INSTALLING AND OPERATING
CARRIER SOFTWARE
ON NETWORKS
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Installing and Operating
Carrier Software on Networks

Carrier Corporation
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1.0 Introduction

This document provides information about installing and operating Carrier Electronic Catalog (E-CAT) and eDesign Suite software on networked computer systems.

The discussion of networking software begins with a summary:

- Quick Start (Section 1.1) - A concise summary of how to install and configure the software for network operation.

The remaining sections of the manual provide greater detail:

- Overview of Network Concepts (Section 1.2)
- Installing the Software on a Network (Section 1.3)
- Running the Software on a Network (Section 1.4)
- Adding Users (Section 1.5)
- Removing Users (Section 1.6)
- Adding or Updating Programs (Section 1.7)
- Uninstalling Software from the Network (Section 1.8)

1.1 Quick Start

This section provides a summary of the information found in the remainder of this manual. Use it to quickly install and configure the software for network operation.

1.1.1 Software Capabilities

The Carrier software has the following capabilities in a network environment. For further details refer to section 1.2.

- The software is network aware.
- It is not client/server software.
- It permits sharing of data among users.
- It does not permit concurrent access to data.
- It permits sharing of programs among users.
- It permits sharing of printers among users.
1.1.2 Installing the Software

The following procedure must be repeated for each workstation which is to have access to the software. For further information refer to section 1.3.

1. Verify that the workstation meets minimum requirements for the software:
   - Operating System: Windows 7, Windows 8, Windows 10
2. Log in as the network administrator. Make sure all other programs are closed.
3. Follow the installation instructions on the release sheet provided with the software to begin the installation process.
4. Carrier X Builder Framework is installed first.
   - Specify the network server drive as the install drive.
   - Supply the company name to appear on reports. (This is only required on first workstation and only if no Carrier program was previously installed).
5. The particular Electronic Catalog or eDesign programs are installed next.
6. You may be asked to reboot the workstation to activate Windows system components that were installed. This completes the installation.
7. Assign Read, Write, Create and Destroy file privileges to the \E20-II folder on the server drive and all its subfolders. It is possible to be more selective about assigning file privileges if you wish. See 1.3.2 for details

1.1.3 Running the Software

To run the software, refer to instructions in the program release sheet for starting the program. For further details, see section 1.4.

1.1.4 Maintaining the Software

For information on:
1. Adding new users – see section 1.5.
2. Removing existing users – see section 1.6.
3. Adding or updating programs – see section 1.7.
4. Uninstalling programs – see section 1.8.

1.2 Overview of Network Concepts

This section provides an overview of the capabilities of the Carrier Electronic Catalog (E-CAT) and eDesign Suite software in a network environment. This information is often useful to network administrators planning for installation, operation and maintenance of the software.

The network capabilities of the Carrier software can be summarized as follows:

- The software is “network aware”.
- The software is not client/server software.
- The software permits sharing of project data among network users, but does not permit concurrent access to data.
- The software permits sharing of programs among network users.
- The software permits sharing of printers among users.

Each of these items is discussed in greater detail in the following sub-sections.
1.2.1 Network Compatibility

Carrier software is “network aware” meaning it can make use of networking features and thereby provide various networking benefits to its users.

1.2.2 Client/Server

The Carrier software is not client/server software. Among the components used by the software, some are installed on the central server and others on the workstation. A single installation procedure run from the workstation automatically installs the required software on the central server and the workstation.

1.2.3 Data Sharing

One of the important benefits of computer networking is the ability to share data among users of the network and even to permit the same data set to be accessed simultaneously by two or more users. In this respect, Carrier software permits data sharing among users, but does not permit concurrent access to the same data. Details are provided below:

- **Data Sharing:** Carrier software stores data in units referred to as “projects”. Briefly, a “project” is a container for data from one or more application programs. Carrier software automatically permits sharing of data among network users. By “sharing” we mean that users have access to the data and may work with it. Further details on this subject are provided in sections 1.3 and 1.4. Further information on projects and project data management can be found in the help system for each Electronic Catalog or eDesign program.

  Example #1: If project data is shared among all users, user JohnSmith can create and save project data. User KenJones can later open and work with any project created by JohnSmith or any other user.

  Example #2: Users JohnSmith and KenJones are running Carrier software on a network. The network administrator wishes to keep data for these two users private so each may use his own project data, but may not use the other’s project data. To achieve this, projects must be stored in folders with restricted file privileges. For example, only JohnSmith is granted read, write, create and destroy file rights to folders containing his projects, and only KenJones is granted read, write, create and destroy file rights to folders containing his projects.

- **Concurrent Access:** Some software programs permit two or more users to simultaneously work with the same data at the same time. Such programs are often referred to as multi-user database programs. While Carrier software permits data sharing, it does not permit concurrent access.

  Example: Users SarahJohnson and SusanWilliams are running Carrier software on a network. SarahJohnson and SusanWilliams can view and work with each other’s projects so long as they do not attempt to work with data for the same application in the same project concurrently. For example, they cannot both work with HAP data in the same project at the same time. However, if a project contains data for HAP, and an E-CAT application, one user could work with the HAP data and another user could work with the E-CAT program data in the same project at the same time.

1.2.4 Program Sharing

Another benefit of computer networking is allowing users to share one set of program files. As a result, a program can be installed in one location on the network server computer and accessed by individual users on their workstations, rather than the program being installed on each individual workstation. This reduces hard disk usage across the network, and reduces the burden of maintenance and support for network administrators.

Carrier software permits program sharing. Two or more users can concurrently run the software using a single copy of the program on the network server.
1.2.5 Printer Sharing

A third benefit of networked systems is the ability of users to print to common printer devices attached to the network. Rather than having individual printers dedicated to each workstation, one or a smaller number of printers can be connected to the network for all users to utilize.

Carrier software permits printer sharing automatically.

1.3 Installing the Software on a Network

This section explains how to install Carrier software on a computer network. The procedures are straightforward and are similar to those for a standalone computer system. Steps in the installation process are described in the sections below:

1.3.1 Installing the Software

The following installation procedure must be repeated for each workstation that will have access to the Carrier software on the network server. This is because the installation procedure not only installs software on the network server, but also installs supporting components that are required on each individual workstation. Installation also creates a group and several program items on the user's Start/Programs Menu. The installation procedure is as follows:

1. Make sure each workstation computer meets the minimum requirements:
   - One of the following operating systems: Windows 7, Windows 8, Windows 10

2. Before beginning the software installation:
   - Make sure you are logged into the network as the network administrator so you are guaranteed of having sufficient data privileges to install files on the network server.
   - Make sure all other programs have been closed. The workstation may need to be rebooted at the end of the installation. While the reboot procedure will automatically close any running programs and will prompt you to save unsaved data, it is usually better if you save and close programs before starting the installation.

3. Follow the instructions listed in the program release sheet to install the software. At the end of the installation procedure you may be asked to reboot the workstation computer to activate Windows software components installed on the workstation.

1.3.2 Assigning Privileges to Network Users

Installation of the software creates several file folders on your network server drive. This section describes the required privileges.

Software installation creates an \E20-II folder on the network server drive and a number of sub-folders beneath \E20-II. Within these folders are files for which users will need read, write, create, and/or destroy file privileges. The simplest approach is to assign Read, Write, Create and Destroy privileges to the \E20- II folder and all its sub-folders. However, if desired, privileges can be more selectively assigned as described below.

**E20-II**
Read, Write, Create, Destroy privileges required. Write privilege is only required the first time a network user runs the software so the user can be registered in the E20XYCFG.MDB database file (only if the software was installed for “Network - all data is private” mode). The Create and Destroy privileges are only required for opening this database. Each time the database is opened, a companion locking (.LDB) file is created; each time the database is closed the .LDB file is erased.

**E20-IINEVIRIO**
Read, Write, Create, Destroy privileges required. In this folder is a database file which contains information about the location of each user’s projects. All four privileges are required to work with this database.
Optional: If network users will store archives of project data in this folder, then Read, Write, Create and Destroy privileges will be needed. Otherwise, if archive files will be stored elsewhere, no privileges are needed. An archive is a compressed file containing all the individual files comprising a project. It is created to safeguard data or when transferring data to external computers.

Optional: If network users will store projects in folders beneath E20-II\PROJECTS, then Read, Write, Create and Destroy privileges will be needed. However, Carrier software permits users to store project data in any folder on any drive the user has access to. Therefore, if E20-II\PROJECTS will not be used for data storage, no privileges are necessary.

Read, Write, Create, Destroy privileges required because certain Carrier programs use this folder as a temporary repository for data.

Read, Write, Create, Destroy. For each Electronic Catalog or eDesign program installed, one of these folders is created. These folders contain program files for a particular program. While most of these files only require Read privileges, Write, Create, and Destroy privileges are required to work the database files in the folder.

No privileges. These folders contains information used when uninstalling Configuration Services. Since uninstall is a procedure that should only be performed by the network administrator, no user privileges should be assigned to this folder.

No privileges. This folder is used during install and uninstall activities. Since these tasks should only be performed by a network administrator, no user privileges should be assigned to this folder.

To run and use the software:

1. From the Windows desktop, press the Start button and choose Programs.
2. From the Programs menu, choose the proper program group and item to launch the program.
3. Operation of the program begins. Because projects can be shared across a network, the Open Project dialog will list all projects created by all users. Any user can open and work with any project so long as the project data is stored in an area of the network to which the user has read, write, create and destroy file privileges.

Periodically it may be necessary to give a new user from a new workstation access to the Carrier software. To add a user, install the software to the network server from the user’s workstation as described in section 1.3. This installs the necessary Windows system components on the workstation and also creates a Start/Programs Menu item to start the software. Also use principles discussed in section 1.3 to assign data privileges for the user to the \E20-II folder and its sub-folders.
1.6 Removing Users

From time to time it may be necessary to remove a user who was using the Carrier software. There are only two concerns here. One is removing Start/Program Menu items. The second, which is optional, is removing file privileges to the program files on the server. First, on the user’s workstation manually remove from the Start/Programs menu the Carrier ECAT/E20 Programs group and all of the program items this group.

Second, if necessary, remove the user’s file access privileges for the \E20-II folder on the network server. Note that you should not uninstall the software from the user’s workstation. This will not only remove components from the local workstation, but it will also uninstall software from the network server. This will prevent all other network users from running the software.

1.7 Adding or Updating Programs

As new Carrier programs are released or existing programs are updated, it will be necessary to install them on the network and provide network users with access to the programs. To accomplish this task, follow the instructions provided on a program’s release sheet for installing the software. If Read, Write, Create, Destroy file privileges have not been granted to the \E20-II folder on the server and all its sub-folders, then these privileges will need to be assigned to the CODE folder for the new application.

1.8 Uninstalling the Software from a Network

This section describes the procedures used to uninstall Carrier software from a network. Uninstall may be required as program versions become obsolete, or when reconfiguring the software on a network.

1.8.1 Uninstalling an Individual Program

To uninstall an individual program, please use the following procedure.

1. Choose one workstation and perform steps 2 through 6 on this workstation.
2. From the Windows Desktop, press the Start button, choose Settings and then choose Control Panel.
3. In the Control Panel, double-click on the “Add/Remove Programs” icon.
4. In the Add/Remove Programs dialog, select the program you wish to uninstall and then press the “Add/Remove” button.
5. When the Uninstall dialog appears, choose the “automatic” option. As the uninstall proceeds, additional dialogs may appear asking if it is OK to remove a specific file. Press the Yes button in each case.

This will remove files for the program and its file integrity verification checker from the network server and will remove the Start/Programs Menu items on the workstation being used.
6. After the software has been uninstalled, you are returned to the Add/Remove Programs dialog. If the name of the program you uninstalled still appears on the list of programs, this is not cause for concern. Windows has not yet updated the list.
7. On the remaining workstations, the Start/Program Menu item must be removed manually. It is not necessary to remove the software components that were installed to the local workstation drive.
1.8.2 Uninstalling All Carrier Software

To completely uninstall all Carrier Electronic Catalog and eDesign software, please use the following procedure. This procedure is typically used when reconfiguring the software.

1. Choose one workstation and perform steps 2 through 11 on this workstation.

Removing Application Programs

2. From the Windows Desktop, press the Start button, choose Settings and then choose Control Panel.

3. In the Control Panel, double-click on the “Add/Remove Programs” icon.

4. In the Add/Remove Programs dialog, select the application program you wish to uninstall and then press the “Add/Remove” button.

5. When the Uninstall dialog appears, choose the “automatic” option. As the uninstall proceeds, additional dialogs may appear asking if it is OK to remove specific files. Press the Yes button.

   This will remove files for the chosen program and its file integrity verification checker from the network server and will remove the Start/Programs Menu items from the workstation being used.

6. After the software has been uninstalled, you are returned to the Add/Remove Programs dialog. If the name of the program you uninstalled still appears on the list of programs, this is not cause for concern. Windows has not yet updated the list.

7. Repeat steps 2-6 for each Carrier application that must be uninstalled. Note that the programs uninstalled must include one name E-CAT Enable.

Removing X Builder Framework

8. In the Add/Remove dialog select the “X Builder Framework” item and press the “Add/Remove” button.

9. When the Uninstall dialog appears, choose the “automatic” option. As the uninstall proceeds, additional dialogs may appear asking if it is OK to remove specific files. Press the Yes button.

   This will remove X Builder Framework software and its file integrity verification checker from the network server and will also remove the Start/Programs Menu items from the workstation being used.

10. Exit from the Add/Remove Dialog.

Removing Configuration Services 2.2

11. In the Add/Remove dialog select the “ECAT/E20 Configuration Services 2.21” item and press the “Add/Remove” button.

12. When the Uninstall dialog appears, choose the “automatic” option. As the uninstall proceeds, additional dialogs may appear asking if it is OK to remove specific files. Press the Yes button.

   This will remove Configuration Services which is underlying data management software used by Carrier programs and will also remove the Start/Programs Menu items from the workstation being used.

13. Exit from the Add/Remove Dialog.
Erasing Any Remaining Files

14. Run Windows Explorer from any workstation.

15. Navigate to the \E20-II folder on the network server drive and erase the E20XYCFG.MDB file. This is a database file used by the Carrier software to coordinate software operation. It was not uninstalled automatically in the previous steps for safety reasons - if the software is uninstalled accidentally, network user information can be recovered as long as this file still exists.

14. NOTE: Do not erase the \E20-II\PROJECTS folder as this may contain project data created by program users and it may need to be preserved.

Removing Start Items on Other Workstations

15. On each additional workstation, manually remove the Start/Programs Menu group titled “Carrier E-CAT and E20-II Programs” and all its items and sub-groups.