

SuccessFactors Integration System

Project Overview:

The SuccessFactors Integration System is designed to seamlessly synchronize employee master data, organizational details, and HR-related information between **SAP SuccessFactors** and internal enterprise applications. The project involves building secure middleware APIs, consuming SOAP/WSDL services, transforming data, and storing it in SQL Server for downstream systems.

The main goal of the system is to automate HR workflows, reduce manual processing, and ensure real-time, reliable data exchange.

Role & Responsibility:

As a .NET Core Developer, my responsibilities included:

API Development & Integration

- Developed **RESTful Web APIs** in **.NET Core** for data exchange between SuccessFactors and internal applications.
- Consumed **SOAP & WSDL-based SuccessFactors services** using C# to fetch employee and organizational data.
- Implemented **data transformation, validation, and mapping logic** to standardize SuccessFactors data formats.

Backend & Middleware Development

- Designed and implemented **business logic** using C#, LINQ, and repository patterns.
- Built scheduled jobs to automate data synchronization from SuccessFactors.

Database Design & Operations

- Created SQL tables, views, stored procedures, and indexes in **SQL Server** for efficient data storage.
- Optimized complex queries to improve API response performance.

Security & Authentication

- Implemented **role-based authentication & authorization** for secure API access.
- Managed authentication tokens, encryption, and secure configuration handling.

Error Handling & Logging

- Implemented centralized **exception handling**, custom middleware, and logging using .NET Core built-in logging.
- Added audit logs for tracking data sync activity.

Testing & Deployment

- Performed unit testing of API endpoints and integration workflows.
- Deployed the application on **on-premise IIS** and handled configuration migration between environments.

Key Objective:

- Automate employee and HR data synchronization between SuccessFactors and enterprise systems.
- Ensure **data accuracy, consistency**, and **real-time availability** across departments.
- Reduce manual HR operations and dependency on spreadsheet-based data handling.
- Provide a secure, scalable API infrastructure for future SuccessFactors integrations.

Core Features

◊ 1. SuccessFactors Data Integration

- SOAP/WSDL service consumption for employee master data, job information, and organizational hierarchy.
- Delta update handling to sync only modified records.

◊ 2. Middleware API Layer

- REST APIs developed in .NET Core for downstream systems to consume HR data.
- Standardized JSON response formatting.

◊ 3. Secure Data Storage & Processing

- SQL Server database for storing, caching, and processing incoming HR data.
- Efficient stored procedures for bulk insert/update operations.

◊ 4. Data Validation & Transformation Engine

- Automatic validation of SuccessFactors data before storage.

- Business rules applied for missing fields, formatting, and normalization.

◊ **5. Role-Based Access Control**

- Secure and controlled access to sensitive employee records.

◊ **6. Monitoring & Logging**

- Audit logs for tracking sync times, record counts, and API usage.

Technology Stack

- **Frontend:** html5, css3, Bootstrap
- **Backend:** .NET CORE API, C#, .NET CORE MVC
- **Database:** SQL SERVER

Results:

- Achieved **95% reduction in manual HR data entry** and improved data consistency.
- Reduced integration failures and mismatched HR records through automated sync.
- Improved operational efficiency with **real-time, API-driven** communication between systems.
- Enhanced security by implementing robust role-based authentication.
- Delivered a scalable, maintainable solution ready for future SuccessFactors modules.