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## **Snowflake Cortex Generates Without Admissibility Gates**

by [Nick Clark](#) | Published March 27, 2026 | [PDF](#)

Snowflake Cortex brings AI inference directly into the data cloud, enabling enterprises to run LLM functions, search, and analysis alongside their governed data without moving it outside the platform. The data governance advantage is real: AI operates where the data already lives, under existing access controls. But Cortex inference output is not evaluated against persistent semantic state before returning results. The model generates within Snowflake's governance perimeter, but the generation itself is not semantically governed. Inference control provides the structural gate between generation and commitment.

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**What Snowflake built**

Cortex integrates AI capabilities directly into Snowflake's SQL environment. Functions like COMPLETE, SUMMARIZE, EXTRACT, and TRANSLATE operate on data in place. Cortex Search provides semantic search over enterprise data. Cortex Analyst enables natural language queries against structured data. The design philosophy is sound: keep AI close to governed data rather than extracting data to external AI services.

Governance for Cortex inherits Snowflake's data governance model: role-based access, data masking, object tagging, and audit logging. The data accessed by AI functions is governed. The output generated from that data is not evaluated against semantic constraints beyond what the model's training and any content filtering provide.

## The gap between data governance and inference governance

Snowflake's data governance ensures that the right people access the right data. Inference governance ensures that AI output generated from that data is semantically admissible in the application context. A Cortex COMPLETE function operating on customer data produces output governed by data access rules but not by the semantic constraints of the business relationship with that customer.

A natural language summary of a customer's account history may be factually accurate based on the underlying data while being semantically inadmissible because it surfaces information that, while accessible to the analyst, should not be presented in the format or context the AI generated. Data governance controls access. Inference governance controls what the AI does with what it accesses.

## What inference control enables

With an admissibility gate inside the Cortex inference path, every generated output is evaluated against persistent semantic state before returning to the calling application. The gate checks output against the application's normative constraints, the data context's semantic requirements, and the declared purpose of the inference request. Outputs that fail semantic admissibility are redirected rather than returned with caveats.

The rights-governance property is particularly relevant for data cloud environments. Inference control can enforce that generated output respects not just data access rights but semantic usage rights: the data may be accessible but the AI's use of it in this context may be constrained by purpose limitation, consent scope, or regulatory requirements that data access controls alone cannot enforce.

## The structural requirement

Snowflake's data governance is robust. The gap is inference governance: evaluating AI output against semantic constraints at the point of generation, not just ensuring that the input data was properly accessed. Inference control provides the admissibility gate that extends Snowflake's governance model from data access to AI output, ensuring that what the model generates is semantically appropriate for the context in which it will be used.

[Inference Control All 21 steps →](#)

Govern inference at the point of generation.

Primary Technical Disclosure

[◦ Inference-Time Semantic Execution Control](#)

Secondary Technical

[◦ Inference as Semantic Execution](#)◦ [Semantic Admissibility Gate](#)◦ [Entropy-Bounded Semantic Admissibility](#)◦ [Inference-Time Semantic Budget](#)◦ [Semantic Rollback and Checkpoint Recovery](#)◦ [Multi-Model Arbitration With Shared Semantic State](#)◦ [Structural Elegance Evaluation](#)◦ [Rights-Grade Inference Governance](#)◦ [Semantic State Object](#)◦ [Semantic State Object Schema](#)◦ [Inference Transition as Mutation](#)◦ [Trust-Slope Continuity Across Inference](#)◦ [Anchored Semantic Resolution](#)◦ [Semantic Lineage Recording](#)◦ [Policy-Governed Inference Execution](#)◦ [Partial State Handling](#)◦ [Model-Agnostic Inference Governance](#)◦ [Pre-Generation vs Post-Generation Distinction](#)◦ [Affect-Modulated Inference Admissibility](#)◦ [Integrity-Aware Inference](#)◦ [Confidence-Gated Inference Advancement](#)◦ [Inference Deployment Embodiments](#)

Applications (General)

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Applications (Specific)

[◦ Einstein Generates Without Semantic Admissibility](#)◦ [Databricks Serves Inference Without Semantic Gates](#)• [Snowflake Cortex Generates Without Admissibility Gates](#)◦ [Hugging Face Serves Models Without Semantic Governance](#)◦ [Cohere's Enterprise LLM Has No Semantic Admissibility Gate](#)◦ [Together AI Optimizes Inference Speed, Not Inference Governance](#)◦ [SageMaker Serves Models Without Semantic Admissibility](#)◦ [Vertex AI Generates Without Per-Transition Admissibility](#)◦ [Azure ML Deploys Models Without Admissibility Gates](#)◦ [Modal Runs Inference Fast Without Governing Output](#)◦ [Replicate Serves Open Models Without Semantic Governance](#)◦ [Fireworks AI Optimizes Speed Without Governing Semantics](#)◦ [Groq's LPU Accelerates Inference Without Governing It](#)◦ [Cerebras Achieves Wafer-Scale Inference Without Semantic Governance](#)

[Inference Control overview →](#)

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