

As AI agents proliferate, every enterprise system needs a production-ready MCP server to be consumed by AI. **Building one from scratch takes weeks**: security gaps from day one, one-to-one API-to-tool mappings that overwhelm agents with hundreds of endpoints, no governance or audit trail, manual Kubernetes setup, and zero lifecycle management after deployment. MCP adoption stalls while engineering backlogs grow.

SOLUTION OVERVIEW

MajorDomo MCP Ops takes any OpenAPI specification to a **hardened, enterprise-grade MCP server in under 30 minutes**. An AI MCP Assistant guides teams through conversational design — or automatically generates aggregated business capabilities from an uploaded spec — grouping related APIs into meaningful tools rather than one-to-one endpoint mappings. All artifacts (source code, Dockerfile, Helm chart, Kubernetes CRDs) are committed directly to GitHub and deployed via integrated CI/CD. A API Gateway runtime gateway provides authentication, RBAC, and per-tool rate limiting from day one. OpenTelemetry delivers full observability across every MCP interaction, and Day-2 operations ensure continuous governance throughout the full server lifecycle.

PLATFORM CAPABILITIES

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AI MCP Server Designer — Conversational and OpenAPI-driven design; create tools, resources, and prompts via AI assistant or auto-generation from a spec upload
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Business Capability Aggregation — Groups related APIs into meaningful business tools, reducing agent complexity and LLM tool-discovery overhead and cost
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GitOps & Kubernetes CI/CD — Dockerfiles, Helm charts, and Kubernetes CRDs auto-committed to GitHub; build → scan → push → deploy pipeline included
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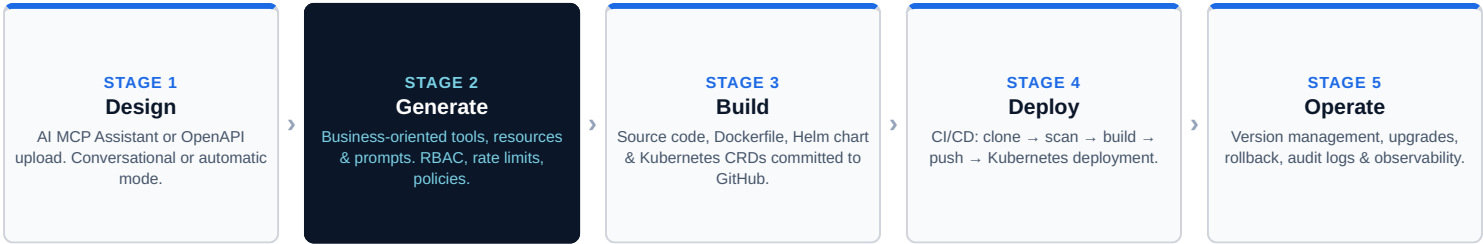
Auth, RBAC & Rate Limiting — API Gateway gateway with identity provider integration (Azure AD, Okta, Auth0), role-based access control, and per-tool rate limits
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Full Observability — OpenTelemetry-based metrics, logs, and distributed traces emitted from every MCP server with no additional instrumentation required
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Day-2 Operations — Full lifecycle management: tool and prompt upgrades, environment promotion, version rollback, deployment history, and complete audit trail

MCP SERVER LIFECYCLE — DESIGN TO OPERATIONS

MajorDomo MCP Ops manages the **complete MCP lifecycle**



Every deployed MCP server runs on the **MCP Platform** — a Kubernetes-native runtime layer that automatically configures security, observability, and governance with zero developer instrumentation.

API Gateway Gateway

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Auth & Authorization — integrates with Azure AD, Okta, Auth0

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RBAC + per-tool, per-environment rate limiting

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TLS / mTLS termination and path-based routing

OpenTelemetry Collector

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Metrics, logs & traces — no instrumentation needed

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Exports to Azure Monitor, Grafana, Datadog, Splunk

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Per-tool call visibility and latency tracking

Kubernetes Operator

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Auto-detects MCP Custom Resources on deployment

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Manages health, auto-scaling, and lifecycle updates

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Zero-touch rollout and version promotion across environments

MAJORDOMO VALUE PROPOSITION

Product & Engineering

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OpenAPI spec to deployed MCP server in under 30 minutes

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AI-assisted design: conversational or fully automatic generation

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Business capability tools — not raw endpoint-per-tool mappings

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GitHub CI/CD with auto-generated Dockerfiles and Helm charts

Platform & Security

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Auth & RBAC with existing identity providers from Day 0

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Per-tool rate limits across Dev, Staging, and Production

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Full audit trail: every design, deployment, and rollback logged

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mTLS, policy enforcement, and air-gap deployment support

Leadership & Business

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Standardized enterprise MCP servers across all teams and APIs

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Lower LLM costs via API aggregation and fewer tool calls

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Compliance-ready governance built in from first deployment

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Day-2 operations: upgrades and rollbacks without downtime

< 30 min SPEC TO PRODUCTION	Zero MANUAL K8S MANIFESTS	100% AUDIT COVERAGE	Day 0 SECURITY & GOVERNANCE	3 Envs DEV · STAGING · PROD
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