

Remote management makes IT administration easy

The Dell EMC Integrated Dell Remote Access Controller (iDRAC) provides powerful capabilities for Taboola to remotely deploy, update and monitor servers across nine global data centers



Content Marketing

Worldwide

Business needs


Taboola serves over three billion web pages and provides 30 to 40 billion content recommendations to users online or through mobile devices every day. The company needed an efficient, highly scalable way to run its data centers and manage its vast array of servers with a minimum of manual intervention.


Solutions at a glance

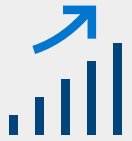
- Dell EMC PowerEdge R740xd servers
- Dell EMC PowerEdge FX series servers
- Dell EMC Integrated Dell Remote Access Controller (iDRAC)

Business results

- Enables hands-off administration of over 10,000 server nodes with only 12 Site Reliability Engineers
- Delivers up to a 99% reduction in admin-attended deployment time
- Puts smiles on the faces of IT admins, thanks to reliable automation and actionable data
- Frees up IT staff for projects that have significant business impact

10,000+ 
nodes managed with
only 12 site engineers

Up to **99%** 
less admin time
to deploy servers


Increased
for operational tasks

When you're building the world's largest content recommendation platform, connecting moments of discovery with online viewers using AI, you need a lot of computing power, responsiveness and reliability — the kind delivered by Dell EMC PowerEdge servers.

But managing more than 10,000 nodes distributed across nine data centers around the globe presented a huge challenge for Taboola—the world's leading online content discovery platform.

"It would be an impossible task to manage that number of servers with only 12 site reliability engineers," says Ariel Pisetzky, vice president of information technology and cybersecurity. "iDRAC running on Dell EMC PowerEdge servers gives us the ability to monitor, deploy and update servers while optimizing our resources."

Hands-off administration

Taboola uses iDRAC with PowerEdge servers to automate a variety of routine administrative tasks including server deployment, firmware upgrades and BIOS updates—without tying up its IT team for long time periods.

iDRAC also enables streaming of key monitoring metrics for advanced analytics—to better understand multiple events being monitored, as well as proactively alert the team to potential problems. These metrics include critical information about how the hardware is configured and performing—with data ranging from CPU errors and memory or power issues to server operating temperatures. And it's all automatically monitored, managed, updated and remediated in the background, agent-free. Taboola continuously works to improve its automation with tools of the trade, such as the DMTF Redfish API and the Dell Remote Access Controller Administration (RACADM) command-line utility.

"Automation is critical to our ability to run our business with a small staff managing nine worldwide data centers with over 10,000 nodes and growing," Pisetzky explains. "We're heavily invested in iDRAC. Without its advanced remote capabilities, I couldn't efficiently run my data centers."

With iDRAC in place on PowerEdge servers, Taboola engineers can track the health of any

server anywhere. From database clusters to K8s deployments, all servers can be centrally managed regardless of the role they have in the data center. The ability to read metrics from the hardware level, such as drive serial numbers to the automation of OS deployments, monitoring server efficiencies across data centers and managing power requirements. Portions of clusters can be taken down for firmware or BIOS updates or other hardware upgrades. Once completed, nodes can easily be brought back up and into the cluster.

One innovative way in which Taboola uses iDRAC is by utilizing the multiple temperature sensors in each server to create a sensor grid for each data center rack. This grid combined with additional sensors in the data center, provides actionable data to perform deep analysis and troubleshooting—with any potential problems automatically popping up into a ticketing system. Energy savings driven from this data are put into play back into the data center.

"If a server's power intake doesn't match the power footprint of other servers in the cluster we know that node has an issue," notes Pisetzky. "With iDRAC in place on our PowerEdge servers, we can keep our systems humming with no issues. But more than that, we can optimize our server workload and use iDRAC to improve server performance"

"This eliminates the need to send engineers on-site, which in these days of shelter-in-place is especially helpful," he continues. "iDRAC provides the needed support to keep our servers at maximum performance."

"iDRAC running on Dell EMC PowerEdge servers gives us the ability to monitor, deploy and update servers while optimizing our resources."

Ariel Pisetzky,
VP of IT and Cybersecurity
Taboola

Running a big business with a small IT team

Taboola has an enormous business footprint that has to run efficiently with its small IT team. The company works with more than 10,000 premium publishers and brands and reaches over 1.4 billion unique users monthly with relevant, new and interesting content when the audience is most receptive to information about products, services and messages.

To do this requires powerful, reliable servers that operate largely hands-off. “Our 12 site reliability engineers have their hands full writing code to support our growing business,” Pisetzky states. “The more we can do using iDRAC integrated with our PowerEdge servers, the less we have to do manually.”

He concludes, “As Taboola grows, iDRAC running on PowerEdge servers allows us to continually improve our automation capabilities—and easily add and manage more compute power with the resources we have.”

“We’re heavily invested in iDRAC. Without its advanced remote capabilities, I couldn’t efficiently run my data centers.”

Ariel Pisetzky,
VP of IT and Cybersecurity
Taboola

“With iDRAC in place on our PowerEdge servers, we can keep our systems humming with no issues.”

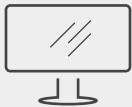
Ariel Pisetzky,
VP of IT and Cybersecurity
Taboola

Alert ID	Time	Category	Message	Suggested Action
10 found	May 12, 2020, 11:51 a.m.	System Health (SEL - System Event Log)	Log cleared.	No response action is required.
	May 12, 2020, 11:44 a.m.	Configuration (IPM - IP Address)	The iDRAC IP Address changed from 0.0.0.0 to...	Remote management consoles that have cached or stored the iDRAC IP address may have to be updated with the new IP address either through a re-discovery or manual reconfiguration. A response action may not be required if the console receives this SNMP notification and updates the iDRAC IP address accordingly.
	May 12, 2020, 11:44 a.m.	Audit (SYS - System Info)	System CPU Resetting.	No response action is required.
	May 12, 2020, 11:44 a.m.	Audit (SYS - System Info)	System is turning on.	No response action is required.
	May 12, 2020, 11:36 a.m.	System Health (HWC - Hardware Config)	Server 2 health changed to a normal state.	No response action is required.
	May 12, 2020, 11:36 a.m.	Audit (SYS - System Info)	System is turning off.	No response action is required.
	May 12, 2020, 11:36 a.m.	Audit (SYS - System Info)	System CPU Resetting.	No response action is required.
	May 9, 2020, 8:47 p.m.	System Health (MEM - Memory)	Correctable memory error logging disabled for a memory device at location DIMM_A0.	Review system logs for memory exceptions. Re-install memory at location -location-.

List of hardware issues as identified and reported by the iDRAC

Component	Status	Model Name	Capacity	SN	Drives	Volumes	Controllers
PROCESSOR	Enabled	PERC H710P 80m	479 GB		6	6	
STORAGE	Enabled	C010089 series 8pin SATA Controller (H710 model)	479 GB		6	6	
MEMORY	Enabled	C010089 series 8pin SATA Controller (H710 model)	958 GB		6	6	
DRIVES	ATA	Solid State Disk 01-0	479 GB		6	6	
DRIVES	ATA	Solid State Disk 01-1	479 GB		6	6	
DRIVES	ATA	Solid State Disk 01-2	958 GB		6	6	

Hardware inventory collected from the iDRAC on the fleet of servers



Learn more about Dell EMC solutions



Contact a Dell EMC Expert



Connect on social