

# Two Factor Authentication and Synchronization of Financial Data Module between Bank and ODOO ERP Involving APIS

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**Abstract:** *In this project, we aim to bolster security and streamline functionality through two key features: two-factor authentication (2FA) using the 32-bit algorithm and financial data synchronization via API integration to Odoo ERP by implementing two key features: two-factor authentication (2FA) using the 32-bit algorithm and financial data synchronization via API integration to Odoo ERP. The implementation of 2FA introduces an additional layer of security to Odoo's login processes. By leveraging the 32-bit algorithm, users will generate one-time passwords (OTPs) throughout authentication processes, significantly reducing the risk of unauthorized access and enhancing overall system security. Simultaneously, we will integrate API endpoints for one-time passwords (OTPs) throughout authentication processes, significantly reducing the risk of unauthorized access and enhancing overall system security. Subsequently, we will integrate API endpoints for one-time passwords (OTPs) throughout authentication processes, significantly reducing the risk of unauthorized access and enhancing overall system security. This synchronization ensures the accuracy and consistency of financial information, enabling real-time decision-making and improving operational efficiency.*

*Our methodology involves carefully selecting and implementing the 32-bit algorithm for OTP generation, ensuring robustness and efficiency in Odoo ERP's security framework. Additionally, we will develop user-friendly interfaces for financial data synchronization, facilitating seamless communication between Odoo ERP and external systems. This synchronization guarantees the accuracy and consistency of financial information, empowering stakeholders with timely insights and facilitating informed decision-making.*

**Keywords:** Odoo ERP, two-factor authentication, 32base algorithm, API integration, real-time decision making.