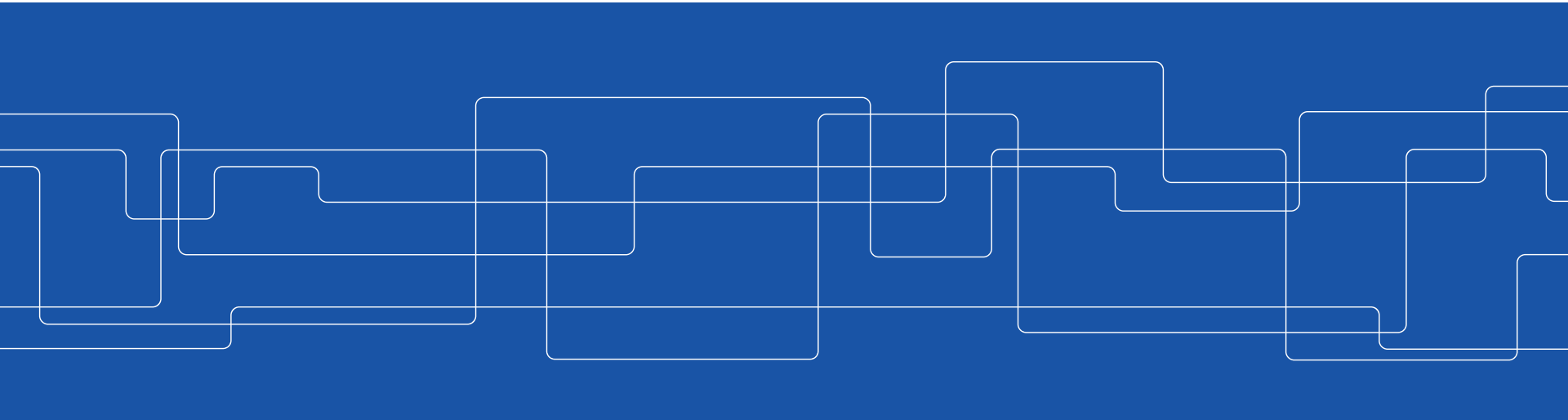




# Introduction

Vladimir Vlassov





# What?

What is a ***distributed system***?

- Give me some examples.
- Give me a definition.

*“...one in which hardware or software components located at networked computers communicate and coordinate their actions only by message passing”*



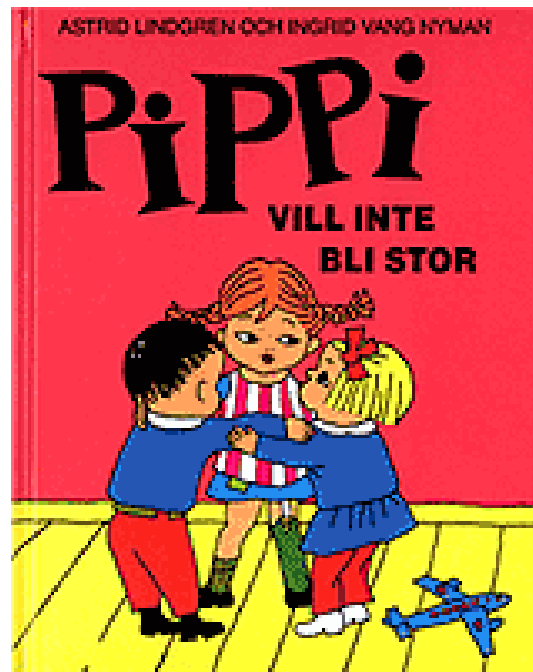
# Why?

Why do we build distributed systems?

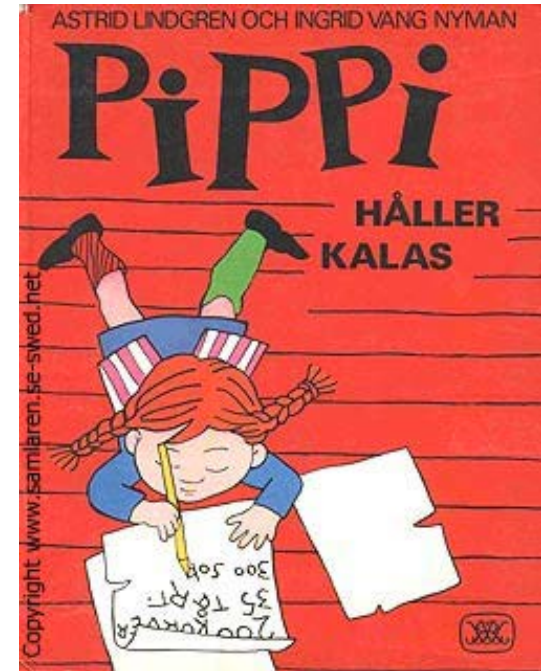
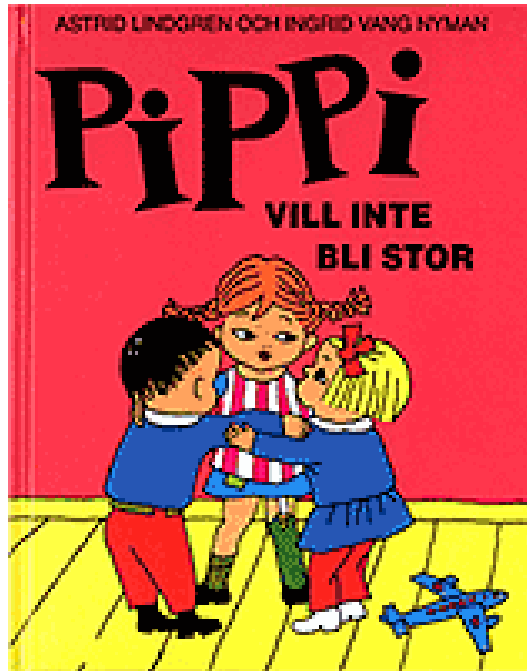
# Different from..



# Concurrency



# Communication



# Messages



# Time





# Security



# Coordination



# Failure





# Handle the problems

- How can we solve
  - communication,
  - security and,
  - coordination,

. . . in a world with failure and no notion of time?

Can we hide all problems?