in an IP environment can further use SIP transfers to transfer calls using capabilities inherent to SIP, thereby helping to control access costs.

Finally, Verizon's Public IP network is interconnected to Private IP network (PIP) through Secure Gateway platforms that allow business customers to extend access to their private virtual networks to 'off-net' sites, such as employees' homes, small branch offices and mobile work forces.

Figure 3.0 illustrates how using Verizon Business' IP network-based hosted solution can reverse the pyramid of infrastructure and expense in a contact center. IP functionality and associated benefits become an application on Verizon's hosted network, independent of architecture. Enterprise customers can centralize and consolidate applications rather

The hosted environment facilitates the move to IP because it opens the door to IP investment while supporting the current enterprise TDM investment as well.

than infrastructure needs, helping reduce capital expense, easing management issues and adding the flexibility of remote centers and agents.

Infrastructure and Service Provider Consolidated Applications Other Apps Expense **Hosted by Verizon Business** CRM **Enterprise Applications** CTI **Enterprise Network** ACD · PBX ACD PBX ACD SIP Infrastructure and Expense

Figure 3.0: Reversing the Pyramid

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Connecting the dots - Hosted, IP Contact Center and Self Service

Enterprise IT departments today are exercising their autonomy to choose an evolutionary path to migration -one that protects existing (TDM) investments. Frost & Sullivan's research indicates that the majority of IP-based agents are being deployed in hybrid environments, adding IP-based agents to existing TDM systems. Hybrid IP implementations, as exemplified in a hosted environment, offer customers a means of realizing the benefits associated with IP migration as well as the means to mitigate some of the associated risks. In this way, enterprises can continue to get maximum value out of their existing infrastructure resources while driving their customer interaction future to IP in order to take advantage of the benefits of the new switching platforms. For example, managing multichannel interactions on a single platform, call recording, SIP presence and advanced routing methodologies become part and parcel of the incremental move up the interaction value chain-all without additional hardware investment or maintenance by IT staff. Self-service options become less expensive, more numerous and much more attractive when hosted on the platform of a trusted service provider.

Enterprises are progressing toward a nimble contact center technical posture: one requiring dexterity, scalability and ease-of-provisioning, transforming their contact centers and focus. Figure 4.0 illustrates how enterprise end users can move their contact centers

Hybrid IP implementations, as exemplified in a hosted environment, offer customers a means of realizing the benefits associated with IP migration as well as the means to mitigate some of the associated risks.

from an established, premises-based traditional TDM business model to a fully hosted IP environment that improves the customer experience and offers a competitive advantage.

**Time** ₾ Contact Center Transformation **Technology** Impac: Optimizing CC delivers competitive advantage Focus on improving Consolidating All customer channels are customer experience, loyalty integrated Begin centralizing and retention through **Establishment** Integrated Unified technology via Hosted intelligent routing Communications shows "presence" of other support resources to drive faster · Only essential capabilities Solutions Use of remote agents Centralized operations, large Standardize on technology Increase in IP-based Cost reduction, improving footprint applications customer service existing capabilities are key Short-term focus on process Utilize all resources across & cost efficiencies ٧٥ ا the enterprise **Premises** Hosted **Business Model** 

Figure 4.0: Contact Center Transformation

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# SECTION 4: EXPERIENCE COUNTS: CHOOSING THE RIGHT PARTNER TO IP-ENABLEMENT

Technology, Processes, the Network & People

Frost & Sullivan believes that Verizon Business is without rival as the market leader. With over 18 years of business process consulting experience and a team of more than 140 skilled professionals, Verizon Business offers world-class capabilities that impact contact center operations. Their professional services team offers an in-depth technology readiness assessment to document the architecture, design and implementation of complex contact center solutions. Using proven project management methodology, Verizon Business explores the full spectrum of contact center solutions from 100% hosted to 100% premise based, or a hybrid solutions tailored to meet customers' business requirements with a combination of the two. Verizon Business leverages its expertise across a number of industry verticals including telecommunications, financial services,

transportation, government, hospitality and consumer products contact center environments. What other key attributes are there to consider in this partnership?

- A consulting practice with key vertical industry expertise and an integrated approach to building solutions
- Broad scope of products and services
- Seamless interoperability of products/services
- Global IP Network
- A secure network infrastructure
- Flexible Service Delivery Options
- Proven expertise in implementation and delivery of customer contact functionality

Basic FAQ's End-Users Need to ask of a Hosted Provider Partner

Frost & Sullivan believes that there are a number of important questions that need to be asked of a potential hosted partner. Critical areas include vendor experience, technical platform, security issues and the process of implementation:

## Vendor Background and Experience

- What is the company's history and experience in call center operations?
- Does the company have experience with large-scale applications and complex deployments?

## IT and Security Considerations

- · How scalable and redundant is the company's network and hosted infrastructure?
- What reliability parameters are included in the Service Level Agreements?
- Is there additional hardware or software to install on-site, or in the provider's network that will add additional cost to the service?
- · How does the company address security and privacy concerns?
- Are there disaster recovery options?

## Hosting Environment

- Is the hosted infrastructure multitenant or dedicated?
- Does the provider own its hosted infrastructure, and if so, where?
- What percentage can I expect to save with a hosted system vs. a premise solution?

## Ease of Administration and Integration

- Does the solution provide a web-based user interface for the agents and supervisors? How long is the training cycle and is it administered on-line?
- Are there additional support and service expenses?

- Do I need to invest in contact center systems in order to integrate back office applications?
- Does the provider integrate with third party applications, or is this up to me?
- How flexible is the provider in helping me grow my business, and managing peaks and valleys in call volume?
- · How quickly can I add agents, either TDM or IP?

## Implementation Expectations

• How long and complicated will the implementation process be?

## **SECTION 5: CONCLUSION**

In summary, Frost & Sullivan recognizes that many enterprise executives, uncertain about the future direction of the contact center, are seeking to understand and leverage two important industry-wide movements:

- I. The shift to a hosted model offering significant business benefits at lower cost and an easy upgrade path to new technologies
- 2. The migration to IP by leveraging a hosted model supporting hybrid environments that can protect existing TDM investments, and ensuring vast improvement in contact center efficiencies.

Simply put, a hosted model can help to painlessly facilitate the move to IP. Frost & Sullivan recommends vigorous due diligence before the organization has made the decision to implement a hosted solution. The recommendation is to seek out an experienced, trusted partner. The next logical step is the upgrade to hosted IP, freeing the enterprise to:

- Focus on core competencies
- Apply flexible technology for continuous improvement in the organization
- · Access Service Providers' advanced technology, latest feature sets and domain expertise
- Realize a return on investment (ROI)

Frost & Sullivan believes that progressive enterprises today must take full advantage of the opportunity to align themselves with innovative technology that allows them to hold onto competitive gains, extend the reach of the brand and strengthen customer relationships; leading to greater shareholder value.

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### **ABOUT FROST & SULLIVAN**

Frost & Sullivan, the Growth Partnership Company, partners with clients to accelerate their growth. The company's TEAM Research, Growth Consulting, and Growth Team Membership™ empower clients to create a growth-focused culture that generates, evaluates, and implements effective growth strategies. Frost & Sullivan employs over 45 years of experience in partnering with Global 1000 companies, emerging businesses, and the investment community from more than 30 offices on six continents. For more information about Frost & Sullivan's Growth Partnership Services, visit http://www.frost.com.

## **ABOUT VERIZON BUSINESS**

Verizon Business, a unit of Verizon Communications (NYSE: VZ), operates the world's most connected public IP network and uses its industry-leading global-network capabilities to offer large-business and government customers an unmatched combination of security, reliability and speed. The company integrates advanced IP communications and information technology (IT) products and services to deliver leading enterprise solutions including managed services, security, mobility, collaboration and professional services. These solutions power innovation and enable the company's customers to do business better. For more information, visit www.verizonbusiness.com.