Scalable CIS

Integration of Service management with Assigned Tasks Using Customer Interaction System

Abstract

Managing and resolving customer issues is one of the main components of the Maintenance Phase of SDLC. This process is simplified with the help of Customer Interaction Systems. Organisations making use of such tools must adapt the systems based on the number of clients, as Current systems are far from flexible or scalable. The system proposed solves the problem of scalability and flexibility by integrating a document oriented NoSQL database which allows for data to be semi-structured which improves the overall throughput of the application.

Authentication

Authentication

The Authentication module manages identity of users, the process of logging in and logging out. This is achieved with the help of PHP5's file based session management.

- Authentication
- Role based ACL

Role based ACL

RACL facilitates Access restrictions needed in an enterprise environment.

- Authentication
- Role based ACL
- Dynamic Forms

Dynamic Forms

Dynamic forms are used for gathering information from the user based on configurable model.

- Authentication
- Role based ACL
- Dynamic Forms
- Prioritisation

Prioritisation

Tickets are assigned a priority based on a set of rules.

- Authentication
- Role based ACL
- Dynamic Forms
- Prioritisation
- Escalation

Escalation

Escalation is the level of expertise needed to solve the problem. This value is assigned to every ticket.

- Authentication
- Role based ACL
- Dynamic Forms
- Prioritisation
- Escalation

REST Interface

REST Interface

Representation State transfer interface is used to provide a service based architecture for extensibility of the application

- Authentication
- Role based ACL
- Dynamic Forms
- Prioritisation
- Escalation

- REST Interface
- Backbone based Ajax Client

 Backbone based Ajax Client

Backbone.js helps building MVC based frontend applications via the REST interface

- Authentication
- Role based ACL
- Dynamic Forms
- Prioritisation
- Escalation

- REST Interface
- Backbone based Ajax Client
- Reports and Charts

Reports and Charts

Reports are generated by running Map/Reduce queries on MongoDB to for various statistics

- Authentication
- Role based ACL
- Dynamic Forms
- Prioritisation
- Escalation

- REST Interface
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- Reports and Charts

Mongo DB Models

MongoDB models are used to store Tickets and related meta information

Mongo DB Models

- Authentication
- Role based ACL
- Dynamic Forms
- Prioritisation
- Escalation

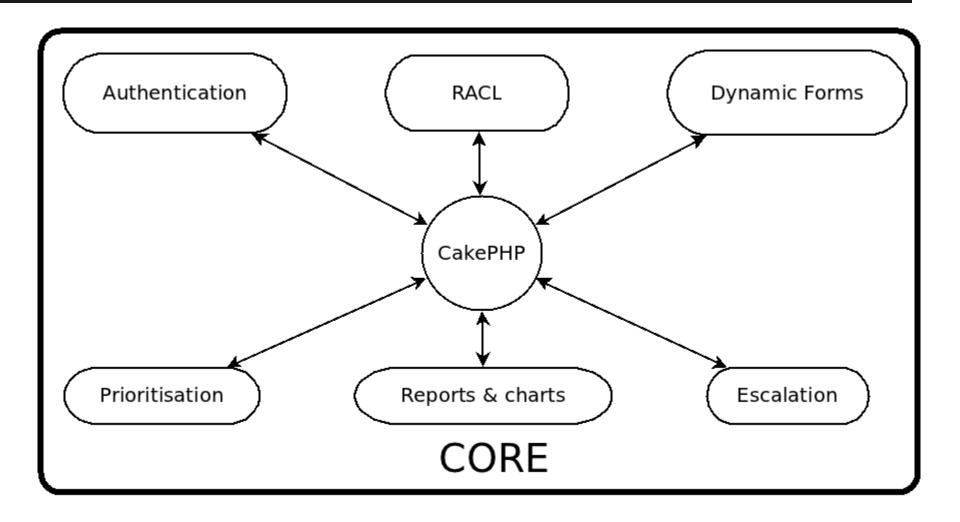
- REST Interface
- Backbone based Ajax Client
- Reports and Charts

- Mongo DB Models
 - MySQL Models

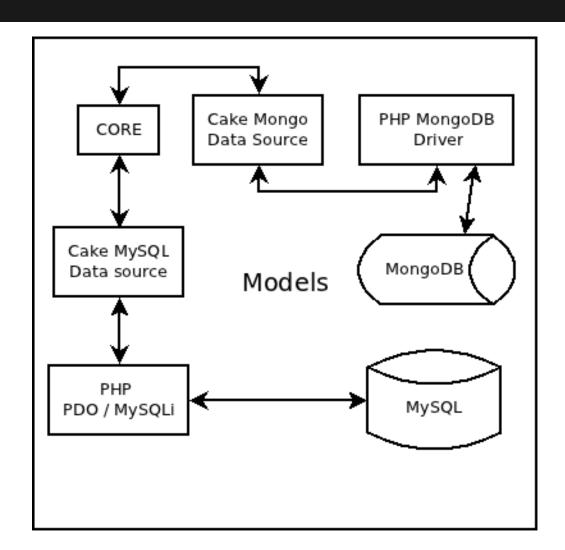
MySQL stores Authentication and ACL related information for users and administrators

MySQL Models

Architecture: Core



Architecture: Models



Thank You

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