



CLAREITY™ SECURITY LLC Kansas City

SAFEMLS® Solutions



"PROTECTING MLS DATA AND CONSUMER PRIVACY"



MLS Bad Behavior (Why)

- Teenage son of a REALTOR®
- The local newspaper
- Potential real estate buyer
- Team-sharing of MLS services
- Appraisal company in Georgia
- Disgruntled administrative assistants

The common thread:

The user of the MLS ID wasn't the Owner of the MLS ID



Craigslist Posting (San Diego)

MLS SANDICOR APPRAISER REAL ESTATE

Reply to: comm-245314799@craigslist.org Date: 2006-12-06, 10:32PM PST

NEED SOMEONE ELSE TO JOIN IN WITH ME AND 2 OTHERS TO PAY LESS FOR THE SAN DIEGO MLS.

IF YOUR NOT FAMILIAR WITH THE PRICE, IT'S FOR THE YEAR FOR ONE PERSON. WITH 4 PEOPLE, IT'S BEACH. A LOT BETTER OF A DEAL.

EVERYBODY WINS.

FEEL FREE TO EMAIL ME.

Location: ORANGE COUNTY It's NOT ok to contact this poster with services or other commercial interests

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Security – What are we Protecting?

- MLS DATABASE
- MLS servers and software (IP)
- 3rd party data and IP
- MEMBERSHIP & ACCOUNTING DATA
- PRIVATE CONSUMER DATA
- SENSITIVE SHOWING INSTRUCTIONS
- Ability to conduct business





The password risk

Passwords are Weak Because...

- Only one-factor authentication
- Easily hacked, stolen, borrowed, guessed or sniffed
- Borrowed passwords can easily propagate
- Difficult to remember and *manage properly*
- Human nature makes passwords inherently weak





The Password Policy Dilemma

- I.T. can make you change your password every 30, 60, or 90 days
- Require complex passwords oA16l8@CeC
- This increases forgotten passwords and help desk calls
- Users often circumvent these policies

 Like by writing passwords down on Post-Its!!
- Defense Dept password policy is 30 pages long





What Security Have We Used?

- 90 day password change
- Preventive multiple member log-in
- Complex Passwords
- These options were somewhat successful.
- The Board of Directors & Broker Leadership wanted Sandicor to find a more effective solution.



Board of Directors & Broker Leadership

- Sandicor implements decisions and polices as directed by the BOD
- The BOD is composed of reps from each of the five Association owners
- The decided 2 step authentication process has valid successful results with several MLS'





The Solution: SAFEMLS®



- <u>Similar Technology</u>
 - Automated Teller Machine
 - Sentrilock Lockboxes
- <u>Strong Authentication</u>
 - Combining something you know with something you have in your possession



 You can't have one without the other



Who uses these products?



Secure remote access for 60,000+ users



Authenticate \$90B in cash management transactions daily for 1.2M+ users



Authenticate 30,000 employees from any location using multiple access methods.



Secure remote access for 40,000 users.



Authenticate 80,000 remote users, suppliers and business partners



Key Tokens/FOB History







- SCUR NASDAQ
- Over 20 years experience
- DOD, NSA
- Dept of the US Navy
 - Torture test
 - Extreme weather
 - Dashboard
 - Washing machine
 - 5 year warranty
 - Battery life- 9 years



Silver vs. Alpine

Big vs. Small



Description: The original authenticator, the SAFEMLS® blue token, is convenient and easy to use. The slim line device measures about 1" X 2" and easily attaches to a key chain for quick access. Just press the small gray button to obtain a password!

Is it for you? The characters on the display window are large and easy to read. This token displays both letters and numbers.



Description: Newly released hardware token. This new token is a slightly smaller form factor with a convenient carbiner clip for easy attachment to lanyards or key chains. Like the blue token, simply press the gray button to obtain a password!

Is it for you? The display area on this token has a magnified password display window. Password display is slightly smaller than the silver token and displays only numeric characters.



SAFEMLS Token Enrollment Process





You must register your Token ONE TIME



1. Go to www.sandicor.com





2. Click on Register your Security Token

Follow this step first before you log in

Log in to the TE	MPO™ MLS system
User ID:	User PIN: SAFEMLS Password: SIGN IN Register Your Token, Lost/Broken Token, Change Your PIN, Forgot Your PIN
	Sandicor
	JUIUU



SafeMLS® Enrollment Agreement

Step 1:	Please enter your User ID#:	
	This is the same as you currently use to login to the Sandicor Tempo 5 system.	

Step 2:	SANDICOR TEMPO MLS END-USER LICENSE AGREEMENT
	This End-User License Agreement ("EULA") is a binding agreement between you ("You" or "Subscriber" or "Participant" or "Assistant") and SANDICOR, Inc., a California Corporation ("SANDICOR"). You are permitted access to the SANDICOR Tempo MLS System only by virtue of your assent to the terms of this EULA. If you decline to assent to the terms of this EULA, your use of the SANDICOR Tempo MLS System will terminate immediately.
	SafeMLS® Enrollment Agreement Printer Friendly



SAFEMLS® Enrollment

Step 1:	Your MLS Login ID: test111
	This is the same login ID as you currently use to login to the MLS system.

t)	Secret Questions (used to verify identity for lost/broken token replacement	Step 2:	
	What is your birth city?		
	What is your birth year?		
	What is your mother's middle name?		

Step 3:	Please enter your SAFEMLS® token's serial number:
	Please re-enter your SAFEMLS® token's serial number:
	Your SAFEMLS® Token serial number is on the back of the token device.

Step 4:	Please select a 4 digit PIN code:	
	Confirm your PIN code:	
	We recommend a code that you will easily remember such as your ATM or lockbox PIN o	ode.

Step 5:

Enroll Token



Successful Enrollment!

You have successfully enrolled your SafeMLS® authenticator.

You may start using your SafeMLS® Authenticator now.

Please add the SafeMLS® administrative address safemls@sandicor.com

to your address book to help make sure you can receive email messages from the SafeMLS® system in case of a lost or broken Authenticator.

Sandicor Tempo 5



How to Use your SAFEMLS Token









Log-in Using the Token/FOB.

Press the gray button to receive a SafeMLS Password

Log in to the TEMPO™ MLS system				
User ID: 987654	User PIN: ****	SAFEMLS Password:	*****	SIGN IN
		ken Token Change Your PIN Ford	got Your PIN	
			367738	
			SAFEMLS	PRESS HERE
			RAFEMLS	PRESS HERE
	Ca			
	501			



Success!

Welcome to Tempo 5!

empo - Windows Internet Expl		
 http://sandicor.mixtem 	com/	🖌 😽 🗙 Google
🐼 😥 🕶 🔊 Tempo	X SafeMLS@ Configure Fixed P SAFEMLS@ User Information	💁 🔹 🔝 🕤 🖶 Bage 🗸 🎯 Tgols
andicor	Q 📀 🗞 I	
	2467.13	COSPECTS RECORDS PROMISINGS BATO IN TOOLS
Matches	Welcome KAREN DUPRIEST	Inventory Watch
lew Prospecting matches	9 MLS Broker	Office Active Listings
earches expiring in 7 days	0 Welcome to TEMPO 5	Expring Within 7 Days
and an internet		Pending Listings
ind a Listing	The TEMPO 5 (T5) system will be running in parallel mode with our current system referred to as Tempo 3 (T3). You have	e attended the training class Pending Sales
ookup by: 🔘 Address or 💿 ML#	and are now ready to experience some of the major enhancements and improvements of T5! Since we will be running in	parallel mode for a few months, Sold Within 6 Months
	you might want to utilize the system with these things in mind:	Office - New This Week
eparate multiple ML# by commas		Office - All Actives
	 Enhancements and improvements will continue for the next two months as more users work with the T5 system. The initial use of T5 will expose unanticipated software bugs that will be resolved periodically with system updates. 	5220000-5200100-02000
Search for a listing	All prospects will be transferred from T3 to T5.	
Hotsheet	4. Your custom searches for established prospects will NOT be transferred from T3 to T5	
Days Bac		
1000	Leave them on a proven system where all properties are still being added to the system and we are still running using the	e old listing input forms.
RES - New Listings	 New listings and changes will be added to T5 every hour. 	
RES - Back on Market	7. New fields have been added to T5 but they will not work until we turn off T3 in April.	
RES - Price Changes	8. Add/Edit functions in T5 will be made available in April when agents are able to update their listings to match the number of the balance and the balanc	
RES - Pending Changes	9 9. In order to begin testing the new system, solicit the help of a friend or perhaps a client who has just begun exploring the new system. Solicit the help of a friend or perhaps a client who has just begun exploring the new system.	



Lost or Broken Token?

	Log in to the TEMPO™ MLS system User ID: User PIN: SAFEMLS Password: > SIGN IN Register Your Token Lost/Broken Token Change Your PIN
<u>Cli</u>	ck Lost/Broken Token here Sandicor



Fill out Form

My Authentie	cator Is Lost
Please enter your User ID#:	
Next Back	Main Menu

Lost Your PIN	
Please answer the following questions to validate your identity	
What is your birth city? What is your birth year?	
What is your mother's middle name?	
Next Back Main Menu	



Confirmation Page

- Temporary Password Confirmation
 - Screen will display which email sent to
 - Email address on file with Association



- Temp password only good for up to 4 days
- Temp password deactivates Token/FOB
- Can only use temp password 3 times a year



Contact Your Service Center

• Contact your local Association:

- To receive new Token/FOB
- To reactivate found Token/FOB







Clareity Tech Support

- www.sandicor.com
 - SafeMLS Token User Guide
 - Click Here for Information on SafeMLS







Clarëity Security...



your price range . . . it's the actual house itself."