GRANICUS

Canadian Datacenter Video Loss

Granicus 2017

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150M+ **CITIZENS** in the GovDelivery Network subscribe to receive targeted government communications	40 **OF THE 50** most populous U.S. cities use Granicus tools including New York, Chicago & Los Angeles	3,000 **ORGANIZATIONS** across the globe use Granicus' solutions every day to improve government
97% **RETENTION RATE** with best-in-class customer care and support teams	12B+ **MESSAGES SENT** annually via the GovDelivery Communications Cloud's 1,800 users	400 **TERABYTES** of legislative data stored in secure and redundant data centers

Event Details

As with the majority of data loss events the failure of our backup procedures required multiple failures.

1. Media Manager is designed to allow customers to update videos to trim extraneous startup and end of meeting time. This is accomplished by creating a new copy of the meeting and deleting the old copy.
2. Our primary storage array in Vancouver had an error that was causing individual files to be lost. This is a very unusual occurrence for a block storage appliance.

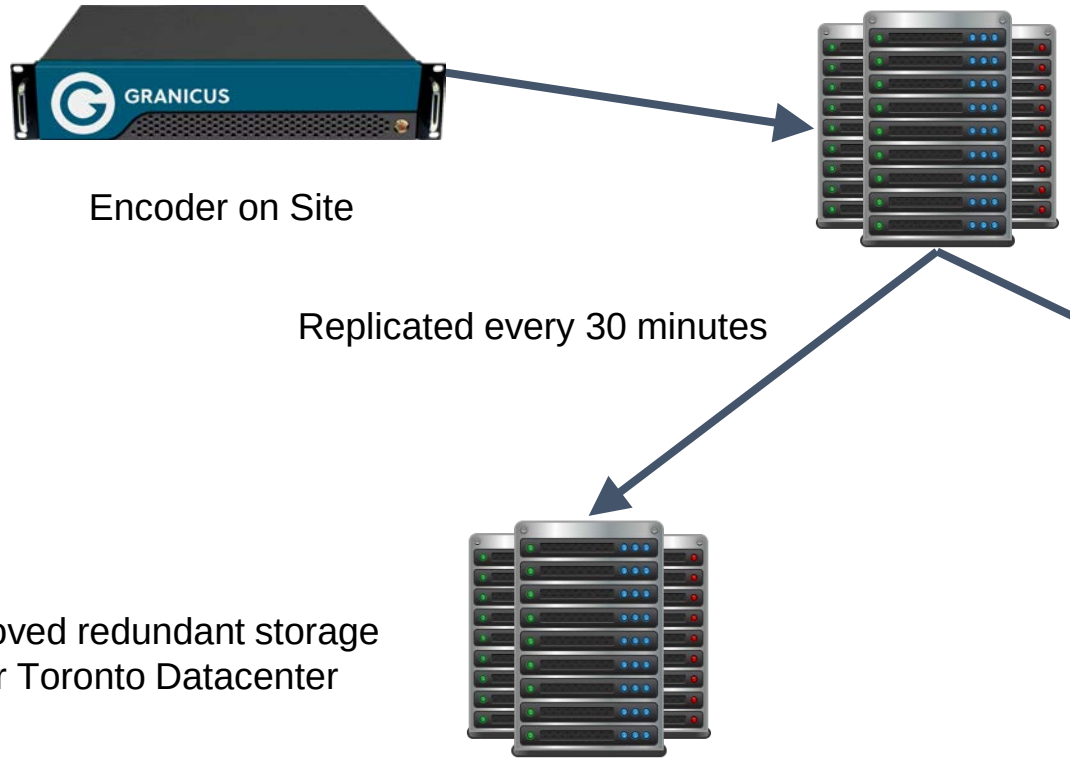
Event Details

3. Our backup process was designed to protect against disasters (natural or technical) not provide a versioned backup.
4. When individual files were lost at the primary datacenter the backup process was designed to remove the backups.
5. The process for our US based customers is based on a versioned object storage provider that was not available to Canadian customers due to service availability and Canadian privacy laws.
6. This resulted for video loss for multiple clients in Canada.

Changes Implemented

1. A replacement for the failed storage array was dispatched the day the problem was identified from our hosting partner in Vancouver.
2. All data possible data recovery options have been explored with our hosting partner and clients.
3. We have altered our traditional backup job to keep files on the backup storage array in Toronto for at least 28 days.
4. A data center has opened in Montreal with the same versioned 99.999999999% durable object storage we use to backup our US customers. Our new backup system is highly redundant. It stores files on multiple devices across multiple facilities. The service is designed to sustain concurrent device failures by quickly detecting and repairing any lost redundancy.

Changes Implemented



Encoder on Site

Improved redundant storage at our Vancouver Datacenter

Replicated every 30 minutes

Replicated every 5 minutes

Improved redundant storage at our Toronto Datacenter

Montreal Object Storage
99.999999999% durability
for example if you store
10,000 objects on average
expect to loose single object
once every 10,000,000 years