SYNESIS Version 8.0 Release Notes

Sep 11, 2023,　　　Version 8.0.4

Applicable Products

This version of the package is applicable to the following products.
- The SYNESIS of Version 8.0.1-8.0.3
  - In this case, you need to apply only the installer.
- The SYNESIS of Version 7.5 or earlier
  - In this case, refer to the "Upgrading" section in the version 8.0.1 release note.
- New shipment

Applicable models are the same as in version 8.0.1.

Fixed Issues

1) Fixed an issue in which file creation did not finish when attempting to create a trace file with packets received from four or more channels in SYNESIS using the following Control Units. [#26439]

Standard Base Models	SYX-D-CB-2G-1
	SYX-D-HCB-8G-1 (Excludes additional external storage)
	SYX-D-CB-10G-1
	SYX-D-CB-10G-2
	SYX-D-HPB-20G-1 (Excludes additional external storage)
	SYX-D-HPB-20G-2 (Excludes additional external storage)
	SYX-P-CB-2G-3
Non-Standard Models	SYxB-20GR1-CP (Excludes additional external storage)

✧ This issue occurred in version 8.0.1-8.0.3.

Jul 24, 2023,　　　Version 8.0.3

Jul 26, 2023: For the fixed issue 1), added exception case for SYX-D-HCB-8G-1.

Applicable Products

This version of the package is applicable to the following products.
- The SYNESIS of Version 8.0.1
  - In this case, you need to apply only the installer.
- The SYNESIS of Version 7.5 or earlier
  - In this case, refer to the "Upgrading" section in the version 8.0.1 release note.
- New shipment

Applicable models are the same as in version 8.0.1.

Fixed Issues

2) Fixed an issue in which packets were not ordered by timestamp when a trace file containing packets received from multiple channels was generated in SYNESIS using the following Control Units. [#26048]

Standard Base Models	SYX-D-CB-2G-1
	SYX-D-HCB-8G-1 (Excludes additional external storage)
	SYX-D-CB-10G-1
	SYX-D-CB-10G-2
	SYX-D-HPB-20G-1 (Excludes additional external storage)
	SYX-D-HPB-20G-2 (Excludes additional external storage)
	SYX-P-CB-2G-3
Non-Standard Models	SYxB-20GR1-CP (Excludes additional external storage)

   ✧   This issue occurred in version 8.0.1.

3) Fixed an issue in which NetKeeper service was restarted when executing merge of a profile that satisfies all of the following conditions in the profile creation process for MFA (multi-flow analysis). [#25933]
   ●   Use pcapng format trace files as data source.
   ●   The number of segments selected in the profile is less than the number of channels in the trace file.
   ✧   This issue occurred in version 8.0.1.

4) Fixed an issue in which the NetKeeper service was restarted when executing merge of a profile with multiple capture sessions selected as data sources in the profile creation process for MFA (multi-flow analysis). In addition, this fix disallows multiple capture sessions to be selected as a data source for the MFA profile. [#25933]
   ✧   This issue occurred in version 8.0.1.

May 22, 2023,   Version 8.0.1

May 22, 2023: V8.0.1.15 Initial Revision
Jun 07, 2023: V8.0.1.16 add a Known Issue 1)
Jun 28, 2023: Correct Quick Start Guide for SYx-D-CB-10G-2 model.
Sep 11, 2023: Add a Known Issue 2)

Upgrading

We provide 2 types of upgrading method, Upgrading Package and Recovery Media.

	Upgrading Package	Recovery Media
Operation	Applying the 2 packages in this order. 1. Extra Upgrading Package 2. SYNESIS V8.0 Package	Performing the system recovery.
Required Time	About 60~90 minutes.	About 90~120 minutes.
Existing Data and Settings	They will be kept.	They will be lost.

Applicable Version	V6.5.1 or later	All versions
Applicable Model	The models listed in the next section.	

Models of Upgrading Available

Standard Base Models			Former SYNESIS Models	Non-Standard Models with following Control Unit P/N
SYX-P-CB-2G-3	SYX-P-CB-40G-2	SYX-D-CB-2G-1	SYU-100G-HPR2	SYxB-100GP1-7300MAX
SYX-P-CB-4G-2	SYX-P-CB-50G-1	SYX-D-HCB-8G-1	SYU-100G-HPP(D)	SYxB-20GR1-CP
SYX-P-CB-10G-3	SYX-P-HPB-100G-2	SYX-D-CB-10G-2		
SYX-P-CB-20G-2	SYX-P-CB-100G-1	SYX-D-HPB-20G-2		

P/Ns of Production Available

Control Unit P/N			Capture Module P/N	
SYxB-2GP3	SYxB-100GP2	SYxB-8GR1-C (*2)	SYxC-1G4N1-HP	SYxC-10G4N1-HP
SYxB-4GP2	SYxB-100GP3	SYxB-8GR2-C (*2)	SYxC-1G4N1-LE	SYxC-10G4N1-LE
SYxB-10GP3	SYxB-100GP4	SYxB-10GR2	SYxC-1G2N1-HPL	SYxC-25G2N1-HPL
SYxB-20GP2	SYxB-200GP2 (*1)	SYxB-10GR3	SYxC-10G2N1-HP	SYxC-25G4N1-HP
SYxB-40GP2	SYxB-200GP3 (*1)	SYxB-20GR2 (*2)	SYxC-10G2N1-LE	SYxC-100G2N2-HP
SYxB-50GP1	SYxB-2GR1-C	SYxB-20GR1-CP (*2)		
SYxB-50GP2	SYxB-2GR2-C			

(*1) Can apply the Long Duration Replaying option.
(*2) Can apply External Storages.

New Features

1) Enabled configuration of a channel that receives inbound traffic and a channel that receives outbound traffic as a single channel group. [#23316]
   Channel groups are used for the following:
   - Select a channel group as data sources for viewing and reporting NPM and APM analysis results.
   - Apply the channel group name as the channel name in the capture session.
   - Apply the channel group name as the interface name in the trace file.
2) Added the ability to slice at the end of the L4 header of a packet to the slice function of the capture option. This function can be applied to the entire SYNESIS or on a per-channel basis. [#22813]
3) Added a new statistical metric for capture session called "Passed" which excludes packets removed by packet deduplication or hardware filter functions from the received packet count. [#22587]
4) Added the ability to display the link status and link speed of each channel as a tooltip or dialog. [#22641]
5) Added the ability to apply a software filter to the analysis function in order to reduce the number of target packets. This filter can be applied to both real-time and post analysis. [#924]
6) Added the ability to decrypt and display the payload of ESP and TLS encrypted packets to the decoding function. [#22283]

7) Added the ability to assign Ethertype, IP protocol, and L4 port number to various protocols in the decode function. [#22283]
8) Renewed MIB configuration for SNMP Trap used for various notifications in SYNESIS. However, the old MIB configuration can still be selected. [#19492]
9) Enabled to change facility as a syslog setting used in SYNESIS notifications. [#22698]
10) Added "Fault Detect" feature to Management Console. With this function, various functions that were previously provided as "checker tools" can now be configured and enabled on the GUI. The existing CLI version of the "Checker Tool" can also continue to be used. [#22586]

Specification changes since version 7.5

1) The bit rate calculation method for capture sessions was previously based on the number of bytes in the received frame without including the Inter Frame Gap (IFG) but is now based on the number of bytes including it. [#22586]
2) Allowed the input of an integer greater than 1000 as the fixed rate value for the stream specified in the PacketReplayer profile. This allows for intermediate values such as 1.5 Gbps, which were not possible in the past, to be specified by changing the unit to Mbps and entering 1500 as the value. [#23886]
3) Changed the terminology used in the SYNESIS GUI and manual. [#21740]
   Major changes are listed below:

Old Term	New Term
Filter	Software Filter
Throughput	Bitrate

4) Fixed the settings for slicing, disk full action, and deduplication to be inherited from the capture options when starting capture using the RESTful API 2.0 "PUT /agents/capture/start". Also, fixed the hardware filter setting in the capture options to be inherited when the hardware filter is omitted in this API. [#25554]

Improvements since version 7.5

1) Trace file saving time reduced by about 30% when software filters are not used. [#21586]
2) Trace file saving time reduced when using software filters, including channel filters. For example, if all four channels are receiving packets at the same rate and the channel filter is limited to two channels, up to 50% of the time can be saved. [#21586]
3) Updated 3rd party libraries for various vulnerabilities. [#24529, #24774, #25498]
4) Replaced the packet and byte columns displayed in the indicator table of the GUI version of the PacketReplayer. [#6911]
5) Added units for file sizes less than 1KB on the trace file list display screen. [#10924]
6) Display blank screen after 5 minutes if the SYNESIS desktop screen is left unattended. This improvement applies only to recovery with Version 8.0 and does not apply to upgrades from Version 7.5 or earlier. [#24826]

Fixed Issues

1) Fixed an issue that caused PacketReplayer usage to be displayed incorrectly. [#24076]
   ✧ This issue occurred in all versions since 6.0.

2) Fixed an issue that prevented the CLI PacketReplayer from replaying in performance mode when using SYxC-100G2N2-HP as capture module and 10G/1Gx2 profile is selected. [#23792]
   ✧ This issue occurred in all versions since 5.0.

3) Fixed an issue that caused packet replay using capture sessions to fail in SYNESIS with SYxB-100GP1-7300MAX as the Control Unit. [#20500]
   ✧ This issue occurred in all versions since 6.5.

4) Fixed an issue in which the capture service may not start when using SYxC-25G2N1-HPL as capture module. [#22343]
   ✧ This issue occurred in all versions since 7.5.

5) Fixed an issue in which incorrect empty data was sometimes added when statistics were exported to a CSV file. [#24438]
   ✧ This issue occurred in all versions since 3.5.

6) Fixed a RESTful API 2.0 issue that caused a 500 error (Internal Server Error) if the "l4Type" parameter was omitted when creating a flow filter with the "POST /hardwareFilters/flow" API. [#24792]
   ✧ This issue occurred in all versions since 6.0.

7) Fixed an issue where an incorrect string was displayed in the "Data Source" column of the Alert Information list on the Alerts screen. [#24719]
   ✧ This issue occurred in all versions since 6.5.

8) Fixed an issue in which only runt errors were not applied when an error filter with all error items selected was specified when creating a trace file. [#24861]
   ✧ This issue occurred in all versions since 3.0.

9) Fixed an issue that failed to create backup files for settings containing "." in the file name. [#24044]
   ✧ This issue occurred in all versions since 7.0.

10) Fixed and issue after uploaded a file into trace banker, the sort order was sometimes reset. [#18417]
   ✧ This issue occurred in all versions since 3.5.

11) Fixed an issue when saving trace failed due to the lack of databank disk space, the error message was "Unknown Error". [#25127]
   ✧ This issue occurred in all versions since 2.5.

12) Fixed an issue in which starting and stopping captures with RESTful API 2.0 did not work properly when capture options were never saved. [#25492]
   ✧ This issue occurred in all versions since 6.0.

13) Fixed an issue where the capture trigger was not disabled after unchecking the "Enable Capture Trigger" checkbox in the capture trigger option. [#25526]
   ✧ This issue occurred in all versions since 7.0.

14) Fixed an issue in which the capture trigger option was not applied when set by an administrator other than "admin" user. [#25526]
   ✧ This issue occurred in all versions since 7.0.

15) Fixed an issue where the bottom portion of the Hardware Pattern Filter Setup screen was missing.
   ✧ This issue occurred in all versions since 6.0.

Known Issue

1) Logging in to SYNESIS via Remote Desktop and Main Unit Display simultaneously might cause no-response state. [#25510] (added Jun 07, 2023)
   - ✧ This issue will occur in version 8.0.1 or later.
   - ✧ To know more detail and how to recover, see another document, "Known Issue related with Remote Desktop" (KnownIssue_25510_RDP_en.pdf).
2) In SYNESIS using SYxC-1G2N1-HPL, an adapter with 1Gbpsx2 ports, "Synesis Adapter NT 10Gbps/1Gbps x 2" is displayed as the name of that adapter. [#26488] (added Sep 11, 2023)
   - ✧ This issue will occur in version 8.0.1 or later.