



Unifying Voice Administration

 WhitePaper

Increase Visibility and Control of Multi-Vendor Voice Systems

YOU CAN'T MANAGE WHAT YOU CAN'T SEE.
START SEEING THE FOREST AND THE TREES.

Increase Visibility and Control of Multi-Vendor Voice Systems**Executive Summary**

As VOIP deployments become more prevalent, managing telephony systems and provisioning end-users with the features and privileges they need becomes more complex. Corporate IT and telecom employees, both administrators and managers, must strive to keep track of thousands of details regarding PBX and voice messaging system configuration processes. While administrators and managers face different problems, both groups benefit from increased visibility to voice systems, to the inter-system relationships, and to user profile information.

Unified voice administration applications solve the visibility problem for both administrators and managers. They provide a centralized interface and toolset that enables enterprise provisioning of telephony assets and the administration of multi-vendor corporate PBX and voice messaging systems. By linking related PBX, voice mail, and directory systems, unified voice administration applications provide an enterprise-wide view of all user and system profile data, including elements like directory information, phones, classes of service, voice mailbox settings, and voice distribution lists.

For administrators, unified voice administration provides multi-vendor cross-system visibility which streamlines system management processes. For example, administrators no longer need to log into separate PBX and voice mail systems to change a phone and voice mailbox. Instead, changes to the related fields can be made simultaneously using a single interface. The use of templates and bulk provisioning tools speed multi-system changes and keep data consistent and accurate. The added ability to search, filter, and view system and user information in multiple ways also enables administrators to retrieve data and process changes more quickly.

For managers, the visibility provided to system and user profile data enables a new level of reporting and data capture. This reporting is essential for telecom and IT managers who want to lower operational and inventory costs, analyze past activities and trends, and improve the performance of corporate voice operations. IT managers are also increasingly required to comply with internal policies and audit requirements. Unified voice administration applications provide audit trails and transaction logs to support these compliance processes.

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Introduction

In the world of voice systems, IT and telecom managers need to regain control over the myriad of multi-vendor voice systems proliferating in their network. Management requirements go beyond the need to monitor network availability and quality of service. While those activities are critical, managing the end-users and the systems which serve them is also paramount. Often the key element lacking is visibility to those users and their profile information, regardless of which PBX or voice messaging system serves their location.

The problem is two-fold and different for system administrators and their managers:

1. *IT and telecom administrators who perform system management on PBX and voice messaging systems are often required to use administration applications specific to that system. These vendor-specific applications often have limited functionality and automation capabilities, requiring administrators to execute redundant steps, remember cryptic commands, command line codes, and use manual processes to manage large projects or to allocate telephony resources.*
2. *IT and telecom managers have difficulty managing inventory of telephony assets, measuring the performance of administrators, tracking accuracy and volume of system changes, validating accuracy of user profile data, and analyzing this information to improve the overall quality of voice operations.*

Unified voice administration applications are specifically designed to address both sets of problems for large organizations with multi-vendor PBX and voice messaging environments. Unified voice administration applications provide IT and telecom managers with the information necessary to measure and improve operational performance. For IT and telecom administrators, unified voice administration provides visibility to, and the ability to change, end-user information, profile settings, business rules, and device configurations through a single, centralized GUI.

Unified Voice Administration

Unified voice administration applications provide a centralized interface and toolset that enables enterprise provisioning of telephony assets and the administration of corporate PBX and voice messaging systems.

At the core of a unified voice administration application is a vendor-neutral architecture, with pre-built integrations to many of the leading PBX, voice messaging systems, and directory

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services, using each system's published API. Whenever possible, industry standards like XML and SOAP are used to build the integrations. This allows new system types to be easily added to the infrastructure and then easily synchronized with other existing systems.

With unified voice administration, telecom administrators and managers can:

- ▶ *View global lists of managed systems*
- ▶ *Filter, sort, compare, and analyze related data across record types*
- ▶ *Group available resources into manageable ranges*
- ▶ *View availability of telecom resources and reserve those assets for specific projects*
- ▶ *Perform Moves, Adds, Changes, and Disconnects (MACDs) with fewer errors and a reduced number of steps*
- ▶ *Use templates and other methods for bulk provisioning*
- ▶ *Audit MACD activity*
- ▶ *Manage voice mail distribution lists*
- ▶ *Integrate with Active Directory, linking subscribers to phone or mailbox numbers*
- ▶ *Confirm policy compliance and validate data integrity*
- ▶ *Automate processes for the provisioning of telecom assets, including updating the appropriate user profile information on other critical business systems such as directory services, HR, E-911, etc.*



For Administrators: Global Visibility Streamlines System Management Processes

For companies with multi-vendor communication environments, the already complex process of provisioning telephony assets is compounded. Traditionally, voice system administration teams have been organized in silos according to vendor. But when administrators can only view their environment through a single-vendor or single-product lens, streamlining the steps in the provisioning process and employing best practices is difficult.

A unified voice administration application changes the paradigm. Within the centralized interface, administrators see a hierarchical view of all their voice systems, regardless of vendor. The logistics of system connections, logins, and passwords are all handled securely behind the scenes. To ensure administrators work only within their domain of expertise, role-based permissions can be created and assigned to meet organizational and security requirements.

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The user interface is organized according to different views. Administrators are able to quickly find, sort, and access information for subscribers, assets, or systems in a variety of ways:

- ▶ *Global lists group multiple systems of the same type together, enabling administrators to view records across those systems*
- ▶ *System lists are organized according to the specific name of a system, allowing administrators to quickly drill into a particular system and then a specific record type*
- ▶ *The types of records administrators can view and manage include the following, among many others:*
 - ▶ *Directory numbers*
 - ▶ *Phones*
 - ▶ *Classes of service*
 - ▶ *Voice mailboxes*
 - ▶ *Voice distribution lists and members*
- ▶ *When accessing record lists, administrators have the flexibility to reorder, add, or hide columns and sort records by field in order to customize the view as needed*
- ▶ *Administrators can save these customized views for future use*
- ▶ *Once a particular record is found (e.g., subscriber, phone), administrators can view any related records on linked systems*

Visibility to available assets and resources also gives administrators more efficient ways to organize the voice systems and plan for large-scale organizational changes. For example, “resource management” features enable administrators to set up and reserve ranges of extensions or directory numbers. Reports that show a list of available resources also display the status of related assets on linked systems, helping administrators ensure that when a directory number is assigned, the corresponding mailbox number is also available. Resources can also be automatically “aged”, so that they remain unavailable for a period of time after de-provisioning.

The architecture and functionality of unified voice administration applications enables IT and telecom administrators to change their workflows, streamlining their system management processes. Administrators no longer need to log into one PBX system to change a phone, then log into an associated voice mail system and make the corresponding mailbox change. Instead, they can view those systems together, within one interface, and make changes to the related fields simultaneously. The ability to search, filter, and view system and user information in multiple

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ways also facilitates faster MACD operations and allows each administrator to use the search method that works best for him or her. The ability to create cross-system templates (for example of a standard phone and its corresponding voice mailbox settings) and perform bulk operations (e.g., add/change/delete from file, multiple select and modify) speeds transactions and also keeps data consistent.



For Managers: Global Visibility Enables Trend Reporting and Analysis

Ask an IT or telecom manager a few of the following questions:

- ▶ *How accurate is the data in your PBX or voice messaging systems?*
- ▶ *Does user profile information in the voice mail system reconcile with user information in Active Directory?*
- ▶ *How closely do your voice operations adhere to corporate standards and compliance policies?*
- ▶ *How long does it take to provision your customers with their phones and voice mailboxes? Does it get done right the first time?*

It's often challenging for IT and telecom managers to determine the answers to these questions, regardless of how well they and their administrators know the company's telephony systems. To effectively manage their enterprise environments, managers must have tools and applications which can elevate their analysis to a multi-vendor, multi-system level. Unified voice administration applications do just that by creating an aggregated perspective of the global corporate voice landscape.

With unified voice administration, reports can be created in a variety of different views to help managers analyze their telecom operations. These queries can be ad hoc, scheduled as part of a recurring monitoring process, or used to export data for further manipulation. Examples of reports that can be created with a unified voice administration application include:

- ▶ *Administrator productivity reports*
- ▶ *MACD breakdowns by time, type of activity, or system*
- ▶ *Inventory reports, including unused assets and resource availability*

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- ▶ *Numerous other possible ad-hoc queries using different data combinations*

These types of reports enable managers to:

- ▶ *Audit internal policy compliance*
- ▶ *Improve productivity of existing operations*
- ▶ *Evaluate managed service provider performance*
- ▶ *Evaluate inventory and resource capacity*
- ▶ *Plan for large organizational changes*
- ▶ *Prepare for process automation*
- ▶ *Plan for system migration*
- ▶ *Close security holes*

Increased visibility to the voice system environment also enables managers to improve internal customer service levels. Audit trails identify what type of change was made on the PBX or voice messaging system, what fields were changed on a record (including new and old values), who changed it, and when it was changed. As enterprise telecom managers know, MACDs are a significant expense for large organizations. The MACD audit trails are invaluable for help with troubleshooting and performance measurement. They help managers:

- ▶ *Provide management with more detailed activity reports and an accurate picture of administrator workload*
- ▶ *Take the guesswork out of staffing requirements*
- ▶ *Identify high-cost activities and processes that are potential candidates for refinement or automation*
- ▶ *Make MACD administration more efficient*
- ▶ *For outsourced MACD activity, generating an audit trail; obtaining detailed information to help interpret and reconcile billing*
- ▶ *Troubleshoot problems with phones or voice mailboxes*
- ▶ *Tighten security and oversight of MACD activity*

Unified voice administration applications integrate with numerous multi-vendor PBX and voice messaging systems, enabling a level of cross-system reporting and data capture not available with vendor-specific administrative solutions. This level of reporting is essential for telecom and IT managers who want to improve the performance of their voice systems.

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Are we compatible?

Unimax software is compatible with leading PBX, voice messaging and unified communications systems from Avaya®, Cisco®, Legacy Nortel®, Microsoft®, AVST® and others. For more information on specific system compatibility, please email us at TellMeMore@unimax.com.

Conclusion

Unified voice administration applications are designed specifically to bridge the gaps that are often created by silos of vendor-specific voice systems. By linking PBX and messaging systems from multiple vendors, unified voice administration applications create an enterprise-wide visibility of systems and user profile information that is critical for both IT and telecom administrators and managers.

2nd Nature®, the flagship software product from Unimax Systems, is specifically designed for multi-vendor environments and is the only unified voice administration application able to provide this level of system visibility and provisioning support. With the ability to actually see and manage all systems in one interface, telecom and IT administrators can streamline their processes and improve the planning and allocation of telephony assets. Managers can regain control over their voice environment and implement best practice management techniques, such as metric tracking, inventory management, workload forecasting, audit ability, and policy compliance.

The benefits from unified voice administration applications are not limited to improved system visibility, however. Unified voice administration presents companies with the opportunity to automate numerous aspects of their voice system management and provisioning workflows. Additional associated benefits include lower operational costs, tighter security of the voice environment, and improved service for internal customers.

For more information on Unimax's Unified Voice Administration products and services, please contact us at (800) 886-0390 or by email at TellMeMore@unimax.com. Visit us online at www.unimax.com.