



Synesis version 4.0 patch 2

Release Note

June 17, 2019

Changes of version 4.0 patch 2

- The issue had been fixed: The version up script cannot be terminated correctly if the available area of working partition is not enough. (Ref #9792)
- The issue had been fixed: Some kinds of packet will not be analyzed at GTP inner analysis, and it will cause the packet drop or the failure operation of stopping capture. (Ref #9773)
- The issue had been fixed: The getting logs will fail in the SYNESIS manufactured at version 3.0 or before. (Ref #9882)

Changes of version 4.0 patch 1

- The issue had been fixed: In the MFA, you cannot merge the pcapng files saved by Wireshark. (Ref #8355)
- The issue had been fixed: Real-time decoding results can't be obtained intermittently. (Ref #8363)
- The issue had been fixed: Normal decoding can't be performed if real-time decoding is performed even once. (Ref #8790)
- The issue had been fixed: MFA time synchronization can't be performed when using a specific trace file. (Ref #8793)
- The issue had been fixed: The report function may not be available at all. (Ref #8794)
- Split file size can be specified when saving trace files using the RESTful API. (Ref #8808)
- The issue had been fixed: If the captured GTP packet has a sequence number field, the inner header of the packet is not correctly recognized in the software filter and analysis. (Ref #9001)



Synesis version 4.0

Release Note

January 30, 2019

This document is a release note of High-Performance Network Packet Recorder “SYNESIS” version 4.0.

1. New features for Synesis version 4.0

1.1. MFA

- You can create a ladder diagram from the traces captured in multiple points.
- You can solve the network traffic issue visibly by narrowing down the flow or application.

1.2. GTP Tunnel Filter/Tunnel Protocol Support in Analysis

- In the hardware filter of IP flow and flow, you can filter the packets by GTP inner headers. You can select the target header from Outer/Inner/Both.
- In the APM, NPM, and L2/L3 analysis, you can select the target header to analysis from Outer/Inner.

1.3. PacketReplayer

- In the packet replacement, the checksum in IP, TCP, and UDP can be recalculated.
- In the packet replacement, the MAC address and the flow can be replaced from “Any” to a specific value.
- You can replay the different trace files from the multiple channels.
- You can start and stop the replay via RESTful API.

1.4. AA (Preview version)

- You can confirm the application server performance and relationship between application servers in post analysis by using an engine provided by Uila.
- This feature is now in the preview version. Therefore, the support for this feature will be limited.

1.5. SSL/TLS

- The communication between SYNESIS and the client is encrypted with SSL/TLS.

1.6. RADIUS External Authentication

- You can sign in to the SYNESIS by the authentication via external RADIUS server.

1.7. Documents

- User's manual had been changed from pdf to the Web Help.
- All documents had been stored in the SYNESIS.

1.8. Log collection

- In the management page, you can obtain more logs so that you can solve the problem easier.

1.9. Version UP

- The operation of the Version UP became more simply, and it takes less waiting time than before.

1.10. Other improvements

- You can confirm the link status from everywhere in the SYNESIS web application.
- You can confirm the channel arrangement of physical port.
- In the configuration, the menu items were grouped by function to improve the visibility.

2. The changes from version 3.5

2.1. Remarks in the version up

- The protocol connecting to the SYNESIS web application had been changed from http to https.
- Related to the above, the port number which the SYNESIS web application uses had been changed from 8080 to 443.
- In the packet replacement in the PacketReplayer, the way to interpret the mask value of '0' had been changed. Please refer to the user's manual.

2.2. Fixed issues and limitations

- The issue had been fixed: If the username or password of the OS had been changed, the backup/restore feature and initialize Synesis feature cannot be performed.
- The issue had been fixed: The size in the storage information was displayed smaller than the actual. The displayed value was calculated by "GiB." --- Now the correct value calculated by "GB" is displayed.
- The issue had been fixed: The file size in the trace file list was incorrect. The value was smaller than the actual by 1. --- Now the correct value is displayed.

- The issue had been fixed: Selected software filter cannot apply correctly immediately after checking "Enable Auto Backup". (Ref #4833)

2.3. Obsolete option

- All PacketReplayer3.5 (standalone) features are integrated into SYNESIS main GUI. You cannot execute replay in the standalone PacketReplayer.

3. Known issues

3.1. Issues of version 3.1 or before

- Agent: The file name is not reflected when we change the name while capturing on capture session. (Ref #1114)
- If saving trace file on the link of [Save Trace] at [ALERT] screen, no filter is applied; all of frames among the time-range. (Ref #1649)
- Back up feature occasionally fails by time-out when the system has low memory available. (Ref #1752)
- Values entered previously display on the Filter making window when configuring new filter. (Ref #1754)
- The most recent analysis result cannot be displayed on Dashboard and AANPM page until the capturing next packet or the stopping the current capture session. (Ref #2865)
- Cannot set the name of trace file when the user creates it in Decode page. (Ref #4017)
- In the first time of capturing with L2/L3 protocol analysis, the counts of L2/L3 packets sometimes less than the actual. (Ref #4169)
- The right edge of DLC trend graph sometimes cannot draw graph correctly when choose time-range click to 30 mins more. (Ref #4212)
- When trace files cannot be created in "Out of disk space", can't download them. (Ref #4358)
- Progress bar show always 0% during analyzing. (Ref #4580)
- Yearly report/One-time report cannot output correctly when the selected Granularity is 1 month (Ref #4741)
- In the export statistics feature, the sum of unicast packets sometimes won't match with the actual. This will occur when only broadcast and multicast packets are captured, and no unicast packets are captured. (Ref #4771)
- In the microburst feature of SYS-2G-EP/SYS-2G-ER models, the alarm whose consecutive count exceeds 5 cannot be detected. Please use it with consecutive count is 1. (Ref #4774)
- Capture status does not reflect even though Disk Full is full when Disk Full Action sets to Stop. (Ref #4781)
- Initialize Synesis may sometimes fail in the first-time execution, but it will succeed when perform it again. (Ref #T62515)

3.2. New issues

- The external data source cannot work correctly in the model of SYS-8G2-HPR, SYS-80G2-HPR, and the one having SYSC-XL option. (Ref #2793)
- The time-based lock trigger will sometimes be created with some delay if the auto-backup option is enabled. (Ref #7819)
- The authentication via RESTful API cannot use the RADIUS server. (Ref #7858)
- The height of the expert information area is fixed. (Ref #8150)
- In the MFA, you cannot merge the pcapng files saved by Wireshark. (Ref #8355)

4. Subject to the limitations

4.1. Limitations of version 3.5 or before

- The site drop list in APM common box won't refresh when add or delete site. (Ref #130)
- When the thresholds are changed for the backed-up Capture Session, the result is not displayed. When the threshold is reset, the original result will be displayed. (Ref #1507)
- If backing up a Capture Session with statistics exported, the statistics is not backed up. Re-exportation can be performed. (Ref #1512)
- If the capture period is less than 5 minutes, Microburst alerts within backed up Capture Session are not detected. Please analyze the record with more than 5 minutes. (Ref #1506)
- Limited time-range statistics cannot be saved in the case of backed up Capture Session. All time-range statistics can be saved. (Ref #2643)
- Even the models supporting link status occasionally show "unknown" right after the start of Capture Session. (Ref #3671)
- Maximum number of Microburst alert showing in the table is 500.
- If the capture period is less than 5 minutes, APM analysis results are not detected. Please analyze the record with more than 5 minutes.
- The statistics counters such as number of packets will not be displayed for about 2 seconds after the capture started.
- Microburst analysis can be performed only on the channel A to D. Data of the channel E to H cannot be analyzed in the SYS-8G2-HPR model.
- If the directory for Auto Backup is set to network disk, the time-out time needs to be set appropriately when mounting it.
- Auto Backup feature does not save frames right before about 10 seconds of stopping Capture Session.
- In the SYS-2G-ER model, if you use auto backup feature, the capture performance will be spoiled sometimes.
- In the PacketReplayer feature, you cannot obtain the full-rate performance if you replay from multiple channels.

- In the trend graph of cyclic report, the x-axis plot is determined by the last edge of the time range. For example, in the case of granularity is 1 day, and the data point is calculated from January 1st 0:00 to January 2nd 0:00, the x-axis plot will be the place of January 2nd.
- In the backup/restore of configuration, if you want to restore from the backup of different hardware model, you need to modify some setting files manually.

4.2. New limitations

- The hardware filter won't work correctly when the capturing and PacketReplayer works at the same time. (Ref #5531)
- The replayed statistics does not match with original capture record if the edge of the capture record is not 0% utilization. (Ref #6591)
- The utilization won't be kept in 100% stably when replaying a capture record whose utilization is below 10% with wire-rate mode. (Ref #7695)
- The PacketReplayer cannot replay a malformed packet. (Ref #7924)