



# CDR DICOM Quick Start Guide

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# Contents

<b>1. Overview .....</b>	<b>1</b>
1.1. Welcome .....	1
1.2. CDR Modules.....	1
<b>2. Getting Started.....</b>	<b>2</b>
2.1. Client Requirements.....	2
2.2. Server Requirements .....	2
<b>3. Installation .....</b>	<b>3</b>
3.1. Installing CDR DICOM Software.....	3
3.2. Using CDR DICOM Product Keys .....	3
3.3. Setting Up Your Database.....	3
3.4. Benefits of Database Support.....	3
<b>4. Standalone Setup.....</b>	<b>4</b>
4.1. Is this the Correct Setup for You?.....	4
4.2. Selections during Standalone Setup .....	4
4.3. Standalone Setup Procedure.....	5
<b>5. Client / Server Setup.....</b>	<b>6</b>
5.1. Is this the Correct Setup for You?.....	6
5.2. Selections during Server Setup .....	7
5.3. Server Setup Procedure .....	8
5.4. Selections during Client Setup .....	9
5.5. Client Setup Procedure.....	10

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# 1. Overview

## 1.1. Welcome

Congratulations on your purchase of CDR DICOM, the client / server software product from Schick Technologies. Compliant with DICOM's latest standard, CDR DICOM is in many ways a completely new product, but if you have used our software previously, you will notice that the "interface" or look of CDR software is familiar. CDR's exam and zoom windows, drop-down menus, and dialog boxes, are almost exactly the same as in earlier versions. In fact, throughout our design process, we have emphasized the need to maintain the style and feel of CDR. What has changed is "how" your patient and image information is stored and retrieved.

## 1.2. CDR Modules

CDR DICOM consists of the following modules:

- CDR Client (cdrdicom.exe) - acquires images and forms requests to find, store, and retrieve patient data and images from CDRServer
- CDR Server (cdrserver.exe) - responds to requests from any CDR client to find, store, and retrieve patient data and images
- Data Administration Utility (cdrdataadmin.exe) - provides database management tools
- Conversion Utility (convertimage.exe) - converts proprietary CDR images to DICOM format

In this Quick Start Guide, we will provide guidelines for the following tasks:

- Installing CDR DICOM software
- Setting up your patient database and location for storing images
- Configuring the access to your patient and image information by direct database
- Connecting multiple workstations to the server (multi-user licenses only)

Users wishing to convert their existing CDR images from our older, proprietary format to the new DICOM format should refer to the following document, "*Strategies for Converting CDR Images to DICOM*", document part number B1051043. This document will describe the operation of the Conversion Utility and provide several options for making your images compatible with DICOM's open standard. For new users no conversion is necessary as all images acquired with CDR DICOM software will be saved in DICOM format.

## 2. Getting Started

### 2.1. Client Requirements

The minimum system requirements for CDR clients are:

- Compatible operating system (Windows 98 SE, 2000, or XP)
- 32 MB RAM
- Pentium-based processor
- 1 GB free disk space
- Supported USB controller (check our website for a current listing)

The recommended system requirements for CDR clients are:

- Compatible operating system (Windows 2000 or XP)
- Minimum of 64 MB RAM
- Pentium IV: 1 GHz or better
- Minimum of 5 GB free disk space<sup>1</sup>
- Supported USB controller (check our website for a current listing)

### 2.2. Server Requirements

The minimum system requirements for CDR servers<sup>2</sup> are:

- NT operating system (Windows 2000, Advanced Server, or Server 2003)<sup>3</sup>
- TCP/IP networking protocols (for DICOM Servers)
- Minimum of 128 MB RAM
- Pentium II: 450 MHz
- 20 GB hard drive

The recommended system requirements for CDR servers are:

- NT operating system (Windows 2000, Advanced Server, or Server 2003)
- TCP/IP networking protocols (for DICOM Servers)
- 512 MB RAM
- Pentium IV: 2 GHz or better
- Minimum of 120 GB hard drive

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<sup>1</sup> Storage requirements will vary depending on the patient volume for each practice.

<sup>2</sup> We recommend that servers not be used for image acquisition, especially in CDR DICOM networks.

<sup>3</sup> When configured as a server, XP Professional has a 10-connection limit, which may be an issue for larger, multi-operatory environments.



## 3. Installation

### 3.1. Installing CDR DICOM Software

Your CDR DICOM software CD contains all the files you need to set up your system to acquire images and store them in DICOM format. At the Windows desktop, close all other applications, and insert the CD into the CD drive. The CD will run the setup program automatically and prompt you through the installation process.

### 3.2. Using CDR DICOM Product Keys

Each CDR DICOM CD contains a Product Key label to unlock the appropriate type of software — either Standalone or Client / Server. As you install CDR DICOM, you will be prompted through several screens, including one for your name, company or practice name, and product ID (serial number). *You must complete each item to continue with the installation.* To complete the Serial field, enter the Product Key located on the CD jacket, keeping in mind that the key is case-sensitive and must include the dashes as well. If your system is set up for Client / Server communication, install the Server first and then each Client. Use the same Product Key number for both server and client(s).

### 3.3. Setting Up Your Database

CDR DICOM requires an open relational database and a compatible ODBC driver like those available with Access or SQL Server (Microsoft), or SQL Anywhere (Sybase) to store patient data and image information. If you already maintain an open database, you will need to make changes to it to accommodate CDR's database structure. *(A separate document on database issues is available.)* If you do not maintain this type of database, CDR will automatically install one on your system.

As you begin using CDR to create exams and take new images, this information will be saved to your database. If you have already converted your patient information and images from previous versions of CDR, your new and earlier data will be merged into that database as well. The end result is that you continue to use CDR just as you have in the past, only now your data is stored in an open database, with all the advantages provided by that structure.

### 3.4. Benefits of Database Support

First, you will be able to perform custom queries for information in your database. You will not need to rely just on the search options supplied in CDR for patient information (although they are still there if you prefer to use them). Depending on your database, you will also have access to any of the reporting or graphing tools found in many databases.

Second, we have built in several data integrity tools with CDR to help ensure that your database is always up-to-date and that your data is even better protected from accidental deletion.

## 4. Standalone Setup

### 4.1. Is this the Correct Setup for You?

You should select this option from the setup program if you are running CDR on one workstation only. In this non-networked configuration, there is no separate storage server. CDR is used to acquire images and to save them. All of the files and utilities required to run CDR DICOM for Windows are located on a single workstation.

When installing CDR, you should choose the following installation:

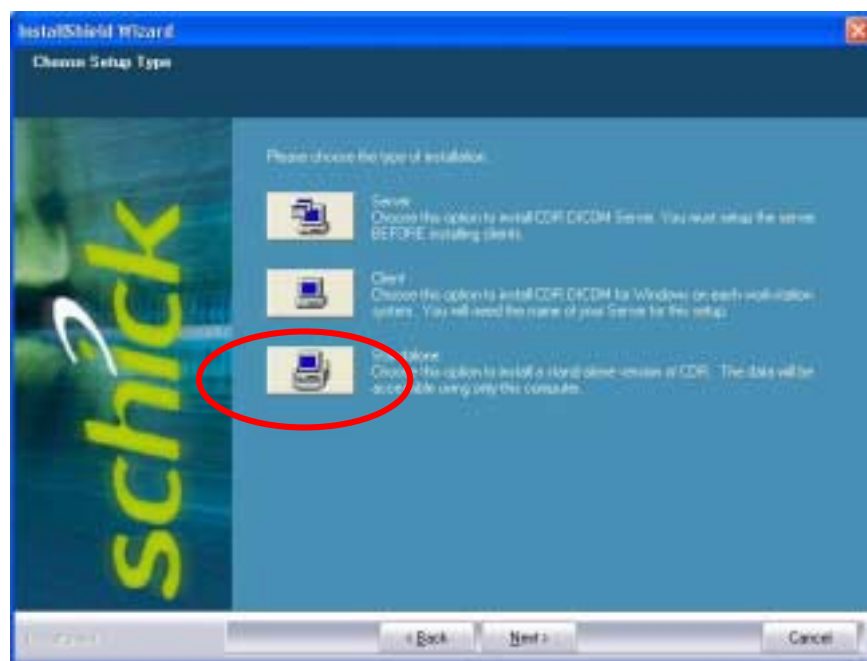


Figure 1. Standalone Setup

### 4.2. Selections during Standalone Setup

While setting up your system, you will be prompted to provide the following information. Some fields contain default settings designed to simplify and expedite the installation process. These fields can be modified if you prefer.

- Help files, Viewset (exam series) and MS Word report template options
- CDR Database and software installation location
- Image storage location

### 4.3. Standalone Setup Procedure

The following steps describe a typical standalone installation.

1. Uninstall any previous versions of CDR DICOM using the Add / Remove Programs wizard in the Windows Control Panel.
2. Insert the CDR DICOM CD. The setup wizard starts automatically and displays the Welcome screen. Click Next.
3. At the Product License screen, complete all of the text boxes. The Product License key, attached to the CD sleeve, identifies either a Standalone or Client / Server installation. Click Next. A message box confirms a single-user installation. If correct, click Yes.
4. At the Choose Destination Location screen, select the folder location where the CDR DICOM files will be installed. Click Next. (The default path is C:\ . . . Schick Technologies \ CDR DICOM for Windows.)
5. At the Image Folder screen, browse to the folder where image data will be stored. Click Next. (A typical folder name might be C:\Images.)
6. At the Select Features screen, verify the checked items the setup program will install. These features are selected by default and unless there are other issues to be considered, we recommend installing all of them. Click Next.
7. At the Start Copying Files screen, review the setup information. Click Next.
8. Installation complete. Click Finish.

## 5. Client / Server Setup

### 5.1. Is this the Correct Setup for You?

You should select this option from the setup program if you are running CDR on several workstations. In this networked configuration, there should be a separate storage server (dedicated server). When installing CDR DICOM networks, always install and configure the server first.

PLEASE NOTE: When possible, we recommend that servers not be used as image acquisition stations, especially in CDR DICOM networks.

In this setup, you identify a central location that contains all the patient records in your practice and all the images associated with those exams. The images are stored on the server, but information about how and where the images are stored is saved in a database. The database tables are already organized for you and are installed automatically with this version of CDR.

PLEASE NOTE: To install CDRServer correctly, you should be the network administrator or have administrative privileges to install and run new software in your network environment.

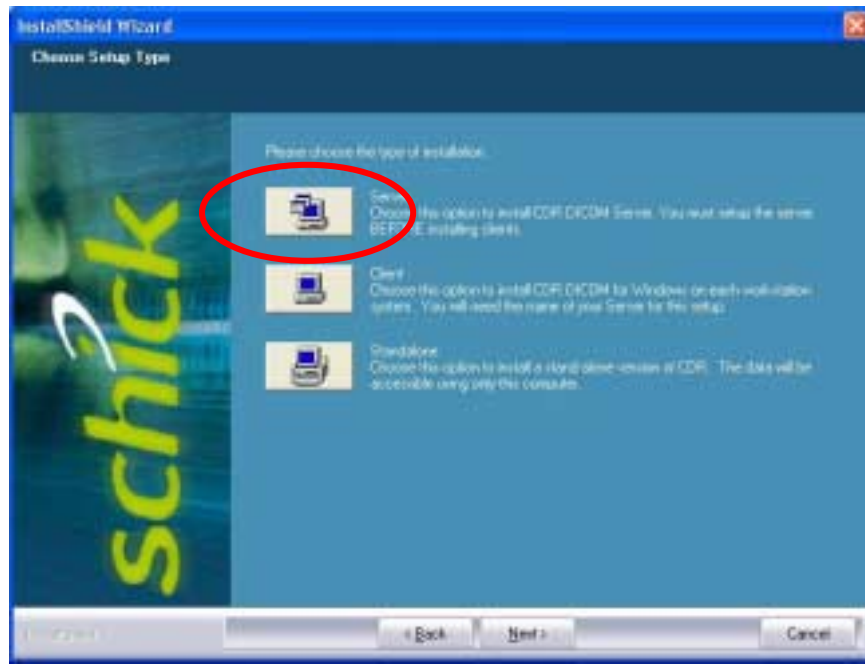


Figure 2. Server Setup

## 5.2. Selections during Server Setup

While setting up your DICOM server, you will be prompted to provide the following information. Some fields contain default settings designed to simplify and expedite the installation process. These fields can be modified if you prefer.

- CDR Database location
- Help file installation option
- Image storage location

After installing the server successfully, install CDR Client on each of your workstations.

### 5.3. Server Setup Procedure

The following steps describe a typical server installation.

1. Uninstall any previous versions of CDR DICOM using the Add / Remove Programs wizard in the Windows Control Panel.
2. Insert the CDR DICOM CD. The setup wizard starts automatically and displays the Welcome screen. Click Next.
3. At the Product License screen, complete all of the text boxes. The Product License key, attached to the CD sleeve, identifies either a Standalone or Client / Server installation. Click Next. A message box confirms a multi-user installation. If correct, click Yes.
4. At the Choose Setup Type screen, click Server.
5. At the Choose Destination Location screen, select the folder location where the CDR DICOM files will be installed. Click Next. (The default path is C:\ . . . Schick Technologies \ CDR DICOM for Windows.)
6. At the Image Folder screen, select a Shared folder where Clients connecting to the Server can access image data. You can perform this step yourself or have the setup program perform it for you. If you wish to perform the step, open Windows Explorer and select the folder you want to share. In Windows XP, right-click on the folder, select Sharing and Security, and click on Share this folder (other operating systems may require different steps). Click OK. Click Next to continue with setup.
7. At the Select Features screen, verify the checked items the setup program will install. These features are selected by default and unless there are other issues to be considered, we recommend installing all of them. Click Next.
8. At the Start Copying Files screen, review the setup information. Click Next.
9. At the Name of Server screen, write down the server name as you will need this information when setting up the Clients. Click Next.
10. Installation complete. Click Finish. Restart the Server workstation.

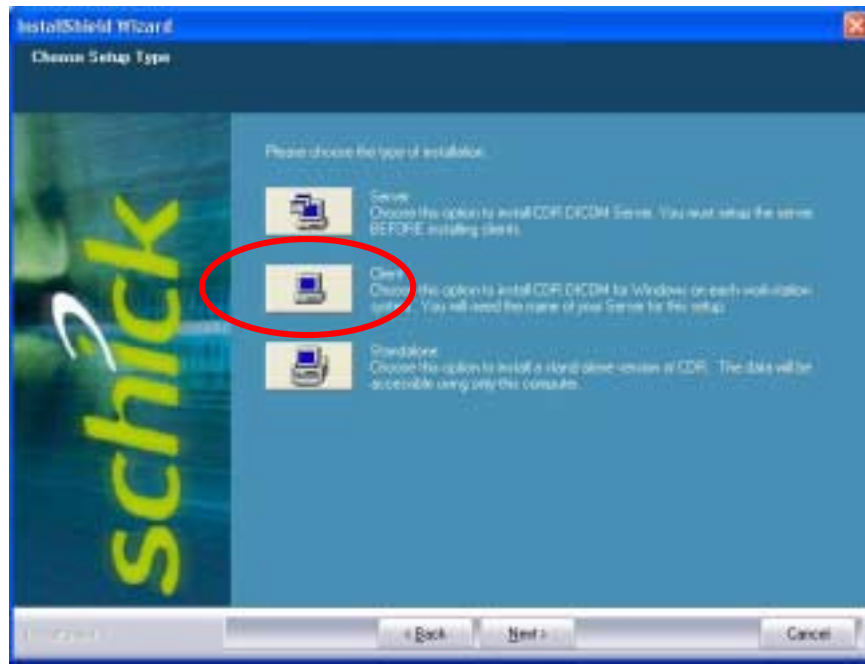


Figure 3. Client Setup

#### 5.4. Selections during Client Setup

While setting up your DICOM clients, you will be prompted to provide the following information. Some fields contain default settings designed to simplify and expedite the installation process. These fields can be modified if you prefer.

- Server name to which this client is connected
- Client installation location

## 5.5. Client Setup Procedure

The following steps describe a typical client installation.

1. Uninstall any previous versions of CDR DICOM using the Add / Remove Programs wizard in the Windows Control Panel.
2. Insert the CDR DICOM CD. The setup wizard starts automatically and displays the Welcome screen. Click Next.
3. At the Product License screen, complete all of the text boxes. The Product License key, attached to the CD sleeve, identifies either a Standalone or Client / Server installation. Click Next. A message box confirms a multi-user installation. If correct, click Yes.
4. At the Choose Setup Type screen, click Client.
5. At the Choose Destination Location screen, select the folder location where the CDR DICOM files will be installed. Click Next. (The default path is C:\ . . . Schick Technologies \ CDR DICOM for Windows.)
6. At the Enter Server screen, enter the name of the server this client will connect to when sending and retrieving image data. Click Next.
7. At the Select Features screen, verify the checked items the setup program will install. These features are selected by default and unless there are other issues to be considered, we recommend installing all of them. Click Next.
8. At the Start Copying Files screen, review the setup information. Click Next.
9. Installation complete. Click Finish.. Repeat these steps for every Client.