## Internet Research Task Force Anti-Spam Research Group (ASRG)

Presentation Created By: Paul Q. Judge, Chair

## **ASRG** status

- Formed: March 2003
- Chairs: Paul Judge and Yakov Shafranovich
- Membership: 615 members

## **ASRG's Motivation and Focus**

#### Motivation:

- Scale, growth, and effect of spam
- Was nuisance, now a significant portion of email traffic
- Stands to affect local networks, the infrastructure, and the way that people use email

### Focus:

 ASRG focuses on the problem of unwanted email messages, loosely referred to as spam

## **Consent-based Communication**

- Definition of spam is inconsistent and unclear
- Generalize the problem into one of "consent-based communication"
- An individual or organization should be able to express consent or lack of consent for certain communication and have the architecture support those desires
- With clear policies, enforcement can safely be done further upstream

# The purpose of the ASRG

 "Understand the problem and collectively propose and evaluate solutions"

# Phase 1: Understand the problem

- Taxonomy of solutions
- Characterization of the problem
- Requirements for solutions
- Understand the scope of spam legislation

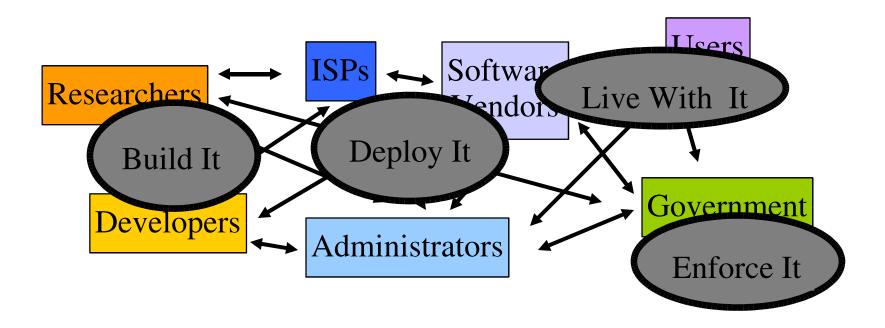
# Phase 2: Propose Solutions

- Novel approaches
- Standards based on common techniques
- Combination of approaches
- Best Practices/Education

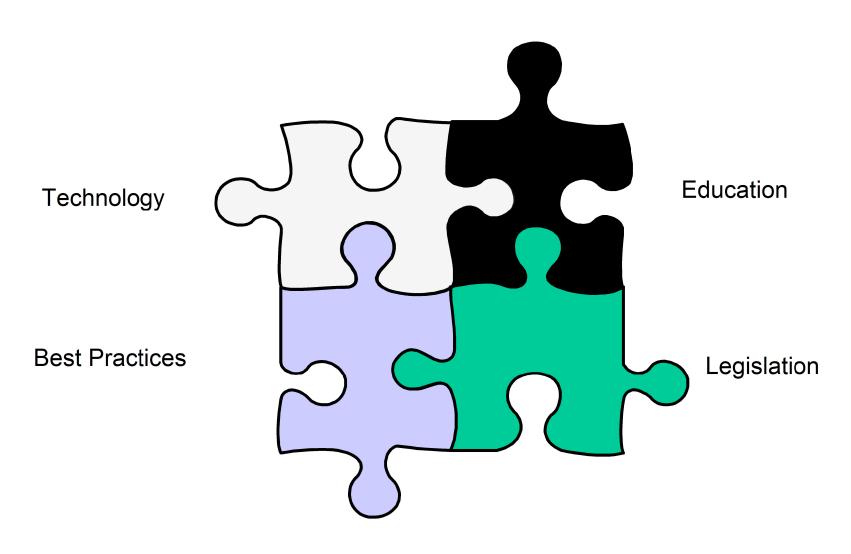
## **Phase 3: Evaluate Solutions**

- Usefulness
  - Effectiveness
  - Accuracy
- Cost
  - Effect on normal use of the system
    - (Change in use, Difficulty of use, delay, etc.)
  - Monetary costs of using the system
    - (Charge, Bandwidth, Computation, etc.)

# The email ecosystem



# The pieces of the solution



## Interaction between Technology & Law

#### Casual Spammer

. Forwards Chain Letters

#### **Hobbyist Spammer**

. Mass BCC mailings with normal clients

#### Small-Scale Spammer

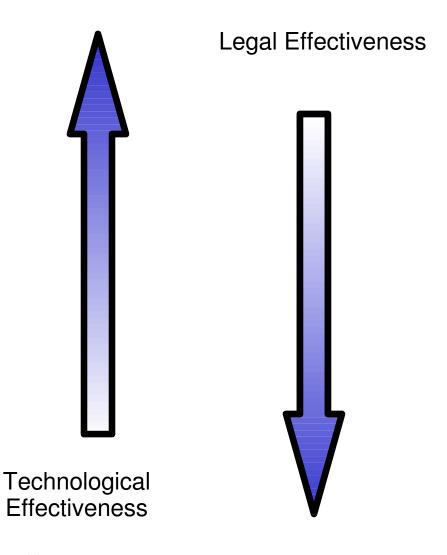
. Uses spamming toolkit and address CDs

#### Hacker Spammer

. Develops tools to bypass filters

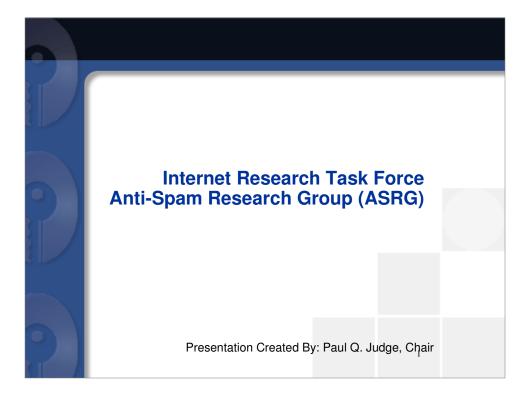
#### Large-Scale Spammer

. Well-funded and knowledgeable



# For more information

ASRG Website: http://www.irtf.org/asrg



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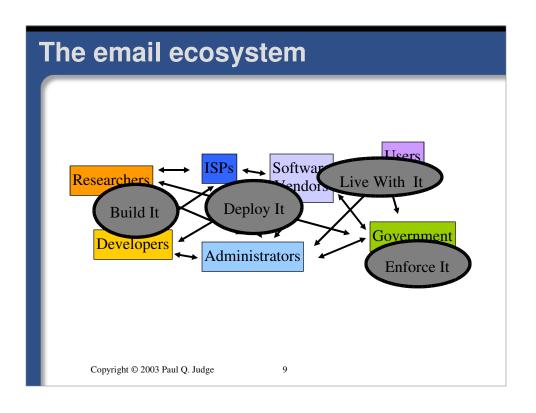
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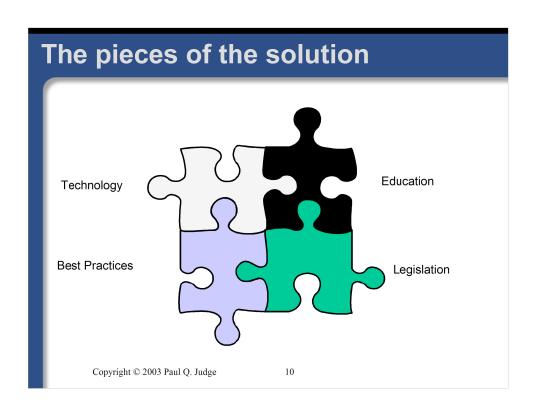
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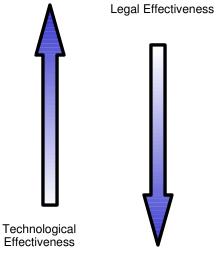
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Effectiveness

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