CONVERSANT® System

Release 9.0
Service Pack 1 Release Notes

Document Number: 07-300052
Comcode: 700317811
Issue 5
Publication Date: August 2004
Compas ID: 100820

Contents

Introduction

CONVERSANT® System Release 9.0 Service Pack 1 Release Notes describes the software updates and improvements in Service Pack 1 and how to install Service Pack 1.

CONVERSANT System Release 9.0 (R9) contains the same software updates and improvements as CONVERSANT System Version 8.0 (V8) with RFU+A installed. If your system shipped from Avaya on or after June 3, 2002, it is considered to be an R9 system and should have the RFU+A software package pre-installed.

Software updates

The following list describes the changes Service Pack 1 makes to the CONVERSANT Release 9.0 software:

- Improved the ASAI protocol discriminator to support the IA5 character set.

- For the csfax package, a cron job runs at 10:01 p.m. every night and resets the fax JOBID to 1.

- Fixed the memory leak in the vexLogd process.

- Changed the **Tbct_Xfer** (Two B-Channel Transfer) external function so that it works correctly in complex applications.

- Changed the **ctiCallInfo** and **ctiCallState** (CTIDIP) external functions to return the correct return code values.

- Improved the subprog external function.

  When application A calls subprog to execute application B, application A returns a NORMALTERM message to the DIP when it terminates, application B returns a SUBTERM message to the DIP when it terminates.

- Improved the EBS language US English to speak the time correctly.

- Improved the CRAM utility to read the memory map correctly.

- Improved the LST1 and LSE1 Loop Start protocol to not remain hung after encountering glare (an incoming call coming to a channel where an outgoing call is attempting to be placed).

- Changed the default string that is displayed on the LCD of a fax machine to Avaya Fax.

- Improved the Exec_UNIX (ScriptBuilder Fax Actions) external action so that it will not disrupt background music that an application is playing.

- Improved TSM handling of the NEWCALL event.

- The status of channels above 128 can be changed using the CVIS menu.

- Improved the install script for the US English Male voice EBS package (ebsUSM).

- Improved the csfaxJP (JapanFax) package to send multiple-page faxes from non-ECM fax machines.

- Improved the SNMP agent to send the correct information to the HP-Openview.

Software updates

- Improved the way CDH data is summarized.

- Improved NLSR speech recognition to work better under a heavy load.

- Improved the Japanese EBS package (ebsJP) to speak large numbers correctly.

- Improved backing up ScriptBuilder transactions to tape using the CVIS menus.

- Improved the csfaxJP (JapanFax) package to receive multiple-page faxes from non-ECM fax machines.

- Improved the **ctiCallInfo** and **ctiCallState** (CTIDIP) external functions to return the correct call state values after a call has been merged and an agent is talking to a customer.

- Added the SCO maintenance pack 3.

- Improved NLSR proxy error logging.

- Improved the **allocPROXY** (NLSR) external function.

Documentation issues

The following are corrections and additions to CONVERSANT System Version 8.0 documents.

CONVERSANT System Version 8.0 System Description

- The maximum number of E1 cards supported is 6, the document shows 5.

- The maximum number of T1 cards supported is 8, the document shows 6.

- The terminal emulation types supported for remote administration are AT386 (console) and xterm (Exceed), the document lists the following terminal types:

  — AT386 (console)

  — DEFINITY Site Administration (DSA) - Emulates 4410

  — 4425 (Exceed)

  — 715 BCT, 605

  — Sun terminal

  — Sun shell tool

  — xterm (Exceed)

- To use the Fax features with analog (tip/ring) cards, an SSP card is required.

CONVERSANT System Version 8.0 MAP/40P Maintenance

On Page 76, the procedure for Mirroring the Boot Disk refers to an obsolete URL. The procedure for Mirroring the Boot Disk can be found at the following URL: http://ou800doc.caldera.com/ODM_VMug/ug-13.html#HEADING13-261

CONVERSANT System Version 8.0 Application Development with Script Builder

This document has incorrect information about the return code for the READ_TABLE action step. $MATCH_FOUND returns a -4 the first time on a local database table if the local database is down and a -2 subsequently. For a remote database, if the database is down, $MATCH_FOUND returns a -2 every time.

Installing Service Pack 1

Before installing Service Pack 1, check to make sure you have all the items required to complete the entire installation procedure.

Installing Service Pack 1 involves the following basic steps:

1. Back up the voice system on page 9
2. Stop the voice system on page 13
3. Check for Maintenance Package ap1 on page 14
4. Prepare to install Service Pack 1 on page 14
5. Run the Service Pack 1 installation script on page 15
6. Reinstall the asp+ap1 and t1dr+ap1 packages on page 18
7. Check the cvlanxcl package on page 19

Items required

To perform the installation, you will need the following items:

- *CONVERSANT System Release 9.0 Service Pack 1 Release Notes* (this document)
- *CONVERSANT System Version 8.0 System Reference* (Comcode 108850207). This document is available at the Avaya Support Centre Web site http://support.avaya.com.
- Data tape cartridges to perform system backups
- Root passwords for the systems on which you will be installing Service Pack 1.

Time required to install Service Pack 1

The time required to perform the Service Pack 1 installation is approximately 40 minutes. The time required to perform a backup of the voice system depends on the size of the file system. Plan on a minimum of 2 hours if a backup is required before installing Service Pack 1.

Call for assistance

For assistance in the United States, call the Technical Service Center at 800-242-2121. Press 0 and then press 15277.

For assistance outside the United States, call your regional support center.

Back up the voice system

Before proceeding with the installation, a complete mkimage backup of the CONVERSANT should be done and verified. If a backup has been done, then proceed to Stop the voice system on page 13. If a backup is not available, assess whether the system has a standard configuration, which is indicated by the following conditions:

- All files are on a single machine (for example, there are no speech or database files that would need to be backed up over a LAN).

- There are no other file systems added to the system disk or to other disks (such as changes to the /unused file systems).

If the system has a standard configuration, then follow the instructions beginning with Setting up the mkimage backup on page 10.

If the system does not have a standard configuration, see "Backing Up the System Using mkimage" in Chapter 3 "Common System Procedures" of *CONVERSANT System Version 8.0 System Reference,* 585-313-215, for information on how to do the backup. Then proceed with Stop the voice system on page 13.

If the hardware platform is a MAP/40P and the system has disk mirroring, see *CONVERSANT System Version 8.0 and Release 9.0 Using mkimage with a Mirrored MAP/40P System*, 555-310-788, for information on how to do the backup. This document is available at the Avaya Support Centre W http://support.avaya.comeb site. Then proceed with Stop the voice system on page 13.

Backing up the system involves the following basic steps:

1. Setting up the mkimage backup on page 10

2. Backing up the voice file system on page 11

3. Verifying the mkimage backup on page 12

Setting up the mkimage backup

The mkimage utility captures a system configuration so that system can be restored. It backs up a defined and fixed set of file systems that contain the essential CONVERSANT system files on the system disk for a standard configuration.

> **Important:**
> Before you back up the system, verify that all call traffic has been directed away from the CONVERSANT system, or that it is okay that the voice system be stopped during backup procedures.

To set up the mkimage backup:

1. Log in as root.

2. Type `stop_vs` at the UNIX prompt then press **Enter**.

    The system displays the following message:

    ```
    The Voice System has stopped.
    ```

3. Type `mkimage` and press **Enter**.

    The system displays the following message:

    ```
    UX:idbuild: INFO:
    The unix kernel will be rebuilt now.
    This will take some time. Please wait.

    UX:idbuild: INFO: The unix kernel has been rebuilt.

    CHECKING THE SYSTEM RUN LEVEL: PLEASE WAIT.....

    ********************************************************
    **
    **WARNING: This process will put the system in single user
    mode!!!**
    ** **
    ********************************************************

    Do you wish to continue (y/n)?
    ```

4. Type `y` and press **Enter**.

    The system displays the following message:

    ```
    RE-LOGIN AFTER THE PROMPT AND RE-EXECUTE THIS COMMAND TO CONTINUE
    THE MKIMAGE PROCESS.
    ```

    This completes the setup for the mkimage backup. The system then displays the login prompt. You must log back in to the system to begin the backup of the voice system. Proceed to

Backing up the voice file system

To back up the voice file system:

1. Log in as root.

2. Type **>** at the UNIX prompt and press **Enter**.

   The system displays the following message:

   ```
   CHECKING THE SYSTEM RUN LEVEL: PLEASE WAIT.....
   THE SYSTEM IS IN SINGLE USER MODE: CONTINUING.....
   WORKING..........

   The total space used in the standard voice filesystems are 1935
   MB. The following are approximate tape counts required for this
   backup for various streaming tape drive sizes:

   320Mb drive: X tape(s)
   525Mb drive: X tape(s)
   1.2Gb drive: X tape(s)
   2.0Gb drive: X tape(s)
   4.0Gb drive: X tape(s)

   Be sure to number the cartridge tapes consecutively in the order
   they will be inserted.

   Label the tape(s) 'Voice System Image Tape x' where x indicates
   the insertion sequence. Also include the current date.

   Note: Very large files, such as database files, take several
   minutes to back up. During this time you will not see any progress
   reported to the console. If the tape drive is running and the
   system disk light is flashing, the operation is progressing.

   Please insert the first tape now. Press ENTER to start image
   creation

   The tape will be retensioned before writing.....
   ```

3. Label the appropriate number of cartridge tapes "CONVERSANT Image Tape *x date time*", where *x* indicates the insertion sequence (such as, "1," "2," "3," and so on), *date* is the current date, and *time* is the current time.

4. Insert the first tape into the cartridge tape drive.

5. Press **Enter**.

   The system takes typically over two hours to load the information onto one tape.

```
End of medium on output
Change to part 2 and press RETURN key. (q)
```

6. If your backup does not require more than one tape, continue with the next step.

    If your system requires more than one tape:

    a) Remove the first tape and insert the next tape into the cartridge tape drive.

    b) Press **Enter**.

    c) Repeat this procedure for all subsequent tapes required to complete the backup.

7. When the system displays the following message, remove the last tape from the cartridge tape drive.

    ```
    The image tapes will be verified now.
    Make sure the tapes are inserted in the order they are made.

    Press `Enter' to start verification.
    ```

8. Press **Enter**.

    The system displays the following message:

    ```
    Please insert the first tape now. Press `Enter' to continue.
    ```

9. Insert the first tape into the cartridge tape drive.

10. Press **Enter** to start the verification process.

    The system takes as long to verify a tape as it did to create it.

    The system will prompt for additional tapes if necessary.

    Proceed to

Verifying the mkimage backup

When the system is done verifying a tape, it automatically reboots, returns to multi-user mode, and displays the console login.

To verify the backup:

1. Log in as root.

2. Type **pg /SaveVsData/mkimage.log** at the UNIX prompt and press **Enter**.

    If the system displays the following message, the mkimage backup was successful:

    ```
    Creation and verification of the CONVERSANT Image Tape is
    complete.
    ```

Proceed to <u>Stop the voice system</u> on page 13.

If the system does not display the verification message, the mkimage backup was not successful. Repeat the procedure beginning at <u>Backing up the voice file system</u> on page 11.

Stop the voice system

Before installing Service Pack 1, verify that all call traffic has been directed away from the CONVERSANT system, or that it is okay that the voice system be stopped during installation of this software.

> **Note:**
> It is highly recommended that a system backup be created prior to and after the installation of any new software. See <u>Back up the voice system</u> on page 9 for more information. Avaya recommends using a different tape for each backup. Do not reuse the same tape.

To stop the voice system:

1. Log in as root.

2. If Vonetix 3.5 or an earlier version is installed on the CONVERSANT system, type `vonetix -stop all` at the UNIX prompt and press **Enter**.

3. Type `stop_vs 0` at the UNIX prompt and press **Enter**.

   The system displays messages indicating that various voice system processes are stopping. Go to the next step when the follow message is displayed:

   ```
   The Voice System has completely stopped, use the
   "Start Voice System" choice from the System Control menu
   to restart the Voice System
   ```

4. Type `stop_wait` and press **Enter**.

   The system displays the following message:

   ```
   The Voice System has stopped.
   ```

   > **Note:**
   > Do not proceed with the installation until you have received this message.

   Proceed to <u>Check for Maintenance Package ap1</u> on page 14.

Check for Maintenance Package ap1

Use the following procedure to determine if Maintenance Package ap1 is installed:

1. Log in as root.

2. Type `pkginfo maint+ap1` and press **Enter**.

3. Use the following table to determine what action to take:

If...	You will see...	Action
Maintenance Package ap1 is *not* installed	`UX: pkginfo: ERROR: information for "maint+ap1" was not found`	No action is required. Go to Prepare to install Service Pack 1 on page 14.
Maintenance Package ap1 is installed	`intuity   maint+ap1 INTUITY Maintenance Package – ap1`	1. Remove Maintenance Package ap1 by typing `pkgrm maint+ap1` and pressing **Enter**. 2. Go to Prepare to install Service Pack 1 on page 14. 3. If you do not have the **maint+1p1** patch, go to the Avaya Support Centre Web site (http://support.avaya.com) and follow the download and installation instructions for the **maint+1p1** patch.

Note:
If Maintenance Package ap1 (maint+ap1) is installed on the system, you must remove it before installing Service Pack 1. After Service Pack 1 is installed, you install the main+1p1 patch. maint+ap1 and maint+1p1 are similar patches. The most important difference is that maint+ap1 is designed to be installed *before* Service Pack 1 is installed and maint+1p1 is designed to be installed *after* Service Pack 1 has been installed.

Prepare to install Service Pack 1

The Service Pack 1 media contains the installation script and the software updates. The Service Pack 1 media is available from the Avaya Support Centre Web site and on CR-ROM. Before installing Service Pack 1, use one of the following procedures to either get Service Pack 1 from the Avaya Support Centre Web site and move it to the CONVERSANT R9 system, or to prepare the CD-ROM drive.

To get Service Pack 1 from the Avaya Support Centre Web site:

1. Using a web browser, go to the <u>Avaya Support Centre Web site</u> (http://support.avaya.com).

2. Go to Contact Center/CRM > Interactive Voice Response > Interactive Voice Response (CONVERSANT IVR) > R9 > Software Downloads > CONVERSANT 9.0 Service Pack 1.

3. Log in to the CONVERSANT R9 as root.

4. Move the **sp1.cpio.Z** file to **/voice1** (recommended) or to a directory that has at least 150MB of available disk space.

5. Type `uncompress sp1.cpio.Z` at the UNIX prompt and press **Enter**.

6. Type `cpio -icBvd < sp1.cpio` and press **Enter**.

7. Type `cd voice1` (or the name of the directory in which the sp1_install package resides) and press **Enter**.

   Proceed to <u>Run the Service Pack 1 installation script</u> on page 15.

To prepare the CD-ROM drive:

1. Log in as root.

2. Put the CONVERSANT R9 Service Pack 1 CD-ROM in the CD-ROM drive.

3. At the UNIX prompt, type **mount -F cdfs -o ro /dev/cdrom/cdrom1 /CD-ROM_1** and press **Enter**.

4. Type **cd /CD-ROM_1** and press **Enter**.

   Proceed to <u>Run the Service Pack 1 installation script</u> on page 15.

Run the Service Pack 1 installation script

After you have copied the Service Pack 1 files to your system, you are ready to run the script that automatically performs the installation of the software.

> **Important:**
> If, for any reason, you must abort the installation script or if the script fails, you must restore the system from backup tape before rerunning the installation script. In cases in which the script fails, Avaya recommends that you <u>call for assistance</u> on page 9 to determine the reason for the failure.

> **Note:**
> Before you run the installation script, make sure you have stopped the voice system. See <u>Stop the voice system</u> on page 13 for more information.

To run the Service Pack 1 installation script:

1. Log in as root.

2. Type `sp1_install` at the UNIX prompt and press **Enter**.

   The system displays the following message:

   ```
   Have you recently taken backup of your system.
   Enter 'y' or 'n' (y/n) ->
   ```

3. Do one of the following:

   — If you do not have a recent system backup available, type `n` and press **Enter**.

   The system displays the following message:

   ```
   You should have a recent backup before loading the update.

   Aborting...!!
   ```

   Create a system backup following the procedure in <u>Back up the voice system</u> on page 9.

   — If you have a recent backup available from which you can recover the system, type `y` and press **Enter**.

   If the uw711m3 (UnixWare 7, Release 7.1.1, Maintenance Pack 3) package is installed on the system, go to Step 5. If the uw711m3 package is not installed, the system displays the following message:

   ```
   UnixWare 7, Release 7.1.1 Maintenance Pack 3    Disk Usage

   Below is a listing of the minimum resources that will be
   used when UnixWare 7, Release 7.1.1, Maintenance Pack 3
   has been installed on your system.

     Available  Required  Available  Required  Mount
     Space<KB>  Space<KB>    Inodes    Inodes  Point
        480427     24232    128060       101  /


   Your choice<s> are:

    1. Continue the Installation. <default>
    2. Cancel the Installation.

   Please select choice followed by 'Enter': 1
   ```

4. Press **Enter** to select the default value.

   The system displays progress messages and then the following message:

   ```
   WARNING: The installation of uw711m3 requires that you

   recreate your Disaster Recovery Floppies. See the UnixWare

   7.1.1 System Handbook or SCOhelp for more information.
   ```

   > **Note:**
   > You can ignore this warning message.

5. The system begins installing Service Pack 1, and displays the following summary of the actions taken:

   ```
   "TSM+sp1 INTUITY Transaction State Machine Package - Service
   Pack 1"was Successfully Installed.

   "cram+sp1 INTUITY CMOS RAM Utilities - Service Pack 1" was
   Successfully Installed.

   "mtce+sp1 INTUITY Utilities Package - Service Pack 1" was
   Successfully Installed.

   "vs+sp1 INTUITY Runtime Processing Package - Service Pack 1"
   was Successfully Installed.

   "csfax+sp1 INTUITY Next Generation FAX Package - Service Pack 1"
   was Successfully Installed.

   "sbcfx+sp1 CONVERSANT Script Builder Fax Actions - Service Pack 1"
   was Successfully Installed.


   The system needs to be rebooted.
   To proceed with the reboot enter 'y'
   To exit sp1_install script without rebooting enter 'n'
   ```

6. Type **y** and press **Enter**.

   Wait approximately 10 minutes for the system to reboot.

7. Log in as root.

8. If the CONVERSANT system has a V4 SSP card or a V4 T1 card, reinstall the asp+ap1 and t1dr+ap1 packages. For more information, see <u>Reinstalling the asp+ap1 and t1dr+ap1 packages</u> on page 18.

9. Type **start_vs** and press **Enter**.

   The system displays messages indicating that the voice system is starting.

10. Type **`vsenable`** and press **Enter**.

    The system displays the following message:

    ```
    Inittab rebuild not needed.
    Successful enable of automatic starting voice system.
    ```

11. If Vonetix 3.5 or an earlier version is installed on the CONVERSANT system, restart Vonetix using your standard method.

    Note:
    One way to start Vonetix is to type **`vonetix -start all`** at the UNIX prompt and press **Enter**. However, depending on how Vonetix is configured, you may have to use a different command to start Vonetix.

Reinstalling the asp+ap1 and t1dr+ap1 packages

If the CONVERSANT system (on which you are installing Service Pack 1) has a V4 SSP card or a V4 T1 card, the asp+ap1 and t1dr+ap1 packages must be reinstalled.

To reinstall the asp+ap1 and t1dr+ap1 packages:

1. Log in as root.

2. Type **`pkgadd -d cdrom1 asp+ap1`** and press **Enter**.

    The system displays progress messages and then the following message:

    ```
    Installation of INTUITY ASP Driver Package - Patch ap1 (asp+ap1)
    was successful.
    ```

3. Type **`pkgadd -d cdrom1 t1dr+ap1`** and press **Enter**.

    The system displays progress messages and then the following message:

    ```
    Installation of INTUITY T1/E1 Board Driver - Patch ap1 (t1dr+ap1)
    was successful.
    ```

4. Type **`/etc/conf/bin/idbuild -B`** and press **Enter**.

    The system displays the following message:

    ```
    UX:idbuild: INFO:
    The unix kernel will be rebuilt now.
    This will take some time. Please wait.

    UX:idbuild: INFO: The unix kernel has been rebuilt.
    ```

5. Type **`shutdown -i6 -g0 -y`** and press **Enter**.

Check the cvlanxcl package

If a **cvlanxcl** package with a release earlier than 8.2.2 was installed on the CONVERSANT R9 system before you installed Service Pack 1, Service Pack 1 will install cvlanxcl release 8.2.2. If Service Pack 1 installed cvlanxcl release 8.2.2, any voice applications that use the cvlanxcl libraries must be recompiled.

To check the installation date of the cvlanxcl package:

1. Type `pkginfo -l cvlanxcl` at the UNIX prompt and press **Enter**.

2. Check the package installation date (INSTDATE).

   If the cvlanxcl package is not installed, or if the installation date is other than today's date, no action is required.

   If the installation date is today's date, go to step 3.

3. Recompile any voice applications that use the cvlanxcl libraries.

Test the voice system

Once you have installed Service Pack 1, you should test the platform to make sure that all of the components have been set up correctly.

1. Log in as root.

   Depending on the system configuration, the voice system may already have started automatically as part of the rebooting process. This will be the case if the system displayed voice startup messages during the rebooting process and before you logged in at the Console Login prompt. If you received these messages, go to Step 3. If not, go to Step 2.

2. Type **start_vs** and press **Enter** to restart the voice system.

3. Verify and install applications to make full use of the fixes in the update. Avaya recommends testing applications before restoring live call traffic back to the system.

Restoring the system

It may be necessary to restore the system from an original backup if:

- The Service Pack 1 installation script repeatedly fails.

- Avaya Technical Support requests it.

What you need to do to restore the CONVERSANT system files is dependent on what part of the system needs to be restored and what platform you are using.

To restore the system from mkimage backups, see *CONVERSANT System Version 8.0 System Reference*.

- For information on how to completely recover your system, see *CONVERSANT System Version 8.0 MAP/40P Maintenance* or *CONVERSANT System Version 8.0 UCS 1000 Maintenance* (depending on the hardware platform of your system). Both documents are available at the Avaya Su http://support.avaya.compport Centre Web site.