COHESITY

Safeguard Critical Patient Records and Medical Data with Cohesity

Key Benefits

- Simplified data management across multiple systems and locations

- Immutable backup for improved security posture against ransomware attacks

- Significant cost savings through modern data reduction techniques

- Increased efficiency through faster backup of large EHR/EMR systems, including Epic

- Meet industry regulatory compliance such as HIPAA and GDPR

Healthcare institutions grapple with many challenges concerning managing and protecting electronic health records (EHR) and electronic medical records (EMR)—particularly within systems like Epic. These challenges stem from the sheer volume and complexity of healthcare data, encompassing patient records, imaging files, lab results, and administrative documents, which require meticulous management and safeguarding. Healthcare providers must navigate stringent regulatory requirements, such as the Health Insurance Portability and Accountability Act (HIPAA), necessitating robust data protection measures to ensure compliance and mitigate the risk of legal penalties. In addition, the escalating threat of ransomware attacks poses a significant concern, as cybercriminals exploit vulnerabilities in healthcare IT systems to encrypt critical data and demand ransom payments—leading to disruptions in patient care and financial losses. Here are a few reasons why healthcare institutions need modern backup and recovery for their EHR and EMR systems, like as Epic:

- **Criticality:** Patient health records and clinical data are mission-critical. There is significant pressure to ensure high availability and quick recovery.

- **Compliance:** There are strict data retention policies and regulatory compliance standards for patient and medical records.

- **Recommendations by Epic:** Healthcare institutions must follow the Epic Systems guidelines and recommendations (like Epic Honor Roll and Business Continuity Review), for managing and protecting Epic Systems.

> "Cohesity has reduced backup and restore times so significantly that at first, it almost wasn't believable compared to our previous environment. We now exceed the backup SLAs for Epic, have more than 50 times data reduction, and have gained time savings of 70 percent for backup and restore. We are confident Cohesity will scale to meet future requirements and keep up with exponential data growth at Riverside Healthcare."
>
> – **Troy Cailteux**, System Administrator, Riverside Healthcare

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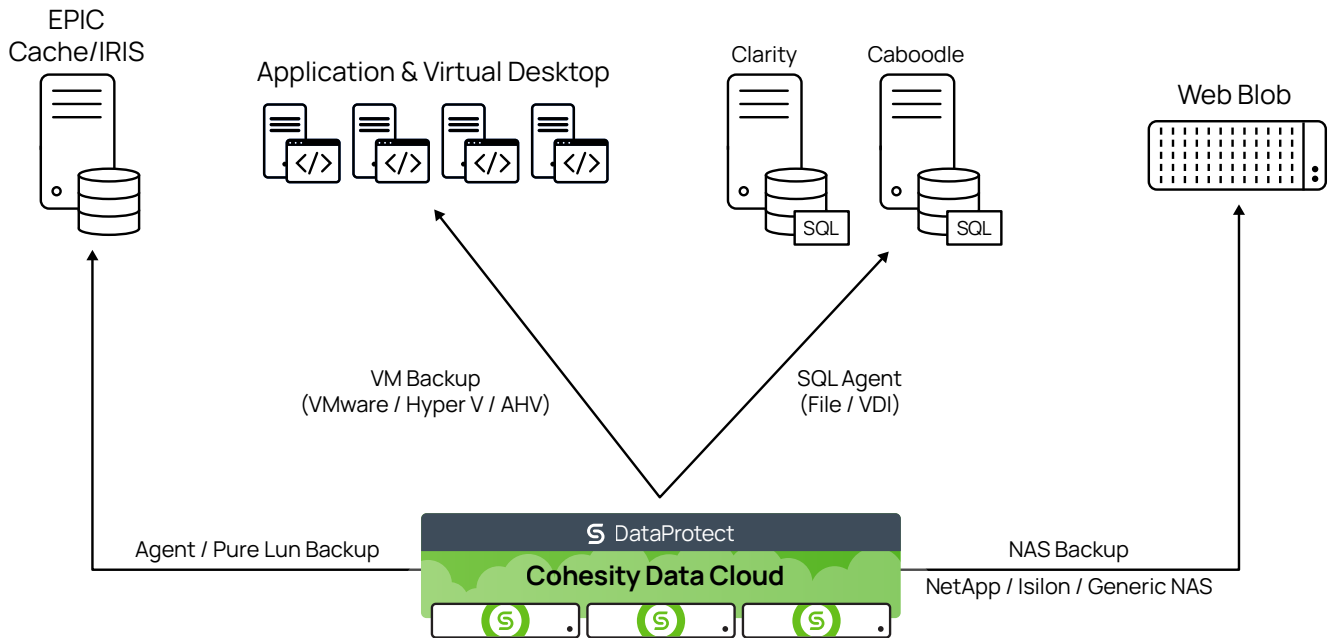
Figure 1: Data protection for Epic with Cohesity

Modern backup and recovery for Electronic Health Record (EHR) systems

Cohesity offers a modern backup and recovery solution tailored to the unique needs of healthcare organizations utilizing Epic Systems for managing electronic health records (EHR) and electronic medical records (EMR). Cohesity's data security and management platform provides a comprehensive approach to backup and recovery, combining advanced technology with seamless integration to safeguard critical patient information and ensure business continuity.

One key feature of Cohesity's solution is its ability to provide immutable backup capabilities, which are crucial in protecting EHR and EMR data against ransomware attacks and unauthorized access. By utilizing write once, read many (WORM) technology, Cohesity ensures that backed-up data remains tamper-proof and cannot be altered or deleted. This preserves data integrity and compliance with regulatory requirements such as HIPAA.

Cohesity offers a unified platform for data management, enabling healthcare organizations to streamline backup workflows, reduce administrative overhead, and optimize resource utilization. With Cohesity's modern backup and recovery solution, healthcare providers can confidently protect their Epic Systems data, ensuring uninterrupted access to critical patient information and mitigating the risk of data loss or downtime. By using Cohesity's advanced technology and expertise, healthcare organizations can enhance their overall cybersecurity posture and focus on delivering high-quality patient care without compromising data security or regulatory compliance.

Efficiently back up large EHR and EMR files

For healthcare enterprises using Epic, large files, such as those common with Caché, can present a challenge for some data protection solutions, but not with Cohesity. These large files might be 100s of gigabytes or 10s of terabytes or larger. Regardless of the actual file sizes, Cohesity can efficiently back up and restore by using MegaFile—a unique component of Cohesity's architecture that allows fast backup and recovery for large files, helping reduce backup times and downtime when recovering from a disaster. MegaFile is a differentiated approach to data streaming across multiple nodes, implemented using technology that intelligently distributes files across all nodes in a cluster. An aspect of Cohesity SpanFS®, MegaFile breaks large files into smaller chunks for parallel backup and recovery across Cohesity nodes. Unlike other vendors, Cohesity dynamically splits and distributes data, allowing large files to be divided into smaller chunks and streamed across the entire cluster. Figures 2 and 3 illustrate a small file being broken up into smaller parts that can be read or written in parallel.

COHESITY

Epic Database Server
interSystems Caché/IRIS
(database files)

```
dir1/CACHW.DAT
    - or -
dir1/IRIS.DAT
```

```
dir2/CACHW.DAT
    - or -
dir2/IRIS.DAT
```

```
dir99/CACHW.DAT
    - or -
dir99/IRIS.DAT
```
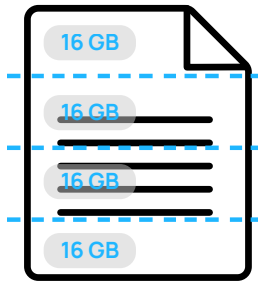
Cohesity Cluster

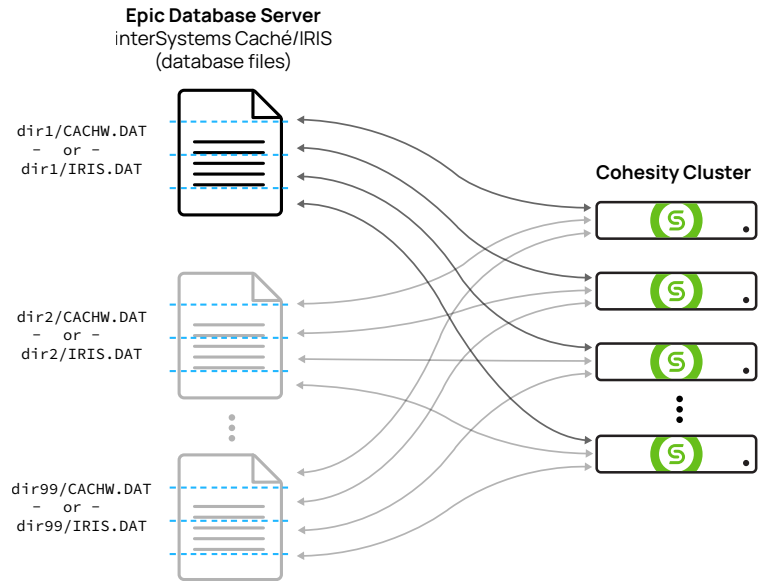Figure 2: File divided into smaller chunks for parallel backup and recovery.

Figure 3: Multiple files backed up in parallel to multiple Cohesity nodes.

Epic's recommendations

As a leading provider of EHR and EMR systems, Epic offers valuable insights and recommendations for healthcare organizations seeking to enhance their data protection strategies. Epic emphasizes the importance of partnering with trusted vendors specializing in healthcare IT solutions and complying with industry data security and privacy standards. Epic recommends implementing a comprehensive backup and recovery solution that aligns with best practices for protecting EHR and EMR data, including the use of immutable backup technology to safeguard against ransomware attacks and ensure data integrity.

Epic's honor roll program recognizes healthcare organizations that demonstrate exemplary use of Epic Systems to improve patient care, enhance operational efficiency, and drive innovation in healthcare delivery. By following Epic's recommendations and partnering with trusted vendors like Cohesity, healthcare organizations can strengthen their overall cybersecurity posture and safeguard their critical patient information against evolving threats.

Why Cohesity for your EHR and EMR backup

Proven solution
Simplify operations at scale to stay compliant and reduce risk.
Over 50 healthcare institutions trust Cohesity for protecting their EHR environment including Epic.

High performance
Faster backup and recovery for large EHR files to minimize downtime.
The largest Epic IRIS DB that Cohesity protects today is 140TB, with a recovery time of less than 14 hours.

Significant cost savings
Significant cost saving through data reduction (5x to 12x)
We use data optimization and reduction techniques that provides a cost-effective mechanism for data mobility irrespective of the size of the environment.

To learn more about how Cohesity can help you protect and manage your EHR and EMR systems, visit Cohesity

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