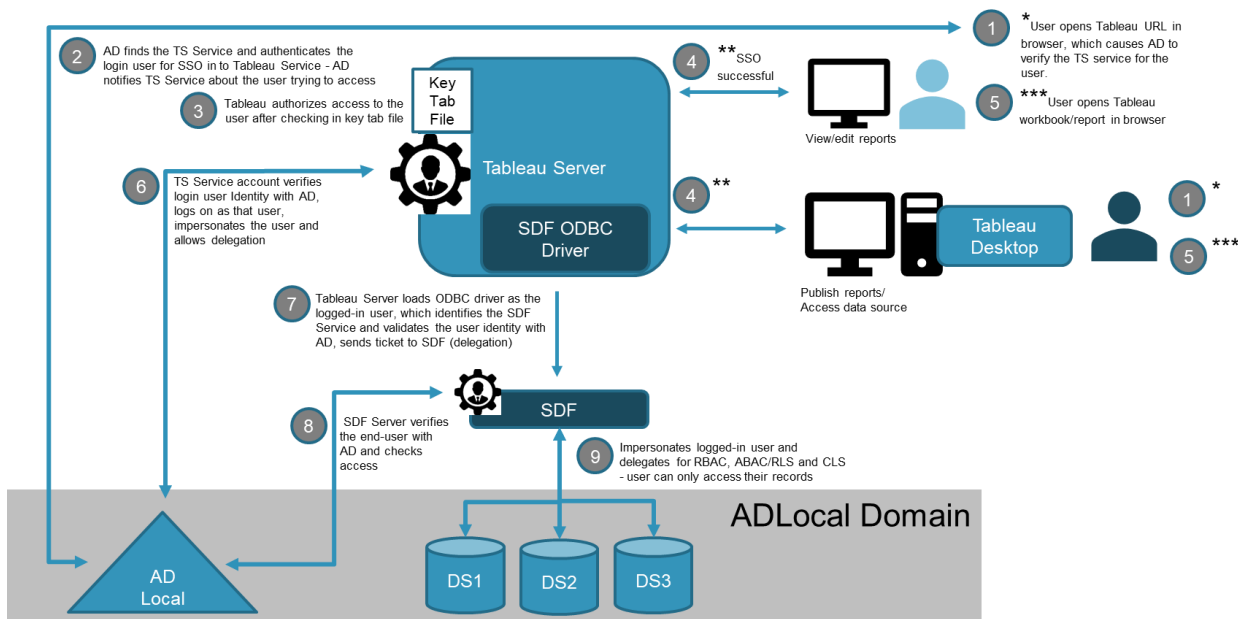


SMARTDATA FABRIC® EXAMPLE CUSTOMER USE CASES

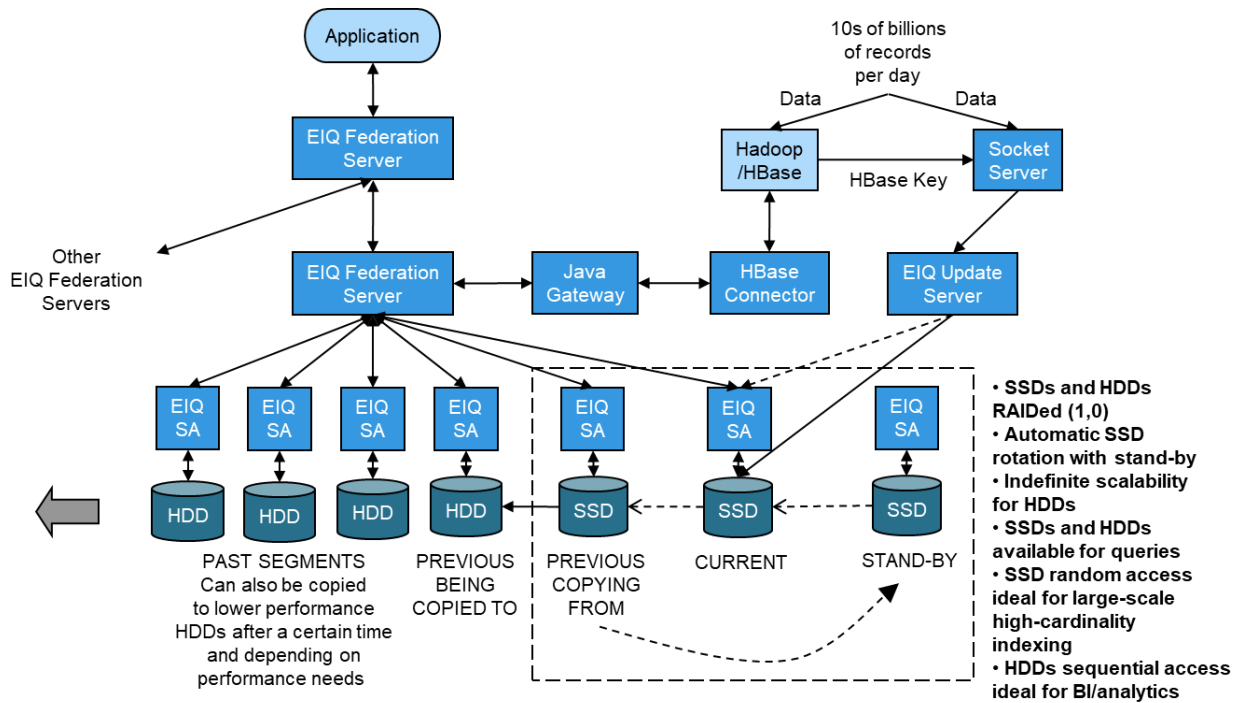
REVISION 1.1

Reference: WhamTech SmartData Fabric Basic Overview.

1. Optum/NAMM: Hybrid Cloud 2.0-type access to 100s and eventually 1000s of remote healthcare partner healthcare data sources using selective indexing to provide a single patient virtual logical view – data cannot be copied or moved
2. General Dynamics (GD): Tableau with Single Sign-On (SSO) enablement on multiple data sources, including Peoplesoft HR and SaaS, using both index-based and conventional federated adapters – seen as a data access and data security solution by GD – also have a multi-domain solution

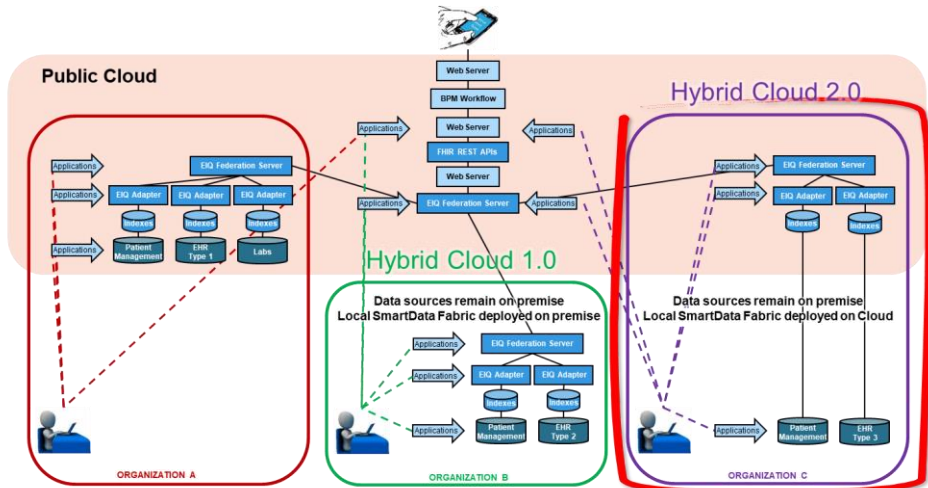


3. Northrop Grumman: Major DoD cyber program and platform – data cannot be copied or moved and need real-time access - potential inclusion
4. Major healthcare payer: Matching unstructured contract content to structured claims data – involves ML-trained entity extraction - potential project
5. Major healthcare provider: Test data access to production data using data virtualization + access and data security + data masking - potential project
6. Past work with major DoD and intel government contractors – high performance and complex query processing, including up to 60 billion records/day (60 TB/per day) of new data + archived data on HBase

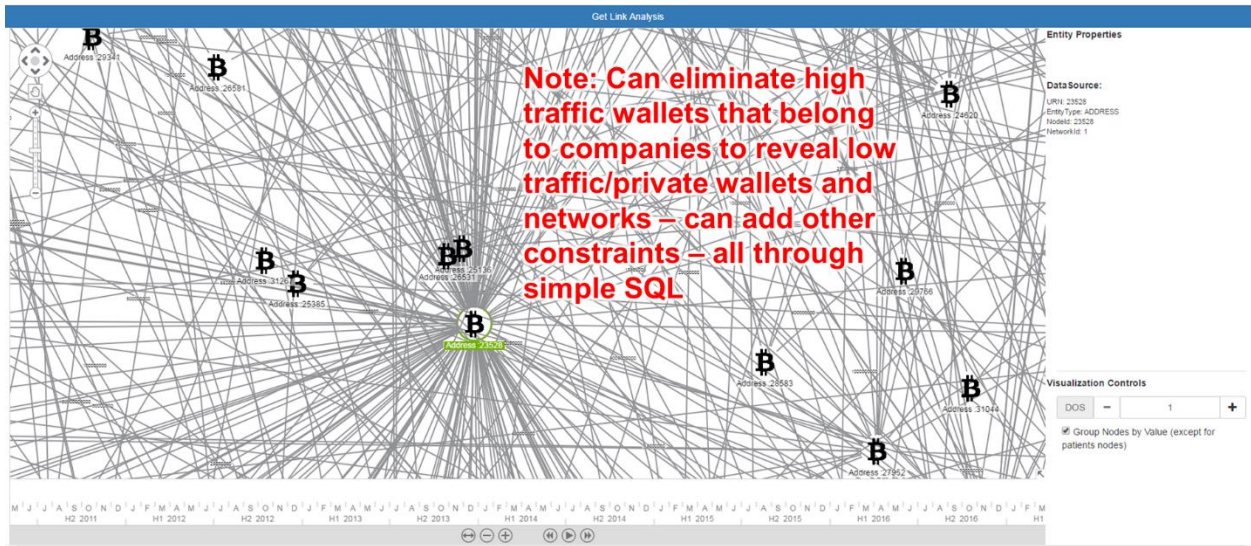


7. POC for single patient view for NHS Trust in the UK – 3 organizations, 7 data sources = 4 on premise and 2 in Cloud - Hybrid Cloud, use NHS MPI and own MPI, FHIR APIs, services and AWS

- Patient-centric smartphone app interacts with legacy data sources through new workflows developed and orchestrated by BPM software
- BPM workflows interact with data source through standard FHIR REST APIs provided as data services
- BPM workflows both read and write back to legacy data sources



8. Message Bank for very large medical academic delivery system for HL7 and other messages – Cassandra target data source, real-time, parse and index, VMPI, FHIR APIs, and future support for reporting, BI and analytics, including SPARK and ML
9. Bitcoin/Blockchain transaction reporting, BI and analytics for fraud detection – graph visualization



10. Virtual graph database, link analysis and graph visualization using simple SQL – OEM KeyLines visualization

Multiple examples.