

# LUCENE / SOLR REVOLUTION / 2017

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## Evaluation of Lucidworks Fusion for Enterprise Search

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# Agenda

- Pre-Fusion Enterprise Search at Sandia
- Desktop Search Initiative
- Fusion Evaluation Initiative
- Current State of Enterprise Search at Sandia
- Conclusion
- Questions



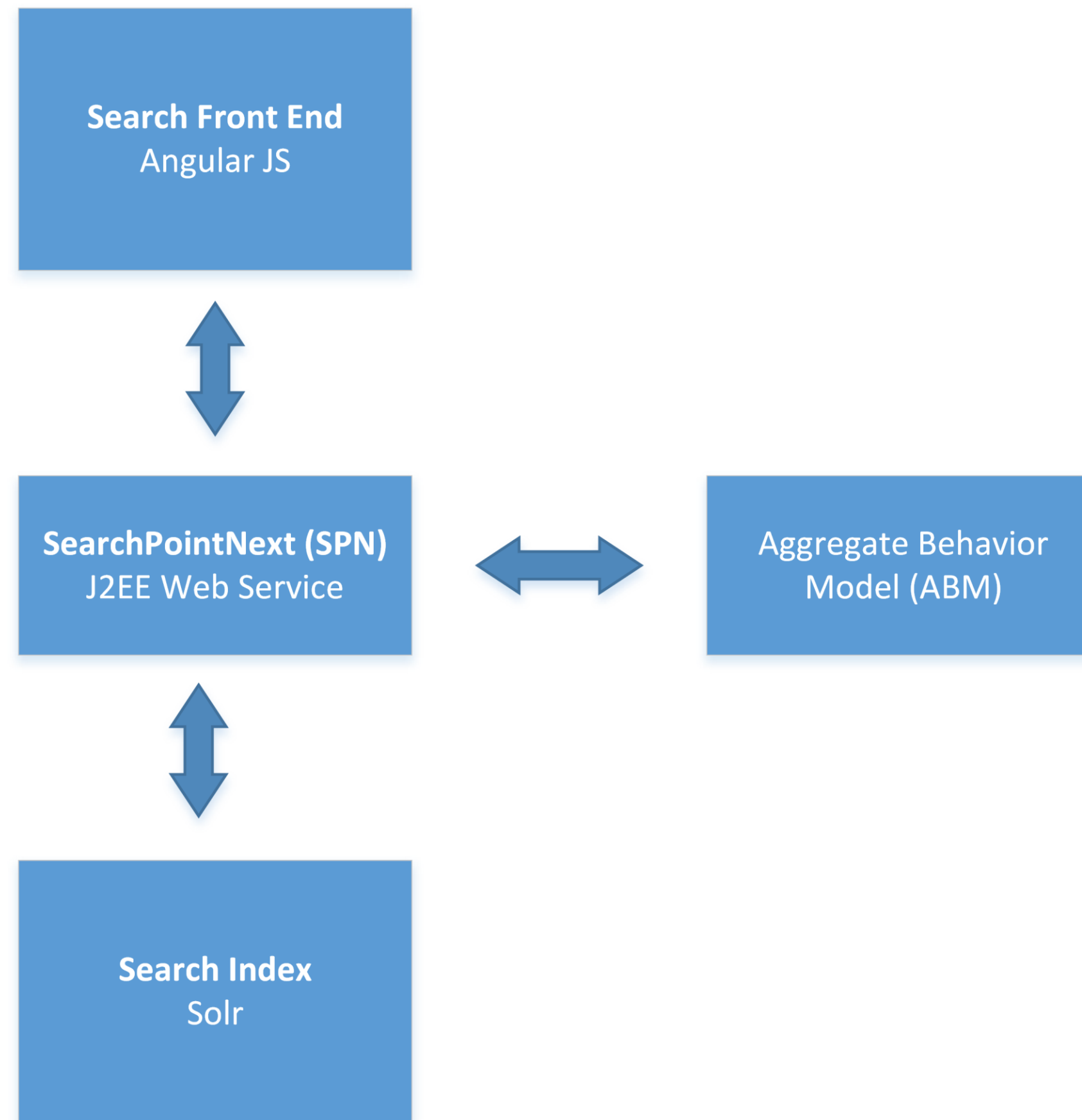
# Pre-Fusion Enterprise Search at Sandia

Enterprise Search at Sandia has evolved through the years to the current state

- Single Solr node
- Custom J2EE Middle Tier
- Custom Aggregate Behavior Model (ABM)
- Difficult to enhance and maintain
- Unable to index all content - we could not honor ACLs
- Biased against COTS solutions



# Pre-Fusion Enterprise Search at Sandia



# Desktop Search Initiative

Another IT organization at Sandia was investigating options for Desktop Search at Sandia

- They were looking for a COTS solution
- Realized that they needed an Enterprise Search solution
- Invited my department to participate in the evaluation
- Really opened my eyes to what COTS has to offer
- The products they evaluated were too costly for their scope





# Fusion Evaluation Initiative at Sandia

Given what we knew about Lucidworks Fusion, we felt it might be worth evaluating against our needs

- We performed a proof of concept evaluation of Lucidworks Fusion features and capabilities relative to our needs
- We also looked at the infrastructure provided by Fusion to enable us to enhance what is available out of the box
- We gathered data to drive our decision as to whether or not Fusion meets our requirements



# Fusion Evaluation Initiative at Sandia

## Procedures/Scope of Work

- Deploy Fusion in our environment
- Migrate a snap shot of our data
- Use Fusion to index new content
- Capture signals from current search logs
- Evaluate features based on our requirements
- Document Results



# Fusion Evaluation Initiative at Sandia

## Fusion Out of the Box (features that are important to us)

- Customizable admin panel and metrics dashboards
- Connectors with customizable index pipelines – honor ACLs
- Query Workbench
- Built in security integration with SSO, Kerberos, Active Directory, and LDAP
- Built in Relevancy tools
- Machine Learning / Signal Processing
- Recommendation engine
- Personalization
- Contextual Search





# Fusion Evaluation Initiative at Sandia

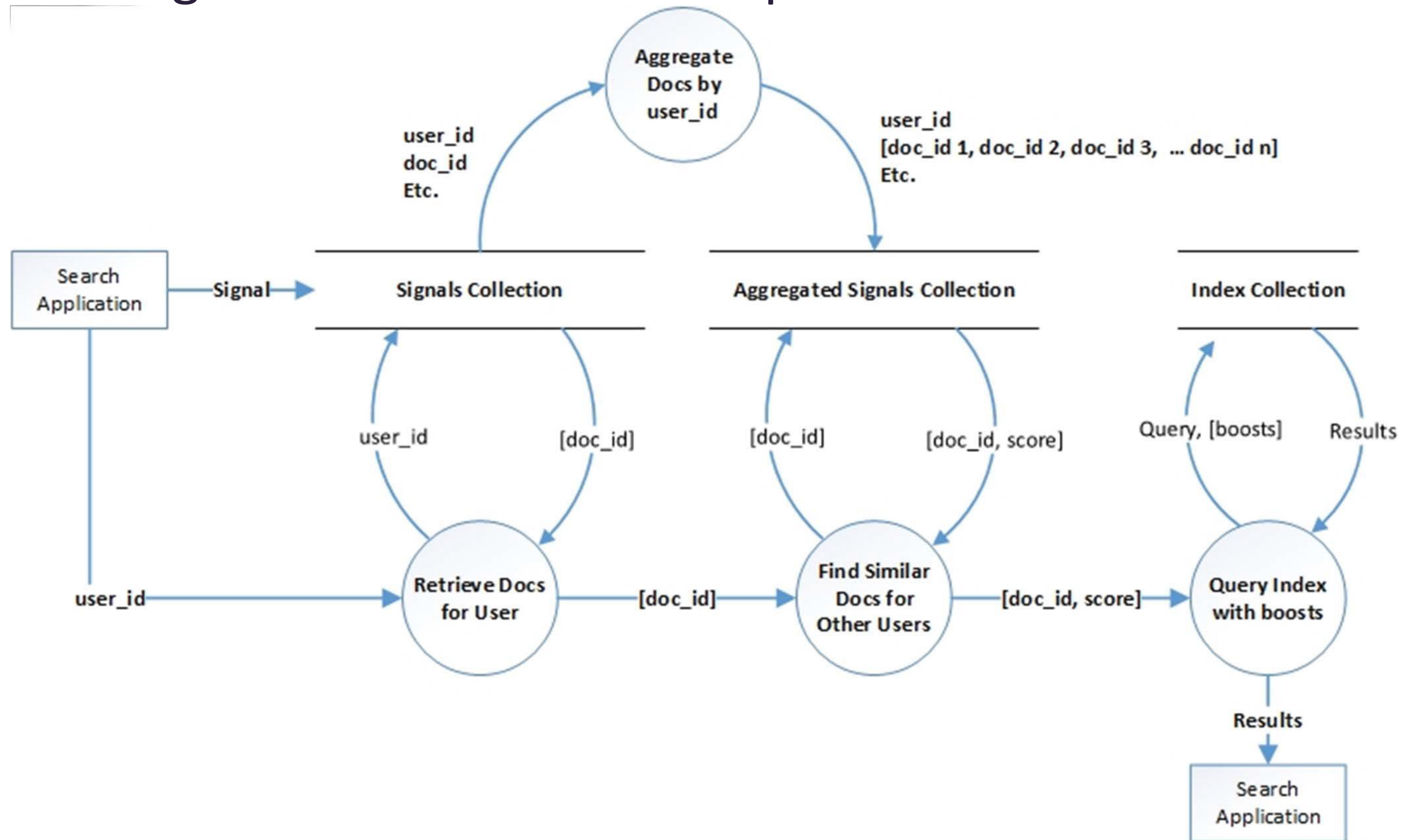
## Evaluation

- Infrastructure Integration
- Admin, Reporting, and Metrics
- Connectors and Crawlers
- Signals Processing
- Lucidworks View
- Miscellaneous



# Fusion Evaluation Initiative at Sandia

## Signals Processing - Personalization Example



# Fusion Evaluation Initiative at Sandia

## Conclusions

- Fusion out of the box meets or exceeds most of our requirements
- Fusion can be customized to meet all of our requirements
- It will enable us to index content that we could not index before – honor ACLs





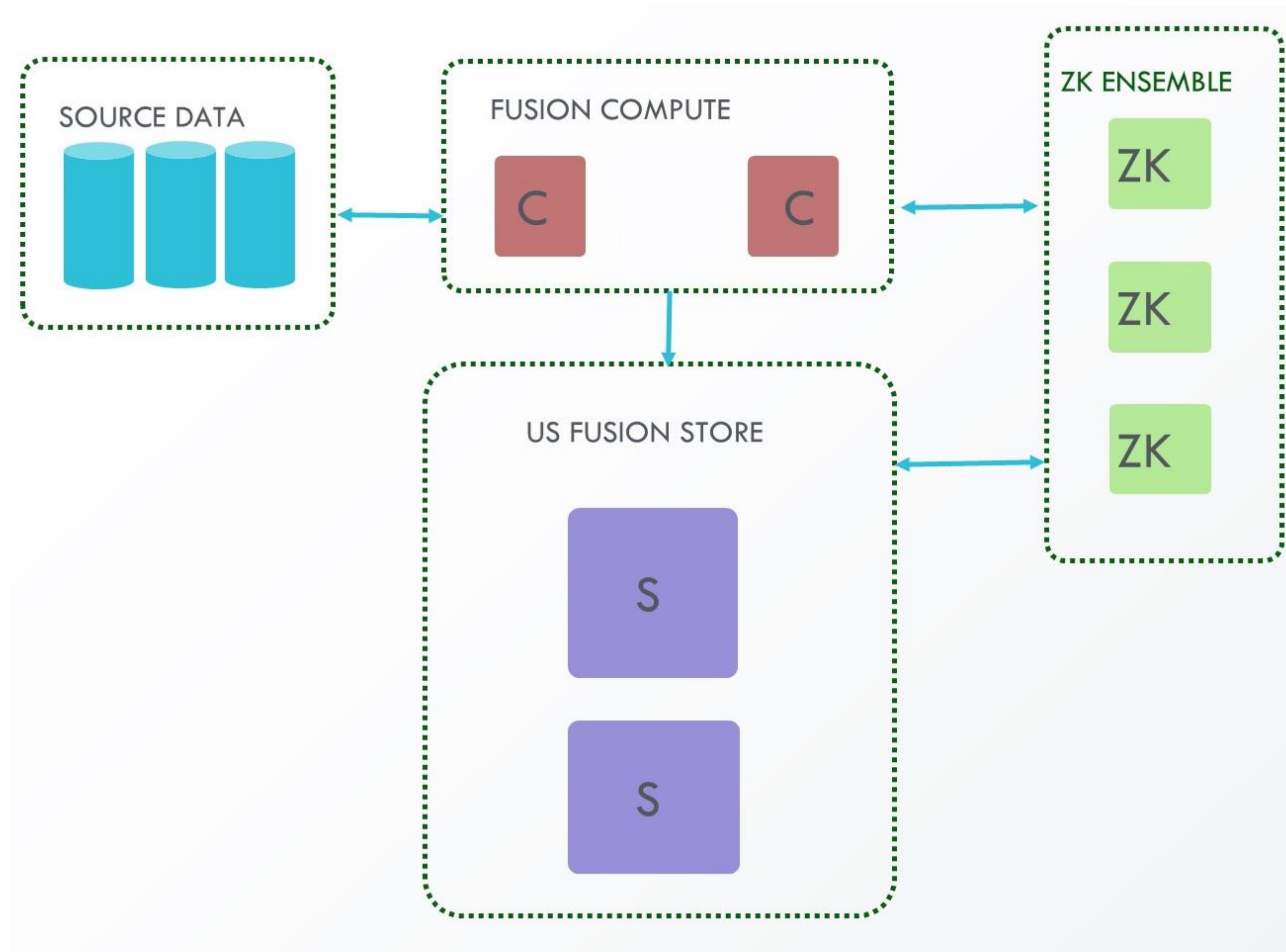
# Current State of Enterprise Search at Sandia

Fusion is on the verge of production deployment

- Replaced much of our custom J2EE middle tier
- Replaced our Custom Aggregate Behavior Model (ABM)
- Deployment environment is much more complex than a single Solr node with a J2EE middle tier
- With Fusion we can capture more content so we will soon need the scalability of a distributed deployment
- We will also be capturing signals for machine learning, personalization, recommendations, and more



# Current State of Enterprise Search at Sandia



# Conclusion

- Fusion appears to be a cost-effective fit for our organization's basic enterprise search needs
- We look forward to capitalizing on many of its more advanced features





# Questions



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## Thank You

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