This is an EXTERNAL SYSTEM that provides the number of regular and overtime hours every hourly employee worked in a given pay period.

This actually describes TWO different use cases: one for salaried employees and one for hourly employees.

# Process

As pay period parameters are approved (by either supervisors or an automated system), the process generates records for each employee for each pay period. The process should run automatically at a preset time for salaried employees because there are no time cards to be approved. The process is manual for hourly employees because supervisors must approve time cards. Once the approval is given the data is provided to the system.

The trigger for data to be provided to the system is EITHER:

1. An automated process that provides salaried employee data
2. A supervisor APPROVES a time card for a given pay period

# Hourly Employees

A supervisor logs on to the system to approve time cards for all their direct reports that are hourly employees. Once the supervisor has approved an employee’s time cards the total number of regular hours and overtime hours are deteremined for each work week. The total regular hours for the pay period and the total overtime hours for the pay period are reported.

Sample

|  |  |  |  |
| --- | --- | --- | --- |
| Employee SSN | Pay Period SID | Regular Hours | Overtime Hours |
| 123456789 | 20240201 | 82.2 | 10.1 |
| 123456780 | 20240215 | 74 | 0 |
|  |  |  |  |
|  |  |  |  |

The EmployeeSSN is the social security number of the employee.

The PayPeriodSID is a surrogate ID that identifies the pay period. Pay periods are typically defined by a start date and an end date. For the purposes of this example the SID will be defined as the year concatenated to the month and day of the first day of the pay period. For example for January 1, 2024 the SID would be 20240101. The SID for the second pay period in March of 2023 (which starts on March 16, 2023) would be 20230116. There should be a prepopulated table in the database containing pay periods. That table should contain the SID (the unique identifier for each row), the start date, and the end date for each pay period.

The regular hours is the total number of hours worked in the pay period that are paid at the standard hourly rate.

The overtime hours is the total number of hours worked in the pay period that are paid at 1.5 times the standard hourly rate.

# Salaried Employees

An automated system runs at a specified time after the conclusion of each pay period and generates the following table for each employee.

Sample

|  |  |  |
| --- | --- | --- |
| Employee SSN | Pay Period SID | Total Pay |
| 123456789 | 20240201 | 2500 |
| 123456780 | 20240215 | 4000 |
|  |  |  |

Salaried employees do NOT receive overtime so the output is limited to the employee SSN, the pay period SID, and the total pay for the pay period. The total pay for a salaried employee in a pay period is their current annual salary divided by the number of pay periods in a year (24 when pay periods are semi monthly). The total pay for each pay period is stored because the annual salary changes when new contracts are issued and signed during the year.