DRAGON
NaturallySpeaking

Dragon Solutions
Enterprise Profile Management

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SUMMARY

Simplifying System Administration and Profile Management for Enterprise Dragon Deployments

In a distributed enterprise, IT professionals are responsible for the administration of software tools deployed across many locations on a variety of computing devices. Without centralized administration capabilities, chaos and frustration can quickly ensue as IT scrambles to manage individual users for each system change. To simplify administration, reduce costs, and ensure data security, organizations need enterprise-strength tools and applications based on industry standards that can be installed and managed from a central network location. The same requirements apply to desktop dictation solutions. Products intended for personal use simply don't offer the network capabilities required for enterprise deployments.

Dragon® NaturallySpeaking® Professional and Dragon® NaturallySpeaking® Legal offer an innovative "Roaming User" feature that dramatically simplifies administration and profile management for enterprise desktop dictation deployments. The convenient enterprise profile management capabilities delivered by the Roaming User feature address many of the challenges faced by system administrators responsible for managing enterprise desktop dictation deployments:

- How can users access their Dragon profile from multiple machines — at home, at the office and in the field?
- How can custom vocabulary be updated from a central location quickly and easily?
- How can common voice macros be distributed to users across the enterprise with optimal efficiency?
- If a secretary, transcriptionist, or some other third party needs to make edits or corrections on behalf of someone else, how do they access the author's user profile?

All these situations and others are easily addressed by Dragon's Roaming User feature.

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USER PROFILES: THE KEY TO DRAGON ACCURACY AND CUSTOMIZATION

When an individual starts working with Dragon, the first step is to create and "train" a user profile. Each profile contains information about the unique characteristics of that person's voice, which Dragon uses to recognize their dictation. Dragon starts with general models of how English is spoken in the US, including regional accent models, and adapts to how an individual speaks (acoustic model) and which words they use (vocabulary and associated language model). This approach accommodates users with varying accents and speech patterns.

Dragon uses this information to accurately determine the words spoken, and chooses between words that sound alike. Every time a Dragon user corrects a word that was not recognized correctly, the software updates his user profile to enable better recognition accuracy over time. The user profile also stores any changes the individual (or administrator) makes to the standard Dragon vocabulary, like additional pronunciations of individual words, specialized words, acronyms, abbreviations, and capitalized phrases. Preferences (optional settings for Dragon's behavior and appearance) and personalized voice commands are also stored within this user profile.

By storing all these elements, the user profile is essential to the quality of each individual's experience, including achieving Dragon's full productivity and ergonomic benefits. As the person's profile is updated to reflect refinements such as new vocabulary items or the correcting of a mis-recognition, Dragon's performance will continue to improve over time.

If an employee uses Dragon without his latest user profile, the software would be unable to recognize some custom commands, personalized vocabulary or individual speech nuances. The employee may be surprised that a last name he recently added is not being recognized; he may also miss important changes to custom commands. Productivity and satisfaction would likely suffer, and correction of the transcribed text would be a more difficult and time-consuming task.

To take advantage of Dragon's improvements over time, and to have a consistent experience, users across the enterprise benefit dramatically from anytime, anywhere access to their Dragon profiles.

With Dragon's enterprise profile management tools, each Dragon user has a single user profile that can be opened from multiple networked machines running Dragon. These "Master Roaming User" profiles are stored on a network location accessible to dictating users across the enterprise. (Note: you must install Dragon on each computer where you plan to have users dictating.) When a person opens his profile on a networked computer, Dragon transfers a copy of his Master Roaming User from that central network location to the local computer. Known as the "Local Roaming User," this copy will be modified locally by corrections and acoustic data (as well as any option changes or custom commands) made during the person's session.

Roaming User in Action
The following scenarios illustrate some of the many opportunities to leverage enterprise profile management. In each case, Dragon's Roaming User feature supports employee dictation from multiple locations and computers, while ensuring centralized control of master user profiles.

SOCIAL SERVICES: A **case worker** uses Dragon to dictate reports at the office using a desktop computer, in the field using a Tablet PC, and at home using a laptop computer. The Roaming User feature allows him to use a local copy of his User Profile from each separate location. When the administrator adds macros to streamline the completion of a new form, the user has immediate access to the voice commands from any PC where Dragon is installed on the network.

PUBLIC SAFETY: A **police officer** uses Dragon to dictate reports in various locations — at the station, at home, and from his patrol car. The officer's profile is updated immediately when the administrator creates new macros that interface with the department's records management system.

LEGAL: A **legal secretary** downloads a local copy of **an attorney's** Roaming User Profile to perform third-party correction on a dictated document that has been automatically transcribed by Dragon. When the transcriptionist finishes the correction process, changes to the Roaming User profile are automatically updated to the attorney's Master User Profile to enable more accurate results the next time he dictates using Dragon.

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USING DRAGON IN MULTIPLE LOCATIONS

Dragon NaturallySpeaking customers often need to dictate from different locations or different machines: at the office, at home or on the road. How can administrators ensure that Dragon will deliver the same level of accuracy and the same access to custom commands and personal vocabulary regardless of the user's location?

The Roaming User feature allows users to dictate from different network locations using a variety of computing devices without having to create (or import) and refine a user profile at each location. System administrators configure Dragon so that a "master" copy for each Dragon profile resides in a central network location. This way, on any PC that can connect to the network (and has Dragon installed), employees have their latest, most refined Dragon profile—Dragon automatically makes a local copy of it from the network's master. When an employee closes his profile on that computer, any changes (such as adding new words to the vocabulary) are automatically saved in the master copy.

In addition to the ability to dictate from multiple locations, it is also possible for an individual to employ a variety of audio input devices ("dictation sources") for his user profile. In other words, a user might select a headset microphone at one computer, an array microphone at another, and a portable recorder for transcription at several computers. By allowing multiple dictation sources for a single user profile, Dragon lets users move from computer to computer regardless of the microphone type or differences in ambient noise.

CENTRALIZED ENTERPRISE PROFILE MANAGEMENT

Thanks to Dragon's Roaming User feature, system administrators can perform enterprise profile management from a central network location. This centralized administration enables them to:

- update and manage user profiles over a network
- distribute customized vocabularies and commands automatically
- control Dragon's optional settings (such as whether Dragon adds one or two spaces after a period)
- automatically synchronize updates and changes via a variety of communication protocols

In many organizations, the Dragon administrator maintains a customized Dragon "vocabulary" for the entire enterprise. This vocabulary contains terms that the employees are likely to dictate (including names of products, unusual proper names, industry- or company-specific terms, acronyms, abbreviations, etc.) along with their special pronunciations and properties as warranted, as well as statistical information about their frequency in the text employees are likely to dictate. Similarly, Dragon administrators often create and maintain a set of "voice macros" for the Dragon users — custom voice commands that can execute even complex sequences of keystrokes and mouse movements — to automate and simplify frequent tasks and boost the productivity and satisfaction of employees.

Because all Master User Profiles are centrally located and maintained, the administrator can automatically refine them with new vocabularies or macros simultaneously. Without the Roaming User feature, users would need to import the customizations into their Dragon profile individually — a less-than-ideal approach that can be time-consuming and inefficient. In addition, enterprise profile management enables system administrators to share customized best practices across the Dragon user community in the enterprise with remarkable speed and ease.

MORE EFFICIENT USE OF NETWORK RESOURCES

Dragon's Roaming User feature also offers distinct advantages to IT administrators for enterprise deployments. First, it minimizes network traffic: if Dragon opens a user profile on a computer where there is already a copy of the Master profile, it downloads only the updates from the Master— not the entire set of files. Similarly, at the end of a dictation or correction session, Dragon uploads only the updates to the Master on the network.

Alternative approaches to enterprise profile management can create potential bandwidth problems and impact network performance. For example, saving profiles to a mapped drive requires users to connect to the network and save the entire profile back to the mapped location after each use. This usually involves 300 to 400 megabytes of data. The Roaming User feature manages and minimizes the amount of data to synchronize, thereby freeing up significant bandwidth for improved network performance.

The Roaming User feature also prevents simultaneous access to user profiles. Dragon automatically displays a warning if there is an attempt to access the same user profile from more than one location at a time. What's more, you can implement username/password protection on user profiles with an Internet Roaming (http or secure http) configuration.

HOW DRAGON SYNCHRONIZES MASTER AND LOCAL ROAMING USERS

Your enterprise IT administrator can configure a central storage device to contain all the Master Roaming User profiles in your organization. By opening their Dragon profile from the central network location, an employee has access to his latest refinements at any computer where Dragon is installed; when he exits Dragon, changes to the profile are automatically copied to that network location. The next time the person opens Dragon, all the saved changes are available — regardless of which computer on the network he uses for dictation.

There are several methods you can use for hosting your Master Roaming User Profiles. You can host them:

- On a file server you connect to over a mapped network drive
- On a file server that you connect to over a UNC (Universal Naming Convention) address
- On a web server that you connect to over HTTP (http://)
- On a secure web server that you connect to over SSL (https://)

Nuance recommends placing the profiles in a shared directory to ensure administrative tasks can be handled most efficiently. These tasks may include scheduling and running the Acoustic and Language Model Optimizer, or upgrading multiple user profiles to a new major release of Dragon.

When a person dictates using a computer not currently connected to a network, all changes are saved to the Local Roaming User; synchronization occurs when the person reconnects the computer to the network containing the Master Roaming User and opens that profile again.

The following changes take place when Local and Master Roaming Users are synchronized:

- Merges into the Master Roaming User vocabulary words added to the Local Roaming User during a dictation session
- Removes from the Master Roaming User vocabulary words deleted from the Local Roaming User
- Copies acoustic data (from files with a .DRA or .NWV extension) from the Local Roaming User and adds them to the Master Roaming User where the data becomes available to the Acoustic Optimizer

• Copies any custom commands created or modified locally (using the MyCommands editor) to the Master Roaming User
• Copies to the Master Roaming User any changes made to Dragon's options, including auto-formatting options

For each Master Roaming User (user profiles stored on the central machine), storage space requirements include the following:

• 30 MB for each set of Roaming User files
• 15 MB for each additional vocabulary you add for this user
• 13 MB for each additional dictation source you add for this user
• 500 MB for Acoustic Optimizer data associated with each dictation source of each user

In addition, for the Local Roaming User, you should plan to have the following space on each PC where the roaming user dictates:

• 30 MB for each set of Roaming User files
• 15 MB for each additional vocabulary you add for this user
• 13 MB for each additional dictation source you add for this user
• 240 MB for Acoustic Optimizer data associated with each dictation source of each user

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