
EagleACD Serves SMB Market Using Microsoft Customer Care Framework

White Paper

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Introduction

Internet Protocol (IP) has revolutionized the way businesses communicate, making e-mail and web transactions as commonplace as phone calls. Now IP is also revolutionizing the way contact (call) centers are operated, managed, and controlled. The maturity of IP Telephony standards and the quality of service on IP networks has opened up a new realm of possibilities in service opportunities, efficiencies, management, control, and cost savings. More specifically, IP communications have brought the corporate global village much closer and distance is irrelevant. The SMB (Small Medium Business) market segment has taken the lead in the IP revolution.

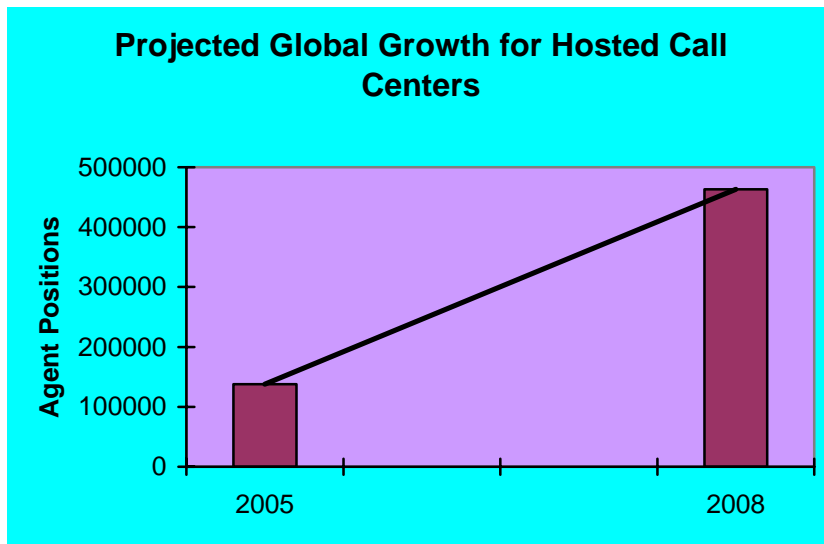
With more than 75 million companies around the world, the SMB market spends more than \$800 billion each year on IT and telecommunications hardware, software and service. According to an AMI-Partners report, dated August 2004, by 2008 that figure is expected to top \$1.1 trillion. In addition, IT and communications spending growth among SMBs tends to outpace that of larger businesses—even during periods of economic downturn. The purchasing power of this group, coupled with its apparent resiliency to recession, provides tremendous opportunities for early movers to capture market share and generate significant revenues. The number of SMBs using hosted applications in the U.S. has exploded during 2003, to 750,000 SMBs, and is expected to grow exponentially during the next few years. With this high rate of adoption, the AMI-Partners Market Research firm estimates that overall spending on hosted applications will increase approximately 40% during the next few years.

Work activities for back office and call center services are now distributed globally. This paradigm shift requires a distributed architecture rather than a centralized solution as jobs are dynamically rotated among many workers on an as-needed basis. The traditional premises-based contact center investment for setting-up an SMB contact center may not be a prudent investment choice during the current uncertain financial recovery period. It is not unusual to find call centers running their telecom and data infrastructure assets at a mere fraction of their capacity. This is due to ongoing changes in the business environment and the unpredictable duration of the customer contract life. In fact, sudden cancellations of service contracts with call center operators have become common. According to Everest Consulting Group, more than 50 percent of recently signed outsourcing contracts were negotiated for five years or shorter in duration.

The so-called “peak-traffic” design approach has driven up costs, cut into operating margins, and created an overall financial drag on the entire call center industry, which is estimated at about 100,000 call centers worldwide. Faced with tight budget constraints and stretched operating budgets, every business is looking to cut the initial capital investment and recurring operating costs of the call center. In addition, the industry is being asked to improve call center utilization capacity, while maintaining an acceptable level of customer service. This underutilized capacity environment along with the advancement of technology has contributed to the birth for the IP hosted call center.

Near shore (Canada and Mexico) and offshore (India and the Philippines) locations are gaining traction with US outsourcing firms and this mega trend is irreversible. A report by Datamonitor predicts that by 2008, 50% more agent positions will be outsourced to a foreign market. This is being triggered by the fact that the traditional big spenders on customer relationship outsourcing services like financial services, communications and technology have now almost been expended. As a result, the incessant pressures to cut costs and reduce capital outlay have triggered the offshore and near shore exodus in the US Customer Relationship Management (CRM) outsourcing industry.

During the last two to three years, IP Hosted solutions that use one common network for voice and data services have been introduced in the market place. This approach has addressed the capacity utilization, network efficiency, and related economic concerns. According to Datamonitor, a leading contact center market research firm, there will be 463,000 hosted agent positions globally by the end of 2008.



Source: Datamonitor

The migration from the premise-based infrastructure to the IP hosted model is accelerating rapidly. Further, a number of legacy hosted call centers are migrating to the IP Hosted solution rather than upgrading their existing systems. There are compelling financial and technical reasons why a number of call centers are now interested in the IP hosted solution. And while there are still some applications where the premise-based solution will be financially and technically attractive rather than leasing port connections, a hybrid of the IP hosted solution and the premise-based solution is emerging as an attractive alternative.

EagleACD is a New York-based company that has taken a leadership role to address the SMB market using the Microsoft® Customer Care Framework platform since early 2004. Its utility-based IP hosted architecture offers a unique unlimited call center infrastructure resource on a true on-demand basis. The call center is simply charged for minutes used by each agent. Fees are charged according to the application use as well, including

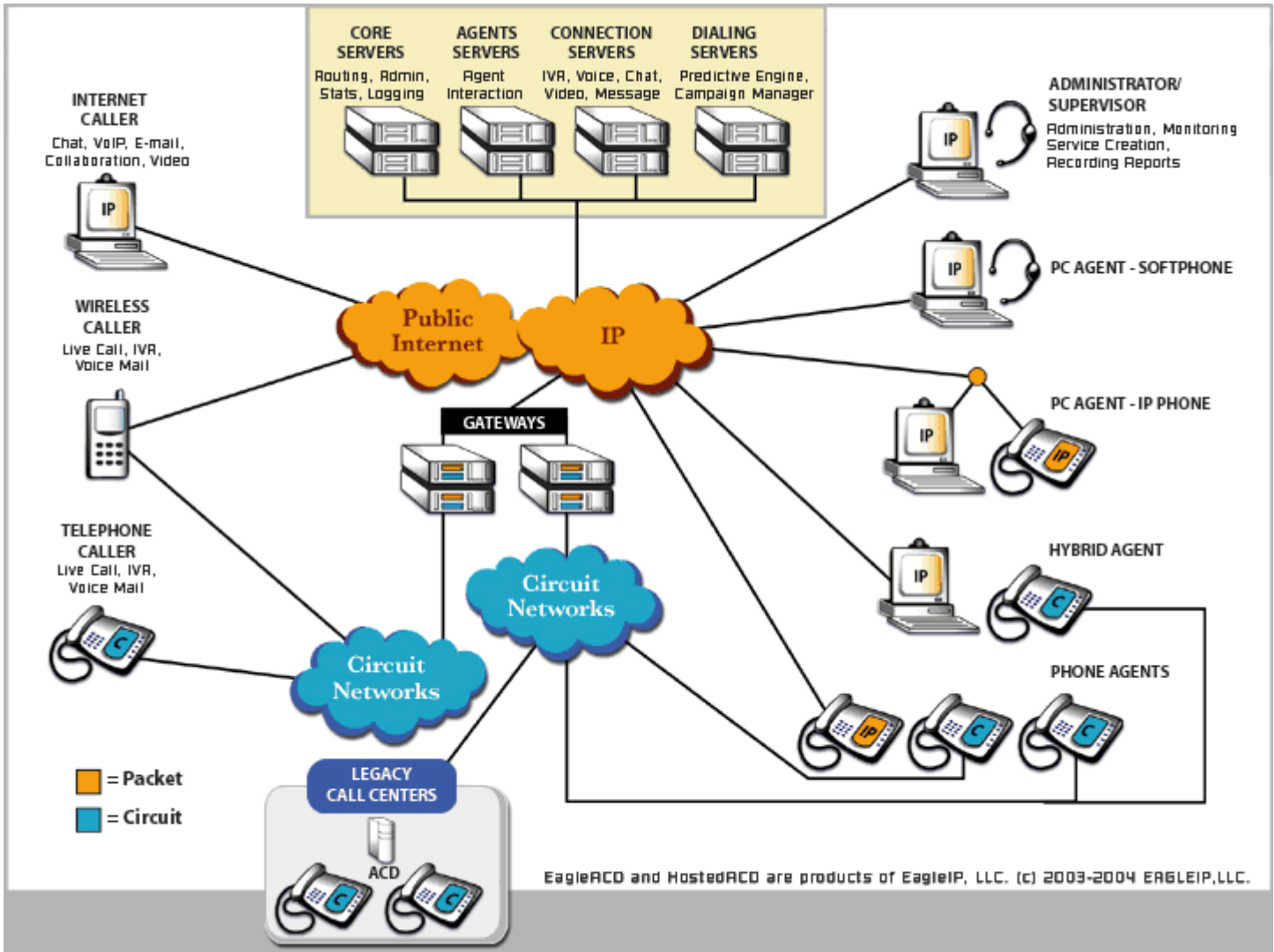
support for live agents, Webchat or predictive dialing. This model provides for financial predictability that maps closely to revenue. It is completely transparent as usage-based pricing is clearly defined. There are ‘no expenses’ if there is ‘no traffic’.

EagleACD Utility Architecture

A network grid is a compilation of dynamic network resources--server, ACDs, telecom and data network, and storage--acting together to create a large pool of resources and dynamically align resources to specific business needs. The use of a grid to provide network resources is analogous to that of an electric utility. The EagleACD network grid is both a technology solution and a business solution. This technology allows running existing business applications in a network grid environment. In a network grid there is a pool of resources that hosts specific customer applications. Resource usage on a per minute basis for a selected application is tracked, and billed accordingly for usage of minutes.

EagleACD employs a state-of-the-art infrastructure with the use of all industry-leading standards, and provides multi-tenant capabilities. Its IP-based infrastructure allows call center agents located anywhere, to interact with voice or Internet callers – regardless of whether the origin point is a public switch network or IP network. This unified and convergence-ready architecture provides a complete contact center solution in one simple package – including multi-media ACD, IVR, predictive dialing, Internet collaboration, E-mail Response Management (ERM), call recording, and CTI-like integration. With EagleACD’s cutting-edge VoIP contact center service, contact centers can be located anywhere in the world.

EagleACD uses the CosmoCall Universe (CCU) platform that is based on the Microsoft® Customer Care Framework (CCF). CCU exploits the unification of VoIP to create a network-based hosted “virtual call center”. It uses IP technology and the on-demand paradigm to bring a whole new level of feature richness and cost effectiveness to hosted contact center offerings. All server applications run entirely on the Microsoft Windows Server 2000® and Windows Server 2003, with support from the Microsoft SQL Server 2000 and the Microsoft Exchange Server.



Call Queuing and Call Routing Requirements for Flexibility and High Performance

EagleACD addresses both the engineering and economic issues by utilizing the advanced capabilities of Microsoft server technology to architect a high-capacity, high-availability solution in the most economical way. This architecture is enabled by Microsoft's Network Load Balancing (NLB) technology, which distributes incoming IP traffic among multiple cluster servers, and Microsoft Cluster Services (MSCS), which provides automatic, fail over for critical SQL Server database applications. Both technologies are found in the Microsoft Windows 2000 Advanced Server and its successor Windows Server 2003.

The user interface utilizes intuitive features aimed at facilitating efficient customer service. A chat call is placed on hold while the agent uses the tabbed call window and

dialer to place a new call. The agent has easy access to canned phrases for commonly asked questions. EagleACD has a graphical tool for call flow generation that does not require programming for the creation and modification of call flows, including IVR scripting components. The service creation environment is browser-based, enabling the ability to securely modify call flows from any PC connected to the Internet.

The Queue is CosmoCall Universe's basic call organizing unit. Call requests are organized into one or more Queues, where the next available agent is scheduled to serve them. The name of a Queue is one of the attributes of a call request, and CosmoCall allows the administrator to define any number of queues. The ACD (Automatic Call Distributor) Server, the core component of CosmoCall Universe, manages calls, queues, CSRs, agent groups, teams, skills, and call priorities. This is a full-featured, high capacity ACD, capable of managing thousands of CSRs, organizing calls into any number of Queues. CSRs are organized into Agent Groups with customer-defined many-to-many relationships between Queues and Groups. Call Requests and Agents are completed as independent objects, which are defined by attributes and properties, which the ACD uses to determine queue configuration and processing.

It also provides multimedia, multi-channel recordings of agent-caller interactions. It records voice, chat, and e-mail sessions, and includes a database searchable by parameters such as agent, time frame and call type. It includes a browser-based client for administrative personnel to review the captured sessions.

The Microsoft Factor--Driver for Strong Platform

Microsoft Customer Care Framework (CCF) 2005 is a software product that provides a reference architecture and software building block utilizing Microsoft core technology assets to accelerate an organization's ability to enhance a customer care environment. Microsoft Customer Care Framework 2005 offers multi-channel integration capabilities via web services, and desktop level application integration through information sharing and interaction between different Line of Business applications. CCF increases contact center agent productivity, facilitating reduction in costs and improving the quality of service.

CCF enables dramatic improvements in contact center efficiency by delivering better information faster to service representatives through the use of XML Web Services. CCF provides the call center agent a single sign-on to multiple applications, a 360° unified view of customer information, and a user-friendly interface. The flexible CCF architecture builds on top of the Microsoft platform and integrates with existing systems, enabling contact center operators to reduce total cost of ownership (TCO) and accelerate return on investment (ROI). The platform seamlessly integrates with underlying business applications without requiring changes to existing systems, and avoids costly and time-consuming 'rip-and-replace' of existing systems.

An important consideration in the design and engineering of the strong Microsoft platform was the optimization of packet routing and sequencing, and the minimization of

the introduction of latency whenever possible. This is critical because the quality of VoIP is highly susceptible to degradation due to latency and sequencing factors. To provide carrier-grade switching, it had to be capable of consistently maintaining PSTN-quality voice sessions under any workload or session contingencies.

Call Queuing and Call Routing Mechanism

The CosmoCall Universe Message Connection Server (MCS) receives and manages all types of incoming messages, including e-mail, voice messages and fax, and submits them for routing by the ACD Server's universal queues. Messages created through Web and IVR applications are routed according to the parameters set by those applications. Other incoming messages are routed by the default parameters of the mailboxes to which they are addressed, and optionally by tools that examine the subject and text, routing by keywords and other custom rules. Messages are delivered to CSRs in the same way as live calls, and administrators can set up the system to present the messages during slow-downs in live calls, improving CSR efficiency.

A flexible combination of routing rules determines the most appropriate destination for each call. In the contact center environment, this is often called "pre-routing" because there is typically a second level of routing performed by the premises ACD. The NGIN platform includes a complete Interactive voice response platform, making it possible to create call flows based on any combination of voice menus, user inputs, and other rules.

Static Routing

Static Routing uses rules that can be resolved within the network, such as time-of-day, percentage allocation, IVR menu selection, and others that do not require dynamic information about the status of potential destinations. The elementary rules are simple, but they may be freely combined in the user interface to create highly customized call treatment scenarios. Static Routing has the advantage of adding value while requiring absolutely no change to an existing PBX or contact center operations.

Dynamic Pre-routing

Dynamic Pre-routing uses information about the current state of the queues and agents in premises contact centers to make routing decisions, resulting in more efficient balancing of traffic across a multi-site contact center operation. Changes in queue and agent status are updated dynamically at the network router.

Skills are an attribute of both call requests and a CosmoCall CSR profile. When a call that includes required skills reaches the front of the queue, it is assigned to the next available CSR who possesses the required skill sets. The Universe ACD Server features a highly configurable priority management algorithm. Call request priority is independent of both queue and skills. Higher priority requests move faster through their queue than lower priority requests. Any number of priorities may be defined.

- Call Control and Routing
- Least cost inbound and outbound routing
- Call restriction (e.g., block certain numbers, exchanges, international calls)
- Centralized point for incoming calls data collection for routing and queuing
- Attended and unattended call transfer to anywhere in the network, or any external phone number
- Agent-to-agent dialing in IP network for agents in any location
- Agent-to-agent transfer across any locations, including screen pop

Customer Experiences

VoiceLog

VoiceLog LLC is the leading provider of monitoring and call recording services, Third Party Verification, and related services to the contact center industry. With over 40 million calls recorded and over 10 million calls scored, VoiceLog offers call recording, automated monitoring systems, third party quality monitoring, Third Party Verification, and long-term audio data storage. With over 250 telecommunications, competitive electric and natural gas and financial services clients in the US, Canada and Europe, VoiceLog is the world's number1 provider of Third Party Verification.

The management decided not to invest additionally in the telecom and data infrastructure in order to provide call center support. Instead, it decided to outsource its telecom and data infrastructure to EagleACD . This decision thwarted any technology obsolescence issues, allowed speed-to-market, and provided a complete stress-free network solution.

Seeing Fast Results

By combining the premises based call center and the hosted call center, VoiceLog was able to create the flexible inbound/outbound call center platform to meet variable customer needs as well as combine in-house agents with the home based agents. This converged approach helped to reduce operating costs and simplify call center administration. Currently customer calls come through VoiceLog's premises based call center in Ashburn, Virginia and then the call is transferred to EagleACD be hosted IP call center in NY. Then these calls are distributed to home agents based on their skill sets and availability.

Mr. James Veilleux, President of VoiceLog, reports, "EagleACD solutions were essential in creating a more reliable and cost-effective environment. Managing costs based on workload were clear just after implementation. So we were able to quickly capitalize on the investment and optimize costs. We required that 90% of calls are answered in less than 15 seconds and that requires 99.999% network reliability. This is the gold standard benchmark in telecom industry—in other words, 6 second down time allowed per week. EagleACD continues to deliver high standards of reliability per our requirements and we are able to bring our agents to speed very quickly."

Microsoft's CCF platform helped VoiceLog in a number of daily business activities to operate the call center. These activities include custom reports, Voicemail and e-mail storage, delivery of content and searching database. These are key parameters not only for customer experience and creating positive working environment, but also for efficient and effective call center operation.

Microsoft Exchange Server acts as a messaging collaboration server, receives, stores and sends both e-mails and voicemails to authenticated users. Voicemails are handled as an e-mail with the recorded audio message as an attachment. So, the Microsoft Exchange Server component of the CCF platform provides storage features to end-users such as VoiceLog.

As a result of the EagleACD solution, VoiceLog has developed a flexible call center platform to manage its call-handling capacity. It has resulted in improved service and operating costs have gone down. EagleACD's "pay as you go" features have helped to eliminate payments for idle time of call center agents. Mr. Veilleux explains another benefit, "EagleACD's routing allocates the skilled attendant to the call by any agents connected to the network. This allows us to optimize staffing and increase service quality for a better ROI- creating a more efficient company and more productive call centers. No over staffing is required due to this high reliability. This reduces operating costs for delivering services".

Since May 2004, VoiceLog was able to achieve the following results:

- More efficient use of call center infrastructure and call handling capacity.
- Able to attract more agents as they can work from home
- Future career opportunities are focused on home office agents and fewer premises based agents
- Improved ROI as margin for home-operated agents is much higher than premises based call center agents
- Improved utilization of skill based call center agents. Number of Verification Agents, Live operators, and Quality Assurance Agents, are spread throughout US.
- Improved call-handling quality as scalability is completely flexible. This allowed mix-and-match any agents at any time.
- Higher satisfaction for agents as well as management. Agents do not have to drive to work and management does not have to worry about the absenteeism due to uncontrollable external factors.

Customer Benefits

Call center operators do not need to spend their scarce capital on purchasing, operating, and maintaining telecom and data infrastructure. In the IP Hosted industry, there are two types of On-Demand communication services available. Most commonly available solutions require fixed monthly payments for each agent seat. However, EagleACD

offers the standardized pricing for a measured unit of usage without any fixed monthly charges. These services can be live agents, webchat, predictive dialing, etc. Consider the advantages:

- No hardware acquisition and follow-up costs (technology is refreshed by the service provider without the buyer paying for it)
- No software licenses or upgrades to manage
- No facilities to purchase or lease
- No maintenance or support staff
- No capital costs (capital expenditure avoidance)
- No fixed monthly expenses (offered by one leading service provider)
- Full scalability (empowering customers to tap into and take advantage of vast traditional and IP network resources at any time anywhere in world.)

The IP hosted contact center industry is looking at a future where customers never have to buy hardware or software again while serving all customer needs regardless of agent seat requirements at anytime, anywhere.

Conclusion

During the last 2-3 years, a number of companies have understood the concept of IP, and the importance of the hosted solution in the telecom and data service industries. They have seen the costs reduced in their operations by an order of magnitude. They have gained a solid competitive advantage for their own company. The IP hosted industry is adding more and more customers each quarter and bringing them value that they need and seek. IP Hosted service providers have seen tremendous opportunity to serve the call center industry and customers as they realize that this service is financially and technically attractive.

Call centers can be started with a small number of seats. As one decommissions old premise based systems according to their business needs, one can add new capacity into the network and move more agents onto the IP hosted system. Over time, the complexity of the telecom and data infrastructure will drop and financial benefits will multiply. The IP hosted solution provides short-term and long-term benefits to the entire call center industry. Businesses can begin to adopt IP Hosted network technologies with no initial investment, zero service disruption, and a fast ROI. The IP hosted industry will continue to place contact centers on the path to even longer term benefits as telecom and data networks evolve and mature.