



Charter Global

CASE STUDY — Charter Global developed, implemented, and supported a large payroll processing company to improve and modernize their existing Payroll Platform.

Continuous/Smart Payroll System

The Continuous/Smart payroll system leverages cutting-edge technologies to swiftly transmit employee information and transaction data to the Payment engine as soon as changes are detected. By promptly identifying any data errors, the system enables users to address discrepancies and mismatches before transmitting the payroll to the Payment Engine, ensuring accurate and error-free processing.

Smart/Real Time Payroll offers several key features:

- Automated Data Transfer: Changes made to the payroll information are automatically transferred to the payment engine.
- Error Notification: The system alerts you about the most commonly occurring errors, allowing for prompt resolution.
- Automated Error Resolution: Errors that do not require data validation are resolved automatically, saving time and effort.
- Mini Preview: Prior to calculating the payroll, you can access a payment breakdown and employee reports, providing a preview of the results.
- Real-Time File Transfer: Payroll files can be transferred in real time, ensuring efficient and immediate processing.

Payroll Modernization (Digital Transformation)

The original working solution was developed using state-of-the-art technologies available at that time. However, as time went on and based on valuable customer feedback and process changes, it became apparent that a significant overhaul of the existing process was necessary. Charter Global played a crucial role by leveraging its extensive expertise and experience in workflow redesign. By incorporating customer feedback and reimagining the process, innovative ideas were generated to enhance data visualization and minimize unnecessary human interactions. The primary goal was to empower users with intuitive control over the payroll process while streamlining system-driven activities in the background.

Cloud Migration

The previous system was hosted on a localized infrastructure, which posed a limitation to the expansion plans due to the onboarding of new clients. To overcome this obstacle, a solution was suggested and put into action by transferring identified services to the cloud. This migration to the cloud offered the advantage of flexible and efficient resource expansion. Charter Global provided assistance to the client in moving their on-premises services to a public cloud environment. The migration to the cloud proved beneficial and resulted in the following enhancements.

- Accelerated deployment times
- Streamlined infrastructure complexity
- Enhanced monitoring systems
- Increased system availability
- Automated backup and logging of key metrics

RS (Retirement Services) - Morgan Stanley

Morgan Stanley, a client of the payroll processing company, sought an integration that would enable them to receive Plan and Participant information, as well as daily transactions, at scheduled times. However, the client's data formats still adhered to legacy standards, making the conversion of data from source to destination quite challenging.

- Charter Global developed a system called Corn Jobs specifically designed to transmit data to Morgan Stanley.
- Significantly reduced job execution time from approximately 2-3 hours to only 20-25 minutes.
- Automated process eliminated the need for manual intervention.
- Implemented a solution capable of retrieving necessary information from various sources.
- Stakeholders receive job status notifications via email.
- In the event of failures, a dedicated technical support team promptly resolves errors and reinitiates the job.

RS (Retirement Services) - Morning Star

The major payroll processing and financial services firm aimed to improve its client offerings by partnering with Morning Star, a financial advisory provider. This collaboration is designed to introduce an alternative to the existing advisory vendors offered by the payroll processing company.

Charter Global played a pivotal role in developing a feature that enables seamless integration between a large payroll processing company and Morning Star, facilitating a two-way communication flow. The following actions were undertaken:

- **Creation of new APIs:** Charter Global successfully developed new APIs that Morning Star utilizes to ascertain whether a specific payroll processing client intends to utilize their services.
- **Evaluation process:** Upon receiving confirmation from the client, Morning Star initiates an evaluation process to assess the suitability of the client's requirements. They then communicate the evaluation results back to the payroll processing company using FTP (File Transfer Protocol).
- **Confirmation feedback:** Our client, upon receiving the confirmation feedback from Morning Star, proceeds to process the necessary next steps based on the information provided.

RS (Retirement Services) - Plan Switch

Our client sought to ensure smooth transitioning of advisory services across multiple platforms as it partnered with financial advisory vendor Morning Star.

Charter Global has introduced a new corn job that facilitates the dynamic management of vendor service switches for participants on a daily basis.

- **Seamless service switch request:** The clients can effortlessly request a service switch without any disruptions.
- **Consolidated data collection:** The corn job gathers the necessary information from multiple source databases and stores it in a single target database with the required format.
- **Streamlined data access:** The application retrieves the data from the target database, ensuring efficient access for processing.
- **Participant notification and confirmation:** The application notifies the participants about the requested service vendor, and upon their confirmation, the switch process is successfully executed.

RS (Retirement Services) - Datashare

The client desires to validate the Annual Returns/Reports of their Employee Benefit Plan using their own validation system. This validation process is intended to ensure that the plans meet the necessary filing edits and acceptance criteria before they are submitted.

- Currently, the client has 9500 payroll processing shared clients that need to be filed before the deadline. Manual filing is no longer a viable option due to the large volume of plans.
- The automation of eFiling is crucial to efficiently handle the 9500 plans and maintain a strong partnership with the large payroll processing company.
- The client of the payroll processing company has made a specific request for a file that includes data points for each plan. This file is intended to enable them to verify the accuracy of the data in their own system before initiating an e-file request.

Charter Global has created a novel corn job that retrieves data (specifically, selected plans) from a database and saves it in a history table.

- By utilizing the history table, we gather a list of the chosen plans and retrieve individual plan details from an API. Subsequently, we generate JSON files, which are then sent to the server.
- To ensure efficient file management, all the generated JSON files are compressed into a single zip file, which is subsequently uploaded to a securely configured Managed File Transfer (MFT) location.
- After the job run is completed, notifications containing job status details are dispatched to the respective support teams.
- Upon a successful execution, Pentegra will consume the files located in the MFT location.

PTWFN (Payforce To Workforce Now) - Data Lake

For enterprise migration purposes, our focus lies on transferring users from their current platform to a new one. Currently, the data lake lacks the capability to directly insert data into the new platform's database. As a workaround, we first load the employee data into a staging environment and subsequently move it from the staging environment to the new platform's database. However, during the initial data copying process, there was no data validation in place, and it simply involved performing insert statements.

To address this, we devised a solution involving the use of DB scripts to facilitate data validation. Here are the steps Charter Global followed to implement data validation:

- We established a connection between the Data Lake and the new platform's database.
- Leveraging the project services dashboard, we executed three sets of queries (scripts) designed specifically for data validation.
- These queries generated a comprehensive validation report, which we then utilized to identify any issues, perform updates, and correct the data as needed.
- Essentially, this process entails validating the new platform's database after the migration, ensuring its integrity and accuracy.

Data Migration

We are currently in the process of migrating data from one platform to another, specifically for certain services that are categorized as default services. Our objective is to determine whether there are additional services that should be chosen for migration and to guarantee the flawless transfer of data for the identified services.

Charter Global did following changes to the code to cater above requirement:

- Assigned services to the client unconditionally.
- Assigned services to the client based on existing services for the source client.
- Assigned menu resources unconditionally.
- Assigned menu resources based on existing services for the source client.

*Internal identifiers that are used for different types of clients can have different values even if what we see on screen appears to be same.

Why Charter Global

- Founded in 1994; Headquartered in Atlanta, GA with development centers in the U.S, India, and Serbia.
- Developed a portfolio of over 100 successful project implementations.
- Nearly 1000 full-time IT professionals support client projects.
- Established customer base of Fortune1000 industry leaders.
- Our experience spans pharmaceutical, manufacturing, telecom, finance, health care, media / entertainment, airlines, energy, retail and hospitality industries.
- Active database of nearly 2M consultants.
- Experienced Talent acquisition teams support client projects.

About Charter Global

Charter Global drives innovation in IT projects and business operations by defining strategy and providing consulting, digital solutions, custom development, and skilled resources. With an established customer base of Fortune 1000 industry leaders and over 100 successful project implementations, our experience and proven methodologies enable our professionals to deliver industry leading solutions in cloud technologies, open source, DevOps, mobility, CRM, AI/ML, AWS, SAP, Microsoft & Pega BPM.