ClearView Import Process

Data Import Process   (See diagram 1)

The data import process is at the heart of the ClearView dashboard engine.   This multi-tiered import and calculation process enables ClearView to provide visibility into performance at all levels of the contact center across multiple disconnected data sources. KPIs, objectives, and trends can all be viewed in one elegant dashboard that complements and unifies virtually any call center system.

Data Sources and Web Services   (diagram 1.1)

ClearView can integrate with any accessible data source. Most cloud-based ACD systems allow ClearView to integrate with the system and pull the data feed directly through the provider's web service APIs. For premise-based systems, such as Avaya, an ACD listener can be installed on a remote-integration server that sits in the customer's network. Additionally, the ClearView professional team can set up or guide the customer's IT resources through the integration of custom data sources. Regardless of the origin, all data can then be mapped and submitted through the standard ClearView web service API architecture. Additional mapping and scrubbing can be handled in the ClearView web service if required.

Data Import   (diagram 1.2-1.3)

Once data is submitted to the ClearView APIs, it is inserted into corresponding database views (diagram 1.2). These views utilize triggers to update any records that are in the table but have changed since the last import, and insert any records that have not been previously inserted (diagram 1.3). This reduces the load on the database by only updating, summarizing, and recalculating based on incremental changes regardless of what data is sent.

Data Summarization and Warehousing   (diagram 1.4)

The data flows through the import process directly to the data warehouse through a series of triggers and views that aggregate and summarize the data, formatting it for dashboard reporting. At each step, only incremental changes are applied to the data, increasing the speed at which the information is available and reducing locking and data artifact issues.

Custom Metric Calculation   (diagram 1.5)

Once half hour and daily summary tables have been updated, the data modifications are then passed through the metric creation process, which creates an additional set of daily and half-hourly summary records. These records summarize the custom metrics and KPIs that the customer has created through the ClearView portal. When a metric is created or updated, this process can run a retroactive update to calculate historical data; however, once the initial calculation is complete, only incremental updates are applied and calculated.
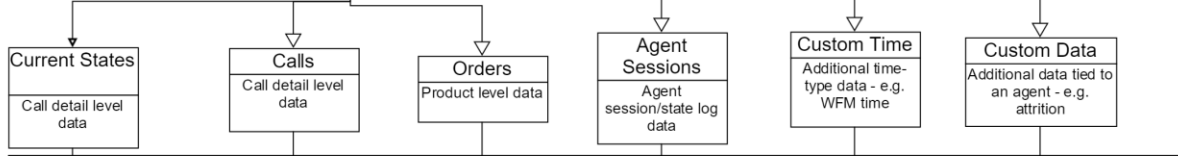
Data Import Optimization

The aggregation and summarization process has been optimized for regular imports spanning a short timeframe, such as a few minutes to a day. The frequent updates and short timeframes allow ClearView to disseminate actionable information to the contact center executives, managers, and agents within minutes of it becoming available, with agent and queue information becoming available in a matter of seconds.
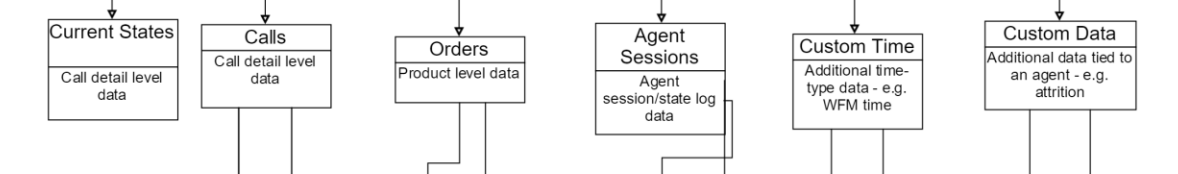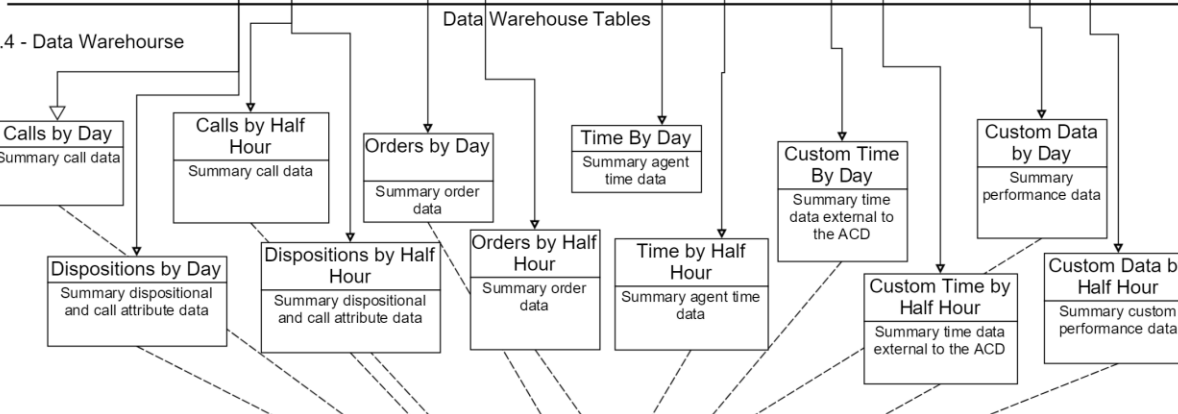
Data Import Diagram

1.1 Sources