

Speech Connect for Cisco Unity: Enabling Greater Collaboration

Executive Summary

In today's global workplace and matrixed organizations, quickly connecting to colleagues is paramount to organizational agility and business success. Speech Connect for Cisco Unity[®] allows people to quickly connect with their colleagues using only their voice. Speech Connect is a Speech-Enabled Automated Attendant (SEAA) for the enterprise. Internal or external callers speak the name of an employee into the phone and are connected to that employee. The Speech Connect solution delivers superior voice-recognition performance and uses enhanced software to store user preferences and fine-tune pronunciations, improving its accuracy over time. Users can collaborate more quickly and easily by connecting with each other without having to know multiple phone numbers. With the proliferation of mobile devices, flexible workspaces, and employee turnover, removing the need to know numbers and location greatly simplifies communications.

Challenge

Business owners and employees today conduct business using seemingly infinite combinations of phones, voice messaging, e-mail, fax, mobile clients, and rich-media conferencing. Without unified communications, however, these tools are often not used as effectively as they could be. Information overload and misdirected communications delay decisions, slow down processes, and reduce productivity. Unified communications solutions, particularly unified messaging, can save time and help control costs, while improving productivity and competitiveness.

Cisco Unity unified messaging allows you to check voice messages from an e-mail inbox, Web browser, or mobile device, consolidating and simplifying communications. However, as more people utilize multiple fixed and mobile phones, they spend more time managing multiple phone numbers – their own as well as those of their co-workers, customers, and business partners. To address the real loss of business productivity due to missed calls to the primary office phone number and managing multiple voice mailboxes, many IT departments are seeking to regain some level of simplicity and manageability while allowing employees their choice of communications methods.

Solution

Cisco[®] is offering a simplified solution for the worker with multiple communications devices and multiple workspaces. Speech Connect for Cisco Unity allows both internal and external callers, using only their voice, to be quickly connected to any employee in the company directory. There are no more phone numbers to remember, no speed dials to program, and no need to provide a variety of phone numbers to others who wish to contact you.

If there are multiple employees with the same name or Speech Connect does not have a perfect match for the name spoken by the caller, Speech Connect will present a number of name choices for the caller and include additional information, such as the employee's location or department. This process is called disambiguation. Speech Connect will also play the person's recorded name in their own voice, making it easier for the caller to choose among the multiple names selected

using the disambiguation process. Furthermore, Speech Connect performance improves over time through a self-learning mechanism that is included with the optional Names Tuning Service described in further detail below.

Speech Connect can be configured to respond to a number of different voice commands, not just employee names. For example, if you deploy product names in the Speech Connect grammar logic, customers can speak the name of a product and reach a person responsible for that product. Employee names, departments, conference rooms, product names, and any other entity that steers a caller to a phone number can enhance the value of Speech Connect to your employees and customers.

While Speech Connect allows for faster, easier connections over the phone, Cisco Unity unified messaging improves productivity by allowing employees to access messages anytime and anywhere, thereby enabling them to respond faster to messages. Speech Connect for Cisco Unity (Figure 1) makes collaboration easier and allows you to be more responsive and more in control of your communications.

Figure 1. Speech Connect for Cisco Unity

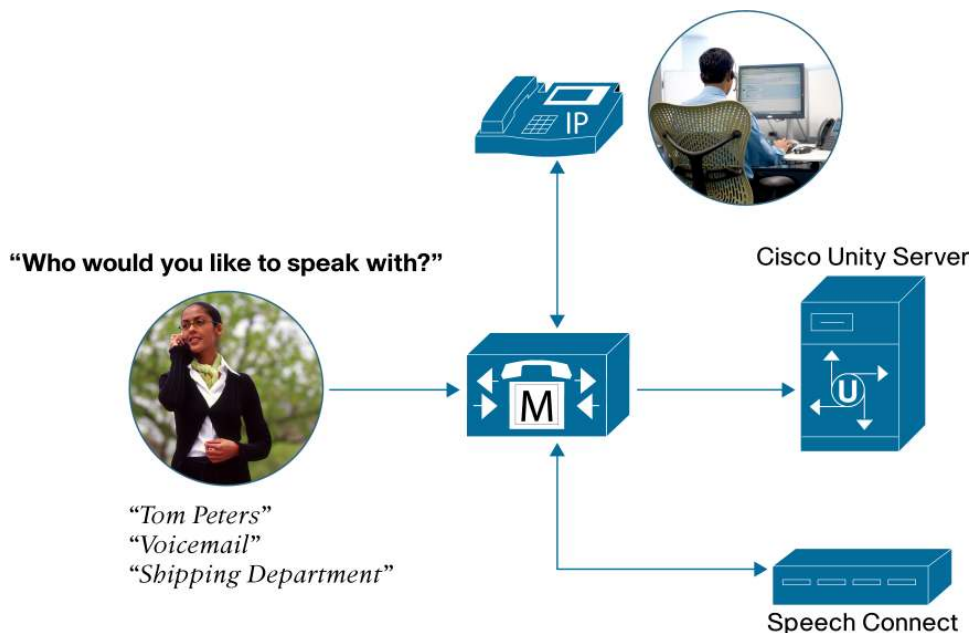


Table 1. Features and Benefits of Speech Connect

Feature	Benefit
Supports up to 200,000 names	Supports the scale required by large enterprises.
Advanced disambiguation	Speech Connect stores caller preferences over time, expediting transfers as it builds knowledge about a caller's community-of-interest when given choices among similar names.
Names Tuning service	This service monitors results in an automated manner, inserting improvements and updated pronunciations within 72 hours of a failed utterance.
Speed dial	Speech Connect can be configured as a speed-dial soft key on Cisco Unified IP phones.
Name response collection	Allows the caller to hear the contact's name in the contact's own recorded voice to help determine proper pronunciation.
SIP integration	Provides flexible integration to Cisco Unified Communications Manager or a private branch exchange (PBX).

Speech Services for the Changing Enterprise

As employees join and leave your company, there are frequent changes such as new names and pronunciations in your directory. To protect the performance and your investment in Speech Connect, Cisco provides an optional service called the Speech Connect Names Tuning service, which automatically corrects in the background, without you having to report issues to a technical support team. The Names Tuning service also includes professional linguists to correct problems relating to nuances in speech recognition – problems that cannot be solved automatically by any speech engine. This service not only fine-tunes the variety of employee name pronunciations within your corporate directory, it also provides support, monitoring, and reporting. The Names Tuning Service continuously improves the performance of Speech Connect to deliver superior, intelligent speech recognition capabilities.

A subscriber to Speech Connect Names Tuning service receives:

- Enhanced linguistic support for 30 days post-installation
- Ongoing, automated monitoring and corrections (corrections generally appear within 72 hours of receipt)
- Cisco Help Desk support for recognition issues – the Cisco Technical Assistance Center (TAC) will prioritize any cases relating to linguistic analysis and correction and put you in contact immediately with a Speech Connect expert
- Monthly reporting of Names Tuning corrections and updates
- Alerts notifying your Speech Connect administrator of corrective actions to be taken

The Speech Connect Names Tuning service (Figure 2) provides immediate benefits to your global enterprise. While it may be easy for employees to pronounce the name of their co-workers in their own country, proper pronunciation can be a real challenge when dealing with unfamiliar names from other parts of the world. The Names Tuning service monitors the performance of speech servers over the unified messaging network, correcting for pronunciation variances and errors within hours. This service helps ensure that Speech Connect is a valuable collaboration tool across borders and time zones no matter who is calling and no matter the name of the person on the other end of the connection.

Figure 2. Speech Connect Names Tuning Service

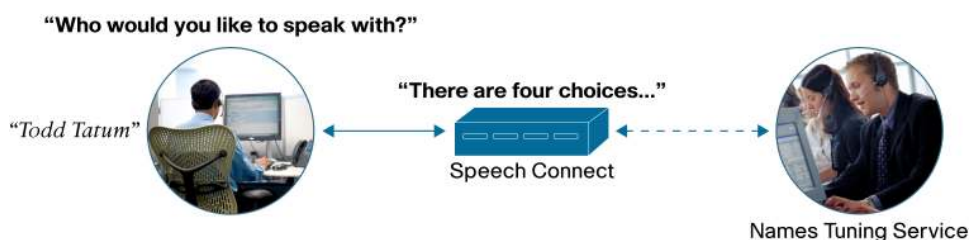


Table 2. Speech Connect Names Tuning Service Issue Correction

Issue	Definition	Action
Out-of-grammar (entire name)	Speech Connect returns with no choices or presents incorrect choices. Cause: the name spoken is not in the corporate directory, often because of timing issues with the accurate import of new employee records.	A Speech Connect Names Tuning service linguist identifies the missing employee record and reports absence to Speech Connect administrator.
Out-of-grammar (first name or last name)	There is an employee record for the desired contact, but results are poor because the first or last name has alternative pronunciations.	A Names Tuning service linguist adds nickname, preferred name, synonym, alternative pronunciation, or improved phonetic definition.

Low confidence score	Callers are being presented with many incorrect choices; there are too many choices to disambiguate. "Did you mean John Smith?"	A Names Tuning service linguist adds alternative pronunciations or improved phonetic definitions. If the poor results are due to audible voice quality issues, the issue is reported to the Speech Connect administrator.
Caller cancels or does not confirm	Caller is offered choices but says "cancel," hangs up, or transfers to the operator.	A Names Tuning service linguist adds nickname, preferred name, synonym, alternative pronunciation, or improved phonetic definition.

Why Cisco?

Speech Connect enables a "numberless enterprise" where names are all that an employee, customer, or business partner needs to bridge the gap created by the proliferation of communications devices. Cisco provides the software and services to create this numberless enterprise, in addition to delivering speech-accuracy enhancements so that connections between logical people and teams become more accurate and instantaneous over time. In addition, Cisco Unity unified messaging amplifies your productivity with an enterprise-ready voice and unified messaging platform as part of a unified communications solution. This system improves productivity by allowing employees to access messages anytime and anywhere, thereby allowing them to respond faster to messages for increased customer intimacy, service, and organizational agility. Speech Connect for Cisco Unity is an essential component of a unified communications strategy that enables collaboration across complex enterprises and across the human network.

For More Information

To learn more about Cisco Unity and Speech Connect, please visit:

<http://www.cisco.com/en/US/products/sw/voicesw/ps2237/index.html>.

Technical details about Speech Connect, such as compatibility, connectivity, and protocols can be found in the Cisco Unity and Speech Connect data sheets at:

http://www.cisco.com/en/US/products/sw/voicesw/ps2237/prod_literature.html.



Americas Headquarters
Cisco Systems, Inc.
170 West Tasman Drive
San Jose, CA 95134-1706
USA
www.cisco.com
Tel: 408 526-4000
800 553-NETS (6387)
Fax: 408 527-0883

Asia Pacific Headquarters
Cisco Systems, Inc.
168 Robinson Road
#28-01 Capital Tower
Singapore 068912
www.cisco.com
Tel: +65 6317 7777
Fax: +65 6317 7799

Europe Headquarters
Cisco Systems International BV
Haarlerbergpark
Haarlerbergweg 13-19
1101 CH Amsterdam
The Netherlands
www-europe.cisco.com
Tel: +31 0 800 020 0791
Fax: +31 0 20 357 1100

Cisco has more than 200 offices worldwide. Addresses, phone numbers, and fax numbers are listed on the Cisco Website at www.cisco.com/go/offices.

©2007 Cisco Systems, Inc. All rights reserved. CCVP, the Cisco logo, and the Cisco Square Bridge logo are trademarks of Cisco Systems, Inc.; Changing the Way We Work, Live, Play, and Learn is a service mark of Cisco Systems, Inc.; and Access Registrar, Aironet, BPX, Catalyst, CCDA, CCDP, CCIE, CCIP, CCNA, CCNP, CCSP, Cisco, the Cisco Certified Internetwork Expert logo, Cisco IOS, Cisco Press, Cisco Systems, Cisco Systems Capital, the Cisco Systems logo, Cisco Unity, Enterprise/Solver, EtherChannel, EtherFast, EtherSwitch, Fast Step, Follow Me Browsing, FormShare, GigaDrive, HomeLink, Internet Quotient, IOS, iPhone, IP/TV, iQ Expertise, the iQ logo, iQ Net Readiness Scorecard, iQuick Study, LightStream, Linksys, MeetingPlace, MGX, Networking Academy, Network Registrar, PIX, ProConnect, ScriptShare, SMARTnet, StackWise, The Fastest Way to Increase Your Internet Quotient, and TransPath are registered trademarks of Cisco Systems, Inc. and/or its affiliates in the United States and certain other countries.

All other trademarks mentioned in this document or Website are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (0708R)