



SafeNet/i

IBM QRadar® SIEM and QRadar Log Manager.

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Function Overview

SafeNet/i is introducing new features in this product update.

1. Integration with **IBM QRadar SIEM and QRadar Log Manager.**

Administrators can now configure SafeNet/i to integrate with IBM's QRADAR family of products. SafeNet/i can send alerts via the required LEFF compliant log file format and store that log file in the system IFS for FTP pickup and processing by the QRADAR Network Anomaly Detection Monitor software.

New for SafeNet/i V11: A full payload output file can now be created. You can now configure SafeNet to send ALL the collected transactions to QRADAR. See command STRSNRADAR

Prerequisites

1. A SafeNet/i minimum level of V11.10 installed. See our support website for PTF level required. (PTF11.10)
2. A minimum IBM OS level of V7R2.
3. Alert Notifications must be configured and active in SafeNet/i. (in V11 this is Not required for ALL transactions in the payload file build)
4. IBM's QRADAR software must be installed on a separate system.

Integration Process Overview

Listed below are the general setup steps for integration with Qradar.

You must have a SafeNet/i minimum PTF Version 11.10 for this function to operate and an IBMi OS level of V7R2.

1. On the IBM i, create an IFS Directory to hold the SafeNet/i Qradar alert files.
Example: /SafeNet/Qradar
2. Setup an IBMi User Profile that QRADAR will use to pick up the alert files by FTP or SFTP.
Example: QRADARUSER
3. Setup the same user in SafeNet/i, allowing FTP access to the directory created above.
 - a. User must have authority to the FTPLogon and FTPServer points
 - b. User must have authority to LIST and GET FTP Sub commands.
 - c. User must have READ authority to the IFS Path created for the QRADAR alert files.
4. Using the SafeNet/i CHGRDRSET command, verify or enter the following:
 - a. THISHOST: Enter a Host name or identifier for this IBM i. This is for QRADAR identification.
 - b. QRPATH: Path to directory created above used for output file creation. Must be in the format of '/path1/path2/'
 - c. MAXSIZE: If you intend to send ALL transactions, set the Maximum Output file size. 25MB = approximately 100,000 transactions to a file.
 - d. STARTDATE/STARTTIME: If this is the first time you are using this function, set a starting date and starting time. These values are used to determine where in your transaction file (TRAPOD) you

want to start the full payload build point. These values will update as the files are output. It represents the “last” record processed and is a starting point for new payload file builds.

5. Setup Alert Notifications in SafeNet/i with the CHGNOTIFY command. You must use Summarized Alerts. (not required if doing a full payload file builds only)
6. Configure the QRADAR software for your SafeNet/i system as a Log Source.:
 - a. Define a log source for this IBM i. (see details below)
 - b. Test alert generation and file pickup by Qradar
7. The alert files created in the IFS directory will be named “SN_QRAD_XXXX.txt” where XXXX = a number

CHGRDRSET Command Example

```
QRADAR Integration Settings (CHGRDRSET)

Type choices, press Enter.

Activate QRADAR Integration? . . . *YES *YES, *NO
This Host Identifier . . . . . MPADEV
IFS Path to QRADAR Alert Files . . . '/SafeNet/QRadar/'
-----
Max output file size (MB) . . . . 025 01-999
Start at Date in File . . . . . 080120 Date
Start at Time in File . . . . . 000001 HHMMSS

Bottom
F3=Exit F4=Prompt F5=Refresh F12=Cancel F13=How to use this display
F24=More keys
```

Notes:

1. The IFS Path must exist prior to entering it in this command.
2. The Host Name entered here is only for Documentation/Identification of this host to the QRADAR log activity.
3. You must have Alert Notification active in SafeNet/i for rejected transaction QRADAR alerts to be generated. This is not required when you want ALL transactions included in the build of the payload file. If you want rejections to IMMEDIATELY be available to QRADAR, set this function to RADACT(*YES). Any Batch files built will also include rejected transactions.

- You can still use the batch full payload build (STRSNRADAR) function even if this is RADACT(*NO)

FTP User Setup Example for QRadar®

The FTP User from QRADAR must have at a minimum LIST and GET authority.

```

FTPSETD                               SafeNet/i                               3/28/14
MPA1                                   Work With Authorized FTP Statements    15:00:21
User-> QRADARUSER QRADAR FTP USER

Type option, press Enter.
1=Select

  Opt      FTP Operation      Associated FTP Command
  -        -                -
  -        Directory/Lib Create  MKDIR, XMKD
  -        Directory/Lib Delete  RMD, XRMD
  -        Set Current Dir      LCD, CWD, CDUP, XCWD
  1        List Files           LIST, NLIST
  -        File Deletion        DELE
  1        Receiving Files      GET, MGET
  -        Sending Of Files     PUT, APPEND, MPUT
  -        Renaming Files       RNFR, RNT0
  -        Execute CL Commands  Any CL - SYSCMD

Bottom

F2=Show Defined Users  F3=Exit    F4=Additional Settings  F7=Alt Profiles
F9 = WRKUSRCMD        F12 = Cancel  (c) Copyright 1997 MP Assoc., Inc

```

Then, Press F4 for Additional Parameters

Note the Initial Name Format and Home Directory settings:

```
FTPSET2D                               SafeNet/i                               3/28/14
                                         Maintain Special FTP Settings for Users 15:02:25
User-> QRADARUSER   QRADAR FTP USER

Initial Name Format->  *PATH              (*LIB, *PATH)
Initial List Format->  *UNIX              (*DFT, *UNIX)
Initial Library-----> *USRPRF          Name, *USRPRF
Encrypted FTP Connection--> 0 (0=Allowed,1=Not Allowed,2=Required)

Initial Home Directory Path___ Name of Path or *USRPRF
/SafeNet/Oradar

-----

CCSID of Initial Path---> 00000 (0 - 65533) 0=Default

F3 = Exit
F12=Return                                HELP (c) Copyright 2001 MP Assoc.,Inc
```

Finally, Use the WRKUSRPTH command and give the FTP user authority to the IFS path where the QRADAR alerts files will be placed.

```
SND0100                               SafeNet/i                               3/28/14
MPA1                                   Maintain Path Names                       15:04:18
User-> QRADARUSER   QRADAR FTP USER

Type option, press Enter.
2=Edit,4=Delete

Opt. Path Names... R W D O/M
- /SafeNet/Oradar/* X - - -

Bottom

F2 = Show Defined SafeNet Users    F3 = Exit    F6 = Add
F12 = Return  HELP                  (c) Copyright 1997 MP Assoc.,Inc
```

Setting Up a Log Source in QRadar®.

1. From the main menu of QRadar, select ADMIN, then LOG SOURCES
2. Click on “Add” top add a new log source.
3. Define the IBM i as a log source in Qradar as follows

Log Source Parameter Values:

Log Source Type	IBM AS/400 iSeries ←Must Be Selected
Protocol Configuration	LOG FILE ←Must Be Selected
Service Type	FTP ←Must Select FTP or SFTP
Remote IP or Hostname	IBMiHostIP ←Enter the ACTUAL IP or Host name of IBM i
Remote Port	21 ←For FTP use 21.
Remote User	IBMiUser ←Use the ID you created on the IBMi
Remote Directory	(leaveblank) ←No need to enter if setup in SafeNet/i correctly.
FTP File Pattern	.* ← Use .* for all files to be picked up (a dot and asterisk)
FTP Transfer Mode	Binary ←Must Be BINARY
Recurrence	15M ←15 minutes minimum allowed (customer choice)
Processor	NONE ←Must be NONE
Event Generator	LINEBYLINE ←Must be LINEBYLINE
File Encoding	US-ASCII ←Must be US-ASCII

See Screenshots on
Next Page.

QRadar Log Manage x

184.75.122.50/console/qradar/jsp/QRadar.jsp

IBM Security QRadar SIEM

admin Preferences Help Messages IBM

System Time: 9:18 AM

Dashboard Log Activity Reports Admin

Admin

- System Configuration
- Data Sources

Log Sources - Google Chrome

184.75.122.50/console/do/sem/maintainSensorDevice?dispatch=edit&appName=eventviewer&pageId=SensorDeviceList&hasSearched=false&id=70&columnSorting=true

Edit a log source

Log Source Name:

Log Source Description:

Log Source Type:

Protocol Configuration:

Log Source Identifier:

Service Type:

Remote IP or Hostname:

Remote Port:

Remote User:

Remote Password:

Confirm Password:

Remote Directory:

Recursive:

FTP File Pattern:

FTP Transfer Mode:

Start Time:

Recurrence:

Run On Save:

EPS Throttle:

Processor:

Ignore Previously Processed File(s):

Change Local Directory?:

Event Generator:

File Encoding:

Folder Separator:

Enabled:

Credibility:

Target Event Collector:

Coalescing Events:

Store Event Payload:

Please select any groups you would like this log source to be a member of:

Testing the Initial Configuration

SafeNet/i Verification:

After the initial setup in SafeNet/i, perform the following to verify proper Setup.

1. Make sure the FTP user can connect and logon, then is able to LIST and GET files from the directory.
2. Make sure Alert Notifications are active in SafeNet/i (See CHGNOTIFY) (Not required if doing a full payload build using STRSNRADAR command)

Do one of the following:

If using RADACT(*YES) for just rejections:

3. Manually cause an alert to be generated by SafeNet/i.
 - a. Example: Using FTP, connect to the IBMi and enter an invalid user id. That will cause a rejection.
4. After the normal Alert wait interval (see CHGNOTIFY), check for the SN_QRAD_XXXX.txt file in the IFS directory.

OR

If using STRSNRADAR For a Full Payload of normal transactions:

5. Set your start date and time using the CHGRDRSET command
6. Issue the STRSNRADAR command. This will initiate the batch job in SAFELOGING subsystem that builds the output file for QRADAR. This is a never ending job that will output all the records in the TRAPOD file. It may build multiple files of output until the EOF is reached. For the initial test, set your MAXSIZE value in command CHGRDRSET to 1 megabyte. Remember to set it back once you testing is complete (25MB is recommended file size)
This job will sleep for ten minutes once EOF occurs before building again. You can cancel this job at anytime if required by using the ENDSNRADAR command.

Once a file is output, check the directory you entered in the CHGRDRSET command parameters (/QRADAR is default)

7. If the file is NOT found, re-check the configuration and the joblog for the ALERTWATCH job and/or the SN_QRADAR job in subsystem SAFELOGING

This finishes the verification of SafeNet/i alert processing.

QRADAR should be verified next,

1. Define the Log source in the QRADAR application.
2. Activate the Log Source.

3. Check Status of Log Source in QRadar.
4. Check the SafeNet/i transaction file for FTP entries from the QRADAR system. You can select records based on the User Id assigned to the Qradar install. This will allow you to verify if QRadar successfully retrieved the alert files from the IBMi IFS.

STRSNRADAR and System Start-up

If you want to use the full payload output to build QRADAR log files continuously as transactions occur on your system, you must either issue the STRSNRADAR command manually or add it to your system start up program. The command has no parameters.

STRSNRADAR submits a job called SN_RADAR to the SafeLogging subsystem. The batch job will read all the transactions from a starting timestamp in file TRAPOD until the Max File size is reached, or EOF occurs. Once either condition happens, a file will be created in the IFS path for pickup by QRADAR. This process does use the “/tmp” directory as a working directory during file build.

ENDSNRADAR

This command will immediately end the SN_RADAR batch job if it is active.

STRTRP and ENDTRP

The STRTRP and ENDTRP commands will end and restart a running SN_RADAR batch job. The ENDTRP command checks for the running job. When the STRTRP command is issued again, the command checks to see if the SN_RADAR job was previously running when the ENDTRP command was issued and will restart the SN_RADAR job if necessary.

Additional References

See the SafeNet/i Reference guide at www.safeneti.com

See QRADAR software guides at www.ibm.com