

Glossary

Alias — the unique nickname R&R assigns to the master or related data table to identify it within the report format.

Alignment options — user-controlled presentation of either label or field items for left justification, right justification, centering, or word wrap.

Alphanumeric — a combination of letters, numbers, symbols and graphical characters producable by typing at the computer keyboard. (See also: **character field**)

AND — connects two query elements or condition statements to create a logical expression where both elements or conditions must be true for the combined statement to be true.

Archive table — a data table that holds inactive transaction (event) records and does not routinely undergo updates. Used to store data that is used infrequently, but may be subject to reporting, and consolidation with a similar, active **event table**.

Ascending sort — the process of arranging records in the table from lowest to highest.

Attribute — one element of an item's appearance; some combination of boldface, underlining, italic, or none of the above.

Audit reporting — a form of administrative reporting in which exceptions to expected results or entries are identified, most likely for corrective action. Also crucial to determining situation which did *not* occur, but which were expected.

Audit trail (table) — a data table that records changes made to records in critical tables within a database application program. Items recorded usually include the table and field changed, old **field entry**, new field entry, date and time of the change, and the user who made the change.

Bachelor record — a record in the originating table of a table relation that finds no records in the related table that share the linking field's value.

Band — a section of a report with positioning and behavior specific to that section. Examples: page header, body, summary.

Band area — the portion of the R&R program screen that indicates to which band each line of the report format belongs.

Banded report — a report category that may be defined in sections and draws key portions of its content from data tables.

Basis field — a data field from the **composite database** that defines a sorting or grouping level, or instructs the software to generate a total field from the values contained in the data field.

Blank Report — a method of report format creation where the user specifies only the data table to be used. Offered as one of several options when the user chooses to create a new report format.

Blank failure action — the instruction given to R&R when a join to a related table does not find any records. R&R will append the data structure of the **related table** to the **originating table** but with null values for all **field entries**.

Calculated field — a **derived field** appended to the **Composite database**; specified as a constant, or as a formula using a combination of: fields from the tables, constants, total fields, other calculated fields.

Cartesian product — a method of joining table in which each record in the first table is joined with every record in the second table. In most circumstances, the result set is limited to just those records where selected field values in the first table match designated field values from the second. This is the method employed by SQL **report writers**, including R&R **SQL**.

Case sensitivity — determines if, in **character strings**, the computer will recognize the difference between capital and small letters.

Center alignment icon — chosen from the formatting toolbar, this icon will change the alignment of all selected items to print centered on the midpoint of the item's area.

Character field — a field in a database that contains a combination of letters, digits, symbols and punctuation.

Chart (graphic) item — an element of a report in which R&R will derive a number of values from the **composite database** and present that information for the selected band in a graphic format. These formats can include a pie chart, bar chart, area graph or line graph, depending on the type of data set specified.

Coded field — a character type field in a data table where the field's value is limited to a pre-defined or user-defined set of possibilities.

Command icon — a graphic representation of a command that acts as a short-cut to selecting the command from the pull-down menu. Examples: cut/copy/paste.

Composite database — all the fields, stored and derived, in the master and related data tables, for records selected via the query.

Comparison — the type of test R&R will perform against each record in one **query element**.

Comparison item — the value or values in each query element against which the query element's field values will be compared.

Compound key expression — an character index key whose formula consists of multiple fields from the subject table in a single string.

Composite database relation — the result to the composite database of joining two tables' records to create an amalgum of the two, based on the defined method of linking the controlling table to the related table.

Composite database shape — the structure of the relationship between the master table and the composite database; described by how many records each master table record generates in the result set as driven by any **composite database relations**.

Conditional — a total field that will only increment for records in the **composite database** that pass a set of restrictions.

Constant — a calculated field expression that creates the same field entry for all records in the **composite database**.

Create new (format) icon — an R&R (and Windows) standard short-cut icon which, when clicked, leads to the creation of a new report format. In nearly all Windows programs, the create new (document/file/format) icon is represented with a blank sheet of paper with a folded corner.

Cross tabular report — a report style where the x-axis variables represent subsets within the y-axis variables. **Grouping levels** are y-axis values and **conditional totals** are x-axis values.

Data dictionary — a listing of all of the data tables, and the fields in them, for an application's database. Usually includes the tables' names, descriptions, and indexes; fields' names, descriptions, types, sizes and other information are included as well.

Data table — a set of rows and columns of information that, taken together, represent a series of events, a set of entities, or a collection of cross-references for abbreviations or codes.

Data type — a classification system for data fields based on the kind of information stored in the field. See also **character field**, **numeric field**, **date field**, **logical field**, **category field**.

Data field — a field in a database that contains either a numeric value or a string of characters and/or digits that represent a specific month, day, and year on the calendar. See also: **month number**, **day number**, **year number**

Day number — the numeric value for the day of the month specified by the date field entry.

Default settings — specified in a dialog box, these control the starting report margins, fonts for report items, ruler and grid spacing, and other layout parameters. Each or all of these settings may be overridden for any report.

Derived field — a data field in the composite database that is not stored in one of the data tables, but is based on one or more fields in the composite database.

Descending sort — the process of arranging records in the table from lowest to highest.

Directory — a “drawer” in the computer’s filing system in which files (documents, data fields, and report libraries) are stored.

Ending scope — the last record in the master table, based on the **master index** or **record number order**, that will be read to derive the composite database. See also: **scope**, **starting scope**

Entity table — a data table where each record identifies someone or something.

Event table — a data table where each record represents a transaction or occurrence.

Failure action — the instruction given to R&R when it is unable to **join** a **originating table**’s record to any of the **related table**’s record. See also: **blank failure action**, **skip failure action**, **terminate failure action**

Field — a column of a data table holding the same type of information for each record.

Field entry — the information stored in a given record for the specified column of the table.

Field item — a piece of information entered at a fixed location of a report format to reproduce a piece of information from a data table or a derived variable. See also: **calculated field**, **total field**

Field list — a box of field names found in many dialog boxes. The list includes all data fields in the **composite database** applicable to the function of the dialog box in which the list appears.

Filtering — the process of selecting applicable records from the data tables to build the composite database from which the report will be built. See also: **query**

Font — See **typeface**

Font information file — a coded computer file containing descriptions of printer capabilities, resident fonts, and control codes for use with MS-DOS version report formats. The MS-DOS file names always end with “.FIF” and R&R supplies them on the original program disks for most major printer brands. Install them using the R&R program installation routine. FIF’s are not necessary in R&R Windows versions because Windows printer definitions already include font information.

Formatting icon — a graphic representation of an action that will change the appearance of an item in the report format. Example: bold/italic/underline

Full-page view — presentation of the entire page image in R&R’s print preview window.

Group footer band — a section of the report layout that will print each time R&R reaches the last record with the same value for the field that is the basis for the grouping level.

Group header band — a section of the report layout that will print each time R&R finds a new value for the field that is the basis for the grouping level.

Group statistic — the process of determining a measurement for a particular field in the table for a group of records. Measurements include record unit count, total value, maximum/minimum value, average value, standard deviation, variance etc.

Group total — See **group statistic**

Grouping — the process of making piles of records to separate the report into section and to gather statistics about the set of records.

Grouping level — a unit of the grouping specification defined by a grouping **basis field**.

Grouping specification — the user-defined control on the sets, or piles of records in the **composite database**.

Greeking — the presentation of information on the computer screen in a small size so as to show only the position of that information but not the content.

History table — a category of event table that stores changes in changeable elements of a **entity table**, or stores completed but regularly used records in an **event table**. See also: **archive table**, **audit trail**.

Horizontal ruler — a measuring grid from left to right representing the position in the report format that corresponds to the location on the printed page.

Instant report — a method of report format creation by R&R to present all the data in the selected table in the columnar format. Offered as one of several options when the user chooses to create a new report format.

Index file — a file that cross-references a data table file by virtue of an index value and the associated record number for that record in the data table.

Index value — the field entry that resides in the cross-reference column of the index file. See also: **key**

Interval data — when the value of a **field entry** represents a values that define ranked brackets, where the end-points of those brackets are **ratio data** values. See also: **ordinal data**, **nominal data**

Item — any individual piece of a report format. See also: **label item**, **field item**

Join — the process of appending the fields from a record in one table with the fields from another table.

Key (expression) — the field or formula that the relating field must match to link with the record or records in the related table. See also: **index value**

Key date — date field in an event table used to uniquely identify an occurrence as defined by the table. Often used in the key expression for an index.

label item — alphanumeric constant entered at a fixed location of a report format to identify other entries or provide additional information for the report user.

Landscape orientation — a printed report where the sheet of paper has the long dimension set left-to-right and the short dimension top-to-bottom.

Launch options dialog box — the box display when R&R is executed from the Windows program manager. The user can select to open an existing report or create a new report using one of several creation alternatives.

Layout — a sketch or picture that represents the relative position of items in a report, often drawn or imagined prior to creating the report.

Layout area — region of the R&R program window, displayed as a grid with report bands on the vertical axis and a measured ruler on the horizontal axis. Text labels, graphics and field items are placed in this grid at positions that R&R will reproduce when the report is printed.

Layout area horizontal center — the position on the horizontal ruler that corresponds to the horizontal center of the printed page. This is a function of the paper size, page orientation (portrait or landscape), and left and right margins.

Left alignment icon — chosen from the formatting toolbar, this icon will change the alignment of all selected items to print from the left side of the item's area.

Library — a file created by R&R to hold one or more report formats.

Line compression — the process R&R applies to record or group header/footer lines that will eliminate a line that contains only character field items with no field entry.

Line logic — conditions placed on a band line that determines whether R&R will present the line in the printed report or not.

Linked record — the combined record in the composite database that contains the entries for all fields in both tables.

Linked table — the table in the relation in which the originating table finds records with common information.

Logical field — a field in a database that contains either a TRUE or FALSE value.

Logical string — the syntax necessary to specify either an affirmative or negative state: TRUE, FALSE, YES, NO, .T., .F.

Master index — an **index file** that R&R will use to determine the order in which the program will: 1) read the records in the master table, 2) define the master file scope, and 3) print the records in lieu of a sort specification.

Master table — the data table that will be the basis for producing the report and generating links to other data tables. A master table selection is required to produce a report.

Memo field — a method by which some databases store extensive free text related to a record, often with <carriage return> entries and paragraphs.

Message area — the region in the R&R program window that provides context-sensitive information and instructions. Also shows the cursor position within the report format area.

Month number — the numeric value associated with each month of the year for a date field entry, where January equals 1, February equals 2, March equals 3 etc.

Multi-scan relation — a three (or more) table join where each record in the controlling table produces a number of records in the composite database equal to the sum of records found across the **one-to-many** (scan) **relations** to the other two (or more) tables.

Multiple index file — a file associated with a data table that contains one or more table indexes, each identified by a **tag** name. This file works like individual single index files combined under a single file name on the computer.

Natural relation — the usual context in which two tables would be joined; or how one would expect to find in common between the tables. Example: a mother could have several children, but each child has only one mother.

Nominal data — when the value of a **field entry** represents ‘name only’ in relation to other potential values for field entries. See also: **ordinal data, interval data, ratio data**

Normal view — presentation of the page image at close to actual print size in R&R’s print preview window.

Numeric field — a field in a database that contains a real number (one that falls on the number line) and is, therefore, subject to all arithmetic and other mathematical operators and functions.

One-to-many relation — a link between two tables where each record in the originating table may find more than one record in the **linked table**.

One-to-maybe relation — a link between two tables where each record in the originating table may *not* find a record in the **linked table** and the originating table record is not in the composite database.

One-to-one relation — a link between two tables where each record in the originating table may find more than one record in the **linked table**.

Open (format) icon — an R&R (and Windows) standard short-cut icon which, when clicked, leads to the report format selection dialog box. In nearly all Windows programs, the open (document/file/format) icon is represented with a manila folder opening (arrow).

OR — connects two query elements or condition statements to create a logical expression where if either element or condition is true, the combined statement will true.

Ordinal data — when the value of a **field entry** represents a ranked valued in relation to other potential values for field entries, in addition to its **nominal data** value. See also: **interval data**, **ratio data**

Originating table — the table in the relation that holds the field entry that R&R will use to match information in the **linked table**. Sometimes also referred to as the ‘controlling table’.

Parenthesis (also ‘paren’) — punctuation logical or mathematical formulas and **query statements** to combine one or more elements together to form a new unit.

Point — a publishing measurement for the average height of printed characters. *72 points* equals one inch.

Portrait orientation — a printed report where the sheet of paper has the long dimension set top-to-bottom and the short dimension left-to-right.

Pre-processed total — a total field in which the value R&R calculates for that field is assigned to every record in the total level. See also: **running total**

Print attributes — the typeface, type size, alignment, and font assigned to items in the report layout.

Properties — the appearance parameters assigned to an item, or logical and size parameters assigned to a band line. For an **item** these include alignment, font, trim etc. For band lines these include logic, height, table group etc.

Purpose — the reason the report was created; that is, to do something, to say something, or to learn something.

Purpose statement — a sentence or two that summarizes how the report will be used to take action, to communicate something to the reader, or to learn something.

Query — R&R term for selecting records from the data tables to build the composite database. See also: **filtering**

Query element — the smallest unit of a **query statement**, composed of a field, **comparison** (test type) and **comparison item**.

Query statement — a logic equation of query elements, combined with logical AND/OR and parenthesis, that determines whether a record is included in the composite database or not.

Ratio data — when the value of a **field entry** represents a numeric value which in relation to other potential values for field entries, that relationship also has a numeric value. See also: **interval data**, **ordinal data**, **nominal data**.

Record — a row of a data table holding information for each field.

Record number — the sequential position of a record within the data table, with record number one being the first record as stored in a file. Only applies to certain types of databases, including all xBase tables.

Record number order — the method R&R follows in reading records in the **master table** while building the composite database.

Reference table — a data table where each record assigns a description and other characteristics to coded fields in either **entity** or **event tables**.

Related table — the data table in a **join** to which the **originating table**'s records are matched based on common values between the two tables.

Related index — the cross-reference mechanism used to locate records in the **related table** during a **join**, based on the values the related table shares with the **originating table**. Only used in some types of databases, including xBase tables.

Related tables icon — the command line icon that executes the table relations dialog box.

Relating field — a data field from the originating table that holds information that R&R will use to find matching records in the linked table.

Relation — a common piece of information between two data tables that enables them to be joined.

Report — an extraction of information from specially tables arranged to serve the purposes of the user.

Report format — a “document” defined in a report writer consisting of the definition and positioning of items in report bands and other specifications.

Report library — See **library**

Report writer — a set of tools to extract information from tables.

Report Wizards — a series of interactive dialog boxes that guide the R&R user through the process of creating a report format. Offered as one of several options when the user chooses to create a new report format.

Reset basis — the point in the record grouping at which R&R will reset a total field’s value to zero and start calculating the total field again.

Result set — See **composite database**

Right alignment icon — chosen from the formatting toolbar, this icon will change the alignment of all selected items to print from the right side of the item’s area.

Running total — a total field in which R&R calculates the value as it passes each record or record group. See also: **pre-processed total**

Scope — the specification for a portion of the **master table** used to generate a report, instead of the all of its records. See also: **master index**

Skip failure action — the instruction given to R&R when a join to a related table does not find any records. R&R will the **originating table** record from the **composite database**.

SQL — short for ‘Structured Query Language’, a programming language applicable to a wide range for databases and the basis for building the composite database in R&R SQL editions, including Arpeggio.

Starting scope — the first record in the master table, based on the **master index** or **record number order**, that will be read to derive the composite database. See also: **scope**, **ending scope**

Sort specification — the user-defined control on the order of the records in the **composite database**.

Sorting level — a unit of the sort specification defined by a **sort basis field** and an sorting order.

System date — the calendar date stored in the computer and used for reference throughout applications programs. R&R's DATE() function returns a **date field** with a value equal to this date.

Table — see: **data table**

Tag — the identifying name for an specific index within a **multiple index file**.

Template — the skeleton of a report format that provides a **jump** start on the creation of a new report format.

Template (report) — a method of creating a new report format in which the user selects a data table and pre-defined page dimension. Offered as one of several options when the user chooses to create a new report format. Not recommended for use.

Terminate failure action — the instruction given to R&R when a join to a related table does not find any records. R&R will suspending processing the composite database and inform the system operator of the failure to join. Only available in R&R xBase Editions.

Text data export — a method of producing the report to a computer file with the contents and text form, like a **text export**, but for only for **field items** in the selected band and with distinct separation between the fields in the band without respect to those field's placement in the **layout area**.

Text export — a method of producing the report to a computer file with the contents and text form, line by line, but without any **print attributes** or paragraph formatting.

Total field — a **derived field** statistic (count, sum average etc.) based on another data field in the composite database.

Total field icon — chosen from the standard toolbar, this icon is represented with the greek letter sigma.

Trim assignment — item characteristics that determines if it will print adjacent to the item on its left (or right for R&R MS-DOS versions).

Typeface — the shape of the characters; designed by professional printers and publishers to maintain a consistent appearance. See also: **font**.

Vertical ruler — a measuring grid for each report band indicating the top to bottom position for lines in the band as they will appear on the printed page.

Xbase export — a method of producing the report to a computer file with the **field items** of the selected band placed in a table for database programs that read this standard data file storage method. Field names for the exported table are the ones used for the field item in R&R.

Word wrap alignment — a presentation for a very long **character field** or **memo field** in which R&R will continue the field contents onto the next line of the printed report, without splitting the text within a word.

Work area — the portion of R&R program screen devoted to the placement of report items at specified positions of the grid.

Worksheet export — a method of producing the report to a computer file with the **field items** of the selected band placed in columns for loading to a spreadsheet program.

Year number — the numeric value for the calendar year specified in a date field entry.

Zoom box — MS-DOS print preview region that will enlarge or shrink the portion of the page image underneath.

Zoom view — presentation of the page image at larger than actual print size in R&R's print preview window.

Additional Glossary Entries