Claude Multi-Agent PM Framework User Guide v4.1.0

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Complete Developer Documentation

CMPM Framework Team

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Preface

The Claude Multi-Agent PM Framework (CMPM) represents a revolutionary approach to software development project management through intelligent agent orchestration. This comprehensive guide provides everything needed to master the framework, from basic installation to advanced customization.

Who This Guide Is For

This guide is designed for competent developers who want to leverage multi-agent coordination for enhanced productivity. Whether you're a solo developer or part of a larger team, CMPM provides the tools and patterns needed for efficient project management.

How to Use This Guide

- **Quick Start**: Follow Chapter 1 for immediate setup (30 minutes)
- **Comprehensive Learning**: Read all chapters for complete mastery (4-6 hours)
- **Reference**: Use the glossary and index for quick lookups
- **Troubleshooting**: Refer to Chapter 7 for problem resolution

Part I: Getting Started

Chapter 1: Getting Started & Installation

Chapter 2: Architecture & Core Concepts

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Appendix A: Glossary

Framework Terms

Agent: An autonomous component in the CMPM framework responsible for specific tasks such as development, testing, or deployment.

Orchestration: The coordination and management of multiple agents to accomplish complex project goals.

Task Tool: The primary mechanism for delegating work to specialized agents via subprocess creation.

Memory Integration: The use of mem0AI for persistent learning and context retention across agent interactions.

Slash Commands: Natural language commands beginning with '/' used to interact with the CMPM framework.

Technical Terms

ai-trackdown-tools: CLI toolset for hierarchical project management and ticket tracking.

Claude Code: Individual development agent working within supervised subprocesses.

CMPM: Claude Multi-Agent PM Framework - the complete project management orchestration system.

Git Worktree: Isolated working directories that share repository history, enabling parallel agent work.

mem0AI: Memory service providing intelligent context retention and learning capabilities.

Multi-Agent Architecture: System design enabling multiple specialized agents to work collaboratively.

Subprocess Delegation: Framework pattern for creating isolated agent environments via Task tool.

Agent Types

Architect Agent: Designs system architecture, APIs, and project scaffolding.

Data Agent: Manages data processing, storage solutions, and analytics integration.

Documentation Agent: Creates and maintains technical documentation and user guides.

Engineer Agent: Implements source code, business logic, and feature development.

Integration Agent: Handles system integration, API coordination, and service mesh management.

Operations Agent: Manages deployment, infrastructure, and monitoring systems.

Performance Agent: Optimizes system performance and analyzes bottlenecks.

QA Agent: Ensures quality through testing, validation, and quality assurance processes.

Research Agent: Investigates technologies, gathers requirements, and provides analysis.

Security Agent: Analyzes security vulnerabilities and implements security measures.

Appendix B: Index