

The WITH clause is used to perform specific control operations in a query. The syntax of the WITH clause is shown below:

The following list contains the select\_options that are part of the **SELECT** command. Other control options that pertain to specific commands are documented within each command.


Option	Description
APPEND	Attaches the results of a query to the end of an existing ASCII extract file or custom table.
ARCHIVE	Select from current instance and any archive instances.
CHECK	Checks for invalid or unacceptable data and corrects it by setting the data in a character field to blank, setting the data in a numeric field to zero, or treating an invalid pack digit in a packed field as zero.
CPC	Generates the print file, <file>.cpc, automatically for the SET SPOOL command. CPC is the default.
NOCP	Skips the creation of the <file>.cpc file because the SET SPOOL is not used.
COMPRESS	Prints in compressed format.
NOCOMPRESS	Prints in normal noncompressed format.
CONSTRAINT(column_name,constraint_string)	Used in conjunction with SELECT INTO TABLE table_name and ORGANIZATION = "T" or ORGANIZATION = "P" control option to create a constraint on the custom RDBMS table. Constraint_String must be embedded in quotation characters and contain one or more of the following options: [NOT]NULL - column can or cannot contain nulls PRIMARY KEY - column is the primary key for the table UNIQUE - column must contain unique values CHECK(condition) - defines a condition on the row that must be true or unknown due to a null. The condition can not refer to other tables or other rows. Additional restrictions on the condition will be imposed by the RDBMS.
CONVERT [= fdl_name]	Converts a file using the File Definition Language (FDL) when the SELECT INTO TABLE option is used. If you do not specify fdl_name, Discern Explorer uses the file table_name.fdl in the CCLUSERDIR as the default. Only valid in AXP environments.
COUNTER	Displays the query counter. COUNTER is the default.
NOCOUNTER	Does not display the query counter.
CRT	Sends output to a dedicated printer attached directly to the terminal from which the query is being run.
CURDIO	Send DIO output into memory which is referenced by CURDIO variable.

DIO = dio_device	<p>Uses DIO for device-independent output (for example, PostScript), where dio_device is the name or number of the printer model to which the DIO output is directed. Required in programs that use DIO commands. Valid DIO devices are listed below.</p> <p>0 "NONE"  1 "VT220"  2 "TI880"  3 "P600XQ"  4 "LG01600"  5 "LZR2620"  6 "TALARIS"  7 "TALQUIC"  8 "POSTSCRIPT"  9 "HPLASERJET"  10 "VFC"  11 "XMDRV"  12 "LN03"  13 "GENDRV"  14 "X3700"  15 "LA210"  16 "ZBR130"  17 "CITHOMP"  18 "INTERMEC3000"  19 "INTERMEC8625"  20 "ZBR60"  21 "TI880W"  22 "TI8900"  23 "LA324"  24 "ZBR220"  25 "HPLJETFORM"  26 "PS_XMDRV"  27 "INTERMEC8636"  28 "LG06"  29 "PS_DUPLEX"  30 "LA324_BC"  31 "IMEC3000IBM"  32 "INTERMEC3400"  33 "EPSONA"  34 "EPSONB"  35 "PRINTRONIX"  36 "RTE"  37 "LG09"  38 "PDF_REPORTRTL"*  39 "ZPL_203DPI"*  40 "IPL_203DPI"*  41 "POSTSCRIPT_REPORTRTL"*  42 "ZPL_300DPI"  43 "ZPL_600DPI"  (*) These drivers write through the Discern Report API.</p>
DIODUPLEX = duplex_option	<p>Identifies an option for use with a DIO device. The following options are available:</p> <p>EDGE - Prints on both sides of the paper, from edge to edge (as in a book).  SIMPLE - Prints on one side of the paper only.  TUMBLE - Prints on both sides of the paper, end over end (as in a flip chart).</p> <p>For DIO device 29, PostScript with duplex support is available (DIODUPLEX = EDGE and DIODUPLEX = TUMBLE).</p>
DIOMARGIN = margin	Sets the margin to the number of points specified if you are using DIO device 29 or DIO device 8, where 72 points are equivalent to one inch. To print a half-inch margin, specify 36 points.
DONTCARE = range	If you are joining to another table and the table to which you are joining does not match on a record, Discern Explorer continues processing. The range is the name or alias of the table to which you are joining. The table name can be the alias or the name of the table.
DONTEXIST	Displays records not on dependent tables only if you are joining to another table and a record does not exist on the table to which you are joining.
DUPREPORT = integer	Duplicates each page of the report by the specified integer. For example, if you indicate WITH DUPREPORT = 5, page 1 prints 5 times, then page 2 prints 5 times, and so on.

EXPAND = 1/0	Allows the EXPAND() function to pass an IN clause in the query to the RDBMS or use a global RDBMS temp table instead of the IN clause. EXPAND = 0 is the default and will create an IN clause. EXPAND = 1 will insert the values from the record member list to the global RDBMS temp table and then perform an implicit join to that temp table.
FILESORT [=integer]	Sorts on the indexed portion of RMS files only, where integer represents the number of work files to be included in the sort; the default is 2. On sorts that involve a large number of records the FILESORT option is more efficient, using less disk space and taking less time to run than the default, RECSORT. To determine whether a file is large, multiply the number of records in the file by the record length and then divide by 512. If the result is less than 20,000 use RECSORT. If the result is greater than 20,000, use FILESORT.
FORMAT (DATE, <display_option>)	Overrides the default display for date and time fields if no format option is applied. For example, format(date,";;q"). See <a href="#">Display Options</a> for more information.
FORMAT (TIME, <display_option>)	Overrides the default display for date and time fields if no format option is applied. For example, format(time,"hh:mm;;s"). See <a href="#">Display Options</a> for more information.
FORMAT = record_format	Identifies the format of a file created using the INTO clause. Valid record formats are listed below: <ul style="list-style-type: none"> <li>• BINARY - Binary fixed record format (FIXED on VMS and Unix but binary fixed for win32). Added in version 8.7.0 of Discern Explorer.</li> <li>• CRSTREAM - Stream record format with carriage return. VMS only.</li> <li>• FIXED - All records are the same length.</li> <li>• LFSTREAM - Stream record format with line feed. VMS only.</li> <li>• PCFORMAT - Comma-separated output with text embedded in quotation marks.</li> <li>• STREAM - Stream record format with carriage return and line feed. VMS or in conjunction with PCFORMAT(quote_char, separator_char [,trim_option]).</li> <li>• UNDEFINED - Undefined record format, no carriage return or line feed. VMS only.</li> <li>• VARIABLE - The length varies from record to record.</li> <li>• XUNDEFINED - Extended undefined record format, no carriage return or line feed. VMS only.</li> </ul>
NOFORMAT	Returns data unformatted.
FORMFEED = formfeed_option	Determines how form feeds are used. The default is POST. Valid options are listed below: NONE - No form feed is used; blank line is used at the end of the page instead. PRE - Places the form feed at the beginning of the page. POST - Places the form feed at the end of the page. This is the default for reports.
FORMS	Displays results using the Displayer.
NOFORMS	Scrolls the results to the terminal.
FORUPDATE(range[{,range}])	Selects the rows from the tables referred to as range with a locked condition. Locked rows cannot be modified by another process or selected with a locked condition by another process. Rows remain in a locked state until a rollback or commit is executed. If the rows cannot be locked, the select completes.
FORUPDATEWAIT(range[{,range}])	Selects the rows from the tables referred to as range with a locked condition. Locked rows cannot be modified by another process or selected with a locked condition by another process. Rows remain in a locked state until a rollback or commit is executed. If the rows cannot be locked the select waits until they can be locked to complete. Generally, ForUpdateWait should not be used because it can cause the process to hang while attempting to get the lock.
HEADING	Prints column headings for queries that do not use report writer sections.
NOHEADING	Does not print column headings.
INDEX (column_name[{,column_name}])	Used in conjunction with SELECT INTO TABLE table_name and ORGANIZATION = "T" or ORGANIZATION = "P" control option to create an index on the custom RDBMS table. The INDEX control option can be used more than once in a single WITH clause to create multiple indexes on the table. If multiple column_names are used, the index will be a composite index made up of those columns.
INDEXUNIQUE (column_name[{,column_name}])	Used in conjunction with SELECT INTO TABLE table_name and ORGANIZATION = "T" or ORGANIZATION = "P" control option to create a unique index on the custom RDBMS table. If multiple column_names are used the index will be a composite index made up of those columns.
LANDSCAPE	Prints in landscape mode.
NOLANDSCAPE	Prints in portrait mode.
MAXCOL = integer	Sets the maximum number of columns per report page. The default is 132.
MAXQUAL (table_name,integer)	Limits the number of records to qualify per join on RMS queries. On relational tables, MAXQUAL limits the total number of rows to display.

MAXREAD (table_name,integer)	Limits the number of records read per table and is used only when you are joining two or more tables. The table_name can be the name or alias of the table you are reading. The integer is the number of matches that represents the maximum number of physical records to be processed.
MAXREC = integer	Limits the total number of rows that are read or displayed.
MAXROW = integer	Sets the maximum number of rows per report page. The default is 60.
MEMSORT	Forces the query to use a memory sort regardless of the size of the record length. Refer to FILESORT
MINE	Displays output on a terminal.
NULLREPORT	Invokes the HEAD REPORT, HEAD PAGE, FOOT PAGE, and FOOT REPORT sections even if no records qualified for the report. The DETAIL and HEAD/FOOT group_expression sections are not invoked with this option.
ORAHINT(hint{,hint})	Send one or more hints to Oracle for rule optimizer. The hint is surrounded by quotes.
ORAHINTCBO(hint{,hint})	Send one or more hints to Oracle for cost optimizer. The hint is surrounded by quotes.
ORGANIZATION = ["I" "R" "S" "W" "T" "P"]	<p>When the INTO TABLE table_name clause is used you can identify how the table you are creating is organized. Valid values are "I" (indexed), "R" (relative), "S" (sequential), "W" (work), "T" (tempRDB), or "P" (PermRDB). Using "I", "R", or "S" creates a Discern Explorer table definition and a file in the default directory. The table definition points to the file and allows it to be treated like a table. Each field or expression in the selection list will be written to the file and treated as a column in the custom table.</p> <p>Relative is similar to sequential except it allows writing to any record, and is used only if you want to allow updates on a sequential file type. Indexed files allow total access and are more efficient because you can specify multiple indexes.</p> <p>Using "W" creates a Discern Explorer working storage table where the table data is written to memory instead of to a file.</p> <p>Using "T" will create a Discern Explorer table definition and a temporary RDBMS table. The table definition will be shared across all sessions but the table data will be unique to the session.</p> <p>Using "P" will create a Discern Explorer table definition and a permanent RDBMS table. The table definition and data will be shared across all sessions.</p> <p>Using "T" or "P" does not write data to the table. Separate INSERT, UPDATE, and DELETE commands will need to be executed to manage the data in the RDBMS table.</p> <p>Extreme caution should be taken when using SELECT INTO TABLE table_name to prevent overwriting the table definition of an existing table. When creating Discern Explorer custom tables, the table_name should begin with a number. When creating RDBMS custom tables the table name must begin with "cust_". Care must be taken when creating a custom table name to prevent accidentally overwriting the table definition of a Millennium production table. Overwriting the table definition for a RDBMS table will drop the table from the RDBMS. All data on the table will be lost.</p>
OWNER = owner_name	Used in conjunction with SELECT INTO TABLE table_name and ORGANIZATION = "T" or ORGANIZATION = "P" control option to specify the owner of the custom RDBMS table.
OUTERJOIN = table_name	Displays the records in table_name even if they are not present on tables to which you are joining. You also can use OUTERJOIN with the DONTEXIST option to create new records on the table to which you are joining when that table does not originally have a record to join to. The table_name can be the name or alias of the table that you want to read first before going to the joined table.

PCFORMAT (quote_char, separator_char [,trim_option])	<p>Used when creating output files to flex the character that separates columns, the character that surrounds textual data, and whether columns will be fixed width or variable width.</p> <p>Quote_char - Character used at the beginning and end of each character column.  Separator_char - Character used to delimit each column.  Trim_option - 1 (one) trim trailing spaces from columns to create variable width columns, 0 (zero) retain trailing spaces to create fixed width columns. The default is 0. If 1 is used, the format = stream control option must also be used.</p> <p>The default is to separate columns with a comma and embed text columns in quotation marks. Using the following, columns are separated by the   (pipe) character, textual columns begin and end with the ^ (caret) character, and columns are a fixed width:</p> <p>.....</p> <p>Using the following, columns are separated by the , (comma) character, textual columns begin and end with the " (quote) character, and columns are variable width with trailing spaces trimmed:</p> <p>.....</p>
PIVOT (<aggregate> where<qualification>,sqltype(datatype(<column_name>,<type>)){,datatype()}))	<p>PIVOT is only valid in the WITH clause of a nested select used to create an inline table.</p> <p>PIVOT requires Discern Explorer to be running in an environment using Oracle version 11 or higher.</p> <p>PIVOT is used to create cross tab query output allowing a column to be turned into one or more new columns. This allows a name value pair to be flattened into multiple columns per row. The datatype() function needs to set the column name and column type for each column returned in the nested select using the pivot.</p> <p>Aggregate - an aggregate function  Qualification - a restriction on known values. One column is created in the output for each value in the qualification  Column_name - a name to use as the column heading  Type - the data type to be used for the column</p> <p>The sqltype() clause must contain an entry for each item in the selection list plus items for each of the values in the pivoted column.</p> <p>Example:</p> <p>.....</p> <p>The output from the above query contains three columns: ID, Cost20_99, and Cost5. Using the Pivot control option on the inner select causes the values from the Cost column to be broken into two columns. One column, Cost20_99, will contain a count of the rows where Cost is equal to 20.99. The second column, Cost5 will contain a count of the rows where Cost is equal to 5.0.</p>
PRESERVE	Used in conjunction with SELECT INTO TABLE table_name and ORGANIZATION = "T" control option to create a temporary RDBMS table to preserve the rows of the table until the end of the session.
NOPRESERVE	Used in conjunction with SELECT INTO TABLE table_name and ORGANIZATION = "T" control option to create a temporary RDBMS table to automatically delete the rows from the table at the end of the transaction. A commit or rollback will end the transaction. When using NOPRESERVE, commit and rollback will have the same effect.

PRINT = printer_setup_module	<p>Enables specifying a printer setup module. Printer set up modules are small data files that contain printer specific commands that put the printer into a known state. These files are inserted into the data stream going to the printer ahead of the actual print job. The files reside in the printer library that is used by the printer queue.</p> <ul style="list-style-type: none"> <li>To see the library in use: <ul style="list-style-type: none"> <li>On AXP perform the command "show que/full/all &lt;quenames&gt;" and look for the "LIBRARY=&lt;library name&gt;" option in the listing.</li> <li>On AIX and HP-UX, go to the \$cer_forms directory and look for the entry for the queue in queue.def. The library is listed in the "library = &lt;library name&gt;" field.)</li> </ul> </li> <li>To determine the modules available in the library: <ul style="list-style-type: none"> <li>On AXP perform the command "LIBRARY/LIST SYSS\$LIBRARY:&lt;library name&gt;.TLB".</li> <li>On AIX and HP-UX, start from the \$cer_forms directory and perform the command "cd ./&lt;library name&gt;" which will take you to the library sub-directory. Next, perform an "ls" command to see the available modules.</li> </ul> </li> <li>Use the names of the modules in the "PRINT =" option for your "WITH" clause". The modules allow you to select printer languages, print orientation, paper trays, duplexing, and so on. Some common module names are: "tray1", "tray2", "tray3", "tray4", "tray5", "pstray1", "pstray2", "pstray3", "pstray4", "pstray5", "a4tray", "lettertray", "legaltray", "ledgertray", "custom1", "custom2", "custom3", "custom4", and "custom5"</li> </ul> <div style="background-color: #e6f2ff; padding: 10px; margin-top: 10px;"> <p> <b>Note</b> Module names are case sensitive on AIX and HP-UX; make sure they are in lower case.</p> </div>
RDBARRAYFETCH = fetchnum	Restrict the buffer size for an RDBMS array fetch.
RDBBINDCONS	Use literals instead of bind variables in nested queries.
NORDBBINDCONS	Use bind variables in nested queries. NORDBBINDCONS is the default.
RDBPLAN	Traces the RDB query path. Include and execute the program and run CCLORAPLAN to view the query path and indexes used.
RDBCBOPLUSZERO	This option has no effect on the rule optimizer and is only recognized for the cost optimizer. By default when the cost optimizer is used, +0 in the WHERE clause will not be retained in the query that is passed to the RDBMS. When the RDBCBOPLUSZERO control option is used, the +0 will be retained in the query that is passed to the RDBMS.
NORDBCBOPLUSZERO	This option has no effect on the rule optimizer and is only recognized for the cost optimizer. When the NORDBCBOPLUSZERO control option is used, a +0 in the WHERE clause will not be retained in the query that is passed to the RDBMS.
RDBSMISC = rdbsmisc	Introduced in Discern Explorer 8.6.5. Used in conjunction with SELECT INTO TABLE table_name and ORGANIZATION = "P" or ORGANIZATION = "T" control option to create a clause in the RDB create table command that is not provided by an existing control option. For example: RDBSMISC="STORAGE(INITIAL 6144 NEXT 6144)"
RDBRANGE	Use the FROM clause of the Discern Explorer query instead of the <a href="#">PLAN/JOIN</a> clause to determine the order of the FROM clause in the query that is sent to the RDBMS. Used in conjunction with the <a href="#">SELECT</a> , <a href="#">UPDATE</a> , <a href="#">INSERT</a> , and <a href="#">DELETE</a> commands.
RECSORT	When reading smaller RMS files you should use the record sort option because it is more efficient, uses less disk space, and runs faster than the FILESORT option. The default is RECSORT. You should multiply the number of records in a file by the record length and then divide by 512 to determine whether a file is large or small. If the result is less than 20,000, use RECSORT, and if the result is greater than 20,000, use FILESORT.
SEPARATOR = character	Separates <a href="#">SELECT</a> columns with the character specified.
SIZE = integer	Sets the length of the record to be written for variable length files or barcode labels; the integer is the length to which the record should be modified. Maximum record length is the default size.
SKIPBEDROCK = 0/1	In a Bedrock domain, Select/Insert/Update/Delete commands on tables that have the BR_CLIENT_ID column implicitly add the BR_CLIENT_ID = CURCLIENTID qualification to the Where clause. SKIPBEDROCK = 0 is the default and uses the implicit qualification. SKIPBEDROCK = 1 disables the implicit qualification. RDB commands do not use this implicit qualification.

SKIPNETDOMAIN = 0/1	In a Network domain, Select/Insert/Update/Delete commands on tables that have the DOMAIN_NETWORK_ID column implicitly add the DOMAIN_NETWORK_ID = CURNETDOMAINID qualification to the Where clause. SKIPNETDOMAIN = 0 is the default and uses the implicit qualification. SKIPNETDOMAIN = 1 disables the implicit qualification. RDB commands do not use this implicit qualification.
SKIPREPORT = 0/1	Allows executing the SELECT command without executing the report sections. 0 - Executes the report sections. 1- Skips the report sections.
SQLTYPE(type,{type})	Used in the With clause of an inline select table to map the SQL datatype to the Discern Explorer datatype. If the SQLTYPE option is specified, it must match the number of columns in the select target list. Valid types are I4, F8, C<string_len>, DQ8. If the SQLTYPE is omitted, Discern Explorer uses the following to implicitly derive the datatype for each column: integer;            I4 real                F8 string              C<string_len> cnvtint()           I4 cnvtreal()          F8 cnvtdatetime()     DQ8 cnvtdatetimeutc() DQ8 substring()        C<substring_len> other                error
STATUS( )	Capture the status of each operation while processing through a record structure list on an insert, update, or delete.
SYNONYM = synonym_name	Used in conjunction with SELECT INTO TABLE table_name and ORGANIZATION = "T" or ORGANIZATION = "P" control option to create a public synonym for the custom RDBMS table.
TABLESPACE	Introduced in Discern Explorer 8.6.5. Used in conjunction with SELECT INTO TABLE table_name and ORGANIZATION = "P" control option to specify the tablespace for the custom table.
TEST	Parses and compiles the program, but does not execute it.
TIME = integer	Sets the number of seconds to process for testing.
VERSION	Creates a file version on AIX® when used in conjunction with the <a href="#">SELECT INTO file_name</a> .