An Avaya Solution for

Network Computing

March 22, 2005

a higher plane of communication

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Request for Information (RFI)
On IP Call Centers

RSVP Deadline: E-mailed or postmarked by **March 1, 2005 5 p.m. (EST)**

RFI Deadline (Avaya): Emailed or postmarked by **March 22, 2005 5 p.m. (EST)**

Publication Date: June 9, 2005

I. Introduction

Network Computing's June 9, 2005 cover package will be devoted to IP Call Centers. Why should an enterprise implement an IP call center, and what is the best path to upgrade from a call center using a traditional TDM (Time Division Multiplexing)-based PBX? The RFI is based on a fictitious enterprise in the consumer electronics industry with 250 call agents in sales and technical support.

If you would like to participate, please RSVP to the author, Michael J. DeMaria (mdemaria@nwc.com) by March 1, 2005 and return the completed RFI to Michael by March 22, 2005 (date agreed with Avaya).

Avaya Response: Acknowledge.

A. Purpose

This Request for Information is proprietary to Network Computing and CMP Media, LLC. It is drafted and disseminated for the sole purpose of generating information on call center products for publication in Network Computing on June 9, 2005. Participating vendors must meet the minimum requirements for participation described in Section B and agree that any information returned to Network Computing in response to this RFI will be published in print and electronic form on our Web site, www.networkcomputing.com.

Please note that we reserve the right to examine a test unit in our Syracuse University Lab or at a customer site for any product submitted for review.

Avaya Response: Acknowledge.

B. Instructions

The following minimum product requirements are necessary to participate in this review of Call Center applications. Please check all that apply.

☒ Product is available to customers on or after March 18, 2005 and is not in beta form

☒ Support for both TDM (circuit) and IP (packet) switched voice networks

☒ Multimedia routing for voice, e-mail, Web, and facsimile communications

☒ Call blending: support inbound and outbound calling

☒ Look-ahead routing logic (interrogate queues and estimate call-wait time)

☒ Priority queuing

☒ Queue escalation

☒ Skills-based routing

If you do not meet all of these criteria, your product does not meet the minimum qualifications for this review. Please notify Michael J. DeMaria (mdemaria@nwc.com or 315-443-5798) by March 1, 2005 that you do not meet the criteria for participation. Thank you for your consideration.

If you respond to the RFI, please note the dates in Section C to complete the RFI on time for inclusion in our June 9, 2005 issue. We suggest you read through the entire RFI before answering questions. You can reference answers to other questions in the RFI using the section and question number. Please do not reference materials outside the RFI; incorporate them into your answers. This RFI will be the only source used to review your product.

Some questions provide for Yes/No checkbox answers, while some require more detail using an essay format. **Essay-type questions include word-count limits. Any responses submitted beyond the limit may be disqualified.**

Please answer all questions--this information is the foundation on which we determine the winning bid and our Editor's Choice Award. If you do not have an answer for a question or it does not apply, please indicate that in the space allotted. If you leave a question blank, we can only assume that your product does not support the proposition or that it does not provide an answer to the question.

C. Effective Dates

RFI Issue Date:	February 25, 2005
RSVP Deadline:	March 1, 2005 by e-mail to mdemaria@nw.com by 5 p.m. (EST),
RFI Deadline (Avaya):	March 22, 2005 postmarked or emailed by 5 p.m. (EST)
Publication Date:	June 9, 2005

Avaya Response: Acknowledge.

II. Business Overview

Kodiak Corporation is a global manufacturer of thermal management solutions for computers. It produces fans, heat sinks, and temperature sensors for PC manufacturers worldwide. It also produces CoolIT, a line of water-cooled workstations and mid-range computers. Kodiak aims to put its thermal technology in every PC on the planet and expand the CoolIT line from its niche market in computer gaming and engineering to enterprise desktops and data centers.

Customers contact Kodiak today using phone, fax, e-mail, and the Web. Each of these methods is independent of the others. The Kodiak Board of Directors has identified this as a problem and a road block to global domination in thermal management. It aims to resolve the problem by establishing an IP Call Center capable of routing multimedia (voice, e-mail, fax, and Web) communications to the call center over IP. However, it is not ready to forklift out its current phone system for a VoIP system and thus lose its investment in its legacy TDM (Time Division Multiplexing)-based PBX.

Kodiak's manufacturing, testing, and support facilities are located in Death Valley, California. Customer sales and service outlets are in Los Angeles and San Francisco. Presently, calls come into both the Los Angeles and San Francisco offices and get routed to sales and service specialists in those facilities. All support calls are blind forwards to Death Valley.

PSTN trunks with ANI (Automatic Number Identification) services connect to TDM-based PBXes in Los Angeles and San Francisco. The PBXes are connected via ISDN lines. Automatic Call Distributors (ACDs) and Integrated Voice Response (IVR) systems in both locations provide front-end voice processing and switching as well as a self-service customer response system. In addition, the redundant systems act as a hot back-up in case one fails.

Calls are routed based on the menu selection for the particular service desired or employee extension and the calling number. A local number receives a lower priority than a long-distance number to reduce the calling party's cost of inquiry.

Kodiak's current system employs call-back messaging. This enables customers to register their number with the system to receive a call back if the wait-time is extensive. For the call back, Kodiak uses call blending to serve both incoming and outgoing agent calls through a predictive dialer. The system monitors the status of incoming calls and the availability of agents and allows outgoing calls only when it determines that an agent is free and that an outbound call will not adversely affect incoming calls.

Support calls are routed from Los Angeles and San Francisco to Death Valley back over the PSTN. Over the past year, the Death Valley office has piloted a number of VoIP initiatives to take advantage of data trunks (T-1) running between each of the offices. But no decision has been made at this time. A detailed RFP for a VoIP system in Death Valley is in progress and implementation is projected for Q4 2005. But Kodiak has no information on the projected implementation in this RFI.

Each of the call centers in Los Angeles and San Francisco support approximately 100 agents (total = 200). During peak sales periods (November-December), Kodiak adds 50 seasonal agents to each location (total = 300). This is a heavy burden on the physical plant but necessary to handle seasonal call volume. Kodiak would look forward to setting up agents outside of the enterprise in home offices or scope out a partner to outsource seasonal contact center agents (segue to an outsource sidebar).

Avaya Response: Acknowledge.

III. Kodiak Business Essentials

A. Employees: 1,500

B. Call agents, regular, FTE (Full-Time Equivalent) employees: 200

C. Call agents, irregular, seasonal employees: 100

D. Number of agents working remotely: 0 now, but desire 100 post implementation.

Existing network infrastructure: The data network at each site sports a Gigabit backbone with 100 Mbps connections to desktops. IEEE 802.3af (Power over Ethernet) is available on desktops and QoS strategies include IEEE 802p/q (Managed Objects) and support for either DiffServ (Differentiated Services) or ToS (Type of Service). All corporate data are contained in Active Directory, file stores, and MS-SQL and Exchange databases that are replicated across each site. Web and e-commerce sites are centralized in San Francisco. Fax servers are located in all three locations. With these facts, assume that the network is more than adequate to support VoIP applications.

Avaya Response: Acknowledge.

IV. Kodiak Goals

A. Improve call center operations

B. Provide excellent customer service

C. Reduce telecommunication costs

Avaya Response: Acknowledge.

V. Kodiak Business Objectives

A. Invest in a new call center platform that integrates with the current (legacy) platform, enabling Kodiak to maintain its investment in a TDM-based system while providing a smooth migration path to a VoIP infrastructure.

B. Use multimedia routing to send all inquiries to call center agents, whether they come in by voice, fax, e-mail, or Web,.

C. Decrease costs by supporting voice and data on a single network

D. Eliminate toll charges between sites

E. Reduce infrastructure costs by enabling agents to work remotely

Avaya Response: Acknowledge.

VI. Review Criteria

The proposed solutions will be graded on the following criteria:

A. General Architecture

1. Provide a diagram of major hardware and software components and how they are interrelated and interconnected.

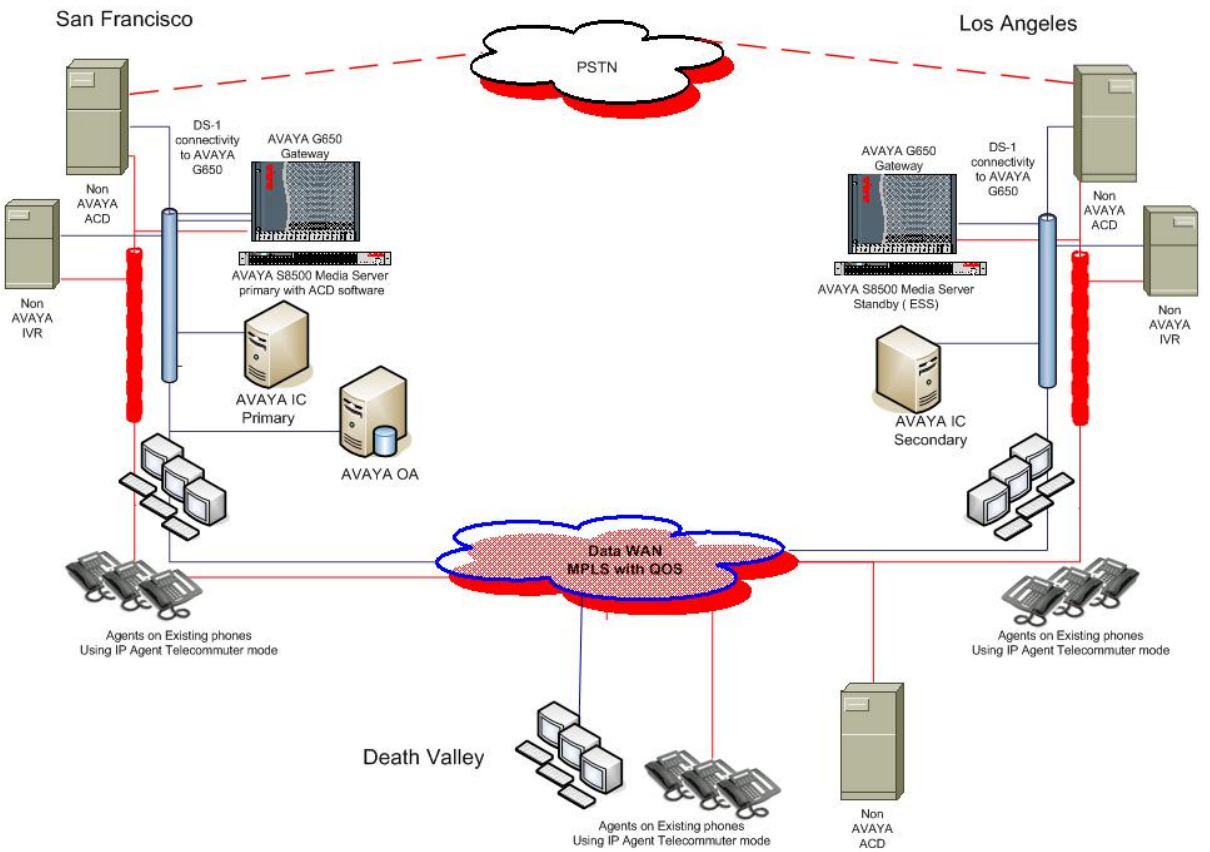


Figure 1 – Proposed Architecture

Avaya Response:

For Kodiak's implementation Avaya's architecture is centered on Avaya Interaction Center, a highly distributed enterprise contact center framework that integrates communication channels, including phone, web and email, provides advanced routing options, supports multiple telephony platforms, and with the companion Avaya Operational Analyst, includes end-to-end multi-channel reporting and analytics. We are also recommending that Kodiak deploy an IP Telephony infrastructure that will consolidate all agents, including telecommuters, into a single virtual contact center, allowing the right resources to be efficiently used to support the right customer interactions, regardless of location. The recommended IP Telephony infrastructure includes Avaya Communication Manager software and

(co-resident) Avaya Call Center "IP-ACD" software, running on an Avaya S8500 Media Server, and using Avaya G650 Media Gateways for connectivity to PSTN and the existing TDM telephony systems. The architecture proposed as seen in Figure 1 is capable of supporting the entire Kodiak enterprise and associate end-points with a single Avaya S8500 Media Server and Avaya Interaction Center system (based, say, in San Francisco), however for redundancy purposes we are recommending server and gateway duplication (in Los Angeles). This approach provides a cost conscious redundant solution, but with a single managed overall system, with integrated administration and enterprise wide reporting.

This architecture enables Kodiak to evolve gradually to IP Telephony, allowing agents to continue using their existing phones connected to the existing TDM PBX system, if desired by Kodiak,. Calls are controlled on the desktop screen through Interaction Center (and an IP softphone – Avaya IP Agent), but the voice path is connected through to the existing PBX. As new agents are added, or old systems are consolidated, Kodiak can go on to deploy IP hard-phones that connect over the IP network directly to the Avaya infrastructure (without changing the infrastructure, which is fully IP-ready), and this can be done incrementally with the single contact center software environment managing agents across any mix of old TDM and new IP endpoints. Telecommuter agents are added to the same system, again using the IP Agent softphone that also allows either direct VoIP to the agent's PC, or alternatively (selected per session) by having the voice separately travel over the PSTN to the agents traditional home phone. This latter option supports lower bandwidth or QoS-difficult home environments, and provides call resiliency in the event that PCs or home networks fail. This telecommuter option is further described in section F below. The point to be made here is that telecommuter/home/remote agent support is a fully integrated part of the proposed architecture

2. Provide the business case for your solution based on Kodiak's goals, objectives, and business environment. You are free to include a competitive analysis. Please limit your answer to 500 words or fewer.

Avaya Response:

Avaya's approach to solution building is to adhere to the customer's overall requirements, while following these axiomatic principals:

- Redundancy/Resiliency
- Security
- Adaptability/Interoperability
- System Self-healing
- Multi-media contact center supporting remote workers

It is this approach that has enabled Avaya to be recognized as a trusted world leader in enterprise communications and services. Through our applications, systems and services we have achieved worldwide #1 position for IP-telephony, multimedia-contact centers, voice messaging, unified communication, and #1 in PBX maintenance services in the US.

The business needs we have met in the RFI include the need for multi-skilled, multi-channeled agents in each of the contact centers. While preserving the original investment in the TDM-based PBX architecture, Kodiak will be able to gain efficiencies from VoIP Telephony and effectiveness from the Avaya branded contact center portfolio. As an added bonus, we have incorporated potential savings from the use of VoIP for the Death Valley location and the seasonal employees, with the use of Avaya IP Agent. We can substantiate these savings and costs in the form of a Return on Investment

Analysis which is available for your review. Excerpts of this analysis will appear periodically throughout the RFI response.

The contact center will be poised for growth as Kodiak continues to expand into new markets. Productivity savings in the Contact Center will be available for this growth or for redeployment depending on Kodiak's needs (see Figure 2 below).

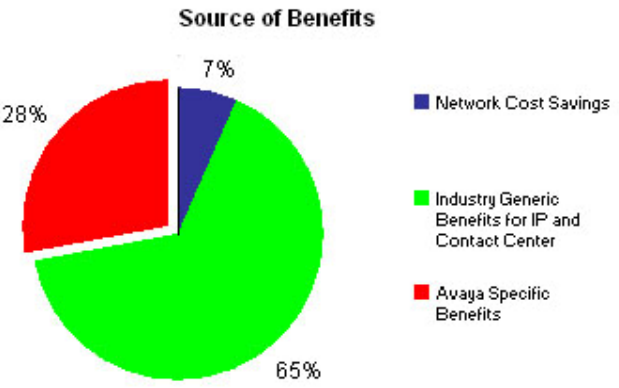
Evaluation of Overall Potential Staff Savings versus the "Do Nothing" Scenario

Loaded Salary, Per Supervisor	$ 79,400	$ 82,179	$ 85,055	$ 88,032	$ 91,113	$ 94,302
Loaded Salary, Per Agent	$ 50,340	$ 52,102	$ 53,925	$ 55,813	$ 57,766	$ 59,788
Hiring & Training Cost		$ 19,500	$ 19,500	$ 19,500	$ 19,500	$ 19,500
DO NOTHING Scenario	TODAY	Year 1	Year 2	Year 3	Year 4	Year 5
Required Agents	**233**	**252**	**272**	**294**	**317**	**343**
Loaded Agent Salary	$ 11,745,819	$ 13,129,477	$ 14,676,129	$ 16,404,977	$ 18,337,484	$ 20,497,639
Agent Hiring & Training		$ 363,995	$ 393,114	$ 424,564	$ 458,529	$ 495,211
Supervisors added (over baseline of 17)		**2**	**1**	**2**	**1**	**2**
Additional Supervisory Loaded Salary		$ 164,358	$ 255,166	$ 440,161	$ 455,567	$ 754,418
Additional Supervisor Hiring		$ 39,000	$ 19,500	$ 39,000	$ 19,500	$ 39,000
	$ 11,745,819	$ 13,696,832	$ 15,343,911	$ 17,308,704	$ 19,271,080	$ 21,786,271
REDEPLOY AGENTS Scenario	**TODAY**	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**
Required Agents, with virtualization of ACD	**199**	**215**	**232**	**251**	**271**	**292**
Loaded Agent Salary	$ 10,016,446	$ 11,196,383	$ 12,515,317	$ 13,989,622	$ 15,637,599	$ 17,479,708
Agent Hiring & Training		$ 310,403	$ 335,235	$ 362,054	$ 391,018	$ 422,299
Supervisors added (over baseline of 17)		**0**	**0**	**1**	**2**	**1**
Additional Supervisory Loaded Salary				$ 88,032	$ 273,340	$ 377,209
Additional Supervisor Hiring				$ 19,500	$ 39,000	$ 19,500
Total Costs	$ 10,016,446	$ 11,506,786	$ 12,850,552	$ 14,459,208	$ 16,340,957	$ 18,298,717
Savings over DO NOTHING Scenario	**$ 1,729,373**	**$ 2,190,046**	**$ 2,493,358**	**$ 2,849,496**	**$ 2,930,123**	**$ 3,487,554**
RETAIN AGENTS, DELAY HIRING Scenario	**TODAY**	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**
Required Agents, with virtualization of ACD	**233**	**233**	**233**	**251**	**271**	**292**
Loaded Agent Salary	$ 11,745,819	$ 12,156,923	$ 12,582,415	$ 13,989,622	$ 15,637,599	$ 17,479,708
Agent Hiring & Training		$ -	$ -	$ 337,790	$ 391,018	$ 422,299
Supervisors added (over baseline of 17)		**0**	**0**	**1**	**2**	**1**
Additional Supervisory Loaded Salary			$ -	$ 88,032	$ 273,340	$ 377,209
Additional Supervisor Hiring			$ -	$ 19,500	$ 39,000	$ 19,500
Total Costs	$ 11,745,819	$ 12,156,923	$ 12,582,415	$ 14,434,945	$ 16,340,959	$ 18,298,718
Savings over DO NOTHING Scenario	**$ -**	**$ 1,539,909**	**$ 2,761,495**	**$ 2,873,759**	**$ 2,930,121**	**$ 3,487,553**

Figure 2: Contact Center Savings by Year for the Reduce or Redeploy Staffing and Retain Agents, Delay Hiring Scenarios Versus the DO NOTHING Scenario for the Contact Center.

Avaya's leadership in contact center applications will provide significant savings exclusive to the Avaya solution, and will provide noteworthy benefit to Kodiak as it increases its presence in the market place and strives for excellence in customer service. With patented technologies in the areas of Advocate routing and IP softphone, home agent capabilities, agent blending, with customer history presented to the agent detailing previous customer interactions, and with technologies inherent in our switching fabric including Meet Me Conferencing and Extension to Cellular capabilities, Avaya can claim these benefits.

In addition to savings in the contact center, the proposed solution provides network and telephony savings, some exclusive to Avaya as well.



Required Rate of Return	20.00%

	Annual Benefits Years 1-5
Grand Total Network Cost Savings	$ 147,000
General Benefits of IP and Contact Center Systems	$ 1,414,620
TOTAL Avaya Specific Benefits	$ 611,094
GRAND TOTAL Annual Benefits	$ 2,172,714

Figure 3: Benefits of the Solution

B. Routing

(business rules used to process and prioritize call center transactions)

1. Describe the business rules available to Kodiak to route multimedia messages to contact center agents. Limit your answer to 500 words.

Avaya Response:

Avaya Interaction Center (IC) accepts contacts from customers arriving on a variety of channels and delivers them to agents in an "optimal" way based on business rules defined via the Avaya Interaction Center Workflow Designer (see section B4). Avaya's "blended media" system supports multiple media contact channels, the agent's ability to handle multi-media contacts (web chatting simultaneous

with a telephone call), and the agent's ability to handle multiple simultaneous contacts when practical (like taking a phone contact while working on email).

Routing rules run for every contact, and identify the customer, determine their intention, assess their business value, and select the treatment that we want to provide to the customer. The first stage of routing for a newly arrived contact occurs within the individual media connector. The connector identifies the caller or intent using techniques like ANI for voice calls, caller-entered digits in an IVR, web user cookie, or the "From" or "Subject" fields in an e-mail header. Avaya Interaction Center then augments the connector's native capabilities to route the contact to a logical agent group, based on business rules that consider factors such as the caller's business value, last agent served the caller, agent skills, site specific information, amount of wait time we will allow, time of day or range of days, IVR exit points, ACD or IVR collected digits, queue load and caller contact history. Avaya Interaction Center is operating across all media types, so this initial routing decision can use the entire caller contact history. This allows the system to make complex decisions like "this voice contact caller sent us an e-mail last week about a problem with his product, so we should route this call to the group that handles problems with these workstations." The result of the routing rules is to select a queue in one of the Interaction Center channel connectors, where the contact will be queued and delivered by the connector as agents become available.

The Business Advocate feature of Avaya Interaction Center enables one to program into the workflow routing rules, based on Kodiak's service level objectives for each category of interaction. Once these rules are established, Advocate then uses patented predictive algorithms to make real-time routing decisions that meet service objectives for all customer segments.

For example, Advocate can predict at the moment a call arrives, that the service level objective for that contact cannot be met with the current pool of agents. Advocate will immediately bring into the agent queue a reserve pool of agents. This patented proactive approach to routing can identify and respond to potential business-affecting events before customers are impacted. This approach is differentiated from other technologies that queue work items to a pool of agents for a pre-defined period of time. If no agent becomes available, the Avaya system will automatically bring in an additional pool of agents to handle the load based on pre-defined service objectives.

2. Are there any differences between routing customer contacts over e-mail, fax, telephone, and the Web? In other words, do business rules (routing) apply to all multimedia contacts equally? If yes, please explain in 300 words or fewer.

Avaya Response:

There are no differences between routing customer contacts from different media channels. The Avaya Interaction Center system is capable of managing and distributing contacts across all channels including telephony (CTI, IVR), Web (chat, collaboration, self-service, personalization), e-mail, fax and other channels while integrating Siebel and other third-party enterprise applications (client-server and legacy). Avaya Interaction Center provides a single media independent workflow engine that allows each customer interaction to be individually routed and personalized based on business rules and prior customer information. A customer interaction can be managed and routed based upon various criteria including the communication channel, the customer, or the purpose of that specific customer interaction. As a result, customers can receive the same level of service across multiple communication channels, and companies can leverage the attributes of each communication channel to deliver more targeted and effective customer service. The mechanics for developing common routing strategies across all media channels is managed by the Avaya Interaction Center Workflow Designer, a capability explained in section B4.

3. Can Kodiak share the same business rules across all sites?

Avaya Response:

Yes. All business rules are defined via the Avaya Interaction Center Workflow Designer a common media independent tool capable of defining, managing and storing the business rules in a centrally managed metafile that is automatically provided to multiple Avaya Interaction Center server instances deployed across multiple sites. (See section B4 for more details.)

4. Describe the difficulty and the tools necessary to make routing changes on a production system. Use 300 words or fewer.

Avaya Response:

Avaya Interaction Center is customized with the Interaction Center Workflow Designer an intuitive, GUI-based environment (see figure below) for defining multi-channel routing and workflow scenarios. Workflow Designer works across the entire Avaya Interaction Center product suite, simplifying system administration while permitting easy management of processes and workflow requirements across all communications media.

The Workflow Designer is equipped with a set of routing templates and associated building blocks expressing concentrated routing logic based on common contact center requirements. Blocks can be interconnected via simple drag and drop functions, manipulated via a set of exposed parameters or entirely modified by exposing the underlining low level code for advanced programming (for example, Kodiak might have a remote thermal monitoring capability for it's customers, and this thermal data could be accessed through APIs and turned into a Workflow block that is used in higher level customer routing decisions). A collection of blocks defining a specific workflow or routing scenario can be compiled into a metafile and consequently committed within the Avaya Interaction Center database. Since a number of Avaya Interaction systems can be integrally interconnected across Kodiak's enterprise via the underlining distributed network, multiple Interaction Center systems can access the same common routing strategies.

The Workflow Designer allows for building, simulating and testing routing or workflow scenarios or specific custom block behavior, before committing the final version. Workflows are organized via a file tree structure providing the administrator or developer the means to manage routing scripts based on organizational and operational needs.

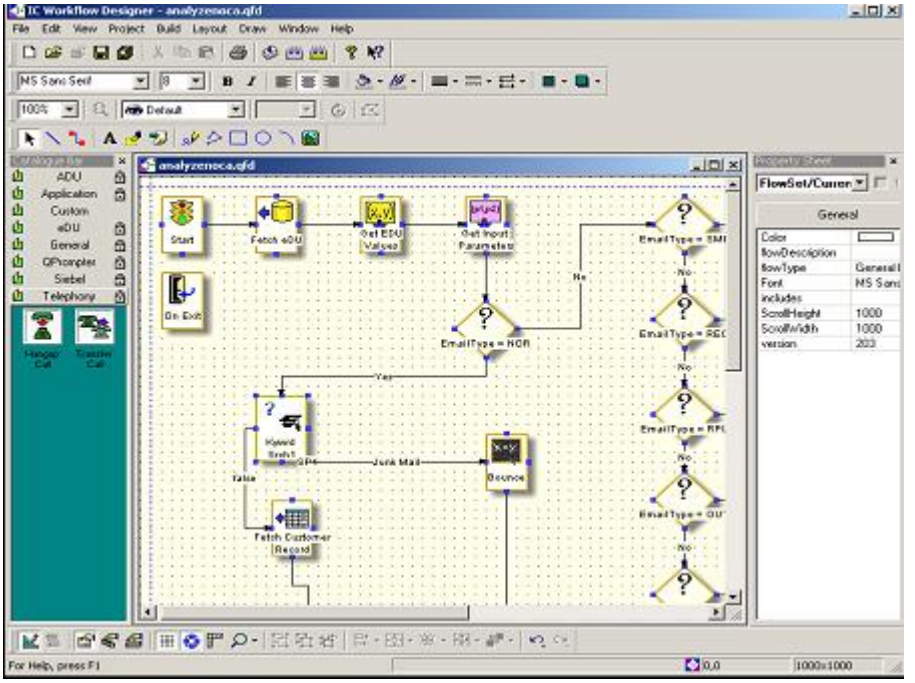


Figure 4: Avaya Interaction Center Workflow Designer

The Avaya Interaction Center Workflow Designer is a flexible and powerful environment for translating business and operational requirements into technical routing and workflow logic efficiently without the need for low level programming, while also providing open access to achieve complex integrations.

5. Are carrier-based pre-call routing options necessary to implement your solution? If so, please detail the routing required by carriers and which carriers are certified for your product. Limit your answer to 250 words.

Avaya Response:

The single IP Contact Center proposed in this solution consolidates the two contact centers into one virtual center while still providing the necessary server and gateway redundancy for reliability. With this approach, Avaya has eliminated the need for a carrier pre-route solution and all of the high per-minute and per-"dip" costs associated with these network services. This will represent a considerable operational cost saving if Kodiak is currently using such services.

By providing "Alternate Route Pattern" information to the carrier and coupling it to our solution which has multiple gateways with potential alternate PSTN connections in different cities, Kodiak would have a system which is made further redundant and reliable for this mission-critical contact center application.

6. When real-time response is indicted by voice and Web contacts, describe the system's ability to inform customers of their positions in the queue and the time remaining before a response? Limit your answer to 250 words.

Avaya Response:

An Avaya solution has the ability to pass its patented "Expected Wait Time" (EWT) to an enabled IVR to be used in announcements spoken to a customer. Although many times this announcement is made when a call first enters queue, the solution is flexible to allow for it to be updated many times during the wait period. Additional flexibility exists to allow coordination to the Callback management portion of the configuration. For example, if the wait time is "excessive" by Kodiak's standards, then callers can hear an option to leave a message for callback at a later time. If the wait time is within a certain appropriate amount, the callback option may not be offered. A variety of announcements are possible, from ones selected according to the wait time to others that tell the caller what wait time to expect. In addition the solution is capable of informing the EWT to customers accessing Kodiak's environment via "soft channels" such as Web and Email. The mechanics of this capability is based on Avaya Interaction Center's recording and maintenance of all communication channels resource based information including EWT for each queue. This then allows a Web solution builder to inform customers arriving on the Web channel what is the EWT is on other channels as well.

C. Queuing

(prioritization of routed contacts)

1. Can the system check the status of a queue prior to routing? Y/N

Avaya Response: Yes.

3. Can the system reroute contacts for changed circumstances, such as queue availability? Y/N

Avaya Response: Yes.

4. Can agents be interrupted from a current task to handle high-priority contacts? Y/N

Avaya Response: Yes. Interaction Center is also very flexible in allowing agents to handle multiple interactions across channels, and have new events, such as a phone call, interrupt activities that can be suspended, such as email handling. In addition, our underlying Advocate predictive routing provides excellent response to high-priority contacts, ensuring that the best agent is applied to them, while also maintaining service levels across all other interactions (simpler schemes will often allow high priority activity to swamp lower-priority of work so that it does not get done and causes customer satisfaction problems).

5. Can contacts select an IVR self-service module and return to their place in the queue to talk with a Kodiak customer service, sales, or support agent? Y/N

Avaya Response: Yes.

D. Enterprise Integration

1. List the TDM-based PBX switches you support by vendor and model.

Avaya Response:

Please refer to the response provided in D3

2. List the IP PBX switches you support by vendor and model.

Avaya Response:

Please refer to the response provided in D3.

3. List the ACD (Automatic Call Distribution) systems supported by vendor and model.

Avaya Response:

We are providing the list of supported PBX and ACD telephony environments in one place here, since while older systems are likely to be TDM, newer systems can typically become IP enabled and support mixes of TDM or IP, or evolve (as in Avaya's solution) to become completely IP-based.

Telephony and ACD Software	**Telephony Hardware**
Avaya Communication Manager 1.X, 2.X	Avaya Media Servers S8300, S8500, S8700, S8710, DEFINITY Server SI, CSI
Avaya DEFINITY call processing (now old, but may be currently in place at Kodiak)	Avaya DEFINITY G3r, G3si, Prologix (old systems)
Aspect 8.3 with Contact Server V4	Aspect Call Center
Nortel Symposium Server 4.2	Nortel Meridien and certain Succession systems
Nortel Meridian X11 Release 24	Nortel Meriden

4. List the IVR (Integrated Voice Response) systems supported by vendor and model.

Avaya Response:

Interaction Center 6.0 Platforms	
IVRs	Avaya Conversant® V8, V9 Avaya Interactive Response 1.X Edify 8.0 Periphonics IBM WebSphere Voice Response [1] InterVoice [2]

[1] IBM Websphere Voice Response integration to IC are provided directly by the IVR manufacturer. Customers should contact their IVR vendor to verify supported releases and obtain the IC connector software

[2] InterVoice integration to IC are provided directly by the IVR manufacturer. Customers should contact their IVR vendor to verify supported releases and obtain the IC connector software

5. If you supply your own IP PBX, what features are supported? Check all that apply.

We are recommending the adoption of an Avaya IP Telephony infrastructure that includes both IP-PBX and IP-ACD capabilities, and which as described previously can be deployed in evolutionary steps against an existing TDM infrastructure.

☒Authorization codes

☒Automatic callback

☒Add-on conference

☒Call waiting

☒Paging

☒Hoteling

☒Automatic camp-on

☒Automatic alternate routing

☒Trunk callback queuing

☒Uniform dial plan

☒Night service

☒E911 Support

☒Class of service

☒Class of restriction

☒Intercom groups

☒Group paging

☒Directed call pickup

☒Group call pickup

☒Distinctive ring

6. List the VoIP gateways that you support by vendor and model. Include the signaling protocol supported with each model (e.g., H.323, SIP).

Avaya Response:

The Avaya S8500 Media Server will support the following gateway types:

- Avaya G650 Media Gateway
- Avaya G700 Media Gateway
- Avaya G350 Media Gateway
- (Within 2005 Avaya will also release further low-end G150 and G250 Media Gateways)

The following older Avaya Gateways are also supported in migration installations (typically where these are currently deployed as part of existing TDM systems):

- Avaya G600 Media Gateway
- Avaya CMC1 Media Gateway

- Avaya MCC1 Media Gateway
- Avaya SCC1 Media Gateway

Avaya Gateways support H.323 endpoints and trunks. The H.248 Media Gateway Control Protocol (MGCP) standard is supported between the Avaya Media Servers and the G700 and G350 Media Gateways. The other Gateways listed support H.323 signaling between the Media Servers and the Media Gateways.

All gateways in the Avaya solution also support the Advanced Encryption Standard (AES) to encrypt IP calls from the point of entry into the Ethernet network. Avaya has openly embraced the National Institute of Standards and Technology (NIST) FIPS 197 Advanced Encryption Algorithm (AES). The Avaya implementation of the NIST FIPS 197 Advanced Encryption Algorithm (AES) uses a 128bit encryption key.

Various components of the proposed solution also support the following standards:

Standard	Current Support (Yes/No)
G.711	Y
G.723	Y Used in Avaya IP Softphones
G.729	Y
G.729a	Y
H.323 V2	Y
T.120	Y (intra-port network)
Q.931	Y
802.1p	Y
802.1q	Y
802.3	Y
SNMP	Y
FAX - Group 3	Y
T.38	Y
IP Precedence	Y
Differentiated Services	Y
RSVP	Y
RTP	Y
RTCP	Y
MGCP H.248	Y

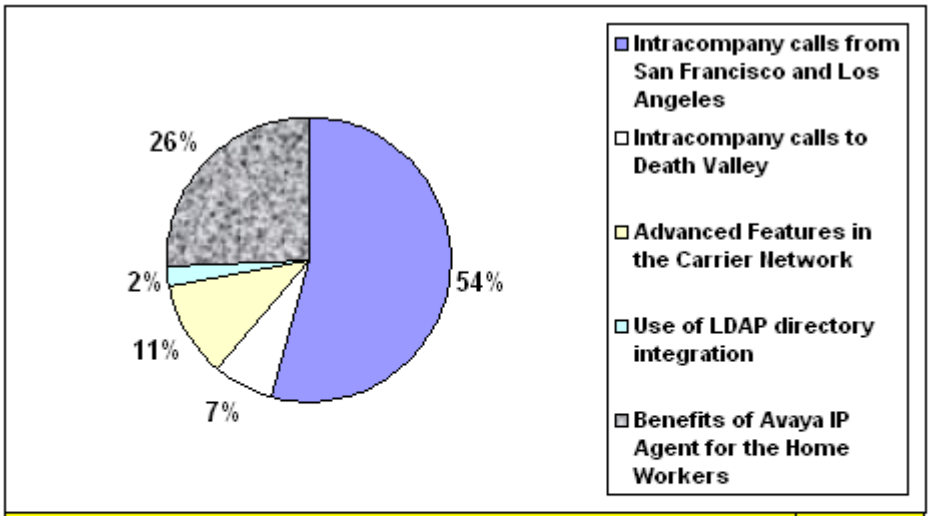
Standard	Current Support (Yes/No)
H.225	Y
H.245	Y
TCP/IP	Y
UDP/IP	Y
DHCP	Y

7. If you manufacture and sell your own VoIP gateway, provide the business case for it in light of Kodiak's goals and objectives in 300 words or fewer.

Avaya Response:

Avaya VoIP gateways are used as part of the solution for Kodiak. They are necessary to provide for the use of the TDM-PBX infrastructure currently in place at Kodiak while taking advantage of the benefits that IP Telephony provides. Avaya's gateway approach will also allow Kodiak to expand those benefits to the employees in the Death Valley location. Technical experts in Death Valley, for example, can become an extension of the contact center operations in San Francisco and Los Angeles with call/contact routing adapted to use Death Valley experts in various ways to increase customer service excellence. Kodiak's business requires seasonal employees. Avaya's solution will allow for Kodiak to recruit employees to work from home, thereby realizing cost savings from a brick and mortar perspective and increasing the talent population from which Kodiak can hire, while using, measuring and managing them as if they were co-located with full time agents.

Upon performing a Return on Investment analysis (ROI), we can anticipate financial benefits in this area as well. Based on industry trends and customers with similar configurations, Kodiak will be able to realize monetary savings in the following areas as they relate to Avaya IP Telephony and VoIP Gateways. Please refer to the figure (5) below for specifics.



Intracompany calls from San Francisco and Los Angeles	$180,000
Intracompany calls to Death Valley	$24,000
Advanced Features in the Carrier Network	$36,000
Use of LDAP directory integration	$6,700
Benefits of Avaya IP Agent for the Home Workers	$86,400

Figure 5: IP Telephony and VoIP Savings

8. Does your solution certify or support integration with major messaging and/or collaboration packages? If yes, please select all the packages that apply.

☐ No (answer question 10)

☒ Yes, the following packages are supported:

☒ IBM Domino/Notes

☒ MS-Exchange/Outlook

☐ Novell Groupwise

☐ Other (Please specify)

9 If you answered "No" to Question 8, what options are available to integrate an enterprise messaging and/or collaboration tool with the contact center? Limit your answer to 300 words.

Avaya Response: N/A.

10. Does your solution certify or support integration with fax server packages? If so, please select all the packages that apply.

☐ No (answer question 11)

☒ Yes, the following packages are supported:

☒ Biscom

☒ Captaris RightFax

☐ Castelle

☐ CopiaFacts International

☐ Esker Fax

☐ Faxback

☐ Faxcore

☐ GFI Fax

☐ Interstar

☒ Omtool

☐ Softlinx

☐ Other (Please specify)

Avaya fully supports outgoing fax and with custom integration can be integrated with incoming fax receipt. Agents can select a "fax" option in the Avaya client when any document is presented, including text and formatted documents such as MS Word documents. The Avaya Alert can also fax documents as part of notification and escalation processes. The Avaya Interaction Center Script API allows specialized faxing to be automated through business rules. Clients can be configured to fax directly, by invoking a local MAPI interface, or centrally through the Avaya Alert, which allows for a single point of configuration and control. Avaya Alert can be run under UNIX, where a shell script is easily configured to support UNIX based fax tools, or under Windows NT, where MAPI is used to connect in a standard way with fax servers. Avaya fully tests and supports leading fax server vendors such as RightFax, Omtool and Biscom.

Management of incoming faxes would most likely be integrated using a separate fax capture and image management system, with the arrival of a fax generating a customer interaction record that has a reference back to the fax image, which would typically be stored by the image management system. The customer interaction record would be routed and managed according to Avaya's standard processes. And an agent reviewing or handling the interaction would have the option of displaying the attached fax, which would invoke (through OLE) the appropriate fax viewer. Other integration options, including direct image storage in the Avaya application database and use of ActiveX components for tighter integration, can be discussed with Avaya.

11. If you answered "No" to question 10, what options are available to integrate an enterprise fax service with the contact center. Limit your answer to 300 words.

Avaya Response: N/A.

12. Does your solution certify or support integration with Web servers? If so, please select all the servers that apply.

☐ No

☒ Yes. The following servers are supported:

☐ Apache

☒ MS-Internet Information Services

☒ Sun Java Enterprise System

☐ Zeus

☐ Other (Please specify)

13. If you answered "No" to question 12, what options are available to integrate Web serves with the contact center? Limit your answer to 300 words.

Avaya Response: N/A.

14. Is there a separate code base and/or point of administration for the support of outbound calls to satisfy the "blended calling" requirement? Or is it fully integrated with the system?

Avaya Response:

For high volume predictive outbound dialing the Avaya Interaction Center System leverages the Avaya Predictive Dialing System (PDS) – an industry acclaimed predictive dialer – deployed with integrated functions at the Avaya Interaction Center desktop level. The Avaya PDS system is currently maintained separately both from an administration and code base point of view, as the Avaya PDS system can be deployed as a stand alone option as well. Avaya is currently moving towards providing a common administration environment.

15. What operating system software is supported? Check all that apply.

☒ Linux

☒ MS-Windows

☒ UNIX (includes Sun Solaris and IBM AIX)

☐ Other (Please specify)

16. What relational (or other) database is supported? Check all that apply.

☒ IBM DB2

☒ MS-Access (for data access, but not as primary IC database)

☒ MS-SQL

☐ MySQL

☒ Oracle

☐ Postgres

☒ Other (Please specify)

Mainframe Legacy back-end integration:

Avaya Interaction Center gains access to databases by connecting to Avaya data services. Avaya Interaction Center provides a different data service for each RDBMS database supported. In addition Avaya Interaction Center provides support for non ODBC compliant databases such as legacy mainframe back-end systems via a legacy data service that typically maps SQL statements to a Customer Information Control System (CICS) transaction and on the translates the result back to a set SQL statement for further processing by the Avaya Interaction Center system.

17. Is the database included with the call center or does the customer supply it? Check the appropriate response.

☐ Included in the call center application

☒ Supplied by the customer

18. Do you have connectors or established integration paths for back-end systems? Please check all that apply?

☐ Epiphany

☒ Oracle and Peoplesoft

☒ SAP

☒ Other (Please specify)

Avaya Interaction Center supports ODBC for access to all integrated databases, plus native support for SQL Server, Oracle, and DB2, as well access to IBM legacy systems, and XML access to web-based systems. Through the use of the Avaya Data Services layer, that optimizes the requests to and from multiple databases, Avaya is able to insulate Avaya Interaction Center processes from having to be coded and developed for each database vendor.

19. What tools are used to administer the system? Check all that apply.

☒ CLI (Command Line Interface)

☐ GUI (Graphical User Interface) 32-bit binary application

☐ GUI 64-bit binary application

☒ Web-based administration

☒ Other. (Please specify)

The Avaya Interaction Center Management console, used to configure and administer the whole system, is a Java application deployed as a desktop application for administrators. It has client/server access to all the necessary back-end distributed services and databases.

20. Do you supply a developer's tool kit with the call center?

☐ No

☐ Yes, gratis

☒ Yes, at cost of: Avaya Interaction Center supplies a comprehensive toolkit that accelerates the development process via Integrated Development Environments (IDE's) in the areas of Desktop Application, Database Integration and Workflow Development. The Developer's licensing fee associated is $45,000 and is included within the pricing provided.

E. Computer Telephony Integration (CTI)

1. Describe the call center's integration with voice and data to attach data to call events. Limit your answer to 300 words.

Avaya Response:

Avaya Interaction Center is equipped with a unique and powerful real-time data management system that is very efficient and versatile in both centralized and de-centralized installations. Essentially all transient data and data pertinent to a contact (such as DNIS, account name, IVR exit points, email address/body, time in queue, agent specific information, web transcripts) is stored or referenced in a real-time data object (called EDU or Enterprise Data Unit) or that is shared with all programs and agents involved with the interaction. Every contact is associated with a unique EDU_ID independent of the channel the session is executed. The EDU does not have a fixed size and can track any type of information predefined within the EDU dictionary. Multiple parties (agents or third party systems) can record information into the EDU – a fundamental property when conferencing, transferring or collecting information from many sources. The EDU effectively is a virtual file folder and retired within the Avaya repository upon termination of the session it tracks, and is archived in the Avaya Interaction Center repository. Consequently the EDU collection can be used for real time, historical reporting and trend analysis via the Avaya OA reporting system. The EDU as a data tracking and transport vehicle is differentiated from other vendors' solutions that use a database for data to voice associations, introducing inefficiencies and performance penalties under heavy volumes. With Avaya Interaction Center, the only time an EDU is in contact with a database is when the session is terminated and consequently the EDU is retired, at which time there is no performance penalty incurred by the session itself. This unique approach in data collection and management is proven to be very effective in virtual multi site, multi-channel contact centers.

2. Describe how the call center application integrates with agent desktops for efficient customer account management. For example, does the CTI component have application programming interfaces (APIs) to applications, or will custom development be necessary? Limit your answer to 300 words and include a graphic of the desktop if applicable.

Avaya Response:

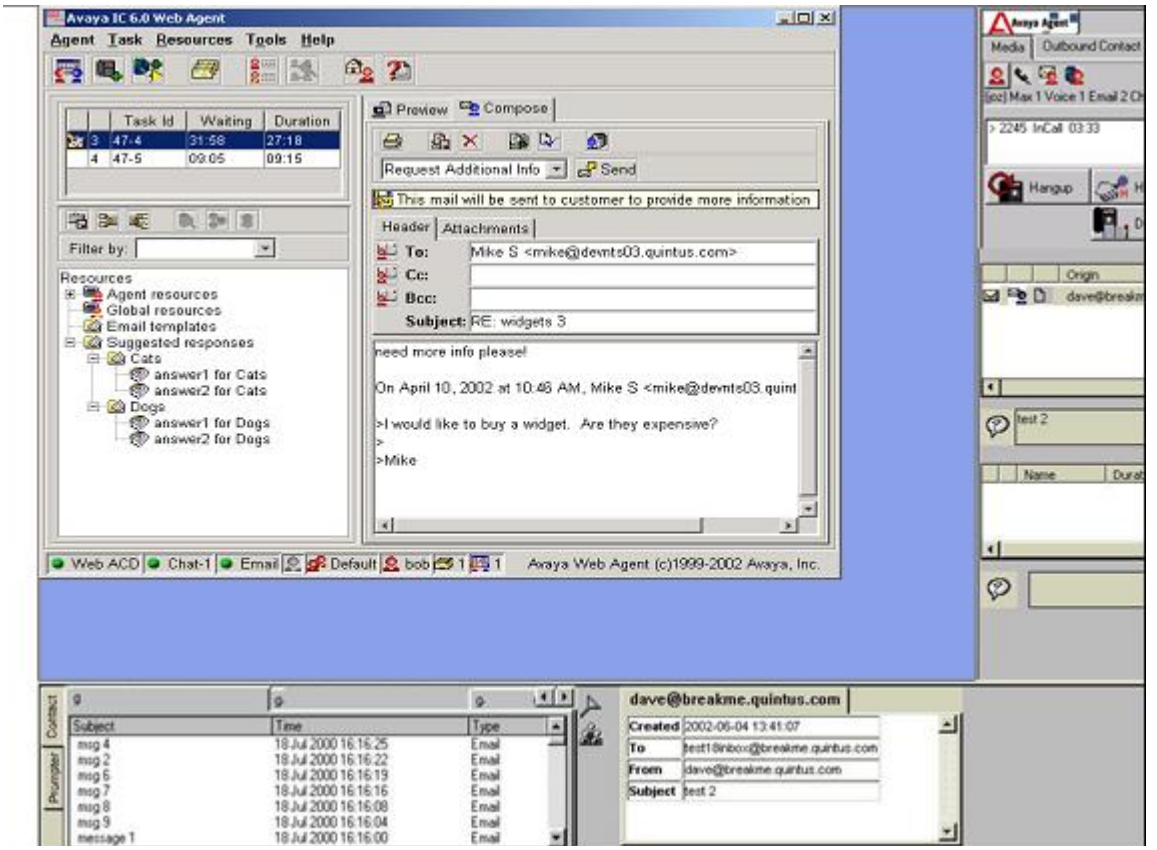


Figure 6: Avaya Interaction Center Agent Desktop

A strength and differentiator delivered by Avaya Interaction Center is the associated agent desktop application (see Figure (6) above). The application is functionally rich and capable of handling all channels with one interface without launching multiple instances. Both thick client and thin client deployment options are available. The application is enabled with contact history across all media channels, an EDU viewer for delivering session related information (such as IVR exit points, customer information), task windows for each medium, comprehensive web and email functions and tools as well as the capability to launch third party applications.

This capability is managed and configured via underlying functions and associated APIs exposed to the applicator for instantiating a third party application and establishing a bi-directional communication. Information can be both delivered to and extracted from the third party applications and can be recorded in the EDU, making the data available to the Avaya Interaction Center system and consequently adding additional data dimensions to enrich the reporting capabilities delivered by Avaya Operational Analyst.

3. List business applications that will integrate with your system, along with a brief summary.

Avaya Response:

Avaya Interaction Center is equipped with the capability to launch third party applications via an intuitive API set as described in section E2. With Avaya's strategic relationships with Siebel, and tactical relationships via partners for Oracle/PeopleSoft and SAP is capable of providing server and

client side integrations. One can adjust the server side integration behavior for pre-routing qualification purposes via workflow blocks within Avaya's Interaction Center Workflow Integrated Development Environment (IDE) as explained in section B4. On the client side Avaya Interaction Center functions can be integrated and embedded within the Siebel, PeopleSoft and SAP client side applications. This integrated solution intelligently routes incoming customer requests in their preferred medium to the appropriate agents within the contact center, while providing agents with the customer, transaction and product information they need to deliver high quality service.

4. List software vendors not mentioned above, in question 3, with which you have established partnerships.

Avaya Response:

Avaya has partnerships with ACT, AMC Technology, ObjectTel and SimpliCTI for Avaya Interaction Center custom development, and strategic relationships with major system integrators including IBM Global Services and Accenture.

5. Provide additional comments about the current or planned business value of support for third-party integration. Limit response to 100 words.

Avaya Response:

In order for a business to be successful today, its applications must have the flexibility to support complex and changing needs. Businesses require close integration between contact center applications, databases, sales force management applications, and other CRM applications such as Siebel and SAP. Since no one vendor can provide the breadth of business applications needed, providing easy integration interfaces to facilitate interconnectivity between these applications is a necessity. Avaya provides easy to use APIs and SDKs to enable our customers, our professional services team, and our development partners to tailor and integrate other business applications with our contact center applications.

6. Describe how agents are alerted to incoming e-mail, fax, and Web messages on their desktops. For example, does a screen pop up, or does the agent have to toggle to another application to observe a queue? Limit your answer to 250 words. You have the option to include a graphic of the desktop integration.

Avaya Response:

The Avaya Interaction Center solution supports screen pops with simultaneous contact arrival at the agent desktop. The Avaya Interaction Center solution unifies the call center's telephony and data environments by creating an Enterprise Data Unit (EDU) for every contact. The EDU can be used to store call information about the caller's IVR activity, agent actions, and data mined from a variety of databases and platforms. The data is then retrieved from the Enterprise Data Unit and displayed on the agent's screen, placed in a database, inserted in a report, or used as search keys to automatically access and screen pop appropriate responses from a database, document, or application. The agent's Enterprise Data Unit-based screen pop includes all available account information tied to the caller's subject, equipment, and customers. The Avaya Softphone engine can also communicate with agent desktop applications and automatically initiate the retrieval of the caller's live account screen(s) to the agent's desktop.

7. Describe how Web interactions and real-time support for chat sessions get routed to agents in their different locations. Is the same routing routine applicable to all the Kodiak sites?

Avaya Response:

Avaya Web Collaboration automatically, intelligently routes and queues incoming web interactions and telephone callback requests, based upon the customer's inquiry, DataWake and enterprise information. Avaya Web Collaboration routes inbound emails and chats to appropriate agents. Intelligent routing, or matching the customer's task to the appropriate agent, is the heart of Avaya Web Collaboration, which efficiently and consistently selects and queues email, chat and phone tasks to agents most capable of addressing the request. Contacts are queued for agents and accessed based upon agent skill-sets, the ability to respond to the various inquiry types, time of day and any other variable dictated by Kodiak's business needs. Workflows can be created to break down the incoming contact by keywords or phrases or apply content analysis to automatically render the context of the contact and then sent to the appropriate agent based on skillset.

8. What standards are supported for CTI? Check all that apply.

☒ CSTA (Computer-Supported Telephony Application)

☒ H.323

☒ HTML

☐ MVIP (Multi-Vendor Integration Protocol)

☒ SIP (Session Initiation Protocol)

☒ TAPI (Telephone Application Programming Interface)

☒ TSAPI (Telephone Services API)

☒ VoiceXML

☒ XML

☒ Other (Please specify)

ASAI (Adjunct/Switch Application Interface) is an ISDN-based CTI protocol published by Avaya. It specifies capabilities that adjunct third party applications may use to access natively Avaya Communication Manager features and control telephone calls. The ASAI capabilities include: adjunct control of telephone calls (e.g. "3rd party call control"), adjunct routing of incoming calls, reporting various events to an adjunct, notification/control for a specific station/call, adjunct invocation of switch features and responding to adjunct queries for information. ASAI serves as the foundation for Avaya's CVLAN API and Avaya's TSAPI and JTAPI implementations.

F. Telecommuting

Kodiak would like to give call center employees who live in the Bay area and in Los Angeles basin the option to telecommute from home via their broadband connections. The company wants to provide the flexibility for those in the call center to be able to work from home in a seamless manner. There will also be 50 additional telecommuters hired on a seasonal basis. Provide details on what the telecommuting strategy will be for Kodiak after they implement the IP Contact Center.

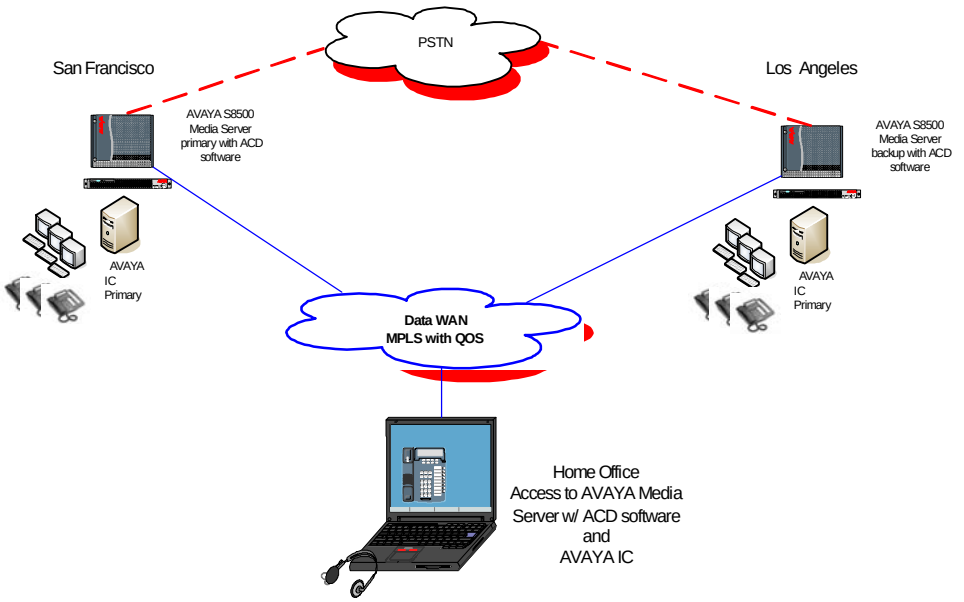
1. Provide name of telecommuting product: Avaya IP Agent

2. Provide per employee price for telecommuting product: $250/agent (proposal price) for IP agent, plus licensing for core multi-channel contact center software for the full agent pool.

3. Provide a diagram of your proposed telecommuting solution.

Avaya Response:

Also see architecture discussion in section A.



4. Describe how you provide the telecommuter solution in a secure, functional environment. Limit response to 150 words.

Avaya Response:

Avaya IP Agent is a softphone solution accommodating both in-office and remote agents. The same robust software suite can be deployed via two options:

Road Warrior (VoIP) Option:

In this option both the voice and audio utilizes the IP network for a "pure VoIP" configuration via an integrated H.323 audio component (Avaya iClarity IP Audio) enabling the agent to receive both signaling and VoIP over a single IP connection. Since the IP Agent registers via a secure VPN connection to the Avaya Media Server the voice stream of the connection can be encrypted to prevent "eavesdropping" from third parties (including "inside" employees).

Telecommuter Option:

This option allows the feature/access control & signaling to be maintained and delivered across the IP network, but the voice to be delivered across the PSTN to provide toll-quality voice. The Avaya Media Server software "binds" these two connections as a single secure session.

G. Scalability

Kodiak recognizes that there physical limitations to everything--even their heat sinks. Share the physical limits to your call center below. If a limit does not apply to your solution or business model, please state that and tell us why in 50 words or less.

1. What is the maximum number of call agent seats/licenses per active system?

Avaya Response:

IP Telephony infrastructure: The combination of Avaya Communication Manager and the Avaya S8500 Media Server supports a maximum of 60,000 administered ACD agent IDs per system. The system supports up to 1,000 agents simultaneously logged in to the system. It is important to note that the agents IDs are administered natively on the communications server, rather than requiring additional servers to support the call processing for the call center application.

Multimedia Contact Management: The Avaya Interaction Center is a software based approach based on a distributive cooperative framework allowing the application to scale across multiple servers under a single administration. A typical single server installation will optimally server around 500-750 agents depending on the system's capacity

2. What is the maximum number of trunk groups and ports (or lines) that can be configured per system?

Avaya Response:

The Avaya S8500 Media Server will support up to 800 trunks.

3. What is the maximum number of calls per hour per system that can be supported?

Avaya Response:

The Avaya S8500 Media Server will support up to 100,000 busy hour call completions of "general business mix" type calls. In a busy call center environment, that number may be somewhat reduced depending on the amount of processing required per call.

4. What is the total number of routing rules that can be configured per system?

Avaya Response:

For incoming ACD calls to the call center, the following capacities for routing rules apply:

	S8500 Media Server
Vectors Per System	999
Steps per Vector	32
Vector Directory Numbers	20,000

For outgoing call routing, the following capacities for routing rules apply:

	S8500 Media Server
AAR/ARS Patterns (Shared)	999
Number of entries in ARS/AAR Analysis Tables (ARS/AAR Tables: 1 per location: S8700/8500: 250; S8300: 50)	8,000
Choices per RHNPA Table	24
Digit Conversion Entries	4000
AAR/ARS Digit Conversion	
Digits Deleted for ARS/AAR	28
Digits Inserted for ARS/AAR	18
AAR/ARS Sub-Net Trunking	
Digits Deleted for ARS/AAR	28
Digits Inserted for ARS/AAR	36
Entries in each RHNPA Tables	1,000
Facility Restriction Levels (FRLs)	8
Inserted Digit Strings	3,000
Patterns for Measurement	
Shared Patterns for Measurement	25
RHNPA (Remote Home Numbering Plan Area)Tables	250
Routing Plans	8
ARS Toll Tables	32
Entries per Toll Table	800
Trunk Groups in an ARS/AAR Pattern	16
UDP (Entries)	80,000
TOD Charts	8
Toll Analysis Table Entries	2,000

5. What is the maximum number of virtual agents (telecommuters) per system that are able to work from home?

Avaya Response:

The S8500 platform supports 1,000 ACD agents all of which can be remote IP agents. The S8500 supports a maximum of 2,400 IP stations.

6. What is the hard limit to real-time or historical reporting?

Avaya Response:

The following table shows the reporting capacities of the proposed contact center reporting solutions. Avaya Operational Analyst provides fully integrated multi-channel real-time and historical reporting and analysis, and is a companion product to Interaction Center in this proposal. Avaya CMS is part of the IP Telephony Infrastructure layer and provides core IP-ACD reporting and management, where its data can be automatically fed into Avaya Operational analyst to provide the consolidated enterprise view.

ACD FEATURE	CMS Release 12	Operational Analyst 6.1.3
Types of Report	Real time Integrated Historical - interval - daily - weekly – monthly – Tabular Reports – Graphical Reports	• Real time • Integrated - different views of real-time data are provided including the current 30-minute interval and up to 4, user-defined 24-hour views • Historical/ aggregate / non-aggregate - 30 min interval, daily, weekly, monthly in Basic Reports; user specifiable and predefined at 5 min, 15min, 30 min, 60 min, daily, weekly, monthly in Advanced Reports – detailed (cradle to grave) – Online Analytical Processing (Cognos) – Tabular Reports – Graphical Reports – 3-D Visual Reports – Web-Based – Multi-Site Real Time Reporting – Multi-Site Historical Reporting – Custom historical report creation
Minimum refresh rate of real time reports	CMS updates as fast as 3 seconds however, The actual speed at which a report refreshes may be slower than the defined speed, since the number of active terminals, the number of active windows, and the number of real-time reports can have an impact on refresh rates.	Operational Analyst allows you to specify a report refresh rate of 5, 10, 15, 30 seconds, 1, 5, 10, or 15 minutes. The refresh rate of a real-time report is independent of the data update rate of the server. You can modify the page refresh rate but not the data refresh rate, which is controlled by the server and not by individual users. For example: if the data update rate is once every minute and the report refresh rate is once every 15 seconds, the report will refresh at least four times before the data in the report will change. The Reporting Server limit is ~500 refreshes per minute.

ACD FEATURE	CMS Release 12	Operational Analyst 6.1.3
Max number of Supervisor licenses	400	10,000+
Maximum storage capacity of historical data	62 days of interval data 5 years of daily data 10 years of weekly data 10 years of monthly data Reporting intervals can be set for 15, 30, or 60 minutes system-wide.	Operational Analysts stores data on customer provided server space according to the length of time you specify for system data retention. The following maximums apply: • Base interval data - 0 to 1096 days • Aggregated data – 0 to 2186 days • Daily container archives – If you have selected the daily archive option in Container Archives, enter a number from 0 to 2186 days. If you have selected the daily and monthly archive option in Container Archives, enter a number from 31 to 2186 days. If you have selected the daily, weekly and monthly archive option in Container Archives, enter a number from 31 to 2186 days. • Weekly container archives – 0 to 520 weeks. • Monthly container archives – 0 to 120 months. • Detail data – Available in CMS call history historical store only when CMS is included in the configuration. 0 to 372 days.
Measured Items	Communication Manager 2.0 Agents: 5,200 Split/Skills: 2,000 per ACD / 16,000 across up to 8 ACDs VDNs: 20,000 Vectors: 999 per ACD/ 7,992 across up to 8 ACDs Trunk Groups: 2,000 per ACD / 8,000 across up to 8 ACDs Agent/Split/Skill Pairs: 60,000 per ACD/ 100,000 across up to 8 ACDs.	Avaya Operational Analyst (OA) collects all Avaya Call Management System (CMS) data (see column to the left) for the voice channel plus statistics for multichannel (email, chat, web) data provided by Avaya Interaction Center (Interaction Center). Avaya OA's predefined data collectors and standard reports across up to 30 Avaya CMS representing 240 MultiVantage ACDs are automatically combined with full multichannel data for complete cradle-to-grave contact analyses.

ACD FEATURE	CMS Release 12	Operational Analyst 6.1.3
Number and Types of Reports (Note: The reports available depend upon your features, options, and permissions.)	43 Real Time standard reports covering: Agent, Events, Multi-ACD, Queue, Split/Skill, Trunk Group, VDN, Vector, and Drill-down reports. 6 Integrated standard reports covering: Agent, Split/Skill, and VDN. 100+ Historical standard reports covering: Agent, Agent Attendance, Login/Logout, Reason Codes, Inbound/Outbound, Agent Trace, Multi-ACD, Events, Call Records, Call Work Codes, Split/Skill, System, Trunk,/Trunk Group, VDN, Vector, Busy Hour, Forecasting, and more. Custom Reporting options are also available.	**Basic Reporting Package** • 10 Real Time Monitoring Reports • 13 Pre-defined Historical Reports Reports can be customized and new reports can be created with optional Visual Insights In3D toolkit. **Advanced Reporting Package** 4 Multidimensional Online Analytical Processing (MOLAP) cubes are provided. • Contacts Cube • CMS Cube • Contact Segment Cube • CallCenterQ Business Application Cube Information in the cubes can be viewed in different combinations of measures and dimensions, and in a variety of formats, such as tabular, line graph, bar graph, pie chart or multi-dimensional graph. Advanced reporting tools are based on Cognos technology and are used for ad hoc querying, modifying reports, custom report creation and the ability to insert custom calculations. With the ability to click on graphic elements and drill down to supporting transaction detail, the user can perform all levels of sophisticated business analysis. The Advanced Reporting Package is available on Windows or Web-based. The Cognos tools include Powerplay and Impromptu. Powerplay is used for extracting data into the multidimensional cubes and viewing the data with the predefined reports. Impromptu is typically for advanced users who require direct access to the data or who wish to create custom reports. **Predefined Advanced Reports** • 8 Predefined PowerPlay reports for Contacts cube • 2 Drill-Through Impromptu Reports for Contacts cube • 3 Predefined PowerPlay reports for Tasks cube • 4 Email specific Impromptu reports • 7 Email specific PowerPlay reports from Tasks cube

ACD FEATURE	CMS Release 12	Operational Analyst 6.1.3
		• 12 CMS specific reports (from the CMS cube) • 17 Contact Segment Impromptu reports from the Contact Segment cube • 15 CallCenterQ Predefined Impromptu reports • 10 CallCenterQ Predefined PowerPlay Reports • 4 Predefined Drill-through(detailed) Reports for CallCenterQ cube • 6 HRQ Predefined Impromptu Reports • 6 CustomerQ Predefined Impromptu Reports

7. Is there a maximum number of skills that can be defined per system in skills-based routing?

Avaya Response:

The maximum number of skills per system is 2,000 on an S8500 Media Server.

8. What is the maximum number of preferences available to identify a skill in skills-based routing?

Avaya Response:

The maximum number of preferences available to identify a skill is Sixteen (16).

H. Reporting

1. What features are available to monitor call center activity? For example, is there support for real-time event monitoring, are there features to view and report queues that service multiple channels (i.e., voice, e-mail, fax, and Web), and can supervisors monitor and record agent activity for quality assurance or compliance with federal and state law? Limit you answer to 250 words.

Avaya Response:

The Avaya solution includes reporting for real-time monitoring and historical activities of the Contact Center. It allows the contact center supervisor to track agent activity within Interaction Center channels to assess performance at the agent, queue, or service class level and make adjustments quickly, as needed. The solution represents customer contact activity as well, across the multiple channels and locations. In particular, the service class reports will allow Kodiak to assess whether they are complying with certain necessary standards. Quality monitoring and recording is supported. Please see section E for more details.

Report examples:

- Real Time Service Class and Queue Status Report -- Shows real time and performance trending over a 30-minutes interval with regard to the service classes assigned to queues. Statistics

for each service class and queue include: Number of Work Items in Queue, Expected Wait Time, Oldest Wait Time, Average Wait Time, etc.

- Real Time Agent Performance by Service Class and Queue Report –Provides an operational view of multiple agents' work performance across multiple service classes and queues. An agent's performance can be compared across service classes and queues or against the performance of other agents.
- Work Item Detail Report -historical – Provides detail contact history information. This reports helps answer the question of what was the customer experience when contacting the center, how many times on average was a work item of a particular type handled, deferred or put on hold.

Hundreds of reports with drill down and drill through capabilities are standard with this solution, copies are available upon request.

2. Is business data available through the reporting module used for the call center? Y/N

Avaya Response: Yes.

3. Can reports run on regular schedules? Y/N

Avaya Response: Yes.

4. Can reports be automatically published for review in HTML or other formats for review by supervisors, etc.? Y/N

Avaya Response: Yes.

5. What file formats can you export reports to?

Avaya Response:

The database is ODBC-compatible and open in design, therefore data can be exported in most popular file formats.

I. Business Summary (Optional)

You may use this section to summarize the business value that you are providing that you were not able to cover in any of the above sections. You may also use it to make additional recommendations or comments on the RFI. Limit your answer to 200 words.

Avaya Response:

Avaya proposes to Kodiak a secure, redundant system which will enable them to realize the benefits of IP Telephony and a Multi-channel contact center environment while preserving the TDM-based solution currently in place. This system is flexible to meet the demands of the full time and the seasonal, remote workforce. The system is expandable to incorporate the agents in Death Valley for additional benefit. Considerations have been made with regard to the IT department, the agents, the management, and of course the customers who do business with Kodiak. Avaya has offered a solution which will improve the call center operations, reduce costs, provide excellent customer

service, and reduce telecommunications costs. Based on industry trends, standards and customer experience in the marketplace, Kodiak should expect a return on its investment within 1 year (figure below). The Return on Investment analysis is available for your review.

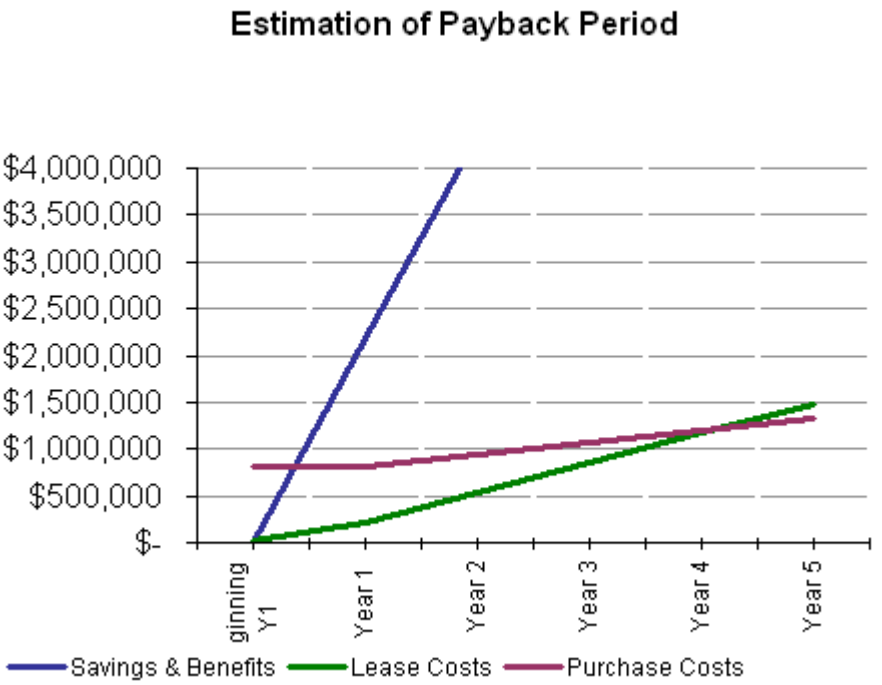


Figure 7 Estimation of Payback Period

J. Pricing Summary and Totals

1. Describe the business model used to market and sell the call center? Limit your answer to 50 words or less.

Avaya Response:

Avaya solutions are sold worldwide, through both a direct sales force and through our channel partners. Through both distribution mechanisms, members of the sales team members and designers, as well as services and installation personnel, are trained and certified in selling and supporting Avaya solutions.

2. Is the system purchased through direct sale, resellers, and/or channel partners?

☒ Direct sale

☒ Certified Resellers

☒ Channel Partners

☐ Resellers

☐ Other (Please explain)

3. Estimate the cost of the call center for Kodiak's 300 call agents.

Avaya Response:

Avaya is recommending a layered solution consisting of the following components:

Multi-channel IP Contact Center Software		
	Avaya Interaction Center (Distributed interaction management) Avaya Operational Analyst (Multi-channel reporting/analytics) Avaya IP Agent (Flexible telecommuter option)	Included and priced ~$285K for 300 agents +$250 /agent for IP Agent
Installation, Services and Support		
	Avaya Global Services for installation and support *Remote monitoring and full managed services available*	Maintenance included and priced ~$80K /year maintenance
Recommended IP Telephony and Gateway Infrastructure		
	Avaya S8500 Media Server (2 for redundancy) Avaya G650 Media Gateway (2 for redundancy) Avaya Communication Manager software (IP Telephony) Avaya Call Center software (IP-ACD), Avaya CMS	Architected and discussed, not priced here (per instructions)
Leveraging Existing Infrastructure		
	Existing IP Network (100Mb/GigE, PoE, QoS, T1 data trunks) Existing potentially-non-Avaya PBX, ACD and IVR Customer-provided RDBMS (Oracle or DB/2 or SQL Server) Customer-provided standard servers (Windows or Unix)	Existing

Per your email dated 3/17/05 (below), Avaya has not included pricing for our recommended IP Telephony and Gateway Infrastructure in this quote, but are just showing the Multi-channel IP Contact Center Software pricing.

> ***"3. Section VI, Review Criteria, subsection J: Pricing Summary and Totals, Question 3 onwards: Is the pricing required for only the call center components, or should it also include pricing for switch, etc.? In other words, what needs to be priced for this presentation?***
>
> **Answer: The question asks for the cost of the components specific to the call center per Kodiak's business facts. We do not want pricing for all the infrastructure components necessary to make the entire solution work, e.g., switches. Although the RFI asks for details on the architecture necessary to make the call center work, we do not want specific pricing for them."**

None-the-less, Avaya is strongly recommending that Kodiak deploy the initial IP Telephony infrastructure proposed here, in order to consolidate all locations into a single distributed virtual center and also fully support remote "telecommuter" agents, as Kodiak desires. Our attached ROI analysis takes a complete look at the infrastructure and contact center software to show that the complete solution would have a high ROI, returning the total investment in less than one year. The costs used in the ROI analysis are also higher, hence more conservative, in order to allow for overages and extras that may not have been captured at the level of this RFI.

We are providing "best proposal" pricing here (not list prices), leveraging current Avaya promotions and discounts.

The pricing for 300 agents (including Kodiak's seasonal employees) for the Multi-channel IP Contact Center Software is: **$284,850**. This includes an assumed mix of concurrent voice/email/web handling agents (210/60/30), full multi-channel reporting, the workflow designer and software administration environments, and also includes the necessary CTI links to the IP Telephony infrastructure. This proposal requires that the customer provide the appropriate Windows or Unix servers to run the software and an enterprise-level relational database, such as Oracle, DB/2 or SQL Server. Pricing is independent of the number of hardware servers on which the software is deployed, allowing Kodiak to make flexible decisions for their distribution and how redundancy objectives are met.

IP Agent, at $250/agent, would be used both for remote telecommuter agents, and also for agents continuing to use existing TDM phones (IP Agent becomes their IP based phone from a control perspective, while the voice path is sent through the gateways to the existing phone). If new IP hard-phones are deployed as part of the IP Telephony infrastructure roll-out, then IP Agent is **not** required for those agents. So the cost here will vary depending on how aggressively IP endpoints are rolled out, up to a maximum of $75,000 if **all** 300 agents are either TDM-based or remote telecommuters.

4. Estimate the cost for the first year of maintenance and support.

Avaya Response:

Maintenance for the Multi-channel IP Contact Center Software will be approximately **$80,000** annually.

5. Do you provide on site training?

☐ No

☒ Yes (answer question 6)

6. If you provide on site training, what would be the cost to train approximately 200 Kodiak agents and supervisors?

Avaya Response:

Avaya provides knowledge transfer sessions as part of the implementation agreement purchase. These knowledge transfer sessions provide enough information to the customer to develop their in house training specific to Avaya Interaction Center and other solutions. Avaya also offers formal (typically customized) Supervisor and Administrator training sessions for CMS.

The cost for this is:

$7000 – This includes five days of support (travel and lodging is not included). This support can be used for CMS administrator and reports training, and Avaya IP Agent training. One week of support would be sufficient for training 200 agents.

VII. Vendor Information

1. How long have you been in business?

Avaya Response:

Avaya is a trusted world leader in enterprise communications and services, combining the vigor and agility of a new business established Oct 2, 2000 with the resources and stability of a company that has more than a century of experience in helping enterprises to communicate and deliver superior business results. We are able to draw on a rich heritage - our AT&T, Bell Labs, and Lucent Technologies past - combining our expertise in enterprise voice systems with mastery of data networking and new IP telephony applications.

We enable customers to efficiently, seamlessly and securely drive their business from where it is today to where they need it to be. In achieving this, we manage complexity, create and maximize value, and lower risk. Our communications solutions give customers "choice"; we enable them to evolve to new technologies on their terms, at a path and pace of their choosing. Our solutions are designed for wide interoperability, based on an open architecture and industry standards.

More than 90% of the FORTUNE 500®, and national governments across the globe, trust Avaya with their communications for profitable relationships with their customers, suppliers, partners, shareholders and employees. More than 900,000 Small and Medium Businesses (SMBs) worldwide rely on Avaya.

We are leading the next generation of communications. Through our applications, systems and services we have achieved worldwide #1 position for IP-telephony, multimedia-contact centers, voice messaging, unified communication, and #1 in PBX maintenance services in the US.

We are unmatched in depth and breadth of Services. Avaya Global Services is a single point of accountability to design, build, implement, maintain and manage multi-vendor communications networks worldwide. A global force of more than 7,000 services professionals, 24 Network Operating Centers and 13 Technical Support Centers. Avaya employs unique, differentiated tools, from financial, business impact and network assessment tools to intelligent systems that remotely monitor, diagnose and resolve faults on multi-vendor networks.

Avaya is expert at constant care, providing round the clock surveillance of customer communications. Avaya EXPERT Systems Diagnostic Tools enable us to diagnose and resolve 96% of customer alarms remotely. Avaya Global Services' comprehensive portfolio of network and application consulting, security, implementation and integration, maintenance and managed services help businesses to optimize performance while extracting maximum value from existing investments. We have multi-vendor, multi-technology expertise and extensive certifications. Expertise includes network applications consulting, implementation, integration, maintenance and managed services expertise supporting equipment from vendors such as Cisco, Nortel, Foundry, 3Com, IBM and HP.

We are a sector leader in R&D investment. Avaya Labs has 2,000 professionals in more than 20 sites across 16 countries, and 4,000 patents and applications worldwide. We have robust and wide-ranging relationships with global systems integrators, distributors, resellers, VARs, and third party software and hardware developers.

Avaya provides customers with a consistent, superior experience through a truly "unique collection of assets" The marriage of best-in-class IP telephony and communications software applications with the most comprehensive, in-depth multi-vendor services capability in the industry.

2. What is the size of your organization by number of employees?

Avaya Response:

Headquartered in Basking Ridge, N.J., we employ over 17,000 people in 49 countries in hundreds of offices around the world.

3. How long has the product been shipping?

Avaya Response:

The initial release of our multi-channel system (now called Interaction Center) was released in August 1998. Avaya was the first vendor to ship multi-channel contact center solutions, and has continued to be a global contact centers leader with over 25,000 Avaya call and contact centers in use by customers worldwide.

4. Do you provide onsite support for installation and configuration?

Avaya Response:

Yes. Avaya Global Services has an extensive team of Implementation Services professionals to commit to an efficient implementation of the total Avaya solution. Implementation Services associates provide implementation and integration services, offers, and applications, including multi-vendor data networks and call center solutions.

We have not priced installation services into this RFI, but would do so following an evaluation of the environment into which the solution would be deployed, the level of IP Telephony infrastructure being deployed, the level of integration with the current TDM telephony systems and other desktop applications, etc.

Project Managers, Software Specialists, and Software Associates are counted among several Implementation Services resources that serve the many Fortune 500 companies Avaya is proud to claim as loyal customers. Our associates team with other Avaya organizations on a daily basis to effectively address the needs of our customers.

Competencies and skill sets include:

- Program Managers
- Project Managers
- Software Specialists
- Call Center Specialists
- Data Specialists
- Network Integration Specialists
- Technical Instructor/Writer
- Field Technicians

Software Specialists provide the system, network and trunking design and software translations for voice, messaging and networking systems. As the premier technical consultant for the project team,

the Software Specialist has overall responsibility for the integrity of all software applications. Standard software includes ARS, ACD and DCS.

Software Associates conduct station reviews with customers and team with the customer to design end user software requirements. The Software Associate will then build and download a database that includes information obtained during the station review. The database also includes the system, networking and trunking translations provided by the Software Specialist.

5. In how many cities do you provide onsite support?

Avaya Response:

Avaya provides one of the largest and most widely deployed field service organizations and over 7,000 Services professionals worldwide. Avaya has a service force of highly trained systems technicians and technical support personnel that are committed to delivering on-site and remote support of integrated multimedia, telecommunications, and converged networks solutions.

The Field Service Organization (FSO) offers a structure that has been developed specifically to meet the needs of Avaya communications system customers. The FSO is comprised of over 3,000 highly trained technical personnel who have overall responsibility for customer premises work activities. The FSO coordinates, supports, and performs the on-premises functions necessary for installations and maintenance in all fifty states.

The Field Service Organization is supported by the Avaya Remote Technical Services (RTS). The RTS is staffed by more than 1,000 technical associates, including engineers, technicians and helpline personnel, who provide support for all Avaya Communications Systems and adjuncts. The key to Avaya's ability to quickly fix Avaya customer systems is our patented EXPERT Systems Diagnostic Tools, which is an integral part of Remote Technical Services. RTS operates 24 hours a day, all days of the year, and provides around-the-clock system monitoring, diagnosis, and resolution that helps maintain system availability. The RTS can detect even small departures from prescribed performance parameters, and respond instantly to alarms issued by the self-diagnostic capabilities built into the Avaya Communications Systems.

Avaya has RTS locations in St. Petersburg, FL; Milpitas, CA; Highlands Ranch, CO; Westminster, CO; Carrolton, TX; and Redmond, WA.

The RTS also provides support directly to Avaya customers. By calling the Avaya toll-free number, you can consult with some of the best technical product specialists at Avaya. Working quickly and effectively, these experts can handle all types of service problems and provide critical support in areas such as security audit and fraud prevention. Expert design assistance is also available for complex applications such as Distributed Communications Call Centers and integrated multimedia and telecommunications applications.

Avaya EXPERT Systems

Avaya has a patented remote monitoring computer system known as EXPERT Systems, with a proprietary maintenance database of over 30,000 Artificial Intelligence algorithms. This tool helps diagnose and resolve system alarms 24x7x365. Additionally, EXPERT Systems proactively manages activities designed to maintain the overall well being of your network, as well as proactively preventing problems from occurring. These proactive "behind-the-scenes" activities are designed to keep your network running optimally. *Together, with Avaya technicians and engineers, these tools clear 96 percent of all alarms remotely.* 88 percent of these alarms are cleared by Avaya EXPERT Systems without human intervention. The average time to alarm is 90 seconds. If the trouble requires a dispatch of an Avaya System Technician for on-site dispatch, the intelligence gathered

from EXPERT Systems provides fix recommendations so that Avaya System Technicians arrive on site with the correct replacement part(s) and the information required to fix the problem the first time, virtually eliminating the need for multiple dispatches.

On-site dispatch for remedial and preventive maintenance is provided by the Avaya Field Services Organization (FSO) that consists of over 2,500 System Technicians. Avaya service technicians are dispatched from geographically dispersed Field Service Organization facilities.

6. List three enterprises that are currently using the proposed solution.

Avaya Response:

- **Medical Mutual of Ohio** - U.S. based healthcare insurance provider chose Avaya for improved customer service, and its ability to deliver real-time customer contact history to reduce the average resolution time.
- **Kyobo Life Insurance** - Large Korean insurance company, chose Avaya for its flexibility and integrated multi-channel communication solution.
- **Eurohypo** - German financial services company, chose Avaya for its high performance and reliability, and its flexible branch office solutions.