



## Cherokee Nation Enterprises

### Oklahoma casinos ensure availability for customer-facing systems with EMC Avamar data protection solutions

Running a successful gaming and entertainment company means relying on repeat business and ensuring 24x7 availability of services to maximize customers' entertainment experience. Today's casino management teams are focusing more on customer service and the technology that supports customer-facing systems like card readers, player tracking, and ticketing. If these basic systems are not operational—or slow to conduct transactions—casinos run the risk of customers taking their entertainment dollars to the competition.

Cherokee Nation Enterprises (CNE), the fastest growing gaming and entertainment company in Oklahoma, operates multiple casinos and retail establishments.

Casino IT managers around the country are working to ensure non-stop uptime, data protection, and business continuity so information regarding every customer, bet, and transaction is processed, stored, and protected in case of data loss. Backup and disaster recovery also help ensure that data can be restored if necessary, mitigating the financial impact of one or more systems failing. For gamblers, downtime means not being able to use the players' club card and may impact the odds of them returning which can negatively impact the operations and reputation of the business.

At CNE, management could not depend its existing tape backup solution to accurately back up data, nor could it reliably recover a failed server or corrupted file. If one of CNE's customer-facing systems went down, business would essentially grind to a halt, potentially costing the company tens of thousands of dollars in missed bets and causing irreversible damage to its reputation. In addition, with several casinos in "Tornado Alley," CNE's IT staff needed to ensure that its systems could be seamlessly recovered in case of a natural disaster or other catastrophic data loss.

"Tape just wasn't doing the job for us," says Todd Gourd, manager of IT systems administration. "It took nearly 30 hours to conduct a full backup, requiring massive storage and staffing resources. Our recovery time was nearly 48 hours and even then we couldn't say for sure that we could restore every file we potentially needed."

Under the old system, each of CNE's nine properties would have to conduct local backups to tape. While the backups were done automatically through auto-loaders, local IT staff was still required to monitor the cycle and troubleshoot any problems, which occurred regularly and usually required dozens of hours per month per casino. At the end of the week, the tapes were transported by car to the main data center in Catoosa

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where they would accumulate until another courier could drive the tapes to an offsite storage facility for archival. These tapes were susceptible to environmental changes, human error, and theft.

“With our business continuity requirements and our industry’s focus on customer service, it was evident that we needed to make a change,” says Gourd. “We needed to dramatically improve our ability to restore lost data faster and shorten our time to recovery. Our corporate goal to provide quality customer experiences depended on it.”

### **Migration to disk backup and disaster recovery**

CNE investigated numerous backup and disaster recovery solutions and chose EMC® Avamar® data protection solutions. Through a series of algorithms, the software identifies and only backs up new or edited data, dramatically reducing the amount of raw data that has to be backed up every night.

“The Avamar solution gives us more-effective data protection and puts us in a better position to restore lost data if necessary. In turn, we’re able to recover failed systems faster and shorten time to recovery for customer-facing services.”

**Todd Gourd, Manager of IT Systems Administration**

CNE deployed an EMC Avamar data protection solution to back up data to disk in its nine casinos in Oklahoma and replicate that data to a remote business continuity facility. By only sending new or edited data, the efficient backup system provides more complete data protection while shortening the backup window and relying on less infrastructure and fewer staffing resources. In addition, CNE’s recovery time has dramatically improved, shortening data restore times of a single system from 48 hours to less than 10 minutes.

Now, CNE’s storage administrator manages the backups for all nine casinos from a centralized console at the company’s headquarters in Catoosa. The data is then replicated across the wide area network to disk for data consolidation in Catoosa where it can be closely monitored. The entire night’s backup can then be replicated to an offsite business continuity site in another facility in Tahlequah. The entire process is conducted nightly so CNE can restore to the prior day’s snapshot.

While it previously took more than 30 hours to conduct a full backup once a week, full backups can now be conducted in every casino every night in less than eight hours. With the ability to manage the entire process from headquarters, local IT staff in the remote sites can focus their resources on more proactive projects. In addition, CNE estimates it has saved two hours per day monitoring the entire data protection process. Instead of querying each of the autoloaders individually, daily reports are printed and alerts are sent by the EMC Avamar solution. The solution also saves time on the road by reducing the number of failed cycles, eliminating the need IT staff to travel to each site to troubleshoot the system.

### **Better data protection and business continuity**

CNE can now recover lost data and restore customer-facing systems within several hours of failure. Since it previously took more than 48 hours to restore a single server, the gaming company stands to save tens of thousands of dollars per incident and reduce the inconvenience to customers. Having a good gaming experience, customers will stay longer and are more likely to return to spend more money.

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CNE’s new disk-based backup solution also saves the company thousands of dollars on tape costs. Instead of stacking thousands of tapes in a storage facility, CNE’s data is simply protected on disk, where it is more easily accessible and reliable. In addition, EMC Avamar eases backup management and puts less strain on network resources. CNE is also backing up its Microsoft Exchange environment with the EMC Avamar solution, extending the business continuity benefits to e-mail so if individual messages or entire mailboxes become corrupted from any day over the past week, they can be restored. This functionality will help protect vital company information and help keep CNE compliant with the many regulations in the gaming industry.



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