

Need a Shared Index? TRLN Discovery Project: Software and AWS Architecture Overview.

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TRLN Discovery is a collaborative software development project which allows users to find materials from all Triangle Research Libraries Network (TRLN) member libraries within a single index. The new shared discovery serves thousands of students, faculty and staff from the Duke, NCCU, NCSU, and UNC libraries and beyond. The project was built using open source software tools and can be locally customized. The consortium wide index is based on a SolrCloud cluster and installed on the Amazon Web Services (AWS) cloud.

Pros

- Well-documented
- Flexible
- Stable
- Many changes can be made pretty quickly
- Variety of services for variety of needs
- Free, local consultation

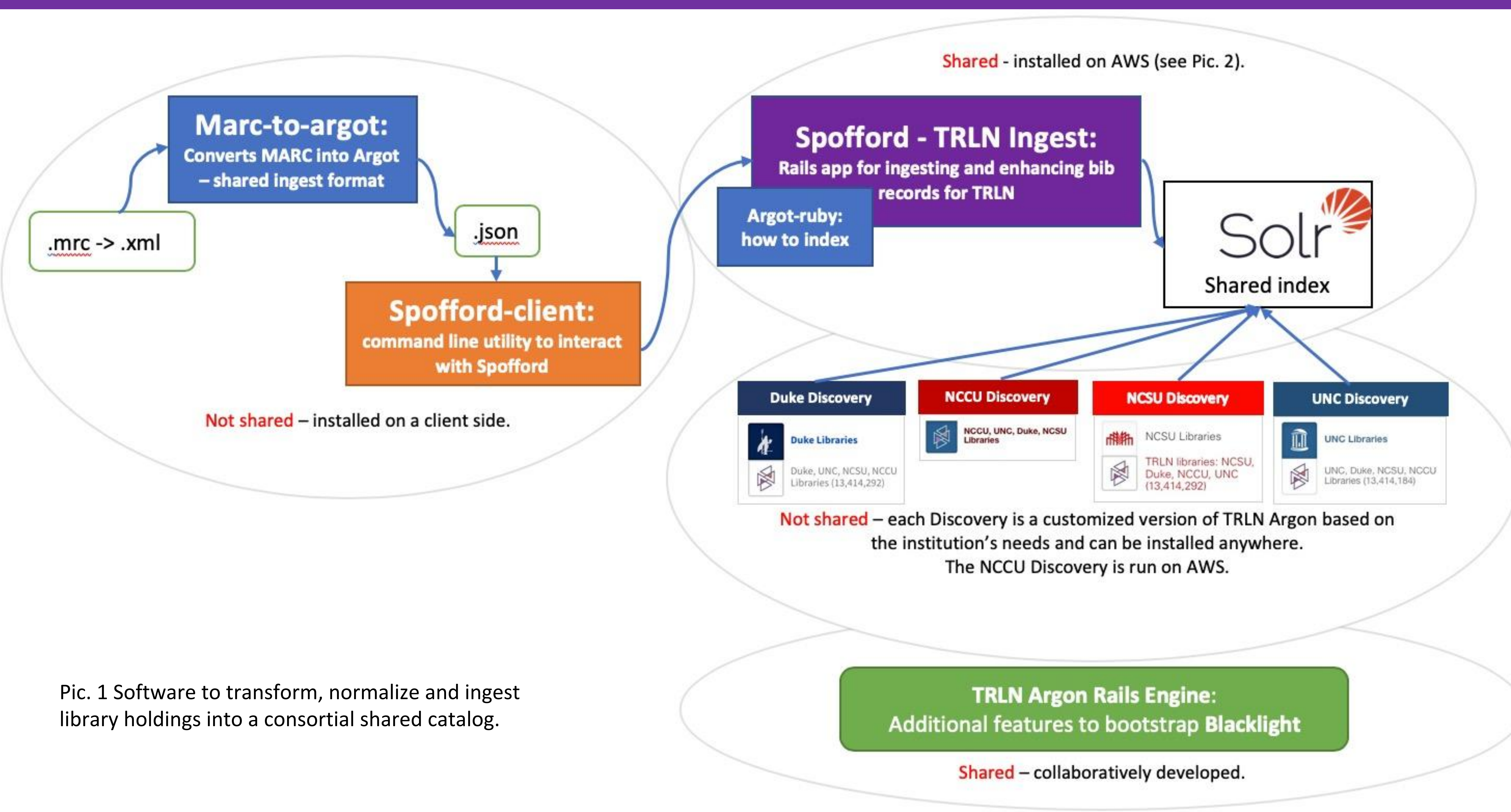
Pros and cons of using AWS

- Requires knowledge of application construction
- Steep learning curve
- Difficult to predict cost of services
- Isolating different environments requires significant preparation

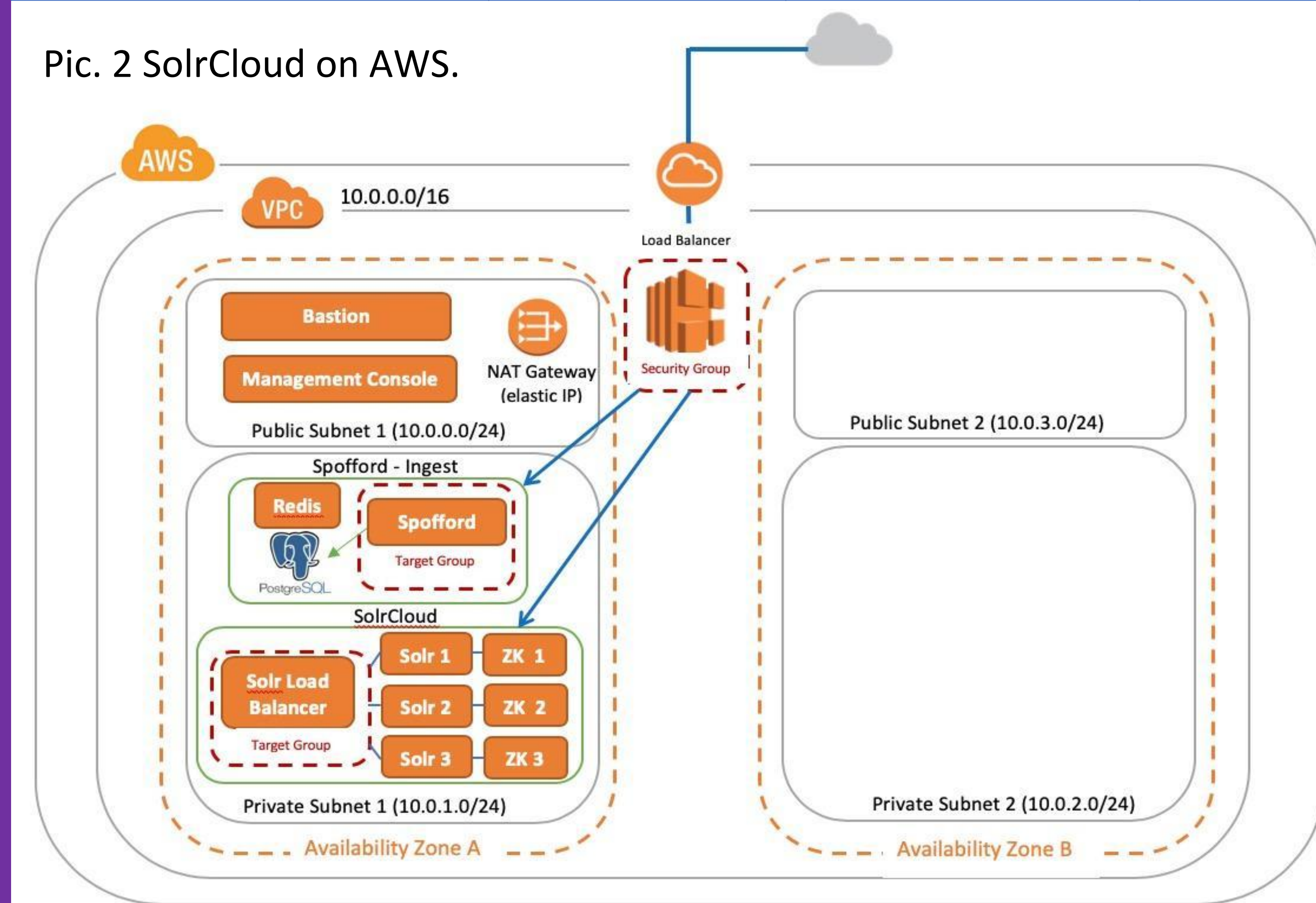
Cons

Conclusion: Overall, our experience with AWS was positive. We would recommend using AWS for hosting this kind of software.

Software	Hosting	Instance Type	Count
Marc-to-argot	Client / AWS	t2.small	1
Spofford-client	Client / AWS	t2.small	1
Spofford - TRLN Ingest	AWS	t3.medium	1
Solr Load Balancer	AWS	t2.micro	1
Solr	AWS	t2.2xlarge	3
Zoo Keeper	AWS	t2.micro	3
NCCU Discovery	AWS	t2.medium	1



Pic. 1 Software to transform, normalize and ingest library holdings into a consortial shared catalog.



Pic. 2 SolrCloud on AWS.