

Content Management System - Drupal

Vikrant Sawant (vikrant.sawant@lc.ca.gov)

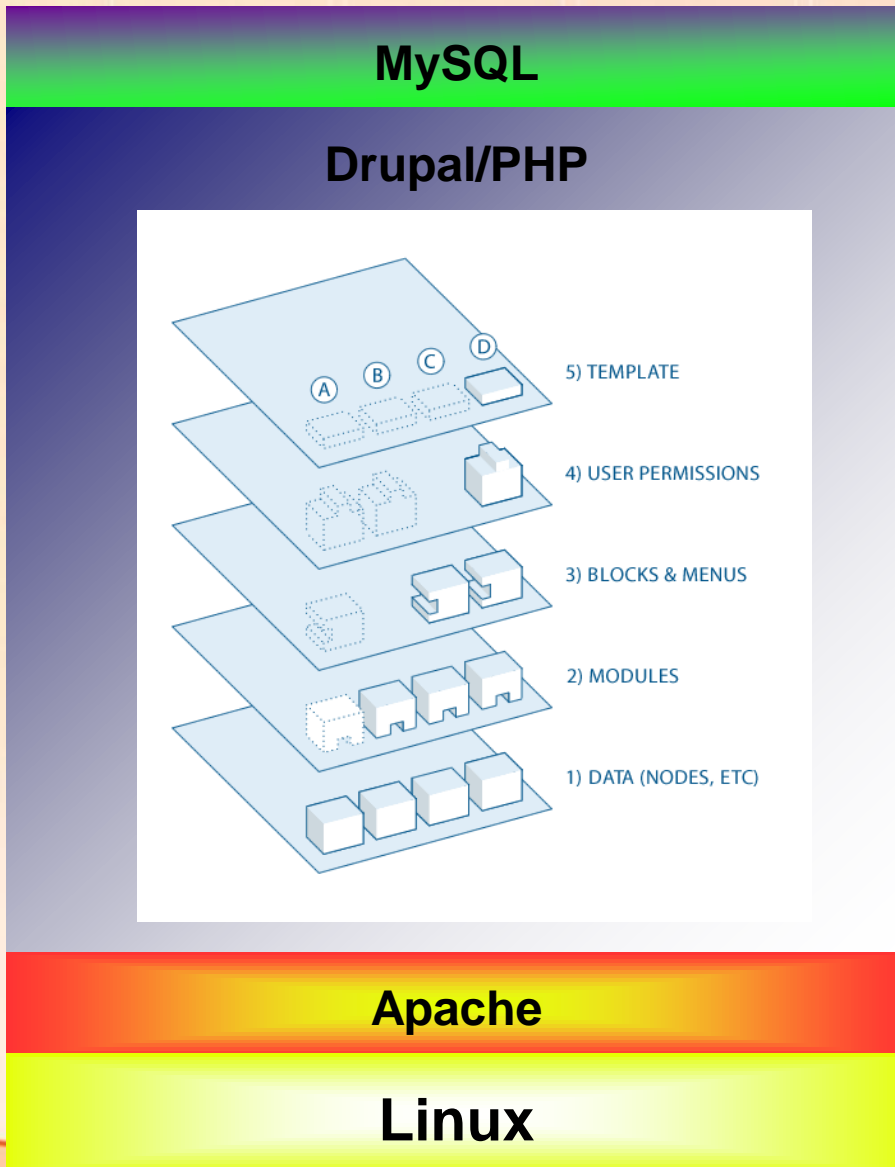
Legislative Data Center, California



What is Drupal?

- **Content management framework to build virtually any kind of website**
Simple static website or social networking site or enterprise web app
- **Free open source, GPL licensed, community powered software**
29000+ developers, 23000+ contributed modules, 1000+ themes
- **Provides extensible, modular, pre-designed components**
Out-of-the-box CMS features, highly customizable components
- **Platform independent software**
 - ◆ Operating System: Unix, Linux, BSD, OS X and Windows
 - ◆ Web Server: Apache, Nginx, lighthttpd or Microsoft IIS
 - ◆ Database: MySQL, PostgreSQL, SQLite, SQLServer, Oracle
 - ◆ Drupal: Mix of core and contributed modules and themes in PHP

Drupal on **LAMP** Stack

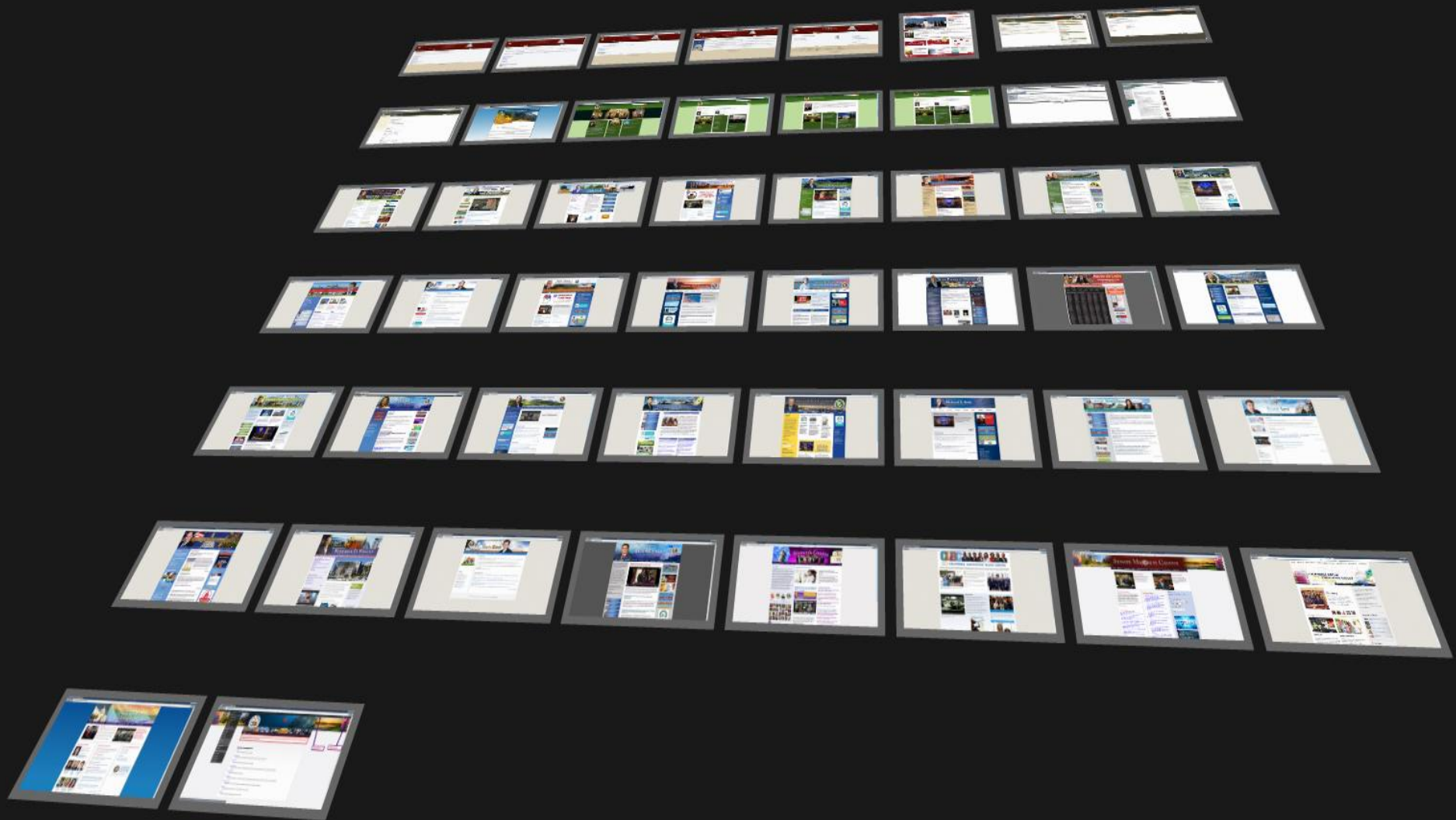


- **L**inux Operating System
- **A**pache WebServer
- **M**ySQL Database
- **P**HP Drupal Framework
 - Nodes (Content)
 - Modules (Plugins)
 - Blocks and Menus
 - User Permissions
 - Template (theme)

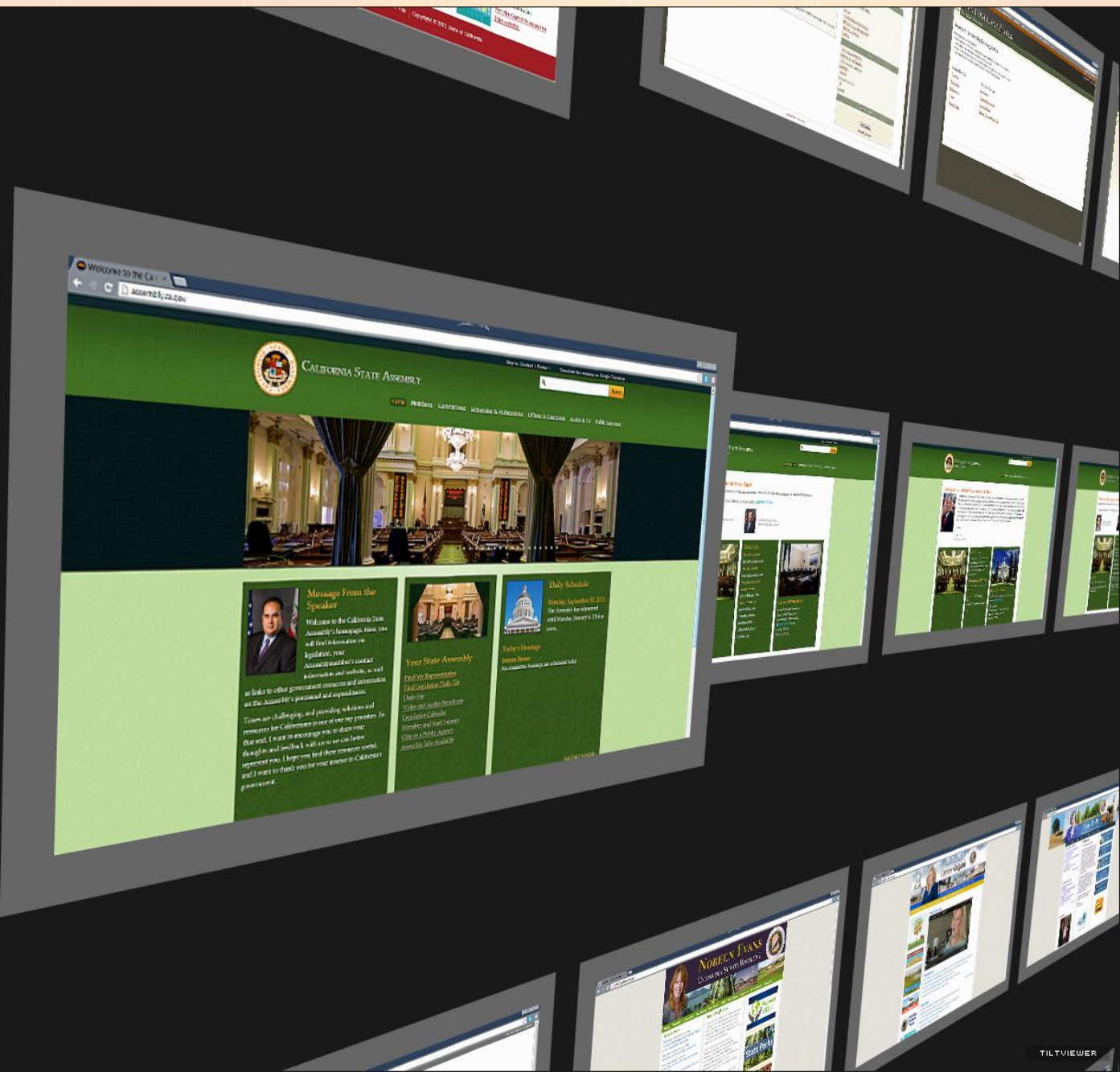
Why We Chose Drupal?

- **Extremely productive than proprietary CMS solution**
- **Usability**
- **Software for non-technical users and top-notch developers**
- **Cost savings**
- **Design flexibility**
- **High platform customization to build scalable, secure systems**
- **Proven in public sector**
- **Good community support, documentation**

Delivered Over **40+** Main and **100+** Small Drupal Websites



assembly.ca.gov and Assembly Committees Drupal Websites



senate.ca.gov and Senate Committees Drupal Websites



Welcome to the Senate Office of International Relations

The California Senate Office of International Relations (SOIR) was established in 1987 by the Senate Rules Committee. Our mission is to assist Senators in fostering strong economic and diplomatic ties between California and the rest of the world. International delegations are welcomed to the state capitol in a manner befitting the protocol of the California Senate to further enhance respect, mutual understanding and cooperation between the governments of guest visitors and the Golden State.

For over two decades, the SOIR has been helping representatives of foreign governments, businesses, media outlets and academic institutions to gain a better understanding of California and its government. The SOIR welcomes global visitors, year-around, to the historic capitol and the Senate Chamber where California's democratic legislative and budgetary processes take place. Additionally, the SOIR fosters diplomatic relationships with foreign peoples and governments and continues to maintain these valued partnerships and exchanges.

Due to its exceptional resources and capabilities, California is rightfully recognized as a global force and is invited as one of the top largest economic markets in the world. The state's reputation as a significant participant in world trade and international affairs is also due to California's worldwide reputation as a center for advanced university studies and the presence of the high-tech and bio-tech industries. At the same time, the Golden State is becoming a global leader in the development of emerging green technologies. Furthermore, California's rich history, coupled with a diverse population, innovative spirit and dynamic vision, continue to propel global visitors.

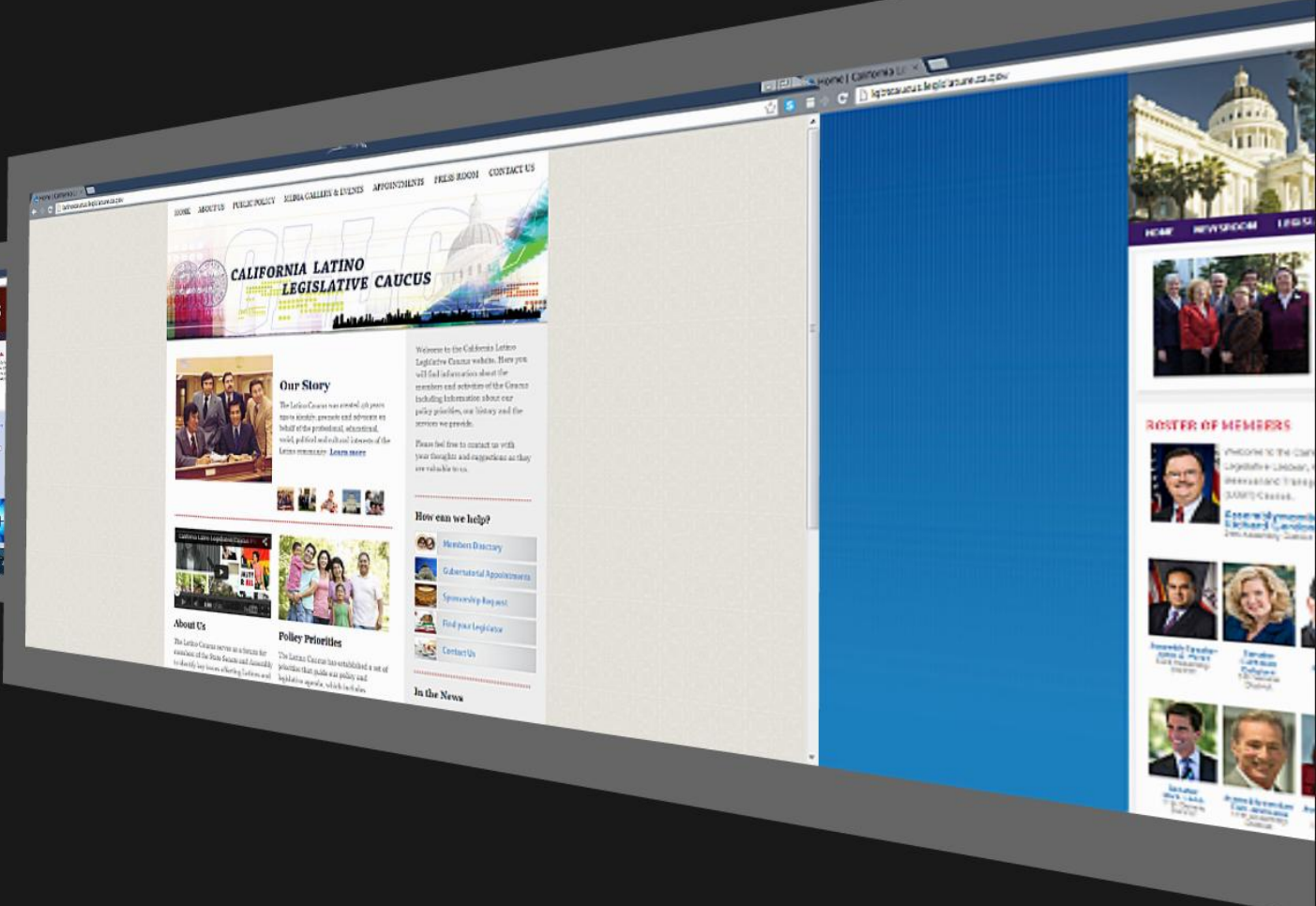
The SOIR hopes this website will be useful to interested parties seeking to learn more about the California State Senate's commitment to promoting representative democracy and economic, educational and cultural exchange between California and nations throughout the world.

1800 • 200.200 • California of Law • Diana Della
Bella, CA
Copyright © 2010 State of California

Hosted Senate Democratic Caucus (sd*.senate.ca.gov) Websites



Hosted Senate Democratic Caucus Websites



Drupal Websites @ Legislative Data Center

- ◆ Senate Internet sites: 1 main website, 59 Senate Committee websites
- ◆ Senate Intranet site: 1 main website

- ◆ Assembly Internet sites: 1 main website, 40 Committee websites
- ◆ Assembly Intranet site: 1 main website, 3 other Intranet websites

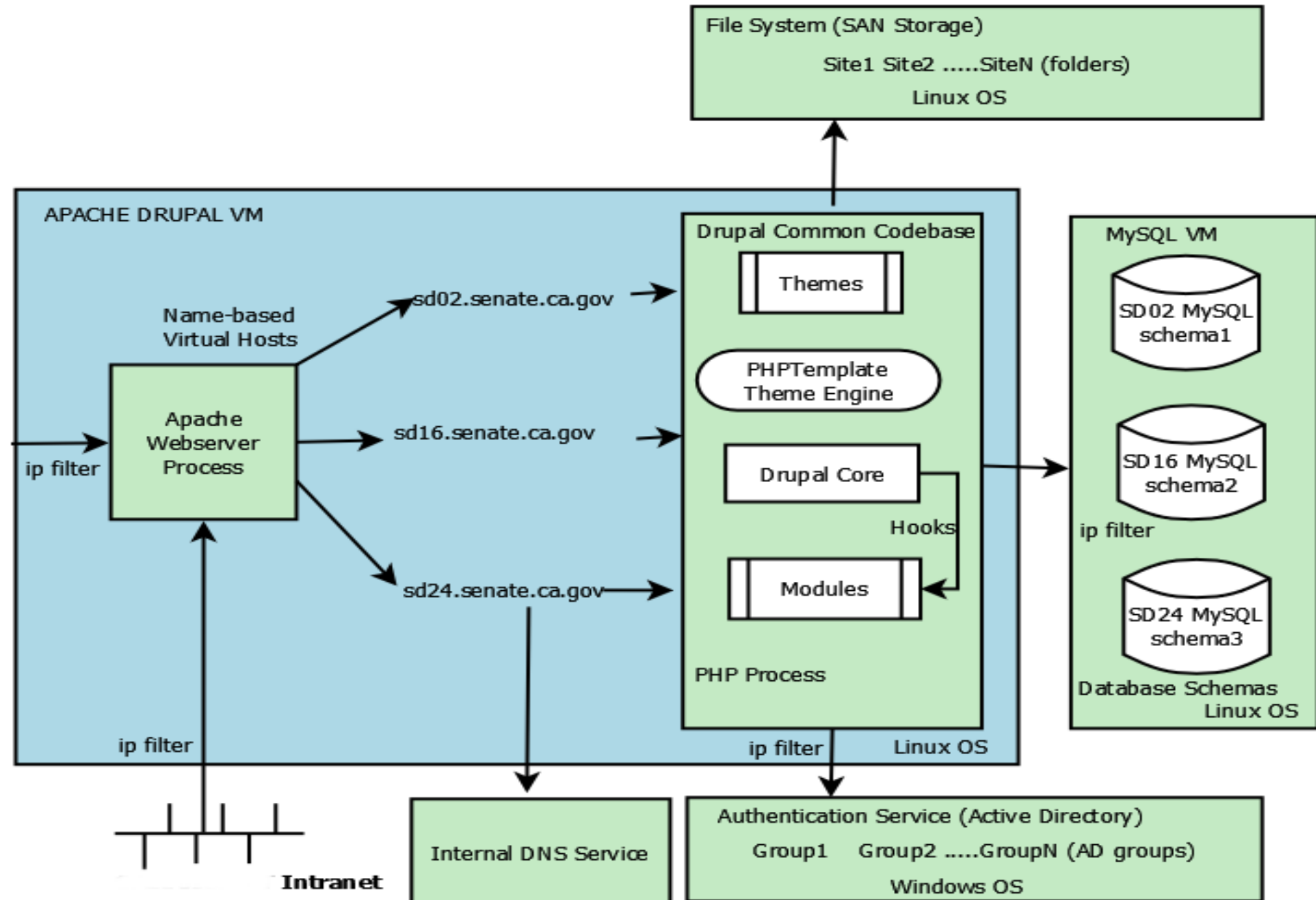
- ◆ Senate Democratic Caucus : 28 Senate Districts, 5 caucus websites
- ◆ Senate Democratic Caucus : 1 Intranet website
(caucus websites are hosted at LDC and developed by caucus developers)

- ◆ Office of Legislative Counsel: 2 Internet based websites and 1 Intranet

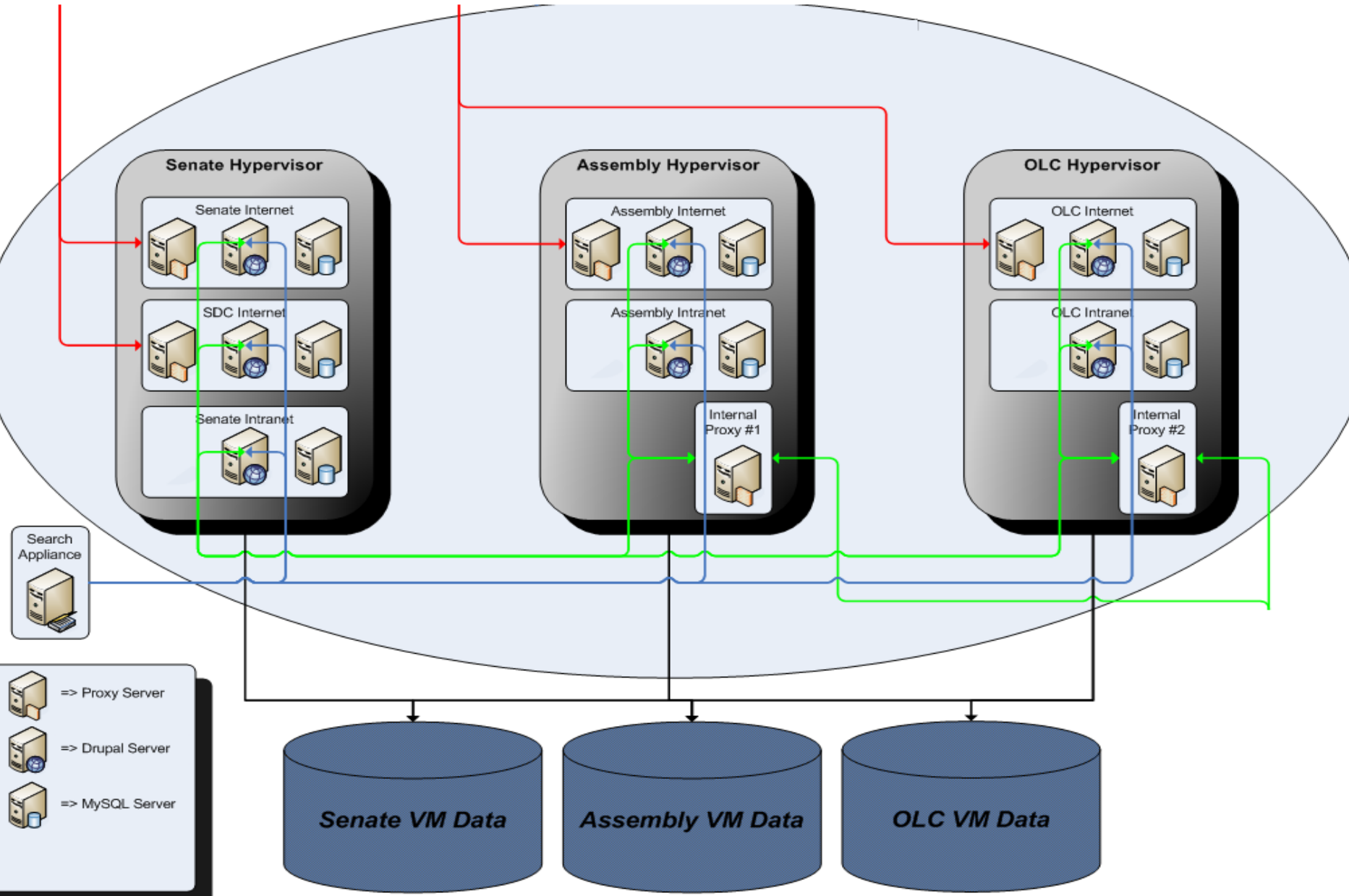
Process to Create a Drupal Website

Task	Group
Create site's MySQL Database	Database Admin team
Create site's DNS	Systems and Messaging team
Create AD groups and assign members (admin, publishers etc.)	Systems and Messaging team
Create keytabs for single sign on	Infrastructure team
Create Virtual Hosts for Apache	Infrastructure team
Install and configure Drupal site	Web Services team
Develop and Deploy site	Web Services team
Update content	Web Content team
Update site's external DNS	Office of Technology Services

Drupal Multisite Architecture



Virtualization Infrastructure



RHEL VM Infrastructure

We use VM template to rapidly create pre-configured virtual machines

RHEV-M (Redhat Enterprise Virtualization Manager) for administration tasks

Physical and logical separation between each customers (Senate, Assembly, and OLC)

An outage of one customer environment does not impact other customers

At network level, Business and Web applications are separated

Intranet and Internet websites are separated

The VM data is stored on SAN storage with customer specific LUNs for virtual disks

VM fail-over is configured to achieve high availability

Seamless Integration with Active Directory and Google Search Appliance

Authentication, Authorization and Single-Sign-On

Users are assigned to AD groups

AD groups are mapped in Drupal to corresponding roles (author, publisher etc)

Each role has a set of permissions in Drupal for authorization

Kerberos authentication based on ticket exchanges for single-sign-on

Google Search Appliance

The search appliance crawls and indexes content from Drupal sites.

Provides GSA front end integration in Drupal site to serve the search results.

Public content is served without any restrictions

Secured content is served using Kerberos authentication and role based authorization mechanism.

Modules We Used

- *CKEditor – WYSIWYG Editor*
- *LDAP_Integration (ldap_sso in Drupal 7)*
- *Views – Presentation Format*
- *CCK – Custom Content Types*
- *Workspace – View, Manage Content*
- *Custom Modules*

Creating Site in Drupal

DEMO



Questions?

Email: Vikrant.Sawant@lc.ca.gov

Skype/Facebook: [Vikrant.Sawant](#)

Drupal: <https://drupal.org/user/717254>