



# Ignition Server User Manual



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## About Ignision Server

Ignision Server fulfills several roles traditionally compartmentalized into either separate products or separate components of a product suite. Ignision Server includes a powerful session broker that can deploy macOS desktops and applications from one or more servers. It can scale from a single server to a large pool of cooperative servers. Regardless of the size of an organization there is an Ignision Server offering and deployment strategy for it. Ignision Standard Edition is optimized for smaller businesses to some medium sized businesses. With Ignision Standard Edition, many of the complexities needed to run a robust server with the delivered feature set have been taken care of automatically. For organizations with complex deployments or complex deployment needs, Ignision Enterprise Edition is designed to provide access to many complex configuration options as well as being highly customizable.


Ignision Standard Edition and Ignision Enterprise Edition both include the same Ignision Server core and thus can deploy and deliver a macOS desktop with built-in features such as load balancing. Some features such as health monitoring, central management, network auditing, network logging, scripting and replication require a complex setup and configuration process, which Ignision Enterprise Edition is designed to deliver. Almost all Ignision Standard Edition and Ignision Enterprise Edition features are optional and do not need to be configured or utilized allowing an organization to enable some, all or none of them at installation time. Ignision Standard Edition and Ignision Enterprise Edition features are included with the selected product bundle making the licensing, maintenance, cost and understanding of each product simpler than traditional server products.

Ignision Standard Edition and Ignision Enterprise Edition both utilize Aqua Connect's Ion Protocol. The Ion Protocol is a specially designed accelerated protocol for delivering macOS, Windows and various other graphical system interfaces over a remote network link such as the Internet. Ion includes many features in the protocol such as load balancing, network fail over and network link quality detection.

## Features

With Ignision Standard Edition and Ignision Enterprise Edition providing the same Ignision Core, a list of different features included in the product bundle is listed below. The Ignision Enterprise Edition includes all the features of the Ignision Standard Edition while enabling the usage of several more complex features. Entries in bold will be Ignision Enterprise Edition only.

- Diagnostic Tool
- Auto Keyboard Mapping
- Remote Home Folders Support (NFS, SMB/CIFS)
- JSON Support

- 
- Custom SSL/TSL Certificate Support
  - RSA 4096 AES 512 CBC Encryption
  - Encryption On/Off
  - Server Fingerprint (Server Authentication)
  - Multiple Connections (Ion)
  - Directory Services Support (LDAP, OD, AD)
  - Session Shadowing (Ignision)
  - Server Lockdown Tools
  - HTML5 Client
  - Memory/CPU Use Optimization
  - IONC Client Data File JSON Support
  - Networking Printing
  - Display Quality Control (Ion)
  - Initial Client Scripting
  - IONC File Modification Detection and Custom IONC Files (Ion Client Configuration Files)
  - On-Console Mode (1:1 Remote Control Session)
  - Hide Console Mode (1:1 Remote Session With Console Locked)
  - Remote Desktop Gateway Support
  - RDP 8.1 Client Support (Clients Older Than XP SP2 Will Not Work At This Time)
  - **Load Balancing**
  - **Failover**
  - **Geo-Location Detection (Geo-Load Balancing)**



## **System Requirements**

### **Hardware (Client)**

- Operates on all hardware that supports 32-bit and/or 64-bit versions of Windows 7, 8, 8.1, or 10 OR
- Operates on all hardware that supports OS 10.8 and above

### **Hardware (Server Connecting to)**

- Intel Core 2 Duo 2 Ghz processor with at least 4 GB of physical memory installed (Recommended hardware is either a Mac Mini Server or a Mac Pro)
- A minimum of 1 GB of RAM per remote user
- 100 MB of free disk space per user to operate normally
- Free space for applications
- Free space for temporary storage of application operating data
- Extra memory for each active user based on applications and data usage

### **Software (Ion Client)**

- Apple Mac OS X software (v.10.8 and higher) OR
- Microsoft Windows software (Windows 7 and higher)

### **Software (Server Connecting to)**

- Apple Mac OS X software v.10.10.2 or higher OR v.10.11.1 or higher OR v.10.12.1 or higher
- Ignision software



# Getting Ready for Ignision Server

## Preparing Your Network and Internet Connection

Before installing Ignision Server, there are a few items pertaining to your network and Internet connection that must be setup properly. Listed below are those items along with details of how they should properly be setup.

1. **Physically Connected:** Although this may seem obvious, we must reiterate that your server must be physically connected to your network infrastructure via Ethernet. Ignision Server requires a stable wired network connection to your local area network. Running a server via Wireless networking is not supported.
2. **IP Address:** A constant non-changing IP address is required by Ignision Server either by assigning a static IP address or by using a DHCP reservation.
3. **Web Proxy:** The server must be able to connect to a https server on the Internet using one of these methods:
  - a. Directly
  - b. NAT/Firewall
  - c. System wide proxy server setting (no user authentication)

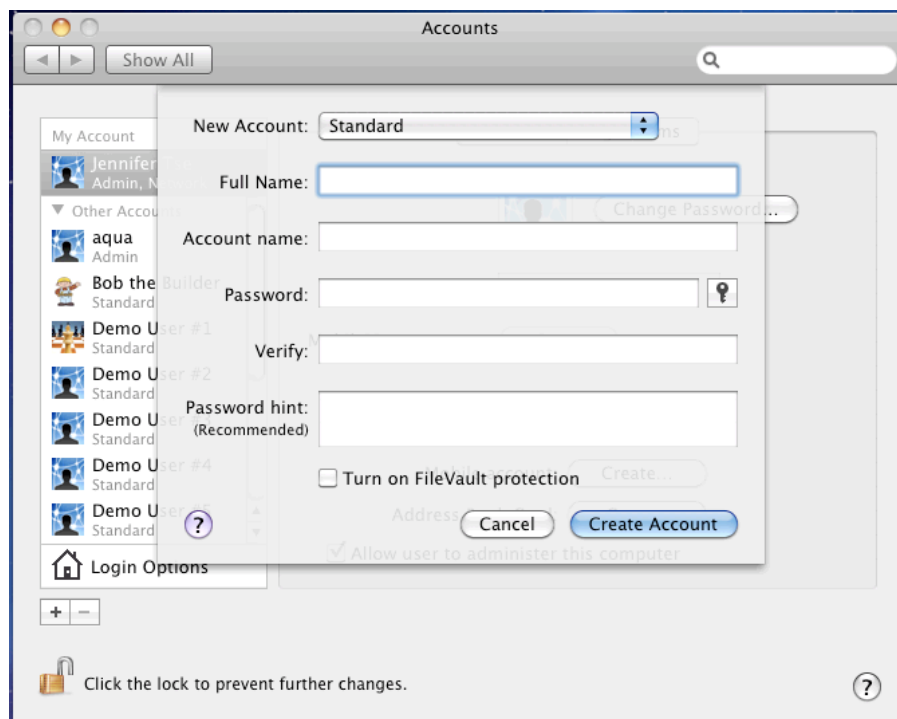
If using Directory Services:

1. **DNS:** Ignision Server requires the Server's Fully Qualified Domain Name (FQDN) must be resolvable by both a forward lookup and a reverse lookup.
2. **Time:** All servers that will interact with one another in some fashion should have the same time source. Some examples of servers that may interact with your Apple Server would be Open Directory Server, Active Directory Server, File Server, LDAP Server, etc. Active Directory clients and servers must use the same time server. If a unanimous time source is not available, the server's times must be in sync within a 3-minute window.
3. **If Using Directory Services:** The Directory Servers names, forests, domains and associated records must be resolvable by both forward and reverse lookups. The forests and domains must not contain the ".local" top level name.

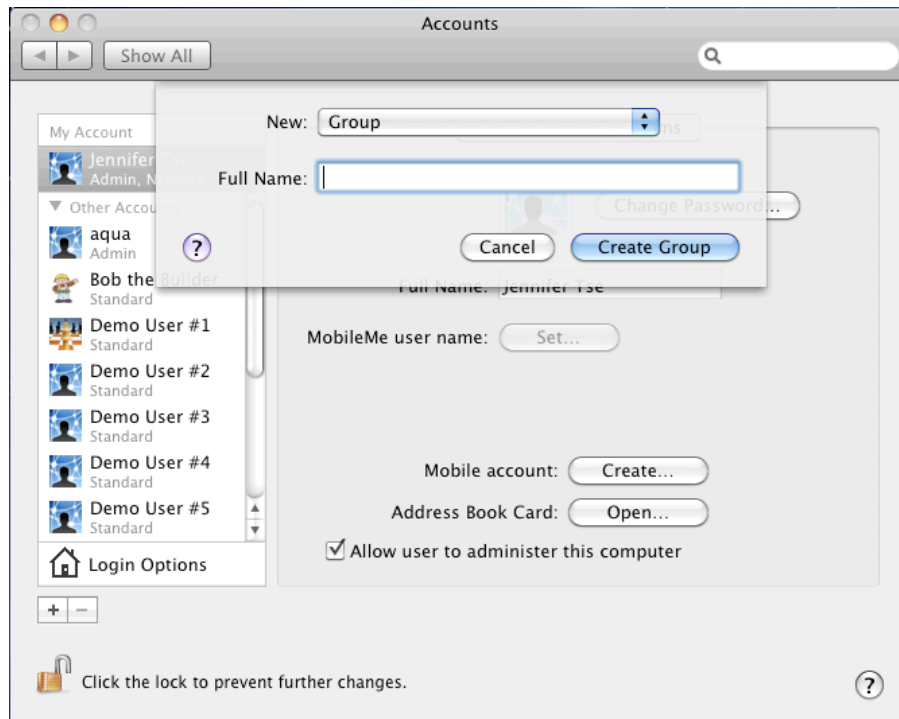
## Deciding How to Create and Manage Users and Groups

When configuring and managing Ignision Server users, there are many options that are available. Below you will find a non-authoritative list you will find containing details about setting up and managing Local, Open Directory and Active Directory users and groups. If you are interested in other ways to manage groups (i.e. LDAP), or other situations where the options described in this list are not applicable, please feel free to contact Aqua Connect support for further information.

1. **Local Users and Groups:** Local Ignision Server Users can be setup via System Preferences. To do so, launch Finder and then launch System Preferences. Click on Accounts and Unlock it if necessary. Then add a new user by selecting the + button on the bottom left hand side.



To group your System Preferences users, select the + button on the left hand side. From the drop down list, select add a new Group. After creating the group, you will see a list of all your local user accounts and can select which users you would like to apply to the newly created group.



2. **Open Directory Users and Groups:** Ignision Server can be easily integrated into your Open Directory environment whether it is on the same server as Ignision or on an entirely separate server.
3. **Active Directory Users and Groups:** Ignision Server can be easily integrated into your Active Directory environment. We support the following Active Directory implementations:
  - a. If the Mac server is bound to AD in cached mode and there are no remote home folders
  - b. Using Centrify's Server Suite, if the Mac server is bound to AD in mapped mode and assigned to a local account with local home folders
  - c. Using Centrify's Server Suite, if the Mac server is bound to AD in mapped mode and assigned to a local account with remote home folders over a Windows file share (SMB or CIFS)





# Installing Ignision Server

## Retrieving Installation Files and Keys

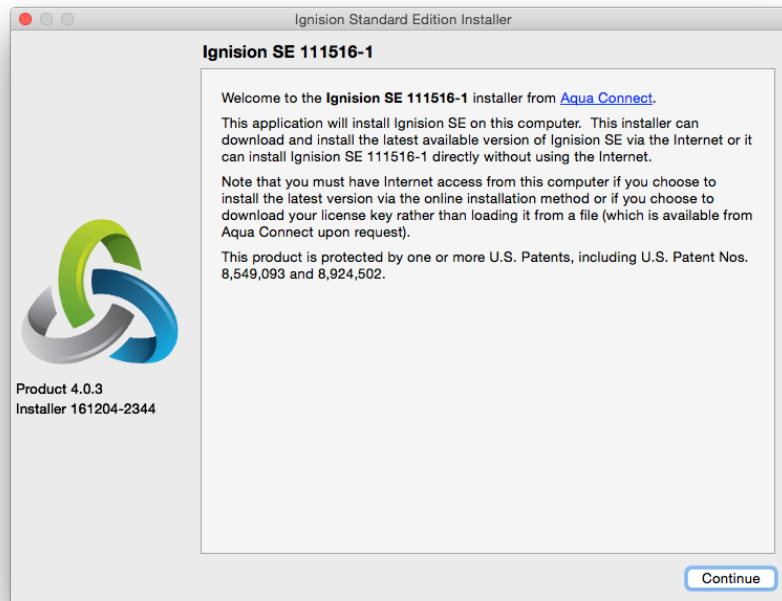
Ignision Server Installation Files can be retrieved from Aqua Connect's website. Please contact your sales or support representative if you require the link to the download page. Ignision Server License Keys can be obtained only through an authorized sales representative. Please contact them if you require assistance.

During the installation process, no other applications should be running and no other users should be logged in. If you have previously installed Aqua Connect Remote Desktop Services on your server, use that version's uninstall feature prior to installing Ignision Server, as the two products are not compatible. When the installation process is complete, the server will prompt you to restart. Failing to restart after the installation process will yield a very unstable system that may cause data corruption or even data loss.

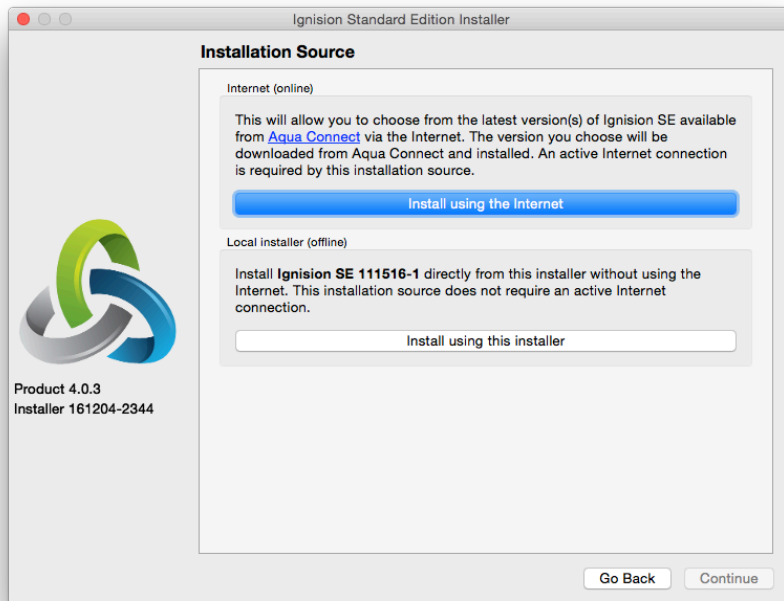
Once downloaded, open the disk image container by launching it. This will mount the disk image revealing the installer, "Installer.app." Double-click the installer to install Ignision Server.

## Installation

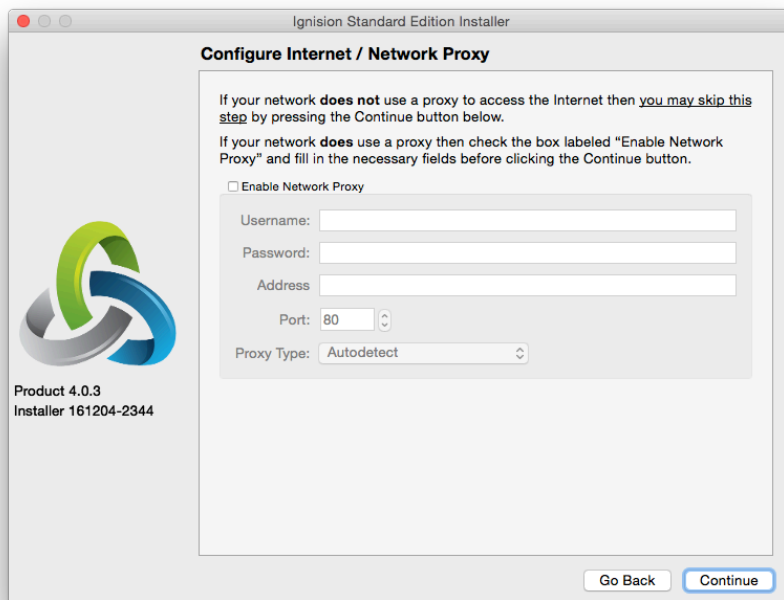
After downloading the product from the link that your Aqua Connect Sales Consultant gave you, double-click on the icon in order to start installing the product. The installer will display a welcome and introduction screen. The version number of the product that you will be installing can be found at the left of the screen. Proceed by pressing **Continue**.



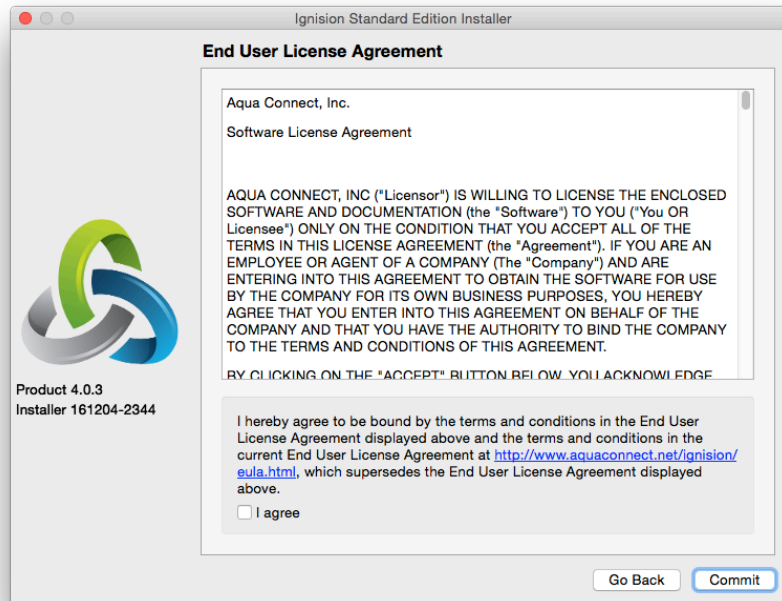
The next screen will offer you the option to use either the Online or the Offline method in order to install Ignision. Choose the Online method if your Ignision Server has access to the internet. This method will ensure you have the most recent update for Ignision when doing your installation. If your Ignision Server does not have internet access (e.g., if you are in a closed network), choose the Offline method. You will install the version of Ignision that was the most updated at the time the installer was created. This is also where you can import the license file that your Aqua Connect Sales Consultant sent you for Offline installation. Then click **Continue**.



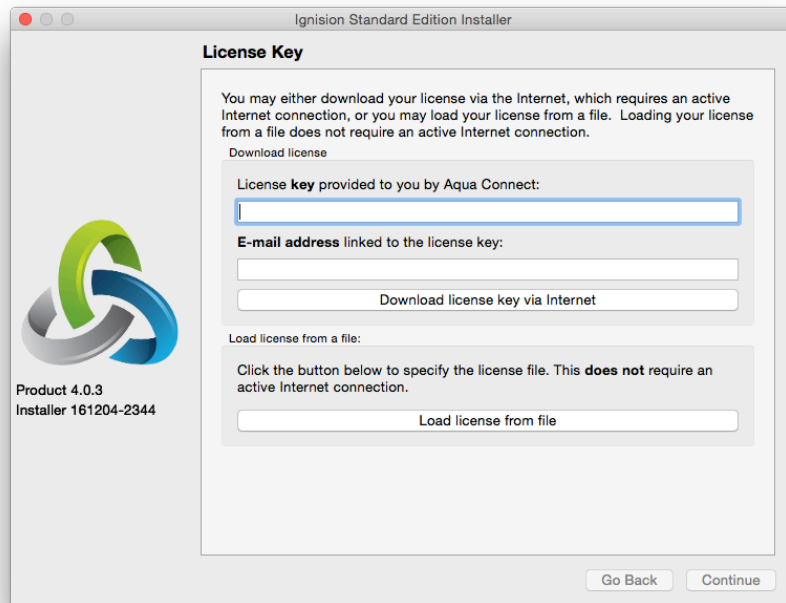
At this screen, you will be able to choose if you would like to use a Network Proxy. If you do, check the box and fill out the appropriate information, including User Name, Password, Server Address, Port and Proxy Type. If you do not want to use a network proxy or have filled out the information needed, click **Continue**.



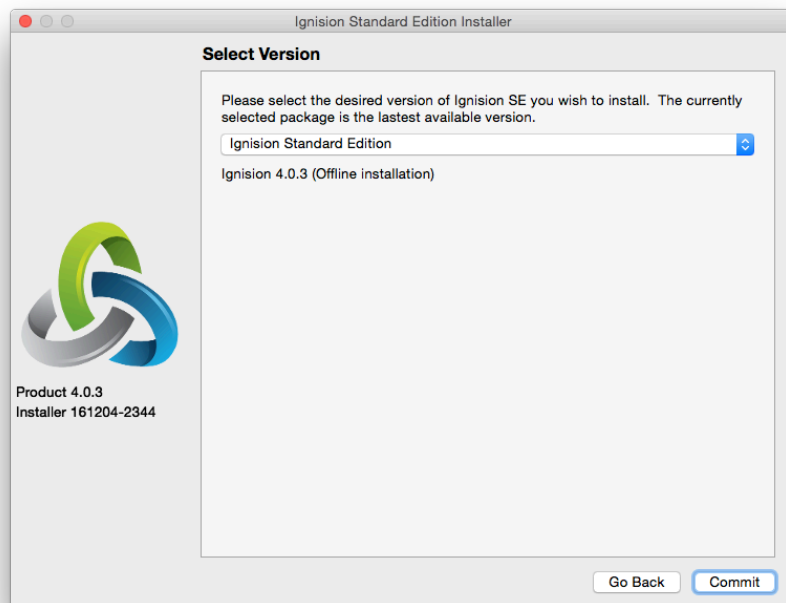
Before continuing further, you will need to read the End User License Agreement (EULA) and click the box that states that you agree with it. If you do not agree, a popup box will appear preventing you from going any further with the installer. You will need to go back and check the box to proceed. Once you have done so, click **Commit**.



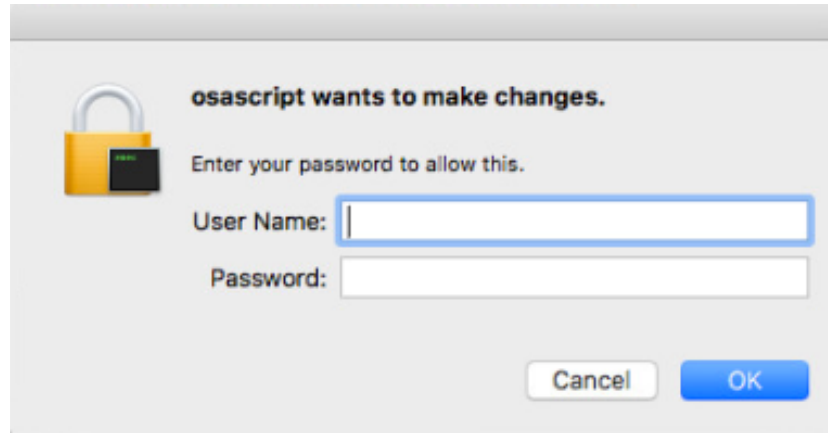
This screen is where you can add the License File or the License Key that was sent to you by your Sales Representative. Copy and paste your license key in the box in order to download it from the internet. The key is case-sensitive so make sure you enter it exactly as written. You will also need to enter in the email address assigned to the key. Once you have done so, click Download License Key Via Internet. If you would prefer to add a License File instead, click on Load License From File. This installation option does not require access to the internet. Once you are successful, a popup box will appear stating that the key is registered to you, along with the amount of licenses you have and the expiration date of your license. Click **OK** and then **Continue** to move on to the next section.



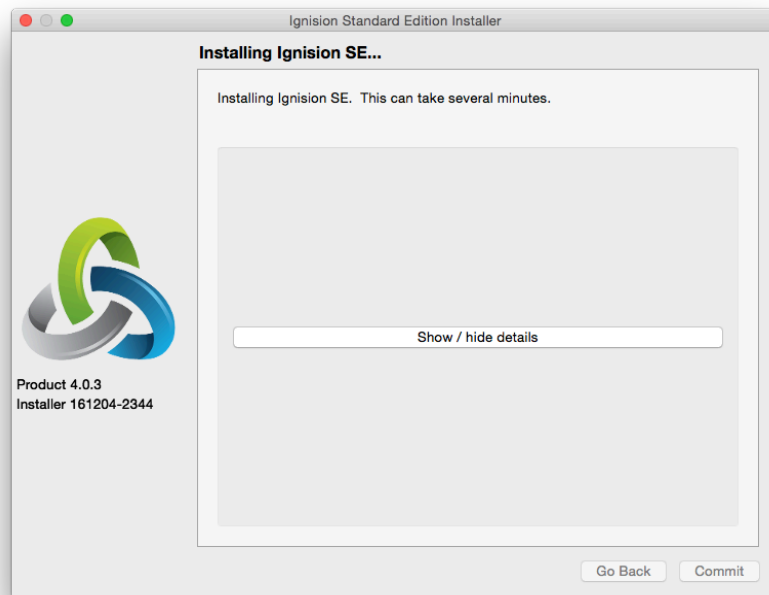
Now you can select the desired version and package of Ignision you wish to install via the dropdown menu. The currently selected package is the latest available version. Once you have made your choice, click **Commit** to move to the next screen.



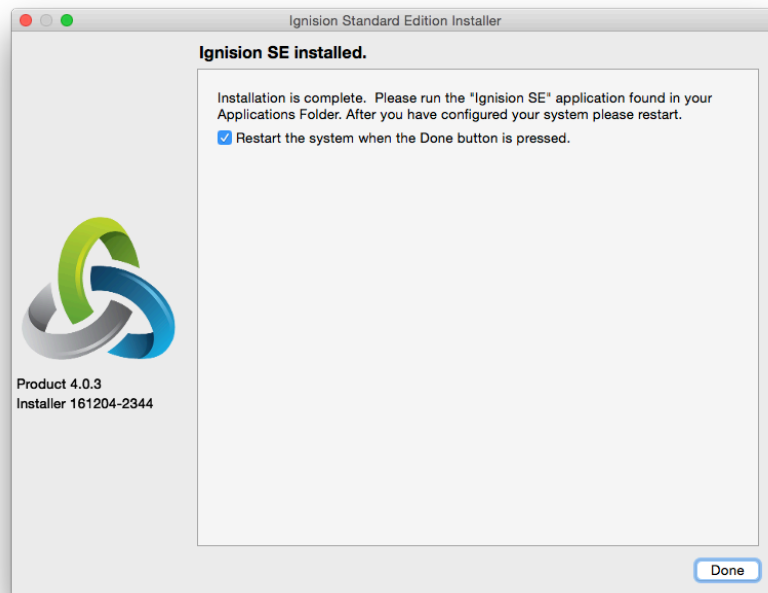
An installation screen will now appear. You may be prompted to enter in an admin user name and password before installation occurs. The window that appears will look similar to the screenshot below.



If you would like to see the Installation Messages the installer is creating, click on Show/Hide Details. Once it is finished installing, click **Commit** as soon as you are able to.



Now Installation is complete. Once you have configured your system, please reboot your machine. If you would like the Installer to reboot your machine automatically for you once installation is complete, check the box to restart when finished and click Done to finish the installation.





## Uninstallation

If you need to uninstall Ignision Server on your Mac hardware, you will currently need to use the Terminal application to do so. A GUI version will be included with the installer in the future. Perform the following steps on your Ignision Server:

1. Download the uninstaller script from [http://www.aquaconnect.net/downloads/uninstall\\_ignision.tar.bz2](http://www.aquaconnect.net/downloads/uninstall_ignision.tar.bz2) and save it to your Downloads folder.
2. Open a terminal by holding down the Control key and pressing the space bar. This will pop up Spotlight Search. Type terminal into spotlight search and press enter. This will open the Terminal application. Enter the following commands in the terminal:

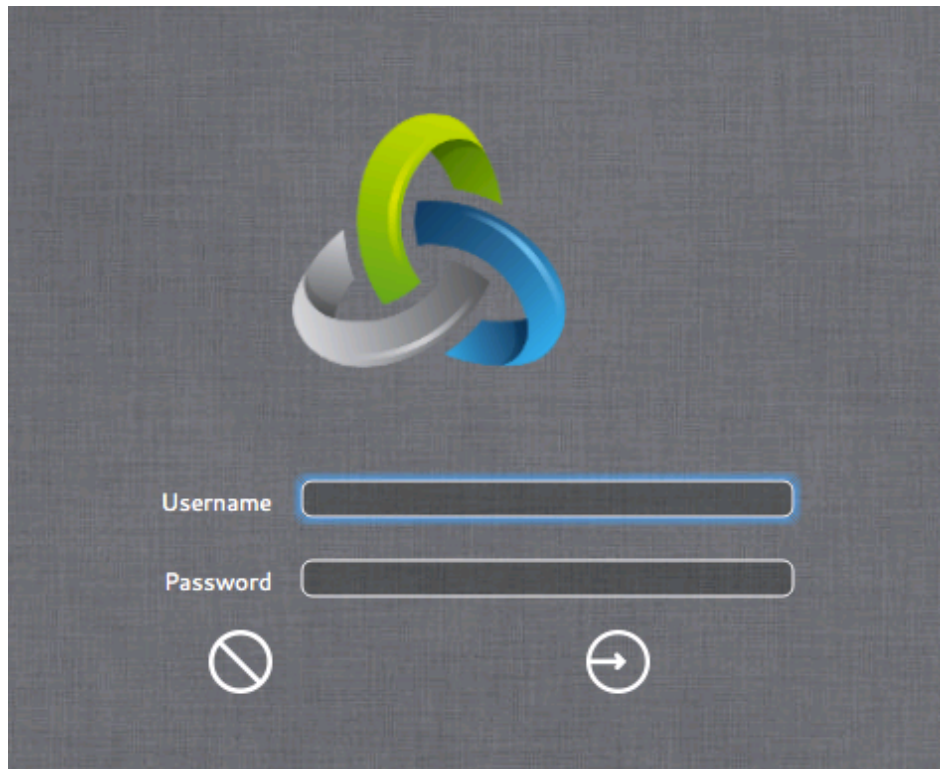
```
cd ~/Downloads
tar xvf uninstall_ignision.tar.bz2
sudo ./uninstall_ignision.sh
rm ./uninstall_ignision.sh uninstall_ignision.tar.bz2
```
3. Reboot the machine.



# Creating Connections to an Ignision Server

## Setting Up the Server

Prior to letting any of your users connect to the Ignision Server, you will need to make sure that the server is up and running. When the Ignision Server boots up, it make take anywhere from a few seconds to two minutes in order to load up. If you try to connect too early, you may receive various error messages. When everything is ready to go on the Ignision Server, you will see a window that looks like the image shown below.



If you would like to log in to the Console, enter in a valid User Name and Password and click on the arrow. If you would like to reset what you wrote in the fields, click on the slash button.

To Shut Down or Reboot the Server, you may need to type in an admin user name and password before the server will let you do so. Those options are currently available in the Apple Menu and will eventually be added to the Ignision session as well.

If you do not want to log in to the Console, you do not need to do anything further on the server and can now log in users remotely.



## Establishing Connections

Since Ignision Server supports multiple clients, the first thing to do is to decide which protocol you would like to use to establish a connection. Ignision Server currently supports the Ion Protocol, RDP and AAP, which all have their own benefits. Below is a list of all of the clients that Aqua Connect has tested.

### Recommended Ion Protocol Software

Available only via the Ion Client

### Recommended RDP Client Software

Windows®

- Microsoft Remote Desktop for Windows

Linux®

- Remmina (Version 1.20 and newer)

Mac®

- Microsoft Remote Desktop for Mac (Version 8.0.36 and newer)

### Recommended AAP Client Software

Available only via the Ion Client

**Note:** Contact the developer of any program listed above for details about acquiring and installing the software. For other handheld devices, contact the manufacturer for a specific device to inquire whether that device is RDP-compatible or can be so configured.



## Client Connection Examples

Since Ignision Server works with many types of different client software, we have included some examples of how to connect using the most widely used programs. Below you will find examples of how to use the Ion Client for Mac and Windows, Microsoft Remote Desktop Connection for Mac and Microsoft Remote Desktop Connection for Windows.

### Ion Client for Mac and Windows

#### Installing the Ion Client

Since the Ion Client was designed for use on several different platforms, users have a wide variety of choices for clients. For the most up-to-date list of versions available, please visit the downloads page that is posted on the website.

#### On a Mac Machine

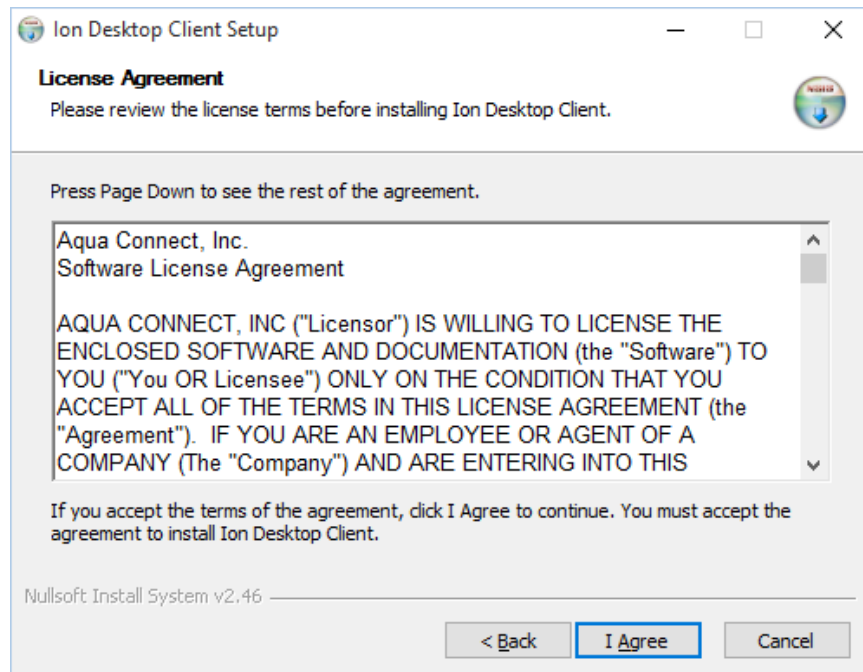
In order to install the Ion Client on a Mac machine, simply download the client file from the package your Aqua Connect Sales Consultant sent you. Place the application in your desired location. To uninstall the product, drag the application to the Trash.

#### On a Windows Machine

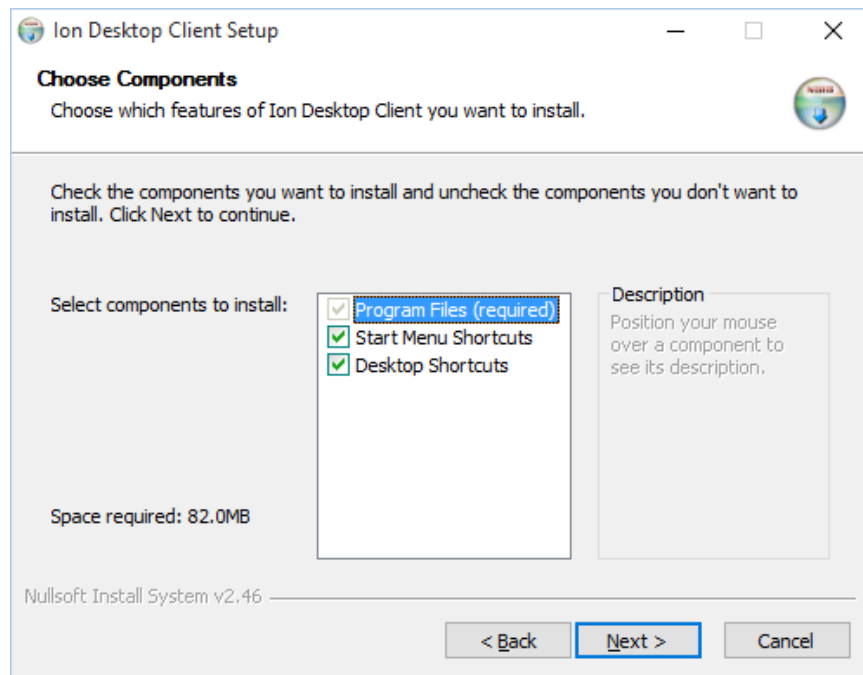
In order to set up a connection on a Windows machine, you will need to run the installer from the package that your Sales Consultant sent you. After downloading the package, double-click on the icon to run the software. An Ion Client Setup Wizard should appear. After you finish reading the welcome screen, click **Next** to continue.



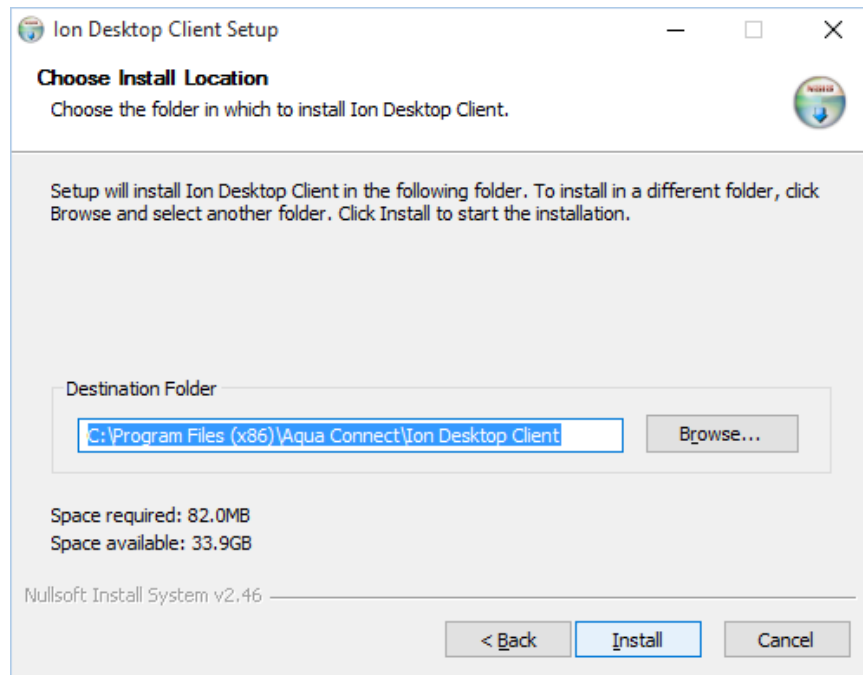
The next screen will bring up the End User License Agreement (EULA). If you accept the agreement, click **I Agree**.



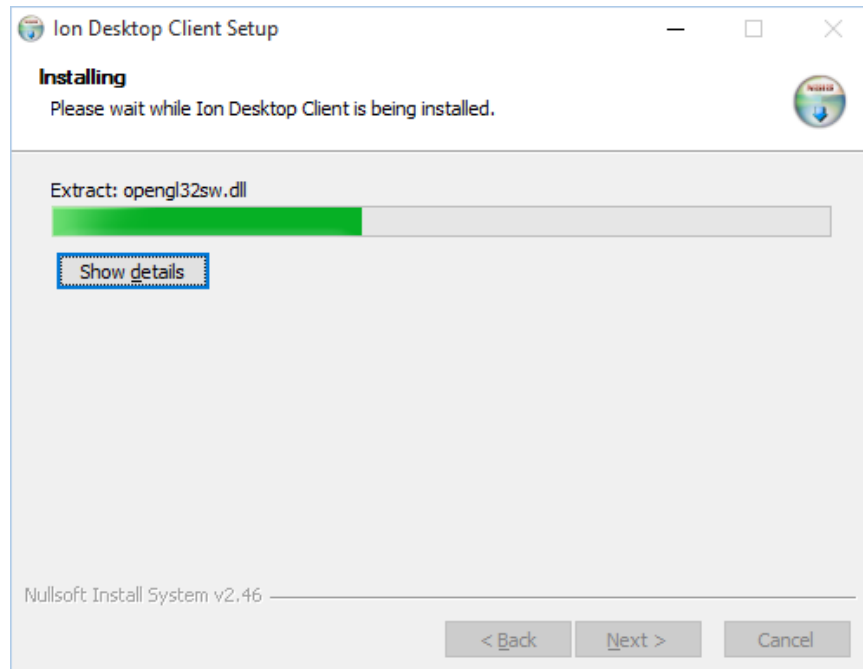
Now you will have to choose which components of the Ion Client you wish to install. By default, the Program Files will be installed. You can choose to add Start Menu and Desktop Shortcuts if you want to include them. Once you have made your decision, click **Next**.



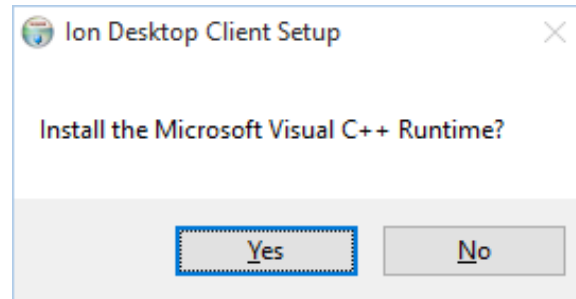
The next screen requires you to Choose an Install Location. By default, it will create a folder in the Program Files labeled Aqua Connect to install it to. If you would like to change the destination location, click **Browse** and choose a new location. Once you have made your decision, click **Install**.



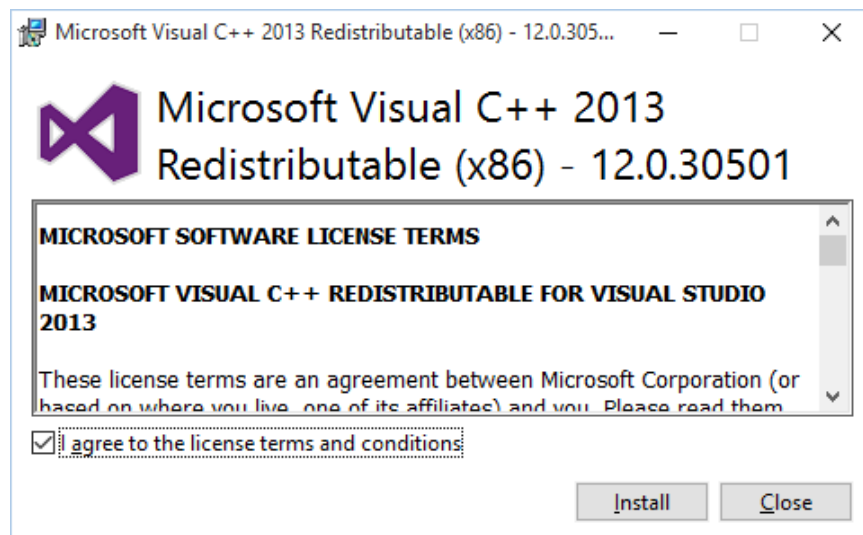
The next screen that appears will show the details of the installation process, if you choose to see them.



If you do not already have Microsoft Visual C++ Runtime installed on your machine, a box will appear asking you to install it. If you click **No**, the installer will quit. Click **Yes** to install the software. Microsoft Visual C++ is required for the Ion Client to work on Windows machines.



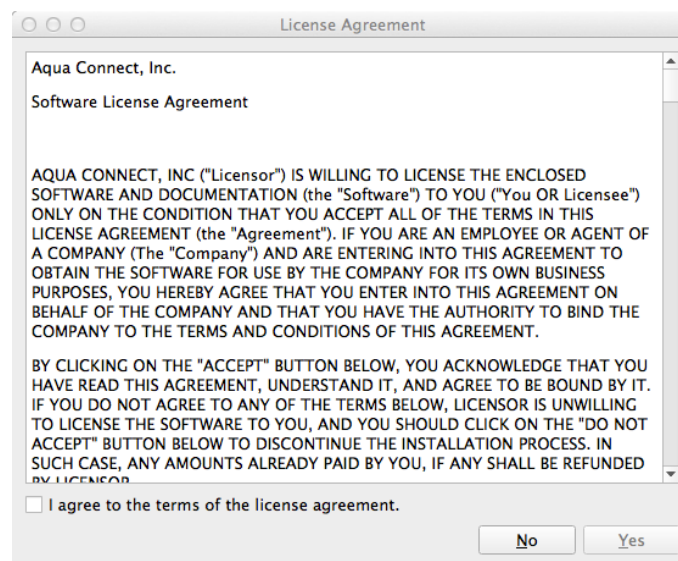
The next window that will appear will be the Microsoft EULA for Visual C++. Agree to the license terms and conditions and then click **Install**. A box will appear once the setup is successful. Click **Close** and you will return to the Ion Client for Windows installation process.



## Setting Up An Ion Client Connection

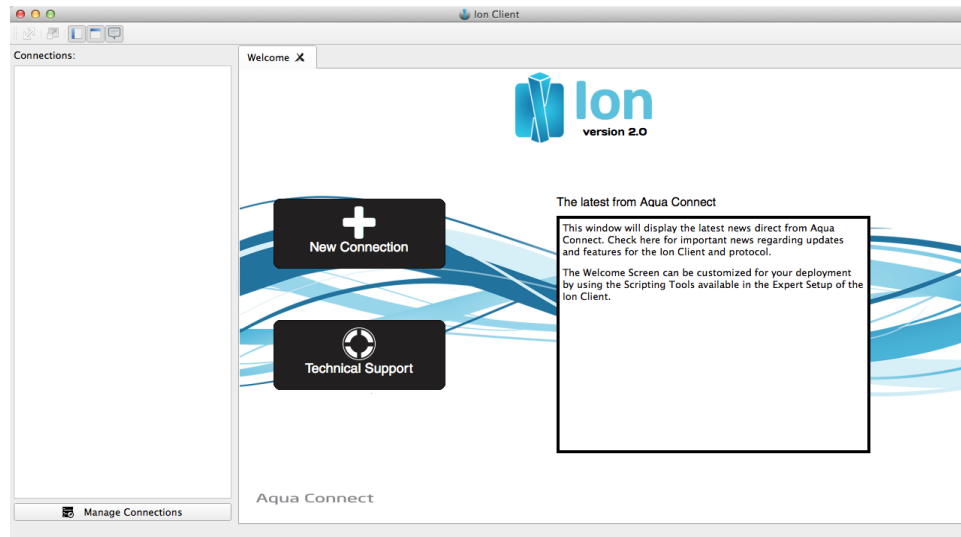
The Ion Client is available for use on most Mac and Windows machines. Below is how to set up a connection on a Mac. Since the Ion Client was created to be a universal client to support multiple operating systems, the instructions for creating a Windows connection would be the same as listed here.

1. After downloading the appropriate client version for your hardware, double-click on the application in order to start the client setup.
2. Once the program opens, you will be launched into a welcome screen. If this is your very first time opening the Ion Client, an End User License Agreement (EULA) will appear. After accepting the terms of the EULA, you will move to the next screen.

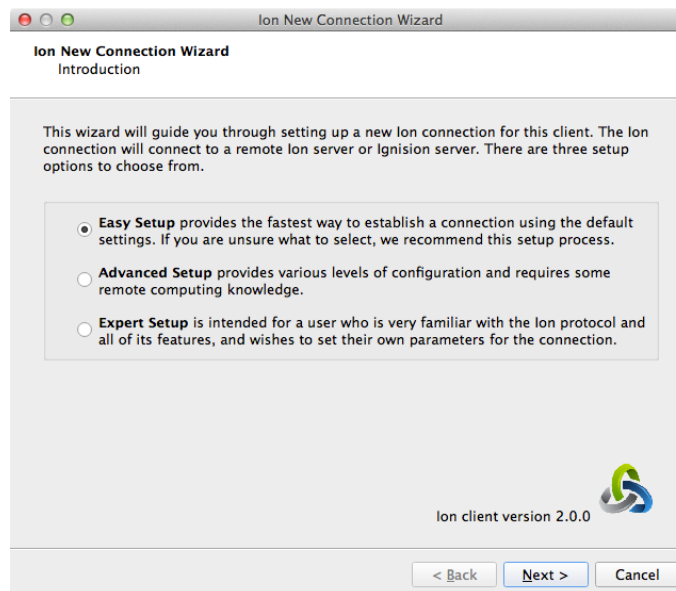




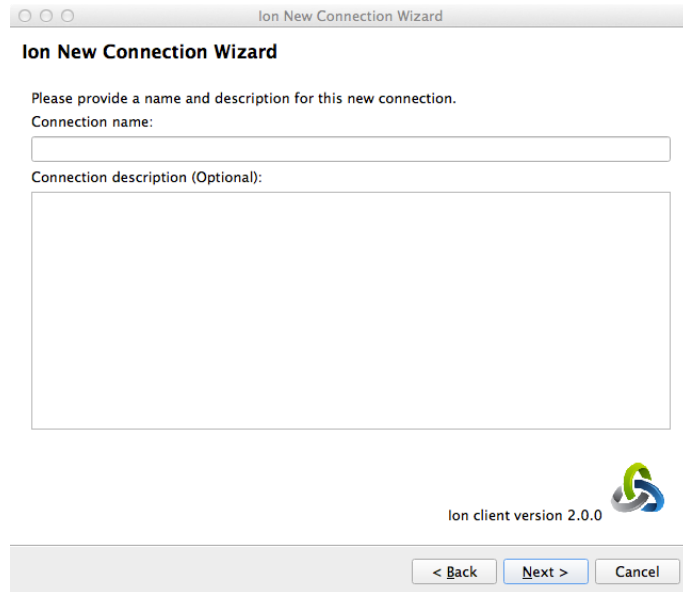
3. On this screen, a New Connection Wizard will appear if you have not created any connections yet.



4. When the New Connection Wizard opens, it will offer three options on connection creation: Easy Setup, Advanced Setup and Expert Setup. If you just want to enter in the IP address of the server, a user name and password, choose Easy Setup. If you want to be able to change some of the most common settings for the client, choose Advanced Setup. If you want to change every possible setting for the client, choose Expert Setup. Once you have made your choice, click **Next**.



5. Now you will be prompted to name the server you wish to connect to. Once you have named the server, click **Next**.



Ion New Connection Wizard

Please provide a name and description for this new connection.

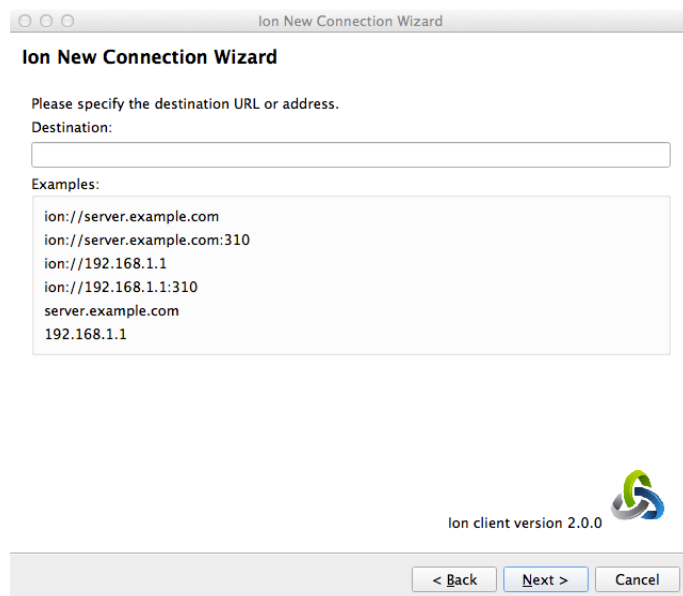
Connection name:

Connection description (Optional):

Ion client version 2.0.0

< Back Next > Cancel

6. Now you will be prompted to specify the destination address for your connection. It can be either an IP address or a URL. In the Advanced and Expert Setups, options will appear so you can add more than one address to connect to. Once you have entered in all of your possible addresses, click **Next**.



Ion New Connection Wizard

Please specify the destination URL or address.

Destination:

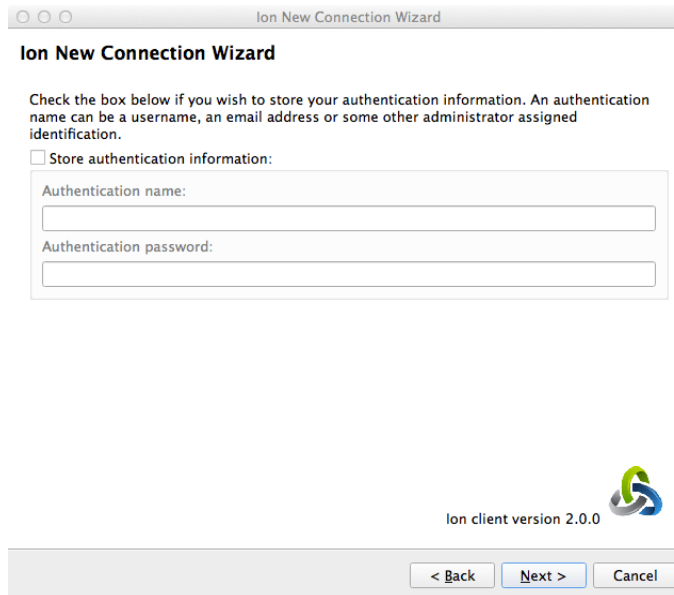
Examples:

- ion://server.example.com
- ion://server.example.com:310
- ion://192.168.1.1
- ion://192.168.1.1:310
- server.example.com
- 192.168.1.1

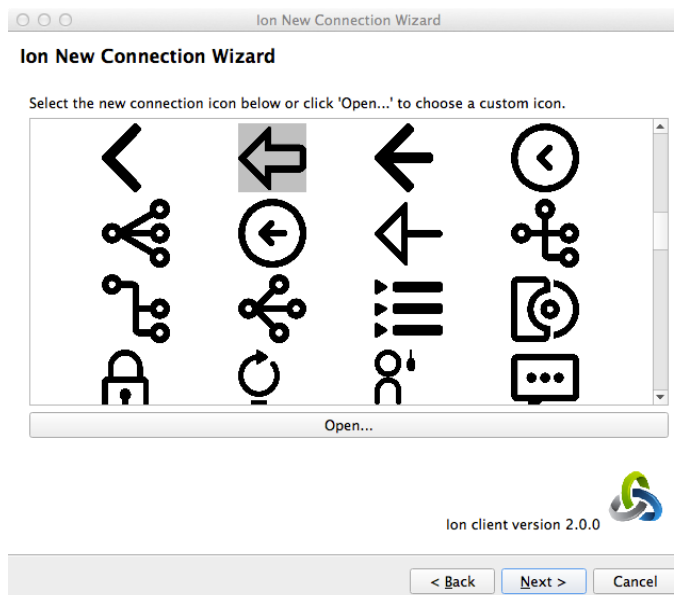
Ion client version 2.0.0

< Back Next > Cancel

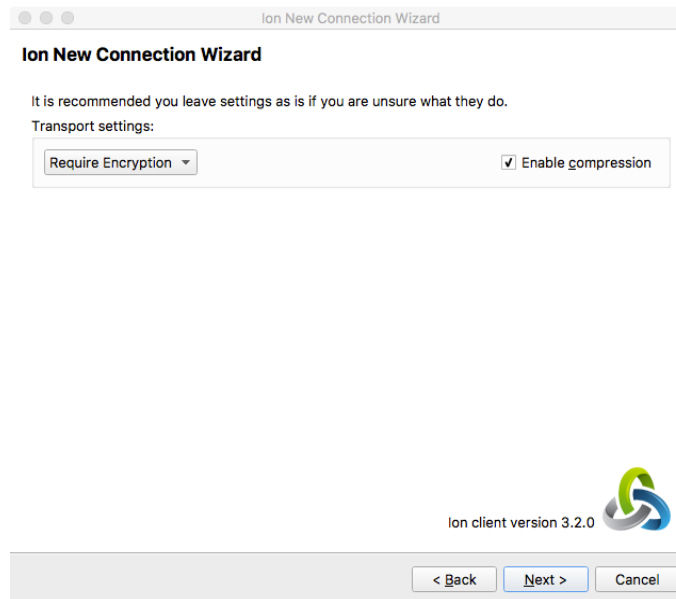
7. Now you will be prompted to choose whether you wish to store your authentication information. By default, it will not save it. If you would like to save it, check the Store authentication information box and enter in the credentials you want to save. Then click **Next**. If you are using the Easy Setup, please skip to Instruction Number 13 to finish creating a connection.



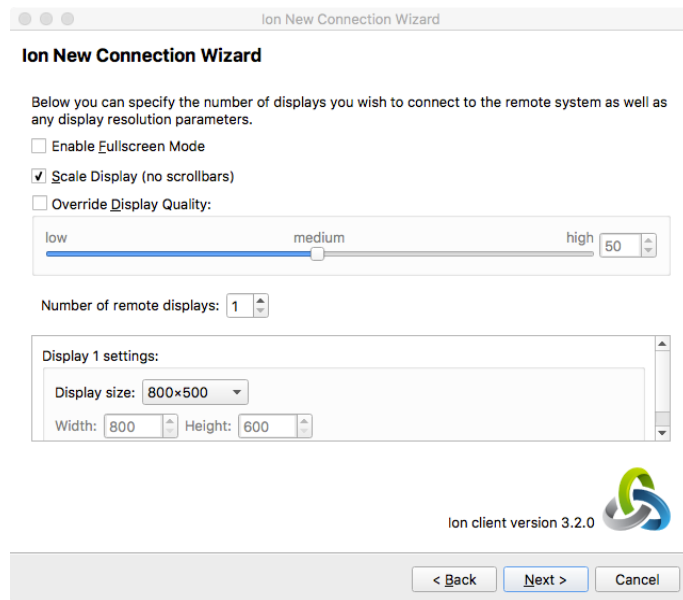
8. In the Advanced and Expert Setups, you will now be prompted to choose an icon to represent each server that you have in your network. You can either choose one of the ones provided or upload one of your own. Once you decide on an icon, click **Next**.



9. Now you can choose which settings you would like to enable for your client. By default, all of the options are enabled. You can choose to enable/disable the following settings: Encryption and Compression. Once you have made your decisions, click **Next**.



10. Here you can choose the number of displays you wish to connect to the remote system and how compressed the displays will appear. The maximum number of screens you can create is 8. As of right now, multiple monitors are not supported. This is also where you can choose to connect at Full Screen, versus a specific screen size. Each display can have a different screen size. You can also choose to put in your own specific screen size. If it is not supported by the client, the connection will either be scaled upwards or downwards in order to get it to the requested size. By default, Scale Display is enabled, which means that no scrollbars will appear on the display since it will be scaled to fit your screen. To enable the Override Display Quality scroll bar, click on the box. You will then be able to move the scroll bar to choose how high the screen quality will be. Medium is considered 50% compression, with 1% (Low) being extreme data compression and 100% (High) being no compression at all. The option to change the Scale Display and Override Display Quality is also available in the Ion Client under the View Tab and will change automatically without needing to log out first. Once you have decided on all of these settings, click **Next**.



**Ion New Connection Wizard**

Below you can specify the number of displays you wish to connect to the remote system as well as any display resolution parameters.

☐ Enable Fullscreen Mode

☒ Scale Display (no scrollbars)

☐ Override Display Quality:

low medium high 50

Number of remote displays: 1

Display 1 settings:

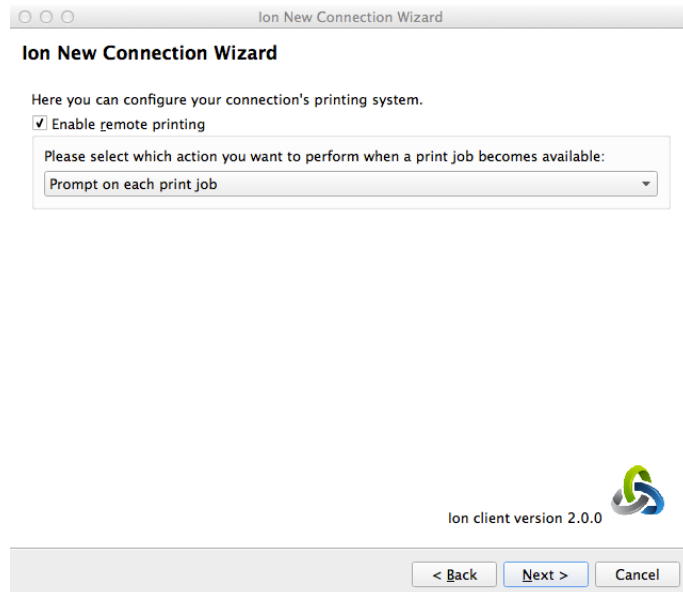
Display size: 800x500

Width: 800 Height: 600

Ion client version 3.2.0

< Back Next > Cancel

11. Now you will be prompted to configure the connection's printing system. By default, enable remote printing is selected. In the dropdown, you can choose to either have it prompt for every print job or point the client to a specific available printer. If you are an admin and would like to ensure that your end users do not have the ability to print at all, you will need to go into the admin tool and make sure that those users have the printing choice unchecked in the Users tab. Once you have made your choice, click **Next**.



**Ion New Connection Wizard**

Here you can configure your connection's printing system.

☒ Enable remote printing

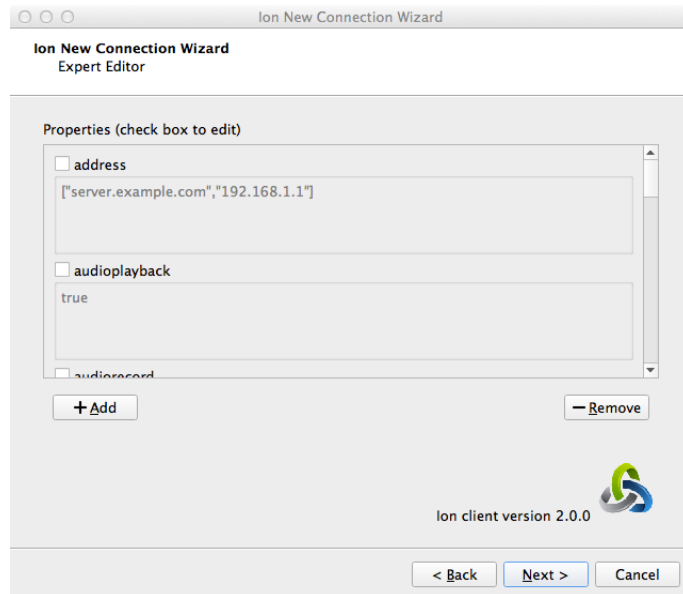
Please select which action you want to perform when a print job becomes available:

Prompt on each print job

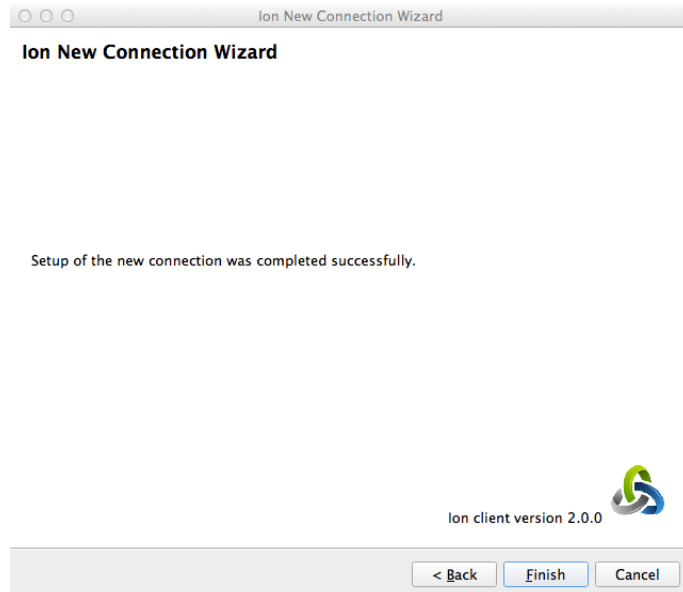
Ion client version 2.0.0

< Back Next > Cancel

12. For Expert Setup users only, the next screen is the Expert Editor. Here is where you can choose to edit specific Properties in the client. If you would like to add something of your own beyond that (like Scripts), you can choose to do so by clicking the Add button. Once you have finished editing, click **Next**.

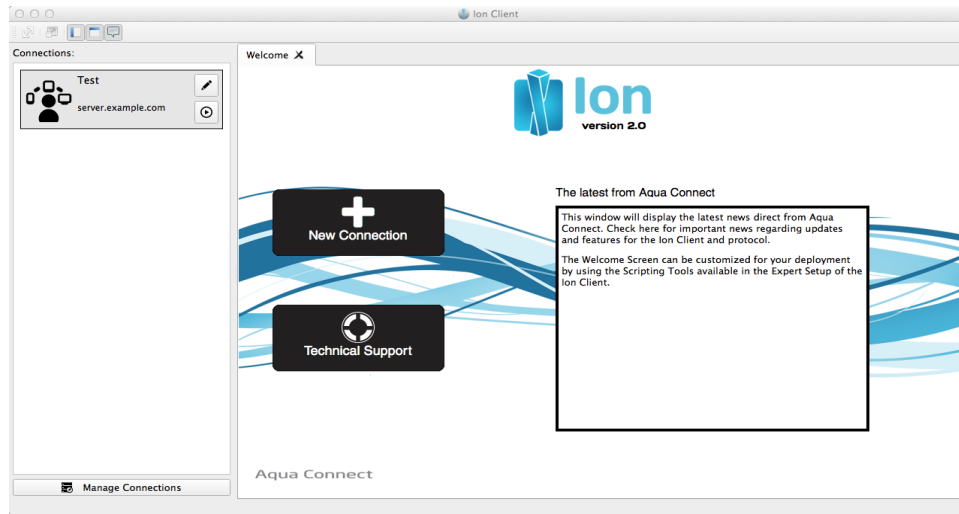


13. You will now see the completed screen. Click **Finish** to close the program out. You will then return to the Welcome Screen.

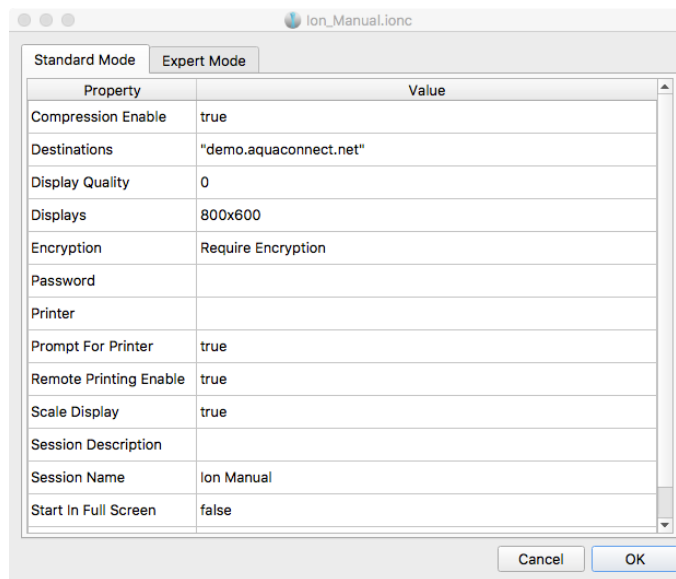


## Using the Ion Client

Now that a connection has been created, you can now connect to an Ignision Server. On the left side of the Ion Client Welcome Screen (called the Connection Gutter), you will see the connection you just made. To connect to a server, click on the circle to connect. The box will turn green if the connection is successful, yellow while it is attempting to connect and red if it cannot connect and there is an issue.



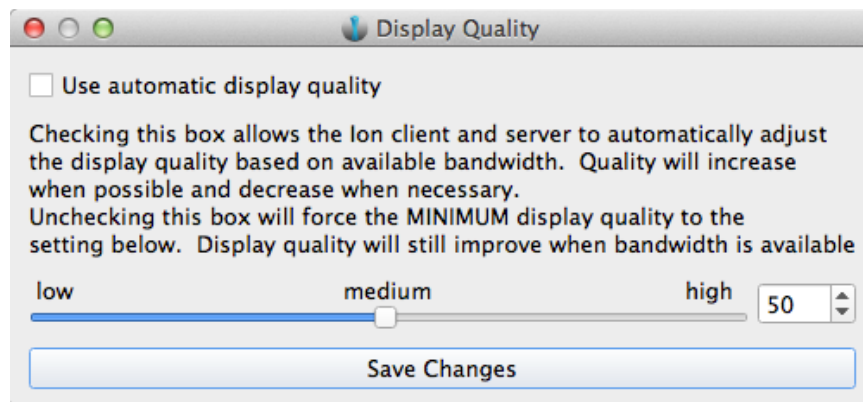
The portion of the screen that is not the Connection Gutter is the part that will show the server you are connecting to. If you would like to edit the connection, you can click on the pencil for that session to make changes. From here, you can edit your display resolution, change your user name, password and other options.



You can also choose to Manage Connections at the bottom of the Connections pane. It is here where you can delete the connections you no longer want. To delete a connection, click the Discard button. Click on the connection you would like to delete. It will then ask you if you are sure you want to delete it. Click yes and the connection will disappear.

If you would like to create a new connection, you can either use the Connection Manager or click on the “Create a New Connection” button on the Welcome screen. If you require technical help with the Ion Client, click on the “Technical Support” button.

If you would like to change the amount of compression for your active session, you can go up to the Ion Desktop Client menu bar and choose View. From there, click on Show Display Quality Controls. Once you click that, a pop up box will appear.



If you check Use Automatic Display Quality, the Ion Client and the Ignision Server will automatically adjust the display quality based on available bandwidth. Quality will increase when possible and decrease when necessary. If you do not check the box and choose to use the slider instead, the amount will be the minimum amount of display quality used. If bandwidth is available to make the quality better, it will use it. Make sure to check Save Changes after making any changes to ensure that the Ion Client will remember your choice in the future.





## General Ion Client User Tips

1. If you have multiple Ion clients to setup and you would like all of them to have the same default options chosen, you can easily take the saved file for one of the setup clients and copy it to the Ion Connections folder in Documents on another client. It will be the file with the file extension .ionc.
2. In the Ion Client toolbar (above the Connection Gutter), you can choose to Show Tab Bar, Scale to Fit Within a Tab, Show Display Quality Controls, Hide the Welcome Tab, Hide the Connection Gutter, Hide the Toolbar, Hide the Status Bar and Enter Full Screen.
3. If you have multiple active connections in the same Ion Client, you can easily switch between them via the tabs at the top of the Welcome screen.

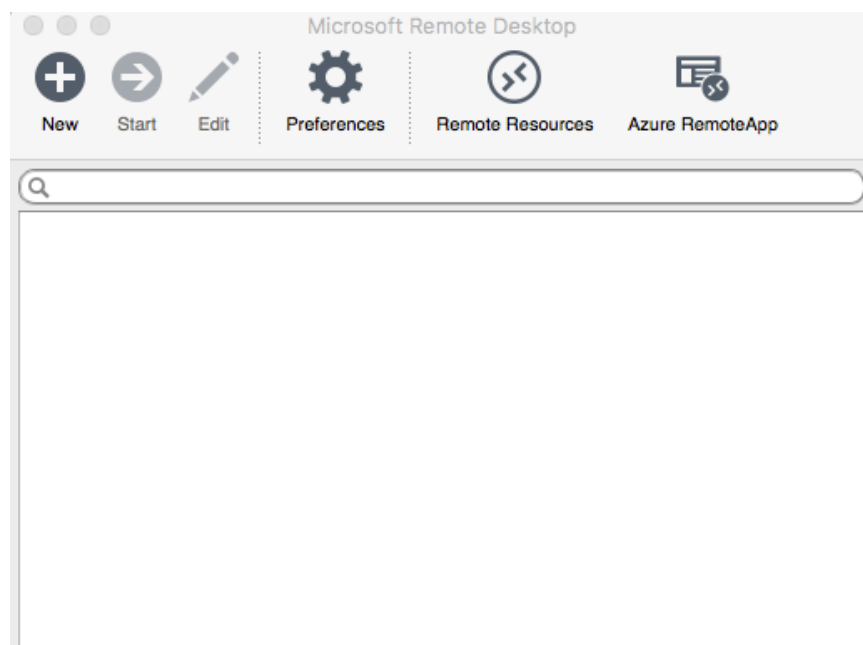
# Microsoft Remote Desktop Connection Software

## Remote Desktop Protocol Notes

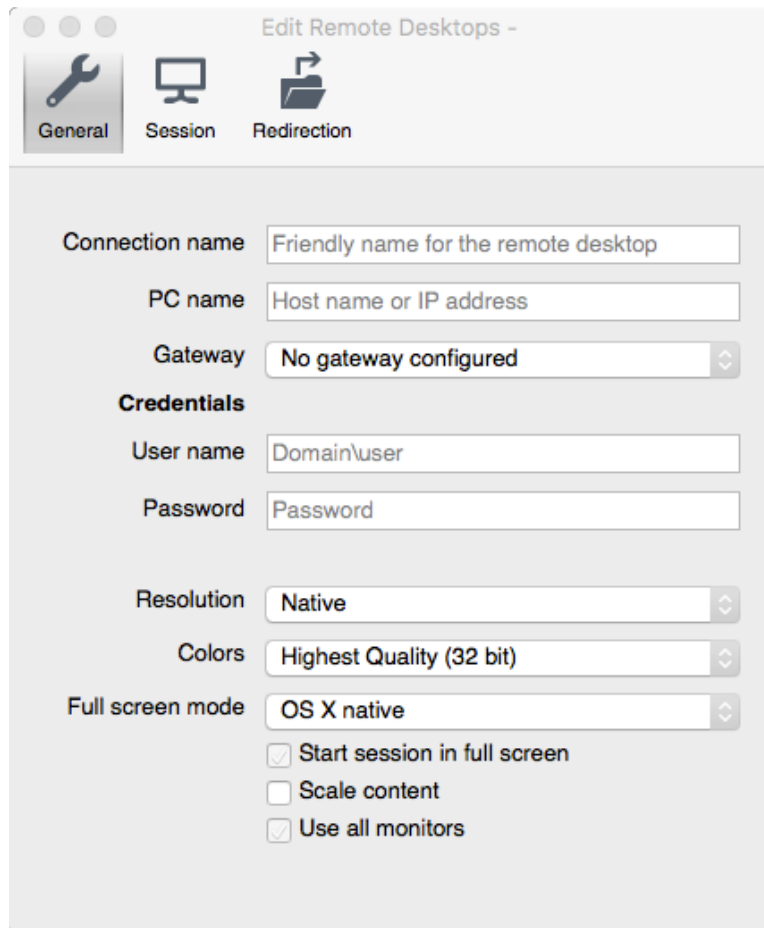
With the RDP Login Window, you can log in to your Ignision user session without saving your credentials in the Remote Desktop Connection software. This provides greater security for customers who are concerned about saving their credentials in the client. If you would like to save your credentials in the Remote Desktop Connection (RDC) software, simply enter and save the correct credentials and the user will login without the RDP Login Window being prompted. If you hit "connect" on RDC with the wrong credentials saved in RDC or no credentials entered, then you will be prompted with the RDP Login Window which has the same appearance as the OS X login screen.

## Remote Desktop Connection for Mac

Once installed, launch Microsoft Remote Desktop simply by clicking on its icon. If you have never opened this before, you will need to create a new connection first.



In the General tab, you can enter in the name of the server, the resolution you would like to connect at, color quality, whether you would like to connect via full screen and whether to scale content or not. If you would like to save your credentials, enter them in here. If you would prefer not to save them, you can enter them in later after connecting. As of right now, the Session and Redirection tabs are not necessary to connect so you can skip them. Once you have filled out everything needed, close the window and it will save your information.

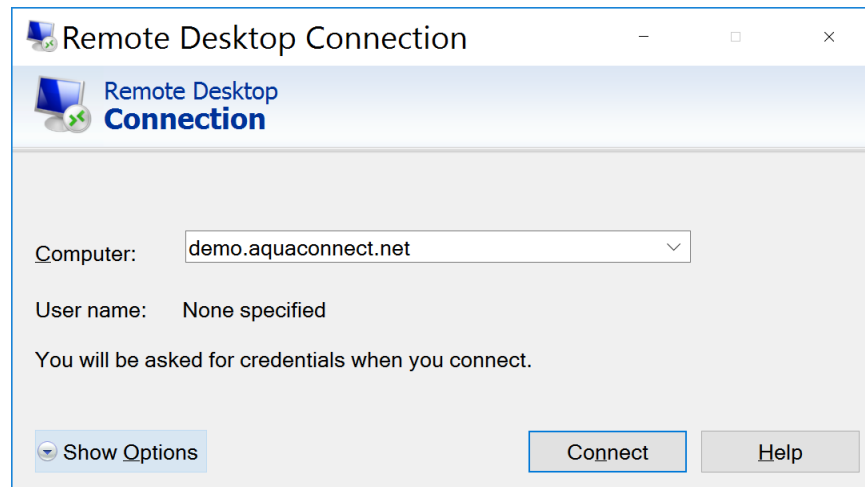
The image shows a screenshot of a macOS-style window titled "Edit Remote Desktops -". It has three tabs: "General" (selected, with a wrench icon), "Session" (with a monitor icon), and "Redirection" (with a folder icon). The "General" tab contains the following fields and options:

- Connection name:** A text field with the placeholder "Friendly name for the remote desktop".
- PC name:** A text field with the placeholder "Host name or IP address".
- Gateway:** A dropdown menu showing "No gateway configured".
- Credentials:** A section header.
- User name:** A text field with the placeholder "Domain\user".
- Password:** A text field with the placeholder "Password".
- Resolution:** A dropdown menu showing "Native".
- Colors:** A dropdown menu showing "Highest Quality (32 bit)".
- Full screen mode:** A dropdown menu showing "OS X native".
- Below the dropdowns are three checkboxes:
  - ☒ Start session in full screen
  - ☐ Scale content
  - ☒ Use all monitors

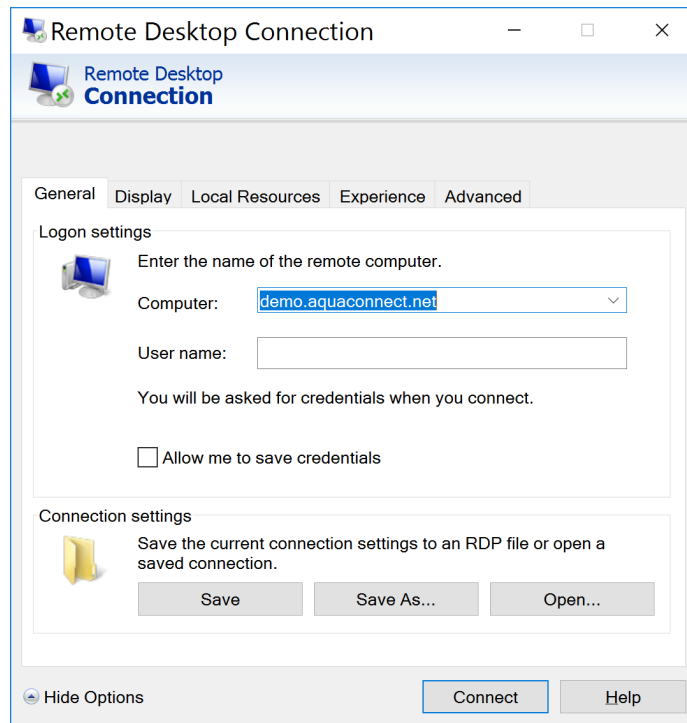
In My Desktops, double-click on the connection you created to connect to your Ignision Server. If you did not enter in your credentials in the General tab, you will be prompted to enter in them in when you connect. At this point a connection is established with the server and the remote desktop appears.

## Remote Desktop Connection for Windows

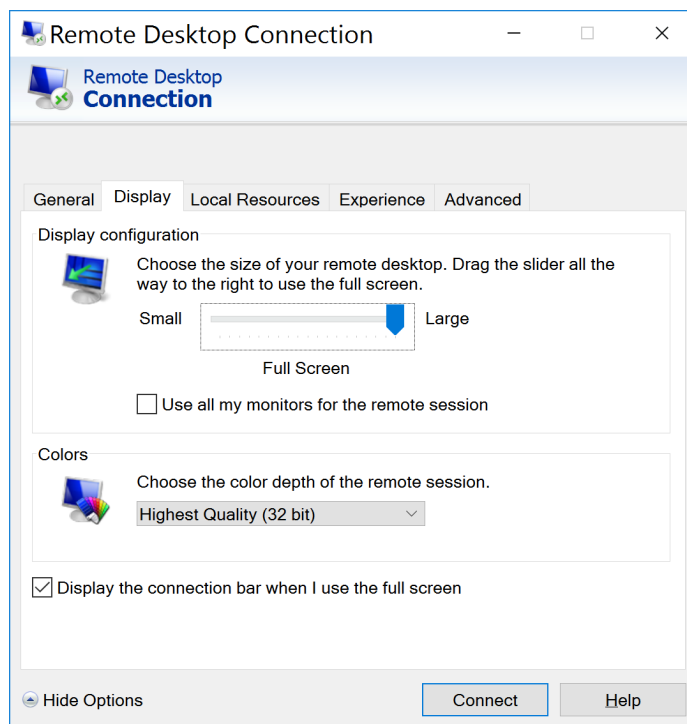
Most Windows computers come with the Remote Desktop Connection already installed. You can find the program by going to the Start button, clicking on All Apps, Windows Accessories and then Remote Desktop Connection. Launch RDC simply by clicking on its icon. The initial display will prompt for the Computer to connect to. Enter the address of the Ignision server. In order to save your user credentials and change other options, click Show Options.



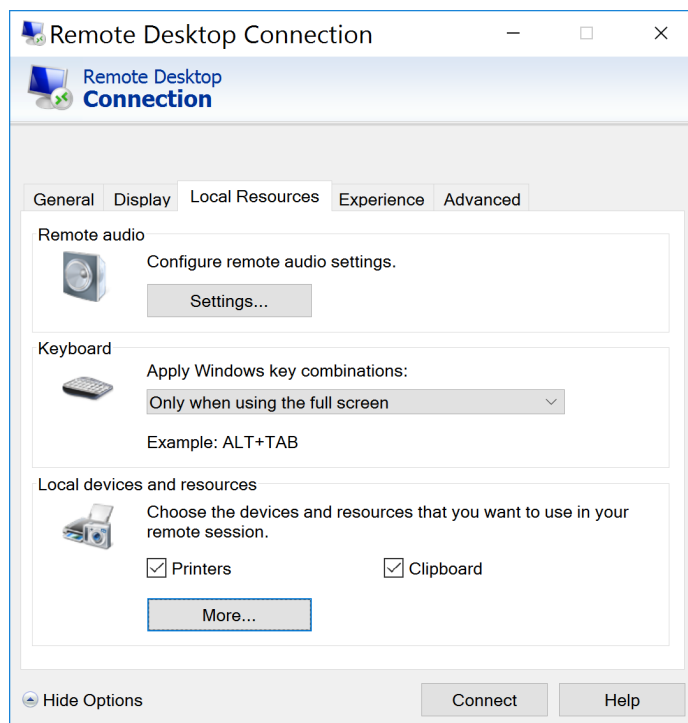
In the General tab, you can enter in the name of the server and the user name you would like to connect with. If you would like to save your credentials, check the box that says "Allow me to save credentials". If you would prefer not to save them, you can enter them in later after connecting. If you would like to save your connection settings, you can do so here.



In the Display tab, you can change your display configuration and how many colors you would like to connect at. You can also choose to if you would like to connect at full screen or at a specific display size.



In the Local Resources tab, you can choose to configure remote audio, keyboard combinations and local devices and resources. It is here where you can set whether you would like to use your printers and clipboard in the remote session.

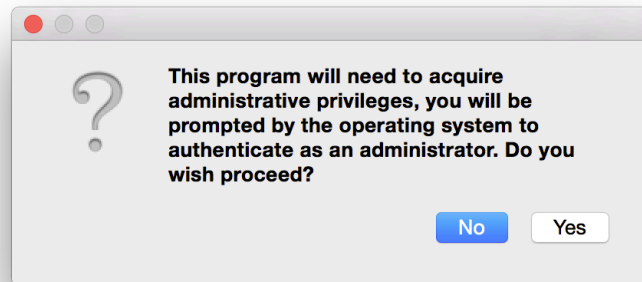


As of right now, the other tabs are not necessary to connect with Ignision Server so you can skip them. Once you have made all of your changes, hit Connect.

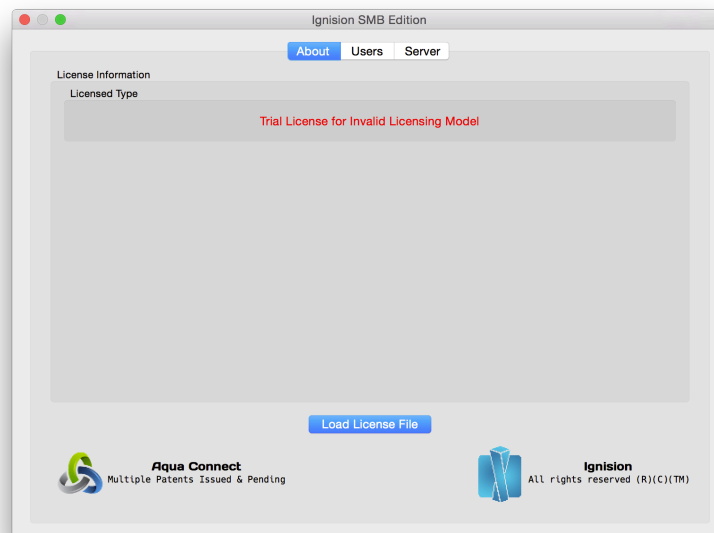
If you did not enter in any User Name or Password prior to connecting, the Ignision Server login window will prompt for a User name and Password. You must enter values that are recognized by the Ignision Server. If you did not save your credentials in the Remote Desktop Connection Client, you will need to enter them in every time you connect to the server. Once you have entered in your credentials, hit the arrow button. After a brief moment, a connection will be established with the server and the remote desktop appears.

## Ignision Server Admin Tool

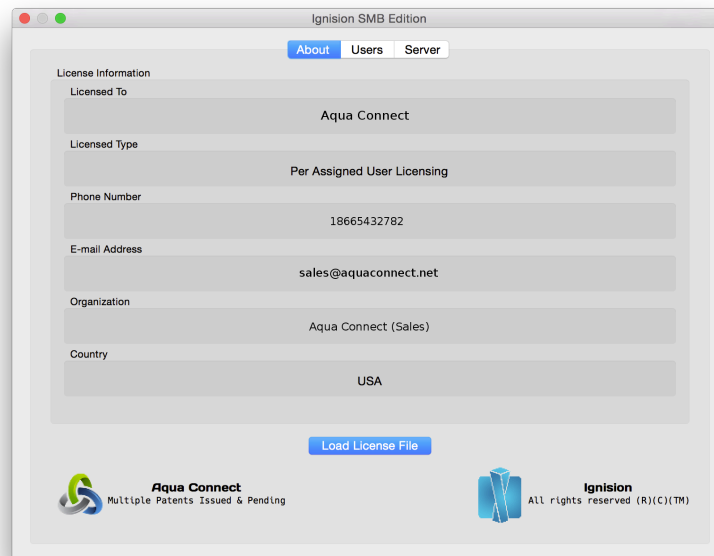
After completing installation of Ignision, you will need to separately start the Admin Tool on the server in order to customize the user experience with Ignision. It will require you to have administrative privileges (or know an admin account password) in order to use it. You can find the Admin Tool in Applications listed as Ignision SE. After clicking **Yes**, the Admin Tool will open and prompt you for the Admin credentials.



The first tab is the About Tab, where it lists what kind of License Type you have. This is also where you could add or replace the License File that your Aqua Connect Sales Consultant sent you. Load the file by clicking Load License File. If it is successful, a box will appear that states the License File has been loaded.



Once the License File is loaded, the About tab will be populated with all of the information that was on the License File including: person who it is licensed to, the type of license it is, the phone number of the license user, email address of the license user, the organization the License File is registered to and the country that the product is registered to.

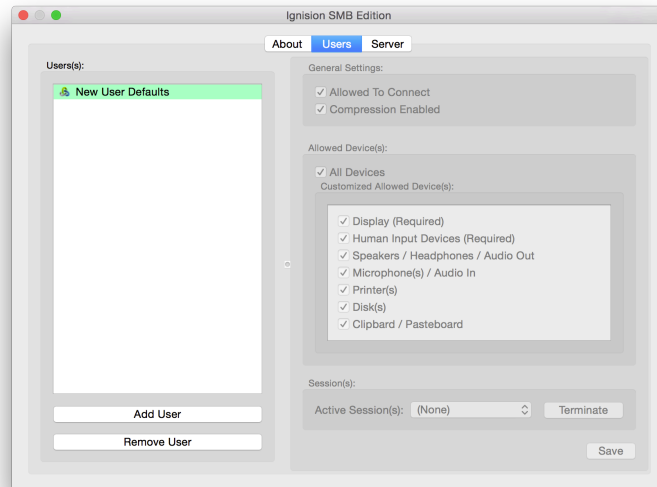


To add new users, click on the Users tab. This is where you can add, remove and edit what each user on your system is allowed/not allowed to do on your Ignision Server. You do not need to create the users with this admin tool. User Accounts can be created on the server via System Preferences like you would normally do. User names will automatically appear here after successfully connecting to the Ignision Server, as long as “Allowed to Connect” is checked in New User Defaults. Those defaults are the preferences that all automatically created user accounts will have. If you change the User Defaults, those changes will only apply to new user accounts and not ones that were previously made before the change.

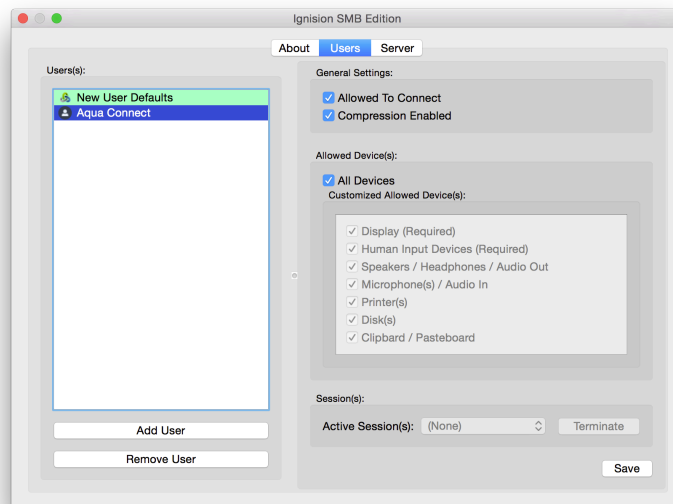
Per user licensing is on a first-come first-serve basis so the admin tool will continue to add connected user accounts until the license limit is reached. If you would prefer to not have that happen, make sure to uncheck “Allowed to Connect” in the New User Defaults section. If that is the case, you will need to manually add each user to the list before they can log into the server. If you reboot your server, the active list of users will reset and then the first users to log on up to your license limit will be considered the active users.

To manually add a user, click Add User. A box will appear where you can add the name of the user account. Click **Add**. To remove a user (to free up a license), click Remove User. Once you have created a user in the Admin Tool, the ability to customize their experience appears.

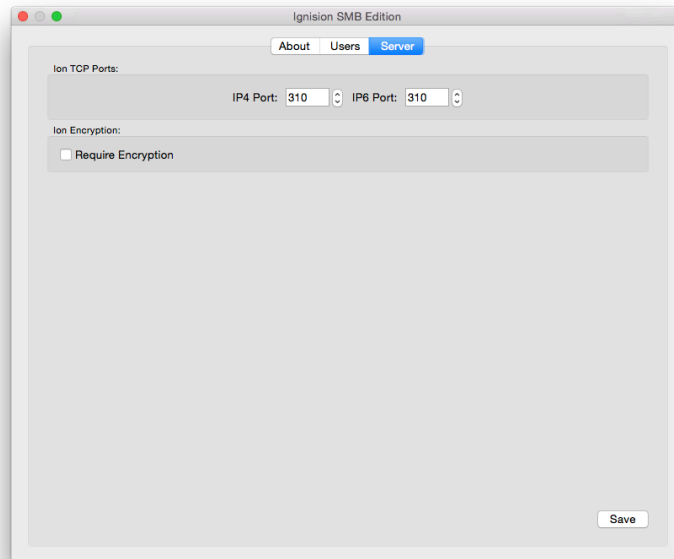




In the General Settings, you can choose to check the Allowed to Connect and Compression Enabled boxes. You can then choose to allow the user to be able to use all of the devices available or only certain ones. The choices are as follows: Display (required), Human Input Devices (required), Speakers/Headphones/Audio Out, Microphones/Audio In, Printer(s), Disk(s) and Clipboard/Pasteboard. The Users tab is also where you can see what Active Sessions the user currently has. If the admin chooses to, they can also terminate the User's session from this tool. If they do not currently have an active session, that dropdown will be grayed out. Once changes have been made, click Save to save them.



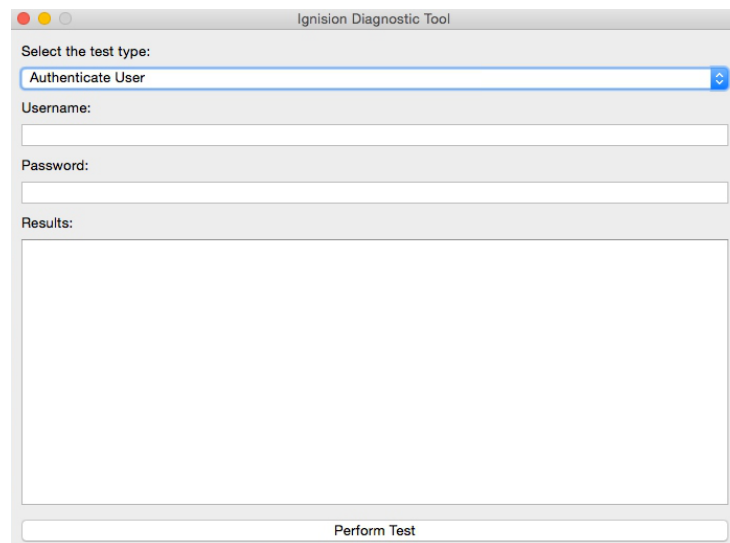
In the Server tab, you can change which TCP Ports you will connect with. By default, both the IVP4 and IVP6 ports will be set at Port 310. If you require client-side Encryption, you can check the box to require it.



## Ignision Diagnostic Tool

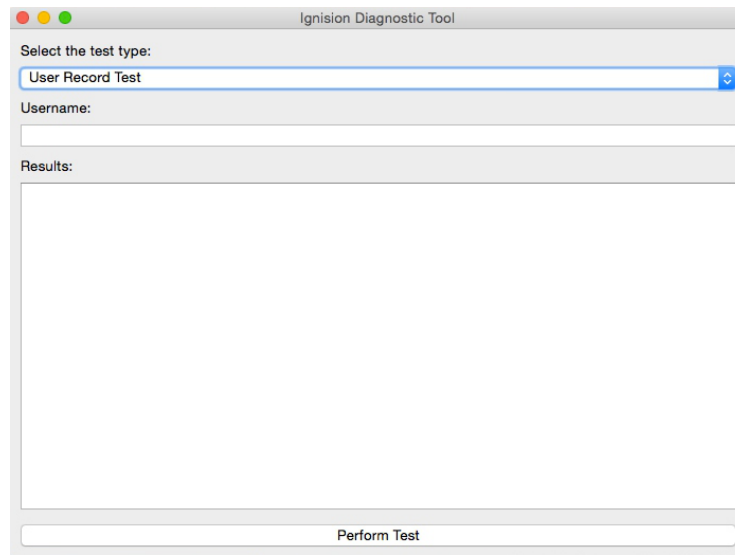
For troubleshooting purposes, an Ignision Diagnostic Tool is available to test some of the most common connection issues between the Ignision Server and the Ignision Client. The tool can be found via the Admin Tool. Click on File in the Menu Bar and then click on Launch Diagnostic Tool to launch the tool. There are four different tests available in the dropdown menu.

The first test is the Authenticate User test. This is where you can enter in a User Name and Password to see if they are an authenticated user. Click on Perform Test to run the test. This will test whether the Ignision Server is setup correctly. If the User Name and Password are okay, you will get a message stating that it has Successfully passed this test. If the password is wrong, you will receive a Password did not validate message. Other error messages may pop up also, depending on what may be wrong.

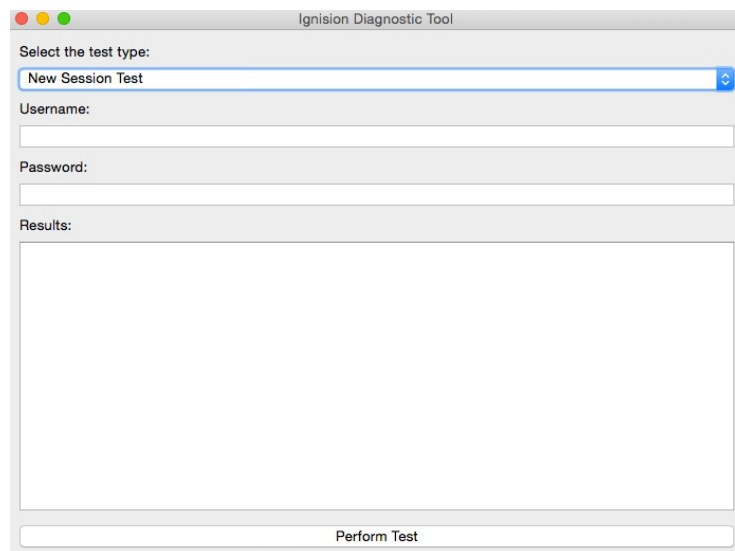


The screenshot shows a window titled "Ignision Diagnostic Tool". Inside, there is a section "Select the test type:" with a dropdown menu currently set to "Authenticate User". Below this are two text input fields labeled "Username:" and "Password:". Underneath these is a large, empty rectangular box labeled "Results:". At the bottom of the window is a button labeled "Perform Test".

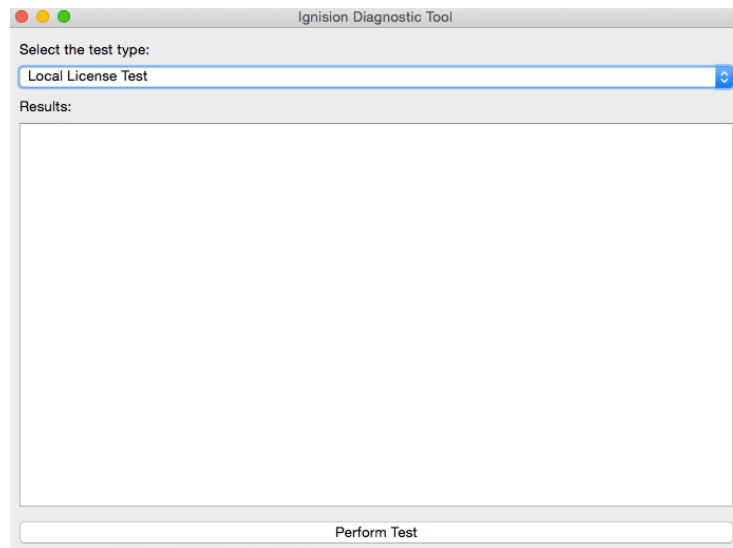
The second test is the User Record test. It will check whether your Active Directory or Open Directory users are set up correctly. Enter in the User Name you would like to test and click on Perform Test. In the results box, five items will appear. The first is the Full Name of the user. Next is the user's Unique ID. Third is their Primary Group ID. Fourth, the user's Local Home Path. If they have a Remote Home Path, that path will show up in the fifth item. If no Local Home Path exists, one will need to be created. If you enter in a User Name that does not exist, you will get a Failed to locate user record message.



The third test is the New Session test. It simulates logging into the Ignision Server by bypassing connecting via the Ion Client. Enter in the User Name and Password that you want to test and hit Perform Test. If everything is okay, you will get a message stating Successfully started session. If Error Codes appear after that sentence and = 0, everything is running as it should. This user will now be considered logged in. If you test a user that is already logged in, you will receive a message that the user is already running. If the user has a bad password or home folder, errors will appear in the Results box. To ensure that all of the users are correctly in sync after the test, we recommend rebooting your server afterwards so you do not have some users logged in via the client and some via this Diagnostic Tool.



The fourth test is the Local License test. This will show what type of license you have, the maximum number of licenses you are allowed and whether it is or is not a Trial License. When you click Perform Test, it will fetch the stored license data. If your License Key has an issue, it will be reported here.





## Known Issues

- Some older RDP clients that come with really old versions of Mac and Windows clients will not work at this time. Older thin clients may also have this problem.
- Sometimes when connecting with RDP client, you may get a grey screen. If that happens, you will need to force an update by clicking on the screen in order to get it to redraw the screen. Disconnecting and reconnecting the session may also work. It is not necessary to log out, just disconnect.
- When the Ignision Server machine boots up, it may take a few minutes to fully load up the software on the server. Various error messages may appear if you try to connect too early. If you want to be sure that the Ignision Server is ready prior to connecting, wait a full 5 minutes after the server boots before making your first attempt.
- When connecting with the Windows version of the Ion Client, the “No Connection to Bridge” error may appear. If it does show up, wait five seconds and try to connect again. The connection should go through at that point.
- If you make multiple attempts to log in with the Ignision Server window with an invalid user name and password, you may make the client hang. Closing and restarting the client should make it work again.
- Apple Screen Sharing should not work at this time.
- Fast User Switching works about 50% of the time. If you switch to the Login Window and then login as another user, it should work. If you try to switch directly to a user session, it will cause all future logins to stop working until the server is rebooted.
- If after Lock Console is enabled and the session hangs, reconnecting to that session from the client solves the hanging problem. If a user clicks Lock Console but is not on the Console, it will not lock the Console at this time.