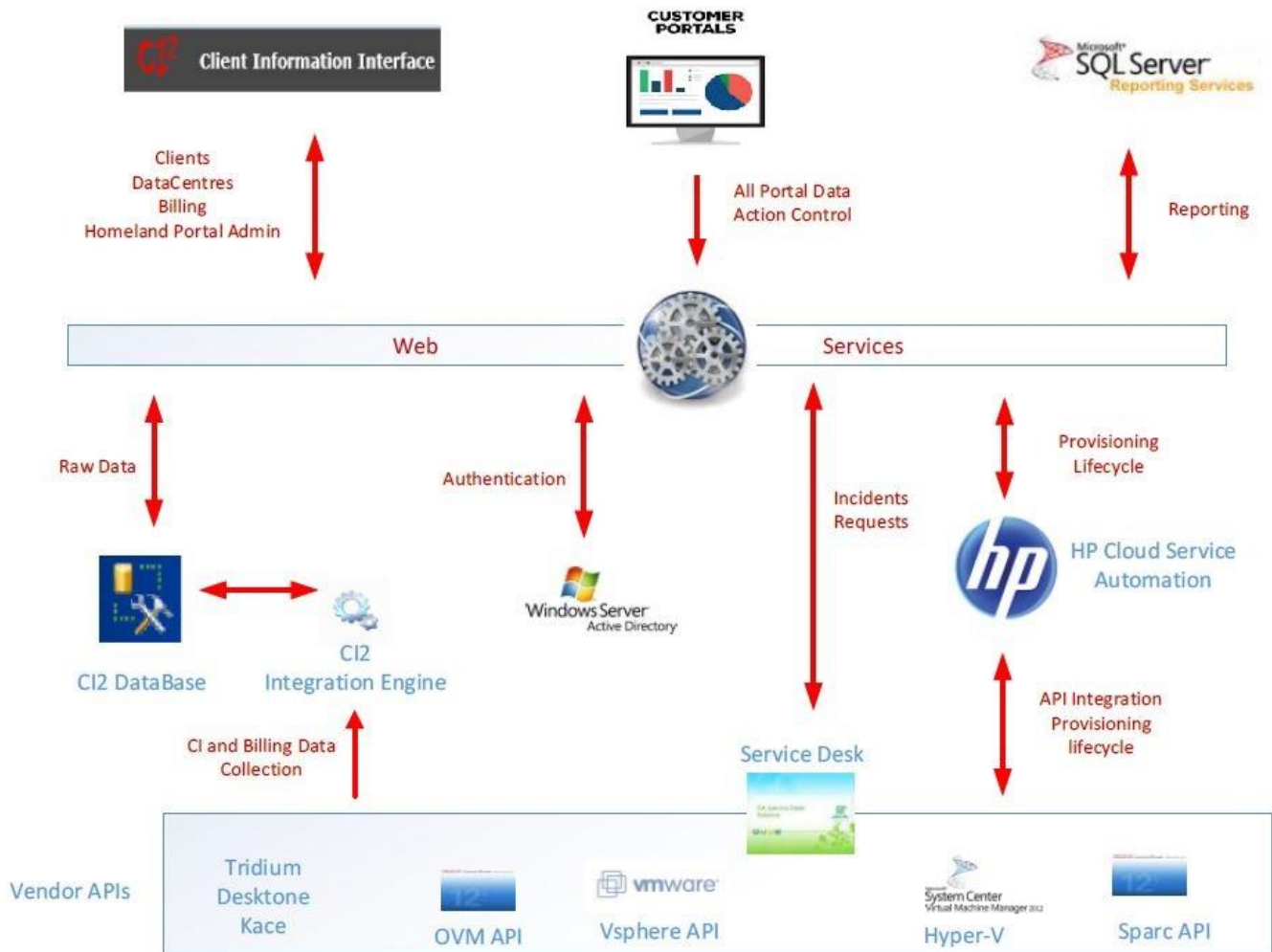# System Overview

- This system is an ecosystem of many vendor provided API's that collate information into usable SQL Data.
- This SQL data is then used to provide a consistent view to Customer Portal
- This SQL data is used to provide billing aggregation based on assigned stock codes to items.
- A web services layer is used to translate between front end services and backends
- An HP cloud Automation tool is used as the Orchestration Engine to provision items.
- All reporting is done via the SSRS Engine
- All Authentication is performed using Active Directory.

Billing Process Overview

This Data is initially written to special Billing Audit tables that contain the raw data to track what was used by a client for a service. There are Three Primary Business Billing Processes that occur and use the same data flows but pass different flags to represent each of these

Provisional Billing Run - This is executed at 6am every day and generates billing data that is representative of what may be billed at the end of the Month

Trial Billing Run - This is executed at the end of the Month (usually multiple times) until the data is correct enough to finalise

Final Billing Run - This is executed when the trial run is to be used as the final billing for the client – the data is then exported to the Financial System.
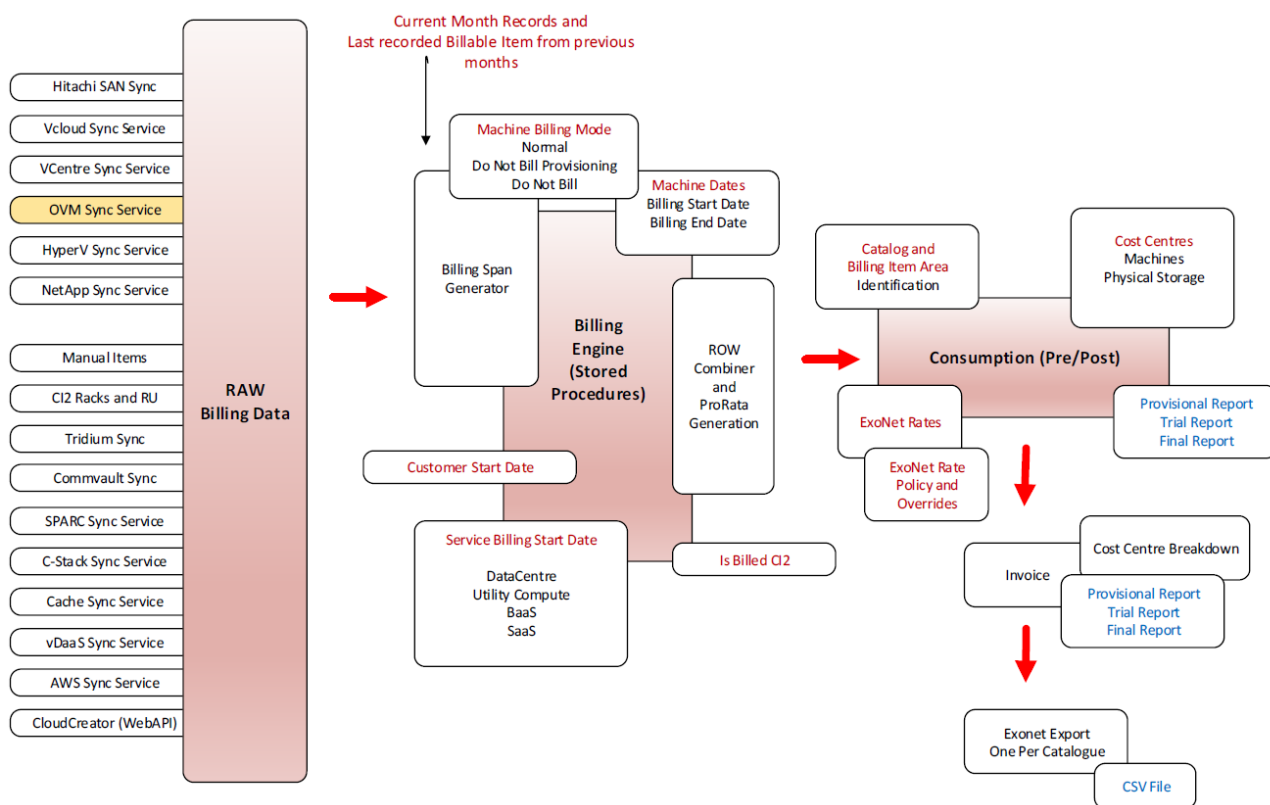
High Level Billing Functional Description
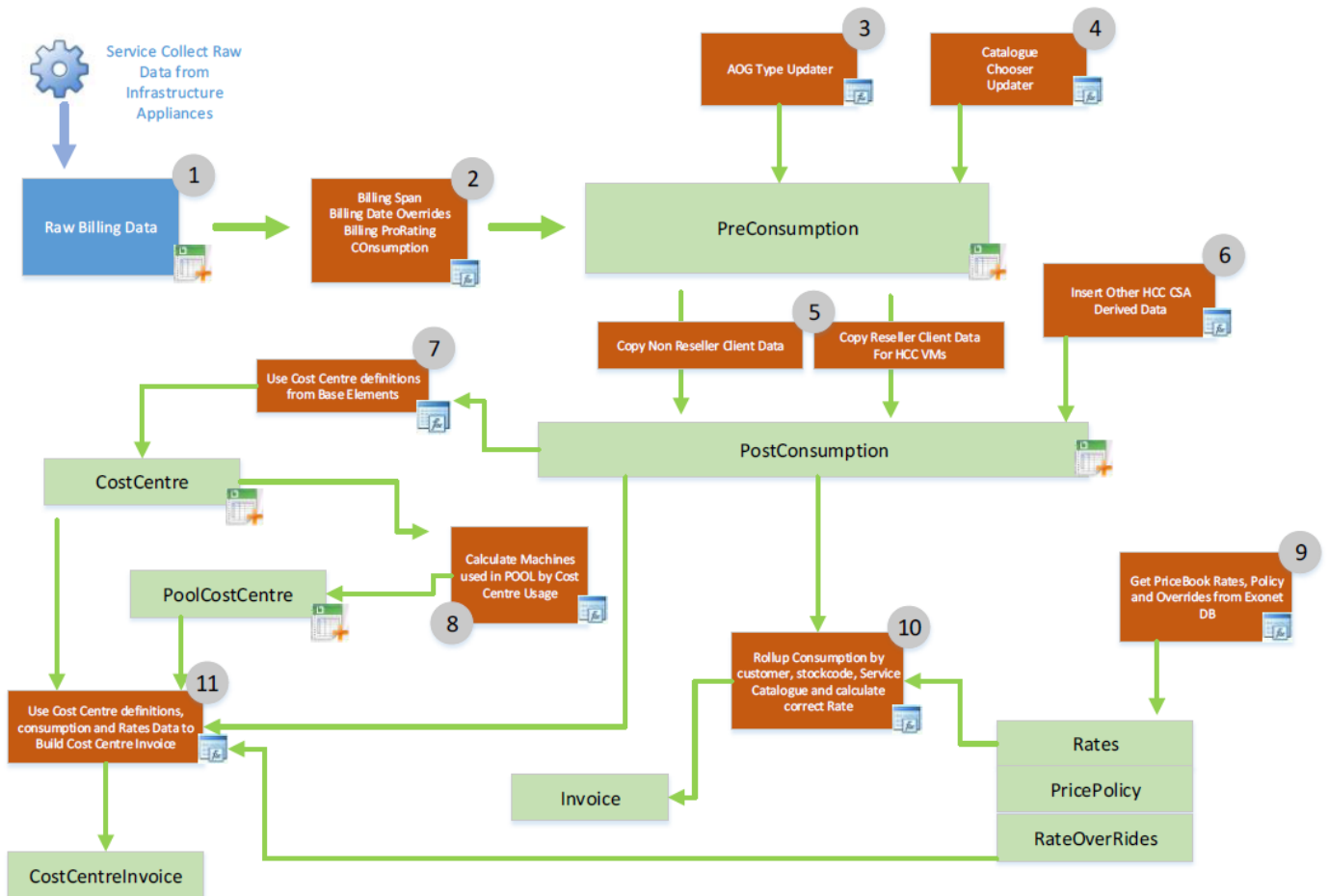
1. The Raw data is collected via Sync Services during the Month – the process of capturing the Raw data is provided by other documents located in
2. A set of stored procedures is called to take the Raw data and any joined data that allow calculations for Billing prorated and end dates to generate the Pre-Consumption Data
3. Update Column in Pre-Consumption Data with a flag to represent if the data is AOG or NOT
4. Update Column in the Pre-Consumption with the Catalogue ID that the Items belong to
5. Move data from Pre-Consumption to Consumption
6. Insert HCC specific data into Consumption
7. Create Cost Centre breakdown data
8. Create VMware Cloud Pool Cost Centre Breakdown Data
9. Get Current Prices, Policy and Overrides
10. Rollup Consumption data with Prices
11. Use Cost Centre and Pool Cost Centre Data with Consumption and Prices to Build Cost Centre Invoice

Example SQL Process

We use a SQL Function to determine exactly which Rate is used against the Item
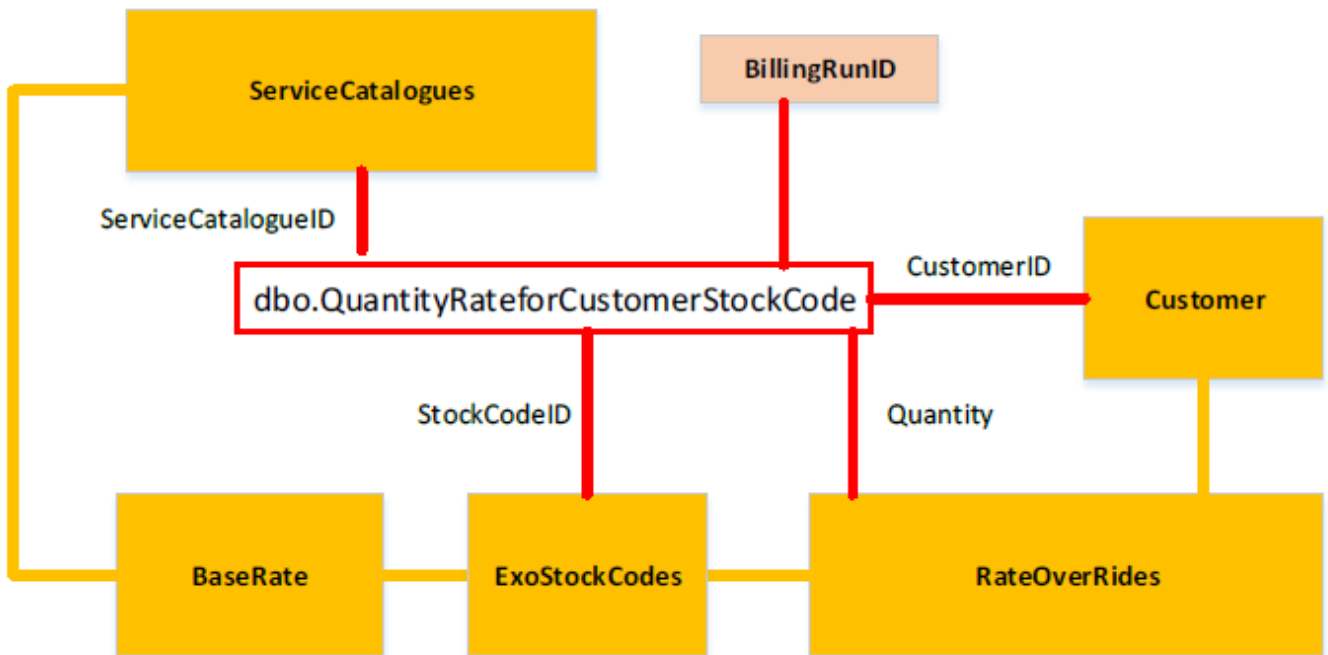
Calculate the Cost Centre Proportion using the CC Table and the Consumption Table – Insert into Temp table