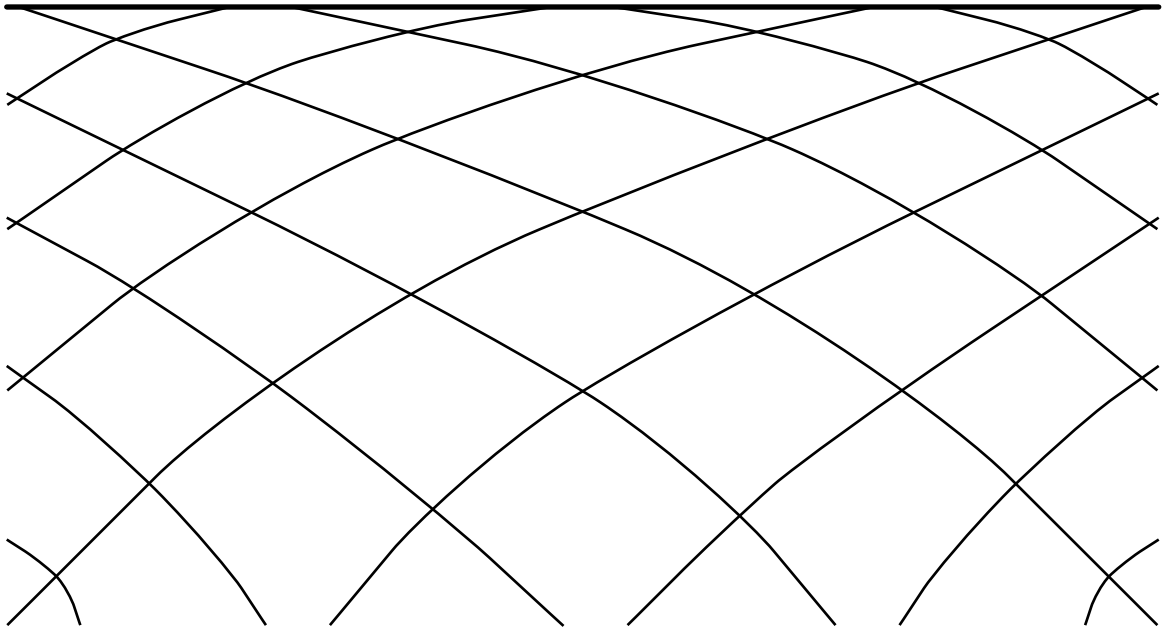
555-230-222
September 1995

DEFINITY Communications System
CallVisor ASAI Planning Guide



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About This Document

This document is a ‘‘road map’’ for CallVisor® ASAI planning and implementation. Its purpose is to identify the planning and implementation tasks associated with the CallVisor Adjunct/Switch Application Interface (ASAI) and to direct the reader through them.

ASAI: An Overview

CallVisor ASAI is a communications interface that provides application processors (called adjuncts in this document) access to switch features and control over calls in the switch.

CallVisor ASAI can be implemented using either an Integrated Services Digital Network (ISDN) Basic Rate Interface (BRI) transport, or an Ethernet Transmission Control Protocol/Internet Protocol (TCP/IP) transport, for single links, or both, for multiple links. The ASAI-Ethernet interface, available in G3V4 releases (and in G3V3 releases with a field maintenance upgrade) provides ASAI functions using 10Base-T Ethernet, rather than BRI, as a transport media. For more information on this option, see *AT&T DEFINITY Communications System Generic 3 CallVisor ASAI-Ethernet Installation, Administration, and Maintenance,* 555-230-223.

The following figure illustrates the simplest configuration, an adjunct connected to a switch via a single ASAI-BRI (or ASAI-Ethernet) link. [1]

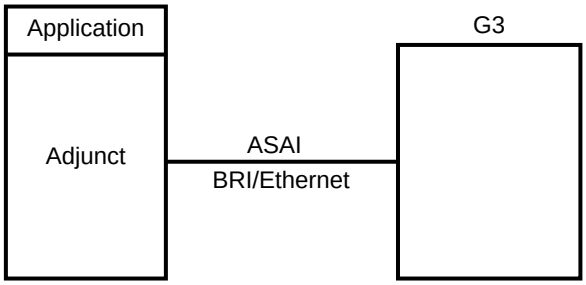


Figure 1. Single Link — Single Processor Configuration

Intended Audience

This document is written for the account team and customer personnel involved in the planning and implementation of CallVisor ASAI for the Generic 3 switch.

Related Documents

AT&T Adjunct/Switch Application Interface (ASAI) Specification, 555-025-203

This document provides a detailed description of the ASAI Reference Model and the capabilities available with ASAI.

DEFINITY Communications System Generic 3 CallVisor ASAI Protocol Reference, 555-230-221

This document provides detailed protocol information regarding the DEFINITY Communications System Generic 3 CallVisor Adjunct/Switch Application Interface. Issue 4.0 also describes the TCP/IP protocol used for transporting ASAI messages in this product. This document is the companion to the following document, 555-230-220.

1. Additional configurations can be found in Chapter 2, ''ASAI and Supported Applications,'' of the *DEFINITY Communications System Generic 3 CallVisor ASAI Technical Reference*, 555-230-220.

DEFINITY Communications System Generic 3 CallVisor ASAI Technical Reference, 555-230-220

This document provides a detailed functional description of CallVisor ASAI for the Generic 3 switch.

DEFINITY Communications System Generic 3 Installation, Administration, and Maintenance of CallVisor ASAI Over the DIFINITY LAN Gateway, 555-230-223

This document describes the installation, administration, and maintenance of the ASAI-Ethernet application, which provides ASAI functionality using 10Base-T Ethernet rather than BRI as a transport media.

DEFINITY Communications System Generic 3 Feature Description, 555-230-204

This document is an overall reference for the planning, operation, and administration of the Generic 3 switch.

DEFINITY Communications System Generic 3i Implementation, 555-230-650

This document describes the implementation of the Generic 3i switch.

DEFINITY Communications System Generic 3 V4 Implementation, 555-230-653

This document describes the implementation of the Generic 3 V4 switch.

DEFINITY Communications System Generic 1 and Generic 3 Installation and Test, 555-230-104

This document describes the installation and testing of the Generic 1 and Generic 3 switches.

Planning the CallVisor ASAI Configuration

1

This chapter describes the considerations, decision points, and planning tasks required to implement a DEFINITY CallVisor ASAI application. It is provided as a guide for the person planning and coordinating the implementation of CallVisor ASAI. The tasks described include planning activities to be completed before and after a sales contract for CallVisor ASAI has been signed. Figure 1-1 shows a road map of the planning activities needed to implement a CallVisor ASAI application.

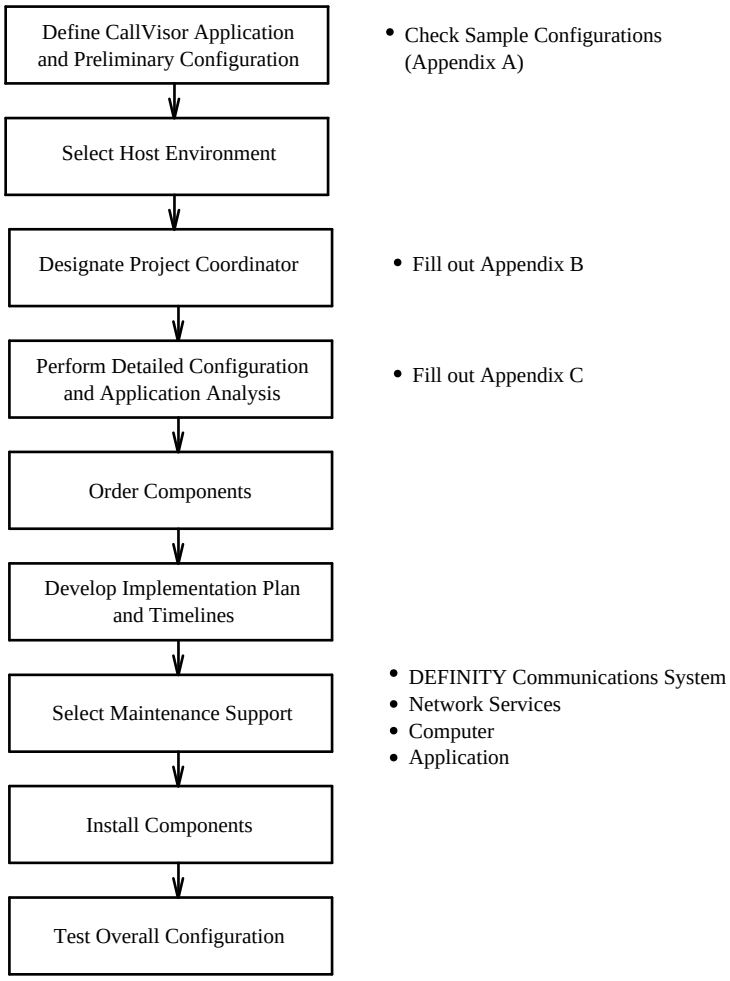


Figure 1-1. CallVisor ASAI Planning Tasks

You should plan for the changes and improvements that will occur in your operations and systems as a result of adding a CallVisor ASAI application. For example, by reducing the amount of time customer calls are on hold or waiting in queue, a CallVisor ASAI application can improve the productivity of agents and the use of trunk facilities. You can take advantage of this in one of two ways:

- You can improve customer service by keeping the same number of agents and reducing the Average Speed of Answer (ASA). ASA is the average time, computed by the AT&T Call Management System (CMS), that callers wait in queue before reaching an agent.
- You can save money by reducing the number of agents and keeping approximately the same ASA.

AT&T products and services are available to meet your requirements for planning, coordinating, installing, verifying, and providing ongoing support for a CallVisor ASAI solution. For more information on CallVisor ASAI service offerings, see Chapter 3, ''Service Offerings,'' or contact your AT&T representative.

Define the CallVisor ASAI Application and Primary Configuration

The first step in planning a CallVisor ASAI configuration is to define the application. You and your AT&T representative must be able to describe the business needs addressed by the application and provide in words or diagrams a high level description of the application.

Consider each part of your current operation and how it can be improved. For example, you might want an application that uses the Calling Party Number/Billing Number (CPN/BN) or Voice Response Unit (VRU) collected digits to provide answering agents with an appropriate data screen. You might also want to originate calls to customers based on a computer-generated list of telephone numbers and only deliver answered calls to agents.

When examining your current operations, you might want to look over your 800-service records (your long distance service provider can provide these). If AT&T provides your long distance service, your AT&T representative can help you obtain and interpret this information.

It may be helpful to create a table showing possible improvements in operations. An example follows.

Table 1-1. Proposed CallVisor ASAI Improvements (Example)

Operation	Proposed Change with CallVisor ASAI
Credit Verification	Use CPN/BN to automatically search for accounts.
New Accounts	Save CPN/BN to analyze advertising effectiveness.
Credit Extension	Use Dialed Number Identification Service (DNIS) to allow agents to handle both credit extension and verification calls.
Voice Response	Use DNIS to trigger a voice script automatically and save VRU ports.
	Use CPN/BN to verify caller identification.
Collections	Use 90 days past due records to call customers automatically when incoming traffic volumes are low.
Customer Service	Have User to User Information (UUI) pass customer information to a more lightly loaded Automatic Call Distributor (ACD) or another DEFINITY G3 switch.

Once you have selected areas for improvement, identify the impact these changes will have on current operations. Agents and personnel involved in current operations may need additional training as a result of the impact of CallVisor ASAI.

Your AT&T representative can work with you to define the DEFINITY CallVisor components needed for your CallVisor ASAI application. When you define your CallVisor ASAI configuration, you must include:

- Estimated Busy Hour Call Completions (BHCCs)
- Number of agents/stations
- Overall call flow/scenario[1]
- CallVisor ASAI capabilities to be used
- Proposed host computer
- Selection of traditional ACD or EAS method of operation (Expert Agent Selection involves agent skills.)

1. Call Flow represents the percentage of total calls that receive various call treatments during the busy hour (peak traffic time). For example, 10 percent of the calls are answered immediately, and 90 percent of the calls queue or wait for an available agent. Of the 90 percent that queue, 50 percent listen to one announcement before being delivered to an agent, and 50 percent listen to two announcements before being delivered to an agent. See Appendix A, ‘‘Sample Models,’’ and Appendix C, ‘‘Call Center Operations Worksheet,’’ for examples.

Appendix A presents sample preliminary configurations to help you decide if a DEFINITY G3i Communications System is the right system for you. Otherwise, a DEFINITY G3r Communications System may be more appropriate for your particular application. Your AT&T representative can provide you with additional information on these sample configurations and contact the AT&T Technical Response Center (TRC) for additional help.

Designate Host Computer Environment and Application Provider

Using the application and configuration defined earlier, and your computing preferences as guidelines, select the appropriate computing platform, application provider, and configuration. Involve your Management Information System (MIS) person, computer platform representative, and software vendor provider at this point. Note that the software application can be:

- An existing software application that needs to be modified to work with CallVisor ASAI
- A new software application that works with CallVisor ASAI

Work with your computer platform representative to determine the specific computer system needed to support CallVisor ASAI and your application, at the traffic level you require. If you do not have a preferred computer platform or software provider, your AT&T representative can provide additional options, including AT&T computer vendor partners, Independent Software Vendors (ISVs), Value Added Resellers (VARs), and AT&T special development proposals.

For more information regarding AT&T computer vendor partners, see Chapter 2, ''Installation Tasks.'' For a list of the CallVisor ASAI functions supported by AT&T vendor partners, see Appendix E.

Select Project Coordinator

After you have decided to implement a CallVisor ASAI application, assign a project coordinator, if one has not already been selected. The project coordinator must prepare a master plan for the design, implementation, maintenance, and monitoring of all products involved in your CallVisor ASAI application. The project coordinator must also prepare and review with all vendors the acceptance criteria used for the project. These criteria should cover performance, response time, problem detection, disaster recovery targets, and procedures. It is recommended that the project coordinator be familiar with DEFINITY Communications System call flows, CallVisor ASAI capabilities, and feature interactions. Appendix B provides a CallVisor Needs Assessment Questionnaire that must be completed before AT&T provides any services to you. Appendix D provides a sample completed CallVisor Needs Assessment Questionnaire as a reference.

If you do not have a project coordinator, AT&T offers, under a separate implementation contract or service offering, Single Point of Contact (SPOC) services for planning and installing your CallVisor ASAI application.

As part of this service, AT&T will assign a trained Project Manager to work with you and other vendors involved in the CallVisor ASAI application to coordinate all planning and installation aspects. CallVisor ASAI applications often involve coordination among five different vendors (DEFINITY Communications System, computer, application, network services provider, and adjuncts [for example, Voice Response Unit]). AT&T's knowledge of your DEFINITY Communications System's call handling functionality allows AT&T to effectively coordinate all aspects of a CallVisor ASAI implementation. You can also designate your own project coordinator and use AT&T's consultation services for the AT&T components of your CallVisor ASAI application. For additional information regarding AT&T service offerings, see Chapter 3, ''Service Offerings.''

Define Detailed Configuration and Application Analysis

Next, a detailed configuration must be prepared. This configuration should include the following:

- Expected call traffic and busy hour call volumes
- Detailed call scenarios/call flows, including:
  - — Vectors, Vector Directory Numbers (VDNs), and Automatic Call Distribution (ACD) splits used (EAS only)
  - — Vector treatments, prompts, announcements, and routing decisions
  - — CPN/BN, DNIS, and lookahead interflow trunks
  - — Dialed digits treatment (deletion and insertion)
  - — Switch dialing plan
  - — Information passed between adjuncts on the same or different switches using UUI
- Use of BRI or Ethernet transport
- Selection of traditional ACD or EAS operating environment
- Number of stations or ACD agents (EAS only) and logical agents
- Hardware and software requirements (for example, programming environment, and transactions per seconds)
- Network services used (for example, INFO 2, Megacom® 800, ISDN Primary Rate Interface [PRI])
- Additional adjuncts used (for example, CMS, AUDIX® Voice Messaging System, and CONVERSANT® Voice Information System)
- CallVisor ASAI messages used

- Need for Answering Machine Detection for predictive outbound applications
- Need for multiple applications to monitor the same ACD splits or VDNs
- Need for applications to provide digits for switch dial-ahead buffer (call prompting) (This request can be made only when routing a call.)
- Need for applications to request digit collection into the switch dial-ahead buffer (This request can be made only when routing a call.)
- International considerations. Specifically, when ASAI is used in certain countries, the ability to do switch-classified calls must be turned off.
- MultiQuest® Flexible Billing considerations. (See ''Planning for Flexible Billing'' later in this chapter.)

The Project Manager must verify that the detailed configuration can be supported by all the proposed components (for example, network services, switch, computer, and application). This is an iterative process with each cycle producing a more refined and detailed configuration.

AT&T provides consultation services for the DEFINITY CallVisor ASAI pieces of your application. The AT&T Design Center, at 1 800 521-7872, will be able to estimate DEFINITY Communications System and ASAI link capacities for your particular configuration. Appendix C contains the Call Center Operations Worksheet that must be completed by the AT&T Account Team before contacting the AT&T Design Center.

CAUTION:
The proposed configuration should be reviewed with extreme care to detect any possible areas where the application may allow unauthorized transfers.

Order Components

After you have completed the previous step, you must order the necessary DEFINITY Communications System and computer components. You might also want to select a different project coordinator for the implementation part of the project.

Develop Implementation Plan and Timelines

Your project coordinator or the AT&T Project Manager (if you contract for Single Point of Contact services) must develop an implementation plan and master schedule to assign and track all milestones and vendor activities needed to implement your CallVisor ASAI application. This includes periodic checks with all vendors to verify that the project is progressing as scheduled and to resolve any conflicts or issues. A detailed equipment room layout and environment assessment (for example, power and cooling considerations) must also be prepared at this point. The following tables provide sample worksheets to help you plan your implementation.

Table 1-2. Sample Implementation Worksheet

ASAI Links						
Port Number	**Station Number**	**Adjunct Type**	**Transport Type***	**Application(s)**	**Installation Date**	**Status**
1)						
2)						
3)						
4)						
5)						
6)						
7)						
8)						

*Optional — ASAI-BRI or ASAI-Ethernet

Table 1-2. Sample Implementation Worksheet *(continued)*

Traditional ACD Agent Configuration Table				
Agent ID	**Agent Extension**	**Agent Screen ID**	**Login ID**	**Status**

Traditional ACD VDN and ACD Split Configuration Table			
VDN/ACD Split Number/Extension	**Application**	**Description**	**Status**

NOTE:
An ACD split or VDN may have up to 3 monitoring applications.

Table 1-3. Sample Implementation Worksheet (EAS Environment)

Agent Configuration Table						
Logical Agent Id	Agent Screen Id	Login Id	Skills			
			Skill 1	Skill 2	Skill 3	Skill 4

VDN and Skill Configuration Table			
VDN Number	Skill 1	Skill 2	Skill 3

Table 1-3. Sample Implementation Worksheet (EAS Environment) ***(continued)***

Skill Table	
Skill Number	**Meaning**

While you develop your application, remember the application should not send more than 80 ASAI messages from adjunct-to-switch in less than 5 seconds (G3i), or more than 50 messages in one second (G3r) per link. Starting with G3V4, the frames (messages per second) are higher: 160 frames per 5 seconds for G3i, and 200 frames per second for G3r. For Ethernet (G3V4), these numbers are the same. If these numbers are exceeded, the link will be declared hyperactive by the switch. In practice, other characteristics will probably be more limiting. This is another reason why an application review by the Design Center is valuable.

To avoid overload of the switch transmit buffers, design your application such that messages from switch-to-adjunct do not exceed 25 messages per link. This number is a guideline. In some instances, more than 25 messages can be supported, but in others, they cannot be supported. For Ethernet, design your application such that messages do not exceed 50 per board.

It is also recommended that your application use a maximum rate of five ASAI Value Queries per second when necessary to synchronize with the switch after an ASAI link is activated.

An important consideration for high-traffic applications is a technical parameter called the layer 2 (LAPD) Receiver-Ready response time. For high-traffic applications, you may have to compare the response times of various vendor platforms to achieve the desired performance.[2]

You must also plan any training sessions that you may have for the agents or personnel who will be using the CallVisor ASAI application. Agent operation is a key factor in realizing the improvements a CallVisor ASAI application can provide. Agents should be instructed about any new data that will appear on their terminals, and about how to utilize this information properly to interact with customers. In addition, the benefits of the CallVisor ASAI application should be explained to agents so they can take full advantage of them.

Select Maintenance Support

At this point you might want to consider purchasing one of the AT&T service offerings as part of the ongoing maintenance of your CallVisor ASAI application. The AT&T Account Team must complete the CallVisor ASAI Needs Assessment Questionnaire provided in Appendix B before contacting the AT&T Technical Response Center for ongoing maintenance support of your CallVisor ASAI. See Chapter 3, ''AT&T Service Offerings,'' for more information regarding ongoing maintenance support.

Planning for Multiple Software Applications

If your CallVisor ASAI configuration involves several software applications, your implementation plan must cover the following:

- How ASAI Event Reports and control of calls will be shared by the applications. For example, if two software applications need to control a call, you must define the process by which one application relinquishes control of a call once the other application requests an ASAI call control capability of that call.
- The effect of the combined load of the applications on the switch and the ASAI link. See Appendix B, ''ASAI and Generic 3 Switch Requirements, '' of the *DEFINITY Communications System CallVisor ASAI Technical Reference,* 555-230-220, for a complete list of ASAI capacities.
- How switch hardware resources, such as trunks and tone detectors (call classifiers), will be shared among the applications.

2. The LAPD Receiver-Ready response time is the time interval between when an endpoint receives an ASAI message and transmits the LAPD ''Receiver Ready'' message. When the transmitter of the message receives the ''Receiver Ready,'' it may transmit its next ASAI message.

- How switch software resources, such as VDNs, splits, and skills will be shared among the applications. Presently, up to three applications can monitor a given split or VDN simultaneously.

You should also plan for the Multiple ASAI Link considerations described in the following section.

Planning for Multiple ASAI Links

If you plan to use multiple ASAI links to the same or different computer platforms, you need to decide how the use of switch resources (for example, VDNs, ACD Splits, EAS skills, and stations) will be split across the different interfaces and how the software applications will access the appropriate link. In addition, you must consider the CallVisor ASAI capacity limitations for the entire switch and for each link. The same application could run on two different adjuncts for redundancy. Then you could use the Multiple Adjunct Routing feature.

You also need to consider how multiple applications running across different links coordinate their call handling. For example, the switch may only allow a single link to control a particular call. In particular, you need to understand how call transfers, conferences, and redirections affect the Event Reports provided by the switch over each ASAI link.

In a multiple link configuration, CallVisor ASAI applications must be able to handle the following situations:

- Denial of a CallVisor ASAI Third Party Take Control capability because another link or software application is controlling the call. For example, another link or computer might have initiated a call to a monitored ACD split and that call might need to be transferred to a different agent.
- Denial of an ASAI Event Notification Request capability because the maximum number of applications are monitoring calls for the ACD Split or VDN. A maximum of three software applications and links can control an ACD split, VDN, or group of agents.
- Receipt of Call Redirected Event Reports without an indication of the ACD split or VDN to which the call has been redirected. When a monitored call enters an ACD split or VDN monitored by another link or software application, the initial monitored link only receives a Call Redirected Event Report.
- Receipt of the same Event Report for a call monitored by two different links or software applications at different times. That is, the switch does not guarantee any specific ordering when sending multiple copies of an Event Report to a number of applications running on multiple links.

Link Versions

The Restart procedure incorporates a method for adjuncts to select a particular version of the ASAI protocol they wish to run on the link. Presently, there are two versions, V1 and V2. If the adjunct does not include any version specification options, V1 is the version that the switch supplies.

NOTE:
Version selection is per link. This facilitates the use of older ASAI applications when switches are upgraded with newer ASAI features. For new G3V4 event reports to be produced, Link version 2 must be active. Link version 1 is compatible with pre-G3V4 functionality.

Planning to Integrate with a VRU

If you plan to integrate your CallVisor ASAI application with a Voice Response Unit (VRU) (for example, CONVERSANT VIS), you should detail how calls will be transferred between the VRU and the CallVisor ASAI application (for example, adjunct routing to the VRU split).[3] You must also follow the guidelines above for multiple applications and CallVisor ASAI links if the VRU application is separate from the CallVisor ASAI application or the VRU uses a different ASAI link.

CAUTION:
When integrating any new component such a VRU, or upgrading the current configuration, extreme care should by taken to detect any possible areas where the application or component may allow unauthorized transfers.

Another important item is the manner in which call information, such as CPN/BN, DNIS, and answering agent/port, will be integrated with VRU-collected information, such as the customer account number. You can either design your CallVisor ASAI application to communicate with the VRU directly through a data link, or you can use the switch's ASAI capabilities to track the call and receive some of the VRU-collected information. For example, you can use the DEFINITY Communications System Call Prompting feature to collect information from the VRU at the time the VRU transfers a call to a CallVisor ASAI application.

3. The effectiveness of your CallVisor application may depend on callers using the VRU to enter information via touch tones. To encourage callers to enter information, you may want to consider wording voice prompts on the VRU to tell callers they will receive higher priority service if they enter touch-tone information. For example, the prompt might say, ''For faster service, enter your account number now.''

When the DEFINITY vector contains a ‘‘converse’’ step, then the CONVERSANT VIS can enter, through the use of a CONVERSANT VIS ‘‘external function,’’ up to 16 digits of CONVERSANT VIS-collected information at the same time the customer is transferred out of CONVERSANT VIS.

NOTE:
The host vendor should be consulted to determine whether the collected digits are made available to the application by the Application Programming Interface (API).

In addition, a CallVisor adjunct can associate data with a call using User to User Information (UUI). The information is available to:

- Other CallVisor adjuncts connected to the same switch
- A CallVisor adjunct at another switch where the call is routed over a PRI facility. The PRI passes along the associated information.

Planning for Flexible Billing

The MultiQuest Flexible Billing feature is an interface to the AT&T MultiQuest 900 Vari-A-Bill® Service, an inbound calling capability offered as part of the MultiQuest Interacter. For G3V4, this feature allows an ASAI adjunct to change the rate at which an incoming 900-type call is billed.

NOTE:
The actual billing decisions may be done in an adjunct processor or in another system that communicates with the adjunct processor.

If you plan to use the Flexible Billing option, you must decide what rates shall apply to what services. For example:

- A new rate can be established for higher-valued services such as requests for particularly valuable information, conversion of text mail to speech, and technical support.
- A flat rate may be charged for consultative support, warranty registration, maintenance contracts, or the recovery of a fixed-cost service or product (for example, a client order).
- A premium charge may be requested for clients who need specialized delivery of information such as overnight mail or FAX, recovery of the cost of a sample product, an account summary, or a transcript.
- A premium credit may be appropriate for promotional discounts, first-time callers, contest winners, or those who use low overhead resources, such as electronic media, rather than human agents.

NOTE:
When you subscribe for MultiQuest Flexible Billing service, you must specify the maximum amount that may be billed to a call.

Additional Flexible Billing considerations include the following:

- Cellular End Offices and about 3% of End Offices (NPA-NXX) do not have the necessary billing software to accept rate changes. Applications should be designed with this limitation in mind.
- Applications where a large percentage of calls are expected from specific exchanges, geographical areas, or cellular customers require careful analysis before using MultiQuest Flexible Billing.
- The adjunct can be notified that a call has Flexible Billing capability in two ways: via a Call Offered Event Report and via a Route Request. The first way requires that the adjunct have an active Event Notification association for a VDN or split to which the call is offered. The second way requires that the call use adjunct routing to a VDN.
- It is the customer's responsibility to insure that their calling parties are notified of rate changes to be applied to their call. There may be legal requirements concerning notification of rate changes to customers.
- Rate change requests can only be made after the call has been answered and before the call is disconnected. Multiple rate changes are subject to the following constraints:
  - — If original and subsequent requests are ''flat charge,'' or if both are ''new rate,'' the amount of change is overwritten. The time stamp at which the change is to be applied remains the same as when the original change was requested.
  - — If the original request is ''Premium Charge'' or ''Premium Credit,'' the subsequent request can be either ''Premium Charge'' or ''Premium Credit.'' The amount of the request and the type of request replace the original request. The two requests are not arithmetically combined.

  These constraints are the customer's responsibility and should be considered when designing the Adjunct Processor application software.
- Flexible Billing is supported using ISDN Country Protocol 1A.
- Flexible Billing does not operate across a private network. The switch that the ASAI adjunct is connected to must be directly connected to the PRI trunk providing the MultiQuest service.
- If two calls with MultiQuest Flexible Billing are conferenced together, it is impossible to control which trunk will receive future flexible billing requests. To insure that the ability to change the rate is preserved and that operation is consistent and predictable, never conference two incoming trunks together when this feature is being used.
- If a call with Return Destination specified also has Flexible Billing assigned, the Return Destination is ignored and the call disconnects. The calling party is disconnected if all other parties drop.
- Special Services Option B does not apply to this feature and thus is not supported.

- DEFINITY system capacities related to MultiQuest Flexible Billing are as follows:
  - — A G3R supports up to 1,000 open billing requests at a time. (This does not mean you can have only 1,000 calls at a time. It means you can change billing on 1,000 calls at a time. Some calls may have to wait to have the billing changed.)
  - — A G3i-medium supports up to 100 open billing requests at a time.
  - — A G3i-small supports up to 25 open billing requests at a time.

  NOTE:
  A request only counts against the above limits until a reply is received from the 4ESS; thus, more calls can actually have the service than the limits state. However, the application would need a strategy to deal with billing change requests rejected because they exceeded the above limits.

- Tandeming of information over PRI trunks is not yet supported.

Install CallVisor ASAI Components

Now you must install your CallVisor ASAI application components, listed below. Your Project Manager should coordinate the installation.

- DEFINITY CallVisor ASAI Environment

  Work with your AT&T representative to coordinate the installation and administration of the CallVisor ASAI link.

- Network Services

  Work with your network service provider to install and test the network services required by your application (for example, Megacom 800, MultiQuest, and INFO 2).

- Computer Environment

  Work with your computer platform provider or VAR to install and test the computing system components.

- CallVisor ASAI Application

  Work with your application provider (for example, computer or independent software vendor) to install and test the CallVisor ASAI application.

Test Overall Configuration

End-to-end testing of the overall configuration must be performed before the CallVisor application is placed into service. A comprehensive test plan must be developed covering the following areas:

1. Intended or unintended feature interactions that the application might have with other switch features, such as service observing of telemarketing agents, call coverage situations, and trunking arrangements.
2. Worst case call and message traffic scenarios to test the application performance under stress conditions.
3. Intended or unintended interactions with other ASAI links or applications.
4. Problem detection and diagnostic capabilities offered by the switch, computer platform, and application. You should become familiar with any ASAI message logs available for recordkeeping, tuning, or troubleshooting of the application.
5. Backup procedures for link, computer platform, or application failures.
6. Application error recovery procedures after switch restarts and link failures. You should force link restarts and overload/hyperactivity conditions to assess how your application will handle such conditions.

After all components have been installed and tested, you should conduct a trial of your CallVisor ASAI application. The trial will allow you to compare old operations with the new CallVisor ASAI operations and to discover any operational faults in your new operations and/or training. After the trial you should gradually cut over your entire operation to the new CallVisor ASAI application.

Installation and Test for CallVisor ASAI

2

Hardware Installation

The CallVisor ASAI link requires the following hardware components:

1. ISDN-BRI Circuit Pack (for CallVisor ASAI-BRI link) or DEFINITY LAN Gateway Multi-Function Board (for CallVisor ASAI-Ethernet link). (Multiple links may use both.)
2. Packet Controller Circuit Card (for internal communications)
3. Packet Maintenance Circuit Pack

Check that your DEFINITY Communications System has the above components. If installation of any of the above components is required, refer to *DEFINITY Communications System Generic 1 and Generic 3 Installation and Test*, 555-230-104.

The following hardware may be needed for your specific CallVisor ASAI application. See *DEFINITY Communications System Generic 1 and Generic 3 Installation and Test*, 555-230-104, for complete information on how to install and test the hardware.

- Announcement Circuit Pack — For integrated announcements
- Call Classifier Circuit Pack — For predictive dialing call classification or for call prompting applications
- DS1 Interface Circuit Pack (ISDN) — For CPN/BN delivery

- Facility Test Circuit Pack — Required for duplicated systems only; optional for unduplicated
- Expansion Interface Circuit Pack — For new multiple-port network systems or upgrades. (If you have the older TN776 circuit pack, it must be replaced with a TN570 circuit pack or later, which permits CallVisor ASAI to terminate on an Expansion Port Network [EPN]).
- MultiQuest trunk for Flexible Billing

Software Installation

In addition to the CallVisor ASAI and the DEFINITY Communications System basic software, the following software might be needed for your specific CallVisor ASAI installation. Refer to the *DEFINITY Communications System Generic 1 and Generic 3 Installation and Test*, 555-230-104, for more information.

- Automatic Call Distribution (ACD) Software — For ACD configurations
- Automatic Route Selection (ARS) Software — For ISDN-PRI call routing
- ISDN-PRI Software — For ISDN-PRI trunks
- Vectoring Basic Software — For call vectoring applications and ASAI adjunct routing
- Vectoring Prompting Software — For integrated call prompting applications
- Vectoring (ANI II Digits Routing)
- Vectoring (G3V4 enhanced)
- Vectoring (G3V4 advanced routing)
- EAS Agent Skills
- Answering Machine Detection for Predictive Outbound Call Management (OCM)
- AT&T Adjunct Links
- VDN Return Destination
- Optionable Switch-Classified Calling
- AT&T MultiQuest Flexible Billing
- ASAI-Accessed Internally Measured Data
- VuStats

CallVisor ASAI Link Administration

The CallVisor ASAI software must be installed in your system before an ASAI link can be administered and activated. Up to eight ASAI links can be administered at the same time to the same or different adjunct processors, using either BRI or Ethernet transport, or both.

To administer an ASAI link, use the **add station** command and set the link type to `ASAI`. Fill out the remainder of the form as appropriate for your ASAI host. CallVisor ASAI links do not support Management Information Messages (MIMs). Screen 2-1 shows a sample completed Add Station form.

```
 add station                                                    Page 1 of 1
-------------------------------------------------------------------------------
                              STATION

Extension: 5000       BCC: 0
     Type: ASAI                                        COR: 1
     Port: 1A0102                                      COS: 1
     Name: asai link

EVENT MINIMIZATION? n


                     XID? y                Fixed TEI? y   TEI: 3
             MIM Support? n
                                          CRV Length: 2
```

Screen 2-1. Add Station

For more information on CallVisor ASAI link administration, see the *DEFINITY Communications System Generic 3 CallVisor ASAI Protocol Reference,* 555-230-221, and the *DEFINITY Communications System Generic 3 Feature Description*, 555-230-204.

Table 2-1 shows how feature options are specified for different ASAI vendor partners' equipment. **`MIM Support?`** must always be set to no.

Table 2-1. ASAI Feature Options Administration for AT&T Vendor Partners

Vendor Partner	XID	MIM Support	Fixed TEI	CRV Length	Event Min.
AT&T CONVERSANT® VIS 4000	Yes	No	Yes,TEI=3	1 byte	n
AT&T CONVERSANT VIS 5000	Yes	No	Yes,TEI=3	2 bytes	n
Dialogic[2]	No	No	No	2 bytes	n
International Business Machines (IBM®)	No	No	No	2 bytes	y
Stratus Computers	No	No	Yes,TEI=1	2 bytes	n
Aristacom	No	No	No	2 bytes	n
Hewlett-Packard	Yes	No	No	2 bytes	n
CallVisor PC (including EIS)	Yes	No	Yes,TEI=3	2 bytes	n
CallVisor 3000	No	No	No	2 bytes	n
Novell	Yes	No	Yes,TEI=3	2 bytes	n
IBM DEFINITY LAN Gateway clients	No	No	Yes,TEI=3	2 bytes	y
All other DEFINITY LAN Gateway clients	No	No	Yes,TEI=3	2 bytes	n

See Appendix E and the ''AT&T Vendor Partners'' section that follows in this chapter for more information.

In addition to the CallVisor ASAI link administration, the DEFINITY Communications System features that follow may need to be administered for your specific ASAI application. The required forms are listed as well.

- Adjunct-Controlled Splits — Add/Change Hunt Group Form (For the majority of applications, this field does not apply and should be left at the default value of NONE.)
- ASAI Adjunct Alarm Administration — The system default for CallVisor ASAI alarms is to provide warnings when an ASAI link fails or the adjunct

2. Formerly Digital Equipment Corporation

does not respond to switch messages. The customer can tune the level of on-board and off-board alarms to warnings, or minor or major alarms. Alarm severities are set by means of the **set options** maintenance command, explained in *DEFINITY Communications System Generic 3r Maintenance*, 555-230-105. Once the ASAI adjunct alarms are administered to an alarm level, the switch alarms all CallVisor ASAI links at that level.

- Automatic Call Distribution (ACD) — Add/Change Hunt Group, Trunk Group, Station, Feature-Related System Parameters, and Attendant Console Forms
- EAS Skills and Logical Agents — Agent Login ID form, Add/Change Hunt Group form, and Add/Change VDN form
- Automatic Route Selection (ARS) — Change ARS Digit Analysis Form
- Call Vectoring — Add/Change VDN and Call Vector Forms
- ISDN-PRI Trunks and Options — Add/Change Trunk Group Form
- Outbound Call Management (OCM) Special Information Tones (SITs) — Remote Access Form
- Answering Machine Detection — System-Parameters Customer-Options Form
- Option for Switch-Classified Calls — System-Parameters Customer-Options Form
- Flexible Billing — System-Parameters Customer-Options Form. In addition, the following optional system features must be activated to support the MultiQuest Flexible Billing feature:
  - — ASAI
  - — Integrated Systems Digital Network — Primary Rate Interface (ISDN-PRI)
  - — MultiQuest Flexible Billing

  Finally, the following optional system features will probably be used when Flexible Billing is active:
  - — Automatic Call Distribution (ACD) — Required if call routing uses ACD
  - — Call Vectoring — Required if inbound calls use Call Vectoring for routing

- ASAI-Accessed Internally Measured Data — System-Parameters Customer Options Form. In addition, the following system features must be activated to support the ASAI-Accessed Internally Measured Data feature:
  - — Internally Measured Data option
  - — VuStats

For detailed instructions regarding the administration of the above features, see the appropriate (G3i or G3r) *DEFINITY Communications System Generic 3 Implementation* document, 555-230-650 or 555-230-655, respectively.

CallVisor ASAI Link Testing

After the CallVisor ASAI link is administered and installed, perform the following tests as described in the *DEFINITY Communications System Generic 3 Installation and Test*, 555-230-104:

- Status Station
- Status bri-port
- Test port

In addition, check that the switch does not report any alarms or errors associated with the CallVisor ASAI port.

NOTE:
AT&T tests that the CallVisor ASAI link is functional as part of the basic installation procedures. Coordination of additional testing can be done by AT&T if the Single Point of Contact Enhanced Installation Offering is purchased by the customer. Actual testing of other vendors' equipment and applications is performed by the customer or appropriate representative.

Additional testing of the adjunct application must be performed by the customer to ensure that the application performs as desired.

AT&T Vendor Partners

The following AT&T vendor partners have signed development agreements with AT&T to share information about each other's products and to establish working relationships among companies.

NOTE:
This list of vendor partners is up-to-date at the time of this document's publication. However, the number of vendor partners may expand in the future. For a current list and more detailed information, contact your AT&T representative.

- Digital Equipment Corp. (DEC)
- International Business Corp. (IBM)
- Hewlett-Packard (HP)
- Aristacom
- Stratus
- Tandem
- Novell (PassageWay™ Telephony Services)

  NOTE:
  This product is known as NetWare® Telephony Services if sold by Novell instead of AT&T.

- Electronic Information Systems (EIS)

See Appendix E for CallVisor ASAI functionality supported by AT&T vendor partners.

Installation and Maintenance Service Offerings

3

AT&T provides the following installation and maintenance service offerings:

- Installation and Implementation
  - — Basic Installation
  - — CallVisor ASAI Consultation Service
  - — CallVisor Implementation Single Point of Contact (SPOC)
- Ongoing Support Services
  - — Basic Ongoing Support (CallVisor ASAI)
  - — CallVisor ASAI Single Point of Contact (SPOC) Support

Installation and Implementation

Basic Installation

AT&T will provide highly specialized and experienced switch installation crews to ensure that CallVisor ASAI is administered, connected, and tested, and that physical connectivity is verified to the adjunct.

Consultation Services

Consultation services allow you to purchase technical expertise from AT&T. An AT&T Technical Applications Consultant (TAC) will prepare CallVisor ASAI call flow specifications and assist you with the following activities:

- Identifying project objectives
- Identifying call center applications

- Identifying preliminary call scenarios and reviewing them with the application provider
- Finalizing and documenting call scenarios
- Integrating call flows with switch configuration
- Developing specifications of switch Busy Hour Call Completions (BHCCs) and CallVisor ASAI link capacity
- Reviewing final call scenarios with the application provider
- Developing and administering switch translations. (The TAC will work with you and the AT&T Account Executive on this activity.)
- Developing a test plan for acceptance of the ASAI application
- Finalizing and documenting the requirements of an ASAI application
- Providing recommendations about the best way to achieve a business goal through the use of ASAI.

Implementation Single Point of Contact (SPOC)

AT&T can serve as your single point of contact during the installation and implementation of all components relating to CallVisor ASAI applications. A fully trained AT&T Complex Project Manager will be assigned to coordinate and monitor the complete installation and testing of components among the vendors. The activities of the Project Manager include the development and implementation of the following:

- System Implementation Plan
- System Acceptance Plan
- Master Schedule
- Documentation Plan
- Post-cut review

NOTE:
SPOC is available to you only if you have contracted for consultative services.

Ongoing Support Services

Basic Ongoing Support

AT&T will provide helpline support free of charge for CallVisor ASAI during the one year of Post-Sale Software Support. Also, for one year after your acceptance, AT&T will replace the CallVisor ASAI software free of charge should the distribution media (tape) be faulty or otherwise corrupted. At the end of the one-year Post-Sale Software Support period, you can purchase the Basic Ongoing Software Support Service that provides support specifically for the CallVisor ASAI link. The DEFINITY switch must be under a maintenance contract. This service offering includes:

- Call receipt, fault isolation, and trouble resolution if the problem is in the AT&T elements of the DEFINITY switch-to-host link
- Cooperation with you (the customer) and other vendors for non-AT&T problems after you have contacted each vendor
- Helpline support for general questions and administrative support

Single Point of Contact Support

This service allows AT&T to act as your agent in problem resolution. The Single Point of Contact (SPOC) consists of a single telephone number to report any problems with both AT&T and non-AT&T equipment, software, and facilities in the CallVisor ASAI call flow. This service offering includes:

- Coordination of all problem reporting and resolution
- Initiation of trouble tickets, monitoring of repair activities, status, and close out of problems

  NOTE:
  AT&T will not service or maintain other vendors' products with this service.

- Preparation of monthly maintenance reports summarizing performance of all the CallVisor ASAI call flow components

To be eligible for this service, contractual services for both the DEFINITY switch and Basic Ongoing Support are required.

Your AT&T representative can explain the above offerings in detail and help you select the service offering that is best for you, based on your specific requirements and needs.

Sample Models

A

Appendix A provides sample models to help you design an initial CallVisor ASAI configuration and determine if your configuration is within the DEFINITY G3i Communications System capacity limits. Each model shows conservative Busy Hour Call Completion (BHCC) and ACD agent values. If your configuration needs are within the values shown below, you can use a DEFINITY G3i Communications System for your CallVisor ASAI application.

NOTE:
AT&T measures Busy Hour Call Completions (BHCCs) instead of busy hour call attempts. For purposes of comparison, BHCCs are usually multiplied by a factor of 3 or 4 to obtain a comparable busy hour call attempts number. In addition, the numbers provided here are extremely conservative to ensure that any borderline situation is assessed by the AT&T Design Center.

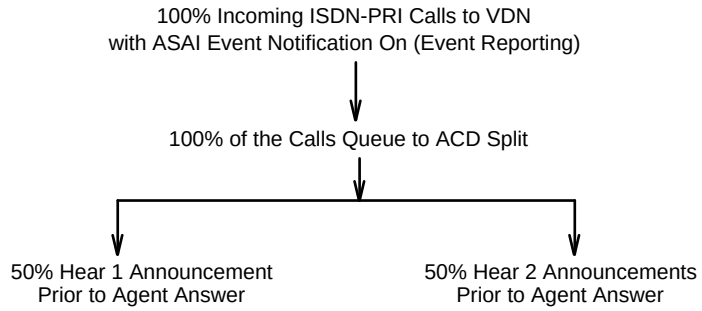
If your configuration is close to or exceeds the BHCC and ACD agents values provided for each model, you should ask your AT&T representative to consult with the AT&T Design Center to better assess the configuration and the capacity limitations. The AT&T Design Center can then determine if a DEFINITY G3i Communications System will be able to handle your configuration or if a DEFINITY G3r Communications System is required. Note that there might be other reasons why you might need to use a DEFINITY G3r Communications System.

These configurations are also a good start for the creation of detailed call flows.

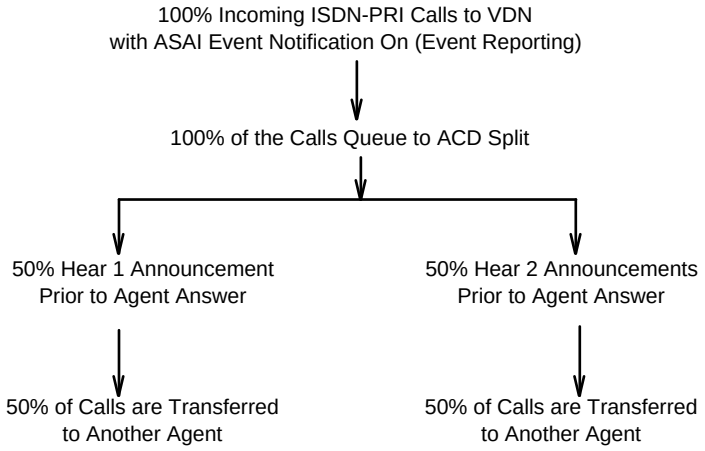
CallVisor ASAI Scenarios

Your AT&T representative can provide you with additional details on each of these sample CallVisor ASAI scenarios or can contact the AT&T Technical Response Center for additional help.

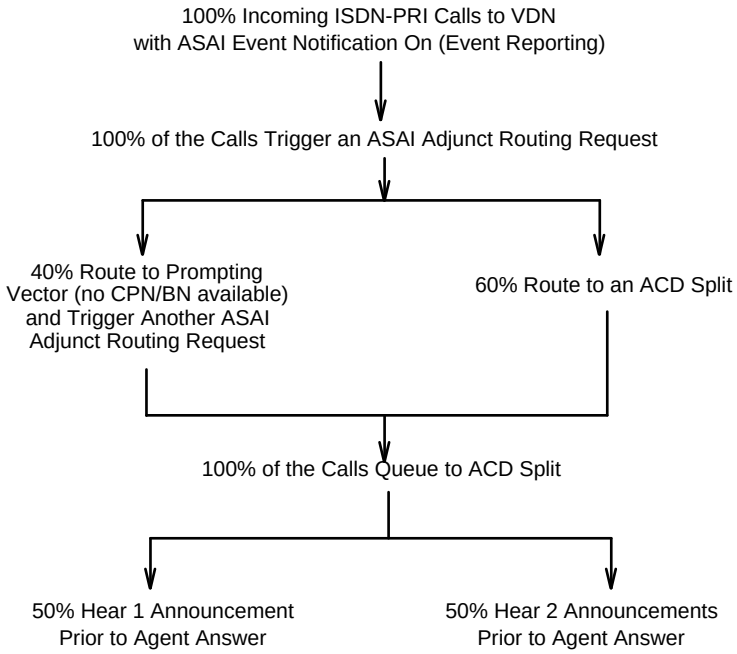
1. Simple Data Screen Delivery:



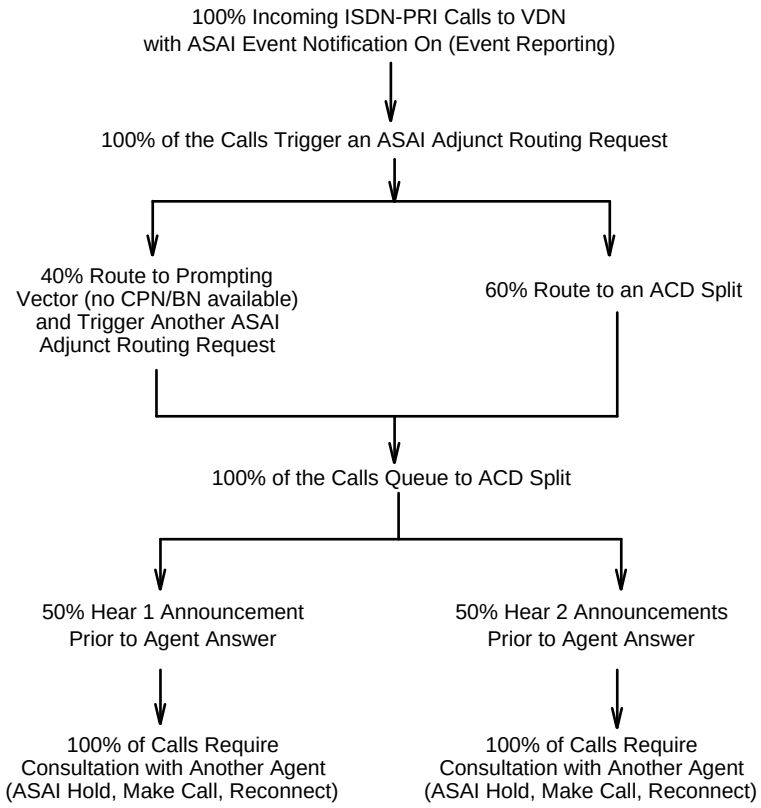
2. Data Screen Delivery with 50 percent Direct Agent Transfers:



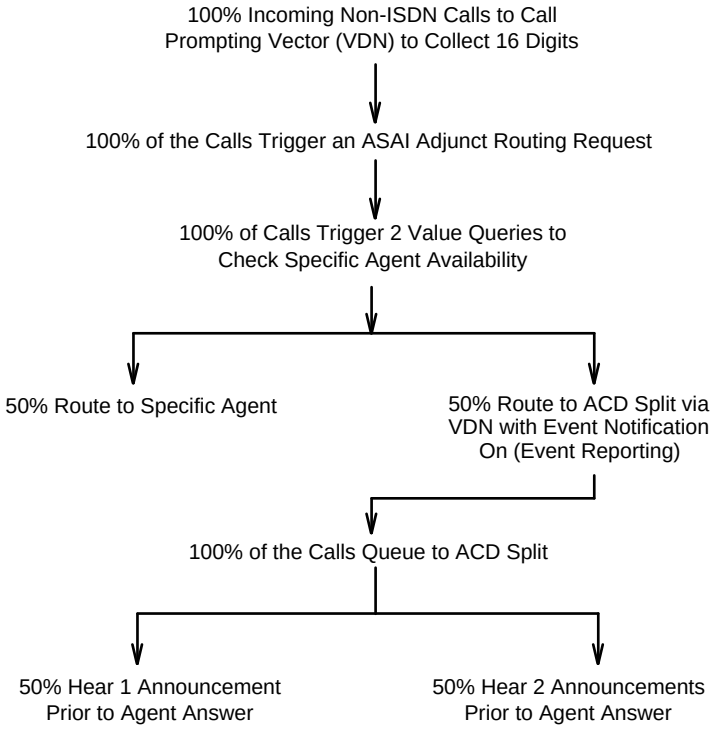
3. CPN/BN Routing with Data Screen Delivery:



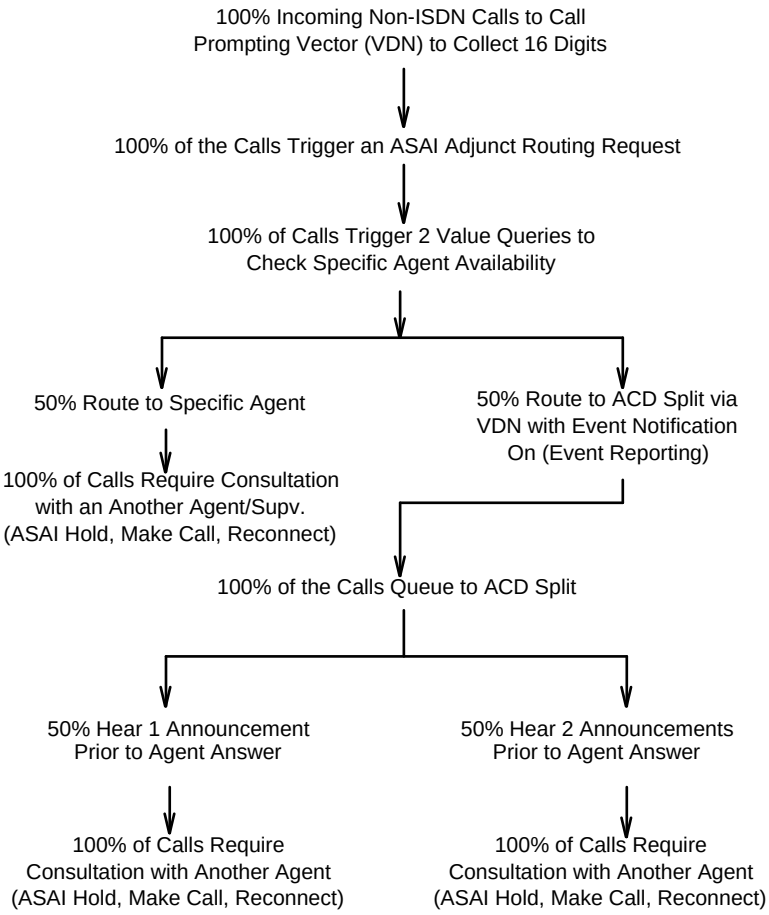
4. CPN/BN Routing with Data Screen Delivery, Consultation Hold, and ASAI Agent Work Mode Control:



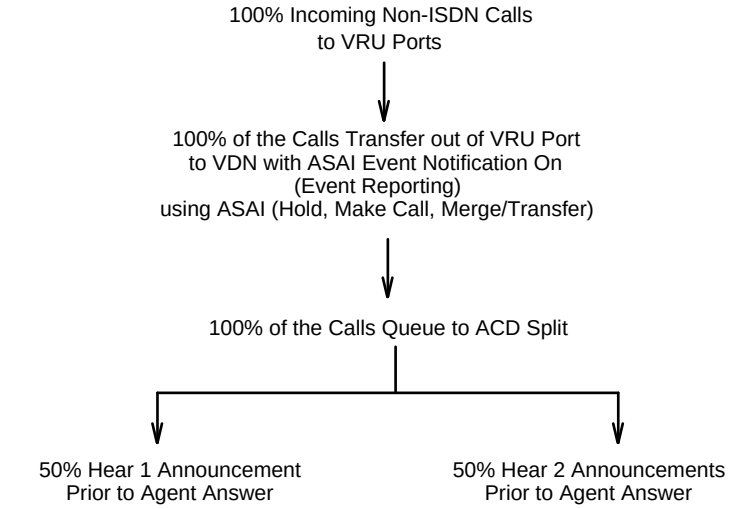
5. Call Prompting with ASAI Adjunct Routing (Account Code Routing):



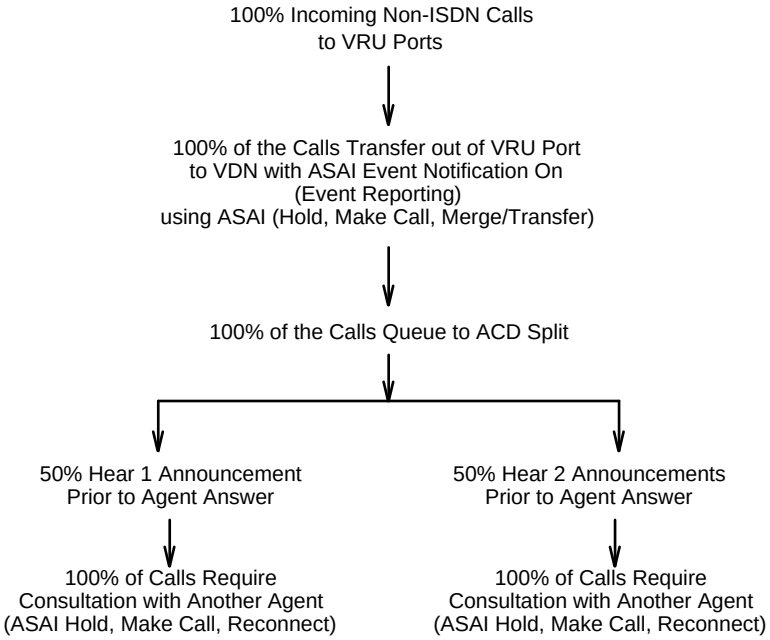
6. Call Prompting with ASAI Adjunct Routing, Consultation Hold, and ASAI Agent Work Mode Change:



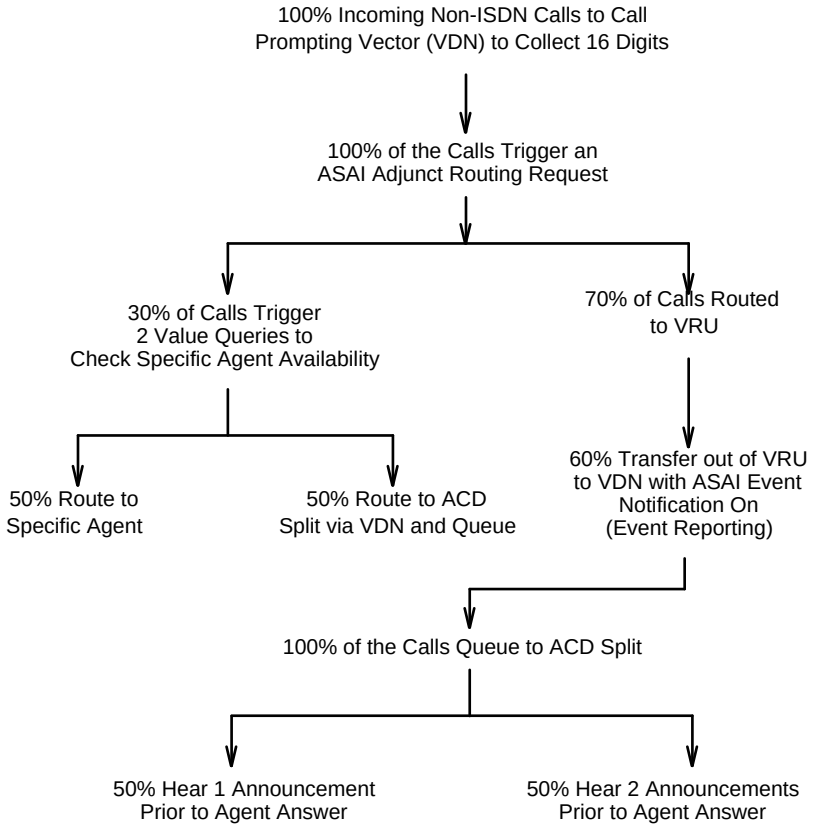
7. ASAI Voice Response Unit (VRU) with Data Screen Delivery:



8. ASAI Voice Response Unit (VRU) with Data Screen Delivery, Consultation Hold, and ASAI Agent Work Mode Control:



9. ASAI Voice Response Unit (VRU) with Data Screen Delivery, Adjunct Routing, and Call Prompting:



Needs Assessment Questionnaire

B

CallVisor ASAI Needs Assessment Questionnaire

To AT&T Account Teams:

Use this questionnaire to gather preliminary information about customers who may be considering the purchase of a switch-to-host application for a DEFINITY Communications System. This questionnaire is part of an information package to be forwarded to the AT&T Design Center and used as a basis for the preliminary system design. If you have any questions, please contact _____.

Submitted by:

Date submitted _____ Prepared by_____

Position _____

Phone_____ FAX_____ATTMail Address_____

Section 1: Project Team Information

Customer Project Team

Corporate Name_____
Address_____
City_____ State_____ Zip Code_____
Phone_____ FAX_____

Project Manager_____
Official Title_____ Phone_____

Call-Center Manager (End User)_____
Official Title_____ Phone_____

Telecommunications Manager_____
Official Title_____ Phone_____

Data Processing Manager_____
Official Title_____ Phone_____

Customer Signature_____ Date_____

Other Key Customer Project Team Members

Name	Title	Phone

AT&T Account Team Information

Account Executive_____
Address_____
City_____ State_____ Zip Code_____
Phone_____ FAX_____ATTMail Address_____

Design Specialist - Call Center_____Branch Code_____
Phone_____ FAX_____ATTMail Address_____

ACD Sales Overlay Specialist_____
Phone_____ FAX_____ATTMail Address_____

Network Technical Center Contact_____
Branch Manager_____
Address_____
City_____ State_____ Zip Code_____
Phone_____ FAX_____ATTMail Address_____

Section 2: Call Center Overview

1. Describe the call center environment (include a general overview of the business goals of the company and the role the call center will play in meeting these goals). Also discuss the size of the call center in terms of the number of agents and the number of trunks required.

2. Describe why the customer is considering switch/host technology. (Include a description of those enhancements switch/host technology can bring to their call center, such as CPN/BN routing and host-controlled transfers, and describe the cost-benefit the customer hopes to derive from this technology.)

Section 3: Computing Environment

1. Has the data processing department been involved in planning for the switch/host application? (Check one.)

   _____ Yes

   _____ No

   If yes, describe key individuals and their involvement to date.

   _____

   _____

   _____

2. Has the host computer system been selected? (Check one.)

   _____ Yes

   _____ No

3. If yes, specify the following:
   Vendor _____
   Model _____
   Operating System_____
   Ready date _____
   Telecommunications management software to be used: (for example, CICS, IMS) _____
   Sales contact for vendor.
   Name _____ Title _____ Phone_____

4. If no, specify the following:
   Who has responsibility for making the decision?_____
   Where in the decision-making cycle are they?

   _____

   Anticipated decision date?_____
   List all host computer systems under consideration.

   _____

   _____

   _____

5. Will ASAI transport be Ethernet or BRI?

   _____

6. Is the customer working with a third-party vendor for assistance with system integration? (Check one.)

   _____ Yes

   _____ No

   If yes, please provide the following contact information:
   Company Name_____
   Primary Contact _____ Title_____
   Phone_____ FAX_____

7. Describe the host system configuration. (Provide a written description of the host computing system, including such considerations as front-end processing, local area networking, and/or a database back end. Include the geographic location of each component in the system.)

   _____
   _____
   _____
   _____
   _____
   _____
   _____

8. Block Diagram (In the space provided below, draw a functional block diagram of the computing environment being planned.)

9. UNIX® Experience (for CONVERSANT or PC/ASAI environment only)

   Check the item that best describes the customer's proficiency with the UNIX operating system.

   _____ Beginner_____ Some experience _____ Expert

   Do they have an experienced UNIX system administrator? (Check one.)

   _____ Yes
   _____ No

   If no, is the customer willing to send a representative to a UNIX administrator's course?

   _____ Yes
   _____ No

Section 4: Software Development

1. Call Center Application Software

   Will the call center application software be:

   _____ New?
   _____ A modification of an existing application?

   Who will develop or provide the call center application software?

   Primary contact _____ Position _____
   Company_____ Phone _____
   City_____ State_____ Zip Code _____

2. Interface Software Development (host API and protocol stack)

   Who will develop or provide the interface software for the host?

   Primary contact _____ Position _____
   Company_____ Phone _____
   City_____ State_____ Zip Code _____

3. Is any software development now underway?

   _____ Yes
   _____ No

   If yes, please explain the current status of the development effort.

   _____
   _____
   _____
   _____
   _____

4. Have any schedules been discussed for software development?

   _____ Yes
   _____ No

   If yes, please state the schedules that have been discussed.

   _____
   _____
   _____
   _____

5. Additional software development comments:

   _____
   _____
   _____
   _____
   _____

Section 5: Communications System Requirements

1. What is the DEFINITY Communications System being used with the PBX/host application?

2. Will more than one communications system be used for this application? (Check one.) _____ Yes _____ No

   If yes, describe the locations and how they will be used.

   _____
   _____
   _____

3. For existing communications systems:

   When will a one-week traffic study be completed on the communications system?_

   If you know the following, please fill it in.

   What is the current number of modules or port networks?_____
   What is the current processor occupancy?_____

   Describe how the existing communications system will change when the ASAI application is in place.

   _____
   _____
   _____

4. For new communications systems:

   When will a DOSS configuration be done for the new communications system?__

   If you know the following, please fill it in.

   What is the anticipated number of modules or port networks?_____
   What is the anticipated processor occupancy and/or busy hour call completions?_
   Total within this system?_____

5. Check all additional application features planned for the communications system. (CMS is strongly recommended. The others should be used based on the individual requirements of the call center.)

   _____ Call Vectoring (recommended)
   _____ Call Management System (CMS)
   _____ Manager IV
   _____ AUDIX
   _____ Message Server (MSG-SRV)
   _____ CONVERSANT Voice Information System
   _____ Traditional ACD
   _____ EAS Skills
   _____ Other _____
   _____ Other _____

6. List any additional software packages that will run on the communications system.

   _____
   _____
   _____
   _____

7. Will any private networking configurations be used (for example, Electronic Tandem Network [ETN], Distributed Communications System [DCS])? Explain.

   _____

8. Are there dialing constraints on the communications system (for example, 4 or 5 digits)? Explain.

   _____
   _____
   _____

9. Block Diagram (In the space provided below, draw a functional block diagram of the communications system environment being planned. Include all gateways, CONVERSANT voice information systems, and CMSs.)

Section 6: Network Interface Requirements

1. Check those services the customer is planning on using in the call center.

   _____ Calling Party Number/Billing Number (CPN/BN)
   _____ Dialed Number Identification Service (DNIS)

2. Specify the long-distance network the customer is planning to use.

   _____

3. For AT&T network customers using CPN/BN:

   Has the customer subscribed to the following:

   _____ Megacom 800?
   _____ INFO-2 with PRI?
   _____ Software Defined Network (SDN)

   If no, specify when the customer plans to subscribe to these services.

   _____

4. For non-AT&T long-distance network users:

   List and describe each of the network features they will have:

   _____
   _____
   _____
   _____
   _____

Section 7: Schedules

1. Describe the general timeline the customer is working toward. (Include any specific planning, software development, integration, and/or testing considerations.)

Section 8: Additional Comments

1. Include any additional comments you feel may have a bearing on the preliminary system design and/or a decision by the customer to purchase one of the CallVisor ASAI products.

Call Center Operations Worksheet

C

The Call Center Operations Worksheet allows AT&T personnel to assess the status and capacity of your existing or proposed DEFINITY switch. The information collected helps AT&T determine the impact of the proposed configuration on your switch.

The worksheet contains four general sections: General Business, ACD Incoming Call Management (ICM), ACD Outgoing Call Management (OCM), and Call Flows. The general business section provides the general business (non-ACD) call traffic mix expected for the switch. The ACD Incoming Call Management section provides general information about inbound telemarketing operations. The ACD Outgoing Call Management section provides general information about outbound telemarketing operations. The Call Flows section provides a list of important items to include in the customer call flows, and several examples of appropriate call flows.

The accuracy of the information provided determines whether realistic and achievable performance capacity figures can be obtained. Therefore, it is STRONGLY recommended that this information be accurate and reviewed by the customer and the appropriate AT&T representative.

General Business

1. Indicate how much of the general business traffic (non-ACD, non-ICM/OCM) in your system fits into each of the following categories. Use percentages. The five categories must add up to 100 percent.

Traffic Type	Percentage
Intercom	_____
Incoming	_____
Outgoing	_____
Private Network (ETN, UDP, DCS)	_____
Vectoring General Business	_____
Total	100%

2. Indicate the call characteristics for each of the categories above. Again, each category (intercom, incoming, outgoing, private networking) must add up to 100%.

Intercom	Answered	_____
	Coverage (See Note 1)	_____
	Auto Call Back	_____
	Total	100%
Incoming	DID Answered	_____
	DID Coverage (See Note 1)	_____
	Attendant Answered (See Note 2)	_____
	Attendant Extended (See Note 3)	_____
	Total	100%
Outgoing	DOD 7/8 Digit Calls	_____
	DOD 10/11 Digit Calls	_____
	Total	100%
Private Networking	Incoming Answered	_____
	Incoming Coverage (See Note 1)	_____
	Outgoing	_____
	Tandem	_____
	Total	100%

NOTES:

Coverage means that the call goes to coverage without being answered at the original destination.

Attendant answered means that an attendant answers a call, handles the caller's request, and disconnects.

Attendant extended means that an attendant answers a call and extends the call to a station that answers.

3. For the general business traffic (non-ACD, non-ICM/OCM), specify the percentage of calls that fit into the following categories. Percentages do not need to add up to 100 percent.

   Calls covered by AUDIX _____

   DCS Calls on Private Network _____

   ISDN on Private Network _____

   ISDN on Incoming Calls _____

   ISDN on Outgoing Calls _____

   ISDN on General Business Vectoring _____

4. Number of SMDR Ports (maximum 2) _____
5. Percentage of Calls on Intra-Switch SMDR _____
6. Specify what percentage of the general business calls in the system are generated to or by the following station types. (Note: This is not necessarily the same as the percentage of total stations in the system that each of these types represents.) Percentages must add up to 100 percent.

   Analog Stations _____

   DCP Non-display _____

   DCP with Display _____

   ISDN-BRI _____

   Total 100%

7. Specify the percentage of general business calls that interact with ASAI (Event Notification, 3rd Party Call Control). _____
8. Specify the percentage of the general business calls that are initiated via ASAI (3rd Party Auto Dial, 3rd Party Make Call). _____
9. Specify the percentage of the general business calls that go to coverage to an ASAI-monitored station (3rd Party Domain Control). _____
10. Provide the appropriate call flow for a general business call using call vectoring, if any. (See the call flow samples shown later in this appendix.)
11. Is Answering Machine Detection needed for predictive OCM?

ACD Incoming Call Management

1. Indicate how much of the inbound ACD traffic in your system fits into the following categories:

   ACD Calls using ISDN trunks _____

   ACD Calls using SMDR _____

2. Will CallVisor ASAI Event Reporting be used? ____
   How many bytes of UUI information (for calls incoming from another CallVisor site)? ____
3. Will Flexible Billing be used? ___ For what percent of incoming calls? ___
4. Will Internally Measured Data be used? ___ For how many stations, splits, VDNs, and so forth, and how many queries per hour?
   _____
5. Indicate the expected agent utilization. (This is the percentage of time that an agent is active on ACD calls or available to receive ACD calls; agents in ACW and AUX are not available to receive calls.) _____
6. Specify the maximum number of inbound ACD agents (include non-AUDIX VRU ports) on the system. _____
7. Specify what percentage of total ACD calls terminate at each of these station types. (Note: This may be different from the percentage of total ACD stations that each of these station types represent). Percentages must add up to 100 percent.

Analog Stations	_____
DCP Non-display	_____
DCP with Display	_____
ISDN-BRI	_____
Total	100%

8. Provide the appropriate call flows. (See the call flow samples shown later in this appendix.)

ACD Outgoing Call Management

1. Indicate how much of the outbound ACD traffic in your system fits into the following categories:

   ACD Calls using ISDN trunks _____

   ACD Calls using SMDR _____

2. Specify the average number of rings for calls that are never answered.
   _____
3. Specify the average number of rings for calls that are answered.
   _____
4. Indicate the expected agent utilization. (This is the percentage of time that an agent is active on outbound calls or available to initiate outbound calls; agents in ACW and AUX are not available for outbound calls.)
   _____
5. Specify the maximum number of outbound ACD agents (include non-AUDIX VRU ports) on the system. _____
6. Specify the percentage of total OCM calls that are connected to each of these station types. Percentages must add up to 100 percent.

Analog Stations	_____
DCP Non-display	_____
DCP with Display	_____
ISDN-BRI	_____
Total	100%

7. Is CMS/BCMS used to monitor and measure the outbound ACD calls?
   _____
8. Is ASAI-Accessed Internally Measured Data used?_____
9. Provide the appropriate call flows. (See the call flow samples shown later in this appendix.)

Call Flows

Using Figures C-1, C-2, and C-3 as examples, specify a call flow, complete with percentages, that best depicts the call center operations during the busy hour. As a minimum, call flows should be provided for general business call vectoring, ACD-ICM, and ACD-OCM areas. If there are several different call flows within each area, draw a call flow for each and give the percentages of the overall traffic that each call flow represents. Table C-1 shows the most important items to include in the call flow for each of the call center categories: General Business, ACD-ICM, and ACD-OCM.

Table C-1. Items to Include in Call Flow Diagrams

Items	General Business Call Vectoring	ACD-ICM	ACD-OCM
Call Vectoring Commands Executed	X	X	
— Announcement	X	X	
— Wait	X	X	
— Collect Digit	X	X	
— Total Digits Collected	X	X	
— Available Agent Conditional Checks		X	
— Go to Conditional Checks (except available agent checks)	X	X	
— Route to Conditional Checks (except available agent checks)	X	X	
— Check Backup Split (except available agent checks)		X	
— Route to (any number other than VDN)	X	X	
— Route to VDN	X	X	
— Successful Queue Commands		X	
— Messaging (AUDIX only)	X	X	
— ASAI Adjunct Routing	X	X	
— ASAI Adjunct Routing to VDN	X	X	
— Look Ahead Interflow (Success & Failure)		X	
— Converse Step	X	X	
— ASAI-Supplied Call Prompter/ Dial-Ahead digits		X	
— ASAI-Supplied UUI		X	
ACD Split Actions (non-vectored splits)		X	X
— Announcements (Forced First/Recurring)		X	X
— Queued		X	X
— Intraflow		X	X
— VRU Transfers		X	
— AUDIX as Automated Attendant		X	

Table C-1. Items to Include in Call Flow Diagrams *(continued)*

Items	General Business Call Vectoring	ACD-ICM	ACD-OCM
ASAI-Related Actions	X	X	X
— ISDN Gateway (IG) Event Reporting	X	X	X
— ASAI Event Reporting (Event Notification)	X	X	X
— ASAI Transfers/Conferences (3rd Party Merge)		X	X
— ASAI Change Work Modes (Request Feature)		X	X
— ASAI Queries (Value Queries) for Agents, Splits and Trunk Status including queries for Internally Measured Data		X	X
— ASAI Call Termination (3rd Party Drop/Clear Call)		X	X
— ASAI Billing Change Request		X	
Other	X	X	X
— Call Holding Time Per Agent		X	X
— VRU Usage		X	X
— Call Transfers/Conferences		X	X
— Digits Dialed (7 or 10 Digits)			X
— User/Switch-Classified			X
— Call Classification Outcomes			X
— Coverage Usage	X		
— Attendant-Handled Calls	X		
— ASAI Redirected Calls	X	X	

Information sources for developing an accurate call flow can be obtained from:

- BCMS Historical Reports—Daily and Hourly Split and System Reports
- CMS Historical Reports—Split and System Reports
- DEFINITY Generic 3 Hunt Group Measurements Report

Once the call flows have been diagrammed, the above table should be used to fill in the expected vector treatments for each ''branch'' of the call flow ''tree.'' See the call flow sample, ''Calls to Vector Delivered to ACD Agents,'' later in this appendix.

Calls to VRU Transferred to Agent Split

This call flow includes:

- CMS Reporting
- ASAI Event Reporting on All Splits (VRU and Agent Splits)
- Non-ISDN Trunks
- CONVERSANT VRU (with ASAI)

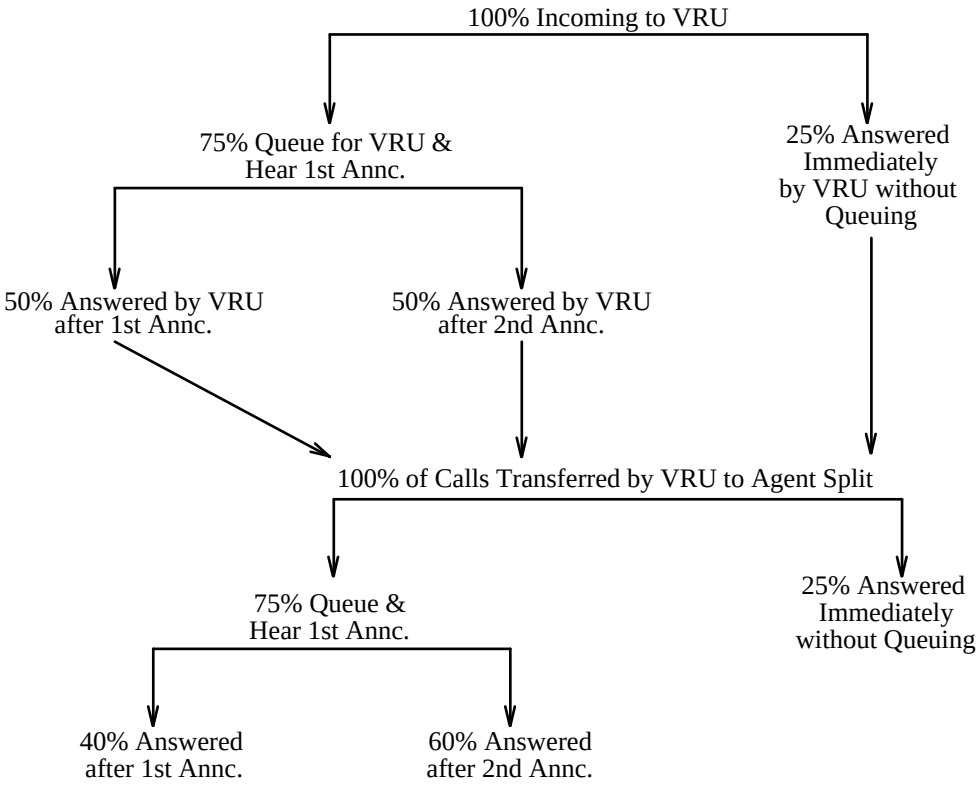


Figure C-1. Sample ACD — ICM Call Flow

Calls to Vector Delivered to ACD Agents

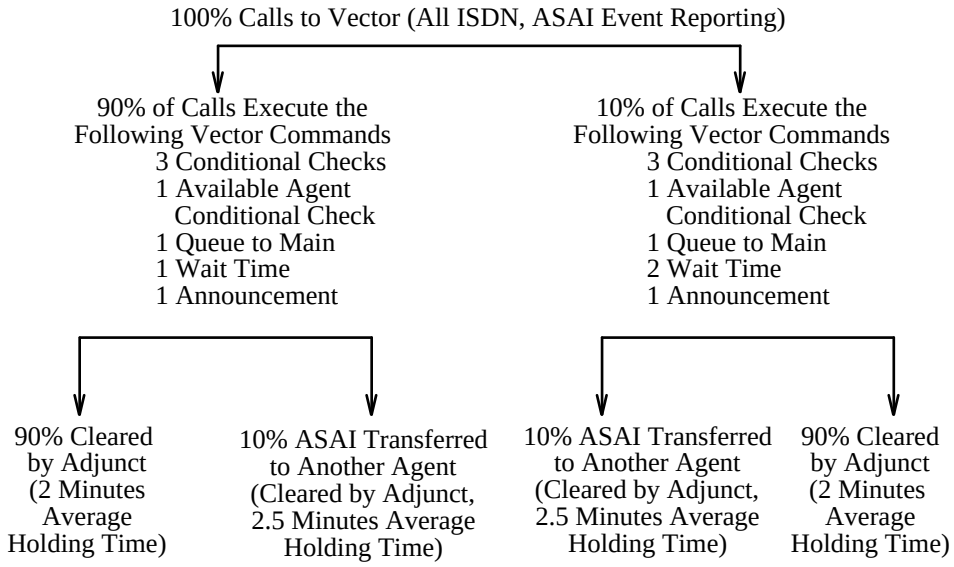


Figure C-2. Sample Call Vectoring Call Flow

ASAI Switch-Classified Calls

The ASAI adjunct originates all calls via the 3rd Party Make Call capability and uses the switch's call classifier board.

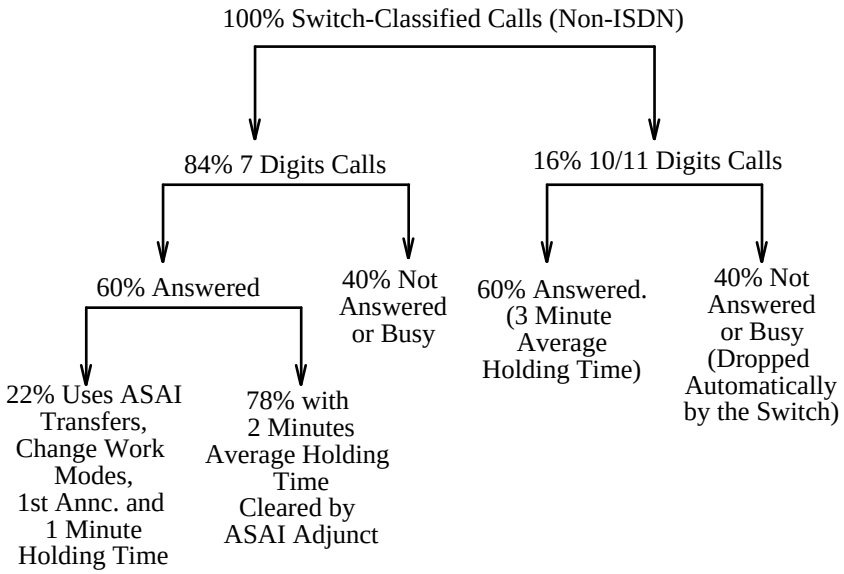


Figure C-3. Sample ACD — OCM Call Flow

CONVERSANT/CallVisor ASAI Sample Needs Assessment Questionnaire

D

CONVERSANT/ASAI Background Questionnaire

This questionnaire is to be used to gather information about customers who may be considering the purchase of a CONVERSANT/ASAI system for use with DEFINITY.

CONVERSANT/ASAI Background Questionnaire

To AT&T Account Teams:

Use this questionnaire to gather information about customers who may be considering the purchase of a CONVERSANT/ASAI system for use with a DEFINITY Generic 3 Communications System. It is part of a package of information to be forwarded to the AT&T Design Center and used as a basis for the preliminary system design. If you have any questions, please contact _____ .

Submitted by:

Date submitted _____ Prepared by _____

Position _____

Phone _____

FAX _____

ATTMail Address _____

Project Team Information

Customer Project Team

Corporate Name Diversified Office Products Corporation

Address 111 Stapler Road

City Chicago State IL. Zip Code 55521

Phone (444) 571-1000 FAX (444) 571-1008

Project Manager Kim Stern

Official Title Project Manager Phone (444) 571-1516

Call Center Manager (End User) Frank Johnson

Official Title Director - Call Center Operations Phone (444) 571-1563

Telecommunications Manager Dennis Moon

Official Title Director - Telecommunications Services Phone (444) 571-1482

Data Processing Manager Bob Able

Official Title Director - Information Services Phone (444) 571-1563

Other Key Customer Project Team Members:

Name	Title	Phone
Bob Jones	Telecommunications Analyst	(444) 571-1417
Carol Smith	Information Services Analyst	(444) 571-1577
Deb Davis	Call Center Supervisor	(444) 571-1318

AT&T Account Team Information

Account Executive Tim Conner

Address 5543 Corporate Road

City Chicago State IL Zip Code 98765

Phone (333) 555-1212 FAX (333) 555-1210 ATTMail Address tconway

System Consultant Red Adair Branch Code

Phone (333) 555-3232 FAX ATTMail Address oilfire

Sales Overlay Specialist John Cray

Phone (333) 555-999 FAX (333) 555-9905 ATTMail Address jcray

Network Technical Center Contact Brian Millham

Branch Manager

City Chicago State IL Zip Code 98765

Phone (333) 555-3851 FAX (333) 555-3800 ATTMail Address vroom

Call Center Overview

1 Describe the call center environment. (*Include a general overview of the business goals of the company and the role the call center will play in meeting these goals*.)

Diversified Office Products Corporation is dedicated to providing quality products and services throughout the midwest business community. They expect to gain an additional 7% market share in office furniture, 3% in office supplies, and 9% in office machine repair over the next 2 years. At the same time, they will also be implementing procedures to reduce accounts receivable by 15%.

Diversified expects that their call center will be the most important contributor toward achieving these goals by increasing selective customer contact. Enhancing customer services in direct sales and collections will go a long way to improve customer perceptions of Diversified's ability to provide quality products and professional services.

2 Explain why the customer is considering a CONVERSANT/ASAI system. (*Include a description of enhancements that CONVERSANT/ASAI can bring to their call center, such as CPN/BN routing and data screen delivery. Also describe any cost-benefits the customer hopes to derive from the system*.)

Diversified expects that with the ability to perform data screen delivery and agent selection based on CPN/BN, quality customer contacts will increase by 50%. The use of a host database will also enable them to monitor and control agent activity more efficiently, while at the same time improving performance.

It is also expected that the CONVERSANT/ASAI system will significantly increase agent effectiveness, improving sales and services without expanding the support staff.

Computing Environment

1 Has the data processing department been involved in planning for the CONVERSANT/ASAI system?

XX Yes

____ No

If yes, describe key individuals and their involvement to date.

Preliminary discussions have centered on application requirements, anticipated transaction volumes, and effect on existing environment.

2 Has the host computer system been selected? Check one.

XX Yes

____ No

3 If yes, specify the following:

Vendor IBM

Model 3090

Operating System MVS

Ready date _____

Telecommunications management software to be used: (e.g., CICS, IMS) CICS

Sales contract for vendor:

Name _____ Title _____ Phone _____

4 If no, specify the following:

Who has responsibility for making the decision? _____

Where in the decision-making cycle are they?

Anticipated decision date? _____

List all host computer systems under consideration.

5 Is the customer working with a third-party vendor for assistance with system integration?

XX Yes

____ No

If yes, please provide the following contact information:

Company Name GoFast Computer Services

Primary Contact John Barry Title Account Executive

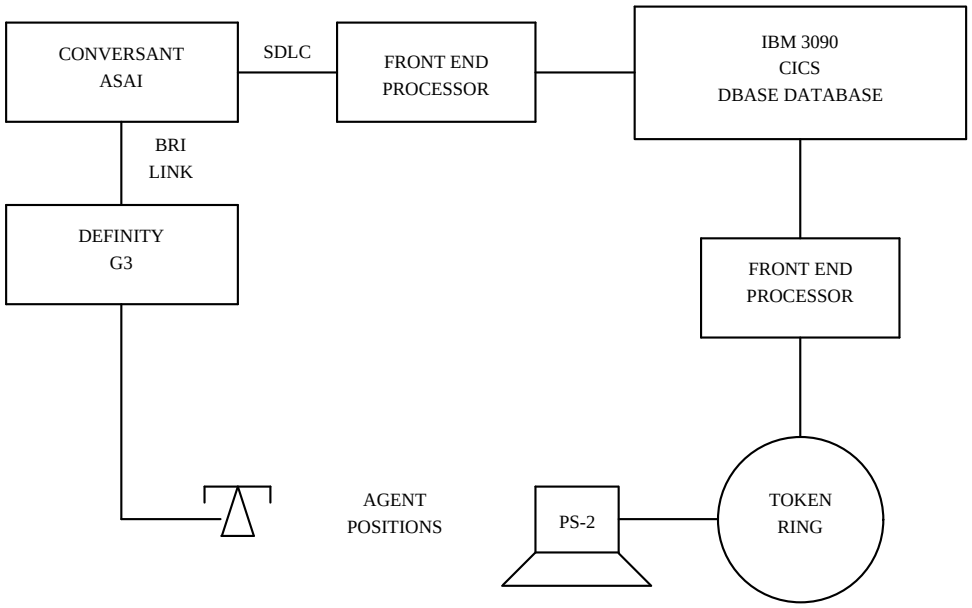
Phone (201) 532-1269 FAX (201) 532-1250

6 Describe the host system configuration. *(Provide a written description of the host computing system, including such considerations as front-end processing, local area networking, and/or a database back end. Include the geographic location of each component in the system.)*

One centralized host system located in Chicago configured as follows:

- 4705 front end processor
- SDLC
- IBM 3090 mainframe
- CICS Telecommunications
- DBase Database package
- Token Ring LAN
- PS-2 Workstations

7 Block Diagram *(In the space provided below, draw a functional block diagram of the computing environment being planned.)*



8 UNIX Experience

Check the item that best describes the customer's proficiency with UNIX.

_____ Beginner ___XX___ Some experience_____ Expert

Do they have an experienced UNIX system administrator?

___XX___ Yes_____ No

If no, is the customer willing to send a representative to a UNIX administrator's course?

_____ Yes_____ No

Software Development

1 Call Center Application Software

Will the call center application software be:

XX New?

____ A modification of an existing application?

Who will develop or provide the call center application software?

Primary contact Carol Smith Position Analyst

Company Diversified Phone 201 571-1577

City Newark State NJ Zip Code

2 Interface Software Development (host API and protocol stack)

Who will develop or provide the interface software for the host?

Primary contact Will Boone Position Analyst

Company GoFast Computer Svcs Phone 201 532-1269

City Newark State NJ Zip Code

3 Is any software development now underway?

XX Yes

____ No

If yes, please explain the current status of the development effort.

Feasibility study is being conducted by Diversified Project Management to ensure proposed project is realistic and realizable given the time and budget constraints.

4 Have any schedules been discussed for software development?

XX Yes

____ No

If yes, please state the schedules that have been discussed.

Preliminary schedules are as follows:

Feasibility Study complete:	July 15, 1992
Requirements Analysis complete:	4 weeks
Preliminary Design:	8 weeks
Detail Design:	8 weeks
Code and Test:	12 weeks
System Integration and Test:	4 weeks

5 Additional software development comments:

GoFast's API/protocol stack documentation is being reviewed by the Information Services group to gain understanding and identify any imposed restrictions or constraints.

Communications System Requirements

1 Is the DEFINITY G3 Communications System being used with the CONVERSANT/ASAI system:

XX A new G3 communications system?

XX An existing communications system?

2 Will more than one communications system be used for CONVERSANT/ASAI applications?

XX Yes

____ No

If yes, describe the locations and how they will be used.

Call center production will upgrade the existing G1 located at Diversified's headquarters in Chicago. A second G3 will be purchased for backup purposes as well as call center application development and test.

3 For existing communications systems:

When will a one-week traffic study be completed on the communications system? June 28, 1992

If you know the following, please fill it in.

What is the current number of port networks/modules? 2

What is the current processor occupancy? 36%

Describe how the existing communications system will change with CONVERSANT/ASAI.

Processor occupancy will increase to approximately 70% within 6 months of CONVERSANT/ASAI implementation.

4 For a new G3 communications system:

When will a DOSS configuration be done for the new communications system? July 25, 1992

If you know the following, please fill it in.

What is the anticipated number of port networks? 2

What is the anticipated processor occupancy? 20%

5 Check all additional applications planned for the communications system. *(ASAI and Call Vectoring are required. Either CMS or BCMS is strongly recommended. The others should be used based on the individual requirements of the call center.)*

XX ASAI (required)

XX Call Vectoring (required)

XX Call Management System (CMS)/Basic Call Management System (BCMS)

XX G3 Management Application

XX AUDIX/AUDIX Voice Power™

____ Call Prompting

XX PNA Other ____

6 List any additional software packages that will run on the communications system.

_____

_____

_____

_____

7 Will any private networking configurations be used (e.g., ETN, DCS)? Explain.

_____

8 Are there any dialing constraints on the communications system (e.g., 4 or 5 digits)? Explain.

5 digit dial plan currently exists

_____

_____

9 Will more than one communications system be used?

_____ Yes

XX No

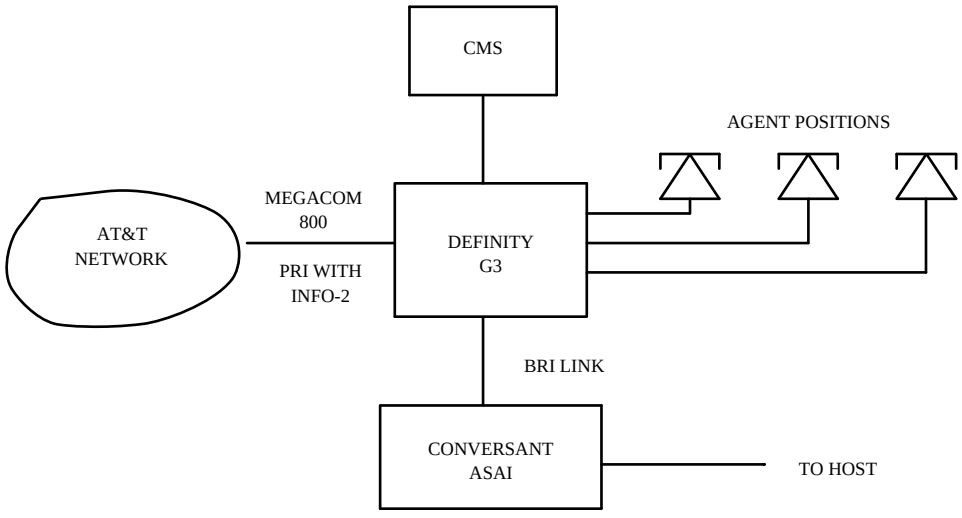
If yes, specify the following:

How many communications systems will be used? Explain the configuration.

_____

Will look-ahead interflow be used? _____

10 Block Diagram *(In the space provided below, draw a functional block diagram of the communications system environment being planned. Include all G3s, CONVERSANTs, and CMS's.)*



Network Interface Requirements

1 Check those services the customer is planning on using in the call center.

XX Calling Party Number/Billing Number (CPN/BN)

XX Dialed Number Identification Service (DNIS)

2 Specify the long distance network the customer is planning to use.

AT&T Megacom, Megacom 800 with ISDN

3 For AT&T network customers using CPN/BN:

Has the customer subscribed to the following:

____ Megacom 800?

____ INFO-2 with PRI?

____ Software Defined Network (SDN)

If no, specify when the customer plans to subscribe to these services.

Megacom, Megacom 800 with INFO-2/PRI will be included in the proposal. The customer is aware that these are requirements for the delivery of CPN/BN.

4 For non-AT&T long distance network users:

List and describe each of the network features they will have.

Schedules

1 Describe the general timeline the customer is working toward. *Include any specific planning, software development, integration, and/or testing considerations.*)

Complete all required studies and gain project approval and go-ahead:	July 20, 1992
Place order for G3 and CONVERSANT/ASAI hardware/software:	July 25, 1992
Develop Call Center Application:	36 weeks
Install CONVERSANT/ASAI hardware/software:	January, 1993
Install GoFast API/protocol stack:	January, 1993
Install development G3 hardware/software:	February, 1993
System Integration Test:	May, 1993
Agent Training:	May, 1993
Live Production:	June, 1993

Additional Comments

1 Include any additional comments you feel may have a bearing on the preliminary system design and/or a decision by the customer to either purchase or not purchase CONVERSANT/ASAI.

The business case being prepared for Diversified's management must include a justification for a payback period which does not exceed 18 months from system start-up. This must include the new G3 and the additional CONVERSANT equipment purchased for development.

The business case must also show that Diversified's projected 2-year growth plan will be supported by the proposed hardware/software configuration.

CallVisor ASAI Functionality Supported by Vendor Partners

E

This appendix shows the CallVisor ASAI functionality supported by various vendor partners. A table entry of ‘‘x’’ means the functionality is supported and is accessible to an application. A blank means the functionality is not supported.

Functionality Tables

Table E-1. Common Applications Supported by Vendor Partner Platforms*

Application	Dialogic CT-Connect**	IBM CallPath	Stratus	AT&T CONVERSANT	AT&T CallVisor PC	HP ACT	Aristacom SCIL*ICP	PassageWay Telephony Services (R2)
ASAI-BRI	x	x	x	x	x	x	x	x
ASAI-Ethernet (DEFINITY LAN Gateway)		1Q96			x			x
Adjunct Routing based on:								
CPN/BN (SID/ANI)	x	x	x	x	x	x	x	x
Dialed Number (DNIS)	x	x	x	x	x	x	x	x
Call Prompter Digits	rel 3.1	x	x	x	x	x	x	x
Agent/Queue Status		x	x		x			x
Lookahead Interflow Info		x	x	x	x	x	x	x
Customer Database Info	x	x	x	x	x	x	x	x
ASAI-Provided Digits					x		x	x
ASAI-Requested Digits					x		x	x
UUI		x			x		Note 1	x
Initiating Calls:								
user-to-user	x	x	x	Note 2	x	x	x	x
supervisor assist			x		x	x		x
direct agent calls	x	x	x	Note 2	x	x		x
Predictive calls	x	x	x		x	x		x
AMD		x			x			x
classifies busy	x	x	x		x	x		x
classifies reorder	x	x	x		x	x		x
classifies modem answer	x	x	x		x	x		x
classifies SIT tones	x	x	x		x	x		x
priority calls			x	Note 2	x	x		x
Call Control	Note 2	x	x		x		x	x
Station Control	x	x	x		x	x		x
Data Screen Delivery possible	x	x	x	x	x	x	x	x
Data screen transfer possible	x	x	x	x	x	x	x	x
Hands-free answer	x	x	x		x	x		x
Call Hold	x	x	x		x	x	x	x
Call Reconnect	x	x	x		x	x	x	x
Call Drop	on-PBX parties	x	x		x	on-PBX parties	x	x x
Call transfer	x	x	x	Note 2	x	x	x	x
Call Conference	x	x	x		x	x	x	x
Terminate Call	x	x	x		x		x	x
Redirect Call		1Q96			x			x
Selective Listening					x			x
Send DTMF		1Q96			x			x

*Vendor partners may have implemented additional capabilities other than those marked. Check with the library vendor for up-to-date support on the features not checked.

**Dialogic now supports Digital's former DEC CIT product line.

Table E-1. Common Applications Supported by Vendor Partner Platforms* *(continued)*

Application	Dialogic CT-Connect**	IBM CallPath	Stratus	AT&T CONVERSANT	AT&T CallVisor PC	HP ACT	Aristacom SCIL*ICP	PassageWay Telephony Services (R2)
Monitoring of:								
VDN	x	x	x	x	x	x	x	x
ACD Split	x	x	x	x	x	x		x
Station	x	x	x		x	x		x
Calls	Note 3	x	x	Note 2	x	Note 3	x	x
Event Information								
Called Number (DNIS)	x	x	x	x	x	x	x	x
Calling Number (CPN/BN)	x	x	x	x	x	x	x	x
Answering Agent extension	x	x	x	x	x	x	x	x
ACD split selected	x	x	x		x	x	x	x
Lookahead Interflow Info		x	x	Note 4	x	x	x	x
Call Prompting Digits	rel 3.1	Note 5	x	x	x	x	x	x
Position in queue	x		x		x			x
transfer event	x	x	x	Note 6	x	x		x
Hold/Reconnect event	x	x	x		x	x		x
conference event	x	x	x		x	x		x
agent disconnect event	x	x	x		x	x	x	x
call ended event	x	x	x	x	x	x	x	x
call abandons in queue (CPN/BN available)	x	x	x	x	x	x	x	x
Reason for Redirection		1Q96			x			x
Login		1Q96			x			x
Originated		1Q96			x			x
Queries								
time of day		x	x		x			x
# agents available in split		x	x		x	x		x
# calls queued in split		x	x		x	x		x
# agents logged into split		x	x		x	x		x
# idle trunks in group		x	x		x	x		x
# in-use trunks in group		x	x		x	x		x
# idle classifiers		x	x		x			x
# in-use classifiers		x	x		x			x
agent workmode and idle/busy	x	x	x		x	x		x
list agents logged into split		x	x		x	x		x
calls/call states at station	Note 7	x	x		x	x		x
parties on call	Note 7	x	x		x	x		x
type of extension	x	x	x		x	x		x
MWL status	x				x			x
SAC status	x				x			x
CF status & Fwd-to number	x				x			x
Integrated Directory Database					x			x
Internally Measured Data					x			x
Set MWL	x	1Q96	x		x	x		x
Billing Change					x			
Feature Requests:								
Call Forwarding	x	x	x		x	x		x
Send All Calls	x	x	x		x			x
Traditional ACD:								
agent login	x	x	x	Note 8	x	x	x	x
Agent Logout	x	x	x	Note 8	x	x	x	x
Change work mode	x	x	x		x	x	x	x
EAS Environment:								
agent Login	rel 3.1	x			x	x		x
Agent Logout	rel 3.1	x			x	x		x
Change work mode	rel 3.1	x			x	x		x

*Vendor partners may have implemented additional capabilities other than those marked. Check with the library vendor for up-to-date support on the features not checked.

**Dialogic now supports Digital's former DEC CIT product line.

Table E-1. Common Applications Supported by Vendor Partner Platforms* *(continued)*

Application	Dialogic CT-Connect	IBM CallPath	Stratus	AT&T CONVERSANT	AT&T Callvisor PC	HP ACT	Aristacom SCIL*ICP	PassageWay Telephony Services (R2)
Maintenance:								
Heartbeat	Note 7	Note 7	x	Note 7	Note 7	Note 7	Note 7	Note 7
Suspend ASAI alarms	Note 7					Note 7		Note 7
Resume ASAI alarms	Note 7					Note 7		Note 7

*Vendor partners may have implemented additional capabilities other than those marked. Check with the library vendor for up-to-date support on the features not checked.

**Dialogic now supports DEC CIT's former product line.

NOTES:

1. Only supported in Make Call Request, not Route Select Message.
2. The CONVERSANT platform has internal restrictions that only permit the application to control calls at the CONVERSANT's T/R ports.
3. Dialogic CT-Connect does not provide call control, but this can be emulated by domain controlling all parties on the call. Domain control is only available for parties on the switch, so there are limitations.
4. DNIS Display information only.
5. IBM CallPath Switch Server/2 supports Call Prompting Digits from the switch. IBM CallPath/400 does not.
6. The CONVERSANT API does not pass the CallVisor ASAI transfer event to the application(s). It does provide an internal indication that a transfer has occurred. The internal indication contains two call-ids.
7. These features are present, but not accessible to applications. The host platform exchanges these messages with the PBX.
8. Switch administration is available to do agent login/logout for CONVERSANT T/R ports. Also, auto-available agents don't require logins/logouts.

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