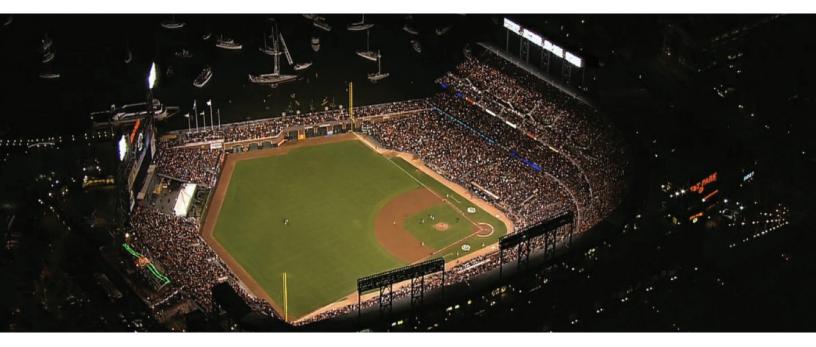
## SAN FRANCISCO GIANTS





The San Francisco Giants expect peak performance from every member of the organization, both on and off the field. With Pure Storage now providing its data-storage infrastructure, the Giants have a new all-star performer to meet its exponentially expanding data capacity needs.

### **BUSINESS TRANSFORMATION**

Club management and back-office staff have fast access to the data and applications they need to run the modern-day operational needs of one of baseball's most prestigious franchises while giving their fans the best possible game-day experience. Meanwhile, the demands of storage management on the IT staff have been reduced to almost zero.

### **CHALLENGES**

- Exponential growth in data volumes overwhelmed legacy storage system.
- Storage management was complex and time-consuming.
- Lagging storage performance caused delays in application response times.

#### IT TRANSFORMATION

- Effortless storage management frees up time of IT staff for higher priority tasks.
- Pure1® provides anytime/anywhere monitoring tool.
- High ratio of data compression sharply cuts space required for storage equipment.

## GEO

North America

#### **INDUSTRY**

Sports

### COMPANY

San Francisco Giants www.sfgiants.com

#### **USE CASE**

VSI – VMware vSphere® Database – Microsoft SQL Server®







"We had the Pure array up and running, and our virtual infrastructure migrated onto it, in about two hours."

**David Woolley** 

Senior Director, Network Operations





# PURE STORAGE HITS A HOME RUN HELPING SF GIANTS DEAL WITH DATA EXPLOSION

Baseball fans are known for their love of statistics, but in recent years the passion for quantifying the nation's pastime has reached unprecedented levels. Just listen to Daniel Quill, senior director of application development for the San Francisco Giants, who has been with the team for 19 years:

"When I started with the Giants in 1997, our entire scouting database fit on a floppy disk; about 600KB. In 2016, we are collecting more than 5 billion records a year, or more than 2 TB. We've experienced exponential growth in the past couple of years, and we expect it to continue."

The cause for much of this growth of late has been Major League Baseball's introduction of Statcast, a

state-of-the-art tracking technology that measures previously unquantifiable aspects of the game. Installed in all 30 Major League ballparks, Statcast collects data using high-resolution cameras and radar equipment. It precisely tracks the location and movements of the ball and every player on the field, resulting in an unparalleled amount of information covering every move of every player in every game.

At the end of each game, the Giants' IT system must ingest around 500,000 records. Making those records – and analysis of them – available to team management is the job of Quill and his colleagues. They, in turn, rely on an IT infrastructure overseen by David Woolley, senior director of network operations.







# GROWING DATA VOLUMES OVERWHELM LEGACY STORAGE SYSTEM

In 2014, as the rollout of Statcast was a year away, the Giants' IT organization realized that its existing infrastructure would not be able to handle the new flood of data. Especially problematic was the hard-disk storage system.

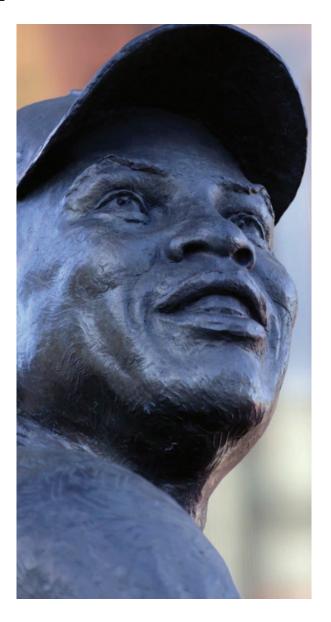
"It was complex, expensive, and didn't provide the performance we needed," Woolley recalled. "It was so complicated to administer that we had to rely on outside resources to do simple upgrades and changes. It was a constant battle to keep it running."

The impact of the faltering storage system filtered through the organization. "Dan Quill was coming to me on a weekly basis about performance and capacity issues, and asking when we would be able to do necessary upgrades," Woolley recalled.

Woolley, Quill and other members of the IT team collaborated with their system integrator, FusionStorm, to acquire a new storage system to meet their needs. Topping the list of criteria, Woolley said, were simplicity and performance.

"We looked at a wide variety of solutions and a range of technologies, and early on we didn't expect we would go with all-flash. But when Pure Storage came in and showed us their interface and described all the features that were included, we were amazed at the performance it provided, and how scalable and easy it was to use."

In the end, the evaluation team determined that Pure Storage offered the best combination of performance, ease of management and long-term return on investment.







# THE PURE STORAGE DIFFERENCE WAS EVIDENT FROM THE START

The value of Pure Storage was evident to Woolley even as the FlashArray//m20 was removed from the box. "Even as we racked the equipment, we noticed the attention to detail. The instructions were so clear; it was evident that a lot of thought had gone into making it easy. We had the Pure array up and running, and integrated into our virtual infrastructure, in about two hours."

The Pure Storage array now hosts all of the Giants' SQL-backed production data and applications, including all those player statistics, as well as back-office functions such as ticket sales, fan information, marketing, and club operations.

Once everything was running on the Pure array, the benefits were obvious. "We have seen a dramatic improvement in all our processes," Quill noted. "We have been able to keep pace with the continued growth in data volumes, and are able to provide sophisticated analysis of player and team stats, as well as timely analytics on ticket and merchandise sales."

And the team is just beginning to tap the potential of all the data at hand. "When I started, there were around 15 or 20 stats that everyone followed. Now, we are sitting on maybe 500 times that amount of data. We're at the very beginning of getting value from all that data. And the performance we get from Pure Storage will help us realize that value."



"It always works; no hiccups. We love it"

## **Daniel Quill**Senior Director, Application Development





# EFFORTLESS MANAGEMENT MAKES LIFE EASIER

From the IT management perspective, the arrival of Pure Storage has been a night-and-day difference. "Our old storage system demanded weekly attention to performance issues, upgrades, and other tasks. Since we have implemented Pure Storage, we haven't had any storage-related issues to deal with," Woolley observed.



Routine but important tasks such as cloning new virtual machines, restores and snapshots are now accomplished quickly and easily, many times even automatically. "It's been a hands-off platform," Woolley added. "I will occasionally look at Pure1 to check on statistics, and that is a great tool. If there ever is an issue, I can just take out my phone, wherever I am, and check on the status of the matter. And I know the Pure support team will already be aware of it and working on it."

Woolley noted a significant impact from the dededuplication and data-compression features of the Pure Storage array. "Space is at a premium here at AT&T Park, and the footprint of our old storage system was growing by the month. But the Pure Storage array occupies just one shelf, with room for expansion. That definitely is a big help for us."

"It's a huge plus to know that a few years from now I will not have to do a forklift upgrade."

## **David Woolley**

Senior Director, Network Operations

He also praises Pure's Evergreen Storage program, which allows customers to deploy storage once, then expand and upgrade it as needed for a decade or more. Components can be mixed and matched – all online and without performance disruption – to keep storage dense, efficient and modern. "It's a huge plus to know that a few years from now I will not have to do a forklift upgrade. Instead, we can have a seamless, non-disruptive upgrade whenever we need the added capacity."

Pure Storage has been batting 1.000 for the Giants. "It always works; no hiccups," Quill reported. "We love it and we're glad we drafted them for our storage infrastructure."

