

***TPS R500—R530
US Implementation***

***Lab Exercise and
Evaluation***

***Use Doc Tool to Query
Journals***

L5438L

LCN

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Lab Exercise

Overview

Introduction

In this lab exercise, you will retrieve specific HM journal data by creating Documentation Tool journal queries.

Objective

Given a requirement for HM journal data, create a Doc Tool query to retrieve required data:

- specify values and patterns to compare against fields in the journals,
 - sort and filter the retrieved journal data, then
 - output the results to a file or printer.
-

Using the Doc Tool to Query Journals

Locate directory

For this lab exercise, you will save your query results to your student directory S####, where #### is your student number. If the directory is not available on the system you are using, create it now (either on the network or on removable media).

Create CUTOOUT event

Perform the following steps to create a Contact Cutout event. Later, you will use the Doc Tool to retrieve the event.

Step	Action
1	If point ALMPT### exists, inactivate it. (It is a CL point that changes the status of points used in this lab. Make the point inactive to prevent it from interfering with this lab exercise.)
2	Cause an alarm cutout event to occur. An easy way to cause an alarm cutout event is to configure an AM regulatory point to be cut out when an AM flag point is in alarm. If you are at a Honeywell training center, modify the following prebuilt AM points. Primary AM Flag Point: J5### PVSTATES(1)=OPEN PVSTATES(0)=OK OFFNORMAL=ON PVNORMAL=OK Secondary AM Regulatory Point: FIC4### PERIOD=5 SECONDS CCINPT=YES CCSRC=(J5###.PTINAL)
3	Make sure that the alarm priority of both points is EMERGENCY. Later, you will retrieve emergency alarms for your unit.
4	After configuring the points, cause FIC4### to go into an emergency alarm.
5	Now cause J5### to go into an emergency alarm. RESULT: The regulatory point will go to the cutout state (CONTCUT=ON) and its alarms will be cut out.
6	Call up the Detail display of the regulatory point and verify that its CONTCUT parameter is ON.
7	From the System Menu, call up the Process Alarm Event History Journal for unit ##. ## = Your AM Regulatory point Unit ID. Verify that the CUTOOUT event was journaled.

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Using the Doc Tool to Query Journals, Continued

Build query 1—all events

Perform these steps to build a query that retrieves *journal events*.

Step	Action
1	Access the Doc Tool. Select QUERY, then select BUILD, then select JRNL.
2	Type in the starting date and time. Use a date/time that will return at least 20 events; for example, one hour. See below for date/time formats.
3	Type in the descriptor: Events ### where ### is your student number
4	Select the targets for all of the journal types.
5	SAVE the query.
6	Press [ENTER] to execute the query.
7	When the results are displayed, page through the events. Notice that the events are sorted by date/time. Press [CTL] [R] to view the right side of the data.
8	Output the results (with field definitions) to a file named EVENTS . XX in your student directory.

Date/time formats

You may use any of the following formats when specifying the Query start and end date/time:

Date

MM/DD

MM/DD/YY

MM-DD

MM-DD-YY

DD/MMM/YY

DD-MMM-YY

Time

HH:MM

HH:MM:SS

Continued on next page

Using the Doc Tool to Query Journals, Continued

Filter query results— alarm cutout

Perform these steps to filter events that do not match a specified condition.

Step	Action
1	Turn ON the FILTER function.
2	<p>Enter the following filter condition:</p> <pre>ET=24 AND GI="*CUTOUT TRUE"</pre> <p>NOTE: Table 1 (at the end of this lab) describes the special characters (including wild cards such as *) that can be used in a condition.</p> <p>RESULT: After executing the filter, events that do not match the condition are removed from the display.</p>
3	<p>If cutout events were found and displayed, go to step 8.</p> <p>If no match was found and you are using an <i>off-process</i> system, go to step 4.</p> <p>If no match was found and you are using an <i>on-process</i> system, go to step 9.</p>
4	<p>Go to the Doc Tool and call up your PREBUILT query named <code>Events ###</code></p> <p>Change the end date/time to current time, then save your change.</p>
5	Press [ENTER] to execute your query again.
6	Output the results (with field definitions) to the file named <code>EVENT###.XX</code> in your student directory.
7	<p>Turn ON the filter function and enter the condition again (see step 2).</p> <p>RESULTS: After the results appear, the cutout event is displayed.</p>
8	Output the results to file <code>CUTO###.XX</code> in your student directory.
9	Turn OFF the filter function.

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Using the Doc Tool to Query Journals, Continued

Filter query results— cable status events

Perform these steps to filter all events except the cable *status events* for node 1.

Step	Action
1	Turn ON the filter function and enter the following Filter condition: Condition: ET=60 AND GI="*NODE 01*"
2	If no cable status events were found, go to step 3. If events were found, output the results to file CABLE###.XX in your student directory.
3	Turn OFF the filter function.

Filter query results— all system errors

Perform these steps to filter all events except these system errors: crashes, s/w errors, communication errors, and driver errors. (events types 0-14).

Step	Action
1	Turn ON the filter function and enter the following Filter condition: Condition: ET > -1 AND ET < 15
2	If system error events were not found, go to step 3. If events were found, output the results to file ERRS###.XX in your student directory.
3	Turn OFF the filter function.
4	CANCEL the current display.

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Using the Doc Tool to Query Journals, Continued

Build query—retrieve emergency alarms

Perform these steps to retrieve the emergency process alarm events for the week.

Step	Action
1	Build a new journal query as follows: Start Date-Time: MM/DD HH:MM Condition: U=nn or U=nn AND GI="*EMERG*" where nn is your assigned unit ID and another student's assigned unit ID. Description: Week's Emergencies ###. where ### is your student number
3	Select the target for the PROCESS ALARMS journal type.
4	SAVE the query named
5	Press [ENTER] to execute the query.
6	If events were found, OUTPUT the results to file EMERG###.XX in your student directory.

Text editor

From the Command Processor, try to use the US Text Editor to edit your file EMERG###.

```
ED NET>(dir)>EMERG###.XX
```

You will get an error message because the record size of the journal is too long to be supported by the Text Editor.

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Using the Doc Tool to Query Journals, Continued

Pattern matching

Table 1 describes the special characters you can use in a query or filter Condition.

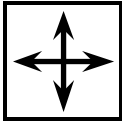
Table 1 Special Characters to Use in Patterns

Special Character	Description	Result
?	Matches a single character.	Example: A? Matches "A" followed by any character.
*	Matches zero or more characters.	Example: *A Matches "A" preceded by any number of any characters.
[string]	Matches any single character in <string>.	Example: A[BC]D Matches ABD or ACD.
[~string]	Matches any single character except those in <string>.	Example: A[~BC]D Matches AAD, ADD, AED, AFD
-	Defines a range of characters within the set to match.	Example: A[B-D]D Matches ABD, ACD, ADD
#	Matches zero or more occurrences of the previous character.	Example: AB# Matches A, AB, ABB, ABBB
@	Defines the special character that follows @ as the character itself.	Example: @? Matches only the " ?" character.

More practice

Feel free to perform more queries to experiment with the capabilities of the new R500 journal query function.

Directions



DIRECTIONS—This is the end of the lab exercise. Discuss questions concerning the study material or lab activities with a colleague or your course manager.

If you are satisfied that you have achieved the objective of the course module, continue with the Student Proficiency Evaluation.

Student Proficiency Evaluation

Criterion Test

Part 1—completion of lab exercise

Completion of the lab exercise satisfies part of the test requirements for this course module.

Be prepared to show your query output files to your course manager:

EVENTS.XX

CUTO###.XX

CABLE###.XX

ERRS###.XX

EMERG###.XX

Part 2—test questions

Be prepared to answer the the following questions and discuss them with your course manager.

1. Describe the fields that the Doc Tool assigns to data retrieved by a journal query.

<u>Field Name</u>	<u>Description</u>
_____	_____
_____	_____
_____	_____
_____	_____

Continued on next page

Criterion Test, Continued

2. Assume that you retrieved all process alarm events for the past two hours. What filter command would you enter to remove all events except the DI SOE events from the report?

21 Nov 10:22:59 1

FIND FILTER SORT QUERY OUTPUT DEFINE CNTRL FILES OPEN CLOSE

Filter State ☒ ON ☐ OFF

condition

CTL CTL CTL CTL CTL CTL

U D R L T B

F2

DEL

F4 F5

FFWD FBCK

F8 F9 F10

PATH ERRORS FIELD

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Criterion Test, Continued

Part 2—test questions, continued

3. On the screen shown below, indicate how to retrieve all operator changes and process alarms for units 01 and 02 for the previous 24 hours (circle the targets and write in the entry ports).

01 May11:39:192

FINDFILTERSORTQUERYOUTPUTDEFINE CNTRL FILESOPENCLOSE

BuildHWY
Select Pre-BuiltUCN
Delete Pre-BuiltUnit
Node
Jrnl

SaveOverwrite

Start Date-Time?
End Date-Time?

Conditions:

Descriptor?

Select one or more Journals:

Process Alarms

Process Changes

Operator Messages

System Maint Messages

System Status Changes

System Error Messages

Status Notification

Sequence Of Events

CTL CTL CTL CTL CTL CTL
U D R L T B

F2
DEL

F4 F5
FFWD FBCK

F8 F9 F10
PATH ERRORS FIELD

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Self-Evaluation

Part 1—completion of lab exercise

Completion of the lab exercise satisfies part of the test requirements for this course module.

Be prepared to show your query output files to your course manager:

EVENTS.XX *All journal events for the past week*

CUTO###.XX *All events filtered except Contact Cutout events*

CABLE###.XX *All events filtered except Cable Status events*

ERRS###.XX *All events filtered except these system errors: crashes, s/w errors, communication errors, driver errors, and OPT errors (events types 0-14)*

EMERG###.XX *All process alarm events for the week filtered except emergency alarm events.*

Part 2—test questions

Be prepared to answer the the following questions and discuss them with your course manager.

1. Describe the fields that the Doc Tool assigns to data retrieved by a journal query.

<u>Field Name</u>	<u>Description of Field Contents</u>
<u>DT</u>	<u>date and time of event</u>
<u>U</u>	<u>process Unit ID or SY if system event</u>
<u>ET</u>	<u>event type (see Table 1)</u>
<u>GI</u>	<u>general information (event description)</u>

2. Assume that you retrieved all process alarm events for the past 2 hours. What FILTER command would you enter to remove all events from the report except the DI SOE events?

ET=27

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Self-Evaluation, Continued

Part 2—test questions, continued

- On the screen shown below, indicate how to retrieve operator changes and process alarms for units 01 and 02 for the previous 24 hours (circle the targets and write in the entry ports).

01 May11:39:192

FINDFILTERSORTQUERYOUTPUTDEFINE CNTRL FILESOPENCLOSE

BuildHWY
Select Pre-BuiltUCN
Delete Pre-BuiltUnit
Node
Jrnl

SaveOverwrite

Start Date-Time?
End Date-Time?

Conditions:
U=01 or U=02

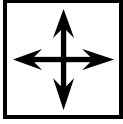
Descriptor?

Select one or more Journals:
Process AlarmsProcess ChangesOperator Messages
System Maint MessagesSystem Status ChangesSystem Error Messages
Status NotificationSequence Of Events

CTL CTL CTL CTL CTL CTL F2 F4 F5 F8 F9 F10
U D R L T B DEL FFWD FBACK PATH ERRORS FIELD

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Directions



DIRECTIONS—This is the end of this course module.

Use your course map to

- Get your course manager to sign off this course module.
- Choose your next eligible course module.

If you have a question

- Ask your course manager.
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