

queries

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Business Logic for Queries Module

This document outlines the business rules that govern the querying system of various entity types (like customers, departments, info-types, and order types), based on the analysis of the RPG programs: `FL500R`, `RA107R`, `RK500R`, `VA540R`, `VA551R`.

Programs Analyzed:

- `FL500R`: Customer project query program.
- `RA107R`: Department maintenance program.
- `RK500R`: Customer query subprogram.
- `VA540R`: Info-type query program.
- `VA551R`: Order type query program for accumulator type 2.

Subfile Handling and Query Logic

1. **Customer Search and Selection (`FL500R`, `RK500R`)**

* **Logic:** Both programs allow for searching customers based on specific criteria. `FL500R` facilitates searching for customer projects, while `RK500R` specifically queries customer information, filtering based on input criteria.

* **File:** `fkpspf` (Customer Project File), `rkunpfr` (Customer Info File)

* **Field:** `flkund` (Customer ID), `rkkund` (Customer ID)

* **Condition:** Customers are excluded from the selection if they do not match the search criteria (`b2stek` in `RK500R`).

2. **Department Records (`RA107R`)**

* **Logic:** `RA107R` deals primarily with the maintenance of departments. It allows searching and selecting departments for maintenance operations, including updating and deleting records.

* **File:** `ra07pfr` (Department File)

* **Field:** `ragkod` (Department Code)

* **Condition:** A department cannot be selected if its status or attributes do not match criteria set for valid department operations (e.g., active departments only).

3. **Info-Type Queries (`VA540R`)**

* **Logic:** `VA540R` is focused on querying info-types. It supports subfile management for displaying info-type records to allow user selection.

* **File:** `vinfpfr` (Info-Type File)

* **Field:** `vaityp` (Info Type ID), `vaitxt` (Info Type Text)

* **Condition:** Info-types are displayed as selectable only if they

fulfill the visibility conditions specified by the user inputs.

4. **Order Types (`VA551R`)**

* **Logic:** This program is responsible for querying available order types. Only order types matching certain characteristics (e.g., facings for billing) are displayed for selection.

* **File:** `votypfr` (Order Type File)

* **Field:** `vaotyp` (Order Type ID), `vaotxt` (Order Type Text)

* **Condition:** The program allows users to see only valid order types, considering specific business rules to exclude inactive or unsuitable types.

Inter-program Relationships

1. **Customer and Info-Type Queries**

* **Relationship:** `RK500R` indirectly interacts with `VA540R`, where customers selected may reference associated info-types when displaying or processing customer details.

2. **Department and Customer Queries**

* **Interaction:** `RA107R` may affect how `FL500R` and `RK500R` display records related to customer projects or customer-specific departments. For instance, if a customer is linked to a specific department, this linkage affects how queries filter based on department visibility.

3. **Aggregated Data Handling**

* **Shared Processing:** The subfile methodology used in `FL500R`, `RA107R`, `RK500R`, `VA540R`, and `VA551R` is similar, emphasizing subfile creation, display, and management using consistent variables such as `w_srrn`, `w_spge`, and `w_fcrn`.

Subprogram Calls Affecting Logic

1. **Customer Search Logic - External Calls (`RK500R`)**

* **Trigger:** `RK500R` calls the helper program `AS700R` during the search operation.

* **Logic:** This external call processes input search strings and returns adapted search parameters for refining customer queries.

* **Impact:** This makes the query process in `RK500R` more robust and effective, adjusting to variable search inputs.

2. **Info-Type Creation and Maintenance (`VA540R`)**

* **Trigger:** Calls to `RK500R` allow interaction where the selection of a customer can lead to adjustments in info-types related to that customer.

* **Logic:** Creates a dependency where customer selection needs direct integration with associated info-type records for maintenance or visibility.

3. **Order Types and Related Customer Actions (`VA551R`)**

* **Trigger:** Order types can be influenced by customer selections and vice-versa, especially in contexts where invoice characteristics need to

align with customer data.

* **Logic:** If a selected customer requires specific order types for an ongoing process, both programs might adjust visibility based on common fields like `w_firm`.

Overall, the system's design creates a cohesive workflow where querying, maintaining, and displaying entities like customers, departments, info-types, and order types are interlinked, ensuring that user interactions are logical and efficient.