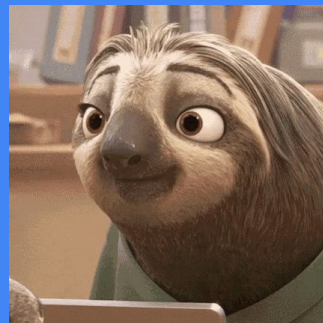


# АСР как база для агентской автоматизации (блиц)

от интеграции с IDE  
к программируемому управлению агентами

Алексей Самойлов, Fastronome  
специально для DevHands AI Club



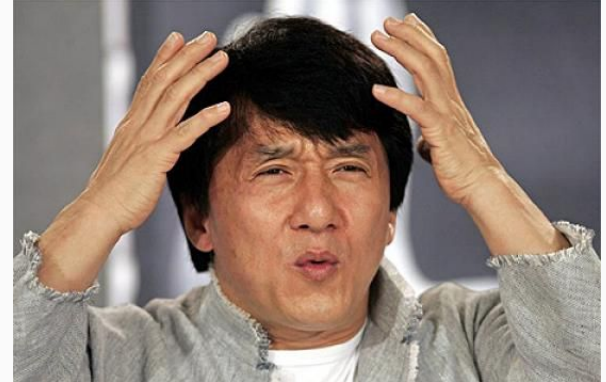
# ACP – Agent Client Protocol

ACP: client → agent

MCP: agent → tools

A2A: agent → agent

ACP ≠ Agent Communication Protocol / A2A

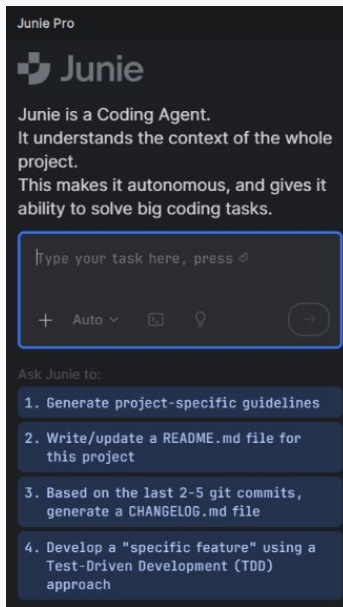


# До ACP: tight coupling

IDE A ↔ Agent X

IDE B ↔ Agent Y

CLI Z ↔ its own runtime



```
javascript ↕  
1 import OpenAI from "openai";  
2 const client = new OpenAI();  
3  
4 const response = await client.responses.create({  
5   model: "gpt-5.5",  
6   input: "Write a short bedtime story about a unicorn.",  
7 });  
8  
9 console.log(response.output_text);
```

```
Python TypeScript  
import asyncio  
from claude_agent_sdk import query, ClaudeAgentOptions  
  
async def main():  
    async for message in query(  
        prompt="Find and fix the bug in auth.py",  
        options=ClaudeAgentOptions(allowed_tools=["Read", "Edit", "Bash"]),  
    ):  
        print(message) # Claude reads the file, finds the bug, edits it  
  
asyncio.run(main())
```

# IDE как ACP client (Agent Client Protocol)

Zed

hosts thread / UI / diffs / permissions



ACP

External Agent

owns runtime / auth / model / tools

Zed -> Gemini CLI (27 августа 2025  
года)

gemini -experimental-acp

# ACP выходит за пределы одной IDE

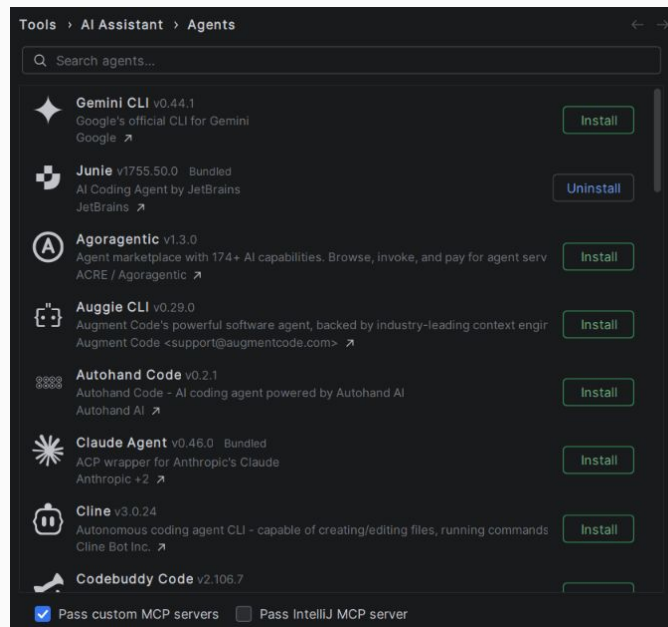
JetBrains + ACP (октябрь 2025)

Zed registry

JetBrains AI Chat

custom ACP agents

MCP forwarding



# Из IDE-интеграции родился lifecycle

→ initialize

↓ version + capabilities

→ session/new

↓ cwd + MCP servers

→ session/prompt

↓

← session/update × N

↓ plan / text / tool calls / usage

← result { stopReason }

**session/prompt** — это не “одно сообщение в чат”, а долгий управляемый turn:

клиент видит события, approvals, tools, diffs и может отменить выполнение.

```
→ {
  "jsonrpc": "2.0",
  "id": 1,
  "method": "session/new",
  "params": {
    "cwd": "/repo",
    "mcpServers": [{
      "name": "jira",
      "command": "/opt/mcp/jira-server",
      "args": [],
      "env": []
    }]
  }
}

← {
  "jsonrpc": "2.0",
  "id": 1,
  "result": { "sessionId": "sess_42" }
}
```

# Любой АСР client может управлять агентом

IDE client

CI runner

chat bot

workflow engine

control plane / harness

dump client

Agent turn becomes an API call.



# ACP-compatible ecosystem

- OpenCode
- Copilot
- Cursor
- Goose
- Hermes
- OpenClaw
- Qwen Code
- Kimi CLI
- Mimo Code
- Gemini CLI (помер)

Via adapters:

- Codex CLI
- Claude Code
- Pi
- Antigravity CLI (coming soon)

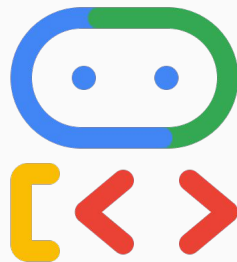
# Hands-on automation

Go-ADK ([github.com/google/adk-go](https://github.com/google/adk-go))

Norma Runtime ([github.com/normahq/norma](https://github.com/normahq/norma))

Agent orchestration/harness:

- norma pdca
- norma goalkeeper
- norma planner



LLM Agent  
Loop Agent  
Sequential Agent  
Parallel Agent



ACPAgent

implements  
agent.Agent

# ACP Agentic Development

[github.com/metalagman/aida](https://github.com/metalagman/aida) (One-shot AI shell command runner)

[github.com/normahq/codex-acp-bridge](https://github.com/normahq/codex-acp-bridge) (app-server to ACP)

[github.com/normahq/relay](https://github.com/normahq/relay) (Telegram Control Plane)

[github.com/normahq/balda](https://github.com/normahq/balda) (Autonomous Worker Comrade for Teams)

[github.com/diffpal/diffpal](https://github.com/diffpal/diffpal) (Open-source AI Review)



Валера  
Принял уточнение. Обновлённый план: ...  
сделай задачу себе в этом спринте 12:49 ✓

Сделано.

Создал в текущем спринте Iteration 140:

- #7704 User Story: Backend: внедрить новый pipeline на DiffPal для Azure DevOps P auth и blocking gate
- #7705 Task: backend: добавить параллельный DiffPalReview@1 pipeline с Copilot aut mini и blocking gate

Обе задачи:

- под Feature #3452 Инфраструктура
- назначены на Valera Botov <valera@fastronome.com>

Если хочешь, следующим сообщением открою #7705 как source of truth, коротко подтвержу score/DoD и дам план перед реализацией.

12:52

github-actions Bot · commented 1 hour ago

## DiffPal Review Summary

### Summary of Changes

- Updated user-facing documentation and setup guidance.
- Updated DiffPal implementation files.

### Review Result

DiffPal found no actionable issues in the reviewed diff.

### Feedback on Files

File	Change	Review	Notes
CONTRIBUTING.md	Modified	Passed	No actionable findings.
README.md	Modified	Passed	No actionable findings.
docs/release.md	Modified	Passed	No actionable findings.
docs/version-and-artifacts.md	Modified	Passed	No actionable findings.

# Спасибо

[agentclientprotocol.com](https://agentclientprotocol.com)

[adk.dev](https://adk.dev)

[langchain.com](https://langchain.com)

[t.me/metalagman](https://t.me/metalagman)

[github.com/metalagman](https://github.com/metalagman)