

Lone Star/CareSight – CarePoint Reader (CPR)

The Lone Star/CareSight “CarePoint Reader” or CPR is a secure gateway which is configured to copy data to the Lone Star/CareSight AWS Cloud repository, specific to a given customer.

The gateway requires minimal resources to run but must have read-only access to databases of interest. It provides access via the Internet to an SSH port and then to the AWS environment (which can be customized if required).

The Lone Star/CareSight CarePoint Reader (CPR) is installed as a Windows Service on premises. The CPR connects to the customer database using standard SQL queries, synchronizing updates to the data and transmitting at specified intervals to the CareSight AWS environment.

Our best practice is to have the CPR “service” installed on a dedicated system (or workstation), not on the actual SQL server that it will be reading from. The system can preferably be run on a VM instance or some other utility-specific server.

The CarePoint Reader utilizes Python for inbound and outbound database connectivity. Connections to customers source database systems use PyODBC. Between CareSight and AWS, CPR utilizes Oracle's MySQL connector library. (Both drivers are capable of requesting TLS, but by default, TLS is not utilized.)

AWS Key Management Service (KMS) is used to provide and maintain encryption key pairs for encryption of data in transit.

Authentication is accomplished via AWS IAM Access Keys. Encryption and IAM Access Keys are unique to each CareSight customer and are automatically rotated every 30 days.

Each customer has issued a unique, temporary encryption key pair upon initial installation. Once the installation is complete, the temporary key is used to download the new, 30-day keypair, which is autorotated from then on.