A Cloud Based Approach:

Enabling Simple, High Quality, Cost-Effective Collaboration

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Executive Summary

Imagine this: your CEO is hosting the quarterly earnings call for the company with participants dialing in from three continents. Several invitees are unable to join for the first fifteen minutes and many attendees cannot see or hear him for the crucial five minutes when he is announcing an exciting new product. No CIO would want this to happen to his or her organization. Clearly, collaboration services need to work flawlessly all the time on a global basis in order for enterprises to entrust a solutions provider with their critical communications needs with clients, partners, and employees. In addition to service levels, ease of use and ROI should be important purchase criteria for CIOs considering a collaboration offering. Meeting these demanding goals requires a new approach. This whitepaper outlines how Arkadin’s Cloud Collaboration Platform delivers unmatched simplicity, breakthrough quality of service, lower costs and enhanced security compared to competing alternatives.

Introduction

Services like audio conferencing are rapidly establishing themselves as a game changer in many industries. By enabling instantaneous and ubiquitous collaboration between stakeholders, experts and decision makers in a business setting, these services can enable enterprises to drive business outcomes rapidly and cost-effectively. Closing that critical deal on the last day of the quarter with client and vendor participants from many continents or resolving a tricky customer support problem involving many client and vendor experts are just a few examples of situations where facilitating rapid collaboration between all parties can make an immediate impact on revenues or customer satisfaction.

Audio conferencing is an essential ingredient of the emerging category of Unified Communications and Collaboration (UCC) which is defined as “[UCC] involves full integration of real-time and near-real-time communications tools in applications and business processes. The overall goal is to enhance human communications by reducing latency, managing workflows, and eliminating device and media dependencies”. Increasingly, business users expect a suite of services that include audio, web, video conferencing and instant messaging/presence that come together to enable real-time interaction.

Figure 1 depicts an estimate of the adoption levels associated with audio conferencing and other services in businesses today. Note that there is still a lot of headroom for adoption for these capabilities. For example, 56% of businesses today do not fully leverage audio conferencing.

1 “State of Unified Communications”, InformationWeek Reports, December 2011
As a CIO or IT buyer, you have three options with respect how you deploy audio conferencing and related collaboration capabilities for users. You could “roll your own” in-house system by aggregating and provisioning the necessary equipment and software. Some enterprises use a “Premises-Based Managed Service” in which equipment is on premises but operated by a service provider who charges a predictable per-user fee. We believe the best approach is the third option, which is to rely on a cloud-based collaboration service provider like Arkadin to enable these services for your organization. We make that case by articulating what you should look for in an audio conferencing and collaboration services solution for your organization.

Figure 1: Adoption of Audio Conferencing and Related Services by Businesses

<table>
<thead>
<tr>
<th>Collaboration Technology</th>
<th>Deployed to full user base</th>
<th>Deployed to limited user base</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voice over IP</td>
<td>43%</td>
<td>29%</td>
</tr>
<tr>
<td>Audioconferencing</td>
<td>44%</td>
<td>31%</td>
</tr>
<tr>
<td>Webconferencing</td>
<td>34%</td>
<td>36%</td>
</tr>
<tr>
<td>Instant messaging/chat</td>
<td>38%</td>
<td>30%</td>
</tr>
<tr>
<td>Presence clients (e.g. Cisco Jabber)</td>
<td>25%</td>
<td>27%</td>
</tr>
<tr>
<td>Videoconferencing - room based</td>
<td>21%</td>
<td>46%</td>
</tr>
<tr>
<td>Videoconferencing - desktop</td>
<td>12%</td>
<td>32%</td>
</tr>
</tbody>
</table>

Source: Adapted from “State of Unified Communications”, InformationWeek Reports, December 2011

What IT Buyers Should Look For

IT buyers should look for the following factors when they evaluate audio conferencing and collaboration systems. To be sure, the priority of these criteria might vary by the size of your business, industry vertical, and level of budgeted investment in incumbent technologies. Nonetheless, the list below should serve as a buyer’s guide.

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• **Ease of use for business users.** 79% of over 400 IT respondents of a CIO Magazine survey rated ease of use as their most important concern when implementing collaboration services. Business users increasingly expect the simplicity of consumer applications when communicating in a business setting. Many business users are probably already using consumer applications to communicate with colleagues. For example, 16% of enterprise users use Skype for instant messaging even though Skype does not actually sell to enterprises, causing one analyst to note “Skype is becoming a factor in the enterprise without even trying.” If simplicity is not factored into your purchase, poor ease of use is likely to hurt adoption when a solution is rolled out. As shown in Figure 3, 39% of businesses cite lack of end user training as the top reason for why their collaboration capabilities are not fully adopted when rolled out – having easy to use systems are the best way to avoid this pitfall.

• **Reliability and Quality of Service.** For business users to rely on collaboration systems, they need to work flawlessly. One analyst points out that collaboration platforms and equipment “rarely outright fail. But sometimes they do flat-out, straightaway stink to use. Voice is choppy, and videoconferencing looks like a bad VHS tape. Who wants to talk to customers, or even colleagues, that way? IT’s carefully crafted ROI models are out the window, and the CIO is left in the embarrassing position of having equipment worth tens of thousands of dollars sit idle while employees Skype back and forth”. 10% of businesses do not bother to purchase collaboration services due to perceived lack of reliability (Figure 3) and 14-16% of businesses point to quality/reliability issues as the reason why these services are not used when deployed (Figure 2).

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3 “Unified Communications Survey”, CIO Magazine, 2009
4 “State of Unified Communications”, InformationWeek Reports, December 2011
5 “Reliable Unified Communications”, InformationWeek Reports, November 2011
**Security.** Business communications need to be confidential at least some of the time for all businesses. Collaboration systems and their providers need to ensure the integrity and privacy of all communications. As shown in Figure 2, 15% of IT buyers do not purchase a collaboration system because of security concerns.
• **Cost.** 64% of IT buyers expect to spend $500 or more per employee in capital expenses to fully deploy a premise-based collaboration system.\(^6\) These costs pertain to onsite equipment, software licenses, and maintenance contracts. In addition to upfront costs, buyers need to worry about on-going space, energy, administration, and maintenance costs for premise-based solutions. Every premise-based system will require software upgrades periodically to address bugs or add new features, and the costs to monitor and maintain these systems can add up quickly. Given such a complex array of costs, it is unsurprising that 24% (shown in Figure 2) of IT buyers do not buy a collaboration system because they think it is too expensive.

• **Incumbent IT investments.** Motivated by cost efficiencies, IT buyers also want to leverage incumbent IT investments, if possible, when considering a collaboration system that subsumes or augments existing capabilities. For example, a company that has already invested in a VoIP infrastructure would want to leverage it when trying to add audio conferencing. 23% (Figure 2) of IT buyers chose not to invest in collaboration infrastructure because they could not leverage legacy investments.

• **IT Skill Sets:** Even if costs were not an issue, skill sets to deploy and maintain a collaboration system are a barrier to implementation. As reflected in Figure 2, 26% of businesses do not purchase such a system because of lack of skill sets and 21% blame skill set gaps for lack of adoption of a deployed system (Figure 3).

• **Scalability and geographic footprint:** Most businesses today need to think about revenues and customers from different parts of the globe. With the spread of customers, partners and employees, global reach should be an important criterion for evaluating solutions. Needless to add, buyers should also allow enough headroom for growth as they add users.

• **Breadth of solution:** IT buyers increasingly prefer a single vendor that can deliver all necessary capabilities of a collaboration suite. Fewer businesses want their IT teams to cobble together a best-of-breed system. 51% of IT buyers in 2011 preferred a single vendor with a broad product portfolio that can supply most, if not all, of the collaboration applications that they need, versus 45% in 2010.\(^7\)

What if you could ensure simplicity for users, reliability, security and global reach at an affordable cost and without the headache of

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\(^6\) “State of Unified Communications”, InformationWeek Reports, December 2011

\(^7\) “State of Unified Communications”, InformationWeek Reports, December 2011
managing premises-based systems? You can, by leveraging a cloud-based collaboration platform.

**Cloud-based Collaboration: The Arkadin Advantage**

As a service provider, Arkadin owns and operates the Arkadin Cloud Collaboration Platform which delivers audio conferencing services using a secure private IP network, sparing customers from installing or managing any equipment or software. The Arkadin Platform is optimized for exceptional audio conferencing quality. The elements that are the basis of the Arkadin advantage, as summarized in Table 1, are discussed in detail below.

<table>
<thead>
<tr>
<th>Buyer Criteria</th>
<th>Arkadin Advantage</th>
</tr>
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<tbody>
<tr>
<td>Reliability</td>
<td>Dedicated, Fully Redundant, Fault Tolerant IP Network</td>
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<tr>
<td>Quality of Service</td>
<td>Quality of Service Through Intelligent Network Design</td>
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<td>Security</td>
<td>Private &amp; Secure IP Network</td>
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<td>Cost Efficiency</td>
<td>Cloud-based Multi-local Network &amp; No In-House Equipment or Skill Sets</td>
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<td></td>
<td>SIP-based Interoperation with Existing Corporate IP Networks</td>
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<td>Global Reach &amp; Scale</td>
<td>Unlimited Scale Due to Cloud Platform</td>
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<td></td>
<td>Local Gateways in 100 Countries</td>
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<tr>
<td>Breadth of Solution</td>
<td>Full Collaboration Suite with World Class Implementation &amp; Customer Care</td>
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**Enabling Simplicity: Single Global List of Personalized Access Numbers and Localized Operator Assistance**

- **Single list of country access numbers**
  With Arkadin, all employees use the same list of country access numbers regardless of their location or the location of their conference bridge. This is far simpler than traditional audio conferencing where a user may have to use different conference phone numbers per moderator, per conference bridge, and per month! Arkadin users find it easy to remember a single list of country numbers or permanently program their device’s speed dial. Administrators benefit by having to manage one list of numbers.

- **Personalized country access numbers**
  Direct dial In (DDI) numbers with a personalized and localized welcome message are available for multiple countries with Toll and Toll Free numbers.
Operator assistance in local language
International conference participants and moderators can reach Arkadin operators for assistance in their local language at any time during a call.

Ensuring Reliability: Dedicated, Fully Redundant, Fault Tolerant IP Network
Experts advise, "poor-quality WAN connections or a provider with a shoddy datacenter can affect your business communications, so potential customers should take pains to investigate the provider’s reliability. Ideally, a provider’s service will be housed in a professionally designed and managed data center that should be mirrored in at least one other location, with a highly reliable network interconnecting them.”

The Arkadin Platform uses network equipment only from Tier-1 technology providers such as Acme Packet, Radisys, Avaya, Dialogic and NTT. Each software and hardware component of the Arkadin network and datacenters are backed-up for full redundancy. If an IP connection is broken, another one replaces it immediately.

According to IP-label’s certification, 100 % of Arkadin calls are completed with a Mean Opinion Score (MOS) > 4 on a 5 point scale.

Quality of Service through Intelligent Network Design
On a given audio conference, the Arkadin Platform hosts the moderator and conference participants, regardless of their geographical location, in the same VoIP bridge to ensure superior audio quality and low latency (see Figure 4).

Figure 4: Arkadin Cloud Collaboration Powered by Secure Private IP Network

Competitors use inferior network designs in which participants of a conference call are hosted in different VoIP bridges interconnected by an IP trunk, which adds latency and degrades audio quality. With Arkadin, because the conference is hosted on a single VoIP bridge, the

8 “Reliable Unified Communications”, InformationWeek Reports, November 2011
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full conference overview is instantly available to Arkadin’s customer care team who can then troubleshoot quickly, should problems arise.

These techniques allow Arkadin to skip voice compression (Codec G.711) and conversion protocol. The Arkadin Platform also uses proprietary techniques to remove latency and acoustic echo. Third party organizations like ISIS have certified Arkadin audio quality at Mean Opinion Score (MOS) of 4 on a 5-point scale.

Securing Communications: Private IP Network and Data Centers
Unlike competitors who use an insecure public network, voice is transported through the Arkadin Platform’s private IP network, ensuring the integrity of communications at all times. The Platform is hosted in Arkadin’s datacenters to ensure 100% physical security.

Cost Efficient Cloud-based, Multi-local Network with SIP Interoperation with Corporate IP Networks
The Arkadin Platform is able to achieve many cost efficiencies that translate to lower prices for customers:

✔ Multi-local Network: Connections Through Local Gateways
International calls are connected to Arkadin’s network via local gateways. As a result, Arkadin’s costs are driven by local access costs versus expensive international telecom rates.

✔ Elimination of Maintenance, Upgrade, and Staffing Costs
Arkadin’s cloud-based approach allows customers to avoid maintenance costs for on-premise equipment, software upgrades, and related IT staff costs. Experts point out: “cloud-based collaboration services have many of the advantages of typical SaaS offerings, including shifting capital expenses to operational expenses, providing a faster upgrade to new applications and services, and reducing the ongoing management efforts of internal staff. In addition, the cloud provider will likely run its applications in a multi-tenant environment, which reduces the provider’s management and operations costs. The provider can then pass those savings to customers via lower prices.”

✔ Leverage Investments in Corporate IP Networks through SIP-based Interoperation
The Arkadin Platform can interoperate with an existing corporate IP network through SIP trunking. For audio conferences that only involve employees on a corporate network, businesses further lower costs by avoiding the carrier network altogether.

These cost efficiencies enable a simple pricing model for Arkadin: one single list of prices per country, facilitating budget predictability. Pay per use pricing is also available.

9 “State of Unified Communications”, InformationWeek Reports, December 2011
Unlimited Scale and Global Reach: Local Gateways in 100+ Countries
The Arkadin Platform includes local gateways in over 100 countries. As a result, international calls can be completed by paying local access fees versus international trunk rates which are high, particularly in many emerging economies. Because of Arkadin’s cloud-based approach, customers can scale without limits, as quickly as they want.

Breadth of Solution: Full Collaboration Suite with Renowned Customer Care and Implementation Services
The Arkadin Platform enables a full suite of collaboration services including audio/web/video conferencing, presence and instant messaging. Arkadin’s best-in-class customer care and implementation services round out the solutions suite. The importance of services and customer care is exemplified by one IT buyer who laments about competitors “Our biggest obstacle has been lack of training from the supplier and lack of best-practice guidance.”  

Conclusion
What business users really want is the ability to collaborate with colleagues, partners and customers in the manner that best fits the situation without having to worry about costs, connectivity, device interoperability, application compatibility or other issues. As an IT decision maker, the least you can to do is to ensure that IT does not get in the way of business collaboration.

Unless your business views technology as a differentiator, has already built out an IP-based datacenter and has an army of IT staff with expertise in networking technologies, the “roll your own” approach to audio conferencing and collaboration services is really not a choice for any IT decision maker, especially when reliability and cost considerations are taken into account. While a premise-based managed service offloads the management burden and related ongoing costs to a service provider, you still have to consider space and energy requirements. In addition, if you have a lot of branch office locations, it may be difficult to find a service provider that has the geographic reach where you need it.

Cloud-based collaboration and audio conferencing is the way of the present and the future. One analyst put it simply: “We’re 100% behind the cloud model for unified communications and collaboration”. If what you need is simple, high quality, reliable, secure, global and cost-effective Unified Communications and Collaboration, the Arkadin Cloud Collaboration Platform is the answer.

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10 Ibid
11 “UC in the Cloud- Does It Make Sense For You?”, InformationWeek Reports, September 2011
About Arkadin

Founded in 2001, Arkadin is a leading Global Collaboration Service Provider offering a complete range of remote collaboration solutions from audio, web and video conferencing to Unified Communications. Arkadin enables all types and sizes of organizations to communicate and collaborate effectively using its user-friendly and cost-efficient solutions to increase business productivity. With a global network of 49 operating centers in 28 countries across six continents, Arkadin delivers its business solutions using a SaaS model so customers benefit from fast, scalable deployments with a high ROI. Arkadin provides added value to its 25,500 customers with dedicated, local support. www.arkadin.com

About Palmer Research

Palmer Research designs and executes custom market research studies focused on helping IT decision makers and high tech companies meet their business objectives. Founded in 2001, Palmer Research delivers the data and intelligence clients need to better understand market dynamics, customers, prospects, and partners. The company is located in Los Altos, CA. For more information, call (650) 224-7439 or go to www.palmerresearchgroup.com.

About Bashyam Anant

Bashyam Anant is a seasoned product leader and general manager. Over the past decade, he has delivered 16 market-leading consumer, business application and infrastructure software products from “thought to finish”, combining rigorous opportunity assessment, future-proof product vision and detailed specification. These products generate $150M+ in combined annual revenues. In addition to product innovation, he has driven pricing, messaging, positioning, sales enablement, marketing campaigns and strategic partnerships. In a prior management consulting career, Bashyam advised leadership teams at telecommunications equipment and services companies on business and product strategy, resulting in several multi-million dollar products and services. He holds a Ph.D. in Management from the University of California at Los Angeles and a B.Tech. in Engineering from the Indian Institute of Technology. His articles on product strategy have appeared in many academic and business publications.