



# InterSystems IRIS for Health Installation Guide

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*InterSystems IRIS for Health Installation Guide*  
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# Table of Contents

<b>About This Book .....</b>	<b>1</b>
<b>1 Installing InterSystems IRIS for Health .....</b>	<b>3</b>
1.1 Performing an Attended Installation .....	3
1.1.1 Running the Installer on Windows .....	3
1.1.2 Running the Installer on Linux or macOS .....	4
1.2 Performing an Unattended Installation .....	4
1.2.1 Running an Unattended Installation on Windows .....	4
1.2.2 Running an Unattended Installation on Linux or macOS .....	5
<b>2 Post-Installation Tasks .....</b>	<b>7</b>
<b>3 Upgrading IRIS for Health .....</b>	<b>9</b>
3.1 Upgrading from 2018.1.2 to 2019.1 .....	9
<b>4 Using the Installer Wizard .....</b>	<b>11</b>
<b>5 Running InterSystems IRIS for Health in a Docker Container: Special Considerations .....</b>	<b>13</b>
5.1 Changing the Network Host Name .....	13



# About This Book

This book describes how to:

- Install a new instance of InterSystems IRIS for Health™ in [attended](#) or [unattended](#) mode
- [Upgrading IRIS for Health](#)
- [Using the Installer Wizard](#)

This book contains a complete [table of contents](#).

For more information on InterSystems IRIS for Health, see the following books:

- [IHE Use Cases](#) describes how to set up IHE communication.
- [FHIR Support in InterSystems Products](#) describes FHIR support in InterSystems products.
- [CDA Interoperability with SDA](#) describes how to work with CDA documents, transforms, and annotations.
- [SDA: InterSystems Clinical Data Format](#) introduces the SDA clinical data format and how to customize it.
- [Registry Guide for InterSystems IRIS for Health and Health Connect](#) describes how to set up and manage the necessary service registries.
- InterSystems IRIS Supported Platforms lists the platforms on which InterSystems IRIS for Health is supported.



# 1

## Installing InterSystems IRIS for Health

To install InterSystems IRIS for Health, follow the instructions below, depending on your situation:

- [How to perform an attended installation](#)
- [How to perform an unattended installation](#)

**Important:** InterSystems strongly recommends that you review the “Preparing to Install” chapter of the *Installation Guide* before you run the installer.

### 1.1 Performing an Attended Installation

#### 1.1.1 Running the Installer on Windows

To install a new instance of InterSystems IRIS for Health on Windows, run the installer executable as an administrator.

For detailed information on the options below, see the “Installing InterSystems IRIS on Microsoft Windows” chapter of the *Installation Guide*.

The installation process will prompt you for some information:

1. Choose an instance name for your installation (multiple instances can run on the same machine).
2. Choose the folder for the installation.
3. For the setup type, *Development* will be appropriate for most situations, especially if you are installing InterSystems IRIS for Health for the first time.
4. For security type, InterSystems recommends that you select *Normal* for a development environment or *Locked Down* for a production environment.
5. The InterSystems IRIS Service can run under a default SYSTEM (Windows Local System) account or under an existing Windows account. You will be prompted to choose a common password for the InterSystems IRIS for Health administrator accounts (**\_SYSTEM**, **Admin**, **SuperUser**, and the Windows account you chose, if any) on the next screen.
6. You will be prompted to enter a password for the **CSPSYSTEM** account.
7. In the **Ready to Install the Program** dialog box, you have the option to enter your license key: click **License** to do so and follow the prompts. You can obtain a license key from your sales engineer.

8. After that, click **Install** to complete the installation.

## 1.1.2 Running the Installer on Linux or macOS

To install a new instance of InterSystems IRIS for Health on Linux or macOS, follow the instructions below.

For detailed information on the options below, see the “Installing InterSystems IRIS on UNIX®, Linux, and macOS” chapter of the *Installation Guide*.

1. Extract the installation components from the provided tarball.
2. Navigate to the directory where you extracted the components and run the command **irisinstall** with elevated privileges.
3. Choose an instance name for your installation (multiple instances can run on the same machine).
4. Enter the name of the directory where the installation will reside. If the directory does not exist yet, it will be created.
5. For the installation type, *Development* will be appropriate for most situations, especially if you are installing InterSystems IRIS for Health for the first time.
6. For security settings, InterSystems recommends that you select *Normal* for a development environment or *Locked Down* for a production environment.
7. At the prompt `What user should be the owner of this instance?`, enter the name of an existing user account.
8. You will then be prompted to choose a password for the InterSystems IRIS for Health administrator accounts (**\_SYSTEM**, **Admin**, **SuperUser**, **CSPSysAdmin**, and the user account you chose for owner).
9. At the prompt `What group should be allowed to start and stop this instance?` enter the name of an existing group.
10. You can then choose to supply the full pathname for your license key, which you can obtain from your sales engineer.
11. After that, your chosen options are displayed on the screen. You can confirm the installation simply by pressing Enter.

## 1.2 Performing an Unattended Installation

InterSystems IRIS for Health can be installed in unattended mode.

### 1.2.1 Running an Unattended Installation on Windows

If you will run InterSystems IRIS for Health on Windows, follow the instructions in the “Unattended Custom Installation” section of the “Installing InterSystems IRIS on Microsoft Windows” chapter of the *Installation Guide*. During that process, keep in mind the following considerations that are specific to InterSystems IRIS for Health.

The minimum required set of parameters includes: instance name, a *fully resolved physical pathname* for the location of the installation, and the password for the **SYSTEM** (superadmin) account. The `/qb` switch is essential to running the installer in unattended mode.

The command line syntax for the minimum required set of parameters is: `C:\> installation_executable.exe /instance instance_name /qb INSTALLDIR="install_directory" IRISUSERPASSWORD="password"`

**Important:** The InterSystems IRIS for Health unattended installer differs from the InterSystems IRIS unattended installer in that a few parameters work differently. See the table below.



Parameter or Switch	Supported by InterSystems IRIS for Health	Notes
ADDLOCAL	Y	Optional. The default installation does not include the Web Gateway libraries for external web servers, such as IIS. To install those libraries within the InterSystems IRIS for Health installation along with all other server components, add ADDLOCAL=ALL to the command line.
INITIALSECURITY	N	Defaults to “Normal”.
CLIENTINSTALL	N	.
ISCSTARTCACHE	N/A	
UNICODE	N	Do not use this option. The installer will default to Unicode support as needed by InterSystems IRIS for Health.
REPAIR	N	
REINSTALL	N	
REMOVE	N	

### 1.2.1.1 Examples: Microsoft Windows Unattended Installation

```
C:\> installation_executable.exe /instance HSIHsilent /qb
INSTALLDIR="D:\InterSystems\HSIHsilent" IRISUSERPASSWORD="password"
```

Installs all available components for InterSystems IRIS for Health.

```
C:\> installation_executable.exe /instance HSIHclient /qb
INSTALLDIR="D:\InterSystems\HSIHclient" CLIENTINSTALL=1
```

Installs only the client components listed in the table above. Some graphical progress indicators will be displayed.

## 1.2.2 Running an Unattended Installation on Linux or macOS

If you are running InterSystems IRIS for Health on Linux or macOS, follow the instructions in the “Unattended InterSystems IRIS Installation” section of the “Installing InterSystems IRIS on UNIX®, Linux, and macOS” chapter of the *Installation Guide*. During that process, keep in mind the following considerations that are specific to InterSystems IRIS for Health.

The minimum required set of parameters includes: instance name, a *fully resolved physical pathname* for the location of the installation, the password for the `_system` (superadmin) account, and “normal” security settings.

The command line syntax for the minimum required set of parameters is: `$ sudo ISC_PACKAGE_INSTANCENAME="instance_name" ISC_PACKAGE_INSTALLDIR="install_directory" ISC_PACKAGE_USER_PASSWORD="password" ISC_PACKAGE_INITIAL_SECURITY="Normal" ./irisinstall_silent`

**Important:** The InterSystems IRIS for Health unattended installer differs from the InterSystems IRIS unattended installer in that a few parameters work differently. See the table below.

Parameter or Switch	Supported by InterSystems IRIS for Health	Notes
ISC_PACKAGE_INITIAL_SECURITY	Y	Defaults to “Normal”.
ISC_PACKAGE_CLIENT_COMPONENTS	N	For a client-only installation, which includes components such as language bindings and SDKs and the InterSystems engine link libraries, use the <code>irisinstall_client</code> script. For more information on installing client components only, see the “Installing Client-only InterSystems IRIS ” section of the “Installing InterSystems IRIS on UNIX®, Linux, and macOS” chapter of the <i>Installation Guide</i> .
ISC_PACKAGE_STARTCACHE	N/A	
ISC_PACKAGE_UNICODE	N	Do not use this option. The installer will default to Unicode support as needed by InterSystems IRIS for Health.

### 1.2.2.1 Examples: Linux or macOS Unattended Installation

```
$ sudo ISC_PACKAGE_INSTANCENAME="HSIHsilent" ISC_PACKAGE_INSTALLDIR="/hs/HSIHsilent"
ISC_PACKAGE_USER_PASSWORD="password" ISC_PACKAGE_SUPERSERVER_PORT="59992"
ISC_PACKAGE_INITIAL_SECURITY="Normal" ./irisinstall_silent
```

Installs InterSystems IRIS for Health in “normal” security mode with Superserver port 59992.

```
$ sudo ISC_PACKAGE_INSTANCENAME="HSIHsilent" ISC_PACKAGE_INSTALLDIR="/hs/HSIHsilent"
ISC_PACKAGE_USER_PASSWORD="password" ISC_PACKAGE_INITIAL_SECURITY="Normal"
ISC_PACKAGE_MGRUSER="hsihadmin1" ISC_PACKAGE_MGRGROUP="hsihadmin"
ISC_PACKAGE_WEB_CONFIGURE="Y" ISC_PACKAGE_WEB_SERVERTYPE="Apache" ./irisinstall_silent
```

Installs all InterSystems IRIS for Health modules; specifies the user and group who own the instance; configures the Web Gateway to work with an existing instance of Apache on the same host (installs Web Gateway libraries in `/opt/gateway` and adds Web Gateway configuration information to `httpd.conf`). Note that this configuration is appropriate only for a development instance of InterSystems IRIS for Health, not for a production installation.

# 2

## Post-Installation Tasks

For security purposes, you need to immediately change the password of the `HS_Services` user account that was created by the installation process. To change the password:

1. Open the Management Portal.
2. Navigate to **System Administration > Security > Users**.
3. Select `HS_Services` from the list of users.
4. Select **Enter new password**.
5. Enter the new password and confirm it.
6. Select **Save**.



# 3

## Upgrading IRIS for Health

The process for upgrading InterSystems IRIS for Health is similar to upgrading the InterSystems IRIS product. You should read the special considerations for upgrading IRIS for Health listed below, and then complete the upgrade procedures found in “Upgrading InterSystems IRIS” in the *InterSystems IRIS Installation Guide*.

### 3.1 Upgrading from 2018.1.2 to 2019.1

Running a post-installation method in the InterSystems Terminal is the final step in upgrading from InterSystems IRIS for Health 2018.1.2. You need to run this method multiple times if you have more than one user-created namespace. To complete the upgrade process:

1. Open the InterSystems Terminal.
2. To change the namespace to HSLIB, enter:

```
set $namespace="HSLIB"
```

3. Enter:

```
do ##class(HS.HC.Util.Installer.Upgrade.XFMapping).UpgradeHSXF("<namespace>")
```

Where *<namespace>* is the name of a user-created namespace. You must repeat this command for each user-created namespace.



# 4

## Using the Installer Wizard

The Installer Wizard allows you to create a Foundation namespace and production that contain all the mappings and libraries needed for healthcare interoperability. Creating an interoperability namespace using **System Administration > Configuration > System Configuration > Namespaces** also creates a Foundation namespace and production, so you can use whichever method you prefer. If you use the **System Administration** menu, you can either use the default Foundation production or remove it and create your own production. However, only Foundation productions are started when you select the **Start All** button on pages accessed through the **Health** menu.

The business host `Ens.Activity.Operation.Local` that is automatically added to a Foundation production is used for activity monitoring, and can be removed if you do not need this functionality.

To install and activate a Foundation production:

1. Log in to the Management Portal for your instance as a user with the **%HS\_Administrator** role.
2. Select **Health** in the left-hand navigation bar.
3. Click the **Installer Wizard** link in the banner at the top of the page.
4. Click **Configure Foundation**.
5. For **Local Name**, enter the name that will identify the Foundation production. This name will become the namespace that contains the class definitions for the production. The maximum length for this string is 50 characters. The local name is referred to below as `<LOCAL_NAME>`.
6. The Network Name is the network-wide, unique name for the Foundation production. It defaults to `Network_Host_Name:<LOCAL_NAME>`.

**Note:** `Network_Host_Name` defaults to the machine's host name if you do not explicitly set it in the **Network Host Name** option in the Installer Wizard. `Network_Host_Name` should always be set in the Installer Wizard before you begin configuring your instance.

A DNS entry is a better choice of `Network_Host_Name`, as it provides more flexibility. In a mirror, it is important that `Network_Host_Name` be set to the VIP (or DNS entry) of your mirror before you use the Installer Wizard to configure your productions.

7. For **Description**, enter an optional short description.
8. For **Production**, enter the package and class name that you will use for this production in the form `Package.Class`. The default is `<LOCAL_NAME>PKG.FoundationProduction`. For example, "HSFOUNDATIONPKG.FoundationProduction". Adding `PKG` to `<LOCAL_NAME>` makes it easy to differentiate between namespace and code package names, and prevents naming collisions.
9. For **Template**, choose **Generic Production**.

10. The default location for the production database, `IRIS.DAT`, is `installDir/mgr/localName`. To specify a location for the database other than the default, enter the alternate location in the **Alternate Database Location** field. If you specify an absolute location, then that location will be created if it does not exist. Your database will be in `alternateDatabaseLocation/localName`. If you specify a relative location then the database will be created in `installDir/mgr/hslib/alternateDatabaseLocation/localName`.
11. Click **Save**. This production is now displayed in the list of configurations.
12. In the row for the production you just created, click **Activate**. A window pops up, asking if you want to proceed. It is at this step that your Foundation production is created.
13. Click **Start** to start the activation process.

**Note:** If you close the dialog box before it displays a message that indicates completion, you will not see any error messages that may occur in the creation of your production.

The result of the activation process is a new namespace that contains a Foundation production and other related classes. If you used the default values, the namespace for this production will be `<LOCAL_NAME>`, and the production name will be `<LOCAL_NAME>PKG.FoundationProduction`. So, for example, if you enter **HSFOUNDATION** in the **Local Name** field, you will create an **HSFOUNDATION** namespace that contains a **FoundationProduction** in the **HSFOUNDATIONPKG** package.



# 5

## Running InterSystems IRIS for Health in a Docker Container: Special Considerations

Running InterSystems IRIS for Health in a Docker container is much the same as running InterSystems IRIS in a container, but you should make the following change once the container is up and running:

- [Change the network host name](#)

For more information on running InterSystems IRIS for Health in a container, see *Running InterSystems Products in Containers*.

### 5.1 Changing the Network Host Name

When you are running InterSystems IRIS for Health in a container, the network host name is defined as the container ID by default. This causes problems when you need to replace the container because the network host name will change to the ID of the new container. To avoid this problem, do the following to define a new network host name that will not change when you replace the container:

1. Log into the Management Portal.
2. Make sure you are in the %SYS or HSLIB namespace.
3. From the Home page, select **Health**.
4. In the top navigation bar, select **Installer Wizard**.
5. Select **Configure Network Host Name** and enter the new name. A DNS entry is a good choice for a name.

