Sewage Networks

George Varghese

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Sewage Networks History

- **Founded:** in 2000 by the perpetrators of NAP, WAP, and other atrocities
- **Funding:** 20 million, first round from KPC
- **Location:** Menlo Park, CA
- **Mission:** Integrating Sewage Networks and the Internet

Introduction

- **Observation**: Everybody with a pipe to the home (electricity, cable, phone) is looking into piggybacking some bits so as to solve the last mile problem.
- **Question:** Why ignore sewage pipes? After all, they are big, fat pipes . . .

Pilot Project

- **Prototype**: As proof of concept, SN hacked up the sewage system of the town on Los Altos in order to deliver 1 Mbps streaming video using only the sewer system, and using toilet bowls as display devices.
- **Bug report**: In initial field trials, users did detect a discernible odor coming from the display devices. SN has promised to add a hardware bit deodorizer in Version 1.2.

A Meeting of the Minds

2001 Darpa Internet Sewage Workshop, papers include:

- **Sewage Side**: The Design Philosophy of the U.S. Sewage Network, by Robin Refuse.
- **Internet Side**: Usage-Based Sewage Pricing: Reshaping the Research Agenda, by Alyssa P. Hacker and E. G. Student
- **Digital Island**: Content in the Internet and Sewage Networks: What's the difference?

Sewage Designs

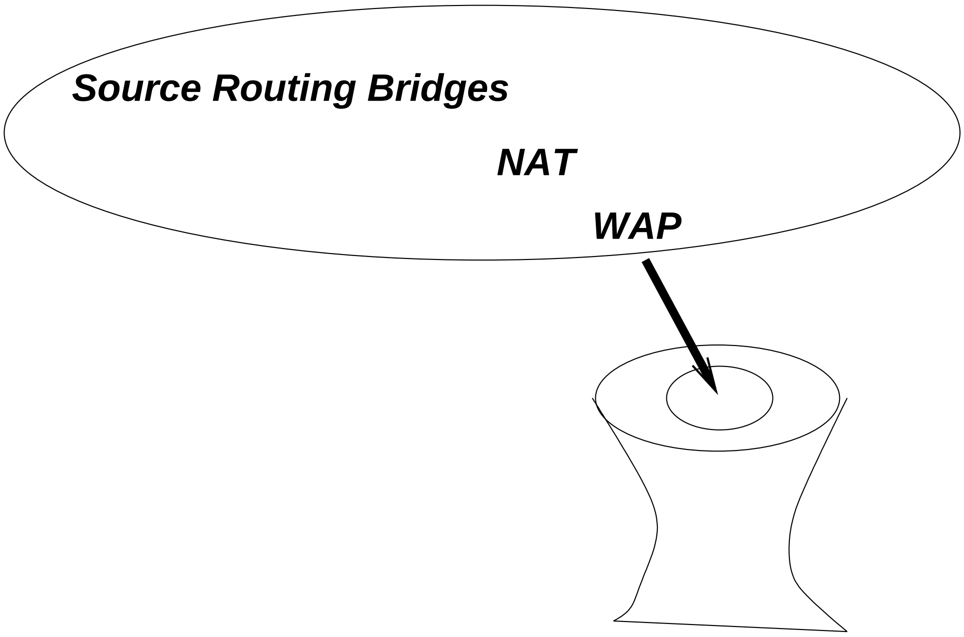
- At the DARPA conference, a well known entrepreneur observed that instead of applying Sewage Technology to the Internet, it made sense to also invert the argument.
- In other words, why not apply Internet Technology to the Sewage System? And thus was born **Sewage Designs**.

SD-1: Sewage Congestion Control

- SD's first idea, Sewage Congestion Control, arose as follows:
- Leading sewage authorities notice high congestion between 9 and 11 am. Situation reminiscent of Internet congestion in the late 1980's.
- SD-1 proposes implementing TCP congestion control for the sewage network when applied to toilet flushing protocols.
- Each flush receives an ack. Each flusher starts with a window size of 1 ounce. For every successful ack the window size increases by 1, and so on.
- Some variations being considered such as randomized toilet flushing. TCP Urgent Mode, considered obsolete, may be useful again in this context.

A Call for Charitable Contributions

- There are a number of protocols that greatly offend the Internet purist Why not donate some of these to Sewage Networks?



Garbage protocols for garbage networks . . .