



Alloantibody Exchange Data Flows

The Alloantibody Exchange seeks to allow healthcare systems multiple, yet equally secure, approaches for data contributions. To find the best approach for your healthcare facility, you may want to consider the following questions:

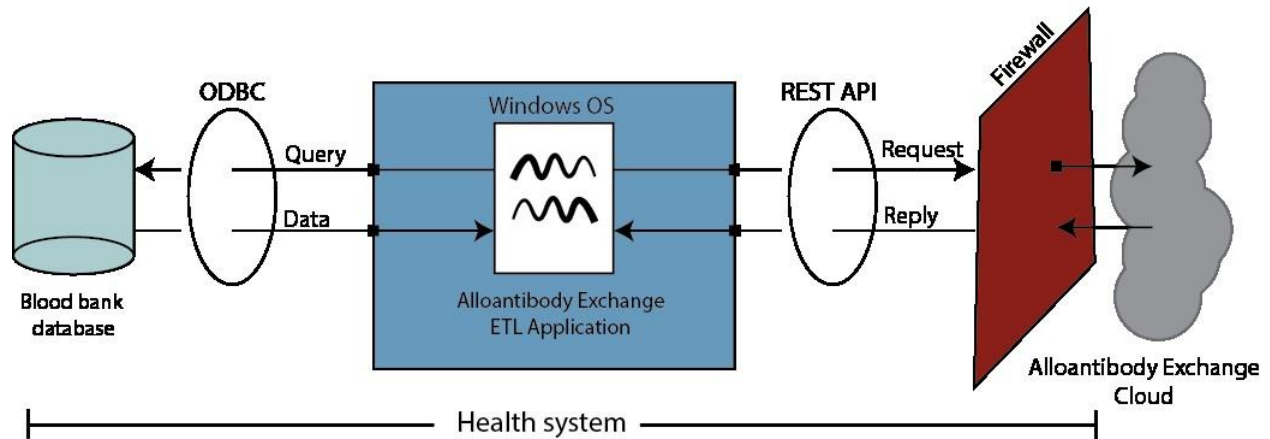
1. What database contains the information?
 - a. For many sites this may exist only in the blood bank database. Example blood bank databases vendors include Cerner, Meditech, SCC Soft Computer, Sunquest, and WellSky.
 - b. Other sites may have the information in a secondary database such as a data warehouse (e.g., Cerner, Meditech).

2. How will we submit data to the Alloantibody Exchange?
 - a. Common protocols include HTTPS and SFTP.
 - b. Sites may choose to use dedicated file transfer programs such as GoAnywhere or MOVEit.

Please browse the flow diagrams for example options.



Alloantibody Exchange ETL Application



Overview

The Alloantibody Exchange ETL Application (middle) submits blood bank data from the site (left) to the Alloantibody Exchange Cloud (right).

- [Left] The blood bank database will vary by vendor (e.g., Cerner and Soft use Oracle. WellSky uses Microsoft). It may not be the same vendor as the EHR (e.g., Epic). This setup is vendor agnostic.
- [Middle] The health system will host the Alloantibody Exchange ETL Application within a Windows environment. (For healthcare systems with a Microsoft Enterprise license, there is no cost with setting up a Windows VM.) The Alloantibody Exchange will provide the application, which runs once daily during off hours.
- [Right] The REST API uses HTTPS encryption (port 443) with OpenID Connect (authentication) /OAuth2.0 (authorization).

→For setup instructions see “Alloantibody Exchange ETL Application Setup”. This is available at <https://alloantibody> > Login > Documents.

IP Addresses for Firewall

Virtual IP address of Alloantibody Exchange’s Microsoft Azure endpoint	20.49.104.46
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Zscaler Exemptions

If your facility uses Zscaler and the Alloantibody Exchange has implemented a conditional access policy to bypass MFA based on the IP address, the following federated login endpoints require an exemption. Exemptions can be specified in the Zscaler PAC (proxy autoconfiguration) file that applies to all Zscaler clients who belong to your domain. Once exempt, the IP address will reflect the health system rather than Zscaler.

login.microsoftonline.com	login.msauth.net	login.live.com
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Question? george.hauser@alloantibody.org

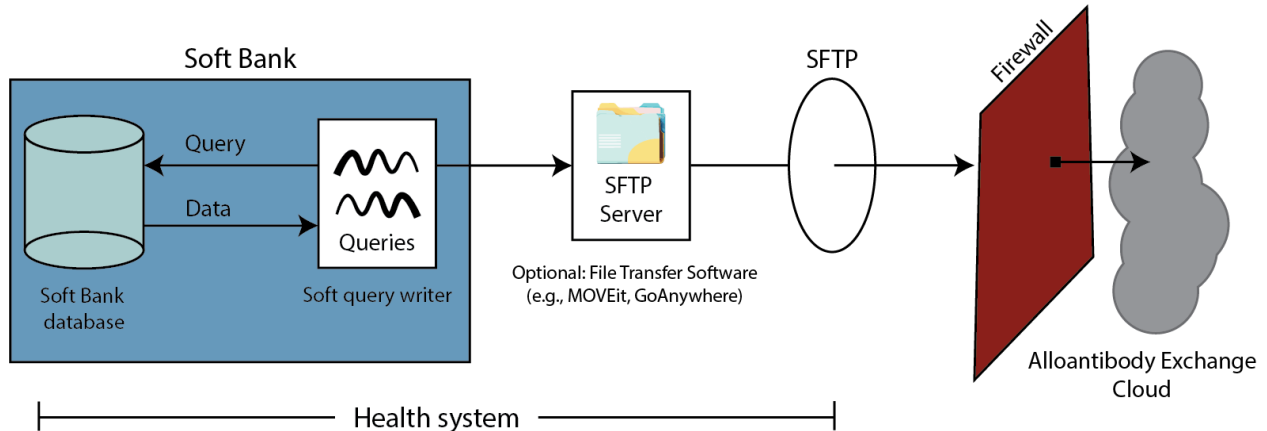


SCC Soft Computer

Overview

- SCC Soft Computer provides a function to run queries and export the results via SFTP. This is built into the software and does not require separate software.
- The results of the queries can be stored on a SFTP server local to the health system. The Alloantibody Exchange can pickup these files from the server.

Data flow diagram



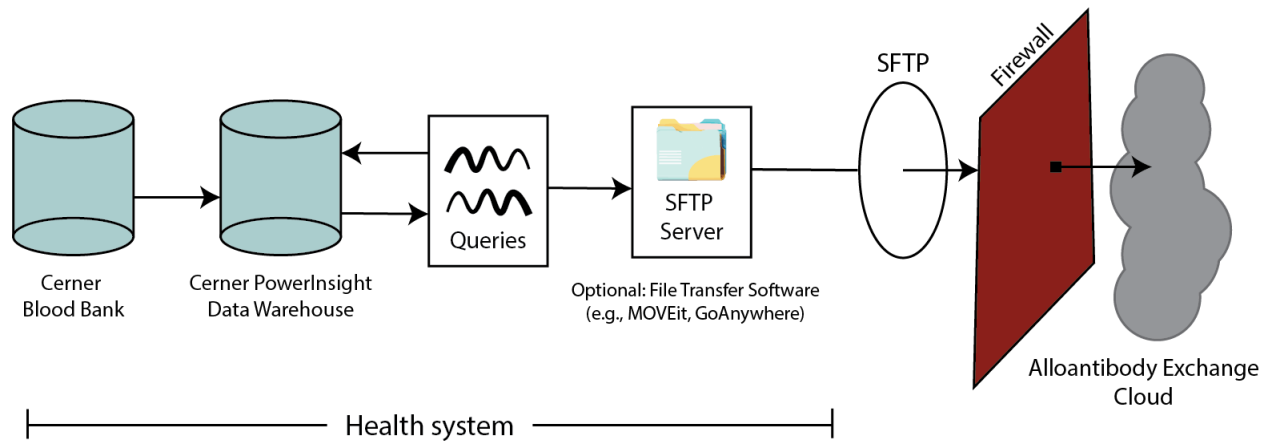


Cerner PowerInsight® Data Warehouse (PIDW)

Overview

- Cerner PowerInsight® Data Warehouse (PIDW) is an enterprise level data warehouse which updates on a nightly basis from the live electronic patient record. ([Ref](#))
- Query results from PIDW can be sent to the Alloantibody Exchange via [GoAnywhere](#), managed file transfer, or a similar platform.

Data flow diagram





Cerner Discern Explorer

Overview

- Cerner Discern Explorer provides several applications that can be used to create, execute, and analyze ad hoc queries, reports and programs.
- Cerner CCL (Cerner Command Language) is the Cerner Corporation fourth-generation programming language, which is expressed in the Cerner Discern Explorer solution. [\[Ref\]](#)
- CCL is patterned after the Structured Query Language (SQL).

Data flow diagram:

