# EXHIBIT 3 TO DECLARATION OF ROBERT LEONARD

#### FORA.tv

November 27, 2007 Tuesday 5:33 PM EST

#### Force Reductions and Redeployment: Part 2

LENGTH: 1352 words

View Video Jul. 29, 2009 (delivered by Newstex) -- Transcript: Florida TV it's the world's. It's thinking -- And -- and -- to me personally. Tenets of a real privilege for me to contribute to it anyway. Meanwhile back at the grand -- US and Russian. Nuclear forces are continuing to be -- flight

A large scale nuclear war with each other. -- on short notice. How short it is this -- If the US and the Russian national command centers have launched borders right now to -- over missiles. Without any prior notice her preparation how long would it take to fire them. And how much

-- And a lot cancers -- The answer is that. -- forces could be salvos in one to two minutes. And within about fifteen minutes. -- the Russell -- missiles could be part. -- -- point 500 words that'll

Be equivalent to something like a 100000 Hiroshima bombs. Or three times more firepower than. Is needed to -- 25% of the populations of the United States. Europe Russia and China component. This short fuse

Runs from the bottom to the top of the chain of command.

In Russia and the United States. As the two sides today still strained to provide a capability. For launch on warning. Much of the decision process within these command systems

This checklist proven -- wrote it's really quasi automatic. The early warning crews. Are labour -- to meet a three -- -- warrant. For assessing whether. Attack indications from surveillance sensors are real or false

They run through -- struggle every day. If there's an assessment that North American it is under the -- nuclear attack. To -- an -- Strategic command and Omaha. And is allowed. As little as three minutes to brief the president on his options and -- consequences

And then the president has us between zero and twelve minutes. To absorb the information and choose. Course of action. That's the situation today. The dealer encrypt went in this short -- by hours

Days weeks months even years. Recruit and would remove the threat of sudden deliberate attack and their parts caught the gritty and not to. These mutually reinforcing. -- it and it will also fire ourselves a wide margin of safety against mistaken. And unauthorized launch

And even theft of nuclear weapons. The -- -- postures. Keep hundreds of weapons and constant motion in the field exposing them. To capturing -- the most horrible. Stage of their operation that is transportation

It -- get -- until. -- postures are stood down and walked now. The Nunn Lugar program will be him strong. And in my estimation will ultimately -- In my paper -- present for a -- -- options there my favorite through twenty others to consider. You can view them as alternative choices -- -- eighth

-- We improved. Step one. Immediately replies the -- plans eliminate massive attack options and thereby eliminating the first right there. For strike threat. And also eliminate don't launch on war

And -- simple changes in emergency more seizures nothing complicated to accomplish this. The missiles could also -- to do targeted stripped of all work time -- points. Many -- you probably think of that has already happened during. Clinton Yeltsin years but it really shouldn't happen. His first up with two victories to reverse -- -- side of it gradually

It's. And operates -- Step through. In the -- immediately isolates. All silo based missiles from external launch control as was done in 91 by President Bush. -- The alert almost half of the minute media works almost overnight

And submarines and see what -- -- from installing a critical electronic component. Known as -- which would put food. -- Both of these actions -- buy a large margin of safety and requires these two reverse. And both can be verified in meaningful ways. Step three

Over the next one to three years separates. All warheads from their delivery vehicles but. Store them inside empty. Silos and -- to -- Trident subs -- each -- of eleven to with a single war and each. Plus eleven tubes with -- -- missiles

And two -- with cranes. For re meeting -- -- the missiles that seat. And a national emergency. -- We're minuteman. After the silos

House -- armed missiles the other app store the warheads of those missiles. It's a scheme that extends launch time -- weeks to months -- -- insurers the survivability of the forces because of the dispersion and protection afforded it. Let it lends itself to -- adequate purification in his deeply reduces the civilians and those. Role of nuclear weapons and our national securities. Step four -- -- the big -- He has to transfer all nuclear warheads from any combat field appointment

To storage facilities on land. This consolidation of warheads. Under strict surveillance and purification. Combined with a lengthy. Time for reconstitution

Which would be weeks to months. We greatly marginalized nuclear weapons and represented -- can slide down the -- -- elimination. He would also put their arsenals and -- fully walked around -- this that would be optimal. For preventing the accidental. Or unauthorized use or theft of nuclear weapons

Now. As the people lays out this is -- -- that must be articulate with great caution because of the potentially. Extreme vulnerability of -- depots to break out -- attack by even a small number. Nuclear weapons or even by conventional forces. So verification must be very effective corporate

And since all of the people -- personals. Our become significant in that situation. All of them also. Eight participants. We also -- have to impose some constraints on offensive

Conventional operations. So we're just wrap up -- emphasizing again. Keeping one weapon much less thousands. Ready to acquire. Upon the receipt

Short. Computer. -- Signals which is the current situation. Is inherently risky. And it's especially so in an age of terrorism and information worker

It's clearly. Undeniably in the strongly in the US and Russian interest to stand -- their forces. And work together to create. Really -- a universal health food. Against anyone ever -- nuclear weapons on -- -- the points

I want to express. At the same thing you play through it and updated it. We have real expert here and internal work and are not designed the same way booted. -- there -- some similar reasons. Rather sharp differences and the patent

Suggestions. Are things on the Russian side that would be more or less comparable terms aren't really there -- So -- very sharp he's inventories in the way the two sides operate nuclear which was there's. Probably about somebody who -- We'll -- somebody in the -- On the on the roof and 01 on both sides abuse. Of well. All of these steps you know them

All off. Removing. Messy but attack options won't work -- Got real. Regulatory -- so -- remotely critical components from. Something like and -- In the case of the United States and burgers and electronic mode component that

Converts. DC to AC power to allow the Westinghouse. Steam pressure generates generous to be ignited. Two two -- to propel them. The missile

Two into the surface. There -- -- opponent and I've looked into a lot of Russian auctions and some of them are analyzed -- This -- boat. Taking. Were -- off missiles and storing them inside of submarine to tightening wise. What can work uniquely on the US side because

Russian missiles and warheads or -- medically sealed inside there. Tubes as I understand it -- more access to them but there are other options that general working in his book. -- -- Provide comparable -- You're on our side in the course lastly there were -- taken off the submarine wouldn't let me storage. And it's securely submit. Well positioned

Well thought. Marbles so greens and -- and I -- you. Gordon yeah it. Europe and you. Obviously and -- like that Bill Perry

It's. Secretary. You mentioned president. -- Command. -- I started working -- -- problems

More than ten years ago -- But don't -- I don't what to do. And resilience and dissidents -- The -- worked out okay. Problems on our -- -- Do these -- -- from Google. (NASDAQ:GOOG) -- In theory you consumer moment but it truer picture of you saw your review but symbolism Martin spokesman -- you've got pu View the video.

Newstex ID: FORA-9026-36816115

LOAD-DATE: August 3, 2009

LANGUAGE: ENGLISH

NOTES: The views expressed in transcripts distributed by Newstex and its re-distributors ("Video on Demand Transcripts") are solely those of the speaker expressing such views in the related video and not necessarily the views of Newstex or its re-distributors. Video on Demand Transcripts containing audio expressions from such speakers are generated using computerized methods that inevitably are subject to technical limitations, and thus are provided "AS IS", with no warranties, and confer no rights. The material and information provided in Video on Demand Transcripts are for general information only and should not, in any respect, be relied on as professional advice. No content in such Video on Demand Transcript is "read and approved" before it is posted. Accordingly, neither Newstex nor its redistributors make any claims, promises or guarantees about the accuracy, completeness, or adequacy of the information contained therein or linked to from such transcripts, nor take responsibility for any aspect of such link-to content. All content in Video on Demand Transcripts shall be construed as speaker-based content and commentary. Accordingly, no warranties or other guarantees is offered as to the quality of the opinions, commentary or anything else offered on such Video on Demand Transcript. Reader's comments reflect his or her individual opinion and publication within Video on Demand Transcripts shall not infer or connote an endorsement by Newstex or its re-distributors of such reader's comments or views. Newstex and its re-distributors expressly reserve the right to delete posts and comments at its and their sole discretion.

PUBLICATION-TYPE: Web Blog

Copyright 2007 Newstex LLC All Rights Reserved Newstex Web Blogs Copyright 2007 FORA.tv

#### Charlotte Observer (North Carolina)

#### October 21, 2007 Sunday THREE EDITION

#### HEALTH NOTES

**BYLINE: HEATHER SOMERVILLE** 

SECTION: YORK; Health Notes; Pg. 13Y

LENGTH: 876 words

#### ID'ing students with special needs

Scott Ardoin, an assistant professor at USC Columbia, will hold a lecture Monday at 5:30 p.m. at the Carole Ray Dowling Center at USC Lancaster, 509 Hubbard Drive, Lancaster. The lecture is titled: "New Model to Identify Students with Special Needs and Recommendations for Intervention." The event is free.

Dinner will be provided by Limericks. One and a half hours of continuing education credit are available for marriage and family therapists, licensed professional counselors and psycho-educational specialists for a \$10 fee. Details: Mark Coe at 803-313-7057.

#### 1-day camp for grieving teens

Hospice & Community Care introduces Camp Hopeful, a one-day grief support camp for teenagers, 9 a.m.-3 p.m. Friday at 2275 India Hook Road, Rock Hill. The free camp will use art, music, storytelling and activities in a group setting to help grieving teens ages 13-18. Lunch will be provided. Register by Thursday; 803-329-1500 or 800-895-CARE.

#### Prescription drug discount cards

United Way of York County is distributing more than 7,000 free FamilyWize prescription drug discount cards to help people without prescription coverage.

Many pharmacies in York County accept these prescription drug discount cards and have them available.

You can print a card by going to www.familywize.com, and you can also look up drug prices and the list of participating pharmacies. Discount cards may be obtained from one of 28 local participating pharmacies, or by calling United Way of York County at 803-324-2735

#### Motorcycle safety course for novices

Cox's Harley-Davidson will bring the Rider's Edge Motorcycle Safety course to York Technical College, 452 S. Anderson Road, Rock Hill. The course is designed for novice riders and provides instruction on basic motorcycle riding technique, safety gear and protective measures.

Participants must be eligible for a motorcycle driving license and be able to ride a bicycle. Motorcycles and approved helmets will be provided. The four-day course, which is split between the York Technical College driving range and the Cox's Harley-Davidson classroom, runs Oct. 26-29 or Nov. 9-12 and is \$325, including two catered lunches. Sessions run Friday and Monday, 5:30-8:30 p.m., and Saturday and Sunday, 8 a.m.-5 p.m.

To register, contact Pam Weatherford at 803-329-8029or pweatherford@yorktech.com. Space is limited to 12 participants.

\*

Nutrition session set for Thursday

Total Nutrition Technology will host a group nutrition workshop called "Why We Eat What We Eat: Understanding the Relationship Between Emotions and Food" 7-8:30 p.m. Thursday at Trinity Bible Church, 914 Cherry Road, Rock Hill.

The workshop, which costs \$40, will explore participants' emotions and how it affects their food choices. To register, contact Amy Townsend of Total Nutrition Technology at 803-980-0480.

Details: www.tntgetfit.com.

\*

Invitation to tour fire departments

During October, the Rock Hill Fire Department invites schools, churches, day cares and individual groups to tour one of the five city fire stations or to have a truck visit their facility and discuss fire-safety tips and demonstrate equipment. For scheduling, contact Jan at 803-329-7220 or lgarris@ci.rock-hill.sc.us Monday through Friday, 8 a.m.-5 p.m.

\*

Food Lion, Bloom offer flu shots

Food Lion and Bloom stores have partnered with Maxim Health Systems to offer flu shots to customers this fall. Pricing for vaccinations: influenza shot, \$30; influenza shot with MVP card, \$27; pneumonia shot, \$40.

For store locations, go to www.foodlion.com/apps/Store Locator/ or www.shop bloom.com/YourBloom/Store Sear-chResults.aspx.

Piedmont East Urgent Care, 760 Addison Drive in Rock Hill, also is offering flu shots for \$25; for patients covered by Medicare, claims will be submitted on their behalf.

ķ

5-week grief support group

Hospice & Community Care will offer a five-week support group on Tuesdays from 3 to 4 p.m. starting Nov. 6. Adults who have recently experienced a loss can register for the group with Hospice & Community Care at 803-329-1500 or 800-895-CARE, where further details will be provided. Meetings will include discussions on dealing with grief, remembering loved ones and identifying changes.

More information, www.Hos piceCommunityCare.org or info@hospicecommunitycare.org.

\*

Blood drives

The American Red Cross will hold these blood drives:

Monday, 4-8:30 p.m., Allison Creek Presbyterian Church, 5780 Allison Creek Road, York.

Wednesday, 2-7:30 p.m., St. Philip Neri Catholic Church, 292 Munn Road, Fort Mill.

Wednesday, 11 a.m.-3:30 p.m., Springs Memorial Hospital, 800 W. Meeting St., Lancaster.

Friday, 2:30-7 p.m., BestBuy, 1775 Chamberside Drive, Rock Hill.

Friday, 3-7:30 p.m., Union Baptist Church, 1195 Hands Mill Highway, York.

Oct. 30, 2:30-7:30 p.m., Oakdale Elementary School, 1129 Oakdale Road, Rock Hill.

Oct. 31, 1:30-6 p.m., Kohl's, 1522 Meeting Blvd., Rock Hill.

Oct. 31, 7:30 a.m.-12:30 p.m., Comporium, 332 Main St., Rock Hill.

Send your Health Notes to The Charlotte Observer, York Bureau, 132 W. Main St., Rock Hill, SC, 29730; call 803-326-4300; or e-mail yorkobs@charlotteobserver.com.

LOAD-DATE: October 22, 2007

LANGUAGE: ENGLISH

**TYPE: BRIEF** 

Copyright 2007 The Charlotte Observer All Rights Reserved

#### Gizmodo

May 3, 2007 Thursday 8:00 PM EST

## Cellphones: Nokia N75 Review and Gallery: Hands on the First Official N-Series Phone

LENGTH: 703 words

May 3, 2007 (http://gizmodo.com/|Gizmodo delivered by Newstex) -- This morning, I woke up to find a virginal No-kia N75, still in its shrink wrap, delivered to my waiting arms, waiting to be unpacked, clicked through and reviewed. A refresher for those of you who haven't been paying attention: The series 60 Symbian phone is notable because it's the first N-series Nokia to be picked up by a US carrier, it takes advantage of Cingy's UMTS 850 / 1900 to rock 3G speeds, and it's packed with the N-series multimedia goodness like the 2MP camera, 352 x 288 pixel video cam. It's a potent handset, and you should be glad it's here in the US and not yet another business oriented smartphone. Like its bigger brother, there are endless lists of features worth knowing about: In fact, it has most of the main features the N95 does, minus the more potent camera and GPS, and video podcasts. But with 3G network speeds, and a somehow snappier feeling OS. And it's subsidized at \$200 after \$50 rebate, with a 2-year contract, so it's about 1/4 the price of the N95 flagship. Before you dive into the gallery tour below, you'll be happy to know this: Even though carriers have traditionally been pretty scared of the openness and power of the N-series Nokia phones, Cingular hasn't neutered the N75's smartphone-ness.

Here's a gallery of the hardware, screenshots, and even some sample shots taken with the camera phone. gallery-Post('n75', 12, 'Cingular Nokia N75'); And here's a complete rundown of what the powerful phone has to offer:Sure the menus are tarted up with Cingular branded stores and many of the powerful apps, like the Office doc readers, are really trial ware. But you can go ahead and install your J2ME and S60 apps, like the Google Maps, GMail, Shozu, and Opera browser we did. And you can transfer to and browse the file system over Bluetooth. The music section, which the N95 doesn't have, is particularly interesting. There's a pay per month service for identifying music (ala Sony (NYSE:SNE) Ericsson's (NASDAQ:ERICY) Free TrackID). And a link to the Yahoo (NASDAQ:YHOO) Unlimited Music Store, which didn't work (despite the link on the phone, you can only sideload.) The link to the nav software was borked, too. (Maybe full N75 network support goes live tomorrow.) Here's a list of the mountain of functions the phone has:

Video Download (Browser linked to Real player, free clips)

Messaging (SMS, TXT)

Call Log

MEdia Net (Browser)

Mall (Buy media crap)

Music (Interesting music app menu)

My Stuff (Media Gallery for images, music and vids)

Address book

Games and Apps

IM & EMail (Email: Bellsouth, AT&T, Yahoo, AOL, AIM, MSN, Chat: AIM, MSN, Yahoo, with logging) Tools

Notes

Clock

Camera

Voice Recorder

Calendar

Web Browser

**Tutorial** 

Flash Player

Calculator

Cellphones: Nokia N75 Review and Gallery: Hands on the First Official N-Series Phone Gizmodo May 3, 2007 Thursday 8:00 PM EST

Adobe PDF Reader

Quick Office (Trialware for office format reader)

Zip Utility

Converter

Help

About

Radio

Realplayer

Settings

Speed Dial

Voice Mail

Transfer (From one symbian phone to another)

**Profiles** 

Config

Voice Command

3d Tones

Themes

Voice Aid

Infrared

Bluetooth

Data Cable Modes

File Manager

App Manager

Memory Manager

Connection Manager

Speech

Msg Reader

Dev. Manager

Sync Music

Music (files, playback)

Music ID (Subscription, \$4 a month)

MobiRadio

Shop Music (Seems useless)

Music Videos (Ditto)

Billboard (More content)

Community

Music Apps (store)

Games and Apps (this is where your j2me and S60 apps show up after you've installed them)

Lifeblog (uploads all your images and text to a typepad blog, over the network)

Ebay Trial (Ebay app)

Lumines

Tetris

3d Pool

MobiTV

And all the other apps I installed. The speakers are tooth sized, but super loud. And the camera needs a lens cover, because when it get dirty, shots end up looking terrible. But clean 2mp shots are great, if not a little grainy compared to a full digicam. Best results occur when you're using the shot mode, white balance, or flash. The video/image modes are annoying to switch between. And I like the sequence/time lapse mode. (See the samples in my gallery.) Overall, good job Cingular for not messing up a good thing. I highly recommend this phone. – Brian Lam <a href="http://www.nokiausa.com/support/phones/main/1,2836,N75,00.html">http://www.nokiausa.com/support/phones/main/1,2836,N75,00.html</a> [Nokia]

LOAD-DATE: May 5, 2007

LANGUAGE: ENGLISH

Cellphones: Nokia N75 Review and Gallery: Hands on the First Official N-Series Phone Gizmodo May 3, 2007 Thursday 8:00 PM EST

NOTES: The views expressed on blogs distributed by Newstex and its re-distributors ("Blogs via Newstex") are solely the author's and not necessarily the views of Newstex or its re-distributors. Posts from such authors are provided "AS IS", with no warranties, and confer no rights. The material and information provided in Blogs via Newstex are for general information only and should not, in any respect, be relied on as professional advice. No content on such Blogs via Newstex is "read and approved" before it is posted. Accordingly, neither Newstex nor its re-distributors make any claims, promises or guarantees about the accuracy, completeness, or adequacy of the information contained therein or linked to from such blogs, nor take responsibility for any aspect of such blog content. All content on Blogs via Newstex shall be construed as author-based content and commentary. Accordingly, no warranties or other guarantees will be offered as to the quality of the opinions, commentary or anything else offered on such Blogs via Newstex. Reader's comments reflect their individual opinion and their publication within Blogs via Newstex shall not infer or connote an endorsement by Newstex or its re-distributors of such reader's comments or views. Newstex and its re-distributors expressly reserve the right to delete posts and comments at its and their sole discretion.

PUBLICATION-TYPE: Web Blog

Copyright 2007 Newstex LLC All Rights Reserved Newstex Web Blogs Copyright 2007 Gizmodo

#### FD (Fair Disclosure) Wire

#### February 28, 2007 Wednesday

## Salesforce.com, Inc. at Goldman Sachs Technology Investment Symposium - Final

LENGTH: 6059 words

RICK SHERLUND, ANALYST, GOLDMAN SACHS: Welcome to day two. It's a pleasure to have management of salesforce.com with us. We have Steve Cakebread, the CFO, and David Havlek, the Vice President of Investor Relations. So, welcome.

What we'd like to do is keep it a little basic in this session and just talk a little bit about, for those that might not be as familiar, some of the basics of the business.

RICK SHERLUND: Steve, could we start out and talk about how many customers you have using the CRM product, and are there certain parts of the product that they use more? And then let's talk a little bit about AppExchange and AppEx, the ecosystem, and we'll kind of build up from there.

STEVE CAKEBREAD, CFO, SALESFORCE.COM: Just in terms of basics, one of the couple tenets that I'd like you to remember about our business, and we talk about this a lot, and you can see that on our website, is the concept of multitenancy. That's where a subscriber is using the same software as everybody else is in the world in the same environment on the same set of computers, essentially. So we get the leverage and the power out of that multi-tenancy. We only have one release of software. It's what every one of us use every day long. When we do upgrades, we upgrade everybody in the installed base, roughly simultaneously. But, since we have global dispersion of our customers, it takes a weekend to go through that. So everybody's running on the same application simultaneously. We don't have versions. We don't support multiple systems back and forth. We don't support multiple platforms because you're running on all of that simultaneously.

In terms of how we go to market, our primary product and the foundation of the company was CRM and customer relationship management in the salesforce automation side. Our initial thrust was to sell to the vice president of sales to make them more efficient and get their sales team sharing that information because one of the clear values of multitenancy is everybody can share that information simultaneously via the internet in any way they can get access to the internet. The product also runs in 12 languages, or thereabouts, because we're always adding languages. But that means if you're in Japan and you want to see that data in Japanese and I'm sitting in San Francisco, we can communicate simultaneously, working on that data, you in your home language and me in my home language as well.

We've introduced over the last couple of years a number of products. Our go to market product initially was Professional Edition. We sell subscriptions and contracts. So Professional Edition is \$65 a month per subscriber. We have a lower priced Team Edition with less functionality. That's about \$1,000 a year for five subscribers. And then there's an Enterprise Edition, which we've been leading with selling it to the larger corporates for the last couple years at roughly \$125 a month per subscriber. Recently, and by that I mean the middle of last year, we introduced Unlimited Edition that goes for \$250 per subscriber per edition. Then, yesterday, and we'll talk about this a little bit more, the financial wealth management edition, if you will, that allows you to bring in for wealth management partners. But that's our lineup of products. There's various add-ons that we've added for wireless and mobile, for various other capabilities in terms of Apex platform, and we'll talk about that a little bit more. But, that's our lineup of products. We sell salesforce automation, like I said. But our other go to market is services and support; it addresses the call center area as well.

RICK SHERLUND: So the strategy of the company, it was started as a buffet, is to become much broader and using AppExchange and an ecosystem. Can you talk a little bit about that directly?

STEVE CAKEBREAD: Right. That's a good question, Rick. We have been and will continue to be and take advantage of the CRM market. That's our go to market. But over the last year, we've developed the platform, and that's our second go to market, if you will. That's just evolving today. The platform brings with it AppExchange, which is a directory of various solutions that our customers can take advantage of. It may not be anything to do with salesforce automation. It may be a human resources solution. It may be in financial services. It may be in direct marketing. But it's an exchange or directory where other applications, both within and with outside of CRM and salesforce automation, can be found to be used in the same hhosted environments. We also have AppEx, which is a developer tool kit which we're using to get these third parties to develop on. They as well can develop on our platform and take advantage of the hosting and security and privacy capabilities, or they can develop on our platform as Business Objects does and run their own centers and interface with ours.

RICK SHERLUND: AppExchange. Can you bring us up to date on the usage of AppExchange and how you monetize that?

DAVID HAVLEK, VP IR, SALESFORCE.COM: Just from a statistical perspective-- Steve mentioned AppExchange has a breadth of applications that span all kinds of capabilities. Today, there are more than 520 applications by more than 250 ISVs. You're starting to see that ecosystem really build. Our customer base today, which is 29,800 customers and 646,000 subscribers as of our last reported quarter, of those customers, approximately 8,000 have actually downloaded and installed an application into their environments. And we've had over 20,000 applications installed into those 8,000 customers. So we're starting to see this ecosystem start to pick up some momentum, and that's really important, not just for the potential monetization prospects down the road, but it also makes our current CRM suite a lot more attractive and a lot more competitive in this space as [inaudible] with other CRM customers.

RICK SHERLUND: David, when you say they've installed it, what do you mean by that?

DAVID HAVLEK: They've deployed it into their instance. So, as Steve mentioned, we sell and deliver a multi-tenant application. That means all 29,800 customers are sharing, essentially, the same instance of an application. What they've done is installed into their organizational instance of the application one of these other applications off AppExchange.

STEVE CAKEBREAD: Right. It's still hosted on your system.

DAVID HAVLEK: It is either hosted entirely on our system, which we refer to it as a native application. It also could be what's called a composite app, which may have some Java script or some other code running offsite, integrated in with salesforce code delivered through our UI to our customers. So, from a customer experience perspective, it looks and feels like it's coming through our environment.

STEVE CAKEBREAD: If I may, let me talk about the monetization of the AppExchange, as you asked it. Today, it's free. Our agenda here is to create an ecosystem with developers and our customers starting to share those applications in AppExchange. In December of this past year and going forward starting this month, we're going down the path of monetizing AppExchange. We're going to do that in a couple different ways. As David said, we monetize AppExchange today because when our customers buy Professional Edition or Enterprise Edition or Unlimited Edition, they get access to AppExchange and have the right to do downloads - different levels and different numbers of downloads, but they have the right to do downloads on AppExchange. So we are in fact taking revenue because we're selling more seats because it gives you access to AppExchange.

As well, starting this year, our new direction is to do a couple of things. Starting in February, we're starting to take what we call partner referral fees. We have a couple different programs. You can develop and place your applet or app solution on AppExchange for free, but you won't get placement and you won't get support from salesforce. But you get access to the market. We have a category of AppExchange partner now that we'll charge 10% fee, and that will give you marketing with us, participation in our marketing events called City Tours, etcetera. We'll start to collect a fee if you transact with a third party or you sell your solution. We want 10% of that fee. Then, there's another category at a higher fee, roughly 25%, where there's even more co-marketing and more services. Those programs just started this month, so they're in the very early stages. But we expect that is one way. Think of it as a referral fee because we're giving those partners access to our installed base for all intents and purposes.

There are some other programs that we call **app store** checkout, which will come later this year - much later this year - where we'll actually take over the environment, where we can assist you as a developer in transacting. So we'll bill for you, we'll provision for you, we'll collect for you, and we'll pay for you because our vision of AppExchange is to create a global set of developers that can sell and share their programs throughout the world. So imagine a developer in central Europe who comes up with a great product. It could be as simple as a project management form. It could be as complex

as a massive HR solution. We want to facilitate that transaction, and we'll take some fees for that as well. We're just working on that technology now. because it is a little bit complicated. I have somebody who develops in Germany and wants to obviously get paid in euros. But his customer ends up in Korea and wants to pay us in won. So we're going to have to figure that out.

UNIDENTIFIED AUDIENCE MEMBER: For those customers, do they also have to buy an OEM edition subscriber seats (inaudible)?

STEVE CAKEBREAD: Today, they have to buy either a professional or enterprise or some edition to get access to that. Now, if you want, and there's a classic example of a large financial services company in New York City that bought an HR solution. They need to buy our solution to get access to AppExchange. They contract directly with the HR company. In that case, we would take the referral fee for that first year. This is evolving, Chris, so you'll see us both change some pricing over time, you'll see us experiment with how we collect and interact with our customers, our third-party suppliers and their customers directly as well. But, yes. You have to have a salesforce solution to gain access to AppExchange at the moment.

DAVID HAVLEK: Chris, just quickly on OEM, and I don't want to spend too much time on it, but the OEM product is a product that we launched last year as well that lets third parties build an application, brand it as their own application, and then they actually go to market and sell it directly themselves. So OEM is not a product that you would buy from salesforce. When we talk about our OEM edition, it's something that a third-party application developer would actually go to market and sell himself. If he wanted to see it through AppExchange, as Steve said, the customer would need to buy an underlying salesforce license. So, OEM's a little bit different.

RICK SHERLUND: Can you talk about a couple of the AppExchange applications that have been most popular?

DAVID HAVLEK: One of the applications that's been most popular is the Dream Factory product has been a very popular project management tool. If you go out and take a look at that product, it looks and feels a lot like Microsoft Project. It has a lot of the same kind of graphical interfaces. Again, it's very, very easy to use. I think what's interesting about AppExchange, is if you go out, and I encourage you all to go out and explore it-- it's AppExchange.com. You'll see what applications are actually the most popular amongst the user base. It will show the top ten most installed and most viewed applications. So that obviously changes as time goes on, Rick. We're also seeing a lot of components and dashboard components being installed now as well. So there's a lot of interesting information out there.

Customers can also-- I didn't mention this-- try applications before they buy them. So, we call them test drives. It's kind of like going onto Amazon and taking a look at a book before you actually buy it. We've had over 200,000 test drives of applications. And then after a customer decides to buy an application, he can actually review it, again, very much like the consumer space. He'll review that application and say, "Gee, I love this application. It's a five-star application" or "I don't think it's so great. It's a one-star application." So you actually see user reviews out there. So, our customers can now go out and try the application. They can see what other users are experiencing with that application, etcetera. If you want to see what's most popular, it's published in real time on our site.

UNIDENTIFIED AUDIENCE MEMBER: How do you guys decide--? You've acquired a few companies that have been part of the AppExchange ecosystem [inaudible]. How do you decide which components you would like to own yourselves versus which [inaudible]?

STEVE CAKEBREAD: That's a good question because, clearly, we're an internet-based company. We generated a lot of cash every quarter. I'm proud to say, since I've joined, we've gone from \$8 million in cash to over \$400 million in cash in the five years. So that's not too bad. But we are going to use that cash to make investments over time. We've done three technology investments. I think, Chris, to answer your question, one was around mobility and wireless, which is clearly something we felt we needed to control and manage that platform because we want to make sure that what we distribute on wireless, the quality is there. So we've done that. We've got a couple small, if you will, application services that we've acquired in very niche areas. So we're looking at complementing our base and not necessarily going in and just cherry picking off the partner base.

There's a couple nuances to this because keep in mind salesforce.com in the small play tenancy solution serves customers as small as two employees to as large as, as we announced yesterday, Merrill Lynch with 25,000. So, when you sit and say, well, gee, I'm going to go buy a solution, you have to be careful that that solution can be broad. I'll use the direct marketing segment. If you go to AppExchange, there's a large number of direct marketing solution providers out there. The exact target tends to hit the middle market. Vertical response tends to hit the smaller market. For us to go acquire somebody that's playing in that niche probably isn't very effective for us because we serve everybody. Yet, I

think the AppExchange providers are starting to figure out they're better off serving niches and getting into a mid market or a small market and maybe in the high end too. But we'll take a look at that.

Right now, we want to encourage developers. We want to create that ecosystem. We're not going to be in all segments. We're not looking to create salesforce as salesforce as a suite because we don't have the domain expertise. What we are looking for is to work with the best and most energetic partners to help us create a suite effect for our customer because when you get on and you try an AppExchange solution in conjunction with salesforce, it very much-- the fit, look and feel and usability are very similar. So you get this suite effect, but we don't have to be in all those markets. For us, I think you'll see us continue to want to do small acquisitions, mostly around technology and some mobile, mobility and wireless, some interesting stuff in terms of displays or usability, etcetera, and then niche products that complement our particular capabilities in the marketplace but really let the partners go out and attract-- and that's the beauty of this model. We don't have to, like a traditional software company, go acquire our partners. We can partner with them on AppExchange, and both of us be very successful at that point.

RICK SHERLUND: Why is it that the business model is that you have to be a customer of, basically, the CRM products, or at least you're paying the price of being a CRM customer to use other products as part of that suite? Why wouldn't you just say, okay, for \$10 a month, you can access other functionality in AppExchange without having to pay \$65 a month?

STEVE CAKEBREAD: Well, that's a good suggestion. And keep in mind; this is an evolving marketplace. We have a capability, and I'd encourage you to go take a look at this-- it's called ideaexchange.com, where you can take that idea, host it and, if we get enough response, we might implement that at some point in time. So this is an evolving type of business model right now. Clearly, like I said, we believe in the CRM space. That's our go to market. We feel very comfortable that we will make salesforce.com successful on the back of CRM. The platform is the next application or space that we want to go after. Rick's got some good ideas in that space. We just need to grow into those over time. Right now, the beauty of AppExchange is when we go sell to our customers, whether it's a large enterprise or a small business, they can go to AppExchange and basically see the roadmap and see other capabilities that they're going to get. But I think you're right, Rick, in that how we go to market with AppExchange, how we're going to interface with our customers over time is going to evolve over time. We'll just see how that comes out.

DAVID HAVLEK: Rick, just one other thing. I think there are some apps out there today that really are customizations of CRM applications specific to maybe a specific business. So, essentially, what's someone's done is built a template on top of our CRM application, maybe specific to the real estate business or something like that. So, if that application provider wants to charge \$10 a month for his template, essentially, the customer is still buying an underlying CRM product. We don't want to have a situation where someone could buy a customized CRM application for \$10, but they've got to come to salesforce to buy a generic CRM application for \$65, \$125 or \$250. So, underlying it, salesforce is still doing all the delivery and providing all the infrastructure as well. So we need to rationalize our way through that whole process as we begin to go forward. But, clearly, there are opportunities for us to monetize this thing in different ways as we go forward.

RICK SHERLUND: The way it would architect an application in AppExchange, does that build on top of your existing offering to the user interface, so it's more of an add-on to the CRM product?

DAVID HAVLEK: I think the answer to that question is it kind of depends. If you go back historically, the answer to your question was it really was more of a customization. If you look at historically how salesforce is involved, we built this big multi-tenant database. We built our own tool set to develop on, and, on top of that, we built our CRM suite. We now turn that tool set over to our developer community. So, in the beginning, what that allowed them to do, really, was customize our application. So what you saw were a lot of adjacent applications to CRM that really were customizations, where people added some fields, they changed some field names. But they didn't have a lot of ground-up business logic. So, to date, that's really been the case.

As we go forward with Apex, the programming language, which we haven't talked about today, which is the world's first multi-tenant programming language, essentially a it will allow people will take that Java code that I talked about earlier, running it in another data center, move it into salesforce data center and run it in our environment fully. Now customers and developers have also built from the ground up deep business logic. That really changes the game, not just from a development perspective but from a business perspective on our side. We'll need to figure out how do we charge for that stuff?

Salesforce.com, Inc. at Goldman Sachs Technology Investment Symposium - Final FD (Fair Disclosure) Wire February 28, 2007 Wednesday

RICK SHERLUND: And then vertical markets. Yesterday's announcement of a financial wealth management system-can you talk about that?

STEVE CAKEBREAD: Yes. The thing that we're starting to see-- just a little bit of background here. Salesforce has a huge diversity in its customer base. No one customer is over about 5% of our revenue stream or subscriber base. We serve small, medium and large businesses, be it two people to these mega corporations like Merrill Lynch. And, at the same time, we're very diverse in our industry base. Technology and financial services are two areas that we've been fairly successful at. But we're in pharma, we're in food services, we're in a number of other areas as well.

What we've been asked by our customers-- and, again, IdeaExchange generates a lot of that opportunity-- is to put together, as David mentioned, more robust templates to help them get started quicker, bring their employees up to speed faster. Since we've had such success in financial services and wealth management in particular, and since Merrill Lynch has been a real primary account for us, we've jointly partnered with Dow Jones, with Thomson Financial, with Cisco for their IP telephony capabilities and a few other partners to bring together, basically, a set of boards that is much more robust than Bloomberg, allows the private wealth people to both keep track of their customers and their clients and what they're invested in and also manage the information around that. That's what we announced yesterday. That product will be available some time in Q3. I would encourage you all to go take some time and take a look at that presentation and the product that we have. We're very, very excited about it.

But this, again, back to David's point-- we're building on our own developer tool kits now, Apex technology, where we're bringing in live video feeds and news feeds, our shared information within the company in terms of customers or accounts or clients or however you want to manage them. Bring those all together in a very easy to use, simple environment, where you can move freely between them, all, again, hosted in the small play tenancy, all developed on our new Apex platform technology.

RICK SHERLUND: We should anticipate additional-- I think of them as vertical markets.

STEVE CAKEBREAD: Yes. You'll see us-- we talked about the potential for the mortgage market, the insurance market and a number of others. Some of these are going to be capabilities brought to us by our system integrators. If you've been following the Company for a while, over the last year, we've also talked about arrangements with the folks like Accenture and Deloitte Touche and others, where they'll also have, obviously, vertical specialties that we're never going to get involved in. With this new platform, it allows them to go bring verticals to market, templates to market, integrated solutions to a particular industry that we may or may not choose to pursue. You're going to see them, as well, start to help us get into more verticals through this kind of Apex platform effect that we've got.

RICK SHERLUND: Can you talk to us for a moment on Apex and how that might eliminate some of the friction in terms of the ease with which someone can build applications?

DAVID HAVLEK: We're talking about Apex, the programming language? Really, what Apex, the language, is going to let us do is allow complex business logic to be embedded now into an application, whereas, in the past, as I mentioned earlier, we were just providing the ability to do customizations and change workflows within the app. That's a big deal. In the past, if you wanted to add specific business logic, you had to do it off of the salesforce platform. Now, you can go ahead and embed that in the salesforce platform, and that opens up all kinds of new prospects for us in terms of business intelligence and in ERP and in inventory management and HR and all kinds of different areas. To Steve's point, not to say that salesforce needs to go do that, but now we sort of put the tool set out there that will allow others to do all kinds of application development that goes well beyond just CRM. That's a big deal because, if you look at our install base today of customers, we have some great customers, Ciscos and the Merrill Lynches. But we're still not fully penetrated into those businesses. Even if Cisco's 15,000 seats—that's a great account for us. They have 60,000 employees. They have 20,000 resellers around the world. We still view their large accounts as tremendous opportunities. In order to get to that opportunity, we need to expand the breadth of [inaudible].

RICK SHERLUND: That's been a big issue. I've talked to people in the industry about AppExchange and the extensibility of that platform. That's been a big concern, which is, well, you don't really have the ability to do procedural programming to extend out into an application that would require something more than a database kind of application to check into the database and check out. So, architecturally, is it your view that you've resolved that issue now, and this does deliver the extensibility of the platform to do more customization?

STEVE CAKEBREAD: It's definitely moving in that direction. Keep in mind we introduced the platform and the developer tool kits just four or five months ago. It's still in beta. It gets released sometime this summer. But I think there's a clear understanding and a roadmap in the developer tool kit on how to allow us to do even more into transacting and

all that. it will be handled differently, obviously, because it's a different set of technologies. But, I think, if you take a look at what's been developed just today and realize that the technology and the tool kit's only been available for a couple of months, it's pretty astounding. Now, it's based off of-- it's not a new language. It's still based off of Java and SQL and a few other things. So it's easy for developers to migrate quickly over here and start working on our product. Our product will get more robust and more extensible over the next couple of years as we develop it as well. We'll have to wait and see how this plays out. There's clearly an awareness. There's other things that we need to provide. I think when we meet with the developers they have some very interesting ideas. I'm very excited about the next year or so on the developer side of it because I think you're going to see-- what people perceived we couldn't do is getting done today. What they perceive we can do is a real possibility for the future.

DAVID HAVLEK: Rick, just quickly on this front, I think it's exciting we're having this conversation because, a year ago, we were talking about base salesforce automation and some of the things that we do. To use a Marc Benioff term-I certainly wouldn't say it as funny as he would say it-- but people do in this industry overestimate what you can do in a year and underestimate what you can do in a decade. We really just have launched AppExchange a year ago January. The platform really, as Steve said, is really just now coming to life here. The Apex language is still in beta. There's a lot of runway left here. So it's exciting that we're having this conversation because I think the prospect is huge.

UNIDENTIFIED AUDIENCE MEMBER: What sort of investments do you have to make in the platform? I think of it as much more process-intensive in terms of the transaction processing you have to do. So, I guess, how do you address that because I think that CRM is relatively simple, as Rick said - check in and check out? Also, how do you prevent people from just writing anything they want [inaudible]?

STEVE CAKEBREAD: Let me start in reverse here for a minute. As our development teams, because, again, they're using the same tools that we've published now, have grown into this environment they've come up with their own set of quality checks and rules of the road, if you will, in terms of the number of API calls, how long those calls should take, etcetera. So, we vet our developers pretty heavily before you can post. We monitor them while in action. So, if we start to see calls that are getting unreasonable into a database or something, there are timeouts that can be had. So we're institutionalizing. I think when I've talked to a couple developer partners, we're institutionalizing our best practices in their early stage companies. That's something that they've been fairly grateful for. We'll continue to do that and monitor that. So, on the quality checking side, nothing's ever perfect. But they've got the same level, and we're imposing certain standards on them to post at all, on that side. So, I feel fairly comfortable about that right now.

UNIDENTIFIED AUDIENCE MEMBER: And in terms of the additional transactions that you're going to be running, [inaudible] these other segments?

STEVE CAKEBREAD: It depends on how they go about putting that in place. That's stuff they're working on today, and we'll see. Everybody feels very comfortable about the capacities and the capabilities of our architecture that we have and for its extensibility. I think it's just one of-- it's just a matter of time and letting these guys go through and use this technology and move forward on it.

DAVID HAVLEK: As you know, Chris, at salesforce.com the number of transactions we're pushing now is just huge, and the transaction speeds are getting faster and faster. So I think we're getting better at this business as we go. Clearly, there will be some challenges, but I think we're-

STEVE CAKEBREAD: I think what's been so exciting is the speed with which the developers are picking up the Apex code and development tool kit and also how quick solutions are coming to market. I would encourage you, even if you don't want to do downloads-- just look at the volume and capabilities of products coming out from our third parties getting posted. Dream Factor that David mentioned started with project management, and they've got four to six products now in under a year that they're working on getting ready to post. That's pretty amazing for a small group of people. I mean this isn't a thousand developers. This is a small group of people that are putting out products so fast, it's exciting them as well. Our own internal development team, because the other question could be - if you're going to do all this stuff, how many more people are you going to need? Of course, we're continuing to hire across the board. But you look at our financials, and our development costs are in the 8% to 10% range. This is a highly leverageable, quick turnaround set of technologies. We're taking advantage of that internally as well.

RICK SHERLUND: I wanted to touch on how we measure the business and assess it. Since it's a subscription business, looking at revenues is not quite the lead indicator of the business that we like to look at, like a bookings number or something. Cash flows the Street looks at, but, if you pay taxes one quarter versus another, it can be kind of an unreli-

Salesforce.com, Inc. at Goldman Sachs Technology Investment Symposium - Final FD (Fair Disclosure) Wire February 28, 2007 Wednesday

able and somewhat volatile metric. The number of subscribers is not also a perfect metric. That's going to be disclosed every other quarter now. What would you suggest we look at to get—the metrics to get a clear read on the business?

STEVE CAKEBREAD: Good question. let me start with what our primary ones are internally, because if you're looking at what management looks at, you'll get a sense of this. Then I'll give you some key indicators that we monitor regularly. Clearly, we look at revenue and earnings per share and the margins. You get guidance from us around revenue and earnings per share. We want to invest in our company in our growth, and we've said that often. Those of you that have met with us know that we believe we have great growth opportunities and we invest in that. But we only invest in it to the extent that we can generate revenues. Clearly, bookings is another one. That shows up, in our case, in deferreds because we invoice you, and it goes on balance sheet as deferred. A couple times a year, we talk about our off-balance sheet, which we talked about last quarter when we reported a little bit over \$600 million between on and off-balance sheet deferred revenue. So we watch those. We spend into our programs. Our gross margins are in the high 70s or low 80s. A lot of that is because we're investing in professional services right now. You'll find the subscription margins are roughly running in the mid 80s to the high 90s, depending on our investment.

Outside of the pure financials that we take a look at and the cash flow, there's a couple other things that we monitor. One is clearly the number of seats or subscribers per customer. Keep in mind one of the strengths of this business is the diversity of the portfolio of small, medium and large businesses. That average seat per customer is a good indicator, since it's been running in the 20s, that we're doing as much small business as we do large business. It's not surprising we give bigger discounts to a Merrill Lynch at 25,000 seats than we give my parents at 6 seats. So that kind of metric is interesting. It's been creeping up because there's been more adoption, and it will over time. But that's an area that we pay a lot of attention to in terms of making sure we're investing in the company in a balanced way.

International mix is another one. We've gone from 20% of our revenues offshore to about 23% this year. We're making significant investments. We think that should grow into the 40s and the 50% range. And then, cash flow, as you said, and accounts receivable management are some of the other traditional ones. Subscribers, of course, we pay attention to. But, honestly, the company pays more attention to customers than subscribers. As David said, when we bring on a customer, it's a largely unpenetrated installed base. We've sold into the sales organization. Even in my family business of 50 people, we have 6 licenses. We have a long ways to go. But, as we introduce the partner management product, where we can start to get to the channels, that exponentially grows our business as well. So we're looking at all of those.

RICK SHERLUND: So what is the holdup with the winery and getting [inaudible]?

STEVE CAKEBREAD: Well, we went from 3 seats to 6 seats. We doubled our business there.

RICK SHERLUND: That's not public.

STEVE CAKEBREAD: No. It's not public.

RICK SHERLUND: Okay. I think we need to carry on with that discussion down the hall in the breakout session. Steve and David, thanks so much for being with us.

STEVE CAKEBREAD: Thank you and Chris.

[Thomson Financial reserves the right to make changes to documents, content, or other information on this web site without obligation to notify any person of such changes.

In the conference calls upon which Event Transcripts are based, companies may make projections or other forward-looking statements regarding a variety of items. Such forward-looking statements are based upon current expectations and involve risks and uncertainties. Actual results may differ materially from those stated in any forward-looking statement based on a number of important factors and risks, which are more specifically identified in the companies' most recent SEC filings. Although the companies may indicate and believe that the assumptions underlying the forward-looking statements are reasonable, any of the assumptions could prove inaccurate or incorrect and, therefore, there can be no assurance that the results contemplated in the forward-looking statements will be realized.

THE INFORMATION CONTAINED IN EVENT TRANSCRIPTS IS A TEXTUAL REPRESENTATION OF THE APPLICABLE COMPANY'S CONFERENCE CALL AND WHILE EFFORTS ARE MADE TO PROVIDE AN ACCURATE TRANSCRIPTION, THERE MAY BE MATERIAL ERRORS, OMISSIONS, OR INACCURACIES IN THE REPORTING OF THE SUBSTANCE OF THE CONFERENCE CALLS. IN NO WAY DOES THOMSON FINANCIAL OR THE APPLICABLE COMPANY OR THE APPLICABLE COMPANY ASSUME ANY RESPONSIBILITY FOR ANY INVESTMENT OR OTHER DECISIONS MADE BASED UPON THE INFORMATION PRO-

Salesforce.com, Inc. at Goldman Sachs Technology Investment Symposium - Final FD (Fair Disclosure) Wire February 28, 2007 Wednesday

VIDED ON THIS WEB SITE OR IN ANY EVENT TRANSCRIPT. USERS ARE ADVISED TO REVIEW THE APPLICABLE COMPANY'S CONFERENCE CALL ITSELF AND THE APPLICABLE COMPANY'S SEC FILINGS BEFORE MAKING ANY INVESTMENT OR OTHER DECISIONS.]

LOAD-DATE: April 12, 2007

LANGUAGE: ENGLISH

TRANSCRIPT: 022807aa.744

**PUBLICATION-TYPE:** Transcript

Copyright 2007 Voxant, Inc. All Rights Reserved. Copyright 2007 CCBN, Inc. All Rights Reserved.

Wisconsin State Journal (Madison, WI)

May 12, 2002 Sunday, ALL Editions

## ADVERTISERS WANT MORE BANG FOR BUCK; MOST NOTABLE IS FAKE DYNAMITE PROMOTIONAL GIMMICK

BYLINE: Judy Newman Business reporter

SECTION: BUSINESS; Pg. E1

LENGTH: 982 words

You may have seen or heard marketing ploys like these in Madison lately:

- \* People standing on street corners in the wind and rain holding signs promoting deep discounts at a soon-to-close Kmart store.
- \* Organizers of a charity golf tournament sending fake dynamite tubes to potential participants, with labels saying the event will be "a blast."
- \* Nonprofit organizations staging raffles with a new house as the grand prize.

Companies and organizations go to great lengths to get our attention, these days.

In a society inundated with written and verbal messages, an advertisement in the newspaper or on TV, or a post card in the mail often is no longer enough, industry experts in Madison say.

It takes something extra -- some drama, excitement or maybe just a touch of the unexpected -- to get a response.

"We get so many credit card offers and (solicitations for) time shares and they all say urgent," said Howard Cosgrove, vice president of public relations for the Lindsay, Stone & Briggs advertising agency. To counteract that, "you've got to entertain or interest (people)."

"We're inundated with junk," added Vicki Moran, creative director at Total Awards & Promotions. "You get junk e-mail, junk mail; you turn on cable (television) at night and what do you get? Infomercials."

The result is often what's referred to as "guerrilla marketing."

"Guerrilla marketing is putting your message where people wouldn't normally expect to find it," Cosgrove said. One example he gave: An employment agency in a major metropolitan area bought space on the tops of city buses and posted ads aimed at office workers in high rise buildings. The ads read, "Don't jump - we have a better job for you."

"You might be suddenly open to that message because it's unexpected," Cosgrove said.

For Kmart, one solution was to hire temporary employees to hold up signs touting the latest price cut at the two Madison stores scheduled to close. The decision came from somewhere within the seven companies hired by Kmart to handle the merchandise liquidation at nearly 300 stores, said Kmart spokesman Stephen Pagnani in Troy, Mich.

Apparently, it works. "If you gauge by the parking lot, I would say yes," said Thomas Towell, an advertising consultant and lecturer at UW-Madison's department of consumer science.

The parking lot at Kmart's West Side store has been jammed, he said. "People were parking across the street, their shopping carts were loaded" and that was before prices were slashed more than 10 percent.

Towell said, though, the Kmart example is not what he would term guerrilla marketing. "They're like wandering bill-boards," he said. "They're almost in the league of the sandwich board saying, Eat at Joe's."

### ADVERTISERS WANT MORE BANG FOR BUCK; MOST NOTABLE IS FAKE DYNAMITE PROMOTIONAL GIMMICK Wisconsin State Journal (Madison, WI) May 12, 2002 Sunday, ALL Editions

Human sign-bearers such as Kmart's are not illegal if they stand on the sidewalk, said Madison zoning administrator George Carran.

And it's not as expensive as producing a series of commercials and buying media time, said Susan Morris, vice president and director of public relations for The Hiebing Group.

"Working through a temporary agency and hiring people at minimum wage and giving them signs -- it's pretty cost-effective," Morris said.

"I applaud it for being different, but it's so limited in terms of its effect," said Jeff Schroeter, major-accounts advertising director for Madison Newspapers Inc. "You're only talking to the street traffic with that kind of advertising. Usually, it's just there aren't the dollars to use media efficiently to bring in buyers from a broad area. They may not have the money to reach our broad audience. The only reason advertisers spend the money to appear in the Wisconsin State Journal is because it works."

Another type of attention-getting stunt drew fire last week but its creators stand by their ploy.

Invitations to the Never Quit Comedy Golf Tournament were packed inside a red mailing tube topped by a white cord, resembling a fake stick of dynamite. The charity event is scheduled in August as a memorial to comedian David Gray, who died in January.

But the promotion coincided with news stories about mailbox pipe bombs being planted around the Midwest. A Monona woman who received one of the red tubes got the jitters and at least a dozen officers from the Monona Police Department, the Dane County Sheriff's Department bomb squad and the FBI spent two hours on the scene before they determined there was no danger.

"When someone tells us that they think they might have a pipe bomb in their mailbox, we don't goof around," Monona Police Chief Brad Keil said.

He's glad there was no bomb but added, "In light of what's going on in this day and age, it's not wise to use advertising that's going to raise suspicion."

Moran, of Total Awards and Promotion, said the fake firecracker is a common promotion and was planned weeks ago. The batch went to the mailer a week ago Friday and "there was no way to recall it," she said.

Moran, who is Gray's sister, conceded that the timing turned out badly but doesn't regret sending the promotion, saying it's drawn national attention.

"This was about David and he was a blast," she said.

Other fund-raisers by nonprofit groups have gone so far as to award a new house to the winner.

"Guerrilla fighters can't spend very much money so they have to find a way to turn leverage to their advantage," said Cosgrove of Lindsay, Stone & Briggs.

A relatively recent twist, said Cosgrove, is for a bottled water company to hire people to go into bars in "fashion-leading" cities and casually chat with patrons about the product.

"If you get the people in Soho to start drinking your water, it's going to become hip and then everyone's going to start drinking it," he said.

"Guerrilla marketing is especially hot right now because everyone's ad dollars are down," said Hiebing's Morris.

"They're looking for more creative ways to spend marketing dollars."

LOAD-DATE: May 14, 2002

LANGUAGE: ENGLISH

GRAPHIC: State Journal photo/Steve Apps

store closings are among the relatively novel methods that businesses and organizations are turning to, as a way to stand out from the barrage of advertisements hurled at the public now from every direction broadcast sources, the printed word, telephone and the Internet.

### ADVERTISERS WANT MORE BANG FOR BUCK; MOST NOTABLE IS FAKE DYNAMITE PROMOTIONAL GIMMICK Wisconsin State Journal (Madison, WI) May 12, 2002 Sunday, ALL Editions

State Journal photo/Craig Schreiner< Hundreds of thousands of these fake firecracker promotional mailers are sent across the country every year, says Vicki Moran, creative director at Total Awards & Promotions in Madison. But she had no idea that the tubes, sent to promote the Never Quit Comedy Golf Tournament in memory of her late brother, comedian David Gray, would appear in mailboxes at the same time pipe bombs were turning up in mailboxes in five states. Moran said she wouldn't hesitate to use the gimmick again — under the right circumstances.

Copyright 2002 Madison Newspapers, Inc.

#### **InternetWeek**

November 12, 2001 Monday

## Web Powers Fighter Project -- Linking all the contractors in real time would have been impossible without the Web, says Northrop's Dave Torchia.

**BYLINE:** Chuck Moozakis

SECTION: NEWS & ANALYSIS; Pg. 1

LENGTH: 890 words

The Internet as a collaborative medium will undergo its biggest test yet as thousands of professionals working for hundreds of defense contractors begin using the Web to design the Joint Strike Fighter.

The Department of Defense last month awarded an alliance of aerospace manufacturers-Lockheed Martin, Northrop Grumman and the U.K.'s BAE Systems-the \$200 billion contract to build the JSF, a next-generation fighter that will anchor the U.S. and British military fleets.

Linking all the companies and governments involved in the project in real time would have been impossible without Web design and project management tools, said Dave Torchia, Northrop's product data management practice manager.

"In previous programs, we had to cut the vehicle up in pieces and assign those projects to specific companies," Torchia said. "Every three months, we'd connect to evaluate progress."

What's more, design engineers would have access only to their own company's databases, and design drawings would be shared manually, sometimes rendering them out of date by the time a partner saw them.

Success now will depend on a product data management (PDM) application powerful enough to track the hundreds of thousands of components required to build the fighters. PDM apps, which store data about product designs and workflow, are untested in projects that involve so many users and data records.

In fact, the PDM application that Northrop uses, Metaphase from EDS, had to be significantly customized in several ways for the JSF project. Additions include a scheduling component to let users make sure tasks are competed on time; change administration to track design revisions on thousands of parts; and advanced policy management to define access privileges for individuals and groups plus levels of authentication, including passwords and smart tokens.

The multimillion-dollar Web collaboration project is expected to save the alliance time and money. A fighter prototype, in development for three years, took a third of the time and half the money it would have taken to build a comparable aircraft without the Web, Torchia said.

The site is used by project teams that include design engineers, production engineers, quality assurance specialists, logistics specialists and project managers. The site automatically keeps track of all changes made to designs, and other engineers working on the same part are notified. This ensures that engineers don't waste their time working on outdated designs, Torchia said.

The stakes are high for this project. The aircraft, known in the United States as the F-35, will be the U.S. and U.K. armed forces' workhorse for the next four decades, able to fly farther, carry more payload and be maintained more easily than today's comparable models. It will also be able to land vertically.

About 80 percent of the parts will be shared among the various models. Each of the 3,000 jets is expected to cost about \$30 million. The first operational JSF is due to be delivered in 2008.

Web Powers Fighter Project -- Linking all the contractors in real time would have been impossible without the Web, says Northrop's Dave Torchia. InternetWeek November 12, 2001 Monday

To monitor all of these projects successfully, JSF program participants will need immediate access to data, without interruption and without fear that competitors may also see the same information, said Ron Charette, a defense industry expert and a project management consultant with the Cutter Consortium.

"One of the big obstacles confronting defense contractors is sharing information," Charette said. "In the past, they shared some of the information but not everything."

One risk is that some engineers will choose to work around the collaboration site, Charette said, keeping the data they produce from other engineers. If there's no incentive for participating, "it won't work," he said.

Metaphase is one component of TeamCenter, a suite of Java 2 Enterprise Edition applications that handle project management (workflow and administration), visualization and product design.

The site's data is stored in an Oracle8i database. All the software runs on Sun Enterprise servers, with three such servers running at a Northrop facility and three at a Lockheed facility.

The Department of Defense will also tap into the JSF extranet to keep tabs on the progress of the fighter and to pass information to other DoD offices, said Lt. Cmdr. Stan Bush, CIO of the JSF's program office. "The Internet is key here," said Bush, citing the Web's ubiquity. "In the old days, we might have been relegated to sending some of this information in diplomatic pouches."

The JSF program office is building its own intranet to link 10 facilities across the country. The first office will gain access to the network next month, and some 1,000 users will be online by mid-2002.

#### JSF WEB PROJECT

#### Benefits

- Data accessible by users across companies and time zones using browser
- Information segmented so that users can access only the data they need

Design and status info updated in real time

#### **CHALLENGES**

- Scaling up to demands placed by thousands of simultaneous users
- Ensuring that users don't work outside collaborative Web app
- Ensuring that information isn't routed incorrectly or hacked

Source: InternetWeek

http://www.internetwk.com/

Copyright 2001 CMP Media LLC

LOAD-DATE: November 13, 2001

LANGUAGE: ENGLISH

Copyright 2001 CMP Media, Inc.

#### **InformationWeek**

June 5, 2000

## Largo's Successful Balancing Act -- DECISION TO USE THIN-CLIENT COMPUTERS LETS CITY'S IT STAFF FOCUS ON STRATEGIC INITIATIVES

**BYLINE: PAUL KORZENIOWSKI** 

LENGTH: 1433 words

How does an organization build an efficient-and, in some respects, an advanced-infrastructure while keeping a tight rein on support costs? Many smaller, resource-constrained enterprises might learn a lesson from the city of Largo, Fla., which maintains just such a delicate balance. The city, which has a staff of only 10 IT people, has deployed many new technologies: digital subscriber line connections tie remote department offices into the enterprise network, for example, while wireless connections let police officers in squad cars access networked information on the spot, as well as upload data pertaining to their investigations. The city is even beginning to experiment with some Linux applications.

The secret to Largo's success? City systems administrator David Richards says much of it can be attributed to the decision to stay away from PCs and instead deploy thin-client computers. Their low-maintenance characteristics- thanks to their dependence on central servers to load apps and store data- mean that the city's IT professionals can spend their time developing new applications and working on other strategic initiatives, rather than running around fixing problems on some 800 city employees' desktop systems.

"We would need to double our staff to support our users if we had PCs," Richards says, because there are more parts to break on those systems and more opportunities for software, driver, or other conflicts to occur, or for users to introduce changes to configurations that then upset other things.

Largo, which has 70,000 residents in a 15-square-mile area, moved up to Microsoft Windows NT Terminal Server and Network Computing Devices and Wyse Technology thin clients -some of them from green-screen, character-based X Window terminals. A real plus, says Richards, is that all the city's users can now work in rich graphical environments, but Largo didn't have to add staff to support the enhanced platform.

"When new versions of applications or operating systems come out, we only need to make minor changes to our server software and not with each desktop system," Richards says. The Windows terminals load their apps and data from any of 17 servers; both SCO OpenServer and SCO UnixWare servers handle the most-important business apps, while Windows NT and Red Hat Linux servers manage the rest. Users in the main offices use the NCD clients, which have built-in emulation capabilities to access the NT, Unix, and Linux servers. SCO Tarentella servers connect remote users on Wyse thin clients to the Unix, Linux, and NT application servers. "We don't have to deal with the technology churn commonly found with PCs where IT staffs replace the underlying infrastructure every couple of years," Richards says.

The city never sleeps, of course, but there's no financial incentive for the government (and even many smaller companies) to maintain an around-the-clock help desk, as there is for large organizations. Though Richards has no complaints about the stability of the SCO operating systems or the server hardware in place, the intense thunderstorms that often hit the city have been known to cause power spikes that take systems down. But hours of overnight downtime isn't acceptable, because police and fire officials need to access the network at any time of day. The city's solution: All the servers are configured so that technicians can reboot them via touch-tone phones, rather than having to go into the data center.

Even though the system's maintenance requirements are low, Largo's IT staff has been plenty busy. Last year, after complaints by some remote employees that they weren't notified about meetings, new job opportunities, or policy

### Largo's Successful Balancing Act -- DECISION TO USE THIN-CLIENT COMPUTERS LETS CITY'S IT STAFF FOCUS ON STRATEGIC INITIATIVES InformationWeek June 5, 2000

changes, the city manager decreed that all employees had to be online. The city already had Novell GroupWise in place as its messaging system for most employees-the product includes a feature that monitors not only when employees receive new messages, but also whether or not they read them. But extending that system and the city's other graphical apps to the 55 employees in 12 remote recreation and police department offices was challenging, for two reasons.

In the first place, remote users at the time were using aging terminals that didn't support access to graphical applications. Second, the city had to settle on a connectivity solution that would support the bandwidth requirements for delivering server-based applications to remote users.

The introduction of Wyse thin clients that could support graphical apps such as GroupWise solved the first problem, and the installation of DSL connections settled the second. DSL connections provide 20 times as much bandwidth as dial-up connections on the users' Wyse thin-client systems. Key to the success of this initiative was the fact that IT staff had the availability to help train remote users on the new system, in conjunction with SCO-something that might not have been possible if their time was taken up with handling volumes of support calls from desktop PC users.

"The remote office users made a 15- year leap in technology, so there was a period when some struggled to become familiar with the new system," says Richards. "We worked with SCO to conduct training classes and went on-site to watch how they adjusted to the new system. There were still a lot of support calls initially, but they dropped significantly after a few months."

Because the deployment of thin clients to desk-bound city employees had gone so well, the city made the decision to go even further: Send thin clients out into the field. While ruggedized notebooks had been the obvious first choice for police squad cars, they also turned out to be an expensive one. The systems cost \$3,000 to \$5,000 each, and the city found itself turning them over every two years to keep up with advances.

Now Windows CE thin clients, which cost about \$600 to \$800 each, are standard issue in each police car. The city estimates these systems will have a life expectancy of 10 years. And the city supports a sophisticated wireless initiative on the systems: Wireless connections allow police officers to log on to the city's databases no matter where they are, to check for outstanding warrants or prior arrests, or scan the Internet for information about suspects.

In addition to these changes, the city improved police department efficiency with a new video application. Like other Florida municipalities, Largo was having trouble moving evidence used with domestic disturbance cases from the squad car to the court system in a timely manner. The city outfitted each car with a video camera that officers use at the crime scene, sending the recorded information over the wireless network to central servers that automatically pass the data along to the city's court system. Such a system can have applications beyond a city government-smaller businesses, such as insurance companies, might find this applicable for employees in the field.

Largo has also been revamping its computing infrastructure to make it more reliable, more functional, and less expensive, including moving off OpenServer to Unixware 7 en masse. "OpenServer was designed for small business, and we've evolved to be considered a medium-sized enterprise," Richards says. "UnixWare is more in line with our requirements and offers features like clustering, which will help to increase application availability." The city began porting servers and essential applications to the new operating system in the middle of 1999 and expects to complete the process by the fall.

There's the potential for things to go even more smoothly than they already do as the city's Linux forays gain ground-the reliability of the Linux operating system is well documented. Largo now runs Netscape App server and Adobe Acrobat on Linux, as well as some noncritical government apps, such as a listing of all Florida state statutes and maps of various counties.

But analysts say that most organizations aren't ready to embrace thin clients as wholeheartedly as has Largo. "Thin clients have been adopted in niches, such as medical and banking; most companies feel more comfortable using PCs for mainstream computing," says Greg Blatnick, a VP at Zona Research.

Yet Largo sees no reason to change course. "Once we put a new system on a user's desk, we pretty much forget about it," Richards says. "Since our systems require so little maintenance, we can spend our time examining emerging technology and determine how it may benefit our users." http://www.iweek.com/

Copyright 2000 CMP Media Inc.

LOAD-DATE: June 3, 2000

## Largo's Successful Balancing Act -- DECISION TO USE THIN-CLIENT COMPUTERS LETS CITY'S IT STAFF FOCUS ON STRATEGIC INITIATIVES InformationWeek June 5, 2000

LANGUAGE: ENGLISH

Copyright 2000 CMP Media Inc.

#### **InternetWeek**

June 5, 2000

## IT MANAGEMENT -- LARGO LEAPS FORWARD -- By embracing thin clients, this Florida city streamlines administrative costs and takes its remote users out of 1985 and into the year 2000

BYLINE: PAUL KORZENIOWSKI

LENGTH: 1275 words

How does an organization build an efficient and, in some respects, even an advanced infrastructure while keeping a tight reign on support costs? Many small resource-constrained enterprises might learn a lesson from the city of Largo, Fla., which maintains just such a delicate balance.

The city, which has a staff of only 10 IT people, has somehow surged ahead, deploying many new technologies. For example, digital subscriber line connections tie remote department offices into the enterprise network, while wireless connections let police officers in squad cars access networked information on the spot and upload data pertaining to their investigations. The city is even beginning to experiment with some Linux applications.

The secret to Largo's success? City systems administrator David Richards says much of it can be attributed to the decision to stay away from PCs and instead deploy thin-client computers. Their low-maintenance characteristics- thanks to their dependence on central servers to load apps and store data- mean that the city's IT professionals can spend their time developing new applications and working on other strategic initiatives, rather than running around fixing problems on some 800 city employees' desktop PCs.

"We would need to double our staff to support our users if we had PCs," Richards says, because there are more parts to break on those systems and more opportunities for software, driver or other conflicts to occur, or for users to introduce changes to configurations that then upset the applecart.

Largo, which has 70,000 residents in a 15-square mile area, moved up to Microsoft Windows NT Terminal Server and thin clients from Network Computing Devices and Wyse Technology. A real plus, says Richards, is that all the city's users can now work in rich graphical environments, but Largo didn't have to add staff to support the enhanced platform.

"When new versions of applications or operating systems come out, we only need to make minor changes to our server software-not with each desktop system," Richards says. The Windows terminals load their apps and data from any of 17 servers; both SCO OpenServer and SCO UnixWare servers handle the mission-critical business apps, while Windows NT and Red Hat Linux servers manage the rest. Users in the main offices use the NCD clients, which have built-in emulation capabilities to access the NT, Unix and Linux servers. SCO Tarentella servers connect remote users on Wyse thin clients to the Unix, Linux and NT application servers.

"We don't have to deal with the technology churn commonly found with PCs where IT staffs replace the underlying infrastructure every couple of years," Richards says.

The city never sleeps, of course, but there's no financial incentive for the government-and even many smaller companies-to maintain an around-the-clock help desk, as there is for large organizations. Although Richards has no complaints about the stability of the SCO operating systems or the server hardware in place, the intense thunderstorms that often hit the city have been known to cause power spikes that take systems down. But hours of overnight downtime isn't acceptable, since police and fire officials need to access the network any time of day. The city's solution: All the servers are configured so that technicians can reboot them via touch-tone phones, rather than having to go into the data center.

IT MANAGEMENT -- LARGO LEAPS FORWARD -- By embracing thin clients, this Florida city streamlines administrative costs and takes its remote users out of 1985 and into the year 2000 InternetWeek June 5, 2000

Although its maintenance requirements are low, Largo's IT staff has been busy. Last year, after complaints by some remote employees that they weren't notified about meetings, new job opportunities or policy changes, the city manager decreed that all employees had to be online. The city already had Novell GroupWise in place as its messaging system for most employees-the product includes a feature that monitors not only when employees receive new messages, but also whether or not they read them. But extending that system, not to mention the city's other graphical apps, to the 55 employees in 12 remote recreation and police department offices was challenging for two reasons. In the first place, remote users at the time were using aging terminals that didn't support access to graphical applications. Second, the city had to settle on a connectivity solution that would support the bandwidth requirements for delivering server-based applications to remote users.

The introduction of Wyse thin clients that could support graphical apps like GroupWare solved the first problem, and the installation of DSL connections settled the second question. DSL connections provide 20 times as much bandwidth as dial-up connections on the users' Wyse thin client systems. Critical to the success of this initiative was the fact that IT staff was available to help train remote users on the new system, in conjunction with SCO-something that might not have been possible if their time was taken up with handling volumes of support calls from desktop PC users. "The remote office users made a 15-year leap in technology, so there was a period when some struggled to become familiar with the new system," says Richards. "We worked with SCO to conduct training classes and went onsite to watch how they adjusted to the new system. There were still a lot of support calls initially, but they dropped significantly after a few months."

As the deployment of thin clients to desk-bound city employees had gone so well, the city made the decision to go even further: Send thin clients out into the field. While ruggedized laptops had been the obvious first choice for police squad cars, they also had turned out to be an expensive one. The systems cost \$3,000 to \$5,000 each, and the city found itself turning them over every two years to keep up with advances.

Now Windows CE systems running Windows Terminal Server, which cost about \$600 to \$800 each, are standard issue in each police car. The city estimates these systems will have a life expectancy of 10 years. And the city supports a sophisticated wireless initiative on the systems: Wireless connections let police officers log into the city's databases no matter where they are, to check for outstanding warrants or prior arrests, or scan the Internet for suspect information.

In addition to these changes, the city improved police department efficiency with a new video application. Like other Florida municipalities, Largo was having trouble moving evidence used with domestic disturbance cases from the squad car to the court system in a timely manner. The city outfitted each car with a video camera that officers use at the crime scene, sending the recorded information over the wireless network to central servers that automatically pass the data along to the city's court system. Such a system can have applications beyond a city government-smaller businesses, such as insurance firms, might also find this applicable for employees in the field.

Overall, analysts say that most organizations aren't ready to embrace thin clients as wholeheartedly as has Largo. "Thin clients have been adopted in niches, such as medical and banking; most companies feel more comfortable using PCs for mainstream computing," says Greg Blatnick, a vice president at Zona Research Inc. Yet Largo sees no reason to change course.

"Since our systems require so little maintenance, we can spend our time examining emerging technology and determine how it may benefit our users," Richards says.

Paul Korzeniowski is a freelance computer journalist based in Sudbury, Mass. He can be reached at paulkorzen@aol.com.

http://www.internetwk.com/

Copyright 2000 CMP Media Inc.

LOAD-DATE: June 3, 2000

LANGUAGE: ENGLISH

Copyright 2000 CMP Media Inc.

#### JavaWorld

October 1997

#### News and New Product Briefs (9/15/97)

BYLINE: Kane Scarlett

LENGTH: 10897 words

HIGHLIGHT: Stay up to date with the latest industry news, new products, and technology announcements! Here you'll find more than 45 items, including: Microsoft gives the thumbs down to Java applets from its Web sites; Daiwa's proof that Java can make it in the business world; Applix Anyware initiative shows Applix's commitment to Java; IO-NA/Visigenic extend CORBA support; Cyrix's new lease on NC market; Novadigm and Marimba duke it out in court; SunScript goes free; Novell and Oracle choose Navigator; Netscape fixes Navigator 4.02 Java bug; Vigor's Mapper J++ provides database access to VJ++; Big four ask Sun to relinquish control of Java; MIPS chips go Java; and much, much more!

National Semiconductor's backing gives Cyrix new leverage

With backing from National Semiconductor, chipmaker Cyrix plans to take the thin-client, NC-device world by storm by targeting the NetPC and handheld device markets with its MediaGX processors (from its new plant in South Portland, Maine). Cyrix's MediaGX chipset combines graphics and audio, cutting out much of the cost involved when adding capabilities to low-end PCs.

National Semiconductor and Cyrix have also partnered to complete a joint reference platform for a network PC, which is expected to cost somewhere in the \$500 range. Delivery date for the platform is planned for late '97. An example unit should look something like this:

A 166MHz multimedia CPU

8 megabytes of DRAM

An Ethernet adapter

64-bit graphics

Audio

A keyboard and mouse

Windows NT with a desktop-management interface

Cyrix officials believe they haven't been able to compete in the PC chip market because historically they've had to lease their manufacturing capabilities from others, making the cost higher than market. And Steve Tobak, Cyrix's VP of corporate marketing, said, We didn't have our own fabrication plant, and we lacked product breadth. This relationship resolves those issues.

FAQ on Cyrix/National Semiconductor merger: http://www.cyrix.com/corpor/about/nsm-faq.htm

Integrity Arts gives Sun access to the JavaCard market

Sun announced it has acquired Integrity Arts, a software development toolmaker that specializes in creating object-oriented Java applications for smart cards. Sun hopes its acquisition will allow the company to standardize the JavaCard API.

Sun is interested in making Java ubiquitous, and our technology helps them do that. We want to bring smart cards to the next level of maturity, said Patrice Peyert, president of Integrity Arts. Peyert added that developing smart card systems usually takes 18 to 24 months, but with Integrity Arts' technology, the development and deployment time can be reduced to as little as a month, depending on the complexity of the operation.

The 16-person Integrity Arts was founded in 1995 by Gemplus, a large smart card provider headquartered in Gemenos, France. Stuart Bagshaw, EVP of Corporate Strategy at Gemplus, said Gemplus is happy to hand over this technology to Sun. The whole purpose why we funded Integrity Arts was to create standards for smart cards. We felt by passing over the custodianship to JavaSoft [Sun's Java business unit], they could put lots of energy behind it and that helps standards along.

http://www.integrityarts.com/

Netscape quickly and quietly repairs Navigator 4.02 Java bug

Some Navigator 4.02 users reported that when they visited Java sites with the newly released browser, it would display a message saying their system classes were not signed. The Java components would then fail to run. In addition, Navigator 4.02's push program, Netcaster, displays the same message when it is started -- and then won't load.

Why? Netscape product manager Dan Claussen confirmed that the standalone version of Navigator 4.02 on the FTP site didn't have the certificates it needed to run Java properly. He added that the company chose not to change the version number of that archive, so there could be several versions of the file n32e402.exe around, with different dates and file sizes.

We checked, and the percentage of people that had downloaded it was fairly limited, said Claussen. We weren't in the hundreds of thousands yet. We immediately replaced it, so the number of people that were affected was fairly limited.

Original article: http://www.pcworld.com/news/daily/data/0897/970820171807.html

Sun makes move into embedded systems with purchase of Chorus

As part of its extension into the embedded systems software market, Sun Microsystems announced plans to buy Chorus Systems SA's software technologies, products, and brands. The France-based Chorus, which supplies operating systems for telecommunication networks and intelligent devices, will become part of the Embedded Systems Software group, which is a new business group at Sun focusing on developing open system software products for the embedded market. Sun's JavaOS development and marketing team will be included in the new group, which will be headed by Jim Herbert.

Microsoft gives the thumbs down to Java on its Web sites

Microsoft has decided to remove Java applets, which number more than 570, from its Web sites, including its main www.microsoft.com. According to the company's Web site editor-in-chief, Tim Sinclair, the decision centers primarily on Java performance and compatibility issues. While some say Bill Gates himself ordered the Java applet removal, Sinclair takes full responsibility for the decision, saying it was his move.

While some Java applets may remain, all applets having to do with navigation will be removed -- and this is to occur over the next 30 to 60 days. What will be used in place of Java? HTML and JavaScript.

This recent move by Microsoft is seen by Sun and others to be a direct and very negative message about the Redmond, WA-based company's view of the platform.

Apparently, Microsoft will be revealing its own distributed computing strategy at the Professional Developers Conference in San Diego. Called the Distributed Network Architecture (DNA), this strategy aims to give developers an overall view of Microsoft's plans for networking computing, including operating systems, object models, and development tools.

Three vendors license Lucent's Inferno network OS

Lucent Technologies announced that three vendors will license its Inferno 1.1 network operating system (NOS). ORGA Card Systems, Cirrus Logic, and Global Converging Technologies intend to use the NOS for a bevy of wireless products, including smart cards, smart phones, PDAs, and residential gateways.

ORGA will use the Inferno NOS to give its smart cards better access to private and public networks.

Cirrus Logic means to port Inferno to two of its chipsets, the CL-PS7110 and CLPS7500FE. In the CL-PS7110 set, the NOS will be incorporated for use in PDAs, two-way pagers, and smart phones. In the CLPS7500FE set, Cirrus will use Inferno for Internet appliances, such as NCs, smart TVs, and digital videodisk players.

Global Converging Technologies will use Inferno to enable communication between gateway products and devices, such as cordless phones.

http://www.lucent-inferno.com/

#### LG Electronics creates Net Champ, a Korean-language NC

This month, LG Electronics will debut a network computer, called Net Champ, based on a Korean-language operating system. Net Champ will come with ARM SA-110 200MHz and 233MHz microprocessors, 8 to 64MB of memory, and 10 to 100Mbps Ethernet card. Its footprint (2.5 x 11 x 9.5 inches) is small, but not as small as the proposed price -- about \$660.

Net Champ is the offspring of agreements signed in May between LG Electronics, Sun Microsystems, and Oracle.

http://www.lg.co.kr

http://ckorea.hnc.net/Hardware/970825.html

#### SGI gives MIPS Java

MIPS chips already have the capability to run the Windows CE OS. Now, with SGI's decision to add Java enhancements to the chips, manufacturers can build Windows terminals or NCs with a common architecture. The Java enhancement is called an application-specific extension.

Several vendors are expected to offer both Windows terminals, which are tied to Windows CE, and NCs, which depend on Java, said Eileen O'Brien, director of the enterprise network computer program at IDC. It seems like something that will be very flexible, she added.

And MIPS chips with the Java enhancement are not perfect for thin clients simply because of the portability. MIPS chips run in the tens of dollars range, so the price is important to NC manufacturers, who rely on the trade-off of cost, performance, and power consumption to make a profit.

#### Fujitsu licenses JavaOS for use in new chips

Fujitsu has signed an agreement with Sun Microsystems, which allows the Japan-based company to integrate the JavaOS with its SPARC-based series of embedded microprocessors. Used in embedded applications that run inside small devices (printers and digital cameras, for example), these 32-bit RISC chips will be specially designed for handheld PCs and network computers.

The JavaOS chips are planned for release during the first half of 1998.

#### SiteSearch 1.0 makes any HTML searchable

SFS Software introduces SiteSearch 1.0, a Java search engine that makes Web sites, HTML documentation, and Internet/intranet contents easily searchable. Beyond the base software, SiteSearch doesn't require additional components (such as CGI or databases) to work.

SiteSearch comes in two parts: SiteSearch creator and a Java applet. The creator is a graphical Java application that searches the user's HTML content for indexes and keywords. The SiteSearch Java applet, connected to the user's HTML files, lists all indexes and keywords and makes it possible for users to search and jump to other contents with a mouse click, much like the Windows Help system.

SiteSearch's key is the algorithm it uses, which packs all keywords and indexes into two small files that can be transferred quickly via the Internet or intranet.

SiteSearch runs on Windows 95/NT, Linux, and Solaris. A SiteSearch license is available directly through SFS for \$199. A free version, limited to creating an index for 50 HTML files, also is available.

http://www.sfs-software.com/sitesearch\_info.html

Novadigm sues Marimba over fractional differencing patent

Novadigm filed a patent-infringement lawsuit against Marimba in March, alleging that Marimba's donation of its Distribution and Replication Protocol (DRP) to the World Wide Web Consortium (W3C) violates Novadigm's intellectual property rights, because the DRP may use techniques similar to its fractional differencing patent.

The patent covers two central points -- fractional differencing and desired state configuration.

Fractional differencing is a technique to compare and contrast the desired state configuration. It identifies what components a target should have with the resources it actually has, resulting in a concise and detailed difference configuration, which describes which components are required and which should be removed to ensure the user is properly configured with a minimum of network traffic.

Desired state configuration is a technique that incorporates essential elements from push and pull distribution models by generating a unique user configuration that describes the software and content a user should have, all generated from a common reference model.

We have invested over six years and thousands of hours in perfecting the technologies needed to solve software and information distribution problems. Standards are clearly a positive force in the industry, but the fact remains that this technology is not Marimba's to give away, stated Albion Fitzgerald, chairman and CEO of Novadigm. The technologies involved are incorporated into Novadigm's Enterprise Desktop Manager.

Novadigm reviewed documents made public by Marimba and the W3C to determine the basis of its suit. It will also notify the other companies involved in the DRP proposal of its claims: Netscape, Novell, Sun, and @Home Network.

http://www.novadigm.com/aB5.htm

Coming soon: Capture and view Web site structure with Mapuccino

IBM's Haifa Research Lab offers a way to easily capture and view the overall structure of any Web site, including the links to other sites. It's called Mapuccino (formerly, WebCutter).

Mapuccino is an application that dynamically constructs visual maps of Web sites, allowing developers and users to visually navigate through a site and check links. The maps can be viewed using any Java-enabled browser and can be stored for quick reference, or shared with other users.

Mapuccino isn't available yet, but you can keep an eye on its progress, see some demos, and find out what its final price will be, at the Mapuccino site.

http://www.ibm.com/java/mapuccino/

IBM offers free Java course, text-based or full multimedia

IBM has developed a text-based version of its free multimedia-laden Introduction to Java course. The course reviews the fundamentals of Java, as well as Java's important implications for electronic Web-based commerce. It includes a Java overview, an introduction to applets, some information about the future direction of Java, and a brief wrap-up. The class only takes an hour or two to complete.

And while we're talking about Java-related classes, IBM has some more (but not all are free). Here's the lineup:

Introduction to Object-Oriented Programming with Java -- Become familiar with the concepts of object orientation using the Java language. Understand and explore concepts, such as encapsulation, classification, and inheritance, and put these concepts into practice as you learn how to write Java applications using the principles discussed.

Java Programming -- Thoroughly explore Java programming in a course that goes beyond an introduction to practical applications of this object-oriented programming language. Learn about and write actual Java applets.

Advanced Java Programming -- This advanced course focuses on effective Java programming practices in a variety of application architectures. Extensive hands-on labs and directed exercises will be used to maximize skill development.

VisualAge for Java -- This course introduces you to the newest addition to the VisualAge family of products: VisualAge for Java. Write applications and build graphical user interfaces for your applications using the award-winning Visual-Age programming paradigm of visual construction of an application from parts.

In addition, IBM offers Java Education World Tour Courseware, developed by CBT Systems. This package features 15 Java courses (for a total of 55 hours of training). Through a special promotion, these courses are available at a discount to members of the IBM Solution Developer Program. (But the promotion ends September 30, 1997.) Membership in the IBM Solution Developer Program is free.

Java course index: http://www.ibm.com/java/education/courses.html

Intro to Java: http://www.ibm.com/java/education/intro/courseoptions.htm

World Tour package: http://www.developer.ibm.com/welcome/cbtjava.html

Guideware intros the Guideware SDK agent system

Guideware introduced the Guideware Software Developers Kit (SDK) to support the Guideware agent system for Java, which allows developers to plug process-management features into corporate intranet and extranet applications. The kit will be marketed to developers and integrators who are developing sales automation, customer help-desk support, human resources, or other business applications that link a company's employees, suppliers, and customers.

In intranet and extranet applications, Guideware agents coordinate and track processes, support online and laptop users, and provide flexible management of business processes. Agents are tuned for network operation, allowing laptop users to work in either connected or disconnected mode. Beta and prototype applications using Guideware agents include a suite of customer help-desk applications, geographically distributed project management, factory floor control, and medical patient treatment tracking. The Guideware agent system for Java includes Agent Monitor software, which controls agents and their access to the Web and other applications. An Agent Monitor must be present on each computer and server using Guideware agents.

The Guideware SDK provides a Java application framework that simplifies the construction of agents that access data, make decisions, and notify users. According to Sunil Mehta, Guideware CEO, developers can add agent-assisted features to legacy applications with minimal rewriting of code. In initial implementations of the Guideware SDK, agent features were incorporated into existing applications by changing less than 5 to 10 percent of the existing code.

The SDK provides a full set of tools, class libraries, and sample code needed to build deployment-ready agents. The SDK works with all Java development environments and supports the Java virtual machine 1.0.2 or higher. Developers can build and test agents on a single computer and then deploy them across a network. The SDK costs \$349 per developer and will be available in October.

The Agent Monitor is available at no charge from the Guideware site.

http://www.guideware.com/

Sun, IBM, Netscape unify Java 1.1 runtime environments

Sun, IBM, and Netscape have agreed to unify their Java 1.1 runtime environments. The lofty goal: A single runtime environment that will tune Java for all platforms and operating systems. The practical goal: establishing the Java Porting and Testing Center in Cupertino, California, so by the time the JDK 1.2 is ready, it will be shipping with products.

JavaSoft president Alan Baratz has concerns about the slow pace that JDK 1.1 technology has exhibited making its way into shipping products (in fact, only now are Netscape and Microsoft readying JDK 1.1 for their respective browsers). Scott McNealy hopes that this trio will be able to ensure that more products ship with the JDK 1.2 on board, when it is ready to go.

Engineers from the three companies will be situated at the Center. Intel, Symantec, Sybase, Borland International, and Oracle also have expressed interest in participating.

http://www.javasoft.com/pr/1997/august/pr97826-01.html

A letter to Sun: Rivals say, Relinquish control of Java

Microsoft, Intel, Compaq, and Digital have sent a letter to Sun CTO Jim Mitchell just days before Sun revised its application to ISO: The letter claims that Java is too important to the Internet for Sun to maintain such a tight control over it. The quartet goes on to say that Sun should relinquish ownership and maintenance of Java to ISO, as well as allow other companies to use the Java name without Sun demanding to oversee product-compatibility testing.

The original submission of the Java proposal to ISO (International Standards Organization) was offered in March 1997 and was struck down by a 2-to-1 margin. But most of the no votes came with comments, which means that Sun has an opportunity to respond to those questions when it resubmits the proposal. And Mitchell claims that the objections raised in the letter are the same ones that were raised by the voting members of ISO -- and that the resubmission would address these questions.

What are the two extremes for this issue? Sun may be holding Java close to the chest to keep Microsoft from co-opting the language to further the case of Windows everywhere. On the other side are the NetPC-friendly letter writers. (Dell must be too busy selling PCs to bother with this.) Mitchell replied, Frankly I believe that Microsoft saw which way the wind was blowing and tried to beat us up before we even had a chance to reply to the ISO. He added that Compaq isn't even a Java licensee.

And as for ISO, Mitchell said, it doesn't have facilities for compatibility testing. As with may aspects of life, the truth probably resides somewhere in the middle.

MetaBridge's netPodium Personal Broadcaster 1.0 uses streaming media

MetaBridge Inc. announced netPodium Personal Broadcaster 1.0, live event software designed for interactive, streaming media broadcasting on the Web. With netPodium, users can connect to a broadcast from desktop computers anywhere on the Web or a company intranet to hear the speaker, see slides and other graphics, and interact with the moderator.

All an audience member needs is a Java-enabled browser running on a multimedia computer and a streaming media player, said Mike Templeman, president of MetaBridge.

Personal Broadcaster 1.0 supports up to 100 simultaneous participants for \$2,995. The Quick Start Kit supports up to 15 participants for \$795 (now available at the special launch price of \$495 through September 30, 1997). The Quick Start Kit cost can be applied to a Personal Broadcaster 1.0 upgrade within 90 days of purchase. MetaBridge also offers a one-year \$995 subscription to the Inside Track Service Pack, a product maintenance and support package.

http://www.netpodium.com/

#### InfoMedia opens online game-playing club

InfoMedia announced the opening of ClassicGames.com, a free Java-based, multiplayer, Internet game-playing club where members can play their favorite games with thousands of registered users through their browsers -- no fees, download, or installation required. Games are delivered via Marimba's Castanet transmitter.

Currently, ClassicGames.com (for Unix, Mac, and Windows users) provides 15 Java-based games for its users, including chess, checkers, backgammon, hearts, spades, bridge, euchre, go, and reversi. Joel Comm, co-founder, said, What better way to get to know someone than over a friendly game of spades or checkers? With the launch of Classic-Games.com, people no longer have to pay to play the classics.

Players get a free login, then go to a live chat room to find someone to play with (or just shoot the breeze). You can also just watch, if you're more of spectator type than a participant. The company plans to offer more than 25 games by the end of the year.

http://www.classicgames.com/

#### Sun's take on the Java Internet Business Expo

In an effort to help out those were unable to spend late August in New York City, Sun has provided coverage of the recent Java Internet Business Expo on their site. Depending on how tolerable you find NYC in August, you may very well enjoy this view of the conference more than the real thing!

day one

day two

day three

day four

BMT Micro distributes J-POP Java e-mail server

BMT Micro is delivering the J-POP Server, a Java-based server that allows remote users to retrieve e-mail from their computers by using the standard Post Office Protocol version 3 (POP3).

J-POP will run on any system that supports Java 1.0.2 or higher. It can be configured to deny access to all Internet hosts except those explicitly allowed. J-POP supports the APOP authentication mechanism so that users don't have to send their passwords over the network.

With J-POP, you can manage the server through a GUI for easy user additions and deletions; it also makes it easy to change server configuration and to update host-access. Changes are detected automatically, so the server doesn't have to be restarted.

J-POP complies with all of the Internet Engineering Task Force's specifications for POP3, including the optional POP3 commands specified in RFC1939, which gives the administrator control over how the server interacts with clients.

http://www.bmtmicro.com/catalog/jpop.html

#### CSR opens the Eventware Java Classroom

Collaborative Systems Research (CSR) opens the Eventware Classroom, a Java-based distance learning tool for the Internet or corporate intranets.

Eventware is designed to emulate a live classroom on the Internet, which users access from the desktop. Eventware teaches with a shared whiteboard, a moderated chat group, and the ability to draw in Web examples as the lecture goes on. Classroom presentations can be saved and rerun.

The Classroom client can be accessed through a standard browser, or installed and run as a standalone program. For small local groups, Classroom clients communicate directly. But when you want to do open lectures or work over the Internet, the clients connect to the Eventware Collaboration Server that runs alongside a Web server.

And for a secure workgroup, CSR also provides a SSL and firewall/proxy support.

http://eventware.com/

JDK bug fix release is available

Sun has made available the JDK 1.1.3 bug fix release in the following forms for these platforms:

This version of the JDK has not been tested on Windows NT 3.5.1. You also can get a preview version of the Win32 Performance Pack featuring a JIT compiler and an early-access Solaris Native Threads Pack.

http://www.javasoft.com/pro ducts/jdk/1.1/

Java/Microsoft wars: Volley three

Todd Nielsen, Microsoft's general manager for developer relations, sent a recent email to publications claiming that evidence is beginning to accrue showing that Java won't live up to its promises.

His specific target, however, was the laboratory that Netscape, IBM, and Sun intend to establish, the Java Porting and Testing Center, which is expected to help move Java into more shipping products. The fact that these companies have to come together to do this additional work tells me that the promise of Java is not coming to fruition, said Nielson. He pointed to Corel's halt in its efforts to create a Java application suite as evidence of Java waning popularity, and he also criticized Sun's decision to team with Netscape to develop a 100% Pure Java Web browser. I think Netscape is pretty brave in choosing 100% Pure as a means to this end, given Corel's recent rude awakening about the downsides of 100% Java. Will 100% Pure Java fail to deliver for Netscape as it did for Corel? I guess we'll have to wait and see.

And from the other side, Sun CEO Scott McNealy commented on the Java/Microsoft wars.

#### McNealy said:

The industry has always been split. There is 100% Pure and there is Windows. The second you take a cup of coffee and add three drops of poison, what do you get? Windows. The second you leave 100% Pureness you are now in Windows territory. There is always going to be two answers -- Java and Windows on the client side. Microsoft, no matter how much Java code they have in Windows, it is still Windows. And only if you are 100% Pure are you Java. The press is letting the world be confused by saying there is two versions of Java. There is not. And if you break 100% Pure, you are no longer Java -- you are now Windows.

McNealy also commented that there is nothing he can do to make Microsoft comply with the 100% Pure Java initiative, and that most developers will write for both -- Java and Windows. But he insists that choice for the consumer is important. McNealy also pointed out that the Netscape Java browser is important for compatibility issues and will be a great boost to the acceptance of network computers.

McNealy cites Lotus (with its upcoming Kona Java applets) as a company that will deliver on its Java promise. And as for Corel abandoning its Java strategy, he said, They are not. This is one of the greatest non-stories that has been blown up. But that's all right. They are ramping up their Java investments, hiring more Java engineers, and more and more of their stuff is going to be written in Java. I think what they have decided is rewriting the hairball in Java is not the way to go. They have to get more componentized in what they do. That is natural.

Sun's JavaEngine 1: NC hardware and software in a box

By the end of 1997, Sun Microsystems hopes to release a single package (of individually available components) called JavaEngine 1. The company hopes that the package of SPARC processors, motherboards, and server software will become an easy point-of-sale NC to OEMs.

JavaEngine 1 is designed for Unix and Windows NT systems, and for special-purpose vendors (those building NCs for specific purposes, such as point-of-sale displays and kiosks). The JavaEngine 1 kit has an opening price of \$385 per unit (when purchased in quantities of 10,000) and includes the motherboard, a 100MHz MicroSPARC processor, chipsets, ASICs, and NC server software. The application software, such as Sun's HotJava Views, will be available separately through Sun or channel partners.

The kit's server software will include Windows NT boot APIs, which enable a Sun JavaStation to be booted from a Windows NT server. The server software also will include Insignia Solutions Intrigue, which allows a Solaris server to run Windows NT applications.

Avex Electronics, Acer Certek, DigiCAD, and GTE have plans to license the design kit to build NCs for special-purpose applications. Olivetti and Siemens Nixdorf plan to use the kit to build NCs.

Original article: http://www.zdnet.com/pcweek/news/0825/25esun.html

Novell and Oracle choose Navigator for desktops and NCs

Novell and Oracle have selected Netscape's Navigator client software as their preferred desktop and NC browser. In August, Netscape announced it would offer Navigator 4.0 (originally meant to reside in the company's Communicator suite only) as a standalone product. It also announced worldwide partnerships with OEMs, ISPs, and telephone companies to deliver more than 100 million copies of Netscape client software to home users and enterprises.

Beatriz Infante, senior VP of Oracle's Application Servers Division, said, The combination of Oracle and Netscape software dramatically lowers cost of ownership by moving complexity off desktop systems to powerful network servers. The movement to 100% Pure Java will ensure support for our customers' multi-platform network computing environments. Oracle's affiliate company Network Computer Inc. offers Navigator as the preferred browser to its corporate network computer hardware partners. NCI will bundle recently merged Navio software with its network computer software for consumer hardware partners.

Eric Schmidt, Novell's chairman and CEO, added that Novell is offering Netscape's market-leading Internet browser as the preferred browser to our customers. This announcement underscores Novell's commitment to providing state-of-theart browser technology. In addition to our relationship with Netscape to launch Novonyx, this initiative ensures custom-

- - -

ers can look forward to easy access to new leading-edge developments in Internet technology, based on 100% Pure Java.

IBM's network OS, WSOD, to ship in November

IBM has announced that its network operating system (NOS), Workspace On-Demand (WSOD), will start shipping in November 1997. WSOD is based on the Bluebird technology; it is designed to extend the built-in Java and RIPL (remote initial program load) technology of OS/2 Warp Server across NCs and multivendor managed-PC platforms. RIPL allows software operating on the server to appear to the user as though it were running locally on the desktop.

WSOD will consist of a server-based manager component, with utilities for administering NCs and thin clients, plus a client-software component, according to Ron Stone, product marketing manager for NC client software in IBM's Personal Software Products Division. WSOD won't replace the OS/2 Warp Server, but instead will run on top of it. And not only can business customers lower their costs of ownership and management by running WSOD, the OS will make it easier for them to manage multi-OS networked environments.

IBM plans to promote WSOD to enterprise customers in addition to corporate VARs. From now through November 28, 1997, customers will be able to participate in WSOD pilot programs together with VARs and IBM's Rapid Deployment Team. At the end of the program, the customer will be given a full implementation plan for the rollout of WSOD. Or, participating customers can choose to receive free defect support for 12 months for OS/2 Warp V3 and OS/2 Warp Connect V2, providing fixes by IBM to product malfunctions.

WSOD will be priced at \$729, including one client. Additional clients will be priced at \$249 each.

http://www.software.ibm.com/

Original article: http://www.infoworld.com/cgi-bin/displayStory.pl?970825.eworkspace.htm

#### Microsoft's Visual J++ gets beta upgrade

Microsoft, trying to keep its thumb firmly pressed on the Java market, will soon release Vegas, the first beta of an upgrade to Visual J++. Vegas will be enhanced with RAD features, and will have an integrated development environment similar to that of Visual Basic, according to Microsoft officials. It also will include Microsoft's J/Direct technology, which allows Java developers to directly access the Win32 API set, bypassing the Java virtual machine.

#### JScape's PowerTools JavaBeans available

JScape announced that the JScape PowerTools, a suite of 23 JavaBeans components, is available for a free download. PowerTools should help to reduce development time of Java applets and applications by providing pre-built (and pretested) essential systems, utility, and graphical components.

PowerTools is a member of the JScape Reusable Componentware product line, products that adhere to strict design and deployment standards so the components are highly reusable. PowerTools provides full native support for Java JDK 1.02, JDK 1.1, JavaBeans, and Java Studio.

PowerTools comes with a royalty-free license for \$250, but you can test a full-featured, 30-day evaluation copy before you purchase.

http://www.jscape.com/dm/product.asp?productid=120

#### Sun's Java Blend simplifies integration between DBs and Java apps

Sun Microsystems has announced Java Blend, a development product that uses Java to simplify building business applications that can access any database. Java Blend automatically translates and maps data and database structures so that developers can write applications for any database entirely in Java.

Java Blend, which was co-developed with The Baan Company, uses a process called object-relational mapping to let developers build database-intensive apps without using SQL. Java Blend automatically generates Java data at runtime that corresponds to the appropriate database format.

Java Blend includes a development tool and the software libraries needed to run Java Blend applications. Java Blend's database compatibility comes from its support of JDBC, a database connectivity API. It also conforms to ODMG, a specification that defines the industry standard for storing Java data in databases.

The product is scheduled to be available early in 1998. To get on board with the early-access program, sign up on Sun's site.

http://java.sun.com/products/java-blend

Daiwa shows that Java can make it in the business world

Daiwa Securities America thinks Java can cut it in the real world. And it offered its case study at the recent Java Internet Business Expo in New York.

Daiwa's thinking: Although the language is not yet full-featured enough for heavy-duty business loads, Daiwa officials think its developers will be able to write applications faster with Java. And the ability to run those apps across a sea of differing machines and operating systems is also important. It's much cheaper for me to spend \$2,500 on a hot-shot PC that'll run Java applications quicker than spend \$50,000 to \$100,000 for an extra programmer to write code, said Jeffry Borror, director of IT at Daiwa Securities America.

Daiwa is preparing to institute two Java applications. The first is a trade-processing system that routes business transactions to different processing locations, much like air traffic controllers do. The second is a trading system for the company's Japanese equities desk.

With the trade-processing application, trades are entered on customers' PCs (usually running Windows 95). The data is then routed across the network (Unix or NT network server) to a database server (usually Unix) for trade validation and processing. A record of the transaction goes to the company's headquarters, where it is stored on (and must be accessed from) a mainframe. Java eliminates the need to rewrite software and platform-specific data hooks for each platform.

With the Japanese equities application, data must be entered (then re-entered on every different platform on which it needs to be available). Java eliminates all the re-entry steps.

Borror realizes Java isn't perfect, with its lack of features and tools, and the performance lag. In fact, he's not sure it'll ever run as fast as C++. But I'll pay a reasonable performance penalty 20 to 25 percent, or even 50 percent, to get the cross-platform capabilities and the cleanliness of the object model. Not to mention that more tools are becoming available every day, and JIT compilers are helping with performance.

The component aspect of Java is what pleases Borror the most, though: If you do object-oriented development correctly, you have a much better chance of achieving the reuse of code we've been looking for in 20 years of programming. In particular, what I like is the JavaBeans model, which makes it very easy to develop and reuse software components.

The component aspect also addresses a specific requirement of Daiwa's business -- speed to deployment. Borror commented, The pressure is particularly intense here because we're under great deadlines. Our markets move very quickly. If we can't deliver things and put things out very quickly, the business opportunity is gone. Traders are dealing with hundreds of millions of dollars regularly. So if you can do something faster or more accurately than the competition, there's millions of dollars that can be made.

Original article: http://cwlive.cw.com:8080/home/online9697.nsf/All/970822daiwa

Sqribe Technologies announces Java-based ReportMart

Sqribe Technologies is introducing ReportMart, Java-based software that lets users access corporate reports from data-bases or data warehouses through the Web. ReportMart, made up of Java apps that store, manage, and deliver objects to users, is compatible with many types of information, including Word documents, Excel spreadsheets, graphics, video clips, and custom applications.

ReportMart consists of

The Repository, for storing objects

The Name Service Agent, for monitoring ReportMart servers

The JobFactory, for managing report updates and inserting objects into the Repository

The Administrator, which lets IS managers manage content creation and administration

The WebSqribe view, that lets users access and view reports through a standard browser

ReportMart includes a browser-based client and a back-end server. Pricing on Windows NT starts at \$15,000 for the ReportMart server plus \$150 per user (for WebSqribe viewer).

http://www.sqribe.com/PRODUCTS/report.htm

Additional informationhttp://www8.zdnet.com/pcweek/news/0825/27msqr.html

#### Sun gets three new JavaStation customers

Sun has announced that SABRE, ScottishTelecom, and the County of Santa Clara, California will deploy JavaStation network computers to replace 3270 terminals, to manage call centers, and to manage business-to-business extranets.

The SABRE Group, a provider of information technology for the travel and transportation industry, is planning for the next generation of its QIK-ACCESS products to run on Java-based network computers. QIK-ACCESS products (current version is QIK-2) now run on a PC system under Windows, OS/2, and DOS. QIK-2 includes a user-friendly interface to make it easy for travel-related personnel to make reservations, manage cargo deployment, and follow airline departures.

Java is uniquely suited to the travel industry because there are a number of architectures and environments in place, and in reservations and check-in, people tend to perform a fixed function, said Susan Tonjes, VP of SABRE Technology Solutions. These environments lend themselves to network computers like the JavaStation, which will provide a good solution to this problem.

ScottishTelecom plans to deploy 100 JavaStations for its call center and customer service divisions. ScottishTelecom has grown rapidly (from 100 to 850 employees) in the two-and-a-half years since it spun-off from Scottish Power. Eventually, the company has plans to create NC kiosks for customers to access to avail themselves of services.

Our marketing strategy is supported by the JavaStation in several ways: by reducing the cost of doing business and by reducing the cost of complexity that goes with traditional PC-based systems, said Peter Black, the ScottishTelecom customer services director. In addition, we can define a new product including interfaces and new functionality from a central location and push it into the JavaStation overnight. The next morning, our operators are ready to run with the new system.

The Santa Clara County Social Services Agency will deploy 150 JavaStation NCs to enhance the county's Greater Avenues to Independence (GAIN) program -- California's version of the Federal JOBS program. The GAIN system was running on a nine-year-old Bull mini-computer architecture that is difficult to maintain, lacks a graphical windowing environment, and doesn't provide Web access. The county introduced the GAIN Conversion System, a project that will completely replace the existing mini-computer's terminals with a Java enterprise computing architecture that includes Sun servers, 150 JavaStations, and a complete rewrite of the GAIN application to Java.

We selected Sun's Java computing solution because it solves many of the problems we've been dealing with over the past several years, said Bruce Overoye, director of information systems.

#### IONA broadens and enhances its CORBA support

IONA Technologies is expanding its CORBA support to Digital's platforms with two new products -- Orbix for OpenVMS 1.0 (OOVMS) and Orbix 2.2 for Digital Unix 4.0 (ODU 2.2/4.0). Orbix allows companies to build software components or objects with standard interfaces so that they can communicate with other software conforming to the same standard.

ODU 2.2/4.0 features a GUI (new) to make it easy to manage and deploy CORBA-based distributed applications. Also, some customer-requested additions were made, including giving developers access to a 64-bit Unix development environment.

With these additions, Orbix is natively available on Digital Unix, OpenVMS, and Alpha, as well as MVS, Solaris, HP-UX, IRIX, Windows NT and 95, OS/2, and Java. It's also available on such real-time OSes as VxWorks, pSOS, and QNX. Orbix for Digital Unix is available now at a cost of \$6,500 per developer. Orbix for OpenVMS should be available in beta later this month, with hopes of general release in the first quarter '98. Pricing is yet undetermined.

In addition to its support for Digital's platforms, IONA announced its latest release of its Java-CORBA development environment, OrbixWeb 3.0 -- a pure Java ORB (on client and server) that delivers a wide range of new features, including the full CORBA Naming Service natively in Java and a range of new GUI tools. These features make the administration, deployment, and management of Java-CORBA applications easier than before. OrbixWeb 3.0 also includes full support for the recently adopted OMG IDL-Java mapping.

We continue our dominance in the Java CORBA space, commented Annrai O'Toole, chief technical officer at IONA Technologies. This release is teeming with features, enhancements, and aggressive new paradigms for building online Internet applications. With features like security and pure Java server-side deployment and a compelling pricing model, any Java developer who isn't using OrbixWeb 3.0 is clearly on the wrong planet.

OrbixWeb 3.0 Beta 2 is available now with general availability expected at the end of October 1997 at a cost of \$799 per developer with no additional run-time costs.

http://www.iona.com/Products/index.html

Upgrade to MerzCom's MerzScope: Smaller, better optimized, more stable

MerzCom's new upgrade release to its Java Web mapping and viewing software, MerzScope 1.01, is available. MerzScope lets users create dynamic, relational graphical maps of Web pages and links.

Java-based MerzScope comes with a mapping application for developers and a Java applet so users can view and navigate the maps. Enhancements in this version include:

Better optimization and stability

A 50 percent decrease in applet size (using Java archiving, jar, for Communicator 4.0)

A MerzScope applet plug-in for earlier versions of Navigator and Internet Explorer

A Castanet channel version of the applet

You can evaluate (and purchase) MerzScope at the MerzCom Web site. The license costs \$395 and includes the MerzScope Web Mapper and one MerzScope Viewer license, which allows you to put any number of maps onto one Web server (one domain name/IP number).

http://www.merzcom.com/eng/store.html

Vigor adds Java-to-database to Visual J++

Vigor Technology is developing Mapper J++, an add-on for Microsoft's Visual J++ development tool that lets developers link Java applications to relational databases. Mapper J++ will allow developers to visually map Java classes, variables, and relationships to any JDBC/ODBC-compliant database.

Mapper J++ is slated to ship by the end of the year, at a cost of \$249.

http://www.vigortech.com/

With this Java Ring, we thee do everything

Sun Microsystems CEO Scott McNealy recently demonstrated a Java smart ring, built by Josten Inc. (Minneapolis) with a Dallas Semiconductor Java chip in it. The \$60 ring (\$1 Java chip) can transmit/receive signals from as much as 10 inches, making it perfect for opening doors, starting cars, or opening a Web page.

According to McNealy, the ring is no different than a Java smart card. It can do whatever a smart card can do running Java applications.

Additional information: http://www.javasoft.com/events/jibe/daytwo.html

Los Alamos Labs chooses Java-based PowerJ

Los Alamos National Laboratory (LANL) and American Management Systems (AMS) have cast a vote for Java by choosing Sybase's PowerJ development environment to help add a platform-independent thin client front-end to the AMS Procurement Desktop, the software they use for internal procurement.

One reason LANL and AMS chose PowerJ was to make Sybase responsible for addressing all of their concerns about reusing their established base of PowerBuilder code. In fact, AMS worked closely with Sybase, helping the company design and construct AMS-required user interface components for PowerJ's component library. Our user-interface needs drove the PowerJ component library, and our code was used internally by Sybase for some of their regression testing, said AMS' Jeff Modell, the person charged with maintaining the relationship between AMS and Sybase.

AMS has decided that Java's ability (current and potential) to deploy platform-neutral code makes it a strategic tool. It has similarly dismissed most browser plug-in technology, as well as ActiveX, as being too platform-specific.

One of the problems the LANL/AMS/Sybase team had to overcome was how to authenticate users in a stateless environment, referring to the way intranet HTTP transfers make every Web-page request a separate transaction. They devised a shared authentication service that allows each user to establish a session ID. The ID then creates a two-hour authentication umbrella for all Web-page requests from that IP address.

LANL/AMS also have seven other standards-based intranet applications either in production or under development.

Original article: http://www.zdnet.com/pcweek/news/0901/01risk.html

#### Digital's new StrongARM for mobile devices

Digital announced that early in 1998 it will ship the StrongARM SA-1100, a 133MHz and 200MHz embedded processor that will be supported by nine different operating systems. The low-power-consumption chips are designed for mobile handheld devices and cellular Internet phones, and emulate communications functions, such as the v.34 modems,

The chips are expected to run Windows CE 2.0, NewtonOS, JavaOS, Inferno, Psion Software PLC's EPOC32, Microware's OS-9, Geoworks's Sokoto, JMI Software's C-Executive, and Wind River's VxWorks — in short, just about every small OS in the world!

Both versions include integrated memory controllers that support a variety of memory types (SDRAM, DRAM, Flash, and ROM). They can also support two PCMCIA cards, color resolutions (1,024 by 1,024 dpi), and I/O interfaces (including USB). The processors will have multipliers with DSP (digital signal processor) functions that Digital officials hope will improve handwriting recognition (a technology easier to use with devices whereby keyboards would be cumbersome).

Digital has developed a Java accelerator (integrated or standalone) to improve Java performance on the chips.

The 133MHz processor will cost \$29; the 200MHz one, \$39 (in 10,000-unit quantities).

http://www.europe.digital.com/semiconductor/strongarm/strongar.htm

Original article: http://www.zdnet.com/pcweek/news/0901/02earm.html

#### Lucent's Inferno 2.0 OS will support PersonalJava

Lucent Technologies has decided that the next generation of the 1.5-megabyte Inferno Network Operating System (NOS) will support PersonalJava applications -- such as those found in screen phones and set-top boxes.

Inferno 2.0 NOS works on top of a host operating system and provides transparent access for users to any of the resources available on the network. Version 1.1 is available now and version 2.0 should be available in the next few months (the OS and an applet). Adding PersonalJava support will let PersonalJava apps use Inferno's security and authentication features.

http://www.lucent-inferno.com/

Athena Design's Integer: Java spreadsheet component

Athena Design's Integer Java spreadsheet Bean is the third generation of the company's product, and it accepts real-time data feeds.

The Bean allows developers to embed a full function, real-time spreadsheet into custom applications with no programming. Integer accepts real-time data from WebLogic's T3 Java Server and CSK's Slingshot servers. The Integer spreadsheet also offers access to any JDBC database, and can import and export legacy data from Excel and Lotus 123. It has more than 300 formula functions onboard, and can support millions of rows and columns with hundreds of layers of data.

Integer uses the JavaBean object standard and integrates with a variety of Java IDE and RAD tools (such as Java Studio, SilverStream, JDesignerPro, JBuilder, Visual Cafe, and Visual J++).

Contact Athena Design for pricing.

http://www.integer.athena.com/

#### CST makes Java face for legacy apps

Client/Server Technology's (CST) Jacada 5.0 will give green-screen front ends for legacy applications a Java-based facelift -- at the same time, giving these applications the ability to be deployed over the Internet.

Jacada 5.0, introduced at the recent Java Internet Business Expo, will also include the CST KnowledgeBase Toolkit, a utility that lets users without Java expertise create graphical front ends for both mainframe and AS/400 applications.

Jacada analyzes host application screens quickly and converts them to sophisticated Java graphical clients. And developers can re-engineer the look and feel of the front end during the conversion; two screens can be combined and new features and functions can be added without having to make any changes to the legacy application.

The only requirements for the client side is that it run Java and can launch a session with the Jacada Server (CST recommends 16 megabytes of RAM). The Web server should have at least 32 megabytes of RAM and run Windows 95 or NT. The Jacada 5.0 software development kit starts at \$7,995 per developer. Jacada client deployment licenses start at \$20,000 for a 40 concurrent session license.

http://www.cst.com/htmls/t1c.htm

#### New version of Darwin gets data mining

Thinking Machines has released Darwin 2.1, a new, more Java-friendly version of its data-mining software for customers with large databases. Darwin is used to slice and dice data within large databases to export prediction models that provide various ways of looking at trends, such as customer attrition, emerging needs for different services, and global purchasing patterns.

The new features in Darwin 2.1 include the ability to export predictive models in Java. The software also exports models in C and C++, so users can integrate data-mining results into custom applications and embed them in SQL queries. Also, Darwin 2.1 can read and write SAS files and export results to Excel.

The mining algorithms have been tuned for performance, and a general importance/sensitivity feature has been added. The sensitivity feature allows miners to indicate the importance of model-building algorithms relative to each other.

Darwin 2.1 starts at \$30,000 for an annual usage fee, depending on configuration. It is available now for Solaris, and should be ready for HP-UX and AIX by the end of 1997.

http://www.think.com/html/products/dartechDataSht.htm

#### Hummingbird gets peace of mind from Xcert

Hummingbird Communications has licensed Xcert Software's public key infrastructure technology (PKI) to provide security for its next generation of Java products.

Xcert's PKI technology will give Hummingbird's enterprise products strong authentication and secure data access via public key certificates (using the x.509 standard, with support for DSS/Diffie-Hellman) and secure directory services (following the LDAP 3 standard).

Why is Hummingbird interested? According to Fred Sorkin, Hummingbird president/CEO: Our customers have indicated that they must see Java's security improved before deploying Java solutions on an enterprise scale. Now [after licensing Xcert's security technology], all of our Java solutions will provide digital certificates and secure directory services. Sun has recommended public key certificates to wall up Java's security holes, but hasn't yet provided any.

For more information, check out the companies' sites.

Xcert: http://www.xcert.com/

Hummingbird: http://www.hummingbird.com/

The Applix Anyware NOW Initiative: Java Anywhere NOW

Applix announced its Anyware NOW initiative, an effort to formalize Applix's Java marketing and research and development programs.

Jay Waldron, Applix COO and president, talked about the company's Java strategy: We believe the true value of Javabased computing is founded on the ability to deliver applications just-in-time to the user, with virtually no advanced preparation and administration of the user's desktop. Only a thin client approach can address both of these issues.

Products based on the Anyware NOW strategy are built on a thin client, thin pipe scheme to give the user the best performance with the smallest amount of resource and communication overhead. So, almost all the application's computing is done on the server — the client applet manages the user's interaction and the interface.

The Applix Anyware product line consists of two parts, Anyware Office and Enterprise Anyware (both certified 100% Pure by Key Labs). Anywhere Office (shipping since March '97) is an office automation suite and Enterprise (shipping since June '97) delivers interactive customer service and help-desk facility to Java desktops. Applix plans to develop an integrated sales and marketing automation system for the Applix line.

http://www.applix.com/press/pressrel/97-09-09AnyNow.htm

NetDynamics Application Server gets VisiBroker for Java

NetDynamics is licensing Visigenic's VisiBroker for Java ORB technology for its Application Server, giving NetDynamics' customers a CORBA-compliant Java application server.

The VisiBroker for Java ORB will be integrated with the NetDynamics Application Server, providing CORBA-standard object interoperability via the IIOP protocol. With this combo, customers should be able to transparently access Java middleware as they deliver scalable Java enterprise applications that can integrate databases and core applications.

NetDynamics Application Server is used to both build (by virtue of a Java RAD tool and WebEXTEND integration modules) and deploy enterprise applications.

http://www.netdynamics.com/about/whitepaper.html#server

http://www.visigenic.com/news/NetDy997.html

New Java whitepapers and JavaStation software

In case you haven't noticed, Sun's Web site has a few new whitepapers on Java computing: Breakaway Business Strategies with Java Computing and Java Computing Extranets: A Primer for the IT Decision Maker.

Plus, the new JavaStation Software Environment (JSE) 1.0.2 developer's release is available. The latest JavaStation software release contains JavaOS 1.0, HotJava Browser LAR (Limited Access Release), HotJava Views 1.0, Views Manager, and JavaStation Manager.

Breakaway WP: http://www.sun.com/javastation/whitepapers/breakaway/

PrimerXtraNet WP: http://www.sun.com/javastation/whitepapers/extranet/

JSE 1.0.2: http://www.sun.com/javastation/jcdev/index.html

#### Get your SunScript products -- free!

Sun has decided not to sell SunScript-based products. It will give them away instead. The company also has plans to integrate SunScript with Java; in fact, Sun officials said they are working on a SunScript interpreter implemented in Java, called Jacl (pronounced jackal).

SunScript, the Tcl/Tk (Tool command language/Toolkit), is a language that was developed by Sun Distinguished Engineer John Ousterhaut while he was doing research at the University of California, Berkeley in the 1980s.

Sun originally had planned to sell products and establish Tcl/Tk as the de facto Internet scripting language when it launched the SunScript Business Group in April '97. Sun engineers thought SunScript was superior to JavaScript, Visual Basic, and even Java. But before SunScript found its place in the Sun establishment, its champion, Eric Schmidt, left to head Novell. In addition, a 1995 JavaSoft/Netscape deal meant that JavaSoft had to support JavaScript.

The first product will be a Tcl/Tk plug-in that will integrate Java with the existing C Tcl interpreter. Ousterhaut said, You'll be able to load a Java virtual machine into any Tcl application and easily invoke Java classes from Tcl. There will also be support for JavaBeans.

#### Ontario collegiate system putting Java to the test

The Ontario College Application Service (OCAS) is rewriting all its applications in Java over the next school year. The OCAS is the division of the Ontario educational system that processes student applications for the 25 schools in the system.

Guy Morazain, executive director of the OCAS, said that moving to Java was an easy decision. The first reason was the Year 2000 problem. The system needed a set of applications it could write and deploy rapidly that would also work across the different platforms (including all flavors of Windows, Unix, and MacOS) in the various colleges. The colleges currently use in-house applications for their online registration process (supporting 250,000 students and 17,000 staff members).

The Java applications are being written by Sanga International, Inc. and deployed on Sun's Ultra Enterprise 3000 servers.

#### Ping, Pong, Ping -- Corel's not abandoning Java

First, Corel said it was dropping plans to create a Java version of its Office suite, Corel Office for Java. Java detractors jumped on this news, declaring that Java was flawed and not business-worthy. Included in the Java death notices was the concept of network computing.

Chris Biber, director of strategic alliances at Corel, has set the record straight. According to Biber, the reasons for putting the Office suite on hold was that customers kept wanting more and more features added to the client, and the fact that users with Word or Word Perfect (but not Office for Java) couldn't share the files. He said, Some people outside Corel said it was because of Java's performance. But that was not an issue for us.

Biber added, This is not a withdrawal from Java. We're increasing our Java [RD]. We continue to believe that Java remains viable as a new model for not only building but distributing applications. We're addressing this [added features and file compatibility] with a technology called Remagen: a Java client and a server piece that sits on top of Windows NT. An existing application [such as Corel Office] runs on the NT server and makes API calls to the operating system. Remagen intercepts these calls and sends them across the wire to the Remagen client, written in Java, which turns the calls into the appropriate screen displays. We'll have clients for NT, Windows 3.1 and others.

Biber went on to talk about Corel's new Java-based project, called Alta -- a group-oriented suite of communications applications: calendaring, scheduling, workflow processes, and a universal in-box (a combo of e-mail, sound files, video, and voice messages). With Alta, the user interface gets assembled at runtime out of HTML and Java components to fit the user's task. Corel plans to release Alta by summer 1998.

#### HotSpot delayed -- again

Sun's HotSpot technology, which comes with the promise of double-fast Java, is delayed again. The delivery date is now set for spring 1998.

In April 1997, Sun announced that HotSpot would come with the JDK 1.2, planned for summer 1997. The kit's launch date got moved to December 1997 -- but HotSpot won't be a part of it. According to Eric Chu, HotSpot won't show its face until a spring 1998 release of the JDK. HotSpot is designed to find the parts of a Java application that can be accelerated, then it makes those portions run faster. JavaSoft purchased HotSpot from LongView Technologies earlier this year.

Chu said the primary focus for the next release of JDK is security and the Java Foundation Classes. He also said JDK 1.2 will provide performance enhancements, including a more efficient way to load JFCs that will use up to 15 percent less memory than before.

Performance is a very real concern for customers thinking about adopting Java. According to Rob Shostak, CTO and founder of Netiva Software, The most pressing issues for Java developers are improving speed and fixing bugs.

IBM's Nways Enterprise Manager: Manage SNMP devices from Java

IBM's Nways Enterprise Manager is a Java-based application for managing switches, routers, and other network gear -- from a Java-enabled Web browser.

The application works by gathering real-time system updates from SNMP Management Information Bases residing on all IBM devices. Network administrators (with a Java-enabled Web browser) can download the applet and monitor network switches, add and delete devices, reconfigure the network, and enable or disable switch and router ports. With Nways, users can analyze event messages generated by IBM's Nways devices and track a variety of management items, such as device inventory.

The Enterprise version is a heftier version of the Nways Workgroup Manager for Windows NT, a Java-based management application that can manage up to 200 nodes. The Enterprise version is expected to be able to handle thousands of devices. The Enterprise version will probably also run on NT servers first, with support for other OSes coming later.

Toshiba develops high-performance, standalone, PC-based Java OS

Toshiba Information Systems has announced a Japanese and English beta version of an operating system for Java-based applications -- Jexe OS 1.0.

Jexe OS 1.0 is designed to allow any commercial PC to run Java applications at a fast clip on a standalone basis. The final English version is expected to ship in December '97; the final Japanese version will ship in January 1998. Pricing for the English version was not set; for the Japanese version, it will be 7,900 yen.

http://www.toshiba.com/

If you have problems with this magazine, contact webmaster@javaworld.com URL: http://www.javaworld.com/javaworld/jw-10-1997/jw-10-newsbriefs.html Last modified:

LOAD-DATE: November 11, 1998

LANGUAGE: ENGLISH

Copyright 1997 Web Publishing Inc., an IDG Communications Company



June 19, 1992 Friday Oswego Edition

## BLAZE DESTROYS BUILDING THAT HELD CLEVELAND'S PAST THE OLDEST COMMERCIAL BUILDING IN THE VILLAGE HAD BEEN A MEAT MARKET, FURNITURE STORE, FUNERAL PARLOR AND DANCE HALL.<

BYLINE: SCOTT SCANLON The Post-Standard

SECTION: LOCAL NEWS; Pg. B1

LENGTH: 591 words

**DATELINE: CLEVELAND** 

Catherine App Bennett could only bring herself to walk one circle around the charred remains of her childhood home.

There wasn't much to see.

The building her grandfather built in the mid-1800s -- which for most of its life served as village meat market, drygoods and furniture store, funeral parlor and dance hall -- was gone. The fire easily destroyed the dilapidated building Thursday morning.

More than 100 firefighters raced to the building at Division and Main streets when they got the fire call at 12:30 a.m.

"It was fully involved on our arrival," Cleveland First Assistant Fire Chief Jack Cottet said. "It looked like a giant paper bag burning."

The blaze melted and cracked two windows at the post office across Division Street. Thursday afternoon, a single hose sat spraying water on the black timbers that lay in a small heap along the stone foundation.

The fire was so severe, Oswego County fire investigators had not determined where the fire started, or what started it.

"It's a sad-looking affair," Bennett said "I hated to see it go."

According to village historian Joni Hinds, the former two-story **App store** was the oldest commercial building in the tiny village along the north shore of Oneida Lake. Only a few private residences predated it, she said.

It was a turn-of-the-century stop along the vaudeville circuit, luring acts that included W.C. Fields and several traveling medicine shows, Bennett recalled. The Syracuse University Glee Club often gathered there. Her grandfather and father played silent movies for patrons when the dance hall was closed.

The early 20th century marked the store's zenith. At the time, Cleveland boasted three glass factories and three hotels—all eventual victims of fire or hard economic times. A former Victory general store once stood across Division Street, but was demolished in the mid-1960s to make way for the new post office.

The store itself had been vacant about three decades. A village real-estate speculator, Ray Barney, took over mortgage payments from Bennett five years ago and promised to rehabilitate it. He made regular mortgage payments and promised to keep the historical flavor while creating apartments and offices, but made little headway, Bennett said.

BLAZE DESTROYS BUILDING THAT HELD CLEVELAND'S PAST THE OLDEST COMMERCIAL BUILDING IN THE VILLAGE HAD BEEN A MEAT MARKET, FURNITURE STORE, FUNERAL PARLOR AND DANCE HALL.< The Post-Standard (Syracuse, NY) June 19, 1992 Friday Oswego Edition

The App family was one of the wealthiest in the village when their store operated. Bennett's grandfather, Martin App, an undertaker, built the first outlet in 1842, shortly after arriving in Cleveland from Germany. The store burned down after the Civil War and App rebuilt it in 1867. Bennett's father, George, ran the place from the turn of the century until his death in 1958, she said.

Bennett is the last surviving App family member. One of her brothers, Clarence, ran a small boat livery 200 yards east of the store until he died seven years ago. A new owner renovated it four years ago, although the small marina still bears the App name.

Bennett recalled living in a first-floor apartment in the store growing up, but said she moved out to go to college about 1920 and did not return to the village until after her husband died in 1952. She has no plans for the property.

Barney, the real-estate speculator, could not be reached Wednesday. A friend who answered his phone said Barney was in California on business. The man, who called himself Jim, said the building was not insured.

"Personally, I'm always sad see a place go that has been a part of the village so many years," said Hinds, the village historian. "But it's also sad to see a building decay before your eyes."

LOAD-DATE: February 12, 2003

LANGUAGE: ENGLISH

**GRAPHIC:** PHOTO; DAVID GRUNFELD/The Post-Standard; Shown above is rubble from the fire at Division and Main streets in; Cleveland Thursday. Below, Donald F. Scott replaces glass that melted; at the post office across the street from the former App family store.; Scott works for National Glass Co., Syracuse.

Copyright 1992 Post-Standard, All Rights Reserved.