



**DRAGON<sup>®</sup> NATURALLY SPEAKING<sup>®</sup> PROFESSIONAL**  
**INCREASE CLAIMS HANDLING SPEED AND EFFICIENCY**  
**WITH SPEECH RECOGNITION**

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A White Paper for the Insurance Industry from Nuance Communications  
March 2009

## INTRODUCTION

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It's a common question across the insurance industry: How can we streamline the claims process for increased productivity, improved customer service and higher retention rates?

Claims documentation inefficiencies are causing rapid cost escalation for insurance carriers of all types and sizes. In fact, field agents and adjusters -- who spend as much as 50 percent of their day typing reports and documentation -- are finding it increasingly difficult just to meet claims quotas. It's no wonder that insurance agencies have little bandwidth to focus on growing revenues or increasing market share.

Lengthy manual input of forms and reports slows down response to customer claims and impacts the quality and thoroughness of required documentation.

In addition, this time-consuming data entry makes it difficult for field agents and adjusters to balance their workload, leading to long hours, low morale, and high turnover rates.

Today's insurance companies are looking for a faster, easier way to complete intensive documentation. Enabling staff to better manage their existing volume of work and handle even more cases per day yields both higher job satisfaction and bottom-line results.

This white paper explains how organizations are using speech recognition solutions, like Dragon NaturallySpeaking Professional from Nuance Communications, to streamline the claims process.

Replacing manual data entry with speech recognition **saves each claims agent several hours per work day**. Because claims are processed much faster, adjusters can handle more claims with higher quality. Faster report creation means faster response to customer claims.

## HOW DOES SPEECH RECOGNITION WORK?

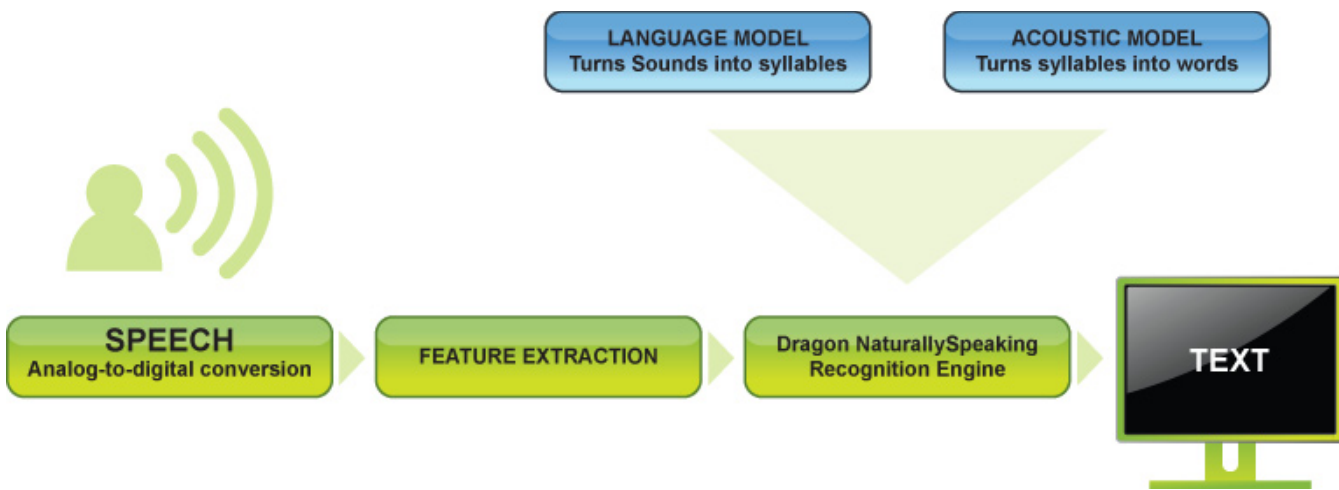
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With speech recognition, claims staff can turn their voices into text with up to 99 percent accuracy using virtually any Windows-based application. The transcribed text appears on the screen three times faster than most people type, speeding the creation of investigation reports, case documents and client correspondence.

In addition, voice commands allow users to control applications and navigate menus or dialog boxes by voice. More advanced speech recognition systems also include custom voice commands that can be created to automate routine tasks, instantly populate fields within template documents, and further streamline the overall claims process.

Speech recognition users within the insurance industry include field agents, adjusters, lawyers, customer service agents, mobile professionals, people with disabilities, transcriptionists, assistants, and other support staff. Each organization, and even the individuals within each organization, use speech recognition for different purposes, based on their responsibilities, workflow, preferences, and other applications used.

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**Figure 1:** How Speech Recognition Works – Speech recognition uses the human voice as the main interface between the user and the computer.

How does it work? Speech recognition software uses the human voice as the main interface between the user and the computer. (See Figure 1) Speaker-dependent speech recognition systems like Dragon NaturallySpeaking Professional create a unique voice profile for each user of the system that contains information about the unique characteristics of each person’s voice. This profile also includes a customized set of words, known as a vocabulary, and user-specific information including software settings and personalized voice commands.

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When users create their profiles, Dragon starts with general models of how the language is spoken, and adapts to how individuals speak and which words they use. This way, the software accommodates users with varying accents and speech patterns and allows users to dictate naturally.

Dragon starts with a standard vocabulary of more than 300, 000 vocabulary entries, including many names of people, places, and institutions. The system also includes basic knowledge of capitalization and other standard typographical rules. But every insurance firm uses specific names, terminology, acronyms, or other vocabulary unique to its specialty or its client base. These unique terms are frequently used in field reports, correspondence, and other claims documents.

To boost accuracy and further speed document turnaround, speech recognition software also allows users (or those who work with them, such as assistants, IT administrators, or trainers) to:

- **Add new vocabulary entries** such as employee names, acronyms, and specialized terminology frequently used in their firm or department
- **Delete entries** that could cause acoustic ambiguity (such as competing spellings like Schaeffer and Schafer)
- **Indicate precisely how items should be capitalized and formatted**, including alternate written forms for various contexts (such “Fig.” instead of “figure” when the word appears before a numeral)
- **Analyze** an individual’s written documents to adapt the user profile’s vocabulary based on writing style and words used

Dragon regularly refines the user’s profile and employs it to accurately determine the words or commands spoken and choose between words that sound alike – resulting in improved recognition accuracy over time.

## SPEED DOCUMENT TURNAROUND

Dragon NaturallySpeaking Professional streamlines time-consuming administrative tasks by serving as a third input option to complement traditional keyboard entry and mouse clicks. Busy agents and adjusters can achieve faster documentation turnaround and automate repetitive processes – just by speaking.

The speed, accuracy, and ease of use of today's speech recognition systems deliver an efficient alternative to traditional approaches for document creation. Simply put, most people can talk faster than they can type. Speech recognition enables claims professionals to create electronic documents at speeds of up to 160 words per minute – three times faster than typing. Dragon never makes a spelling mistake and recognizes your dictations with increasing accuracy the more you use it.

Users just talk to their computers and their words instantly appear in the full Microsoft® Office® suite, as well as Microsoft Internet Explorer, Corel® WordPerfect®, and virtually all other Windows-based applications, including claims tracking systems.

An enterprise deployment of speech recognition allows claims professionals to go beyond dictation to accomplish routine tasks more quickly and efficiently:

### Navigate Applications by Voice

Speech recognition software enables users to command and control the computer desktop by voice. Users simply speak standard commands that prompt the computer to perform an action. For example, a user could say, "Open Microsoft Word" and the PC launches the application, or "Set font size to 18" and the font size is automatically adjusted to the desired size. Menu, sub-menu, and dialog box items (such as buttons and checkboxes) can be controlled hands-free. Users can edit and format their work; launch applications; switch between open windows; and open, save, print, and close files; or cut-and-paste within or between documents. In other words, speech recognition helps to speed up routine tasks on the PC.

Many applications can be easier to use and more effective when deployed in conjunction with speech recognition. Searches, queries, and form-filling are all faster to perform by voice than keyboarding. Document management, document assembly/automation, and claims tracking software programs are all highly conducive to control by speech. Tasks such as text and data entry can be completed by voice in most of the programs without any customization. Other functions can easily be performed using custom voice commands often referred to as "voice macros" (see below).

## GET MORE DONE IN LESS TIME

Dragon provides dictation and workflow automation capabilities to help insurance agents and adjusters get more done in less time:

- **Correct, revise and format text** using intuitive voice commands. Dragon automatically formats items such as prices, addresses, dates, phone/plate/part numbers, codes, units of measure, etc. Users have the ability to customize these formats to meet their unique preferences.
- **Dictate notes anytime, anywhere**, using a handheld digital recorder -- while they are still fresh in their minds -- to produce more detailed claim reports.
- **Access information** in enterprise applications and web sites – entirely by voice – to speed documentation turnaround and improve service to clients.
- **Create email** and manage the overwhelming flow of messages with ease using natural dictation and voice commands (including direct commands for creating Outlook messages and appointments).
- **Navigate and control desktop applications** by voice for new levels of productivity and ease of use.

## Managing Email

Since managing email takes up an increasing amount of everyone's workday, speech recognition software can be used to create, navigate, send, and respond to email by voice using popular programs like Microsoft Outlook® or Lotus Notes. In addition, Dragon NaturallySpeaking Professional contains text-to-speech technology that allows users to have the software read text aloud, which enables them to complete other tasks while listening to their email or documents.

## Work on the Web by Voice

Today's speech recognition programs make it easier than ever for claims staff to search the Web, access information, and navigate Web pages. This includes not only the public Internet, but also private Intranets and other HTML interfaces.

## CONSOLIDATE MULTI-STEP PROCESSES INTO A SINGLE VOICE COMMAND

### Dragon Voice Shortcuts

Dragon NaturallySpeaking Professional enables users to collapse multiple tasks into single voice commands. For example, using the Dragon Voice Shortcuts for Email feature, a claims professional could simply say, "Send email to <contact name(s)>" and Dragon will launch the user's email program, create a new email and put the name(s) the agent said into the "To:" box. (One can even say the name of a distribution list defined in Outlook, such as "New York staff.") Users can also search the Web with a simple voice command such as, "Search the Web for demutualization of mutual insurers," or "Search maps for 1 Wayside Road, Burlington, Massachusetts." It's just as easy to find information on a user's desktop with a command such as, "Find email about the Anderson report."

### Boilerplate Commands

Claims staff spend a considerable amount of time creating and filing documents — many of which share standard elements. As a result, many agents find themselves entering the same information into these documents time and time again. Users can create text blocks—including commonly used phrases, paragraphs, and even graphics—and insert them into documents or emails using a single voice command for faster, easier document creation. These custom commands can also contain "voice fields." In this way, a single voice command can create a complete "template" that can be completed by navigating through each field to fill in variable information (e.g., the name of a client or a rate on a standard client letter or claims template.)

Repetitive tasks take far less time when they're automated with simple voice commands. By simplifying multi-step processes that claims staff performs dozens of times a day, workflow automation can deliver significant productivity gains, especially when multiplied across hundreds of workers enterprise-wide.

### Macro Commands to Perform Tasks

Repetitive tasks, such as data entry or form filling, can be sped up by using speech. In many cases, users who are unfamiliar with complex software programs are more comfortable "telling" the computer what to do rather than trying to master the interface. Macros can be created to enable users to go from field to field by voice, or to perform a sequence of keystrokes or mouse movements. Macros can yield productivity benefits for even the fastest typists in the claims department because they reduce time-consuming, multi-step tasks to a simple voice command.

Creating commands that automate sequences of actions such as the pressing of one or more keystrokes or the opening of a particular web page, folder or document, can be created simply, with no knowledge of programming, via Dragon NaturallySpeaking's command editor tool. In addition, Dragon NaturallySpeaking's command editor gives the option to create sophisticated commands using scripting similar to Microsoft Visual Basic. For example, an organization can build a single voice command that saves an investigation report using a standard naming convention (including the date of creation), emails it to a standard list of recipients within the department for review, and prints out a hard copy at corporate headquarters -- all with a single spoken command such as "Report wrap-up."

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## IMPROVE REPORT QUALITY AND INCREASE PRODUCTIVITY ON THE GO

Since most agents spend a significant amount of time traveling from location to location, Dragon offers an option to capture the material that needs to be transcribed with a digital voice recorder in the field. On-the-go claims agents and adjusters can dictate notes into any Nuance-certified handheld device for automatic transcription when they synch with their\* [see sidebar] PCs back at home or at the office.

Dictate into any Nuance-certified digital voice recorder for automatic transcription when you connect to your PC

After dictating field notes and returning to his laptop or desktop PC, the agent simply transfers the audio files from the device to his PC; although file transfer methods vary, many devices simply plug directly into the USB port of a computer and let one “drag and drop” audio files from the device directly to his PC. Supported audio formats include: .wav, .vox, mp3, .wma, .sri, and .wma files. The user can choose where Dragon will transcribe the text, such as inside a Microsoft Word document.

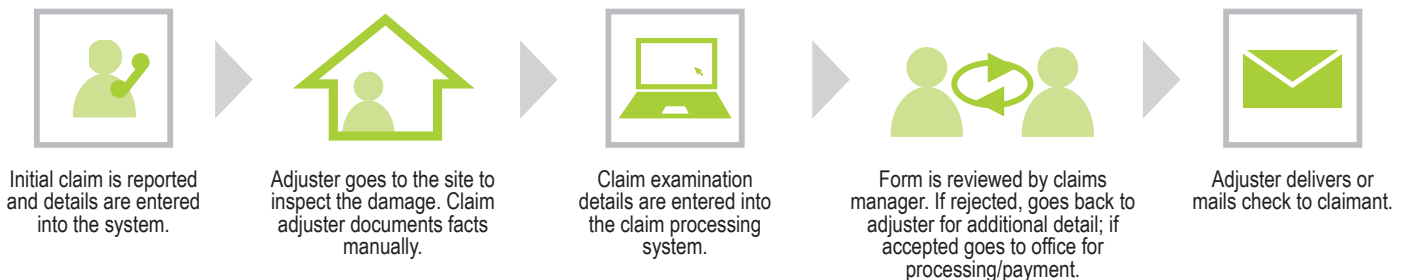
This mobile productivity tool ensures that time spent on the road or off site does not mean even later nights at the office catching up on work. Agents can use in-vehicle and other formerly unproductive time to dictate notes, reports, and other documents — safely and accurately. As a result, they are able to turn around documents quickly for improved client service and increased focus on creating more thorough and accurate content for each report.

An enterprise deployment of speech recognition also allows users to export their user profile via the network or a portable storage device for use on another computer or laptop. This enables users to take advantage of speech recognition anywhere, at anytime, leading to richer content and more detailed reports, since they have access to all their customizations, including special vocabulary and commands.

## STREAMLINE THE CLAIMS PROCESSING WORKFLOW

Insurance companies across the country are using Dragon to streamline the claims processing workflow for dramatic productivity gains and cost savings. In a typical claims workflow, the initial claim is reported by the customer and details are entered into the system. An adjuster goes to the site to inspect the damage and document the facts manually. Next, the claim examination details are entered into the claim processing system. The claim forms are then reviewed by the claims manager. If rejected, the claims form goes back to the adjuster for additional detail. If accepted, the claim goes to the office for processing/payment. The adjuster then delivers or mails the check to the claimant. (See Figure 2)

With Dragon, preparing claim reports and documentation is three times faster than typing, saving each claims agent several hours per day – which doesn’t even factor in the time savings of automating certain tasks within the process. As a result, claims are processed more quickly for improved customer service. In addition, adjusters are able to handle a higher volume of claims and do so with greater thoroughness and higher quality.



**Figure 2:** Sample Claims Process – Preparing reports with Dragon is three times faster than typing, saving each claims agent several hours per day. Claims are processed faster, so adjusters can handle more claims with higher quality.

## REDUCE CLAIMS ADJUSTER TURNOVER

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Since adjusters typically spend 40-50% of their time on the administrative aspects of their jobs, they often have no choice but to complete insurance reports in the evening, a practice that eats into precious personal and family time. Over time, this grueling pace can take its toll, leading to low employee morale and high turnover rates.

Dragon NaturallySpeaking has proven to be an effective solution for boosting adjuster retention by:

- **Cutting documentation time** in half, resulting in several hours of time-savings per day for adjusters
- **Turning formerly idle driving time into productive work** time used to dictate field notes while details are still fresh in the adjuster's mind
- **Streamlining traditional workflow** and eliminating time-consuming keyboard input, enabling adjusters to focus more time and energy on the more interesting and challenging aspects of their jobs
- **Reducing classic strains from keyboarding** (wrists, shoulders, back, and eyes, headaches)

Adjuster burnout and its associated high turnover rates represent a major cost burden and service for insurance companies. Recruiting, hiring and training new adjusters — a process that can take up to five months — not only impacts the bottom line, but it disrupts the quality and continuity of customer service. By significantly reducing administrative demands for overburdened adjusters, Dragon helps alleviate administrative overload, thereby leading to increased retention and better client service.

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## BEYOND CLAIMS ...

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In addition to core claims staff, litigation departments of major insurance companies are using Dragon NaturallySpeaking. This is the case for one of the nation's largest insurance companies, which is headquartered in Los Angeles and operates in 41 states with over 18,000 employees. In this organization the divisional supervising attorney oversees a claims litigation department of 150 people responsible for providing legal services and representation to the company and its clients. Efficiently researching, creating, managing and archiving data related to these legal services is crucial to the department's success.

In order to stay competitive, the organization implemented an electronic case management system to integrate documentation creation and production. However, use of the case management system was hampered because manual typing was still required to populate the system with data. Relying on transcription was simply too costly and time-consuming. Instead, the company installed Dragon NaturallySpeaking on 150 desktops in 32 separate locations.

The supervising attorney estimates the potential to save \$1.2 million a year by eliminating the text processing support function at all of the company's sites.

The cost savings has been substantial. In fact, the supervising attorney estimates the potential to save \$1.2 million a year by eliminating the text processing support function at all of the company's sites.

## SPEECH RECOGNITION FOR THE ENTERPRISE

Speech recognition products intended for personal use simply don't offer the network capabilities required for enterprise deployments. To simplify administration, lower costs, and ensure data security, insurance companies need enterprise-strength tools and applications based on industry standards that can be installed and managed from a central network location. Unlike most off-the-shelf speech recognition products, Dragon NaturallySpeaking Professional is an enterprise-ready application, with administrative tools for managing large user populations and securely managing voice profiles.

Enterprise deployments of Dragon include several components: client software; Nuance Professional Services (including planning, installation, customization, training and support); audio peripherals (such as headsets, handheld digital recorders, and wireless microphones); and enterprise resources (including server and storage resources, back-end system integration, end-user support, and data and profile maintenance). (See Figure 3)

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A successful enterprise speech deployment requires careful attention to user expectations, training and customization. Training – customized to suit any situation and offered both onsite or remotely -- is an important element of an enterprise installation, enabling staff to quickly realize more significant productivity gains and cost savings and maximize their return on investment.

Figure 3: Components of a Dragon Enterprise Installation



In addition, setting realistic expectations has a critical impact on the success or failure of the speech recognition program. While speech recognition enables organizations to automate workflows without disrupting existing processes, there is still a component of change as employees adopt the new technology and transition to the new approach of dictation vs. typing. Professional services can facilitate the change management process, helping to speed and ease the organization's transition and drive higher user adoption rates.

## JUSTIFYING THE EXPENSE

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Dragon NaturallySpeaking Professional can deliver significant return on investment to insurance companies — often in as little as one year. And experience has shown that this kind of ROI is the rule – not the exception. Most companies that purchase Dragon realize improved productivity and ROI almost immediately because:

- **It's easy to use**, allowing most users to be up and running in less than 15 minutes, leading to high adoption rates with minimal training and support costs.
- **It saves time** by enabling users to create reports and other case documentation three times faster than with keyboard and mouse alone.
- **It delivers up to 99% accuracy** out of the gate, letting users quickly create accurate, detailed reports with no spelling errors.
- **It automates and streamlines** repetitive manual processes for productivity increases of up to 300 percent.

Dragon also reduces personnel-related costs. By curbing the notoriously high turnover rates among agents and adjusters, it drives down costs associated with recruiting, hiring, and training new talent. What's more, its accessibility features eliminate other potentially significant personnel-related expenses, including the annual cost of noncompliance with the American Disabilities Act, the cost of Repetitive Strain Injury (RSI) claims, and loss of productivity from RSI and fatigue.

When the benefits of Dragon are multiplied across dozens, hundreds, or even thousands of users enterprise-wide, the cost savings and productivity gains add up quickly.

## ABOUT NUANCE COMMUNICATIONS, INC.

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Nuance is a leading provider of speech and imaging solutions for businesses and consumers around the world. Its technologies, applications and services make the user experience more compelling by transforming the way people interact with information and how they create, share and use documents. Every day, millions of users and thousands of businesses experience Nuance's proven applications and professional services.

For more information, please visit: [www.nuance.com](http://www.nuance.com).