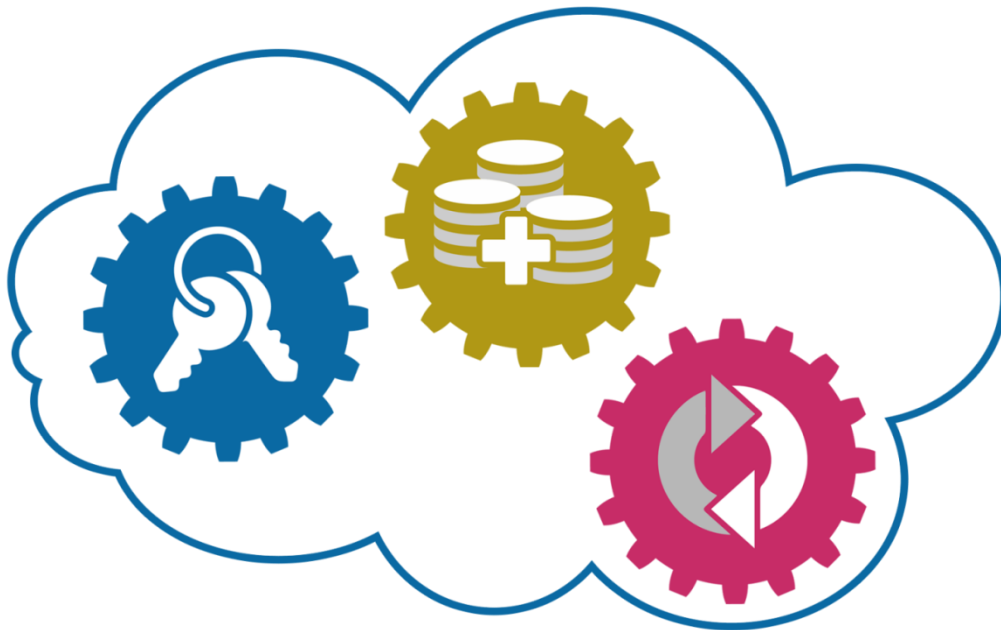


ezCAC: HIPAA Compliant Cloud Solution



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TECHNICAL SAFEGUARDS

Access Control 164.312 (a) (1)

Unique User Identification

- ✓ ezCAC provides identity management for the application. It assigns the unique username for identifying and tracking the user in the system. It also restricts access to any ezCAC application without prior authentication. No Access Policy for shared users IDs/ generic IDs.
- ✓ ezCAC provides access management for the application that can be used to provide access by module and/or by function:
 - The super user can assign rights to respective modules and system menus (i.e. Restrict Clinical Document Specialist or Case Manager from accessing the Audit module).
 - The super user can assign View and Edit rights (i.e., only Coders and Coding Supervisors have access to EDIT billable codes).

Automatic Logoff

- ✓ Configurable session time-out after predetermined time of inactivity.

Encryption and Decryption

- ✓ ezCAC encrypts at-rest data with unique encryption keys for each object using AES-256 bit encryption algorithm. Encrypted data is kept isolated from our key management cluster and our primary services. Access to ezCAC application is via Hypertext Transfer Protocol Secure (HTTPS) communications protocol using SSL certificate such as VeriSign/ Comodo.

Emergency Access Procedure

- ✓ Emergency access procedures are discussed during the implementation phase. ezCAC will handle the authentication flow and track activities for compliance.

Audit Controls 164.312 (b)

- ✓ Every user action and API calls are automatically recorded for compliance purposes.
 - Application events
 - System events
 - Directory services events
 - File replication service events
 - DNS events

Integrity 164.312 (c) (1)

- ✓ A hash-based authentication code (HMAC) is created and used to verify at-rest object integrity regularly and every time an object is retrieved.

Person or Entity Authentication 164.312 (d)

- ✓ The person or entity authentication is done by ezCAC's identity and access management application.
- ✓ ezCAC also provides strong password policy by default, minimum 8 characters are required with Upper Case, Lower Case, Number and Special Characters.
- ✓ Built in password expiration module. E.g. 30 days, 60 days, 90 days, etc...
- ✓ ezCAC also provides password reset workflow mechanism.

Transmission Security 164.312 (e) (1)

- ✓ ezCAC employs HTTPS communications protocol for all services. All data transactions are transmitted in encrypted form and verified via HMAC within ezCAC infrastructure.

DISASTER RECOVERY (DR)



ezCAC is designed from ground-up to be highly scalable, fault-tolerant, reliable, secure, and fast. It is built on cloud infrastructure that is available in three distinct availability zones (data centers) that provides the business continuity in the event of disaster or failure.

Traditional DR Investment Practices

To minimize the impact of a disaster on patient care, hospitals invest time and resources to plan, prepare, rehearse, document, train, and update processes to deal with such events. The investment for the disaster recovery planning of a particular system can vary dramatically depending on the cost of a potential outage. A traditional approach to DR involves different levels of off-site duplication of data and infrastructure. Hospitals typically invest in infrastructure needed to support the duplicate environment and the scope would include, but not be limited to following:

- ✓ Facilities to house the infrastructure including power and cooling.
- ✓ Security to ensure the physical protection of assets.
- ✓ Suitable capacity to scale the environment.
- ✓ Support for repairing, replacing, and refreshing the infrastructure.
- ✓ Contractual agreements with an Internet Service Provider (ISP) to provide internet connectivity that can sustain bandwidth utilization for the environment under a production load.
- ✓ Enough server capacity to run all mission-critical services including storage appliances for the supporting data and servers to run applications and backend services such as user authentication, Domain Name System (DNS), Dynamic Host Configuration Protocol (DHCP), monitoring, and alerting.

Depending on the criticality of the services, the duplicate environment may be configured in a fault tolerant manner. This normally involves duplicating the entire infrastructure listed above.

In most traditional environments, data is backed up to tape and sent off-site regularly. The backup of your data is only half the story. Recovery of data in a disaster scenario needs to be tested and achieved quickly and reliably. Your recovery time will be the longest using this method.

ezCAC Cloud Advantage

The ezCAC cloud-based, Computer-Assisted Coding solution enables a Disaster Recovery solution for critical data, and applications from day one. Our Recovery Point Objective (RPO) design target is zero data loss and our Recovery Time Objective (RTO) design target is instant failover. This means that if there is a disaster or disruption that affects one of the data centers, we are able to shift users to an alternate data center, so they can continue working uninterrupted.

This eliminates the complexity of managing heterogeneous servers and storage platforms, and the costs of building and managing disaster recovery infrastructure. It provides you the ability to recover in the event of a disaster, without adding any extra costs on your IT resources.

Planning for disaster recovery is a major challenge, but with ezCAC you the risk is mitigated. And, while planning for technology failures and natural disasters can be cumbersome and expensive, we are proud of the benefits our customers gain. Your coded and billed documents will be accessible so your business can continue despite the disruption.



OVER THE AIR UPDATES (OTA)

ezCAC is designed to provide over-the-air (OTA) software updates to create the best user experience. By employing OTA software updates, ezCAC is able to provide new functionalities, required customization, and software upgrades seamlessly and without any required IT interactions. The updates typically include the following, but not limited to:

- ✓ Natural Language Processing updates based on
 - Machine Learning algorithm
 - Users (CDI/ Coder/ Auditor) code validation
 - Physician documentation
 - Best practices
- ✓ Code and Terminology Updates for ICD-9, ICD-10 Dx, ICD-10 PCS, Snomed-CT, CPT and more
- ✓ Encoder Updates such as Groupers, Code Edits, Medical Necessity Checks, RAC Alert Data etc.
- ✓ User Interface Updates

Downloading, testing, and deploying patches has become a significant challenge for many IT departments. Typically there are 4-6 updates a year just for the encoder. When these updates are released, an IT resource must update the server and each of the workstations. How long does that take IT team to do that? How long after an update comes out is it applied?

- ✓ Security Updates

With ezCAC, there is no hardware deployed/IT footprint. There are no configuration management requirements for patches, or upgrades, or updates.

SUMMARY

While improved productivity and cost savings have long been at the top of the list, more and more hospitals are choosing ezDI, LLC for its security and reliability benefits. Our pure and proven cloud deployment is designed to protect our users' data and deliver reliability at levels that are very difficult or impossible for many organizations to achieve on their own. Even on-premise solutions, or so called "private cloud" and hybrid technologies are challenged to deliver the data protection and reliability that comes with ezDI Health Information Management Solutions.

Following are data protection and reliability advantages that we hear about most frequently from customers (in no particular order):

1. Powerful administration and workflow tools give you control of your data

When hospital data is stored in ezDI applications, hospital administrators have powerful tools to help them manage users, clinical documents, service lines, case allocation rules, user alerts, dashboards and reports. Dashboards and Reports also provide visibility into how the applications are being used and what data is in them so that administrators have the control they need without having to maintain the infrastructure.

2. Proven cloud architecture

Our cloud infrastructure is specifically designed and built for our suite of applications and does not include any unnecessary hardware/software codes. This reduces the number of potential vulnerabilities that could be targeted.

3. Over-the-Air (OTA) software updates

No more manual updates to apply, ever again! With the "Computer-Assisted-Coding application integrated with Encoder" residing in the cloud, updates are all automatic.

4. HIPAA security

We employ an information security team that monitors our data centers and applications 24x7x365. Not only do we ensure that all HIPAA guidelines are met, such as Technical, Physical, Administrative safeguards, but we also follow all current healthcare industry best practices for secure transmissions and sessions, network protection, environmental controls, and more, mitigating the risk of a data breach.

5. High Availability

ezCAC provides a Computer-Assisted Coding solution that is highly available, scalable, robust and ultra-responsive with a goal of zero maintenance window, or planned downtime.

6. Disaster Recovery

ezDI offers robust disaster recovery capabilities which are commonly measured by Recovery Time Objective (RTO) and Recovery Point Objective (RPO). ezCAC is designed with RTO and RPO goals of zero. Clinical documents and coded data are auto-saved every few seconds and replicated to multiple data centers. Meaning, if one of our data centers becomes unavailable, we seamlessly switch the user to another data center and because data is almost immediately replicated across multiple data centers, there is no loss of data and users continue working uninterrupted.

7. Customer Support

Your success is our top priority at ezDI. We provide direct access to qualified support specialists and a team of technical experts that provides peace of mind by helping ensure your business continuity, proactively preventing issues and maximizing your ezCAC technology investment. Our customer support is designed to accelerate user adoption, increase productivity, and maximize ezCAC's ROI.

ABOUT ezDI

ezDI - Transforming the Patient Story into Meaningful and Actionable data since 2004. We provide intuitive solutions focusing on positively impacting the healthcare customers' entire clinical documentation and revenue cycle operations.

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