



The Challenge: Protecting Access to Healthcare Data

Healthcare Organizations have made deep investments in clinical workflows and patient engagement. Downtime has to be minimized in view of important operating goals:

Compliance: HIPAA, HITECH - The HITECH Act strengthened civil and criminal penalties for failure to produce patient health information (PHI) after a crisis. Value and population-based reimbursement formulas rely on systems uptime.

Physician/Patient Satisfaction: Physicians who have invested precious time in developing EMR/EHR expertise cannot endure extended downtimes. Similarly, patients relying on provider IT systems for communication of clinical information expect the service to be as simple and available as online banking.

Security: Backup and recovery strategy is the first line of defense against many forms of cyberattack, especially increasingly common and deadly ransomware incursions.

The Solution: OpSus Recover

OpSus Recover is a hybrid cloud disaster recovery-as-a-service (DRaaS) that provides secure, reliable disaster recovery to healthcare organizations for clinical, administrative, and financial applications.

OpSus Recover services are designed to provide safe, stateful recovery of new web-based EMR and EHRs, Imaging Applications, Data Repositories, Financial Applications, and even Analytics Engines. Unlike "one size fits all" cloud solutions with vague SLAs, OpSus Recover marries multi-cloud economics to the customers operating environment. CloudWave takes responsibility for design, project management, implementation, testing, and ongoing support and change control in partnership with each customer.

Unlike unmanaged "data bunkering" solutions, OpSus Recover uses a disciplined approach to pre-build secure network connectivity for users, devices, and interfaces at each customer. A structured, carefully-managed implementation process results in a validating test at the launch of the service, with testing repeated annually or more often as each customer's audit process requires.



"After our major system upgrade, we had an advanced EMR and other critical systems in need of a cost effective disaster recovery solution. Prior to CloudWave, we were dissatisfied with our RPO and RTO. We needed to do much better to recover both our EHR and other information systems.

Through OpSus Recover, CloudWave helped us to achieve dramatic improvements, up to 90% reduction in RTO. Our hospital is in a stronger and more confident position to recover in the event of a disaster. The solution is even better since recovery does not rely heavily on hospital staff. That's peace of mind."

– Audrey Parks, CIO
Salinas Valley Memorial
Healthcare System

Service Levels

CloudWave Technical Consultants will work with each organization to determine their optimal RPO and RTO and decide which service level best satisfies their individual requirements.

OpSus Recover Silver offers enhanced restoration time and improved reliability and security over traditional tape media and handling. Our secure connectivity and defense in depth security manage provide a functioning “air gap” for your sensitive healthcare data. RTO Range: 6-12 Hours. RPO Range : 2-24 Hours..

How it Works: A replication appliance is installed at the hospital data center, where periodic backup save-sets are

stored and replicated automatically to the OpSus Cloud. In the event of a disaster, data at OpSus is restored to our disaster recovery SAN to facilitate recovery.

OpSus Recover Gold uses continuous data protection and automated processes to offer an aggressive Recovery Point Objective with significantly reduced recovery and restoration times. RTO Range 0-2 Hours. RPO Range: 0-2 Hours.

How it Works: Virtual replication appliances track and asynchronously replicate all data changes for the past 72 hours. Additionally, specific application backups are taken every 2 hours. In the event of a disaster, a prebuilt environment is powered on and the most recent data is automatically restored.

Service Comparison

	Typical Public Cloud Vaulting	Typical MSP Remote Backup	OpSus Recover SILVER SLA	OpSus Recover GOLD SLA
RTO Range	24-72 hours	12-48 Hours	6-12 Hours	0-2 Hours
RPO Range	Unknown	6-48 Hours	2-24 Hours	0-2 Hours
Annual Test	No	Fee-based	Included	Included
Additional Tests	No	Fee-based	Optional	Optional
Project Management	Customer	Customer	CloudWave	CloudWave
Change Control	Customer	Customer	CloudWave & Customer	CloudWave & Customer
Pre-built connectivity	No	No	Included	Included
HIPAA Associate	No	Varies	Yes	Yes
Implementation Consulting	No	Optional	Included	Included
Backup Optimization	No	No	Included	Included

Did You Know

CloudWave offers deep, cost-saving integration between OpSus Recover and OpSus Backup, our fully managed Multi-cloud Backup-as-a-Service (BaaS) for Healthcare. This is a great option for customers who have had long term operating or management challenges around backup and recovery.

Service Highlights

- Tier 4 Secure Private Cloud Data Centers, with defense in depth security, a 99.9999% available platform design, and thoughtful public cloud integration where needed
- Full, stateful protection for critical healthcare applications based on MUMPS, SQL, and other healthcare database technologies
- Fully-managed data recovery and restoration services – frees your staff to respond in a crisis
- Periodic testing to validate data recoverability and update recovery procedures
- Ongoing collaborative program management and change control
- Archive-aware integration optimizes backups and protects legacy data

Learn More at www.gocloudwave.com.

CloudWave offers a complete suite of services to provide customers with options for end-to-end EMR/EHR, Imaging, and enterprise systems support and management.