WISE 2011

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TTi Technologies, Inc.
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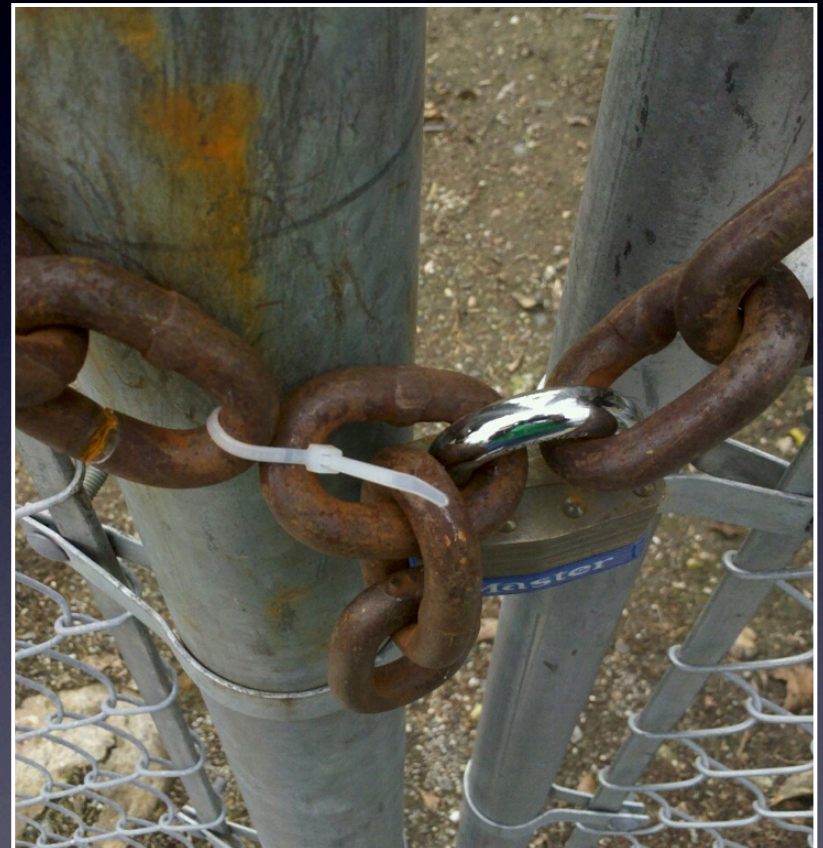
Mobile Security and the Need for Innovative Solutions

Increase in Smart Phone Use

- Mobile Industry will reach $1.3T in revenue this year

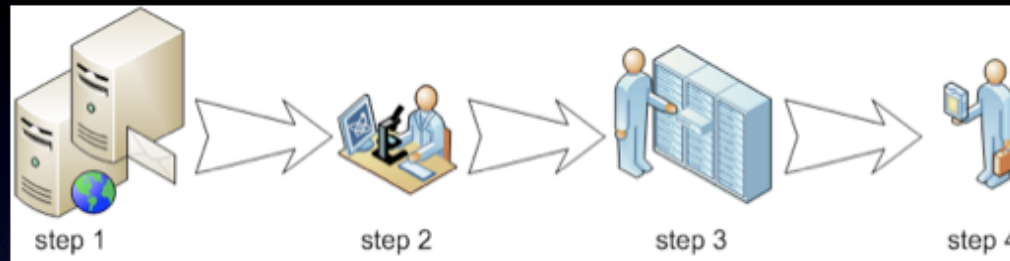- Mobile subscriptions will reach 6B globally

Increase in Smart Phone Malware

- March - Droid Dream

- May - Droid Dream Light

- June - Plankton, Droid Kung Fu, HippoSMS

- Proof of Concept - SoundMiner

Antivirus Signatures


step 1   step 2   step 3   step 4

Step 1. Bad guy launches a new piece of malware. Antivirus company attempts to identify and obtain a sample of the malicious program.

Step 2. After sample is obtained, the process of analysis begins. This stage can be performed by rudimentary automatic analysis and by malware analysts. This stage results in the addition of signatures to the antivirus database.

Step 3. After a signature is added to the antivirus database the testing process begins. The objective of testing is to identify any potential errors in the entries that were added.

Step 4. Once the testing phase is completed, the updates are delivered to the users of the antivirus program.

Machine Learning
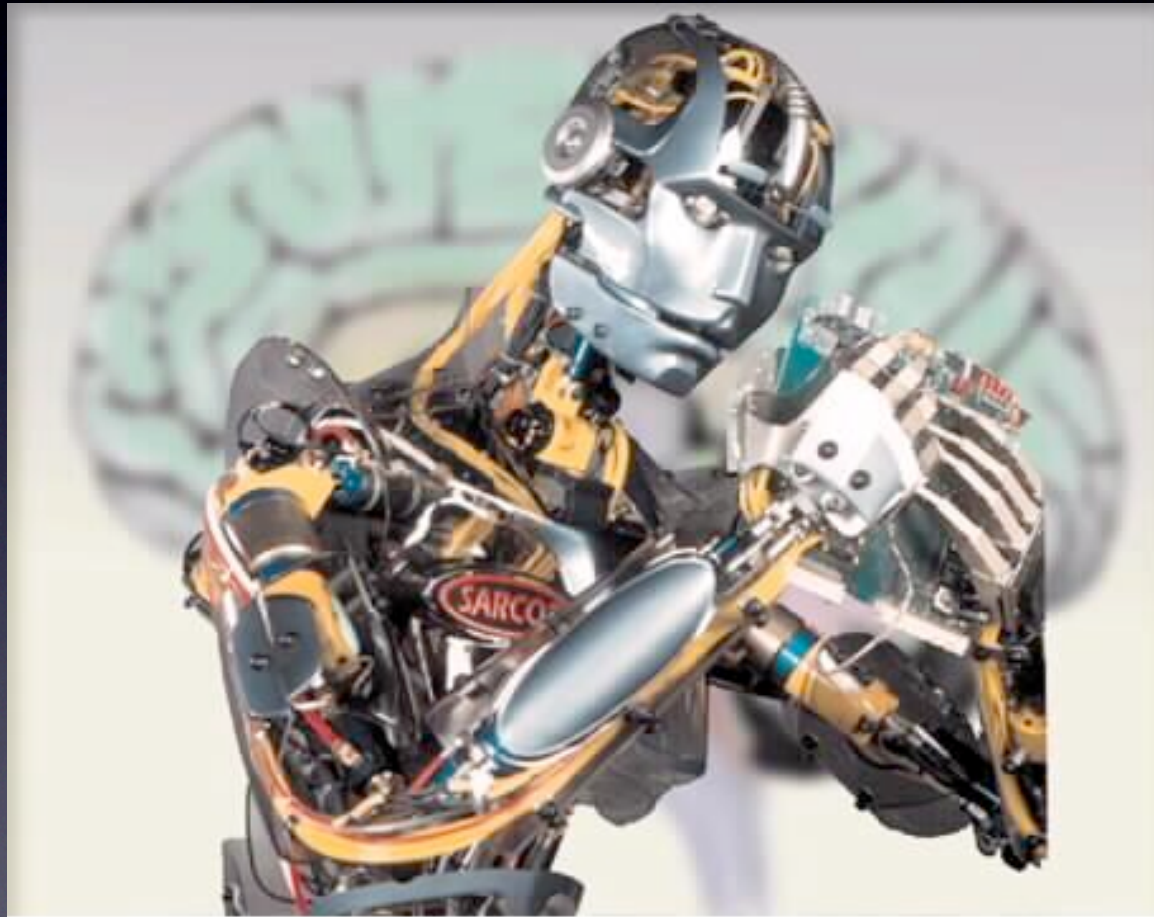
Mobile Security Innovations

- Encryption

- Privacy Preservation

- Mobile Payments

- Authentication