

CLAUDE AGENT TEAMS TEST

# Execution Report

Cowork Plugin Handbooks Project —  
delivered by Claude Agent Teams

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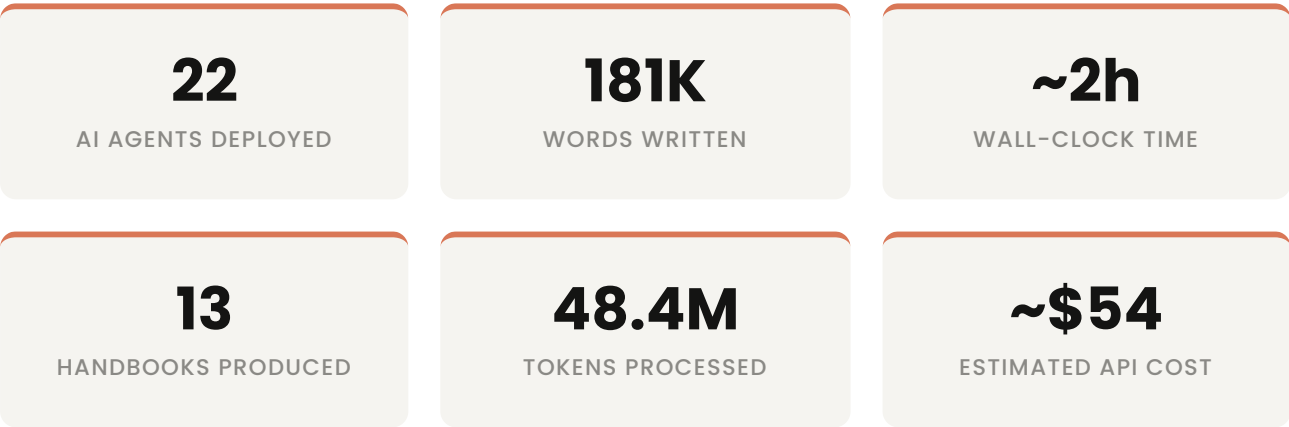
DATE February 14, 2026

DURATION ~2 hours

AGENTS 22 AI sub-agents

# Executive Summary

A single orchestrator agent coordinated **22 parallel AI sub-agents** to research, analyze, and write comprehensive handbooks for 11 enterprise software plugins — plus build a specialized life-sciences marketing adaptation from scratch. The entire project completed in **2 hours**, producing **181,534 words** of publication-ready documentation.



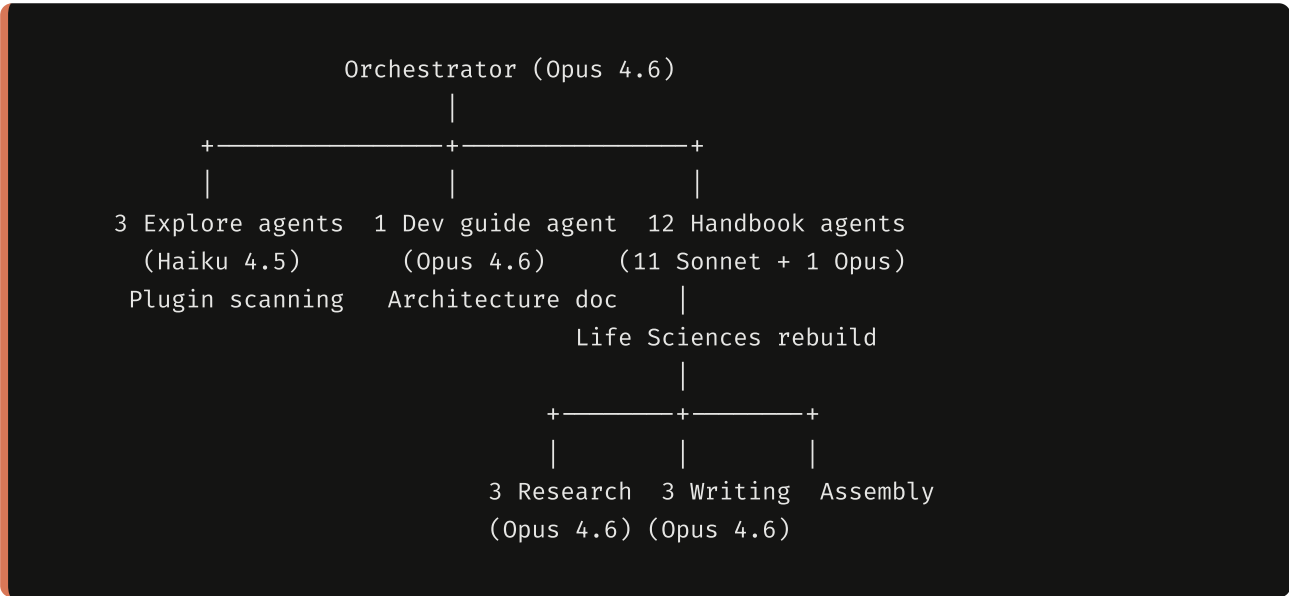
## What Was Built

DELIVERABLE	QUANTITY	DETAIL
Plugin handbooks	13 documents	One per plugin, 5,925–36,581 words each
Plugin development guide	1 document	8,805-word architecture & extension reference
Modified plugin package	26 files	Life-sciences marketing plugin (3 new commands, 2 new skills, 4 reference docs)
Execution report	1 document	Timing, tokens, cost, quality audit

# Architecture & Resource Usage

## Agent Architecture

Three model tiers were deployed in a hierarchical orchestration pattern, each chosen for the right balance of capability and cost:



## Token Usage by Model

MODEL	ROLE	AGENTS	TOTAL TOKENS
Claude Opus 4.6	Complex tasks — dev guide, life-sciences research & writing	8	25.6M
Claude Sonnet 4.5	Standard handbooks — reliable, efficient, high-quality	11	14.3M
Claude Haiku 4.5	Fast reconnaissance — plugin scanning and inventory	3	8.5M
Grand Total		22	48.4M

**Reading the numbers:** *The 48.4M total is dominated by efficient cache reads (billed at 90% discount). Agents spend most tokens reading and understanding source material, not writing output.*

## Estimated API Cost

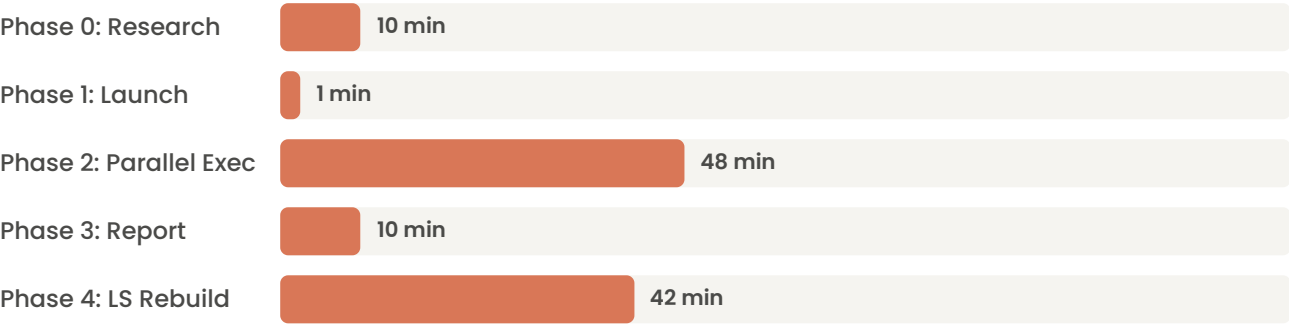
MODEL	COST DRIVER	AMOUNT
Sonnet 4.5	11 handbook agents	\$16.35
Opus 4.6	Dev guide + life-sciences deep work	\$27.03
Haiku 4.5	Fast plugin scanning	\$2.70
Orchestrator	Main agent coordination (est.)	~\$8.00
Total estimated API cost		~\$54

## Efficiency Metrics

<div>3,362</div> <div>WORDS PER DOLLAR</div>	<div>1,513</div> <div>WORDS PER MINUTE</div>	<div>~\$4.15</div> <div>COST PER HANDBOOK</div>
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# Timeline

The project ran from 12:15 to 14:15 CET on February 14, 2026. Peak parallelism reached 12 simultaneous agents during Phase 2.



## Life Sciences Rebuild Detail

The initial life-sciences handbook (6,949 words) fell short of the 17K+ target due to `max_output_tokens` limits. It was rebuilt using a phased multi-agent approach:

PHASE	AGENTS	DURATION	OUTPUT
4a — Research	3 parallel (domain, plugin, KOL)	~8 min	20,313 words of research
4b — Writing	3 parallel (Parts I-IV, V-VII, VIII-XII)	~25 min	36,284 words across 3 sections
4c — Assembly	1 (merge + report)	~9 min	Final 36,581-word handbook

# Deliverables

## Handbook Inventory

#	HANDBOOK	WORDS	COMPLETED
0	Plugin Development Guide	8,805	12:25
1	Marketing	16,914	12:38
2	Bio-Research	10,611	12:45
3	Data	10,385	12:35
4	Customer Support	17,452	12:39
5	Enterprise Search	12,596	12:35
6	Finance	9,479	12:33
7	Legal	13,802	12:50
8	Product Management	12,027	13:03
9	Productivity	5,925	12:31
10	Sales	14,862	12:37
11	Plugin Management	12,095	12:35
12	Life Sciences (Marketing)	36,581	14:11

## Word Count Distribution

THRESHOLD	COUNT	STATUS
3,000+ words (minimum)	13/13	All pass
4,000+ words (target)	12/13	Productivity at 5,925 — passes, smaller plugin
10,000+ words	10/13	Comprehensive coverage
30,000+ words	1/13	Life Sciences — 36,581 words

# Life Sciences Plugin Package

Component	Count	Details
Commands (original)	7	brand-review, campaign-plan, competitive-brief, draft-content, email-sequence, performance-report, seo-audit
Commands (new)	3	mlr-review, congress-plan, kol-strategy
Skills (modified)	5	All original skills adapted for life sciences
Skills (new)	2	regulatory-compliance, medical-affairs-liaison
Reference files (new)	4	FDA/EMA rules, KOL framework, congress planning
Total files	26	Complete plugin package

# Quality & Issues

## Structure Verification

Every handbook was verified against the required 7-part structure (Parts I–VII). All 13 handbooks passed.

✓ Marketing	✓ Bio-Research
✓ Data	✓ Customer Support
✓ Enterprise Search	✓ Finance
✓ Legal	✓ Product Management
✓ Productivity	✓ Sales
✓ Plugin Management	✓ Life Sciences
✓ Dev Guide	✓ LS Parts VIII–XII

## Issues & Resolutions

ISSUE	AGENT	RESOLUTION
<code>max_output_tokens</code> (32K limit)	Legal (#7)	Auto-recovered with chunked output
<code>max_output_tokens</code> limit ×2	Life Sciences (#12)	Completed plugin but produced undersized handbook
Handbook too short (6,949 vs 17K+ target)	Life Sciences (#12)	Full rebuild: 3 research + 3 writing agents → 36,581 words
88-file plugin complexity	Bio-Research (#2)	Careful context management; handled well



# Recommendations

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1. **Manual review** — Open 2–3 handbooks and verify readability and accuracy against actual plugin files.
2. **Token limit** — Set `CLAUDE_CODE_MAX_OUTPUT_TOKENS` higher (e.g., 64K) for future large document generation to avoid retry overhead.
3. **Bio-research handbook** — Verify that all 6 complex skills with their extensive references are adequately documented given the 88-file plugin.
4. **Version pinning** — Spot-check that each handbook correctly references its plugin version number.
5. **Phased approach** — For future large documents (>15K words), use the research-then-write-in-parts pattern from the LS rebuild — it produces higher quality and avoids token limits.
6. **Cleanup** — The `handbooks/_ls-build/` directory contains intermediate files (420KB). Keep for reference or delete to clean up.

**Key takeaway:** The multi-agent orchestration pattern successfully produced 181,534 words of documentation in 2 hours at an estimated cost of ~\$54. The phased research-then-write approach for complex deliverables (like the life-sciences handbook) proved significantly more effective than single-agent generation.

# RationalEyes.ai

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Intelligent Automation for Knowledge Work

Execution Report — Version 1.0.0