helpsystems

Intermapper Installation Guide
6.6

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Before You Begin

Read this section before you install Intermapper® or Intermapper RemoteAccess.

Intermapper Components

Intermapper is a network mapping, monitoring, and alerting program. It provides an early warning system that alerts an administrator to problems with their network servers and IP networks. For more information on Intermapper, visit our website at www.intermapper.com.

Intermapper includes the following components:

- **Intermapper Server** - provides the core facilities of Intermapper, including discovery, polling and monitoring, charting, and alerting.
- **Intermapper Flows** - collects NetFlow and sFlow data from routers and switches. It saves the flow records in a database and displays data about traffic senders, recipients, type, and volume.
- **Intermapper DataCenter** - provides the following tools:
    - **Intermapper Authentication Server** - allows you to authenticate users against external Active Directory, LDAP, RADIUS, Kerberos, and IAS directories.
    - **Intermapper Database** - a PostgreSQL database that stores historical data from Intermapper servers.
    - **Intermapper Reports** - reports are generated from the Intermapper database.

You can use the built-in Intermapper client to connect to the Intermapper server running on your own machine or you can remotely connect to Intermapper servers anywhere on your network using *Intermapper RemoteAccess*.

System Requirements

Virtual Machine and Intermapper License Keys

To use a license key, the following variables must remain static:

- `Hostname`
- `IP address`
- `MAC address`

> **NOTE:**
> You can set the variables when you create a new virtual machine.

A change in hardware attributes (CPU, storage, or memory) within the same system does not affect how the Intermapper server or Intermapper RemoteAccess™ operate. If you move to new system hardware, you must obtain a new license key.

A change in the Network Interface Card (NIC) requires a new license key; the MAC address is unique and is tied to a network interface (physical, virtual, or wireless).

Software Requirements for Intermapper, Intermapper RemoteAccess, and Intermapper Flows

To install and run Intermapper, Intermapper RemoteAccess, and Intermapper Flows, your configuration must meet the following requirements:

Platform	Operating System Level
Debian	10
macOS	10.15, or 11 (Big Sur)
Microsoft Windows on x64 systems	8.1, 10, 11
Microsoft Windows Server *IPV6 support requires Microsoft Windows Server 2008 or higher	2012 R2, 2016, 2019, or 2022
Red Hat Enterprise Linux on x64 systems	7 or 8
SuSE Linux Enterprise Server	12
Ubuntu	18.04, 21.04 or 22.04

If you install Intermapper on a headless server, use a remote desktop access program that supports remote sounds or a copy of Intermapper RemoteAccess.

Running Intermapper on a macOS virtual machine is not supported.

Minimum Hardware Requirements

Intermapper Application Server

To install and run the Intermapper Application Server, your configuration must meet the following requirements:

Hardware	Requirement
Processors	Two (2) Virtual CPUs dedicated and reserved for App server
Memory (RAM)	
macOS and Linux	8 GB exclusively to the Application Server
Microsoft Windows	16 GB exclusively to the Application Server
Disk Configuration	
OS Drive Array	100 GB 10k SAS of pre-allocated disk space
Data Drive Array	350 GB 10k SAS of pre-allocated disk space

> **NOTE:**
> These recommendations support up to 500 devices. As your device counts increase, so do storage requirements.

Intermapper Flows

To install and run the Intermapper Flows, your configuration must meet the following requirements:

Hardware	Requirement
Virtual Machines	
Intermapper Flows	Four (4) Virtual CPUs for Intermapper Flows
macOS and Linux	8 GB (RAM) exclusively to the Intermapper Flows
Microsoft Windows	16 GB (RAM) exclusively to the Intermapper Flows
Dedicated Hardware	Two (2) or more of the latest generation Intel or AMD processors with at least four (4) processor cores each.
	Recommend processing speed us 2.5Ghz or higher
Disk Configuration	
OS Drive Array	100 GB 10k SAS
Data Drive Array	350 GB 10k SAS
Up to 10 million flows/hour	Quad Core, 16 GB of RAM
	Requires 64-bit Microsoft Windows, Linux, or macOS hardware
100 million flows/hour	Quad Core, 3GHz, 65 GB of RAM, RAID storage
	Requires 64-bit Microsoft Windows, Linux, or macOS hardware

NOTE:
Intermapper Flows requires a fairly powerful computer; both processor power and the amount of RAM are important considerations. The minimum recommended specifications support up to 10 million flows per hour.

Intermapper Flows benefits from having a large amount of RAM for its database cache. Use a 64-bit Microsoft Windows, macOS, or Linux system to allocate more than 1.5 GB of RAM for the cache.

Intermapper RemoteAccess

To install and run Intermapper RemoteAccess, your configuration must meet the following requirements:

Hardware	Requirement
Processor	In general, any recent computer capable of running a relatively current macOS, Microsoft Windows, or Linux OS version can run Intermapper RemoteAccess. A 64-bit OS is required.

> **NOTE:**
> Intermapper RemoteAccess installs the supported Java runtime version. (Windows and macOS only.)

Installing Intermapper on Microsoft Windows Systems

To download Intermapper on a Microsoft Windows system:

1. Download the installer to a convenient location. If you are a current user, access the download from the HelpSystems website (https://community.helpsystems.com). If you are a new customer, use the link in the email received from HelpSystems to download Intermapper. Double-click the Intermapper_Setup_66.x64.exe file and follow the instructions.

   > **NOTE:**
   > - You must be an administrator to install Intermapper.
   > - If you are installing the 64-bit version, you must uninstall previous 32-bit versions installed on your system before you can run the installer. You should back up your Intermapper systemup before uninstalling the previous version.

2. When the installer finishes, it starts the Intermapper client so you can view and configure your Intermapper server.

What is Installed and Where

The components of Intermapper are installed as separate Microsoft Windows services. This means that after you start them, they automatically start running when your computer starts, before any users are logged in, and continues to run even when no user is logged in. For information on managing these services, see Managing Intermapper Services.

The installer creates an Intermapper folder in the Microsoft Windows Program Files folder on your 64-bit Microsoft Windows system. This folder contains all of the Intermapper core files. When it first starts, Intermapper creates an Intermapper folder in the default Microsoft Windows ProgramData location. This folder contains settings and data that Intermapper collects from your network. For example,

```
C:\Program Files\InterMapper
C:\Program Files\InterMapper\dwf
C:\Program Files\InterMapper\flows
C:\ProgramData\InterMapper - The "InterMapper Settings" folder
```

If it does not already exist, the installer creates an InstallShield or an InstallShield Shared directory in Program Files/Common Files. These files are required for uninstalling Intermapper.

Intermapper adds keys to the Microsoft Windows registry that it uses to identify the installation location and local preferences.

Managing Intermapper Services

You can start and stop Intermapper services with the Intermapper Control Center system tray icon. The Intermapper and Intermapper DataCenter services are started and stopped simultaneously. You can also start and stop individual services from the Microsoft Windows service control panel.

Check if the Intermapper services are currently running with the Intermapper Control Center system tray icon. You can also look for Intermapper.exe, flows.exe, and imdc.exe files in the Task Manager or check their entries in the Services control panel.

You can find the version of Intermapper that is installed using the Intermapper Control Center. You can also start a web browser and navigate to the web interface for Intermapper DataCenter. The version number is displayed at the bottom of the page.

Starting Intermapper

The first time you start the Intermapper server, it accepts only connections from the local machine. If you have a graphical interface and Java already installed, you can launch Intermapper by clicking the Intermapper button from the Intermapper Control Center.

Starting Intermapper Flows

The fastest way to start using Intermapper Flows is to read Installing Intermapper Flows and Intermapper Flows Overview.

Intermapper Flows does not start automatically; you must use the Intermapper Control Center to start it before you can access flows information.

When Intermapper Flows first starts, it creates a 10 GB flows database. You can change the database size and location to fit your needs.

Intermapper Flows does not contain a separate graphical user interface. However, you can access flow information either through the built-in Intermapper client or through Intermapper RemoteAccess. You can open the Flows window by right-clicking a device on a map. When you do this, you can see information about the traffic on the selected device.

If you purchased Intermapper with Flows, use the serial number to register your installation. If you are only trying Intermapper out, your evaluation serial number allows you to receive data from one exporter (source of NetFlow or sFlow data).

You do not need to configure Intermapper DataCenter if you access it from the local machine. To enable external access and more advanced configuration, go to https://localhost:8182.

Intermapper DataCenter ships with a self-signed SSL certificate. Your browser displays a certificate warning when you visit the DataCenter web interface. You can select the certificate and safely continue to navigate to the page. The Intermapper DataCenter Settings page allows you to upload your own certificate rather than relying on the less secure certificate shipped with Intermapper.

Uninstalling Intermapper

To uninstall Intermapper, use the Programs and Features or Add or Remove Programs item from the Windows™ control panel.

Uninstalling Intermapper does not remove the associated settings or data files. If you do not plan on reinstalling Intermapper and want to remove it completely, manually remove the InterMapper Settings, Intermapper Datacenter, and Intermapper Flows folder from the Microsoft Windows Program Files and Program Data locations.

Installing Intermapper on SuSE Linux Systems

Intermapper is shipped as an RPM package (.rpm file) and is available in the following package:

- **64-bit: Intermapper-6.6-1sse.x86_64.12x.rpm** - includes 64-bit versions of Intermapper server and Intermapper Flows server. These versions allow systems operating near memory capacity to take advantage of increased memory space. A 64-bit package can be installed only on a 64-bit release. If you are upgrading from a version previous to 5.8, uninstall Intermapper as described below before you upgrade. HelpSystems recommends that you back up your InterMapper Settings directory before you install Intermapper.

Installing From a Command Line

Run the following commands:

```
cd <directory-containing-rpm>
sudo rpm -ivh InterMapper-6.6-1sse.x86_64.12x.rpm
```

Upgrading Intermapper

When you upgrade an existing Intermapper installation to a newer version, data is retained in the InterMapper Settings folder. HelpSystems recommends that you create a backup of that folder before you upgrade, just to be safe. For information on which files to back up, see What is Installed and Where.

Upgrading From a Command Line

To upgrade to the 64-bit package, run the following commands:

```
cd <directory-containing-rpm>
sudo rpm -Uvh --nopreun InterMapper-6.6-1sse.x86_64.12x.rpm
```

NOTE:
When *upgrading* from Intermapper versions earlier than 6.5.2, the option --nopreun is required.

OpenSuSE

The set of libraries required for OpenSuSE changes often, therefore it is difficult to offer consistent advice about the required libraries. The best procedure is to run the Intermapper installer using the procedure above. If you see messages about missing libraries, install the first

one with its dependencies, then run the Intermapper installer again. Repeat this procedure until Intermapper is successfully installed.

Installing the Intermapper Public Key

The Intermapper RPM is signed with gpg to allow you to verify the integrity of the downloaded file. To install the Intermapper gpg public key, run the following commands:

```
curl --output InterMapper_Key.asc -L
http://www.intermapper.com/go.php?to=gpgkey
sudo rpm --import
https://hsdownloads.helpsystems.com/intermapper/debian/helpsystems-
rpm-public.asc
```

After you import the key, rpm remembers it for future releases and you do not need to import it again.

To check the signature on the Intermapper package before installing it, run the following command:

```
rpm -K "InterMapper-6.6-1sse.x86_64.12x.rpm"
```

If the package signature is correct, the following line is displayed:

```
InterMapper-6.6-1sse.x86_64.12x.rpm: (sha1) dsa sha1 md5 gpg OK
```

Java Runtime Environment

A compatible Java JRE is automatically installed with each version of Intermapper server. This file runs the Intermapper client.

Starting Intermapper

The Intermapper user interface (UI) is launched by executing the command *intermapper*. The installation process creates a link to that command in the directory /usr/local/bin - provided that the directory exists. To start the Intermapper UI, issue the command /usr/local/bin/intermapper. If that path does **not** exist, the path at which the link has been created can be seen in the output of the installation command and that path should be used instead.

> **NOTE:**
> During installation, /usr/bin/local/intermapper would be created if /usr/local/bin already existed. If /opt/local/bin existed, then /opt/local/bin/intermapper will be created.

> **NOTE:**
> If you cannot run the above command, see [Configuring Intermapper Remotely](#).

Starting Intermapper Flows

The fastest way to start using Intermapper Flows is to read Installing Intermapper Flows and Intermapper Flows Overview.

When Intermapper Flows first starts, it creates a 10 GB flows database. You can change the database size and location to fit your needs.

Intermapper Flows does not include a graphical user interface. However, you can access flow information either through the built-in Intermapper client or through Intermapper RemoteAccess. Open the Flows window by right-clicking a device on a map. When you do this, you can see information about the traffic on the selected device.

If you purchased Intermapper with Flows, use the serial number to register your installation. If you are only trying Intermapper out, your evaluation serial number allows you to receive data from one exporter source (NetFlow or sFlow data).

Intermapper Flows is not running by default. For information on starting Intermapper Flows, see Managing Intermapper Daemons.

Intermapper DataCenter

You do not need to configure Intermapper DataCenter if you access it from the local machine. To enable external access and more advanced configuration, go to https://localhost:8182.

Intermapper DataCenter ships with a self-signed SSL certificate. Your browser displays a certificate warning when you visit the DataCenter web interface. You can select the certificate and safely continue to navigate to the page. The Intermapper DataCenter Settings page allows you to upload your own certificate rather than relying on the less secure certificate shipped with Intermapper.

What is Installed and Where

Intermapper components are installed as separate daemons. This means that after you start them, they automatically begin running when your computer starts, before any users are logged in, and continue running even when no user is logged in. For information on managing these daemons, see Managing Intermapper Daemons.

The installer creates files and folders at the following (default) locations:

File Path	Contents
/var/opt/helpsystems/intermapper/InterMapper_Settings	Intermapper settings
/opt/helpsystems/intermapper/bin/	Intermapper Server binaries
/opt/helpsystems/intermapper/bin/intermapperd	Intermapper Server executable

File Path	Contents
/opt/helpsystems/intermapper/bin/intermapperauthd	Intermapper authorization delegate
/opt/helpsystems/intermapper/bin/intermapperflows	Intermapper Flows server
/opt/helpsystems/intermapper/man/man1/intermapperd.1	Documentation
/opt/helpsystems/intermapper/man/man1/intermapperauthd.1	Documentation
/opt/helpsystems/intermapper/share/intermapper	Intermapper support files
/opt/helpsystems/intermapper/imdc	Intermapper DataCenter folder
/var/opt/helpsystems/intermapper/InterMapper_Settings/Flows	Intermapper Flows folder
/var/opt/helpsystems/intermapper/InterMapper_ Settings/Flows/SESSIONDB	Default directory for the flow database
/var/opt/helpsystems/intermapper/InterMapper_ Settings/Flows/flows.conf	Configuration file for Intermapper Flows
/var/opt/helpsystems/intermapper/InterMapper_Settings/Flows/services	List of port numbers and service names
/opt/helpsystems/intermapper/share/intermapper/imflows_configure.sh	The configuration script

When Intermapper first starts, the `Intermapper_Settings` folder is created and stored in the `/var/opt/helpsystems/intermapper/Intermapper_Settings` folder. This folder stores preferences, maps, and data that Intermapper collects from your network. You can change the location of the InterMapper Settings folder by editing Intermapper's configuration file (`intermapperd.conf`) to which a link is created from the `/usr/local/etc` folder.

The installer also creates a new folder `/opt/helpsystems/intermapper/imdc` that contains the Intermapper DataCenter's files, including data and configuration files.

As of Intermapper version 6.6, the three Intermapper services (intermapperd, imflows, and imdc) are managed by systemd on all Linux systems that have systemd active at the time Intermapper is installed. The systemd service files for these services are located in the `/opt/helpsystems/intermapper/share/intermapper/units` directory. These files are copied to the appropriate run-time location during the installation process. The SystemV-style startup scripts (as used in earlier Intermapper versions) are supplied in the `/opt/helpsystems/intermapper/share/intermapper/sysv.init` directory. These files are only installed if systemd is not managing the Linux host when Intermapper is installed.

The `intermapperauthd` file is a setuid-root program. The `intermapperd` daemon (running as a non-privileged user) makes requests to `intermapperauthd` to access low-level network services, such as ICMP ping and low-numbered network ports.

The installer creates user and group entries named *intermapper* on your system, if they do not exist already. The new user and group configuration and log files are stored in the InterMapper Settings and Intermapper DataCenter folders. These log and configuration files are not granted public read access. If you want to read these files, add yourself to the *intermapper* group or use sudo in your commands.

Managing Intermapper Daemons

To start and stop individual daemons, issue the following service managment commands:

```
sudo systemctl start intermapperd.service
sudo systemctl start imdc.service
sudo systemctl start imflows.service
```

```
sudo systemctl stop intermapperd.service
sudo systemctl stop imdc.service
sudo systemctl stop imflows.service
```

To look up the version of Intermapper that is installed, run the following command:

```
/opt/helpsystems/intermapper/bin/intermapperd -v
```

To check if Intermapper daemons are currently running, run the following commands:

```
systemctl status intermapperd.service
systemctl status imflows.service
systemctl status imdc.service
```

If your Intermapper server does not have a graphical interface, use Intermapper RemoteAccess to administer the Intermapper server. Before the Intermapper server can accept connections from Remote Access, launch the server with a command line argument, telling it where to connect from. Run the following commands* to manually stop the intermapperd process and restart using the -A option:

```
sudo systemctl stop intermapperd.service
sudo /opt/helpsystems/intermapper/bin/intermapperf -f
/usr/local/etc/intermapperd.conf -A "remote:password@*.*.*.*"
```

*For installations that do not have sudo installed, it is not required. The commands must be run as root; the sudo command can be omitted.

The Intermapper server accepts administrator connections from any IP address (*.*.*.*) with the user identifier of remote and the password of password. Launch Intermapper RemoteAccess on another computer, log into the new Intermapper system, and set up your Intermapper users and groups.

Setting a Password for Intermapper Data Center

Intermapper DataCenter requires its initial configuration to be performed.

The Intermapper DataCenter configuration page, accessed from a browser, requires its own password.

Run the following commands:

```
sudo systemctl stop imdc.service
sudo /opt/helpsystems/intermapper/imdc/sbin/imdc --password=
[password]
sudo systemctl start imdc.service
```

Now you can connect to Intermapper using one of the following URLs:

- https://localhost:8182/settings.html
- https://*IPaddress*:8182/settings.html
- https://*domain name*:8182/settings.html

Uninstalling Intermapper

To remove Intermapper from your system, use the system's graphical package manager or run the following command:

```
sudo rpm -ev InterMapper
```

When you uninstall Intermapper, the settings and data files are not removed. If you do not plan on reinstalling Intermapper and want to remove it completely, manually remove the InterMapper Settings, Intermapper Flows, and Intermapper DataCenter folders using the following commands:

```
sudo rm -rf /var/opt/helpsystems/intermapper/InterMapper_Settings
sudo rm -rf /opt/helpsystems/intermapper/imdc
sudo deluser intermapper
```

Installing Intermapper on Red Hat Linux Systems

Installing the Intermapper Public Key

Intermapper is shipped as an RPM package (.rpm file). The Intermapper RPM is signed with gpg to allow you to verify the integrity of the downloaded file. The `yum` utility, referenced below, requires the public key as part of the installation process.

To install the Intermapper gpg public key, run the following commands:

```
curl --output InterMapper_Key.asc -L http://www.intermapper.com/go.php?to=gpgkey

sudo rpm --import
https://hsdownloads.helpsystems.com/intermapper/debian/helpsystems-rpm-public.asc
```

After you import this key, rpm remembers it for future releases and you do not need to import it again.

To check the signature on the Intermapper package before installing it, run the following command:

```
rpm -K "InterMapper-6.6-1.x86_64.7x.rpm"
```

If the package signature is correct, the following line is displayed:

```
InterMapper-6.6-1.x86_64.7x.rpm: (sha1) dsa sha1 md5 gpg OK
```

Installing Intermapper

The Intermapper RPM is available in the following package:

- **64-bit: Intermapper-6.6-1.x86_64.7x.rpm** - includes 64-bit versions of the Intermapper server and Intermapper Flows server. These versions allow systems operating near memory capacity to take advantage of increased memory address space. You can only install the 64-bit package on a 64-bit release. If you are upgrading from a version previous to 5.8, uninstall Intermapper as described below before you upgrade. HelpSystems recommends that you back up your InterMapper Settings directory.

Installing From a Command Line

For CentOS, follow the instructions for the compatible version of Red Hat.

```
cd <directory-containing-rpm>
sudo yum install "InterMapper-6.6-1.x86_64.7x.rpm"
```

Upgrading Intermapper

When you upgrade an existing Intermapper installation to a newer version, data from the InterMapper Settings folder is retained. HelpSystems recommends that you create a backup of that folder before you upgrade, just to be safe. For information on which files to back up, see *What is Installed and Where*.

Upgrading From a Command Line

To upgrade to the 64-bit package, run the following commands:

```
cd <directory-containing-rpm>
sudo rpm -Uvh --nopreun InterMapper-6.6-1.x86_64.7x.rpm
```

> **NOTE:**
> When *upgrading* from Intermapper versions earlier than 6.5.2, the option --nopreun is required.

Java Runtime Environment

A compatible Java JRE is automatically installed with each version of Intermapper server. This file runs the Intermapper client.

Starting Intermapper

The Intermapper user interface (UI) is launched by executing the command *intermapper*. The installation process creates a link to that command in the directory /usr/local/bin - provided that the directory exists. To start the Intermapper UI, issue the command /usr/local/bin/intermapper. If that path does **not** exist, the path at which the link has been created can be seen in the output of the installation command and that path should be used instead.

> **NOTE:**
> During installation, /usr/bin/local/intermapper would be created if /usr/local/bin already existed. If /opt/local/bin existed, then /opt/local/bin/intermapper will be created.

> **NOTE:**
> If you cannot run the command above, see Configuring Intermapper Remotely.

Starting Intermapper Flows

The fastest way to start using Intermapper Flows is to read Installing Intermapper Flows and Intermapper Flows Overview.

Intermapper Flows does not run by default. Use the Intermapper Control Center to start it to access flows information.

When Intermapper Flows first starts, it creates a 10 GB flows database. You can change the database size and location to fit your needs.

Intermapper Flows does not include a graphical user interface. However, you can access flow information either through the built-in Intermapper client or through Intermapper RemoteAccess. You can open the Flows window by right-clicking a device on a map. When you do this, you can see information about the traffic on the selected device.

If you purchased Intermapper with Flows, you can use the serial number to register your installation. If you are only trying Intermapper out, your evaluation serial number allows you to receive data from one exporter (NetFlow or sFlow data).

Intermapper Flows does not run by default. For information on starting Intermapper Flows, see the Managing Intermapper Daemons.

What is Installed and Where

Intermapper components are installed as separate daemons. This means that after you start them, they automatically start running when your computer starts, before any users are logged in, and continue running even when no user is logged in. For information on managing these daemons, see Managing Intermapper Daemons.

The installer creates the following files and folders:

File Path	Contents
/var/opt/helpsystems/intermapper/InterMapper_Settings	Intermapper settings
/opt/helpsystems/intermapper/bin/	Intermapper Server binaries
/opt/helpsystems/intermapper/bin/intermapperd	Intermapper Server executable
/opt/helpsystems/intermapper/bin/intermapperauthd	Intermapper authorization delegate
/opt/helpsystems/intermapper/bin/intermapperflows	Intermapper Flows server
/opt/helpsystems/intermapper/man/man1/intermapperd.1	Documentation
/opt/helpsystems/intermapper/man/man1/intermapperauthd.1	Documentation
/opt/helpsystems/intermapper/share/intermapper	Intermapper support files
/opt/helpsystems/intermapper/imdc	Intermapper DataCenter folder
/var/opt/helpsystems/intermapper/InterMapper_Settings/Flows	Intermapper Flows folder
/var/opt/helpsystems/intermapper/InterMapper_Settings/Flows/SESSIONDB	Default directory for the flow database

File Path	Contents
/var/opt/helpsystems/intermapper/InterMapper_ Settings/Flows/flows.conf	Configuration file for Intermapper Flows
/var/opt/helpsystems/intermapper/InterMapper_Settings/Flows/services	List of port numbers and service names
/opt/helpsystems/intermapper/share/intermapper/imflows_configure.sh	The configuration script

When Intermapper first starts, the `Intermapper_Settings` folder is created and stored in the `/var/opt/helpsystems/intermapper/Intermapper_Settings` folder. This folder stores preferences, maps, and data that Intermapper collects from your network. You can change the location of the InterMapper Settings folder by editing the `intermapperd.conf` to which a link is created from the /usr/local/etc folder..

The installer also creates the `/opt/helpsystems/intermapper/imdc` folder that contains Intermapper DataCenter files, including data, configuration, and log files.

As of Intermapper version 6.6, the three Intermapper services (intermapperd, imflows, and imdc) are managed by systemd on all Linux systems that have systemd active at the time Intermapper is installed. The systemd service files for these services are located in the /opt/helpsystems/intermapper/share/intermapper/units directory. These files are copied to the appropriate run-time location during the installation process. The systemv-style startup scripts (as used in earlier Intermapper versions) are supplied in the

/opt/helpsystems/intermapper/share/intermapper/sysv.init directory. These files are only installed if systemd is not managing the Linux host when Intermapper is installed.

The `intermapperauthd` file is a setuid-root program. The `intermapperd` daemon (running as a non-privileged user) makes requests to `intermapperauthd` to access low-level network services, such as ICMP ping and low-numbered network ports.

The installer creates the *intermapper* user and the *intermapper* group on your system, if they do not exist already. The new user and group own configuration and log files in the InterMapper Settings and Intermapper DataCenter folders. These log and configuration files are not granted public read access. If you want to read these files, add yourself to the intermapper group or use sudo in your commands.

Managing Intermapper Daemons

To start and stop individual daemons, run the following startup scripts:

```
sudo systemctl start intermapperd.service
sudo systemctl start imdc.service
sudo systemctl start imflows.service
```

```
sudo systemctl stop intermapperd.service
sudo systemctl stop imdc.service
sudo systemctl stop imflows.service
```

To look up the version of Intermapper that is installed, run the following command:

```
/opt/helpsystems/intermapper/bin/intermapperd -v
```

To check if Intermapper daemons are currently running, run the following commands:

```
systemctl status intermapperd.service
systemctl status imflows.service
systemctl status imdc.service
```

Uninstalling Intermapper

To remove Intermapper from your system, you can use the system's graphical package manager or run the following command:

```
sudo rpm -ev InterMapper
```

When you uninstall Intermapper, the settings and data files are not removed. If you do not plan on reinstalling Intermapper and want to remove it completely, manually remove the InterMapper Settings, Intermapper Flows, and Intermapper DataCenter folders using the following commands:

```
sudo rm -rf /var/opt/helpsystems/intermapper/InterMapper_Settings
sudo rm -rf /opt/helpsystems/intermapper/imdc
sudo deluser intermapper
```

Installing Intermapper on Debian and Ubuntu Linux Systems

Intermapper is shipped as a Debian package (.deb file) and is available in the following package:

- **64-bit: intermapper_6.6-18.04-1_amd64.deb** - includes 64-bit versions of Intermapper server and Intermapper Flows server. These versions allow systems operating near memory capacity to take advantage of the increased memory space. The 64-bit package can be installed only on a 64-bit Debian release.

> **NOTE:**
>
> Intermapper must be installed in the default location.

The Debian package can be installed using the system's graphical package manager or from a command line as described below.

Installing From a Command Line

Run the following command:

```
sudo dpkg -i "intermapper_6.6-18.04-1_amd64.deb"
```

The curl command above appends the following to the apt sources.list file:

```
#-----------------------------------------------------------------#
#                       OFFICIAL UBUNTU REPOS                      #
#-----------------------------------------------------------------#
###### Ubuntu Main Repos
deb http://am.archive.ubuntu.com/ubuntu/ bionic main restricted
universe
deb-src http://am.archive.ubuntu.com/ubuntu/ bionic main restricted
universe
###### Ubuntu Update Repos
deb http://am.archive.ubuntu.com/ubuntu/ bionic-security main
restricted universe
deb http://am.archive.ubuntu.com/ubuntu/ bionic-updates main
restricted universe
deb-src http://am.archive.ubuntu.com/ubuntu/ bionic-security main
restricted universe
deb-src http://am.archive.ubuntu.com/ubuntu/ bionic-updates main
restricted universe
```

Installing Intermapper Using apt-get

On all modern Debian and Ubuntu systems, you can install Intermapper using apt-get as an alternative to the manual steps above.

1. Add the HelpSystems repository URL to the /etc/apt/sources.list file:

```
echo "deb [trusted=yes]
https://hsdownloads.helpsystems.com/intermapper/debian /" |
sudo tee -a /etc/apt/sources.list
```

    After you import the key, apt remembers it for future releases. You do not need to import it again.

2. Add the GPG key used for signing to APT's keyring using Ubuntu's suggested method:

```
wget -q -O-
https://hsdownloads.helpsystems.com/intermapper/debian/dartwar
e_public_key.asc | sudo tee
/etc/apt/trusted.gpg.d/hsdownloads.helpsystems.com.asc.asc
```

    or the deprecated method

```
wget -q -O-
https://hsdownloads.helpsystems.com/intermapper/debian/dartware_
public_key.asc | sudo apt-key add -
```

Removing An Old or Expired Intermapper Release Signing Key

In the event the Intermapper Debian Repository Release Signing Key is no longer used or expired, it is strongly recommended to cease use of the old key and remove it from the apt keyring.

Find the fingerprint for the key you wish to delete by listing all keys in the apt keyring:

```
sudo apt-key list
```

Example output looks like:

```
/etc/apt/trusted.gpg
------------------
pub   dsa1024 2007-06-12 [SC]
      4E87 6D4B 2C09 45F1 4BC1  65F6 DF7B A8CA 6ACA CF42
uid           [ unknown] Dartware, LLC <info@dartware.com>
sub   elg2048 2007-06-12 [E]

/etc/apt/trusted.gpg.d/debian-archive-bullseye-automatic.gpg
------------------------------------------------------------
pub   rsa4096 2021-01-17 [SC] [expires: 2029-01-15]
      1F89 983E 0081 FDE0 18F3  CC96 73A4 F27B 8DD4 7936
uid           [ unknown] Debian Archive Automatic Signing Key (11/bullseye) <ftpmaster@debian.org>
sub   rsa4096 2021-01-17 [S] [expires: 2029-01-15]

/etc/apt/trusted.gpg.d/debian-archive-bullseye-security-automatic.gpg
--------------------------------------------------------------------
pub   rsa4096 2021-01-17 [SC] [expires: 2029-01-15]
      AC53 0D52 0F2F 3269 F5E9  8313 A484 4904 4AAD 5C5D
uid           [ unknown] Debian Security Archive Automatic Signing Key (11/bullseye) <ftpmaster@debian.org>
sub   rsa4096 2021-01-17 [S] [expires: 2029-01-15]
```

In this example, we want to remove the old info@dartware.com public key whose fingerprint is 4E87 6D4B 2C09 45F1 4BC1 65F6 DF7B A8CA 6ACA CF42.

Using the last eight characters of the fingerprint for the key we want to remove, we can now delete it with:

```
sudo apt-key del 6ACACF42
```

Upgrading Intermapper

When you upgrade an existing Intermapper installation to a newer version, you do not lose data in the InterMapper Settings folder. HelpSystems recommends that you create a backup of that folder before you upgrade, just to be safe. For information on which files to back up, see What is Installed and Where.

Upgrading From a Command Line

On most Debian and Ubuntu releases, you should be able to upgrade to the 64-bit package in a similar manner. You can install the upgrade package using the following commands:

```
cd <directory-containing-deb>
sudo dpkg -i "intermapper_6.6-18.04-1_amd64.deb"
```

On some versions of Ubuntu, you must remove old 32-bit packages using the following commands before you install the new 64-bit package:

```
cd <directory-containing-deb>
sudo dpkg -r intermapper:i386
sudo dpkg -r intermapper-datacenter:i386   #if upgrading from pre-
5.7
sudo dpkg -i "intermapper_6.6-18.04-1_amd64.deb"
```

> **NOTE:**
> At Intermapper version 6.6 the default installation location for Intermapper's program files changes from /usr/local to /opt/helpsystems/intermapper and for Intermapper's data files from /var/local/InterMapper_Settings /var/opt/helpsystems/intermapper/InterMapper_ Settings. On Debian and Ubuntu platforms the installer for IM-6.6 will relocate your installation accordingly.

When you start the new Intermapper version, it uses the old configuration.

> **NOTE:**
> Although Intermapper uses the existing InterMapper Settings directory and the Intermapper database files, HelpSystems recommends that you back up both of these directories before you start the upgrade process.

Java Runtime Environment

A compatible Java JRE is automatically installed with each version of Intermapper server. This file runs the Intermapper client.

Starting Intermapper

Tthe Intermapper user interface (UI) is launched by executing the command *intermapper*. The installation process creates a link to that command in the directory /usr/local/bin - provided that the directory exists. To start the Intermapper UI, issue the command /usr/local/bin/intermapper. If that path does **not** exist, the path at which the link has been created can be seen in the output of the installation command and that path should be used instead.

> **NOTE:**
> During installation, /usr/bin/local/intermapper would be created if /usr/local/bin already existed. If /opt/local/bin existed, then /opt/local/bin/intermapper will be created.

> **NOTE:**
> If you cannot run the command above, see Configuring Intermapper Remotely.

Starting Intermapper Flows

The fastest way to start using Intermapper Flows is to read Installing Intermapper Flows and Intermapper Flows Overview.

Intermapper Flows does not run by default. Use the Intermapper Control Center to start it to access flows information.

When Intermapper Flows first starts, it creates a 10 GB flows database. You can change the database size and location to fit your needs.

Intermapper Flows does not include a graphical user interface. However, you can access flow information either through the built-in Intermapper client or through Intermapper RemoteAccess.

You can open the Flows window by right-clicking a device on a map. When you do this, you can see information about the traffic on the selected device.

If you purchased Intermapper with Flows, you can use the serial number to register your installation. If you are only trying Intermapper out, your evaluation serial number allows you to receive data from one exporter (source of NetFlow or sFlow data).

Intermapper Flows is not running by default. For information on starting Intermapper Flows, see Managing Intermapper Daemons.

You do not need to configure Intermapper DataCenter if you access it from the local machine. To enable external access and more advanced configuration, go to https://localhost:8182.

Intermapper DataCenter ships with a self-signed SSL certificate. Your browser displays a certificate warning when you visit the DataCenter web interface. You can select the certificate and safely continue to navigate to the page. The Intermapper DataCenter Settings page allows you to upload your own certificate rather than relying on the less secure certificate shipped with Intermapper.

What is Installed and Where

Intermapper components are installed as separate daemons. This means that after you start them, they automatically start running when your computer starts, before any users are logged in, and continue running even when no user is logged in. For information on managing the daemons, see Managing Intermapper Daemons.

The installer creates files and folders at the following default locations:

File Path	Contents
/var/opt/helpsystems/intermapper/InterMapper_Settings	Intermapper settings
/opt/helpsystems/intermapper/bin/	Intermapper Server binaries
/opt/helpsystems/intermapper/bin/intermapperd	Intermapper Server executable
/opt/helpsystems/intermapper/bin/intermapperauthd	Intermapper authorization delegate
/opt/helpsystems/intermapper/bin/intermapperflows	Intermapper Flows server
/opt/helpsystems/intermapper/man/man1/intermapperd.1	Documentation
/opt/helpsystems/intermapper/man/man1/intermapperauthd.1	Documentation
/opt/helpsystems/intermapper/share/intermapper	Intermapper support files
/opt/helpsystems/intermapper/imdc	Intermapper DataCenter folder
/var/opt/helpsystems/intermapper/InterMapper_Settings/Flows	Intermapper Flows folder
/var/opt/helpsystems/intermapper/InterMapper_ Settings/Flows/SESSIONDB	Default directory for the flow database

File Path	Contents
/var/opt/helpsystems/intermapper/InterMapper_Settings/Flows/flows.conf	Configuration file for Intermapper Flows
/var/opt/helpsystems/intermapper/InterMapper_Settings/Flows/services	List of port numbers and service names
/opt/helpsystems/intermapper/share/intermapper/imflows_configure.sh	The configuration script

When Intermapper first starts, the `Intermapper_Settings` folder is created and is located in the `/var/opt/helpsystems/intermapper/Intermapper_Settings` folder. This folder stores preferences, maps, and data that Intermapper collects from your network. You can change the location of the InterMapper Settings folder by editing Intermapper's configuration file, which is `/usr/local/etc/intermapperd.conf`).

The installer also creates the `/opt/helpsystems/intermapper/imdc` folder, which contains the DataCenter files, including data and configuration files.

As of Intermapper version 6.6, the three Intermapper services (intermapperd, imflows, and imdc) are managed by systemd on all Linux systems that have systemd active at the time Intermapper is installed. The systemd service files for these services are located in the /opt/helpsystems/intermapper/share/intermapper/units directory. These files are copied to the appropriate run-time location during the installation process. The systemv-style startup scripts (as used in earlier Intermapper versions) are supplied in the/opt/helpsystems/intermapper/share/intermapper/sysv.init directory. These files are only installed if systemd is not managing the Linux host when Intermapper is installed.

The `intermapperauthd` file is a setuid-root program. The `intermapperd` daemon (running as a non-privileged user) makes requests to `intermapperauthd` to access low-level network services, such as ICMP ping and low-numbered network ports.

The installer creates a user called intermapper and a group called intermapper on your system, if they do not exist already. The new user and group are the owners of the configuration and log files in the InterMapper Settings and Intermapper DataCenter folders. These log and configuration files are not granted public read access. If you want to read these files, add yourself to the intermapper group or use `sudo` in your commands.

Managing Intermapper Daemons

To start and stop individual daemons, run the following startup scripts:

```
sudo systemctl start intermapperd.service
sudo systemctl start imdc.service
sudo systemctl start imflows.service
```

```
sudo systemctl stop intermapperd.service
sudo systemctl stop imdc.service
sudo systemctl stop imflows.service
```

To look up the version of Intermapper that is installed, run the following command:

```
/opt/helpsystems/intermapper/bin/intermapperd -v
```

To check if Intermapper daemons are currently running, run the following commands:

```
systemctl status intermapperd.service
systemctl status imflows.service
systemctl status imdc.service
```

Configuring Intermapper Remotely

If your Intermapper server does not have a graphical interface installed, you can use Intermapper RemoteAccess to administer the Intermapper server. Before the Intermapper server can accept connections from Remote Access, launch the server with a command line argument, telling it where to connect from. Run the following commands* to manually stop the intermapperd process and restart using the -A option:

```
sudo systemctl stop intermapperd.service
sudo /opt/helpsystems/intermapper/bin/intermapperf -f
/usr/local/etc/intermapperd.conf -A "remote:password@*.*.*.*"
```

*For installations that do not have sudo installed, it is not required. The commands must be run as root; the sudo command can be omitted.

The Intermapper server accepts Administrator connections from any IP address (*.*.*.*) with the user identifier of remote and the password of password. Launch Intermapper RemoteAccess on another computer, log into this new Intermapper system, and set up your Intermapper users and groups.

Setting a Password for Intermapper DataCenter

Intermapper DataCenter also requires initial configuration.

The Intermapper DataCenter configuration page, accessed from a browser, requires its own password.

Run the following commands:

```
sudo /opt/helpsystems/intermapper/imdc/sbin/imdc stop
sudo /opt/helpsystems/intermapper/imdc/sbin/imdc --password=
[password]
sudo /opt/helpsystems/intermapper/imdc/sbin/imdc start
```

Now you can connect to Intermapper from one of the following URLs:

- https://localhost:8182/settings.html
- [https://*IPaddress*:8182/settings.html](https://IPaddress:8182/settings.html)
- [https://*domain name*:8182/settings.html](https://domainname:8182/settings.html)

Uninstalling Intermapper

To remove Intermapper from your system, use the system's graphical package manager or run the following command:

```
sudo dpkg -r intermapper
```

When you uninstall Intermapper, the settings and data files are not removed. If you do not plan on reinstalling Intermapper and want to remove it completely, manually remove the InterMapper Settings, Intermapper Flows, and Intermapper Datacenter folders or run the following commands:

```
sudo dpkg --purge intermapper
sudo rm -rf /var/opt/helpsystems/intermapper/InterMapper_Settings
sudo rm -rf /opt/helpsystems/intermapper/imdc
sudo deluser intermapper
```

Installing Intermapper on macOS Systems

To download Intermapper on a macOS system:

1. Download the installer to a convenient location. If you are a current user, access the download from the HelpSystems website (https://community.helpsystems.com). If you are a new customer, use the link in email you received to download Intermapper.
2. Double-click the **.dmg** installer file to open the disk image.
3. Double-click the **Intermapper-6.6.pkg** file and follow the instructions. You must be an Administrator to install this software.
4. When the installer finishes, it launches the Intermapper client to view and configure your Intermapper server.

Advanced Installation Instructions

To install Intermapper from the command line, run the following command and double-click your copy of Intermapper to launch the client to view and configure your Intermapper server:

```
sudo installer -pkg "InterMapper-66.pkg" -target /
```

You can also use Intermapper RemoteAccess to administer the Intermapper server from another computer. However, before the server can accept connections from Remote Access, you must tell it where to connect from using the following commands:

```
sudo /usr/local/share/intermapper/Stop.sh
sudo /usr/local/bin/intermapperd --setenv
"Admin=remote:password@*.*.*.*"
sudo /usr/local/share/intermapper/Start.sh.
```

The `--setenv Admin "remote:password@*.*.*.*"` option tells Intermapper server to accept administrator connections from any IP address `(*.*.*.*)` with the user ID of `remote` and the password of `password`. After you restart the server, launch Intermapper RemoteAccess on another computer, log into the Intermapper server to set up the Admin user with a strong password, and set the allowed addresses for the remote server access list.

What is Installed and Where

Intermapper components are installed as separate macOS daemons. This means that after you start them, they automatically start running when your computer starts, before any users are logged in. It continues to run even when no user is logged in. For information on managing these daemons, see Managing Intermapper Daemons. The installer creates the following files and folders:

File Path	Contents
/Library/Application Support/InterMapper Settings	Intermapper settings
/Applications/InterMapper.app	Intermapper application folder
/usr/local/bin/intermapperd	Intermapper Server executable
/usr/local/bin/intermapperauthd	Intermapper authorization delegate
/usr/local/bin/intermapperflows	Intermapper Flows server binaries
/usr/local/share/man/man1/intermapperd.1	Documentation
/usr/local/share/man/man1/intermapperauthd.1	Documentation
/usr/local/share/intermapper/Start.sh	Script to start Intermapper Server
/usr/local/share/intermapper/Stop.sh	Script to Stop Intermapper Server
/usr/local/share/intermapper/Extension.sh	Script to start/stop Later 2 server
/usr/local/share/intermapper/Uninstaller.sh	Script to uninstall Intermapper application
/usr/local/share/intermapper/TestScript.pl	
/usr/local/share/intermapper/relaunch	Executable to relaunch Intermapper Server
/Library/Application Support/InterMapper Settings/Flows	Intermapper Flows folder
/Library/Application Support/InterMapper Settings/Flows/SESSIONDB	Default directory for the flow database
/Library/Application Support/InterMapper Settings/Flows/flows_knowngood.conf	The last known good configuration file
/Library/Application Support/InterMapper Settings/Flows/flows.conf	Configuration file for Intermapper Flows
/Library/Application Support/InterMapper Settings/Flows/services	List of port numbers and service names
/usr/local/imdc	Intermapper DataCenter folder

When Intermapper first starts, the `InterMapper Settings` folder is created in the `/Library/Application Support/InterMapper Settings` directory. This folder stores settings and data that Intermapper collects from your network.

Intermapper DataCenter creates the `/opt/helpsystems/intermapper/imdc` folder that contains the core IMDC files, including configuration and log files.

For macOS 10.7 and higher, the following installation files are created:

- `/var/db/receipts/com.dartware.InterMapperPkg.bom`
- `/var/db/receipts/com.dartware.InterMapperPkg.plist`

The following system start-up configuration files are also created:

- `/Library/LaunchDaemons/com.dartware.InterMapperServer.plist`
- `/Library/LaunchDaemons/com.dartware.InterMapperDataCenter.plist`
- `/Library/LaunchDaemons/com.dartware.InterMapperFlows.plist`

The `intermapperauthd` file is a setuid-root program. The `intermapperd` daemon (running as a non-privileged user) makes requests to intermapperauthd to access low-level network services, such as ICMP ping and low-numbered network ports.

The `Start.sh`, `Stop.sh`, and `Uninstaller.sh` scripts are described in detail below. The `Extension.sh`, `TestScript.pl`, and relaunch scripts are used internally by Intermapper for diagnostic purposes.

The installer creates the intermapper user and the intermapper group on your system, if they do not exist already. The new user and group configuration and log files are stored in the InterMapper Settings and Intermapper DataCenter folders. These files are not granted public read access. If you want to read these files, add yourself to the intermapper group or use sudo in your commands.

Managing Intermapper Daemons

You can start and stop Intermapper daemons with the Intermapper Control Center, available on the right side of the macOS menu bar. The Intermapper and Intermapper DataCenter daemons are started and stopped simultaneously. You can also manually start and stop individual daemons using the following commands:

```
# commands to start InterMapper, the DataCenter, and Flows
sudo /usr/local/share/intermapper/Start.sh
sudo /usr/local/share/intermapper/Start.sh imdc
sudo /usr/local/share/intermapper/Start.sh imflows
```

```
# commands to stop InterMapper, the DataCenter, and Flows
sudo /usr/local/share/intermapper/Stop.sh
sudo /usr/local/share/intermapper Stop.sh imdc
sudo /usr/local/share/intermapper/Stop.sh imflows
```

You can look up the version of Intermapper that is installed from the Intermapper Control Center. You can also start a web browser and navigate to the web interface for Intermapper DataCenter. The version number is displayed at the bottom of the page. You can also run the following command:

```
/usr/local/bin/intermapperd -v
```

To check if Intermapper daemons are currently running, run the following commands:

```
ps acux | grep intermapperd
ps acux | grep intermapperflows
ps acux | grep imdc
```

Starting Intermapper Flows

The fastest way to start using Intermapper Flows is to read Installing Intermapper Flows and Intermapper Flows Overview.

Intermapper Flows does not run by default. Use the Intermapper Control Center to start it to access flows information.

When Intermapper Flows first starts, it creates a 10 GB flows database. You can change the database size and location to fit your needs.

Intermapper Flows does not have its own graphical user interface. However, you can access flow information either through the built-in Intermapper client or through Intermapper RemoteAccess. You can open the Flows window by right-clicking a device on a map. When you do this, you can see information about the traffic on the selected device.

If you purchased Intermapper with Flows, you can use the serial number to register your installation. If you are only trying Intermapper out, your evaluation serial number allows you to receive data from one exporter (NetFlow or sFlow data).

You do not need to configure Intermapper DataCenter if you access it from the local machine. To enable external access and more advanced configuration, go to https://localhost:8182.

Intermapper DataCenter ships with a self-signed SSL certificate. Your browser displays a certificate warning when you go to the DataCenter web interface. You can select the certificate and safely continue to navigate to the page. The Intermapper DataCenter Settings page allows you to upload your own certificate rather than relying on the less secure certificate shipped with Intermapper.

Uninstalling Intermapper

To remove Intermapper from your system, run the following command:

```
sudo /usr/local/share/intermapper/Uninstaller.sh
```

When you uninstall Intermapper, the settings and data files are not removed. If you do not plan on reinstalling Intermapper and want to remove it completely, manually remove the InterMapper Settings, Intermapper Flows, and Intermapper DataCenter folders using the following commands:

```
sudo rm -rf "/Library/Application Support/InterMapper Settings"
sudo rm -rf /usr/local/intermapper/imdc
```

Installing Intermapper RemoteAccess

Intermapper RemoteAccess is packaged as a self-extracting installer, which contains the necessary programs and support files.

Microsoft Windows Systems

Double-click the `Intermapper_RemoteAccess_Setup_6.6.exe` file and follow the instructions.

macOS Systems

Double-click the `Intermapper_RemoteAccess_6.6.dmg` file to open the disk image. Drag the Intermapper RemoteAccess icon into the Applications folder or onto your Desktop. Double-click the icon to start Intermapper RemoteAccess.

Linux Systems

To start the Intermapper RemoteAccess installer, run the following command:

```
$ sh ./Install_InterMapper_RemoteAccess_6.6.bin
```

To launch Intermapper RemoteAccess, run the following commands:

```
$ cd InterMapper_RemoteAccess_6.6
$ ./intermapper_remoteaccess.sh
```

Alternatively, if you are using a system that supports the freedesktop.org Desktop icon spec, the installer script should place an icon on your desktop for Intermapper RemoteAccess. Double-click the Intermapper RemoteAccess to start the program.

Java Runtime Environment

For each of Windows and macOS the Intermapper RemoteAccess package includes and installs a compatible JRE which runs the Intermapper client. The Linux Intermpper RemoteAccess package (a self-extracting installer) does not deliver a Java JRE: it will attempt to use the JRE supplied with an Intermapper Server installation on the same host, or, failing that, a Java Runtime from the host environment.

Uninstalling Intermapper RemoteAccess

macOS Systems

To uninstall Intermapper RemoteAccess from a macOS system:

1. Open the **Applications** folder.
2. Drag the **Intermapper RemoteAccess** icon to the trash.
3. Manually remove files that have **com.dartware.*.plist** or **com.helpsystems.*.plist** in the file names from the **../Library/Preferences** folder.

Microsoft Windows Systems

To uninstall Intermapper RemoteAccess from a Microsoft Windows system:

1. Open the **Control Panel**.
2. From **Programs and Features**, click **Intermapper RemoteAccess**.
3. Click **Uninstall** and follow the prompts.

Linux Systems

Delete the **Intermapper_Remote Access_6.6** directory and the Intermapper RemoteAccess icon from your desktop.

After You Are Done

Congratulations! Intermapper is now installed. Read the following for additional information and your next steps:

License and Firewall Information

HelpSystems redesigned the licensing mechanism and license key formats. You need a license key in the new format to run a current version of Intermapper. If you are a customer with a current maintenance contract, you need to request a new license key. If no valid license key is found, a License Key Required window is displayed. Click **Request a trial license key** and complete and submit the form. Intermapper connects to a web service, retrieves a key, and inserts it in the Register Intermapper Server window. Click **Register** to apply the key.

You might need to adjust your firewall settings to allow access from either Intermapper RemoteAccess (defaults to TCP port 8181) or your web browser (port 80). You might also need to open the UDP port 2055 to use Intermapper Flows.

Other Resources

For more information, see the following:

- [Intermapper Quick Start Guide](#)
- [Intermapper User Guide](#)
- [Intermapper DataCenter Tech Note](#)

Contacting Us

For additional resources, or to contact Technical Support, visit the HelpSystems Community Portal at https://community.helpsystems.com.