Data Collection Device (DCD) 1.0

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1 Foreword

About This Manual

This manual is designed for users of IEI Data Collection Device 1.0 software. From this point on the Data Collection Device software on the PC and also the software installed onto the Palm OS PDA will be referred to as "DCD".

The DCD software is currently only compatible with IEI prox.pad controllers with firmware v1.2b or higher. The DCD software was designed to emulate the Hewlett Packard (HP) IR Printer, for the purpose of:
1. receiving transaction logs from a prox.pad v1.2b or higher
2. viewing the received transactions logs directly on the Palm PDA
3. sending the transaction log data to a CSV file on the PC via the Palm Desktop HotSync process
4. receiving user settings

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Using this Manual

This manual is your reference to the DCD software, its features, and functionality. This manual contains the following topic sections, along with others:

Overview

Provides a description of the DCD software features and functionality.

Main Screen

Explains the layout and features available through the main screen of the DCD software.

Files

Provides access to session files stored on the DCD.

Settings

Provides access to selectable DCD options and configuration information.

DCD Names Software

Describes the additional PC software utility provided with the DCD PDA software and explains how to use it.

Obtaining Technical Support

Describes how to obtain technical support for DCD software, and how to prepare to make a technical support request.

Glossary

contains commonly used terms and definitions.

2   Installation

2.1   Installation

This section provides a general description of the installation procedures for the IEI DCD PDA software and its accessory components. DCD PDA is a software program designed for the Palm OS. DCD Names is a utility software program designed for Microsoft Windows operating systems (98/2000/XP). It is provided during the DCD PDA software install. DCD PDA and DCD Names are to be used in conjunction with IEI's access control equipment.

Installing the DCD software on the PC

NOTE: The PC components of the DCD software are only required if the user desires to use the DCD Names utility program or to retrieve captured data from the PDA on their PC. This is done during the standard Palm HotSync process and requires the installation of the PC components of the DCD software.

1. Download the DCD software
2. Double Click the Install_DCD.exe icon.
3. Select the button labeled "Install DCD".
4. Select the PDA's that you want the DCD software installed onto.
5. The Start Copying Files screen displays.
6. If the listed current settings are acceptable, click Next. If not, click **Back** and change the desired settings. Various "Copying files" messages display while the installation continues. When the installation finishes, the Setup Completed screen displays.
7. It is highly recommended that you view the ReadMe because it contains late breaking information, which may not be in this document.
8. Click the corresponding check box and **Finish**.
9. The DCD Software installation is complete.

3 Overview

3.1 General Overview

The Data Collection Device (DCD) programs provide an easy way to obtain information directly from your Infra-Red (IR) enabled access control hardware. Three types of information can be captured using the DCD : Device information, User information, and Event information. This information can be critical in quickly resolving technical support issues and verifying an installation setup. Some key features of the DCD system are:

- **Intuitive**
- **Data storage for later viewing**
- **Easily assign names**
- **Easily store data on PC**

Key DCD Features
Intuitive
The screen layout is designed along standard Palm OS guidelines. This makes it easy to use the DCD right away without needing to learn a bunch of new concepts.

Data storage for later viewing
The DCD stores all of your session data on the internal memory of the PDA. External SD memory cards CAN'T be used to store the data. Stored session data can be accessed and viewed at any time directly from the Files screen.

Easily assign names
The DCD can assign names to hardware users easily via the Edit Users option on the main menu. The DCD Names utility program is provided if you'd prefer to use the PC to assign names to hardware users.

Easily store data on PC
All stored session data can be stored on the PC using the standard Palm HotSync process. This allows important data such as user lists or event logs to be backed up on a PC and provides the ability to bring the data into other applications for further manipulation (such as incorporating the data into a larger report.)

3.2 Running DCD

The DCD software is shipped ready to run. To run the DCD, simply:

1. Install the DCD software onto a compliant Palm device.as specified in the previous section.
2. The Palm screen will display the DCD icon. Using your stylus, tap the DCD icon. The DCD will now start on the Palm device.

3.3   Running DCD Names

DCD Names is an optional utility program for the PC provided to allow you to edit and maintain the names used by DCD on the PC.

After installation, launch the DCD names utility program:

Run the following program: C:\IEI\DCD\DCDNames.exe

NOTE: The PC components of the DCD software are only required if the user desires to use the DCD Names utility program or the retrieve captured data from the PDA on their PC using the standard Palm HotSync process.

4   Main Screen

4.1   DCD Main Screen

The DCD Main Screen is the initial screen viewed when the DCD has been started and is ready for use. From here, all other screens and program functions can be accessed. The screen contains 3 buttons:
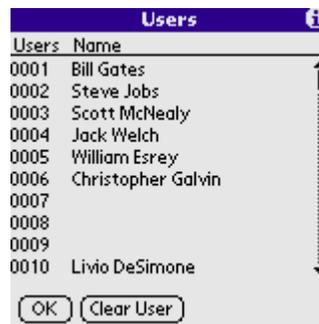
1. Retrieve - Places the DCD into receive mode, just like turning on the HP IR Printer.
2. Files - Provides assess to all stored session on the DCD.

3. Settings - Provides access to configurable DCD program settings.

Other functions that can be accessed through the drop-down menu on the Main Screen are: Edit Users, and Viewing Program Information.

Editing User Names With DCD

The DCD allows you to edit and maintain a list of user names that can be associated with specific hardware users. This can be helpful when trying to identify a particular user in a piece of hardware. To access this feature select **Options | Edit Users** from the drop-down menu on the Main Screen. This is done by using the stylus and touching the bar at the top of the screen. You will be presented with the current user list. Here, you can assign a name to each user location. Simply highlight the name field next to the user number you'd like to edit and type the user name to the list. You can enter the name as you would any other text on the Palm device. To delete a name, simply select it and tap the 'Clear User' button. Tap the 'OK' button when you have finished editing the list.

NOTE: The DCD Names utility PC program can also be used to edit and maintain the user list. For some, it is easier to type many names using the PC keyboard rather than the stylus on the Palm device.

Viewing DCD Program Information

From the drop-down menu on the Main Screen, select **Help | About**. You will be presented with the program About Screen. The About screen displays program version and build information. This information can be helpful to support staff when identifying possible issues and working towards resolution.

5 Retrieve Screen

5.1 Retrieving Data

The Retrieve Screen is displayed whenever the DCD is in receive mode. In normal circumstances, there are two basic steps involved in collecting data from a device:

1. Retrieving Data
2. Storing Data

The DCD is placed in receive mode by tapping the Retrieve button on the main screen. The Retrieve Screen displays the status of all incoming data as its being received by the DCD. The DCD will remain in receive mode for the period of time specified by the Timeout value on the Settings Screen.

Retrieving Data

The DCD is placed in receive mode by tapping the Retrieve button on the main screen. The Retrieve Screen displays the status of all incoming data as its being received by the DCD. The DCD will remain in receive mode and continue to receive data from device(s) for the period of time specified by the Timeout value on the Settings Screen or until the user taps the 'Cancel/Stop' button at the bottom of the screen.

Storing Data

After the DCD has received data from a device or devices, the user can tap the 'Cancel/Stop' button at the bottom of the Retrieve Screen to store the received data as a session on the DCD. You will be prompted for a name for the session. All data that has been received since the user started the retrieve process will be stored in the session. After the user provides a name for the session, the session is stored on the DCD and displayed to the screen.

6 Files

6.1 Overview

The Files Screen provides access to all stored sessions on the DCD. These sessions are displayed as a list in this screen. From this list, session properties can be viewed,

session data can be viewed and stored sessions can be removed from the DCD.
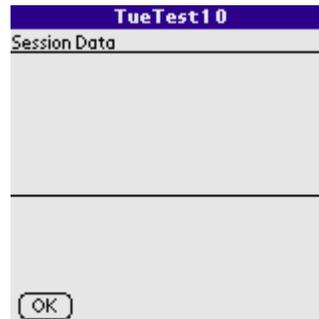
Viewing Session Properties With DCD

From the Files Screen, select the session whose properties you would like to view. On the right-hand side of the selected item is an Action drop-down menu. Select 'Info' from this menu. A message box will be displayed showing the properties for the selected session. When finished viewing, tap the 'OK' button on the message box to go back to the Files Screen.

Viewing a Saved Session With DCD

From the Files Screen, select the session that you would like to view. On the right-hand side of the selected item is an Action drop-down menu. Select 'View' from this menu. The session data will now be displayed on the DCD screen. You can scroll as necessary to view all data. When finished viewing, tap the 'OK' button at the bottom of the screen to be returned to the Files Screen.

Removing a Saved Session With DCD

From the Files Screen, select the session that you would like to view. On the right-hand side of the selected item is an Action drop-down menu. Select 'Remove' from this menu. You will be prompted to confirm the deletion. Select 'OK' at the prompt to confirm the deletion. Select 'Cancel' at the prompt to cancel the deletion.

WARNING: This action is not reversible! If you choose to delete the stored session, it cannot be recovered.

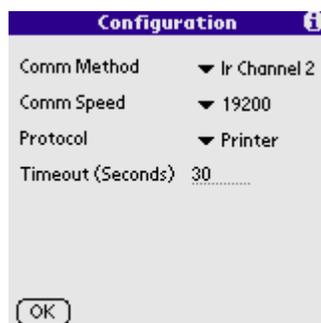### Removing All Saved Sessions With DCD

From the drop-down menu on the Files Screen, select **Options | Remove All Sessions**. You will be prompted to confirm the deletion. Select 'OK' at the prompt to confirm the deletion. Select 'No' at the prompt to cancel the deletion.

WARNING: This action is not reversible! If you choose to delete the stored session, it cannot be recovered.

7   Settings

7.1   DCD Settings

The DCD Settings Screen provides access to configurable DCD program settings. Options include: Comm Method, Comm Speed, Protocol, and Timeout.

Comm Method

The Palm OS supports multiple implementations of IR (Infra Red) communications for different Palm PDA hardware platforms. The IR implementation for a particular Palm device is selected by the manufacturer. Most newer devices will support the newer implementation, 'IR Channel 5'. If you receive an 'unable to open port' or similar error message when attempting to communicate with your Palm device, you should change the selected Comm Method to an alternate IR Channel. Keep doing this until you find a channel that works.

Because there are differences in the way the different models of the Palm PDA hardware access and use the infrared outputs of the PDA, there is a drop-down list allowing selection of what 'IR Channel' (infrared) DCD is going to use.

Here is a list of known compatible PDA's and the 'IR Channel' (infrared) setting that should be set in the DCD PDA application.

Make	Model	'IR Channel' Setting (infrared)
Aceeca	Meazura	2
Handspring	Visor	2
Kyocera	7135 Smart Phone	2
Palm	IIIc	1
Palm	IIIx	1
Palm	IIIxe	1
Palm	m105	2
Palm	m125	2
Palm	m130	2
Palm	m500	2
Palm	m505	2
Palm	m515	2
Palm	V	1
Palm	Vx	1
Palm	VIIx	1
Palm	Tungsten E	3
Palm	Tungsten E2	5
Palm	Tungsten T	3
Palm	TX	5
Palm	Tungsten T2	3
Palm	Tungsten W	2
Palm	Tungsten C	4
Palm	Zire	2
Palm	Zire 21	3
Palm	Zire 71	3
Palm	Zire 72	5
Palm	Zire 31	5
Sony	Clie SJ20	2

Models with known problems:
Palm Tungsten T3
Palm Zire 22

Comm Speed

The Comm Speed setting allows you to adjust the baud rate the DCD communicates at. The baud rate should be set to the same speed the target hardware communicates at. Currently the prox.pad operates at 19,200, so this setting should not be modified.

Protocol

The DCD supports communications with the IEI prox.pad v1.2b or higher. To communicate with the IEI prox.pad, select the 'Printer' protocol.

Timeout

To save battery life on your Palm device, the DCD will not just sit endlessly in 'Receive Mode' waiting for communications with a device. After the period specified by timeout, the DCD will automatically stop attempting to communicate. This will save battery life

on your Palm device in case a device is not functioning properly or the Palm is not aligned properly with the device.

8 DCD Names Utility

8.1 Running DCD Names

DCD Names is a utility program for the PC provided to allow you to edit and maintain the names used by DCD on the PC. For some, it is easier to type many names using the PC keyboard rather than using the stylus on the Palm device.

After installation, there are two ways to launch the DCD names utility program:

After installation, launch the DCD names utility program:

Run the program: C:\IEI\DCD\DCDNAMES.exe.

NOTE: The PC components of the DCD software are only required if the user desires to use the DCD Names utility program or the retrieve captured data from the PDA on their PC using the standard Palm HotSync process.

9 Help

9.1 Error Messages

Here are some error messages and potential resolutions:

When I install the DCD software on my PC I receive an error of "Insufficient Disk space".
This error is commonly seen on Win 2000 or Win XP and is normally caused by restrictive permissions of the Windows login username that is currently logged in.

RESOLUTION: Have the administrator change the permissions of this Windows login to give this user full administrator privileges.

When I try to save within the DCD Names program I receive an error of "Saving error".
This error is commonly seen on Win 2000 or Win XP and is normally caused by restrictive permissions of the Windows login username that is currently logged in.

RESOLUTION: Have the administrator change the permissions of this Windows login to give this user full administrator privileges.

**When I am receiving an event log from a Prox Pad I receive an error of:
'Failed to Retrieve Log Info'**

This error is commonly seen when the initial part of a log dump is missed by the DCD PDA software. The initial part of the log dump is critical because it contains information that will let the DCD PDA software determine if all data has been received properly. This generally happens when the IR receiver of the PDA device is not aligned with the IR transmitter of the hardware.

RESOLUTION: Make sure the IR receiver of the PDA device is properly aligned with the IR transmitter of the hardware and restart the log dump.

10 Obtaining Technical Support

10.1 Obtaining Technical Support

Should you experience any difficulty installing or operating the DCD software, please contact your installer.

11 Copyright Information

11.1 Copyright Information

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