Query Records and Query Resources

The **DBGetNewQuery** function converts the 'qrsc' resource in the query document into a **QueryRecord** in memory. The query definition function can then modify the **QueryRecord** before the application sends the query to the data server. This section defines the format of a 'qrsc' resource **Writing a Query Definition Function**, describes 'qdef' resources and query definition functions.

Query Resources

Each query document should contain a single 'qrsc' resource. Here is the structure of the 'qrsc' resource, in Rez format.

```
type 'qrsc' {
Integer;    // version
Integer;    // ID of 'qdef' resource
Integer;    // ID of 'STR#' resource that contains
            ddevName, host, user, password,
            connection string
Integer;    // current query

// array of IDs of 'wstr' resources that contain queries

Integer = $$CountOf(QueryArray);            // array size
wide array QueryArray{
    Integer;        // ID of 'wstr' resource
};

// array of resource types and IDs for other resources
   in the query document

Integer = $$CountOf(ResArray);              // array size
wide array ResArray{
    literal LongInt;                        // resource type
    Integer;        // resource ID
};
};
```

The first field in the 'qrsc' resource is the version number of the 'qrsc' format. For the **Data Access Manager** released with System 7.0, the version number is 0.

The second field is the resource ID of the 'qdef' resource containing the query definition function that the **Data Access Manager** is to call when it opens this 'qrsc' resource. Use an ID of 0 if there is no query definition function for this resource-that is, if the **Data Access Manager** should send the query in this resource to the data server without modifications.

The third field is the ID of an 'STR#' resource that contains five Pascal strings corresponding to some of the parameters used by the **DBInit** function. If the query definition function is going to prompt the user for the values of these parameters before entering them in the **QueryRecord**, they should be zero-length strings in the 'STR#' resource.

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The sixth field in the 'qrsc' resource is an array of ID numbers of the 'wstr' resources in the query document. The fifth field is the size of the array of 'wstr' IDs, and the fourth field is an index value indicating which element in the array of 'wstr' IDs represents the current query. (The array elements are numbered starting with 1.) The current query is the one actually sent to the data server. If the query document contains more than one 'wstr' resource, the query definition function can prompt the user to select the query to use and modify the current query field in the **QueryRecord** appropriately.

The eighth field in the 'qrsc' resource is an array listing the resource types and IDs of all the resources in the query document other than the standard resources included in all query documents. The seventh field is the size of this array. The resources listed in this final array are those used by the query definition function. This list should include resources embedded in other resources, such as a 'PICT' resource that is included in a 'DITL' resource.

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