Snowflake CoCo

From Cortex AI to your AI coding agent

Learn CoCo (formerly Cortex Code) step by step: what it is, how it works, how to control it, and how to use it on real maintenance data.

THE DAY

Agenda: learn a little, then do it

Part	Topic
A	Cortex AI foundations
B	Meet CoCo
C	Levels 1 to 3: ask, write, fix
C	Levels 4 to 6: analyse, build, customise
D	Access, governance and cost
E and F	Real scenarios, what is new, UI changes

OUTCOMES

By the end of today, you can

Explain

Where CoCo fits

Describe the Cortex AI family and what CoCo adds.

Use

Ask, write, fix

Use CoCo to explore data, write and explain SQL, and fix errors.

Build

Analyse and build

Make notebooks, charts, views and semantic views with CoCo.

Customise

Skills and AGENTS.md

Teach CoCo your team's rules and repeat work with one command.

Control

Safe and governed

Use approvals, plan mode and restricted chats. Know what CoCo can see.

Manage

Cost aware

Pick a model, set daily credit limits, and check usage.

Part A

Cortex AI foundations

CoCo is one member of the Snowflake Cortex AI family. First we meet the family.

SNOWFLAKE CORTEX AI

AI that runs where your data already is

Cortex AI gives you large language models inside Snowflake. You call them from SQL, from apps and from chat. The data does not leave Snowflake.

No data movement

The model comes to the data. You do not copy tables to an outside AI tool.

Same security

Roles, masking and row access policies still apply. AI sees only what your role can see.

Pay for use

Billed in Snowflake credits by tokens. Admins can see and limit the cost.

THE CORTEX AI FAMILY

Six members, two kinds of user

For SQL and pipelines

AI functions

AI_COMPLETE, AI_CLASSIFY, AI_EXTRACT, AI_REDACT, AI_AGG and more, called inside SQL.

Questions on tables

Cortex Analyst

Turns a question into SQL, using a semantic view: the business names of your data.

Questions on documents

Cortex Search

Finds the right text in documents with vector and keyword search.

Combines the tools

Cortex Agents

An agent plans, picks Analyst or Search, and answers with sources.

For business users

Snowflake CoWork

Chat with your agents and data. Was Snowflake Intelligence until June 2026.

For builders: today

CoCo

An AI coding agent that builds and runs SQL, notebooks, pipelines and apps for you.

AI FUNCTIONS

AI in one line of SQL

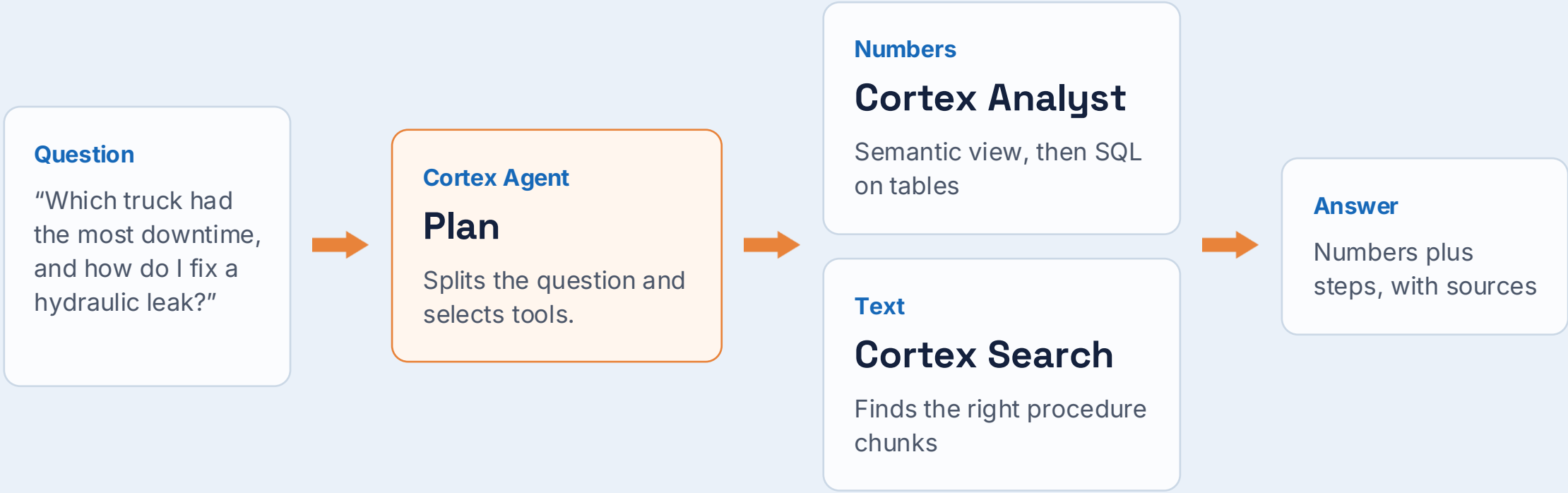
Function	Example use in maintenance
AI_REDACT	Hide names and phone numbers in work requests
AI_SUMMARIZE	One-line summary of a long request
AI_CLASSIFY	Put each request in a failure category
AI_EXTRACT	Pull the equipment ID out of free text
AI_AGG	Find repeat problems across many rows
AI_COMPLETE	Any prompt to a chosen model

```
-- Classify each request
SELECT request_id,
AI_CLASSIFY(description,
['Hydraulics','Tyres',
'Electrical','Structural'])
:labels[0]::STRING AS category
FROM maint_requests;
```

On a trial account, AI functions work after an account admin adds a credit card. Adding a card does not end the trial.

HOW THE PIECES WORK TOGETHER

An agent picks the right tool for each question



Where CoCo fits: CoCo is the builder’s agent. It can create the semantic view, the search service and the agent for you.

BEFORE YOU START

Three things every Cortex AI user must know

1

Access is a role

Database role SNOWFLAKE.CORTEX_USER gives access to Cortex AI. By default it is granted to PUBLIC. Admins can revoke it and grant it to chosen roles.

2

Cost is credits

AI usage is billed by tokens in credits, plus the warehouse that runs the SQL. Daily limits and budgets keep it under control.

3

Region matters

If a model is not in your region, an admin turns on cross-region inference: CORTEX_ENABLED_CROSS_REGION. Data stays in Snowflake.

```
ALTER ACCOUNT SET CORTEX_ENABLED_CROSS_REGION = 'ANY_REGION';
```

Part B

Meet CoCo

What CoCo is, how it thinks, where you find it, and the controls in its chat panel.

WHAT IS COCO?

An AI coding agent that knows your Snowflake account

You describe the task in plain English. CoCo reads your databases, roles and history, makes a plan, writes and runs the code, and shows you each change.

A normal chatbot

Guesses

Writes generic SQL. Does not know your tables, your roles or your costs. You copy, paste, run and fix.

CoCo

Knows and does

Uses your real catalog, runs SQL under your role, fixes its own errors and asks you before it changes things.

Name: CoCo was called Cortex Code until Snowflake Summit, June 2026. Status: generally available for commercial accounts.

HOW COCO WORKS

The agent loop: from request to result

1 **Understand**
Reads your request and the context: open file, selected SQL, @ objects.

2 **Plan**
Breaks the task into steps. For big tasks it can show a plan first.

3 **Use tools**
Searches the catalog, reads docs, writes files, runs SQL.

4 **Ask you**
With default approvals, it asks before each tool call that changes things.

5 **Check**
Reads the result. If there is an error, it tries to fix it.

6 **Report**
Gives an answer, a diff of file changes and a summary.

WHERE COCO RUNS

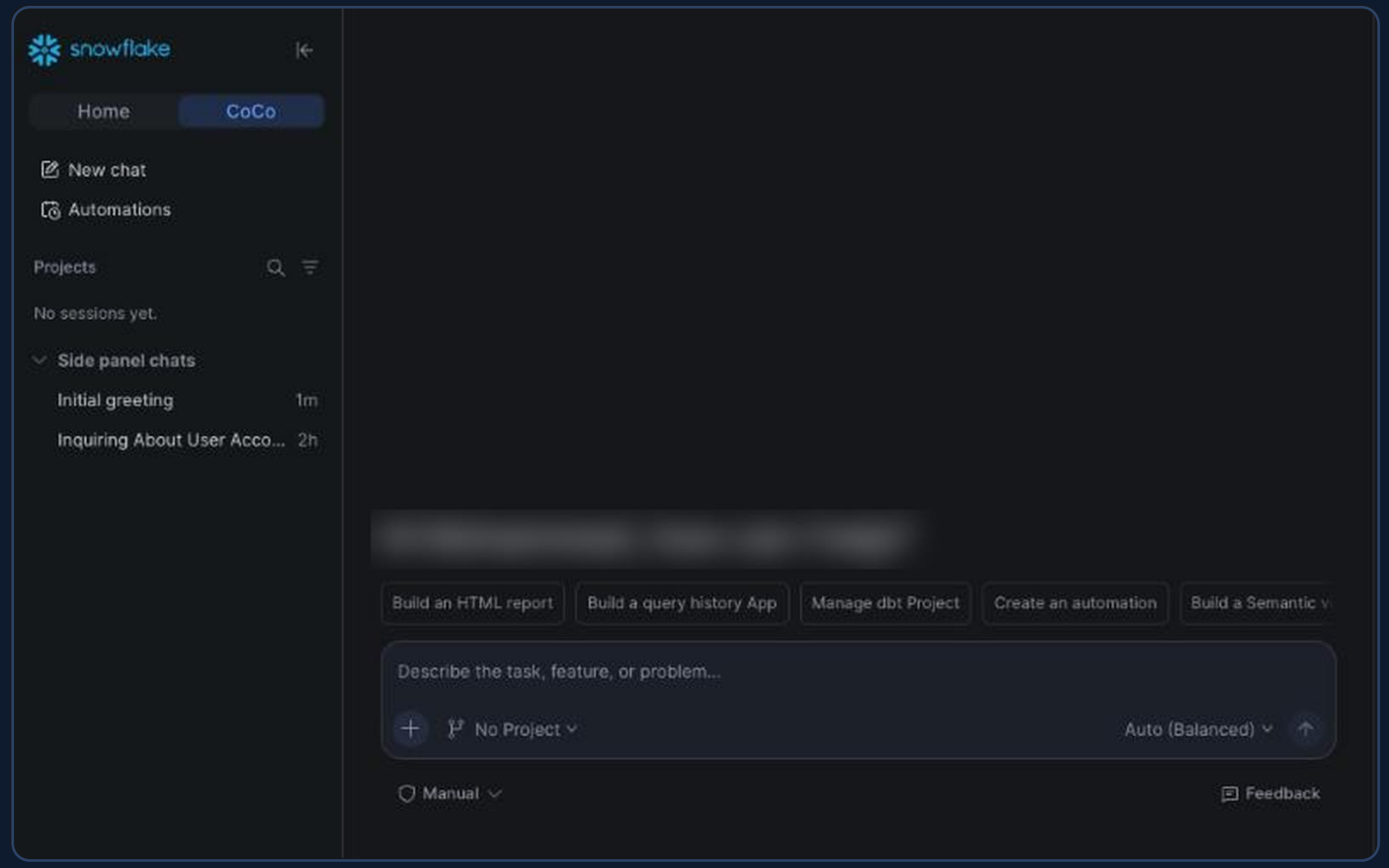
One agent, many places to use it

Surface	Status	Best for
CoCo in Snowsight	GA	SQL, notebooks, dbt and admin work in the browser. Today’s lab.
CoCo Desktop	GA	macOS and Windows app: local projects, plugins, MCP, automations
CoCo CLI	GA	Terminal and CI/CD: SQL, bash and git on your own code
VS Code extension	Available	CoCo inside your code editor
Excel and Google Sheets	Preview	Chat pane in a spreadsheet with live Snowflake data
CoCo Agent SDK	Preview	Build your own agents in Python or TypeScript

Status as in the Snowflake documentation, November 2026. Excel and Sheets preview announced on 3 November 2026.

TWO WAYS TO OPEN COCO IN SNOWSIGHT

A side panel, or a full CoCo page



Side panel

CoCo icon, bottom right of any page. Best while you work in Workspaces.

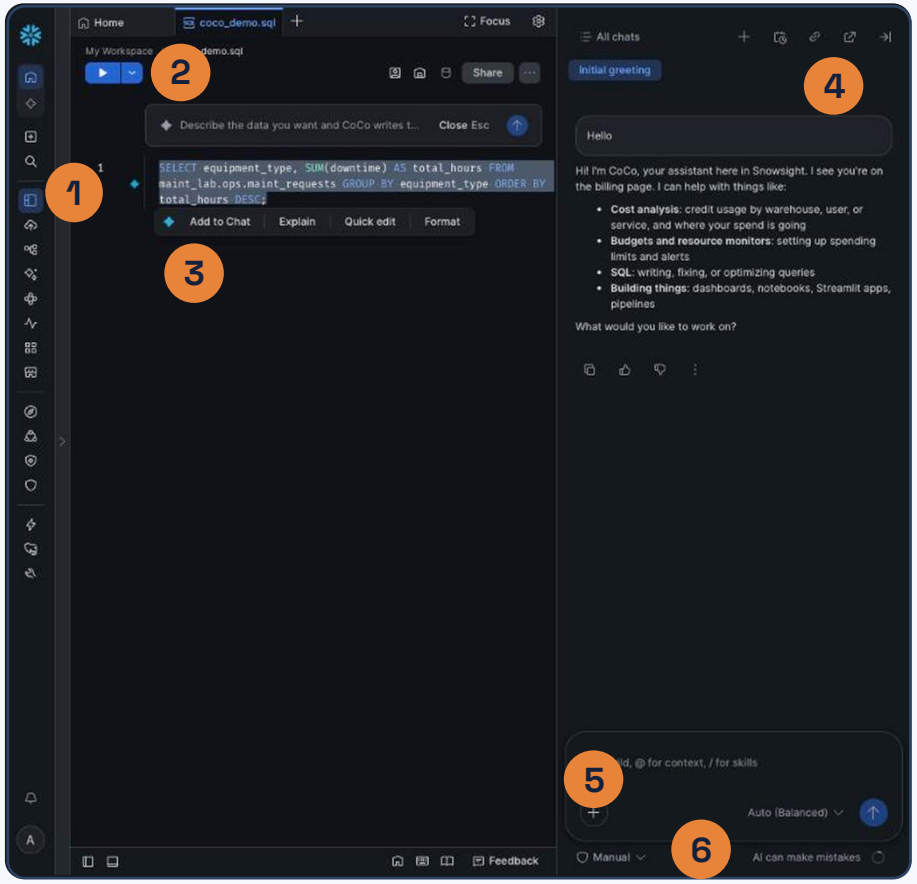
CoCo mode (Preview)

Select **CoCo** in the **Home | CoCo** switch, top left. Full-page chat, history, automations and Cloud Agents.

Screenshot: Snowsight, 17 November 2026

WHERE COCO LIVES IN SNOWSIGHT

Workspaces, with CoCo on the right



1 **Workspaces** in the left menu (Work with data)

2 **Run**, or Cmd/Ctrl + Enter

3 Highlight SQL: **Add to Chat · Explain · Quick edit · Format**

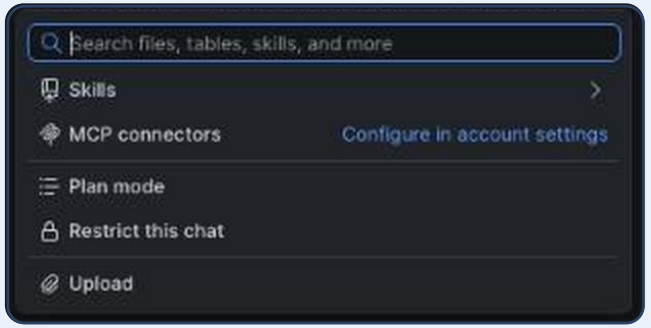
4 CoCo panel header: **All chats, New chat (+), Automations**

5 Message box: **+** menu, **@** context, **/** skills, model

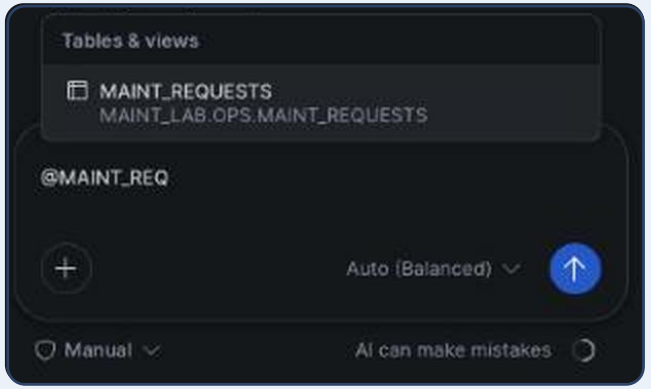
6 Approval mode: **Manual**, Auto or Bypass

THE COCO MESSAGE BOX

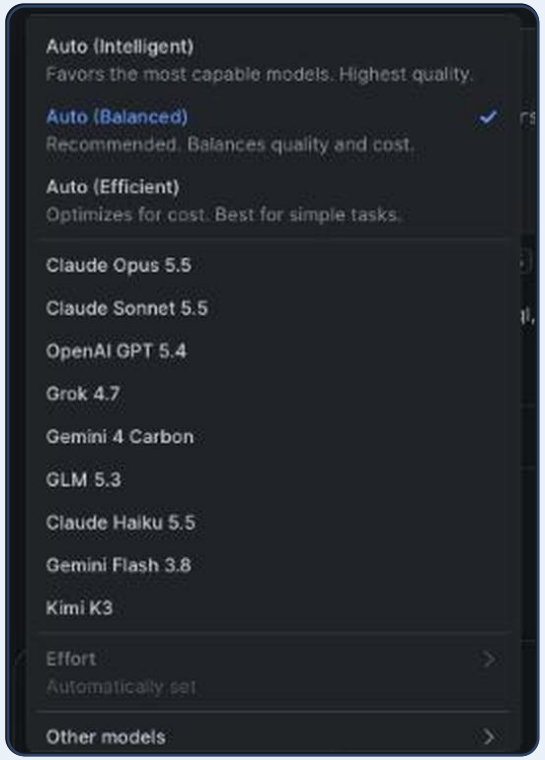
The controls you use every day



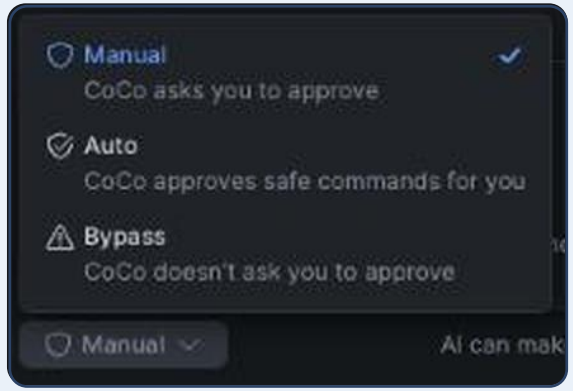
+ menu: Skills, MCP connectors, **Plan mode**, **Restrict this chat**, Upload



@ adds a table, view or file as context



Model: Auto (Balanced) is the default



Approvals: Manual asks you, Auto approves safe commands, Bypass never asks

Today: keep **Manual**. Type **/** for skills.

Part C

Six levels of CoCo skill

Each level builds on the one before. Each level has a lab.

Level 1 · Lab 2

Ask and explore

Level 2 · Lab 3

Write and explain SQL

Level 3 · Lab 4

Fix and improve

Level 4 · Lab 5

Analyse and chart

Level 5 · Labs 6, 7

Build data products

Level 6 · Lab 8

Customise and repeat

LEVEL 1 · ASK AND EXPLORE

Start with questions, not code

CoCo can find

- Databases, schemas and tables you can see
- What a table holds, with sample rows
- Answers from the Snowflake documentation
- Data in the Snowflake Marketplace

Use @ to point CoCo at one object. It saves time and gives better answers.

You
What tables are in COCO_LAB.MAINT? Describe each table in one line.

You
@MAINT_REQUESTS which columns tell me about downtime and priority?

You
What is a semantic view in Snowflake? Answer in 3 bullets.

LEVEL 2 · WRITE AND EXPLAIN SQL

Three ways CoCo helps you write SQL

In the chat

Ask for a query

Describe the result you want. CoCo writes the SQL into your file and shows a diff to accept.

In the editor

Inline suggestions

Gray text appears as you type. Push Tab to accept. Push Esc to dismiss.

On highlighted SQL

Quick actions

Quick Edit, Format, Add to Chat and Explain appear when you highlight SQL.

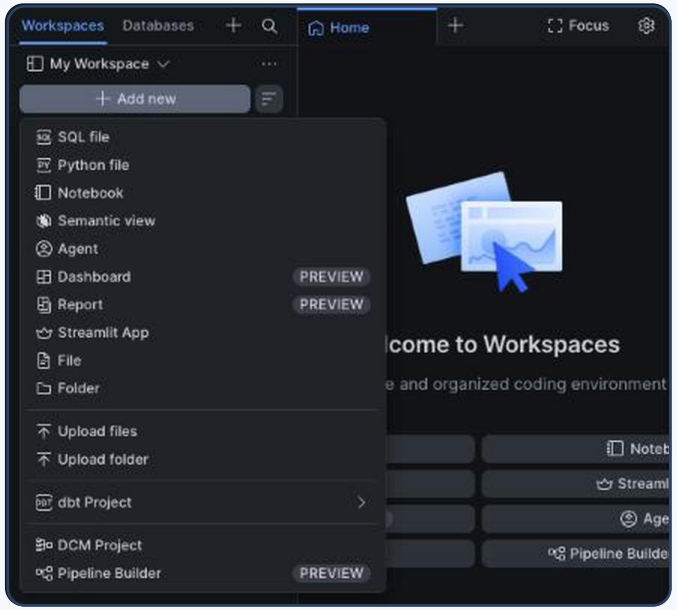
You

Write a query on COCO_LAB.MAINT.MAINT_REQUESTS: total downtime hours by asset and priority. Sort by downtime, highest first.

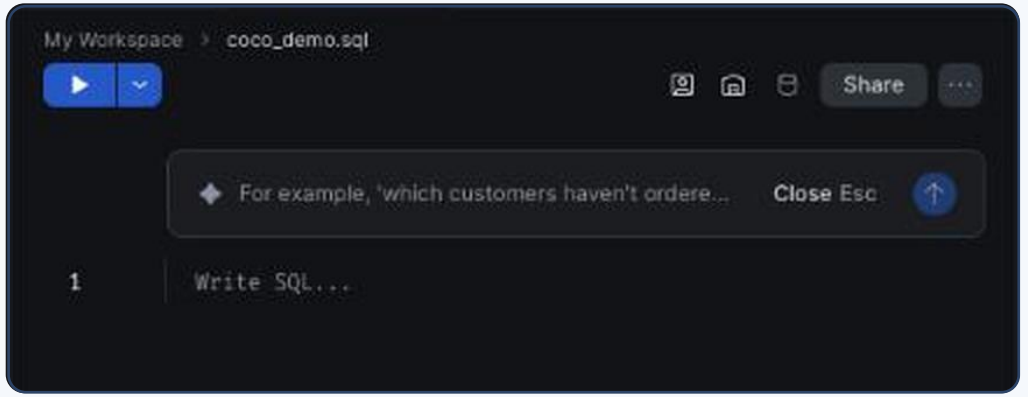
```
SELECT s.asset, r.priority,
SUM(r.downtime_hours) AS downtime
FROM maint_requests r JOIN sites s
ON s.site_id = r.site_id
GROUP BY 1, 2 ORDER BY 3 DESC;
```

LEVEL 2 · ON THE SCREEN

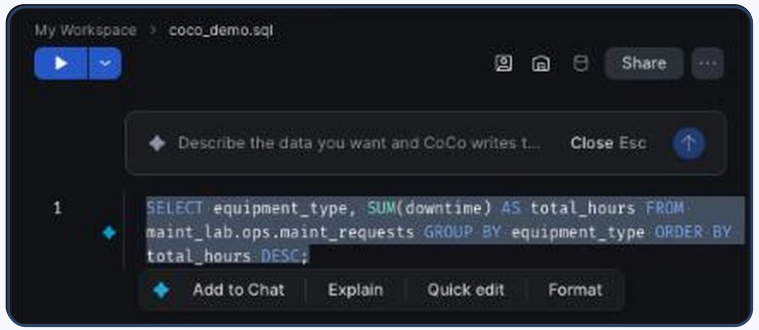
Three places to start writing with CoCo



1 · + Add new: a new SQL file, notebook, semantic view or agent



2 · Empty file: describe the data you want, CoCo writes the SQL



3 · Highlighted SQL: Add to Chat, Explain, Quick edit, Format

LEVEL 3 · FIX AND IMPROVE

Errors become one click, not one hour

1. Run a query. It fails, for example *invalid identifier 'DOWNTIME'*.
2. Select **Fix** in the results grid.
3. CoCo reads the error and the table, then shows a **diff**: red is removed, green is added.
4. Accept or reject the change. Run again.

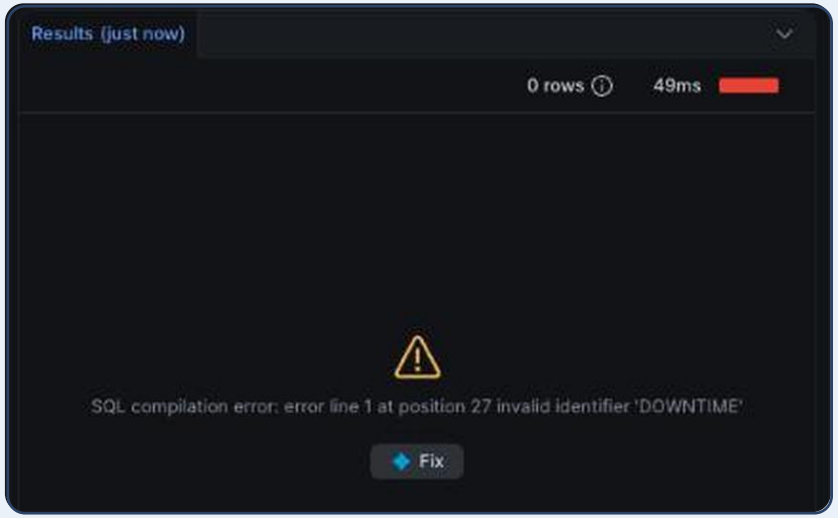
Also ask CoCo to improve

> **You**
> This query is slow. Explain why and suggest a faster version. Do not run it.

> **You**
> Add comments to every step of this query for a new team member.

LEVEL 3 · ON THE SCREEN

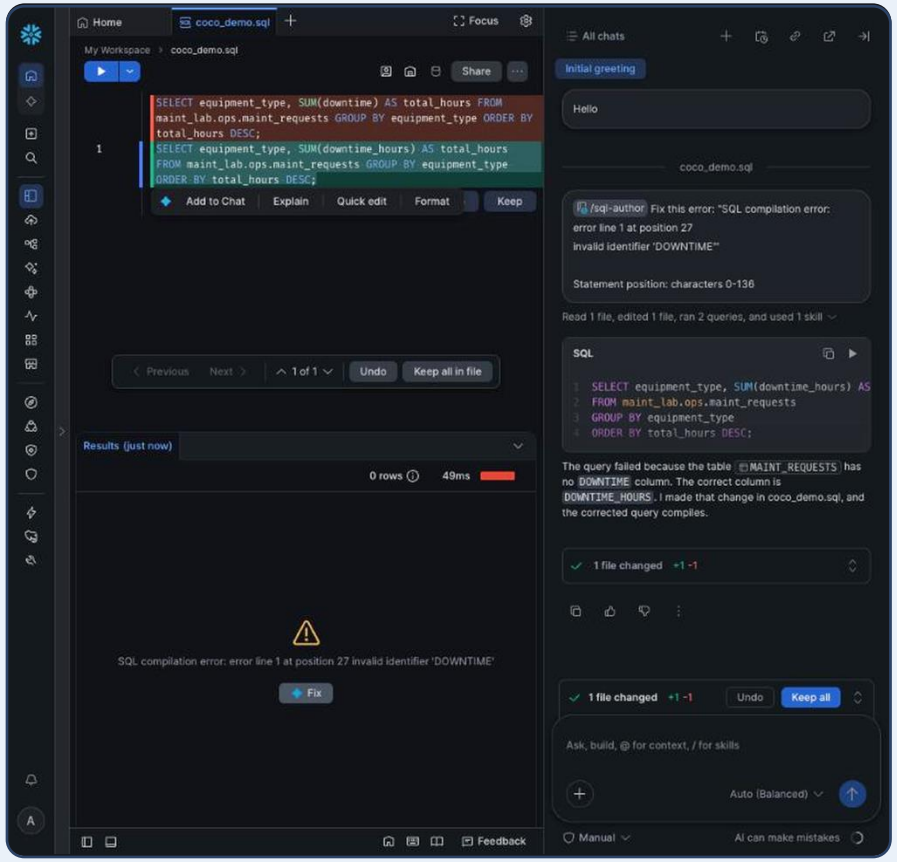
Fix, read the diff, then Keep or Undo



1 · The query fails. Select **Fix**.

2 CoCo checks the table, finds the right column, and edits the file.

3 Red is removed, green is added. Select **Keep** or **Undo**.



LEVEL 4 · ANALYSE AND CHART

From a question to a notebook with charts

In Notebooks in Workspaces, CoCo can

- Create a notebook and add SQL, Python and Markdown cells
- Run cells, or the whole notebook
- Draw charts with matplotlib, seaborn, plotly or altair
- Explain what the chart shows, in plain words

You

Create a notebook called downtime_review. Load COCO_LAB.MAINT.MAINT_REQUESTS. Add a line chart of downtime hours per month and a bar chart of downtime per failure mode. Add a Markdown cell with 3 findings.

What you get

A notebook with cells you can read, change and run again. Not a picture: real, reusable code.

LEVEL 5 · BUILD DATA PRODUCTS

Bigger tasks: let CoCo plan first

Views and tables

Reporting views, clean tables, dynamic tables

Semantic views

Business names for Cortex Analyst and agents

AI enrichment

AI_REDACT, AI_CLASSIFY and AI_SUMMARIZE on columns

Pipelines

dbt projects, file loading, Streamlit apps

Plan mode

For a multi-step task, CoCo can show a plan first: what it will create, in what order. You approve the plan, then it runs. Plan mode is read-only until you approve.

You

Plan first, do not run yet: create a view V_ASSET_KPI with requests, downtime and P1 count for each asset and month.

LEVEL 6 · CUSTOMISE AND REPEAT

Teach CoCo your rules once, use them every day

Rules for every chat

AGENTS.md

A file at the root of your workspace. CoCo reads it each time: naming rules, which warehouse, what never to do.

Repeat a task

Skills

A SKILL.md with steps for a task, for example a weekly report. Run it with /name. Stored in .snowflake/cortex/skills.

Run on a schedule

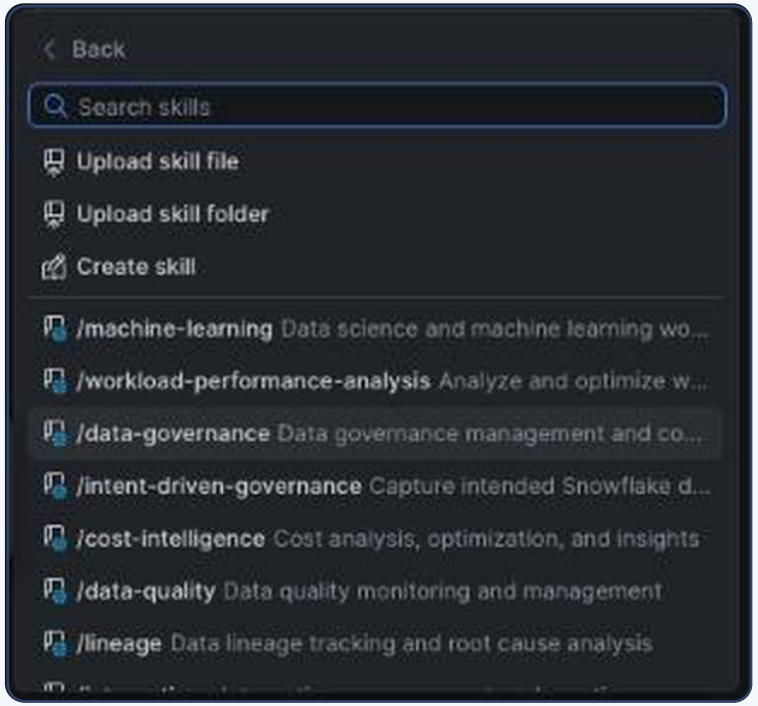
Automations

A prompt that runs on a schedule, at most once an hour, as your user. GA November 2026.

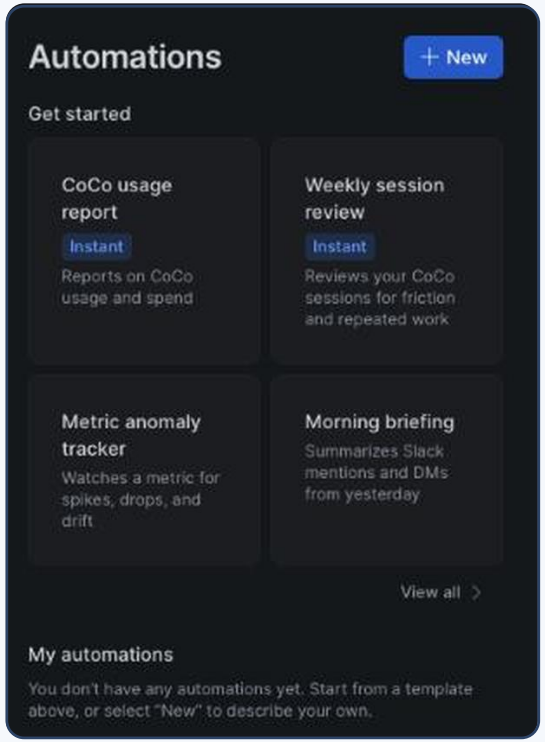
```
# AGENTS.md (example)
- Always use fully qualified names: COCO_LAB.MAINT.<table>
- Use warehouse COCO_WH. Never DROP or TRUNCATE a table.
- Add a comment line above each SQL statement.
```

LEVEL 6 · ON THE SCREEN

Skills and automations



+ › Skills (or type **/**): upload or create your skill, or use a built-in one



Automations (panel header): **+ New** or a template

Built-in skills

/cost-intelligence, /data-quality, /data-governance, /lineage, /machine-learning and more

Your skill

Lab 8: /weekly-asset-report

PROMPTING COCO WELL

A good request names the data, the result and the limits

Weak

“Show me the bad machines.”

Which table? What is bad? How many? CoCo must guess.

Strong

“From COCO_LAB.MAINT.MAINT_REQUESTS, list the 5 equipment IDs with the most downtime hours in October 2026. Show downtime and number of requests. Read only, do not create objects.”

1 · Data

Full names, or @ the object

2 · Result

Columns, sort, count, chart

3 · Limits

Read only, which warehouse, no DROP

4 · Check

Ask CoCo to show the SQL and explain it

STAY IN CONTROL

You decide what CoCo is allowed to do

Control	What it does	Use it when
Manual approvals	CoCo asks you to approve its actions	Always, while you learn
Auto / Bypass	Auto approves safe commands. Bypass never asks. Admins can turn Bypass off.	Trusted, repeat work only
Plan mode	+ › Plan mode. Shows the steps first, read-only until you approve	Multi-step builds
Diff view	Shows each file change. Select Keep or Undo	Every change to code
Restrict this chat	+ › Restrict this chat. Read-only, or limited to chosen roles	Exploring production data
Your active role	CoCo runs as your role. It cannot see more than you can.	Always: pick the smallest role

Part D

Access, governance and cost

What admins set up, so that CoCo is safe and the bill has no surprises.

WHO CAN USE COCO

Access is ordinary Snowflake RBAC

1. The role needs **SNOWFLAKE.CORTEX_USER** or the smaller **SNOWFLAKE.CORTEX_AGENT_USER**.
2. Until change bundle **BCR-2445** reaches your account, the role also needs **SNOWFLAKE.COPILOT_USER**.
3. The user's daily credit limit must not be 0.
4. CoCo works as your **active role**, selected in the user menu, bottom left.

```
-- Give CoCo to one team only
REVOKE DATABASE ROLE SNOWFLAKE.CORTEX_USER
FROM ROLE PUBLIC;
GRANT DATABASE ROLE SNOWFLAKE.CORTEX_USER
TO ROLE maint_analyst;
```

Trial accounts: AI features, CoCo included, start after an account admin adds a credit card. The trial continues.

COST CONTROL

Pick the right model, and set a daily limit

Model choices

Option	Meaning
Auto (Balanced)	Default. Balances quality and cost
Auto (Intelligent)	Most capable models, highest cost
Auto (Efficient)	Lowest cost, best for simple tasks
One model	For example Claude Opus 5.5, Claude Sonnet 5.5, GPT 5.4, Gemini 4 Carbon, Grok 4.7

Daily credit limit per user

```
-- Default is -1: no limit. 0 blocks CoCo.
ALTER ACCOUNT SET
CORTEX_CODE_SNOWSIGHT_DAILY_EST_CREDIT_LIMIT_PER_USER = 5;
-- A user value overrides the account value
ALTER USER jsmith SET
CORTEX_CODE_SNOWSIGHT_DAILY_EST_CREDIT_LIMIT_PER_USER = 20;
```

Also for CoCo CLI and Desktop: replace SNOWSIGHT with CLI or DESKTOP. The limit is a rolling 24 hours.

Part E

Real scenarios

How three people in a mining maintenance team use CoCo in a normal week.

THREE PEOPLE, ONE WEEK

Who uses CoCo, and for what

Reliability analyst

“Why is BMA downtime high?”

Asks CoCo to find repeat failures, builds a notebook with a monthly trend, and shares 3 findings with the planners.

Levels 1, 2, 4

Data engineer

“Make it a product”

Plans a KPI view and a semantic view with CoCo, adds AI_REDACT to hide names, then writes a skill so the weekly report runs with one command.

Levels 3, 5, 6

Platform admin

“Keep it safe and cheap”

Asks CoCo which warehouses cost the most this week, who can read the maintenance tables, and sets a daily CoCo credit limit.

Governance and cost

SCENARIO WALK-THROUGH

One analyst chat, five prompts, one finding

1. **Explore:** “@MAINT_REQUESTS what does each column mean?”
2. **Measure:** “Total downtime by asset and month, July to October 2026.”
3. **Drill down:** “For BMA only: which equipment IDs failed more than once?”
4. **Understand:** “Use AI_AGG on the descriptions of those requests. What do the repeat failures have in common?”
5. **Share:** “Put steps 2 to 4 in a notebook called bma_repeat_failures with one chart and a summary.”

Finding (dummy data): dragline DL-0101 at Goonyella Riverside has two failures, a boom crack and hoist motor wear, with 29 downtime hours. The analyst checks every number in the SQL CoCo shows.

Part F

What is new, and the lab

CoCo changes every month. Here is what changed from August to November 2026, the Snowsight screens that moved, and your lab.

WHAT IS NEW IN COCO

August to November 2026

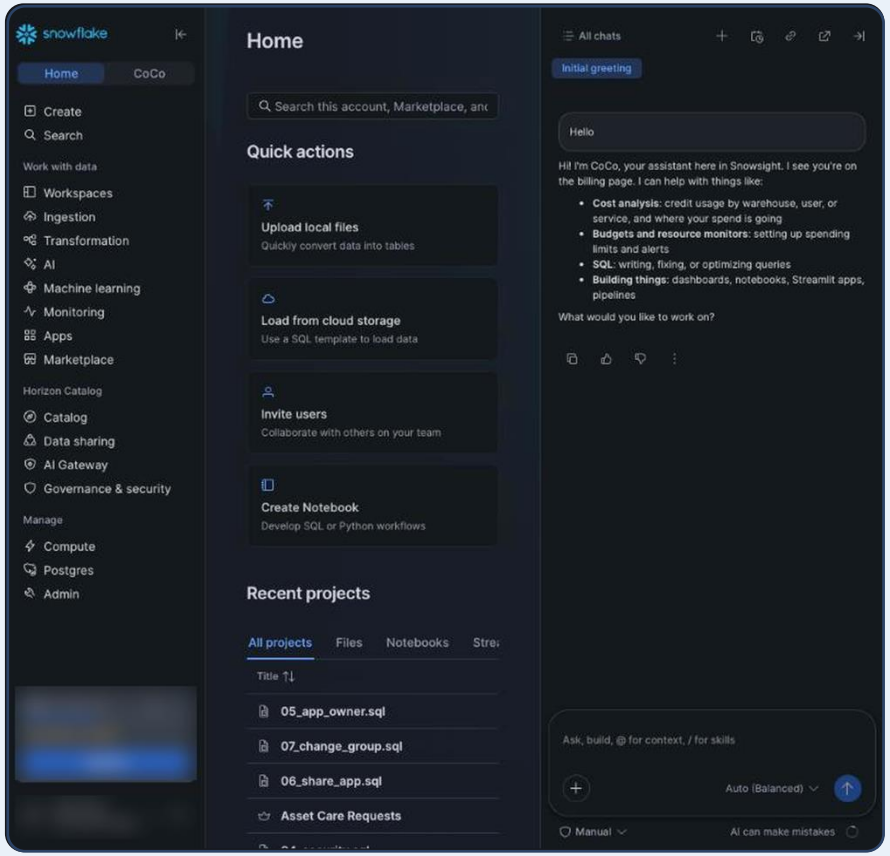
Date	Change
4 Aug	Agent-requested plan mode (GA)
27 Aug	Subagents (GA)
9 Sep	Restrict this chat (GA)
24 Sep	Approval modes: Default and Bypass (GA)
29 Sep	Effort levels, new model list (GA)
22 Oct	Skill and plugin sharing (GA)

Date	Change
27 Oct	Bulk and continuous file loading (GA)
2 Nov	CoCo automations (GA)
3 Nov	CoCo for Excel and Google Sheets (Preview)
Early Nov	CoCo Admin in Snowsight (Preview)
9 Nov	Skill recommendations and sharing suggestions
12 Nov	Tableau workbooks to Streamlit apps (Preview)

Sources: CoCo in Snowsight changelog and Snowflake release notes, checked 16 November 2026. CoCo Desktop also ships about two releases a month (v1.25.4 on 10 November).

SNOWSIGHT UI CHANGES

Where things are now



Grouped left menu

Work with data: Workspaces, Ingestion, Transformation, AI, Machine learning, Monitoring, Apps, Marketplace. **Horizon Catalog:** Catalog, Data sharing, AI Gateway, Governance & security. **Manage:** Compute, Postgres, Admin.

CoCo everywhere

Home | CoCo switch at the top. CoCo panel on the right of any page. **Workspaces** is now a top-level item.

Screenshot: Snowsight, 17 November 2026. Older guides say Worksheets, Projects and Database Explorer.

HANDS-ON LAB

Asset Care with CoCo: nine short labs

Use case: a mining maintenance team (real BHP asset and site names, dummy data) wants answers about equipment downtime. You use CoCo for every step.

Labs 1 and 2 · Level 1

Meet CoCo. Load the data and explore it with questions and @.

Labs 3 and 4 · Levels 2, 3

Write and explain SQL. Fix three broken queries with Fix.

Lab 5 · Level 4

A notebook with downtime charts and findings.

Labs 6 and 7 · Level 5

Plan and build a KPI view and a semantic view. Enrich text with AI functions.

Lab 8 · Level 6

AGENTS.md and your own skill: /weekly-asset-report.

Lab 9 · Control

Read-only chat, approvals, and a cost check.

WRAP-UP

Five habits to take home

1. Name the data, the result and the limits in every prompt.
2. Read the SQL and the diff before you accept. Trust, then verify.
3. Use the smallest role, default approvals and plan mode for big tasks.
4. Put team rules in AGENTS.md, and repeat work in skills.
5. Watch cost: pick the model on purpose and keep a daily limit.

Read more: docs.snowflake.com/en/user-guide/cortex-code/cortex-code-snowsight · CoCo in Snowsight changelog · snowflake.com/en/developers/guides (search “CoCo”)