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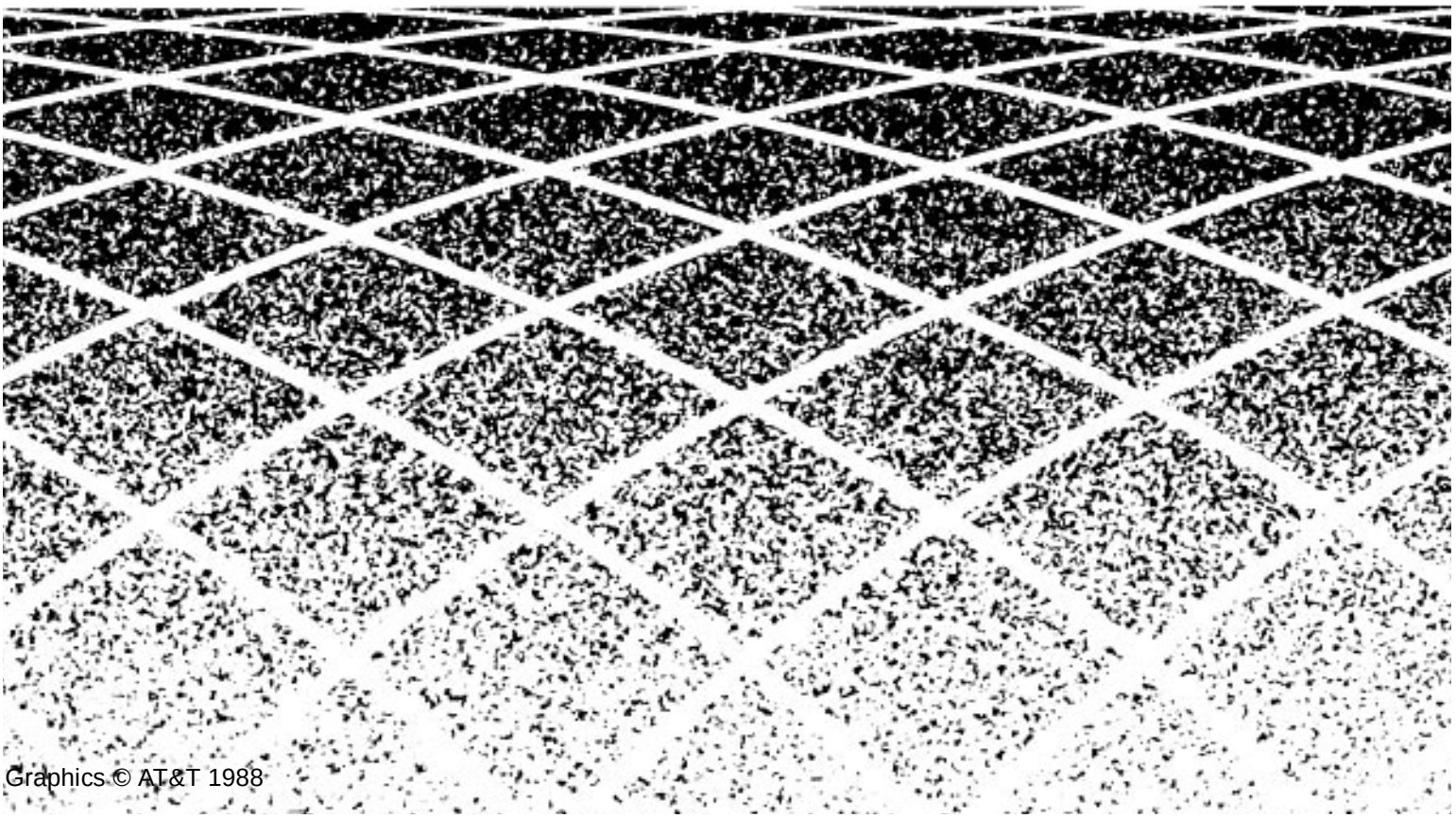
Intuity CONVERSANT VIS Version 5.0

Change Description



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Contents

Contents

Version 5.0 Change Description

Purpose

This book, *Intuity CONVERSANT VIS Version 5.0 Change Description*, 585-310-406, describes the product changes and additions, product hardware and, product user documentation that make up the AT&T Intuity™ CONVERSANT® Voice Information System V5.0 product. This book also serves as release notes for the V5.0 product.

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Change Description Overview

This document contains the following sections:

- Product changes and additions — A section that describes the V5.0 features, including changes in the product, and additions to the product since the last release, Version 4.0.
- Product exceptions — A listing of known problems and the recommended work-around for each problem
- Open Issues — A listing of general hints and work-arounds for different areas in the system (for example, Script Builder issues).
- Where to get help — Information on using the maintenance book and reaching customer support services

Product Changes and Additions

This section describes the V5.0 features, including changes in the product, and additions to the product since the last release, Version 4.0.

Open Interfaces

Version 5.0 takes several steps toward greater openness by implementing and supporting a specific set of open interfaces. The following list identifies some examples of the V5.0 open interfaces changes:

- Migration to UnixWare — All available functions of UnixWare are supported, and any/all peripherals are allowed on the platform to the extent that UnixWare allows the devices. For example, VIS sells a specific SCSI disk and tape drive, but a customer willing to provide the system integration function could add different SCSI peripherals of their choosing, as long as UnixWare supports it.
- IRAPI — Provides a C interface to controlling voice system functions
- Token Ring support — Expands network and data connectivity choices
- Speech files — Have moved from a proprietary filesystem to standard UnixWare files.
- System capacities — Have expanded and artificial restrictions have been removed to the extent possible by the software and hardware designs

UnixWare Operating System 1.1

The move to UnixWare provides support for the following UnixWare packages:

- SCSI Hard Disk Support — This feature continues support for SCSI hard disks; the 1.2-Gbyte SCSI disks are supported in upgrades, but all new sales ship the 1.7-Gbyte SCSI disks.

  Change → ESDI and IDE components (hard disk drives, cartridge tape drives, controller cards) are *no longer* supported. All V5.0 systems must be SCSI.

- SCSI Tape Drive Support — This feature continues support for SCSI cartridge tape drive; the SCSI 525-Mbyte cartridge tape drive is supported. Older SCSI tape drives are supported in upgrades, but only with a firmware update made during the installation process.

  Change → QIC cartridge tape drives are *no longer* supported.

- VERITAS Volume Manager — This feature is a disk management system that increases data availability, improves disk input/output performance, and provides disk mirroring.

- LAN — This feature uses the software bundled with standard UnixWare to support TCP/IP networking. This software gives access to TCP/IP over Token Ring or Ethernet hardware.

- Ethernet card — All V5.0 systems with networking features must upgrade to the SMC Elite 16 Ultra Combo Adapter card (EtherCard).

  Change → Since there is no driver support for either the StarLAN-10 NAU or the NP-600 Network Processor cards in Unixware, these cards are not supported in V5.0.

- Mouse — A mouse is optional for use with V5.0; the voice system is completely operable and administrable without a mouse. A mouse is required, however, to effectively use the GUI features of UnixWare. Under open interfaces, any other mouse supported by UnixWare may be supplied and installed by the customer.

In addition, the following list shows the UnixWare-Application software integration support:

- Speech file system — V5.0 provides access to speech files stored only in UnixWare filesystem. The concept of phrases/talkfiles is maintained in V5.0, but the underlying storage mechanism is UnixWare files.

  Change → The previous proprietary filesystem provided in V4.0 and earlier releases are *no longer* available. All tools that referenced speech in the proprietary filesystem are ported to use UnixWare files. These tools are invoked the same way, take the same inputs and produce the same outputs. Examples of such tools are: **list**, **add**, and **remove**.

  Standard UnixWare commands such as **ls**, **cp**, and **rm** can also be used to manage and manipulate speech files in V5.0. For MAP/100 and MAP/100C systems with greater than 72 telephone network connections, all speech files are stored on a second hard disk.

- Operation, Administration, and Maintenance — The UNIX System V Administration tools (SYSADM) are available from the VIS administration screens through the use of the **cvis_mainmenu** command.

  Change → With the move to UnixWare, the FACE administration screens are *no longer* supported or available. System administration is now supplied through SYSADM. Refer to Appendix A, "System Administration Features," in *Intuity CONVERSANT VIS V5.0 Operations*, 585-310-550, for more information on SYSADM.

  Change → With the move to UnixWare and the use of the NOVELL UnixWare user documentation, the SCSI errors messages documented in previous releases of the maintenance book are *no longer* valid and thus, are not documented in V5.0. These errors messages are obsolete with the move to UnixWare.

- Backup and restore — V5.0 supports the capability to make incremental backups to diskette or tape for:

  — User and system files

  — Speech files

  — Applications

  — Database tables

  V5.0 supports the capability to make incremental restores from diskette or tape for:

  — User and system files

  — Speech files

  — Applications

  — Database tables

  V5.0 supports the capability to make a full backup (mkimage), as well as the capability restore as full backup from tape.

- User Login Administration — V5.0 supports 3 levels of Voice System Security (administration, application, and operations). These privileges are administrable per user.

WARNING:
UnixWare Warning: Under no circumstances should you install a public copy of NOVELL UnixWare Update 1.1.1 (Update 5) or Update 1.1.2 (Update 6) on a Intuity CONVERSANT UnixWare system. The official public versions, as might be obtained from a UnixWare Bulletin Board, contain a flaw in the "asyc" Driver.o file that causes repeated errors messages whenever a terminal or modem attempts to use one of the COM ports. The only Updates you should install on your V5.0 system are those updates contained on the cartridge tape labeled Intuity CONVERANT VIS V5.0 UnixWare for Intuity that is shipped with V5.0.

INTUITY Response Application Programming Interface

All voice system capabilities can be viewed as services provided by the IRAPI by applications. Services are grouped under several categories:

- Library parameters
- Event and interrupt management
- Resource management
- Error detection and recovery strategy
- Application Interactions and management
- Basic and advanced telephony services
- Speech playing, recording, and storage
- Advanced speech services
- Performance measurement services

For more information on IRAPI, refer to the *Intuity CONVERSANT VIS V5.0 IRAPI Programming Guide*, 585-310-226.

Token Ring

To provide the Token Ring feature, major architecture changes were made to the 3270 host interface package. Support for 3270 over Token Ring is provided via CLEO LINKix software.

This feature includes a driver package and an IBM 16/4 ISA-16 Adapter Token Ring card.

CLEO LINKix Host

The voice system provides a HLLAPI programming interface so that custom C-level applications can be developed. Access interfaces defined for 3270 SNA applications shall be equivalent regardless of how they are physically routed, either over SDLC or Token Ring links. 3270 feature capabilities are equivalent to in V4.0, specifically, enhanced file transfer, NetView alarms, and 3278 terminal emulation is provided.

Change → The maximum number of configured LUs in V5.0 is 128 per physical link per voice system. The CLEO DataTalker card is no longer supported in V5.0. The CLEO PC/XL card (Revision D or later) is still supported in upgrades to V5.0, and another change to note about this card is that now a single PC/XL can support up to 128 LUs. However, systems with dual host connectivity cannot use 2 PC/XL cards. Dual host systems must be upgraded to the new synchronous host card, the CLEO FIFO-SIB. The FIFO-SIB can also support up to 128 LUs on a single card, and 2 FIFO-SIB cards are to be used to support dual host connectivity.

FlexWord Toolkit

V5.0 provides enhancements by providing a FlexWord Toolkit by separating FlexWord vocabularies from the FlexWord Recognition package.

This toolkit allows end-users to create their own words, wordlists, and vocabularies. The FlexWord Toolkit consists of tools and documentation necessary to create FlexWord wordlists, to verify and fine tune the phonetic definition of the words in the wordlists, and to package and install the customer-defined vocabularies.

The wordlist size limit is 500 words, and the maximum number of wordlists on a system is 200, with a maximum total number of words of 2,000.

Platform Enhancements

- CPU memory — On all MAPs, the voice system provides memory configurations in 16-Mbyte increments up to a maximum of 64 Mbytes of memory.

  Change → All MAPs in V5.0 must be configured with a minimum of 32 Mbytes of memory.

- Telephone network connections — V5.0 supports a maximum of 48 transactions on MAP/40 systems provided that a maximum of 48 telephone network connections is not exceeded. Any combination of the digital and analog telephony is acceptable on the MAP/40.

V5.0 supports a maximum of 96 transactions on MAP/100 system up to the physical limits of the platform. The total system-wide count for telephone network connections (including bridging) can be a maximum of 120. Any combination of digital and analog telephony is acceptable in making up the 96 transactions subject to other restrictions in the system (such as, no more than 72 Tip/Ring connections). A second SCSI hard disk drive is required for MAP/100(C) systems with more than 72 telephone network connections for speech storage.

- Migration to ORACLE V7 — V5.0 supports the same database related capabilities as those supported by the V4.0 system. The move to ORACLE DBMS 7.0.1.2 requires VIS to replace ORACLE V6 with ORACLE V7. Customers upgrading from earlier release need to also move to ORACLE V7.
- Local Alarm Support for CompuLert/SCCS — News sales of V5.0 do not support the Alarm Relay Unit (ARU), PEC 70462, because of an incompatibility with Equinox 8-port Asynchronous card. Existing systems using the Alarm Relay Unit that are upgrading to V5.0 may continue to use the ARU. The ARU and earlier versions of the asynchronous cards (IPC-900/Gemini-1000) are compatible and are supported in upgrades to V5.0.

Hardware Upgrades

As indicated in some of the sections above, there are several hardware components are no longer supported on V5.0. These hardware upgrade issues effect upgrade customers only, since all new sales are shipped with the newest supported hardware.

The following is a list of some of the hardware upgrade issues, but this list is not exhaustive or complete:

- CPU — Only 486 CPUs, 25 and 50 MHz, are supported for V5.0. The 25 MHz version is supported only on the MAP/40.

  Change → 386 CPUs are *no longer* supported.

- Disk subsystems — Only SCSI components are supported for V5.0.

  Change → IDE and ESDI disks (and the QIC tape drive) are *no longer* supported.

- LAN cards — Only the SMC Elite 16 Ultra Combo Adapter card (EtherCard) is supported for V5.0.

  Change → StarLAN and NP-600 LAN cards are *no longer* supported.

- VRS6 cards — Only IVP6 and IVP4 cards are supported in V5.0.

  Change → VRS6 cards are *no longer* supported.

- Power supply — Large configurations of Tip/Ring cards in older MAP/100s may need to upgrade the power supply to increase the -5 volt capacity.

- DataTalker — PC/XL and FIFO-SIB cards are supported in V5.0 with the following caveats:

  V5.0 does not support the use of two PC/XL cards in the same system, nor does it support using a PC/XL and FIFO-SIB on the same system. Therefore, in cases where two physical links are desired, both links must be implemented using the FIFO-SIB card.

  Pre-V5.0 systems with one PC/XL card (Revision D or later) can reuse this card in V5.0. Pre-V5.0 systems with two PC/XL cards (Revision D or later) are able to support up to 128 LUs in V5.0 on a single PC/XL card. The second PC/XL card is not needed, nor is it supported.

  Change → DataTalker cards are *no longer* supported.

A full list of all hardware upgrade issues affecting upgrade customers can be found in Chapter 4, “Hardware Upgrades” of *Intuity CONVERSANT VIS V5.0 Upgrade*, 585-310-152.

Product Hardware

The hardware components tested for support of the V5.0 general availability are as follows (newer hardware components may ship with new sales as they become available throughout the lifecycle of V5.0):

Table 1. Version 5.0 Hardware Components

Hardware Component Name	Series/Revision and Notes	V5.0 Only
Speech Processor AYC2B	Series (All)	
Speech Processor AYC2C	Series 0,1 Series 0,2 Series 0,3 Series 0,4 Series 0,5	
Speech Processor AYC9 (for Text To Speech)	Series 2 Series 3 Series 4 Series 5	
IVP6 AYC28	Series 2 and Series 3	X
IVP6 AYC5	Series (All)	
IVP6 AYC5B	Series 2 and Series 2,3	
IVP4 AYC6	Series (All)	
IVP4 AYC6B	Series 0A,1	

Continued on next page

Table 1. Version 5.0 Hardware Components — *Continued*

Hardware Component Name	Series/Revision and Notes	V5.0 Only
Companion AYC7 (for speech recognition)	Series 1 and 2 — shielded cables required	
T1 AYC11	Series 1 Series 2 Series 3 Series 4,5	
T1 AYC3B	Series 2 Series 3 Series 4	
FAX Attendant	TR114+I4L (900-701) — new FAX card, old and new may be used in the same platform	X
	TR114-I4L (900-707) — supported in upgrades to V5.0	
PC/PBX Platform (DCP)	CAG6 or CAG1-MOD Series (All)	
PC/ISDN (ASAI)	CAG4 Series (All)	
LAN	SMC Elite 16 Ultra Combo Adapter	X
Token Ring	IBM 16/4 ISA-16 Adapter	X
Synchronous Host	CLEO PC/XL — one card only; must be Revision “D” or later, supported only in upgrades to V5.0	
Synchronous Host	CLEO FIFO-SIB	X
Asynchronous 8 Port	IPC-900 or Gemini 1000 — supported only in upgrades to V5.0	
Asynchronous 8 Port	Equinox Megaport 8CS-990241	X
External Alarm Card	DDI 8661-P62WX10 — supported in MAP/100C only	
SCSI Adapter	Adaptec AHA-1542B or BusLogic BT-542B	
Video Control	Western Digital WDXLR83160 (X7) or WDXLR831124 (X2)	
CPU	Texas Microsystems D486DXC/50, BIOS Version 2.1c — supported in all MAP types	
CPU	Texas Microsystems D486SXC/25, BIOS Version 2.1c — supported in MAP/40 only	
Hard Disk Drive	Micropolis 1.75 GB, Model 2217 SCSI	X
Cartridge Tape Drive	33777-058, Rev. E.	X
Serial Mouse	Agiler Model AGM600E — shipped with new V5.0 sales; all Logitech’s mice are still supported.	X

Product User Documentation

The user documentation used to support the V5.0 product release is as follows:

Table 2. Version 5.0 User Documentation

Document Title	Document Number
Intuity CONVERSANT VIS V5.0 Change Description	585-310-406
Intuity CONVERSANT VIS V5.0 Documentation Guide	585-310-020
Intuity CONVERSANT VIS V5.0 System Description	585-310-225
Intuity CONVERSANT VIS V5.0 Upgrades	585-310-152
Intuity CONVERSANT VIS V5.0 Software Installation	585-310-151
Intuity CONVERSANT VIS MAP/100 Hardware Installation	585-310-148
Intuity CONVERSANT VIS MAP/100C Hardware Installation	585-310-149
Intuity CONVERSANT VIS MAP/40 Hardware Installation	585-310-150
Intuity CONVERSANT VIS V5.0 Maintenance	585-310-153
Intuity CONVERSANT VIS V5.0 Operations	585-310-550
Intuity CONVERSANT VIS V5.0 Script Builder	585-310-727
Intuity CONVERSANT VIS V5.0 Communication Development	585-310-229
Intuity CONVERSANT VIS V5.0 Speech Development	585-310-228
Intuity CONVERSANT VIS V5.0 Application Development	585-310-227
Intuity CONVERSANT VIS V5.0 IRAPI Programming Guide	585-310-226
Intuity CONVERSANT VIS V5.0 Command Reference	585-310-230
Intuity CONVERSANT VIS V5.0 Application Design Handbook	585-310-551
GBCS Security Handbook	555-025-600
VERITAS File System, System Administrator's Guide	585-350-906
VERITAS Volume Manager documentation Installation Guide Release 1.2 Basic User's Guide Release 1.2 System Administrator's Guide Release 1.2	585-350-907

Continued on next page

Table 2. Version 5.0 User Documentation — *Continued*

Document Title	Document Number
NOVELL UnixWare Documentation Set Installation Handbook Introduction to System Administration System Performance Administration System Setup and Configuration User and Group Management Backup and Restore Services Print Service Administration File System Administration System Performance Administration Basic UNIX System Networking TCP/IP Administration NFS/RPC/INIS Administration User Handbook	585-350-908
CLEO LINKix Documentation Set Hardware Installation Administration Guide Common Service Verbs Programmer's Guide 3270 User's Guide HLLAPI Programmer's Guide NetView User's Guide	585-350-912
ORACLE Administration Guide	585-350-909
ORACLE Messages and Code Manual	585-350-910
ORACLE SQL*PLUS User's Guide	585-350-911
ORACLE SQL*NET TCP/IP Documentation	585-350-913
ORACLE SQL*MENU User's Guide	585-350-914
ORACLE SQL*FORMS Operator's Guide	585-350-915
ORALCE SQL*FORMS Designer's Reference	585-350-916
ORACLE SQL*ReportWriter	585-350-917
ORACLE Programmer Guide	585-350-918
Asynchronous Host Toolkit for CONVERSANT VIS Version 4.0	585-350-215
CONVERSANT VIS Version 4.0 486 CPU Upgrade Kit for MAP/100 and MAP/100C	585-350-211
CONVERSANT VIS Version 4.0 SCSI Disk Drive Upgrade Kit for MAP/100 and MAP/100C	585-350-212
CONVERSANT VIS Version 4.0 Upgrade Kit for MAP/40	585-350-213

Product Exceptions

Listed on the following pages are the exceptions you must be aware of for this release of Version 5.0.

An explanation of the impact and how to deal with it is provided for each item. Below each item is a *Ref* number; this number is for internal AT&T tracking problems. Please ignore it.

- In Intuity CONVERSANT VIS V5.0 many of the user screens and menus have been developed as JAM® screens. This conversion greatly increases the openness and flexibility of these administration screens. As with almost any upgrade, there are a few items that may work differently than before. There may also be some items that are not available, and, of course, new items that previously were not available. For example, migrating to JAM screens required the elimination of the reshaping feature for the administrative screen.

  Ref: 501403.00

- For some packages, there is a discrepancy in the actual package names and the name listed when you use the **displaypkg** command:

  Example: The actual package name is AVP R.25 Switch Integration Software for System 75/DEFINITY G1/G3 PBX

  displaypkg output does not list the G1/G3, only G1

  Ref: 502062.01

- In Intuity CONVERSANT VIS V5.0, the speech file system has been converted to the UnixWare file system. This allows the Script Builder application developer to use standard UNIX commands for development. However, we recommend that you use only Script Builder and its associated tools to create and modify Script Builder applications. UnixWare tools may not handle all components of the your application properly and therefore can lead to unexpected behavior in Script Builder or your application.

  Ref: 502049

  Because of the speech file change to UnixWare files, some of the pre-V5.0 speech tools, applicable to raw slice speech filesystems, are obsolete in V5.0. The following is a list of known commands that are obsolete and no longer supported in V5.0:

  — **audit** — Audit the integrity of raw slice speech file system. No replacement.

  — **buildfs** — Build a raw slice speech file system. No replacement.

  — **spsav** — Save the speech on the raw slice. Use UnixWare **ls** and **cpio** commands.

- — **installlist** — Same as **list** (can be invoked anytime); replace with **list**.
- — **installadd** — Same as **add** (can be invoked anytime); replace with **add**.
- — **installerase** — Same as **erase** (can be invoked anytime); replace with **erase**.
- — **installvdf** — Same as **vdf** (can be invoked anytime); replace with **vdf**.
- — **spch_header** — Add speech headers to all speech in the raw slice filesystem. It was created in V2.1 to convert all speech from no speech headers to using headers. No replacement.
- — **link_count** — No replacement.
- — **sp_ship** — No replacement.
- — **sp_install** — No replacement.
- — **sp_remove** — No replacement.

Ref: 501742.00

- Improvement in the graceful removal of a busy SP card — Graceful removal of a busy SP card has improved in V5.0, and as a result the user may observe changes in the behavior of the remove SP command. Prior to V5.0, it was not possible to execute a graceful removal of an SP card on a busy system. In V5.0, when the user requests the graceful removal of a busy SP card, the system diverts all new calls to other SP cards with the same assigned function. Once the current calls on the SP card are completed, the SP is removed from service. If the SP card is the only SP assigned to that function, the system takes the card out of service as soon as all calls on that card are completed.

  Ref: 500838.00

- On Voice System start-up for some IRAPI applications, the following message may be reported on the console:

  ```
  NOTICE:RM Command not implemented.
  ```

  This message is generated by starting up (from inittab) an IRAPI process that contains Pro*C statements to do remote ORACLE selects. This message can be ignored.

  Ref: 502043.01

- The use of the **smc_setup** utility command (provided as part of the SMC Ethernet STREAMS Device Driver SVR4.2 package) has been shown to cause a reset of T1 cards with OS index 1 and 4 (and might cause a reset or other problems for other T1 cards). A reset of the T1 results in a TWIP022 critical alarm reporting the T1 card is inoperable. The card is normally diagnosed and returned to service in about 5 minutes.

Never use **smc_setup** while the voice system is active (run level 4).

Ref: 502033.01

- *Problem description*: In systems equipped with T1 and Token Ring card, a conflict exists in the I/O address between T1-0 and T1-1, and the Token Ring card.

  Work-around: The base I/O address switch settings of all T1 cards must be reset when a Token Card card is present in the system.

  Figure 1 illustrates the proper DIP switch settings for all T1 cards residing in a V5.0 system that is also equipped with a Token Ring card.

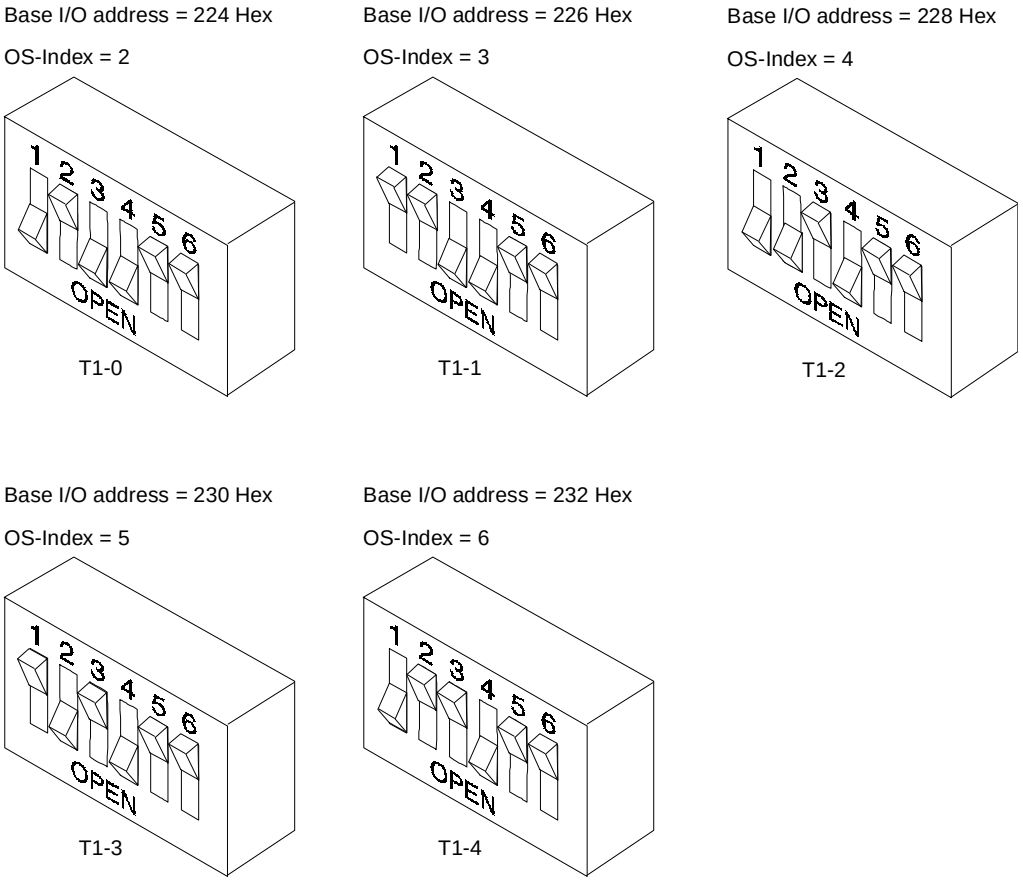

Figure 1. Switch Settings for T1 (AYC11) Circuit Cards, T1-0 through T1-4 in a System with Token Ring Circuit Card

Ref: 501899

- *Problem description*: Static Kernel limitation — UnixWare has a limitation on the size of the bootable or static kernel (**text/data/bss**). The maximum size is 4 Mbyte. Customers taking advantage of our open architecture strategy and installing packages with kernel drivers outside of what Intuity CONVERSANT VIS V5.0 offers may run into this problem. If the static kernel size exceeds 4 Mbyte, the system goes into a rolling reboot when the system starts up.

  Work-around: To recover from the rolling reboot situation you must hold (ENTER) down when the system displays the red UnixWare graphics screen during a reboot. The system will prompt for a previously saved kernel executable. Use either **unix.old** (which is saved automatically each time the kernel is rebuilt), or provide the name of a kernel that had been manually saved at some prior time.

  Ref: 501808.00

- *Problem description*: If a mkimage of your system requires two tapes, and a large file spans the two tapes, you could have problems after restoring the mkimage.

  Work-around: If after restoring a mkimage from two tapes, your system is not sane (some symptoms may be processes respawning or messages coming to the console) follow normal escalation procedures. The support organization will help you recover your data.

  Ref: 502089

- *Problem description*: An IRAPI transient process may hang when requiring an IRE_DEINIT_DONE event to exit. The IRE_DEINIT_DONE event is not generated if a channel is not idle when irDeinit is called (that is, service state != IRD_INACTIVE and library state != IRS_IDLE). This is due to the fact that message processing functions always return IRID_IGNORE on channels in the IRS_DEINITING state, despite the fact that they may have queued the IRS_DEINIT_DONE event. An internal fix involves checking the event queue within the rmMsgrcv while loop before sleeping on rmMsgrcv.

  To prevent this, a transient process that requires the IRE_DEINIT_DONE event to know when it is safe to exit, it must do the following:

  - Always call irStop and wait for any done events.
  - Call irDisconnect and wait for any done events.
  - Turn off the echo canceler if on, wait for done events.

  When the library is in the IDLE state and the service state is IRD_INACTIVE, call **irDeinit()**.

  Work-around: The following pseudo code (on the next page) could be used. The channel_idle function would be called in place of irDeinit.

  Ref: 502106

```
int channel_idling_flag  = 0;

void channel_idle(channel_id cid) {

        channel_idling_flag = 1;
        if ( irLibState(cid) != IRS_IDLE ) {
            (void) irStop(cid);
            /* Wait for done event */
            return;

        }
        if (irCheckEcho(cid) == IRR_ON) {
            (void) irStopEcho(cid);
            /* Wait for done event */
            return;

        }
        if ( irServiceState(cid) != IRD_INACTIVE ) {
            (void) irDisconnect(cid);
            /* Wait for done event */
            return;

        }
        /*
         * Channel library and service states are
         * idle and echo canceler
         * are off so call irDeinit.
         */

        (void) irDeinit(cid);
        return;

}

/*
 * While waiting for events
 */

        while (irWCheck(&ev)) {
            if ( channel_idling_flag && ev.cid != IRD_NULL )
{
            channel_idle(ev.cid);
            break;

            }
            switch(ev.event_id) {
                .
                .
                .
              case IRD_DEINIT_DONE:
                exit(0);
                .
                .
                .
            }
```

- *Problem description*: You receive a SPIP001 message with a channel number that appears to be a higher number than the total number of telephone network connections in your system. For example, you get a SPIP001 message with channel number 52 even though your system has a total of 48 telephone network connections.

  Work-around: The channel numbers in these instances are *virtual* channels that are being used for background play.

  Ref: 502007

- *Problem description*: The **into_et** command used in pre-V5.0 releases, can only be used to generate *old* (pre-V3.1 generic) logging messages in later generics. An *old message* is defined in the header files located in **/attmsgipc/etmsgs/*_et.h**

  The **into_et** command responds to the explicit message number or mnemonic referred to in these header files. The **into_et** command cannot be used to generate *new* logging messages. A *new message* is defined in the header files located in **/usr/spool/log/head**.

  Work-around: If it is necessary to have information appear in the logging files generated later generics, the **logit** command allows you to place arbitrary text in the logging files, with a specified priority, under a GEN002 message ID.

  If it is necessary to generate an explicit logging message, the only command currently available is **logTest**. While **logTest** can generate any valid logging message, it operates outside of the system that controls the normal distribution of logging messages and the priorities assigned to them.

  It is the responsibility of the user to convert the symbolic destinations assigned to a specific message in the file **/usr/spool/log/msgDst.rules** and defined in the file **/usr/spool/log/Config** into a numeric bit mask and to supply the priority assigned to the message from msgDst.rules as well.

  As a test tool, **logTest** is capable of misdirecting and wrongly assigning the priority of a message as well as generating valid and legal messages.

  Descriptions of the operation of **into_et**, **logit**, and **logTest** are available in *Intuity CONVERSANT VIS V5.0 Command Reference*, 585-310-230.

- *Problem description*: When some layer(s) on the host side goes down, it causes some LUs to get stuck in the recovery state. The LUs can't communicate with the host. The terminal emulator shows the LU in a blank screen with "4O" on the lower left-hand corner, and "TOPSSEA" on the upper left-hand corner.

  If you press ENTER, the system responds with X(<) indefinitely, meaning that it waiting for the host to respond.

  Work-around: Press ESC S (sysreq) twice to push the LU into sending and getting screens as usual. Log out LUs before taking the host down and log them back when host is up.

- *Problem description*: The Prompt and Collect window of Script Builder has a problem in page 3 of the Prompt and Collect definition. If Text to Speech is used in the Voice Response window of Confirm, Script Builder does not append a space to the end of each line of text as it does the Prompt Window of page 1. This missing space causes problems with the speaking of text because text from successive lines are running together.

  Work-around: Edit the **.t** file and manually add the necessary spaces to the text.

- *Problem description*: When using the **stop_vs** command, the 60 second time allotment given by **sb_logoff** does not seem to be enough time.

  Work-around: Log off all LUs using the **hlogout** command and wait until all LUs are logged-out before stopping the voice system. For information on the **hlogout** command, refer to *Intuity CONVERSANT VIS V5.0 Command Reference*, 585-310-230.

- *Problem description*: You set the Script Builder parameter Reserve LU to *yes*. Changing this parameter to *no* does not automatically prevent the script from executing HOST_DOWN or HOST_UP labels of the script. This problem will show up in the following scenario:

  1. Develop an application with the Reserve LU parameter set to yes. The transaction component will automatically generate HOST_UP and HOST_DOWN labels.
  2. Develop the transaction as follows:

     ```
       Answer Phone
     HOST_DOWN:
       Quit
     HOST_UP:
       (communicate to host)
     ```

  3. Verify and install the script.
  4. Change the Reserve LU parameter to no.
  5. Verify and install the script.

  Work-around: If the reserve LU parameter is changed from yes to no, remove the HOST_DOWN portion of the script and the HOST_DOWN and HOST_UP labels.

- *Problem description*: Multiple file transfers do not work from initial file transfer menu. A message appears in the top left hand corner of the screen `:is not an identifier`, and the File Transfer screen does not come up. This happens every time you try to bring the menu up with this session.

  Work-around: Exit out of sb_te, then get right back in on this session.

- *Problem description*: AUDIX Voice Power users may hear incorrect prompts if the Pause for Touch Tone Input parameter is changed to 4 from default value of 7.

  For example, an AVP user is listening to a Voice Mail message, and presses 2 to rewind the message, the system should respond: "Rewound. To play, press 3. To step back again, press 2."

  Instead, they hear: "Rewound. To play, press 3. To step back again. To listen, press 0. To respond or forward, press 1. To delete, press star D. To skip, press pound. To restart at the Activity Menu, press star R."

  Work-around: Give the Pause for Touch Tone Input parameter a higher value: 7 or higher. This is done via the AVP "System Parameter Administration" screen.

- *Problem description*: CCA feature may not work properly when used on an AYC9 SP card.

  Work-around: Always run CCA on AYC2Cs and not AYC9s.

- *Problem description*: When installing the Form Filler Plus package the following error message may appear on the screen and the installation is terminated: `This package must use talkfile 9. However, there are phrases in talkfile 9. Please remove them.`

  Work-around:

  1. Make sure that the talkfile 9 is empty.
     Enter **list phrase all in talkfile 9**
  2. Install the package again. Ensure that the voice system is started prior to installing this package.

Open Issues

For easier access, information is presented in the following categories:

- Technical Updates
- Security issues
  - — Toll Fraud
  - — Passwords
- Installation and configuration issues
- Hardware issues
- Maintenance issues
- Operation issues
- Host issues
- Application Development issues
- Script Builder issues
- Speech Production Kit issues
- Adjunct/Switch Application Interface issues
- Text To Speech issues
- Call Classification Analysis issues
- CompuLert Issues
- Speech Recognition issues

Technical Updates

Every effort was made to ensure that the information contained in the V5.0 user documentation is technically accurate, and will guide readers in the normal operation of the system. There are instances however, when the Intuity CONVERSANT VIS V5.0 product behaves differently than is documented in the library.

To help with this, an on-line bulletin board is available to all Intuity CONVERSANT VIS V5.0 customers that provides supplemental information about this product in an electronic mail format. These updates include hints, tips, and exception conditions about all aspects of the Intuity CONVERSANT VIS V5.0 product that were discovered after the core library was published.

This service is called Access, and is available 24 hours-a-day, seven days-a-week to anyone who subscribes to it. To begin receiving electronic Intuity CONVERSANT VIS V5.0 Access articles, call 1-800-242-6005, and ask for department 186.

Security Issues

Please be aware of the following Intuity CONVERSANT VIS security issues:

Toll Fraud

Corporate security experts report that toll fraud (that is, the unauthorized access to long distance facilities) attempts through voice messaging systems and automated attendant systems have grown dramatically. Therefore, it is possible that some VIS applications may lend themselves to toll fraud.

THIS IS COMPLETELY UNDER THE CONTROL OF THE APPLICATION DEVELOPER.

While AT&T is not responsible for the billing resulting from this toll fraud, the following information is provided to assist you in dealing with this problem.

Toll fraud is possible when the application allows the incoming caller to make a network connection with another person. Thus, bridging to an outbound call, call transfer, or 3-way conferences would be involved.

Several preventive measures can be used to avoid toll fraud. There are trade-offs in each of these, and the method(s) selected will depend on the application. Preventive measures to consider are:

- Requiring callers to use passwords for applications that are susceptible to toll fraud.
- Have the application verify that long distance numbers are not being requested or verify that only permitted numbers are requested.
- Using appropriate switch translation restrictions. Please contact the AT&T Call Center Helpline at 1-800-344-9670 for switch-specific help.

Passwords

It is important that you protect your system from unauthorized users. It is *imperative* that you choose cryptic passwords for all passwords in your system, but especially for root, install, sysadm, and oracle. Also, install and use external passwords for modems.

All passwords must follow these general guidelines (DO NOT use the examples in the parenthesis!):

- Use at least 6 digits in all passwords
- Use and mix upper and lower case letters (ABcdEf)
- Use numbers (A1BcdE)
- Use punctuation marks (A1Bcd!)

An unauthorized user will try to gain access to your system by using commonly known passwords. For this reason, DO NOT use the following for passwords:

- Common english words like *system*
- Your company name
- The word “root”
- A carriage return, <Enter>
- Your machine name
- Your name

Installation and Configuration Issues

- Under no circumstances should you install a public copy of NOVELL UnixWare Update 1.1.1 (Update 5) or Update 1.1.2 (Update 6) on a Intuity CONVERSANT UnixWare system. The official public versions, as might be obtained from a UnixWare Bulletin Board, contain a flaw in the “asyc” Driver.o file that causes repeated errors messages whenever a terminal or modem attempts to use one of the COM ports. The only Updates you should install on your V5.0 system are those updates contained on the cartridge tape labeled *Intuity CONVERANT VIS V5.0 UnixWare for Intuity that is shipped with V5.0.*
- When the Intuity CONVERSANT VIS interfaces with a non-AT&T switch (PBX or ACD), fine-tuning is sometimes required to maximize performance. If assistance is needed when using a non-AT&T switch, please obtain the tuning parameters for your switch from your switch administrator and then call the AT&T Technical Support Center at 1-800-344-9670.

- The Configuration Program assumes that the card configuration is capable of supporting customer applications. It does not warn the user of possible hardware resource limitations. For example, a 1SP-2CMP system can only support 12 transactions of speech recognition. If the user has 24 telephone network connections (T1 or T/R), the Configuration Program will not "warn" the user that speech recognition resources could run out. A 24 telephone network connection system with 1SP-2CMP is fully operational given proper application management.

  If resource conflicts are encountered, you may see repeated TSM003 or THR003 messages. You can set a higher threshold on these messages or lower their priority. For a permanent solution, contact your AT&T sales respresentative for solutions to increase configuration capacity.

- When an SP card is connected to only one Companion card, the Companion card must be CMP-0 (as determined by the DIP switch settings on the card). If the Companion card is CMP-1, the system will believe the SP has two Companion cards to use, and the SP will not be able to perform correctly. This will be evident by instances of messages like the following in the Event Log:

  ```
  SPIP001  SP CA <equip #> Speechbreak detected on
  channel <chan #>.  Cause Code: <cause #>.
  ```

  Message priority:

  None.

  Description and effect:

  ```
  A speech break has been detected during a coding or
  voice playback session involving an SP card.  The coded
  voice is incomplete, or inappropriate silence was
  inserted into the playback session.  This condition may
  be attributed to excessive load either on the system or
  the SP card, or the SP card may be broken.  The Cause
  Code field of the message may be used to further isolate
  the cause.  If the Cause Code field is negative, the
  problem is caused by the companion card(s).

  The impact of this error is not severe and no action is
  warranted if the message is reported less frequently
  than the threshold limit.

  The impact may be significant if the message occurs
  more frequently than the currently set threshold limit.
  In that case, you will see a threshold message similar
  to the following:

   ** THR003   -- -- --- The first threshold level for
         SPIP_SBRK exceeded.  50 messages have been
         generated in the last 3 minutes.
  ```

```
The threshold limits and threshold message priority
shown above reflect the default values for this
thresholded message.
```

(Please note that this message can be caused by other configuration/load problems.)

If the SP has two Companion cards, they should be CMP-0 and CMP-1, respectively.

- The AYC9 SP card is to be used for Text-To-Speech only. Attempts to use this card for any other SP functionality may disrupt the normal working of the VIS.

Hardware Issues

- Occasionally, when CTRL ALT DEL keystroke sequence is entered at the `Reboot the System Now` prompt, the system will not respond to the sequence and will not reboot. If this happens, simply depress and release the RESET switch to reboot the system.
- Occasionally, if the system is turned on after having been off (power cycled), the status LEDs on the front of the unit come on properly, but the system will fail to enter the Power On Self Test (POST). (Allow at least 10 seconds for the system to enter POST after turning power on). If this happens, simply depress and release the RESET switch to re-initiate system initialization.

Maintenance Issues

- When a card is automatically put into the BROKEN state, and then a **stop_vs** and **start_vs** occurs, if the card passes TDM diagnostics it will be placed MANOOS. The card should be diagnosed to ensure that it is functional. If the card passes diagnostics, it may be restored to INSERV.
- In some instances when the **remove**, **restore**, or **diagnose** commands are aborted, the system may not respond immediately. This is attributed to the system attempting to return to the hardware states which existed prior to the **remove**, **restore**, or **diagnose** commands being issued. The system is not idle but is processing the abort request.

  Continuous, rapid aborts may result in the system not being able to successfully return to the original hardware states. If this occurs, diagnose the appropriate card(s) with the “immediate” option enabled.

Operation Issues

- After renumbering the voice channels (by selecting the Renumber Voice Channels option in the "System Control" window), you need to return to the "CONVERSANT VIS Version 4.0" window before doing any other administration of the CONVERSANT VIS. Otherwise, you may see error messages of various types. For example, assigning a function to an SP may result in the following error message:

  ```
  Invalid card number(s) found.
  The card should be between 0 and <some negative
  number>.
  ```

  These results do not occur in all situations, and the situation is corrected by returning to the CONVERSANT VIS Version 5.0 screen.

- Diagnostics on T1 cards take approximately 3 minutes for each card. The system may appear to be idle during this period; however, diagnostics are being performed on the designated card(s).

- It is recommended that you not take individual T1 channels out of service. If you must take a channel out of service, make the whole card MANOOS.

  If the entire card is taken out of service, calls will no longer be routed to the card from the switch. If some channels on the T1 card are INSERV and others are MANOOS, calls will be still routed to all channels on the card, based on the switches routing algorithm. If the called channel is MANOOS, the caller will hear busy; if the called channel is INSERV, the caller will be processed by the VIS.

  If a T1 card with some channels INSERV and some channels MANOOS is diagnosed, the behavior of the card changes. After diagnostics, callers connected to the MANOOS T1 channels will hear "ring no answer". If, at VIS start up (**start_vs**), a T1 card is partially INSERV, the INSERV channels will process calls correctly while the MANOOS channels will provide "ring-no answer."

- Be careful not to create multiple, simultaneous User Interface windows. This could severely impact system performance.

  Example of what to avoid:

  You have a VIS screen displayed and you press the FRM-MGMT function key to access the system prompt. At the system prompt, you enter **cvis_menu** to display another user interface screen, and then proceed to press FRM-MGMT to access the system prompt again. These actions create several simultaneous layers of software and this cycle ultimately locks up the system.

- The REMOVE option in the "Application Administration" screen removes only the data and fields of a local database table. After a remove of this type, the table still exists and is undefined, and this may be a cause of confusion. You must access Script Builder to delete the table name from the database. This is done via the "Table Names" screen.

- Although the *Intuity CONVERSANT VIS V5.0 Operations*, 585-310-550, book indicates that a Traffic Report can be issued for the current date's data, the voice system does not provide data on activity after the most recently passed midnight.
- Occasionally, the Call Data Detail report shows the call duration to be one second less than the actual time.
- Occasionally, there will be two entries in the Traffic Summary and Call Data Summary reports for the hour between 12:00 AM and 1:00 AM. When this occurs, the calls are actually being summarized twice, and if the first duplicate record of each report is ignored, the remaining information is correct.
- In the unlikely event that the extension assignment of the ACD type domain that has 'VIS' service assigned must be changed, first log out all ASAI channels in the Channel Administration window.

  After assigning the new extension to the domain, then log in the channels again. If this procedure is not followed, and the channels are already logged in under the old split extension, they will remain logged in to the old extension until the system is restarted or the channels are logged out and then logged back in.

Host Issues

- The following is a Host troubleshooting guideline to be added to Chapter 2 of the maintenance book:

Trouble Indication	Corrective Action
VIS could not recognize the Host screen	Make sure the identifiers from the host do not contain oversized characters and/or change the identifier being used.

- When defining the host interface in Script Builder, you are allowed to administer the parameter "LU_AVAIL." This defines the length of time in seconds that a script will wait for an LU to become available.

  NOTE:
  Large LU_AVAIL values are not recommended. LU_AVAIL defines the amount of time a caller will hear ring-no-answer before the script that does not have an LU answers the call. If a script answers the call and does not have an LU, it is up to the application to handle the exception condition gracefully.

Application Development Issues

- Systems with under-allocated disk space for the Call Data Handler (CDH) database stop writing call records when the space is full. However, calls will continue to be processed. Administrators should carefully size this space per instructions found in *Intuity CONVERSANT VIS V5.0 Operations*, 585-31-550, Appendix B, "Database Environment." Space can be re-allocated by following the instructions provided in the operations book. An indication that the database may be full is a significant increase is the response time to retrieve Call Data reports. When the database is full, the message "Call database is full" is generated to the Message Log Report window with no other explicit alarming.
- If the "spin-off" option is used for the script **tflush** instruction and the first playback completes at approximately the same time the second phrase starts, there is the potential for the second phrase to be terminated prematurely. If this can occur in your script, make the first phrase longer (even with trailing silence) to avoid the situation.

Script Builder Issues

- When defining or removing database tables, keep the following in mind:

  A database table that is currently locked by some other process cannot be redefined. The following message displays on screen to indicate the table is currently locked:

  ```
  Alter failed...Can't drop original table.
  ```

  Make sure that the table is not currently accessed by other processes before redefining the table. If the problem persists, you may want to restart the database to clear the condition. The database may keep a table locked inappropriately. Restarting the database (where the table resides) may clear the condition.
- A new return value has been added for the $MATCH_FOUND field in the READ_TABLE external action (see "Defining Read Table" in Chapter 8 of the Script Builder book for information on $MATCH_FOUND). If the database DIP experiences difficulties and drops its connection with the database, a new return value of -4 will appear in the $MATCH_FOUND field.
- It is possible to enter Script Builder when the voice system is not running. This may result in strange behavior. Local databases will appear undefined. Problems may be encountered attempting to perform speech administration. Before escalating Script Builder problems, please verify that the voice system is running by entering **who -r**. Verify that the system is at run-level 4.

- The phrases *billion* and *trillion* have been added to the standard speech file. However, these numbers are too large to be spoken with the **tnum()** instruction. Users who wish to speak such large numbers may start with an ACSII string, parse the string (getting the amounts of billions and trillions as substrings), then convert the three remaining substrings to integer values and speak them with the **tnum()** instruction, inserting a **talk()** instruction with the phrase for trillion or billion where appropriate.
- When removing a service from the system with the Script Builder Applications screen, first make sure that the service is not being referenced in the Assign Service to Called Number screen. This information is not automatically checked before the service is removed, and the system will complain about an invalid service if you try to unassign the removed service from a called number (using the "Assign Service to Called Number" window) when the service is no longer in the VIS. If you find yourself in this situation, you can add the service back to the system, unassign the service from called numbers, then remove the service again.
- When defining the To Initiate Transfer field in the Analog Interfaces screen, the sequence

  ```
  FW9W  Flash - Wait for dial tone - Dial 9 - Wait for
  dial tone
  ```

  will not dial the "9" as specified. The work around is to perform a

  ```
  FP9W Flash - Pause for 3 seconds - Dial 9 -Wait for dial
  tone
  ```

  This work around does not wait for dial tone before dialing the "9." It blindly dials the 9 after the pause is complete.
- If you use A_Tran to transfer to tie trunks, the destination number should be specified using the following format:

  TXXXX#

  Where T is the Trunk Access Code (TAC), *XXXX* is the number you wish to dial, and *#* must be used to terminate the dialed number.

  For example, to transfer a call to number 1234 on a tie trunk with trunk Access code of 70, specify the Destination Number in A_Tran as 701234# Note that the total number of characters cannot exceed 10.
- The Transfer Call action expects only one reconnect sequence for reconnect on busy. This may not be the situation if calls are transferred to stations both internal and external to a local PBX (Public Branch Exchange, or switch), although many times the reconnect sequence is the same for both. If your application needs multiple reconnect sequences and assistance is needed, contact the AT&T Call Center Helpline at 1-800-344-9670.

- Spoken output for time fields, date fields, or number fields in any language other than English are not supported. The reason for this is that the rules for concatenating numbers varies depending on the language. The standard speech currently includes number 1-20, 30, 40, 50, 60, 70, 80, 90, 100, 1000, and 10000. The method used supports English only to form numbers by combining these standard numbers.
- The system does not allow the use of a primary and secondary speech pool if the primary speech pool is empty. Script Builder fails to install the application and the **tas** command (see the Intuity CONVERSANT VIS V5.0 Application Development, 585-310-227, book) indicates it cannot find the phrase by printing a message similar to the following:

  File “chantst.t”, Line 24: ‘ talk (“enter four touch tone digits”)’
  ‘Too few arguments to ‘talk’’
- In the Prompt and Collect touch tone terminator field, it is possible to activate touch tone termination with a “yes” without specifying the touch tone termination key. This will result in the default termination key of “#” being used.
- When selecting the Action in the third page (Analyze Input) of the Prompt and Collect Script Builder action step, the Continue choice can be selected only through the use of the F2 (CHOICES).
- Remote access (for example, AT&T 605-BCT) to the “Speech Administration” window can result in a garbled screen display. This problem occurs less frequently at faster line speeds. Use the monitor connected to the platform to avoid this problem.
- When re-recording a phrase that already exists, applications that are currently playing the phrase will be adversely affected. This will only occur when a phrase is simultaneously being recorded by one party and played by an application. The listening party (that is, the caller) will hear garbage at the moment the phrase is installed. Future playbacks of the new phrase will not be affected.

  NOTE:
  This should be considered by applications that play long messages that are re-recorded on a regular basis (that is, applications that provide up-to-date news and information bits).

- Local database date field information must be entered using the *mmddyyyy* format (month, day, four-digit-year). When records are read from the local database table by the field date, the information must be retrieved using the *yyyymmdd* format (four-digit-year, month, day).

  Also, when editing a local database for a date field, the acceptable format is *mm/dd/yy* or *mm/dd/yyyy*. However, when the date is entered as *mm/dd/yy* and saved, it appears in the *mm/dd/yyyy* format.

- Script Builder will not directly allow a field name to be defined as a database field and then changed to be another type of field. If a field name is initially defined to be a database field and it needs to be changed to another type, all references to that name must be completely removed from the script before it can be used in the new way. Therefore, the field name must be removed from the database table and the script. Then, the name can be re-used for any purpose.
- When an application reads a local database table to look for matches on a specified search key, each call for that application is limited to 148 Read Table requests *for the same search key*. (Refer to the "Defining Read Table" section of Chapter 9 of *Intuity CONVERSANT VIS V5.0 Script Builder*, 585-310-727.) When the system variable $MATCH_FOUND reaches 149, all VIS calls will be dropped.

  Because 149 Read Table requests with the same search key for one call is unusual and time consuming, most applications should not find this limitation to be overly restrictive. With the exception of this "148 same search key" restriction, the number of Read Table requests for a call is unlimited.
- There are cases when using external actions that the Script Builder incorrectly locates an integer at an odd address. In these cases, integer values returned to the application from external actions/functions are lost. An application is prone to this problem if it specifies a 'char' field for storing integers returned from external actions/functions.

  

  NOTE:
  Not all external actions/functions return numbers. External actions/functions that declare arguments in the following format will return numbers:

  DEFARG(argX, num, out) DEFARG(argX, num, both)

  Currently applications only have to be careful when using the message coding external action, or the unpacking NX number external function

  To avoid this problem, make sure that 'num' type is specified for external action/function arguments (fields and constants) that are of type 'num.'

Speech Production Kit Issues

- There is an unknown set of steps that could lead the speech production kit to record speech that is grossly distorted. This is a very rare occurrence. If this should happen report the problem to your customer support center.

  Before attempting to re-record the speech, save all changes. Re-record the speech by exiting all administration screens saving any changes that have been made, then re-enter Script Builder from the Voice System Administration screen.

On the older T/R cards, there are two modular plug hook-ups. When using the Speech Production Kit to record speech, the person recording the speech must call into the system to listen to and edit recorded speech. The Speech Production Kit and the caller must be hooked up to the same card, one to each of the 2 modular hookups. The line from the Speech Production Kit to the card should be direct, and should not go through any device that might remap the active wire pairs that are used.

Adjunct/Switch Application Interface Issues

- In the unlikely event that the extension assignment of the ACD type domain that has 'VIS' service assigned must be changed, first LOGOUT all ASAI channels in the Channel Administration window. After assigning the new extension to the domain, then LOGIN the channels again. If this procedure is not followed, and the channels are already logged in under the old split extension, they remain logged in to the old extension until the system is restarted or the channels are logged out and then logged back in.
- If Tip/Ring channels are logged in to the 'VIS' ACD split and the ASAI link should go down (for example, Basic Rate Interface cable is disconnected), the channels will remain logged in even though the Channel Administration window indicates that they are in state HWOOS.

  The reason for this is that the channels are logged in and out using messages over the ASAI link. If the ASAI link should go down without warning, there is no time for the VIS to send logout messages to the PBX.

  Therefore the channel will remain in a logged in state. (The PBX will not automatically log out the channels). It is therefore important to have a 'backup' voice script which can answer calls to the Tip/Ring channel.

There are two methods that can be used to handle link down conditions.

— All Tip/Ring channels (on the ACD split) should be assigned to DNIS service (*DNIS_SVC). Your primary service script used while ASAI is operational (that is, script contains A_Callinfo and/or A_Tran) should be assigned to the Called Number(s) that are expected. The backup script in case of ASAI link failure (that is, script does not contain A_Callinfo or A_Tran) should be assigned to Called Number 'ANY'. When ASAI service is down, no DNIS will be received for calls to the Tip/Ring channels, thus the VIS will invoke the backup script assigned to Called Number 'ANY'.

— If you do want to use the DNIS service to start up scripts, A_Callinfo may be used to check if the ASAI link is down. If the Return Field of A_Callinfo field returns -80, and the Cause Value field returns the value 41, then the ASAI link is down. In this case, the user's script should use Call Transfer instead of A_Tran.

Text To Speech Issues

- Some TTS customers may experience problems with their AYC9 SP cards going BROKEN intermittently. When diagnosed, these cards pass all the SP tests and get put back into service by the system, but after a period of time they end up going BROKEN again.

  This type of unpredictable failure by an AYC9 SP can result from misuse of the escape sequences.

  The AYC9 SP card is very sensitive to these escape characters and improper use them could cause the AYC9 card to die and go BROKEN. First of all, the character strings *\!* and *\(* have special meaning to the TTS software and should NEVER be embedded in text to be spoken by the AYC9 SP card unless they are being used as part of an escaped sequence. These strings act as flags to the TTS software and they cause the AYC9 card to change its current mode of operation. If for some reason the string *\!* or *\(* appears in some text and it is not intended to signal an escape sequence to the board, it MUST be either removed from the text, OR a space or some other character must be placed between the 2 characters.

  Note that even if the silence sequences are used properly but appear too close together in the text this could cause a failure on the AYC9. If you plan to use the special silence delays, please be aware that if they appear too densely in the text it could cause problems for the AYC9 cards.

- Compound words (two words that are hyphenated) are incorrectly recognized and mispronounced by TTS when they start a sentence and are preceded by a space. When the words are within a sentence or occur at the beginning of a new line, they are correctly recognized and pronounced.

- If an application comprises only TTS prompts and no voice prompts, compilation of the application will fail with the message:

  `No speech exists for application` *`appl_name`*

  1. Enter the Speech Administration screen.
  2. Cancel out of the Speech Administration screen.
  3. Verify and install the application.

Call Classification Analysis Issues

- The specifications for the supported CCA tones and levels conform to LSSGR standards. Specifically, CCA will recognize tone conforming to Section 6.4, LSSGR Issue 2, July 1987 TR-TSY-000506

  The system conforms to special information tones as specified in section FSD 20-06-0500. Sections can be ordered from Bell Core by calling (908) 699-5800

  NOTE:
  Full CCA is intended for use in North America only

- Occasionally, advanced CCA (Call Classification Analysis) on digital interfaces (T1 and PRI) does not recognize speech energy. The application is not likely to notice this because the digital interfaces provide answer supervision. There may be some instances that voice energy would have been detected more quickly than answer supervision. In addition, if network announcements are received with no SIT tones, the system may interpret this as a “High and Dry” disposition (because there is no answer supervision and voice energy is not detected).

Speech Recognition Issues

- The SR_Allocate action step allows a script to reserve a recognition resource until it is finished using the resource or terminates. This reservation is necessary in systems where more than the maximum supported number of Speech Recognition scripts are vying for recognition resources (that is, 24 transactions are vying for 12 recognition resources). In this scenario, scripts should reserve a recognition resource before entering a prompt and collect that uses speech recognition. It is recommended that if the script uses speech recognition and the caller talkoff feature, that a single SR_Allocate and SP_Prompt be done at the beginning of the script, and the resources not be released until the transaction performs its last prompt and collect.

  NOTE:
  If a script performs an **exec**, these resources are automatically deallocated.

- A rare condition exists that could cause SP speaker talk-off resources to be wrongly allocated. To prevent this from occurring, in each script that reserves the talk-off feature using SP_Prompt, the talk-off feature should be explicitly de-allocated with the same command prior to script termination. This is especially important before the use of the **exec** command.

Getting Help for Version 5.0

When your system has problems or errors, it generates a system message. System Messages are used to alert you to problems, potential problems, or a change in the state of the system. These messages are collected in the Message Log Report screen under the Reports Administration menu.

Refer to Chapter 3, "System Messages Listing" in *Intuity CONVERSANT VIS V5.0 Maintenance*, 585-310-153, to determine the action you must take regarding these system-reported troubles. If the action requires you to contact a "field service representative," this means one of the following:

- If you are field technician supporting a customer per a maintenance agreement or a time and material charge basis, you are the field service representative. If the problem is more serious than you can handle, contact the next level of support or AT&T for assistance.
- If you are a support person assisting an end customer, you are the field service representative. If you cannot solve the problem, contact the Technical Support Center (TSC) at 1-800-344-9670 for assistance.