

# Control and Configure Network Test Lab Infrastructure with Ease

## Solution Overview

CNTL Connect promotes a modular approach for test lab infrastructure, enabling unprecedented flexibility in how you build and adapt testbeds. As the cornerstone of the CNTL (Composable Network Test Labs) solution suite, CNTL Connect empowers users with dynamic control over switching and connecting the physical infrastructure. Eliminate manual patching, streamline setup, and gain full visibility into your test network switching fabric. CNTL Connect seamlessly integrates with APNT's CNTL Manage and Automate, solutions, facilitating centralized resource management, test execution orchestration, and deeper automation for a holistic, optimized network test lab.



*"Composable infrastructure helped us reduce our change management and mean-time-to-repair process from days down to minutes while providing access from any of our global sites."  
-Fortune 500 Company*

## Connectivity: The Foundation of Lab Automation

APNT CNTL Solution Suit promotes a modular approach to test lab infrastructure, enabling you to build and adapt testbeds with unprecedented flexibility. At the core of this composability lies CNTL Connect, a solution that empowers you to dynamically manage physical connectivity with the following key strengths.



### Rapidly Reconfigure Testbeds

Swap rigid cabling with intelligent software-defined fabrics.



### Compose and Share Topologies with Ease

Visually compose, automate and reuse lab infrastructure elements.



### Unified E2E Switching Architecture

Utilize standardized interfaces to scale an E2E, multi-vendor switching environment.



## CNTL Connect Solution

Solution Features by Spirent Velocity TestStream

### Agile Provisioning

Design, schedule, and activate topologies on-demand

### Intuitive Configuration

Remotely manage and automate connectivity with visual tools

### Test Traffic Shaping

Customize traffic flows and patterns for realistic testing

### Secure Remote Access

Control user access with role-based permissions and resource domains

### Troubleshooting

Remotely pinpoint issues with in-depth port analysis and diagnostics

## Unified E2E Switching Architecture

CLI | API



L1 OEO Switching



Port Aggregation, Replication, Tapping & Impairments (OEO Only)



L1 OOO Switching



COTs L2-3 Switching\*



Cloud, Virtual & Container E2E Connectivity\*

## Network Test Lab Infrastructure



Test Tools



Analyzers



Mult-Service Devices



Blades



Disk Storage



Routers



Access/Edge Device



Cloud Services



EMS

\*Requires Spirent Velocity Upgrade

## Unified L1 OEO and OOO Control

Unify and streamline your network testing with CNTL Connect. This powerful solution uses Spirent Velocity TestStream's automation with Optical-Optical-Optical (OOO) and Optical-Electrical-Optical (OEO) L1 switching. Experience centralized control of your entire L1 switching environment through a single, intuitive interface (UI, CLI, or API) for unparalleled efficiency and adaptability. Future-proof your switching architecture and seamlessly adapt to evolving network technologies. Some OEO and OOO switching benefits to consider for your networking test lab.

Benefit	OEO Switch	OOO Switch
Signal Integrity	Precise control & regeneration	Data plane integrity
Performance	Predictable, deterministic latency	Latency-neutral
Flexibility	Advanced traffic engineering	Optics versatility
Scalability	Modular for growth	Cost-effective at scale
Reliability	Redundancy & hot-swappable	Simple design



Spirent's Velocity TestStream  
L1 (OEO/OOO) Infrastructure Automation



## Scalability, Speed and Form Factor Options

Explore a comprehensive range of CNTL Connect's OEO and OOO L1 switch options provide by Spirent Velocity. These powerful switches offer varying port densities, speeds, and form factors to meet diverse network testing requirements.

Switch Series	HS-Series (OEO)			3900 Series (OEO-Blade Based)			Calient (OOO)
Model	HS-3200	HS-6400	HS-3240	3901	3903	3912	S320
Chassis Type	All-in-One	All-in-One	All-in-One	(1 Slot)	(3 Slot)	(12 Slot)	S320
Rack Size	1RU	2RU	1RU	1RU	3RU	16RU	7RU
Media Types Supported							
Copper				✓	✓	✓	
Multi-Mode Fiber	✓	✓	✓	✓	✓	✓	
Single Mode Fiber	✓	✓	✓	✓	✓	✓	✓
Maximum Ports							
400G			32				320
100G	32	64	64				320
50G	64	128	128				320
40G	32	64	128	8	24	96	320
25G	64	128	128				320
10G	64	128	128	96	288	1,152	320
1G		128	128	72	216	864	320

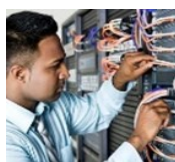
## Take Control, Achieve Results with APNT's CNTL Experts

Simplify the path to a modern, optimized network test lab with APNT's expert services designed to support your CNTL solution. We tailor solutions to your unique needs, ensuring rapid deployment for fast time-to-value. Our ongoing management maximizes efficiency and offloads routine lab tasks. Let our expertise unlock the full power of your CNTL investment, freeing your team to focus on innovation.



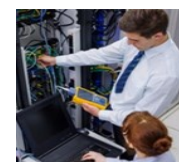
### Strategic Guidance

We lead or guide a CNTL strategy for your lab.



### Seamless Deployment

We ensure a seamless CNTL deployment.



### Ongoing Support

We are your partner committed to CNTL outcomes.