

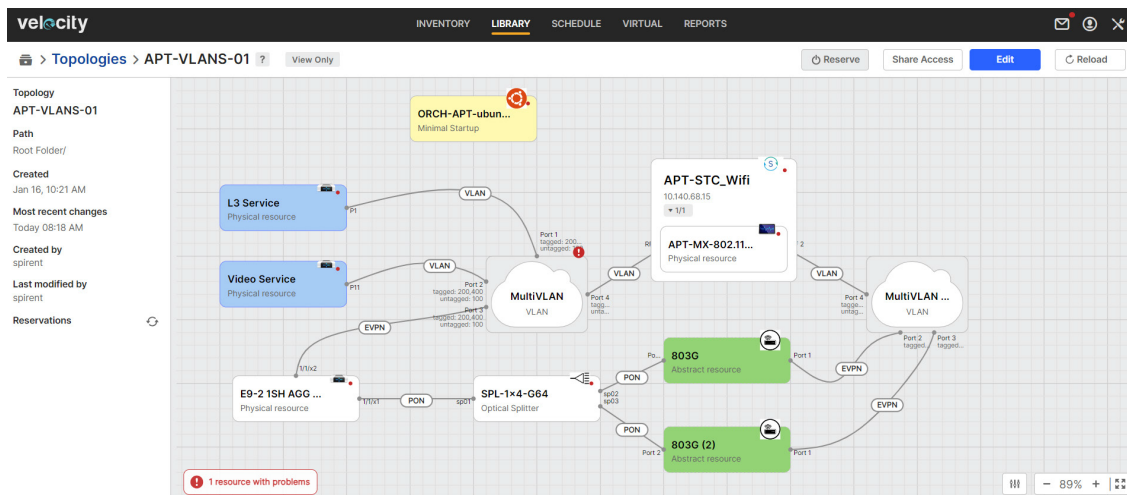
Velocity Core

Achieve 60% OpEx and CapEx Reductions and Accelerate New Releases via Integrated Lab Automation Management

Test lab teams face competing pressures to shorten technology release cycles in expanding multi-vendor environments while significantly reducing operating and capital expenses. In response, organizations have virtualized and automated portions of lab processes, but remain stuck with many lab activities that are reliant on manual configuration and testing.

Velocity Core empowers teams to consolidate and manage multiple labs as a single web-accessible resource using automation to accelerate testing, eliminate manual effort, and maximize equipment utilization. Lab automation is facilitated by the Velocity Core self-service mechanism for sharing, provisioning, and orchestrating resources, thereby enhancing utilization.

As the central part of the Velocity Automation Portfolio, Velocity Core fully automates and integrates lab and test resources into the CI/CD process, configuring and managing shared use of lab resources and facilitates automated test suite creation.



Keysight has helped thousands of companies achieve 60% CapEx and OpEx reductions by:

- Boosting equipment utilization from 30% to 80%
- Slashing lab energy use in half
- Identifying and retiring unused equipment
- Reducing release times by months

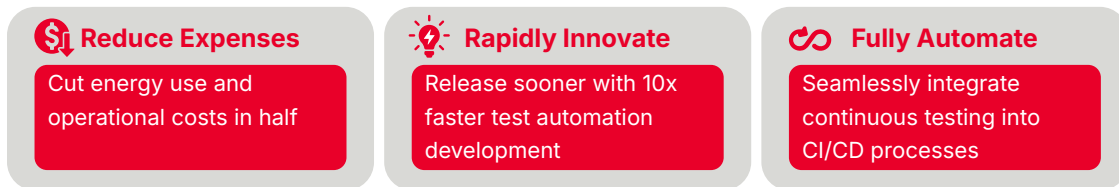


Figure 1. Chart displaying three key Velocity Core benefits

Highlights

- Consolidate multiple labs in different locations into a web-accessible resource, shared by all teams
- Shorten release schedules by weeks or months, lowering setup and test times by 90%
- Expand testing capacity with 24/7 remote access to test bed resources
- Seamlessly integrate test lab resources into CI/CD processes
- 300x acceleration in lab configuration setup times (days to minutes)
- Drive positive ROI through dramatic decrease in power usage

Key Features

Just-in-Time Resource Reservation

Reserve resources when needed and release them when no longer needed, even if the test is still running.

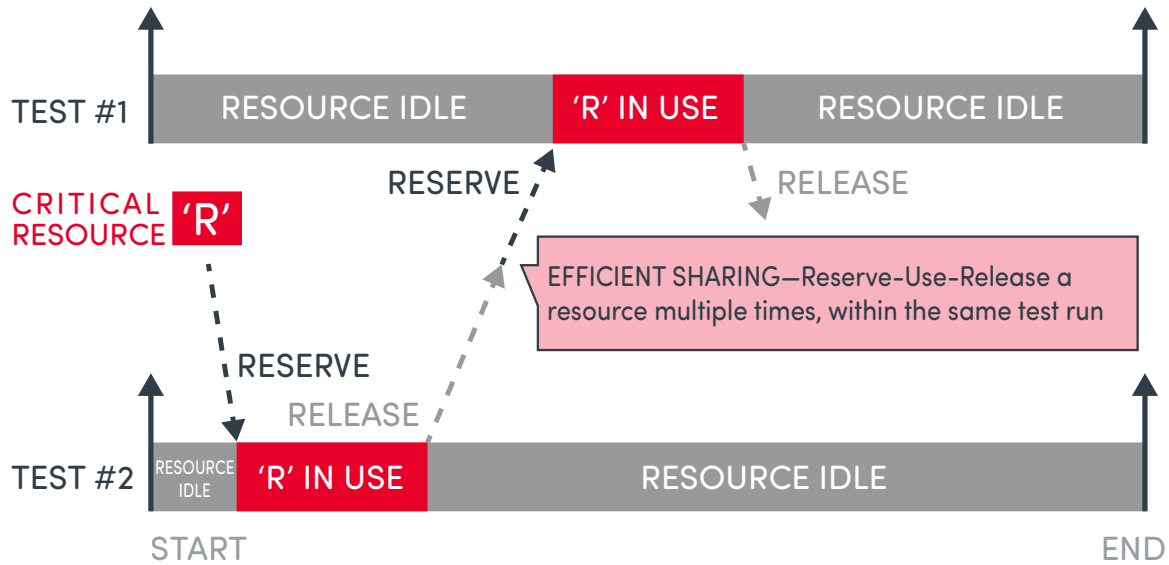


Figure 2. Velocity Core chart displaying resource reservation

Interactive Workflow Automation

Create automation workflows and scripts. Then test them, sync, publish, and share with other teams via popular tools such as Git.

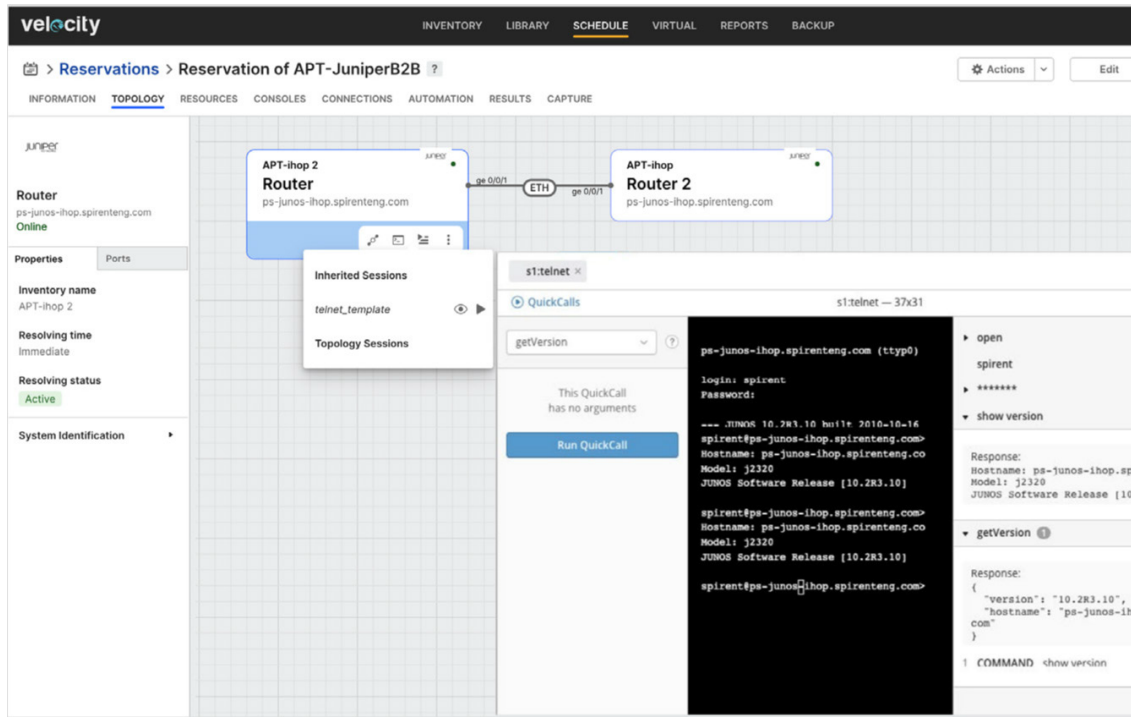


Figure 3. Velocity Core automation workflow window

Visual Topology Editor

Connect, configure, and orchestrate physical machines, virtual machines, and container deployments with a simple drag-and-drop user interface.

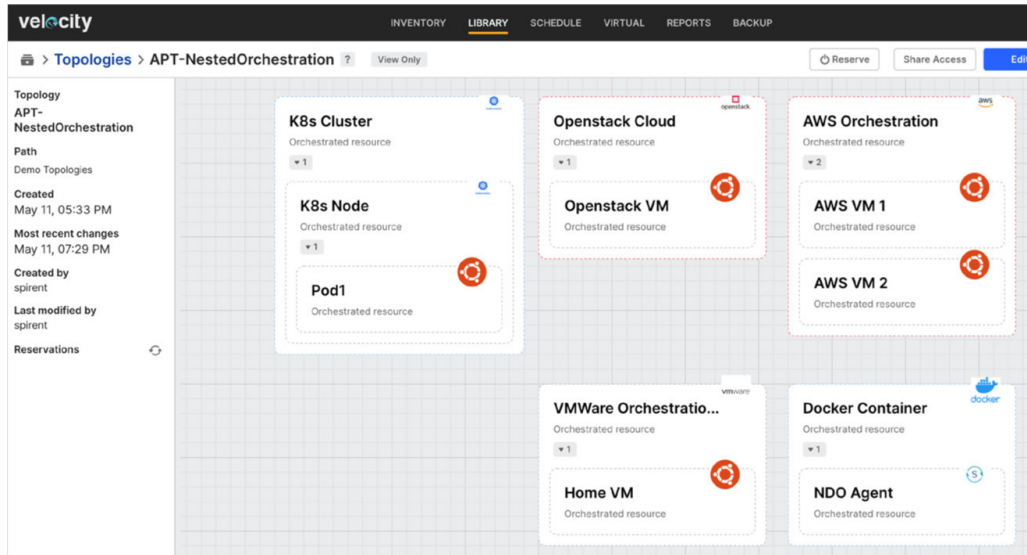


Figure 4. Velocity Core window showing drag-and-drop UI

Adaptive Resource Modeling

High granularity of resource inventory enables greater flexibility to model the natural hierarchy of environment attributes, from lab geographies to rack details, device components, and application capabilities. Users can forecast resource usage and identify optimal configurations for energy savings.

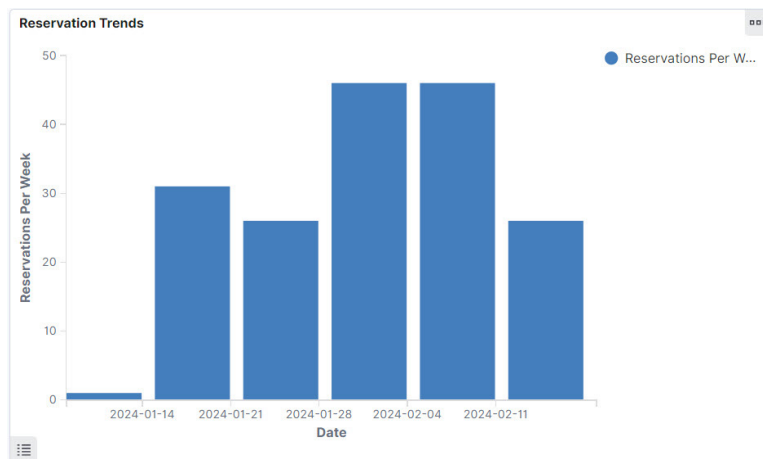


Figure 5. Velocity Core bar chart displaying reservation trends

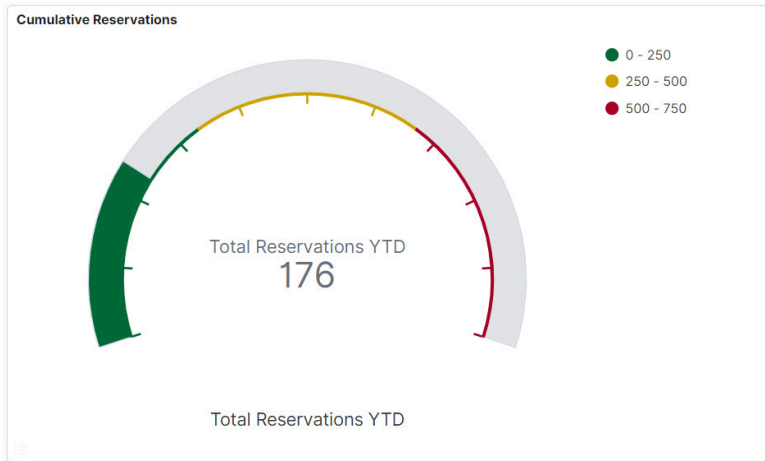


Figure 6. Velocity Core pie chart showing cumulative reservations

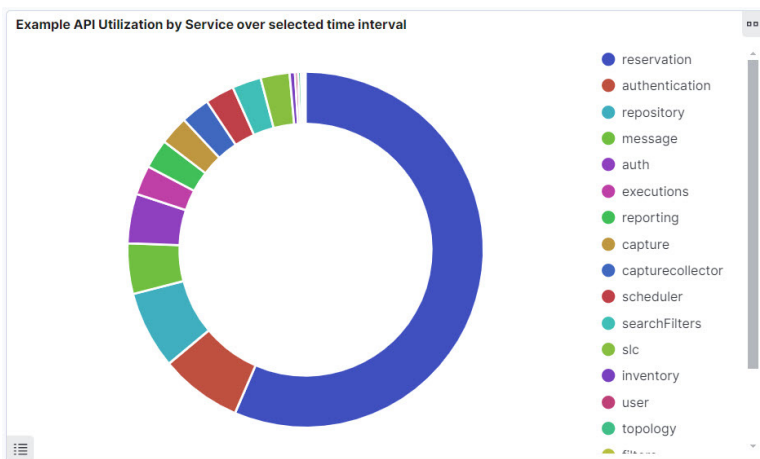


Figure 7. Velocity Core pie chart showing API utilization over time

Actionable Insights and Reporting

Velocity Core's highly configurable editor creates customized, exportable dashboards, reports, and KPI widgets with real-time triggers and event notifications.

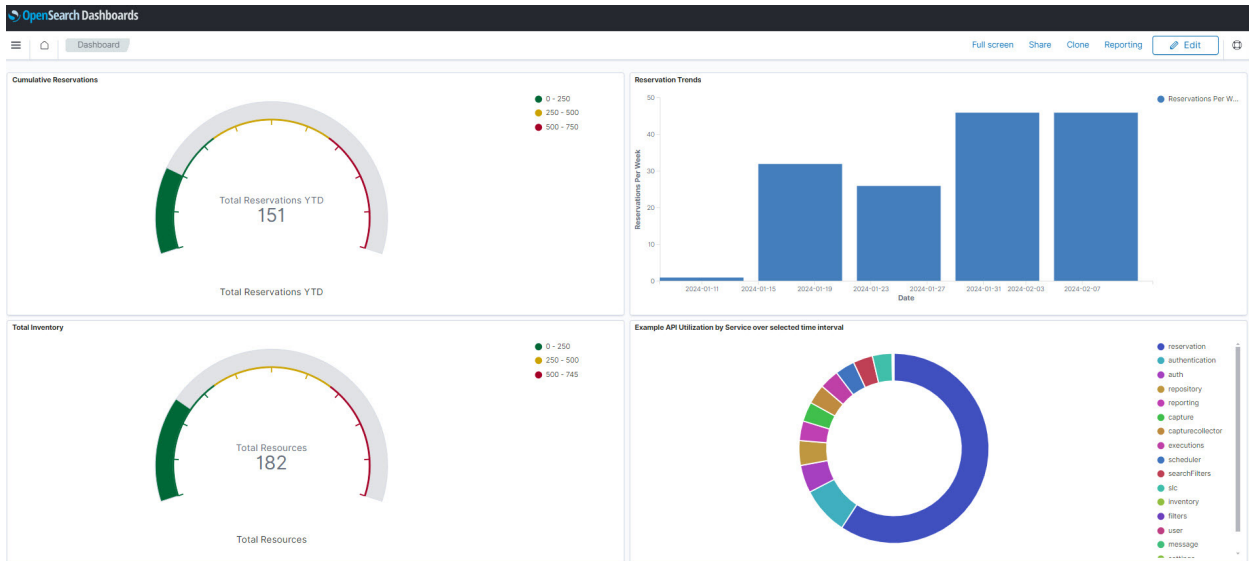


Figure 8. Velocity Core window showing exportable dashboards and reports

Analytics and Reporting Examples

Resource Utilization

Get an accurate view of resource utilization to make better business decisions.

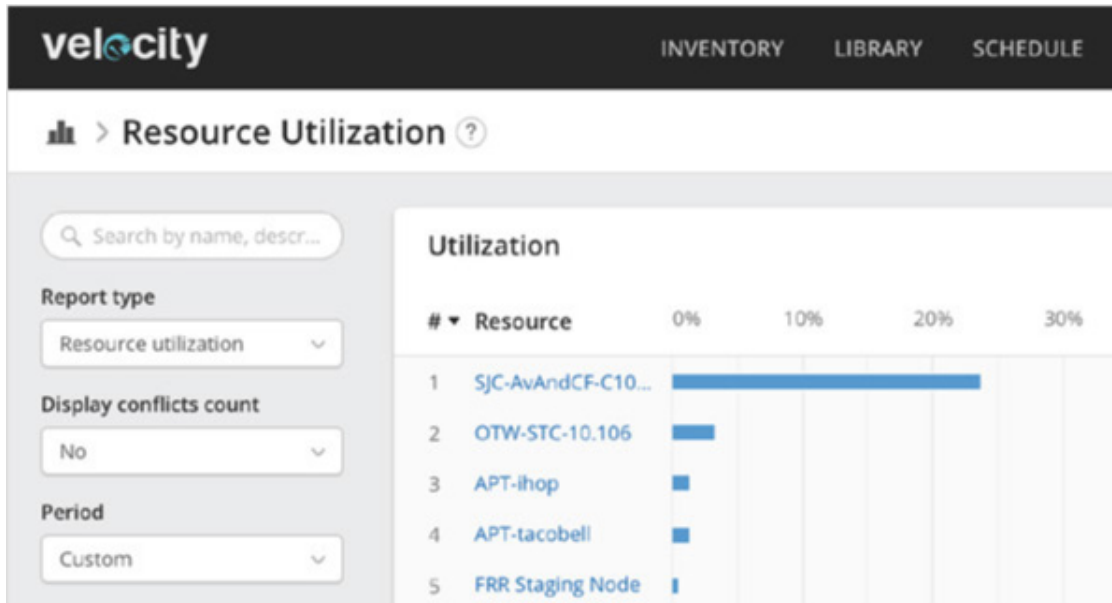
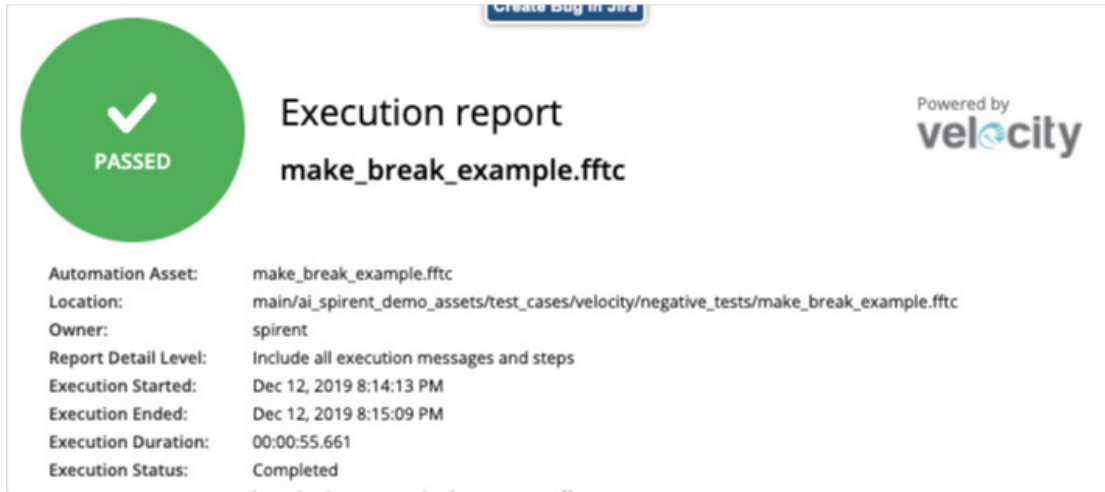


Figure 9. Velocity Core window showing resource utilization

Execution Reports

Access and download test results in multiple formats, create bug reports directly in Jira, and automatically attach all relevant testing data.



The screenshot shows a Velocity Core execution report window. At the top left, there is a green circular icon with a white checkmark and the word "PASSED" below it. To the right of this icon, the text "Execution report" is displayed in a large font, followed by "make_break_example.fttc" in a slightly smaller font. In the top right corner, there is a "Powered by velocity" logo. Below the main title, there is a "Create Bug in Jira" button. A table of execution details is located at the bottom left of the window.

Automation Asset:	make_break_example.fttc
Location:	main/ai_spirent_demo_assets/test_cases/velocity/negative_tests/make_break_example.fttc
Owner:	spirent
Report Detail Level:	Include all execution messages and steps
Execution Started:	Dec 12, 2019 8:14:13 PM
Execution Ended:	Dec 12, 2019 8:15:09 PM
Execution Duration:	00:00:55.661
Execution Status:	Completed

Figure 10. Velocity Core window showing an example execution report

Energy Audit and Sustainability Reports

Benchmark and demonstrate energy savings for measuring ROI and verifying decreased energy demand over time for sustainability reporting.

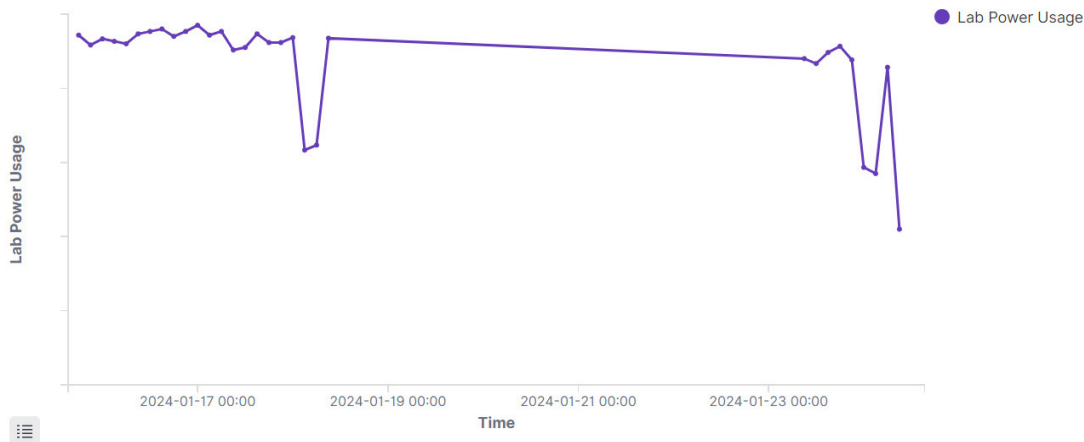


Figure 11. Velocity Core chart showing lab power usage over time

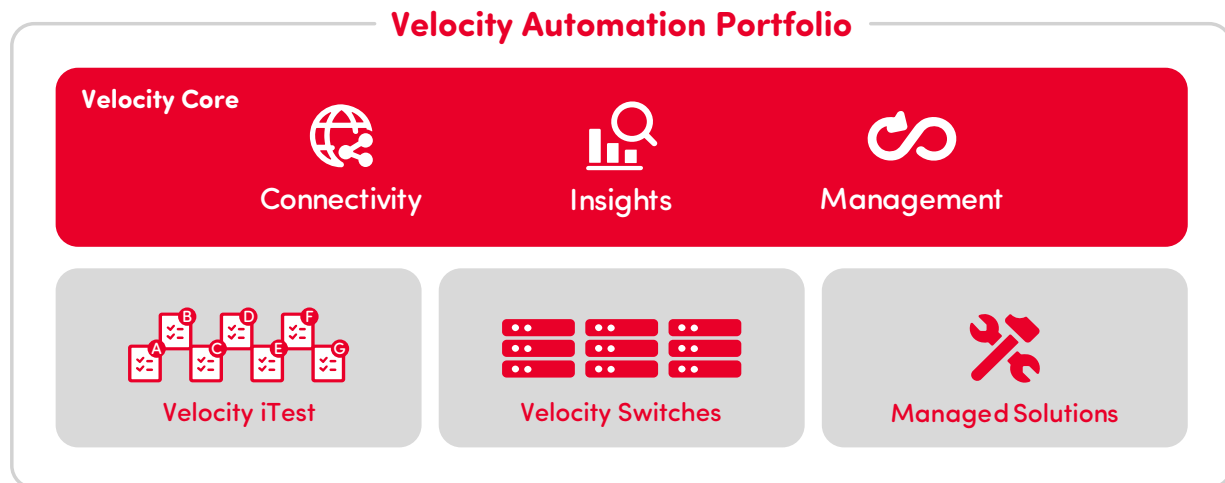


Figure 12. Chart displaying Velocity Automation Portfolio offerings

The Velocity Automation Portfolio supports the complete automation of customer lab and testing environments for large enterprise, NEM, and service provider organizations. It is the only fully integrated solution to provide automation and management of lab resources, facilitate automated test suite creation, oversee lab connectivity and topology, and provide professional services for initiative success.

Keysight enables innovators to push the boundaries of engineering by quickly solving design, emulation, and test challenges to create the best product experiences. Start your innovation journey at www.keysight.com.

