

**YEAR 2000 READINESS DISCLOSURE
of the
Voice Services Platforms (VSP) Division
of
Comverse Network Systems, Inc.**

THIS STATEMENT IS A YEAR 2000 READINESS DISCLOSURE

FORWARD

The Current Release of all VSP Software is year 2000 ready.

VSP has conducted extensive year 2000 readiness testing, however not all Software versions have been tested in all supported operating environments.

Complete details are contained in the remainder of this VSP Year 2000 Readiness Disclosure.

DEFINITIONS

When used in this Statement, the terms listed below shall have the following meanings:

Code -- shall mean computer programming code. If not otherwise specified, Code shall include Source Code, Object Code and Machine Code.

A. Source Code -- shall mean software written in programming languages, including all comments and procedural code such as job control language statements, in a form intelligible to trained programmers and capable of being translated into Object Code form through assembly or compiling.

B. Object Code -- shall mean software which is the output of an assembly or compiling process. Object Code is input to a binder or linker process which converts it to Machine Code. Object Code is generally not intelligible to humans without reverse assembly, reverse compiling or reverse engineering.

C. Machine Code -- shall mean software in the form which is ready for direct execution on computer equipment. Machine Code is the output of a binder or linker process and is the language directly readable by machines but not generally by humans without reverse assembly, reverse compiling or reverse engineering.

Current Date -- shall mean the then-current date as known to the Software.

Current Release -- shall mean the most recent Release and Update thereto.

Custom Software -- shall mean all Code, Documentation, and other materials developed for Licensee by VSP under a separate agreement. Custom Software does not include any VSP Software.

Documentation -- shall mean user manuals and other written materials, other than Code, that relate to particular Code, including, without limitation, materials useful for design (e.g., logic manuals, flow charts, and principles of operation), engineering drawings, schematics, bills of materials, training manuals, and technical manuals.

End-User -- shall mean that individual, partnership, corporation, joint venture, limited liability company, estate, trust, unincorporated association or any other form of business or legal association or entity which is granted a sub-license by Licensee to use the VSP Software and related Documentation.

Error -- shall mean any incorrect functioning of Code that renders the Code inoperable, causes the Code to fail to meet the specifications thereof, causes incorrect results, or causes incorrect functions to occur when any such Code is used, or any incorrect or incomplete statement or diagram in Documentation that causes the Documentation to be inaccurate or incomplete in any material respect, irrespective of whether any of the foregoing shall be caused by VSP, Licensee or otherwise.

Licensee -- shall mean that individual, partnership, corporation, joint venture, limited liability company, estate, trust, unincorporated association or any other form of business or legal association or entity which is granted a license by VSP to use the VSP Software.

Release -- shall mean any modifications or revisions to Code and related Documentation, other than Updates, made by VSP from time to time and which is denominated by the numeral(s) to the left of the decimal point, with the newer Release having the larger numeral (e.g. 7.0 to 8.0).

Software -- shall mean Custom Software and/or VSP Software.

Update -- shall mean any modification or revision to Code or Documentation that corrects Errors caused by VSP, supports new releases of the operating systems with which the Code is designed to operate, supports new input/output (I/O) devices, or provides other incidental updates and corrections, and is denominated by the numeral(s) to the right of the decimal point, with the newer Update having the larger numeral (e.g. 7.1 to 7.2).

Version -- a Release or an Update.

VSP Software -- shall mean VSP's commercial, off the shelf software licensed to Licensee and/or sub-licensed to End-User, as the case may be.

STATEMENT

VSP considers a product year 2000 ready if Software (including any required Updates thereto), when used in accordance with its Documentation, is capable of correctly processing, providing, and/or receiving date data within and interchanged between the 20th and 21st centuries, provided that all products (for example, hardware, software and firmware) used with Software properly exchange accurate date data with it.

This Statement does not apply to "third party" or "vendor" products used with the Software. Licensees and/or End-Users should contact the "third party" or "vendor" regarding the readiness status of their products.

Year 2000 readiness shall mean that neither performance nor functionality is affected by dates prior to, during and after the year 2000. In particular:

Rule 1. No value for Current Date will cause any interruption in operation.

This rule is sometimes known as general integrity. If this requirement is satisfied, roll-over between all significant time demarcations (e.g. days, months, years, centuries) will be performed correctly.

Rule 2. Date-based functionality must behave consistently for dates prior to, during and after year 2000.

This rule is sometimes known as date integrity. This rule means that all Software must calculate, manipulate and represent dates correctly for the purposes for which they were intended. The meaning of functionality includes both processes and the results of those processes. If desired, a reference point for date values and calculations may be added by organizations; e.g. as defined by the Gregorian calendar. No Software shall use particular date values for special meanings; e.g. "99" to signify "no end value" or "end of file" or "00" to mean "not applicable" or "beginning of file".

Rule 3. In all interfaces and data storage, the century in any date must be specified either explicitly or by unambiguous algorithms or inferencing rules.

This rule is sometimes known as explicit/implicit century. It covers two general approaches: (a) explicit representation of the year in dates: e.g. by using four digits and (b) the use of inferencing rules: e.g. two-digit years with a value greater than a defined inference year of xx (e.g. 50) imply 19xx, those with a value equal to or less than the defined inference year imply 20xx. It may be necessary to allow for exceptions where domain-specific standards (e.g. standards relating to Electronic Data Interchange, automatic teller machines or Bankers Automated Clearing Services) should have precedence. Rules for century inferencing as a whole must apply to all contexts in which the date is used, although different inferencing rules may apply to different date sets.

Rule 4. Year 2000 must be recognized as a leap year.

For Rules 1 and 2 in particular, an organization may determine to specify allowable ranges for values of Current Date and dates to be manipulated (for example, a negative date value is not permitted). The ranges may relate to one or more of the feasible life-span of equipment or products or the span of dates required to be represented by the organization's business processes.

DISCLAIMER

NOTWITHSTANDING ANYTHING CONTAINED IN THIS STATEMENT TO THE CONTRARY, IN NO EVENT SHALL VSP BE LIABLE TO CUSTOMER FOR ANY LOST PROFITS, SAVINGS OR OTHER CONSEQUENTIAL, EXEMPLARY OR INCIDENTAL DAMAGES ARISING OUT OF THIS STATEMENT OR THE USE OR PERFORMANCE OF ANY SOFTWARE, EVEN IF VSP HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES, OR FOR ANY CLAIM BY ANY OTHER PARTY.

PRODUCT-SPECIFIC SPECIFICATIONS

SUMMARY

The table below summarizes the year 2000 readiness status of each of the VSP Software products. The entries in the table shall have the following meanings:

Ready: These readiness criteria are met. The criteria can be met either because the VSP Software in question processes date data correctly or because the VSP Software in question does no relevant date data processing.

Not Ready: These readiness criteria are not met.

Not Tested: No year 2000 readiness testing of the indicated Version of this product has been conducted by VSP.

Not Available: The indicated Version of this product is not available for the indicated operating environment.

Note that the use of user customizable features of Software that is year 2000 ready, such as macros, custom programming and formatting features, may produce results that are not year 2000 ready.

VSP Software	Version	Operating Environment	Rule 1	Rule 2	Rule 3	Rule 4	Product
Audio Application Processor (AAP) ¹	9.8	UNIX ²	Ready	Ready	Ready	Ready	Ready
		VMS ³					Not Available
	9.7 ⁴	UNIX ²	Ready	Ready	Ready	Ready	Ready
		VMS ³	Ready	Ready	Ready	Ready	Ready
	9.4 ⁵	UNIX ²	Ready	Ready	Ready	Ready	Ready
		VMS ³					Not Available
	9.2 ⁵	UNIX ²	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested
		VMS ³	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested
	7.3 ⁵	UNIX ²					Not Available
		VMS ³	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested
7.2 ⁵	UNIX ²					Not Available	
	VMS ³	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	
All other ⁶	UNIX ² , VMS ³	Not Ready	Not Ready	Not Ready	Not Ready	Not Ready	
GhostWriter	4.5 ⁷	Windows 95	Ready	Ready	Ready	Ready	Ready
		Windows NT	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested
	All other	Windows 95, Windows NT	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested
SR-3511 v. 4.0 (1129+)	9.8	UNIX ²	Ready	Ready	Ready	Ready	Ready
	9.4	UNIX ²	Ready	Ready	Ready	Ready	Ready
	All other	UNIX ² , VMS ³	Not Ready	Not Ready	Not Ready	Not Ready	Not Ready
VoiceBox	All	UNIX ²	Ready	Ready	Ready	Ready	Ready
ScatterBox	All	UNIX ²	Ready	Ready	Ready	Ready	Ready
JunctionBox	All	UNIX ²	Ready	Ready	Ready	Ready	Ready
ShadowBox	All	UNIX ²	Ready	Ready	Ready	Ready	Ready
PopBox	All	UNIX ²	Ready	Ready	Ready	Ready	Ready
Legacy System Gateway	9.8	UNIX ²	Ready	Ready	Ready	Ready	Ready
	All other	UNIX ² , VMS ³	Not Ready	Not Ready	Not Ready	Not Ready	Not Ready

¹ AAP Versions 9.6 and 9.5 handle dates similarly to AAP Version 9.4; however VSP has conducted no testing to confirm year 2000 readiness of AAP Versions 9.6 and 9.5. AAP Version 9.6 is available for both UNIX² and VMS³. AAP Version 9.5 is available for UNIX² only. Since no VSP client is running AAP Version 9.6 or AAP Version 9.5 any longer, these two versions are not specifically described in the Product-specific Specification for the Audio Application Processor (AAP), below.

² UNIX refers to Compaq Tru64 UNIX (formerly Digital UNIX) version 4.0d unless otherwise specified in the Product-specific Specification sections, below.

³ VMS refers to Compaq OpenVMS (formerly Digital OpenVMS) version 7.1 unless otherwise specified in the Product-specific Specification sections, below.

⁴ AAP Version 9.7 is separated from AAP Version 9.8 due to the shorter date range over which it functions correctly. See Date Ranges Supported By AAP Version 9.7 in the Audio Application Processor (AAP) section, below.

⁵ AAP Versions 9.4, 9.2, 7.3, and 7.2 are separated from AAP Version 9.7 because the date calculation subroutines in AAP Versions 9.4, 9.2, 7.3, and 7.2 do not support date data input with explicitly represented four-digit years. See Date Ranges Supported By AAP Versions ... in the Audio Application Processor (AAP) section, below.

⁶ Except AAP Version 9.6¹ and AAP Version 9.5¹.

⁷ With GhostReporter Update applied.

Custom Software is discussed at the end of the Audio Application Processor (AAP) section, below.

Audio Application Processor (AAP) Year 2000 Specification

VSP Software	Version	Operating Environment	Rule 1	Rule 2	Rule 3	Rule 4	Product
Audio Application Processor (AAP) ¹	9.8	UNIX ²	Ready	Ready	Ready	Ready	Ready
		VMS ³					Not Available
	9.7 ⁴	UNIX ²	Ready	Ready	Ready	Ready	Ready
		VMS ³	Ready	Ready	Ready	Ready	Ready
	9.4 ⁵	UNIX ²	Ready	Ready	Ready	Ready	Ready
		VMS ³					Not Available
	9.2 ⁵	UNIX ²	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested
		VMS ³	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested
	7.3 ⁵	UNIX ²					Not Available
		VMS ³	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested
7.2 ⁵	UNIX ²					Not Available	
	VMS ³	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	
All other ⁶	UNIX ² , VMS ³	Not Ready	Not Ready	Not Ready	Not Ready	Not Ready	

¹ AAP Versions 9.6 and 9.5 handle dates similarly to AAP Version 9.4; however VSP has conducted no testing to confirm year 2000 readiness of AAP Versions 9.6 and 9.5. AAP Version 9.6 is available for both UNIX² and VMS³. AAP Version 9.5 is available for UNIX² only. Since no VSP client is running AAP Version 9.6 or AAP Version 9.5 any longer, these two versions are not specifically described in the Product-specific Specification for the Audio Application Processor (AAP), below.

² UNIX refers to Compaq Tru64 UNIX (formerly Digital UNIX) version 4.0d unless otherwise specified in the Product-specific Specification sections, below.

³ VMS refers to Compaq OpenVMS (formerly Digital OpenVMS) version 7.1 unless otherwise specified in the Product-specific Specification sections, below.

⁴ AAP Version 9.7 is separated from AAP Version 9.8 due to the shorter date range over which it functions correctly. See Date Ranges Supported By AAP Version 9.7 in the Audio Application Processor (AAP) section, below.

⁵ AAP Versions 9.4, 9.2, 7.3, and 7.2 are separated from AAP Version 9.7 because the date calculation subroutines in AAP Versions 9.4, 9.2, 7.3, and 7.2 do not support date data input with explicitly represented four-digit years. See Date Ranges Supported By AAP Versions ... in the Audio Application Processor (AAP) section, below.

⁶ Except AAP Version 9.6¹ and AAP Version 9.5¹.

AAP Version 9.8

AAP Version 9.8 is year 2000 ready. The only substantive difference with regards to date processing between Version 9.8 and Version 9.7 described below is the range of dates over which date related data is processed correctly. The specific date ranges for the two Versions are defined in their respective sections. Other differences between the two Versions with regards to date processing are considered by VSP to be cosmetic.

Date Ranges Supported By AAP Version 9.8

1. AAP Version 9.8 function properly with a Current Date starting at the beginning of year 1980 through the end of year 2037.
2. AAP Version 9.8 allows the user to enter (or otherwise accepts) dates with an explicitly represented year (i.e. four-digit year). (Note: the date routine which calculates the number of business days before or after a given date, i.e. `business_date_calc`, supports YYMMDD and MMDDYY formats. There is no date routine which calculates the number of business days before or after a given date which supports CCYYMMDD or MMDDCCYY formats.) The operational range for the storing, calculating and speaking of dates entered (or otherwise accepted) with an explicitly represented year is from the beginning of year 1800 through the end of year 3599. Throughout this operational range:
 - 2.1. AAP Version 9.8 stores, speaks and calculates dates consistent with a four-digit year format (i.e. CCYYMMDD or MMDDCCYY).
 - 2.2. AAP Version 9.8 correctly executes leap year calculations.
 - 2.3. AAP Version 9.8 does not use special values for dates.
3. AAP Version 9.8 allows the user to enter (or otherwise accepts) dates with a two-digit shortcut for the year. The operational range for the storing, calculating and speaking of dates entered (or otherwise accepted) with a two-digit shortcut for the year is defined by the inferencing rules specified in Date Handling Routines In AAP Version 9.8, below. Throughout this operational range:
 - 3.1. AAP Version 9.8 stores, speaks and calculates dates consistent with a 4-digit year format (i.e. CCYYMMDD or MMDDCCYY), in accordance with such inferencing rules.
 - 3.2. AAP Version 9.8 correctly executes leap year calculations.
 - 3.3. AAP Version 9.8 does not use special values for dates.

Date Handling Routines In AAP Version 9.8

The AAP software contains subroutines (a) to convert dates to speech and (b) to perform date calculations (calendar days forward and back, number of days between two dates, etc.). For AAP Version 9.8, date manipulations are supported in the following manner:

1. The subroutine which speaks dates in AAP Version 9.8 correctly handles dates that are represented either explicitly in either of the formats CCYYMMDD or MMDDCCYY or that are represented implicitly in either of the formats YYMMDD or MMDDYY. When century values are represented implicitly using YYMMDD or MMDDYY, AAP Version 9.8 use the following inferencing rule: if a YY value is equal to or less than 25, it is assumed to be the 21st century, and if a YY value is greater than 25, it is assumed to be the 20th century. This creates a range of 1926 through 2025 when centuries are represented implicitly.
2. The subroutines which perform date calculations in AAP Version 9.8 correctly handle dates that are represented either explicitly in either of the formats CCYYMMDD or MMDDCCYY or that are represented implicitly in either of the formats YYMMDD or MMDDYY. (Note: the date routine which calculates the number of business days before or after a given date, i.e. `business_date_calc`, supports YYMMDD and MMDDYY formats. There is no date routine which calculates the number of business days before or after a given date which supports CCYYMMDD or MMDDCCYY formats.) When century values are represented implicitly using YYMMDD or MMDDYY, AAP

Version 9.8 use the following inferencing rule: if a YY value is less than 80, it is assumed to be the 21st century, and if a YY value is equal to or greater than 80, it is assumed to be the 20th century. This creates a range of 1980 through 2079 when centuries are represented implicitly.

Year 2000 Testing of AAP Version 9.8 Under UNIX

VSP conducted extensive testing of AAP Version 9.8 under UNIX to confirm year 2000 readiness. The testing was done under a Compaq Tru64 UNIX (purchased as Digital UNIX) version 4.0d operating system running on a Compaq AlphaServer (purchased as a Digital AlphaServer) 1000 4/266, which was loaded with AAP Version 9.8. An application environment was established that performed the tests. The testing is outlined below. A document detailing the testing, including expected and actual results, is available upon request.

Date Routines -- All sixteen date routines were tested.

Date Routine	Two-digit Year / Inference Year	Four-digit Year	Speak Date	Date Calculation	System Call
say_date	X / 25	X	X		
business_date_calc	X / 80			X	
date_calc	X / 80			X	
date_calc1	X / 80			X	
date_check	X / 80			X	
date_dayofweek	X / 80			X	
date_diff	X / 80			X	
aap_date_calc		X		X	
aap_date_calc1		X		X	
aap_date_check		X		X	
aap_date_dayofweek		X		X	
aap_date_diff		X		X	
aap_get_date	X / NA				X
get_system_date	X / NA				X
get_system_dnt (date and time)	X / NA				X
get_dnt_string (date and time)	X / NA	X			X

X=supported

Current Dates on Which the Application Was Executed -- The Current Date of the test system was set to the first date of each of these date groups and the application run on each of the dates of each date group.

1. 2/28/1999 (not a leap year) to 3/1/1999 (2 days)
2. 12/31/1999 to 1/1/2000 to 1/2/2000 to 1/3/2000 (4 days)
3. 2/28/2000 to 2/29/2000 (leap year) to 3/1/2000 (3 days)
4. 2/28/2001 (not a leap year) to 3/1/2001 (2 days)
5. 2/28/2004 to 2/29/2004 (leap year) to 3/1/2004 (3 days)

Year 2000 Testing of AAP Version 9.8 Under VMS

AAP Version 9.8 is not available for VMS.

AAP Version 9.7

AAP Version 9.7 is year 2000 ready. The only substantive difference with regards to date processing between Version 9.8 described above and Version 9.7 is the range of dates over which date related data is processed correctly. The specific date ranges for the two Versions are defined in their respective sections. Other differences between the two Versions with regards to date processing are considered by VSP to be cosmetic.

Date Ranges Supported By AAP Version 9.7

1. AAP Version 9.7 functions properly with a Current Date starting at the beginning of year 1980 through the end of year 2037.
2. AAP Version 9.7 allows the user to enter (or otherwise accepts) dates with an explicitly represented year (i.e. four-digit year). (Note: the date routine which calculates the number of business days before or after a given date, i.e. business_date_calc, supports YYMMDD and MMDDYY formats. There is no date routine which calculates the number of business days before or after a given date which supports CCYYMMDD or MMDDCCYY formats.) The operational range for the storing, calculating and speaking of dates entered (or otherwise accepted) with an explicitly represented year is from the beginning of year 1901 through the end of year 2099. Throughout this operational range:
 - 2.1. AAP Version 9.7 stores, speaks and calculates dates consistent with a four-digit year format (i.e. CCYYMMDD or MMDDCCYY).
 - 2.2. AAP Version 9.7 correctly executes leap year calculations.
 - 2.3. AAP Version 9.7 does not use special values for dates.
3. AAP Version 9.7 allows the user to enter (or otherwise accepts) dates with a two-digit shortcut for the year. The operational range for the storing, calculating and speaking of dates entered (or otherwise accepted) with a two-digit shortcut for the year is defined by the inferencing rules specified in Date Handling Routines In AAP Version 9.7, below. Throughout this operational range:
 - 3.1. AAP Version 9.7 stores, speaks and calculates dates consistent with a 4-digit year format (i.e. CCYYMMDD or MMDDCCYY), in accordance with such inferencing rules.
 - 3.2. AAP Version 9.7 correctly executes leap year calculations.
 - 3.3. AAP Version 9.7 does not use special values for dates.

Date Handling Routines In AAP Version 9.7

The AAP software contains subroutines (a) to convert dates to speech and (b) to perform date calculations (calendar days forward and back, number of days between two dates, etc.). For AAP Version 9.7, date manipulations are supported in the following manner:

1. The subroutine which speaks dates in AAP Version 9.7 correctly handles dates that are represented either explicitly in either of the formats CCYYMMDD or MMDDCCYY or that are represented implicitly in either of the formats YYMMDD or MMDDYY. When century values are represented implicitly using YYMMDD or MMDDYY, AAP Version 9.7 uses the following inferencing rule: if a YY value is equal to or less than 25, it is assumed to be the 21st century, and if a YY value is greater than 25, it is assumed to be the 20th century. This creates a range of 1926 through 2025 when centuries are represented implicitly.
2. The subroutines which perform date calculations in AAP Version 9.7 correctly handle dates that are represented either explicitly in either of the formats CCYYMMDD or MMDDCCYY or that are represented implicitly in either of the formats YYMMDD or MMDDYY. (Note: the date routine which calculates the number of business days before or after a given date, i.e. business_date_calc, supports YYMMDD and MMDDYY formats. There is no date routine which calculates the number of business days before or after a given date which supports CCYYMMDD or MMDDCCYY formats.) When century values are represented implicitly using YYMMDD or MMDDYY, AAP Version 9.7 uses the following inferencing rule: if a YY value is less than 80, it is assumed to be the 21st century, and if a YY value is equal to or greater than 80, it is assumed to be the 20th century. This creates a range of 1980 through 2079 when centuries are represented implicitly.

Year 2000 Testing of AAP Version 9.7 Under UNIX

VSP conducted extensive testing of AAP Version 9.7 under UNIX to confirm year 2000 readiness. The testing was done under a Digital UNIX (now referred to as Compaq Tru64 UNIX) version 4.0d operating system running on a Digital AlphaServer (now referred to as a Compaq AlphaServer) 1000 4/266, which was loaded with AAP Version 9.7. An application environment was established that performed the tests. The testing is outlined below. A document detailing the testing, including expected and actual results, is available upon request.

Date Routines -- All sixteen date routines were tested.

Date Routine	Two-digit Year / Inference Year	Four-digit Year	Speak Date	Date Calculation	System Call
say_date	X / 25	X	X		
business_date_calc	X / 80			X	
date_calc	X / 80			X	
date_calc1	X / 80			X	
date_check	X / 80			X	
date_dayofweek	X / 80			X	
date_diff	X / 80			X	
aap_date_calc		X		X	
aap_date_calc1		X		X	
aap_date_check		X		X	
aap_date_dayofweek		X		X	
aap_date_diff		X		X	
aap_get_date	X / NA				X
get_system_date	X / NA				X
get_system_dnt (date and time)	X / NA				X
get_dnt_string (date and time)	X / NA	X			X

X=supported

Current Dates on Which the Application Was Executed -- The Current Date of the test system was set to the first date of each of these date groups and the application run on each of the dates of each date group.

1. 2/28/1999 (not a leap year) to 3/1/1999 (2 days)
2. 12/31/1999 to 1/1/2000 to 1/2/2000 to 1/3/2000 (4 days)
3. 2/28/2000 to 2/29/2000 (leap year) to 3/1/2000 (3 days)
4. 2/28/2001 (not a leap year) to 3/1/2001 (2 days)
5. 2/28/2004 to 2/29/2004 (leap year) to 3/1/2004 (3 days)

Year 2000 Testing of AAP Version 9.7 Under VMS

VSP conducted extensive testing of AAP Version 9.7 under VMS to confirm year 2000 readiness. The testing was done under a Digital OpenVMS (now referred to as Compaq OpenVMS) version 7.1 operating system running on a Digital AlphaServer (now referred to as a Compaq AlphaServer) 1000 4/266, which was loaded with AAP Version 9.7. An application environment was established that performed the tests. The testing is outlined below. A document detailing the testing, including expected and actual results, is available upon request.

Date Routines -- All sixteen date routines were tested.

Date Routine	Two-digit Year / Inference Year	Four-digit Year	Speak Date	Date Calculation	System Call
say_date	X / 25	X	X		
business_date_calc	X / 80			X	
date_calc	X / 80			X	
date_calc1	X / 80			X	
date_check	X / 80			X	
date_dayofweek	X / 80			X	
date_diff	X / 80			X	
aap_date_calc		X		X	
aap_date_calc1		X		X	

aap_date_check		X		X	
aap_date_dayofweek		X		X	
aap_date_diff		X		X	
aap_get_date	X / NA				X
get_system_date	X / NA				X
get_system_dnt (date and time)	X / NA				X
get_dnt_string (date and time)	X / NA	X			X

X=supported

Current Dates on Which the Application Was Executed -- The Current Date of the test system was set to the first date of each of these date groups and the application was run on each of the dates of each date group.

1. 2/28/1999 (not a leap year) to 3/1/1999 (2 days)
2. 12/31/1999 to 1/1/2000 to 1/2/2000 to 1/3/2000 (4 days)
3. 2/28/2000 to 2/29/2000 (leap year) to 3/1/2000 (3 days)
4. 2/28/2001 (not a leap year) to 3/1/2001 (2 days)
5. 2/28/2004 to 2/29/2004 (leap year) to 3/1/2004 (3 days)

AAP Version 9.4

AAP Version 9.4 for UNIX is year 2000 ready. AAP Version 9.4 is not available for VMS.

The only difference with regards to date processing between AAP Version 9.4 and AAP Version 9.7 described above is that the date calculation subroutines in AAP Version 9.4 do not support date data input with explicitly represented four-digit years.

Date Ranges Supported By AAP Version 9.4

1. AAP Version 9.4 functions properly with a Current Date starting at the beginning of year 1980 through the end of year 2037.
2. With the exception of the AAP date calculation subroutines, AAP Version 9.4 allows the user to enter (or otherwise accept) dates with an explicitly represented year (i.e. four-digit year). The operational range for the speaking of dates entered (or otherwise accepted) with an explicitly represented year is from the beginning of year 1901 through the end of year 2099. Throughout this operational range:
 - 2.1. AAP Version 9.4 speaks dates consistent with a four-digit year format (i.e. CCYYMMDD or MMDDCCYY).
 - 2.2. AAP Version 9.4 does not use special values for dates.

The date calculation subroutines available with AAP Version 9.4 do not allow the user to enter (or otherwise accept) dates with an explicitly represented year (i.e. four-digit year). Therefore AAP Version 9.4 does not execute leap year calculations with an explicitly represented year.
3. AAP Version 9.4 allows the user to enter (or otherwise accept) dates with a two-digit shortcut for the year. The operational range for the storing, calculating and speaking of dates entered (or otherwise accepted) with a two-digit shortcut for the year is defined by the inferencing rules specified in Date Handling Routines In AAP Version 9.4, below. Throughout this operational range:
 - 3.1. AAP Version 9.4 stores, speaks and calculates dates consistent with a 4-digit year format (i.e. CCYYMMDD or MMDDCCYY), in accordance with such inferencing rules.
 - 3.2. AAP Version 9.4 correctly executes leap year calculations.
 - 3.3. AAP Version 9.4 does not use special values for dates.

Date Handling Routines In AAP Version 9.4

The AAP software contains subroutines (a) to convert dates to speech and (b) to perform date calculations (e.g. calendar days forward and back, number of days between two dates). For AAP Version 9.4, date manipulations are supported in the following manner:

1. The subroutine which speaks dates in AAP Version 9.4 correctly handles dates that are represented either explicitly in either of the formats CCYYMMDD or MMDDCCYY or that are represented implicitly in either of the formats YYMMDD or MMDDYY. When century values are represented implicitly using YYMMDD or MMDDYY, these AAP Versions use the following inferencing rule: if a YY value is equal to or less than 25, it is assumed to be the 21st century, and if a YY value is greater than 25, it is assumed to be the 20th century. This creates a range of 1926 through 2025 when centuries are represented implicitly.
2. The subroutines which perform date calculations in AAP Version 9.4 correctly handle dates that are represented implicitly in either of the formats YYMMDD or MMDDYY only. The following inferencing rule is used: if a YY value is less than 80, it is assumed to be the 21st century, and if a YY value is equal to or greater than 80, it is assumed to be the 20th century. This creates a range of 1980 through 2079 when centuries are represented implicitly.

Year 2000 Testing of AAP Version 9.4 Under UNIX

VSP tested AAP Version 9.4 under a Digital UNIX (now referred to as Compaq Tru64 UNIX) version 4.0b operating system running on a Digital AlphaServer (now referred to as a Compaq AlphaServer) 1000A to confirm correct operation. The testing was accomplished by running an VSP demo application that exercised the AAP, including the date routines available with AAP Version 9.4.

Date Routines -- The following eleven date routines available with AAP Version 9.4 were tested.

Date Routine	Two-digit Year / Inference Year	Four-digit Year	Speak Date	Date Calculation	System Call
say_date	X / 25	X	X		
business_date_calc	X / 80			X	
date_calc	X / 80			X	
date_calc1	X / 80			X	
date_check	X / 80			X	
date_dayofweek	X / 80			X	
date_diff	X / 80			X	

aap_get_date	X / NA				X
get_system_date	X / NA				X
get_system_dnt (date and time)	X / NA				X
get_dnt_string (date and time)	X / NA	X			X

X=supported

Date Situations Covered by the Tests -- The tests covered the following situations:

1. Validate correct calculation of dates.
2. Validate the correct acceptance of dates from the operating systems.
3. Validate the inferencing rule with two-digit year dates.

Current Dates on Which the Demo Application Was Executed -- The Current Date of the test system was set to the first date of the date group and the demo application was run on each of the dates of the date group.

1. 12/31/1999 to 1/1/2000 to 1/2/2000 to 1/3/2000 (4 days)

Testing and Results -- Starting with the Current Date set to 12/31/1999, normal calls were placed into the system and run through the demo application. This application spoke all dates correctly and performed date calculations correctly. The system was left running overnight and calls were entered the next day, 1/1/2000. Statistic reports were run for the previous day, 12/31/1999. The system was left running for two additional days, 1/2/2000 and 1/3/2000. Calls were entered and various reports were run on these days. All aspects of the system functioned normally throughout the test.

Year 2000 Testing of AAP Version 9.4 Under VMS

AAP Version 9.4 is not available for VMS.

AAP Version 9.2 (With Updates Applied)

AAP Version 9.2 was not year 2000 ready at the time it was originally released. However, VSP has Updates available for AAP Version 9.2 which are intended to cause it to handle dates in the same manner as AAP Version 9.4 (see AAP Version 9.4, above, and Year 2000 Updates for Selected Earlier AAP Versions, below). Note, however, that VSP has done no year 2000 readiness testing of AAP Version 9.2 either with or without Updates applied. Hence, the description of AAP Version 9.2 with Updates applied in this document states design objectives which have not been confirmed by testing by VSP.

The only difference with regards to date processing between AAP Version 9.2 with Updates applied and AAP Version 9.7 described above is that the date calculation subroutines in AAP Version 9.2 with Updates applied do not support date data input with explicitly represented four-digit years.

Date Ranges Supported By AAP Version 9.2 With Updates Applied

1. AAP Version 9.2 with Updates applied functions properly with a Current Date starting at the beginning of year 1980 through the end of year 2037.
2. With the exception of the AAP date calculation subroutines, AAP Version 9.2 with Updates applied allows the user to enter (or otherwise accept) dates with an explicitly represented year (i.e. four-digit year). The operational range for the speaking of dates entered (or otherwise accepted) with an explicitly represented year is from the beginning of year 1901 through the end of year 2099. Throughout this operational range:
 - 2.1. AAP Version 9.2 with Updates applied speaks dates consistent with a four-digit year format (i.e. CCYYMMDD or MMDDCCYY).
 - 2.2. AAP Version 9.2 with Updates applied does not use special values for dates.

The date calculation subroutines available with AAP Version 9.2 with Updates applied do not allow the user to enter (or otherwise accept) dates with an explicitly represented year (i.e. four-digit year). Therefore AAP Version 9.2 with Updates applied does not execute leap year calculations with an explicitly represented year.
3. AAP Version 9.2 with Updates applied allows the user to enter (or otherwise accept) dates with a two-digit shortcut for the year. The operational range for the storing, calculating and speaking of dates entered (or otherwise accepted) with a two-digit shortcut for the year is defined by the inferencing rules specified in Date Handling Routines In AAP Version 9.2 With Updates Applied, below. Throughout this operational range:
 - 3.1. AAP Version 9.2 with Updates applied stores, speaks and calculates dates consistent with a 4-digit year format (i.e. CCYYMMDD or MMDDCCYY), in accordance with such inferencing rules.
 - 3.2. AAP Version 9.2 with Updates applied correctly executes leap year calculations.
 - 3.3. AAP Version 9.2 with Updates applied does not use special values for dates.

Date Handling Routines In AAP Version 9.2 With Updates Applied

The AAP software contains subroutines (a) to convert dates to speech and (b) to perform date calculations (e.g. calendar days forward and back, number of days between two dates). For AAP Version 9.2 with Updates applied, date manipulations are supported in the following manner:

1. The subroutine which speaks dates in AAP Version 9.2 with Updates applied correctly handles dates that are represented either explicitly in either of the formats CCYYMMDD or MMDDCCYY or that are represented implicitly in either of the formats YYMMDD or MMDDYY. When century values are represented implicitly using YYMMDD or MMDDYY, these AAP Versions use the following inferencing rule: if a YY value is equal to or less than 25, it is assumed to be the 21st century, and if a YY value is greater than 25, it is assumed to be the 20th century. This creates a range of 1926 through 2025 when centuries are represented implicitly.
2. The subroutines which perform date calculations in AAP Version 9.2 with Updates applied correctly handle dates that are represented implicitly in either of the formats YYMMDD or MMDDYY only. The following inferencing rule is used: if a YY value is less than 80, it is assumed to be the 21st century, and if a YY value is equal to or greater than 80, it is assumed to be the 20th century. This creates a range of 1980 through 2079 when centuries are represented implicitly.

Year 2000 Testing of AAP Version 9.2 With Updates Applied Under UNIX

VSP has conducted no year 2000 readiness testing of AAP Version 9.2 either with or without Updates applied.

Year 2000 Testing of AAP Version 9.2 With Updates Applied Under VMS

VSP has conducted no year 2000 readiness testing of AAP Version 9.2 either with or without Updates applied.

AAP Version 7.3 (With Updates Applied)

AAP Version 7.3 was not year 2000 ready at the time it was originally released. However, VSP has Updates available for AAP Version 7.3 which are intended to cause it to handle dates in the same manner as AAP Version 9.4 (see AAP Version 9.4, above, and Year 2000 Updates for Selected Earlier AAP Versions, below). Note, however, that VSP has done no year 2000 readiness testing of AAP Version 7.3 either with or without the Updates applied. Hence, the description of AAP Version 7.3 with Updates applied in this document states design objectives which have not been confirmed by testing by VSP.

The only difference with regards to date processing between AAP Version 7.3 with Updates applied and AAP Version 9.7 described above is that the date calculation subroutines in AAP Version 7.3 with Updates applied do not support date data input with explicitly represented four-digit years.

Date Ranges Supported By AAP Version 7.3 With Updates Applied

1. AAP Version 7.3 with Updates applied functions properly with a Current Date starting at the beginning of year 1980 through the end of year 2037.
2. With the exception of the AAP date calculation subroutines, AAP Version 7.3 with Updates applied allows the user to enter (or otherwise accept) dates with an explicitly represented year (i.e. four-digit year). The operational range for the speaking of dates entered (or otherwise accepted) with an explicitly represented year is from the beginning of year 1901 through the end of year 2099. Throughout this operational range:
 - 2.1. AAP Version 7.3 with Updates applied speaks dates consistent with a four-digit year format (i.e. CCYYMMDD or MMDDCCYY).
 - 2.2. AAP Version 7.3 with Updates applied does not use special values for dates.The date calculation subroutines available with AAP Version 7.3 with Updates applied do not allow the user to enter (or otherwise accept) dates with an explicitly represented year (i.e. four-digit year). Therefore AAP Version 7.3 with Updates applied does not execute leap year calculations with an explicitly represented year.
3. AAP Version 7.3 with Updates applied allows the user to enter (or otherwise accept) dates with a two-digit shortcut for the year. The operational range for the storing, calculating and speaking of dates entered (or otherwise accepted) with a two-digit shortcut for the year is defined by the inferencing rules specified in Date Handling Routines In AAP Version 7.3 With Updates Applied, below. Throughout this operational range:
 - 3.1. AAP Version 7.3 with Updates applied stores, speaks and calculates dates consistent with a 4-digit year format (i.e. CCYYMMDD or MMDDCCYY), in accordance with such inferencing rules.
 - 3.2. AAP Version 7.3 with Updates applied correctly executes leap year calculations.
 - 3.3. AAP Version 7.3 with Updates applied does not use special values for dates.

Date Handling Routines In AAP Version 7.3 With Updates Applied

The AAP software contains subroutines (a) to convert dates to speech and (b) to perform date calculations (e.g. calendar days forward and back, number of days between two dates). For AAP Version 7.3 with Updates applied, date manipulations are supported in the following manner:

1. The subroutine which speaks dates in AAP Version 7.3 with Updates applied correctly handles dates that are represented either explicitly in either of the formats CCYYMMDD or MMDDCCYY or that are represented implicitly in either of the formats YYMMDD or MMDDYY. When century values are represented implicitly using YYMMDD or MMDDYY, these AAP Versions use the following inferencing rule: if a YY value is equal to or less than 25, it is assumed to be the 21st century, and if a YY value is greater than 25, it is assumed to be the 20th century. This creates a range of 1926 through 2025 when centuries are represented implicitly.
2. The subroutines which perform date calculations in AAP Version 7.3 with Updates applied correctly handle dates that are represented implicitly in either of the formats YYMMDD or MMDDYY only. The following inferencing rule is used: if a YY value is less than 80, it is assumed to be the 21st century, and if a YY value is equal to or greater than 80, it is assumed to be the 20th century. This creates a range of 1980 through 2079 when centuries are represented implicitly.

Year 2000 Testing of AAP Version 7.3 With Updates Applied Under UNIX

VSP has conducted no year 2000 readiness testing of AAP Version 7.3 either with or without Updates applied.

Year 2000 Testing of AAP Version 7.3 With Updates Applied Under VMS

VSP has conducted no year 2000 readiness testing of AAP Version 7.3 either with or without Updates applied.

AAP Version 7.2 (With Updates Applied)

AAP Version 7.2 was not year 2000 ready at the time it was originally released. However, VSP has Updates available for AAP Version 7.2 which are intended to cause it to handle dates in the same manner as AAP Version 9.4 (see AAP Version 9.4, above, and Year 2000 Updates for Selected Earlier AAP Versions, below). Note, however, that VSP has done no year 2000 readiness testing of AAP Version 7.2 either with or without the Updates applied. Hence, the description of AAP Version 7.2 with Updates applied in this document states design objectives which have not been confirmed by testing by VSP.

The only difference with regards to date processing between AAP Version 7.2 with Updates applied and AAP Version 9.7 described above is that the date calculation subroutines in AAP Version 7.2 with Updates applied do not support date data input with explicitly represented four-digit years.

Date Ranges Supported By AAP Version 7.2 With Updates Applied

1. AAP Version 7.2 with Updates applied functions properly with a Current Date starting at the beginning of year 1980 through the end of year 2037.
2. With the exception of the AAP date calculation subroutines, AAP Version 7.2 with Updates applied allows the user to enter (or otherwise accept) dates with an explicitly represented year (i.e. four-digit year). The operational range for the speaking of dates entered (or

otherwise accepted) with an explicitly represented year is from the beginning of year 1901 through the end of year 2099. Throughout this operational range:

- 2.1. AAP Version 7.2 with Updates applied speaks dates consistent with a four-digit year format (i.e. CCYYMMDD or MMDDCCYY).
- 2.2. AAP Version 7.2 with Updates applied does not use special values for dates.
The date calculation subroutines available with AAP Version 7.2 with Updates applied do not allow the user to enter (or otherwise accept) dates with an explicitly represented year (i.e. four-digit year). Therefore AAP Version 7.2 with Updates applied does not execute leap year calculations with an explicitly represented year.
3. AAP Version 7.2 with Updates applied allows the user to enter (or otherwise accept) dates with a two-digit shortcut for the year. The operational range for the storing, calculating and speaking of dates entered (or otherwise accepted) with a two-digit shortcut for the year is defined by the inferencing rules specified in Date Handling Routines In AAP Version 7.2 With Updates Applied, below. Throughout this operational range:
 - 3.1. AAP Version 7.2 with Updates applied stores, speaks and calculates dates consistent with a 4-digit year format (i.e. CCYYMMDD or MMDDCCYY), in accordance with such inferencing rules.
 - 3.2. AAP Version 7.2 with Updates applied correctly executes leap year calculations.
 - 3.3. AAP Version 7.2 with Updates applied does not use special values for dates.

Date Handling Routines In AAP Version 7.2 With Updates Applied

The AAP software contains subroutines (a) to convert dates to speech and (b) to perform date calculations (e.g. calendar days forward and back, number of days between two dates). For AAP Version 7.2 with Updates applied, date manipulations are supported in the following manner:

1. The subroutine which speaks dates in AAP Version 7.2 with Updates applied correctly handles dates that are represented either explicitly in either of the formats CCYYMMDD or MMDDCCYY or that are represented implicitly in either of the formats YYMMDD or MMDDYY. When century values are represented implicitly using YYMMDD or MMDDYY, these AAP Versions use the following inferencing rule: if a YY value is equal to or less than 25, it is assumed to be the 21st century, and if a YY value is greater than 25, it is assumed to be the 20th century. This creates a range of 1926 through 2025 when centuries are represented implicitly.
2. The subroutines which perform date calculations in AAP Version 7.2 with Updates applied correctly handle dates that are represented implicitly in either of the formats YYMMDD or MMDDYY only. The following inferencing rule is used: if a YY value is less than 80, it is assumed to be the 21st century, and if a YY value is equal to or greater than 80, it is assumed to be the 20th century. This creates a range of 1980 through 2079 when centuries are represented implicitly.

Year 2000 Testing of AAP Version 7.2 With Updates Applied Under UNIX

VSP has conducted no year 2000 readiness testing of AAP Version 7.2 either with or without Updates applied.

Year 2000 Testing of AAP Version 7.2 With Updates Applied Under VMS

VSP has conducted no year 2000 readiness testing of AAP Version 7.2 either with or without Updates applied.

Year 2000 Updates for Selected Earlier AAP Versions

VSP has Updates available for AAP Versions 9.2, 7.3, and 7.2 which are intended to cause them to handle dates in the same manner as AAP Version 9.4. Note, however, that VSP has done no year 2000 readiness testing of AAP Versions 9.2, 7.3, or 7.2 with or without Updates applied. VSP will supply such Updates for AAP Versions 9.2, 7.3, and 7.2 free of charge to Licensees with a software maintenance agreement in effect covering the AAP. The Licensee remains responsible for testing and production rollout. If problems with the AAP are encountered during testing or in production, VSP will assist under the terms of the software maintenance agreement.

Licensees not covered under a software maintenance agreement who wish to obtain either

- The year 2000 Updates for AAP Version 9.2, 7.3, or 7.2, or
- The most current AAP Version,

must either

- Retroactively renew their maintenance coverage, or
- Purchase new licenses for the current Version of the AAP.

All Other AAP Versions

All other AAP Versions are not year 2000 ready and VSP has no plans to make them ready. VSP Licensees with AAP Versions other than those specifically listed above must upgrade to the current AAP Version to become year 2000 ready.

Custom Software (AAP Applications)

(Note: The following paragraph applies only to VSP Licensees running their Custom Software under AAP Versions 9.8, 9.7, 9.4, 9.2 (with Updates applied), 7.3 (with Updates applied), or 7.2 (with Updates applied). Custom Software running under any other AAP Version will need to be re-worked in conjunction with the Licensee upgrading its AAP to the current Version.)

VSP can review the Custom Software and change date processing where necessary. This service is not covered by a software maintenance agreement. There will be a fee incurred for this service and VSP will provide a price quotation upon request. The Licensee remains responsible for testing and production rollout of the changed Custom Software. If problems with the Custom Software are encountered during testing or in production, VSP will assist under the terms of the software maintenance agreement (if one is in effect for the Custom Software).

GhostWriter Year 2000 Specification

VSP Software	Version	Operating Environment	Rule 1	Rule 2	Rule 3	Rule 4	Product
GhostWriter	4.5 ⁷	Windows 95	Ready	Ready	Ready	Ready	Ready
		Windows NT	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested
	All other	Windows 95, Windows NT	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested

⁷ With GhostReporter Update applied.

GhostWriter Date-Related Design Objectives and The GhostReporter Defect

An VSP date-related design objective for GhostWriter is to have this Software do no year-related date processing but rather to isolate this type of processing in the execution environment (AAP). A second VSP date-related design objective for GhostWriter is to have this Software produce scripts and call-plans which are independent of the Current Date on the GhostWriter system. If these date-related design objectives are met, GhostWriter is year 2000 ready.

Until early 1999, VSP had believed that these design objectives were met. However, contrary to the first year-related design objective, it was then discovered that the GhostReporter component of GhostWriter was performing certain year-related date processing. GhostReporter is the script mode report generator facility used by all versions of GhostWriter. The year-related date processing performed by GhostReporter caused this component to stop producing reports as of the beginning of 1999. This defect was resolved by removing the year-related processing from GhostReporter altogether.

With the GhostReporter defect resolved, the GhostWriter date-related design objectives are again met, and hence GhostWriter is year 2000 ready.

The GhostReporter Update

VSP has created a GhostReporter Update which corrects the year-related defect in GhostReporter. This Update is available upon request and free of charge to all licensed GhostWriter users. The GhostReporter Update applies to all Versions of GhostWriter running in all supported operating environments.

Note that this defect affected GhostReporter only. No other GhostWriter functionality was affected by the GhostReporter defect.

GhostWriter Version 4.5 (With The GhostReporter Update Applied)

GhostWriter Version 4.5 with the GhostReporter Update applied is year 2000 ready.

Year 2000 Testing of GhostWriter Version 4.5 With The GhostReporter Update Applied Under Windows 95

VSP conducted testing of GhostWriter Version 4.5 with the GhostReporter Update applied under Windows 95 to confirm year 2000 readiness. The testing was done under a Microsoft Windows 95 OSR-2 operating system running on a Gateway Pentium-233, which was loaded with GhostWriter Version 4.5 with the GhostReporter Update applied. The testing is outlined below. A document detailing the testing is available upon request.

The testing was designed to confirm that GhostWriter functions correctly for any Current Date on the GhostWriter system. To accomplish this, a Current date in the past, a Current Date in the present, and a Current Date in the future were selected.

Current Dates on Which the Testing Was Executed -- The year of the Current Date of the test system was set to each of the following years and the testing executed.

1. 1980
2. 1999
3. 2037

Since the tests were designed to confirm correct GhostWriter processing independent of Current Date, the month and day of the Current Date are considered by VSP to be of no significance to these tests. The actual month and day were in late February and early March.

The Testing -- The testing consisted of performing all or most of the following steps with the year of the Current Date set to each of the above years:

1. Generate the report for an existing script mode application
2. Generate the report for an existing call-plan mode application
3. Create a new script mode application
4. Generate the report for the new script mode application
5. Create a new call-plan mode application
6. Generate the report for the new call-plan mode application
7. Migrate a script mode application created with an earlier version of GhostWriter to the current version
8. Generate the report for the newly migrated script mode application
9. Migrate a call-plan mode application created with an earlier version of GhostWriter to the current version
10. Generate the report for the newly migrated call-plan mode application

Year 2000 Testing of GhostWriter Version 4.5 Under Windows NT

Applying the GhostReporter Update to GhostWriter Version 4.5 for Windows NT is intended to make this Version meet the two VSP date-related design criteria stated above, thus making this Version year 2000 ready. However, VSP has conducted no year 2000 readiness testing of GhostWriter Version 4.5 either with or without the GhostReporter Update applied under Windows NT.

All Other GhostWriter Versions

Applying the GhostReporter Update to other GhostWriter Version is intended to make these Versions meet the two VSP date-related design criteria stated

above, thus making these Versions year 2000 ready. However, VSP has conducted no year 2000 readiness testing of any other GhostWriter Version either with or without the GhostReporter Update applied.

SR-3511 v. 4.0 (1129+) Year 2000 Specification

VSP Software	Version	Operating Environment	Rule 1	Rule 2	Rule 3	Rule 4	Product
SR-3511 v. 4.0 (1129+)	9.8	UNIX ²	Ready	Ready	Ready	Ready	Ready
	9.4	UNIX ²	Ready	Ready	Ready	Ready	Ready
	All other	UNIX ² , VMS ³	Not Ready	Not Ready	Not Ready	Not Ready	Not Ready

² UNIX refers to Compaq Tru64 UNIX (formerly Digital UNIX) version 4.0d unless otherwise specified in the Product-specific Specification sections.

³ VMS refers to Compaq OpenVMS (formerly Digital OpenVMS) version 7.1 unless otherwise specified in the Product-specific Specification sections.

SR-3511 v. 4.0 (1129+) software is extensions to the Audio Application Processor (AAP). The extensions themselves do not perform any year-related date processing, therefore the year 2000 readiness of a particular SR-3511 v. 4.0 (1129+) Version is the same as the readiness state of its underlying AAP Version.

VoiceBox Year 2000 Specification

VSP Software	Version	Operating Environment	Rule 1	Rule 2	Rule 3	Rule 4	Product
VoiceBox	All	UNIX ²	Ready	Ready	Ready	Ready	Ready

² UNIX refers to Compaq Tru64 UNIX (formerly Digital UNIX) version 4.0d unless otherwise specified in the Product-specific Specification sections.

No Version of this product performs any year-related date processing, therefore all Versions are year 2000 ready.

ScatterBox Year 2000 Specification

VSP Software	Version	Operating Environment	Rule 1	Rule 2	Rule 3	Rule 4	Product
ScatterBox	All	UNIX ²	Ready	Ready	Ready	Ready	Ready

² UNIX refers to Compaq Tru64 UNIX (formerly Digital UNIX) version 4.0d unless otherwise specified in the Product-specific Specification sections.

No Version of this product performs any year-related date processing, therefore all Versions are year 2000 ready.

Junction Box Year 2000 Specification

VSP Software	Version	Operating Environment	Rule 1	Rule 2	Rule 3	Rule 4	Product
JunctionBox	All	UNIX ²	Ready	Ready	Ready	Ready	Ready

² UNIX refers to Compaq Tru64 UNIX (formerly Digital UNIX) version 4.0d unless otherwise specified in the Product-specific Specification sections.

No Version of this product performs any year-related date processing, therefore all Versions are year 2000 ready.

ShadowBox Year 2000 Specification

VSP Software	Version	Operating Environment	Rule 1	Rule 2	Rule 3	Rule 4	Product
ShadowBox	All	UNIX ²	Ready	Ready	Ready	Ready	Ready

² UNIX refers to Compaq Tru64 UNIX (formerly Digital UNIX) version 4.0d unless otherwise specified in the Product-specific Specification sections.

No Version of this product performs any year-related date processing, therefore all Versions are year 2000 ready.

PopBox Year 2000 Specification

VSP Software	Version	Operating Environment	Rule 1	Rule 2	Rule 3	Rule 4	Product
PopBox	All	UNIX ²	Ready	Ready	Ready	Ready	Ready

² UNIX refers to Compaq Tru64 UNIX (formerly Digital UNIX) version 4.0d unless otherwise specified in the Product-specific Specification sections, below.

No Version of this product performs any year-related date processing, therefore all Versions are year 2000 ready.

Legacy System Gateway Year 2000 Specification

VSP Software	Version	Operating Environment	Rule 1	Rule 2	Rule 3	Rule 4	Product
Legacy System Gateway	9.8	UNIX ²	Ready	Ready	Ready	Ready	Ready
	All other	UNIX ² , VMS ³	Not Ready	Not Ready	Not Ready	Not Ready	Not Ready

² UNIX refers to Compaq Tru64 UNIX (formerly Digital UNIX) version 4.0d unless otherwise specified in the Product-specific Specification sections, below.

³ VMS refers to Compaq OpenVMS (formerly Digital OpenVMS) version 7.1 unless otherwise specified in the Product-specific Specification sections.

Legacy System Gateway (LSG) software is extensions to the Audio Application Processor (AAP). The extensions themselves do not perform any year-related date processing, therefore the year 2000 readiness of a particular LSG Version is the same as the readiness state of its underlying AAP Version.