Welch Allyn Allscripts Unity CardioPerfect Interface

Installation and configuration guide

Welch Allyn®

Advancing Frontline Care™

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User responsibility

This product is designed to perform in conformity with the description thereof contained in this operation manual, when installed, operated, maintained and repaired in accordance with the instructions provided.

Support

For information about any Welch Allyn product, visit www.welchallyn.com/en/about-us/locations.html.

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Overview

The Allscripts Unity CardioPerfect interface consists of several components, two of which are discussed here:

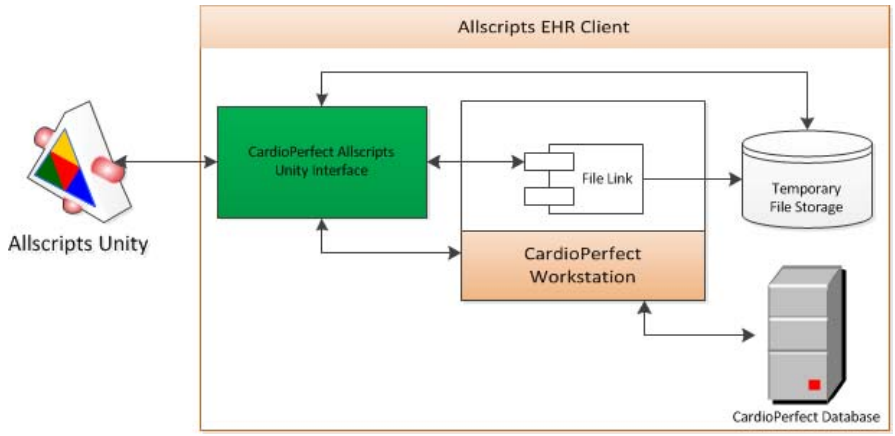
CardioPerfect Allscripts Unity Interface

This component is installed on each workstation that runs CardioPerfect. It captures patient demographic data and other Allscripts-specific information from the Allscripts' Electronic Health Record (EHR) client. It launches CardioPerfect, creating users and patients while maintaining patient data as defined within the Allscripts' EHR. It is also responsible for uploading images to the Allscripts Unity server.

Note This component requires CardioPerfect File Link to be pre-installed.

CardioPerfect File Link plug-in

The CardioPerfect File Link plug-in is installed on each workstation that runs CardioPerfect. This plug-in creates the image files that are uploaded to the Allscripts Unity server. The installer is located on the CardioPerfect Workstation CD.



Prerequisites

- Microsoft.NET Framework 4.0 – Full install
- CardioPerfect Workstation, software version 1.6.4 or higher (previously installed)
- CardioPerfect File Link plug-in, software version 3.1 or higher
- PartnerConnect software, version 2.0 or higher

Install the CardioPerfect File Link application

1. Install the CardioPerfect File Link application. This application is located on the CardioPerfect Workstation CD.

Note Use the default settings for File Link; the settings are automatically configured by the interface.

Install the PartnerConnect application

1. Go to www.welchallyn.com/en/service-support/service-center/partnerconnect.html.
2. Download the application.
3. Unzip the contents into a temporary folder.
4. Install the PartnerConnect application by following the instructions during the install.

Note

- **Do not run the PartnerConnect.exe file from inside the .zip file** after downloading the PartnerConnect application, Be sure to unzip, extract, or copy the PartnerConnect.exe file from the .zip file prior to executing.
  - If needed, copy the extracted PartnerConnect.exe file to a portable drive, mapped folder, or other media for use in installing on other computers or servers.
- During the PartnerConnect installation, on the Site Information page, in the Serial Number field, enter **WAUNITY**.

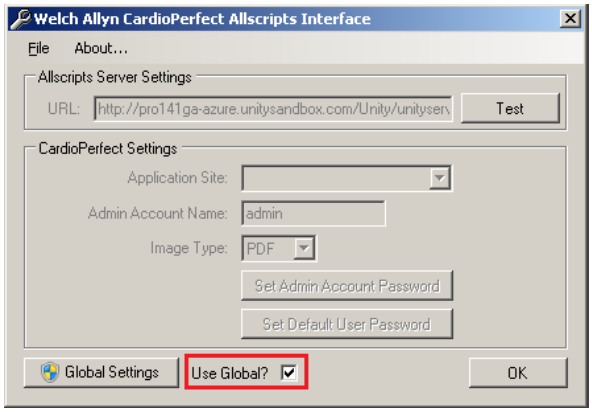
Install the Allscripts Unity CardioPerfect Interface application

1. Locate the Welch Allyn Allscripts Unity CardioPerfect Interface installation media.
2. Start the installation by running **Welch Allyn Allscripts Unity CardioPerfect Interface Setup.msi**. The installation begins.
3. When prompted for elevation, allow the installation to continue.

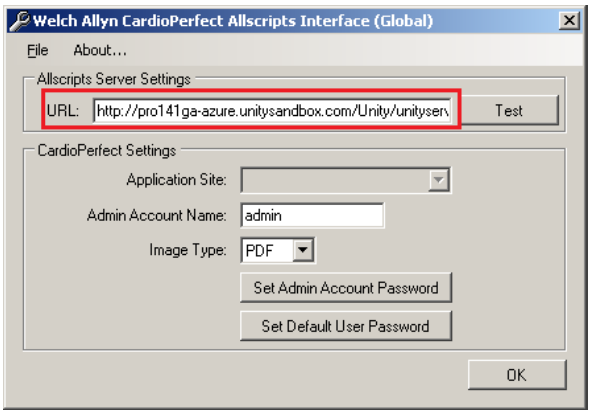
Configure the Allscripts Unity CardioPerfect application

The software controls how new users are created within CardioPerfect.

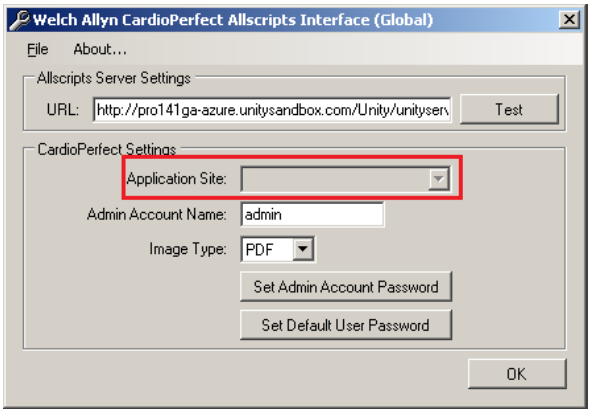
1. Locate the configuration shortcut on the Start Menu. Click the shortcut to start configuring the software.
2. To configure the current user settings, deselect the **Use Global** option. To configure the global settings, click **Global Settings**. With UAC turned on, you are prompted to elevate your session.



3. Configure the Allscripts server settings to the Allscripts Unity Web service URL. Click **Test** to confirm the connection to the service is functioning. If successful, a window displays the details of the server.



4. The software supports the use of Sites within the CardioPerfect product. The application site drop down list is enabled only if sites are configured for CardioPerfect. If applicable, select the CardioPerfect site you want to use.

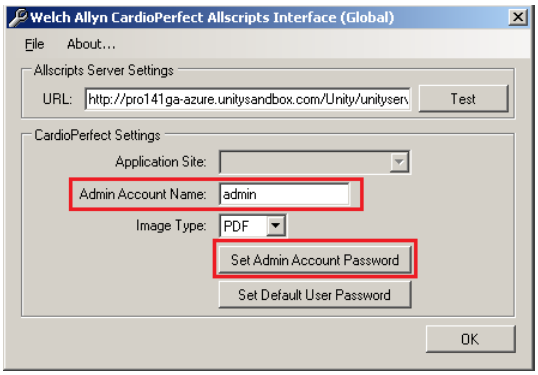


5. The software allows the configuration of the administrator account used. By default, the admin account name is used for administrative activities.

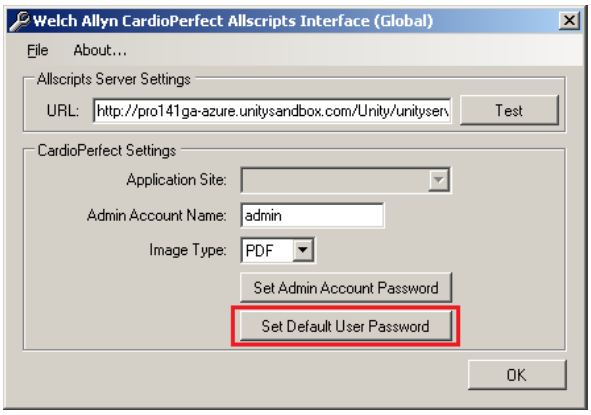
   a. To change the administrator account name, enter the account name you want to use. The account must exist in CardioPerfect, and it must be assigned the **Administrator** user role.

   b. To set the administrator password, click **Set Admin Password**. Enter the password for the administrator account and confirm the new password.

   c. Click **OK** to set the password and return to the configuration form.

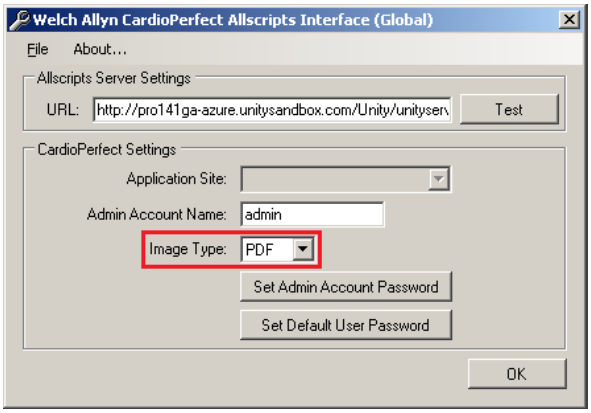


6. To set the default user password, click **Set Default User Password**. Enter the password for new accounts and confirm the new password. Click **OK** to set the password and return to the configuration form.



7. The software can upload either .tif or .pdf images to the Allscripts Unity server.

   a. To set which image type should be used, select the desired image type from the image type drop down list.



8. Once you have completed configuring the interface, click **OK** to save your settings and close the form. To close the form without saving the changes, click **X** in the upper-right corner of the form.

Uninstall the program

The Allscripts Unity CardioPerfect interface can be completely removed by using the program control found in the system control panel. The software is listed as *Welch Allyn Allscripts Unity CardioPerfect Interface* in the currently installed programs. Select the program and choose Uninstall. When the uninstallation is complete, the interface is removed from the installed programs list.

Order workflow

The Allscripts Unity CardioPerfect interface is designed to aid health care practices achieve their meaningful use goals by implementing order workflow.

Computerized provider order entry

Order workflow starts with the provider creating an order for the patient within the Allscripts EHR. The Allscripts Unity CardioPerfect interface recognizes orders for the following test types:

- Ambulatory blood pressure monitoring
- Electrocardiogram
- Spirometry

See “Appendix: Order Matching” for details on configuring test type order matching.

Acquiring Data

The next step in the order workflow is data acquisition. The Allscripts Unity CardioPerfect interface is launched from the Allscripts EHR by the technician who performs the test. The interface collects user information and patient demographics and starts the CardioPerfect application. When the test has been completed, the interface updates the order as “In progress” in Allscripts and creates a task for the provider.

Completing the Order

Order workflow finishes where it started, with the provider. The Allscripts Unity CardioPerfect interface is launched from the Allscripts EHR by the provider who will interpret the test. Once the interpretation is confirmed, the interface uploads an image of the test performed into the patient's record within the Allscripts EHR, and updates the order as completed.

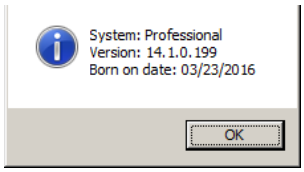
Troubleshooting

Use the configuration tool for troubleshooting if you have problems with the software.

Allscripts Server Settings

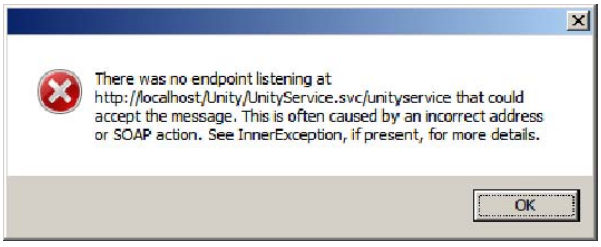
The Allscripts Server Settings section provides a Test button. With the Allscripts Server settings URL configured, the Test button will attempt to communicate with the Allscripts Unity Web service. Based on the results of the test, you can determine if your configuration is capable of communicating with an Allscripts Unity Web service installation.

Successful test



The image above displays the results of a successful test. It displays the system type, Version, and Allscripts Unity Web service "Born on date." This information is helpful in determining that a connection was established with the Allscripts Unity web service.

No endpoint listening failure

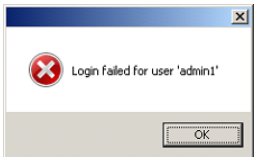


The most common cause of "No endpoint listening failure" is an invalid Allscripts Web service URL. This error can also be caused by a network failure. Verify that the URL field is correct.

CardioPerfect settings

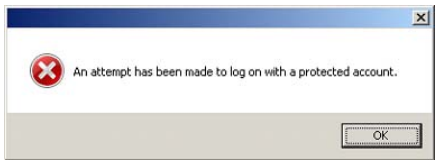
The default configuration for CardioPerfect normally requires no customization. When additional customization is required, you may encounter error messages from the software that indicate the modifications necessary for a successful install.

Login failure



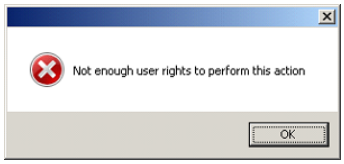
This failure is caused by a failed launch of CardioPerfect from the interface. It is the result of either an invalid administrator name or password set in the configuration. Confirm that these values are correct.

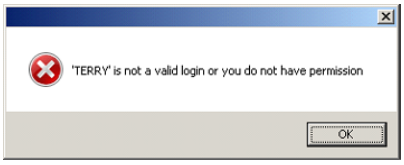
Protected account



This failure is caused by a failed launch of CardioPerfect from the interface. It is the result of the Allscripts EHR user having the same name as the administrator account in the configuration or a protected account (such as CcDBA). If this is in result of matching the administrator account, you will need to establish an alternative administrator account for the interface.

Not an administrator



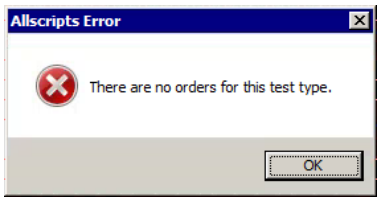


These failures are caused by a failed launch of CardioPerfect from the software. They are the result of the administrator account specified in the configuration not being in the Administrator user role. Change the account used to an administrator account or change the role for the user to administrator. This account must also be assigned the 'sysadmin' role on the SQL Server containing the CardioPerfect database.

Order workflow

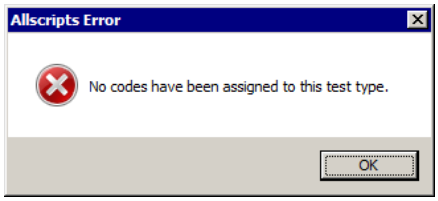
The Allscripts Unity CardioPerfect interface requires an order to be established for each test to be performed on a patient. You may encounter error messages from the software that indicate that order workflow has not been followed.

No order



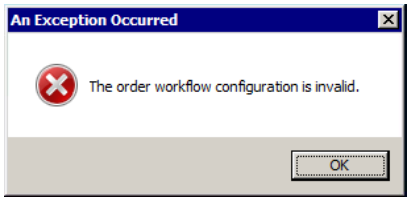
This failure indicates that an order has not been found for the test performed. The most common cause is that an order does not exist. From the EHR, create an order for the patient for the test. Once created, you can connect the test to the new order created by updating the test within CardioPerfect.

No codes



This failure indicates that the test type has been excluded from order searches. See "Appendix: Order Matching" for details on configuring test type order matching.

Invalid configuration

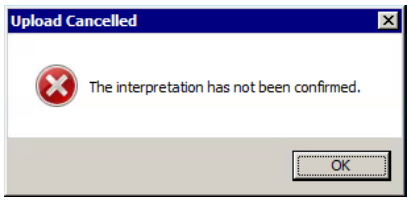


This failure indicates that the test type order matching configuration is invalid. See "Appendix: Order Matching" for details on configuring test type order matching.

Image upload

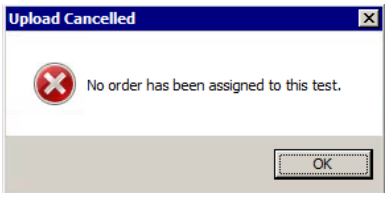
Image upload occurs when an ordered test's interpretation has been confirmed by the provider. You may encounter error messages from the software when image upload is performed.

Unconfirmed interpretation



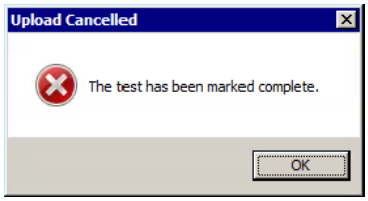
This failure indicates that the test interpretation has not been confirmed. The provider must confirm the interpretation for the upload to complete.

No order



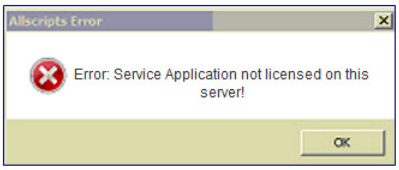
This failure indicates that the test interpretation has been confirmed, but no order was found for the test performed. From the EHR, create an order for the patient for the test performed. Once created, you can connect the test to the new order by updating the test within CardioPerfect. To complete the upload, reconfirm the test or use the File Link print button to start the process.

Test marked complete

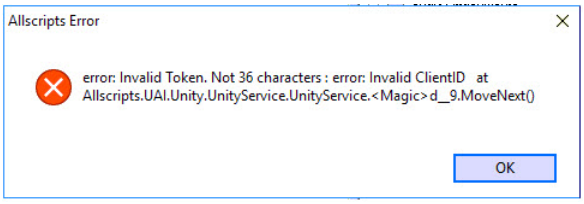


This failure indicates that an image upload was attempted after the image already had been successfully uploaded. Once a test interpretation has been confirmed and the image has been uploaded successfully, the test is marked complete. No further uploads of the image can be performed.

Allscripts expired credentials



This failure indicates that the credentials needed for the Welch Allyn Interface program to communicate with the Allscripts application are not aligned.



This failure indicates that the updated security credentials are not installed and configured properly for use in an Allscripts Ubiquity environment. This error will occur if your site is set up to use Allscripts Ubiquity to communicate to the Allscripts EMR server.

Note Because Allscripts Ubiquity systems uniquely integrates the updated security credentials used by the Welch Allyn integration programs, contact Welch Allyn for further assistance if this error occurs.

Administrative deployment

The Welch Allyn Allscripts Unity CardioPerfect Interface software can be deployed in an unattended fashion. Any deployment infrastructure capable of managing Windows Installer technology (MSI) should support installation of the software. Windows Installer properties are used for configuration when performing unattended management. All public properties must be specified in uppercase. Any properties or values containing spaces must be enclosed in double quotes. Refer to “Windows Installer Property Guide” on page 15 for a complete list of Windows Installer properties.

- To perform unattended installation with default features installed and no configuration:

  msiexec /i “[Path]\Welch Allyn Allscripts Unity CardioPerfect Interface Setup.msi” /qn PROPERTY=value

- Unattended uninstallation of a Windows Installer program requires the product code GUID:

  msiexec /x {5BC03DB7-A9A7-478A-8D2E-D05E05F0DC52} /qn

Windows Installer Property guide

The following table lists the Installer properties and defaults. Values may be overridden by the Installer user interface.

Installer property	Description
ADMINACCOUNTNAME	The interface requires an administrator logon to CardioPerfect to create and modify user IDs. The default value is 'admin'.
ADMINPASSWORD	Password for ADMINACCOUNTNAME. The default value is 'admin' (will be encrypted upon installation).
APPLICATIONSITE	The CardioPerfect application site. If no sites are configured, omit this property.
DEFAULTUSERPASSWORD	Password used for all users created by the interface. The default value is 'CPUnity.1' (will be encrypted upon installation).
IMAGETYPE	Image type used. The value can be PDF or TIF. The default value is PDF.
WEBSERVICEURL	The Allscripts Unity Web service URL.

Appendix: Order Matching

Default configuration

Order matching is configured by default for the following test types:

- Ambulatory blood pressure monitoring (ABPM)
- Electrocardiogram (ECG)
- Spirometry (Spiro)

The rules for order matching are maintained in a configuration file located in the application folder:

WelchAllyn.Unity.CardioPerfect.OrderWorkflow.xml

```
<?xml version="1.0" encoding="UTF-8"?>
<OrderWorkflow>
  <Systems>
    <SystemType type="Professional" newOrderStatus="Ordered">
      <Procedures>
        <Procedure name="ABPM" code="CPT|93784"/>
        <Procedure name="ECG" code="CPT|93000"/>
        <Procedure name="Spiro" code="CPT|94010"/>
      </Procedures>
    </SystemType>
    <SystemType type="Enterprise" newOrderStatus="Active">
      <Procedures>
        <Procedure name="ABPM" code="ABPM"/>
        <Procedure name="ECG" code="ECG"/>
        <Procedure name="Spiro" code="SPIRO"/>
      </Procedures>
    </SystemType>
  </Systems>
</OrderWorkflow>
```

For professional EHR

The Allscripts Unity CardioPerfect interface looks for matching orders for the patient through the use of order item IDs. Order item ID searches are case sensitive. These are the default order item IDs searched when the lookup is performed:

Test type	Order item ID (case sensitive)
ABPM	CPT | 93784
ECG	CPT | 93000
Spiro	CPT | 934010

For TouchWorks EHR

The Allscripts Unity CardioPerfect interface looks for matching orders for the patient through the use of order codes. Order code searches are case sensitive. These are the default order codes searched when the lookup is performed:

Test type	Order code (case sensitive)
ABPM	ABPM
ECG	ECG
Spiro	SPIRO

Customization

Order matching rules can be customized by editing the configuration file section which applies to your Allscripts EHR product. You need administrator permissions and be elevated to edit the configuration file.

For professional EHR

You can change the default order item IDs to any order item ID configured in the system. Typically, these will reflect traditional CPT codes for the test type. You can configure additional order item IDs for each test type.

- To modify which order item IDs are searched, edit the 'Professional' system type section in the configuration file.
- To change the default order item ID for a test type, replace the 'code' value for the test type 'Procedure' you wish to change with the order item ID you wish to use. Order item ID searches are case sensitive.

Note: Be sure to use the proper case.

- To add an additional order item ID for a test type, add an additional line with the test type 'Procedure' name and the 'code' value you wish to add.

Note: A ‘code' value can only be used once. You cannot assign it to more than one test type.

Order item ID searches are case sensitive. Use the proper case when modifying or adding order item IDs.

- To exclude a test type from order searches, remove all of the test type 'Procedure' lines for that test type from the file.

For TouchWorks EHR

The default order codes can be changed to any order code configured in the system. Typically, these will reflect traditional order codes for the test type. Additional order codes can be configured for each test type.

- To modify which order codes are searched, edit the 'Enterprise' system type section in the configuration file.
- To change the default order code for a test type, replace the 'code' value for the test type 'Procedure' you wish to change with the order code you wish to use

- To add an additional order code for a test type, add an additional line with the test type 'Procedure' name and the 'code' value you wish to add.

Note: A 'code' value can only be used once. You cannot assign it to more than one test type.

Note: Order code searches are case sensitive. Use the proper case when modifying or adding order codes.

- To exclude a test type from order searches, remove all of the test type 'Procedure' lines for that test type from the file.