



Solution Brief: CallXpress for Large and Multi-Site Enterprises

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Challenge

It's a sign of the times: more and more companies are being joined together through mergers or acquisitions. Likewise, their diverse communications infrastructures are being blended together, creating complex and dynamic environments with multi-vendor PBX and groupware infrastructure.

Solution

This scenario is actually a perfect set of conditions for CallXpress® the Unified Communications Solution from AVST. The major strength of CallXpress lies in the solution's interoperability within complex environments. For more than 25 years, CallXpress has been a trusted platform. It delivers the features that large and multi-site enterprises like yours need most—advanced call processing, voice mail, unified messaging, fax, notification and a speech-enabled personal assistant. But don't take our word for it. Ask any of the more than 40,000 customers who trust CallXpress to stay connected—and competitive.



When it comes to supporting your mission-critical applications, it's all about reliability.

CallXpress provides superior levels of reliability through:

Redundant Server Components

CallXpress high-performance servers provide non-stop operations with robust redundancy of components—including hot-swap N+1 redundant power supplies, hot-swap hard drives, and hot-swap cooling fans. These servers stand up to even the most challenging application requirements and the most demanding 24/7 environments. Perhaps even more importantly, our servers protect your capital investment too. Each one is subjected to rigorous validation testing that greatly exceeds industry standards. (Recommended Servers: I-4000 Level 6 or I-6000 Level 7).

Standby Servers

From a solution architecture standpoint, AVST delivers high levels of availability through the use of standby servers that support your company's emergency preparedness and business continuity initiatives. By employing twin servers, one actively handling calls while the other acts as a "warm standby" containing duplicate data, you can even survive complete server failures. If necessary, you can simply re-route phone lines to the standby server without missing a beat.

Built-in System Reliability

The architecture itself enhances system reliability. Whatever the implementation type—voice mail only, unified messaging only, or a combination of the two—CallXpress always maintains its own local directory and message database. And regardless of the status of the LAN or groupware server, CallXpress will always answer calls, take messages and allow the subscribers to access any new messages received.

A comprehensive set of server and processing monitoring tools helps keep tabs on the current health and status of the system, while a separate suite of tools, specially designed by AVST, tests and monitors all of the critical system processes.

Uncompromising Security

One of the biggest concerns with Unified Communications is preventing messages and information from being leaked outside of the company. CallXpress ensures the protection of your most sensitive business information through such features as secure unified messaging and user authentication by utilizing strong password policies and forced password reset.

With secure unified messaging, all voice and fax messages can be stored on the CallXpress server. Voice and fax messages are then accessed and managed from the Web PhoneManager application, rather than from within an e-mail client. For even greater security, access to voice messages can be made completely secure by requiring that the playback of messages be restricted to the telephone or streamed to a Windows based client. When configured in this manner, users never have possession of the actual voice and fax message, and therefore the messages cannot be forwarded outside the company. This way, system administrators have the assurance that voice messages are kept separate from e-mail messages, so that separate rules for confidentiality, discoverability and compliance can be applied. CallXpress offers the most flexible unified messaging architectures available enabling IT managers to choose between server-based, client-based, secure and simplified, or mix and match architectures based on individual user requirements.

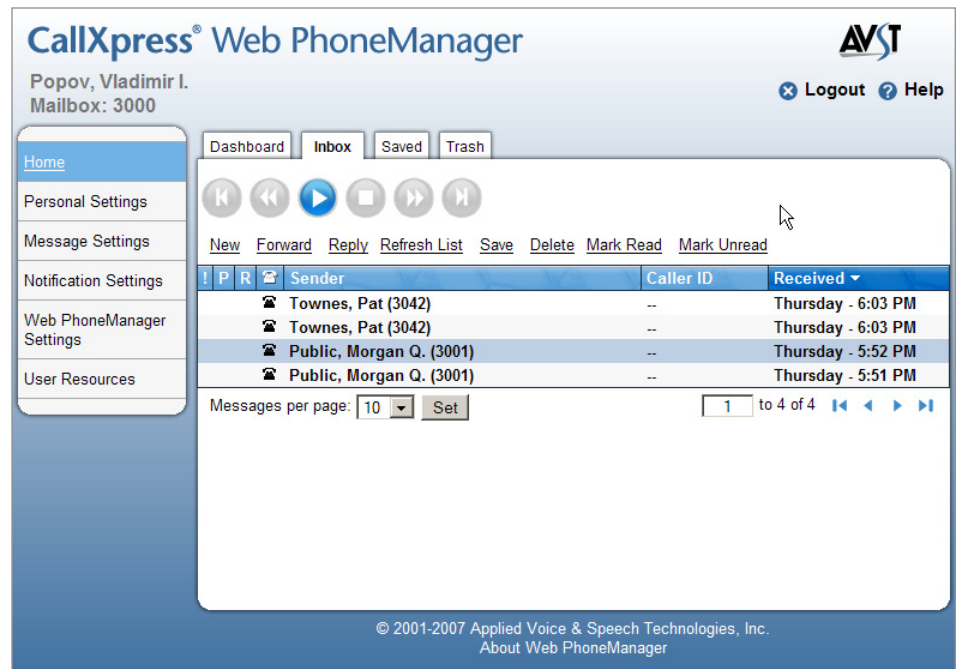


Figure A: Secure Unified Messaging

Ideal for organizations who need to keep voice messages secure by prohibiting forwarding capability of voice mails outside the company.



Exceptional Interoperability & Scalability

Multi-PBX Integration Support

Depending on the size and geographic footprint of the enterprise, there will typically be multiple PBX makes and models and/or Centrex deployed throughout the organization. In this case, creating a single Unified Communications solution requires a high degree of interoperability.

CallXpress has the ability to support multiple PBX integration methods, including SIP/RTP, E1, T1, QSIG, CAS, DPNSS, Digital Station Emulation, Analog, inband signaling, and SMDI. It's also one of the few systems able to support multiple integrations—both traditional telephone systems and IP phone systems—on a single voice-mail server. This allows for greater flexibility when configuring systems to support a multi-site environment. CallXpress also supports the analog Dialogic® Media Gateway as part of its multiple integration support. This allows for a more economical method of centralizing small remote sites.

Multiple e-mail Environment Support

The e-mail clients and stores of most enterprises are typically extensive and quite varied—even within the same geographic footprint.

CallXpress, through its ability to integrate with virtually any e-mail environment such as Microsoft® Outlook®, IBM® Lotus® Notes®, Novell® GroupWise®, Mirapoint®, and any IMAP4 compliant e-mail system, can uniquely deliver Unified Communications capabilities to multi e-mail environments.

Scalability

The solutions you invest in need the ability to grow with you, rather than hold you back. Whether your organization is growing, is involved in a merger or you're looking to centralize your solutions for easier IT management, it's important to invest now in solutions that can scale with your changing requirements.

CallXpress scales to 192 voice ports per server, which can support approximately 20,000 voice mail users, depending on usage and call traffic. CallXpress also supports multiple locations with a network of CallXpress servers for larger user populations.

Comprehensive Administration

Networking

Today's complex environments require a communications system that is truly unified. CallXpress offers powerful networking capabilities that support proprietary high-performance protocols, as well as the standards-based protocols such as AMIS and VPIM. In addition, CallXpress supports Avaya® Message Networking servers, allowing it to participate in older, proprietary Avaya messaging system networks.

With CallXpress networking deployed, you can:

- Send and forward messages to remote users - Users will have the ability to send new messages and forward existing messages to users on the other systems.
- Utilize cross-system distribution lists - The systems will support distribution lists that contain members from the other systems.
- Reply to cross-site messages - Users will have the ability to reply to messages sent from other users at other sites.

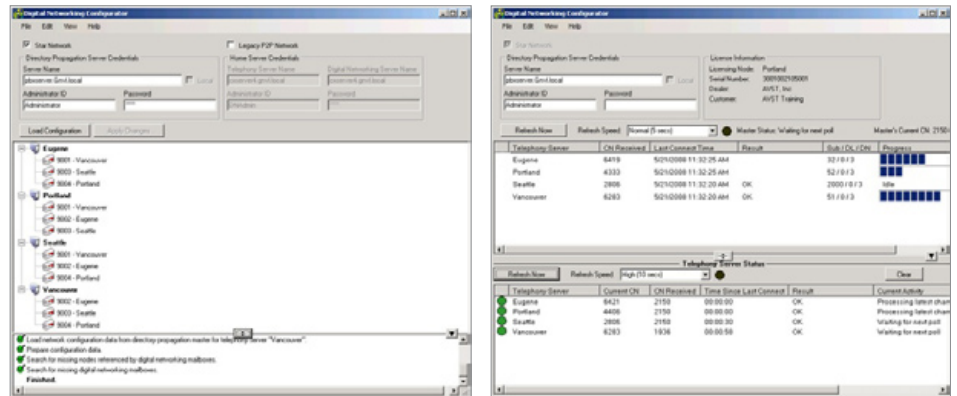


Figure B: Digital Networking

Digital Networking allows you to combine a number of CallXpress servers into a single, coordinated messaging system that serves an entire enterprise. Easy-to-view progress bars keep you updated when activity is underway between the master server and other nodes in the network.

Comprehensive Administration

Global User Administration

Ever-tightening budgets are creating an even greater demand for administrative tools that can increase productivity. These tools must have the capability to deliver exceptional service through the centralization of application administration, as well as to provision various levels of administrative access, depending on the criticality and nature of various administrative tasks.

CallXpress allows administrators the ability to administer multiple CallXpress systems in a single program window. This greatly simplifies administrator training and ongoing maintenance. With Global User Administration, an administrator can:

- View all the mailboxes from each individual server, one at a time
- View all the mailboxes from all of the servers simultaneously
- Make changes to single or multiple mailboxes on a single server
- Make changes that span mailboxes on multiple servers
- Move users from one server to another

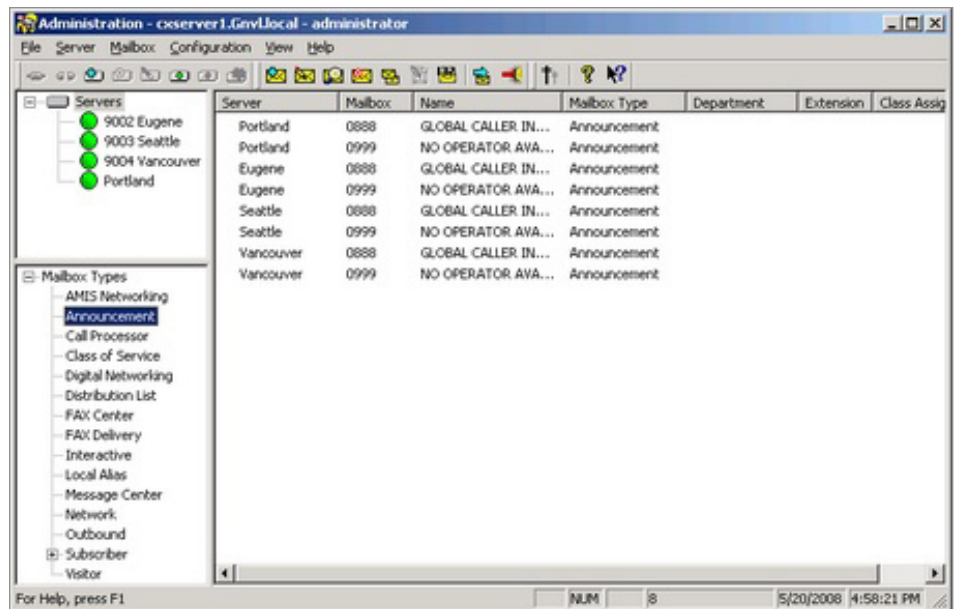


Figure C: Global User Administration

This example demonstrates the ability to manage multiple announcements from four servers simultaneously.

Comprehensive Administration

Reporting

No one knows your business better than you do. That's why CallXpress provides you with the flexibility to report on communication data in a format that will truly help you manage your business better. In addition to providing 20+ standard reports, CallXpress supports custom reports through the popular Crystal Reports package that can produce a final report, or export data to other popular reporting tools.

Automated Attendant Usage Report					
For Mailbox Range: 0000 to 9999					
For Period From: 3/15/2005 Through: 3/29/2005					
0000 Key					
1	Blind Transfer / 4200	30	F	Subscriber Mfg	0
1	Key Overlay	87	A	UnDefnd	0
2	On To CF / 0200	14	B	UnDefnd	0
3	On To CF / 0877	114	C	Answer Manager / 1111	0
4	Blind Transfer / 0000	3	D	UnDefnd	0
5	On To CF / 0800	0	*	Wgrp	73
6	On To CF / 0800	3	#	Answer Manager	45
7	Answer Manager / 000000	0	TO	Blind Transfer / 4200	20
8	Blind Transfer / 0000	1	FAX	Subscriber Fax / 0470P	0
0100 Key					
0	Subscriber Mfg / 4030	1	F	Subscriber Mfg	0
1	Key Overlay	18	A	UnDefnd	0
2	On To CF / 0241	1	B	UnDefnd	0
3	On To CF / 0877	22	C	Answer Manager / 1111	0
4	Blind Transfer / 0000	1	D	UnDefnd	0
5	On To CF / 0800	0	*	Wgrp	22
6	On To CF / 0800	1	#	Answer Manager	47
7	UnDefnd	0	TO	Subscriber Mfg / 4030	4
8	Answer Manager	0	FAX	Subscriber Fax / 0400P	0
0100 Mail Subs Coming Out Key					
0	Transfer / 1300	0	F	UnDefnd	0
1	On To CF / 0241	8	A	UnDefnd	0
2	Blind Transfer / 0302	3	B	UnDefnd	0
3	Blind Transfer / 0419	0	C	UnDefnd	0
4	UnDefnd	0	D	UnDefnd	0
5	UnDefnd	0	*	On Answer-Make	0
6	On To CF / 0240	1	#	UnDefnd	0
7	UnDefnd	0	TO	On Answer-Make	0
8	UnDefnd	0	FAX	UnDefnd	0
N Inbr: *Missing Data:					

Figure E: Automated Attendant Usage Report

MAILBOX USAGE REPORT					
For Mailbox Range: 0041 to 0087					
For the Period: 3/15/2005 through: 3/29/2005					
MAILBOX 0041					
	From	Time	Line	Time Elapsed	Exit Info
3/15/2005	12:00:10	10		00:00:10	Transfered
3/15/2005	12:12:13	13		00:00:19	Transfered
3/15/2005	13:17:51	6		00:00:10	Transfered
3/15/2005	13:20:53	1		00:00:12	Transfered
3/15/2005	14:20:40	5		00:00:10	Transfered
3/15/2005	14:29:39	80		00:00:22	Transfered
3/15/2005	14:30:36	14		00:00:17	Transfered
3/15/2005	16:04:16	8		00:00:17	Transfered
3/15/2005	08:53:51	80		00:00:31	Transfered
Total Logins To Mailbox 0041: 9				00:02:37	
MAILBOX 0045					
	From	Time	Line	Time Elapsed	Exit Info
3/15/2005	07:43:40	15		00:00:11	LogOff
3/15/2005	08:42:24	15		00:00:19	LogOff
3/15/2005	10:08:42	13		00:00:00	LogOff
3/15/2005	08:00:36	16		00:00:00	LogOff
3/15/2005	08:38:38	4		00:00:26	LogOff
3/15/2005	11:41:04	15		00:02:21	Transfer
3/15/2005	20:36:52	7		00:04:33	LogOff
3/15/2005	21:39:29	8		00:02:31	LogOff
3/15/2005	05:14:11	13		00:12:10	LogOff
3/15/2005	05:30:17	14		00:00:12	LogOff
3/15/2005	20:27:24	4		00:01:47	LogOff
3/15/2005	05:46:21	3		00:01:48	LogOff
3/15/2005	17:37:51	9		00:02:11	Transfer
3/15/2005	20:02:01	8		00:01:16	Transfer
3/15/2005	23:04:49	11		00:02:17	LogOff
3/15/2005	11:04:06	10		00:00:34	LogOff
3/15/2005	11:04:46	3		00:00:09	LogOff
3/15/2005	10:03:21	3		00:00:31	LogOff
Total Logins To Mailbox 0045: 19				00:44:39	
MAILBOX 0046					
	From	Time	Line	Time Elapsed	Exit Info
3/15/2005	12:28:29			***:1:173	LogOff
				1:0:17	LogOff
					Log

Figure D: Mailbox Usage Report

Call Handling Statistics Report		
For the Period: 7/7/2005 through: 7/20/2005		
Attendant Calls		
Calls Answered:	15024	Percentage
Caller dialed during greeting:	264	2
Caller hung up during greeting:	14726	98
Greeting Complete:	34	0
Total Transfers:	205	
Transfer By Timeout:	29	14
"O" Key for Operator:	33	16
Single key requests (except "O"):	12	6
Full Extension Requests:	127	62
Virtual Extension:	4	2
Results of Transfers:	201	
Line Busy:	0	0
Ring No Answer:	0	0
Call Blocking:	20	10
Rejected:	0	0
Illegal Number:	0	0
Call Connected:	177	88
Virtual Extension:	4	2
Directed:	0	0
Held Initiated:	0	
Call Connected:	0	0
Message Taken:	0	0
Held Abandoned:	0	0
Diverted Calls:	0	
Message Taken:	0	0
Internal Transfer:	0	0
External Transfer:	0	0
Disconnected:	0	0
Call Activity		
Total	15979	
Attendant Calls:	15024	
Integrated Messaging Calls:	899	
System Calls:	56	
Total Messages Taken:	341	
Directory Requests:	105	

Figure F: Call Handling Statistics Report



CallXpress: The Ideal Unified Communication Solution for Large and Multi-site Enterprises.

In today's increasing complex IT environment, there is no margin for error when it comes to selecting the right Unified Communication solution for your enterprise. It must deliver reliability, provide security, promote interoperability and simplify administration—all without increasing costs. Clearly, CallXpress from AVST is up to the challenge.

For More Information

For over 25 years, AVST has been shaping the evolution of communications, with more than 40,000 installations worldwide. So as the world of communications advances, you can be assured that AVST's award winning products have your future covered. To learn more visit www.avst.com or contact us at +1.949.699.2300.



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