

The LA Dodgers are Revolutionizing Data Analytics On and Off the Field with Cisco HyperFlex and Intel Optane SSDs

Los Angeles Dodgers · Size: 550 employees · Industry: Sports and Entertainment · Location: Los Angeles

Challenges

- Speed up data modeling for better operational, baseball, and fan analytics
- Maintain critical uptime for game day ticketing, concessions, and retail transactions
- Streamline data center maintenance and infrastructure patching

Solutions

- Cisco HyperFlex™ Hyperconverged Infrastructure (HCI) with Intel® Xeon® Scalable processors and Intel® Optane™ Solid State Drives (SSDs)

Results

- Accelerated mission-critical analytics processing by 13x, producing data in minutes vs. hours¹
- Reduced infrastructure footprint and licensing costs by more than 70 percent¹
- Shifted IT focus from infrastructure maintenance to future growth and innovation

¹Source: As reported by LA Dodgers from data and interviews provided in 2019.

The Los Angeles Dodgers franchise, with six World Series championships and 23 National League pennants since its beginnings in Brooklyn in 1890, is committed to a tradition of pride and excellence. The Dodgers are dedicated to supporting a culture of winning baseball, providing a first-class, fan-friendly experience at Dodger Stadium, and building a strong partnership with the community. With the highest cumulative fan attendance in Major League Baseball history and a record of breaking barriers, the Dodgers are one of the most cherished sports franchises in the world. For more information, visit dodgers.com.

For more information

- [Cisco HyperFlex HCI](#)
- [Intel Xeon Scalable processors](#)
- [Intel Optane SSDs](#)





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Ralph Esquibel

Vice President, Information Technology, LA Dodgers

Building the future of baseball

The Los Angeles Dodgers aren't just envisioning the future of baseball. They're actively building it.

On game days of the future, fans will walk freely into the venue. No lines, no turnstiles, no tickets. Contactless technology will validate their attendance and welcome them to Dodger Stadium. Giant LED walls will provide information and media that pull fans into the game before it even starts. And all of it will be personalized for each of the 56,000 people in attendance.

“Statheads” will receive more game-related statistics, matchup analyses, and replay angles than they could ever attain from the comforts of home. Adults with children will receive family-oriented offers for the ballpark's concession stands and retail stores. And everyone will receive game and stadium information that is tailored to their preferences and patterns.

This vision of the future isn't far off. In fact, the Dodgers hope to make it a reality in the next three to five years.

“Taking the game day fan experience to another level is our next evolution,” says Ralph Esquibel, vice president of information technology for the Dodgers. “Regardless of who you are or where you are in the stadium, you'll be a part of the game and the experience will be customized for you.”

The Dodgers have a history of pushing Major League Baseball to new heights. And recently, they've been doing it with the help of Cisco HyperFlex HCI with Intel Xeon Scalable processors and Intel Optane SSDs.

“We become more reliant on technology every year,” says Esquibel. “We're doing things with Cisco and Intel technologies that didn't seem possible a few short years ago, and they've changed our way of thinking and how we run our ballclub.”

Accelerating analytics—on and off the field

From its earliest incarnations in the 1830s, baseball has always been a game of numbers. With no clock and lightning-strike moments of excitement, statistics provide essential context and subtext—not only for fans of the game, but also for the players, general managers, and scouts who are immersed in it every day.

Today, statistics extend well beyond the playing field, informing and shaping every aspect of a baseball team’s operations.

Spanning 81 home games as well as concerts and special events, the Dodgers host over four million fans every year. Through 600 point of sale terminals and 150 handheld devices, the ballclub facilitates up to 1000 transactions every minute of every event. Like each at bat, these transactions are analyzed in real time and the team’s operations are adjusted on the fly to accommodate demand and increase revenue.

“This is more than a game,” says Esquibel. “The amount of commerce, engagement, and processing that takes place in those five-hour event windows is enormous. That’s why we have to invest in the best, most reliable technology. If our systems go down, we aren’t transacting.”

The Dodgers chose Cisco HyperFlex with Intel Xeon Scalable processors and Intel Optane SSDs, in part, to accelerate its data processing and analytics. The HCI platform supports all of the club’s baseball and business operations, fueling its SQL Server databases, business intelligence applications, ticketing and point of sale systems, and other mission-critical workloads.

“We do complex modeling,” Esquibel says, “and we wanted to speed up our processing and analytics in order to make smarter, faster decisions.”

It wasn’t long ago, he explains, that the team’s staff had to wait overnight to receive operational and game-related data from the previous day’s event. Instead of shaping the present and building toward the future, the Dodgers were analyzing the past. With Cisco HyperFlex and Intel Optane SSDs powering the ballclub’s customer-facing and backend systems, that’s no longer the case.

“When we installed the platform, our developers and analysts thought something was broken because the models were running so fast,” Esquibel says. “Queries that used to take 13 hours or more now take 60 minutes or less.¹ Having that horsepower behind our SQL databases has made a huge difference.”

That difference is being felt across the entire organization.

Game day operations have completely transformed with ticketing, concession, and retail data available in minutes instead of hours. If a gate is crowded, for example, the team can shift additional ticketing and security personnel—as well as “hawkers” wielding handheld devices and game day promotions—to accommodate the crowd and reduce wait times.

“When I started here 11 years ago, we were still ripping tickets at the turnstile. Today, a single ticket scan has a staggering amount of validation and analytics behind it,” Esquibel says. “We have the ability to see what’s happening as it happens, and we can shift people and resources to where the fans are.”

Cisco HyperFlex and Intel Optane SSDs are also fueling advanced baseball analytics, helping the team prepare for its opponents and improve its on-field performance.

“We do a lot of video analytics, which is such a heavy workload with so many data points involved,” Esquibel says. “I can’t go into it too much because that’s our secret sauce. But needless to say, having our analytical models running 13 times faster ultimately helps us win ball games.”

Equally important are the analytics driving better fan experiences at Dodger Stadium. With a clearer, more timely understanding of fan movement, purchases, and preferences, the team is delivering increasingly adaptive and personalized guest services.

“In the past, we would test certain things. Now we’re analyzing everything in real time and making decisions accordingly,” Esquibel says. “Data is such a critical component of how we interact with our fans.”

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Vice President, Information Technology, LA Dodgers

More computing power with less overhead

Cisco HyperFlex and Intel Optane SSDs have done more than supercharge the Dodgers' business and game analytics. The platform has also dramatically simplified the club's technology infrastructure and operations.

"The size and complexity of a technology stack can get out of hand quickly," says Esquibel, noting the IT team's two system administrators had been struggling to monitor and maintain 30 legacy server nodes on a one-by-one basis. "When you're constantly patching things and putting out fires, it creates liabilities with security and compliance. With Cisco HyperFlex and Intel Optane SSDs, we no longer have to fight those fires."

Instead of managing 30 legacy nodes individually, the Dodgers are now leveraging Cisco HyperFlex software-defined automation to manage eight nodes collectively.¹ Two racks of physical gear have been consolidated down to half of a rack.¹ More than thirty hypervisor hosts have been whittled down to six.¹ And yet, the team has more computing power and memory performance than its IT leaders could previously imagine.

"When they said we could get this type of performance with fewer nodes and less storage, it was hard to believe. It didn't make sense," Esquibel says. "It's amazing to have an eight-node array that serves all of our needs, can be easily scaled, and is managed collectively instead of piece by piece."

No longer encumbered with infrastructure maintenance and proverbial firefighting, the ballclub has shifted its focus to fan engagement and operational innovation—using its technology and data resources to ensure Dodger Stadium delivers the best possible experience for every attendee.

"Everything we do for our fans and the team, we're doing it on the shoulders of Cisco HyperFlex and Intel Optane," Esquibel says. "I know it's cliché, but those technologies help me sleep at night."

And dream about the future, which isn't so far away.

Explore more Cisco Data Center Compute customer success stories at cs.co/dccstories.



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Cisco and Intel work together to optimize solutions from the edge, through the network, to the data center. Cisco's innovative UCS servers and HyperFlex hyperconverged solutions, powered by Intel Xeon processors, Intel Optane technologies, and Intel Ethernet products, provide high performance with low cost, simplified operations, advanced security features, and a modern data center. Customers can benefit from joint, scalable solutions, designed to solve key market challenges in multiple industries. Together, Cisco and Intel create a trusted ecosystem for hardware, software, and services that bring intelligence and analytics to your business.

¹Source: As reported by LA Dodgers from data and interviews provided in 2019. Software and workloads used in performance tests may have been optimized for performance only on Intel microprocessors. Performance tests, such as SYSmark and MobileMark, are measured using specific computer systems, components, software, operations and functions. Any change to any of those factors may cause the results to vary. You should consult other information and performance tests to assist you in fully evaluating your contemplated purchases, including the performance of that product when combined with other products. For more complete information visit www.intel.com/benchmarks.

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