A vertical decorative strip on the left side of the page features a background of Earth from space. Overlaid on this are three large, black, stylized letters: 'P' at the top, 'E' in the middle, and 'R' at the bottom, which together spell out 'PERI'.

## Cloning for Redundancy – Payment Processing Gateway Company

A payment processing Gateway Company uses high encryption to encrypt credit card and other payment information between its clients and their processing gateway. This encryption is handled by a software solution running on their high availability servers. The software however has to be preloaded with encryption keys. This is both time consuming and tedious. Also, revocation of these keys and the software module used for operational, billing and security reasons is time consuming as multiple modules have to be updated. Duplication of these modules for redundancy and fail-over is complex and error prone. The customer was looking for a simple, easy to use solution to manage encryption keys and also a solution that can be available in multiple data centers for redundancy and fail-over. Using digital certificates and PKI, PERI was able to meet their requirements.

### Project Work: Digital Certificates in a Cloned environment

Digital Certificates contain electronic keys that can be used to encrypt and sign digital information. Digital Certificates also help in establishing identity of a user or application that is trying to use these keys. Deploying software applications that perform encryption using digital certificates alone is not sufficient. A complete Public Key Infrastructure (PKI) had to be built to issue, manage, backup, revoke and restore certificates. The customer also needed to have the PKI available in other geographic locations not only for load balancing, fail-over but also for redundancy. Redundancy was a critical part of the solution.

### Solution

PERI designed a solution that included building and deploying a cloned PKI solution available at multiple geographic locations. PKI managers can issue, manage, backup, revoke and restore certificates from multiple locations.

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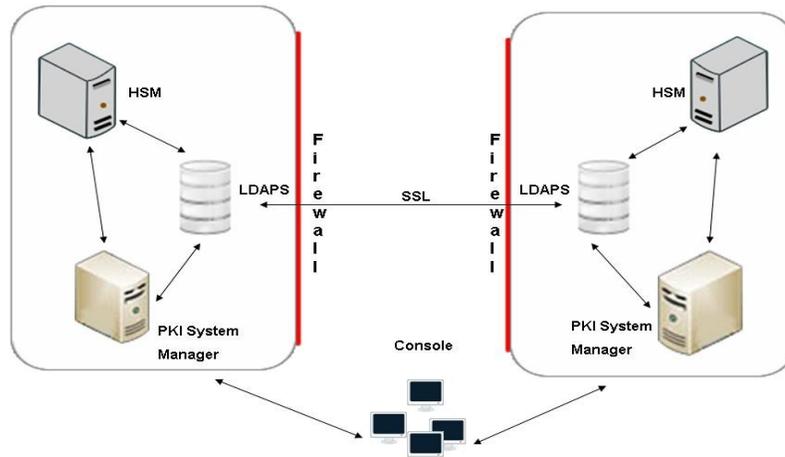
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The back-end LDAP servers synchronize with each other immediately updating all information and providing a transparent, redundant, fail-over solution.



By letting PERI build the Cloned PKI environment across different geographic regions, the customer achieved the following:

- Fully functional redundant system
- Complete administrative access to multiple sites, issuing, verifying and revoking digital certificates to their customers
- Real time Fail over capability in case of catastrophic - shutdowns due to natural causes such as hurricanes and earthquakes
- Distributed administration of their PKI
- Collective auditing
- High availability for their Public Key Infrastructure

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