
Copilot Core Architecture Proposal

Author: JI INSU

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Contact: [knigh286@gmail.com]

Executive Summary

This proposal outlines a unified Copilot Core architecture that connects Microsoft 365 apps, GitHub Copilot, Windows, and Security Copilot through synchronized sessions and a shared learning pipeline. The goal is to evolve Copilot from a product-specific assistant into a proactive, cross-domain operating partner.

Architecture Overview

1. Copilot Core as Central Orchestrator

- All apps (Word, Excel, PowerPoint, VS Code, GitHub Copilot, Windows) connect to a shared Copilot Core.
- Each task is assigned a Session ID (e.g., Session #42), enabling seamless context sharing and session continuity.

2. LLM Integration

- The LLM connects directly to Copilot Core.
- Enables real-time orchestration: session triggering, code generation, content injection.

3. Windows + Security Copilot Integration

- Copilot is embedded in Windows 11, accessing system-level context (files, logs, settings).
- A Security Copilot layer connects to Microsoft Defender, Sentinel, and Intune.
- Enables real-time threat analysis, incident summarization, and guided mitigation.

4. Session-Based Learning Loop

- User feedback, activity logs, and corrections are captured per session.
 - Enables personalization and cross-domain reasoning.
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Architecture Diagram

Subject: Proposal: Embedding Copilot into Productivity and Security Architecture

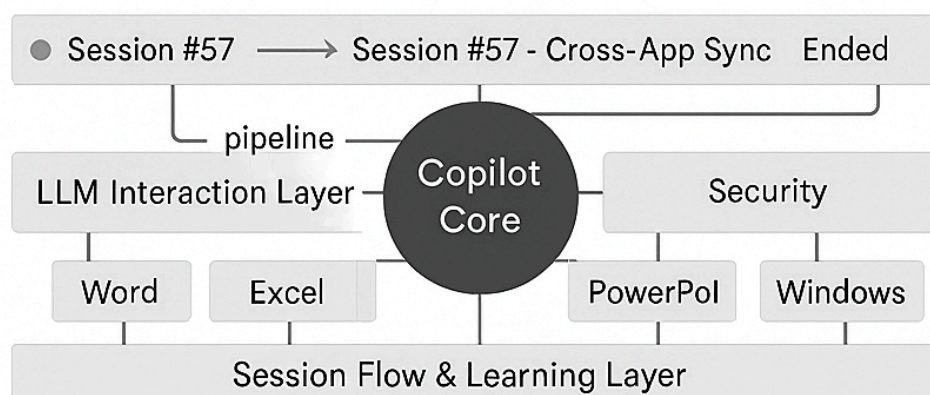
Hello,

I'd like to propose a unified architecture where Copilot not only enhances productivity across Microsoft's product suite but also integrates seamlessly with security functions.

- By connecting Copilot via the same central core and synchronized session pipeline, context and user activity can be preserved across Word, Excel, PowerPoint, VS Code, Windows, and security systems.
- This integration extends to a "Security Copilot" layer that interfaces with Microsoft Defender for real-time threat intelligence and adaptive threat response.
- Copilot can leverage user feedback and past security incidents, alongside productivity context, to provide a smarter, session-aware experience.
- The architecture ensures Copilot operates as a proactive coordinator, managing applications and protecting the system.

I'd welcome an opportunity to discuss this further.

Integrated Copilot Architecture



Integrated Copilot Architecture

Integrated Copilot Architecture

View Diagram (copilot.microsoft.com in Bing)

Strategic Opportunity

- LLMs like Claude focus on code-centric workflows.
- Copilot can dominate productivity + security by owning the full workflow.
- Copilot becomes the default AI layer of the modern OS.

API Access Request

To validate this architecture, I request access to:

- GitHub Models API
- Copilot Core API (if available)

This access would enable prototyping of session-based orchestration, cross-app reasoning, and feedback-driven learning. I'm happy to share experimental outcomes and structural feedback.

Language Note

As I'm not a native English speaker, I've used Copilot to help translate and structure this proposal. I hope the intent and architecture are conveyed clearly, and I'd be happy to clarify any part if needed.