# AIE Overview, Part 4

Active Security

ATTIVIO®
ACTIVE INTELLIGENCE

Search and Security

- Two traditional models for securing content:

  - Early Binding Security (flattening)
  - Late Binding Security (post-query filtering)

- Both have significant drawbacks

- Attivio's patented Query-time JOIN capabilities allow us to eliminate the problems of both models

Early Binding Security
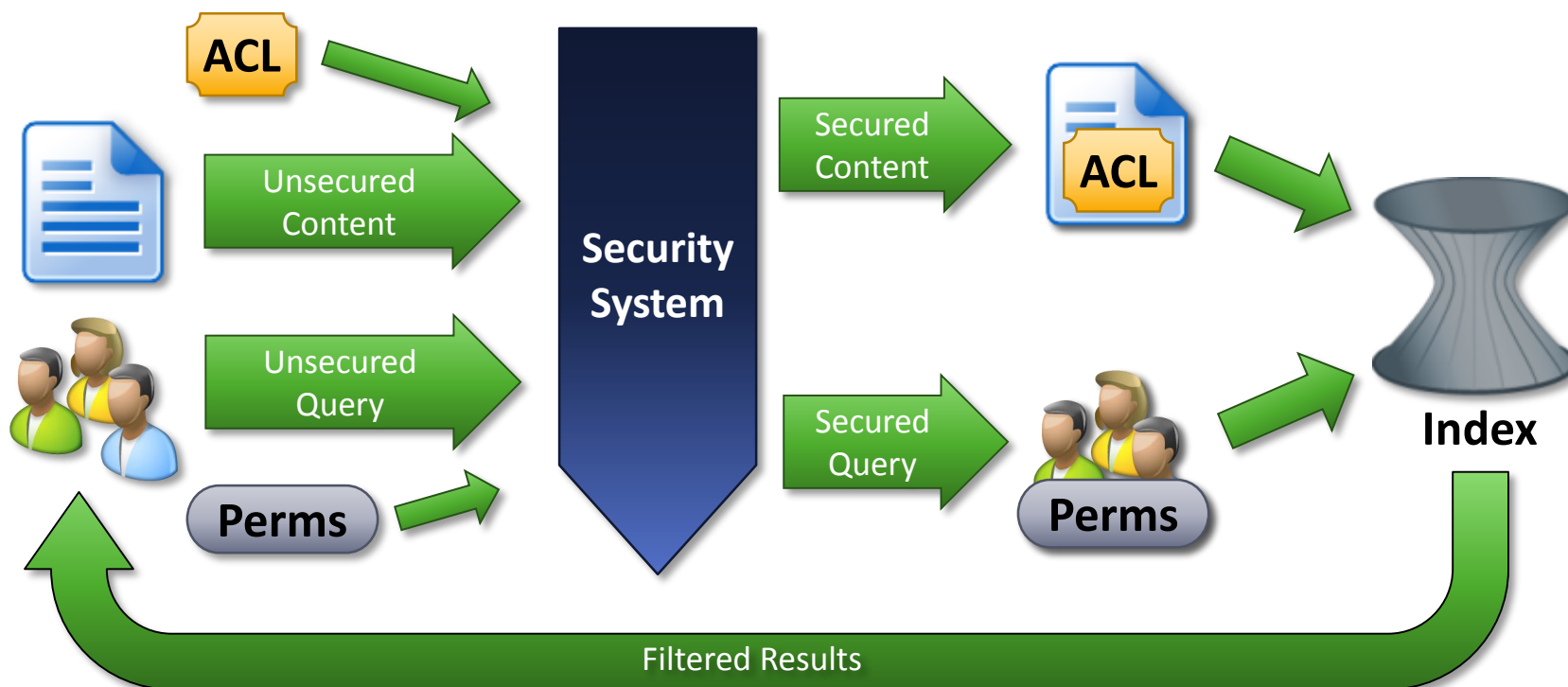
- Documents <u>must</u> be tagged and indexed with ACLs
  - ❗ Updating ACLs requires re-processing all associated content
- ✔ More secure than the Late Binding model

Late Binding Security
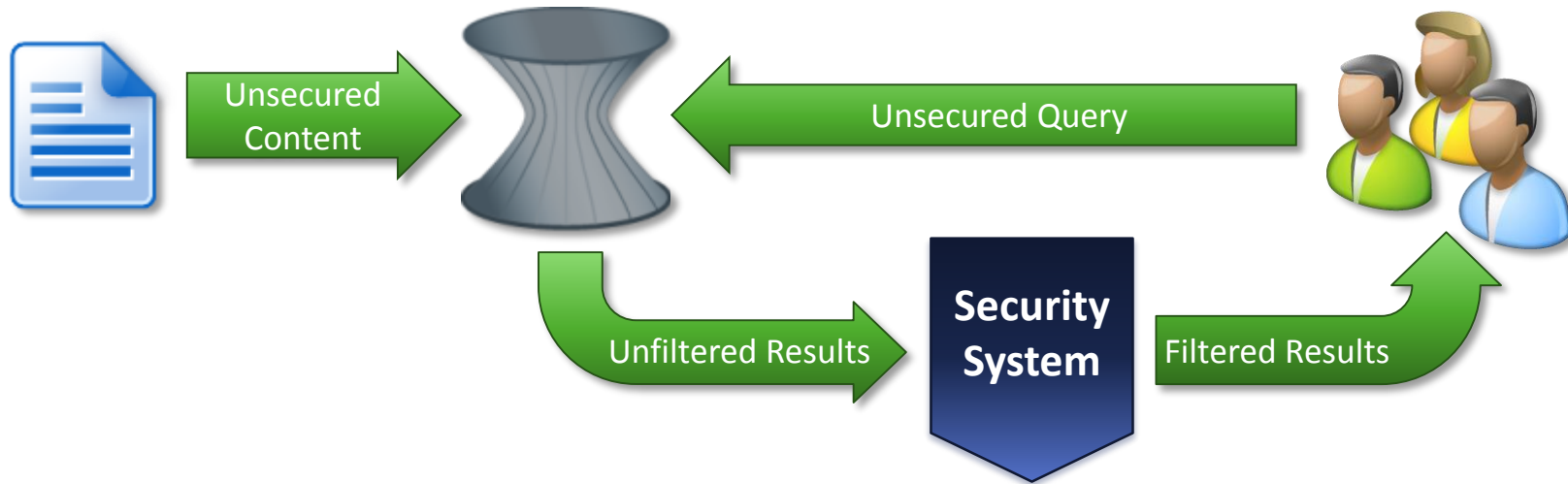
- Results are filtered to remove documents that the user does not have access to

  - Failure case: too many documents displayed

- Inaccurate facet counts—facets "leak" information from filtered documents

- Easier to update than the Early Binding model

Attivio Active Security
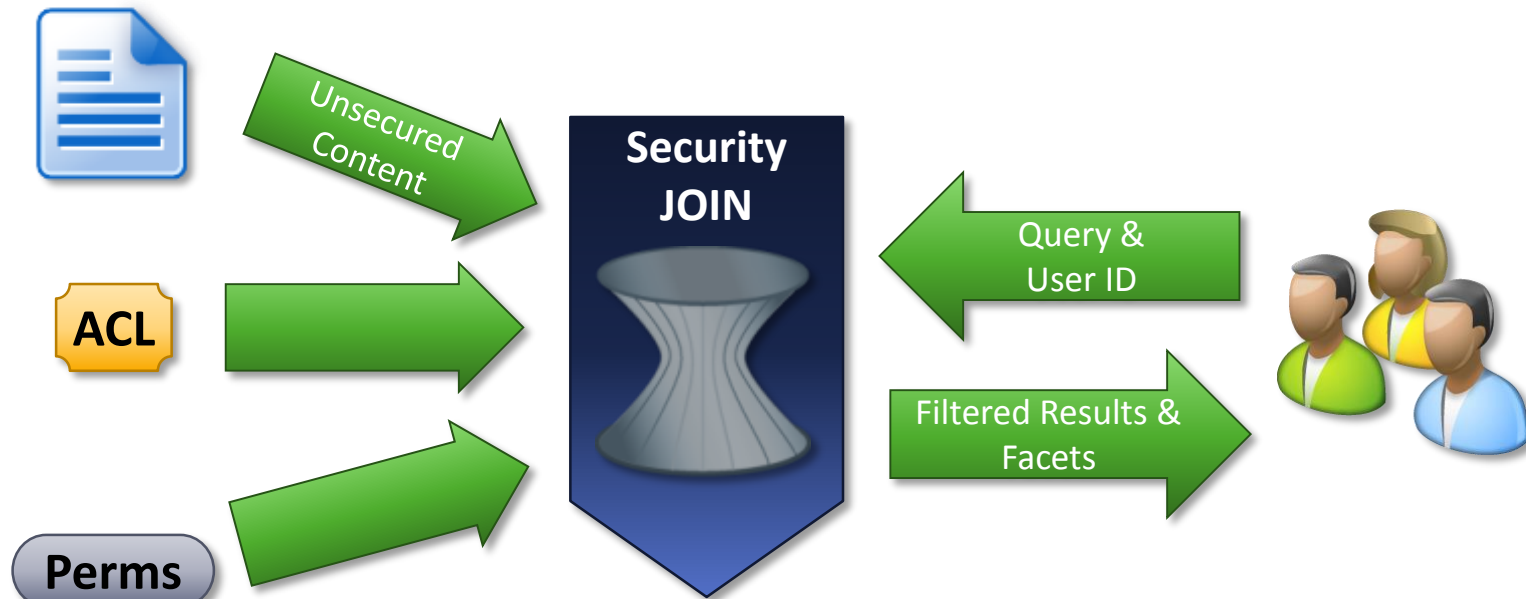
- Ingest and store content, permissions, and ACLs independently
- Permissions and ACL updates don't affect associated content
- Can ingest existing traditional security systems and convert them to an Active Security model

Active Security Example

Search | title: "Magnus Carlsen"

Document

id	doc-01
title	Magnus Carlsen

ACL

id	ACL-001
doc_ids	doc-01, doc-02
allow	permission-01
deny	permission-02

Permission

id	permission-01
name	Sales
type	group

Permission

id	permission-02
name	John Smith
type	user
membership	Sales

John Smith will not be able to see this document.