



Asterisk Business Edition™
Version C.3.1.2
Digium Partner Certification



Interoperability Report
Aumtech MRCP Connector



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Section 1: Executive Summary

This document covers the tests executed for validation of interoperability of the partner's product(s) with Digium's Asterisk Business Edition. All relevant information is included in order to allow the replication of these test scenarios.

1.1 Products Tested

Asterisk Business Edition has been thoroughly tested for interoperability against the partner's product(s) listed below. The software versions for all tested products are included.

1.1.1 Asterisk Business Edition

Product	Version	Remarks
Asterisk Business Edition	C.3.1.2	

1.1.2 Partner Equipment Tested (UUTs)

Partner	Product	Remarks
Aumtech	MRCP	

The Aumtech MRCP (Media Resource Control Protocol) Connector for the Microsoft Office Communications Server 2007 Speech Server (OCS) provides an open, standards-based access to Speech Recognition and TTS (Text-to-Speech) functions of the OCS. Since the MRCP Connector is based on the WC3 Forum's open standard MRCP, applications running on open platforms such as Linux can access the Speech Recognition and TTS functions of the OCS.

1.2 Summary of Test Results

A summary of the test results is provided below. Detailed test results are available in Section 4.

1.2.1 Test Cases

Test Case	
PC-25	✓
PC-26	✓
PC-27	✓
PC-28	✓
PC-29	✓
PC-30	✓
PC-31	✓
PC-32	✓
PC-33	✓
PC-34	✓
PC-35	✓
PC-36	✓
PC-37	✓
PC-38	✓
PC-39	✓
PC-40	✓
PC-41	✓
PC-42	✓

Legend	
✓	Pass
✗	Fail
□	Not Applicable

PC-43	✓
PC-44	✓

Section 2: Test Configuration

This section describes the test configuration and setup. Additional equipment used to perform testing is also described in this section. Specific settings and configurations of the Aumtech connector and supporting software is described in Aumtech's configuration guides. A diagram of the test setup is available in Section 2.2.

2.1 Description of Test Setup

An isolated test network was created using an Adtran NetVanta switch, a PC-based server running Asterisk Business Edition, and a Windows Server 2003 system running Microsoft Speech Server. The Asterisk Business Edition Server was connected to the Windows Server 2003 using the Aumtech MRCP connector. A Snom M3 was used as the SIP endpoint to facilitate calls through the connector.

2.1.1 Other Equipment Used During Testing

Vendor	Product	Version	Remarks
Adtran	NetVanta	1224st	

2.2 Test Setup Diagram

The diagram listed below illustrates how the test equipment was connected during testing. This diagram applies to all tests within this report.



Section 3: Product Configuration

The relevant Asterisk configurations for the tested product are included in this section.

Please see the MRCP Users Guide and OCS Server Installation Guide for instructions on how to setup the other necessary components.

/etc/asterisk/sip.conf

```
[general]

[1000]
type=friend
username=1000
secret=1000
host=dynamic
context=speech-tests
disallow=all
allow=ulaw
qualify=1000
subscribecontext=BLF_Enable
mailbox=1000
```

/etc/asterisk/extensions.conf

```
[speech-tests]
exten => 2000,1,Goto(speech-demo,s,1)
exten => 2001,1,Goto(multiple-grammars,s,1)
exten => 2002,1,Goto(multiple-grammars-nodeactivation,s,1)
exten => 2003,1,Goto(multiple-grammars-uri,s,1)
exten => 2004,1,Goto(multiple-grammars-uri-nodeactivation,s,1)
exten => 2005,1,Goto(multiple-grammars-builtin,s,1)
exten => 2006,1,Goto(multiple-grammars-builtin-nodeactivation,s,1)
exten => 2007,1,Goto(uri-large-grammar,s,1)
exten => 2008,1,Goto(large-uri-grammar-no-deactivate-destroy,s,1)
exten => 2009,1,Goto(no-deactivate-no-destroy,s,1)
exten => 2010,1,Goto(mrcp-set-parameter-timeouts,s,1)
exten => 2011,1,Goto(mrcp-set-parameter-defaults,s,1)
exten => 2012,1,Goto(mixed-local-remote-and-builtin,s,1)
exten => 2013,1,Goto(one-session-multiple-recognitions,s,1)
exten => 2014,1,Goto(test-case9,s,1)
exten => 2015,1,Goto(nbest-single-grammar,s,1)
exten => 2016,1,Goto(nbest-multiple-grammar,s,1)
exten => 2017,1,Goto(nbest-multiple-grammar-no-unload,s,1)
exten => 2018,1,Goto(speech-digits,s,1)
exten => 2019,1,Goto(speech-multiple-grammars,s,1)
exten => 2020,1,Goto(speech-multiple-load-unload,s,1)
```

```

exten => 2021,1,Goto(speech-no-destroy,s,1)

[trich-demo]
exten => s,1,Wait(1)
exten => s,n,Answer
exten => s,n,SpeechCreate()
exten => s,n,Set(SPEECH_ENGINE(no-input-timeout)=5000)
exten => s,n,Set(SPEECH_ENGINE(speech-complete-timeout)=9000)
exten => s,n,SpeechActivateGrammar(file://months.grxml|months)
exten => s,n,SpeechBackground(testPrompts/NumberBet0And9)
exten => s,n,GoToIf("${SPEECH_GRAMMAR(0)}" = "no-match"?1000)
exten => s,n,GoToIf("${SPEECH_GRAMMAR(0)}" = "no-input"?1010)
exten => s,n,Playback(testPrompts/YouSaid)
exten => s,n,Wait(1)
;; exten => s,n,SayAlpha(${SPEECH_TEXT(0)})
exten => s,n,Playback(speech_demo/${SPEECH_TEXT(0)}_month)
exten => s,n,SpeechDeactivateGrammar(months)
exten => s,n,SpeechDestroy()
exten => s,n,Playback(testPrompts/goodbye)
exten => s,1001,Goto(s,1020)
exten => s,1000,Playback(testPrompts/Nomatch)
exten => s,1001,Goto(s,1020)
exten => s,1010,Playback(testPrompts/NoInput)
exten => s,1011,Goto(s,1020)
exten => s,1020,Hangup

[speech-demo]
exten => s,1,Answer
exten => s,n,Wait(1)
exten => s,n,SpeechCreate()
exten => s,n,Set(SPEECH_ENGINE(no-input-timeout)=5000)
exten => s,n,Set(SPEECH_ENGINE(speech-complete-timeout)=9000)
exten => s,n,SpeechActivateGrammar(file://months.grxml|months)
exten => s,n,SpeechBackground(testPrompts/MonthOfYear)
exten => s,n,GoToIf("${SPEECH_GRAMMAR(0)}" = "no-match"?1000)
exten => s,n,GoToIf("${SPEECH_GRAMMAR(0)}" = "no-input"?1010)
exten => s,n,GoToIf("${SPEECH_GRAMMAR(0)}" = ""?1020)
exten => s,n,Verbose(1, hit Before YOU SAID ---- )
exten => s,n,Playback(testPrompts/YouSaid)
exten => s,n,Verbose(1, hit After YOU SAID ---- )
;; exten => s,n,SayAlpha(${SPEECH_TEXT(0)})
exten => s,n,Playback(speech_demo/${SPEECH_TEXT(0)}_month)
exten => s,n,SpeechDeactivateGrammar(months)
exten => s,n,SpeechDestroy()
exten => s,n,Playback(testPrompts/goodbye)
exten => s,n,Hangup
;;
exten => s,1000,Playback(testPrompts/Nomatch)
exten => s,n,Verbose(1, hit no match ---- )
exten => s,n,Hangup
;;
exten => s,1010,Playback(testPrompts/NoInput)
exten => s,n,Verbose(1, hit no input ---- )
exten => s,n,Hangup
;;
exten => s,1020,Verbose(1, DEE DEE DEE !!!)
exten => s,n,Hangup

```

```

;;test 1
[multiple-grammars]
exten => s,1,Answer
exten => s,n,Wait(1)
exten => s,n,Background(testPrompts/TestCase1)
exten => s,n,Background(testPrompts/MultiLocalGram)
exten => s,n,SpeechCreate()
exten => s,n,Set(SPEECH_ENGINE(speech-complete-timeout)=5000)
exten => s,n,SpeechActivateGrammar(file://WeekDays.grxml|days)
exten => s,n,SpeechActivateGrammar(file://months.grxml|months)
exten => s,n,SpeechActivateGrammar(file://Digits.grxml|Digits)
exten => s,n,SpeechBackground(testPrompts/DayMonthDigit)
exten => s,n,GoToIf("${SPEECH_GRAMMAR(0)}" = "no-match"?1000)
exten => s,n,GoToIf("${SPEECH_GRAMMAR(0)}" = "no-input"?1010)
exten => s,n,Playback(testPrompts/YouSaid)
exten => s,n,SayAlpha(${SPEECH_TEXT(0)})
exten => s,n,SayAlpha(${SPEECH_GRAMMAR(0)})
exten => s,n,SpeechDeactivateGrammar(days)
exten => s,n,SpeechDeactivateGrammar(months)
exten => s,n,SpeechDeactivateGrammar(Digits)
exten => s,n,SpeechDestroy()
exten => s,n,Playback(testPrompts/EndOfTest)
exten => s,n,Playback(testPrompts/goodbye)
exten => s,n,Hangup
exten => s,n,Goto(test-case1,s,1020)
exten => s,1000,Playback(testPrompts/Nomatch)
exten => s,1001,Goto(s,1002)
exten => s,1010,Playback(testPrompts/NoInput)
exten => s,1011,Goto(s,1020)
exten => s,n,Playback(testPrompts/EndOfTest)
exten => s,n,Playback(testPrompts/goodbye)
exten => s,1020,Hangup

;; test 2
[multiple-grammars-nodeactivation]
exten => s,1,Answer
exten => s,n,Wait(1)
exten => s,n,Background(testPrompts/TestCase2)
exten => s,n,Background(testPrompts/MultiLocNoDeactive)
exten => s,n,SpeechCreate()
exten => s,n,Set(SPEECH_ENGINE(speech-complete-timeout)=5000)
exten => s,n,SpeechActivateGrammar(file://WeekDays.grxml|days)
exten => s,n,SpeechActivateGrammar(file://months.grxml|months)
exten => s,n,SpeechActivateGrammar(file://Digits.grxml|Digits)
exten => s,n,SpeechBackground(testPrompts/DayMonthDigit)
exten => s,n,GoToIf("${SPEECH_GRAMMAR(0)}" = "no-match"?1000)
exten => s,n,GoToIf("${SPEECH_GRAMMAR(0)}" = "no-input"?1010)
exten => s,n,Playback(testPrompts/YouSaid)
exten => s,n,SayAlpha(${SPEECH_TEXT(0)})
exten => s,n,SpeechDestroy()
exten => s,n,Playback(testPrompts/EndOfTest)
exten => s,n,Playback(testPrompts/goodbye)
exten => s,n,Hangup
exten => s,n,Goto(test-case1,s,1020)
exten => s,1000,Playback(testPrompts/Nomatch)
exten => s,1001,Goto(s,1002)
exten => s,1010,Playback(testPrompts/NoInput)

```

```

exten => s,1011,Goto(s,1020)
exten => s,n,Playback(testPrompts/EndOfTest)
exten => s,n,Playback(testPrompts/goodbye)
exten => s,1020,Hangup

;; test 3
[multiple-grammars-uri]
exten => s,1,Answer
exten => s,n,Wait(1)
exten => s,n,Background(testPrompts/TestCase3)
exten => s,n,Background(testPrompts/MultiUriGram)
exten => s,n,SpeechCreate()
exten => s,n,Set(SPEECH_ENGINE(speech-complete-timeout)=40000)
exten => s,n,SpeechActivateGrammar(http://10.0.0.185/asterisk/Digits.grxml|
digits)
exten => s,n,SpeechActivateGrammar(http://10.0.0.185/asterisk/months.grxml|
months)
exten => s,n,SpeechActivateGrammar(http://10.0.0.185/asterisk/WeekDays.grxml|
days)
exten => s,n,SpeechBackground(testPrompts/DayMonthDigit)
exten => s,n,GoToIf(["${SPEECH_GRAMMAR(0)}" = "no-match"]?1000)
exten => s,n,GoToIf(["${SPEECH_GRAMMAR(0)}" = "no-input"]?1010)
exten => s,n,Playback(testPrompts/YouSaid)
exten => s,n,SayAlpha(${SPEECH_TEXT(0)})
exten => s,n,SpeechDeactivateGrammar(digits)
exten => s,n,SpeechDeactivateGrammar(days)
exten => s,n,SpeechDeactivateGrammar(months)
exten => s,n,SpeechDestroy()
exten => s,n,Playback(testPrompts/EndOfTest)
exten => s,n,Playback(testPrompts/goodbye)
exten => s,n,Hangup
exten => s,n,Goto(test-case1,s,1020)
exten => s,1000,Playback(testPrompts/Nomatch)
exten => s,1001,Goto(s,1002)
exten => s,1010,Playback(testPrompts/NoInput)
exten => s,1011,Goto(s,1020)
exten => s,n,Playback(testPrompts/EndOfTest)
exten => s,n,Playback(testPrompts/goodbye)
exten => s,1020,Hangup

;; test 4
[multiple-grammars-uri-nodeactivation]
exten => s,1,Answer
exten => s,n,Wait(1)
exten => s,n,Background(testPrompts/TestCase4)
exten => s,n,Background(testPrompts/MultiUriGramNoDeactive)
exten => s,n,SpeechCreate()
exten => s,n,Set(SPEECH_ENGINE(speech-complete-timeout)=7000)
exten => s,n,SpeechActivateGrammar(http://10.0.0.185/asterisk/Digits.grxml|
digits)
exten => s,n,SpeechActivateGrammar(http://10.0.0.185/asterisk/months.grxml|
months)
exten => s,n,SpeechActivateGrammar(http://10.0.0.185/asterisk/WeekDays.grxml|
days)
exten => s,n,SpeechBackground(testPrompts/DayMonthDigit)
exten => s,n,GoToIf(["${SPEECH_GRAMMAR(0)}" = "no-match"]?1000)
exten => s,n,GoToIf(["${SPEECH_GRAMMAR(0)}" = "no-input"]?1010)
exten => s,n,Playback(testPrompts/YouSaid)

```

```

exten => s,n,SayAlpha(${SPEECH_TEXT(0)})
exten => s,n,SpeechDestroy()
exten => s,n,Playback(testPrompts/EndOfTest)
exten => s,n,Playback(testPrompts/goodbye)
exten => s,n,Hangup
exten => s,n,Goto(test-case1,s,1020)
exten => s,1000,Playback(testPrompts/Nomatch)
exten => s,1001,Goto(s,1002)
exten => s,1010,Playback(testPrompts/NoInput)
exten => s,1011,Goto(s,1020)
exten => s,n,Playback(testPrompts/EndOfTest)
exten => s,n,Playback(testPrompts/goodbye)
exten => s,1020,Hangup

;; test 5
[multiple-grammars-builtin]
exten => s,1,Answer
exten => s,n,Wait(1)
exten => s,n,Background(testPrompts/TestCase5)
exten => s,n,Background(testPrompts/MultiBuiltin)
exten => s,n,SpeechCreate()
exten => s,n,Set(SPEECH_ENGINE(speech-complete-timeout)=5000)
exten => s,n,SpeechActivateGrammar(builtin:grammar/digits|digits)
exten => s,n,SpeechActivateGrammar(builtin:grammar/date|date)
exten => s,n,SpeechActivateGrammar(builtin:grammar/boolean|boolean)
exten => s,n,SpeechBackground(testPrompts/digitDateYesNo)
exten => s,n,GoToIf("${SPEECH_GRAMMAR(0)}" = "no-match"?1000)
exten => s,n,GoToIf("${SPEECH_GRAMMAR(0)}" = "no-input"?1010)
exten => s,n,Playback(testPrompts/YouSaid)
exten => s,n,SayAlpha(${SPEECH_TEXT(0)})
exten => s,n,SpeechDeactivateGrammar(digits)
exten => s,n,SpeechDeactivateGrammar(date)
exten => s,n,SpeechDeactivateGrammar(boolean)
exten => s,n,SpeechDestroy()
exten => s,n,Playback(testPrompts/EndOfTest)
exten => s,n,Playback(testPrompts/goodbye)
exten => s,n,Hangup
exten => s,n,Goto(test-case1,s,1020)
exten => s,1000,Playback(testPrompts/Nomatch)
exten => s,1001,Goto(s,1002)
exten => s,1010,Playback(testPrompts/NoInput)
exten => s,1011,Goto(s,1020)
exten => s,n,Playback(testPrompts/EndOfTest)
exten => s,n,Playback(testPrompts/goodbye)
exten => s,1020,Hangup

;; test 6
[multiple-grammars-builtin-nodeactivation]
exten => s,1,Answer
exten => s,n,Wait(1)
exten => s,n,Background(testPrompts/TestCase6)
exten => s,n,Background(testPrompts/MultiBuiltinNoDeactive)
exten => s,n,SpeechCreate()
exten => s,n,Set(SPEECH_ENGINE(speech-complete-timeout)=5000)
exten => s,n,SpeechActivateGrammar(builtin:grammar/digits|digits)
exten => s,n,SpeechActivateGrammar(builtin:grammar/date|date)
exten => s,n,SpeechActivateGrammar(builtin:grammar/boolean|boolean)
exten => s,n,SpeechBackground(testPrompts/digitDateYesNo)
exten => s,n,GoToIf("${SPEECH_GRAMMAR(0)}" = "no-match"?1000)

```

```

exten => s,n,GoToIf("${SPEECH_GRAMMAR(0)}" = "no-input"?1010)
exten => s,n,Playback(testPrompts/YouSaid)
exten => s,n,SayAlpha(${SPEECH_TEXT(0)})
exten => s,n,SpeechDestroy()
exten => s,n,Playback(testPrompts/EndOfTest)
exten => s,n,Playback(testPrompts/goodbye)
exten => s,n,Hangup
exten => s,n,Goto(test-case1,s,1020)
exten => s,1000,Playback(testPrompts/Nomatch)
exten => s,1001,Goto(s,1002)
exten => s,1010,Playback(testPrompts/NoInput)
exten => s,1011,Goto(s,1020)
exten => s,n,Playback(testPrompts/EndOfTest)
exten => s,n,Playback(testPrompts/goodbye)
exten => s,1020,Hangup

;; test 7
[uri-large-grammar]
exten => s,1,Answer
exten => s,n,Wait(1)
exten => s,n,Background(testPrompts/TestCase7)
exten => s,n,Background(testPrompts/LargeURI)
exten => s,n,SpeechCreate()
exten => s,n,Set(SPEECH_ENGINE(speech-complete-timeout)=10000)
exten =>
s,n,SpeechActivateGrammar(http://10.0.0.185/asterisk/LargeNamesGrammar.grxml|
Names)
exten => s,n,SpeechBackground(testPrompts/GrammarNames)
exten => s,n,GoToIf("${SPEECH_GRAMMAR(0)}" = "no-match"?1000)
exten => s,n,GoToIf("${SPEECH_GRAMMAR(0)}" = "no-input"?1010)
exten => s,n,Playback(testPrompts/YouSaid)
exten => s,n,SayAlpha(${SPEECH_TEXT(0)})
exten => s,n,SpeechDeactivateGrammar(Names)
exten => s,n,SpeechDestroy()
exten => s,n,Playback(testPrompts/EndOfTest)
exten => s,n,Playback(testPrompts/goodbye)
exten => s,n,Hangup
exten => s,n,Goto(test-case2,s,2020)
exten => s,1000,Playback(testPrompts/Nomatch)
exten => s,1001,Goto(s,2020)
exten => s,1010,Playback(testPrompts/NoInput)
exten => s,1011,Goto(s,2020)
exten => s,n,Playback(testPrompts/EndOfTest)
exten => s,2020,Hangup

;; test 8
[large-uri-grammar-no-deactivate-destroy]
exten => s,1,Answer
exten => s,n,Wait(1)
exten => s,n,Background(testPrompts/TestCase8)
exten => s,n,Background(testPrompts/NoDestroyNoDeactiv)
exten => s,n,SpeechCreate()
exten => s,n,Set(SPEECH_ENGINE(speech-complete-timeout)=10000)
exten =>
s,n,SpeechActivateGrammar(http://10.0.0.185/asterisk/LargeNamesGrammar.grxml|
Names)
exten => s,n,Wait(2)

```



```

exten => s,n,SpeechBackground(testPrompts/GrammarNames)
exten => s,n,GoToIf(["${SPEECH_GRAMMAR(0)}" = "no-match"]?1000)
exten => s,n,GoToIf(["${SPEECH_GRAMMAR(0)}" = "no-input"]?1010)
exten => s,n,Playback(testPrompts/YouSaid)
exten => s,n,SayAlpha(${SPEECH_TEXT(0)})
exten => s,n,Playback(testPrompts/EndOfTest)
exten => s,n,Playback(testPrompts/goodbye)
exten => s,n,Hangup
exten => s,n,Goto(test-case3,s,1020)
exten => s,1000,Playback(testPrompts/Nomatch)
exten => s,1001,Goto(s,1002)
exten => s,1010,Playback(testPrompts/NoInput)
exten => s,1011,Goto(s,1020)
exten => s,n,Playback(testPrompts/EndOfTest)
exten => s,1020,Hangup

;; test 9
[no-deactivate-no-destroy]
;;
;; this passed, it neither deactivates the grammar or calls speech destroy
;; but speech destroy does get called when the call hangs up
;;
exten => s,1,Answer
exten => s,n,Wait(1)
exten => s,n,Background(testPrompts/TestCase9)
exten => s,n,Background(testPrompts/SingleNoDeactivNoDestroy)
exten => s,n,SpeechCreate()
exten => s,n,Set(SPEECH_ENGINE(no-input-timeout)=11000)
exten => s,n,Set(SPEECH_ENGINE(recognition-timeout)=11000)
exten => s,n,Set(SPEECH_ENGINE(speech-complete-timeout)=11000)
exten => s,n,SpeechActivateGrammar(builtin:grammar/digits|digits)
exten => s,n,SpeechBackground(testPrompts/NumberBet0And9)
exten => s,n,GoToIf(["${SPEECH_GRAMMAR(0)}" = "no-match"]?1000)
exten => s,n,GoToIf(["${SPEECH_GRAMMAR(0)}" = "no-input"]?1010)
exten => s,n,Playback(testPrompts/YouSaid)
exten => s,n,SayAlpha(${SPEECH_TEXT(0)})
exten => s,n,Playback(testPrompts/EndOfTest)
exten => s,n,Playback(testPrompts/goodbye)
exten => s,n,Hangup
exten => s,1000,Playback(testPrompts/Nomatch)
exten => s,1001,Goto(s,1020)
exten => s,1010,Playback(testPrompts/NoInput)
exten => s,1011,Goto(s,1020)
exten => s,1020,Hangup

;; test 10
[mrcp-set-parameter-timeouts]
;;
;; we need to make sure these are followed as they pass through to the back end
;;
exten => s,1,Answer
exten => s,n,Wait(1)
exten => s,n,Background(testPrompts/TestCase10)
exten => s,n,Background(testPrompts/SetMrcpDetails)
exten => s,n,SpeechCreate()
exten => s,n,Set(SPEECH_ENGINE(no-input-timeout)=8000)
exten => s,n,Set(SPEECH_ENGINE(recognition-timeout)=60000)

```

```

exten => s,n,Set(SPEECH_ENGINE(speech-complete-timeout)=5000)
exten => s,n,SpeechActivateGrammar(builtin:grammar/digits|digits)
;;exten => s,n,SpeechActivateGrammar(file://WeekDays.grxml|days)
;;exten => s,n,SpeechActivateGrammar(file://months.grxml|months)
;;exten => s,n,SpeechActivateGrammar(file://Digits.grxml|Digits)
exten => s,n,SpeechBackground(testPrompts/ZeroAndNine)
exten => s,n,Wait(1)
exten => s,n,GoToIf("${SPEECH_GRAMMAR(0)}" = "no-match"?1000)
exten => s,n,GoToIf("${SPEECH_GRAMMAR(0)}" = "no-input"?1010)
exten => s,n,Playback(testPrompts/YouSaid)
exten => s,n,SayAlpha(${SPEECH_TEXT(0)})
exten => s,n,SpeechDeactivateGrammar(digits)
exten => s,n,SpeechDestroy()
exten => s,n,Playback(testPrompts/EndOfTest)
exten => s,n,Playback(testPrompts/goodbye)
exten => s,n,Hangup
exten => s,1000,Playback(testPrompts/Nomatch)
exten => s,1001,Goto(s,1020)
exten => s,1010,Playback(testPrompts/NoInput)
exten => s,1011,Goto(s,1020)
exten => s,1020,Hangup

;; test 11
[mrcp-set-parameter-defaults]
;;
;; we need to make sure these are followed as they pass through to the back end
;; in this case default values are passed
;;
exten => s,1,Answer
exten => s,n,Wait(1)
exten => s,n,Background(testPrompts/TestCase11)
exten => s,n,Background(testPrompts/DeFaultMrcpDetails)
exten => s,n,SpeechCreate()
exten => s,n,SpeechActivateGrammar(builtin:grammar/digits|digits)
exten => s,n,SpeechBackground(testPrompts/ZeroAndNine)
exten => s,n,GoToIf("${SPEECH_GRAMMAR(0)}" = "no-match"?1000)
exten => s,n,GoToIf("${SPEECH_GRAMMAR(0)}" = "no-input"?1010)
exten => s,n,Playback(testPrompts/YouSaid)
exten => s,n,SayAlpha(${SPEECH_TEXT(0)})
exten => s,n,SpeechDeactivateGrammar(digits)
exten => s,n,SpeechDestroy()
exten => s,n,Playback(testPrompts/EndOfTest)
exten => s,n,Playback(testPrompts/goodbye)
exten => s,n,Hangup
exten => s,1000,Playback(testPrompts/Nomatch)
exten => s,1001,Goto(s,1020)
exten => s,1010,Playback(testPrompts/NoInput)
exten => s,1011,Goto(s,1020)
exten => s,1020,Hangup

;; test 12
[mixed-local-remote-and-builtin]
;;
exten => s,1,Answer
exten => s,n,Wait(1)
exten => s,n,Background(testPrompts/TestCase12)
exten => s,n,Background(testPrompts/ManyGrammsLoadAndUnload)
exten => s,5,Background(testPrompts/dayMonthCarDigitNoth)

```

```

exten => s,n,SpeechCreate()
exten => s,n,Set(SPEECH_ENGINE(speech-complete-timeout)=5000)
exten => s,n,SpeechActivateGrammar(http://10.0.0.185/asterisk/WeekDays.grxml|
days)
exten => s,n,SpeechActivateGrammar(file://cars.grxml|cars)
exten => s,n,SpeechActivateGrammar(file://months.grxml|months)
exten => s,n,SpeechActivateGrammar(builtin:grammar/digits|digits)
exten => s,n,SpeechBackground(beep)
exten => s,n,GoToIf("${SPEECH_GRAMMAR(0)}" = "no-match"?1000)
exten => s,n,GoToIf("${SPEECH_GRAMMAR(0)}" = "no-input"?1010)
exten => s,n,Playback(testPrompts/YouSaid)
exten => s,n,SayAlpha(${SPEECH_TEXT(0)})
exten => s,n,SpeechDeactivateGrammar(digits)
exten => s,n,SpeechDeactivateGrammar(days)
exten => s,n,SpeechDeactivateGrammar(months)
exten => s,n,SpeechDeactivateGrammar(cars)
exten => s,n,SpeechDestroy()
exten => s,n,Goto(s,5)
exten => s,n,Playback(testPrompts/goodbye)
exten => s,n,Hangup
exten => s,n,Goto(s,1020)
exten => s,1000,Playback(testPrompts/Nomatch)
exten => s,1001,Goto(s,1002)
exten => s,1010,Playback(testPrompts/NoInput)
exten => s,1011,Goto(s,1018)
exten => s,1018,Playback(testPrompts/EndOfTest)
exten => s,n,Playback(testPrompts/goodbye)
exten => s,1020,Hangup

;; test 13
[one-session-multiple-recognitions]
;;
exten => s,1,Answer
exten => s,n,Wait(1)
exten => s,n,Background(testPrompts/TestCase13)
exten => s,n,Background(testPrompts/MultiRecOneResource)
exten => s,n,SpeechCreate()
exten => s,n,Set(SPEECH_ENGINE(speech-complete-timeout)=5000)
exten => s,n,SpeechActivateGrammar(file://WeekDays.grxml|days)
exten => s,n,SpeechBackground(testPrompts/DayOfWeek)
exten => s,n,GoToIf("${SPEECH_GRAMMAR(0)}" = "no-match"?1000)
exten => s,n,GoToIf("${SPEECH_GRAMMAR(0)}" = "no-input"?1010)
exten => s,n,Playback(testPrompts/YouSaid)
exten => s,n,SayAlpha(${SPEECH_TEXT(0)})
exten => s,n,SpeechDeactivateGrammar(days)
exten => s,n,Set(SPEECH_ENGINE(speech-complete-timeout)=5000)
exten => s,n,SpeechActivateGrammar(file://months.grxml|months)
exten => s,n,SpeechBackground(testPrompts/MonthOfYear)
exten => s,n,GoToIf("${SPEECH_GRAMMAR(0)}" = "no-match"?1000)
exten => s,n,GoToIf("${SPEECH_GRAMMAR(0)}" = "no-input"?1010)
exten => s,n,Playback(testPrompts/YouSaid)
exten => s,n,SayAlpha(${SPEECH_TEXT(0)})
exten => s,n,SpeechDeactivateGrammar(months)
exten => s,n,Set(SPEECH_ENGINE(speech-complete-timeout)=5000)
exten => s,n,SpeechActivateGrammar(file://Digits.grxml|Digits)
exten => s,n,SpeechBackground(testPrompts/NumberBet0And9)
exten => s,n,GoToIf("${SPEECH_GRAMMAR(0)}" = "no-match"?1000)
exten => s,n,GoToIf("${SPEECH_GRAMMAR(0)}" = "no-input"?1010)
exten => s,n,Playback(testPrompts/YouSaid)

```

```

exten => s,n,SayAlpha(${SPEECH_TEXT(0)})
exten => s,n,SpeechDeactivateGrammar(Digits)
exten => s,n,SpeechDestroy()
exten => s,n,Playback(testPrompts/EndOfTest)
exten => s,n,Playback(testPrompts/goodbye)
exten => s,n,Hangup
exten => s,1000,Playback(testPrompts/Nomatch)
exten => s,n,Goto(s,1020)
exten => s,1010,Playback(testPrompts/NoInput)
exten => s,n,Goto(s,1020)
exten => s,1020,Hangup

;; test 14
[test-case9]
;;
exten => s,1,Answer
exten => s,n,Wait(1)
exten => s,n,Background(testPrompts/TestCase14)
exten => s,n,SpeechCreate()
exten => s,n,Set(SPEECH_ENGINE(no-input-timeout)=5000)
exten => s,n,Set(SPEECH_ENGINE(recognition-timeout)=6000)
exten => s,n,Set(SPEECH_ENGINE(speech-complete-timeout)=3000)
exten => s,n,SpeechActivateGrammar(file://months.grxml|months)
exten => s,n,SpeechActivateGrammar(builtin:grammar/digits|digits)
exten => s,n,SpeechActivateGrammar(file://WeekDays.grxml|days)
exten => s,n,SpeechActivateGrammar(file://cars.grxml|cars)
exten => s,n,SpeechBackground(testPrompts/dayMonthCarDigit)
exten => s,n,GoToIf("${SPEECH_TEXT(0)}" = "")?1000)
exten => s,n,Playback(testPrompts/YouSaid)
exten => s,n,SayAlpha(${SPEECH_TEXT(0)})
exten => s,n,SpeechDeactivateGrammar(digits)
exten => s,n,SpeechDeactivateGrammar(day)
exten => s,n,SpeechDeactivateGrammar(months)
exten => s,n,SpeechDeactivateGrammar(cars)
exten => s,n,Wait(10)
exten => s,n,SpeechDestroy()
exten => s,n,Playback(testPrompts/EndOfTest)
exten => s,n,Playback(vm-goodbye)
exten => s,n,Hangup
;;
exten => s,1000,SayAlpha("empty string");
exten => s,n,Hangup

;; test 15
;;
;; nbest grammars results
;;
[nbest-single-grammar]
;;
exten => s,1,Answer
exten => s,n,Wait(1)
exten => s,n,Background(testPrompts/TestCase15)
exten => s,n,Background(testPrompts/NbestOneGrammar)
exten => s,n,SpeechCreate()
exten => s,n,Set(SPEECH_ENGINE(no-input-timeout)=10000)
exten => s,n,Set(SPEECH_ENGINE(recognition-timeout)=7000)
exten => s,n,Set(SPEECH_ENGINE(speech-complete-timeout)=3000)
exten => s,n,Set(SPEECH_RESULTS_TYPE)=nbest)

```

```

exten => s,n,SpeechActivateGrammar(file://JanuaryNbest.grxml|nbest)
exten => s,n,SpeechBackground(testPrompts/jaunaryNbest)
exten => s,n,GoToIf("${SPEECH_GRAMMAR(0)}" = "no-match"?1000)
exten => s,n,GoToIf("${SPEECH_GRAMMAR(0)}" = "no-input"?1010)
exten => s,n,Playback(testPrompts/YouSaid)
exten => s,n,SayAlpha(${SPEECH_TEXT(0)})
exten => s,n,Verbose(1, Number of Results=${SPEECH(results)})
exten => s,n,Verbose(1, Matching Grammar ${SPEECH_GRAMMAR(0)})
exten => s,n,Verbose(1, First Result ${SPEECH_TEXT(0/0)})
exten => s,n,Verbose(1, Second Result ${SPEECH_TEXT(0/1)})
exten => s,n,Verbose(1, First Score ${SPEECH_SCORE(0/0)})
exten => s,n,Verbose(1, Second Score ${SPEECH_SCORE(0/1)})
exten => s,n,SayAlpha(${SPEECH_GRAMMAR(1)})
exten => s,n,SayAlpha(${SPEECH_GRAMMAR(2)})
exten => s,n,SpeechDeactivateGrammar(nbest)
exten => s,n,SpeechDestroy()
exten => s,n,Playback(testPrompts/EndOfTest)
exten => s,n,Playback(vm-goodbye)
exten => s,n,Hangup
exten => s,1000,Playback(testPrompts/Nomatch)
exten => s,n,Goto(s,1020)
exten => s,1010,Playback(testPrompts/NoInput)
exten => s,n,Goto(s,1020)
exten => s,1020,Hangup

;; test 16
;; multiple nbest grammars
;; these only print the other results, you will have to consult the console for
the results
;; though it does spell out in the earpiece the other results
;;
[nbest-multiple-grammar]
;;
exten => s,1,Answer
exten => s,n,Wait(1)
exten => s,n,Background(testPrompts/TestCase16)
exten => s,n,Background(testPrompts/NbestManyGrammars)
exten => s,n,SpeechCreate()
exten => s,n,Set(SPEECH_ENGINE(speech-complete-timeout)=10000)
exten => s,n,Set(SPEECH_RESULTS_TYPE()=nbest)
exten => s,n,SpeechActivateGrammar(file://JanuaryNbest.grxml|nbest)
exten => s,n,SpeechBackground(testPrompts/jaunaryNbest)
exten => s,n,GoToIf("${SPEECH_GRAMMAR(0)}" = "no-match"?1000)
exten => s,n,GoToIf("${SPEECH_GRAMMAR(0)}" = "no-input"?1010)
exten => s,n,Playback(testPrompts/YouSaid)
exten => s,n,SayAlpha(${SPEECH_TEXT(0)})
exten => s,n,Verbose(1, Number of Results=${SPEECH(results)})
;; exten => s,n,Verbose(1, Matching Grammar ${SPEECH_GRAMMAR(0)})
exten => s,n,Verbose(1, First Result ${SPEECH_TEXT(0/0)})
exten => s,n,Verbose(1, Second Result ${SPEECH_TEXT(0/1)})
exten => s,n,Verbose(1, First Score ${SPEECH_SCORE(0/0)})
exten => s,n,Verbose(1, Second Score ${SPEECH_SCORE(0/1)})
exten => s,n,SayAlpha(${SPEECH_GRAMMAR(1)})
exten => s,n,SayAlpha(${SPEECH_GRAMMAR(2)})
exten => s,n,SpeechDeactivateGrammar(nbest)

```

```

;; exten => s,n,SpeechDestroy()
;; exten => s,n,SpeechCreate()
exten => s,n,Set(SPEECH_ENGINE(speech-complete-timeout)=10000)
exten => s,n,SpeechActivateGrammar(file://FebruaryNbest.grxml|1nbest)
exten => s,n,SpeechBackground(testPrompts/februaryNbest)
exten => s,n,GoToIf(["${SPEECH_GRAMMAR(0)}" = "no-match"]?1000)
exten => s,n,GoToIf(["${SPEECH_GRAMMAR(0)}" = "no-input"]?1010)
exten => s,n,Playback(testPrompts/YouSaid)
exten => s,n,SayAlpha(${SPEECH_TEXT(0)})
exten => s,n,Verbose(1, Number of Results=${SPEECH(results)})
exten => s,n,Verbose(1, First Result ${SPEECH_TEXT(0/0)})
exten => s,n,Verbose(1, Second Result ${SPEECH_TEXT(0/1)})
exten => s,n,Verbose(1, First Score ${SPEECH_SCORE(0/0)})
exten => s,n,Verbose(1, Second Score ${SPEECH_SCORE(0/1)})
exten => s,n,SayAlpha(${SPEECH_GRAMMAR(1)})
exten => s,n,SayAlpha(${SPEECH_GRAMMAR(2)})
exten => s,n,SpeechDeactivateGrammar(1nbest)
;; exten => s,n,SpeechDestroy()
;; exten => s,n,SpeechCreate()
exten => s,n,Set(SPEECH_ENGINE(speech-complete-timeout)=10000)
exten => s,n,SpeechActivateGrammar(file://JuneNbest.grxml|2nbest)
exten => s,n,SpeechBackground(testPrompts/juneNbest)
exten => s,n,GoToIf(["${SPEECH_GRAMMAR(0)}" = "no-match"]?1000)
exten => s,n,GoToIf(["${SPEECH_GRAMMAR(0)}" = "no-input"]?1010)
exten => s,n,Playback(testPrompts/YouSaid)
exten => s,n,SayAlpha(${SPEECH_TEXT(0)})
exten => s,n,Verbose(1, Number of Results=${SPEECH(results)})
;; exten => s,n,Verbose(1, Matching Grammar ${SPEECH_GRAMMAR(0)})
exten => s,n,Verbose(1, First Result ${SPEECH_TEXT(0/0)})
exten => s,n,Verbose(1, Second Result ${SPEECH_TEXT(0/1)})
exten => s,n,Verbose(1, First Score ${SPEECH_SCORE(0/0)})
exten => s,n,Verbose(1, Second Score ${SPEECH_SCORE(0/1)})
exten => s,n,SayAlpha(${SPEECH_GRAMMAR(1)})
exten => s,n,SayAlpha(${SPEECH_GRAMMAR(2)})
exten => s,n,SpeechDeactivateGrammar(2nbest)
;; exten => s,n,SpeechDestroy()
;; exten => s,n,Goto(test-casell,s,41)
;; exten => s,n,SpeechCreate()
exten => s,n,Set(SPEECH_ENGINE(speech-complete-timeout)=10000)
exten => s,n,SpeechActivateGrammar(file://MayNbest.grxml|3nbest)
exten => s,n,SpeechBackground(testPrompts/mayNbest)
exten => s,n,GoToIf(["${SPEECH_GRAMMAR(0)}" = "no-match"]?1010)
exten => s,n,GoToIf(["${SPEECH_GRAMMAR(0)}" = "no-input"]?1011)
exten => s,n,Playback(testPrompts/YouSaid)
exten => s,n,SayAlpha(${SPEECH_TEXT(0)})
exten => s,n,Verbose(1, Number of Results=${SPEECH(results)})
;; exten => s,n,Verbose(1, Matching Grammar ${SPEECH_GRAMMAR(0)})
exten => s,n,Verbose(1, First Result ${SPEECH_TEXT(0/0)})
exten => s,n,Verbose(1, Second Result ${SPEECH_TEXT(0/1)})
exten => s,n,Verbose(1, First Score ${SPEECH_SCORE(0/0)})
exten => s,n,Verbose(1, Second Score ${SPEECH_SCORE(0/1)})
exten => s,n,SayAlpha(${SPEECH_GRAMMAR(1)})
exten => s,n,SayAlpha(${SPEECH_GRAMMAR(2)})
;;
exten => s,n,SpeechDeactivateGrammar(3nbest)
exten => s,n,SpeechDestroy()
exten => s,1010,Verbose(1, NO MATCH)
exten => s,1011,Verbose(1, NO INPUT)
exten => s,n,Playback(testPrompts/EndOfTest)

```

```

exten => s,n,Playback(vm-goodbye)
exten => s,n,Hangup
;;
;;
;;

;; test 17
[nbest-multiple-grammar-no-unload]
exten => s,1,Answer
exten => s,n,Wait(1)
exten => s,n,Background(testPrompts/TestCase17)
exten => s,n,Background(testPrompts/NbestMultiGramNoDeactive)
exten => s,n,SpeechCreate()
exten => s,n,Set(SPEECH_ENGINE(no-input-timeout)=10000)
exten => s,n,Set(SPEECH_ENGINE(recognition-timeout)=10000)
exten => s,n,Set(SPEECH_ENGINE(speech-complete-timeout)=10000)
exten => s,n,Set(SPEECH_RESULTS_TYPE)=nbest)
exten => s,n,SpeechActivateGrammar(file://JanuaryNbest.grxml|nbest)
exten => s,n,SpeechActivateGrammar(file://FebruaryNbest.grxml|1nbest)
exten => s,n,SpeechActivateGrammar(file://MayNbest.grxml|2nbest)
exten => s,n,SpeechActivateGrammar(file://JuneNbest.grxml|3nbest)
exten => s,n,SpeechBackground(testPrompts/februaryNbest)
exten => s,n,Playback(testPrompts/YouSaid)
exten => s,n,SayAlpha(${SPEECH_TEXT(0)})
exten => s,n,Verbose(1, Number of Results=${SPEECH(results)})
exten => s,n,Verbose(1, Matching Grammar ${SPEECH_GRAMMAR(0)})
exten => s,n,Verbose(1, First Result ${SPEECH_TEXT(0/0)})
exten => s,n,Verbose(1, Second Result ${SPEECH_TEXT(0/1)})
exten => s,n,Verbose(1, First Score ${SPEECH_SCORE(0/0)})
exten => s,n,Verbose(1, Second Score ${SPEECH_SCORE(0/1)})
exten => s,n,SayAlpha(${SPEECH_GRAMMAR(1)})
exten => s,n,SayAlpha(${SPEECH_GRAMMAR(2)})
exten => s,n,SpeechDeactivateGrammar(nbest)
exten => s,n,SpeechDeactivateGrammar(1nbest)
exten => s,n,SpeechDeactivateGrammar(2nbest)
exten => s,n,SpeechDeactivateGrammar(3nbest)
exten => s,n,SpeechDestroy()
exten => s,n,Playback(testPrompts/EndOfTest)
exten => s,n,Playback(vm-goodbye)
exten => s,n,Hangup

;; test 18
[speech-digits]
;;
exten => s,1,Answer
exten => s,n,Wait(1)
exten => s,n,Background(testPrompts/TestCase18)
exten => s,n,Background(testPrompts/MultiGramDigits)
exten => s,n,SpeechCreate()
exten => s,n,Set(SPEECH_ENGINE(no-input-timeout)=5000)
exten => s,n,Set(SPEECH_ENGINE(recognition-timeout)=6000)
exten => s,n,Set(SPEECH_ENGINE(speech-complete-timeout)=3000)
exten => s,n,SpeechActivateGrammar(builtin:grammar/digits|digits1)
exten => s,n,SpeechActivateGrammar(file://digits.grxml|digits2)
exten => s,n,SpeechActivateGrammar(http://10.0.0.185/asterisk/digits.grxml|
digits3)
exten => s,n,SpeechBackground(testPrompts/NumberBet0And9)

```

```

exten => s,n,Playback(testPrompts/YouSaid)
exten => s,n,SayAlpha(${SPEECH_TEXT(0)})
exten => s,n,Playback(testPrompts/GrammarUsed)
exten => s,n,SayAlpha(${SPEECH_GRAMMAR(0)})
exten => s,n,SpeechDeactivateGrammar(digits1)
exten => s,n,SpeechDeactivateGrammar(digits2)
exten => s,n,SpeechDeactivateGrammar(digits3)
exten => s,n,SpeechDestroy()
exten => s,n,Playback(testPrompts/EndOfTest)
exten => s,n,Playback(vm-goodbye)
exten => s,n,Hangup

;; test 19
[speech-multiple-grammars]
;;
exten => s,1,Answer
exten => s,n,Wait(1)
exten => s,n,Background(testPrompts/TestCase19)
exten => s,n,Background(testPrompts/MixedGramSource)
exten => s,n,SpeechCreate()
exten => s,n,Set(SPEECH_ENGINE(no-input-timeout)=10000)
exten => s,n,Set(SPEECH_ENGINE(recognition-timeout)=60000)
exten => s,n,Set(SPEECH_ENGINE(speech-complete-timeout)=10000)
exten => s,n,SpeechActivateGrammar(file://months.grxml|months)
exten => s,n,SpeechActivateGrammar(builtin:grammar/digits|digits)
exten => s,n,SpeechActivateGrammar(builtin:grammar/boolean|bool)
exten => s,n,SpeechBackground(testPrompts/MonthNumberBool)
exten => s,n,GoToIf("${SPEECH_GRAMMAR(0)}" = "no-match"?1000)
exten => s,n,GoToIf("${SPEECH_GRAMMAR(0)}" = "no-input"?1010)
exten => s,n,Playback(testPrompts/YouSaid)
exten => s,n,SayAlpha(${SPEECH_TEXT(0)})
exten => s,n,Playback(testPrompts/GrammarUsed)
exten => s,n,SayAlpha(${SPEECH_GRAMMAR(0)})
exten => s,n,SpeechDeactivateGrammar(months)
exten => s,n,SpeechDeactivateGrammar(digits)
exten => s,n,SpeechDeactivateGrammar(bool)
exten => s,n,SpeechDestroy()
exten => s,n,Playback(testPrompts/EndOfTest)
exten => s,n,Playback(vm-goodbye)
exten => s,n,Hangup
exten => s,1000,Playback(testPrompts/Nomatch)
exten => s,n,Goto(s,1020)
exten => s,1010,Playback(testPrompts/NoInput)
exten => s,n,Goto(s,1020)
exten => s,1020,Hangup

;; [speech-multiple-nbest]
;;
;;exten => s,1,Answer
;;exten => s,n,SpeechCreate()
;;exten => s,n,Background(testPrompts/TestCase19)
;;exten => s,n,Set(SPEECH_ENGINE(no-input-timeout)=5000)
;;exten => s,n,Set(SPEECH_ENGINE(recognition-timeout)=6000)
;;exten => s,n,Set(SPEECH_ENGINE(speech-complete-timeout)=3000)
;;exten => s,n,Set(SPEECH_RESULTS_TYPE)=nbest

```



```

;;exten => s,n,SpeechActivateGrammar(file://possible_nbest.grxml|nbest)
;;exten => s,n,SpeechBackground(tt-monkeys)
;;exten => s,n,SayAlpha(${SPEECH_TEXT(0)})
;;exten => s,n,Verbose(1, Number of Results=${SPEECH(results)})
;;exten => s,n,Verbose(1, Matching Grammar ${SPEECH_GRAMMAR(0)})
;;exten => s,n,Verbose(1, First Result ${SPEECH_TEXT(0/0)})
;;exten => s,n,Verbose(1, Second Result ${SPEECH_TEXT(0/1)})
;;exten => s,n,Verbose(1, First Score ${SPEECH_SCORE(0/0)})
;;exten => s,n,Verbose(1, Second Score ${SPEECH_SCORE(0/1)})
;;exten => s,n,Playback(testPrompts/GrammarUsed)
;;exten => s,n,SayAlpha(${SPEECH_GRAMMAR(0)})
;;exten => s,n,SayAlpha(${SPEECH_GRAMMAR(1)})
;;exten => s,n,SayAlpha(${SPEECH_GRAMMAR(2)})
;;exten => s,n,SpeechDeactivateGrammar(nbest)
;;exten => s,n,SpeechDestroy()
;;exten => s,n,Playback(testPrompts/EndOfTest)
;;exten => s,n,Playback(vm-goodbye)
;;exten => s,n,Hangup

;; test 20
[speech-multiple-load-unload]
;;
exten => s,1,Answer
exten => s,n,Background(testPrompts/TestCase20)
exten => s,n,Background(testPrompts/MultiSingleGramLoad)
exten => s,n,SpeechCreate()
;;exten => s,n,Set(SPEECH_ENGINE(no-input-timeout)=5000)
;;exten => s,n,Set(SPEECH_ENGINE(recognition-timeout)=6000)
;;exten => s,n,Set(SPEECH_ENGINE(speech-complete-timeout)=3000)
exten => s,n,SpeechActivateGrammar(file://months.grxml|months)
exten => s,n,SpeechBackground(testPrompts/MonthOfYear)
exten => s,n,Playback(testPrompts/YouSaid)
exten => s,n,SayAlpha(${SPEECH_TEXT(0)})
exten => s,n,SpeechDeactivateGrammar(months)
;;
exten => s,n,SpeechActivateGrammar(builtin:grammar/digits|digits)
exten => s,n,SpeechBackground(testPrompts/NumberBet0And9)
exten => s,n,Playback(testPrompts/YouSaid)
exten => s,n,SayAlpha(${SPEECH_TEXT(0)})
exten => s,n,SpeechDeactivateGrammar(digits)
;;
exten => s,n,SpeechActivateGrammar(builtin:grammar/boolean|bool)
exten => s,n,SpeechBackground(testPrompts/YesNo)
exten => s,n,Playback(testPrompts/YouSaid)
exten => s,n,SayAlpha(${SPEECH_TEXT(0)})
exten => s,n,SpeechDeactivateGrammar(bool)
exten => s,n,SpeechDestroy()
exten => s,n,Playback(testPrompts/EndOfTest)
exten => s,n,Playback(vm-goodbye)
exten => s,n,Hangup

;; test 21
[speech-no-destroy]
;;
;; this passed, it neither deactivates the grammar or calls speech destroy
;; but speech destroy does get called when the call hangs up
exten => s,1,Answer

```

```

exten => s,n,Background(testPrompts/TestCase21)
exten => s,n,Background(testPrompts/SingNoDeactNoDes)
exten => s,n,SpeechCreate()
exten => s,n,Set(SPEECH_ENGINE(no-input-timeout)=5000)
exten => s,n,Set(SPEECH_ENGINE(recognition-timeout)=6000)
exten => s,n,Set(SPEECH_ENGINE(speech-complete-timeout)=3000)
exten => s,n,SpeechActivateGrammar(builtin:grammar/digits|digits)
exten => s,n,SpeechBackground(testPrompts/NumberBet0And9)
exten => s,n,Playback(testPrompts/YouSaid)
exten => s,n,SayAlpha(${SPEECH_TEXT(0)})
;; exten => s,n,SpeechDeactivateGrammar(digits)
;; exten => s,n,SpeechDestroy()
exten => s,n,Playback(testPrompts/EndOfTest)
exten => s,n,Playback(vm-goodbye)
exten => s,n,Hangup

[no-input-timeout-long]
;;
;; we need to make sure these are followed as they pass through to the back end
;;
exten => s,1,Answer
exten => s,n,Background(testPrompts/TestCase22)
exten => s,n,SpeechCreate()
exten => s,n,Set(SPEECH_ENGINE(no-input-timeout)=10000)
exten => s,n,Set(SPEECH_ENGINE(recognition-timeout)=60000)
exten => s,n,Set(SPEECH_ENGINE(speech-complete-timeout)=8000)
exten => s,n,SpeechActivateGrammar(builtin:grammar/digits|digits)
exten => s,n,SpeechBackground(tt-monkeys)
exten => s,n,Playback(testPrompts/YouSaid)
exten => s,n,SayAlpha(${SPEECH_TEXT(0)})
exten => s,n,SpeechDeactivateGrammar(digits)
exten => s,n,SpeechDestroy()
exten => s,n,Playback(testPrompts/EndOfTest)
exten => s,n,Playback(vm-goodbye)
exten => s,n,Hangup

[no-input-timeout-short]
;;
;; we need to make sure these are followed as they pass through to the back end
;;
exten => s,1,Answer
exten => s,n,Background(testPrompts/TestCase23)
exten => s,n,SpeechCreate()
exten => s,n,Set(SPEECH_ENGINE(no-input-timeout)=3000)
exten => s,n,Set(SPEECH_ENGINE(recognition-timeout)=60000)
exten => s,n,Set(SPEECH_ENGINE(speech-complete-timeout)=3000)
exten => s,n,SpeechActivateGrammar(builtin:grammar/digits|digits)
exten => s,n,SpeechBackground(tt-monkeys)
exten => s,n,SpeechDeactivateGrammar(digits)
exten => s,n,SayAlpha(${SPEECH_TEXT(0)})
exten => s,n,SpeechDestroy()
exten => s,n,Playback(vm-goodbye)
exten => s,n,Hangup

;; end speech rec tests

```

Section 4: Tests Performed

The specific tests performed for verification of functionality with the partner's product(s) are provided below.

4.1.1 Test Case PC-25

Loads multiple local grammars and recognizes against any one of the loaded grammars.	
Step(s)	<ol style="list-style-type: none"> 1. Dial 2001. The following prompts should be heard. <ol style="list-style-type: none"> a. "Test case one" b. "Testing multiple local grammars" c. "Please say a day of the week, a month of the year or a digit between 0 and 9" 2. The caller speaks "seven". The following prompts should be heard. <ol style="list-style-type: none"> a. "You said <utterance>" b. "End of Test" c. "Goodbye" 3. Repeat the test with the following utterances: <ol style="list-style-type: none"> a. Caller speaks "March". Caller should hear "You said M. A. R. C. H." b. Caller speaks "Friday". Caller should hear "You said F. R. I. D. A. Y." c. Caller speaks an invalid utterance such as "Bolivia". Caller should hear "No Match". d. Caller does not speak an utterance. After a timeout, caller should hear "No Input".
Expected Result(s)	<ul style="list-style-type: none"> • Use case: Caller should hear "you said", followed by utterance

	<ul style="list-style-type: none"> • Error case: No Input, No Match. <ul style="list-style-type: none"> ◦ Caller should hear “No Input” in the case of no utterance. ◦ Caller should hear “No Match” in the case of an invalid utterance.
Additional Info.	<p>Extension: 2001</p> <p>From a softphone, call SIP URI 2001@<asterisk server IP></p> <p>Number of grammars Activated: 3</p> <p>Grammar 1: Local file/ WeekDays.grxml</p> <p>Grammar 2: Local file/ months.grxml</p> <p>Grammar 3: Local file/ /Digits.grxml</p>
Pass / Fail	Passed
Test Notes	Test performed on Build Aumtech-11.01.09-MRCP-C.3.1.2.
Author	spimental

4.1.2 Test Case PC-26

Activates multiple local grammars, without explicitly calling Speech Deactivate Grammars.	
Step(s)	<ol style="list-style-type: none"> 1. Dial 2002. The following prompts should be heard. <ol style="list-style-type: none"> a. "Test case two" b. "Testing multiple local grammars without calling Speech Deactivate Grammar" c. "Please say a day of the week, a month in the year, or a number between 0 and 9" 2. Caller speaks "seven". The following prompts should be heard. <ol style="list-style-type: none"> a. "You said, utterance>" b. "End of test" c. "Goodbye" 3. Repeat the test with the following utterances: <ol style="list-style-type: none"> a. Caller speaks "March". Caller should hear "You said M. A. R. C. H." b. Caller speaks "Friday". Caller should hear "You said F. R. I. D. A. Y." c. Caller speaks an invalid utterance such as "Bolivia". Caller should hear "No Match". d. Caller does not speak an utterance. After a timeout, caller should hear "No Input".
Expected Result(s)	<ul style="list-style-type: none"> • Use Case: Caller should hear "you said", followed by the spelling of the name said. • Error Case: No Match, No Input. <ul style="list-style-type: none"> ◦ Caller should hear "No Input" in the case of no utterance.

	<ul style="list-style-type: none"> ◦ Caller should hear “No Match” in the case of an invalid utterance.
Additional Info.	<p>Extension: 2002</p> <p>From a softphone, call SIP URI 2002@<asterisk server IP></p> <p>Number of grammars Activated: 3</p> <p>Grammar: file://WeekDays.grxml</p> <p>Grammar: file://months.grxml</p> <p>Grammar: file://Digits.grxml</p>
Pass / Fail	Passed
Test Notes	Test performed on Build Aumtech-11.01.09-MRCP-C.3.1.2.
Author	spimental

4.1.3 Test Case PC-27

Multiple URI grammars.	
Step(s)	<ol style="list-style-type: none">1. Dial 2003. The following prompts should be heard.<ol style="list-style-type: none">a. "Test case three"b. "Testing Multiple URI Grammars"c. "Please say a day of the week, a month of the year or a number between 0 and 9"2. The caller speaks "five". The following prompts should be heard.<ol style="list-style-type: none">a. "You said <utterance>"b. "End of test"c. "Goodbye"3. Repeat the test with the following utterances:<ol style="list-style-type: none">a. Caller speaks "March". Caller should hear "You said M. A. R. C. H."b. Caller speaks "Friday". Caller should hear "You said F. R. I. D. A. Y."c. Caller speaks an invalid utterance such as "Bolivia". Caller should hear "No Match".d. Caller does not speak an utterance. After a timeout, caller should hear "No Input"
Expected Result(s)	<ul style="list-style-type: none">• Use Case: Caller should hear "you said", followed by the spelling of the name said.• Error Case: No Match, No Input.<ul style="list-style-type: none">◦ Caller should hear "No Input" in the case of no utterance.◦ Caller should hear "No Match" in the case of an invalid utterance.

Additional Info.	Extension: 2003 From a softphone, call SIP URI 2003@<asterisk server IP> Number of grammars Activated: 3 URI grammar: http://localhost/asterisk/Digits.grxml URI grammar: http://localhost/asterisk/WeekDays.grxml URI grammar: http://localhost/asterisk/months.grxmlL
Pass / Fail	Passed
Test Notes	Test performed on Build Aumtech-11.01.09-MRCP-C.3.1.2.
Author	spimental

4.1.4 Test Case PC-28

Multiple URI grammars are activated, but Speech Deactivate Grammar is not explicitly called at the end.	
Step(s)	<ol style="list-style-type: none">1. Dial 2004. The following prompts should be heard.<ol style="list-style-type: none">a. "Test case four"b. "Testing Multiple URI grammars without calling Speech Deactivate Grammar"c. "Please say a Day of the week, A month of the year, or a digit between 0 and 9"2. The caller speaks "five". The following prompts should be heard.<ol style="list-style-type: none">a. "You said <utterance>"b. "End of Test"c. "Goodbye"3. Repeat the test with the following utterances:<ol style="list-style-type: none">a. Caller speaks "March". Caller should hear "You said M. A. R. C. H."b. Caller speaks "Friday". Caller should hear "You said F. R. I. D. A. Y."c. Caller speaks an invalid utterance such as "Bolivia". Caller should hear "No Match".d. Caller does not speak an utterance. After a timeout, caller should hear "No Input".
Expected Result(s)	<ul style="list-style-type: none">• Use Case: Caller should hear "you said", followed by the spelling of the name said.• Error Case: No Match, No Input.<ul style="list-style-type: none">◦ Caller should hear "No Input" in the case of no utterance.

	<ul style="list-style-type: none"> ◦ Caller should hear “No Match” in the case of an invalid utterance.
Additional Info.	<p>Extension: 2004</p> <p>From a softphone, call SIP URI 2004@<asterisk server IP></p> <p>Number of grammars Activated: 3</p> <p>Grammar: http://localhost/asterisk/Digits.grxml</p> <p>Grammar: http://localhost/asterisk/months.grxml</p> <p>Grammar: http://localhost/asterisk/WeekDays.grxml</p>
Pass / Fail	Passed
Test Notes	Test performed on Build Aumtech-11.01.09-MRCP-C.3.1.2.
Author	spimental

4.1.5 Test Case PC-29

Multiple built-in grammars.	
Step(s)	<ol style="list-style-type: none"> 1. Dial 2005. The following prompts should be heard. <ol style="list-style-type: none"> a. "Test case five" b. "Testing multiple built-in grammars" c. "Please say a number between 0 and 9, a date, yes or no" 2. The caller speaks "seven". The following prompts should be heard. <ol style="list-style-type: none"> a. "You said <utterance>" b. "Grammar names equals <grammar used in the test>" c. "End of test" d. "Goodbye" 3. Repeat the test with the following utterances: <ol style="list-style-type: none"> a. Caller speaks "September 8th 2009". Caller should hear "You said 2. 0. 0. 9. 0. 9. 0. 8." b. Caller speaks "Yes". Caller should hear "You said T. R. U. E." c. Caller speaks "No". Caller should hear "You said F. A L. S. E." d. Caller speaks an invalid utterance such as "Bolivia". Caller should hear "No Match". e. Caller does not speak an utterance. After a timeout, caller should hear "No Input".
Expected Result(s)	<ul style="list-style-type: none"> • Use case: Caller should hear "you said", followed by utterance. • Error case: No Input, No Match. <ul style="list-style-type: none"> ◦ Caller should hear "No Input" in the case of no utterance. ◦ Caller should hear "No Match" in the case of an invalid

	utterance.
Additional Info.	<p>Extension: 2005</p> <p>From a softphone, call SIP URI 2005@<asterisk server IP></p> <p>Number of grammars Activated: 3</p> <p>Grammar 1: builtin:grammar/digits</p> <p>Grammar 2: builtin:grammar/date</p> <p>Grammar 3: builtin:grammar/boolean</p>
Pass / Fail	Passed
Test Notes	Test performed on Build Aumtech-11.01.09-MRCP-C.3.1.2.
Author	spimental

4.1.6 Test Case PC-30

Activates multiple built-in grammars without calling Speech Deactivate Grammar.	
Step(s)	<ol style="list-style-type: none"> 1. Dial 2006. The following prompts should be heard. <ol style="list-style-type: none"> a. "Test case six" b. "Testing multiple built-in grammars, without calling Speech Deactivate Grammar" c. "Please say a number between 0 and 9, a date, yes or no" 2. The caller speaks "seven". The following prompts should be heard. <ol style="list-style-type: none"> a. "You said <utterance>" b. "End of test" c. "Goodbye" 3. Repeat the test with the following utterances: <ol style="list-style-type: none"> a. Caller speaks "September 8th 2009". Caller should hear "You said 2. 0. 0. 9. 0. 9. 0. 8." b. Caller speaks "Yes". Caller should hear "You said T. R. U. E." c. Caller speaks "No". Caller should hear "You said F. A L. S. E" d. Caller speaks an invalid utterance such as "Bolivia". Caller should hear "No Match". e. Caller does not speak an utterance. After a timeout, caller should hear "No Input".
Expected Result(s)	<ul style="list-style-type: none"> • Use case: Caller should hear "you said", followed by utterance. • Error case: No Input, No Match. <ul style="list-style-type: none"> ◦ Caller should hear "No Input" in the case of no utterance. ◦ Caller should hear "No Match" in the case of an invalid

	utterance.
Additional Info.	<p>Extension: 2006</p> <p>From a softphone, call SIP URI 2006@<asterisk server IP></p> <p>Number of grammars Activated: 3</p> <p>Grammar 1: builtin:grammar/digits </p> <p>Grammar 2: builtin:grammar/date</p> <p>Grammar 3: builtin:grammar/boolean</p>
Pass / Fail	Passed
Test Notes	Test performed on Build Aumtech-11.01.09-MRCP-C.3.1.2.
Author	spimental

4.1.7 Test Case PC-31

Activates a large grammar that consists of 5000 names.	
Step(s)	<ol style="list-style-type: none"> 1. Dial 2007. The following prompts should be heard. <ol style="list-style-type: none"> a. "Test case seven" b. "Testing large URI grammar" c. "Please say Michael Biggs or Hunter Poole" 2. The caller speaks "Michael Biggs". The following prompts should be heard. <ol style="list-style-type: none"> a. "You said <utterance>" b. "End of Test" c. "Goodbye" 3. Repeat the test with the following utterances: <ol style="list-style-type: none"> a. Caller speaks "Hunter Poole".
Expected Result(s)	<ul style="list-style-type: none"> • Use case: Caller should hear "you said", followed by utterance. • Error case: No Input, No Match. <ul style="list-style-type: none"> ◦ Caller should hear "No Input" in the case of no utterance. ◦ Caller should hear "No Match" in the case of an invalid utterance.
Additional Info.	<p>Extension: 2007</p> <p>From a softphone, call SIP URI 2007@<asterisk server IP></p> <p>Number of grammars Activated: 1</p> <p>Grammar: LargeNamesGrammar.grxml</p>
Pass / Fail	Passed
Test Notes	Test performed on Build Aumtech-11.01.09-MRCP-C.3.1.2.

Author	Spitts

4.1.8 Test Case PC-32

Activates a large URI grammar, but at the end, Speech Activate Grammar and Speech Destroy is not called.	
Step(s)	<ol style="list-style-type: none"> 1. Dial 2008. The following prompts should be heard. <ol style="list-style-type: none"> a. "Test case eight" b. "Testing Large URI grammar without calling Speech Deactivate Grammar or Speech Destroy" c. "Please say, Michael Biggs or Hunter Poole" 2. The caller speaks "Michael Biggs". The following prompts should be heard. <ol style="list-style-type: none"> a. "You said <utterance>" b. "End of test" c. "Goodbye" 3. Repeat the test with the following utterances: <ol style="list-style-type: none"> a. Caller speaks "Hunter Poole".
Expected Result(s)	<ul style="list-style-type: none"> • Use case: Caller should hear "you said", followed by utterance. • Error case: No Input, No Match. <ul style="list-style-type: none"> ◦ Caller should hear "No Input" in the case of no utterance. ◦ Caller should hear "No Match" in the case of an invalid utterance.
Additional Info.	<p>Extension: 2008</p> <p>From a softphone, call SIP URI 2008@<asterisk server IP></p> <p>Number of grammars Activated: 1</p> <p>Grammar: LargeNamesGrammar.grxml</p>

Pass / Fail	Passed
Test Notes	Test performed on Build Aumtech-11.01.09-MRCP-C.3.1.2.
Author	spimental

4.1.9 Test Case PC-33

Activates a single built-in digit grammar, but does not call Speech Deactivate Grammar or Speech Destroy.	
Step(s)	<ol style="list-style-type: none"> 1. Dial 2009. The following prompts should be heard. <ol style="list-style-type: none"> a. "Test case 9" b. "Testing single built-in grammar without calling Speech Deactivate Grammar and Speech Destroy" c. "Please say a number between 0 and 9" 2. Caller speaks "seven". The following prompts should be heard. <ol style="list-style-type: none"> a. "You said <utterance>" b. "End of test" c. "Goodbye"
Expected Result(s)	<ul style="list-style-type: none"> • Use case: Caller should hear "you said", followed by utterance. • Error case: No Input, No Match. <ul style="list-style-type: none"> ◦ Caller should hear "No Input" in the case of no utterance. ◦ Caller should hear "No Match" in the case of an invalid utterance.
Additional Info.	<p>Extension: 2009</p> <p>From a softphone, call SIP URI 2009@<asterisk server IP></p> <p>Number of grammars Activated: builtin:grammar/digits</p>
Pass / Fail	Passed
Test Notes	Test performed on Build Aumtech-11.01.09-MRCP-C.3.1.2.
Author	spimental

4.1.10 Test Case PC-34

Checks that the timeout values are being set as specified in the test case.	
Step(s)	<ol style="list-style-type: none"> 1. Dial 2010. The following prompts should be heard. <ol style="list-style-type: none"> a. "Test case 10" b. "Testing timeout values set explicitly for, No input timeout, Speech complete timeout and Recognition timeout" c. "Please say a number between 0 and 9." 2. The caller speaks "five". The following prompts should be heard. <ol style="list-style-type: none"> a. "You said <utterance>" b. "End of test" c. "Goodbye"
Expected Result(s)	<ul style="list-style-type: none"> • In the file /usr/local/mrcp_client/client.log, verify that the values are being set. Examples: <ul style="list-style-type: none"> ◦ No-Input-Timeout:8000 ◦ Recognition-Timeout:60000 ◦ Speech-Complete-Timeout:5000
Additional Info.	<p>Extension: 2010</p> <p>From a softphone, call SIP URI 2010@<asterisk server IP></p> <p>Number of grammars Activated: 1</p> <p>Grammar: builtin:grammar/digits</p> <p>To validate the values, on the Asterisk system, tail the file /usr/local/mrcp_client/client.log using the following command: # tail -f /usr/local/mrcp_client/client.log</p>
Pass / Fail	Passed
Test Notes	Test performed on Build Aumtech-11.01.09-MRCP-C.3.1.2.

Author	spimental
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4.1.11 Test Case PC-35

No timeout values are being set. Only default values are used.	
Step(s)	<ol style="list-style-type: none"> 1. Dial 2011. The following prompts should be heard. <ol style="list-style-type: none"> a. "Test case 11" b. "Testing default settings for, No Input timeout, Speech Complete timeout and Recognition timeout." c. "Please say a number between 0 and 9" 2. Caller speaks "seven". The following prompts should be heard. <ol style="list-style-type: none"> a. "You said <utterance>" b. "Grammar name equals <grammar used>" c. "End of test" d. "Goodbye"
Expected Result(s)	<ul style="list-style-type: none"> • In the file /usr/local/mrcp_client/client.log, verify that the values are being set. Examples: <ul style="list-style-type: none"> ◦ No-Input-Timeout:8000 ◦ Recognition-Timeout:60000 ◦ Speech-Complete-Timeout:3000
Additional Info.	<p>Extension: 2011</p> <p>From a softphone, call SIP URI 2011@<asterisk server IP></p> <p>Number of grammars Activated: 1</p> <p>Grammar: builtin:grammar/digits</p> <p>To validate the values, on the Asterisk system, tail the file /usr/local/mrcp_client/client.log using the following command: # tail -f /usr/local/mrcp_client/client.log</p>

Pass / Fail	Passed
Test Notes	Test performed on Build Aumtech-11.01.09-MRCP-C.3.1.2.
Author	spimental

4.1.12 Test Case PC-36

Performs a Speech Create, Speech Destroy, Speech Grammar Activate and Speech Grammar Deactivate multiple times.

Step(s)	<ol style="list-style-type: none">1. Dial 2012. The following prompts should be heard.<ol style="list-style-type: none">a. "Test case 12"b. "Testing Speech Create, Speech Destroy, Speech Grammar Activate and Speech Grammar Deactivate multiple times within one call.c. "After the beep, please say a day of the week, a month of the year, digit between 0 and 9, Ford, or don't say anything at all."2. The caller speaks "Monday". The following prompts should be heard.<ol style="list-style-type: none">a. "You said <M. O. N. D. A. Y>"b. "Grammar name equals <grammar used>"c. "After the beep, please say a day of the week, a month of the year, digit between 0 and 9, Ford, or don't say anything at all."3. The caller speaks "June". The following prompts should be heard.<ol style="list-style-type: none">a. "You said <J. U. N. E>"b. "Grammar name equals <grammar used>"c. "After the beep, please say a day of the week, a month of the year, digit between 0 and 9, Ford, or don't say anything at all."4. The caller speaks "seven". The following prompts should be heard.<ol style="list-style-type: none">a. "You said seven"b. "Grammar used equals <grammar used>"c. "After the beep, please say a day of the week, a month of the year, digit between 0 and 9, Ford, or don't say anything at all."
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	<p>5. The caller speaks "Ford". The following prompts should be heard.</p> <ol style="list-style-type: none"> a. "You said <F. O. R. D>" b. "Grammar used equals <grammar used>" c. "After the beep, please say a day of the week, a month of the year, digit between 0 and 9, Ford, or don't say anything at all." <p>6. The caller says nothing. The following prompts should be heard.</p> <ol style="list-style-type: none"> a. "No input" b. "End of test" c. "Goodbye"
Expected Result(s)	<ul style="list-style-type: none"> • All grammars are activated and deactivated, the calls ends without any errors.
Additional Info.	<p>Extension: 2012</p> <p>From a softphone, call SIP URI 2012@<asterisk server IP></p> <p>This test is in a loop, and the caller will be re-prompted for an input. When a no-match or a no-input is thrown, the call exits.</p> <p>Number of grammars Activated: 4</p> <p>Grammar: http://localhost/asterisk/WeekDays.grxml</p> <p>Grammar: file://cars.grxml</p> <p>Grammar: file://months.grxml</p> <p>Grammar: builtin:grammar/digits</p>
Pass / Fail	Passed
Test Notes	Test performed on Build Aumtech-11.01.09-MRCP-C.3.1.2.
Author	spimental

4.1.13 Test Case PC-37

Speech Create and Speech Destroy is called only once while doing multiple Speech Recognitions.	
Step(s)	<ol style="list-style-type: none"> 1. Dial 2013. The following prompts should be heard. <ol style="list-style-type: none"> a. "Test case 13" b. "Testing multiple recognitions within one speech resource" c. "Please say a day of the week" 2. Caller says "Monday". The following prompts should be heard. <ol style="list-style-type: none"> a. "You said M. O. N. D. A. Y" b. "Grammar name equals <grammar used>" c. "Please say a month of the year" 3. Caller speaks "March". The following prompts should be heard. <ol style="list-style-type: none"> a. "You said M. A. R. C. H" b. "Grammar name equals <grammar used>" c. "Please say a number between 0 and 9" 4. Caller speaks "seven". The following prompts should be heard. <ol style="list-style-type: none"> a. "You said seven" b. "Grammar name equals <grammar used>" c. "End of test" d. "Goodbye"
Expected Result(s)	<ul style="list-style-type: none"> • Use case: Caller should hear "you said", followed by utterance. • Error case: No Input, No Match. <ul style="list-style-type: none"> ◦ Caller should hear "No Input" in the case of no utterance. ◦ Caller should hear "No Match" in the case of an invalid

	utterance.
Additional Info.	<p>Extension: 2013</p> <p>From a softphone, call SIP URI 2013@<asterisk server IP></p> <p>Number of grammars Activated: 3</p> <p>Grammar: file://WeekDays.grxml</p> <p>Grammar: file://months.grxml</p> <p>Grammar: file://Digits.grxml</p>
Pass / Fail	Passed
Test Notes	Test performed on Build Aumtech-11.01.09-MRCP-C.3.1.2.
Author	spimental

4.1.14 Test Case PC-38

Tests N best with a single grammar activated.	
Step(s)	<ol style="list-style-type: none"> 1. Dial 2015. The following prompts should be heard. <ol style="list-style-type: none"> a. "Test case 15" b. "Testing N best with a single grammar" c. "Please say, Panunary , Sanuary, January, Anunary." 2. Caller speaks "Sanuary". The following prompts should be heard. <ol style="list-style-type: none"> a. "You said <depending on how high the confidence level is on a match. You can get back up to 3 matches returned.>" b. "End of test" c. "Goodbye"
Expected Result(s)	<ul style="list-style-type: none"> • Use case: Caller should hear "you said", followed by utterance. • Error case: No Input, No Match. <ul style="list-style-type: none"> ◦ Caller should hear "No Input" in the case of no utterance. ◦ Caller should hear "No Match" in the case of an invalid utterance.
Additional Info.	Extension: 2015 From a softphone, call SIP URI 2015@<asterisk server IP> Number of grammars Activated: 1 Grammar: file://JanuaryNbest.grxml
Pass / Fail	Passed
Test Notes	Test performed on Build Aumtech-11.01.09-MRCP-C.3.1.2.
Author	spimental

4.1.15 Test Case PC-39

Tests N best with multiple grammars activated.	
Step(s)	<ol style="list-style-type: none"> 1. Dial 2016. The following prompts should be heard. <ol style="list-style-type: none"> a. "Test case 16" b. "Testing N best with multiple grammars" c. "Please say, Panunary , Sanuary, January, Anunary." 2. Caller speaks "Sanuary". The following prompts should be heard. <ol style="list-style-type: none"> a. "You said <depending on how high the confidence level is on a match, you can get back up to 3 matches returned.>" b. "Please say, Nebruary, Sebruary, February, or Webruary" 3. Caller speaks "February". The following prompts should be heard. <ol style="list-style-type: none"> a. "You said <depending on how high the confidence level is on a match, you can get back up to 3 matches returned.>" b. "Please say, Prune, Zune, or Baloon" 4. Caller speaks "June". The following prompts should be heard. <ol style="list-style-type: none"> a. "You said <depending on how high the confidence level is on a match, you can get back up to 3 matches returned.>" b. "Please say, Say, Way, Day, or May" 5. Caller speaks "May". The following prompts should be heard. <ol style="list-style-type: none"> a. "You said <depending on how high the confidence level is on a match, you can get back up to 3 matches returned.>" b. "End of test" c. "Goodbye"
Expected Result(s)	<ul style="list-style-type: none"> • Use case: Caller should hear "you said", followed by utterance. • Error case: No Input, No Match.

	<ul style="list-style-type: none"> ◦ Caller should hear “No Input” in the case of no utterance. ◦ Caller should hear “No Match” in the case of an invalid utterance.
Additional Info.	<p>Extension: 2016</p> <p>From a softphone, call SIP URI 2016@<asterisk server IP></p> <p>Number of grammars Activated: 4</p> <p>Grammar: file://JanuaryNbest.grxml</p> <p>Grammar: file://FebruaryNbest.grxml</p> <p>Grammar: file://JuneNbest.grxml</p> <p>Grammar: file://MayNbest.grxml</p>
Pass / Fail	Passed
Test Notes	Test performed on Build Aumtech-11.01.09-MRCP-C.3.1.2.
Author	spimental

4.1.16 Test Case PC-40

Multiple N best grammars activated, but Speech Grammar deactivate is not called for each grammar.	
Step(s)	<ol style="list-style-type: none"> 1. Dial 2017. The following prompts should be heard. <ol style="list-style-type: none"> a. "Test case 16" b. "Testing N best with multiple grammars" c. "Please say, Panunary , Sanuary, January, Anunary." 2. Caller speaks "Sanuary". The following prompts should be heard. <ol style="list-style-type: none"> a. "You said <depending on how high the confidence level is on a match, you can get back up to 3 matches returned.>" b. "Please say, Nebruary, Sebruary, February, or Webruary" 3. Caller speaks "February". The following prompts should be heard. <ol style="list-style-type: none"> a. "You said <depending on how high the confidence level is on a match, you can get back up to 3 matches returned.>" b. "Please say, Prune, Zune, or Baloon" 4. Caller speaks "June". The following prompts should be heard. <ol style="list-style-type: none"> a. "You said <depending on how high the confidence level is on a match, you can get back up to 3 matches returned.>" b. "Please say, Say, Way, Day, or May" 5. Caller speaks "May". The following prompts should be heard. <ol style="list-style-type: none"> a. "You said <depending on how high the confidence level is on a match, you can get back up to 3 matches returned.>" b. "End of test" c. "Goodbye"
Expected Result(s)	<ul style="list-style-type: none"> • Use case: Caller should hear "you said", followed by utterance.

	<ul style="list-style-type: none"> • Error case: No Input, No Match. <ul style="list-style-type: none"> ◦ Caller should hear “No Input” in the case of no utterance. ◦ Caller should hear “No Match” in the case of an invalid utterance.
Additional Info.	<p>Extension: 2017</p> <p>From a softphone, call SIP URI 2017@<asterisk server IP></p> <p>Number of grammars Activated: 4</p> <p>Grammar: file://JanuaryNbest.grxml</p> <p>Grammar: file://FebruaryNbest.grxml</p> <p>Grammar: file://JuneNbest.grxml</p> <p>Grammar: file://MayNbest.grxml</p>
Pass / Fail	Passed
Test Notes	Test performed on Build Aumtech-11.01.09-MRCP-C.3.1.2.
Author	spimental

4.1.17 Test Case PC-41

Three digit grammars are activated from three different sources. Recognition performed against the first grammar that is loaded.	
Step(s)	<ol style="list-style-type: none"> 1. Dial 2018. The following prompts should be heard. <ol style="list-style-type: none"> a. "Test case 18" b. "Loading the three identical digit grammars, from three different sources." c. "The first grammar loaded is what the utterance should be matched against" d. "Please say a number between 0 and 9" 2. Caller speaks "seven". The following prompts should be heard. <ol style="list-style-type: none"> a. "You said seven" b. "Grammar names equals <grammar used>" c. "End of test" d. "Goodbye"
Expected Result(s)	<ul style="list-style-type: none"> • Use case: Caller should hear "you said", followed by utterance. • Error case: No Input, No Match. <ul style="list-style-type: none"> ◦ Caller should hear "No Input" in the case of no utterance. ◦ Caller should hear "No Match" in the case of an invalid utterance.
Additional Info.	<p>Extension: 2018</p> <p>From a softphone, call SIP URI 2018@<asterisk server IP></p> <p>Number of grammars Activated: 3</p> <p>Grammar: builtin:grammar/digits</p>

	Grammar: file://digits.grxml Grammar: http://localhost/asterisk/digits.grxml
Pass / Fail	Passed
Test Notes	Test performed on Build Aumtech-11.01.09-MRCP-C.3.1.2.
Author	spimental

4.1.18 Test Case PC-42

Grammars loaded are from different sources and of a different type.	
Step(s)	<ol style="list-style-type: none"> 1. Dial 2019. The following prompts should be heard. <ol style="list-style-type: none"> a. "Test case 19" b. "Testing mixed grammar sources. Two built-in grammars and one local grammar loaded" c. "Please say a month of the year, a digit between 0 and 9, Yes or No" 2. Caller says "March". The following prompts should be heard. <ol style="list-style-type: none"> a. "You said M. A. R. C. H" b. "Grammar name equals <grammar used>" c. "End of test" d. "Goodbye" 3. Repeat the test with the following utterances: <ol style="list-style-type: none"> a. Caller speaks "seven". Caller should hear "You said seven". b. Caller speaks "Yes". Caller should hear "You said T. R. U. E.". c. Caller speaks "No. Caller" should hear "F. A. L. S. E". d. Caller speaks an invalid utterance such as "Bolivia". Caller should hear "No Match". e. Caller does not speak an utterance. After a timeout, caller should hear "No Input".
Expected Result(s)	<ul style="list-style-type: none"> • Use case: Caller should hear "you said", followed by utterance. • Error case: No Input, No Match. <ul style="list-style-type: none"> ◦ Caller should hear "No Input" in the case of no utterance. ◦ Caller should hear "No Match" in the case of an invalid

	utterance.
Additional Info.	<p>Extension: 2019</p> <p>From a softphone, call SIP URI 2019@<asterisk server IP></p> <p>Number of grammars Activated: 3</p> <p>Grammar: file://months.grxml</p> <p>Grammar: builtin:grammar/digits</p> <p>Grammar: builtin:grammar/boolean</p>
Pass / Fail	Passed
Test Notes	Test performed on Build Aumtech-11.01.09-MRCP-C.3.1.2.
Author	spimental

4.1.19 Test Case PC-43

Multiple single grammars activated and deactivated within one Speech Resource.	
Step(s)	<ol style="list-style-type: none"> 1. Dial 2020. The following prompts should be heard. <ol style="list-style-type: none"> a. "Test case 20" b. "Testing speech multiple single grammar load and unload" c. "Please say a month of the year" 2. Caller speaks "May". The following prompts should be heard. <ol style="list-style-type: none"> a. "You said M. A. Y" b. "Please say a number between 0 and 9" 3. Caller "says seven". The following prompts should be heard. <ol style="list-style-type: none"> a. "You said seven" b. "Please say yes or no" 4. Caller says "Yes". The following prompts should be heard. <ol style="list-style-type: none"> a. "You said T. R. U. E." b. "End of Test" c. "Goodbye"
Expected Result(s)	<ul style="list-style-type: none"> • Use case: Caller should hear "you said", followed by utterance. • Error case: No Input, No Match. <ul style="list-style-type: none"> ◦ Caller should hear "No Input" in the case of no utterance. ◦ Caller should hear "No Match" in the case of an invalid utterance.
Additional Info.	<p>Extension: 2020</p> <p>From a softphone, call SIP URI 2020@<asterisk server IP></p>

	Number of grammars Activated: 3 Grammar: file://months.grxml Grammar: builtin:grammar/digits Grammar: builtin:grammar/boolean
Pass / Fail	Passed
Test Notes	Test performed on Build Aumtech-11.01.09-MRCP-C.3.1.2.
Author	spimental

4.1.20 Test Case PC-44

Single built-in grammar activated. Speech Grammar Deactivate and Speech Destroy is not called.	
Step(s)	<ol style="list-style-type: none"> 1. Dial 2021. The following prompts should be heard. <ol style="list-style-type: none"> a. "Test case 21" b. "Activating a single built-in grammar, Performed recognition, exited without calling Speech deactivate Grammar or Speech Destroy" c. "Please say a number between 0 and 9" 2. Caller speaks "five". The following prompts should be heard. <ol style="list-style-type: none"> a. "You said five" b. "End of test" c. "Goodbye"
Expected Result(s)	<ul style="list-style-type: none"> • Use case: Caller should hear "you said", followed by utterance. • Error case: No Input, No Match. <ul style="list-style-type: none"> ◦ Caller should hear "No Input" in the case of no utterance. ◦ Caller should hear "No Match" in the case of an invalid utterance.
Additional Info.	<p>Extension: 2021</p> <p>From a softphone, call SIP URI 2021@<asterisk server IP></p> <p>Number of grammars Activated: 1</p> <p>Grammar: builtin:grammar/digits</p>
Pass / Fail	Passed
Test Notes	Test performed on Build Aumtech-11.01.09-MRCP-C.3.1.2.

Author	spimental
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Section 5: Glossary of Common Terms

The following is a glossary of common telecommunication acronyms and terms that may be used in this report.

Term	Definition
Codec	Coder/Decoder, Compressor/Decompressor. Software or hardware (or a combination of both) that converts data to a code and later decodes it, e.g. telephone firmware that converts digital signals to analog, and vice versa. Also, technology (such as MPEG) that compresses data (such as sound files) for storage and decompresses it for processing.
DND	Do Not Disturb
Fast Busy	A busy signal (also referred to as a “reorder”) in telephony is an audible or visual signal to the calling party that indicates failure to complete the requested connection of that particular telephone call.
Gateway	A general term used by various companies to refer to the controlling interface between the PBX and the phones within a local area network. Other companies’ “gateways” are called Call Managers or Call Servers.
PBX	Private Branch Exchange. Originally referring to a system providing local telephone service (“public exchange”) and access to the PSTN, PBX now typically refers to whatever connection a phone user has to other users or to the outside world. In some cases, that connection is a call manager, call server, or gateway, or some other box or combination of boxes. In some IP protocols there might not even be such a box, but simply a direct access to the Internet.
POE	Power over Ethernet (POE) technology is a system to transmit electrical power, along with data over a standard Ethernet cable to remote devices such as IP Telephones, remote network switched, and other appliances where it would be inconvenient or more expensive to provide a separate power supply for the device.
SIP	Session Initiation Protocol (SIP) is the Internet Engineering Task Force's (IETF's) standard for multimedia conferencing over IP. SIP is an ASCII-based, application-layer control protocol (defined in RFC 2543) that can be used to establish, maintain, and terminate calls between two or more end points.

Term	Definition
TDM	Time-Division Multiplexing. A type of digital signaling and transmission (sometimes used in digital-to-analog or analog-to digital systems) in which two or more signals or bit streams are transferred simultaneously as sub-channels in one communication channel, physically “taking turns” on the channel. Examples of TDM communications include T1, E1, and J1 digital lines.
TFTP	Trivial (or Thin) File Transport Protocol. A simple form of FTP, TFTP uses UDP and provides no security features. It is often used by servers to download firmware or configurations to IP phones, embedded network devices, routers, and other devices whose user interfaces are simple or not included.
UUT	Unit Under Test. In a formal test setup, the UUT is the device that is being tested or evaluated.
VoIP	Voice-over Internet Protocol