RISA Installation Instructions

Application Installation Manual

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Before You Begin

Thank you for purchasing RISA Software. Before you install this software please review the following system requirements below:

System Requirements (RISA Applications)

Operating System

One of the following operating systems is required:

- Microsoft Windows 10 (64 bit only)
- Microsoft Windows 8.1 (64 bit only)
- Microsoft Windows 7 SP1 (64 bit only)

Internet (Subscription License Only)

An internet connection is required to launch the program. The internet connection must be maintained as long as the program is open, although brief internet outages (a few minutes) do not affect the user's ability to keep the program open.

Demonstration Mode

RISA Products all come equipped with a Demonstration Mode which can be accessed when a license cannot be retrieved. The Demonstration Mode has certain limitations, and is intended to function both as a reader of existing files and as showcase of product features for those users who do not own the product.

Launching in Demo Mode

When a license cannot be found the option is presented to launch in Demonstration Mode. Once the program has been launched in Demonstration Mode it cannot re-enter the regular Non-Demo Mode during the same session.

For example, if RISA-3D Standalone is launched without the Sentinel USB Key attached the user is given an option to launch in Demo Mode. When in Demo Mode in RISA-3D no model with more than 40 Joints can be saved. If the user creates a model with 50 Joints they cannot save it, even if the Sentinel USB Key is plugged in after the fact. That is because the program cannot switch from Demo Mode back to Non-Demo Mode. The user will have to close the model without saving, then launch the program with the key plugged in to enter Non-Demo Mode. The 50 Joint model will be lost, and cannot be recovered.

Application Installation Instructions

Where to get the Install

Contact license@risa.com to request an installation link, which we will email quickly.

Installation Instructions

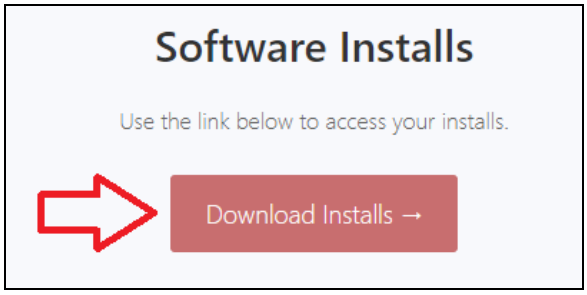
Below are the step-by-step instructions for each step of the install.

Note:

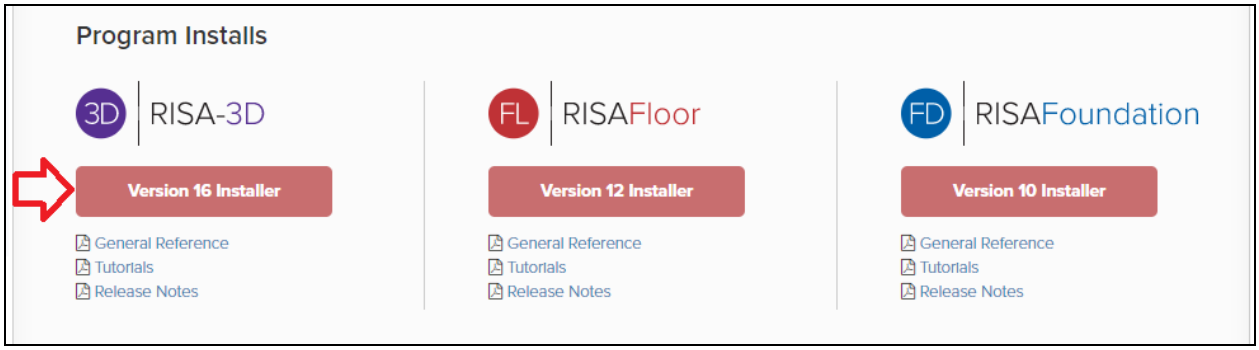
- You must be an Administrator on the machine in order to run this install.

Downloading the Install

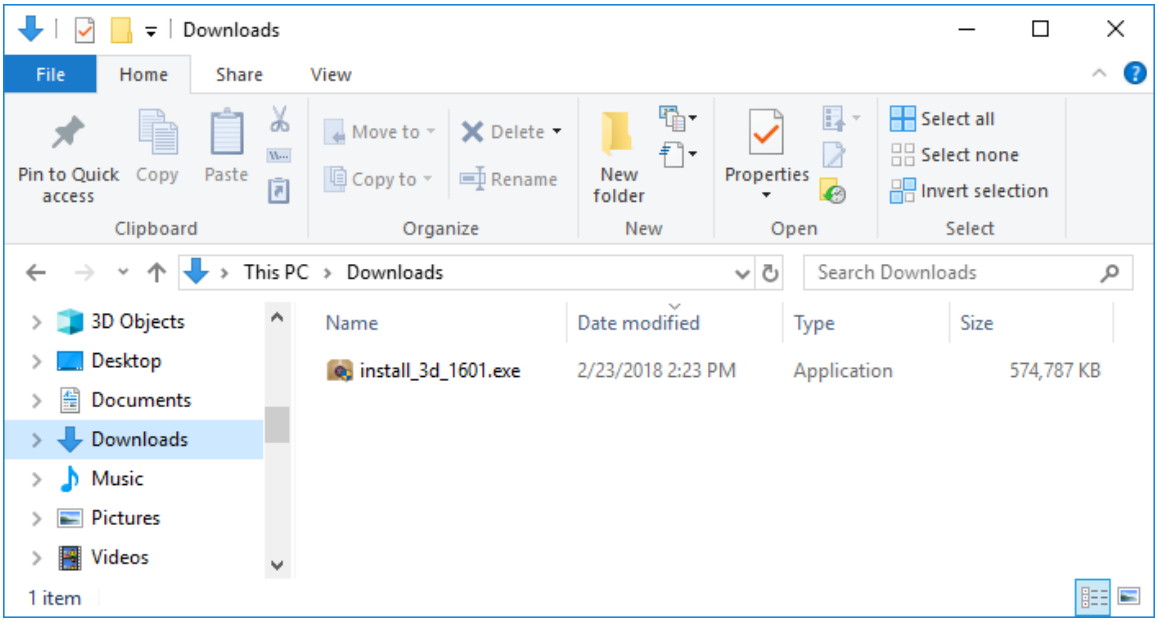
1. Go to the installation web page by clicking on the red **Download Software** button from the e-mail that was sent to you from our licensing department:



2. Click on the red RISA program **Installer** button and it will download the program installation:



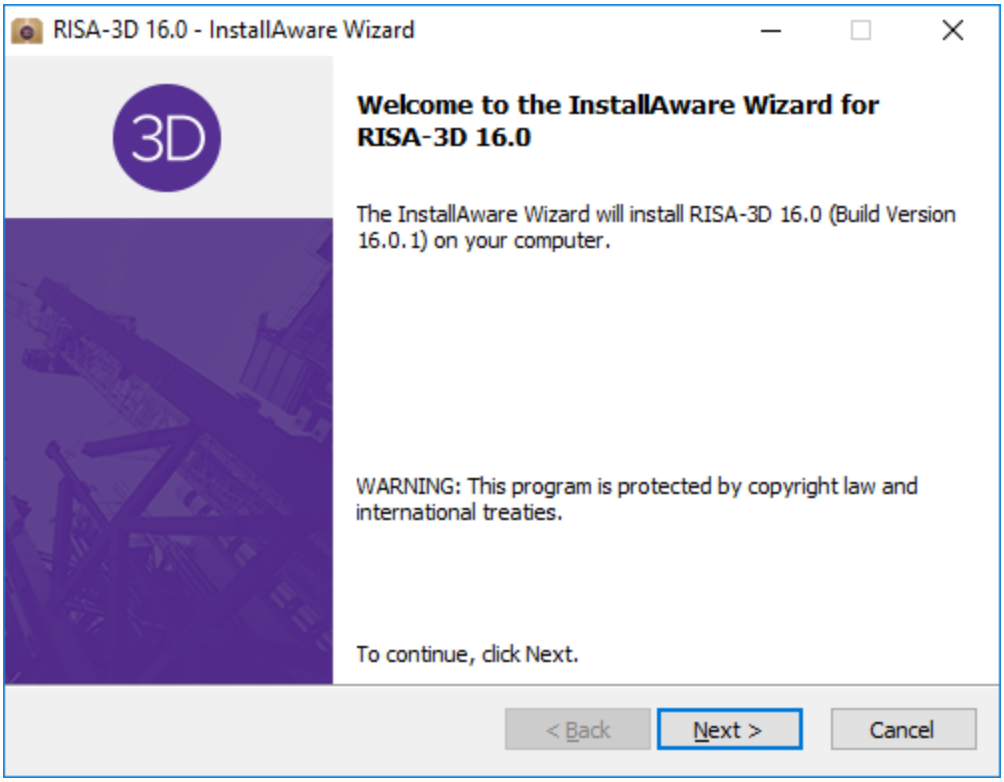
3. After it finishes downloading, click on the downloaded file (wherever it downloaded on your local computer) to run the installation:



4. If you receive a User Account Control / security message click **Yes** to continue with the installation.

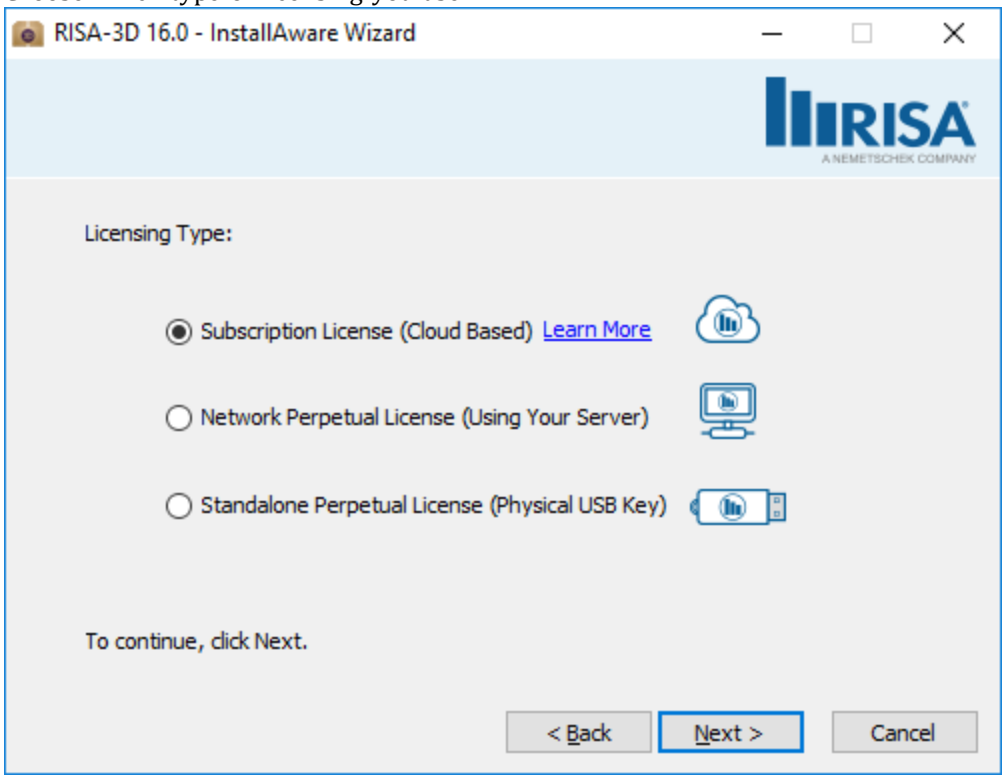
Installation Procedure

1. From the Welcome screen, click **Next**:



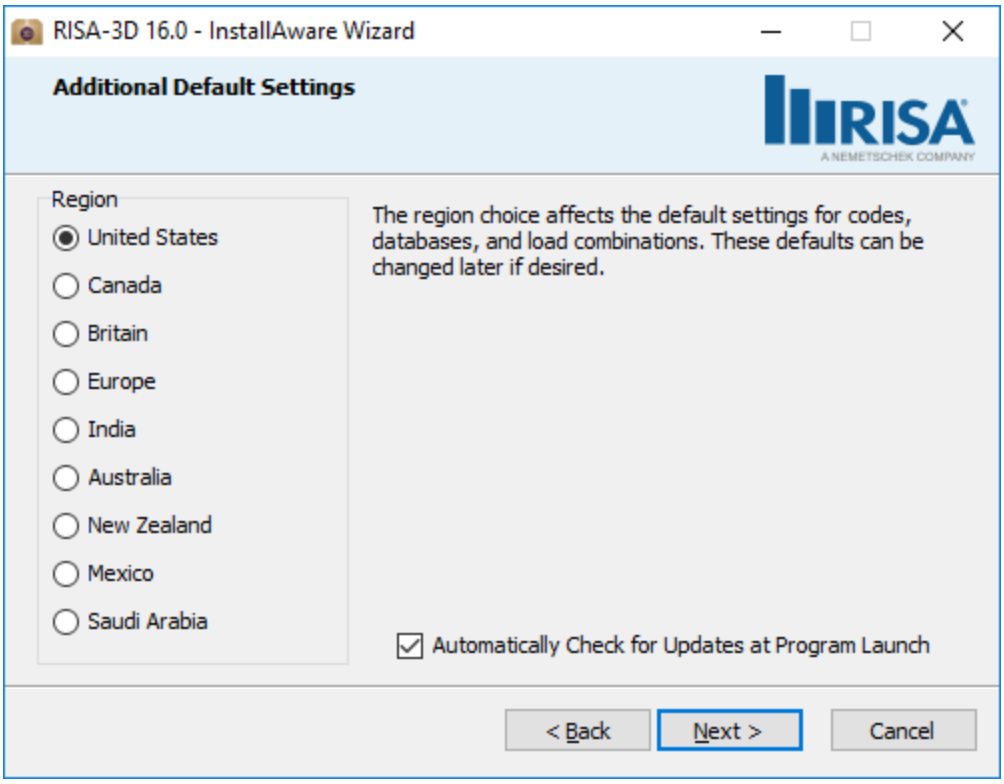
2. Accept the terms of the license agreement and click **Next** again:

3. Choose which type of licensing you use:

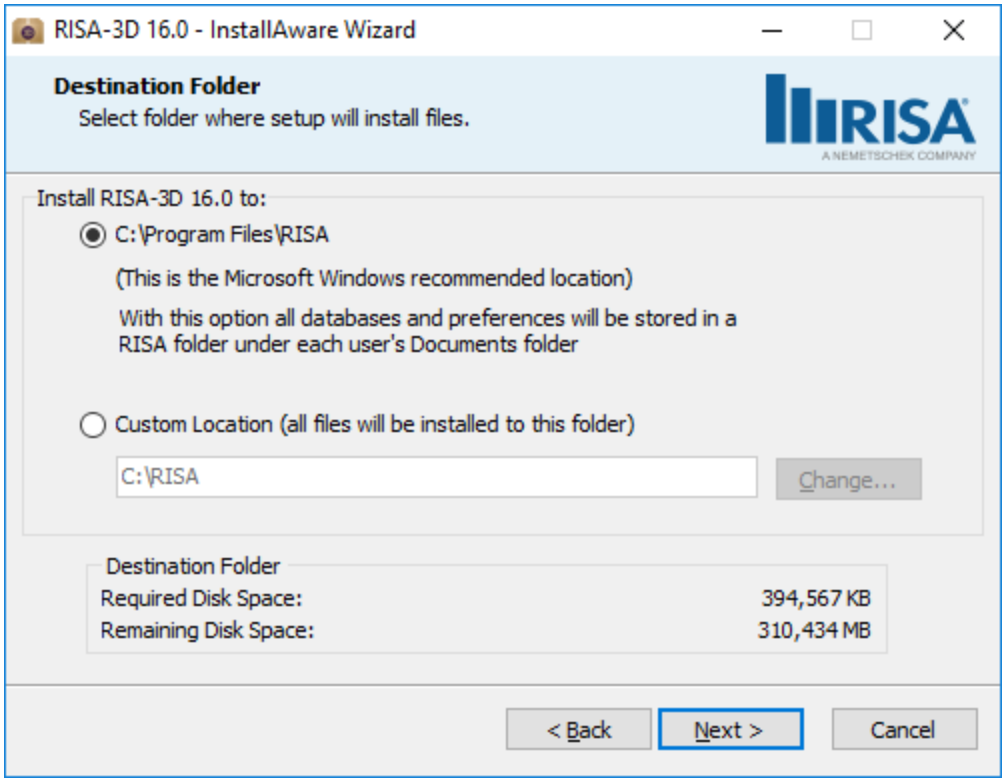


   a. ***Standalone Perpetual*** - this requires a physical USB key to be plugged into the user's computer:
   b. ***Network Perpetual*** - this option will allow you to check out a license from your network server computer:
   c. ***Subscription License (Cloud)*** - this checks out a license via your internet connection:

4. Select your Region and click **Next**:

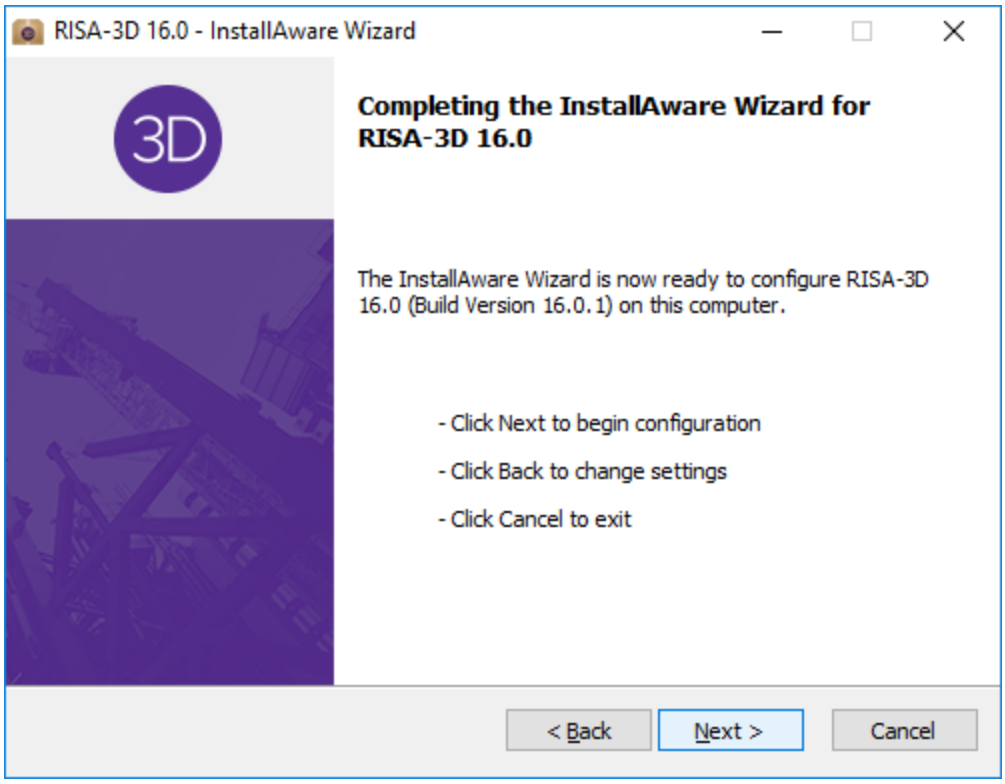


5. Choose a destination folder for the program on the client machine. The default will place the program in the **C:\Program Files\RISA** folder, and will place all databases, preferences, and other user editable files in each user's Documents folder. Choose a preferred location, then click **Next**:



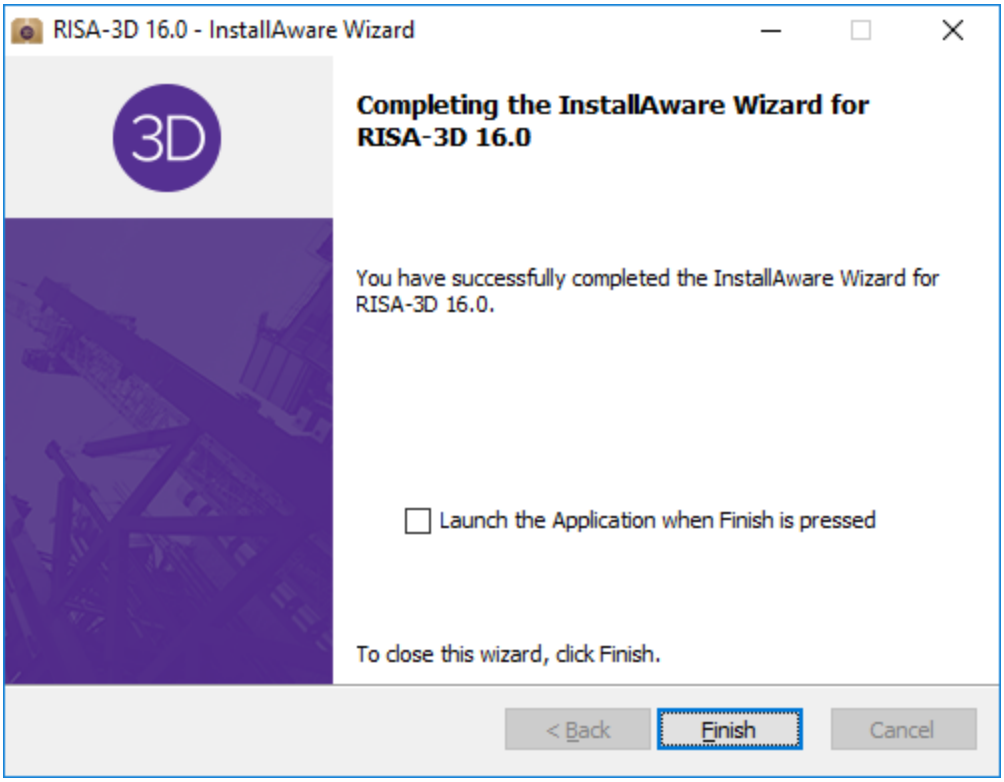
6. If you have a previous version installed, you will get a dialog that confirms the upgrade. Click **Yes** to continue.

7. Click **Next**:



8. (Standalone Perpetual Users Only) You may be prompted to install the Sentinel System Driver.
    a. Click **Finish** once the driver install is complete.

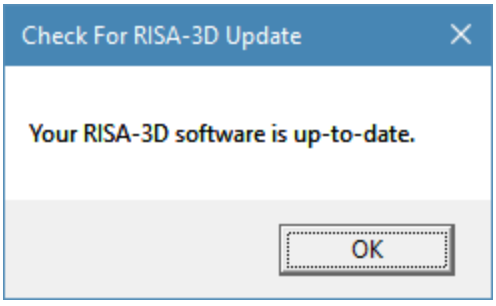
9. After the installation is complete, select **Yes** to check for program updates and then click **Finish**:



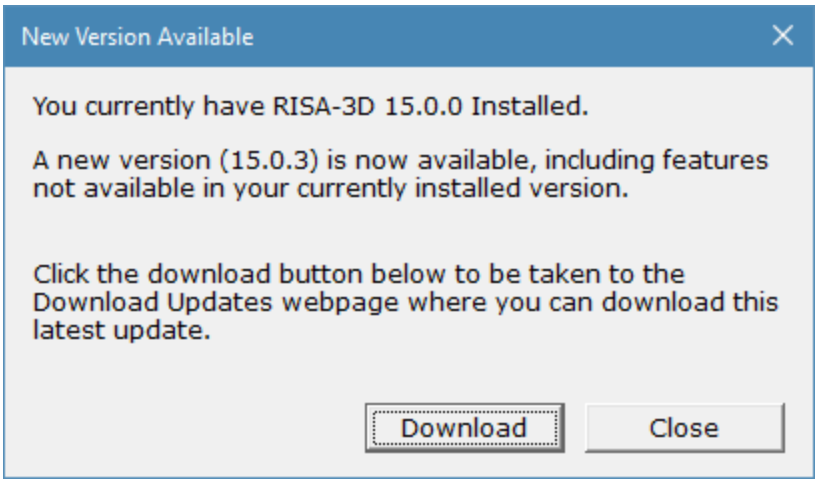
10. Launch your RISA program if it has not automatically.
    a. If you are using a Standalone perpetual license, you may be prompted for a RUS Password, check for an e-mail from RISA containing that information.
    b. If you are using a Subscription license, you may be prompted for user login and password, check for an e-mail from RISA containing the default settings, or your administrator if they have made any changes.

Check for Updates

The Check for Updates feature will compare the installed version on your computer to the most current update listed on our RISA website.



If it finds a newer version, it will offer you the option to open your internet browser to the Download Updates page where you can download the install.



You can also access this feature from within the RISA program. Simply go to **Help** - **Check for Updates** to run this feature from within your program.

Installation Options

In general, 99% of users will want to use the default installation options. However, each option is described below for the more advanced users:

Region

This setting controls what default design codes, shape databases, and load combinations show up in the program.

Destination Folder

This setting controls what folder your program files are installed into. When installing into Program Files a folder is created under each user's Documents folder which contains all of the databases, preferences, and editable files. The only files which get placed into the Program Files folder are files that the user never needs to directly interact with. Alternatively, all RISA related files may be installed to a single folder (such as C:\RISA).

Note:

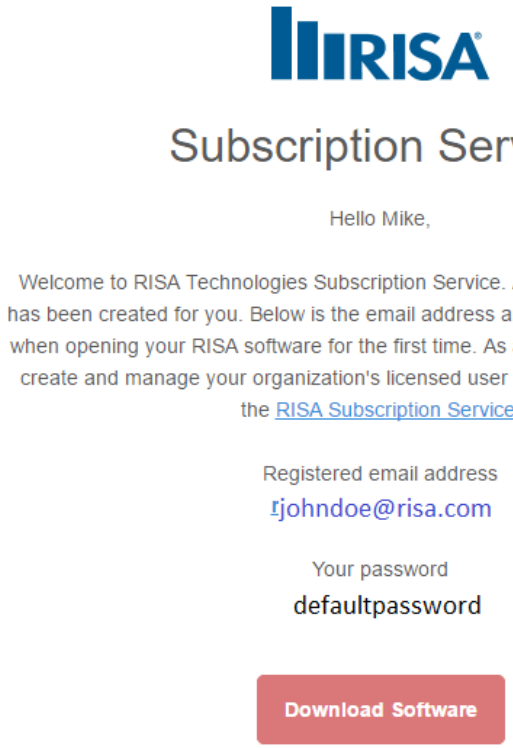
- If there are uncommon settings on your machine (Documents on the E: drive rather than the default C: for example) then the installer may force you to choose a Custom location.

Subscription Licensing

RISA Subscription licensed products use the internet for licensing. This allows the owner to install RISA products on many different machines without violating the license agreement, and it allows them to use any computer without requiring a Sentinel USB Key or a connection to any particular network. In order to run a RISA Subscription product an internet connection must be present at the time the program is launched . Here is how the system works.

Welcome E-mail

With the purchase of the product an e-mail will be sent to you giving a **E-mail Address** and **Password** and a **Download Software** button. There will also be a link to view your account on the **RISA Subscription Service** website.

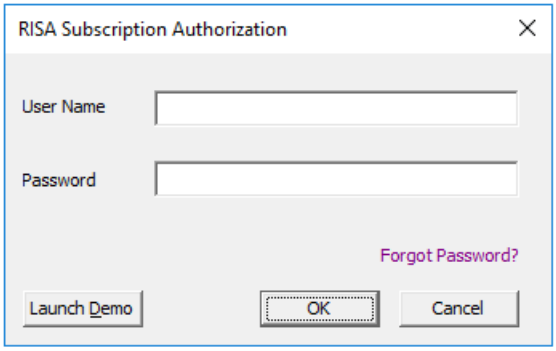


Note:

- You can either forward this e-mail to other users for them to get up and running (sharing the SAME E-mail/Password across the company) OR use the Administration tools to separate log-ins for each employee. See Users below for instructions on setting up separate log-ins for each employee.

Running the Program

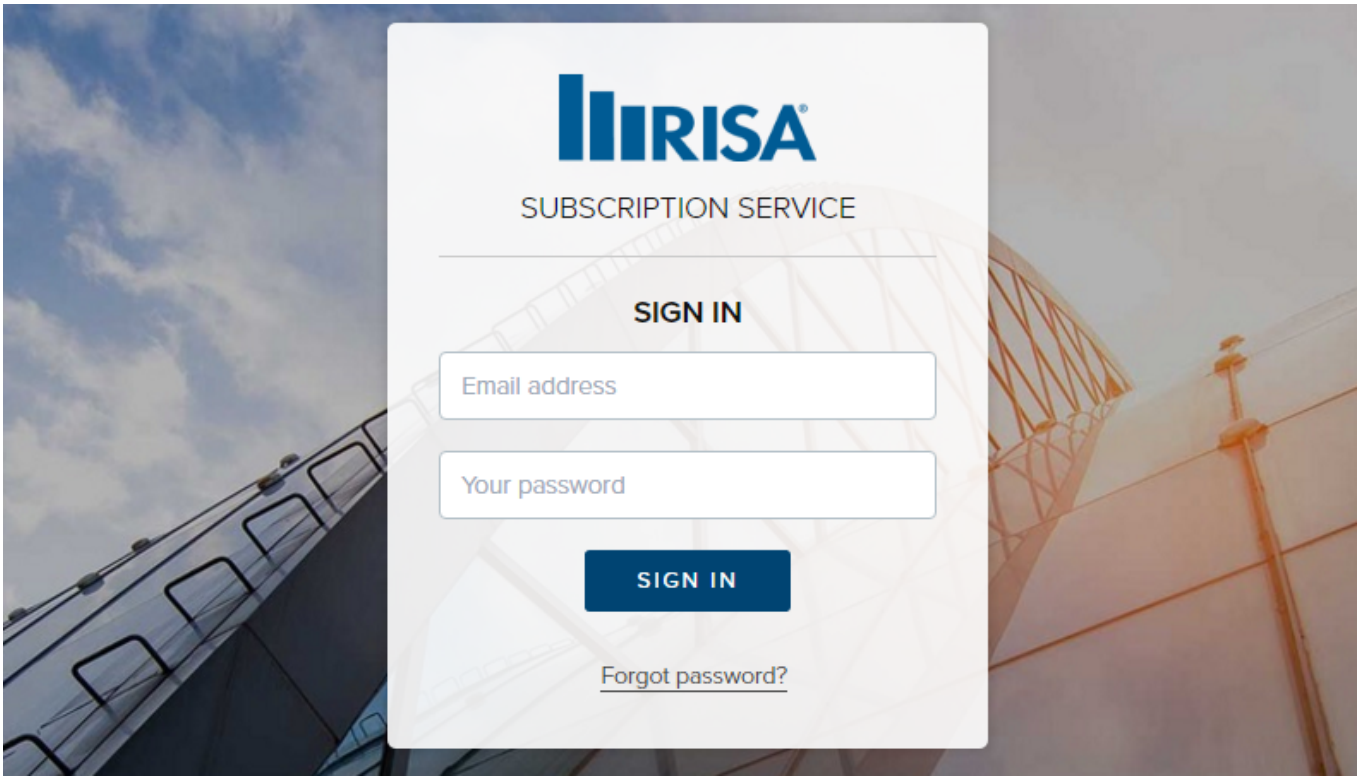
After installing your RISA products, the first time you open the program we will ask for this Username/E-mail and Password. Input this once and it will now be saved on your computer.



After inputting this then the program will open and you are successfully using our subscription system.

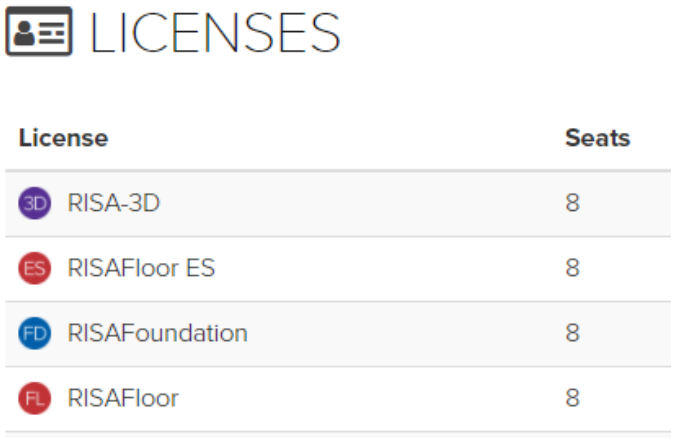
Account Management

If you want to take an active role in the subscription licensing process you can do so at ***secure.risa.com***. Use your log-in E-mail and Password to access. As the Administrator on the account you'll have the **Programs**, **Users, Usage** and **My Account** pages. Here we will go through each.



Licenses

This page allows you to see which programs and how many seats of each program that are owned.



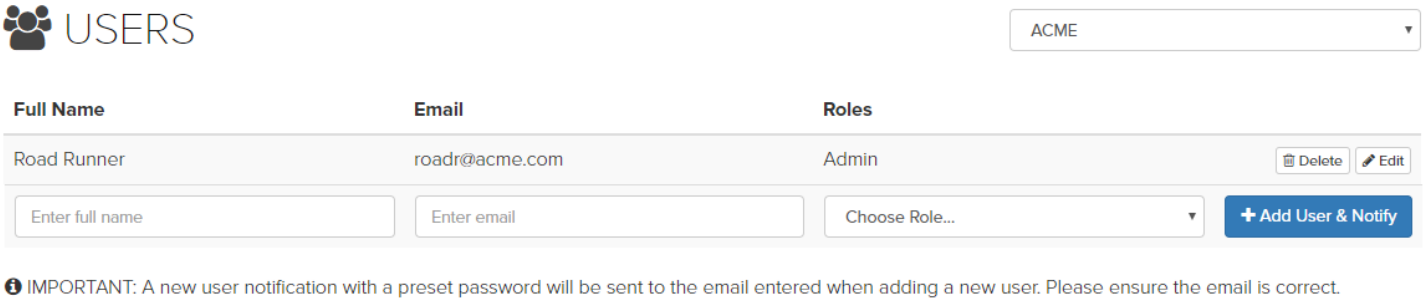
Users

This page allows you to build out your company and create separate log-ins for each employee who will use RISA subscription products. Only Administrator's can view this page. A User can't access this page.

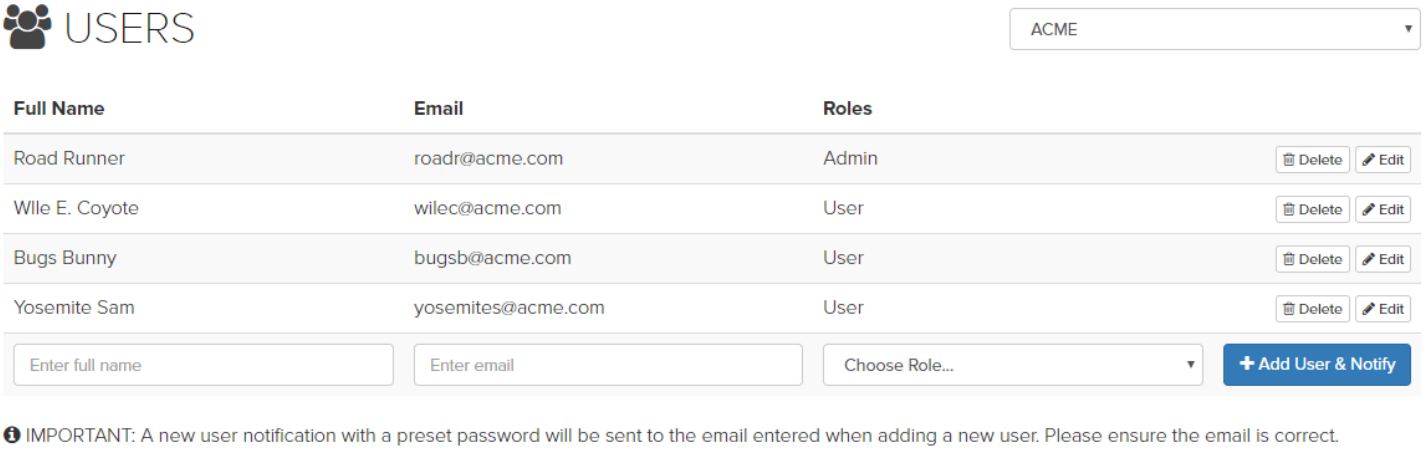
Note:

- You can either share one E-mail/Password for all users of RISA subscription products OR create separate log-ins for each employee.

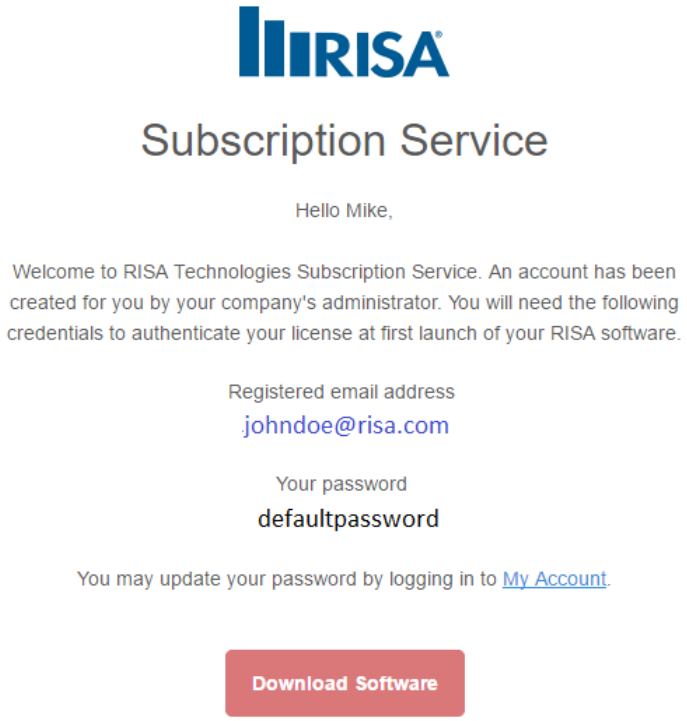
Upon first entry you'll just the Administrator as the only user.



If you choose to you can use the **+ Add User & Notify** to create a log-in for each employee. When finished it could look similar to below:

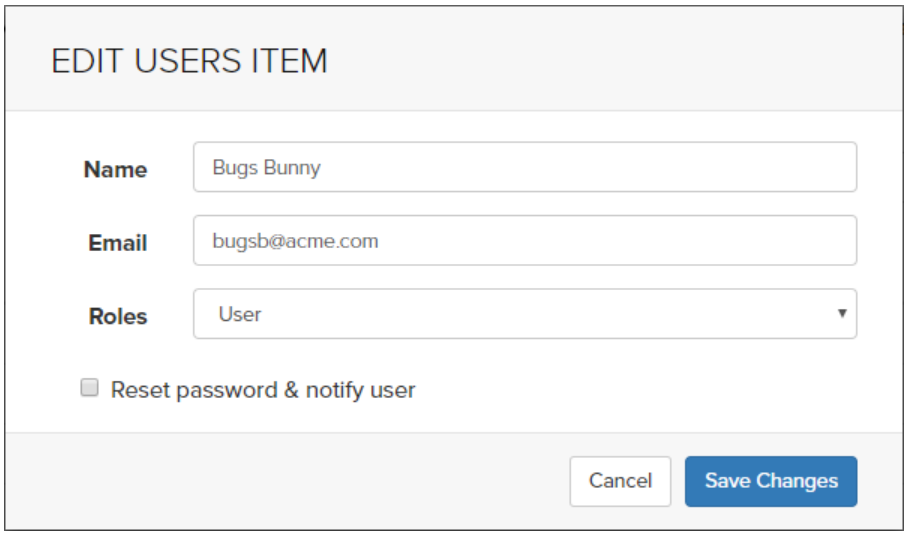


When the **+ Add User & Notify** button is clicked an e-mail is generated for that user, with a default password and a **Download Software** button to get up and running.



This will give each individual what they need to install and start using the programs.

The Administrator(s) can also Edit or Delete users. If you click **Edit** next to a user this dialog will open:



Here you can change the Name, E-mail, Roles and Reset their password. If you check the **Reset Password and Notify User** checkbox this user will be notified via e-mail and will be given a new default password.

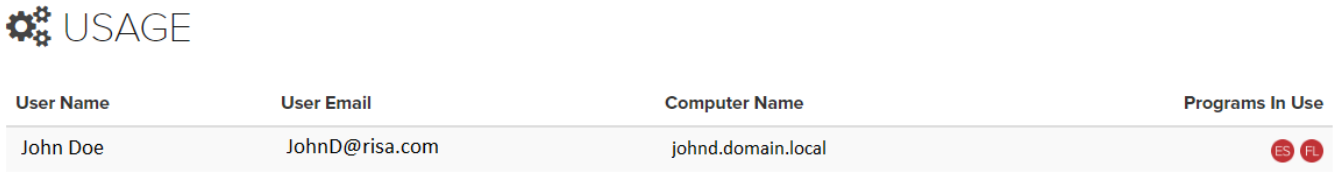
Roles work as follows:

- Admin: This permissions level allows you to Add/Edit/Delete users and see more advanced data on the account.

- User: This permission level allows limits you to very simple usage of the program and ability to change your own password.

Usage

This page allows you to see the CURRENT usage in the program. This is available to both Administrators and Users.

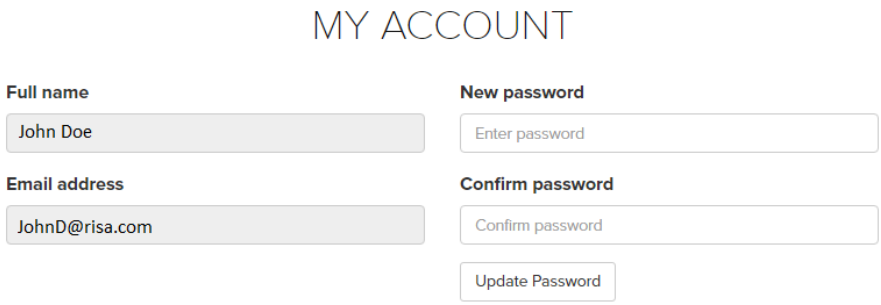


Note:

- A future enhancement will be to allow for historical usage reports to analyze your RISA usage.

My Account

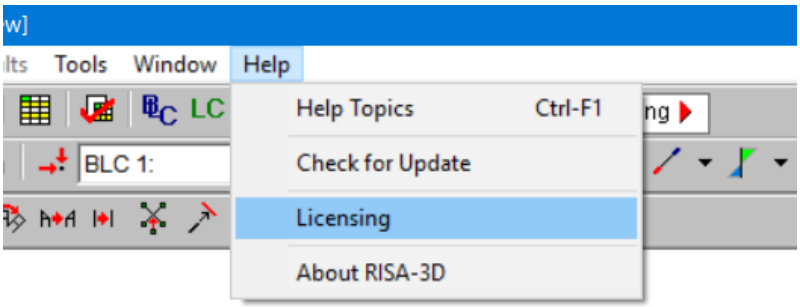
This page allows the User or Administrator who's logged in to change their password.

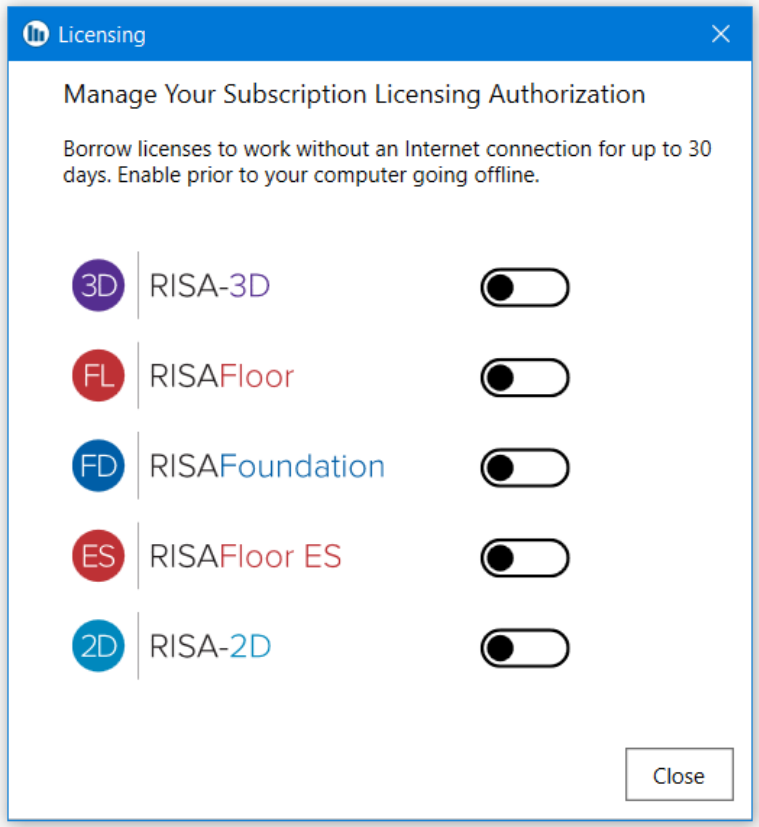


If a User wants to change their password they can simply log on and do so here.

License Borrowing

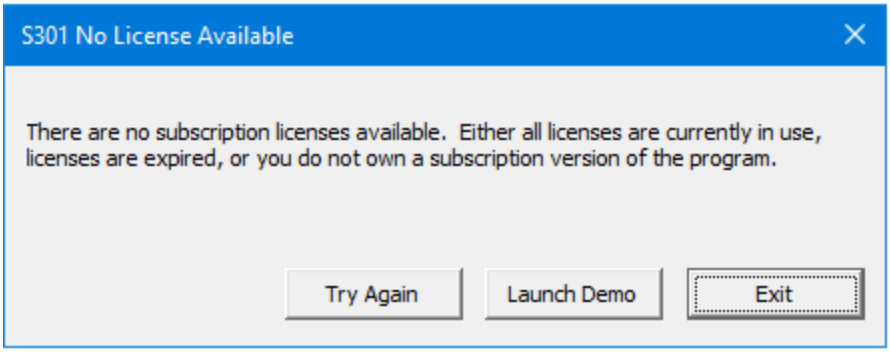
From the help menu inside of the program it is possible to borrow a license if you plan to be offline. The dialog will allow you to borrow a license for up to 30 days.





Error Messaging

S301 No License Available



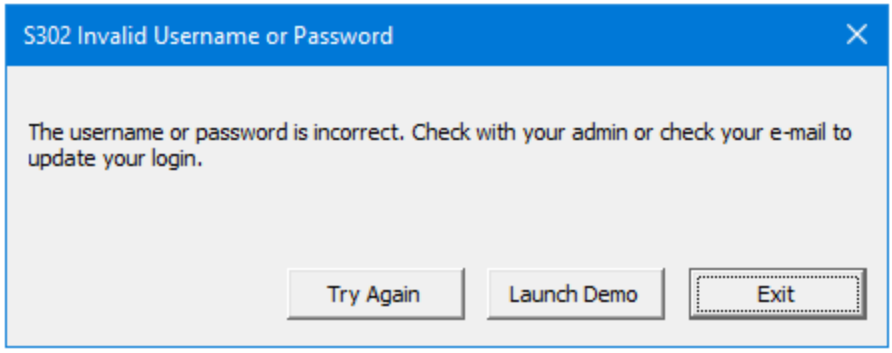
This message will occur if either:

- All licenses for this product are currently in use.
- Licenses have expired.
- A RISA Subscription copy of this program is not owned.

Note:

- Check out the **Usage** information for your account by logging in at ***secure.risa.com***.

S302 Invalid Username or Password

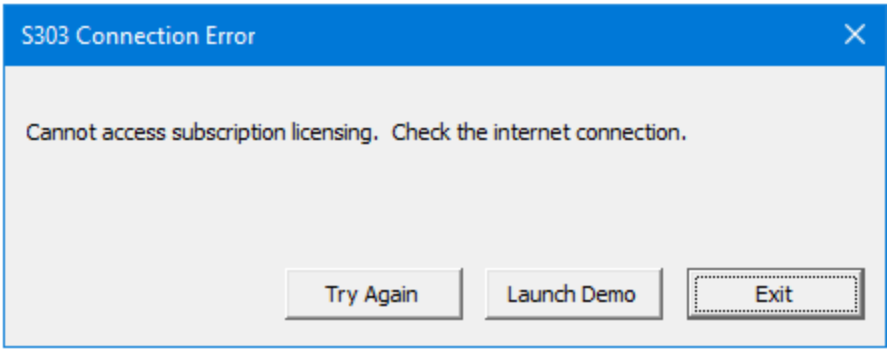


This message will occur if the E-mail Address & Password combination does not match any on your account.

Note:

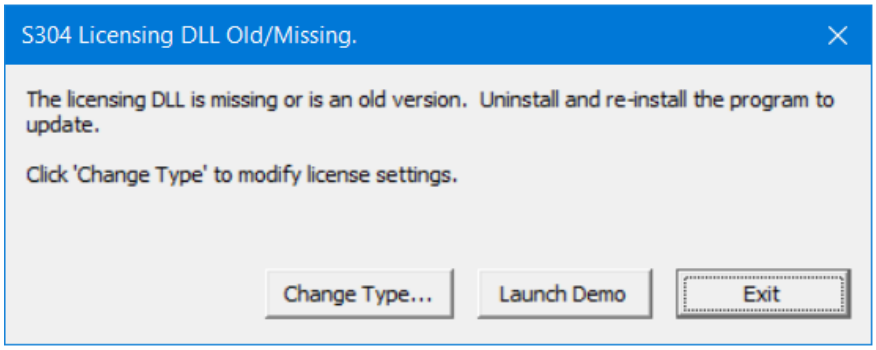
- You may need to log-in to ***secure.risa.com*** and reset your password.

S303 Connection Error



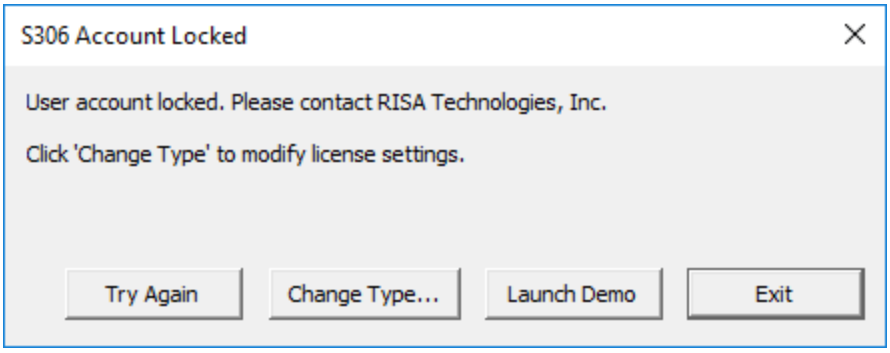
This message will occur if your computer can't access secure.risa.com. This is likely an internet connection problem or could be a firewall problem that is preventing communication. If running on a VPN this could also block access.

S304 Licensing DLL Old/Missing



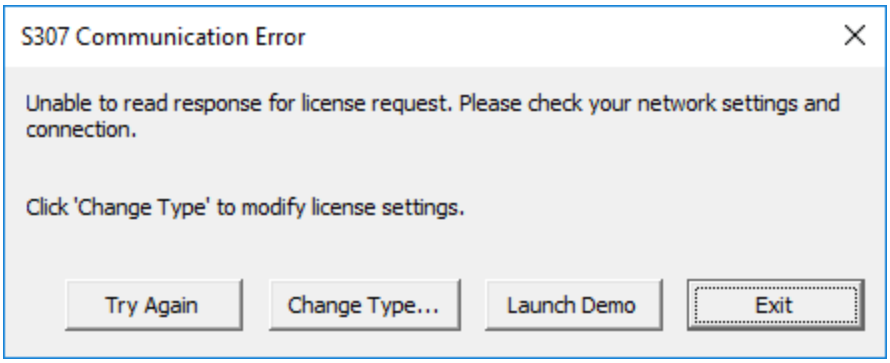
This message will occur if your computer can't access the **RISALicenseManagerCOM.dll** because it is either missing or is an older version. Uninstall/re-install the program to re-install this file.

S306 Account Locked



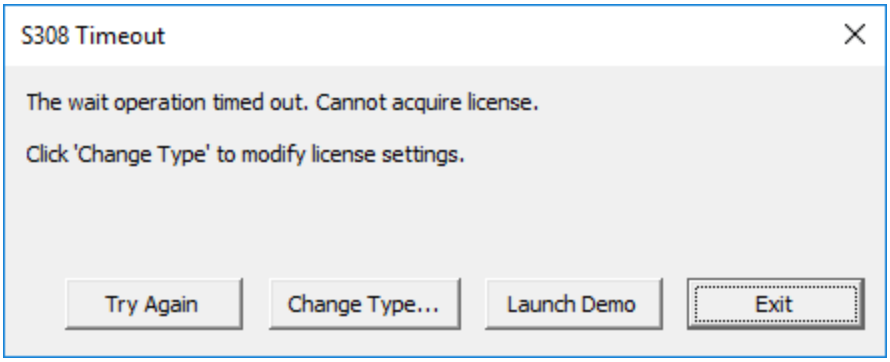
This message will occur if it appears there's an attempt to access multiple licenses incorrectly. If you receive this error and are not sure why please e-mail support@risa.com to have the account released.

S307 Communication Error



This message will occur if something is blocking your communication with our licensing server at secure.risa.-com. Check firewalls, anti-virus and anything else on your network that may block communication.

S308 Communication Error

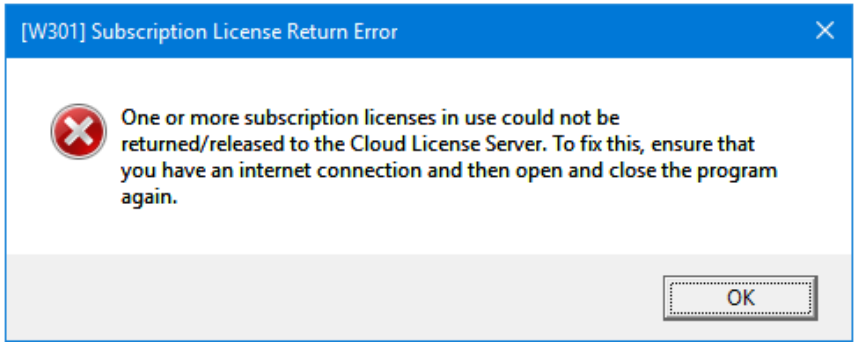


This message will occur if something is blocking your communication with our licensing server at secure.risa.-com. Check firewalls, anti-virus and anything else on your network that may block communication. If running on a VPN this could also block access.

W301 Exiting the RISA Product

When exiting a Subscription RISA Product the license will automatically be released over the internet. If no internet connection is present when exiting then the following error will appear, and the license will continue to be

held by that computer even though the RISA program is no longer open.



Once internet connection is restored, simply launch the RISA Product and then exit again for the license to be released.

Subscription Expiration Notice

Once you're within 60 days of expiration with your license the program will give you a notification when you start up letting you. Whether you open RISAFloor (& ES), RISA-3D or RISAFoundation, these four products will notify you even if you're not in those products. Note that RISASection and RISAConnection show this message separately.

Sentinel USB Key

RISA uses a Sentinel USB Key for licensing. This key may be plugged into any USB port on the machine. When functioning properly the key will light up green or red when plugged into a running machine.

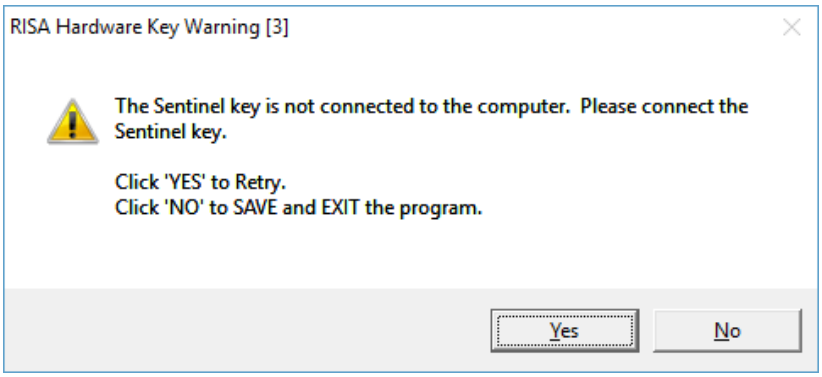
The design of Sentinel's keys has changed over the years. The oldest Sentinel USB Keys are purple, and typically do not have an adhesive label attached. Newer ones are black. The newest keys are purple and have a much more compact size to them. The black keys and new purple keys have an adhesive label designating their Key ID. See the image below:

Note:

- If trying to determine whether a USB key is a RISA key, the presence of the serial # SRB11137 usually signifies it is a RISA key.
- Safenet Sentinel Superpro keys, in rare instances, may have a problem being read when plugged into a USB 3.0 port. If you run into this issue please use a USB 2.0 port instead.

Launching the RISA Product

When launching a RISA standalone product the product will search for a connected Sentinel USB Key. If no key is found then the following dialog box is displayed (Warning 3):



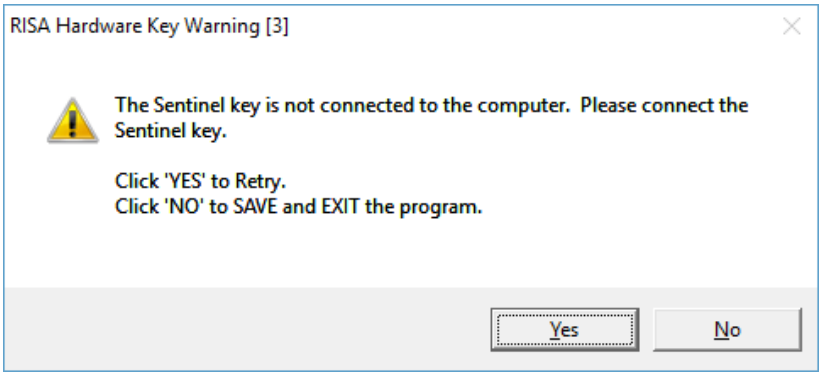
The user can check the key then click **Yes** to try again, or click **No** to exit.

Note:

- In rare circumstances Warning **L:26** will accompany this message. If this occurs it is letting you know that there is a license file issue that is not authorizing the program. Either time tampering or UAC problems are occurring.
- In very rare circumstances Warning **L:509** will accompany this message. If this occurs it is letting you know that there is a license file issue in combination with a license file that is not authorizing the program. The latest version of the RISA Key Manager was not used in generating the Locking Criteria.

Removing the Key

RISA Products periodically check to ensure that the Sentinel USB Key is plugged in. Removing the Sentinel USB Key during the operation of a RISA standalone product will eventually cause the following dialog box to be displayed:



Once this dialog box is displayed, no additional work may be done within the RISA Product until the key is inserted. Clicking the **No** button on the dialog box displayed above will automatically save the file (overwriting the previous version of the file) and exit the program immediately.

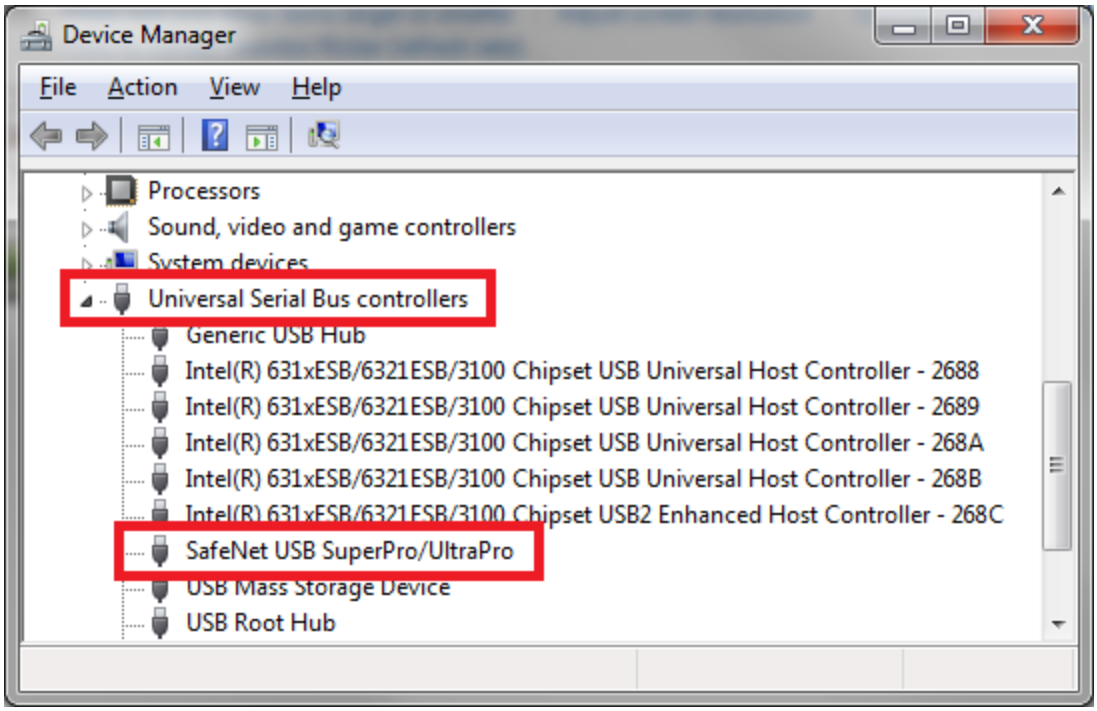
Remote Desktop

Standalone licenses allow access through Remote Desktop for all current RISA programs except RISASection.

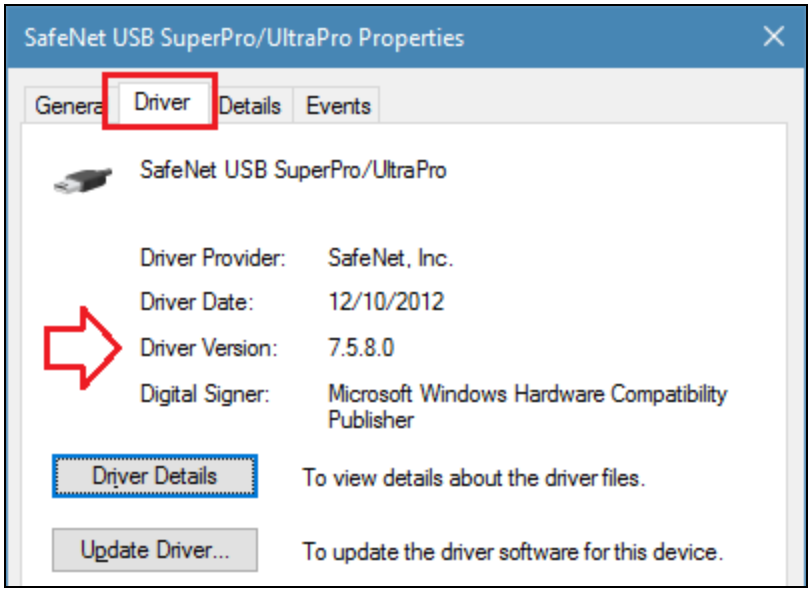
Key Driver

A Sentinel driver is necessary for the machine to read the USB key. This driver must be installed prior to plugging in the key. The latest **Sentinel System Driver** (also called the **Sentinel Protection Installer**) can be obtained from the RISA Product Licensing website, and is always included in both the Network server and Standalone Perpetual installs (this install is ran from the **SetupSPI.exe** located in the *RISA\Sentinel Protection Installer* folder).

To confirm that your machine is running the latest driver open the **Device Manager**, which is accessible through the Windows **Control Panel**. If the key is plugged in and the correct driver is installed then it will be listed under the Universal Serial Bus controllers as a **SafeNet USB SuperPro/UltraPro** device



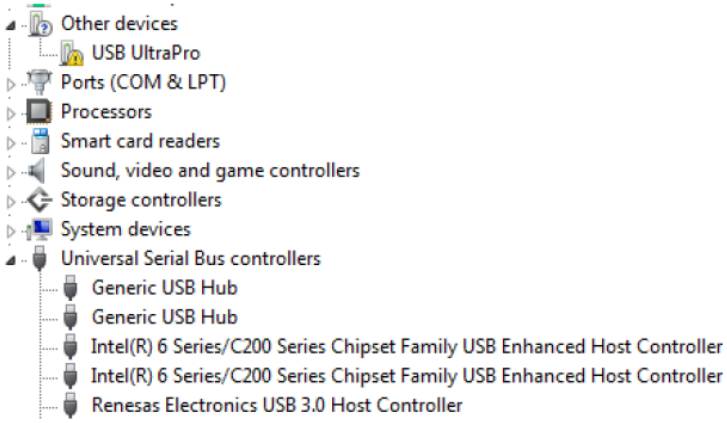
Double-click on the **SafeNet USB SuperPro/UltraPro** device to view its properties. Clicking on the **Driver** tab will reveal the **Driver Version**:



Manual Driver Installation

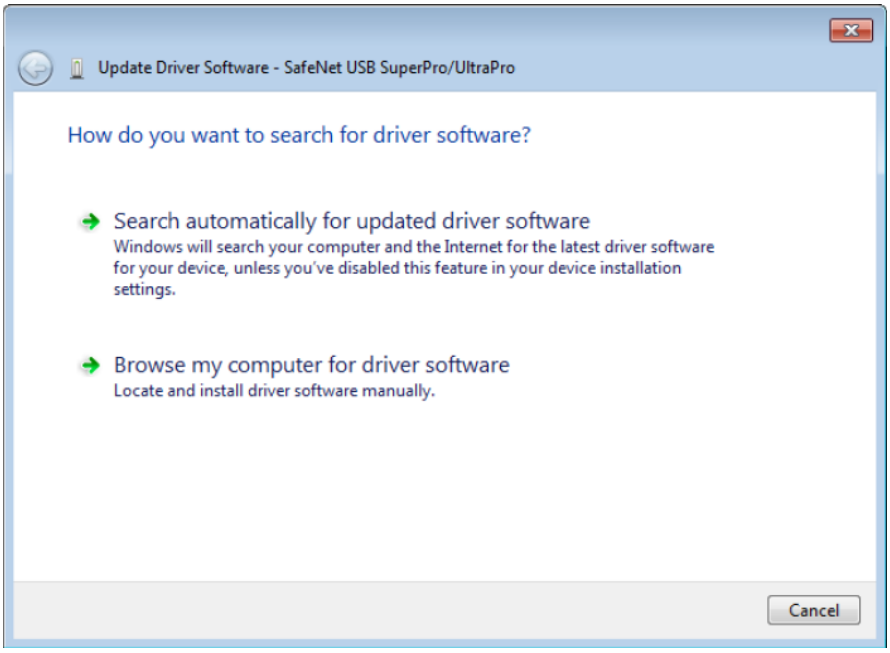
There are times when the driver has some difficulty installing. In these cases it may be necessary to manually install the Sentinel Driver. To do this:

1. In the device manager highlight the entry for the USB key. It may appear as **USB UltraPro** or **USB SuperPro** and have yellow triangle on it to indicate an incomplete driver install.

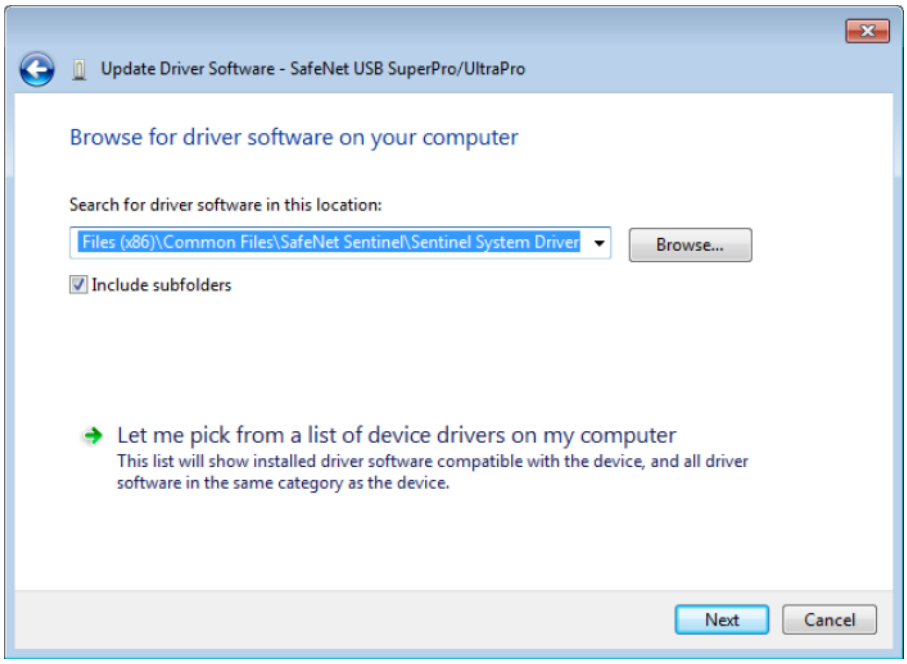


2. Now right-click to bring up a menu as shown below and choose **Update Driver Software...**

3. You should get **Update Driver Software** dialog shown below. Select the **Browse my computer for driver software** option:



4. The browse dialog below will come up. Browse to following location: ***C:\Program Files (x86)\Common Files\SafeNet Sentinel\Sentinel System Driver***
5. Click **Next** on the dialog and the driver software should install.



SSD Cleanup

There are instances when uninstalling the key driver will leave remnants of information in the registry. This will sometimes cause problems in reading the key when a new version of the key driver is installed. In this instance it may be required to run the SSD Cleanup utility to fix this problem. This file is called **SSDCleanup.exe**.

It is located here (by default): **C:\Program Files\RISA\Sentinel System Driver\x64**

Note:

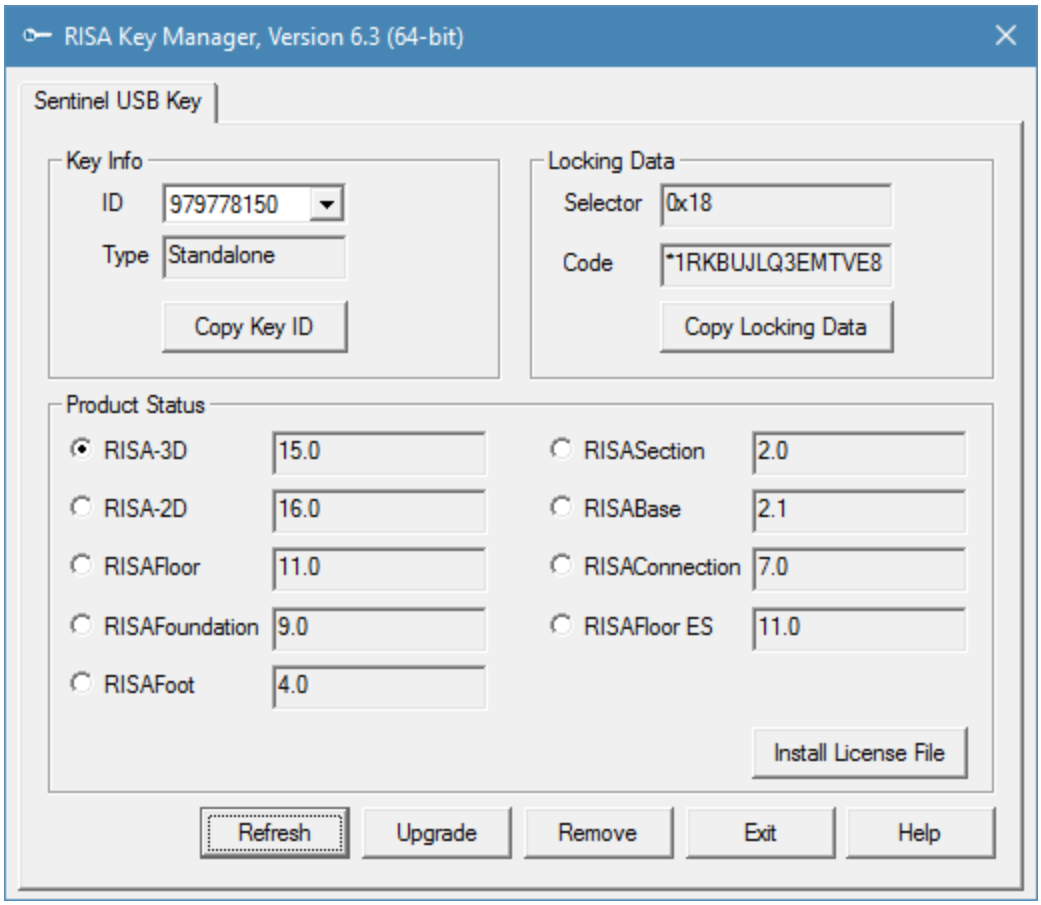
- If RISA has been installed to a location other than *C:\Program Files* then you will find a Sentinel System Driver subfolder in that other location (e.g. *C:\RISA*)

So the typical way to fix key driver issues is as follows:

1. Uninstall the key driver from the machine.
2. Run the SSD Cleanup utility (SSDCleanup.exe or SSDCleanupx64.exe).
3. Re-install the key driver by running the SetupSPI.exe from the **C:\Program Files\RISA\Sentinel System Driver** folder

RISA Key Manager

The RISA Key Manager is a utility which allows you to interact with the Sentinel USB licensing key. A shortcut to this utility can be found in the Windows Start Menu.



For Sentinel USB Keys (Standalone or Network Server) the Key Manager is used mainly for these purposes:

- Upgrading a standalone key for a new version
- Upgrading a network key for a new program

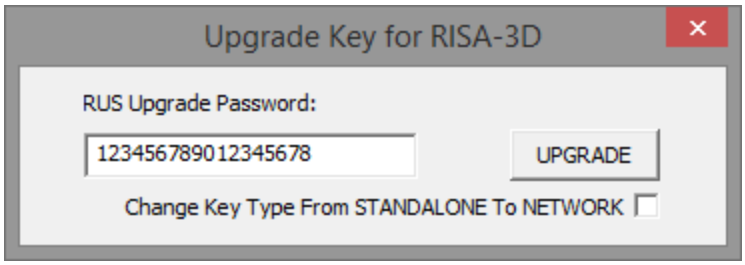
Additional capabilities include:

- Copying the locking data from a computer
- Converting a key from standalone to network and vice versa
- Removing a feature from the key and sending RISA a removal confirmation code

Uses For the RISA Key Manager

Upgrading a Standalone Key for a New Version (Perpetual License Only)

For each major version of the program the Sentinel USB Key must be upgraded to the newer version. This can be done by clicking the radio button of the program you are updating, pressing the **Upgrade** button and inputting the RUS password. The RUS password can be found in an e-mail from RISA. Once you have input the RUS password, then press **Upgrade** and the key will then be upgraded.



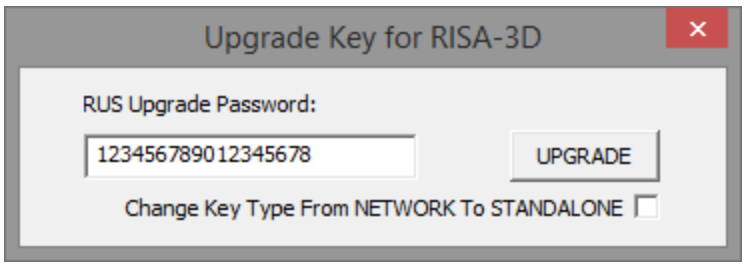
After this process you should then see the updated version next to that program and your key is then upgraded.

Note:

- Minor releases do not require an update to the key. For example, an update of RISA-3D from 15.0.0 to 15.0.1 will not require an update to the key.
- If you upgrade the key and you get a message stating *Unable to update Sentinel key. The currently authorized program version exceeds the upgrade version*, this means that the key is already up to date for the version of the RUS password you entered.

Upgrading a Network Key for a New Program (Perpetual License Only)

A network Sentinel USB Key only has to be authorized for a program once. After the key is authorized, then version upgrades do NOT require the key to be updated. If you own a network version of RISA-3D and then purchase a network version of RISAFloor, then you WILL need to update your key for RISAFloor. This is done by clicking the radio button of the program you are updating, pressing the **Upgrade** button and inputting the RUS password. The RUS password can be found in an e-mail from RISA.. Once you have input the RUS password, then press **Upgrade** and the key will then be upgraded.



Note:

- If you upgrade the key and you get a message stating *Unable to update Sentinel key. The currently authorized program version exceeds the upgrade version*, this means that the key is already been authorized for that program.

Miscellaneous Uses

Copying the Locking Data from a Computer

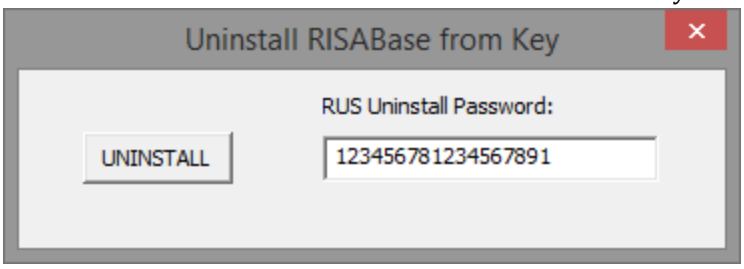
The locking data is a code that is specific to your computer. RISA may request that you can press the "Copy Locking Data" button and it will copy this information to your clipboard. You can then open up an e-mail and paste (CTRL-V) the locking data into an e-mail.

Converting a Key from Standalone to Network and Vice-Versa

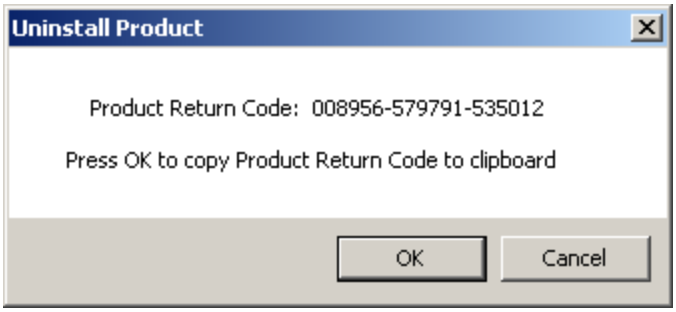
If your company switches from standalone licensing to network licensing or vice versa then RISA will send you an RUS password to convert your Sentinel USB Key. To do this follow the **Upgrade** procedure above, except make sure to check the "Change Key Type..." check box.

Removing a Program from the Key and Sending RISA a Removal Confirmation Code

When reconfiguring licenses sometimes there is a need to remove a program from the key. This can be done by:

- Clicking the radio button of the program you wish to install and press the **Remove** button.
- Enter the RUS Uninstall Password that has been e-mailed to you from RISA and press the **Uninstall** button. 

- You be asked if you wish to continue. Press the **Yes** button.
- It will then tell you that the program has been uninstalled.
- A final screen will come up with a **Product Return Code** that MUST be sent to RISA to confirm that the program has been uninstalled.



Silent Install

These instructions are intended for customers who want to install the program without clicking through all of the dialogs associated with the install.

How the Silent Install Works

RISA installations can be run silently from the command prompt or by running a bat file. To run a silent install, of RISA-3D for example, you would execute the installation file with the "/s" switch. The entire command line would look something like this:

```
<C:\RISA\install_3d_1600.exe /s
```

The above command assumes you saved the install in the C:\RISA directory. Alternatively you can use a .bat file to execute a silent install as well or a registry entry. When you run an install RISA places an example .bat file in the **Documents\RISA\Misc** directory for your use.

Note:

- This functionality was added in RISA-3D V16, RISA-2D V17, RISAFloor V12, RISAFoundation V10, RISAConnection V8 and RISASection V2.1.
- If the installation is an update release (eg 15.0.3, 15.0.4) over an existing installation, the InstallationDirectory and ProgramGroup values are ignored in favor of using the values already in effect for the existing installation.
- Silent install capability is not available in the demo versions.

Using the Setup.ini File to Guide the Installation

Simply running the silent install will install the program(s) with default selections for each of the dialogs in the actual install. However, we can use the Setup.ini to instruct the silent install on how to act. A default version of this file is provided upon install in the **Documents\RISA\Misc** directory for your use.

This file has controls for all RISA products, so you can use the same file for all products. The controls are the same for each. For RISA-3D for example here are the controls

[RISA-3D]

InstallationDirectory

ProgramGroup=

Region=

AutoCheckForUpdates=

LicenseType=

Input	Further Instructions	Default
InstallationDirectory	Define an installation directory. This allows you to place the install anywhere if the default is not satisfactory. Leave this completely blank to use the default.	C:\Program Files\RISA (executables) & Documents\RISA (editable files)
ProgramGroup	This is the name of the folder where the programs are stored from your Start menu	RISA
Region	Here are the other region codes (if applicable for the given program): 0 – United States, 1 – Canada, 2 – Great Britain, 3 – Europe, 4 – India, 5 – Australia, 6 - New Zealand, 7 – Mexico, 8 – Saudia Arabia)	0 (United States)

Input	Further Instructions	Default
AutoCheckForUpdates	Yes or No. This sets a registry flag for the program to notify you when a program has a new version available.	Yes
LicenseType	This sets the license type required to use the program. The options are Subscription, Key or Network, so this must be entered to match your licensing type unless you are the default (subscription)	Subscription

Notes:

- If an InstallationDirectory is specified, both the execution files and data files will go there.
- Specifying a directory containing “Program Files” is not allowed. The installer will instead write execution and data files to C:\RISA.
- If the installer is running under a roaming, re-directed user profile, or using SCCM, executables and editable files are always written to C:\RISA

Further Customization Using the .BAT File

The default .BAT file created is very simple. This file must be placed in the same folder as the install and will only consider a setup.ini file if it is also place in the same directory as the install. However, we can update these directories with the .BAT file. An example of the contents of a .BAT file is shown below:

```
cd C:\RISA\Install
install_3d_1600.exe /s "LOG=C:\RISA\Install\3d Install.log" "INIFILE-
E=C:\RISA\Install\Setup.INI"
```

Let's explain the contents of this example file. First of all, we can input a directory to look to for the install. It doesn't need to be the directory where the .bat file currently resides. Secondly, the program will create a .log file after the silent install runs. This will let you know if there were any problems with the install. The .bat file will give the option to choose where you want this file written to. Lastly, the INI file used to guide the silent install also doesn't need to be in the install directory. The .bat file gives the option to set a directory to find this .bat file.

Setup.ini and .Log Path Notes:

- Double quotes are needed around the entire expression if the path contains blanks or unusual characters.
- An equals sign follows INIFILE, not a colon.
- These files can be any name as long as they have the .ini and .log file extensions.
- LOG specifies the complete path to a .log file written during silent install. If omitted, no log is written.

Network Perpetual Licensing

RISA network products are licensed with a License Server. This server distributes licenses to the Client Machines.

Launching the RISA Product on a Client Machine

When launching a RISA network product the program will search for a connected Standalone Sentinel USB Key. If no key is found then the program will search the subnet for a License Server. If a License Server is found then the program will check out a license (if available).

If no license server is found, or if no licenses are available, you are presented with the option to enter Demo mode. If you believe that this is happening in error the two general problems are:

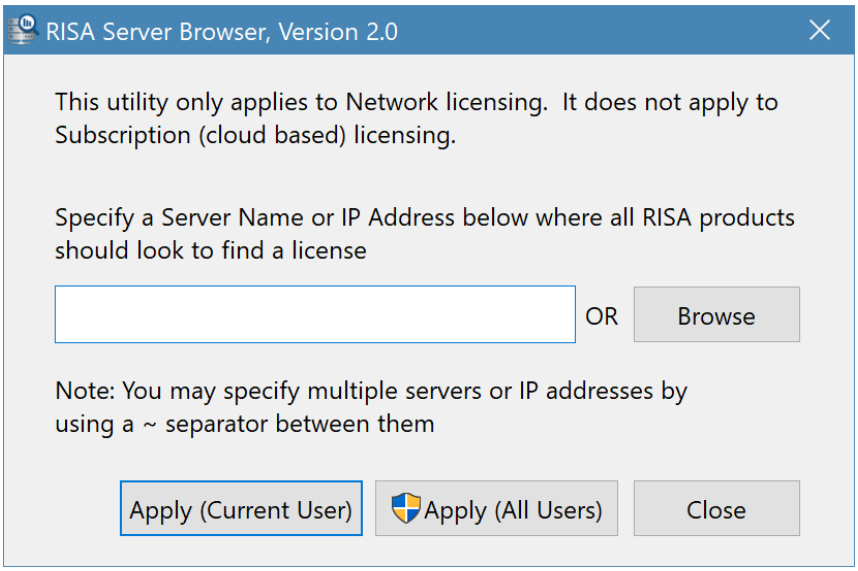
- A firewall is blocking communication. To fix this problem you must set an exception for UDP port 5093 on both the server and client for both inbound and outbound.
- The license broadcast is timing out. To fix this follow the **Pointing a Client Machine to a License Server** section below.

Pointing a Client Machine to a License Server

If no license server is found by the Client Machine then it may be necessary to point the Client Machine to the License Server.

Current Versions of all RISA Products (except RISASection)

Go to the Windows Start Menu and open the **RISA Server Browser:**

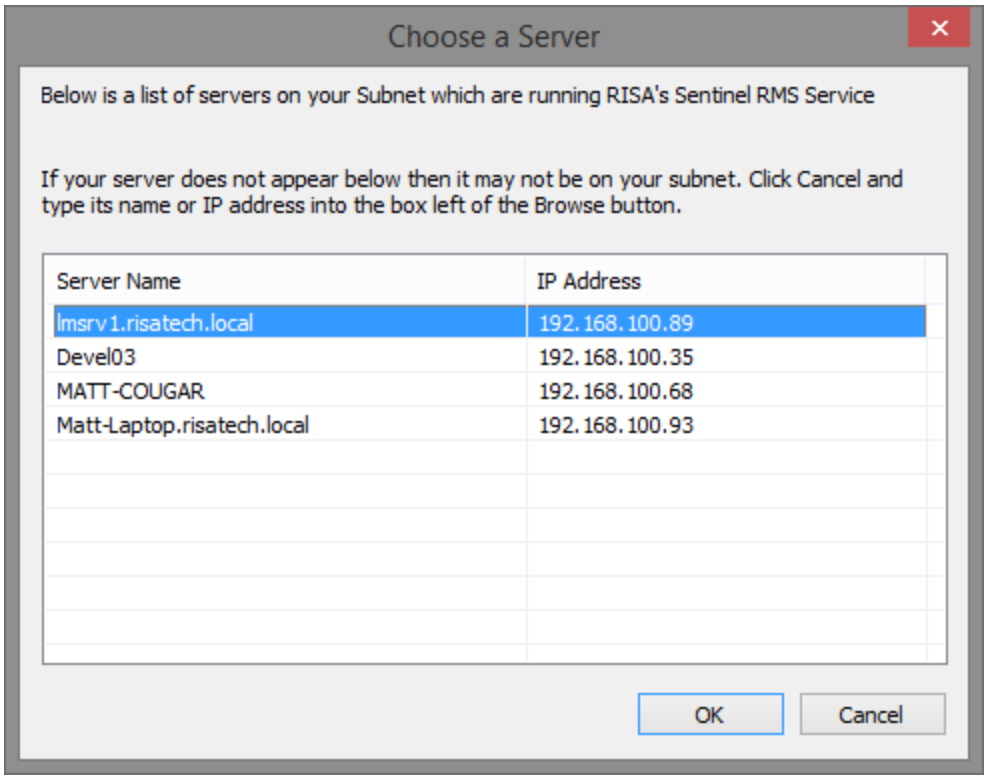


Choose whether you want to point all of your RISA products to the same server or whether you only want to point a specific RISA product to this license server.

Note:

- This utility will not work for RISASection.
- If you have multiple license servers that run RISA products you may enter multiple IP addresses or DNS names. Each name must be separated by a ~ (tilde) symbol.

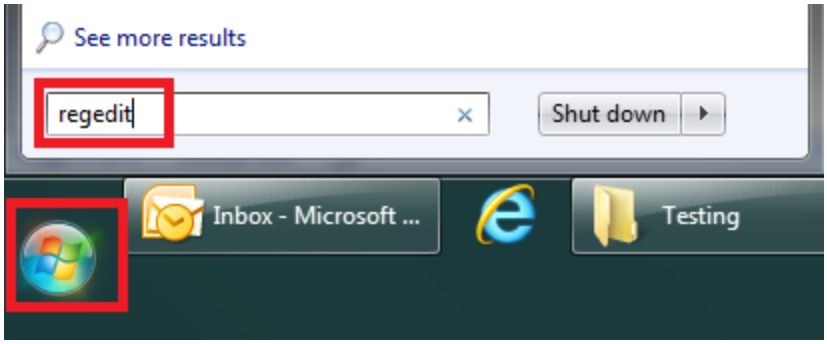
To point to a specific license server, enter the server name or IP address in the text box, or click the **Browse** button to view a list of available servers. Click on the name of the server and click **OK** to use that server.



You may apply the settings to the user who is currently logged in, or apply the settings to all users on the computer (including future users). IT Administrators logged in as themselves should apply to All Users so that other users get these settings when they are logged in.

RISASection

To do this, open the Registry Editor on the Client Machine by clicking on the Windows **Start Button**, clicking in the **Search box**, and typing **regedit**, then hit **Enter**.



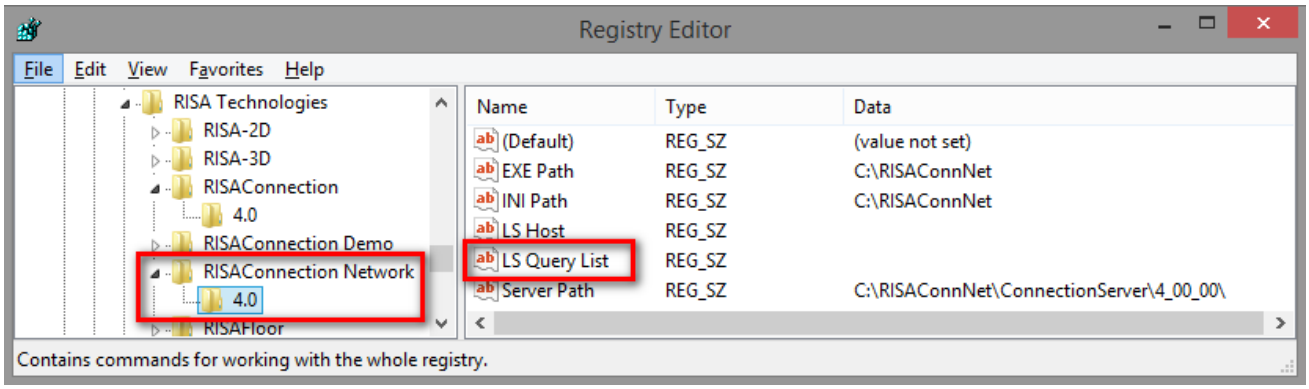
Note:

- The instructions above are valid for Windows 7. If you are running a different version of Windows then the procedure may be slightly different.

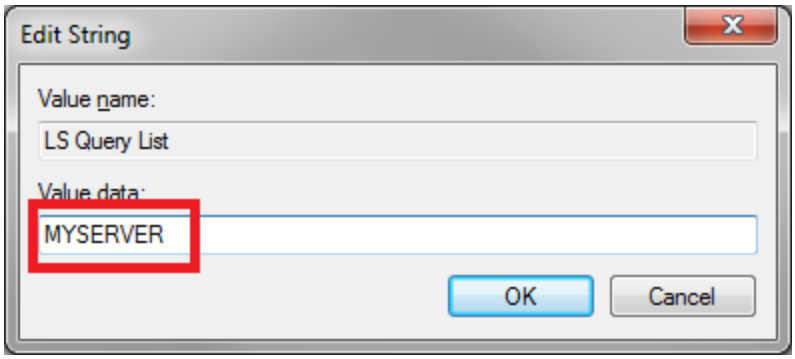
Check the following two locations on the left side of the Registry Editor:

HKEY_LOCAL_MACHINE\SOFTWARE\RISA Technologies\RISASection Network\2.0

HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\RISA Technologies\RISASection Network\2.0



Double-click on the LS Query List registry entry to edit it:



Under **Value Data** enter either the **DNS Name** or **IP address** of your license server. Then hit **OK** and exit the registry editor. This will point your client machine directly at the license server.

Note:

- Current versions of RISA products except RISASection use a : (colon) or ~(tilde) character as the delim-inator when specifying multiple servers in the LS Query List
- RISASection uses a : (colon) to separate the server entries. This was changed to better support the default IP settings for Windows 7 (which can use the colon as part of the IP address).

How Network Licenses Work on a Client Machine

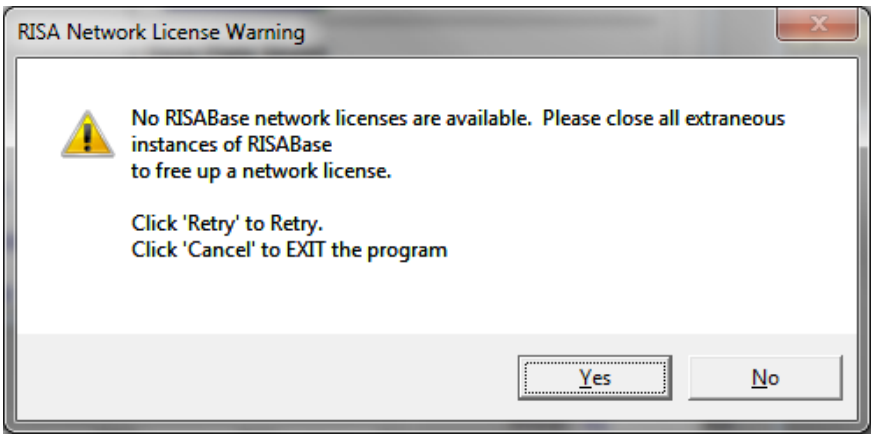
When a network client machine opens a RISA product a license gets checked out from the server. From that point on there is a "heartbeat" for the license where it intermittently checks in on the network server. Here are some details on that behavior.

- The license will “expire” after 5 minutes if the server doesn’t receive a "renewal request" in that time, and the license will be returned to the pool of available licenses on the server.
- A "renewal request" is initiated after at least 2 minutes has passed when a new file is opened, when a model is solved, and at many other times during use of the RISA product. The timer is then reset after triggering the "renewal request".
- If none of these "renewal request" triggers occur the program will automatically renew at 4 minutes, thus giving the network client machine a full minute before the license will expire. This 4 minute renewal request will happen even mid-solution to guarantee the license is still available.
- If the program is closed the license is then automatically checked back in and made available to another user.
- If the program is still open but a "renewal request" is not successful then after 5 minutes that license will be made available to other users. Reasons this may happen:
    1. A network connectivity issue where the client machine loses connection with the server or there is sufficient lag to cause an issue.

2. An idle or asleep computer that is non-responsive to any Windows message. It is not certain whether a renewal request could be achieved if the computer using the RISA product is in this state. Adjusting the Power Settings on the machine may help if this is causing the problem.
3. If either of these cases happens you may see a dialog similar to what's shown in the image below, or a Save and Close option may be given.

Losing Network Connection

RISA Products periodically check the connection to the License Server. Severing this connection during the operation of a RISA network product will eventually cause the following dialog box to be displayed:



Once this dialog box is displayed, no additional work may be done within the RISA Product until the network connection (and the license from the License Server) is restored. Click **Yes** to have the program search for a license. Clicking the **No** button on the dialog box displayed above will present the option to save the file (overwriting the previous version of the file) and exit the program immediately. If you point the client directly to a license server machine this can remedy this problem.

VPN Configuration Regarding MTU Settings

First of all, when looking for a license on a client machine over a VPN, the LS Query List registry setting must be set using the RISA Server Browser utility. Beyond that, however, there are maximum transmission unit (MTU) settings that may affect the connectivity between the client machine and the license management server.

MTU's are the size of the largest packet the network can transmit. The MTU send/receive size must both be the same value for the client machine, and these must also be the same for the server computer. Refer to the Licensing Error Messages section and the Miscellaneous VPN issues topic for more information on this subject.

License Commuting

Licenses may be checked out from the license server onto client machines in such a way that the client machine does not need to remain connected to the license server. This process is called "commuting". This feature is commonly used on laptops which need to borrow licenses to be used in remote locations where a network connection to the license server is not possible.

There are two methods for commuting licenses: Local (most common), and Remote. ***Note that it is very important that you understand the two options before starting. The Remote option does not allow you to check licenses back in, so please read through the instructions completely before deciding which is appropriate for you.***

Local Commuting

This commuting method is preferable as it allows the licensing administrator more control over the commuted license. It does require the client machine to be connected to the network at the time of license check-out, so it cannot be done if the client's machine cannot be connected the network at the time that the license is checked out (borrowed).

Prerequisites

- The client machine must be connected to the network, with direct access to the license server.
- The license server must have at least one available license for the product which is to be commuted.
- The appropriate RISA product (i.e. RISA-3D) must be installed on the client machine.

Procedure

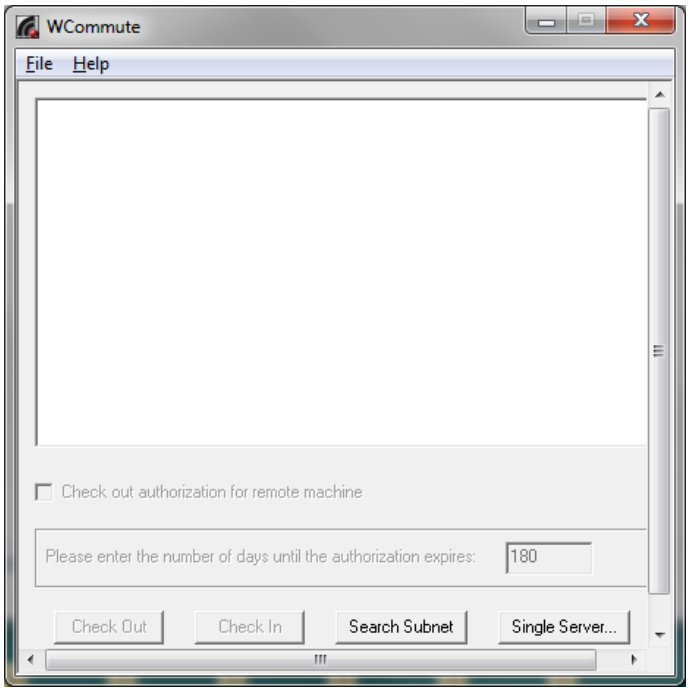
On the client machine, run the following utility:

C:\Program Files\RISA\Sentinel RMS\Commute\WCommute.exe

Note:

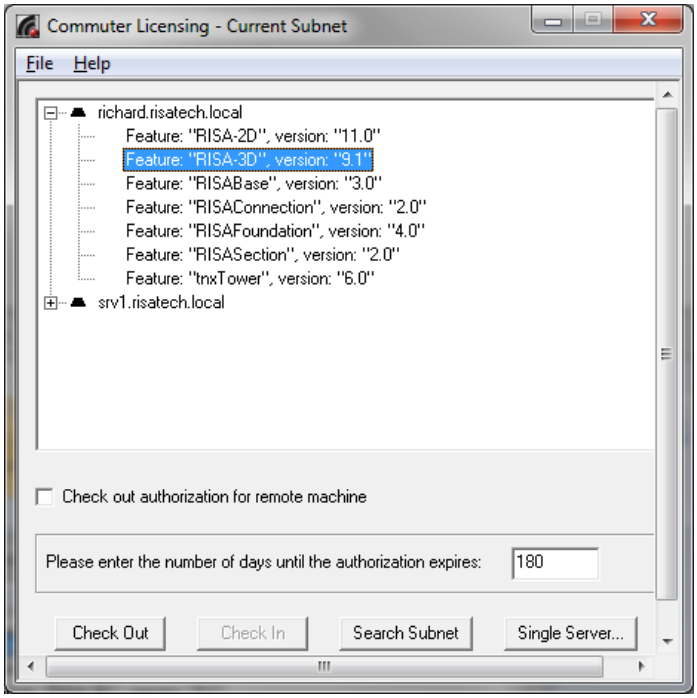
- If RISA has been installed to a location other than *C:\Program Files* then you will find a Sentinel RMS subfolder in that other location (e.g. *C:\RISA*)

This will launch the following dialog box:



- To have the WCommute utility search the entire subnet for license servers, click the **Search Subnet** button.
- To point the WCommute utility directly to a license server (nessecary if the server is on a different subnet than the client machine) click the **Single Server** button and enter that server's name or IP address.

The license server should now appear, with all of the available RISA products branched out underneath it as shown below:



Click on the program which you would like to commute a license for.

Note:

- Licenses for each program must be commuted independently
- Do **not** check the *Check out authorization for remote machine* box.

A commuted license is retained by the client machine, and is unavailable on the license server until it is checked back in, or until it expires. If a commuted license is not checked in by its expiration date then that license disappears from the client machine and reappears on the license server.

Enter a number of days which the commuted license will be valid for. Then click the **Check Out** button. A red check mark will appear next to the Feature, indicated that a license has been checked out. You can then close the WCommute utility.

Note:

- It is recommended that you immediately disconnect the client machine from the network and launch the RISA program which a license has been checked out for. Do this before leaving the office to confirm that the license has been correctly commuted.

Remote Commuting

This method of commuting should only be used in the circumstance where it is not possible to connect the client machine directly to the license server at the time of checking out the license. There are three main steps: retrieving locking code data from the remote machine, retrieving the authorization code and checking out a license on the local machine, and installing the authorization code on the remote machine.

Note:

- Remotely commuted licenses cannot be Checked-In!! They will remain commuted until their expiration date.

Prerequisites

- The license server must have at least one available license for the product which is to be commuted.
- The appropriate RISA product (i.e. RISA-3D) must be installed on the remote client machine. This must be a Network Client Install.
- There must be a local client machine (connected to the license server) with any current Network Client Install of a RISA product installed.

Retrieving the Locking Code (Remote Client Machine)

The commuted license will be locked to a specific remote client machine. In order to do this the license server needs a locking code for that client machine.

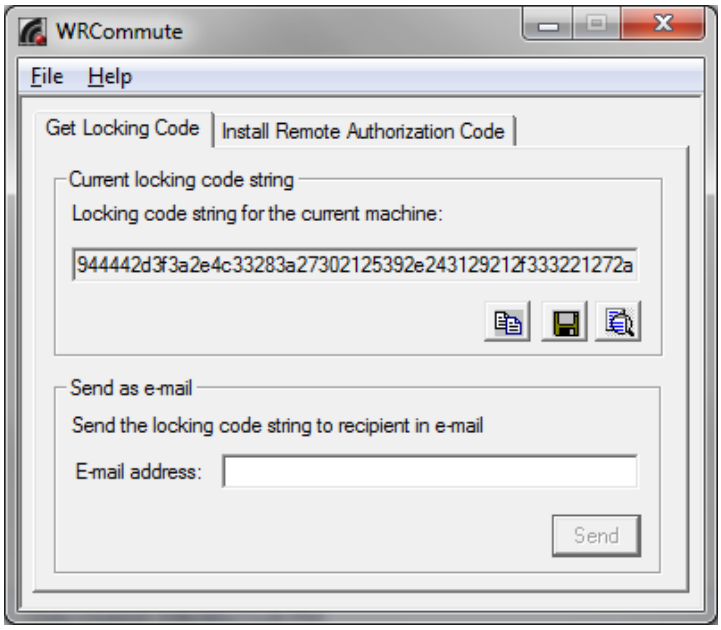
On the remote client machine, run the following utility:

C:\Program Files\RISA\Sentinel RMS\Commute\WRCommute.exe

Note:

- If RISA has been installed to a location other than *C:\Program Files* then you will find a Sentinel RMS subfolder in that other location (e.g. *C:\RISA*)

This will launch the following dialog box:



Click on the **Get Locking Code** tab, and click the button. Save the Locking Code File to a temporary location. Then send the Locking Code File to a user who has a local client machine (connected to the license server).

Retrieving the Authorization Code (Local Client Machine)

The license server can use the Locking Code to generate an Authorization Code which the remote client machine will need in order to remotely commute a license. This step can be done from any local client machine which has access to the license server.

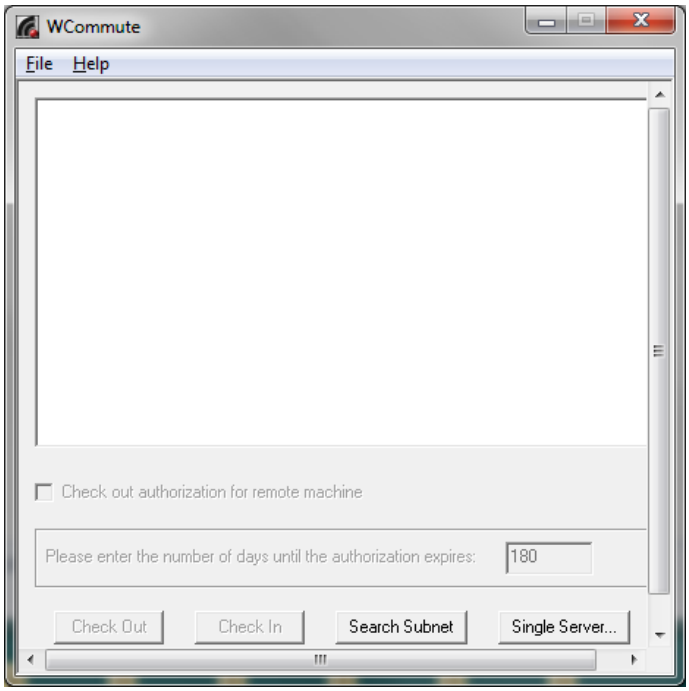
On the local client machine, run the following utility:

C:\Program Files\RISA\Sentinel RMS\Commute\WCommute.exe

Note:

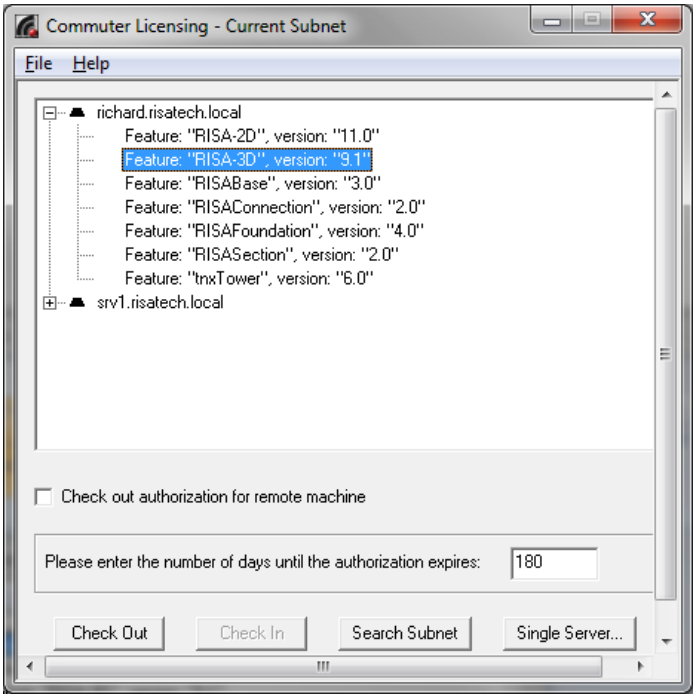
- If RISA has been installed to a location other than *C:\Program Files* then you will find a Sentinel RMS subfolder in that other location (e.g. *C:\RISA*)

This will launch the following dialog box:



- To have the WCommute utility search the entire subnet for license servers, click the **Search Subnet** button.
- To point the WCommute utility directly to a license server (necessary if the server is on a different subnet than the client machine) click the **Single Server** button and enter that server's name or IP address.

The license server should now appear, with all of the available RISA products branched out underneath it as shown below:

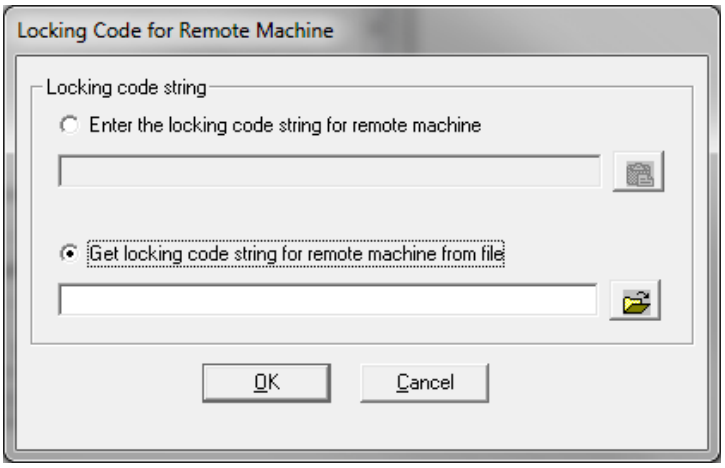


Click on the program which you would like to commute a license for.

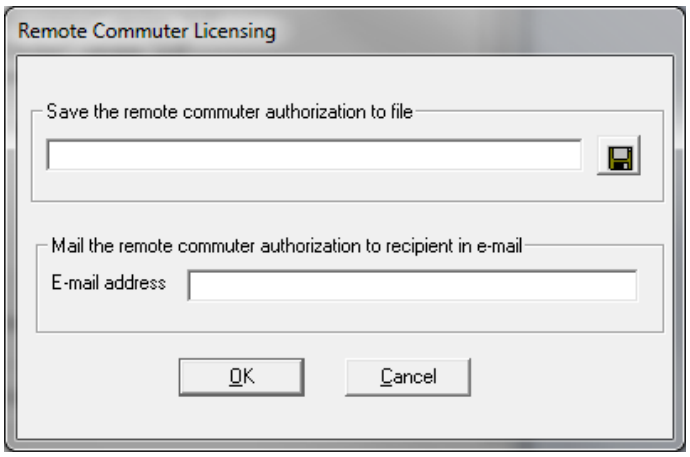
Note:

- Licenses for each program must be commuted independently
- You **must** check the *Check out authorization for remote machine* box.

Enter a number of days which the commuted license will be valid for. Then click the **Check Out** button. The following dialog box will be launched:



Click on the *Get locking code string for remote machine from file* button, then click the button. Browse to the Locking Code File which was generated by the remote client machine and click **Open**. Then click the **OK** button. The following dialog box will appear:



Click the button. Save the Authorization Code File to a temporary location. Click **OK**, then exit the WCommute utility.

Send the Authorization Code File to the remote user.

Installing the Authorization Code (Remote Client Machine)

The Authorization Code must be installed on the remote client machine to activate the commuted license.

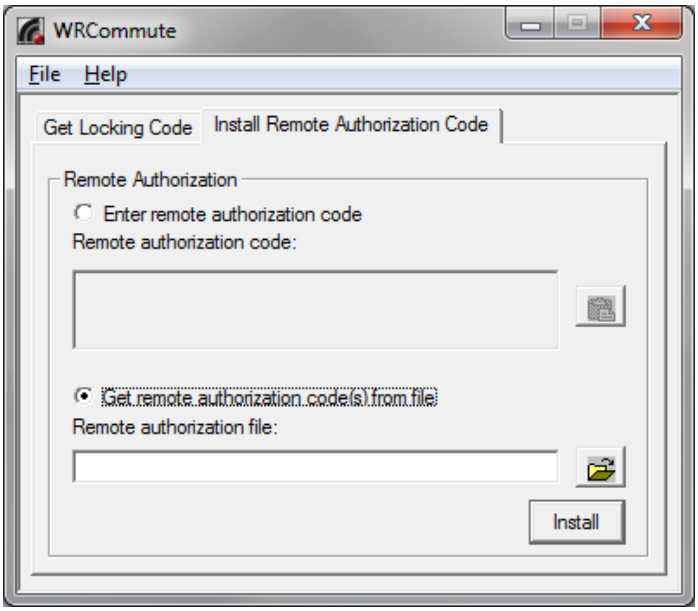
On the remore client machine, run the following utility:

C:\Program Files\RISA\Sentinel RMS\Commute\WRCommute.exe

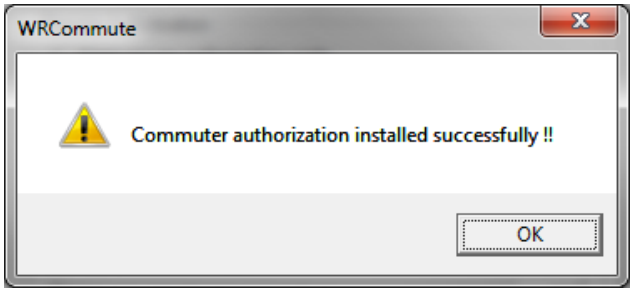
Note:

- If RISA has been installed to a location other than *C:\Program Files* then you will find a Sentinel RMS subfolder in that other location (e.g. *C:\RISA*)

Click on the **Install Remote Authorization** tab which is shown below:



Click on the *Get remote authoirzation code(s) from file* button, then click the button. Browse to the Authrozization Code File which was generated by the local client machine and click **Open**. Then click the **Install** button. The following dialog box will appear:



Close the WRCommute utility. The remote client machine will now be able to use the commuted license until it expires. Test this by launching the RISA program for which a license was commuted.

Returning Commuted Licenses

Licenses which were commuted using the Remote Commuting procedure may not be returned. They will remain commuted until they expire, based on the expiration date entered at the time that the license was commuted.

Licenses which were commuted using the Local Commuting procedure may be returned at any time prior to their expiration date (which was entered at the time that the license was commuted).

Procedure

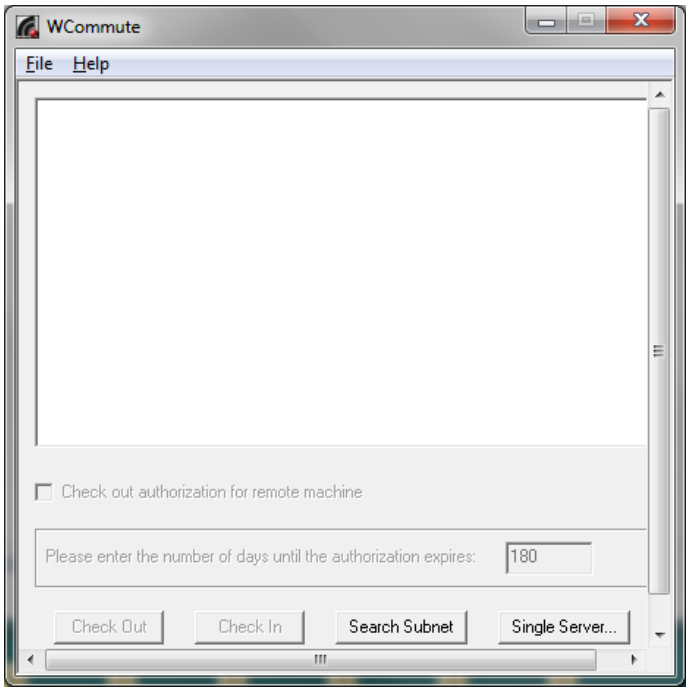
On the client machine, run the following utility:

C:\Program Files\RISA\Sentinel RMS\Commute\WCommute.exe

Note:

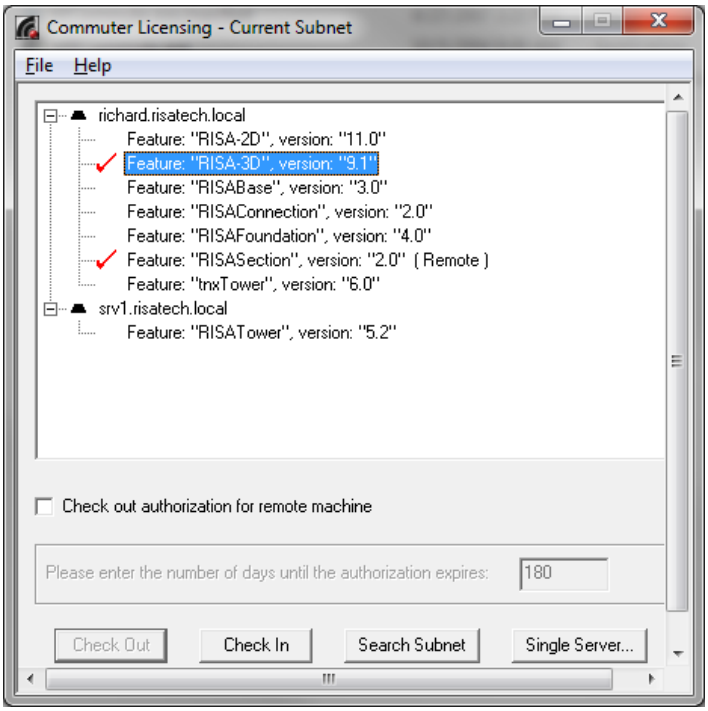
- If RISA has been installed to a location other than *C:\Program Files* then you will find a Sentinel RMS subfolder in that other location (e.g. *C:\RISA*)

This will launch the following dialog box:



- To have the WCommute utility search the entire subnet for license servers, click the **Search Subnet** button.
- To point the WCommute utility directly to the license server which the license was commuted from (nessecary if the server is on a different subnet than the client machine) click the **Single Server** button and enter that server's name or IP address.

The license server which the license was commuted from should now appear, with all of the available RISA products branched out underneath it. The commuted license for each RISA program should show a red check mark next to it as shown below:



Click on the license to be returned and then click on the **Check In** button. The red check mark will disappear, indicating that the license is no longer commuted. Close the WCommute utility.

Initializing the Program for Commuted Licenses

In order for Commuted Licenses (or emergency license files for stand-alone programs) to work a special initialization routine must be run. This routine is run as part of both the Client network installation and the stand-alone installation routines. The initialization routine is unique for each version of each program.

This initialization should occur automatically during the installation. However, if the initialization is not run properly then the 'time-tampering' check will prevent the commuted licenses from checking out properly. If this occurs, the initialization routine may need to be run again before the commuted license can be successfully run.

To run this utility do the following:

1. Login to the end-user computer with full administrative permissions.
2. Locate the initialization utility. This should be located in the C:\Program Files\RISA\Utilities sub-directory. It will be given a program and version specific name similar to the following:
    - LSinitCORE15.exe (for RISA-3D version 15)
3. Run the initialization routine. If a User Account Control message asks if you want to allow the this program (from an unknown publisher) to be allowed to make changes to your computer, be sure to select yes. The initialization routine will not complete successfully unless it has been run with administrative permissions.

Versions of RISA programs released after June 2014 have a log file generated during the installation routine to report back the successful (or failed) attempt to run the installation routine. These log files are be written to the C:\ProgramData\RISA\ directory.

Log Contents Codes

The possible codes are explained below with the three most common return codes listed in bold.

0 - Successfully initialized for standalone licensing

1 - Indicates initialization function call with bad values (error in program)

2 - Library initialization failure.

8 - Licensing initialization has already been carried out on this machine for the specified application and version

10 - Failed to initialize the security attributes.

20 - Failed to create security keys in registry.

40 - Failed to set security attributes on key.

80 - Failed to open secured information registry key.

100 - Failed to store the time information in the registry key.

400 - Failed to create the initial secured files on system.

800 - Failed to open the secured files on system.

1000 - Failed to store the secured information in the file.

2000 - Failed to set the security attributes on file.

4000 - Exception error occurred during the function call.

40000 - Time tampering detected

20000 - Licensing initialization not run with elevated permissions so no initialization is possible

80000 - Failed to open persistence file path.

100000 - Failed to read secure information from file.

400000 - Failed to get lock.

800000 - Failed to set configuration object.

Cleansing a Commuted License

In the event that a commuted license cannot be returned to the license server, there is a way to "cleanse" the commuted license information off of the server.

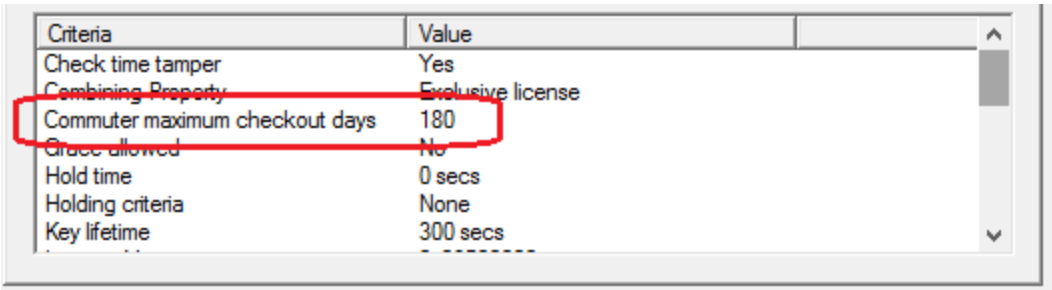
This is not a simple or straight forward process, so you will need to contact RISA technical support in order to complete. The basic process involves the following:

1. Contacting RISA Technical support (support@risa.com). They will give instructions on obtaining a locking code for the client or server computer upon which the commuted license has been stuck.
2. Technical support will then use this locking information to e-mail a "cleansing" file to be run on that computer. Usually this will be called something like cleanse_server.dat or cleanse_client.dat
3. In the Utilities sub folder (on the client or the server) there will be a utility called lsclean.exe. This utility will need to be run from a DOS prompt referencing the cleansing file obtained in item #2. An example of this command line would be the following: **lsclean cleanse_server.dat**

Miscellaneous

Maximum Number of Checkout Days

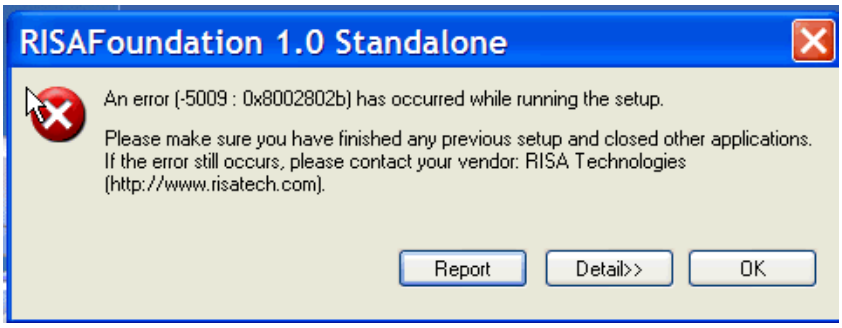
In the *WlmAdmin.exe* there is a hardwired value set for the **Commuter maximum checkout days** that is set to 180 days. This cannot be changed.



Appendix C - Installation Error Messages

There are an assortment of installation errors that are very uncommon, but do come up from time to time when trying to install the program. Here is a listing of a few of these items:

Error -5009 0x8002802b



This error can happen when installing the standalone version of RISA products. To fix this, go to the C:\Program Files\Common Files\InstallShield\Professional\. folder. Rename the "RunTime" folder to "RunTimebak" and then try the install again.

If this does not work try to uninstall and re-install the program.

Feature Transfer Error

The cause of this error can be a number of things. Below are some potential causes and possible solutions for each.

Cause 1: Corrupted Install.

There are some instances where downloading the install will alter the install file and corrupt it. Try to download the install packages again.

Cause 2: Not Enough Hard Drive Space

If the hard drive on this machine is very full then there may not be enough room on the hard drive for temporary files to be placed. Clean your hard drive to remove old temporary files and other files that are no longer necessary and then run the installs again.

Cause 3: Size or Restrictions on Temporary Directory

There may be problems that occur when the web install extracts its files a temporary location due to size or other restrictions with that directory. A solution to this is to run the install from CD or extract the files to a particular directory and click on **Setup.exe** in that directory to start the install.

Cause 4: Anti-Virus Issues

It is possible that necessary files that are temporarily placed on system are being deleted by an Anti-Virus or another similar program. A solution is to disable anti-virus, run the install, and then re-enable anti-virus.

Technical Support

Technical support is an important part of the RISA software package. There is no charge for technical support for all licensed owners of the **current** version of RISA software. Technical support is very important to the staff at RISA. We want our users to be able to reach us when they are having difficulties with the program.

Hours: 6AM to 5PM Pacific Standard Time, Monday through Friday, not including holidays.

Before contacting technical support, **please search the Help File or General Reference Manual**. Most questions asked about RISA Licensing are documented in the Help File or General Reference Manual. The Search and Table of Contents are helpful in finding specific topics and appropriate sections.

Email: **support@risa.com**. Please give us detailed information about your specific problem, including screen captures of any error messages that you are having trouble with. The more information we get about the problem, the quicker we can get you an effective solution. Make sure you tell us your name, company name, serial number or Key ID, phone number, and a problem description.

Phone Support:(949) 951-5815. Feel free to call, especially if you need a quick answer. It is helpful to have access to the problematic workstation when you call. We will likely need to navigate with you to specific places on your machine to troubleshoot your issue.

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