



CAL-ACCESS Replacement System Project

California Secretary of State

Political Reform Division (PRD) CAL-ACCESS System As-Is Architecture

v1.3

October 16, 2017

REVISION SUMMARY

VERSION #	CHANGE DATE	AUTHOR	COMMENTS
0.1	05/26/2017		Initial Draft
0.2	05/29/2017		Review, feedback and updates
0.3	05/30/2017		Revision based on feedback
1.0	06/01/2017		Submission to ITD
1.1	06/23/2017		Submission to ITD
1.2	07/19/2017		Updates based on additional feedback
1.3	10/16/17		Updated architecture diagrams.

DOCUMENT APPROVAL

Signatures below indicate approval of the attached document.

Project Name: CAL-ACCESS Replacement System (CARS) Enterprise Architecture Support

Document Name: PRD CAL-ACCESS As-Is Architecture – Redacted

Version Number: 1.3

Submitted To:

Date Submitted: October 16, 2017

Signatures:

CARS Project Director

Date

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1. PRD CAL-ACCESS As-Is ARCHITECTURE

The following sections describe the As-Is Architecture of the current Political Reform Division's (PRD'S) California Automated Lobby Activity Campaign Contribution Expenditure Search System (CAL-ACCESS) System at the California Secretary of State's (SOS) Office. Following The Open Group's Architecture Framework (TOGAF's) framework, we describe the current PRD CAL-ACCESS system from the following perspectives:

- Business Architecture
- Data Architecture
- Application Architecture
- Technology Architecture

The tool used to create the diagrams in this document is called ArchiMate. ArchiMate is a technical standard and registered trademark from The Open Group and is based on the IEEE 1471 standard for describing enterprise architecture. See Appendix A for a basic summary of ArchiMate's Core and Relationships Notation. For more information, the following link provides an introduction to ArchiMate along with descriptions of the notations used in this document:

https://opengroup.org/archimate/2.1/ArchiMate2_intro.pdf

1.1 Business Architecture

Business Architecture describes the product and/or service strategy, as well as the functional and process aspects of the business environment.

1.1.1 User Context Diagram for PRD CAL-ACCESS

The following diagram shows all the users, groups of users, and external partner systems that access the CAL-ACCESS system.

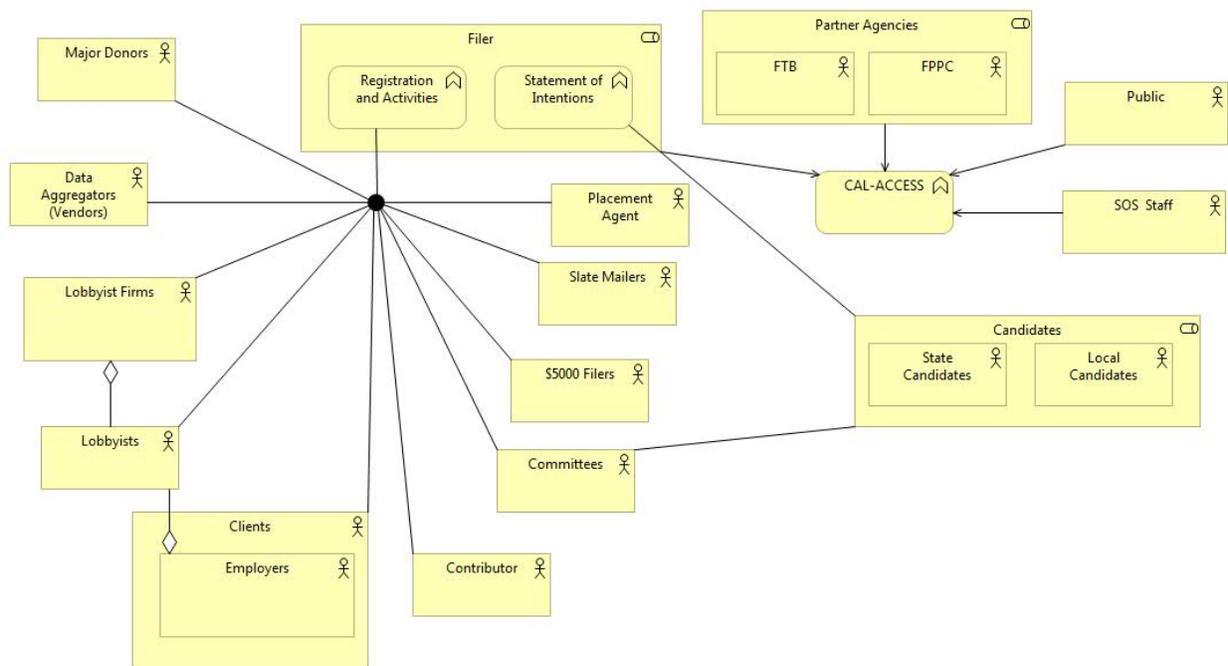


Figure 1: CAL-ACCESS User Context Diagram

- **Major Donors** - They are individuals or businesses that contribute to campaigns, ballot measures, positions, etc. totaling more than \$10,000 in any election year in California.
- **Lobbyists** - They are individuals who engage in lobbying activities directly. All lobbyists work for a lobbying firm.
- **Lobbyists Firms** - They are businesses that engage in lobbying activities and employ lobbyists.
- **Clients** - They hire lobbying firms to lobby on their behalf. They could be businesses or association or interest groups.
- **Data Aggregators (Vendors)** - They collect and file activity information on behalf of committees and lobbying entities.
- **Contributors** - They are individuals or businesses who contribute to committees.
- **Employers** - They are Clients who can also have their in-house lobbyists.
- **Committees** - They raise money and expend funds to advocate a position for an election subject like candidates, ballot measures, initiatives, positions. They can also be involved with positions that are not meant to be on a ballot.
- **Candidates** – They are individuals who get on a ballot for local and statewide elections.
- **Public** – They are the consumers of the information made available by CAL-ACCESS system.
- **Partner Agencies** – California Franchise Tax Board (FTB) and California Fair Political Practices Commission (FPPC) access the financial data pertaining to the filings.
- **Filers** - This is a role or a group users that use one of the two functions of the Cal Access System: Registration and Activities and Statement of Intentions.
- **SOS Staff** – This group of users performs functions ranging from manual entry of data to approval of registrations and filings.
- **\$5000 Filers** – They are individuals or entities that do not make payments to lobbyists or a lobby firm, but spends \$5000 or more in a calendar quarter to influence legislative or administrative action.
- **Slate Mailers** – An organization involved in producing slate mailers.
- **Placement Agent** – A person hired for the benefit of an external manager in matters of the California Public Employees' Retirement System (CalPERS) or California State Teachers' Retirement System (CalSTRS) or other state retirement systems.

1.1.2 Business Functions and Processes

The following subsections illustrate the business functions and processes the current CAL-ACCESS system supports.

1.1.2.1 Committee Registration

The following diagram displays the processes and actors that collaborate to fulfill the Committee Registration function.

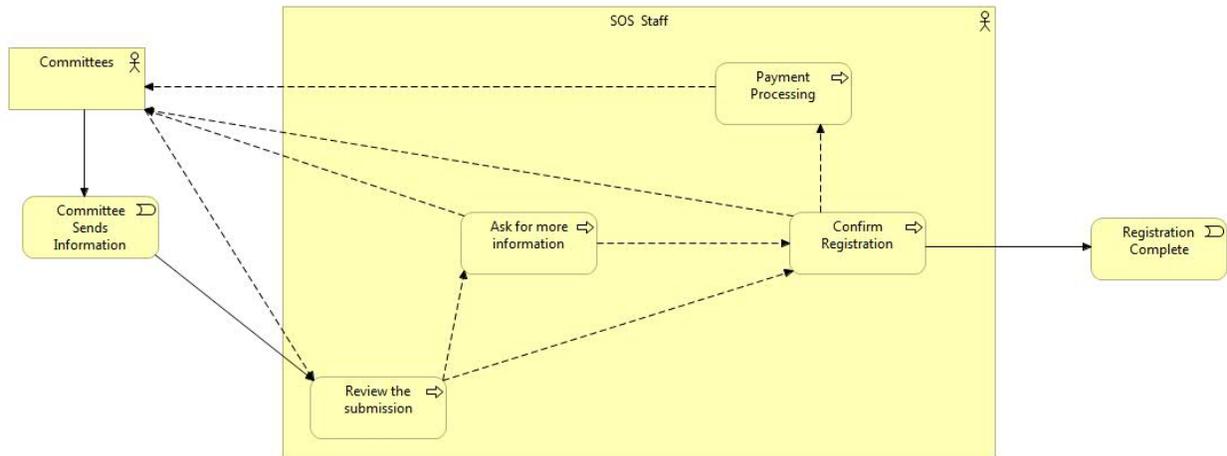


Figure 2: CAL-ACCESS Committee Registration Function

1.1.2.2 Lobbying Registration

The following diagram displays the processes and actors that collaborate to fulfill the Lobbying Registration function.

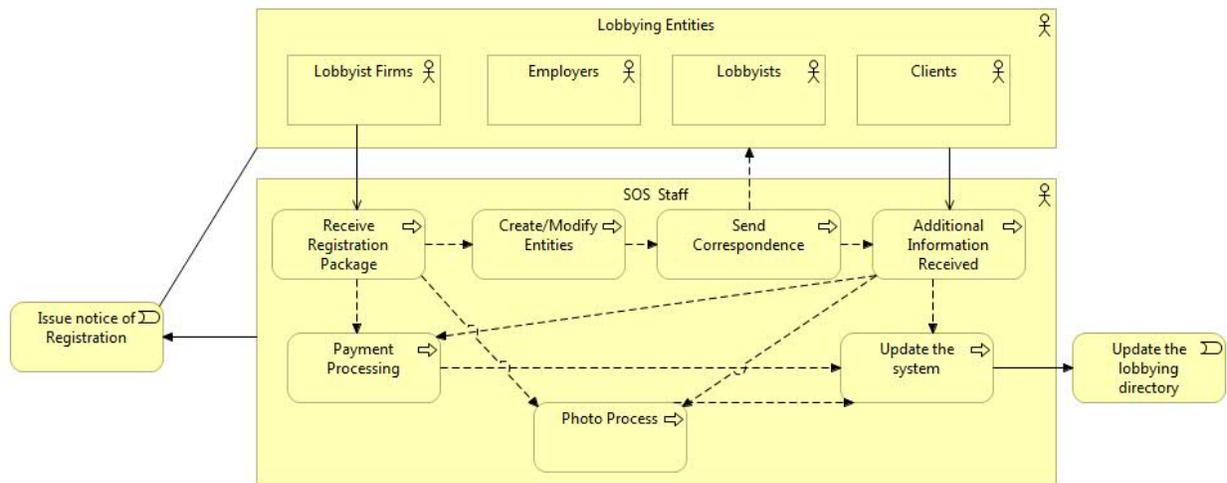


Figure 3: CAL-ACCESS Lobbying Registration Function

1.1.2.3 Filing Disclosure

The following diagram displays the processes and actors that collaborate to fulfill the Filing Submission function.

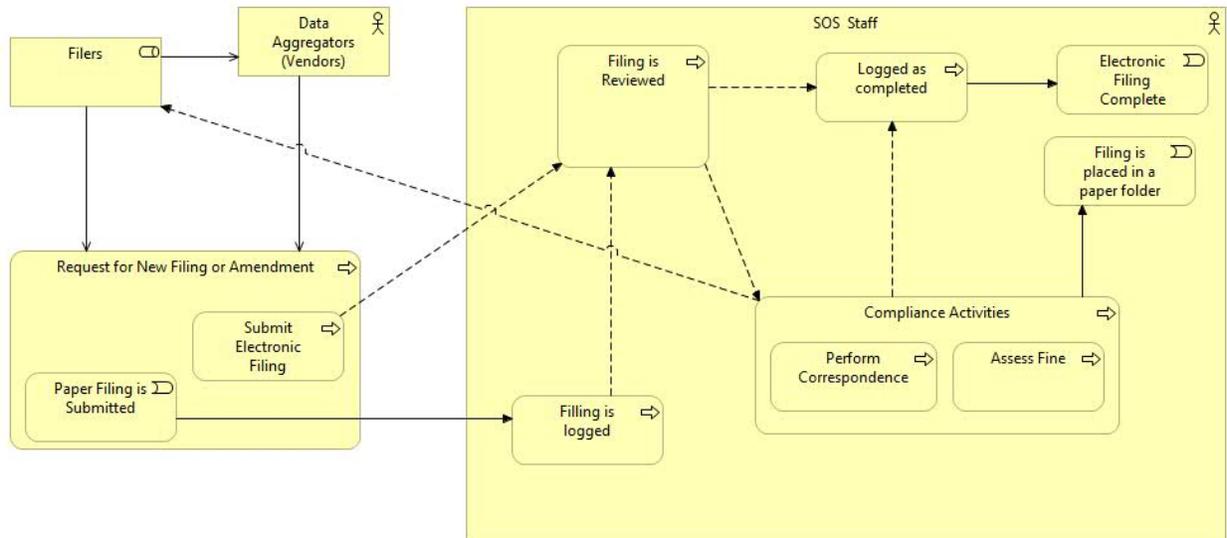


Figure 4: CAL-ACCESS Filing Submission Function

1.1.2.4 Filing Disclosure by Data Aggregators (Vendors)

Data Aggregators (Vendors) collect and file activity information on behalf of committees and lobbying entities (Clients, Firms, Employers, Lobbyists). The following diagram displays the processes in CAL-ACCESS that allow Data Aggregators (Vendors) to file Disclosure data.

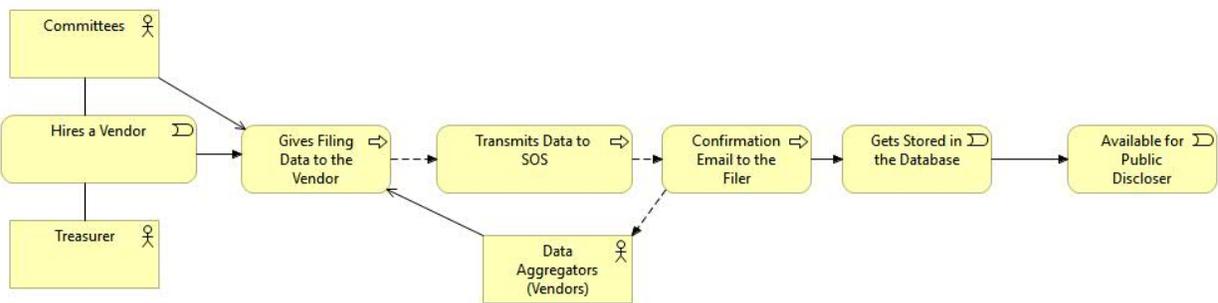


Figure 5: CAL-ACCESS Filing Disclosure by Data Aggregator (Vendors) Function

1.2 Data Architecture

The following diagram displays the high-level Data Architecture for the current CAL-ACCESS system. The system deals with the following types of data objects.

- Organizations such as Committees, Employers, FTB, FPPC, etc.
- People such as Lobbyists, Local and State Candidates, and SOS Staff

- Filer Activities
- Finance Data
- Elections
- Measures

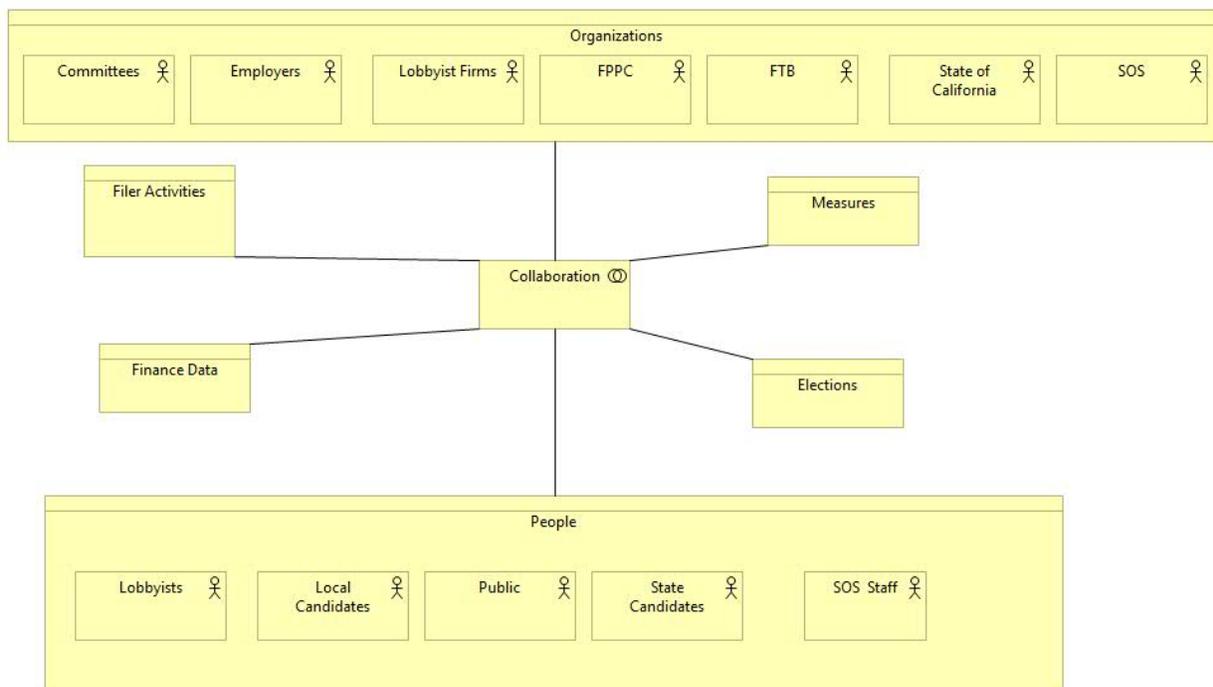


Figure 6: CAL-ACCESS High-level Data Architecture

1.3 Application Architecture

The current CAL-ACCESS system is designed to support the activities carried out by the PRD to store and manage the public data necessary for carrying out the functions dictated by the Political Reform Act (PRA). The functions supported by CAL-ACCESS are:

- Receipts and expenditures in an election
- The activities of lobbyists and their finances
- Providing public access to vitally important information regarding elections, candidates and campaign or lobbyist finances
- Providing the Fair Political Practice Commission (FPPC) all necessary data used as required to enforce the requirements of the PRA
- Providing the necessary data required by the Franchise Tax Board (FTB) to carry out mandatory and random audits as required by the PRA
- The system is capable of capturing, storing, and reporting contact information for all filers such as address and telephone numbers

1.3.1 Agency Management System

The Agency Management System (AMS) system was developed to support PRD staff and provide easy access and functionality to the CAL-ACCESS database. This system provides internal PRD staff with a user interface for entering hard copy forms and in maintaining both the electronic and hard copy information supplied to and by the political entities into the CAL-ACCESS database.

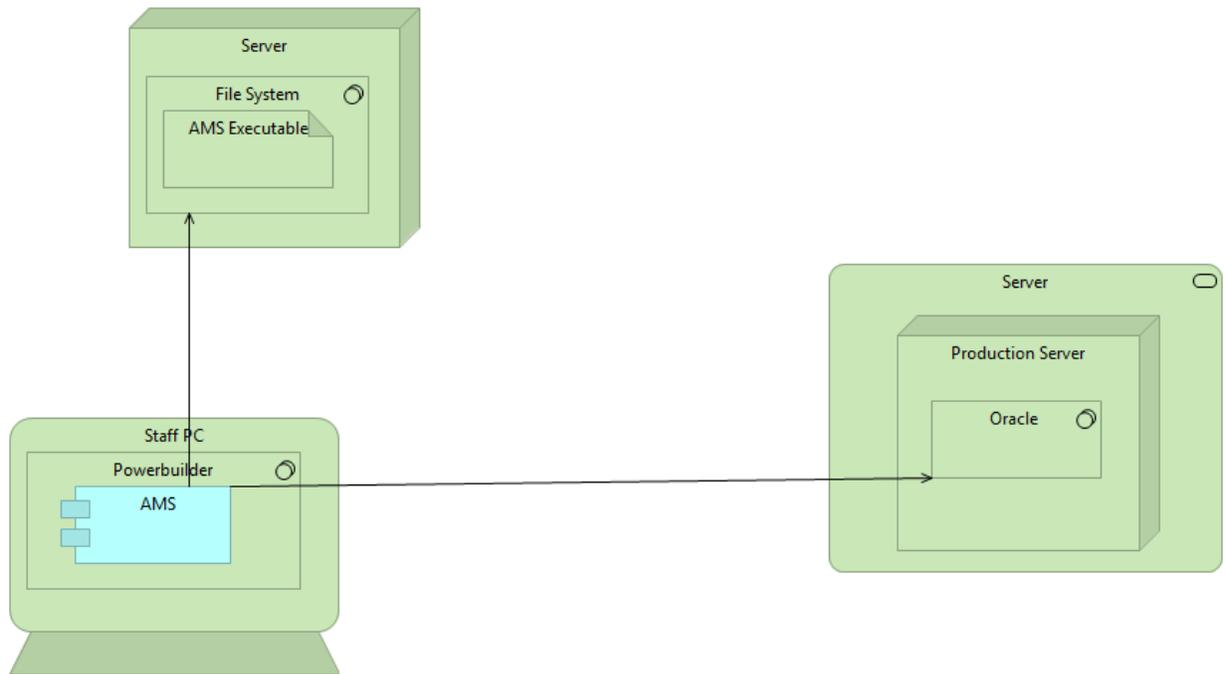


Figure 7: Agency Management System

1.3.2 Cache Manager

This application caches queries to create faster response time for the Public Disclosure website.

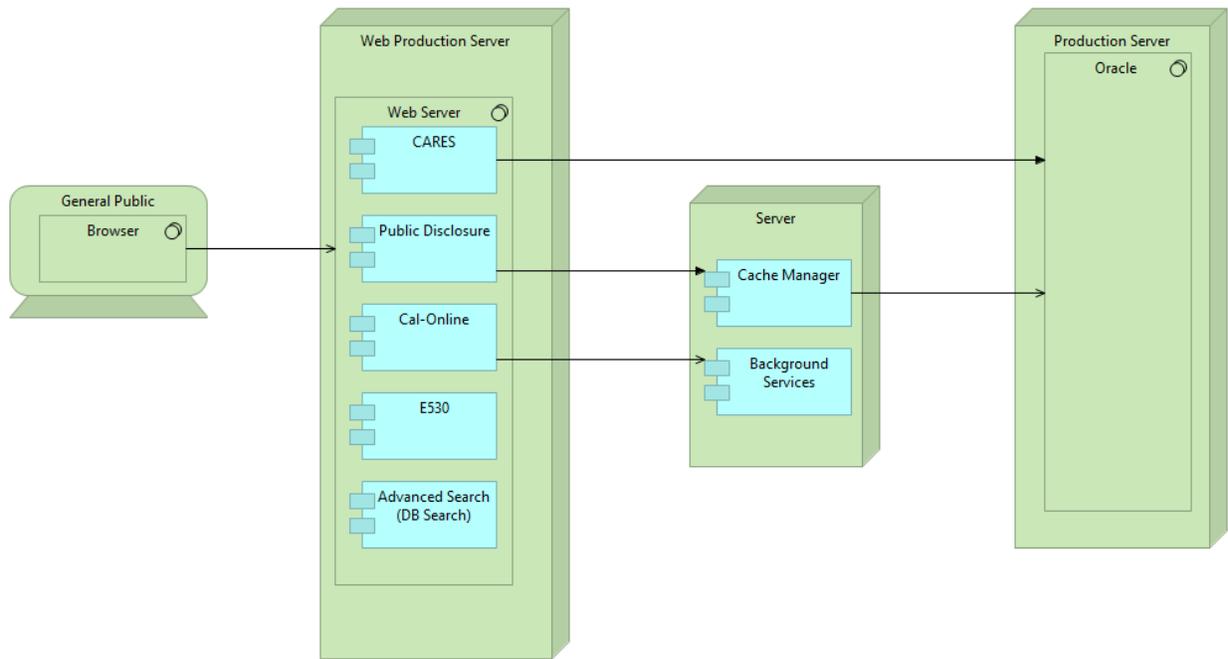


Figure 8: Cache Manager

1.3.3 Cal-Online

The Cal-Online system provides filers with the ability to electronically file campaign and lobbying registration and disclosure statements online through a public website. Cal-Online offers filers another, no-charge filing alternative. Via the Internet, filers access the Cal-Online web site, enter their identification number and password, select the appropriate disclosure form, and enter the required data.

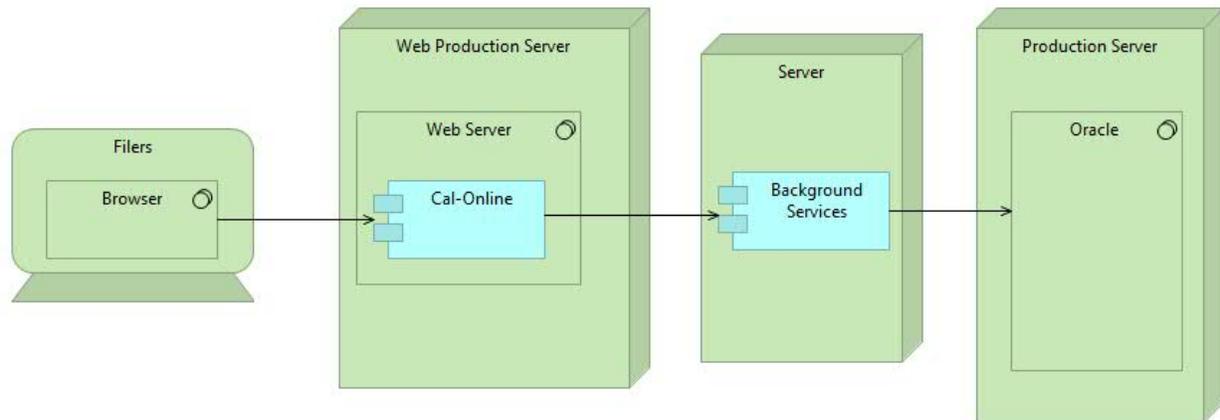


Figure 9: Cal-Online

1.3.4 CARES

CARES (CAL-ACCESS Restricted Views) is a secure website with all campaign and lobbying registration and disclosure information and confidential information. CARES is used by PRD stakeholders, such as FPPC and FTB, to obtain information for the purposes of audit and filing compliance investigations.

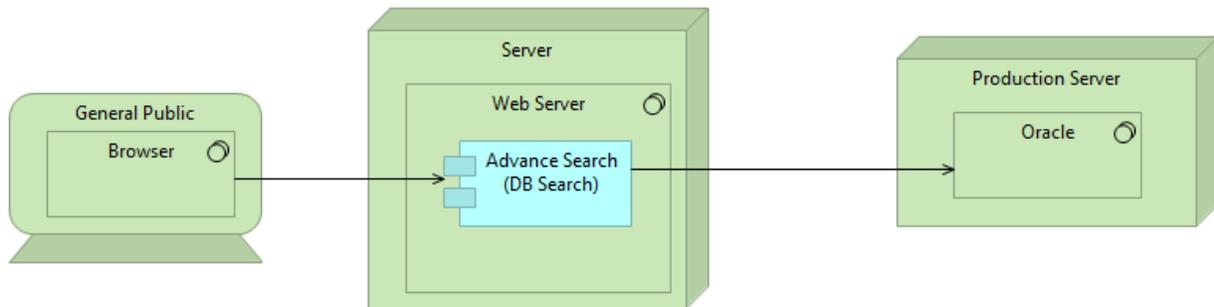


Figure 10: CARES

1.3.5 Electronic Filing System

The Electronic Filing System (EFS) system provides major filers or vendors filing on their behalf, with the mechanism to submit the required PRA forms electronically directly into the CAL-ACCESS database. The EFS system accepts and validates electronic filings from Cal-Online and directly from vendors.

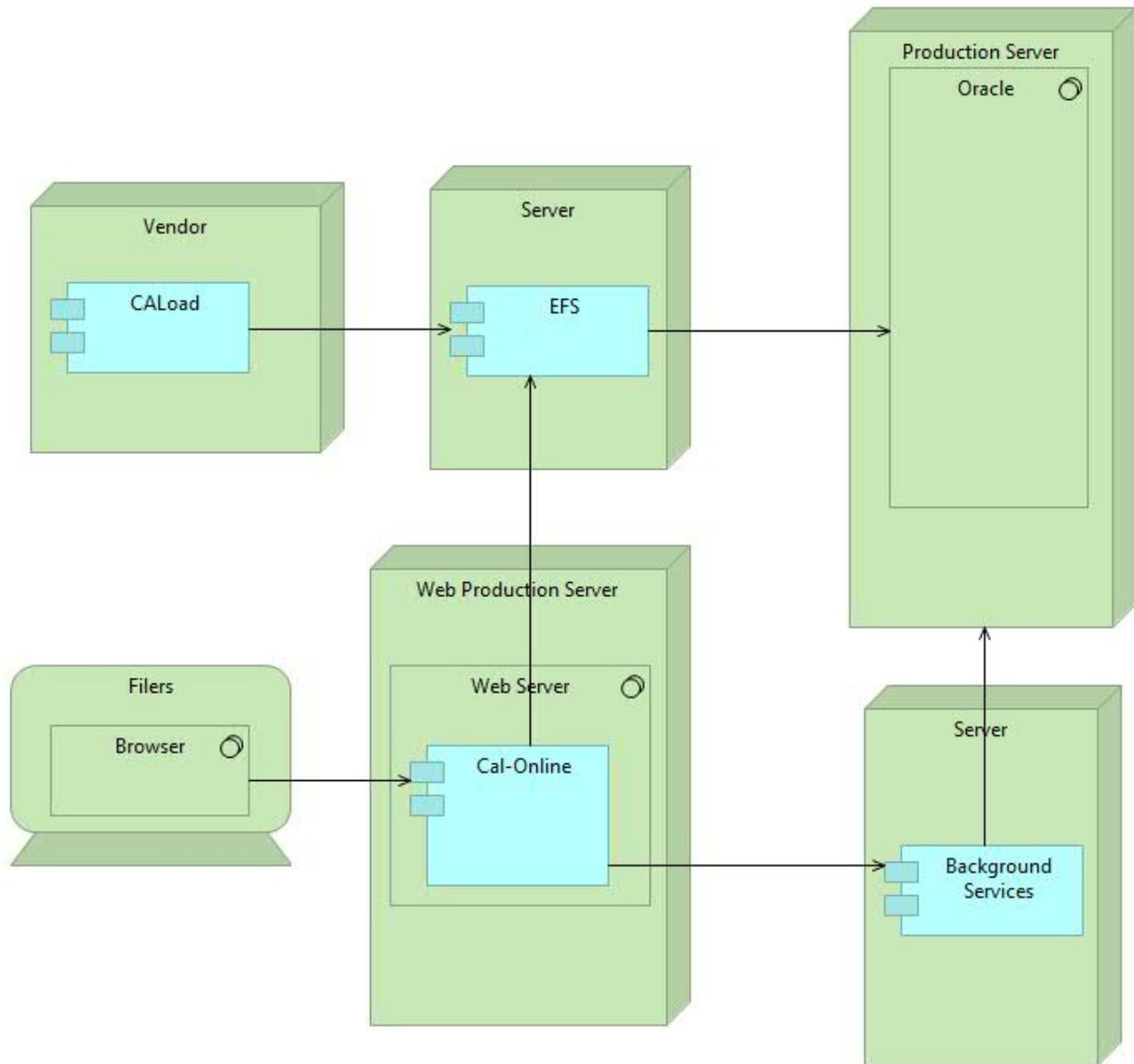


Figure 11: Electronic Filing System

1.3.6 CAL-ACCESS PDF Generator

This utility allows automating the conversion of various printed system reports into the Portable Document Format (PDF) file.

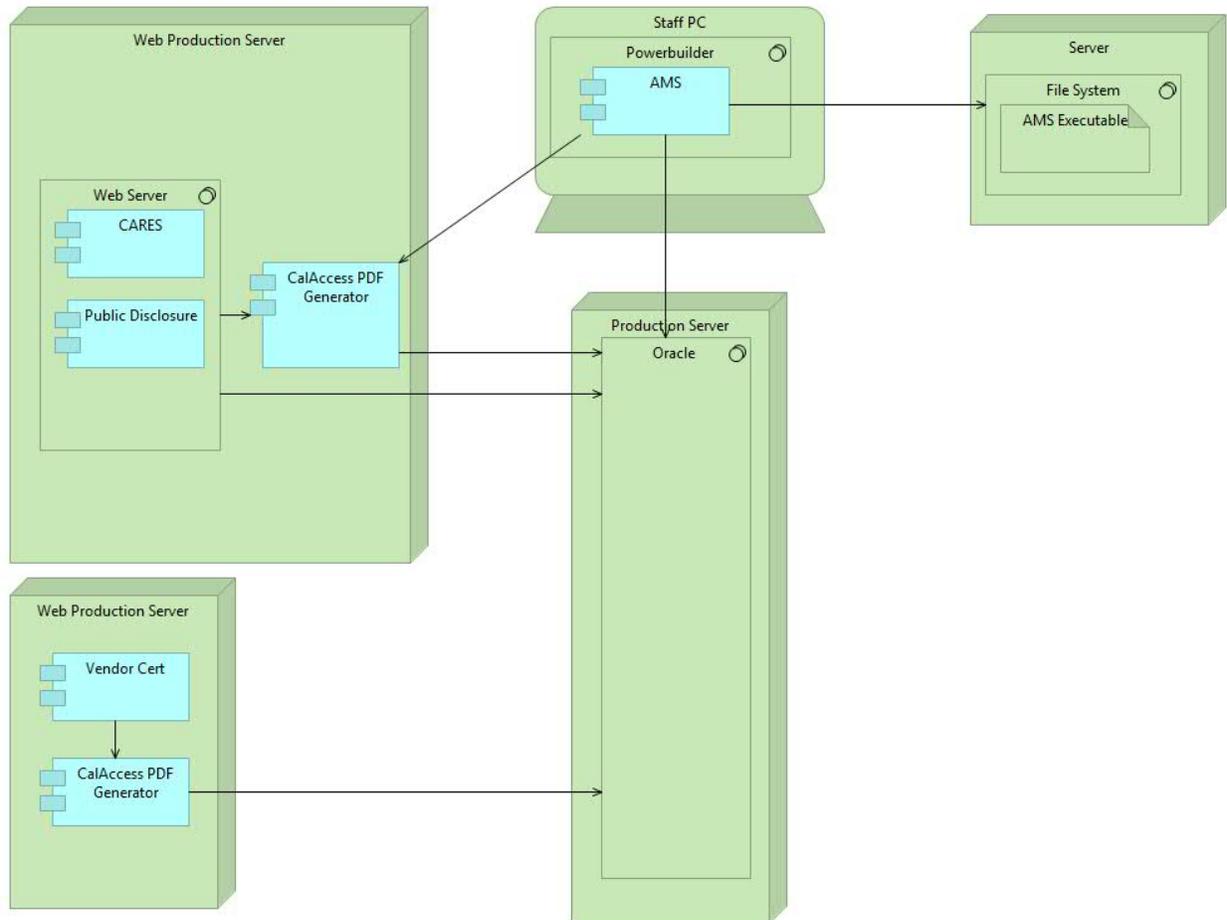


Figure 12: CAL-ACCESS PDF Generator

1.3.7 New PRD Admin Tool

The administration tool collection is used by PRD staff to manage CAL-ACCESS. This new application is to consolidate and replace the following existing utilities:

- PRD Admin Tools
- PRD Admin Web Tools

PRD Admin Tools and PRD Admin web tools were re-written and combined into one web application PRD Admin Tool. This tool allows PRD Staff to edit announcement text boxes on the CAL-ACCESS site, edit public incumbents date, delete, rollback, and end session on the CAL-ACCESS site.

It also includes the following new features:

- New Senate Bill (SB) 1001 reports
- User administration

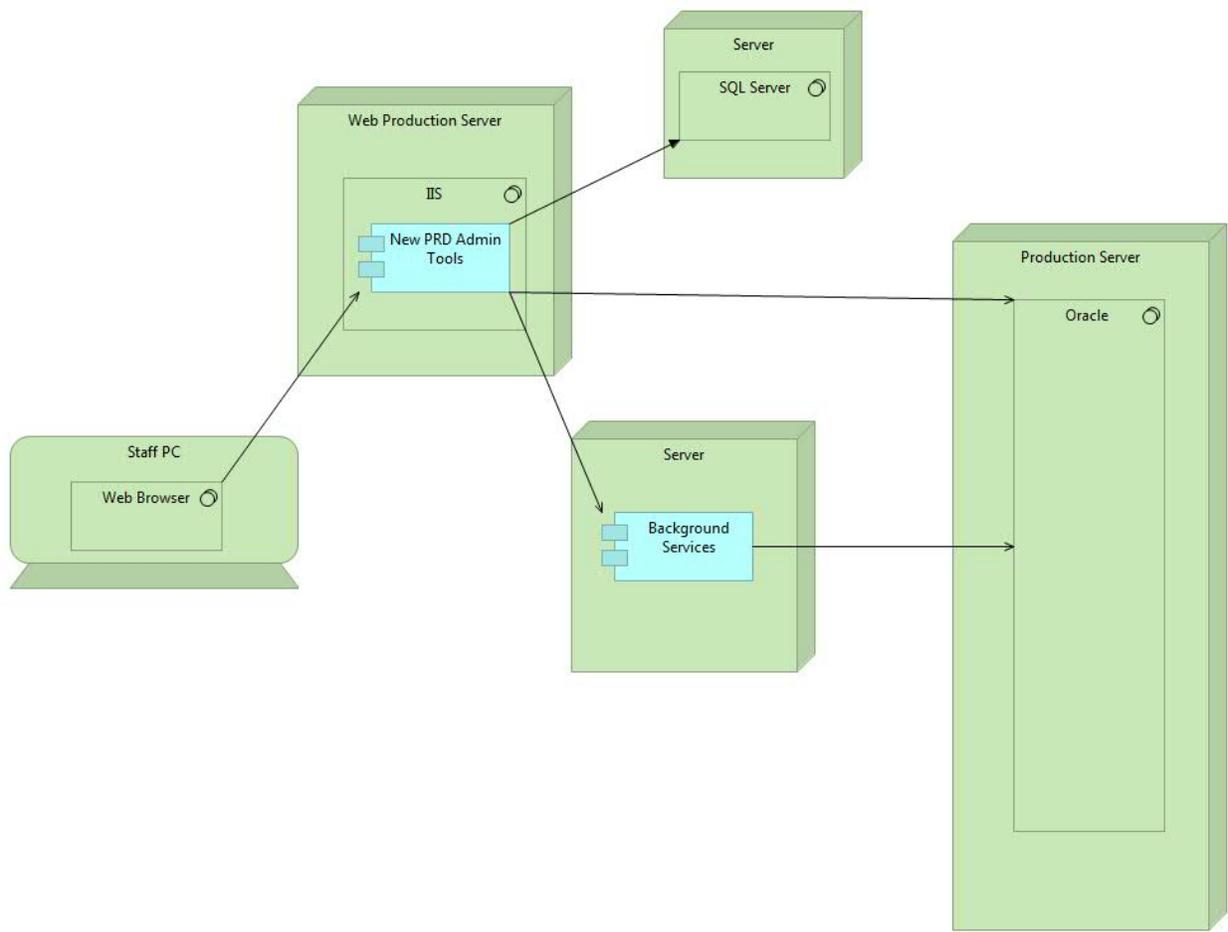


Figure 13: New PRD Admin Tool

1.3.8 Lobbying Directory Generator

This application is an executable windows-based application that is located on a personal computer (PC) located in the PRD office area. The application creates the Lobbying Directory in Word format. PRD staff converts the file from a Microsoft Word to PDF file and publishes it on the CAL-ACCESS website. The Lobbying Directory is updated monthly.

PRD is required to publish a Lobbying Directory of all registered state lobbyists, lobbying firms, and lobbyist employers.

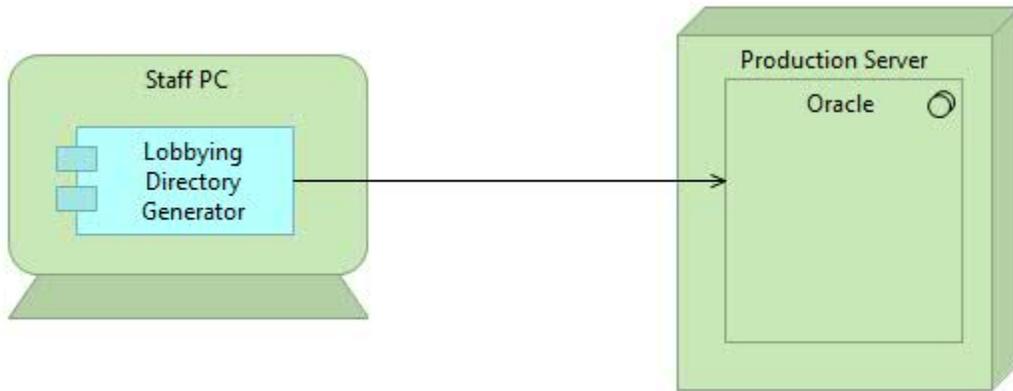


Figure 14: Lobbying Directory Generator

1.3.9 DBExport

This utility is a scheduled batch job which creates a raw data extract file and the Guides to the CAL-ACCESS data structure and fields from the database on the daily basis. The raw data is presented in tab-delimited text files from corresponding tables in the CAL-ACCESS database. The data is compressed and copied over to the Content Delivery Network (CDN).

The public can download the files from the SOS CAL-ACCESS website. This allows people with technical expertise to create their own databases.

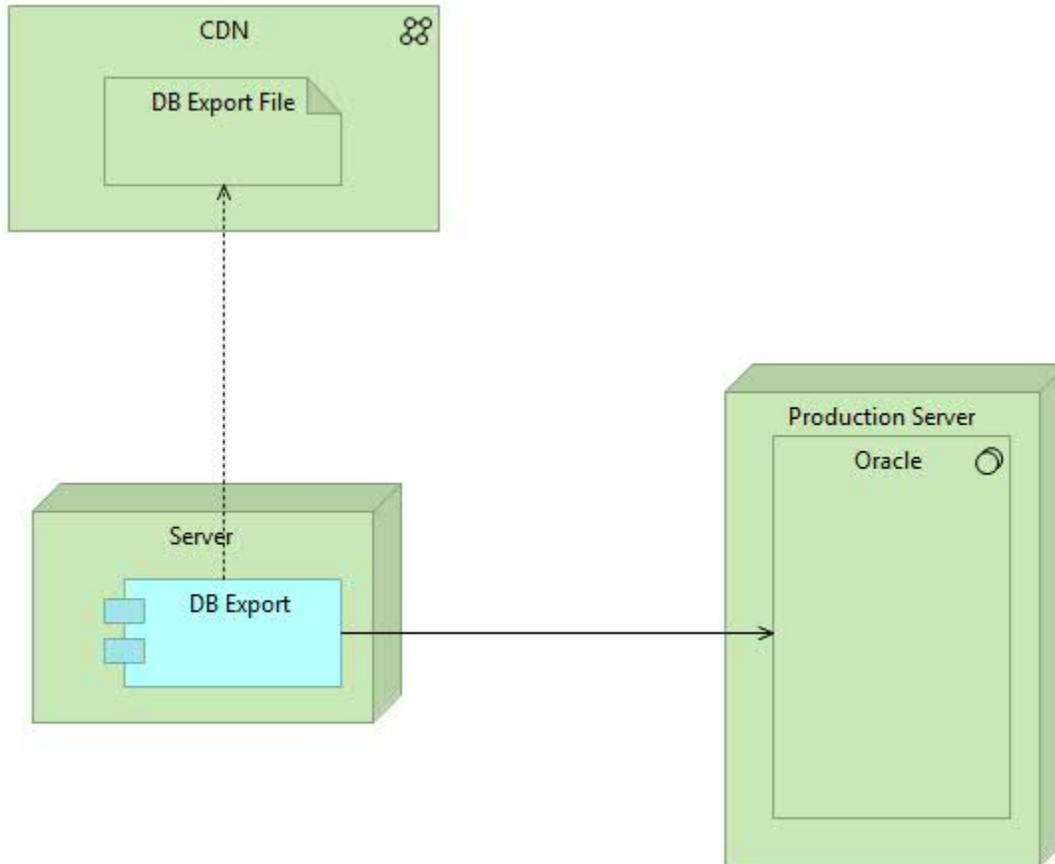


Figure 15: DBExport

1.3.10 DB Search

This application supports the CAL-ACCESS database. Data from the CAL-ACCESS database is migrated to the DB Search database, located on its own server, periodically. DB Search allows search functionality within the Public Disclosure website.

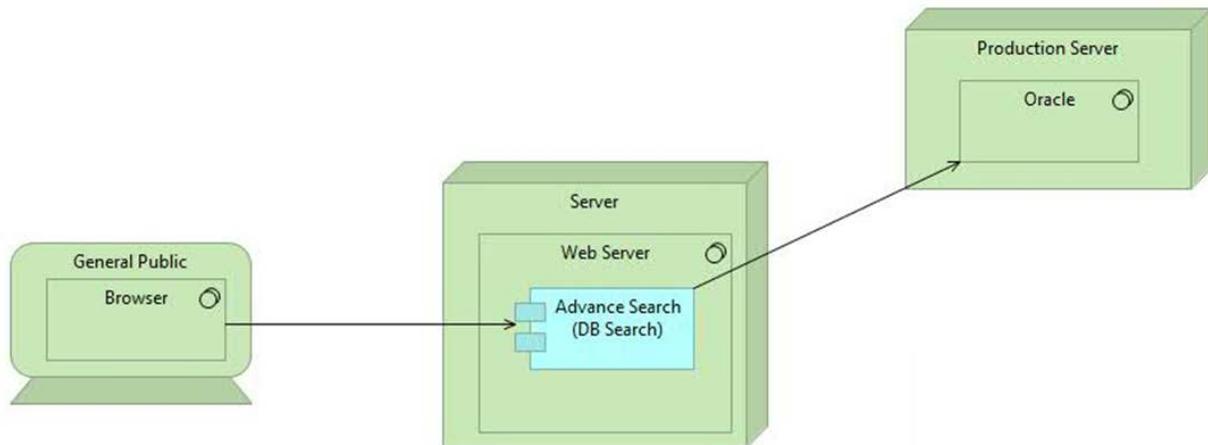


Figure 16: DB Search

1.3.11 Power Search

Power Search provides quick access to useful summary information, on the CAL-ACCESS web site, at the contributor, candidate, ballot measure and campaign committee levels with options for sorting and further manipulating the data. Frequently Asked Questions (FAQs) provide helpful information for conducting searches.

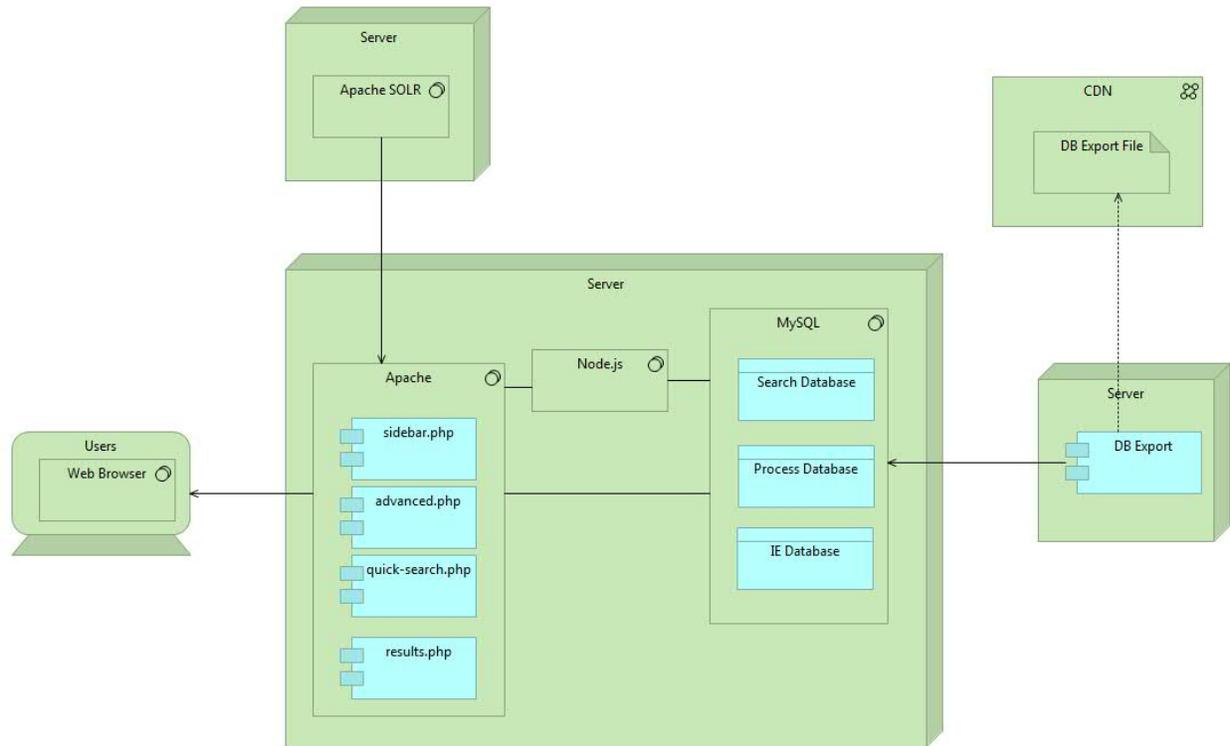


Figure 17: Power Search

1.3.12 E530

Proposition 34 requires persons who spend \$50,000 or more for certain types of “issue advocacy” communications to file a report. Individuals in this filing category use the E530 system to submit such filings.

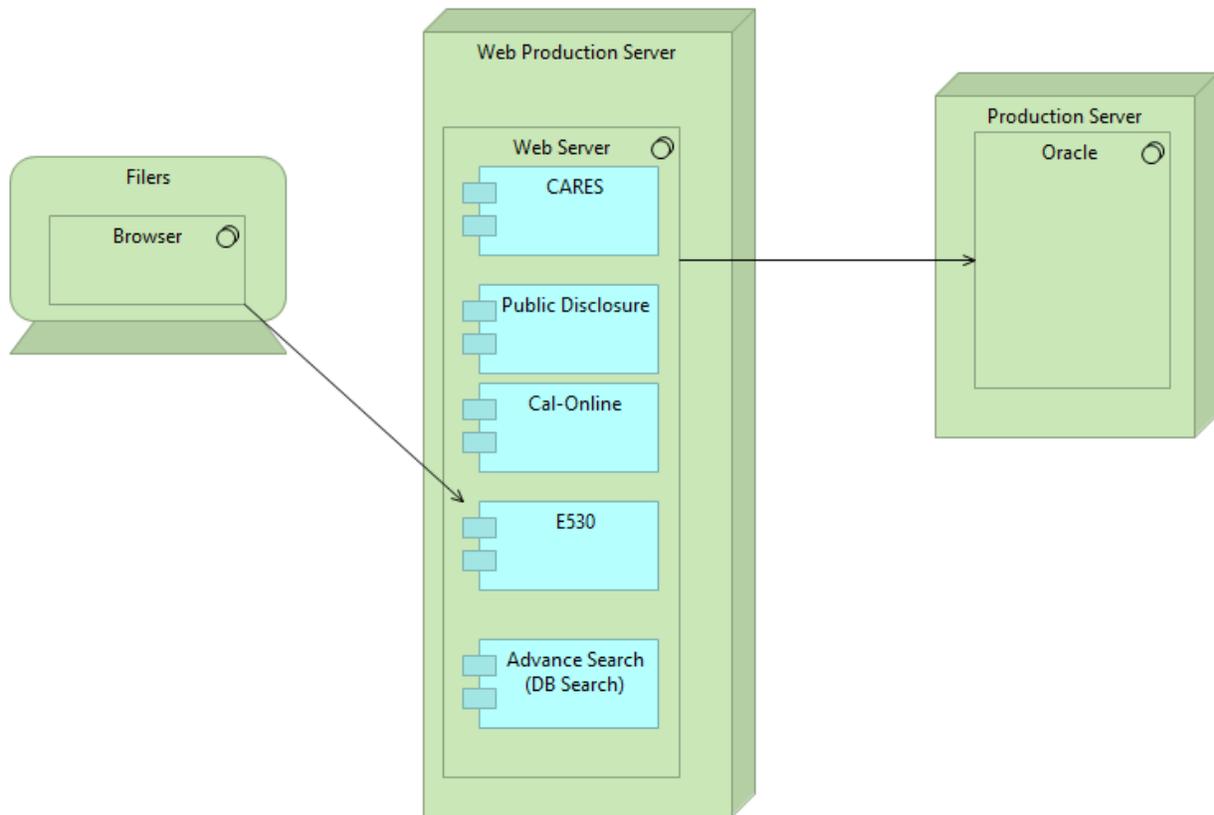


Figure 18: E530

1.4 Technical Architecture

The following subsections depict four (4) viewpoints of the technical architecture. The viewpoints are categorized by the following user roles:

- General Public Access
- SOS PRD Access
- FTB and FPPC Access
- Filer Access

All applications displayed in the diagrams are described in the Application Architecture section.

1.4.1 General Public Access

The following diagram depicts the CAL-ACCESS architectural components that the public access.

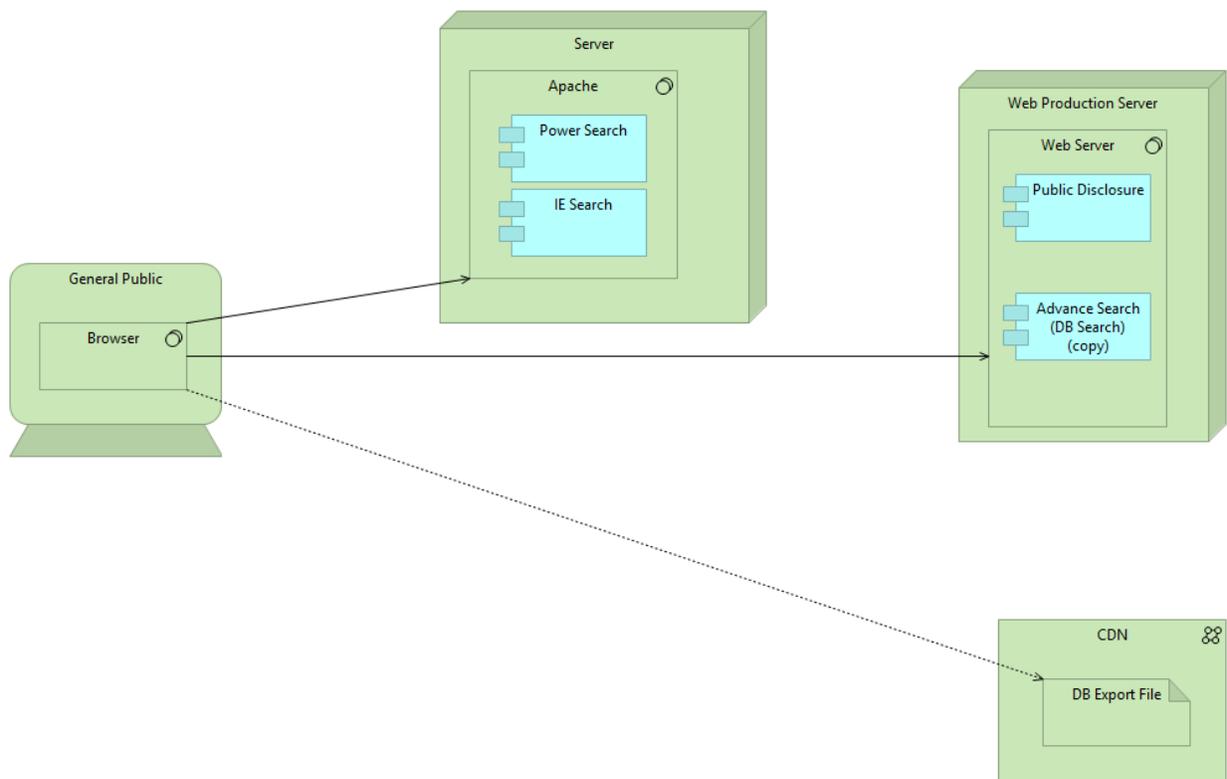


Figure 19: System Components Accessed by the General Public

1.4.3 FTB and FPPC Access

The following diagram illustrates that FTB and FPPC access CARES and Public Disclosure via a web server.

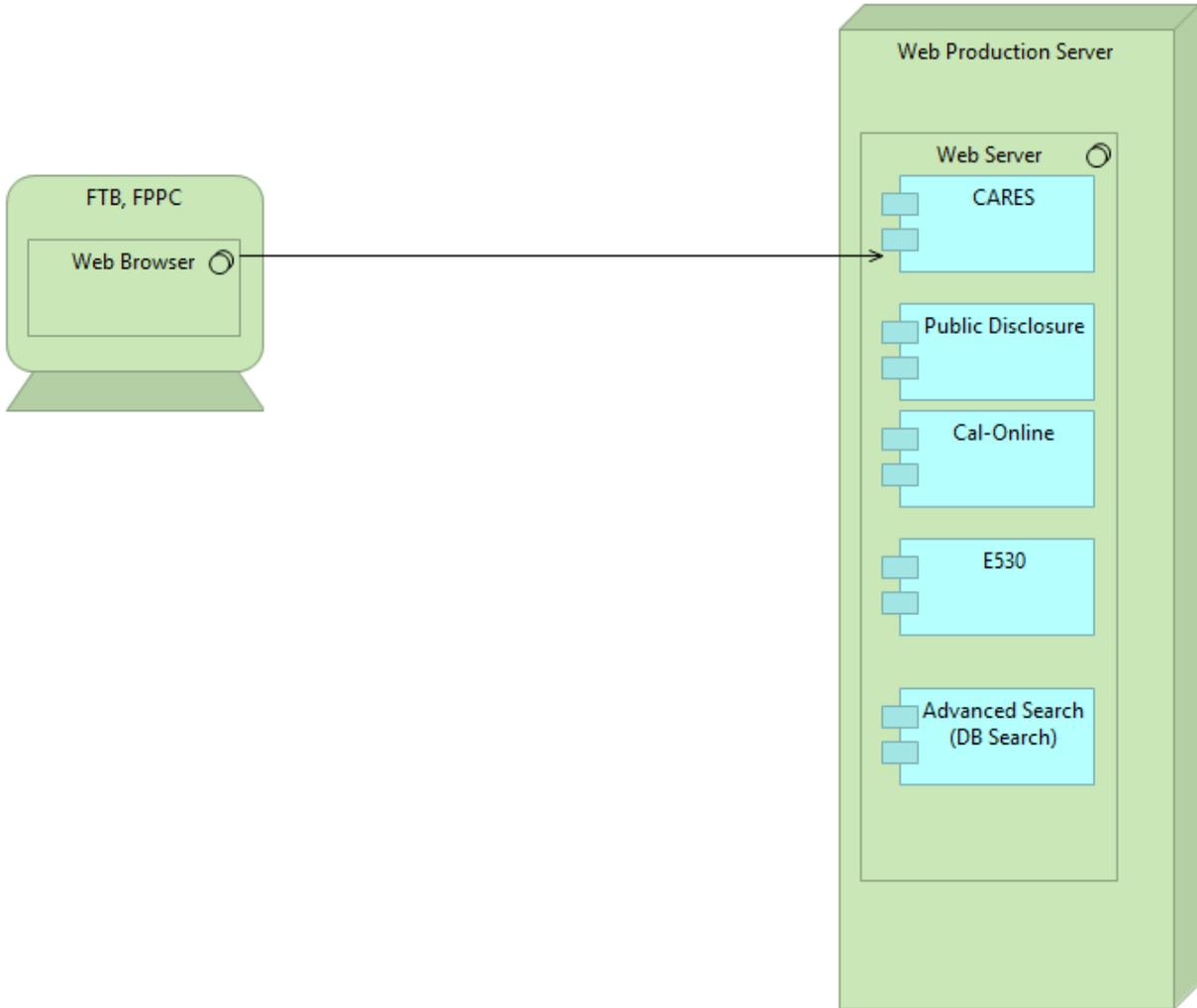


Figure 22: System Components Accessed by FTB and FPPC

1.4.4 Filers Access

The following diagram depicts the CAL-ACCESS architectural components that allows Filers to register and file activities.

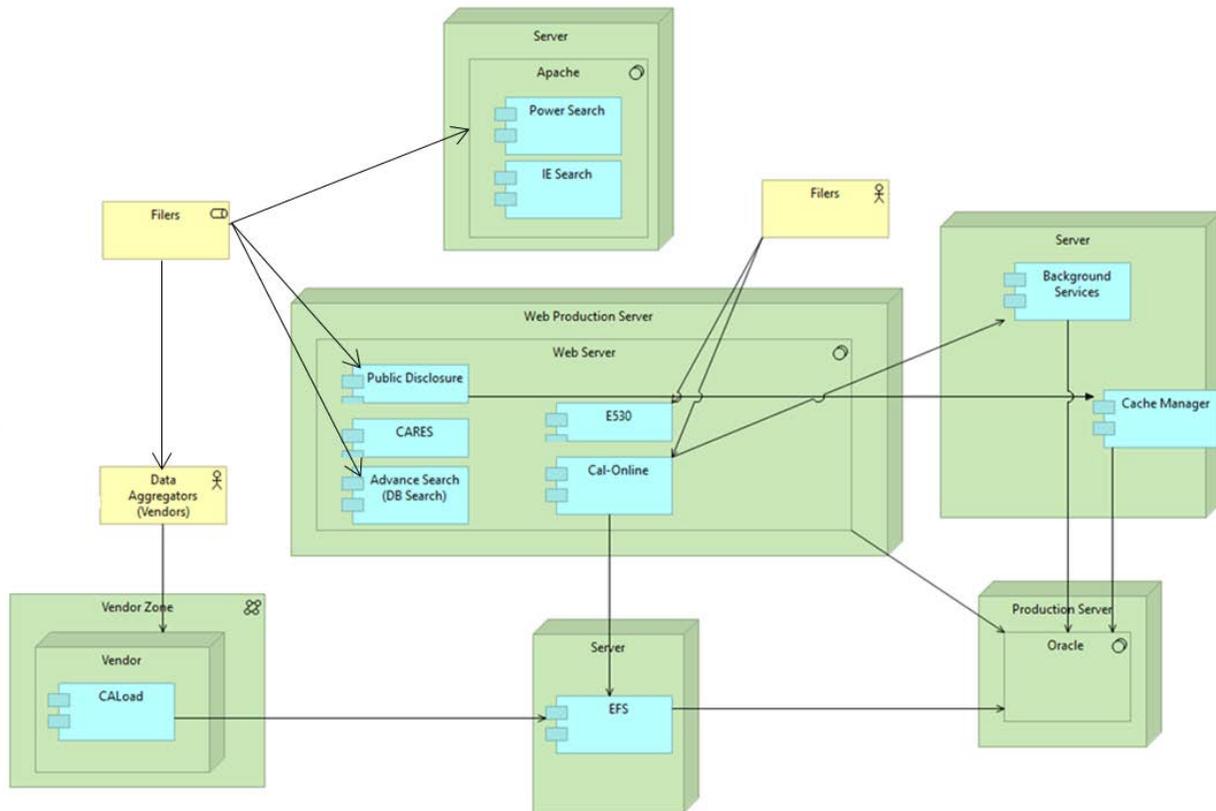
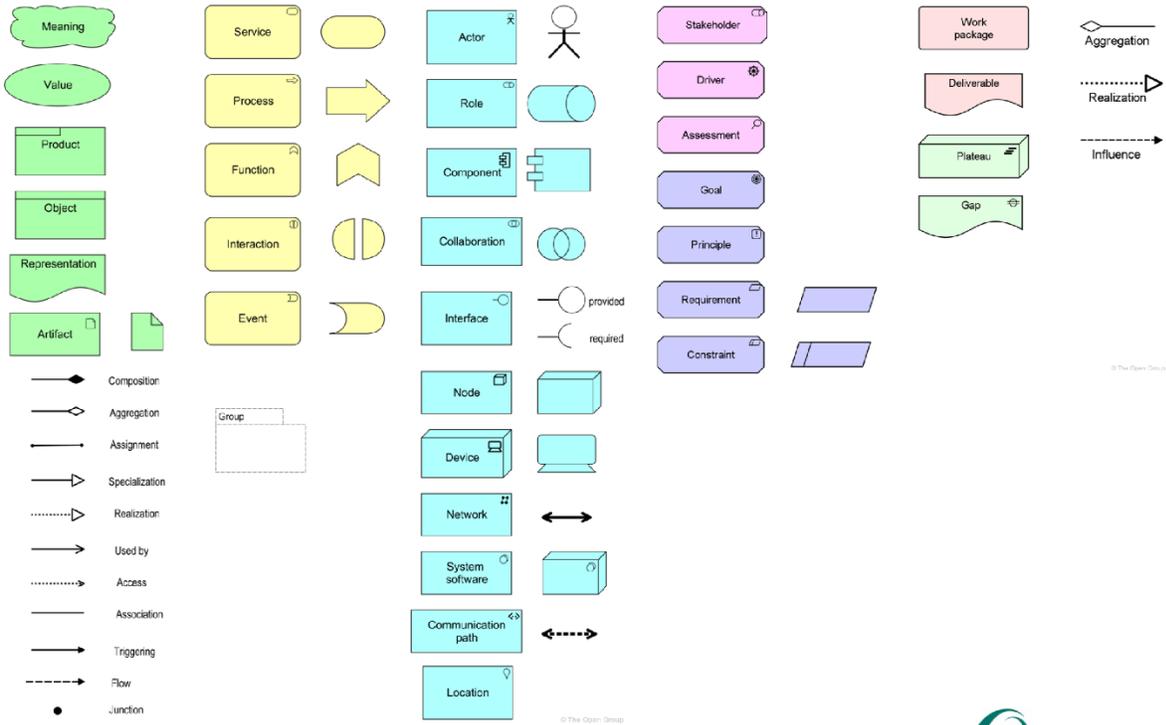


Figure 23: Filers Access

2. APPENDIX A – ARCHIMATE CORE AND RELATIONSHIPS NOTATION SUMMARY

ArchiMate 2 Summary



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ArchiMate® 2.1



ArchiMate Core

	Active Structure Concepts				Behavioral Concepts				Passive Structure Concepts	
Business	Business actor		Business role		Business process		Business service		Business object	Representation
	Business collaboration		Business interface		Business function		Business event		Product	Meaning
	Location				Business interaction				Contract	Value
Application	Application component		Application collaboration		Application function		Application interaction		Data object	
	Application interface				Application service					
Technology	Node		Device		Infrastructure function		Infrastructure service		Artifact	
	Network		System software							
	Communication path		Infrastructure interface							

N131 Reference Card: ArchiMate® 2.1

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ArchiMate® 2.1



Relationships

Structural Relationships		Notation
Association	Association models a relationship between objects that is not covered by another, more specific relationship.	—————
Access	The access relationship models the access of behavioral concepts to business or data objects.>
Used by	The used by relationship models the use of services by processes, functions, or interactions and the access to interfaces by roles, components, or collaborations.	—————>
Realization	The realization relationship links a logical entity with a more concrete entity that realizes it.▷
Assignment	The assignment relationship links units of behavior with active elements (e.g., roles, components) that perform them, or roles with actors that fulfill them.	•————•
Aggregation	The aggregation relationship indicates that an object groups a number of other objects.	◊————
Composition	The composition relationship indicates that an object is composed of one or more other objects.	◄————
Dynamic Relationships		Notation
Flow	The flow relationship describes the exchange or transfer of, for example, information or value between processes, function, interactions, and events.	----->
Triggering	The triggering relationship describes the temporal or causal relationships between processes, functions, interactions, and events.	—————>
Other Relationships		Notation
Grouping	The grouping relationship indicates that objects, of the same type or different types, belong together based on some common characteristic.	
Junction	A junction is used to connect relationships of the same type.	•
Specialization	The specialization relationship indicates that an object is a specialization of another object.	—————▷