WORKING PAPER · V0.1

Agent Scrum

A sprint methodology for AI agent teams, with observations from 324 sprints

Dave Remy · 28 October 2026 · doi:10.5281/zenodo.23771171

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38 days, one real backlog

324

two-hour sprints, run around the clock, 20 Sep to 28 Oct 2026

79%

of committed stories done inside the sprint (297 of 375, team sprints)

<5 min

of ceremony per sprint: starting plus wrapping

<2 h

a day of human time, usually under one hour

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Why sprints at all?

Scrum was not the plan. The first sprint came from a request for sessions that end in a summary and a retrospective. Every later device was adopted reluctantly, one at a time, to answer a specific failure. The boundary does three jobs that an open queue tends to postpone:

Clear the context

Write a durable handoff and start fresh on a schedule, before the context fills and quality drops.

Count spillover

Unfinished work is saved and accounted for, not left to pile up silently.

Compare honestly

Committed against done, every two hours, which is what makes velocity and planning possible.

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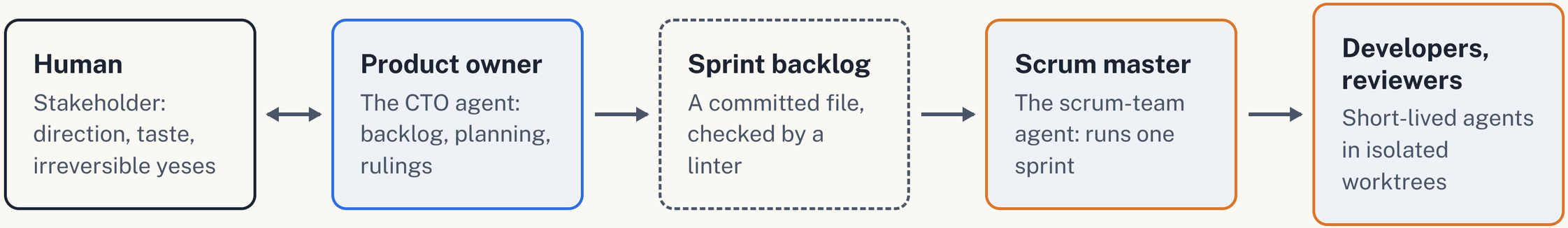
Scrum, rescaled for agents

Scrum	Agent Scrum
Stakeholder	The human: direction, judgment, taste
Product owner	The CTO agent: backlog, planning, rulings; runs no sprints
Scrum master	A scrum-team agent, started on demand, one sprint at a time
Developers	Short-lived developer and reviewer agents in isolated worktrees
Sprint length	Two hours, on fixed boxes starting at odd hours
Velocity	Rolling merged points per sprint, plus token velocity
Daily stand-up	None: a live board instead
Retrospective	Every wrap; each finding ends in an issue, a fix or a reason

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Who does what



Conversation and planning

Stay with one human-facing agent. It never runs a sprint.

Execution

Moves to scrum-team agents started on demand. A second team is a second instance of the same definition; designed, not yet funded.

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Splitting conversation from execution

20 SEP · SPRINTS 1 TO 234

The CTO agent ran every sprint itself, and also talked with me. One context window, two jobs; each degraded the other.

19 OCT · THE SPLIT

A scrum team became a class of agent, started on demand. The CTO agent keeps the conversation and the backlog.

SINCE 20 OCT

The dedicated team ran every sprint: 90 so far. The CTO agent runs none.

THROUGHPUT DID NOT CHANGE

72% → 71%

committed points merged in sprint, CTO-run vs team-run

7.4 → 7.8

points merged per sprint

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Planning, from months to hours

MONTHS

Issues, epics, milestones

All work is an issue, filed with a priority and its epic

WEEKS

Backlog order

One ranked list across all repositories

A WEEK

Weekly plan

Two or three goals; 15 to 20 min of refinement with the human

HOURS

Sprint backlog

Committed an hour ahead; the next two always ready

Definition of Ready

Four fresh reads within 12 hours of the sprint, a size, a brief and a stop rule

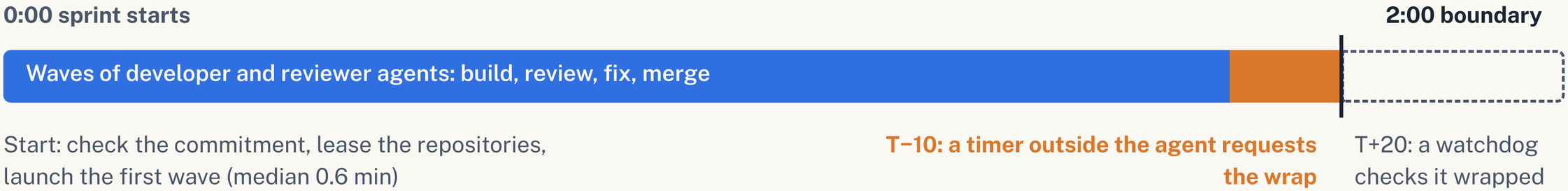
Overflow 1.5×

Ready stretch work worth 1.5 times the commitment, after the team ran dry three times in one night

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A deadline the agent does not hold



BEFORE · SPRINT 43

The wrap timer lived inside the agent’s session. It never fired, and the sprint overran by about 100 minutes.

AFTER · TRIGGER OUTSIDE THE AGENT

58 of its last 60 firings delivered the wrap; 2 reported an error. It never interrupts a running step.

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Who merges what

The team merges what its Definition of Done can judge

Ordinary, reversible changes in its leased scope, reviewed by risk, CI green. Most work.

No agent merges the rules that govern it

Instructions, skills, merge rules and gates go to the product owner.

Irreversible changes need the human’s yes

Money, auth, production data, releases. Collected at planning, so the sprint never waits.

When in doubt, ask

If the class is unclear, raise an impediment instead of guessing.

Authority follows the ability to judge consequences.

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Points, velocity and token velocity

POINTS

1 2 3 5 8

One estimator, the product owner. A linter rejects other values and over-committed backlogs. Recent sprints commit 13 points.

TOKEN VELOCITY

0.27–0.68

million tokens per merged point, recent sprints, Claude side only. Points times token velocity is a budget.

CAPACITY

Rate limits, not headcount

The 5-hour window caps how many developers work at once. The 7-day window is the real weekly capacity.

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The team never asks the human

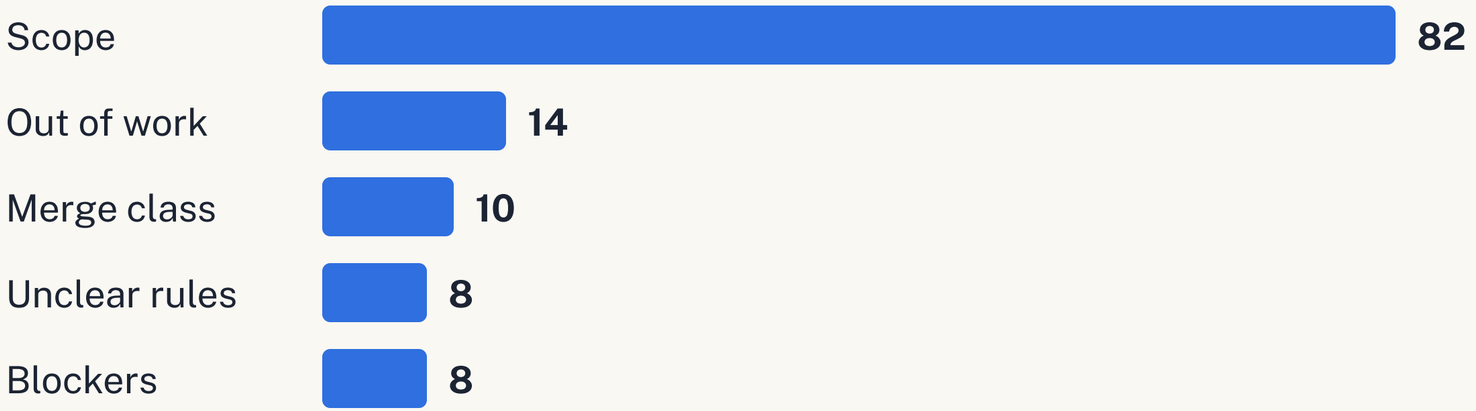
130

requests to the product owner in the team's first nine days

1 min

median time to a ruling (75th percentile: 3 min)

REQUESTS BY CLASS



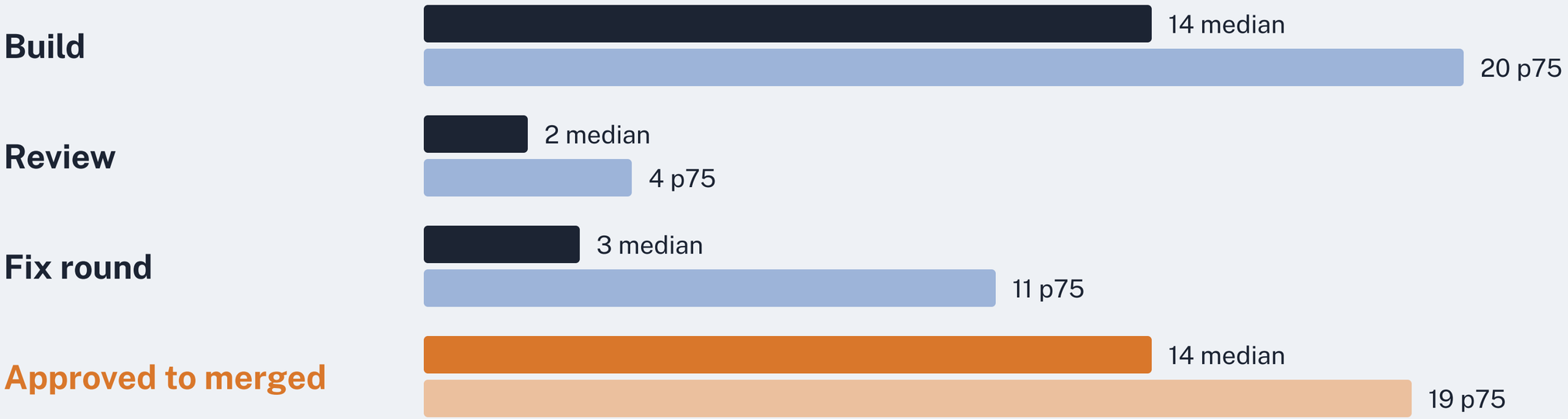
Most scope rulings widen the story by one file, and it continues.

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Merging takes as long as building

Minutes per stage of a story, from board events for 257 stories. Dark bar: median. Light bar: 75th percentile.



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The slowest stage is not writing code.

Approval to merge takes as long as building. Optimize integration before adding agents.

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The one dangerous dependency: waiting for a person

5 h 12 min

22 Sep: one permission prompt in the CTO agent’s session halted the sprint cycle

15:45 → 21:53

26 Oct: an open question dialog; no backlog committed, the team idle 17:00 to 22:00

Decide at planning. A story needing approval carries the quoted decision.

Block only when it must. The human is typing now, and the answer gates the next step.

The team never asks. A missing decision spills the story over.

Pre-empt prompts. Permissions granted ahead; hooks refuse with a reason.

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What is still weak

Problem	What we measured
Retrospective follow-through	119 of 159 retrospective issues still open
The merge tail	18% of stories end a sprint approved but unmerged
Planning cost	Refinement and planning are not yet timed or costed
Several teams at once	Designed, untested: the 7-day token budget funds one
Sprint length	Two hours is a choice, not a finding; not yet compared
Quality	Escaped defects not measured; about 1.7% of commits are reverts

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Where to start: five pieces

1. A product-owner agent that talks with the human and plans
2. A separate scrum-master agent that runs one sprint at a time
3. Short-lived developer and reviewer agents
4. A committed sprint backlog with a done condition per story
5. A wrap trigger that lives outside the agents

Add everything else only as observed failures justify it. Persistent agents help but are not required: a timer that starts a headless scrum-master session every two hours is enough to begin.

daveremy.github.io/agent-scrum **github.com/daveremy/agent-scrum**

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