



# Shaping Data with Sigmafine®

... for Future Business Needs

Sean Williams, Phillips 66 Company – Billings Refinery

SIGMAFINE™  
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Shaping  
Data  
for Action



# Abstract

- This presentation discusses the implementation of Sigmafine 4.5 at the Phillips 66, Billings, Montana Refinery. With the introduction of Sigmafine 4.5 and AF 2.4, a new toolset is now available that allows the reconciliation process to be redesigned. With these advances comes the possibility to more fully integrate Sigmafine with other modeling processes, such as production forecasting. As forecasting accuracy increases, efficiencies and business value can be realized across multiple business units. This presentation will offer examples of both changes to the reconciliation process and system integration.



# Introduction

- My background
  - 24 years with Phillips 66 (Previously ConocoPhillips, Conoco)
  - 10 years in operations
  - 6 years in rotating equipment
  - 8 years as the “Coordination and Economics Analyst”
- Business Interests
  - W3C Standards
  - “Big Data”



# Context of Presentation

- At the Phillips 66 Billings Refinery, Sigmafine is used by the “Optimization, Planning and Economics” Group (OPE).
  - Produces the standards reports used by the Finance and Accounting group.
  - Goes beyond that to support the needs of the OPE “Model Centric Vision”.
- What is presented here today may not be the most elegant or robust way to build out the new SF 4.xx platform.
  - Our intent is to see what is possible with the new platform and to incorporate it into the reporting solution while it is being built.
  - Once the reporting system is complete, change is far more difficult. At that point we will revisit many of these topics to fine tune them.
  - What does that mean?



# AF Capabilities

In my personal opinion – AF is capable of far more than most of us can envision.



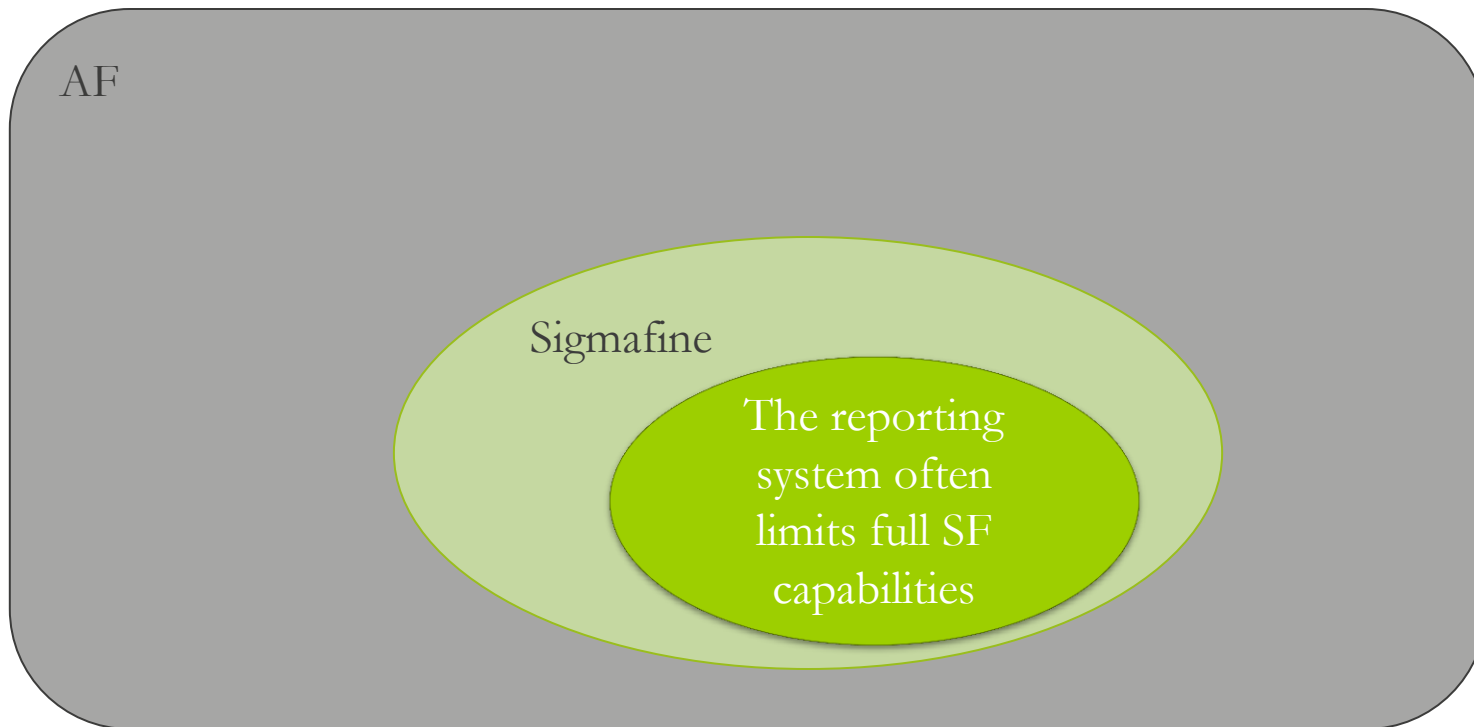
# Sigmafine Capabilities

AF



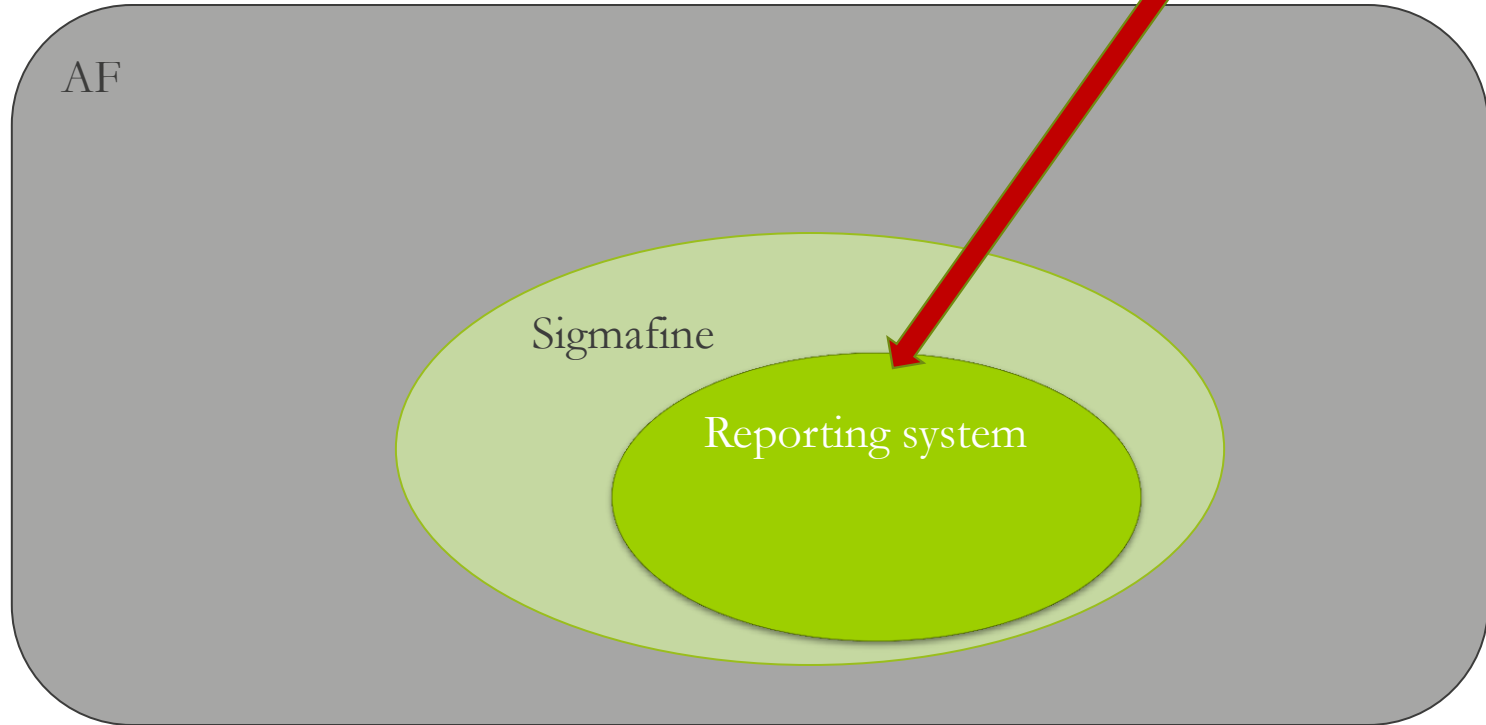
Sigmafine uses a portion of  
AF to satisfy a specific  
business need

# Reporting Capabilities



# System Boundaries

This boundary often defines what we “think” Sigmafine/AF is capable of.

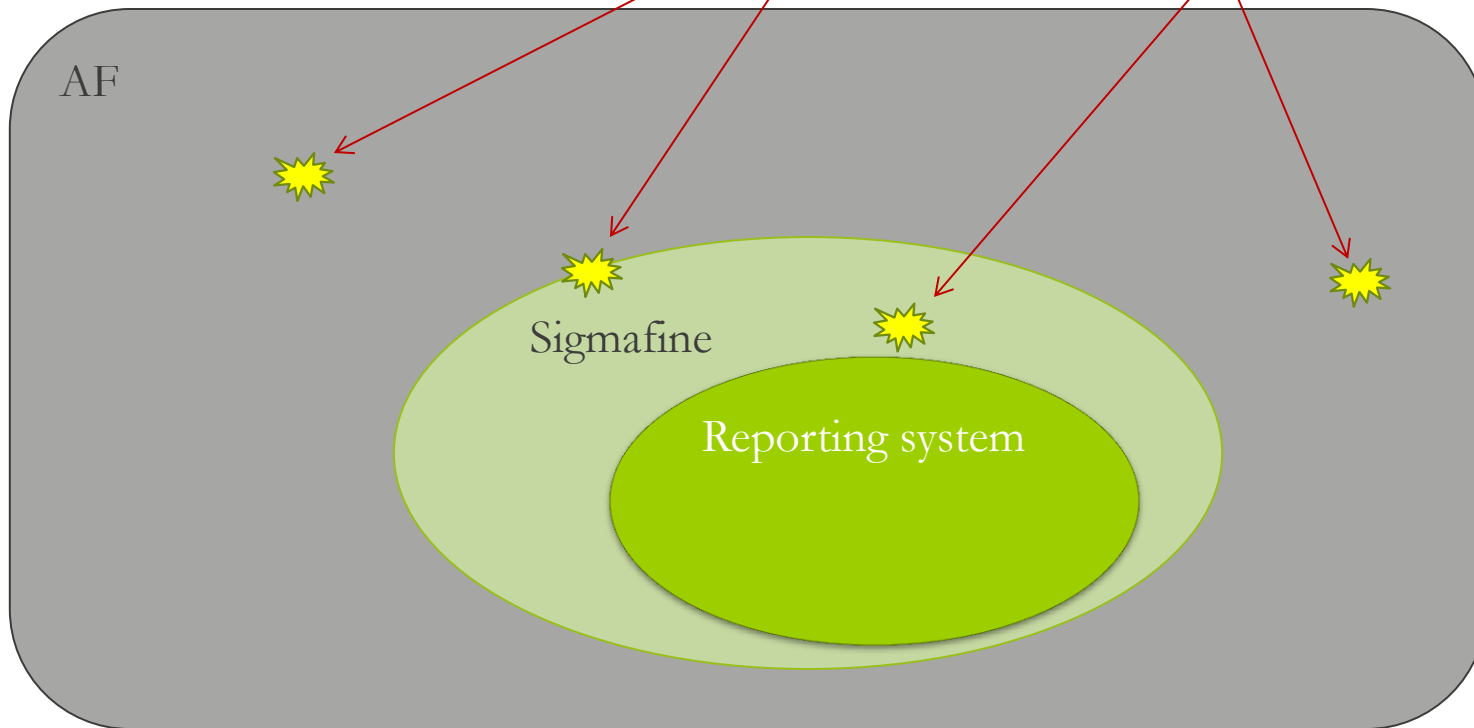






# Business Needs

What if some of our present or future business needs lie in these areas?





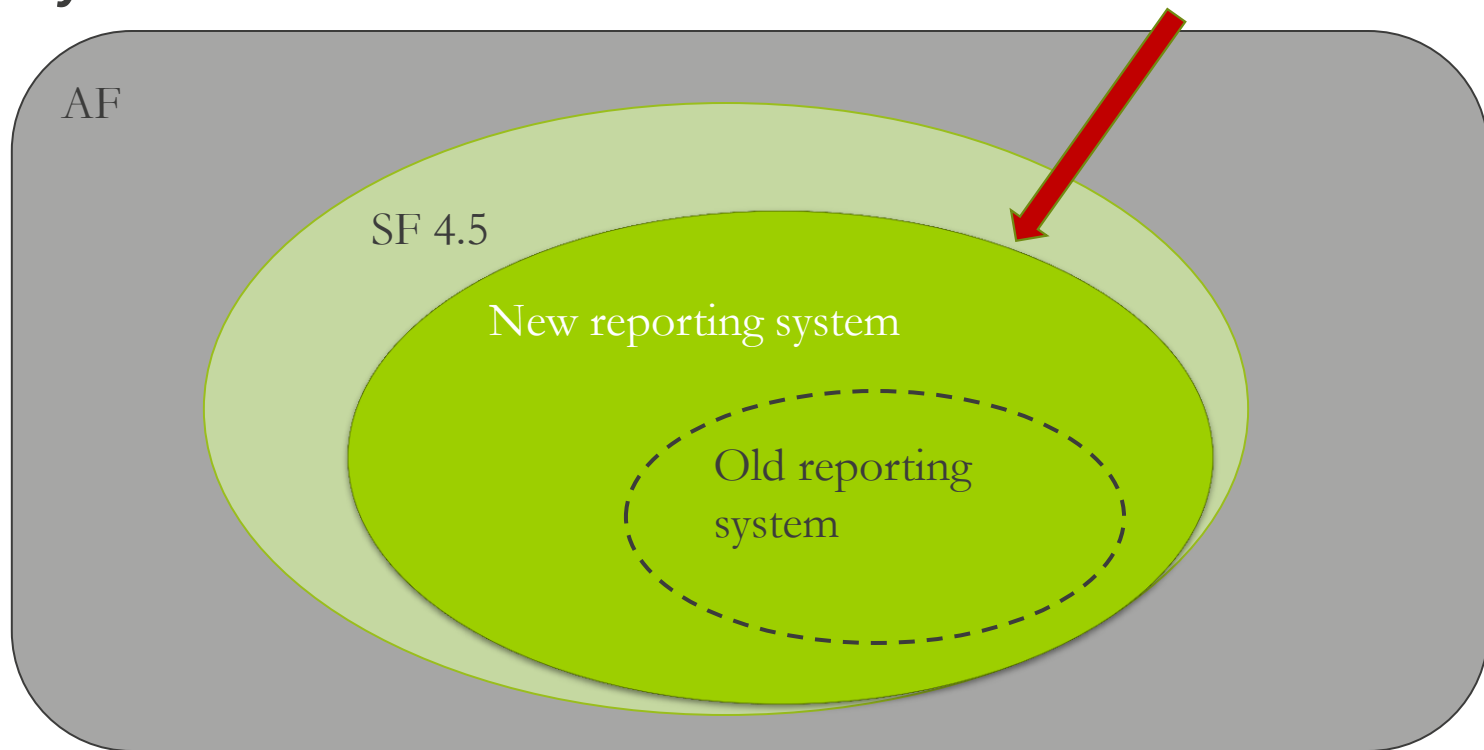
# Design Approach When Migrating from Sigmafine 3 to Sigmafine 4.5

- Quickly test out new Sigmafine capabilities and implement them to achieve a more effective tool than what we had with our previous version.
- Incorporate any changes required in the new reporting system so as to reduce the limits it places on our model or ability to achieve future business needs.



# System Boundaries

Now our new boundary of what we “think”  
Sigmafine/AF is capable of is much larger  
and new business needs are within reach.





# Video Presentation 1

- In order to present as much information as quickly and concisely as possible, the following video presentation has been prepared.
- This video will give a few examples of new Sigmafine capabilities that we have found very beneficial and the changes required to achieve them.
- [Play video](#)



# Shaping Data for Action

- A basic rule of thumb – ‘Never model simply for the sake of modeling. Model to answer a question, solve a problem, to fill a need.’
- Thus the question is rightfully asked, “Why make all these changes, what is the benefit?”
  - If the only thing we will ever use this system for is to produce a few standard reports and our current model achieves that, there may be no need for change.
  - But... if we want to go beyond that to –
    - answer more questions
    - solve more problems
    - increase business valuethen change will have to be embraced.



## Video Presentation 2

- This video will give a few examples of the real business value we are achieving with these new capabilities.
- [Play video](#)



# Summary

- We are very pleased with the new capabilities of our Sigmafine 4.5 installation.
- There are other business initiatives coming our way. We are excited to see how Sigmafine will be part of the solution.
- In the meantime, we will continue to keep our eyes on upcoming enhancements to AF/Sigmafine and attempt to incorporate them as soon as they become available.
  - PI Server ability to store future values
  - AF ability to pass parameters
  - Event Frames
  - Etc.
- Questions



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 Thank you