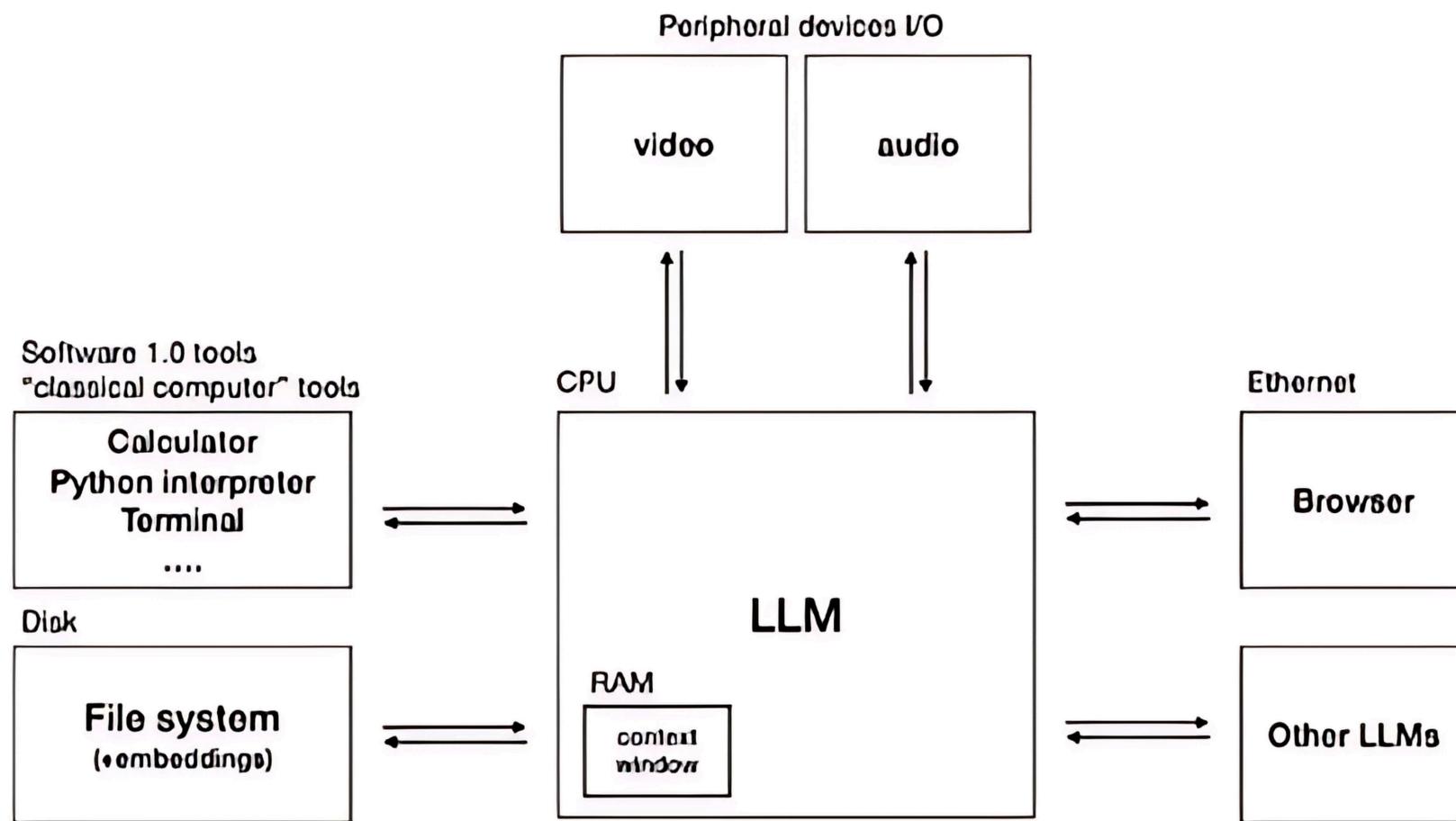




Introduction

Since the launch of GPT-3.5 in 2022, the tech landscape has transformed dramatically.

Perplexity's AI browser "Comet" and OpenAI's rumored AI smartphone are just the beginning. What if we had a Agentic Operating System?



An Agentic OS is an AI-driven operating system where intelligent agents, powered by LLMs, understand user intent and autonomously handle tasks - from scheduling meetings to data analysis - without explicit step-by-step commands.

Key Questions:

- Will it exist?
- How would it work?
- Key features?

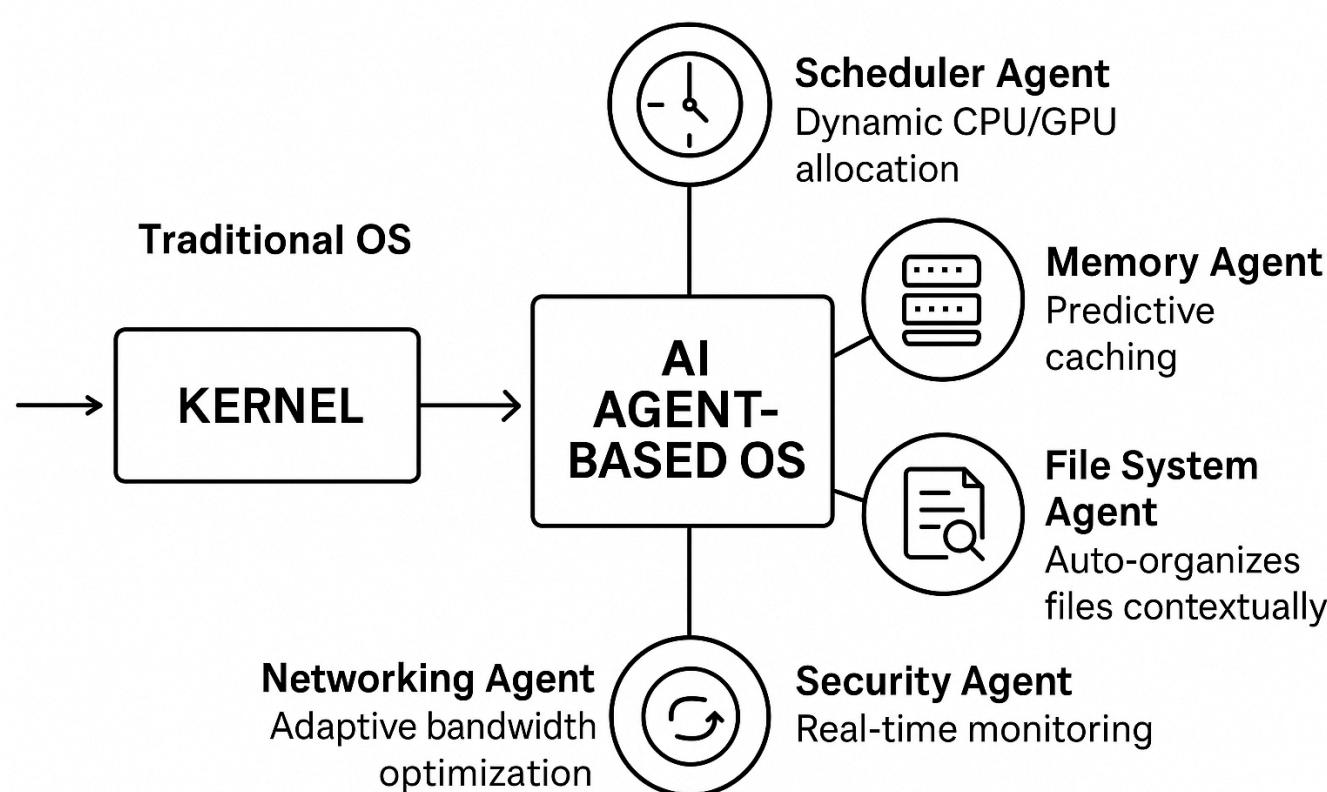
Let's explore the potential of this groundbreaking system.

Core Architecture

Kernel is the most important part of an OS which basically connects your software to your hardware.

In a traditional OS, the kernel manages hardware resources, processes, and memory.

In an AI Agent-Based OS, the kernel is replaced (or augmented) by a **network of specialized AI agents** that autonomously handle core functions:



Here are some examples of agents:

Scheduler Agent

Memory Agent

File System Agent

Security Agent

Networking Agent

Next lets talk about how the mode of instructions will change -

Natural Language

“The most profound change in Agentic OS isn't what it can do - but **how you don't have to do anything.**”

In an Agentic OS, you would be able to do tasks through natural language e.g. **Book a meeting with Melon Usk at 2 PM.**

Here's what changes we can see:

Traditional OS

Nested Menus

Manual File Management

Static Settings

One-size-fits-all UI

Agentic OS

Natural Conversation

Intent-based auto-organization

Context-aware adaptation

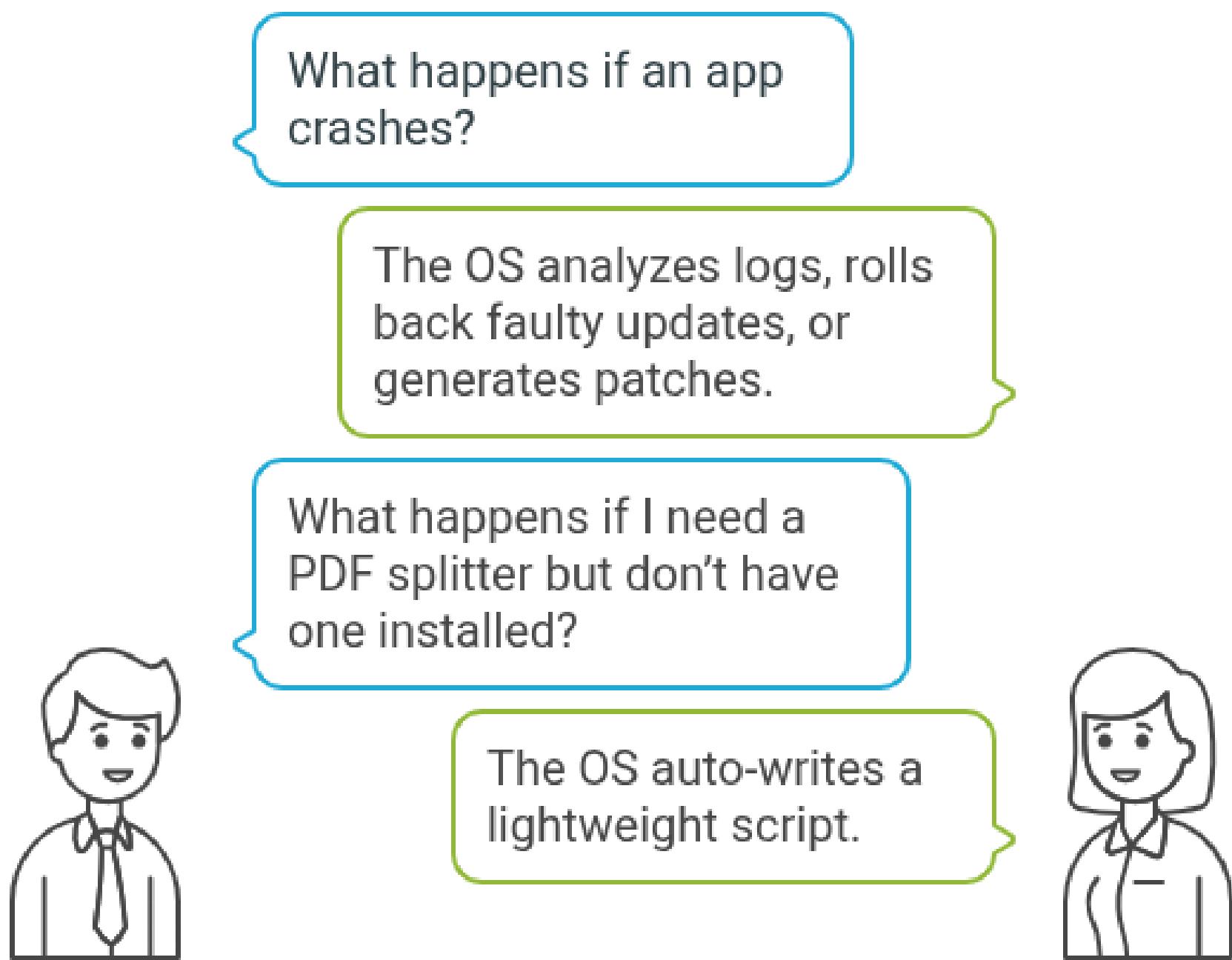
Personalized interaction modes

With the last one you will be able to create custom UI as per your need.

AI is known to self learn and be better with time. Agentic OS will work the same way, let's see how -

Self Learning System

This is where an AI Agent-Based OS transitions from reactive to proactive - continuously improving itself and adapting to your needs without manual intervention.



Agentic OS will offer adaptive features like:

Predictive
Pre-Loading

Adaptive
Power &
Performance

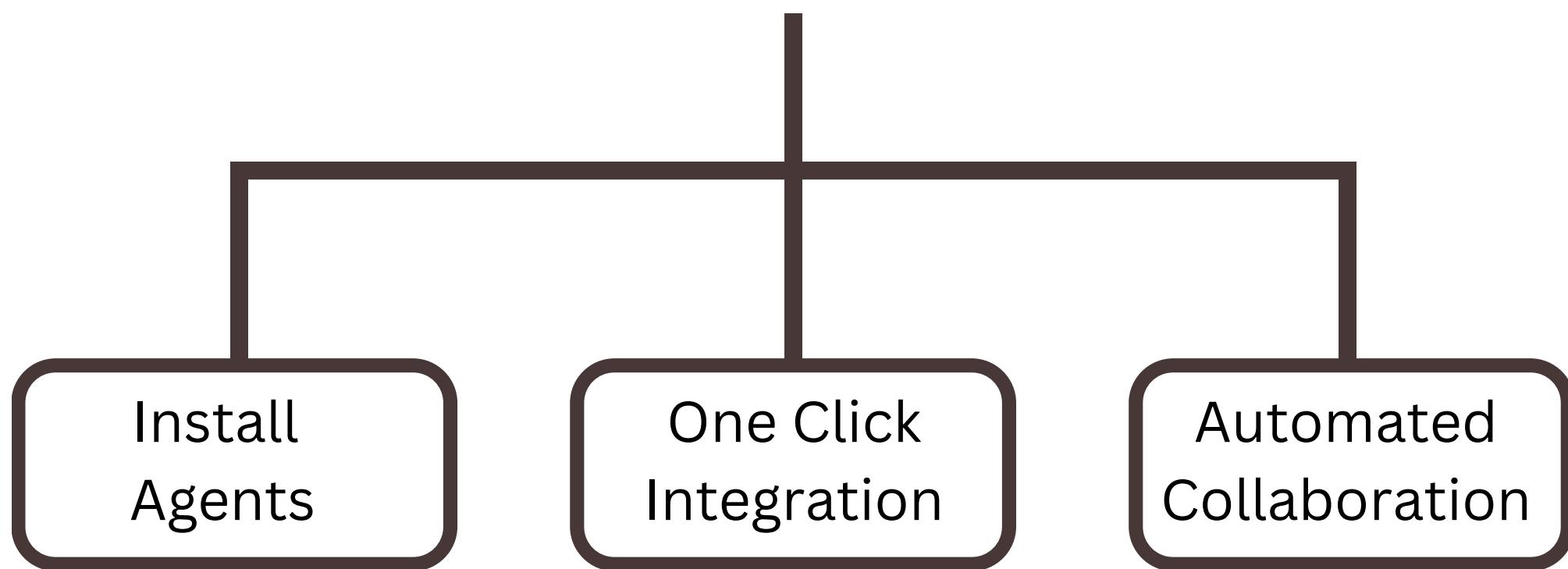
Autonomous
Bug Fixing

AI Generated
Features

and you will be able to install agents as apps -

Agent Ecosystem: App Store

This is where the OS transforms from a tool into a team of specialized AI assistants - each with unique skills that can be mixed, matched, and combined like digital LEGO blocks.



Swarm Intelligence

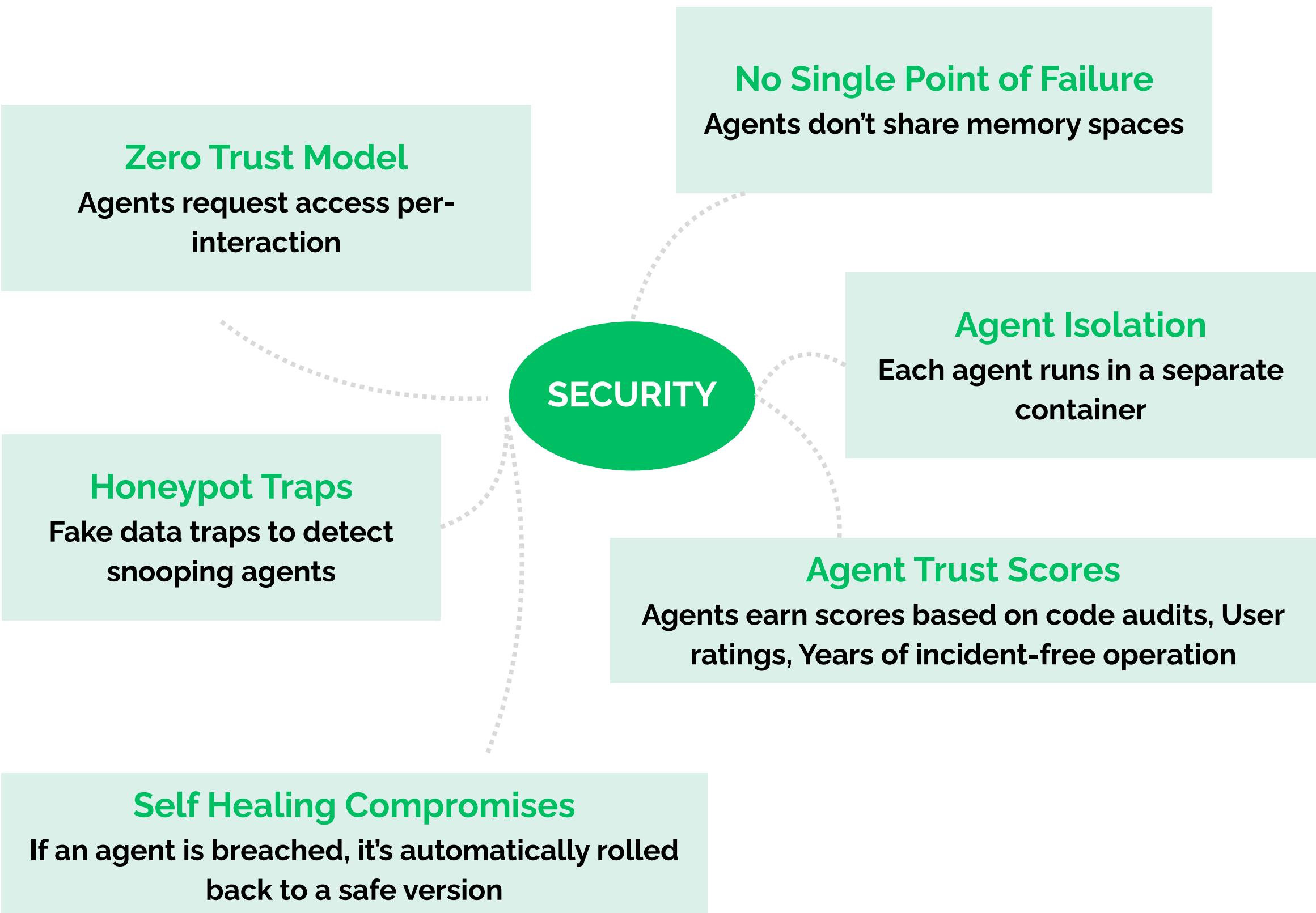
- Agents negotiate to resolve conflicts
 - e.g., Budget Agent vetoes a hotel choice
- They learn from each other
 - e.g., your Writing Agent adopts phrases your Creative Agent prefers

While talking about features, it is very important to keep security in check, let's see how agentic OS handles that -

Decentralized & Secure

For an AI Agent OS to work, users need absolute confidence that their data and workflows are protected - not just from external threats, but from the agents themselves.

Here's how Agentic OS will ensure security without sacrificing functionality:



There are no Agentic OS as of now but if someone releases it in the future. You know what to ask for!

Stay Ahead with Our Tech Newsletter! 🚀

👉 Join 1.1k+ leaders and professionals to stay ahead in GenAI!

🔗 <https://bhavishyapandit9.substack.com/>

Join our newsletter for:

- Step-by-step guides to mastering complex topics
- Industry trends & innovations delivered straight to your inbox
- Actionable tips to enhance your skills and stay competitive
- Insights on cutting-edge AI & software development

WTF In Tech

[Home](#) [Notes](#) [Archive](#) [About](#)

People with no idea about AI saying it will take over the world:



My Neural Network:

Object Detection with Large Vision Language Models (LVLMs)

Object detection, now smarter with LVLMs

MAR 27 • BHAVISHYA PANDIT

AI Interview Playbook : Comprehensive guide to land an AI job in 2025

Brownie point: It includes 10 Key AI Interview Questions (With Answers).

MAR 22 • BHAVISHYA PANDIT



WTF In Tech

My personal Substack

💡 Whether you're a developer, researcher, or tech enthusiast, this newsletter is your shortcut to staying informed and ahead of the curve.



**Follow to stay updated on
Generative AI**



LIKE



COMMENT



REPOST