

# [WiP] Design Proposal for Evolution - NMR

Status	WIP
Stakeholders	
Outcome	
Due Date	
Owner	
Solution/Domain/Data Architect	OLIVEIRA, Tiago

- Background
  - Laboratory Architecture - Building Blocks
  - NMR workflow & application context
- Questions/Concerns
- Scenarios/Use Case
- Technical and Functional Assumptions
- Sensitivity Points
- Risks
- Non Risks
- Architectural Approaches
  - Target Architecture
- Trade-offs (alternatives)
- Conclusion
- References
- Meeting Notes

## Background

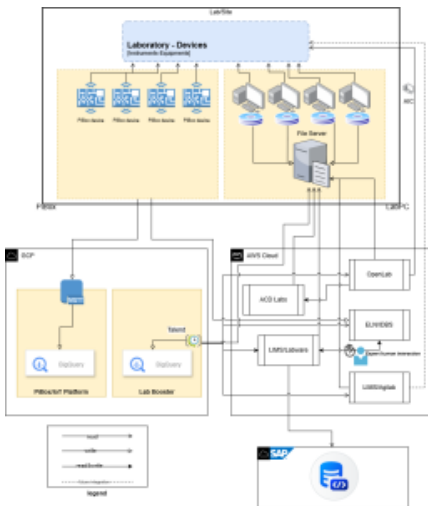
In the new ACD Labs Harmonization strategy, *tbd*

ACD Labs offers an opportunity to assess a license for deploying the solution in the cloud, where new features capabilities would be also available.

Today there are several deployments across sites globally in the company.

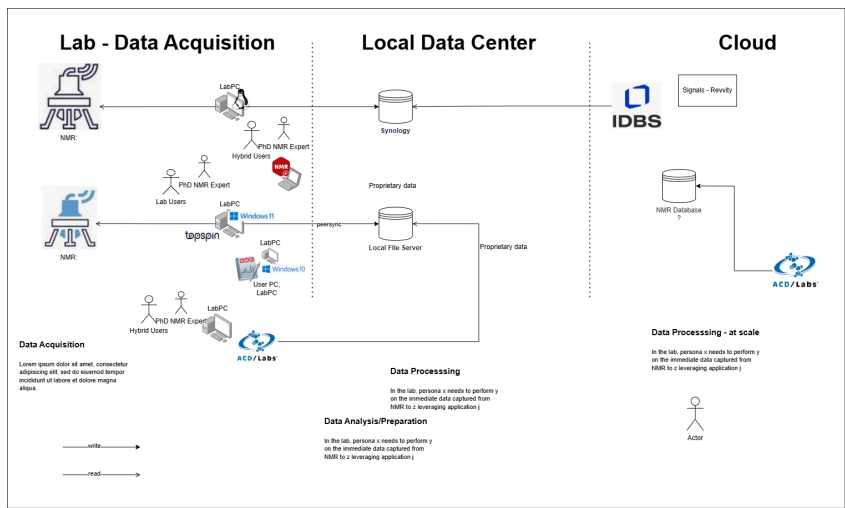
Goals: Rationalization of apps, centralize ACD Lab deployments...

## Laboratory Architecture - Building Blocks



## NMR workflow & application context

WiP



**Questions/Concerns**

1. Cloud provider strategy:
2. China/Shanghai: In case of Azure being the best fit as cloud provider for this deployment, Shanghai site can be also covered by leveraging Azure [21Vianet](#) local partner.

**Scenarios/Use Case**

1. Instrument-application dependency on Windows 10 OS
2. Instrument-application dependency on Linux OS and Synology storage (instead Local File Server)
3. Large file generation to manage for specific purposes: immediate usage, long term storage, complex analytics at scale, global NMR database

**Technical and Functional Assumptions**

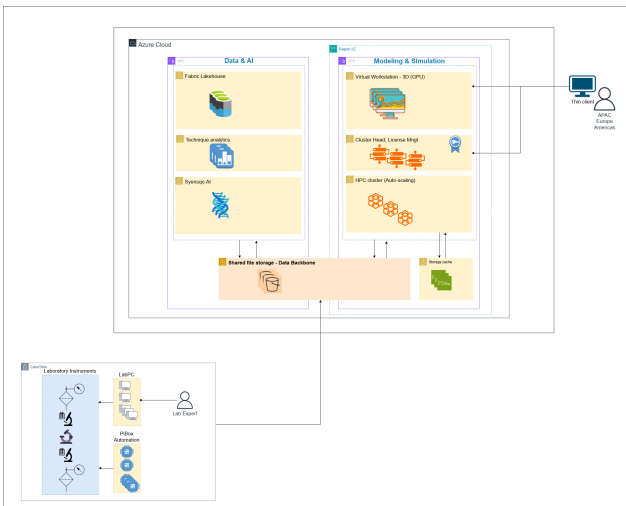
**Sensitivity Points**

**Risks**

**Non Risks**

**Architectural Approaches**

**Target Architecture**



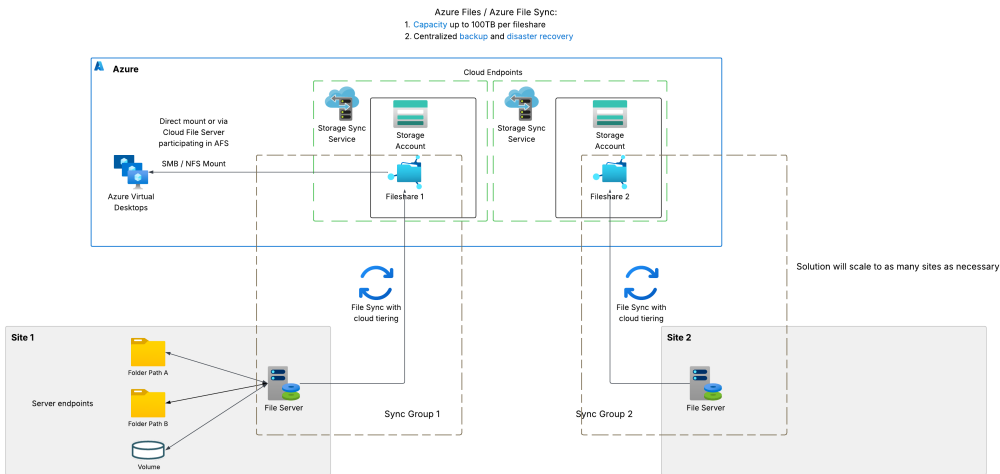
## Trade-offs (alternatives)

**Alternative 1 - ACD Lab**

**Alternative 2 -**

**Alternative 3 -**

TBD



Data Synchronizer Architecture - LabPC to the Cloud

- Evaluation Matrix

	Architectural Approach			
1	Alternative/Evaluation Vector	Alternative 1 -	Alternative 2 -	Alternative 3 -
2	Technical Debts	Paid		
		Added		

3	<b>Major Work Block</b>				
4	<b>Performance</b>				
5	<b>Scalability</b>				
6	<b>Consistency</b>				
7	<b>Deployability</b>				
8	<b>Interoperability</b>				
9	<b>Resource - Cost Efficiency</b>				

Conclusion

References

Meeting Notes