PoC v12 & v14 for PT Pesonna Optima Jasa

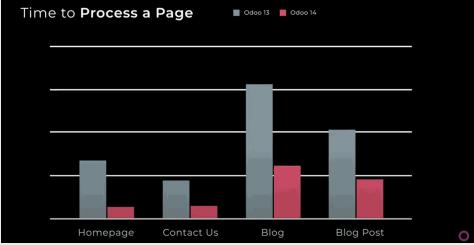
**Eric Budiana** 



## Faster, slicker, more user-friendly system

In every new version, Odoo improves its speed, both in front-end & back-end. On average, the back-end of Odoo 13 is almost 5x faster than the previous versions!





### V12 x V14

Faster load times: In Odoo 14, the ORM (Object-Relational Mapping) has been optimized to perform faster by introducing a new binary field type. This new binary field is used to store and retrieve large binary data, such as images or documents. The binary field is stored in a separate table and is loaded on-demand, which reduces the memory usage and improves the performance when working with large datasets.

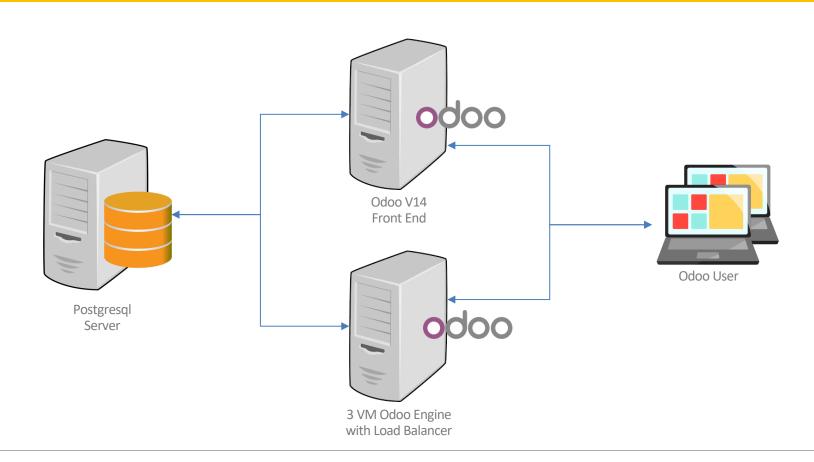
Improved indexing: Odoo 14 uses a new indexing system that improves the speed of database queries. The new indexing system is based on PostgreSQL's built-in indexing capabilities, which allows for faster and more accurate data retrieval. Additionally, it uses indexing on computed fields, which can improve the performance of complex queries. Also, the new indexing system indexes fields that are used in the ORM domain, which improves the performance of the search and filter operations.

Better caching: Odoo 14 has been optimized to use less memory, which improves the performance of the system as a whole. This is achieved through the use of more efficient caching mechanisms, such as the use of the new lru\_cache decorator, which reduces the number of database queries, and the caching of computed fields, which improves the performance of complex queries.

Improved Multi-Company: Odoo 14 has been optimized to handle multiple companies more efficiently and faster. This is achieved by improving the performance of the ORM multi-company rules, which are used to filter data based on the current company and making them more consistent. The ORM multi-company rules are applied on-demand, which reduces the memory usage and improves the performance.

**Improved security**: Odoo 14 has been improved in terms of security, it has new modules for security management, improved the access rights management, and it introduced a new security system based on Access Control Lists (ACLs). This improves the security and performance of the system by reducing the number of database queries and applying the security rules on-demand.

## The Architecture



# **Testing Summary**

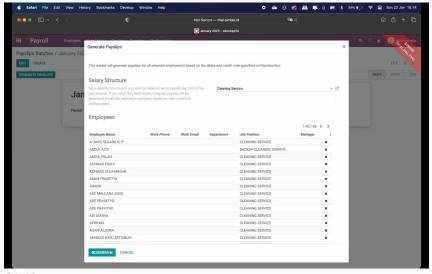
#### Odoo V12

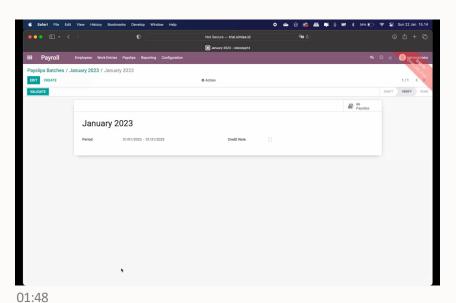
Compute Sheet Payslip 66 Employees06:50:31

#### Odoo V14

- Generate Batch Payslip 66 Employees
  - 00:08:70
- Import Timesheet Attendance 66 Employees
  - 00:02:67
- Compute Sheet 66 Employees
  - 00:08:31

## Generate Batch Payslip

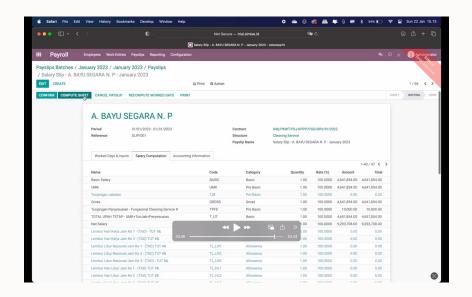


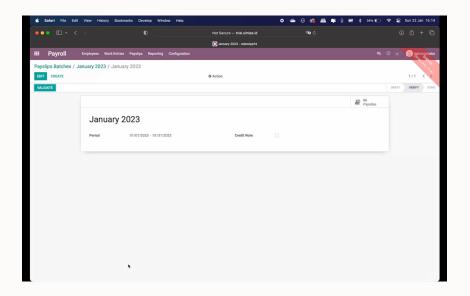


01:40

**Duration 00:08:70** 

### **Compute Sheet**





**Duration 00:08:31** 

### Suggestion

- Maksimalkan penggunaan Work Entry
- Optimise Structure Salary Rules
- Recheck Python Code Rules
- Maksimalkan odoo configuration file
- Perbaikin custom module yang terdapat loop dalam proses dan code yang kurang sesuai

