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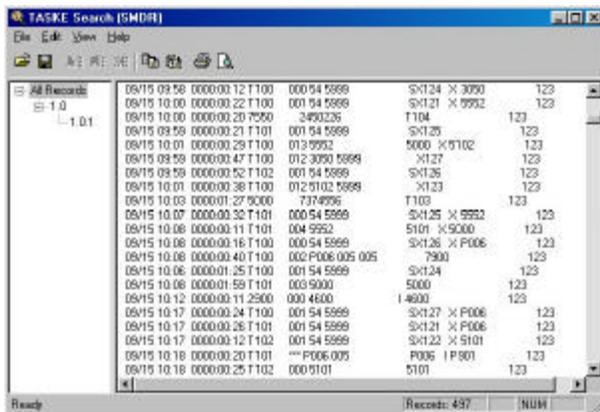
## TASKE Search

The TASKE Search utility provides a means for call center supervisors to view call center activity directly from the records produced by the PBX. These records, though somewhat cryptic, provide comprehensive call center information that is searchable. By creating search filters, supervisors view only the records that conform to the defined search criteria.

The TASKE Search utility searches SMDR (Station Message Detail Record) and ACD (Automatic Call Distribution) call records. A SMDR record is generated at the completion of a call, summarizing the call activity from beginning to end. ACD records are real-time event records produced for each event occurring within a call.

The filtering ability of the Search utility is essential for finding specific call records. A single day in a call center amasses thousands of records that take hours to search individually. Using the filtering capabilities of the Search utility, a single filter can contain several subordinate filtering levels, each excluding the records not matching the filter criteria. Each level of the search can be saved individually as a .txt file for viewing with a text editor or word processor.

### The TASKE Search Interface



The Search interface is a two-paned window. The left pane of the window lists the search filters. The right pane of the window lists the call records that match the criteria of the selected search. A Menu Bar and a Toolbar that provide the tools for using the Search utility span the top of the interface. Spanning the bottom of the interface is a Status Bar that reports the application status.

### Using the Menu Bar / Toolbar



The menu bar and the toolbar span the top of the TASKE Search window. These two sections of the Search utility window provide keyboard and mouse access to the functions of the TASKE Search utility. The menu bar contains four menus. The four menus of the menu bar are File, Edit, View, and Help. The toolbar provides easily accessible buttons for several of the functions available through the menu bar.

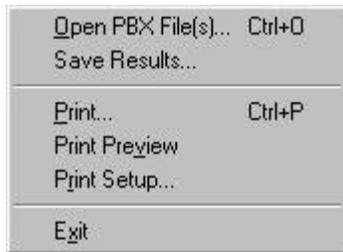
## File Menu



**Open PBX File(s)** - This option opens the Select Date(s) dialog box. Selection of one or more dates from this dialog box opens the PBX files for those dates.



**Save Results...** - This option opens the Save As dialog box. Using this dialog box, save search results as .txt files for viewing with text editing and word processing applications.



**Print...** - This option opens the Print dialog box where the search results are sent to the printer. This dialog box also accesses the printer properties.



**Print Preview** – This option opens the print preview window, providing a preview of the printed search results. Use the tools of the print preview window to maneuver throughout the pages of the preview, view multiple pages, zoom in or zoom out on the page, and print the search results. Clicking the Close button closes the print preview and returns to the search results.

**Print Setup...** – This option opens the Print Setup dialog box where the printer is setup to print the search results using the desired settings.

**Exit** – This option closes the TASKE Search utility without saving the search results.

## Edit Menu



**Copy Selected Records** – This option copies the selected records (all highlighted records) to the Windows clipboard. There must be at least one record selected in the right pane of the Search window to activate this option.



**Copy All Records** - This option copies all of the records in the selected search filter to the Windows clipboard. There must be at least one record selected in the right pane of the Search window to activate this option.

**Change Font...** - This option allows users to change the font of the event records in the left pane of the Search window. Use any font installed on the PC.

### **View Menu**

**Toolbar** – Select to enable or disable the view of the Toolbar. When a check mark is present beside the Toolbar option, the view of the Toolbar is enabled. When a check mark is not present beside the Toolbar option, the view of the Toolbar is disabled.

**Status Bar** - Select to enable or disable the view of the Status Bar. When a check mark is present beside the Status Bar option, the view of the Status Bar is enabled. When a check mark is not present beside the Status Bar option, the view of the Status Bar is disabled.

### **Help Menu**



**Contents** – This option accesses the online help for the TASKE Search utility.

**About Search...** - This menu option opens the About TASKE Search dialog box. This dialog box provides the software release number, the software version number, and the copyright information. Click OK to exit the dialog box.

### **Additional ToolBar Functions**



- Click to open the Search Parameters dialog box and create a sub-filter for the selected filter. To activate this option, one of the filters in the left pane of the Search window must be selected.



- Click to open the Search Parameters dialog box and modify the selected search filter. To activate this option, one of the filters in the left pane of the Search window must be selected.



- Click to delete the selected search filter. This action opens the TASKE Search dialog box where confirmation of the deletion is required by clicking the Yes button. To activate this option, one of the filters in the left pane of the Search window must be selected.

### **Using the Status Bar**

Spanning the bottom of the TASKE Search window, the Status Bar is a read-only display. The Status Bar provides the current status of the Search application, the number of records that match the selected filter, and the keyboard status of the Caps Lock, Num Lock, and Scroll Lock keys.

## Opening SMDR or ACD files

Both SMDR and ACD files are based on calendar dates. All records within either type of PBX file are call records that originated on the same date. For this reason, the date is the primary search filter for opening PBX files.



Open PBX files using the Select Date(s) dialog box. This dialog box is opened using one of the following three methods:

1. Starting the Search utility.
1. Selecting Open from the File menu.
1. Clicking  on the Toolbar.

To open one or more PBX file(s):

1. Access the Select Date(s) dialog box using one of the above methods.
2. Use  and  to select the desired year.
3. Use  and  to select the desired month.
4. Click on each of the desired date(s).
5. Enable the SMDR Search radio button to search for SMDR records or enable the ACD Event Search radio button to search for ACD records.
6. Click OK.

If PBX data is not available for the selected date(s), a warning message is displayed indicating that the requested file(s) were not found. When a date is selected it is highlighted in blue. To remove a date selection click on the date a second time.

## Changing the Font of the Event Records

The font of the event records, or the text in the left pane of the Search window, is changeable to accommodate user preferences. Use any font installed on the PC and set the style and size as desired.

To change the font of the event records:

1. Select Change Font... from the Edit menu to open the Font dialog box.
2. Select a font from the Font list.
3. Select a font style from the Font style list.
4. Select a font size from the Size list or input a value for the font size in the Size box.
5. Click OK.

The Sample section of the Font dialog box provides an illustration of the selected font variables.

## Creating and Modifying Filters

Define the parameters for a search in the Search Parameters dialog box. To access the Search Parameters dialog box, click either  or . Clicking  creates a sub-filter for the selected filter, and clicking  modifies the selected filter.

The Search Parameters dialog box contains two tabs: Search Options and Search Events. Using the Search Options tab, define search filter criteria based on call characteristics. Using the Search Events tab, define search filter criteria based on call handling. Include both types of search criteria in the same search filter. When all of the desired options for the search filter have been selected from both tabs, click OK to view the results.

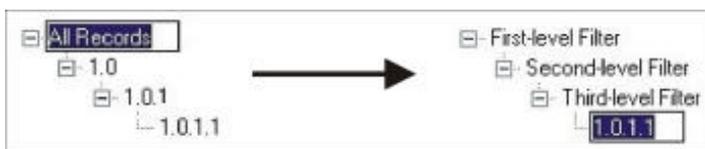
To create a new filter:

1. Select a filter from the left pane of the TASKE Search window to act as the base of the new sub-filter .
2. Click  on the toolbar or right-click on the selected filter and select Filter Results from the drop-down menu.
3. The Search Parameters dialog box opens.
4. Choose the desired search parameters.
5. Click OK.

To modify a filter:

1. Select the filter to modify from the left pane of the TASKE Search window.
2. Click  on the toolbar or right-click on the selected filter and select Modify Filter from the drop-down menu.
3. The Search Parameters dialog box opens.
4. Change the search parameters as required.
5. Click OK.

## Renaming Filters



Each new filter is automatically named using a decimal-based numbering structure. Second-level filters, created directly from the root, are named sequentially in the

format X.0. Third-level filters are named X.0.X. This numbering system continues as additional filtering levels are created. If desired, rename the filters to anything that is 32 characters or less in length. Use any standard keyboard character in the name, including spaces.

To rename a filter:

1. Click the filter to rename in the left-pane of the TASKE Search window.
2. Click the filter a second time to open the edit box.
3. Type the new filter name.
4. Press Enter.

### **Deleting a Filter**

Deleting a filter from the tree structure in the left pane of the TASKE Search window deletes all of its sub-filters as well. Only the root filter cannot be deleted. For instance, deleting filter 1.0 also deletes sub-filters 1.0.1 and 1.0.1.1.

To delete a filter:

1. Select any filter, except the root filter, from the left pane of the TASKE Search window.
2. Click  on the toolbar or right-click on the selected filter and select Remove Filter from the drop-down menu.
3. The TASKE Search dialog box opens asking the user to confirm the filter deletion.
4. Click Yes to delete the filter and its sub-filters.

### **Printing the Search Results**

Preview and print the search results for each filter individually. The records are printed as they appear in the Search window. The printed page includes a header, titled TASKE Search Results, and a footer that includes the page number, date, and time.

To use the print preview to view and print the results of a search filter:

1. Select the search filter to preview from the left pane of the Search window.
2. Click  or select Print Preview from the File menu to open the print preview window.
3. Use the Next Page, Prev Page, One/Two Page, Zoom In, and Zoom Out buttons to view the search results.
4. If desired, click Print to open the Print dialog box and print the search results.
5. Click Close to exit the print preview window.

To print the results of a search filter:

1. Select the search filter to print from the left pane of the Search window.
2. Click  on the Toolbar or select Print from the File menu to open the Print dialog box.
3. Select the printer, print range, and the number of copies.

4. Click OK.

To change the print setup:

1. Select Print Setup from the File menu to open the Print Setup dialog box.
2. Make the required changes to the printer, paper, and paper orientation.
3. Click OK.

### **Copying Records to the Clipboard**

Copying the records of a search filter to the Windows Clipboard makes them available to other applications. This is one method of exporting PBX records.

To copy all records in the filter to the Clipboard:

1. Select the filter containing the desired records from the left pane of the Search window.
2. Click  or select Copy All Records from the Edit menu to copy all records in the selected filter to the Clipboard.

To copy selected records in the filter to the Clipboard:

1. Select the filter containing the desired records from the left pane of the Search window.
2. Select the records to be copied from the right pane of the Search window.
3. Click  or select Copy Selected Records from the Edit menu to copy the selected records to the Clipboard.

To select a group of records that are in order for copying:

1. Select the first record.
2. Hold SHIFT and click the last record in the range.

To select a group of records that are not in order for copying:

1. Select the first record.
2. Hold CTRL and click each of the remaining records.

### **Saving the Search Results**

Save the results of a search filter as a text file (.txt) for viewing using text editing or word processing software applications.

To save the results of a search filter as a .txt file:

1. Select the filter to save from the left pane of the Search window.
2. Click  or select Save Results from the File menu to open the Save As dialog box.
3. Choose the destination directory and type a name for the file.
4. Click Save.

## Searching SMDR Call Records

Displayed in a tree structure in the left pane of the Search interface, filters are created for the selected PBX files based on specific incidences that occur within calls. Setting boundaries for these incidences eliminates those records that do not fall within the specified range. Create several filtering levels for a single search. Sub-filters drill-down through the records, with each level displaying a more detailed level of search.

The primary filter for any PBX file is the date. When a search is opened, all call records for the selected dates are included in a root filter that is titled All Records. Any additional filters created for the search are subordinate to the root filter in the tree structure.

Search filters are created, modified and deleted using the tools provided on the Toolbar. The  button creates a sub-filter for the selected filter. The  button is used to modify the selected filter. The  button deletes the selected filter. Clicking either the  button or the  button opens the Search Parameters dialog box where the boundaries for a search filter are defined.

Each new filter is automatically named using a decimal-based numbering structure. Second-level filters, created directly from the root, are named sequentially in the format X.0. Third-level filters are named X.0.X. This numbering system continues as additional filtering levels are created.

Deciphering the information included in a SMDR record is a difficult task for those viewing the records directly from the PBX. A SMDR record is a call record that describes call activity. The records are stored in a database and each field in the database stores a specific section of a call.

A SMDR record may contain the following information:

MM/DD HH:MM hhhh:mm:ss cccc \* TTA dddddddddddddddddDDDDCSppppX  
TTTT aaaaaaaaaaaa sss

where:

MM/DD	=	Start date of the call
HH:MM	=	Start time of the call
hhhh:mm:ss	=	Call duration
cccc	=	a) Inbound call: the trunk number obtained by the call b) Outbound call: the identifying number of the calling party
*	=	a) Displays * if the call was handled by an attendant b) Blank if not handled by an attendant
TTA	=	a) Inbound call: displays the time to answer b) Abandoned call: displays *** c) Outbound call: displays the trunk access code
dddd...	=	The digits dialed
DDDD	=	a) Displays the meter pulses if applicable. b) Displays a continuation of the digits dialed if meter pulses are not involved. c) Blank if meter pulses are not applicable and digits dialed are not long enough to use the space
C	=	The call completion status
S	=	a) The ARS (Automatic Route Selection) speed call flag b) Blank if call is not speed dialed
pppp	=	The identifying number of the called party
X	=	a) Displayed for transferred calls b) Blank if a transfer did not occur
TTTT	=	a) The identifying number of the third party b) Blank if a third party was not involved
aaaa...	=	a) The account codes for the call b) Blank if account codes were not applicable
sss	=	System identifier number, used only when multiple PBX systems are in use

## Using the Search Options Tab

Using the Search Options tab, define search filter criteria based on call characteristics. When all of the desired options for the search filter are selected, click OK to view the results.

## Using the Time to Search for Calls

To create a search filter that includes the call records occurring within a specific time period, define a start time and an end time in the Include Records Between section of the Search Options tab. When setting the start time and the end time, ensure that the start time precedes the end time, keeping in mind that the 24-hour clock is used.

To set the time range for a search filter:

1. Click the hour field in the Start Time box to select the field.
2. Input a number between 00 and 23.
3. Click the minute field in the Start Time box to select the field.
4. Input a number between 00 and 59.
5. Repeat steps 1 to 4 in the End Time box.

## Searching for Calls Using the Time to Answer

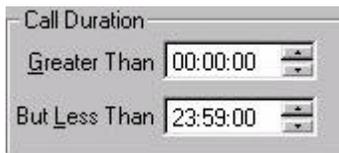
The time to answer is the amount of time a caller waits for an answer from the time a trunk is accessed. To create a search filter that includes the call records for calls that were answered within a specified time range, define the time range for the filter in the Time To Answer section of the Search Options tab. The time to answer is recorded in

seconds. Input values ranging from 0 to 999 seconds in the input boxes of this section.

To define the time to answer range:

1. Click the Greater Than box and input a value between 0 and 999 to represent the lower limit for the time to answer.
2. Click the But Less Than box and input a value between 0 and 999 to represent the upper limit for the time to answer.

### **Searching for Calls by Duration**



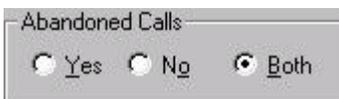
The call duration is the call length, from the time a trunk is accessed to the time the call is terminated. To create a search filter that includes the call records where the call duration falls within a specified time range, define the time range for the filter in the Call Duration section of the Search Options tab. Ensure

that the Greater Than time precedes the But Less Than time, keeping in mind that the 24-hour clock is used.

To define the time range for the call duration:

1. Click the hour field in the Greater Than box to select the field.
2. Input a value between 00 and 23.
3. Click the minute field in the Greater Than box to select the field.
4. Input a value between 00 and 59.
5. Click the seconds field in the Greater Than box to select the field.
6. Input a value between 00 and 59.
7. Repeat steps 1 to 6 in the But Less Than box.

### **Including and Excluding Abandoned Calls in a Search Filter**



When a caller terminates a call before receiving an answer, the call is abandoned. To create a search filter that includes only abandoned calls, enable the Yes radio button in the Abandoned Calls section of

the Search Options tab. To exclude abandoned calls from the search filter, enable the No radio button. The Both radio button is the default option. Enabling the Both radio button includes all calls in the search filter, regardless of the answer state.

### **Searching for Calls by Participant**

The image shows a screenshot of a software interface titled "Party". It contains three vertically stacked input fields. The first field is labeled "Calling", the second is labeled "Called", and the third is labeled "Third". Each field has a small cursor icon on the left side of the text box.

Use the Party section of the Search Options tab to create a search filter based on an agent ID or extension number. Call records can be extracted for an individual based on calls made, calls received, or calls handled as a third party. Only one of these items can be included in a single filter.

A search using the Calling box searches for the calls made by the selected individual. A search using the Called box searches for the calls received by the individual. A search using the Third box searches for instances where the individual was a third party to a call.

To create a search filter for the calls made by an agent or extension:

1. Input the agent ID or extension number in the Calling box.

To create a search filter for the calls received by an agent or extension:

1. Input the agent ID or extension number in the Called box.

To create a search filter for calls where an agent or extension was involved as a third party:

1. Input the agent ID or extension number in the Third box.

### **Searching for Calls Using the Digits Dialed**

The image shows a screenshot of a software interface with a label "Digits Dialed" followed by a text input box. The input box contains the number "18005551234".

Use the Digits Dialed box in the Search Options tab to create a search filter based on the digits dialed in outbound or internal calls.

The digits dialed are the dialable characters that direct the call to its destination. Use the characters in the table below to create a search based on the digits dialed.

The allowable characters to use when searching for the digits dialed are:

P	Match 'P' as the first character, indicating a Pilot number.
0-9, * #	Match a specific digit.
?	Match any character, including a blank.
.	Match any non-blank character.
	Match a blank character.
/	Place at the beginning and end of a string of characters. The character string is matched anywhere it occurs in the digits dialed of a call record.

### **Searching for Call Records Using Automatic Number Identification**

Input a number in the ANI box to include a specific ANI number in the search criteria. ANI is an acronym for Automatic Number Identification. This is a service provided by a telephone company that identifies the telephone number of the caller. Not all trunks can provide this information and it is usually a service that must be purchased from the local telephone carrier.

The allowable characters to use when searching for an ANI number are:

0-9, * #	Match a specific digit.
?	Match any character, including a blank.
.	Match any non-blank character.
	Match a blank character.
/	Place at the beginning and end of a string of characters. This matches the character string anywhere it occurs within a string of characters.

### **Searching for Call Records Using Dialed Number Identification Service**

Input a number in the DNIS box to create a search filter that looks for a specific DNIS number. DNIS is an acronym for Dialed Number Identification Service. This is a service where the telephone company returns an identification number to the PBX receiving a call that is usually the last four digits dialed by the caller. The DNIS identification number reveals the service the caller is requesting from the call center. Not all trunks can provide this information and it is usually a service that must be purchased from the local telephone carrier.

The allowable characters to use when searching for a DNIS number are:

0-9, * #	Match a specific digit.
?	Match any character, including a blank.
.	Match any non-blank character.
	Match a blank character.
/	Place at the beginning and end of a string of characters. This matches the character string anywhere it occurs within a string of characters.

### **Searching for Call Records Using the System ID**

Call centers with more than one PBX can create a search filter based on the system ID of the PBX. The system ID is an address number used to identify a PBX. To create a search filter based on a specific PBX, input the system ID number of the PBX in the Sys ID box on the Search Options tab.

The allowable characters to use when searching for a system ID are:

0-9, * #	Match a specific digit.
?	Match any character, including a blank.
.	Match any non-blank character.
	Match a blank character.

### **Searching for Call Records Using the Account Code**

Account Codes

Account codes are a call classification mechanism used by some organizations. Call centers using account codes can create search filters to search for call records with specific account codes using the Account Codes box on the Search Options tab. To include a specific account code in a search filter, input the account code in the Account Code box.

The allowable characters to use when searching for an account code are:

0-9, * #	Match a specific digit.
?	Match any character, including a blank.
.	Match any non-blank character.
	Match a blank character.
/	Place at the beginning and end of a string of characters. This matches the character string anywhere it occurs within a string of characters.

### **Using the Search Events Tab**

The screenshot shows the 'Search Parameters' dialog box with the 'Search Events' tab selected. The 'Call Completion' section has check boxes for: Blank (Nothing), Answer Suspension, Caller Is Busy, Caller Error, IAFAS Answered, Recall Answered, and Recall Not Answered. The 'Speed / Forward' section has check boxes for: Blank (Nothing), Speed Call, External Call Forward, and Default ARS. The 'Transfer / Conference' section has check boxes for: Blank (Nothing), Supervised Transfer, Unsupervised Transfer, and Conference. There is a 'Toggle All' button at the bottom right of the dialog, and 'OK' and 'Cancel' buttons at the very bottom.

Using the Search Events tab, define search filter criteria based on call handling. When all of the desired options for the search filter are selected, click OK to view the results.

To enable or disable all of the check boxes on the Search Events tab, click the Toggle All button.

### **Searching by Call Completion Status**

To create a search filter based on the completion results of calls, use the Call Completion section of the Search Events tab. Enable the check boxes for the call completion results to include in the search filter.

The call completion results to include in a search are:

**Blank (Nothing)** - When the call completion status is blank in a call record, it means that the call completion result for the call record is unknown.

**Answer Supervision** - The Answer Supervision call completion status occurs when the central office provides a signal to the PBX indicating that the outgoing call received an answer.

**Callee is Busy** - The Callee is Busy call completion status occurs when the incoming call is returned to the queue because the intended receiver is busy.

**Caller Error** - The Caller Error call completion status occurs when the caller dials an invalid destination and the PBX cannot route the call.

**TAFAS Answered** - For outgoing calls, the TAFAS Answered call completion status indicates that the toll was denied. For incoming calls, this means that the call was available to all stations or TAFAS (Trunk Answer From Any Station) answered.

Call Completion

- Blank (Nothing)
- Answer Supervision
- Callee Is Busy
- Caller Error
- TAFAS Answered
- Recall Answered
- Recall Not Answered

**Recall Answered** - The Recall Answered call completion status occurs when a transferred call does not receive an answer at the intended extension, is returned to the original extension, and is answered again by the original receiver.

**Recall Not Answered** - The Recall Not Answered call completion status occurs when a transferred call does not receive an answer at the intended extension, is returned to the original extension, and is not answered because the original receiver is not available to answer the call.

### Searching for Speed Dialed and Forwarded Calls

Speed / Forward

- Blank (Nothing)
- Speed Call
- External Call Forward
- Default ARS

To create a search filter based on speed dialed or forwarded calls, use the Speed / Forward section of the Search Events tab. Enable the check boxes for the variables to include in the search filter.

The variables to include in the search filter are:

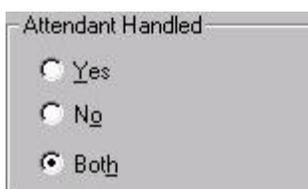
**Blank (Nothing)** - When the status of calls in relation to speed dialing and forwarding is unknown, the field in the call record is blank.

**Speed Call** - A Speed Call is reported in a call record when a short directory number, programmed into the PBX, that represents a longer number is dialed.

**External Call Forward** - External Call Forward occurs in a call record when a dialed extension has call forwarding enabled and the call is forwarded to an external number.

**Default ARS** - ARS is an acronym for Automatic Route Selection. The ARS is a routing mechanism for routing outbound calls. For instance, dialing 9 before the telephone number may access an outbound trunk that only allows local calls whereas, dialing 8 before the telephone number may access an outbound trunk that permits long distance calls. Default ARS occurs in a call record when the default ARS number routes outbound calls to the appropriate trunk.

### **Searching for Calls Handled by an Attendant**



Attendant Handled

Yes

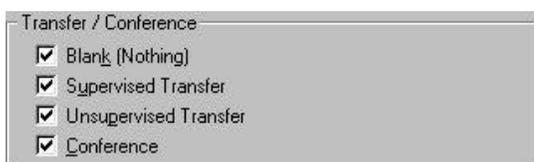
No

Both

Call records for calls handled by attendants can be included or excluded from a search filter using the Attendant Handled section of the Search Events tab.

To include call records for calls handled by attendants in a search filter, enable the Yes radio button. To exclude these call records, enable the No radio button. To include both types of calls in the search filter, enable the Both radio button.

### **Searching for Transferred and Conference Calls**



Transfer / Conference

Blank (Nothing)

Supervised Transfer

Unsupervised Transfer

Conference

To create a search filter based on transferring or conferencing, use the Transfer / Conference section of the Search Events tab. Enable the check boxes for the variables to include in the search filter.

The variables to include in the search filter are:

**Blank (Nothing)** - When the transferred or conference status of a call is unknown, the fields in the call record for this information are blank.

**Supervised Transfer** - A Supervised Transfer occurs in a call record when a call is transferred to a third party and the transferring party remains on the line to make sure the call is answered.

**Unsupervised Transfer** - An Unsupervised Transfer occurs in a call record when a call is transferred to a third party and the transferring party abandons the caller before ensuring that the third party answers the call.

**Conference** - Conference occurs in a call record when a third party is involved in the call via a conference.

## Searching ACD Call Records

Displayed in a tree structure in the left pane of the Search interface, filters are created for the selected PBX files based on specific incidences that occur within calls. Setting boundaries for these incidences eliminates those records that do not fall within the specified range. Create several filtering levels for a single search. Sub-filters drill-down through the records, with each level displaying a more detailed level of search.

The primary filter for any PBX file is the date. When a search is opened, all call records for the selected dates are included in a root filter that is titled All Records. Any additional filters created for the search are subordinate to the root filter in the tree structure.

Search filters are created, modified and deleted using the tools provided on the Toolbar. The  button creates a sub-filter for the selected filter. The  button is used to modify the selected filter. The  button deletes the selected filter. Clicking either the  button or the  button opens the Search Parameters dialog box where the boundaries for a search filter are defined.

When defining search parameters for ACD call records, it may be necessary to search for specific agent, extension, Pilot, or group IDs. Accomplish this by inputting the ID numbers in the ID boxes on the appropriate tabs of the Search Parameters dialog box. When the exact ID is not known, mix the wildcards with the known information about the agent, extension, Pilot, or group to make the search for these entities more general.

The wildcards and an explanation of their use are provided in the table below.

0-9	Match a specific digit
?	Match any character, including a blank
.	Match any non-blank character
	Match a blank character

Each new filter is automatically named using a decimal-based numbering structure. Second-level filters, created directly from the root, are named sequentially in the format X.0. Third-level filters are named X.0.X. This numbering system continues as additional filtering levels are created.

Deciphering the information included in an ACD record is a difficult task when viewing the call records directly from the PBX file. An ACD record is a report that provides event specific information for the system, agents, Pilots, and the ACD queue.

There are four types of ACD report records. These are time reports, group reports, pilot

reports, and event reports. Time reports, group reports, and pilot reports always contain the same type of information. The content of the event reports depends on the event being reported.

### Time Reports

24/08/99 09:14:16 Time

Generated every 15 seconds, a time report synchronizes the PC clock with the PBX clock. A time report provides the following information:

##/##/##	=	Date in DD/MM/YY format
##:##:##	=	Time in HH:MM:SS format
Time	=	Report title

### Group Reports

24/08/99 09:14:16 Group 005 CW: 0 AA: 1 Longest Wait: 00:00

Generated every 15 seconds, an agent group report provides the following information:

##/##/##	=	Date in DD/MM/YY format
##:##:##	=	Time in HH:MM:SS format
Group	=	Report title
###	=	Group number
CW: #	=	Number of calls waiting
AA: #	=	Number of agents available
Longest Wait: ##:##	=	Amount of time the longest waiting caller has been waiting

### Pilot Reports

24/08/99 09:14:03 Path P004 CW: 0 AA: 2 Longest Wait: 00:00

Generated every 15 seconds, a Pilot report provides the following information:

##/##/##	=	Date in DD/MM/YY format
##:##:##	=	Time in HH:MM:SS format
Pilot	=	Report title
P###	=	Pilot number
CW: #	=	Number of calls waiting
AA: #	=	Number of agents available
Longest Wait: ##:##	=	Amount of time the longest waiting caller has been waiting

## Event Reports

Event reports are generated whenever an event occurs. There are ten types of event reports. These are Login/Logout, Set/Remove DND, Set/Remove Make Busy, Answer Personal, Answer ACD, Originate, Idle, Work Timer Start/Expire, Hold Activate/Retrieve/Abandon, and Remote ACD Answer. The first two fields of all event reports contain the date, in DD/MM/YY format, and the time in HH:MM:SS format. The remaining information in the event reports include:

### Login / Logout

```
24/08/99 12:05:48 Logout 4300 AGT: 7900 Line: 0
24/08/99 12:29:13 Login 4300 AGT: 7900 Line: 0
```

The Login / Logout reports display the login and logout status of agents in the queue.

Login or Logout	=	Report title
####	=	Extension number
AGT: ####	=	Agent ID
Line: #	=	Line number

### Set / Remove DND

The Set / Remove DND reports display the use of the Do Not Disturb feature by agents.

### Set / Remove Make Busy

```
24/08/99 11:37:28 Set Make Busy 4300 AGT: 7900 Line: 0
24/08/99 11:51:30 Remove Make Busy 4300 AGT: 7900 Line: 0
```

The Set / Remove Make Busy reports display the use of Make Busy by agents.

Set Make Busy or Remove Make Busy	=	Report title
####	=	Extension number
AGT: ####	=	Agent ID
Line: #	=	Line number

**Answer Personal**

24/08/99 10:37:08 Answer Personal 4200 AGT: 7300 Line: 2

The Answer Personal report displays agents on non-ACD calls.

Answer Personal	=	Report title
####	=	Extension number
AGT: ####	=	Agent ID
Line: #	=	Line number

**Answer ACD**

24/08/99 11:33:05 Answer ACD P901 AGT: 7800 Line: 0

The Answer ACD report displays agents on ACD calls.

Answer ACD	=	Report title
P###	=	Pilot number
AGT: ####	=	Agent ID
Line: #	=	Line number

**Originate**

24/08/99 09:40:49 Originate 5200 AGT: 7550 Line: 0

The Originate report displays outbound calls originating with an agent.

Originate	=	Report title
####	=	Extension number
AGT: ####	=	Agent ID
Line: #	=	Line number

**Idle**

24/08/99 12:05:32 Idle 3100 AGT: Line: 1 State: Make Busy

24/08/99 12:13:38 Idle 5200 AGT: 7550 Line: 0 State: Idle

The Idle report displays the agent state when idle. This may be Idle, Make Busy, Do Not Disturb, or Do Not Disturb and Make Busy.

Idle	=	Report title
####	=	Extension number
AGT: ####	=	Agent ID
Line: #	=	Line number
State: ???	=	Agent state, will be Idle, Make Busy, Do Not Disturb, or Do Not Disturb and Make Busy

### Work Timer Start / Expire

24/08/99 09:55:18 Work Timer Start 4300 AGT: 7900 Line: 0  
 24/08/99 09:55:48 Work Timer Expire 4300 AGT: 7900 Line: 0

The Work Timer Start / Expire reports display the agent use of Work Timer.

Work Timer Start or Work Timer Expire	=	Report title
####	=	Extension number
AGT: ####	=	Agent ID
Line: #	=	Line number

### Hold Activate / Retrieve / Abandon

19/08/99 15:23:26 Hold Retrieve 4200 AGT: 7300 Line: 0  
 19/08/99 15:27:03 Hold Activate 5100 AGT: 7800 Line: 0  
 19/08/99 15:28:06 Hold Abandon 5100 AGT: 7800 Line: 0

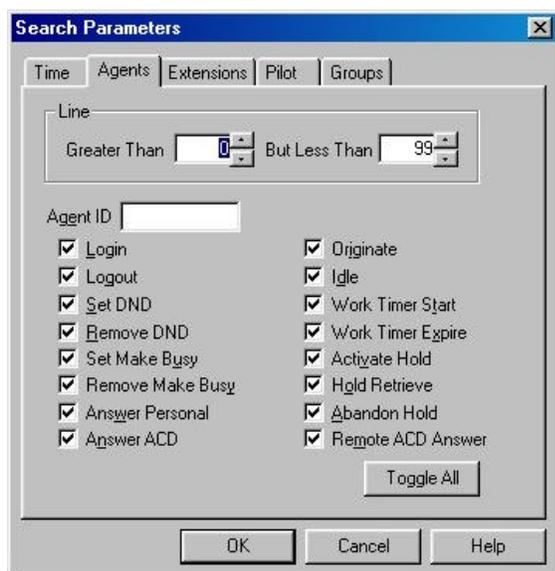
The Hold Activate / Retrieve / Abandon reports display the use of hold by agents.

Hold Retrieve, Hold Activate, or Hold Abandon	=	Report title
####	=	Extension number
AGT: ####	=	Agent ID
Line: #	=	Line number

### Remote ACD Answer

The Remote ACD Answer report displays calls answered by agents at remote sites.

## Defining ACD Search Parameters



Define the parameters for an ACD search in the Search Parameters dialog box. To access the Search Parameters dialog box for ACD records, ensure that an ACD search is open and click either  or . Clicking  creates a sub-filter for the selected filter, and clicking  modifies the selected filter.

The Search Parameters dialog box for ACD records contains five tabs: Time, Agents, Extensions, Pilots, and Groups. Using these tabs, include the time of day, an agent ID, an extension number, a Pilot number, and a group ID in a search filter. After selecting all of the desired options for the search filter, click OK to view the results.

## Searching for Call Events by Time

The screenshot shows the 'Time' tab selected in a search filter interface. Under the 'Include Records Between' section, the 'Start Time' is set to 00:00 and the 'End Time' is set to 23:59. Below this, the 'Time Report' checkbox is checked.

The Time tab defines search filter criteria based on the time of day that events occurred. By defining a start time and an end time, define a time period as small as one minute or as large as 23 hours and 59 minutes. The search filter excludes all records that do not fall within the specified time period.

To include the Time Reports in the filter, enable the Time Report check box. To exclude the Time Reports from the filter disable the Time Report check box.

To create a time base for a search filter:

1. Click the hour field in the Start Time box to select the field.
2. Input a number between 00 and 23.
3. Click the minute field in the Start Time box to select the field.
4. Input a number between 00 and 59.
5. Repeat steps 1 to 4 in the End Time box.

## Searching for Call Events by Agent

The screenshot shows the 'Agents' tab selected in a search filter interface. Under the 'Line' section, 'Greater Than' is set to 1 and 'But Less Than' is set to 99. Below this, the 'Agent ID' field is empty. A list of agent events is shown with checkboxes, and a 'Toggle All' button is at the bottom.

The Agents tab defines search filter criteria based on line numbers and events related to a specific Agent ID. The Line field on the Agents tab defines a range of line numbers to include in the search filter. The Agent ID field and the check boxes below define the agent events to include for the identified agent.

When defining the search parameters on the Agents tab, use the Toggle All button to switch between enabling and disabling all of the options.

To create a filter on agent specific information:

1. Click the Greater Than box in the Line section to select the field.
2. Input a value to represent the lower limit for the line number. This must be

- a number from 0 to 99.
3. Click the But Less Than box in the Line section to select the field.
4. Input a value to represent the upper limit for the line number. This must be a number from 0 to 99.
5. Click the Agent ID box and input the ID of the agent to include in the search filter.
6. Enable the check boxes of the agent events to include in the search filter.

### Searching for Call Events by Extension

The Extensions tab defines search filter criteria based on an extension number. The Extension field and the check boxes below define the extension events to include in the search filter for the identified extension.

When defining the search parameters on the Agents tab, use the Toggle All button to switch between enabling and disabling all of the options.

To create a filter on extension specific information:

1. Input the extension number of the extension to include in the search filter.
2. Enable the check boxes of the extension events to include in the search filter.

### Searching for Call Events by Pilot

The Pilots tab defines search filter criteria based on a particular pilot. The Pilot to include in the search filter is identified in the Pilot box and the remaining sections of the tab define the search parameters for the Pilot.

To avoid including a number of unwanted records in the search filter that are not specific to a Pilot, disable the Time Reports, agent events, extension events, and Group Reports on the other tabs.

To create a search filter for a specific Pilot:

1. Input the Pilot number of the Pilot to include in the search filter.
2. Enable the Pilot Report check box to include Pilot reports in the search filter.
3. Enable the Answer ACD check box to include Answer ACD reports in the search filter
4. Enable the Remote ACD Answer check box to include Remote ACD Answer reports in the search filter.

To include a range for the longest call waiting for the Pilot in the search filter, input a start time and an end time in the Longest Call Waiting section of the Pilots tab. The start time and the end time identify the duration of the longest call waiting. For instance, input 00:10 in the Start box and 01:30 in the End box to find all of the longest calls waiting for the Pilot that waited anywhere from ten to ninety minutes. The duration of the longest call waiting can be as short as one minute or as long as 23 hours and 59 minutes.

To set a range for the longest call waiting in the queue of the selected Pilot:

1. Click the hour field in the Start box to select the field.
2. Input a number from 00 to 23 to define the lower limit for the hour.
3. Click the minute field in the Start box to select the field.
4. Input a number from 00 to 59 to define the lower limit for the minute.
5. Repeat steps 1 to 4 to define the upper range for the duration of the longest call waiting in the End box.

To include a range for the number of calls waiting for the Pilot in the search filter, input a value for the low end of the range and a value for the high end of the range in the Calls Waiting section of the Pilots tab.

To set a range for the calls waiting:

1. Click the Greater Than box to select the field.
2. Input a number from 0 to 999 to define the lower range for the number of calls waiting.
3. Click the But Less Than box to select the field.
4. Input a number from 0 to 999 to define the upper range for the number of calls waiting. Ensure that this number is greater than the number in the Greater Than box.

To include a range for the number of available agents for the Pilot in the search filter, input a value for the low end of the range and a value for the high end of the range in the Available Agents section of the Pilots tab.

To set a range for the available agents:

1. Click the Greater Than box to select the field.
2. Input a number from 0 to 999 to define the lower range for the number of agents available.
3. Click the But Less Than box to select the field.
4. Input a number from 0 to 999 to define the upper range for the number of agents available. Ensure that this number is greater than the number in the Greater Than box.

### Searching for Call Events by Group

The screenshot shows the 'Groups' tab of the search filter interface. It includes a 'Group ID' text box, a checked 'Group Report' checkbox, and four sections for defining search ranges: 'Longest Call Waiting' (with 'Start' and 'End' time pickers), 'Calls Waiting' (with 'Greater Than' and 'But Less Than' pickers), and 'Available Agents' (with 'Greater Than' and 'But Less Than' pickers). The 'Start' and 'End' pickers are set to '00:00' and '23:59' respectively. The 'Greater Than' pickers are set to '0' and the 'But Less Than' pickers are set to '999'.

The Groups tab defines search filter criteria based on a particular group. The group to include in the search filter is identified in the Group ID box and the remaining sections of the tab define the search parameters for the group.

To avoid including a number of unwanted records in the search filter that are not specific to the group, disable the Time Reports, agent events, extension events, Pilot Reports, Answer ACD reports, and Remote ACD Answer on the other tabs.

To create a search filter for a specific group:

1. Input the group number in the Group ID box.
2. Enable the Group Report check box to include group reports for the group.

To include a range for the longest call waiting for the group in the search filter, input a start time and an end time in the Longest Call Waiting section of the Groups tab. The start time and the end time identify the duration of the longest call waiting. For instance, input 00:10 in the Start box and 01:30 in the End box to find all of the longest calls waiting for the group that waited anywhere from ten to ninety minutes. The duration of the longest call waiting can be as short as one minute or as long as 23 hours and 59 minutes.

To set a range for the longest call waiting:

1. Click the hour field in the Start box to select the field.
2. Input a number from 00 to 23 to define the starting hour.
3. Click the minute field in the Start box to select the field.
4. Input a number from 00 to 59 to define the starting minute.

5. Repeat steps 1 to 4 in the End box.

To include a range for the number of calls waiting for the group in the search filter, input a value for the low end of the range and a value for the high end of the range in the Calls Waiting section of the Groups tab.

To set a range for the calls waiting:

1. Click the Greater Than box and input a number from 0 to 999 to define the lower range for the number of calls waiting.
2. Click the But Less Than box and input a number from 0 to 999 to define the upper range for the number of calls waiting. Ensure that this number is greater than the number in the Greater Than box.

To include a range for the number of available agents for the group in the search filter, input a value for the low end of the range and a value for the high end of the range in the Available Agents section of the Groups tab.

To set a range for the available agents:

1. Click the Greater Than box and input a number from 0 to 999 to define the lower range for the number of agents available.
2. Click the But Less Than box and input a number from 0 to 999 to define the upper range for the number of agents available. Ensure that this number is greater than the number in the Greater Than box.