



Application Management and Real Soft, Inc.

Where are we now?

Most IVR Management applications today are either server or channel centric and focused on infrastructure monitoring, alarming, and configuration. Although these applications provide tools essential for managing this environment, they fall short when faced with the complexities involved in the growing number of deployments utilizing multiple IVR servers, locations, applications, and emerging technologies such as VOIP and “soft IVRs” running VXML applications. Equally important has been the inability to provide real-time meaningful data and analysis for measuring the automation impacts as they relate to ROI and customer satisfaction. With fully redundant application servers now becoming the platform of choice, automated voice applications are no longer structured around the concept of a group of channels, ports, or servers associated with incoming telecommunications facilities such as T1s. In today’s environment, an active session becomes the defining object. This active session can reside on any Gateway or Application server and across multiple locations.

Application Management tools must be able to function in an environment that supports both declining (TDM) and emerging (VOIP) infrastructures. Additionally tools must support system engineers, administrators, developers and each business stakeholder. Management and marketing teams must have access to application specific information to determine the effectiveness of their management and marketing strategies. In addition, all stakeholders must be able to get a real-time holistic view of the effectiveness of the automation design, performance, and utilization. This level of information is simply not available in today’s tools. RSI’s new OneManage Application Monitoring Suite seeks to address each of these limitations.

Where are we going?

Telecommunications Management Network (TMN) defines the concept of a manager/agent layer and their roles. These concepts are similar to the ones described in Open Systems Interconnection (OSI) and Common Management Information Protocol (CMIP). Agents live within the managed devices and provide control far exceeding the traditional SNMP alarming functions.

RSI’s concept is for a Manager process to issue directives and receive notifications while an Agent process carries out directives, sends responses, and emits alarms and events. This concept provides a common framework for analysis and can be effective for both voice applications and their infrastructure.

RSI is engaged in an effort to reorganize our existing suite of tools into a single unified approach to Application Management, using the Manager/Agent concept. Our intent is to release a new generation of OneManage with a single Web-based Graphical User Interface (GUI) containing multiple plug-ins that will be licensed to address each necessary capability and feature.

OneManage will provide an application framework enabling complete end-to-end IR Management. The OneManage Application Management suite will contain all of the tools necessary to manage at both the enterprise and application level. Administrators as well as stakeholders will have a common interface to deploy, manage, monitor, and analyze the effectiveness of their investment. The following example illustrates the capabilities and solutions provided with OneManage.



Issue: An ASAB Voice Application supporting an order entry system is functioning on multiple IRs (48 channels) and supporting ASR functionality. The caller is experiencing delays exceeding 30 seconds while waiting for order confirmation playback from the TTS engine.

Solution: Provide a data set including call accounting data, call event logs, hardware utilization, network traffic, application data, and latency from remote or local resources (Host, ASR, ASAB, TTS, Media Server, and PBX) and provide analytic reporting to pinpoint a service level breakdown as well as predict the levels that are necessary to avoid future degradation.

The new release of RSI's enhanced OneManage is scheduled for 2nd Qtr 2005. OneManage will provide enterprise, unified Application Management by enabling and centralizing the following capabilities.

Administration

Provides ease in defining users, assigning passwords, and establishing security access at the menu level. It also provides the mechanism for defining all telecommunications facilities, telephony servers, application servers, speech servers, speech recognition and text to speech (TTS) resources.

Development/Deployment

Document management and a VXML debug tool are two key features to assist in application development. The document management feature affords users a single access point for creating, viewing and managing requirement documents, test plans, application overviews, call flows, project plans, timelines and executive summaries. Each document can be assigned a security level to limit read/write access to authorized personnel.

The OneManage debug tool, CodeVue, gives both the novice and expert developer the ability to view VXML scripts real-time as the application server generates them. Additionally developers will be able to set breakpoints, pause, and view variables and recognition results.

The deployment feature enables Users to define an application package, establish version control, and manage/deploy tone and speech enabled applications across multiple systems and locations. This includes J2EE based VXML applications running on application servers or web servers. From a single WEB based GUI Interface, users can maintain, deploy and rollback multiple versions.

An added feature will provide "off-site" back-up for applications and source code. With the touch of a button, developers/administrators will be able to send "packaged" code to an RSI vaulted database storage facility.

Management

With OneManage administrators can perform daily management of multiple IVR systems across numerous, manage all IVR resources including system cards and services remotely, monitor application channels, trace application channels, view logs, stop and start voice systems, schedule applications and check the status of CTI services.

Analysis/Reporting



Today's business stakeholders lack access to much needed application specific information, e.g., who is calling, why did they call, were their needs met in the automated system, and if not why? This type of information is non-existent in most IVR systems and is generally never available "real-time". We consider this information not only necessary, but critical, in measuring application design and overall effectiveness. The data is essential in measuring the effectiveness of a company's business strategy.

OneManage seeks to close this information gap by giving Users a vehicle to collect additional data, assimilate existing data, and display this information (historical and real-time) in meaningful ways. Users will now have a single WEB based GUI to create, manage and view both system and application reports on an enterprise basis. With OneManage, business stake holders as well as administrators will now have powerful analysis and reporting tools and be able to define and customize these tools to meet their particular needs.

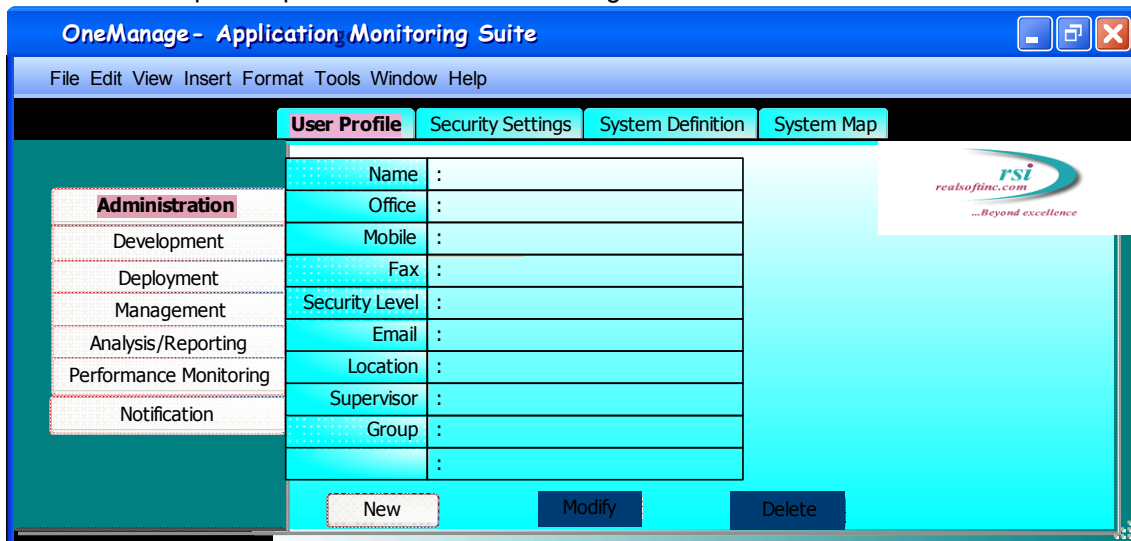
Performance Monitoring

OneManage includes a powerful state-of-the-art application monitoring and alarming tool. Practically every component in an IVR system down to the card level is monitored on a real-time basis. Data networks, voice networks, application servers, speech and TTS resources, and back-end database servers can all be monitored for degradation and failures.

It provides assurances that incoming calls are answered and appropriate personnel are notified in the event of a problem. The OneManage notification engine can also initiate automatic failover. OneManage supports Management Information Base (MIB) groups for commonly used Conversant and IR objects such as TipRing Cards, T1 Cards, SP Cards, Channels, System Monitor and Host Monitor.

Email, SMS, phone and pager alerts can be sent to individual users or groups of users based on the severity of the alarm. Additionally OneManage can send notifications to customers, executives, or other stakeholders when specified events occur. OneManage is truly a flexible and long awaited tool.

A conceptual representation of a OneManage Screen is shown below.



OneManage - Application Monitoring Suite

File Edit View Insert Format Tools Window Help

User Profile Security Settings System Definition System Map

Administration Development Deployment Management Analysis/Reporting Performance Monitoring Notification	Name :	
	Office :	
	Mobile :	
	Fax :	
	Security Level :	
	Email :	
	Location :	
	Supervisor :	
	Group :	
	:	

New Modify Delete

rsi
realsoftinc.com
...Beyond excellence