



VerifiedID@SG

Mitigating Identity Theft in .sg Registrations

26 Mar 2014

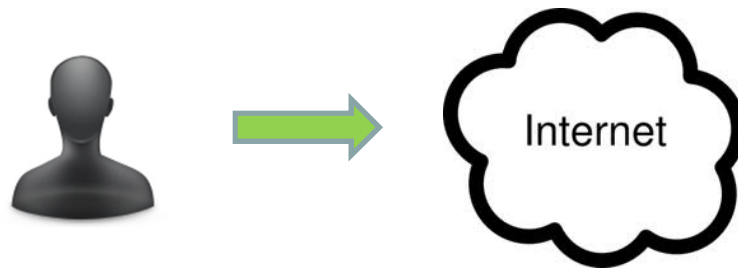
Ryan Tan

Scope



- **The Problem**
- **Solutions?**
- **The Plan**
- **Observations**

The Problem



Registrant can claim to be anyone. e.g. **ABC Ltd** is registrant of **ABCbank.com.sg**

Not difficult to fake identity or perform identity theft!

- Precursor to other domain name abuses

No consequence even if caught

The Problem



Mitigations

- Investigate 'suspicious' cases
- Act on complaints

How serious?

- Those we come to know: couple of cases.
- Those we do not know: *No one knows!*

The Problem



Solutions



The “Best” way:

Apply in-person with a stack of documentary proofs

- Company registration certificates
- Individual’s identity card, passport etc.
- Authorisation letter
-

Solutions



Any other ways?

Need a solution that:

- Provides positive identification of the person performing the registration
- Preserve online & real-time nature of registration
- Allows simple and fast identity verification process

Solutions



- **Singapore has a “SingPass” system. (Singapore Personal Access)**
- **Pretty much anyone who lives or works in Singapore is issued a “SingPass” by the Singapore government (i.e. positively identified by the government).**
 - Username: <National ID or Foreigner ID>
 - Password: <*****>

Solutions



“SingPass” is in use for many existing e-services:

- Buy house
- Buy car
- File income tax
- Apply credit card
- Check retirement account
- and many others...

The Plan



- All .sg domain names already require a local admin contact
- We can further require admin contact to have a valid SingPass ID.
- The admin contact can then authenticate himself via SingPass and vouch for the identity of the registrant!
- For identify theft/fake identity cases, admin contact *may be implicated*

The Plan



- **Admin contact has 21 days to perform verification otherwise domain name will be suspended (i.e. cease to resolve)**
- **Pretty naggy reminder emails sent daily to:**
 - **admin contact from day 1 to day 21**
 - **registrar from day 11 to day 21**
 - **registrant from day 14 to day 21**

The Plan



SGNIC Online Whois Results

After registration
but before
verification

Result of query on TESTCOMPANY123.COM.SG :

SGNIC WHOIS Server

The following data is provided for information purposes only.

Registrar: REGISTRAR 123 PTE LTD

Domain Name:	TESTCOMPANY123.COM.SG
Creation Date:	04-May-2013 17:25:48
Modified Date:	04-May-2013 17:25:48
Expiration Date:	04-May-2014 17:25:48
Domain Status:	OK
Domain Status:	SERVER RENEW PROHIBITED
Domain Status:	VerifiedID@SG-Mandatory
Domain Status:	VerifiedID@SG-Pending (ID NOT VERIFIED. PENDING ADMIN CONTACT VERIFICATION)

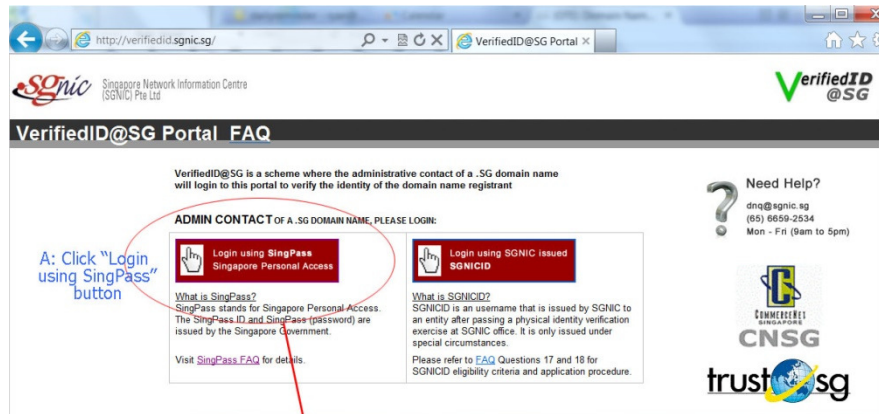
Registrant:

Name: TEST COMPANY PTE LTD (SGNIC-ORG1013843)

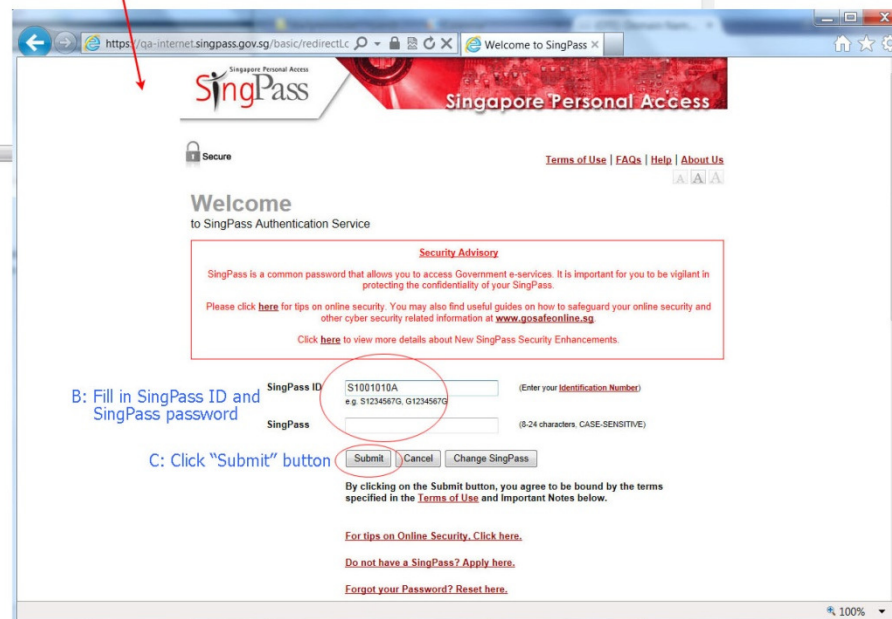
Administrative Contact:

Name: JOHN TAN (SGNIC-PER1717294)

The Plan



2-step process
< 5 minutes



The Plan



Browser address bar: <http://verifiedid.sgnic.sg/>

Page Header: **VerifiedID@SG** Singapore Network Information Centre (SGNIC) Pte Ltd. You are login as: S1001010A [Logout](#)

VerifiedID@SG Portal FAQ

- [Domains Pending Verification](#)
- [Domains Verified](#)
- [Authorised Email Addresses](#)
- [Logout](#)


Domain Names Pending Identity Verification


Please review the accuracy and completeness of information provided for the Registrant and yourself, put a tick against the domain name, scroll down and click on the "Verify Identity" button.

If the information is not accurate or incomplete, it can be updated via the Registrar for the domain name.

<input type="checkbox"/>	Domain Name	Registrant	Admin Contact
The following domain name(s) have indicated that you are the new Administrative Contact of a new registration or the new Administrative Contact of an existing registration.			
<input type="checkbox"/>	TESTCOMPANY123.COM.SG Registrar: REGISTRAR 123 PTE LTD Created: 04-May-2013 17:25:48 Modified: 04-May-2013 17:25:48 (VerifiedID@SG)	TEST COMPANY PTE LTD [ID]:501234567A [ADDRESS]:1 TEST ROAD #01-00 654321 Singapore [PHONE]:+65.22222222 [FAX]: [EMAIL]:test@testcompany.com	JOHN TAN [ID]:S1001010A [ADDRESS]:1 TEST ROAD #01-00 123456 Singapore [PHONE]:+65.22222222 [FAX]: [EMAIL]:test-verifiedid@sgnic.sg
<input type="checkbox"/>	TESTCOMPANY123.SG Registrar: REGISTRAR 123 PTE LTD Created: 04-May-2013 17:25:49 Modified: 04-May-2013 17:25:49 (VerifiedID@SG)	TEST COMPANY PTE LTD [ID]:501234567A [ADDRESS]:1 TEST ROAD #01-00 654321 Singapore [PHONE]:+65.22222222 [FAX]: [EMAIL]:test@testcompany.com	JOHN TAN [ID]:S1001010A [ADDRESS]:1 TEST ROAD #01-00 123456 Singapore [PHONE]:+65.22222222 [FAX]: [EMAIL]:test-verifiedid@sgnic.sg

By clicking on the "Verify Identity" button below, I, the Administrative Contact for this domain name registration, am declaring that I have checked and verified the identity of the registrant as described above. In the event that a domain name is found to be abused for undesirable activities (e.g. fraud), and the identity of the registrant is found to be inaccurate, I may be asked to assist SGNIC or any relevant authorities in their investigations. Where SGNIC believes that you had made a false declaration or had provided false, misleading or inaccurate information in connection with this verification process, SGNIC may bar you from acting as an administrative contact for any registration process.

 By clicking on the "Verify Identity" button below, I, the Administrative Contact for this domain name registration, am declaring that I have checked and verified the identity of the registrant as described above. In the event that a domain name is found to be abused for undesirable activities (e.g. fraud), and the identity of the registrant is found to be inaccurate, I may be asked to assist SGNIC or any relevant authorities in their investigations. Where SGNIC believes that you had made a false declaration or had provided false, misleading or inaccurate information in connection with this verification process, SGNIC may bar you from acting as an administrative contact for any registration process.



The Plan



“Success” emails sent to admin contact and registrant for information

SGNIC Online Whois Results

Result of query on TESTCOMPANY123.COM.SG :

SGNIC WHOIS Server

The following data is provided for information purposes only.

```
Registrar: REGISTRAR 123 PTE LTD
Domain Name: TESTCOMPANY123.COM.SG
Creation Date: 04-May-2013 17:25:48
Modified Date: 05-May-2013 08:45:11
Expiration Date: 04-May-2014 17:25:48
Domain Status: OK
Domain Status: VerifiedID@SG-Mandatory
Domain Status: VerifiedID@SG-OK
```

After verification

Registrant:

Name: TEST COMPANY PTE LTD (SGNIC-ORG1013843)

Administrative Contact:

Name: JOHN TAN (SGNIC-PER1717294)

The Plan



After years of preparation, we launch a 6-months pilot trial on 2 May 2013.



Observations



- **Very few negative feedback**
- **No drop in registration volume**
- **75% of admin contact verify within 24 hrs;
99% within 21 days**
- **Quality of registration data improved!**
- **No suspected cases of identify theft and
fake identity cases (May to Oct 2013)**
- **Increased in email and phone queries**
- **Converted to permanent scheme since Nov
2013.**

Summary



Before:



Claims that **ABC Ltd** is registrant of **ABCbank.com.sg**

After:



S7098765A



Real person to verify online that **ABC Pte Ltd** is the registrant



Thank You