

## CDR DICOM Security Information

### Background

Creating a faster and easier experience of installing CDR Dicom software has always been important to us. For this reason CDR Dicom uses default passwords so that customers can start working with the software quickly. In well-protected network environments, the use of default passwords poses limited risk to the patient data stored by CDR. Improper, internal access to this information can exist, however, and a [recent report](#) by the CERT Vulnerability Analysis Team at Carnegie Mellon University has confirmed this as a potential issue.

### Vulnerability

A potential risk exists where unauthorized individuals with knowledge of the default passwords, and internal access to CDR's SQL database, could retrieve the patient information stored by CDR exams.

The following default credentials in CDR are listed below:

- sa - This is the system administrator account and is required when installing SQL Server. It has administrative rights to the entire SQL instance.
- cdr - This is the user account created by CDR and is typically used by clients to connect to the server.

### Mitigation

Customers can mitigate the risk caused by this issue in several ways. Any (or all) of these approaches would be appropriate:

- Change the default passwords in CDR (*see link below*).
- Ensure that the network storing patient information is secure and up-to-date with the latest security patches.
- Ensure patient information is accessed only when necessary and only by those who have a valid reason for doing so.
- Protect your passwords and keep them secured.

## Changing Default Passwords

### Introduction

The following information will assist customers who wish to change the default passwords that were set up during the installation of CDR Dicom. You may wish to do this as an added security measure to protect the patient information stored within the SQL database used by CDR Dicom.

### Recommendation

If you are concerned about this issue, you may wish to replace the default passwords with custom ones. During the installation of CDR Dicom certain default credentials were used to optimize the installation process. These credentials consist of the following: "sa", which is the system administrator account required when installing SQL Server, and "cdr", which is the user account created by CDR and is typically

used by clients to connect to the server. You can change the password for either account, or both of them, depending on your personal preferences. Please note that if you choose to change the cdr password in a server/client network, you will need that new password to re-connect each client to the server.

We have developed two SQL commands, one for the sa account and the other for the cdr account, that can be used to change the default passwords. To do this, open a command prompt window on the server workstation where the SQL database is installed (typically where CDR Server is located) and type the following, substituting newpassword1 and newpassword2 with your own passwords:

```
sqlcmd -S .\CDRDICOM -U sa -P CDRDicom50 -Z newpassword1
```

```
sqlcmd -S .\CDRDICOM -U cdr -P cdr -Z newpassword2
```

Press Enter after each command and remember to keep a record of the new passwords and to protect them.