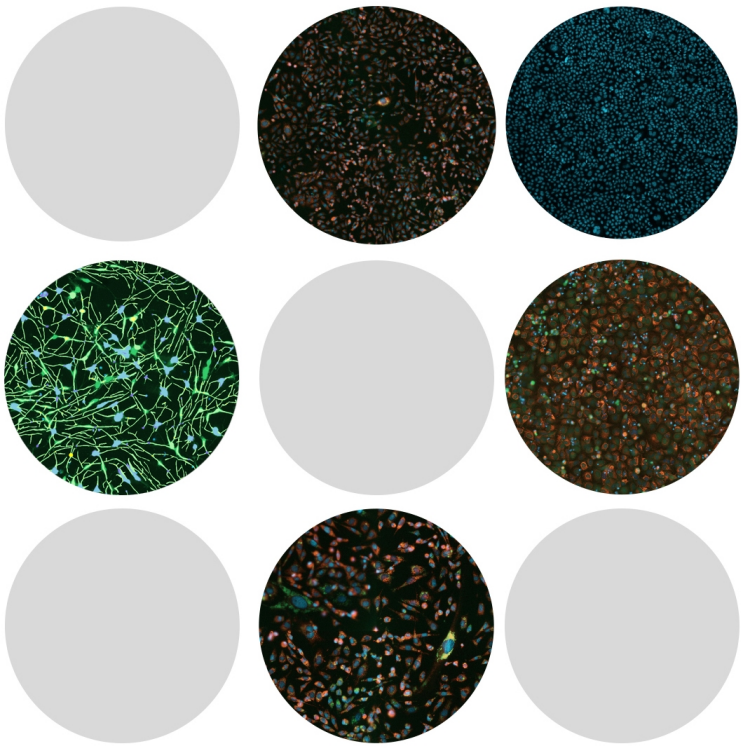


CellReporterXpress

Image Acquisition and Analysis Software

Version 1.0

Installation Guide

MOLECULAR DEVICES

5058771 B
December 2017

This document is provided to customers who have purchased Molecular Devices equipment, software, reagents, and consumables to use in the operation of such Molecular Devices equipment, software, reagents, and consumables. This document is copyright protected and any reproduction of this document, in whole or any part, is strictly prohibited, except as Molecular Devices may authorize in writing.

Software that may be described in this document is furnished under a non-transferrable license. It is against the law to copy, modify, or distribute the software on any medium, except as specifically allowed in the license agreement. Furthermore, the license agreement may prohibit the software from being disassembled, reverse engineered, or decompiled for any purpose.

Portions of this document may make reference to other manufacturers and/or their products, which may contain parts whose names are registered as trademarks and/or function as trademarks of their respective owners. Any such usage is intended only to designate those manufacturers' products as supplied by Molecular Devices for incorporation into its equipment and does not imply any right and/or license to use or permit others to use such manufacturers' and/or their product names as trademarks.

Each product is shipped with documentation stating specifications and other technical information. Molecular Devices products are warranted to meet the stated specifications. Molecular Devices makes no other warranties or representations express or implied, including but not limited to, the fitness of this product for any particular purpose and assumes no responsibility or contingent liability, including indirect or consequential damages, for any use to which the purchaser may put the equipment described herein, or for any adverse circumstances arising therefrom. The sole obligation of Molecular Devices and the customer's sole remedy are limited to repair or replacement of the product in the event that the product fails to do as warranted.

For research use only. Not for use in diagnostic procedures.

The trademarks mentioned herein are the property of Molecular Devices, LLC or their respective owners. These trademarks may not be used in any type of promotion or advertising without the prior written permission of Molecular Devices, LLC.

Patents: http://www.moleculardevices.com/productpatents

Product manufactured by Molecular Devices, LLC.
1311 Orleans Drive, Sunnyvale, California, United States of America 94089.
Molecular Devices, LLC is ISO 9001 registered.
©2017 Molecular Devices, LLC.
All rights reserved.

Contents

Chapter 1: Introduction **5**

Items Required to Complete the Software Installation 5

Software Components on the Flash Drive 5

Documentation Available on the Flash Drive 5

Before You Install the Software Components 6

Computer Specifications 7

Typical Configurations 8

Obtaining Support 14

Chapter 2: Starting the CellReporterXpress Installation and Configuration Utility **17**

Starting the Installation and Configuration Utility 17

Determining the Installation Status of Components 19

Installing the Individual Components 19

Chapter 3: Installing and Verifying Prerequisites, Keys, and Licenses **21**

Installing Prerequisites 21

Verifying the Hardware Key 24

Installing and Verifying the CellReporterXpress Software License File 27

Chapter 4: Installing the CellReporterXpress Software **29**

Installing Standalone CellReporterXpress Software 32

Installing the CellReporterXpress Software on a Server 35

Installing the CellReporterXpress Software on a Client Computer 37

Installing Remote Data Storage Component 40

Installing Remote Analysis Software 42

Chapter 5: Starting and Setting Up the CellReporterXpress Software **45**

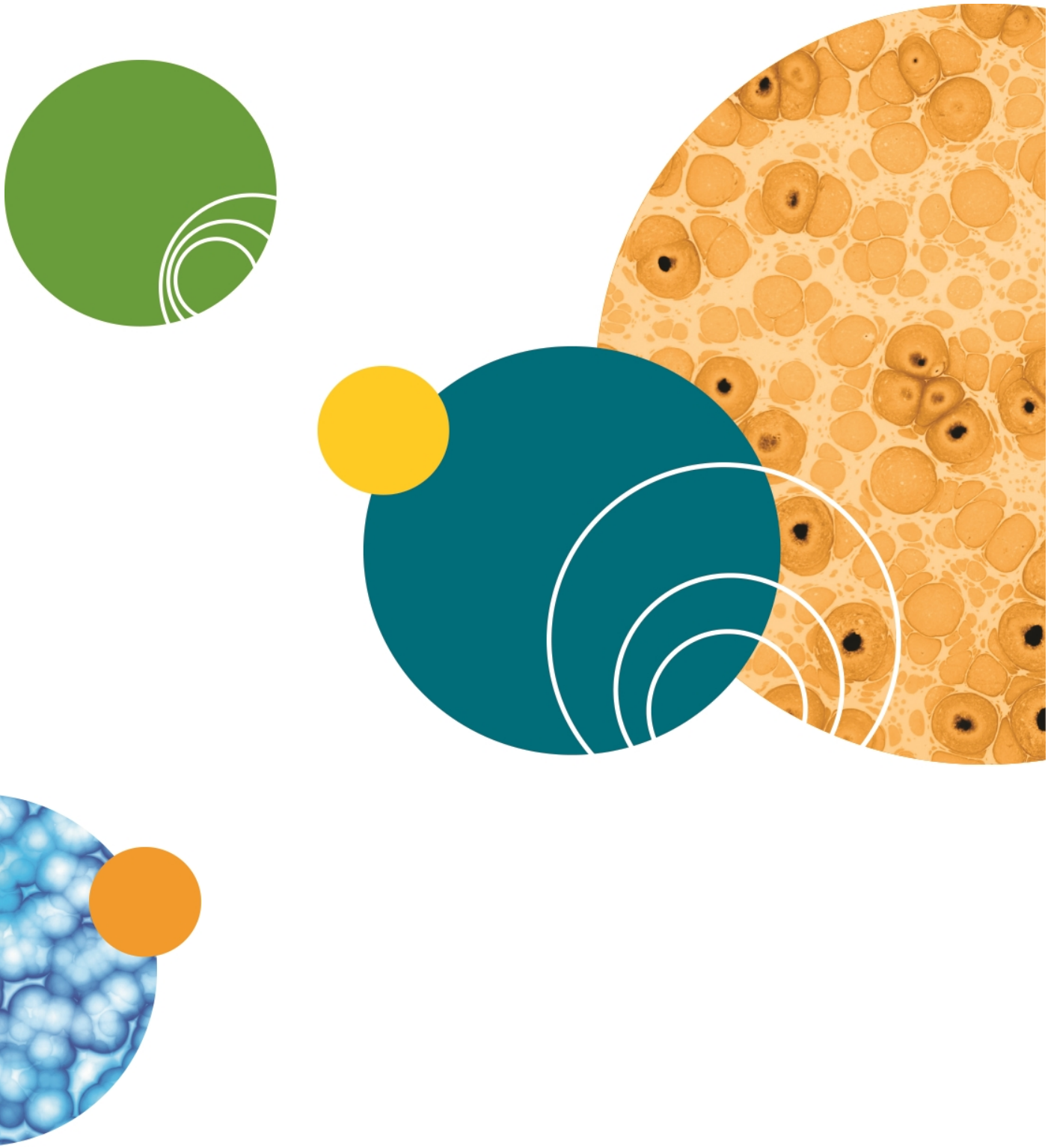
Logging In to the Software 46

Setting up a Non-Windows-Based Web Connection 47

Setting up Device Connection 48

Setting up Remote Data Storage 51

Setting up Remote Analysis 53



Chapter 1: Introduction

1

The CellReporterXpress Image Acquisition and Analysis Software is divided into two major parts:

- Acquisition involves configuring settings, acquiring images, and storing plate data in a database. For information about image acquisition, see the user guide for the ImageXpress Nano Automated Imaging System with CellReporterXpress. User guides are provided on the CellReporterXpress installation media and are available in the Molecular Devices knowledge base at www.moleculardevices.com/support.
- Analysis consists of selecting, measuring, assessing, and managing acquired images and plate data.

Items Required to Complete the Software Installation

- For first time installations, you must provide the computer system, unless you purchased the ImageXpress® Nano Automated Imaging System with the optional computer system through Molecular Devices. See Computer Specifications on page 7.
- The **CellReporterXpress Image Acquisition and Analysis Software Installer** flash drive contains the software components and product documentation.

- The **SafeNet Sentinel** CellReporterXpress USB hardware key (called a dongle) contains licensing information required to run the CellReporterXpress.

Software Components on the Flash Drive

- **CellReporterXpress Image Acquisition and Analysis Software** is the primary tool for acquiring and analyzing images.
- **CellReporterXpress Help** file is available on the flash drive and also within the software.

Documentation Available on the Flash Drive

The CellReporterXpress flash drive contains installation and user guides for the supported software and hardware.

The following documents are available in the **Manuals** folder on the flash drive:

- *CellReporterXpress Installation and Configuration User Guide*
- *ImageXpress® Nano Automated Imaging System With CellReporterXpress User Guide*

Before You Install the Software Components

Do the following tasks before installing any of the components that are on the CellReporterXpress flash drive:

- Make sure your computer hardware meets at least the minimum specifications. See Computer Specifications on page 7.
- Make sure that you are logged in as a user with administrative privileges on the computer where you are installing the software.
- Make sure the computer can connect to the imaging device either through the local network or through a direct Ethernet connection.

Computer Specifications

For the base model of the ImageXpress Nano System, you provide your own host computer and monitor as your host interface with the CellReporterXpress Image Acquisition and Analysis Software. Optionally, contact your Molecular Devices representative to buy the host computer and monitor through Molecular Devices.

Host Computer

The host computer functions as a server.

Your host computer must meet the following minimum specifications:

Item	Minimum Requirement	Notes
Operating System	Microsoft Windows 10 (64-bit)	Pro, Enterprise, and Education editions are supported.
CPU Speed	2.4 GHz	
Logical Processors	10	Logical processors are virtual processing units on the CPU that can function as additional physical processing units. 10 logical processors supports 4 concurrent analyses. For each additional concurrent analysis that you want to perform, add 2 logical processors.
RAM	12 GB	12 GB of RAM supports 4 concurrent analyses. For each additional concurrent analysis that you want to perform, add 2 GB of memory.

Client Devices

The ImageXpress Nano System uses the web browser-based CellReporterXpress as an interface. The device you use to run the browser-based software is the client device. In a standalone configuration, the host computer functions as the client device. A client device can be a desktop computer, a laptop computer, an iPad tablet, and an Android tablet. Tablets must have a 9" screen or larger.

The following web browser specifications are required:

Operating System	Minimum Browser Version
Microsoft Windows	Google Chrome 60 (64-bit)
Apple Macintosh OS 10.12 or higher	Google Chrome 60 or Apple Safari 11.0
Apple iOS 10.3.3 or higher	Apple Safari

Operating System	Minimum Browser Version
Google Android	Google Chrome 59
Linux	Google Chrome 60

Typical Configurations

To determine the best configuration for the CellReporterXpress Software, consider the needs of your users along with your networking constraints and hardware availability.

Typical configurations for the CellReporterXpress Software include the following:

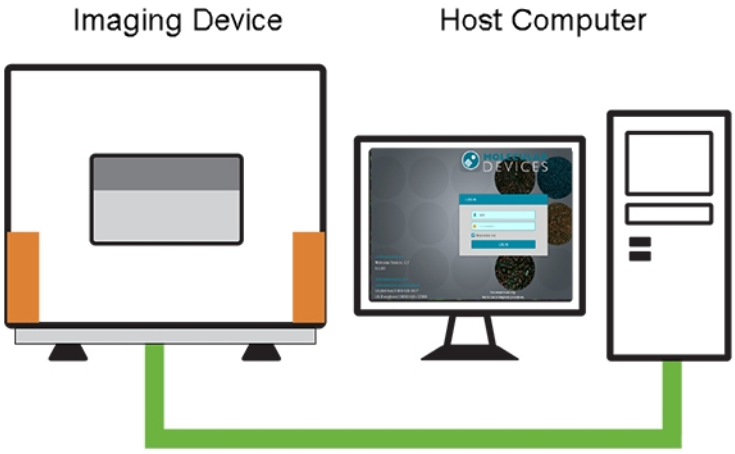
- Standalone Configuration, see page 9
- Network Configuration, see page 10
- Server Configuration, see page 11

During installation of the ImageXpress Nano imaging device, a Molecular Devices Field Service Engineer will set up a standalone configuration or a network configuration to configure and test the instrument. This will be done either with a customer-provided host computer or with a host computer optionally purchased from Molecular Devices.

Note: The host computer must be configured according to the specifications described in this guide. If no acceptable computer is available, the Field Service Engineer's laptop will be used to test the instrument, and you will be responsible for eventually installing the CellReporterXpress Software on the host computer.

Standalone Configuration

A standalone configuration is the simplest configuration. It uses a direct Ethernet connection between the imaging device and the host computer. The CellReporterXpress Software runs on the host computer in a local browser. All CellReporterXpress Software components and services (specifically MD.CoreService, MD.DataService, MD.WebService, MD.LocationService, and MD.AnalysisService) are installed on the host computer, which performs all analysis and data storage operations.

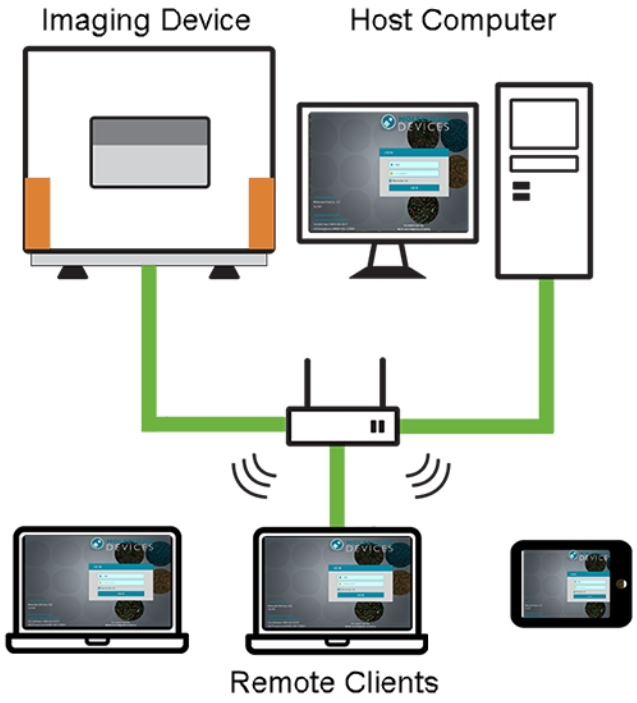


Note: You can also use a network connection between the host computer and the imaging device. In a network connection, the imaging device appears on the network with the prefix "IXN-" followed by the serial number (for example, IXN-123456).

To set up a standalone configuration, run the CellReporterXpress Installation and Configuration Utility on the host computer and perform a **Complete** installation.

Network Configuration

A network configuration is more advanced than a standalone configuration. In a network configuration, the imaging device and the host computer are each set up on a network connection. The CellReporterXpress Software runs on the host computer in a local browser. All CellReporterXpress Software components and services (specifically MD.CoreService, MD.DataService, MD.WebService, MD.LocationService, and MD.AnalysisService) are installed on the host computer, which performs all analysis and data storage operations. In addition, the installation includes a component that enables you to set up remote clients, such as another computer or a tablet device, to connect to the host computer.



To set up a network configuration, do the following:

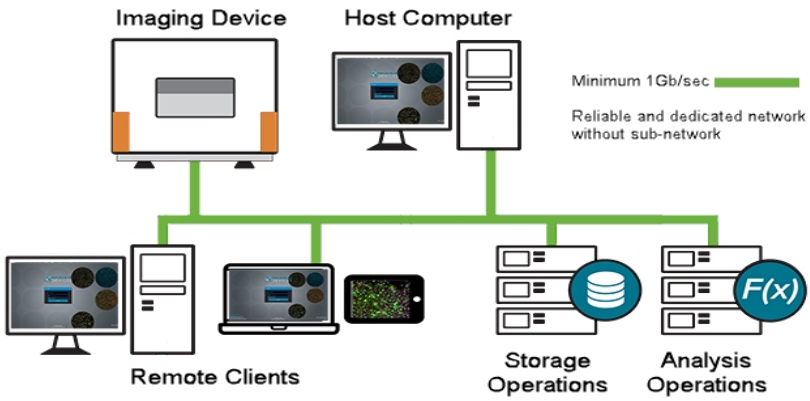
1. Run the CellReporterXpress Installation and Configuration Utility on the host computer and perform a **Complete** installation.
2. Run the CellReporterXpress Installation and Configuration Utility on all Windows remote clients and perform a **Client Workstation** installation.

Note: Non-Windows remote clients connect to the CellReporterXpress Software through a supported browser. No installation is required. See Remote Clients for details.

Server Configuration

A server configuration, which is the most advanced configuration, can enhance the performance of your imaging system. In a server configuration, CellReporterXpress Software functionality is distributed across several computers on your network. The host computer runs all the core services (specifically MD.CoreService, MD.DataService, MD.WebService), but you can set up more powerful computers to perform analysis operations (MD.AnalysisService) and storage operations (MD.LocationService). As with the network configuration, other computers and tablets can connect to the host computer as clients to communicate with the imaging device (or even multiple imaging devices).

Tip: For optimal data transfer, Molecular Devices recommends using a sustainable network connection with a speed of at least 1 Gb/s.



To set up a server configuration, do the following:

1. Run the CellReporterXpress Installation and Configuration Utility on the host computer and perform a **Server** installation.
2. Run the CellReporterXpress Installation and Configuration Utility on one or more storage operations computers and perform a **Data Storage** installation.
3. Run the CellReporterXpress Installation and Configuration Utility on one or more analysis operations computers and perform an **Analysis Station** installation.
4. Run the CellReporterXpress Installation and Configuration Utility on all Windows remote clients and perform a **Client Workstation** installation.

Note: Non-Windows remote clients connect to the CellReporterXpress Software through a supported browser. No installation is required. See Remote Clients for details.

Network and Server Configurations

The following are set up requirements and recommendations when using a network or server configuration.

Tip: For optimal data transfer, Molecular Devices recommends using a sustainable network connection with the speed of at least 1Gb.

The network connection between the CellReporterXpress host computer and the imaging instrument can use either a direct Ethernet connection or a local network (LAN).

Computer Settings

Molecular Devices recommends the following computer settings:

- For the host computer and other computers that run any of the CellReporterXpress services:
  - Power plan set to **High performance**
  - Display Sleep Mode set to **Never**
  - Computer Sleep Mode set to **Never**
- Each web client computer and tablet must use routable IP addresses and/or DNS resolvable name paths.
- All computer resources, except client devices, should use **Static IP** addresses.
- In a Network or Server configuration, when using separate computers for storage and analysis, all firewalls and routers must allow data transfer between all of the applicable computers using the default ports. See Network Configuration on page 10 and Server Configuration on page 11.

  CAUTION! If firewalls block the default ports, system communication can fail.

Default Port Settings

- For inbound ports to the ImageXpress Nano instrument—UDP 3702. TCP 8091 and TCP 9090
- For inbound ports to any remote analysis station computer—TCP 12325
- For inbound ports to any remote data storage computer—TCP 12324
- For inbound ports to the CellReporterXpress host computer—TCP 8080

CAUTION! If you run anti-virus software, to ensure proper performance and stability of your system, all the service components must be added to the list of exclusions in your anti-virus software. If you use Windows Defender, the CellReporterXpress installer will attempt to apply the necessary settings and exclusions, but there is no guarantee, because your company IT policy might block it. Refer to the *CellReporterXpress 1.0 IT Guide* available on the Knowledge Base here: http://www.meta.moleculardevices.com/links/crx-it-guide for more information.

Obtaining Support

Molecular Devices is a leading worldwide manufacturer and distributor of analytical instrumentation, software, and reagents. We are committed to the quality of our products and to fully supporting our customers with the highest possible level of technical service.

Our support website, www.moleculardevices.com/support, has a link to the Knowledge Base with technical notes, software upgrades, safety data sheets, and other resources. If you still need assistance, click **Request Support** to submit a request to our technical support representatives.

You can contact your local representative or contact Molecular Devices Technical Support at 800-635-5577 (North America only) or +1 408-747-1700. In Europe, call +44 (0) 118 944 8000.

To find regional support contact information, visit www.moleculardevices.com/contact.

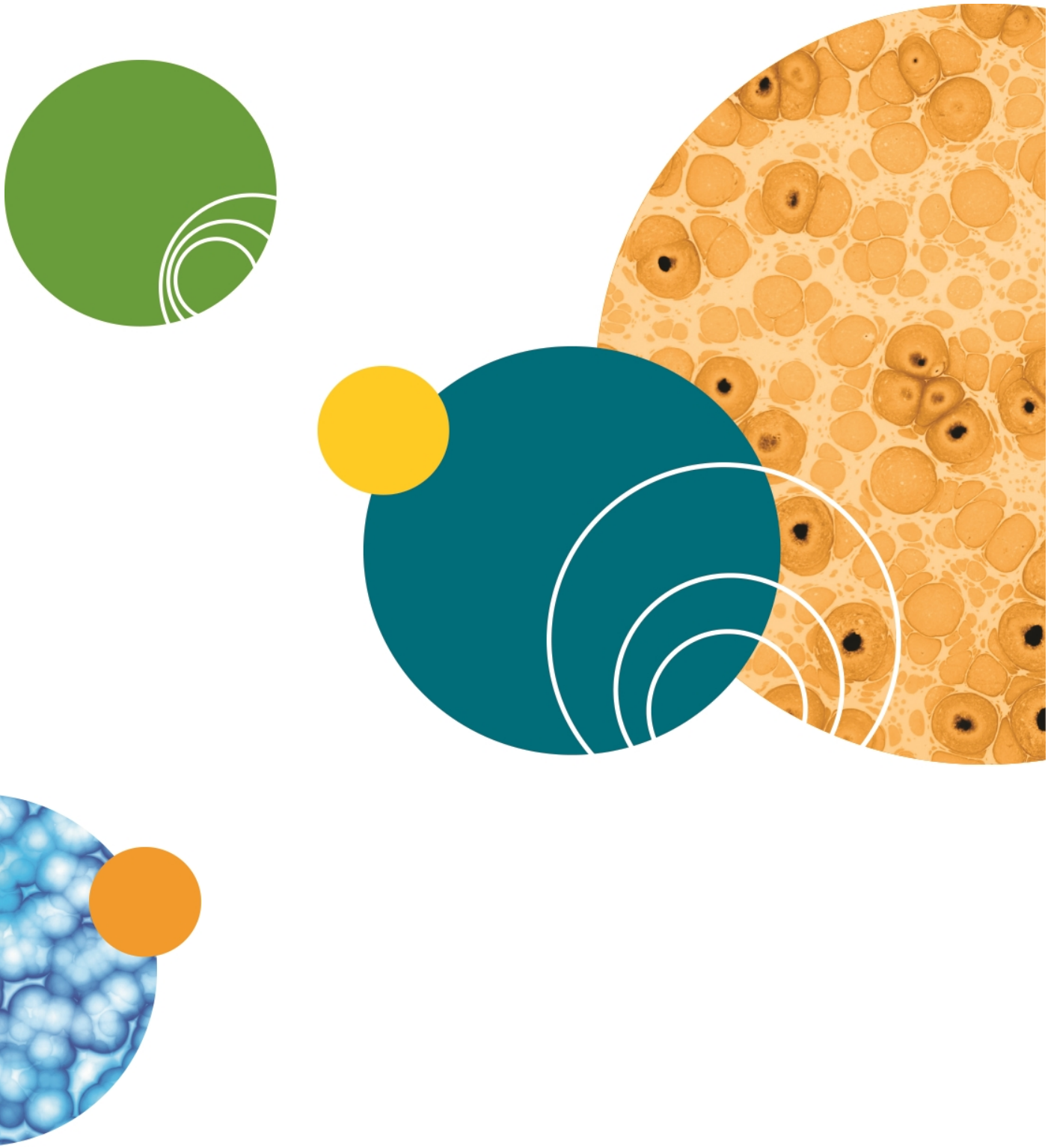
Molecular Devices provides a wide range of support:

- Documentation: Check the guides that are included on the installation media and the Help that is available within the CellReporterXpress Software. Help for an active dialog can be accessed by pressing **F1** on your keyboard.
- Online Knowledge Base: The Knowledge Base contains links to technical notes, software upgrades, newsletters, user guides, and other resources. Visit the Molecular Devices Support website at www.moleculardevices.com/support and follow the links to the Knowledge Base.
- Technical Support: You can contact Molecular Devices Technical Support by phone or submit a support request through the Knowledge Base. You will need the instrument serial number, software version number, and the name of the system owner.

  The serial number is located on the back panel of the instrument.

Figure 1-1: Serial Number location on the back of the ImageXpress Nano System

- Additional Resources:
  - Web-based microscopy courses:
    - www.microscopyu.com
    - www.ibiology.org/ibioeducation/taking-courses/ibiology-microscopy-short-course.html
  - The Molecular Probes Handbook offers advice on fluorescent probes and can help you determine if there are better stains available for your analysis:
    - www.lifetechnologies.com/us/en/home/references/molecular-probes-the-handbook.html
  - Filter information:
    - www.semrock.com
    - www.chroma.com
    - www.omegafilters.com



Chapter 2: Starting the CellReporterXpress Installation and Configuration Utility

2

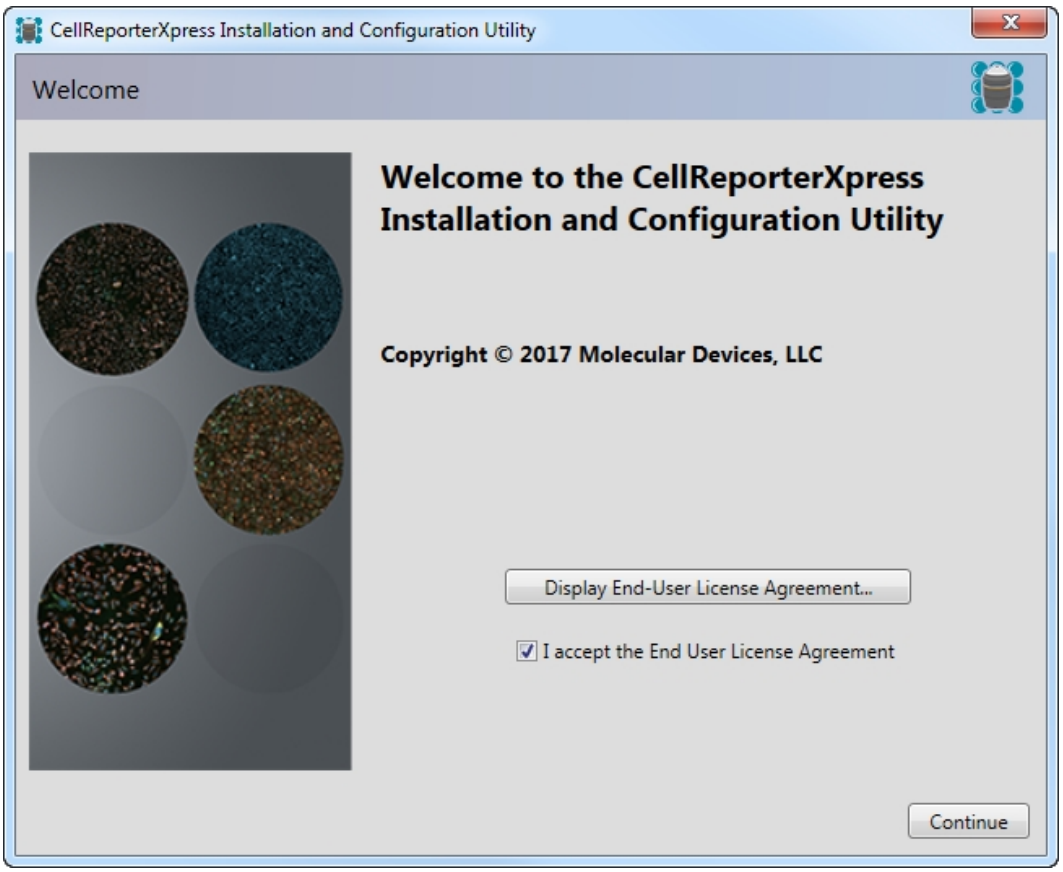
This chapter explains how to start the **CellReporterXpress Installation and Configuration Utility**.

Topics in this chapter:

- Starting the Installation and Configuration Utility
- Determining the Installation Status of Components on page 19
- Installing the Individual Components on page 19

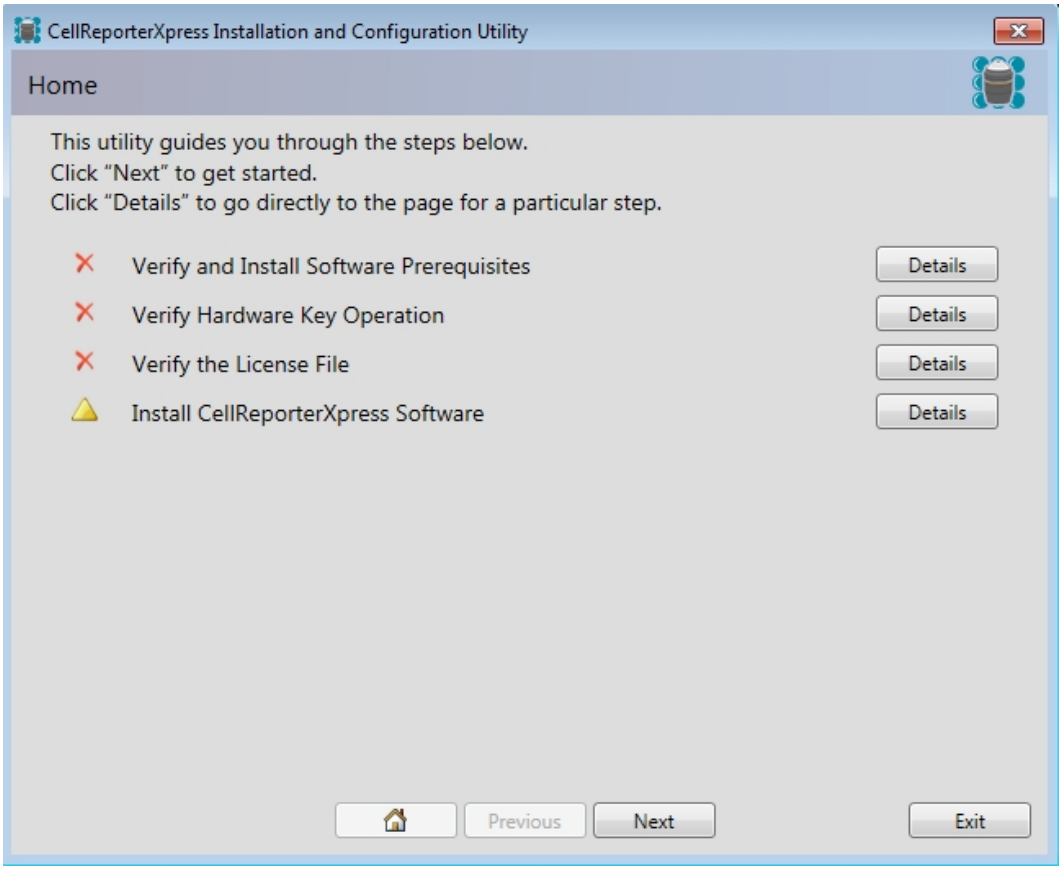
Starting the Installation and Configuration Utility

1. Insert the CellReporterXpress flash drive into a USB port.
   If a dialog with a security warning appears, click **Run**.
   If the CellReporterXpress installation window does not appear after a short time, then browse to the flash drive folder on your computer, right-click the **setup.exe** file, and click **Run as administrator**.



2. Click **Display End-User License Agreement**.
3. Review the license agreement, select **I accept the End-User License Agreement**, and then click **Continue**.
   The installation utility checks your computer for installed prerequisite software. If the required prerequisite software is not installed, follow the instructions provided in each setup wizard to install the software.

   After checking for prerequisites, the first page of the **CellReporterXpress Installation and Configuration Utility** appears summarizing the steps required for a complete installation of the CellReporterXpress.



   - The symbols on the left indicate the status of the components that might already be installed on your computer. See Determining the Installation Status of Components on page 19.
   - The **Details** buttons on the right take you directly to the pages for installing individual components. See Installing the Individual Components on page 19.
4. To continue to the next page of the utility, click **Next**. See Installing and Verifying Prerequisites, Keys, and Licenses on page 21.

Determining the Installation Status of Components

The **CellReporterXpress Installation and Configuration Utility** displays one of the following symbols to indicate the status of a prerequisite or component:

Table 2-1: Component Status Icons

Symbol	Description
	The latest available version of the component is installed, or the prerequisite or requirement has been met.
	The component is not installed, or the prerequisite or requirement has not been met.
	The component or prerequisite is optional. For example, an earlier version of the component or prerequisite might exist on the computer, so upgrading to the latest version is optional.
	The component or prerequisite is not required for, or applicable to, your system or software configuration.

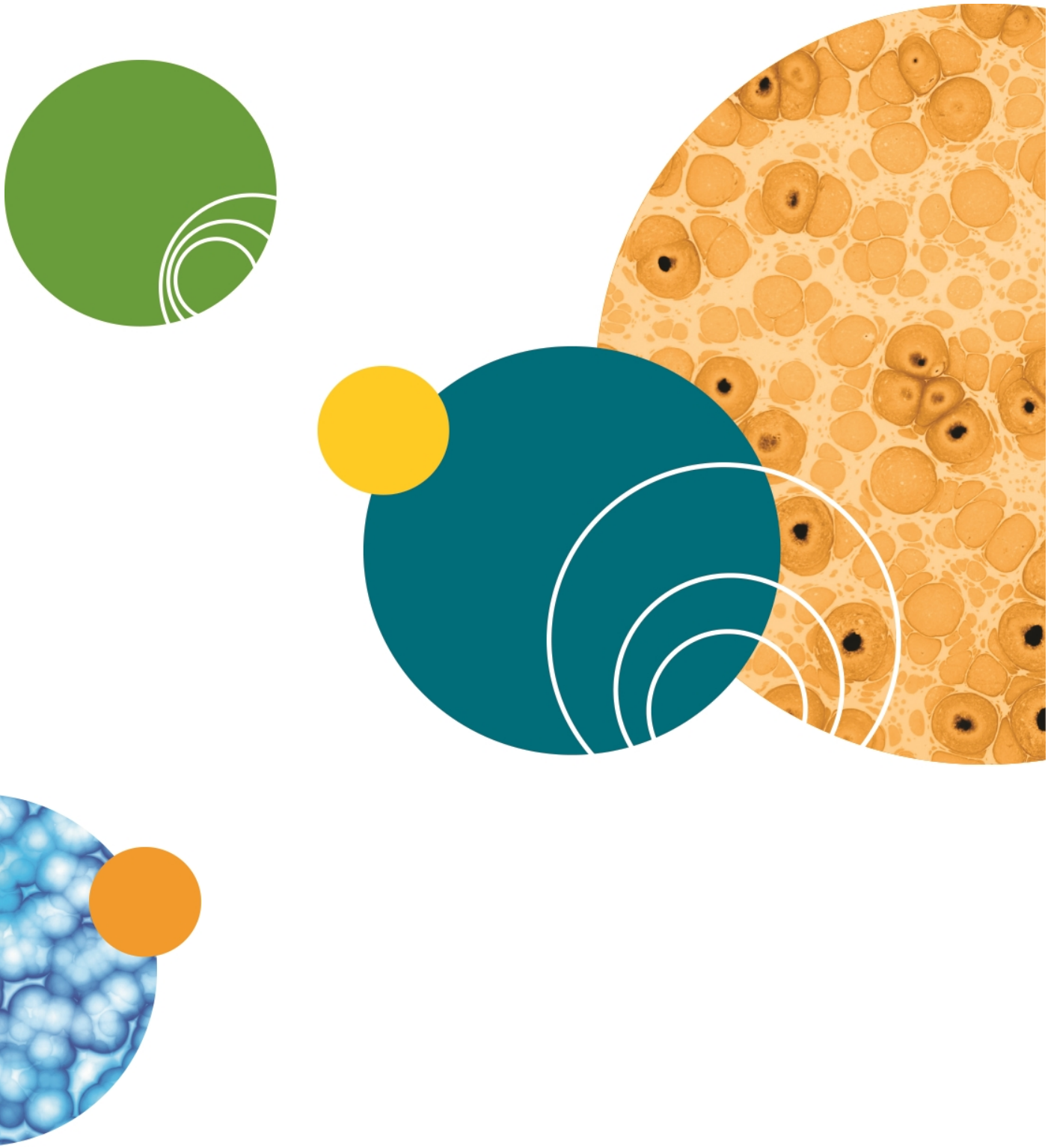
Installing the Individual Components

You can choose to have the utility guide you through the installation process starting with the first page or you can go directly to the page for installing the components that you need.

- The **Manage CellReporterXpress Prerequisites, Verify the Hardware Key**, and **Install and Verify the CellReporterXpress License File** pages help you make sure that your computer is ready to install the components of the CellReporterXpress. See Installing and Verifying Prerequisites, Keys, and Licenses on page 21.
- The **Install CellReporterXpress** page helps you install the CellReporterXpress. See Installing the CellReporterXpress Software on page 29.

To go directly to the utility page where you can install an individual component, click its **Details** button.

For a complete installation, Molecular Devices recommends that you follow the steps in the installation wizard in the order that they are presented. To advance from one page to the next, click **Next**.



Chapter 3: Installing and Verifying Prerequisites, Keys, and Licenses

3

The first few pages of the CellReporterXpress Installation and Configuration Utility verify prerequisites, the CellReporterXpress hardware key, and the license file.

Topics in this chapter:

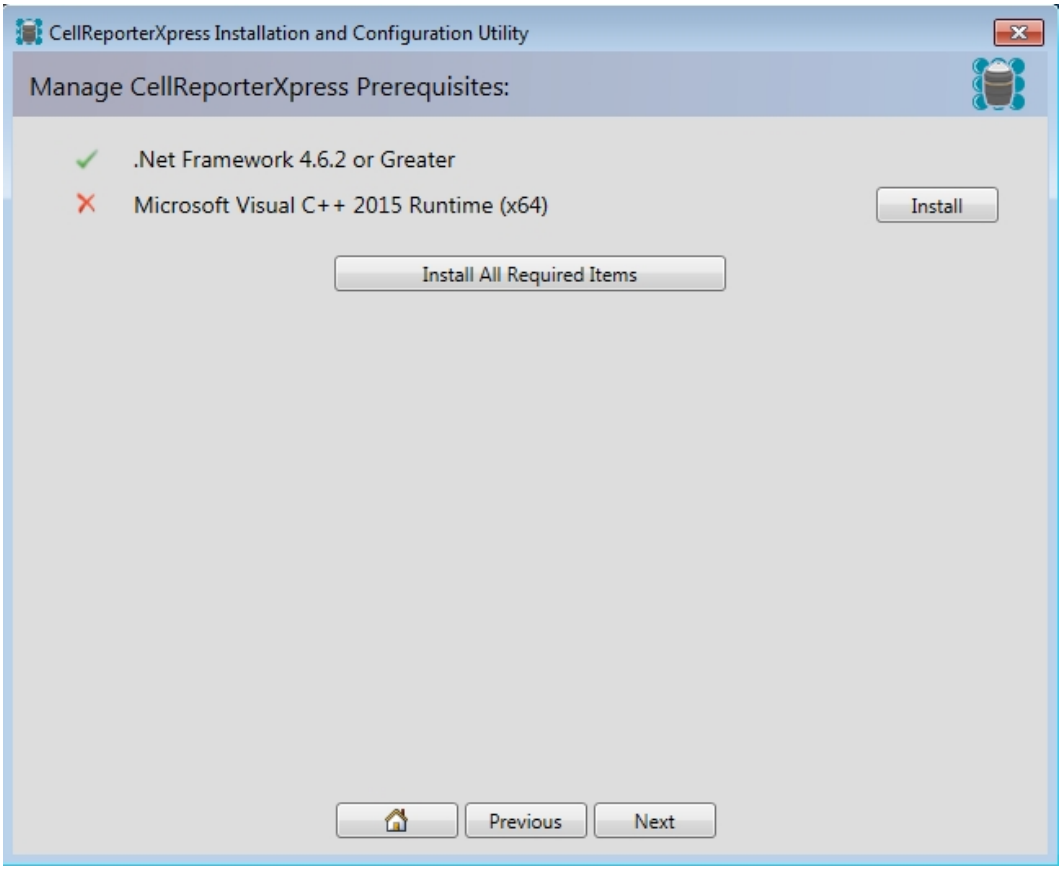
- Installing Prerequisites on page 21
- Verifying the Hardware Key on page 24
- Installing and Verifying the CellReporterXpress Software License File on page 27

Installing Prerequisites

Molecular Devices recommends that you install all required items as described in this section. Table 3-1 lists the specific prerequisites required for each component.

CAUTION! Molecular Devices advises that you do not skip any required installation that is displayed in the wizard.

1. On the **Manage CellReporterXpress Prerequisites** page, click **Install All Required Items**.

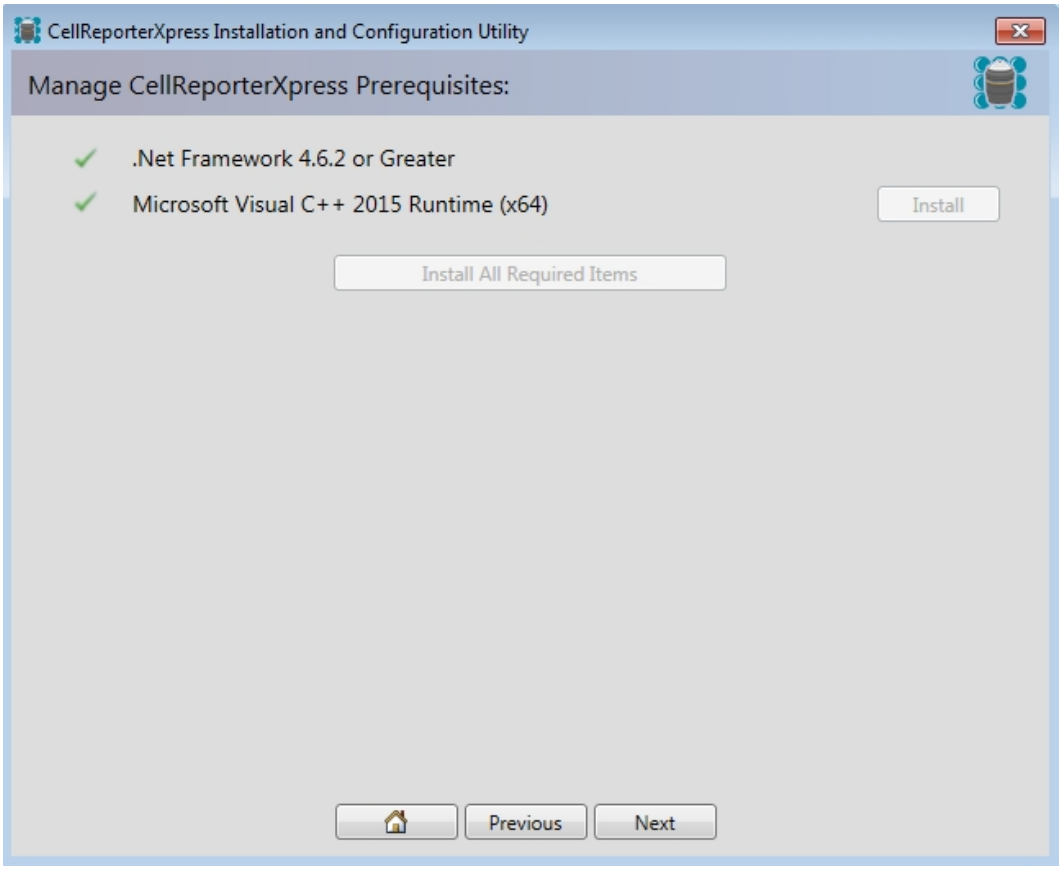


   The progress of the installation of the prerequisites is displayed.

2. As needed, follow the instructions in the prerequisite setup wizards to install the prerequisite components.

3. When the required installations finish and the page displays all green check marks, click **Next** to continue to the **Verify the Hardware Key** page.

Tip: The **Verifying the Hardware Key** and the **Install and Verify the CellReporterXpress License File** procedures are not required for Analysis Station, Data Storage, or Client Workstation installations. Continue to Installing the CellReporterXpress Software on page 29.



Prerequisite Requirements

The following prerequisite software must be installed using the prerequisite setup wizard. The installer detects and installs the specific required software versions for your system.

Table 3-1: CellReporterXpress Components Prerequisites

Component	Prerequisites Needed	Hardware Key Required	License File Required
Complete Installation	SafeNet Sentinel System Driver .Net Framework 4.6.2 or newer Microsoft Visual C++ 2015 Runtime Libraries (x64) Google Chrome Browser	Yes	Yes
Server Installation	SafeNet Sentinel System Driver .Net Framework 4.6.2 or newer Microsoft Visual C++ 2015 Runtime Libraries (x64)	Yes	Yes
Analysis Station Installation	.Net Framework 4.6.2 or newer Microsoft Visual C++ 2015 Runtime Libraries (x64)	No	No
Data Storage Installation	.Net Framework 4.6.2 or newer	No	No
Client Workstation installations	Google Chrome Browser version 60.0.3112.90 (64bit) or newer	No	No

Verifying the Hardware Key

Note: The hardware key is not required for Analysis Station, Data Storage, or Client Workstation installations. See Prerequisite Requirements on page 24.

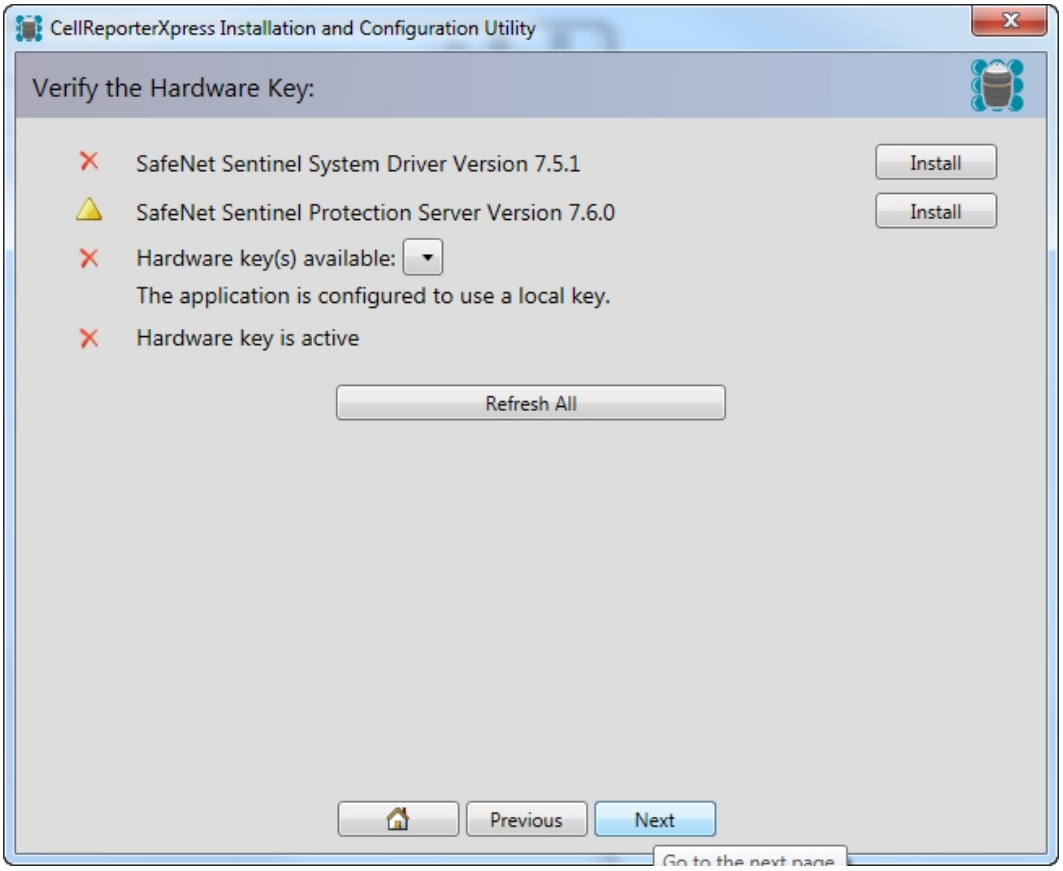
When installing and using these components, keep the hardware key inserted in a USB port on the host computer.

The driver for the hardware key must be installed on the host computer.

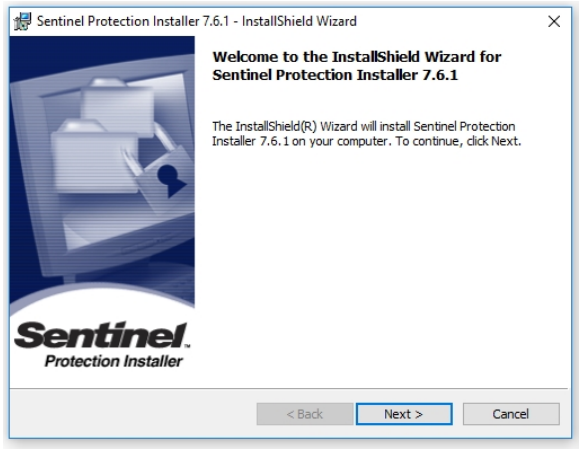
To verify the hardware key:

1. The hardware key must be in a USB port on the host computer.
2. Before the installation and configuration utility can read and verify your hardware key, for **Complete** and **Server** installations, you must install the SafeNet Sentinel System Driver software and the SafeNet Sentinel Protection Server software.

3. On the **Verify the Hardware Key** page, when detected, in the **Hardware key(s) available** field, select the available key, then confirm the **Hardware key is active**.

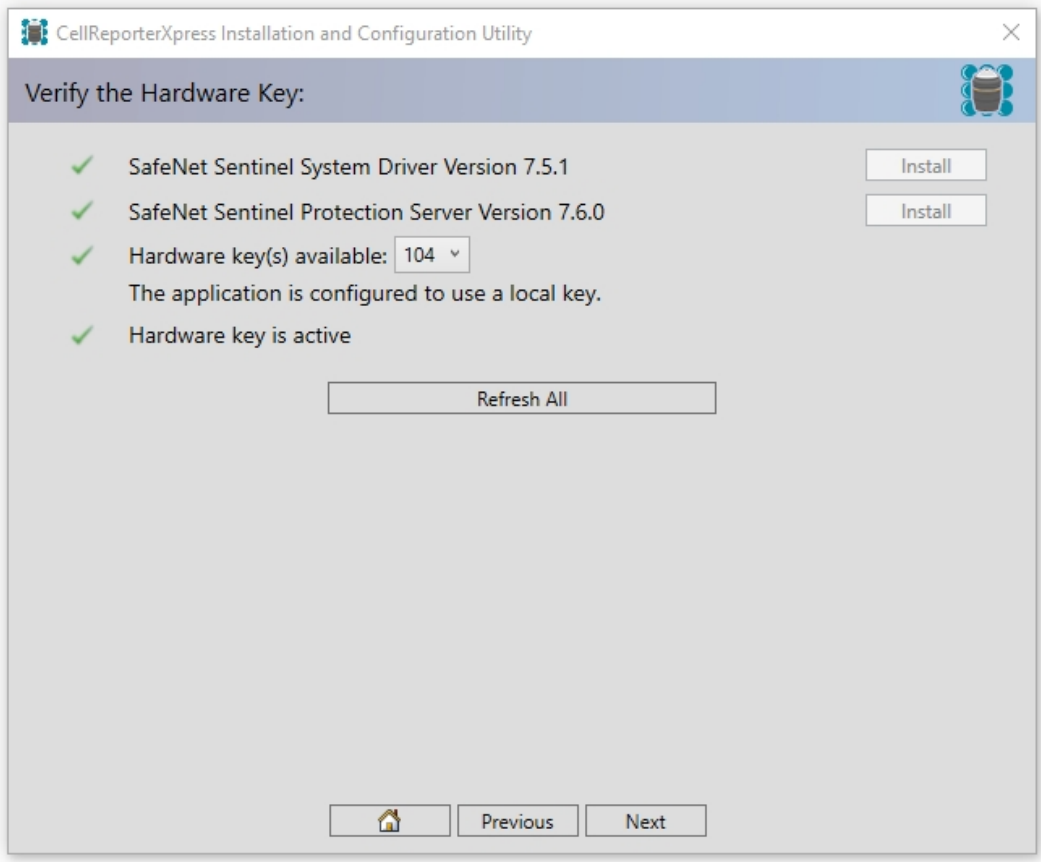


4. Click the SafeNet Sentinel System Driver **Install** button.
5. Follow the instructions provided in the Sentinel Protection Installer wizard.



6. Install the SafeNet Sentinel Protection Server software.

7. The **Verify the Hardware Key** page shows that the hardware key is set up and can be read. Your System ID number must be displayed. If the page does not display all green check marks or if your hardware key is not inserted into a USB port, insert the hardware key and then click **Refresh All** to verify the hardware key.



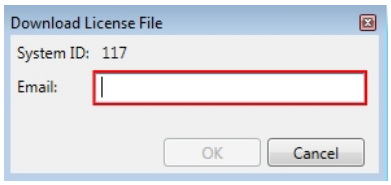
8. When the **Verify the Hardware Key** page displays all green check marks, click **Next**. See Installing and Verifying the CellReporterXpress Software License File on page 27.

Installing and Verifying the CellReporterXpress Software License File

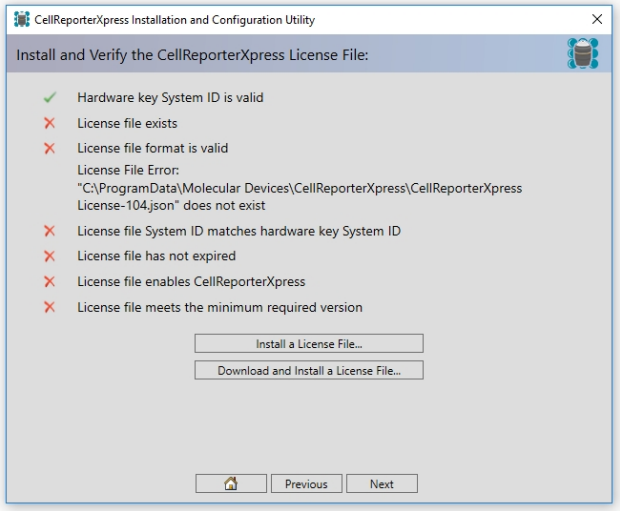
Note: Software License File installation is not required for Analysis Station, Data Storage, or Client Workstation installations. See Prerequisite Requirements on page 24 or continue to Installing the CellReporterXpress Software on page 29.

To install and verify the license file:

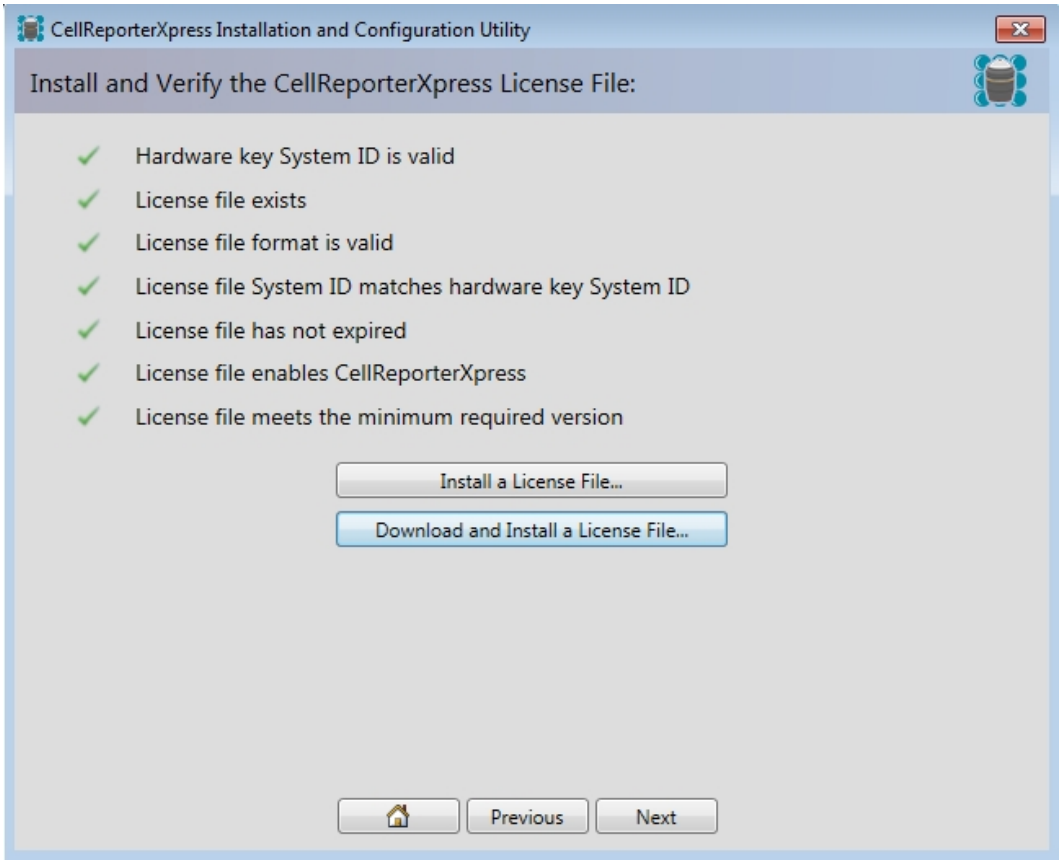
1. On the **Install and Verify the CellReporterXpress License File** page, verify your license using one of the following options:
   - If you are connected to the Internet, click **Download and Install a License File**. The installation and configuration utility then communicates with the Molecular Devices server to verify your license.

   - If you are not connected to the Internet, click **Install a License File** and browse to the location of your license file on the computer.
   - If you do not have a license file and you are not connected to the Internet, use another computer that is connected to the Internet to obtain a license file from the following web site:
     http://www.meta.moleculardevices.com/software/crx/authorize.
     On the web site, select the appropriate license file, type your System ID (displayed in the previous step), click **Download** and save the file in a convenient location on your computer, and then transfer the downloaded file to a convenient location on the computer where you are installing the software. Then, on the **Install and Verify the CellReporterXpress License File** page, click **Install a License File** and browse to the location of the license file.



2. When the **Install and Verify the CellReporterXpress License File** page displays all green check marks, click **Next** to continue installing the software. See Installing the CellReporterXpress Software on page 29.



Chapter 4: Installing the CellReporterXpress Software

4

Molecular Devices recommends that you use the CellReporterXpress flash drive to install version 1.0 of the CellReporterXpress completely. After you install version 1.0 of the software, you can then install updates as they are made available on the CellReporterXpress Updates web site.

Before installing the CellReporterXpress, verify that you have installed all required prerequisites. See Prerequisite Requirements on page 24.

Note: Tablet client devices do not require any CellReporterXpress installations.

CellReporterXpress can be installed in several different configurations depending on your available hardware resources. See Typical Configurations on page 8. Determine your installation requirements and install the required software accordingly. See Table 4-1.

CAUTION! Do not use a portable computer, for example a laptop, as a CellReporterXpress Service computer in the Networked configuration because changing network connections will cause communication errors.

CAUTION! If you run anti-virus software, to ensure proper performance and stability of your system, all the service components must be added to the list of exclusions in your anti-virus software. If you use Windows Defender, the CellReporterXpress installer will attempt to apply the necessary settings and exclusions, but there is no guarantee, because your company IT policy might block it. Refer to the *CellReporterXpress 1.0 IT Guide* available on the Knowledge Base here: http://www.meta.moleculardevices.com/links/crx-it-guide for more information.

Table 4-1: CellReporterXpress Software Configuration and Installation Requirements

Configuration Type	Hardware Resources	Required Software Installation
Standalone Standalone Configuration, see page 9	Host Computer Imaging Instrument	Installing Standalone CellReporterXpress Software on page 32
Networked Network Configuration, see page 10	Host Computer Imaging Instrument (Optional) Client Desktop Computer or Laptop	Installing the CellReporterXpress Software on a Server on page 35 (Optional) Installing the CellReporterXpress Software on a Client Computer on page 37
Server—Components can be installed individually or in combination using the Custom Install utility. The following are configuration options. Server Configuration, see page 11		
Server with Remote Data Storage	Host Computer Imaging Instrument Remote Data Storage Computer (Optional) Client Desktop Computer or Laptop	Installing the CellReporterXpress Software on a Server on page 35 Installing Remote Data Storage Component on page 40 (Optional) Installing the CellReporterXpress Software on a Client Computer on page 37
Server with Remote Analysis Processing	Host Computer Imaging Instrument Remote Analysis Processing Computer (Optional) Client Desktop Computer or Laptop	Installing the CellReporterXpress Software on a Server on page 35 Installing Remote Analysis Software on page 42 (Optional) Installing the CellReporterXpress Software on a Client Computer on page 37

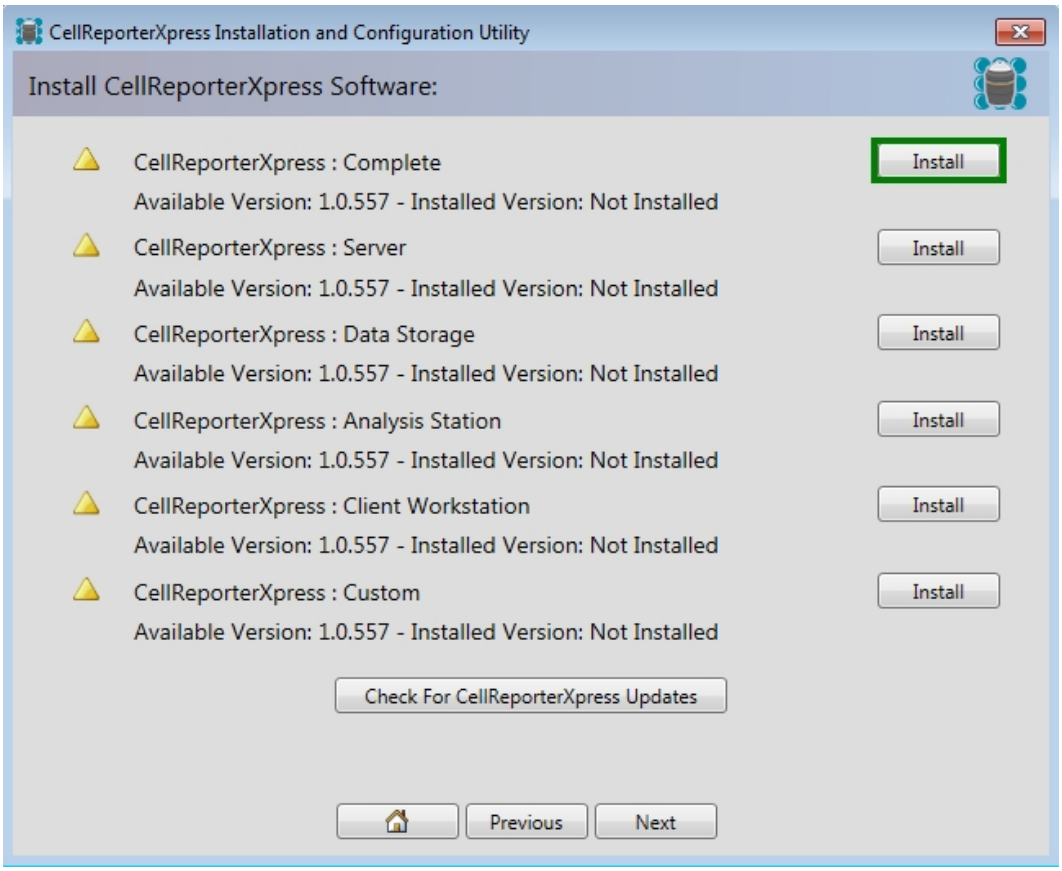
Table 4-1: CellReporterXpress Software Configuration and Installation Requirements (continued)

Configuration Type	Hardware Resources	Required Software Installation
Server with Remote Data Storage and Remote Analysis Processing	Host Computer Imaging Instrument Remote Data Storage Computer Remote Analysis Processing Computer (Optional) Client Desktop Computer or Laptop	Installing the CellReporterXpress Software on a Server on page 35 Installing Remote Data Storage Component on page 40 Installing Remote Analysis Software on page 42 (Optional) Installing the CellReporterXpress Software on a Client Computer on page 37

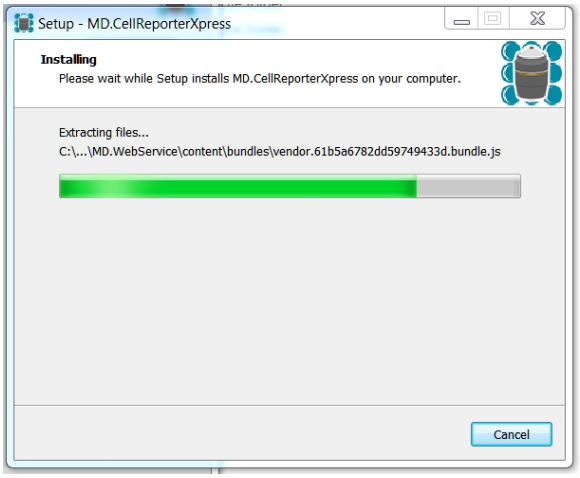
Installing Standalone CellReporterXpress Software

The following procedure is for the complete software installation on a standalone computer directly connected to the instrument. See Typical Configurations on page 8.

1. You must have installed and verified your software license file before continuing. See Installing and Verifying the CellReporterXpress Software License File on page 27.
2. On the **Install the CellReporterXpress** page, next to **CellReporterXpress:Complete**, click **Install**.

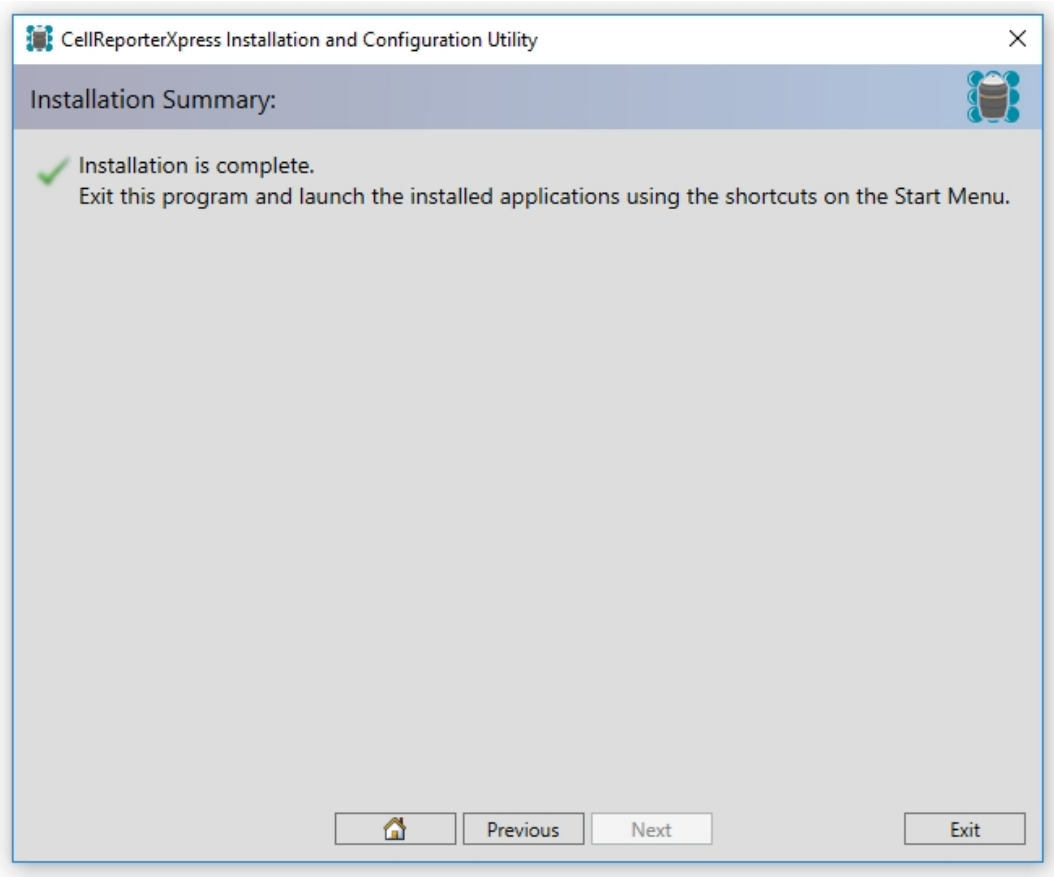


The **Installing** page appears.



3. When the installing finishes, click **Next**.

4. On the **Installation Summary** page, verify that you are finished with CellReporterXpress Installation and Configuration Utility, and click **Exit**.



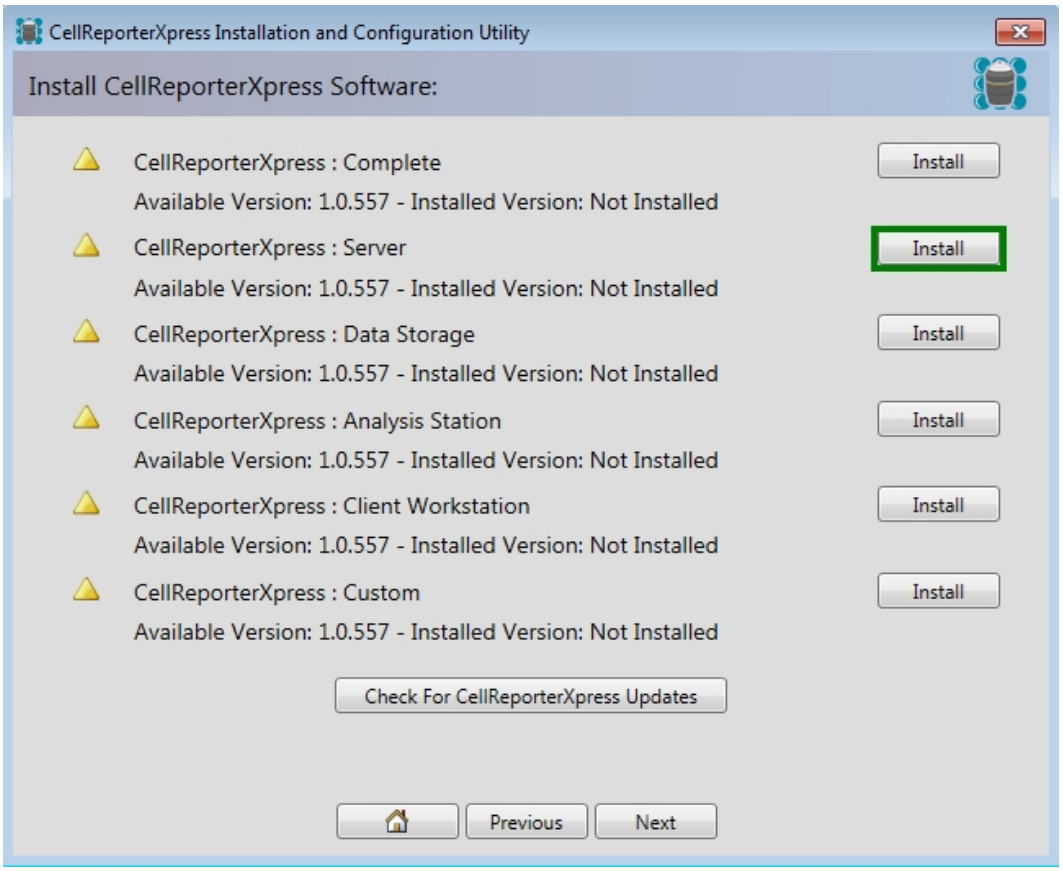
A desktop icon and a Start > Programs menu icon are created as shortcuts to connect quickly to the software.

5. To set up the device connection in the software, see Setting up Device Connection on page 48.

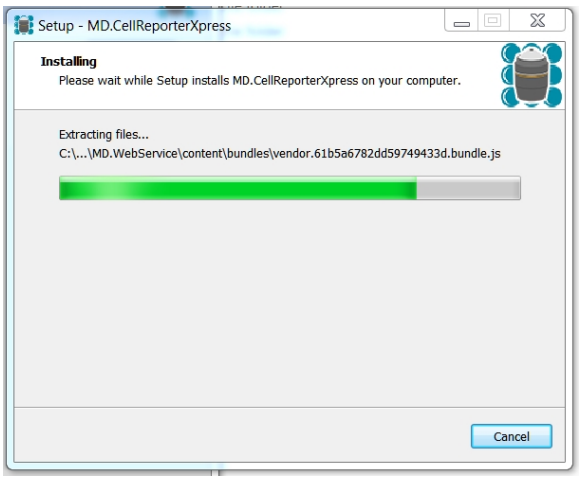
Installing the CellReporterXpress Software on a Server

The following procedure is for installing the core server components only. See Server Configuration on page 11 and Prerequisite Requirements on page 24.

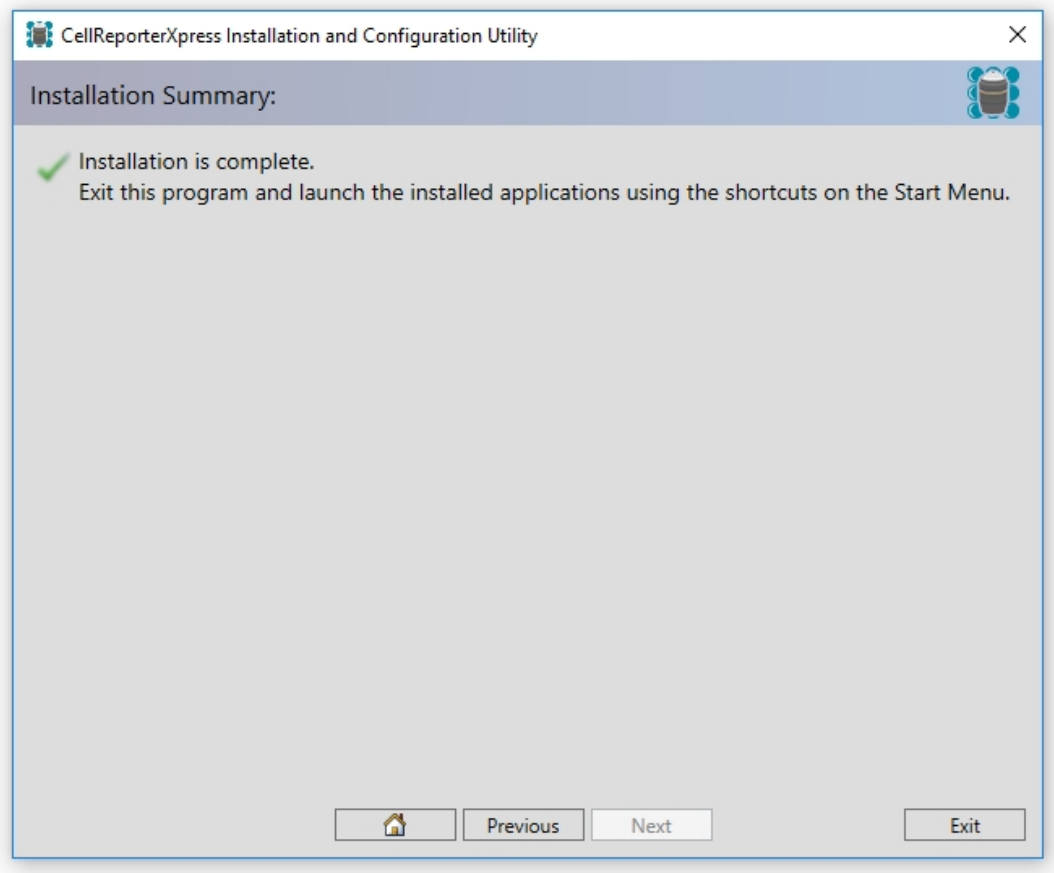
1. You must have installed and verified your software license file before continuing. See Installing and Verifying the CellReporterXpress Software License File on page 27.
2. On the **Install the CellReporterXpress** page, next to **CellReporterXpress:Server**, click **Install**.



The **Installing** page appears.



3. When the installing finishes, click **Next**.
4. On the **Installation Summary** page, verify that you are finished with CellReporterXpress Installation and Configuration Utility, and click **Exit**.



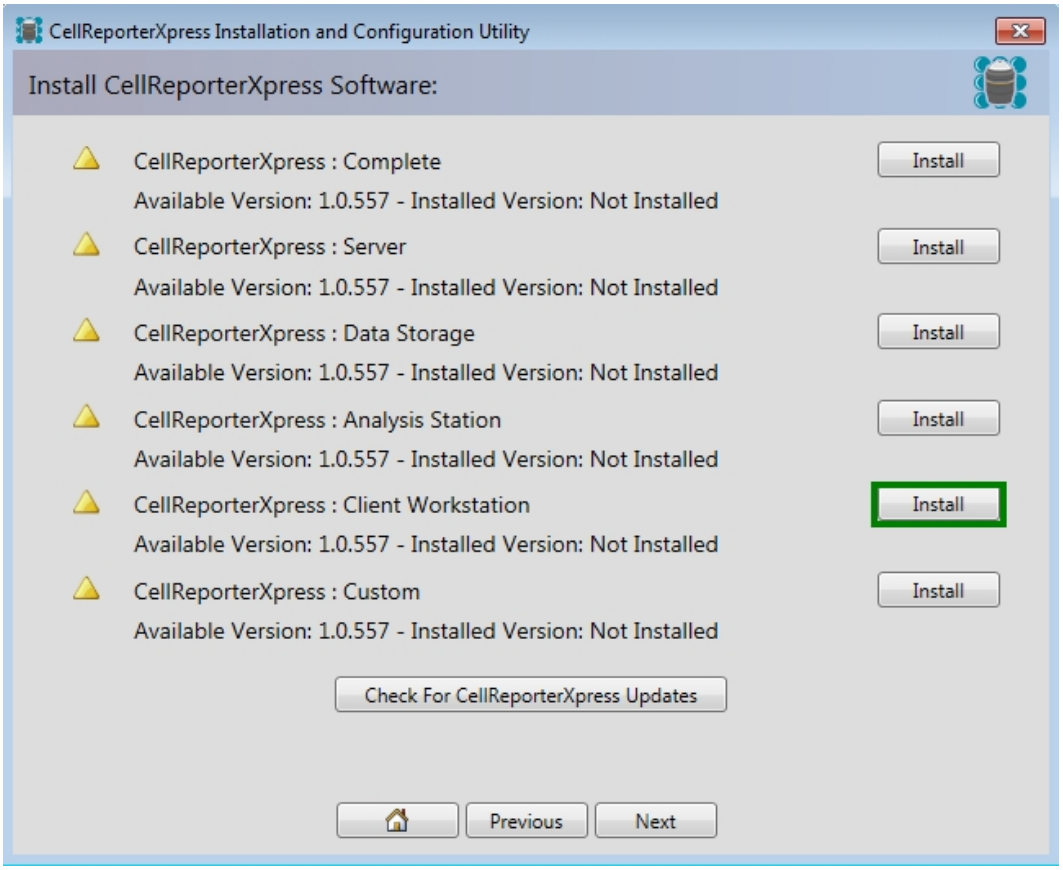
Installing the CellReporterXpress Software on a Client Computer

The following procedure is for the Client Workstation software installation. This software component is for your remote client computer, which can be a desktop computer or a laptop computer. This installation creates a shortcut link to your server hosted software.

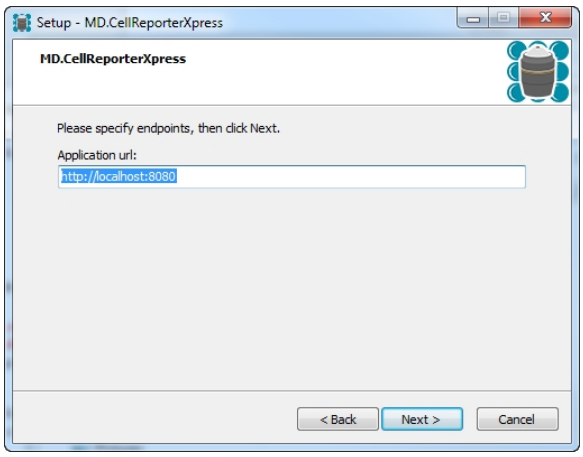
Note: Tablet client devices and Apple Macintosh computers do not require any CellReporterXpress installation.

Before continuing with this procedure, you must have your host computer set up with the Server software installed. See Installing the CellReporterXpress Software on a Server on page 35.

1. On the **Install the CellReporterXpress** page, next to **CellReporterXpress:Client Workstation**, click **Install**.

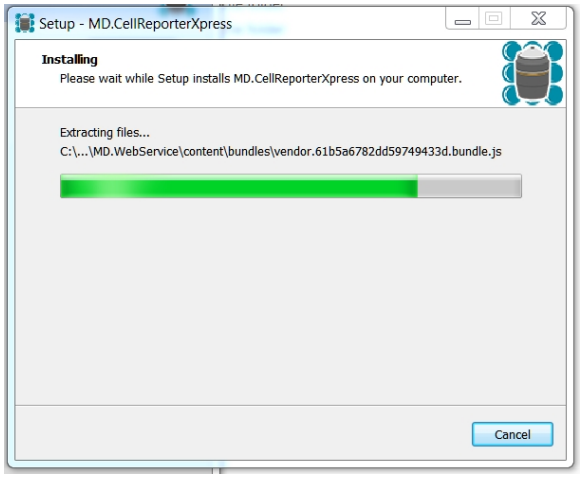


The **Application url** dialog appears.



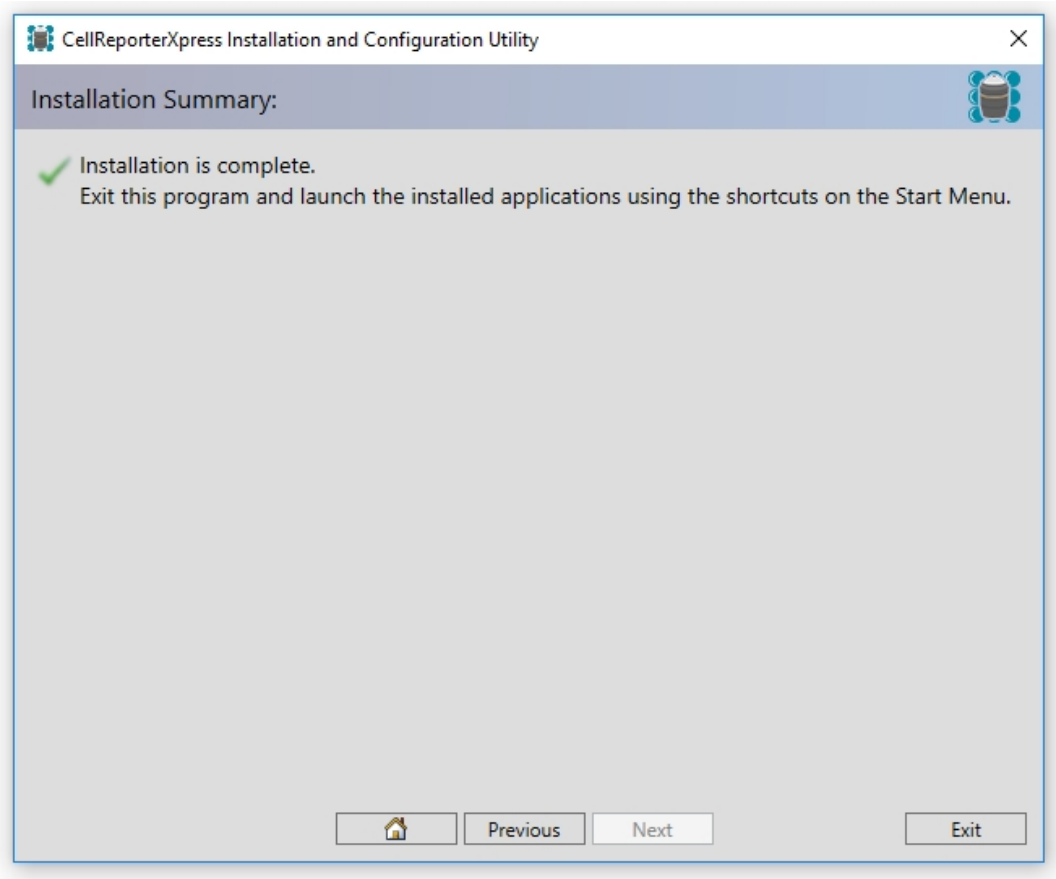
- If your server is running on the same computer, click **Next**.
- If you are connecting to a remote server, replace [**LOCALHOST**] with the IP address of your server, like **HTTP://168.15.254.12:8080**, or the server name, like **HTTP://MYSERVERNAME:8080**, then click **Next**.

The **Installing** page appears.



2. When the installing finishes, click **Next**.

3. On the **Installation Summary** page, verify that you are finished with CellReporterXpress Installation and Configuration Utility, and click **Exit**.

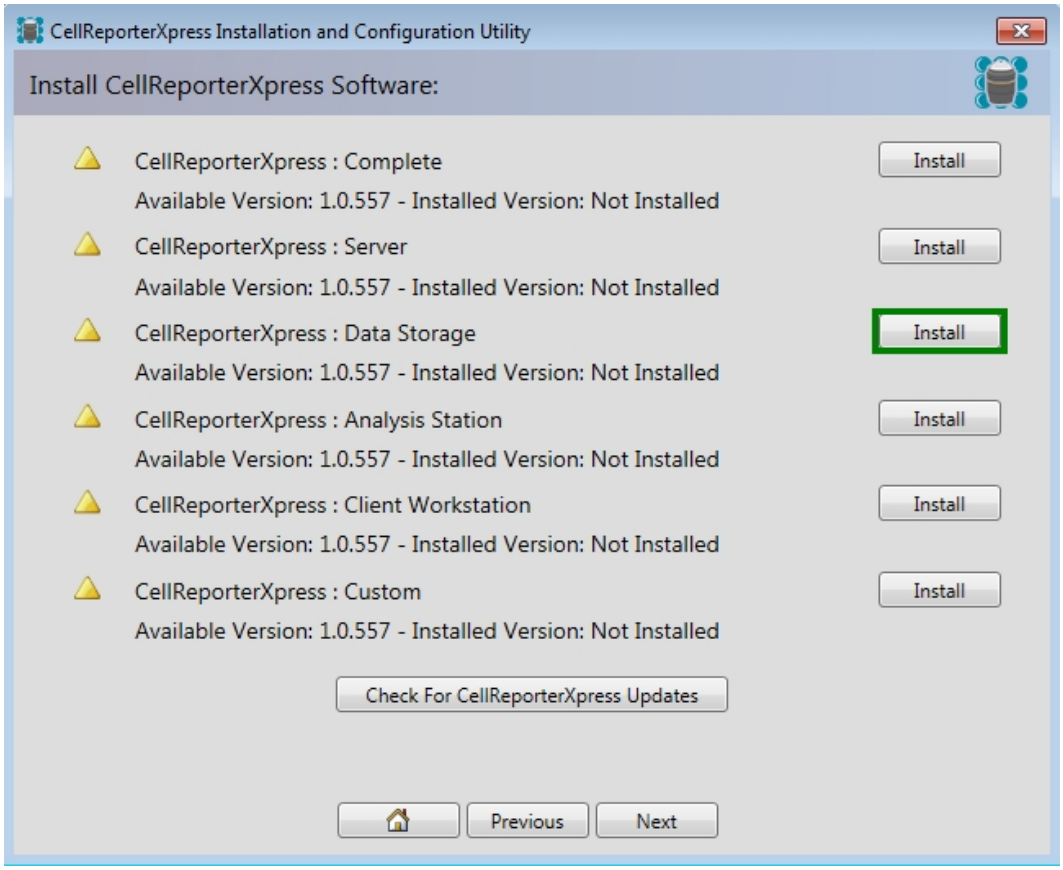


A desktop icon and a Start > Programs menu icon are created as shortcuts to connect quickly to the software.

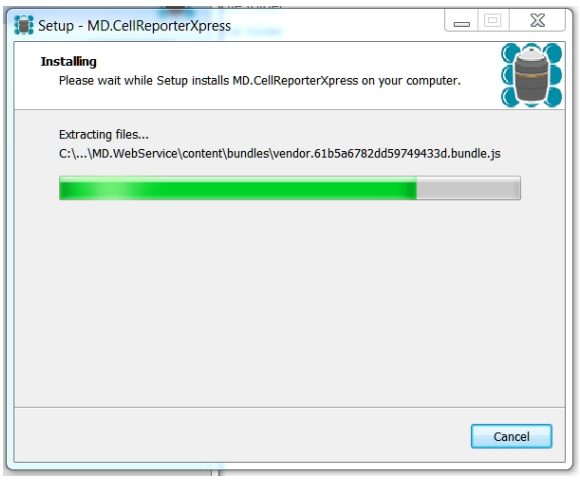
Installing Remote Data Storage Component

The following procedure is for a computer used for remote data storage only.

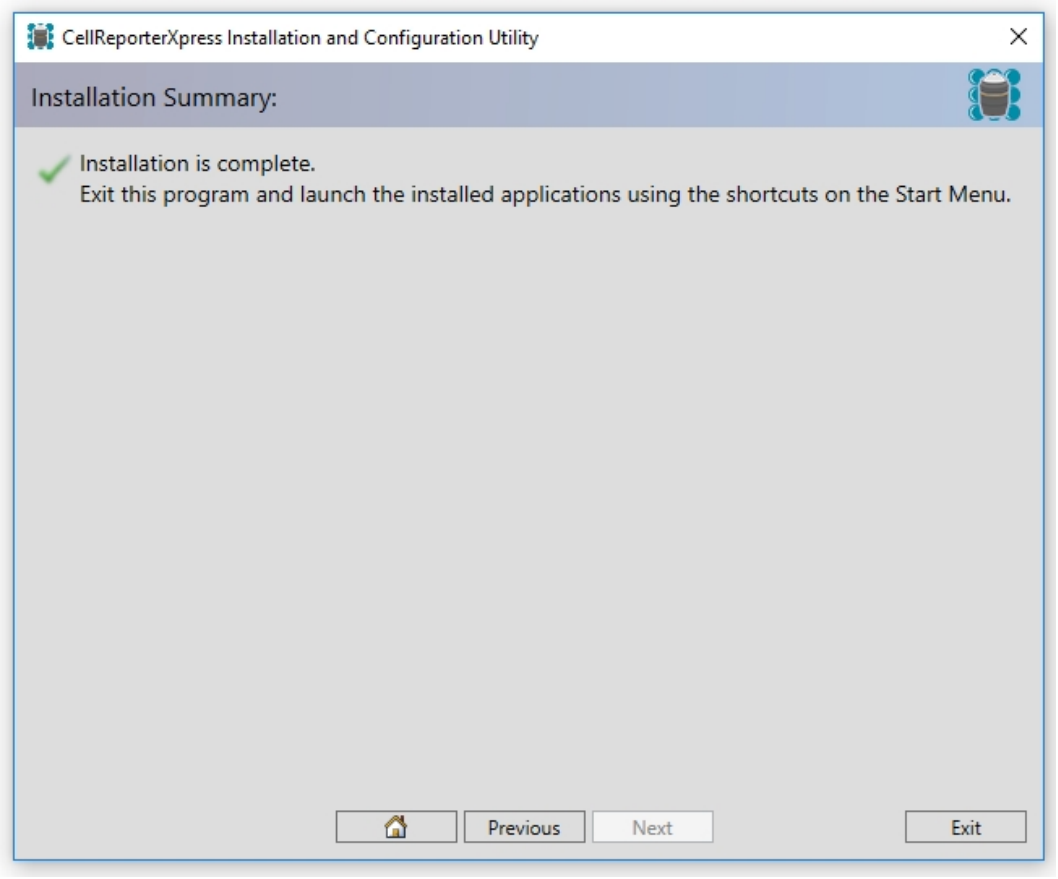
1. Start the CellReporterXpress Installation and Configuration Utility. See Starting the Installation and Configuration Utility on page 17.
2. Install the prerequisites. See Installing Prerequisites on page 21.
3. On the **Install the CellReporterXpress** page, next to the **CellReporterXpress : Data Storage** description, click **Install**.



The **Installing** page appears.



4. When the installing finishes, click **Next**.
5. On the **Installation Summary** page, verify that you are finished with CellReporterXpress Installation and Configuration Utility, and click **Exit**.

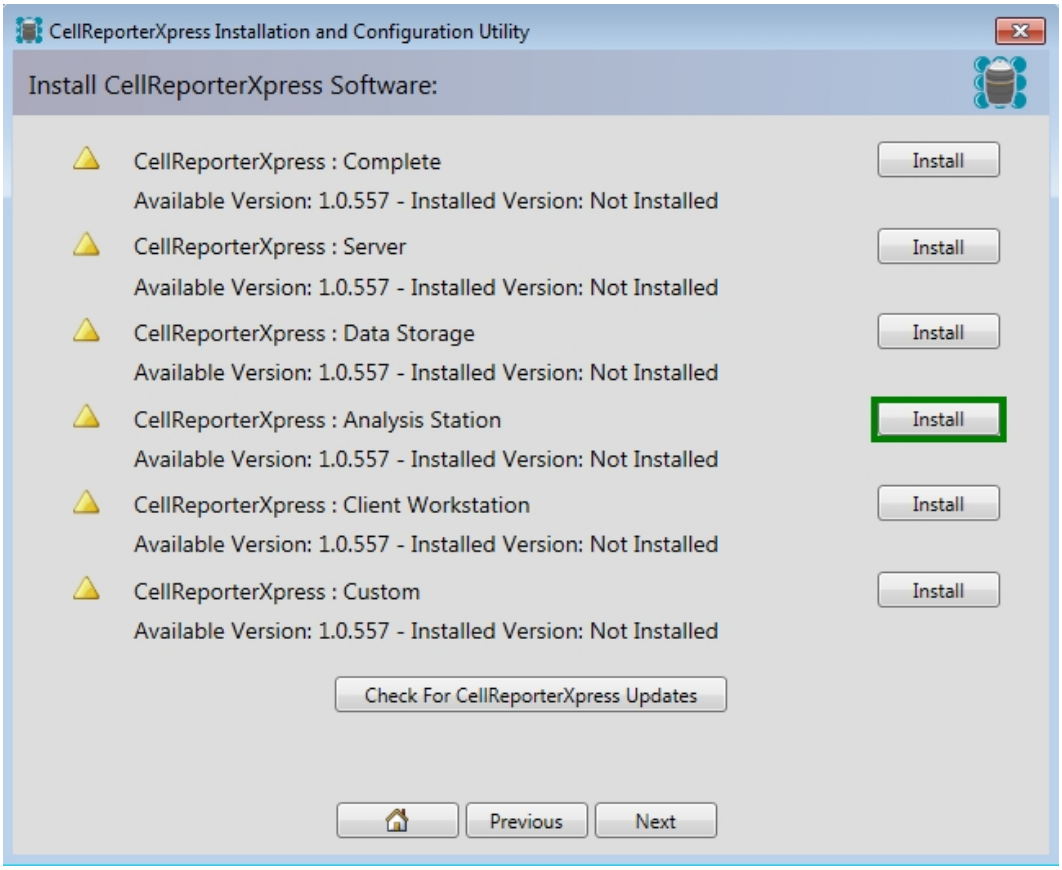


6. To set up the storage in the software, see Setting up Remote Data Storage on page 51.

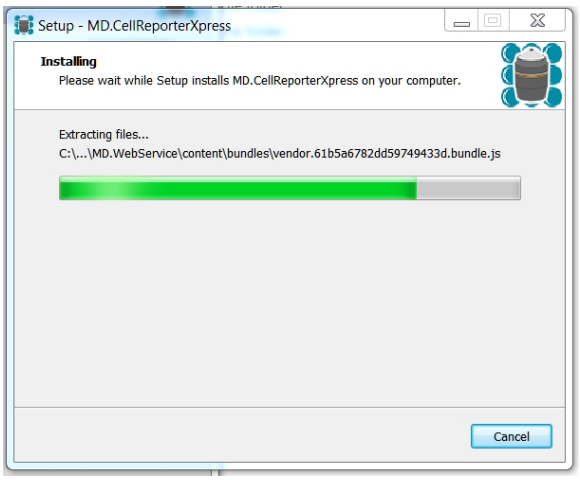
Installing Remote Analysis Software

The following procedure is for a computer used for remote analysis only.

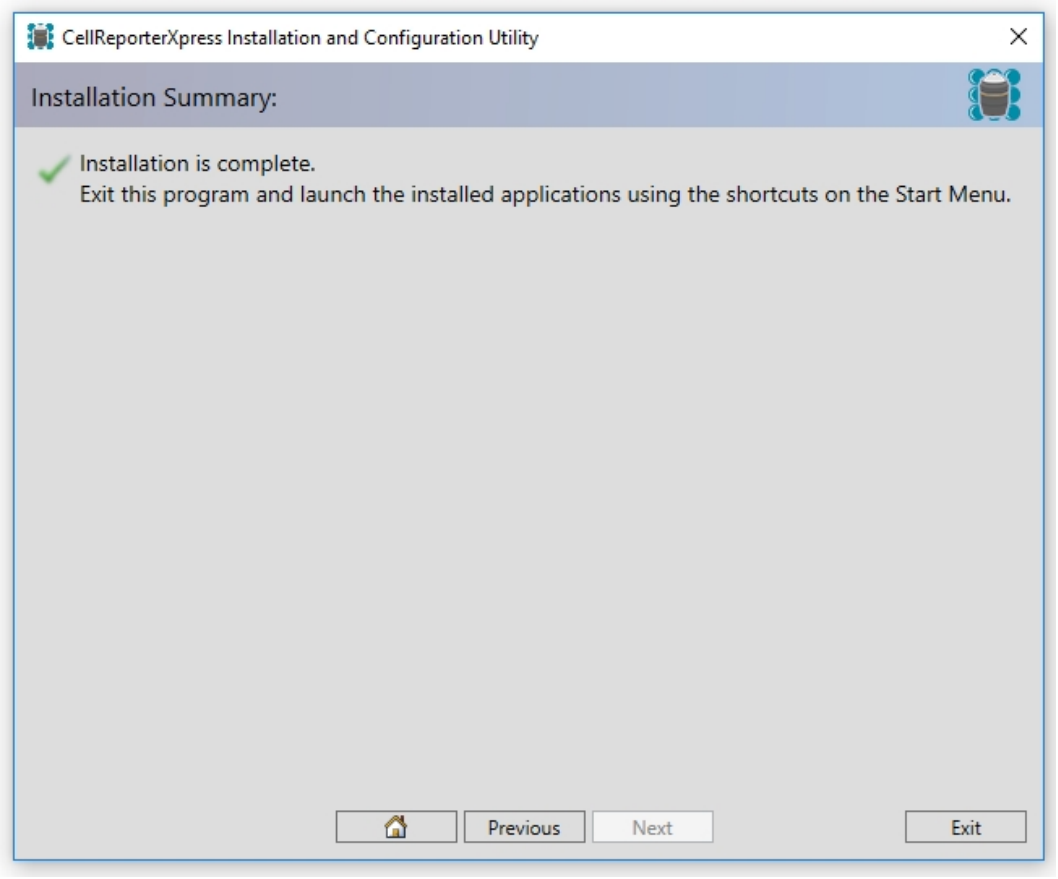
1. Start the CellReporterXpress Installation and Configuration Utility. See Starting the Installation and Configuration Utility on page 17.
2. Install the prerequisites. See Installing Prerequisites on page 21.
3. On the **Install the CellReporterXpress** page, next to the **CellReporterXpress : Analysis Station** description, click **Install**.



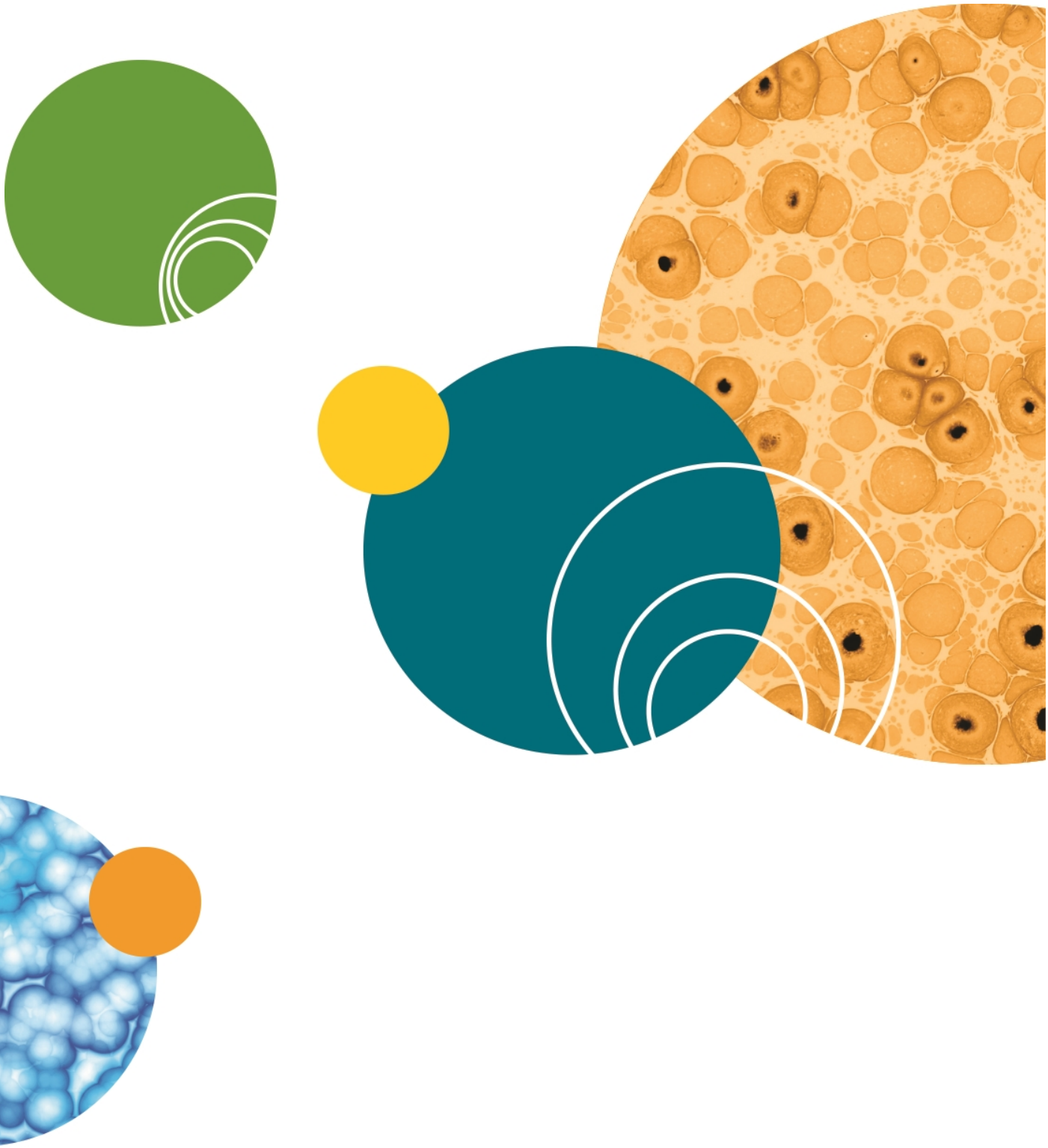
The **Installing** page appears.



4. When the installing finishes, click **Next**.
5. On the **Installation Summary** page, verify that you are finished with CellReporterXpress Installation and Configuration Utility, and click **Exit**.



6. Continue setting up for remote analysis in the software. See Setting up Remote Analysis on page 53.



Chapter 5: Starting and Setting Up the CellReporterXpress Software

5

After you have installed the necessary CellReporterXpress components, continue with the following set up procedures as needed:

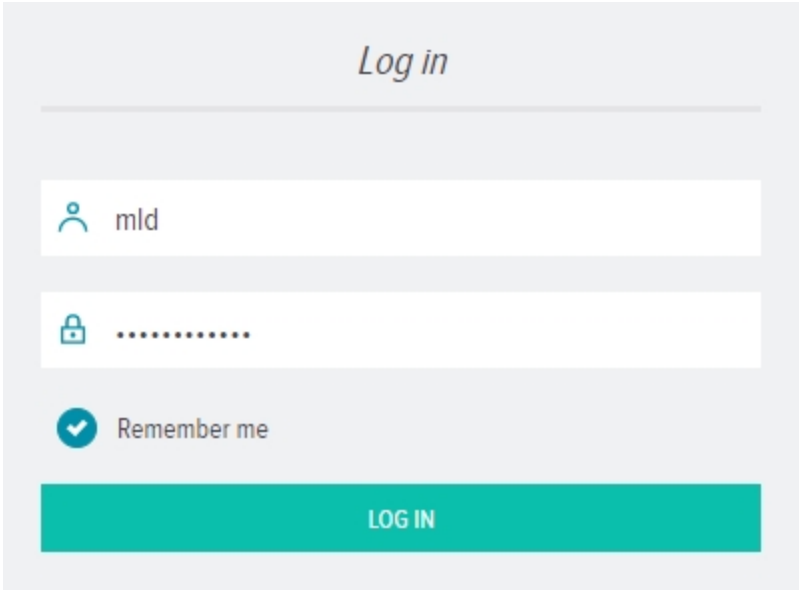
- Logging In to the Software on page 46
- Setting up a Non-Windows-Based Web Connection on page 47
- Setting up Device Connection on page 48
- Setting up Remote Data Storage on page 51
- Setting up Remote Analysis on page 53

Logging In to the Software

The ImageXpress Pico System requires a host computer to run the CellReporterXpress Software. All acquisition and analysis operations are performed in the CellReporterXpress Software.

Complete the following steps to log in to the CellReporterXpress Software on the host computer:

1. Do one of the following to display the CellReporterXpress Log In screen:
   - On the desktop, double-click .
   - Click **Start > Molecular Devices > MD.CellReporterXpress**.



2. In the Login field, enter your CellReporterXpress user name.
3. In the Password field, enter your CellReporterXpress password.

   Note: Use the Windows system user name and password to log in to the CellReporterXpress Software.

4. Click **LOG IN**.

Setting up a Non-Windows-Based Web Connection

If you are using a different computer operating system than Microsoft Windows, the CellReporterXpress system can be accessed using a web browser and connecting to the CellReporterXpress host computer. The prerequisites for the CellReporterXpress host computer must be pre-installed and accessible by the web browser interface through the appropriate ports.

The ImageXpress Nano System uses the web browser-based CellReporterXpress as an interface. The device you use to run the browser-based software is the client device. The client software can run on the local host computer or a remote client workstation. The client software can also run on an iPad and Android tablet with a 9" screen or larger. The web browser must match the supported client device operating system.

The following web browser specifications are required:

Table 5-1: Client Device Web Browser Specifications

Operating System	Browser Support
Apple Macintosh v10.12 or newer	Google Chrome and Apple Safari
Apple iOS v10.3.3 or newer	Google Chrome and Apple Safari
Android	Google Chrome v59 or newer

To connect to the CellReporterXpress on your local machine, open a compatible browser and in the address field type the following: **HTTP://LOCALHOST:8080**.

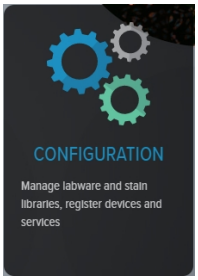
To connect to the CellReporterXpress over a network, open a compatible browser and in the address field type either the IP address, for example **HTTP://168.15.254.12:8080**, or the CellReporterXpress computer name, for example **HTTP://MYHOSTSERVERNAME:8080**.

Setting up Device Connection

Before continuing with this procedure, you must already have the device and the software installed. This is the final procedure for connecting the software to the device.

Tip: You instrument must be connected to the host computer, or if networked, both your instrument and your host computer must be connected to the same network. All services must not be blocked by a firewall or anti-virus software.

1. Start and log in to the CellReporterXpress. See Logging In to the Software on page 46.
2. On the **Home** page, click **Configuration**.



3. Click **Devices**.

   These registration settings depend on how your software host computer is connected, either connected directly to a device or remotely through a network connection.

   This configuration page is divided into the following sections:

   - **Direct Connection**—Use these buttons to specify to which LAN port on the back of the instrument your software host computer is directly connected.
   - **Remote Connection**—Use this field to add a new network connected instrument to the list of available instruments.
   - **List of Devices**—Use this list to view all the instruments available to users, and if needed, delete instruments from the list.

4. Follow the connection procedures that match your system installation.

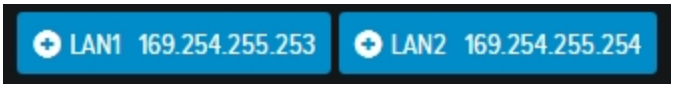
Direct Connection

To register an instrument connection for access by a host computer directly connected to the back of the instrument:

1. Look at the back of your instrument and verify the name of the LAN port that is directly connected to your host computer.

Note: There are two LAN ports on the back of the ImageXpress Nano Automated Imaging System. It does not matter which LAN port you use, but your host computer should only be connected to one of the LAN ports.

2. In the CellReporterXpress, on the **Configuration > Devices** page, under the **Direct Connection** heading, click the button with the same name as the LAN port to which your host computer is connected, either **LAN1** or **LAN2**.



The registered instrument is added to the **List of Devices** entries showing the device name, serial number, installed software version, IP address, amount of free space, and the connectivity status.

Note: After you see the device in the **List of Devices**, it will take up to several minutes for the connectivity status and device details to update.

- Indicates online status.
- Indicates offline status.
- Indicates busy status.
- Indicates error status.

Remote Connection

To register an instrument connection for access for all network connected users:

1. In the **Remote Connection** field, type the network address or name of the instrument you want to add.
2. Click the + button.

   The registered instrument is added to the **List of Devices** entries showing the device name, serial number, installed software version, IP address, amount of free space, and the connectivity status.

   - Indicates online status.
   - Indicates offline status.
   - Indicates busy status.
   - Indicates error status.

CAUTION! If you change the device (instrument) name or IP address, for example, changing LAN port connection, or connecting to a different network, you must remove the existing device from the **List of Devices**, reboot the instrument and host computer, and then add the changed device to the **List of Devices**.

Setting up Remote Data Storage

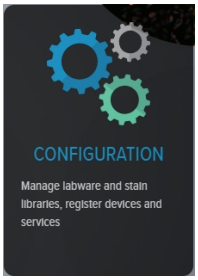
The following procedure is for setting up remote data storage only. Before continuing with this procedure, you must have your server installed with the CellReporterXpress and a client configured to connect to the host computer. See Installing the CellReporterXpress Software on a Server on page 35 and Installing the CellReporterXpress Software on a Client Computer on page 37. The CellReporterXpress Data Storage component should also already be installed on the network and accessible from the host computer. See Installing Remote Data Storage Component on page 40.

Tip: To optimize application performance on a system with anti-virus software, for real-time protection scanning, add the target folder to a list of your anti-virus software folder exclusions.

Tip: To optimize performance and improve stability of the system, avoid registering networked folders or folders on mapped networked drives. Install the CellReporterXpress Data Storage component on the remote location and register it with the system.

To configure your remote data storage device to communicate with your CellReporterXpress:

1. Start and log in to the CellReporterXpress. See Logging In to the Software on page 46.
2. On the **Home** page, click **Configuration**.



3. Click **Data Storage**.
4. In the **Add Data Storage Device** field, type the computer name or IP address for the computer to be used as your data storage system, and then click **+**.

5. Verify that the system you added appears in the **List of Registered Remote Storage Devices**. A green **Online** icon appears when connected.

   Tip: If the system you added does not appear in the **List of Registered Remote Storage Devices**, verify that you entered a valid computer name or IP address for the computer to be used as your data storage system, and try step 4 again.

6. In the **Map Folder on Storage Computer/Device** field, type the full path name of an existing folder on your data storage system, and then click **+**.
7. Verify that the system you added appears in the **List of Mapped Folders on <your connected computer name>**. A green **Online** icon appears when connected.

   Tip: If the mapped folder you added does not appear in the **List of Mapped Folders on <your connected computer name>**, verify that you entered a valid path, and try step 5 again.

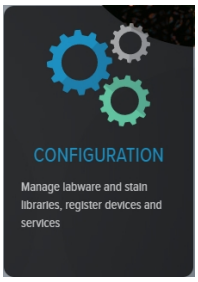
CAUTION! If you registered your data storage device by name and then move your system and/or component to another network or location, you must remove the data storage device from the **List of Registered Remote Storage Devices**, reboot the instrument and host computer, and then add the changed data storage device to the **List of Registered Remote Storage Devices**.

CAUTION! If you register a folder on an external hard drive, make sure that external hard drive supports and is connected using a USB 3 interface. After registering the external hard drive, do not unplug it while the system is operational. Use the safe eject option, or shutdown the computer and then unplug the external hard drive.

Setting up Remote Analysis

The following procedure is for a computer used for remote analysis only. Before continuing with this procedure, you must have the Server software installed and the Client Workstation software installed and connected to the server. See Installing the CellReporterXpress Software on a Server on page 35 and Installing the CellReporterXpress Software on a Client Computer on page 37. The CellReporterXpress Analysis Station software should also already be installed on the network and accessible from the host computer. See Installing Remote Analysis Software on page 42.

1. Start and log in to the CellReporterXpress. See Logging In to the Software on page 46.
2. On the **Home** page, click **Configuration**.



3. Click **Image Analysis Services**.
4. In the **Add Image Analysis Service** field, type the computer name or IP address for the computer to be used as your analysis system, and then click **+**.
5. Verify that the system you added appears in the **Registered Image Analysis Services** list.

Tip: If the system you added does not appear in the **Registered Image Analysis Services** list, verify that you entered a valid computer name or IP address for the computer to be used as your analysis system, and try step 4 again.

CAUTION! If you change the **Image Analysis Service** component name or IP address, for example, changing LAN port connection, or connecting to a different network, you must remove the existing Image Analysis Service from the list of **Registered Image Analysis Services**, reboot the instrument and host computer, and then add the changed **Image Analysis Service** component to the list of **Registered Image Analysis Services**.

Contact Us

Phone: +1-800-635-5577
Web: moleculardevices.com
Email: info@moldev.com

Visit our website for a current listing of worldwide distributors.

The trademarks used herein are the property of Molecular Devices, LLC or their respective owners.
Specifications subject to change without notice. Patents: www.moleculardevices.com/productpatents
FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES

©2017 Molecular Devices, LLC.
All rights reserved.
5058771 B

MOLECULAR DEVICES