Capture 100% / Replay 100%

BENEFITS

- ✓ Improve customer experience
- ✓ Prevent loss of business due to network downtime
- ✓ Insure network infrastructure vendors have complete data for troubleshooting
- ✓ Extend the value of existing network tools with automated actions
- ✓ Reduce network operating cost with better team collaboration and efficiency

HIGHLIGHTS

- ✓ Full line rate capture with no packet loss, with patented stream to disk technology
- ✓ Support for 1G/10G/25G/40G/100G interfaces
- ✓ Capture weeks, even months of network data
- ✓ Replay captured traffic even 100Gbps
- ✓ Save processing time for extracting packets with SYNESIS FS
- ✓ Simple, intuitive yet powerful GUI
- ✓ All-in-one appliance
- ✓ Multi-Language support(EN/CN/JP)
- ✓ Wireshark analyzer can be installed as a plugin
- ✓ Microburst Notification
- ✓ Security Option (Anomaly detection)
- ✓ Redundancy Support for Distributed type
- ✓ DC Power support option for Distributed type

SYNESIS is a network data recorder that can continuously capture up to **200Gbps**. SYNESIS, an all-in-one packet capture system, can be deployed in data centers, remote site branches, and test labs as a physical appliance. Configuration is minimal so it can be installed and capturing high speed traffic in minutes.

Only **SYNESIS** is able to capture all network packet data completely and at high granularity through two unique patented technologies; parallel write processing and intelligent load balancing.
These technologies enable SYNESIS to perform long term capture even at **200Gbps** full line rate without incurring any packet loss. No other packet capture system can achieve this level of performance.

Now PacketReplayer up to 100Gbps is available!

Replay single packets or data from extended long-term capture sessions. Time of each channel can be synchronized.
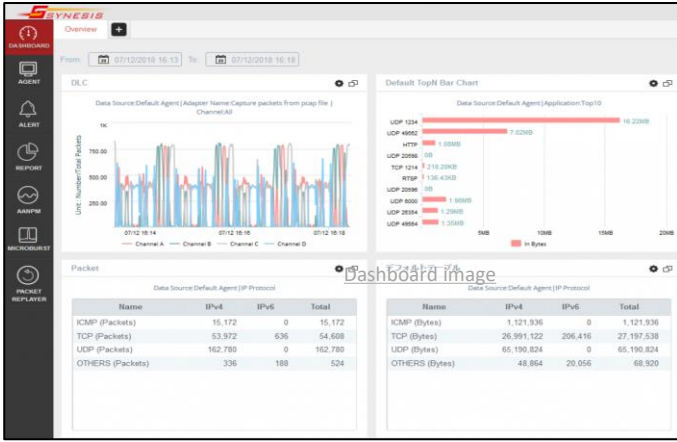Perfect application for R&D/QA and Field Support teams to know what happened in the commercial network!

Capture 100% in the field.. → **Then Replay 100% in the lab!**
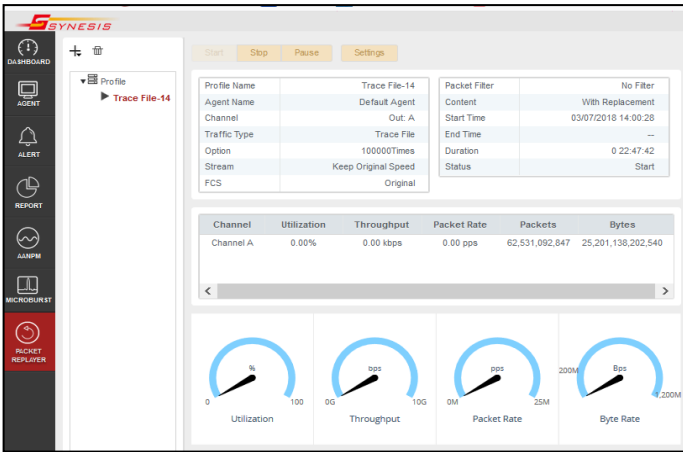
Packet Capture

SYNESIS is a capture appliance compatible with 1G/10G/25G/40G/100G networks that can capture traffic at wire speed without loss using our patented data processing algorithm.

New Capture trigger feature allows to specify the time to start / stop capturing.
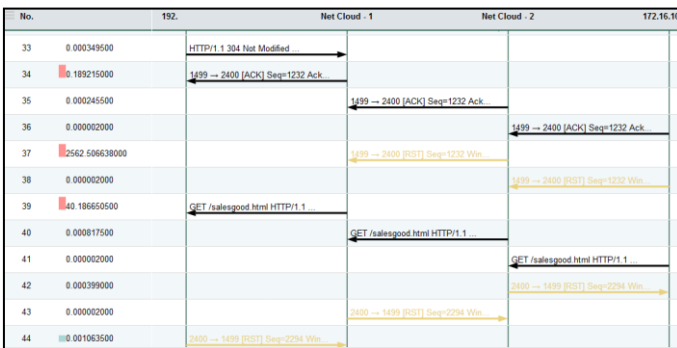
PacketReplayer®

Real-life wire-rate traffic capture and replay up to **100Gbps** with micro-second level packet gap granularity. The following headers may be filtered and replaced within each frame in a PCAP file to be generated.
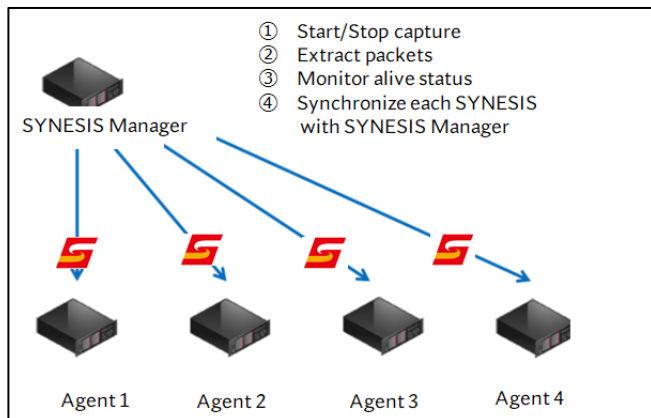
Time of each channel can be synchronized

-MAC address
-VLAN ID
-IP address (v4/v6)

Smart Analytics （Ladder View)

MFA (Multi Flow Analysis) provides a visual representation of connections between multiple capture points with corresponding ladder diagrams to better understand how transactions propagated in the network.

SYNESIS Manager

SYNESIS Manager is able to control several SYNESISs at sites providing better visibility of network and help to execute tasks on each SYNESIS at one screen.

System Specifications
SYNESIS system can be configured based on your requirement on capture performance, local storage size and capture module.

Distributed

Base Unit		
Compact Base Unit	**High-Capacity Base Unit**	**High-Performance Base Unit**
SYX-D-CB-2G-1 SYX-D-CB-10G-2	SYX-D-HCB-8G-1	SYX-D-HPB-20G-2 SYX-D-HPB-20G-3

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Extended Storage Unit		
High-Capacity Extended Storage	**High-Performance Extended Storage**	
SYX-D-HCE-8G-1 (Max 6 units)	SYX-D-HPE-20G-2 (Max 6 units) SYX-D-HPE-20G-3 (Max 6 units)	

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Capture & Replay Module	
SYS-C-IL-SFP (100/1000BASE-X (SFP) x 4)	* 2 capture module are available in Standard/High-Performance Base Unit
SYS-C-XL-SFP+ (10GBASE / 1000BASE-X (SFP+/SFP) x 2)	
SYS-C-XL4-SFP+ (10GBASE / 1000BASE-X (SFP+/SFP) x 4)	
SYS-C-CL-QSFP28-B(100GBASE / 40GBASE / 25GBASE / 10GBASE/ 1000BASE-X(QSFP28 / QSFP+ / SFP28 / SFP+ / SFP) x 2)	

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Option		
SYS-A-SW-PR PacketReplayer	**SYX-D-A-HW-48VDC** Redundant DC 48DC power supplyfor High-capacity/High-Performance Base Unit and Extra Storage Unit	
SYX-D-CB-HW-KYHD HDD Keep service for Compact Base Unit	**SYX-D-HB-HW-KYHD** HDD Keep service for High-capacity/High-Performance Base Unit	**SYX-D-HE-HW-KYHD** HDD Keep service for Extended Storage Unit

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Accessory		
ACC-TSC-40-A Optional cable to connect and syncronize 2 Capture&Replay Modules for High-capacity/High-Performance Base Unit	**ACC-TSA-PTP** Optional cable to syncronize with an external source of time(PPS/GPS/PTP) for SYS-C-IL-SFP/SYS-C-XL-SFP+/SYS-C-XL4-SFP+	

Configuration example

Configration	SYX-D-CB-2G-1	SYX-D-CB-8G-1	SYX-D-CB-10G-2	SYX-D-HPB-20G-2	SYX-D-HPB-20G-2+SYX-D-HPE-20G-2	SYX-D-HPB-20G-2+SYX-D-HPE-20G-2 3units	SYX-D-HPB-20G-2+SYX-D-HPE-20G-2 4units	SYX-D-HCE-8G-1	SYX-D-HPE-20G-2
Monitoring Port	(Specification changes based on your choice of Capture&Replay Module)							-	-
Interface	(Specification changes based on your choice of Capture&Replay Module)							-	-
Capture Performance	2Gbps	8Gbps	10Gbps	20Gbps	40Gbps	80Gbps	100Gbps	-	-
Local Storage (TB)	30.0	101.0 (+ Max 6 units x 101.0TB/extra storage)	12.0	44.0	88.0	176.0	220.0	101.0	44.0
Time stamp resolution	1ns	1ns	1ns	1ns	1ns	1ns	1ns	-	-
RAID	5	6	5	6	6	6	6	6	6
Power (W) 100V-240VAC	350	1100	350	1100	Control 1100 x 1unit Storage 600 x 1unit	Control 1100 x 1unit Storage 600 x 3unit	Control 1100 x 1unit Storage 600 x 4unit	600	600
Operating temperature/ humidity	10-35℃ /50-95℉ /8%-85%（noncondensing）								
Weight (Kg)	14.0	28.1	14.0	28.1	Control unit:28.1 Storage unit： 24（each unit）			24.0	24.0
Dimensions H x W x D (cm)	4.3 x 43.4 x 53.5	8.7 x 43.4 x 75.1	4.3 x 43.4 x 48.4	8.7 x 43.4 x 75.1	Control unit: 8.7 x 43.4 x 75.1 Storage unit: 8.7 x 48.2 x 54.1			8.7 x 48.2 x 54.1	8.7 x 48.2 x 54.1

Maintenance should be ordered separately
Model number and specifications are subject to change without notice

Portable

<table>
<tr><td colspan="5" align="center">Base Unit</td></tr>
<tr><td colspan="3">Compact Base Unit</td><td>Standard Base Unit</td><td>High Performance Base Unit</td></tr>
<tr><td>SYX-P-CB-2G-3</td><td>SYX-P-CB-20G-2</td><td>SYX-P-CB-100G-1</td><td>SYX-P-SB-80G-1</td><td>SYX-P-HPB-100G-2</td></tr>
<tr><td>SYX-P-CB-4G-2</td><td>SYX-P-CB-40G-2</td><td></td><td></td><td>SYX-P-HPB-200G-2</td></tr>
<tr><td>SYX-P-CB-10G-3</td><td>SYX-P-CB-50G-1</td><td></td><td></td><td>SYX-P-HPB-200G-3 (Long PacketReplayer Ver.)</td></tr>
</table>

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<tr><td colspan="2" align="center">Capture & Replay Module</td></tr>
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<table>
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<tr><td>SYS-A-SW-PR

PacketReplayer</td><td></td><td></td></tr>
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<tr><td colspan="3" align="center">Accessory</td></tr>
<tr><td>ACC-TSC-40-A
Optional cable to connect and syncronize 2 Capture&Replay Modules for High-capacity/High-Performance Base Unit</td><td>ACC-TSA-PTP
Optional cable to syncronize with an external source of time(PPS/GPS/PTP) for SYS-C-IL-SFP/SYS-C-XL4-SFP+/SYS-C-XL4-SFP+</td><td>ACC-CB-CASE-S

Trolly case for Compact Base Unit</td></tr>
<tr><td>ACC-CB-CASE-M
Trolly case for Standard Base Unit</td><td>ACC-CB-CASE-L
Trolly case for 100G High Performance model</td><td>ACC-CB-CASE-XL
Trolly case for 200G High Performance model</td></tr>
</table>

Configuration example

Model	2G	4G	10G	20G	40G	50G	80G	100G	100G	200G
Configration	SYX-P-CB-2G-3	SYX-P-CB-4G-2	SYX-P-CB-10G-3	SYX-P-CB-20G-2	SYX-P-CB-40G-2	SYX-P-CB-50G-1	SYX-P-SB-80G-1	SYX-P-CB-100G-1	SYX-P-HPB-100G-2	SYX-P-HPB-200G-2 SYX-P-HPB-200G-3
Monitoring Port	(Specification changes based on your choice of Capture&Replay Module)									
Interface	(Specification changes based on your choice of Capture&Replay Module)									
Capture Performance	2Gbps	4Gbps	10Gbps	20Gbps	40Gbps	50Gbps	80Gbps	100Gbps	100Gbps	200Gbps
Local Storage (TB)	3.7	7.5	11.0	22.5	19.0	38.0	44.5	76.5	57.5	127.0
Time stamp resolution	1ns	1ns	1ns	1ns	1ns	1ns	1ns	1ns	1ns	1ns
RAID	-	-	-	-	-	-	-	-	-	-
Power (W) 100V-240VAC	400	400	400	400	400	400	680	400	800	800
Operating temperature/ humidity	10-35℃ /50-95℉ /8%-85%（noncondensing）									
Weight (Kg)	9.0	9.0	9.0	9.0	9.5	9.5	13.4	9.5	21.2	20.0
Dimensions H x W x D (cm)	25.4 x 38.1 x 17.8						32.9 x 40.6 x 17.5	25.4 x 38.1 x 17.8	33.9 x 43.0 x 25.0	33.9 X 43.0 X 28.0

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