Unified Microsoft Modernization System

Recursive Integration Framework — One-Page Explainer

Objective

Unify Microsoft Partner Success Expanded Benefits with FNGU providers using a DIY local hardware stack.
Deliver recursive manageability, scalability, and cost-efficiency across Personal, Family, and Business domains.

Integration Fabric (FNGU)

Microsoft (core) • Apple (MDM/Dev) • Netflix (OSS) • AWS (optional compute) • Google (AI/Firebase/GenAI) • Meta (XR/Marketing) • NVIDIA (GPU) • Broadcom (Infra/Sec) • ServiceNow (ITSM) • CrowdStrike (Telemetry)

Semantic & Orchestration Backbone

- Semantic Kernel planners orchestrate domain agents.
- Microsoft Graph unifies data access and context.
- Power Automate / Logic Apps handle workflows and policies.
- Policy-based routing enables recursive task delegation between cloud and local nodes.

DIY Hardware Layer (Recursive)

Primary Node: Ryzen 9/i9, 64–128 GB RAM, 2TB NVMe + 8TB HDD, RTX 3090/A6000.
Secondary Nodes: Raspberry Pi/NUCs • NAS (TrueNAS/Synology) • UPS/Surge • Efficient cooling.
Strategy: Local-first compute, modular agents per domain, energy-aware scaling and failover.

Data, Governance & Security

- Data: SharePoint, OneDrive, Dataverse, SQL/Azure Storage, Cosmos DB; vector indexes.
- Zero Trust: Entra ID, Conditional Access, PIM; Defender XDR/Cloud; Purview DLP/eDiscovery/Records.
- Governance applies per layer via policies, RBAC, sensitivity labels, and audit.

DevOps, Observability & Cost

- DevOps: GitHub Repos, Actions, Environments; IaC with Bicep/Terraform; signed artifacts & SBOM; release rings.
- Observability: Azure Monitor, Log Analytics, Sentinel.
- FinOps: Power BI dashboard for credits, sponsorships, and local-vs-cloud optimization.

At-a-Glance

Recursive Operating Model: Domain agents (Personal, Family, Business) plan and act via Semantic Kernel; workloads flow between cloud and local hardware under policy, performance, and cost constraints. Zero Trust and governance apply across every layer.