AVG 2012 LinkScanner for Mac

User Manual

Document revision 2012.02 (11/15/2011)

AVG LinkScanner

Contents

1. Introduction

This user manual offers a general overview of the tasks and detection technologies provided by **AVG 2012 LinkScanner for Mac**. We will briefly talk about the program installation, initial startup, configuration and use.

AVG 2012 LinkScanner for Mac is provided free-of-charge. It is up and running immediately from the moment of installation. All basic settings have been pre-set by the manufacturer, so most of the time you will not have to worry about anything – just let **AVG 2012 LinkScanner for Mac** work in the background and protect you without any effort on your part. However, there might be situations where you need to adjust the program settings, or decide what to do with a virus infected file; this manual is here to provide detailed information and assist you with any task.

1.1. What is the AVG 2012 LinkScanner for Mac?

In the last couple of years the number of malicious programs has increased dramatically. New dangerous applications are being created every day. The majority of today's viruses, that is spreading via Internet, is designed for financial/commercial gain. Moreover, there are far more threats out there than plain viruses. You have probably come across the term spyware as well, however, authors of malicious codes and dangerous websites are very innovative, and new kinds of threats emerge quite often. Here are some of the most common:

- *Exploit* is a malicious code that takes advantage of a flaw or vulnerability in an operating system, Internet browser, or other essential program.

- *Social engineering* is a common term for various techniques used to trick people into giving away their personal information (passwords, bank account details, credit card numbers etc.). A typical example of social engineering is *phishing* – an attempt to acquire sensitive personal data by shamming a trustworthy and well-known organization. Usually, the potential victims are contacted by a bulk e-mail asking them to e.g. update their bank account details. In order to do that, they are invited to follow the link provided which then leads to a fake website of the bank.

- *Scam* can be also considered a kind of social engineering; it includes false job offers, or ones that will abuse the workers for illegal activities, summons to withdraw a large sum of money, fraudulent lotteries and the like.

- *Hoax* is a bulk e-mail containing dangerous, alarming or just bothering and useless information. Many of the above threats use hoax e-mail messages to spread.

- *Malicious websites* are ones that deliberately install malicious software on your computer, and hacked sites do just the same, only these are legitimate websites that have been compromised into infecting visitors.

The **AVG 2012 LinkScanner for Mac** is here to protect you from all these online threats.

AVG. LinkScanner

2. Installation Requirements

2.1. Operation Systems Supported

The **AVG 2012 LinkScanner for Mac** will only run on computer with Mac OS X 10.6.x or higher.

Please note that only the Intel platform is supported!

## 2.2. Web Browsers Supported

AVG 2012 LinkScanner for Mac is fully compatible with the following Internet browsers:

- Apple Safari 5.1.x and higher,

- Mozilla Firefox 3.0.x and higher.

3. Installation Process

To download the installation file of **AVG 2012 LinkScanner for Mac** visit the *__LinkScanner for Mac site__* and follow the *Free Download* link.

Once you have downloaded and saved the installation file on your hard drive, you can launch the installation process. Double-click your installation package (the *avg_lsm_stf_all_2012_????.dmg* file) to open the following dialog:
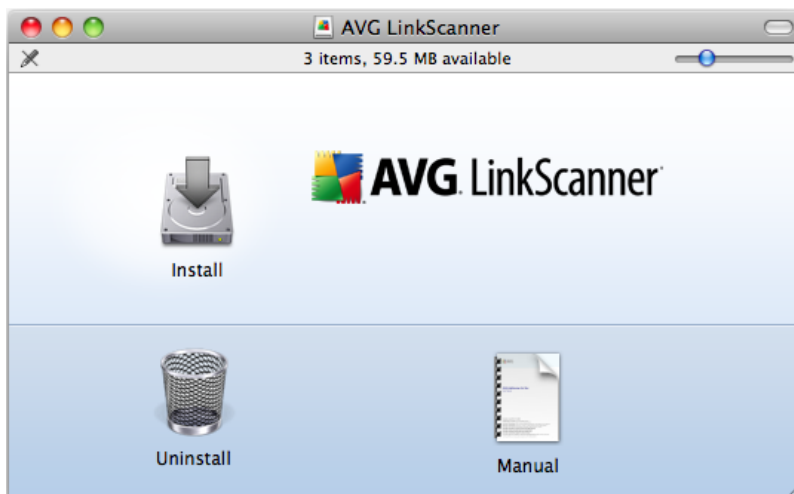
In this dialog, double-click the **Install** icon to launch the installation process. This process is a sequence of dialog windows with a brief description of what do at each step. In the following, we offer an explanation for each dialog window.

You can also click the **Manual** icon to open this very manual... but perhaps you have already done that.

3.1. Introduction
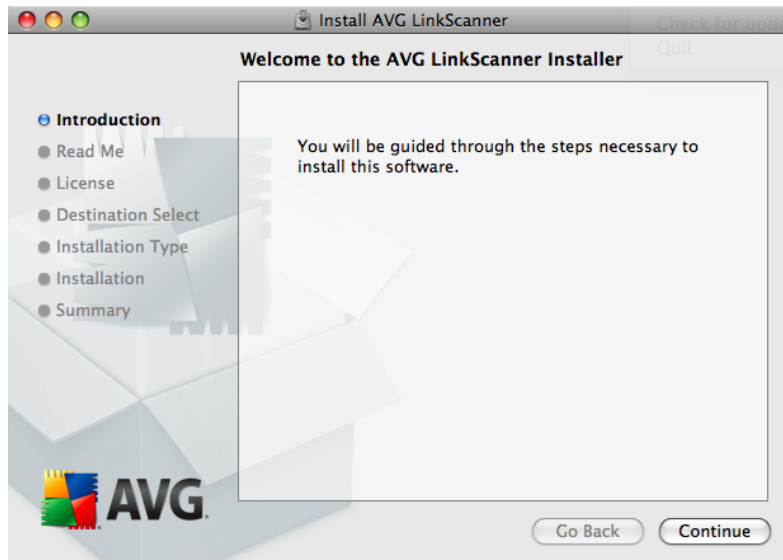
The installation process starts with the **Welcome to the AVG LinkScanner Installer** window. Click the **Continue** button to go on with the installation process.

3.2. Read Me

The next dialog provides some basic information on usage of **AVG 2012 LinkScanner for Mac**. You can print the whole text by clicking the **Print...** button or save it to your hard drive by clicking the **Save...** button and selecting the resulting PDF file's name and its location.

Please keep in mind that information provided by this dialog is really brief and if you want to learn more about the AVG 2012 LinkScanner for Mac, you should always consult this User manual or application-based help.

After you are finished reading this text, click the **Continue** button to trigger the next dialog of the installation process.
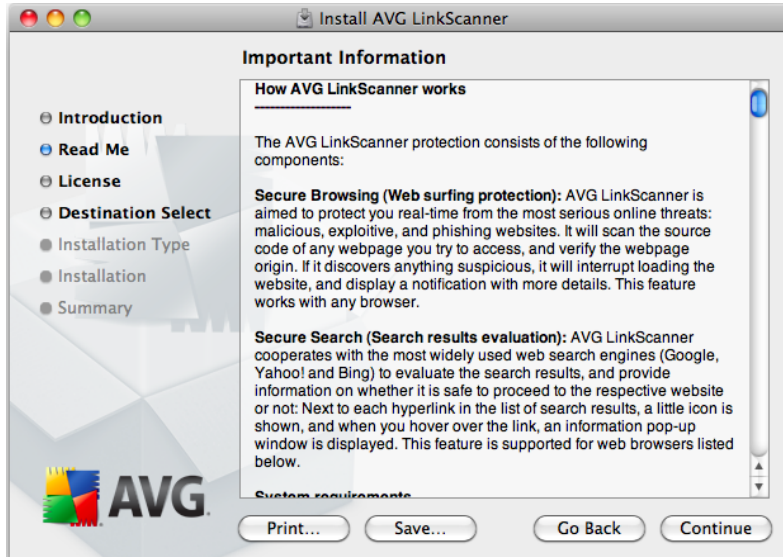
3.3. License

The next dialog provides information on **AVG 2012 LinkScanner for Mac** terms of use. Please read it carefully. Right now, this license agreement is only available in English language.
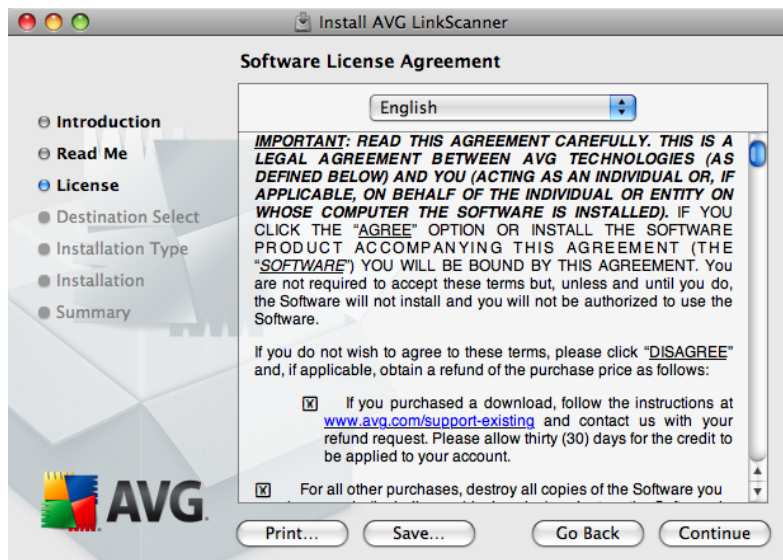
Once you have finished reading, click the **Continue** button to trigger a little pop-up dialog:
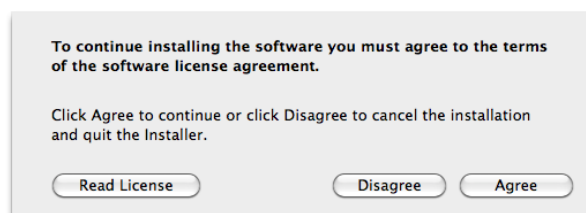
In this dialog confirm that you have read, understood and accept the agreement by pressing the *Agree* button. If you do not agree with the terms of use stated, press the *Disagree* button, and the installation process will be terminated immediately.

3.4. Destination Select

This dialog allows you to choose whether you want to install the AVG LinkScanner for all users of this computer, or just for one for of them. Select an option that suits you most and proceed by clicking the **Continue** button.
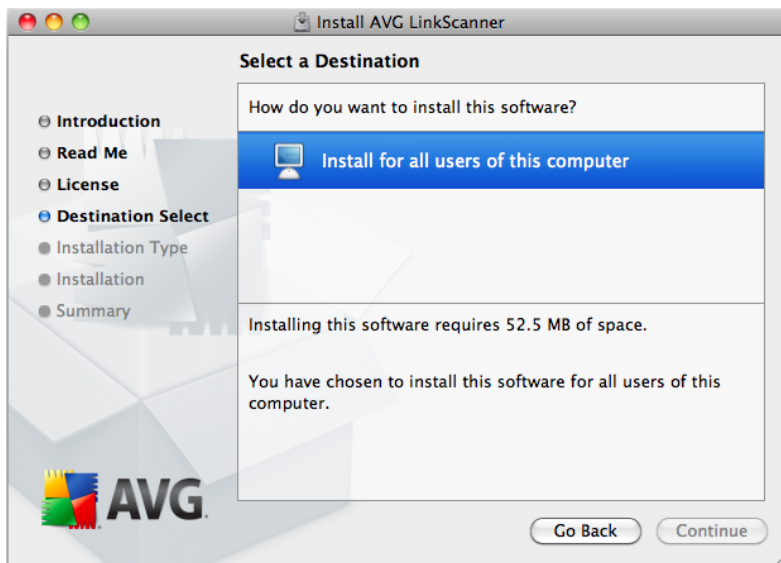
3.5. Installation Type
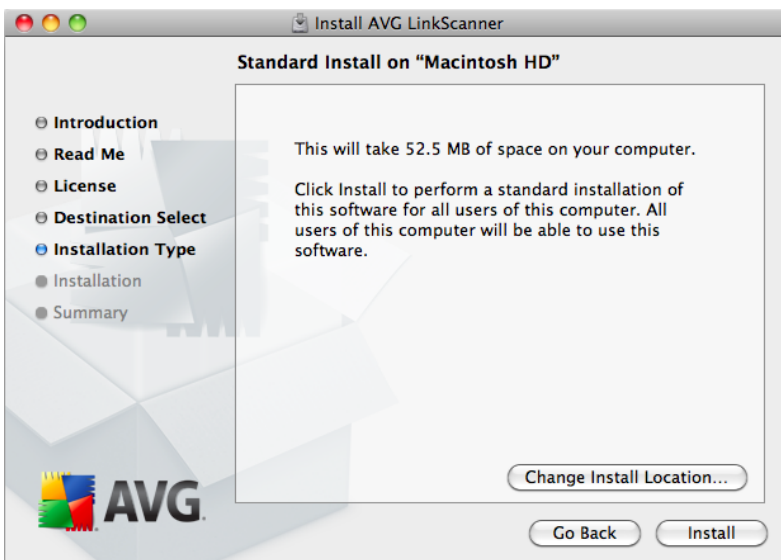
![AVG LinkScanner]

This dialog informs you that your **AVG 2012 LinkScanner for Mac** will be installed on your local hard drive. You can either click the **Change Install Location...** button in order to return to the previous dialog, allowing you to select a different destination for your installation, or click the **Install** button.

Right after that you will be prompted to type an administrator's name and password (otherwise the Installer won't be allowed to make changes and the installation process won't be able to continue). If you do not know the login name and password, you will need to contact the person who administers your computer.
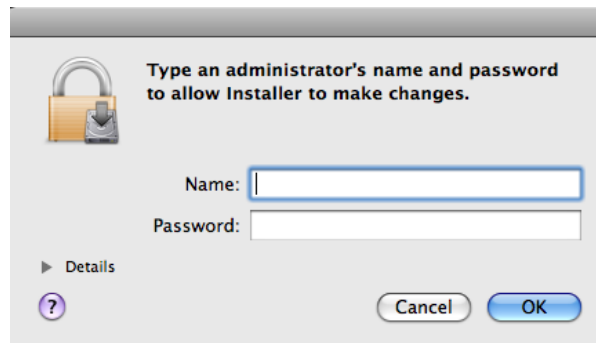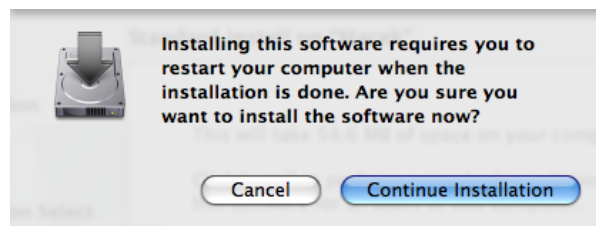

Finally, another dialog appears to inform you about the necessity of your computer restart in order to successfully finish the installation. This allows you to save all your current work and quit all running applications. Click the **Continue Installation** button to start the installation itself.

3.6. Installation
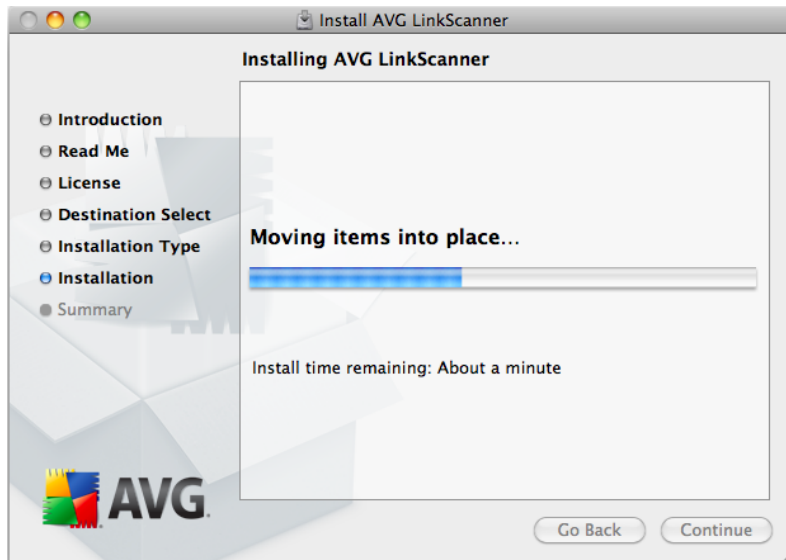
This dialog shows the progress of the installation process, and does not require any intervention. All you have to do is to sit and wait until the installation is complete (it doesn't take long).

3.7. Summary

This dialog is the last step of the **AVG 2012 LinkScanner for Mac** installation process. **AVG 2012 LinkScanner for Mac** is now installed on your computer. However, in order for the application to be fully functional, it requires restart (as you were warned previously). Make sure all your current work is saved and closed, then click the **Restart** button.
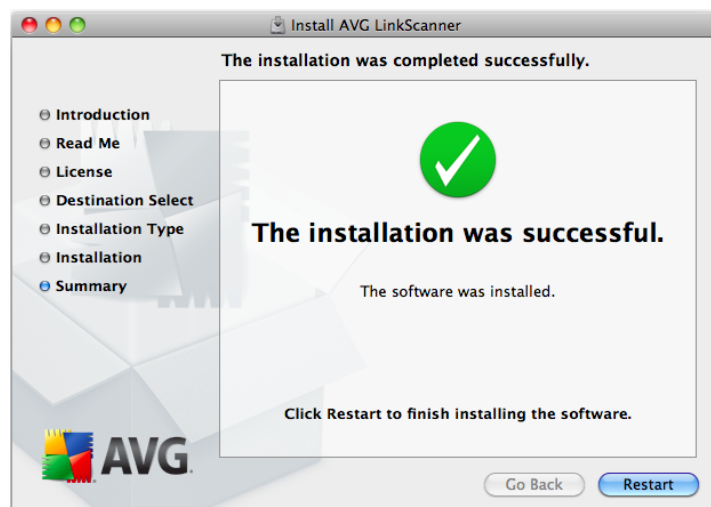
3.8. After Installation

The first thing you should see after your Mac OS reboots is this dialog:
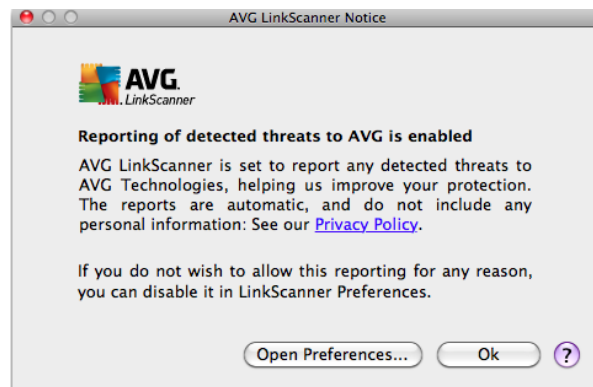
It serves to inform you about a special AVG feature, allowing your **AVG 2012 LinkScanner for Mac** to automatically report the threats that you encounter while surfing the web. Details about the detected threat are sent automatically to AVG Technologies, which happens without any inconvenience or need of any action on your part, and of course without any reference to you or your personal data. The received data is then thoroughly analysed by our malware specialists, which enables us to continuously improve the AVG protection for all its users. For this reason, we kindly ask you to keep this feature activated.

However, if you don't want to enable the reporting, you can do it immediately. Clicking the **Open Preferences** button takes you directly to your AVG LinkScanner Settings (more precisely the General Settings section of the General tab). All you have to do here is to unmark the **Reporting threats to AVG** checkbox.

Otherwise click the **OK** button to finally finish the installation process.

4. Finding your way around the AVG LinkScanner

In the **AVG 2012 LinkScanner for Mac** you can choose between three ways of accessing various settings, overviews, and functions:

- click the **AVG 2012 LinkScanner for Mac** icon in the Dock to open the Main User Interface, where you can view current AVG protection status and access setting options for individual components. **Click to learn more about the AVG 2012 LinkScanner for Mac Main User Interface.**

- click the AVG icon that is (optionally) displayed in the right part of the menu bar. Upon clicking the icon, you get a context menu resuming neatly relevant options of the application menus. Apart from quick access to frequently used items, the icon also indicates AVG protection status. **Click to learn more about the AVG 2012 LinkScanner for Mac icon in the Menu Bar.**

- if the User Interface is active, clicking the **AVG 2012 LinkScanner for Mac** menu allows you to access some basic options. **Click to learn more about the AVG 2012 LinkScanner for Mac menu in the Menu Bar.**

4.1. Main User Interface

To access the Main User Interface, simply click the docked AVG icon.

Thereafter the Main User Interface appears:
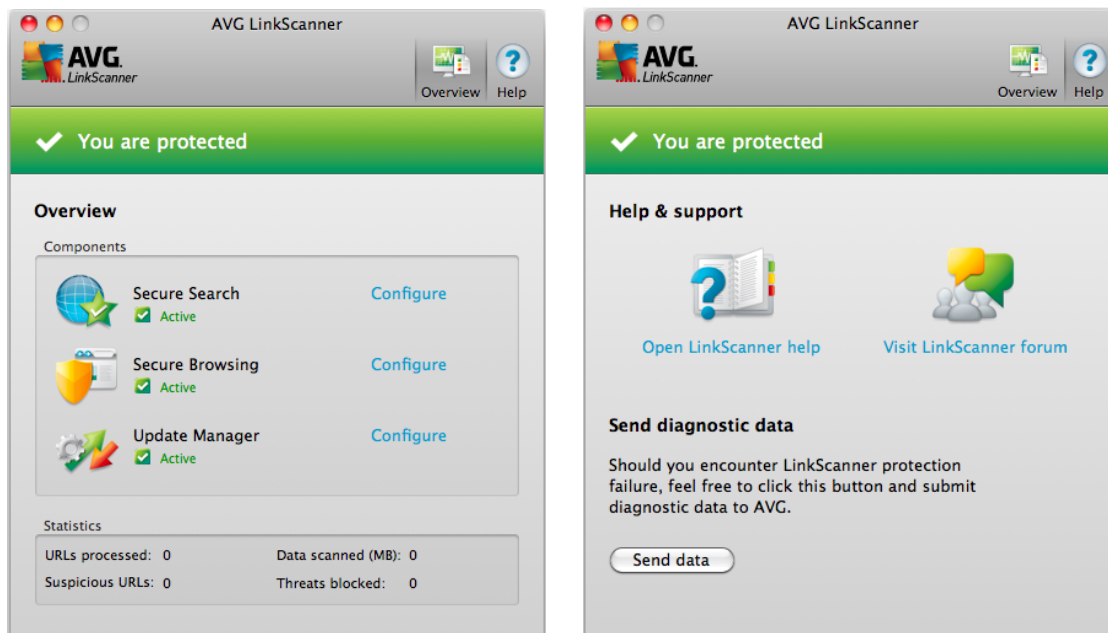
As you can see, there are two possible views for the Main User Interface - **Overview** (opened by default) and **Help & Support**. To switch between them, simply click the ***Overview / Help*** buttons in the upper-right corner of the interface.

No matter which view you're currently in, you will always see your AVG protection status in the upper part of the Main User Interface. Click ***here*** to learn more about protection statuses in your ***AVG 2012 LinkScanner for Mac***.

Overview

The upper section of this view displays the components of your AVG protection and whether they are active or not. Clicking the ***Configure*** link (next to each component's name) opens its unique setting options. ***AVG 2012 LinkScanner for Mac*** contains three components:

- **Secure Search** - when searching the web with component on, all search results returned from the most popular search engines are evaluated for dangerous or suspicious links. By

checking these links and marking the bad links, this component warns you before you click on dangerous or suspicious links, so you can ensure you only go to safe websites.

- **Secure Browsing** - this component will block malicious content of any webpage you try to open, and prevent it from being downloaded to your computer. With this feature enabled, clicking a link or typing in a URL to a dangerous site will automatically block you from opening the web page thus protecting you from inadvertently being infected.

- **Update Manager** - this component helps you to control regular updating. Within this component you can schedule automatic downloads of update files either from the Internet, or the local network. *Learn more about updates and why they are so important.*

The bottom part of the Main User Interface shows various *AVG 2012 LinkScanner for Mac* statistics:

- **URLs processed** - total number of URLs (web addresses) that have been processed by AVG 2012 LinkScanner for Mac.

- **Suspicious URLs** - number of URLs that have been processed and marked as risky by the Secure Search component (low, medium, and high risk levels).

- **Data scanned (MB)** - total size of data processed by AVG 2012 LinkScanner for Mac (in Megabytes).

- **Threats blocked** - number of threats that have been blocked by the Secure Browsing component.

Help & Support

Use this view to learn more about your *AVG 2012 LinkScanner for Mac*.

Click the *Open LinkScanner help* link to open built-in help, containing basic info about the application and its functionality.

Click the *Visit LinkScanner forum* link to visit AVG forums - a great place to discuss your issues with other AVG users, customer support specialists and developers.

Finally, in case you encounter a really serious technical trouble, you can contact AVG directly. Click the **Send data** button to send us a message describing the problem together with necessary diagnostic information (collected automatically).
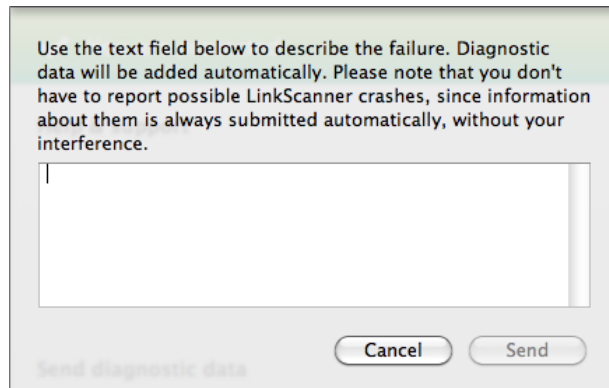
Be assured that no personal or other sensitive data will be collected during the process. Sending diagnostic information is also quite undemanding and won't affect your computer's performance.

4.2. Icon in the Menu Bar

The AVG icon can be optionally displayed in the right part of the menu bar. If it is not visible, you can display it by turning on the *Show AVG icon in the menu bar* option in General tab of AVG 2012 LinkScanner for Mac Settings. Upon clicking the icon, you get a context menu resuming neatly relevant options of the application menus:
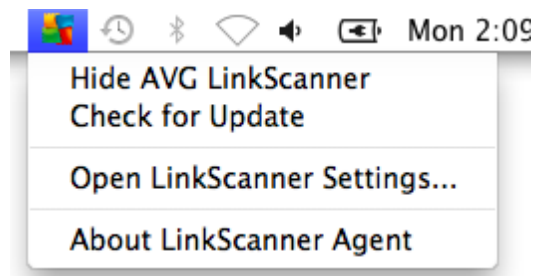
- **Show/Hide AVG LinkScanner** - click to show / hide the docked AVG icon.

- **Check for Update** - click to immediately start the update process.

- **Open LinkScanner Settings...** - displays the General tab of setting options dialog.

- **About LinkScanner Agent** - shows the version of LinkScanner Agent.

Apart from quick access to frequently used items, the icon also indicates AVG protection status (correct, warning or error).

4.3. Menu in the Menu Bar

Whenever the Main User Interface is opened, the AVG 2012 LinkScanner for Mac menu appears in the right part of the menu bar:
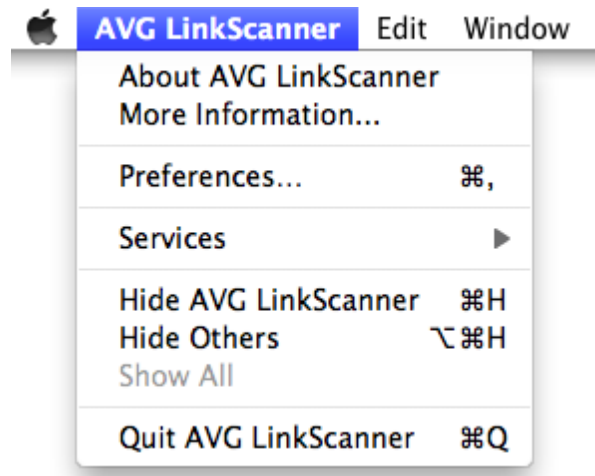
This menu provides you access to a few basic options:

- **About AVG LinkScanner** - displays a small dialog with copyright and version number information.

- **More Information...** - starts your browser and opens the LinkScanner for Mac site.

- **Preferences...** - displays the General tab of setting options dialog.

- **Hide AVG LinkScanner** - minimizes the Main User Interface (without turning the AVG protection off).

- **Quit AVG LinkScanner** - turns AVG protection off.

4.4. AVG Protection Status

The protection status is intended to show you, whether you are fully protected or not. When your **AVG 2012 LinkScanner for Mac** is up-to-date and working, the protection status is **correct**. However, when a non-critical part of the AVG protection is switched off or inactive, you are immediately warned about the **warning** protection status. Finally, when a component is switched off, or your protection is outdated, the **error** status appears.

The warning status may also mean that error status of some component is being intentionally ignored. You can set this in the Ignore faulty states section in General settings.

AVG 2012 LinkScanner for Mac uses several graphical indicators allowing you to view the protection status of this application. The following screenshots show the docked AVG icon displayed either normally (indicating correct or warning status), or with an orange exclamation mark (error status):

You can also recognize the status by looking at the icon in the menu bar, when means correct or warning status and means error. If the AVG icon in the menu bar is not visible, you can display it by turning on the *Show AVG icon in the menu bar* option in General settings.

Finally, you can see your protection status in the left part of Main User Interface. The first screenshot shows the Main User Interface in correct status, the second illustrates a warning status (in this case, the Secure Search component is disabled), while the third one shows the warning status with the Secure Search component inactive. Note that your Main User Interface always gives you details about the error, even suggesting how to fix it.
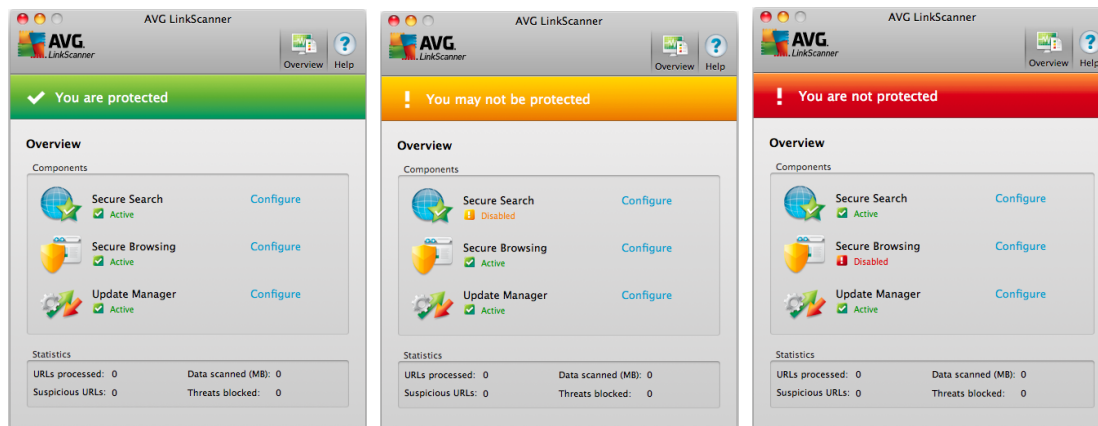
5. AVG LinkScanner in your web browser

Your **AVG 2012 LinkScanner for Mac** functions within your web browser without affecting its performance. It uses a set of informative icons to either show you the threat level of every search result in most commonly used web search engines (the Secure Search component), or to warn you in case a webpage you try to access appears to suspicious (the Secure Browsing component). The set of icons (identical for both components) is listed in the table below:

✵	The page has been successfully scanned and is safe. **Please note that this icon is not displayed on the Yahoo! server!**
⚠	The page does not contain threats but is somewhat suspicious (questionable in origin or motive, therefore not recommended for e-shopping etc.).
⚠	The page can be either safe itself, but containing further links to positively dangerous pages; or it can be suspicious in code, though not directly employing any threats at the moment.
☒	The linked page contains active threats. **We do not recommend visiting this page, or forwarding the URL via e-mail!**
◐	The page can not be scanned (which can mean that is doesn't exist anymore, or it is temporarily unavailable.

5.1. Secure Search

When searching Internet with the *AVG Secure Search* on, all search results returned from the most popular search engines (Google, Yahoo and Bing - former MSN) are evaluated for dangerous or suspicious links. By checking these links and marking the bad links, the **AVG 2012 LinkScanner for Mac** warns you before you click on dangerous or suspicious links, so you can ensure you only go to safe websites.

While a link is being evaluated on the search results page, you will see a graphic sign next to the link informing that the link verification is in progress. When the evaluation is complete, the respective informative icon will be displayed. Hovering over an individual icon will display brief pop-up dialog describing the particular link in question.

Please note that the search results are generated based on a blacklist (database of known malicious websites) and the evaluation itself cannot be configured!

Various pop-up dialogs are listed below:
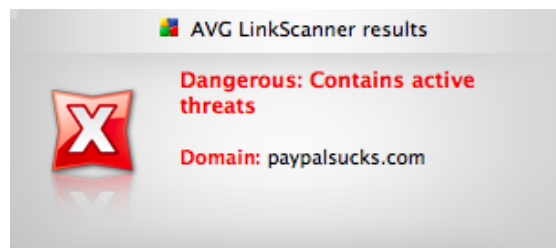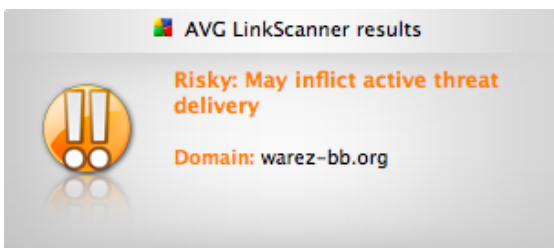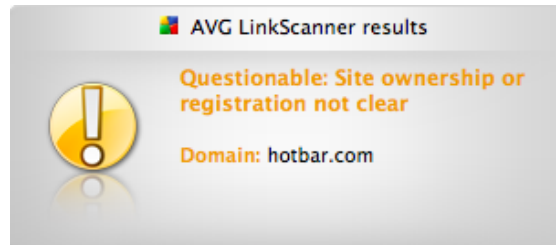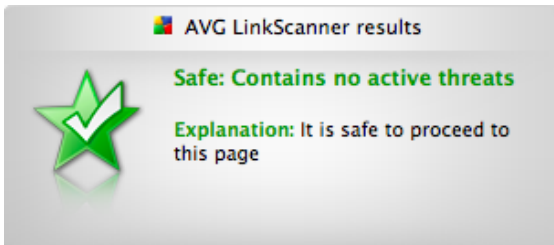
There are a few settings for this component that you can adjust. The easiest way to access the Secure Search settings dialog is by clicking the **Configure** link next to this component's name in Main User Interface.

Please note that while in Mozilla Firefox browsers the AVG Secure Search feature is active and running immediately after *AVG 2012 LinkScanner for Mac* installation, for Safari browsers it is first necessary to install the appropriate extension. To do so, open the Secure Search settings dialog (by clicking the **Configure** link next to this component's name in Main User Inte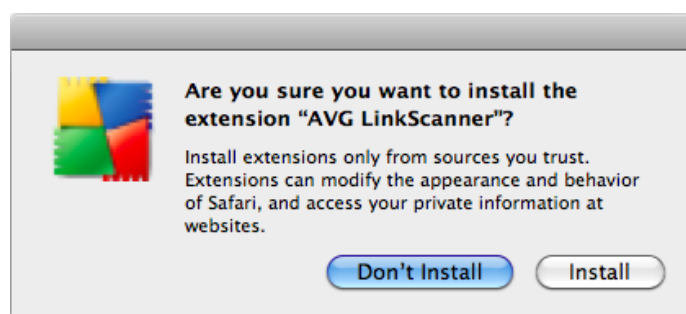rface) and click the **Install** button in its bottom part. Afterwards your Safari browser starts; all you have to do now is to confirm your choice in the following dialog:

5.2. Secure Browsing

Present-day internet is quite a dangerous place to surf - exploited web pages might infect your computer simply by visiting the affected site. The AVG Secure Browsing aims to prevent that. This powerful feature provides you a real-time protection from the most serious online threats: malicious, exploitive, and phishing websites. If enabled, it automatically scans the source code of any website you try to access (either by clicking a link or typing in a URL) and verifies the webpage origin. If it discovers anything suspicious, it will interrupt loading the website, and display a notification with more details.
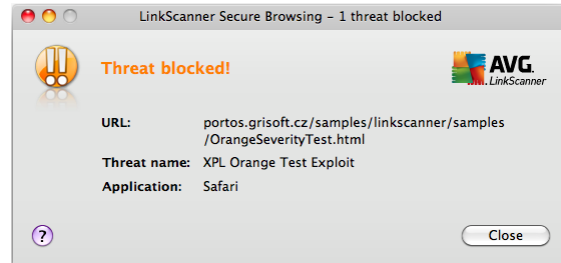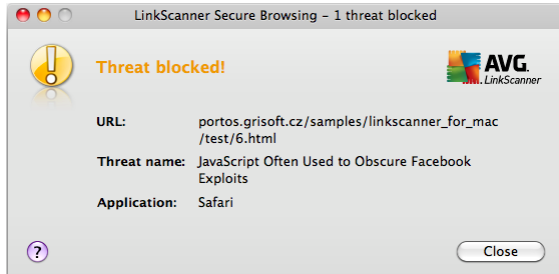
The notification dialogs (listed above) use the same set of informative icons as the Secure Search and are informative only. They serve just to notify you that the threat has been found and blocked, so the loading of the page has been interrupted. Access to a potentially dangerous website itself is not blocked; the decision whether to visit the page is completely up to you. However, the page shown in the browser after closing the notification dialog will be just a fragment of the original one - it will be displayed only from the start to the point where the threat was discovered and blocked.

There is no simple way to access the original infected page. However, if you have any reason to visit the untouched original page (possibly containing an infection), you can disable AVG Secure Browsing in the Secure Browsing tab of AVG 2012 LinkScanner for Mac Settings (which requires administrator password since it disables the protection of the machine) and then reload the page (a cache cleaning might be needed depending on application requesting the page because of application internal caching).

6. AVG LinkScanner Settings

This dialog allows you to modify all adjustable settings of your **AVG 2012 LinkScanner for Mac**. It is divided into several tabs - the General tab contains some universal settings, while Secure Shield, Secure Browsing and Update tabs offer settings for respective components. The dialog is accessible in three ways:

- click the docked AVG icon to open the Main User Interface, then click the **Configure** link next to any component's name. Note that the AVG 2012 LinkScanner for Mac Settings dialog will then be opened on the tab related to the chosen component.

- click the AVG icon in the menu bar and select *Open LinkScanner Settings...* The AVG 2012 LinkScanner for Mac Settings dialog will be opened on the General tab.

- when the Main User Interface is active, open the AVG LinkScanner menu in the menu bar and select *Preferences*. The AVG 2012 LinkScanner for Mac Settings dialog will be opened on the General tab.

Setting options of major importance are protected by authentication, and are by default locked (grayed out and inactive). To modify the settings you have to be click the padlock icon in the lower right corner of every dialog:
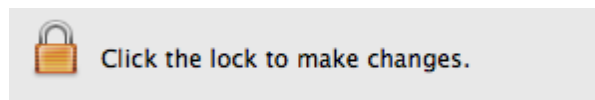
Immediately a new dialog appears, in which you are prompted to enter administrator login name and password. If you don't know the name/password, you will have to ask the person who administers your computer:
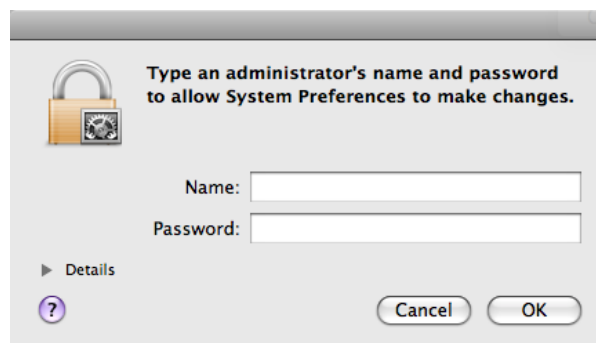
If have entered login name and password correctly, you will be able to modify all setting options. The padlock icon is now unlocked and looks like this:
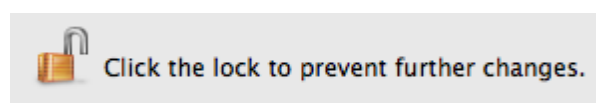
If you wish to prevent further settings modifications, simply click the icon and enter administrator login name and password once again.

6.1. General tab

This dialog allows you to configure basic **AVG 2012 LinkScanner for Mac** settings. There are three sections sections in this dialog with specific adjustable items in them:

General settings:
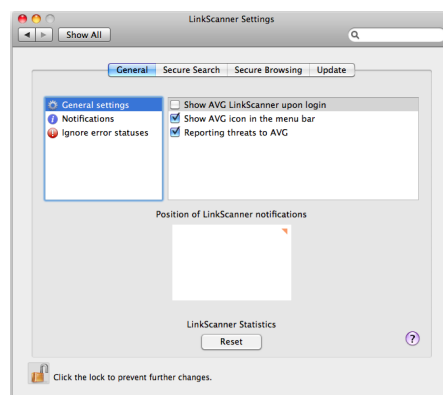
- **Start AVG LinkScanner upon login** - if the box is checked, the **AVG 2012 LinkScanner for Mac** will launch automatically after computer startup, when a user logs in, or whenever the application quits (e.g. if another application forces **AVG 2012 LinkScanner for Mac** shutdown, it will be re-launched immediately).

- **Show AVG icon in the menu bar** - if the box is checked, the AVG icon is displayed in the right end of the menu bar. Click **here** to learn more about the menu bar icon.

- **Reporting threats to AVG** - if the box is checked, details about detected threats will be automatically sent to AVG Technologies, where they will be analysed by our malware specialists. This enables continual improvement of AVG protection for all its users. Click **here** to learn more about this feature.

Notifications:
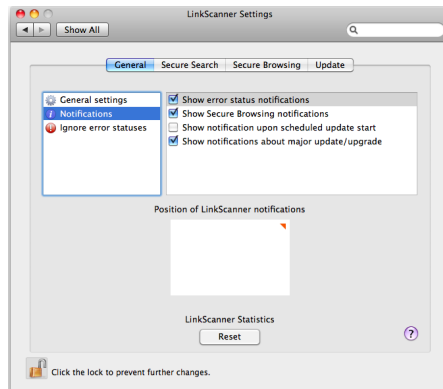
Notifications are little pop-up windows that appear for a few seconds only, and inform you of less important events than alerts. Check the box at the respective notification option you want to activate:

- **Show error status notifications** - if the box is checked, a notification window will appear whenever a component changes its status from correct to warning/error. Please note that if you choose to ignore a component's status, the change status notifications for that component will not be displayed. To learn more about AVG protection statuses click **here**. Ignoring error statuses is described in the end of this chapter.

- **Show Secure Browsing notifications** - if the box is checked, you will get a notification whenever the Secure Browsing component detects a suspicious webpage or other kind of suspicious connection, and the detected threat is NOT blocked. (In the Secure Browsing settings, you can set AVG LinkScanner not to block threats of lower severity.) For threats of severity defined to be blocked, the connection is always interrupted, and an alert window is displayed until you decide to close it. For unblocked threats, only the notification is displayed, so that you are at least informed that the webpage is somewhat questionable and that you should proceed with caution.

- **Notify me upon scheduled update start** - if the box is checked, a notification window will be displayed at each scheduled AVG LinkScanner update, informing you of the update progress. Click **here** to learn more about updates and their types.

- **Show notifications about major update/upgrade** - if the box is checked, a notification window will be displayed whenever there is an important update, or upgrade to a new version of AVG LinkScanner available.

If the respective setting option is not applicable at the moment, because the related feature or component is switched off, a warning icon ⚠ will be displayed next to its name. If you move your mouse over the warning icon, a pop-up message will appear, explaining briefly why that notification is not applicable now.

Ignore error statuses:
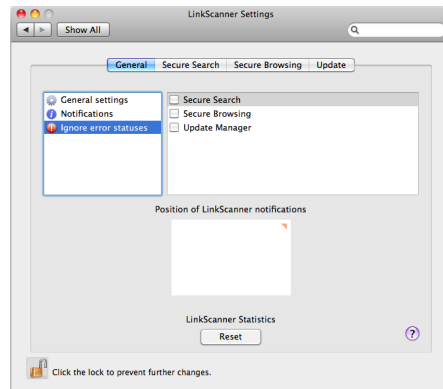
If a component shows error or warning status, and you decide to deliberately ignore it, you can check the respective component here. This means that the **AVG 2012 LinkScanner for Mac** will no longer report the error/warning status of the component, and won't display notifications about the component status change.

No matter which section you're in, you can always change **Position of LinkScanner** notifications. The white rectangle represents your screen. The tiny orange triangle shows where the notifications appear right now (which is by default in the upper right corner). To change this simply move the mouse cursor to any other corner and click. You will immediately see that the tiny orange triangle has moved to selected corner - and from now on, the notifications are going to pop up here.

Finally, you can use the **Reset** button to set all *AVG LinkScanner* statistics (displayed in the bottom part of the Main User Interface) back to zero.

6.2. Secure Search tab

This dialog allows you to configure some Secure Search component related settings.
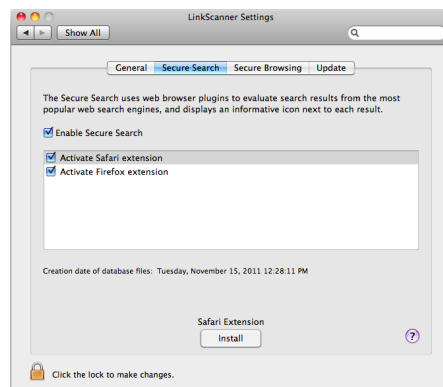
- **Enable Secure Search** - if the box is checked, AVG Secure Search is active and evaluating safety of the results of the most popular online search engines. Uncheck the box to switch the function off.

The following checkboxes allow to choose Internet browsers, in which you wish the search results to be evaluated. This is being achieved by activation / deactivation of appropriate browser extensions:

- *Activate Safari extension* - with this box checked, the search results will be evaluated in the Safari web browser.

- *Activate Firefox extension* - with this box checked, the search results will be evaluated in the Mozilla Firefox web browser.

Creation date of DB files states last successful update of the database of malicious sites.

Please bear in mind that the AVG Secure Search feature is automatically active and running only in Mozilla Firefox browsers. Therefore you may want to install a special extension to activate it for Safari browsers as well. To do so, click the **Install** button. When your Safari browser starts, all you have to do is to confirm (or cancel) your choice in the following dialog:
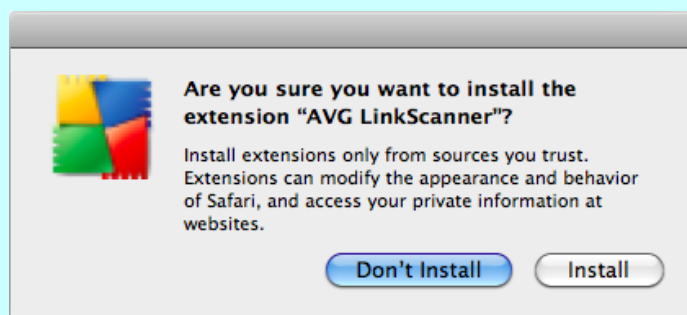
6.3. Secure Browsing tab

This dialog allows you to configure some [Secure Browsing](#) component related settings.
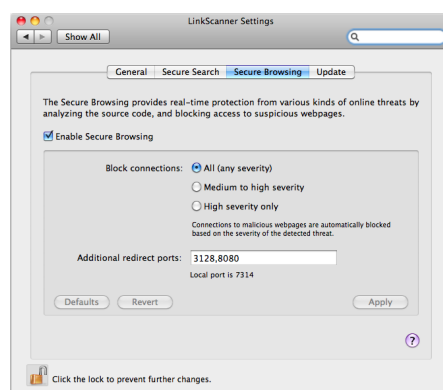
- **Enable Secure Browsing** - if the box is checked, AVG Secure Browsing is active and, whenever surfing the web, protecting you real-time from the most serious online threats: malicious, exploitive, and phishing websites. Uncheck the box to switch the function off.

- **Block connections** - whenever the Secure Browsing detects a threat on a webpage you are trying

to access, it will interrupt downloading the webpage contents so that the harmful code does not get into your computer at all. You can specify the lowest level of threat severity to trigger the interruption:

- o *Low* will interrupt the connection upon detection of any threat. This option is recommended and set by default.

- o *Medium* will interrupt the connection upon detection of a threat of medium to high severity.

- o *High* will interrupt the connection only upon detection of a high severity threat.

Please note that if you decide not to block low severity threats, then upon such threat detection, the webpage will be displayed normally, only a notification pop-up window will be displayed so that you know that the webpage is somewhat suspicious and potentially dangerous. Displaying the notifications can be turned off in General tab, section Notifications; however, we strongly recommend not to do this if you do not have a serious reason, because in that case you are not notified or protected from the lower-danger webpages or connections in any way.

- **Additional Redirect Ports** - any ports entered in this field will be redirected to the Local Port above. By default, the port 80 is always included, too (not editable).

Finally, there are three button in the bottom part of this dialog. Clicking the **Defaults** button sets all options in the dialog to the manufacturer pre-set and recommended values. Clicking the **Revert** button sets all options in the dialog to the last user-saved values. Use the **Apply** button to save all current changes to the settings.

6.4. Update tab

This dialog allows you to configure some Update related settings (managed by the Update Manager component).
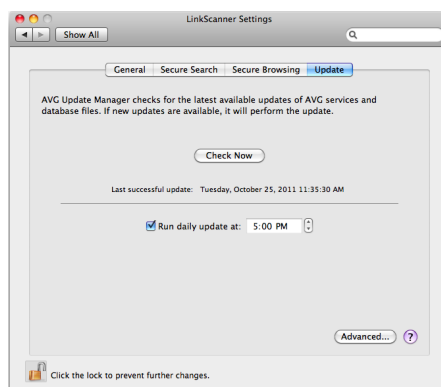
Click the **Check Now** button if you wish to update your **AVG 2012 LinkScanner for Mac** immediately. This also called the manual update. The **AVG 2012 LinkScanner for Mac** will then search online for new update files, and if available, download these and automatically update itself.

Under this button you can see the time of **Last Successful Update**. If the database had not been

updated lately, you will be informed by the **AVG 2012 LinkScanner for Mac** displaying error status.

Next, there is a checkbox called Run Daily Updates at. This box should remain checked to ensure that **AVG 2012 LinkScanner for Mac** updates itself automatically at regular intervals, without your intervention. By default, the **AVG 2012 LinkScanner for Mac** updates itself automatically at 5:00 PM. If you prefer a different hour, type it in the time box, or use the little up and down arrows to set the hour.

If you (for any reason) have switched off automatic updates (by unchecking this box), do not forget to update manually at reasonable intervals to stay protected. Click **here** to learn more about updates and their importance.

Finally, you may use the **Advanced** button to access and edit existing web proxy server settings (if you want to define a new web proxy, you will have to do so via *System Preferences*). Upon clicking the Advanced button, the following dialog appears:
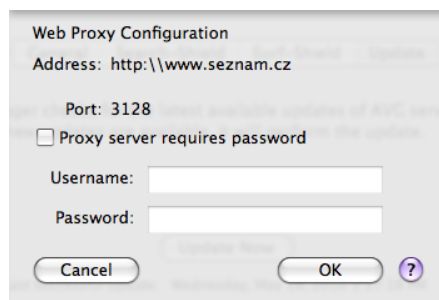
You can see the proxy server address and number of communication port (default is 3128) in the top part of the dialog. The server may also require authentication. In this case you will need to fill in the login details, too. These cannot be filled in for you, because each user account on the computer might have different login details. Please mark the checkbox *Proxy server requires authentication*, and type your proxy server username and password in the respective fields.

7. Updates

AVG 2012 LinkScanner for Mac contains a number of definition files with information on dangerous or suspicious websites, and uses combined techniques to generate the final result (i.e. whether an URL is dangerous or safe). AVG developers work hard to keep all these files and mechanisms up-to-date, and any new definitions and improvements of these are delivered to you from AVG Technologies servers via online update. Regular updating of your **AVG 2012 LinkScanner for Mac** is therefore essential.

All update related settings can be adjusted in the Update tab of AVG 2012 LinkScanner for Mac Settings dialog.

7.1. Update Types

Basically, there are two types of update in the **AVG 2012 LinkScanner for Mac**:

- *Manual update* is an immediate **AVG 2012 LinkScanner for Mac** update that can be performed any time the need arises. You can either open the Update tab of AVG 2012 LinkScanner for Mac Settings dialog and click the **Check Now** button, or you can click the AVG icon in the Menu bar and select **Check for Update** from the context menu.

- *Scheduled update* - within **AVG 2012 LinkScanner for Mac** it is also possible to pre-set an update. The planned daily update is then performed periodically according to the setup configuration. Whenever new update files are present on the specified location, they are downloaded either directly from the Internet. When no newer updates are available, nothing happens. The exact time of this automatic update can be set via the time box in the Update tab of AVG 2012 LinkScanner for Mac Settings dialog. You can also use the checkbox to turn the scheduled update off/on.

> Please note that if the computer is turned off at the time of scheduled update, the update will be missed without compensation. For this reason, we recommend setting up the daily update time to an hour when your computer is most likely running.

7.2. Update Process

Whenever an update starts (no matter if it's manual or scheduled), **AVG 2012 LinkScanner for Mac** will first verify whether there are new update files available. If so, **AVG 2012 LinkScanner for Mac** starts their downloading and launches the update process itself. During the update process you will get redirected to the *Update* interface where you can view the process progressing in its graphical representation as well as its final result:
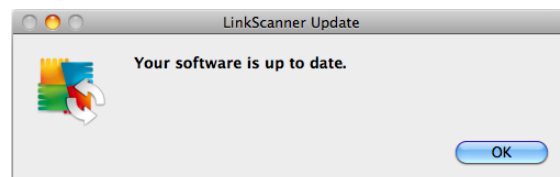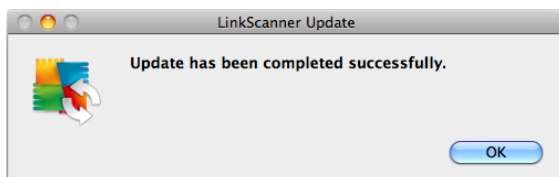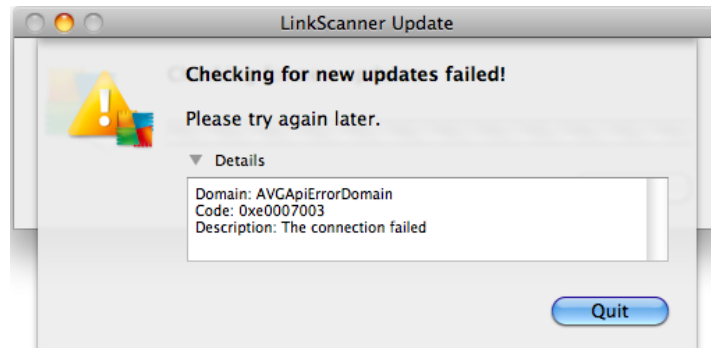
The first screenshot shows the situation when the process was successfully finished and your **AVG 2012 LinkScanner for Mac** was updated. The second one illustrates another outcome - when there are no new update files available. Finally, the third one shows update failure. There might be a few reasons for this, with limited or unavailable Internet connection being the most common.

From time to time, you may also encounter the following dialog:
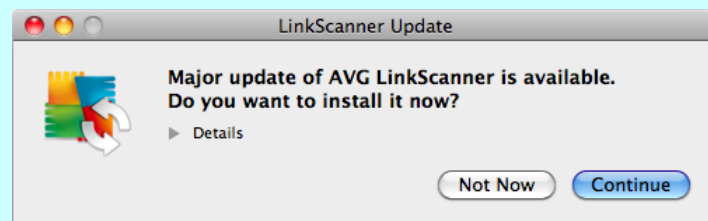
This means that an important update, or upgrade to a new version of AVG LinkScanner is currently available. Such updates usually take a bit more time to accomplish. You may start this update by clicking the Continue button, or postpone it by clicking the Not Now button. If you don't want to be notified about these important updates, open the Notification section in the General tab of your AVG LinkScanner Settings and uncheck the **Show notifications about major update/upgrade** box. In such case, important updates will be installed automatically, without any notice.

8. Uninstallation of AVG LinkScanner

There are two ways to remove the **AVG 2012 LinkScanner for Mac** from your computer. You can either choose the automatic uninstallation, or the manual uninstallation.

8.1. Automatic uninstallation

To trigger automatic uninstallation, please click the **Uninstall** icon located in the installation package (the ***avg_lsm_stf_all_2012_????.dmg*** file):
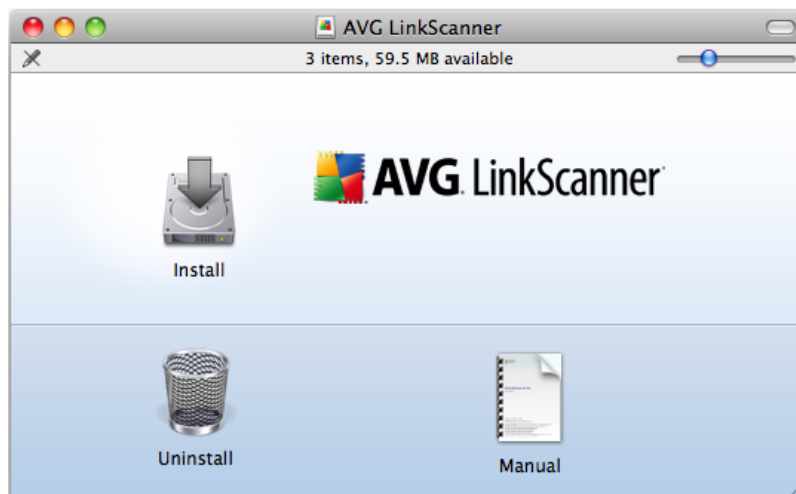
The Uninstaller will appear and guide you conveniently through the uninstallation process.
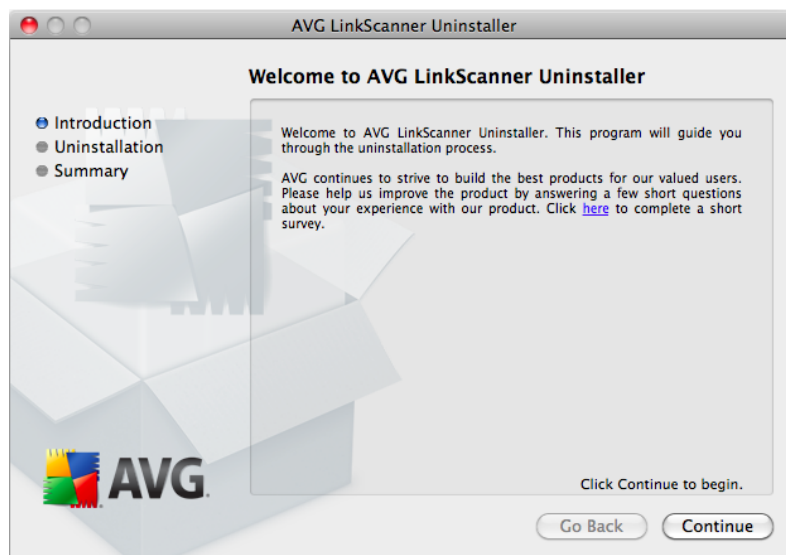
All you have to do in this dialog is to click the **Continue** button. Next you will be prompted to enter administrator's name and password (otherwise the Uninstaller won't be allowed to make changes and the uninstallation process won't be able to continue). If you do not know the login name and password, you will need to contact the person who administers your computer.

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After that, the dialog with uninstallation progress bar appears. If the whole process is successful, you will see the following dialog asking you to reboot your computer.
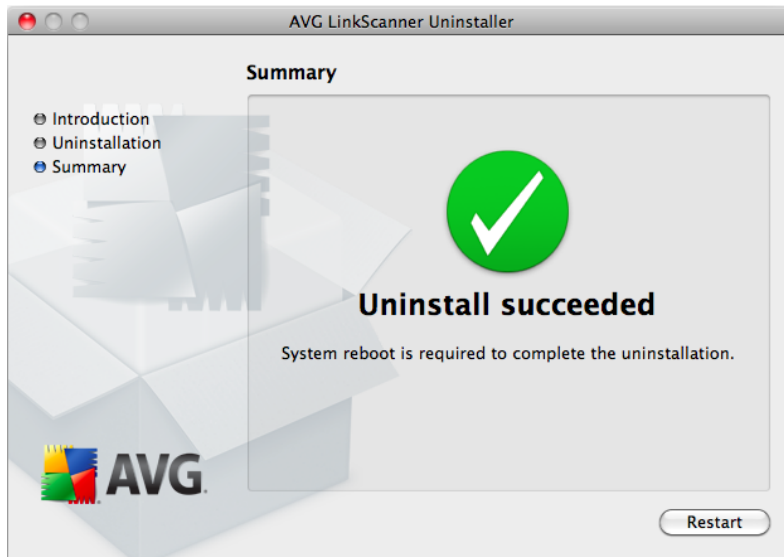
Please note that Firefox, Safari and System Preferences will be closed if running!

Please note that it is necessary to exit the AVG LinkScanner application in order to proceed with the uninstallation!

8.2. Manual uninstallation

In most cases, you will not need to perform manual uninstallation. However, should the need arise, you can remove all files related to the AVG product as follows:

1. Open AVG LinkScanner Settings and in General tab (General Settings section) uncheck the **Start AVG 2012 LinkScanner for Mac upon login** item.

2. Quit the Firefox, Safari and System Preferences applications, if running.

3. Prevent "launchd" daemon from automatically invoking the main **AVG 2012 LinkScanner for Mac** services by executing the following commands in a terminal window:

> */bin/launchctl remove com.avg.LinkScannerAgent*
> */bin/launchctl remove com.avg.LoaderAgent*
> *sudo /bin/launchctl remove com.avg.apiServices*
> *sudo /bin/launchctl remove com.avg.avgconfigd*
> *sudo /bin/launchctl remove com.avg.avgnotifyd*
> *sudo /bin/launchctl remove com.avg.avgprivd*

4. Unload the network kernel extension by executing the following commands as a root in a terminal

window:

> */sbin/SystemStarter stop "AVG Netshield support"*

If an error occurs, it means that the kernel extension is currently busy and can't be unloaded. You can still proceed to the next step.

5. Execute the following commands as a root in a terminal window:

> *rm -rf Applications/AVG\ LinkScanner.app*
> *rm -rf /Library/PreferencePanes/LinkScannerSettings.prefPane*
> *rm -rf /opt/avg/avg2012*
> *rm -f /Library/LaunchDaemons/com.avg.apiServices.plist*
> *rm -f /Library/LaunchDaemons/com.avg.configurationTool.plist*
> *rm -f /Library/LaunchDaemons/com.avg.notificationTool.plist*
> *rm -f /Library/LaunchDaemons/com.avg.privilegedTool.plist*
> *rm -f /Library/LaunchAgents/com.avg.LoaderAgent.plist*
> *rm -f /Library/LaunchAgents/com.avg.LinkScannerAgent.plist*
> *rm -f ~/Library/Preferences/com.avg.LinkScannerSettings.plist*
> *rm -f /Users/Shared/AVG/com.avg.LinkScannerSettings.plist*
> *rm -f /usr/sbin/avgctl*
> *rm -f /usr/sbin/avgcfgctl*
> *rm -f /usr/sbin/avgupdate*
> *rm -f /usr/sbin/avgurlscan*
> *rm -f /usr/share/man/man1/avgctl.1.gz*
> *rm -f /usr/share/man/man1/avgcfgctl.1.gz*
> *rm -f /usr/share/man/man1/avgd.1.gz*
> *rm -f /usr/share/man/man1/avgdump.1.gz*
> *rm -f /usr/share/man/man1/avglnsd.1.gz*
> *rm -f /usr/share/man/man1/avgnsd.1.gz*
> *rm -f /usr/share/man/man1/avgsched.1.gz*
> *rm -f /usr/share/man/man1/avgupd.1.gz*
> *rm -f /usr/share/man/man1/avgupdate.1.gz*
> *rm -f /usr/share/man/man1/avgurlscan.1.gz*
> *rm -rf /Library/ScriptingAdditions/AVGScriptingAdditions.osax*
> *rm -rf /Library/Application\ Support/AVG/Plugins/AVGSafariPlugin.bundle*
> *rm -rf /Library/Application Support/Mozilla/Extensions/{ec8030f7-c20a-464f-9b0e-13a3a9e97384}/linkscanner@avg.com*
> *rm -rf /Library/PrivateFrameworks/AVGLnscServices.framewrok*
> *rm -rf /Library/StartupItems/AVGNetShieldLoader*

6. To unregister all packages related to the installation (i.e. to remove all related receipts), do the following as a root in a terminal window:

To find out what packages have been registered, please execute:

> *pkgutil --pkgs=.*LinkScanner.**

For each package in the list, please execute:

> *pkgutil --forget=<package name>*

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7. If you have encountered any error in step 4, please reboot your computer.

After performing these steps, the **AVG 2012 LinkScanner for Mac** product should be completely removed from your computer.

9. Contact & Support

All AVG products are created by AVG Technologies. Please visit our webpage at www.avg.com to learn more, or for more information specifically on the AVG LinkScanner for Mac product, please visit linkscanner.avg.com/mac.

For support, there are the following options:

- browse the FAQ section of the AVG Free website at: free.avg.com/faq.

- use the online AVG forums, to discuss your issue with other AVG users, customer support specialists and developers. To get there, open the Main User Interface, click **Help** in the upper right corner, and then click *Visit LinkScanner forum* link.

- if you wish to contact us directly, you can always send us a message describing the problem together with necessary diagnostic information (collected automatically). Please open the Main User Interface, click **Help** in the upper right corner, and then click the *Send data* button.