Brightware Glossary

Actions – Defined within the Knowledge Base to specify the steps to take when the intent of the incoming message is recognized by the Brightware Natural Language Processor (NLP).

Agents – A Member Service Center E-mail Desk Representative.

Business Unit – A Business Unit is an organizational entity within a business. With the new Contact Center Business Units feature, Contact Center can be deployed to meet specific business configurations such as Outsourcing, Hosting, and Departmentalization models.

Business Unit Inbox/Outbox – Individual Business Unit e-mail box for messages.

Contact Center Console – Supervisor User Interface that allows for administration and monitoring of the Brightware system, Queues, and Agents.

Brightware Server – The main component of Brightware. The Brightware Server contains several components including Inbound Protocol Handler (IBPH), Router, Queue Manager, Natural Language Processor, and Outbound Protocol Handler which read, classify, and route requests from members. The Brightware Server can respond automatically and directly to members (auto-response) or route inquiries and suggested responses to a Contact Center agent for review. The information and business rules, defined within the Knowledge Base, determine if an auto-response can be sent or if the message must be routed to an agent.

IDK – Brightware Integration Development Toolkit. Use the IDK to modify the User Interface of the Web Agent Desktop or Contact Center Console and even create applications to allow Brightware to work with third-party applications.

Knowledge Base – The Knowledge Base (KB) stores a collection of language features used to interpret and process member e-mail. These language features include phrases, regular expressions, features, intents, actions, business policy rules, as well as custom rules. Each Business Unit can utilize one or more distinct Knowledge Bases for processing e-mail, however basic e-mail processing can occur within the system without a defined Knowledge Base.

Knowledge Manager – The tool used to create and edit the Knowledge Base. The Knowledge Manager is installed separately from the Contact Center Console and Agent Desktop, typically only on the Knowledge Engineer’s desktop or laptop computer.

Member E-Mail – E-Mail message from a member. The content of which is scanned by the system and used to direct the message to an appropriate response or Agent.

NLP – Brightware Natural Language Processor. Unlike keyword approaches that require exact word matches, Brightware compares the message text to a knowledge base of words, phrases, and expressions relevant to your business to determine the “intent” of the message. This approach means that a single rule guides classification, routing, and management of whole categories of customer interaction across all electronic data channels.

Outbound Mail Handler – The SMTP mail server.

Queue – Each Queue is a collection area for incoming messages routed to a particular Business Unit. Once Brightware determines it cannot automatically respond to the member’s request, it uses the routing rules to direct messages to Queues where the messages wait for an available agent. Supervisors create the Queues in the Contact Center Console. Because the Queue is created within a Business Unit, the Supervisor can associate a Queue to only one Business Unit. Once a Queue is created, the Supervisor can assign agents to each Queue.

Queue Manager – The Queue Manager is the Brightware Server component responsible for managing inbound and outbound messages within the queues.

Response Library – A collection of pre-defined potential responses for incoming requests. The Response Library can shorten the time for Agents to process the message.

Suggested Response – Once the NLP determines the intent of an incoming message (based on rules defined in the Knowledge Base) the action relating to the intent identified may trigger one or more proposed responses to the incoming message, known as suggested responses. When the incoming message appears on an Agents’ screen, the suggested response(s) appears as well, assisting the Agent with information commonly used to respond to a message of that particular type.

Web Agent Desktop – E-mail Graphic User Interface for Agents. The Web Agent Desktop allows Agents to process (receive, respond, and track) messages.

Datamart-Specific Terminology

The Brightware Datamart product is built on the *star schema* data model, which can be used successfully for Analytics and reporting. The following list provides definitions of terms and concepts as related to the Datamart.

Additiveness of Measures: The type of a recorded measure can be classified as:

- **non-additive** – These are facts or measures that cannot (or should not) be aggregated in any way. For example, a common fact recorded in each fact record is the time of day the event occurred. It does not make sense to add the time of day of two event records. However, the difference between two time of day values makes perfect sense and is known as the interval or duration.

- **semi-additive** – These facts or measures can be aggregated, but with care. For example, the duration of an event is recorded as a measure in most fact tables. Note that the duration of the online time of one Agent should not be added with the duration of the offline time of another Agent. However, the durations of the online times of the same Agent can be added over a period of days to calculate the cumulative online time.

- **additive** – These are facts or measures that can be aggregated in any way to yield a meaningful result. The Brightware Datamart database only uses non-additive and semi-additive measures. Foreign and primary keys are always non-additive. The Datamart is incapable of enforcing these semantics and therefore care must be taken when using analytic applications and reporting tools.

Attributes – These are commonly used to refer to the non-key columns of dimension tables. For example, the queue name, the customer name, the day of week and so on, are attributes of their respective dimensions.

Dimension Tables – These tables are the end, or spokes, of the stars and simply contain attributes of an entity. For example, the customer dimension contains one record for each customer that has interacted with the Contact Center and everything known about the customer.

Fact Tables – These tables are the center, or hub, of the star schema and track a specific business activity. For example, the fact table requestEvent tracks the state changes of email messages as they are processed by the Contact Center and the fact table queueEvent tracks the flow of the email messages through the Contact Center.

Facts & Measures – These are information and values that define an event and are recorded as column values in the fact tables. These properties depend on the event itself and not on the who or what of an event.

For example, if a customer sends mail received by the Contact Center, the fact that the mail was received and replied to, are recorded as two separate events in the fact tables. However, the duration between the events (elapsed time between receipt and response) is recorded as a measure in the fact table.

Primary and Foreign Keys – All keys in the Datamart are the database native integer data type. Primary keys uniquely identify a record in a dimension table.

For example, each customer in the customer dimension table is assigned a unique identifier by the ETL that becomes that customer's primary key. When a customer's primary key value is stored in a column of a fact table, the key is known as a foreign key. It is important to understand that although primary keys uniquely identify a dimension record, a foreign key does not uniquely identify a fact record. For example, if a customer interacts with the Contact Center many times, there would be a single record for that customer in the dimension table while there may be several records in a fact table that identifies or points to that customer through the foreign key.

Star Schema – A star schema is a data model in which the tables form a relationship that when depicted pictorially have the appearance of a star. The table at the center of the star is a fact table. The tables related to the fact table are dimension tables. The fact and dimension tables are related through foreign keys and primary keys. The dimension tables are usually not related to each other. Likewise, the fact tables are usually not related to each other.

A Datamart may have several fact tables sharing the same set of dimension tables.