ServerGenius Documentation

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Get Started with ServerGenius

Step 1: Installing ServerGenius on your computer

Installing ServerGenius is an easy process.

Just download it from our web site, run the Setup-ServerGenius.exe and follow the steps detailed here.

Files are decompressed and copied into:

- "C:\Program Files\RDS-Tools\ServerGenius" folder (32 bit systems)
- "C:\Program Files (x86)\RDS-Tools\ServerGenius" folder (64 bit systems).

The trial version is a full featured version limited to 2 weeks.

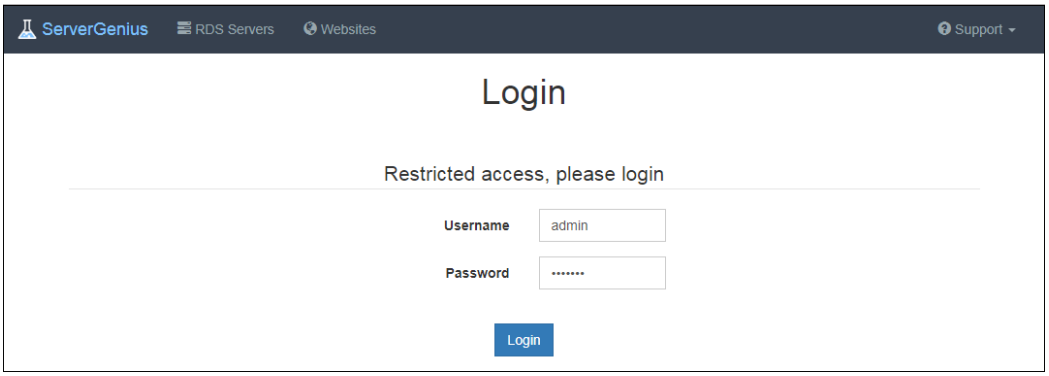
After the installation, there will be a new icon on your Desktop:

Step 2: Checking your Installation

On your server, start an Internet browser (such as Chrome, Firefox or Internet Explorer).

Browse to http://localhost:7777 by default, or change the "7777" part with the port you have chosen during the installation.

If everything has been installed and configured properly, then you should have a web page such as the one below:



If this page is not displayed, please contact our Support team.

By default, the login is **admin**, password **admin** which you can then change by modifying the Settings on the Administration tab.

Step 3: Connecting Remotely to your Server's Reporting & Monitoring web interface

You can now connect to ServerGenius web interface from virtually any device (your computer or laptop, your tablet, your mobile phone...).

All you have to do is to browse to http://yourserver:7777 (using your server's domain name or public IP address).

Next steps

We advise all our customers to read our online documentation.

Do not hesitate to contact us if you have questions or feedback about ServerGenius and/or this quick-start guide.

Pre-requisites

Hardware Requirements

Please find below our recommendations based on the number of monitored servers:

Monitored servers	CPU	Memory (RAM)
1-2	2	8
3-4	4	16
5+	8	32

Installing ServerGenius on an SSD type disk drive is recommended for better performance.

Also, you may need to allocate additional disk space for ServerGenius Server, depending on the number of servers and websites monitored, and coincidelly the amount of data collected and stored in the PostgreSQL database.

Finally, please note that it is generally a good idea to run a monitoring application such as ServerGenius on a dedicated server. This prevents other applications to reduce available resources.

Operating System

ServerGenius is compatible with the following OS:

- Windows **7 Service Pack 1**
- Windows **8/8.1**
- Windows **10 Pro**
- Windows **11 Pro**
- Windows **Server 2008 SP2/Small Business Server SP2 or 2008 R2 SP1**
- Windows **Server 2012 or 2012 R2**
- Windows **Server 2016**
- Windows **Server 2019**
- Windows **Server 2022**

Both 32 and 64 bits architectures are supported.

Network

Only one network port is required, and will be asked during the setup. By default, we suggest to use port 7777, which is not an officially registered port and therefore not assigned to specific services.

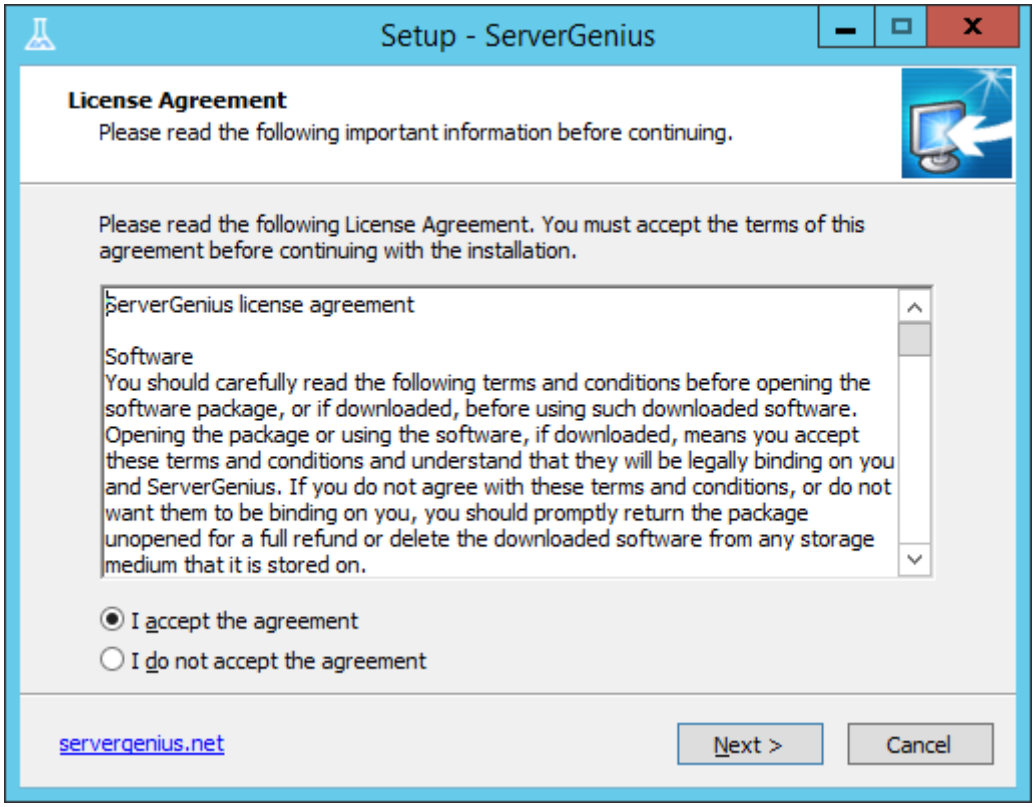
If you want to access your ServerGenius web interface from outside your company's network, you will need either a public IP address or a domain name / subdomain to access the server.

If you cannot connect to ServerGenius web interface on your server, please contact your Administrator first, as this is most probably a network or firewall issue, not a ServerGenius issue.

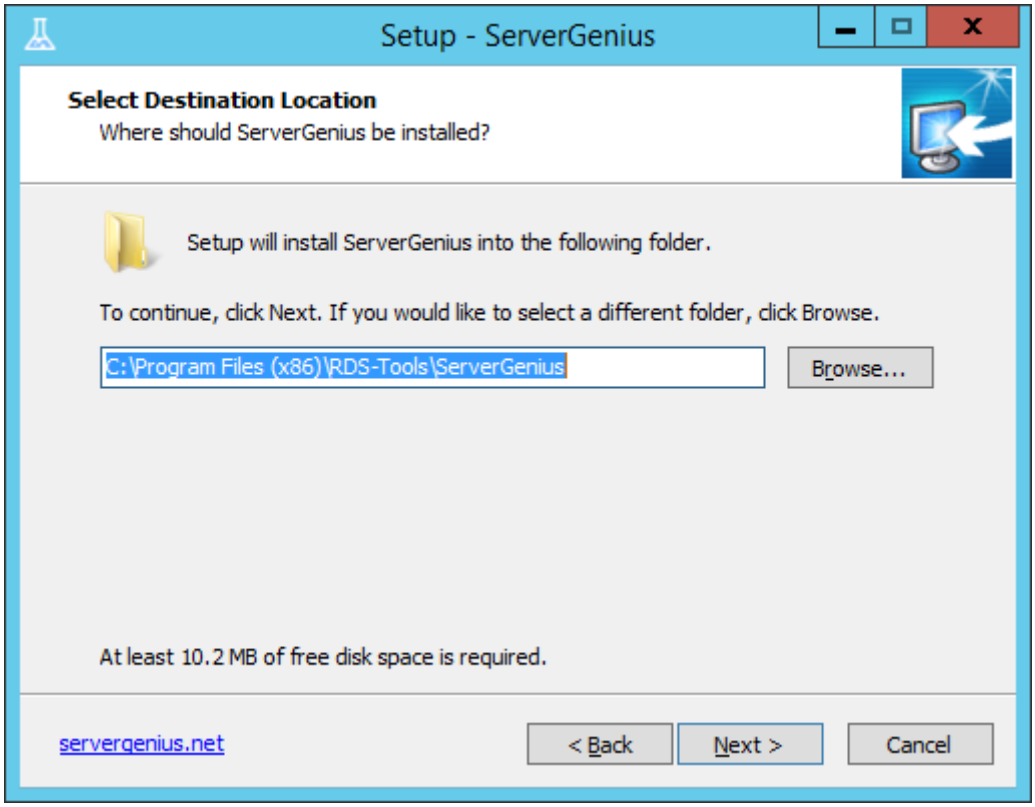
Installation

Run ServerGenius Setup program and then **follow the installation steps**.

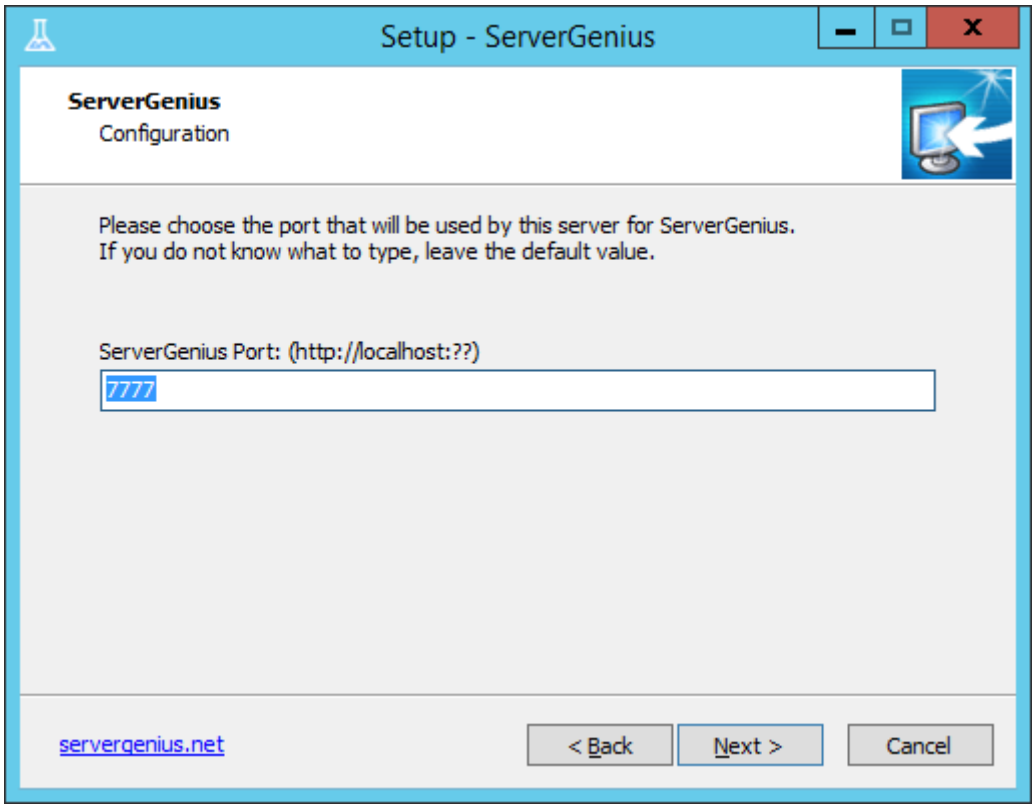
Please note that you must run this Setup as an Administrator, but don't worry, Windows will automatically require it.



Click on "Next" if you agree to the license.



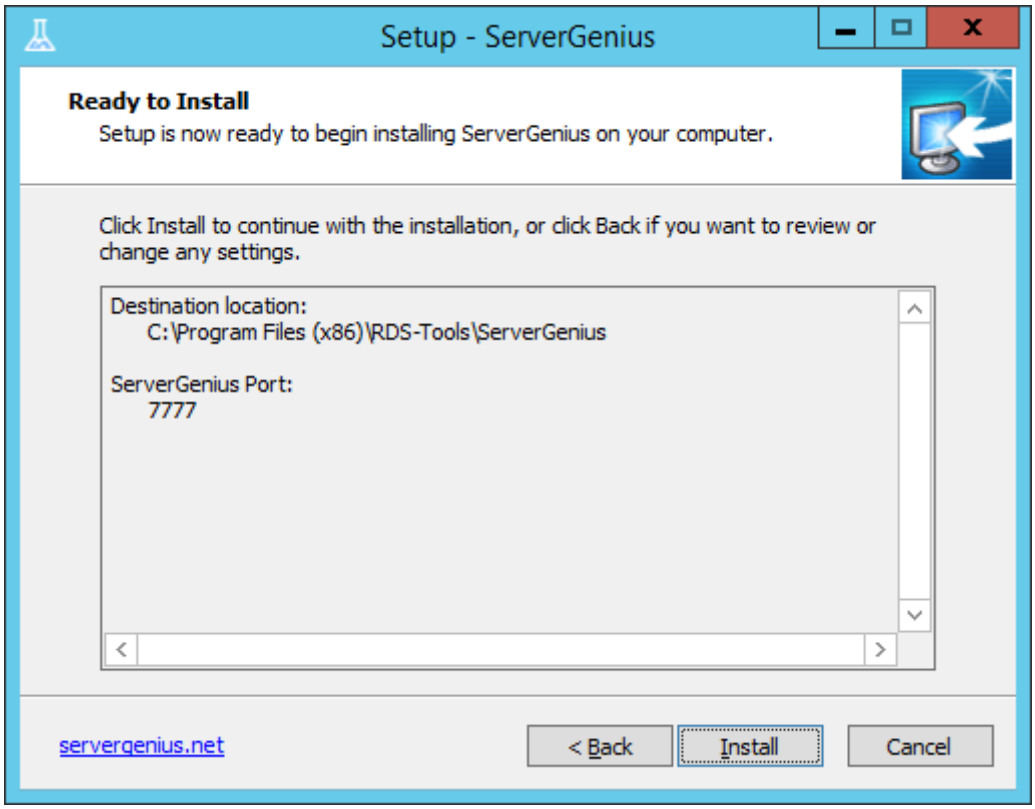
Choose where to install ServerGenius on your computer (we recommend to use the default path).



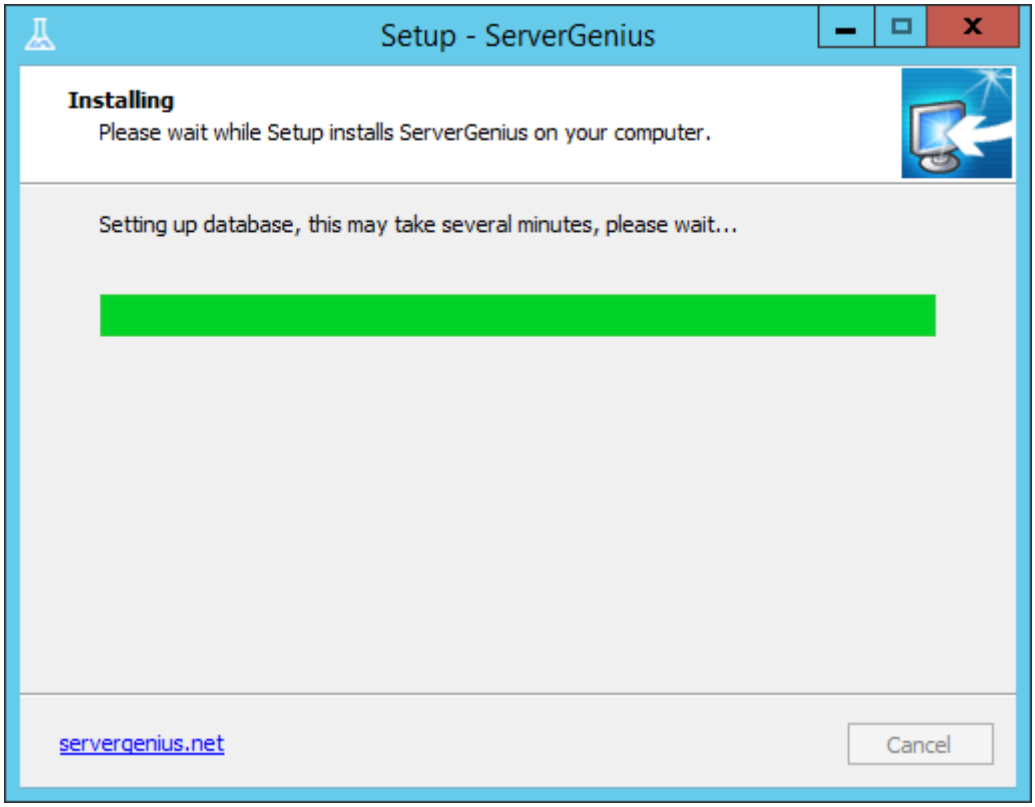
Choose the port on which ServerGenius will publish its web interface.

This is the network port on which you will browse to see ServerGenius reports, alerts, administration panel, etc.

If you do not know what to enter, we recommend you to use the default port. You can change it after the installation if you need to.

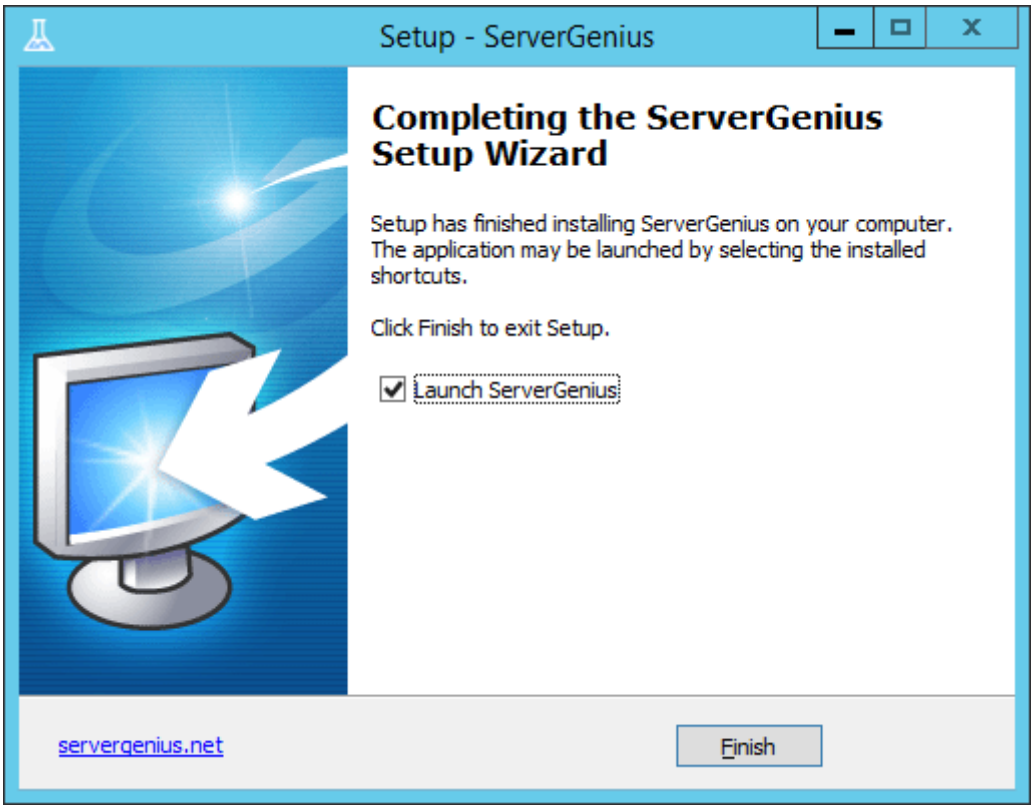


The Setup is now ready to install ServerGenius on your computer. Click on "Install" to start the actual installation.



A progress bar is displayed and allows you to follow the installation progress.

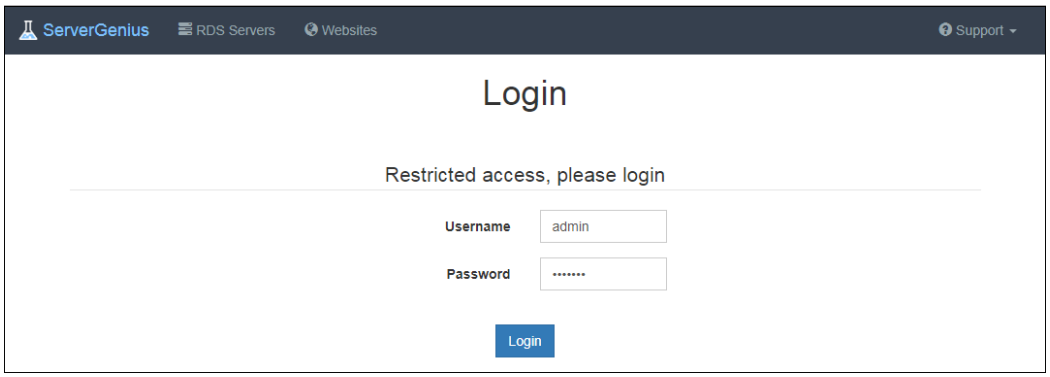
Please be patient, as it can sometimes take up to a few minutes to fully install the software.



The installation is now finished and ServerGenius is already running in the background on your server.

You can now start using ServerGenius by double-clicking on its icon on your Windows desktop:

or by opening your browser and browsing to ServerGenius address (http://localhost:7777 by default):

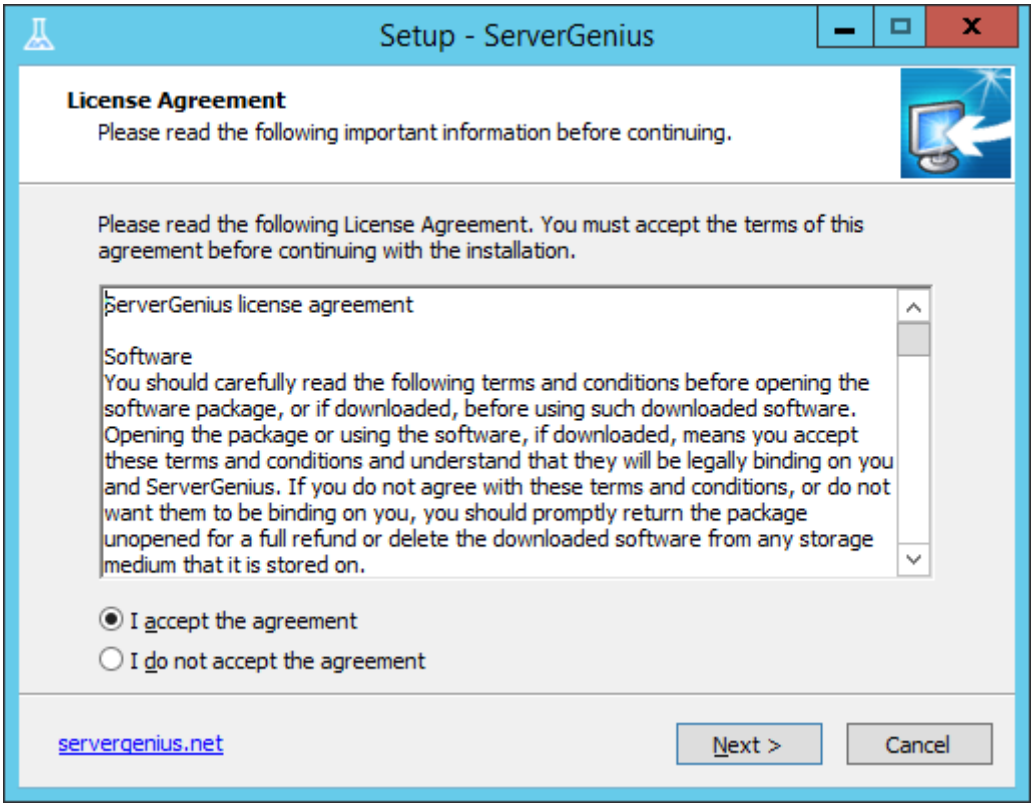


The free trial version is fully featured for 2 weeks.

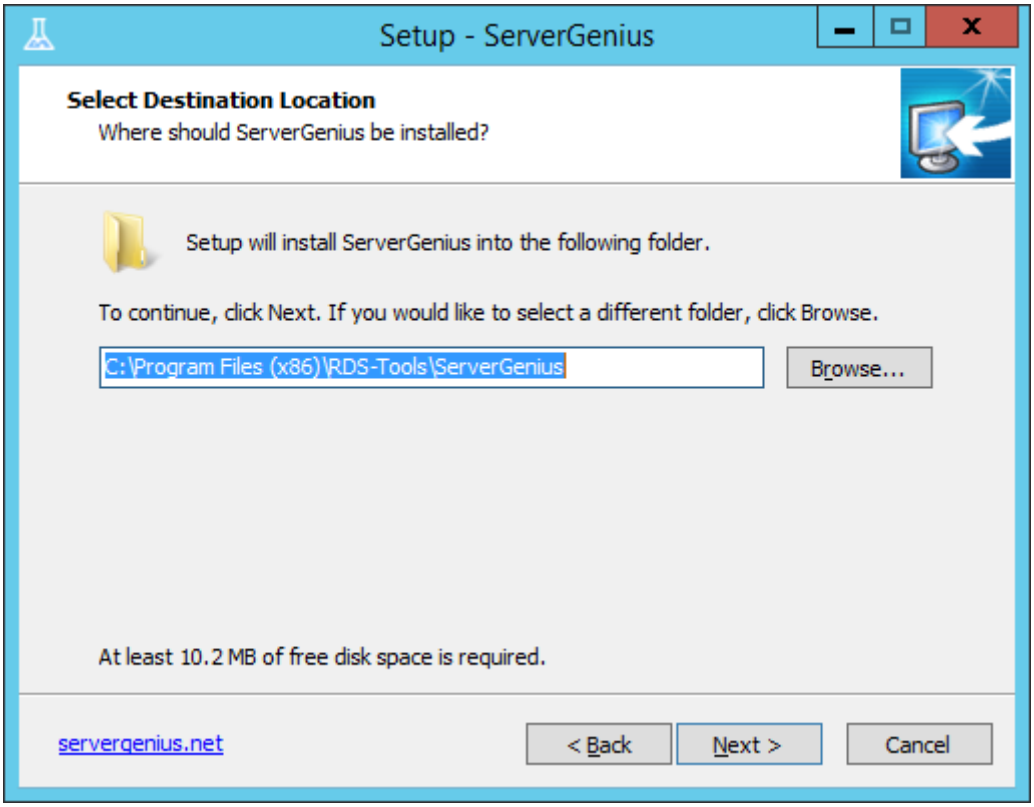
Updating ServerGenius

Run ServerGenius Update Release program (It is actually the Setup Program, available here and then **follow the installation steps**.

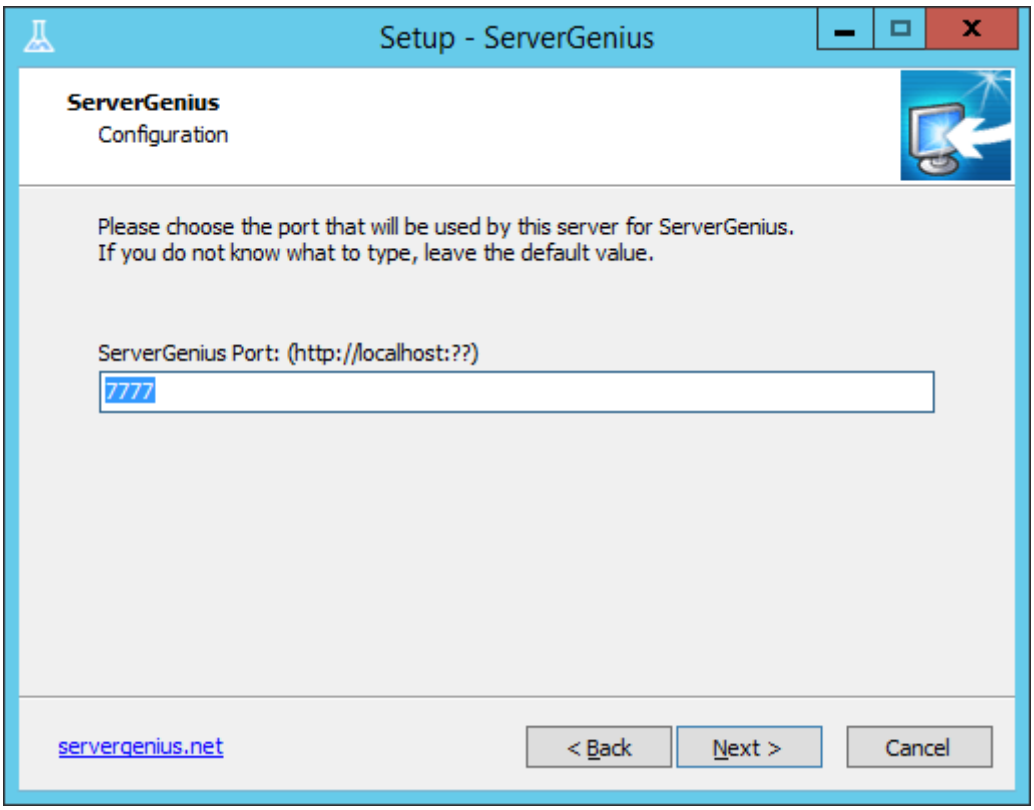
Please note that you must run this Update Release as an Administrator, but don't worry, Windows will automatically require it.



Click on "Next" if you agree to the license.



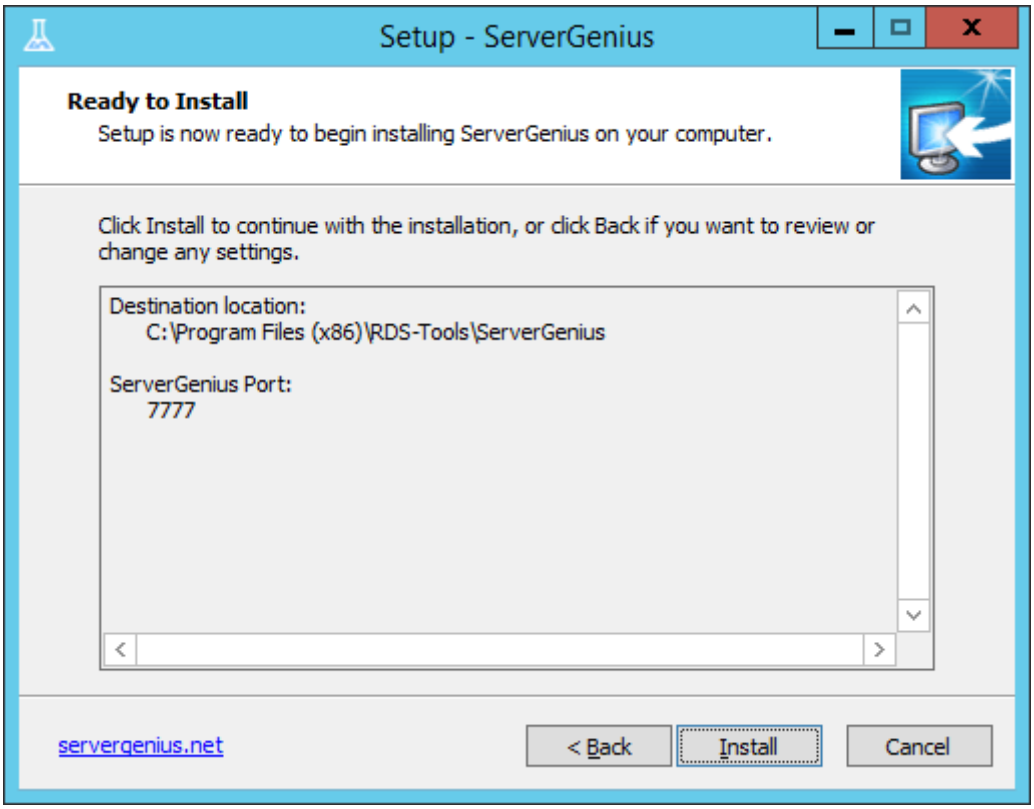
Choose the ServerGenius installation folder on your computer, then click on "Next".



Choose the port on which ServerGenius will publish its web interface.

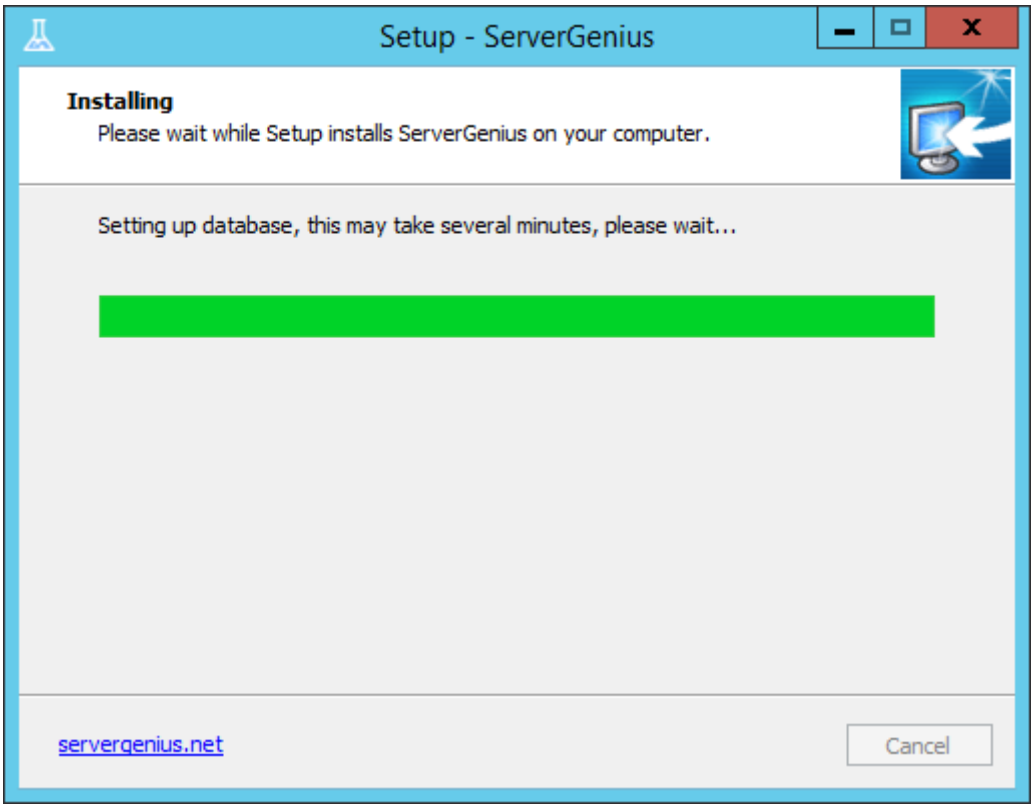
This is the network port on which you will browse to see ServerGenius reports, alerts, administration panel, etc.

If you do not know what to enter, we recommend you to use the default port. You can change it after the installation if you need to.

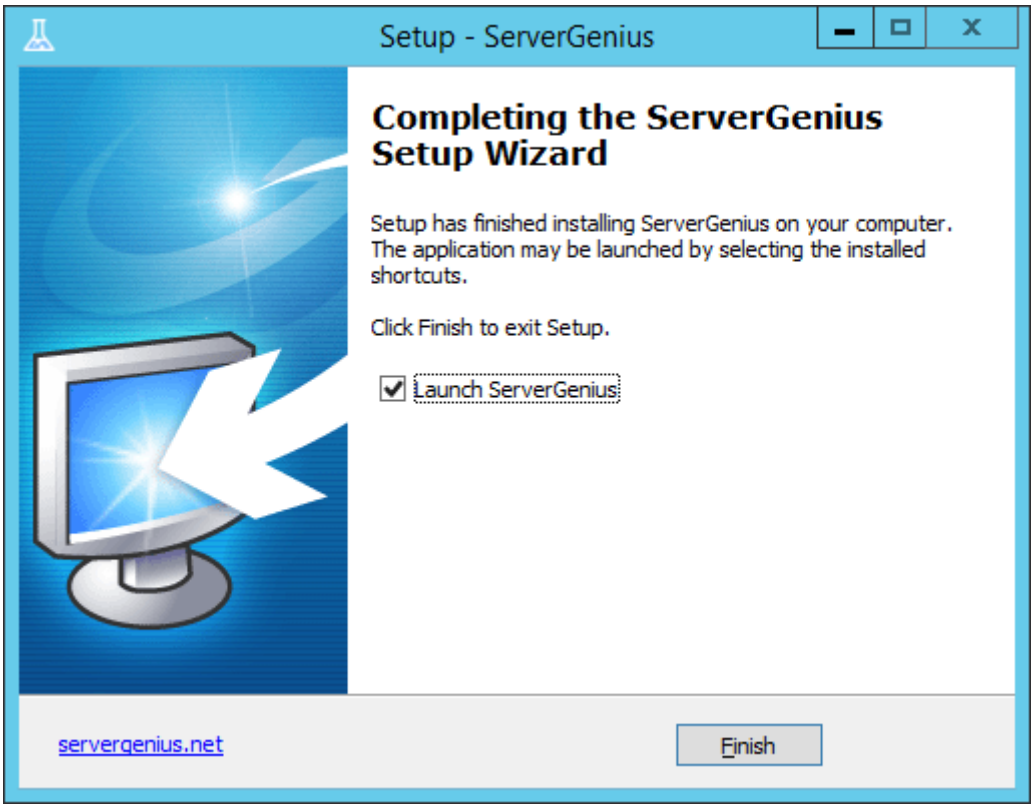


The Setup is now ready to install ServerGenius on your computer.

Click on "Install" to start the actual installation.



A progress bar is displayed and allows you to follow the update progress.



The update is now finished, and you can start using the latest version of ServerGenius.

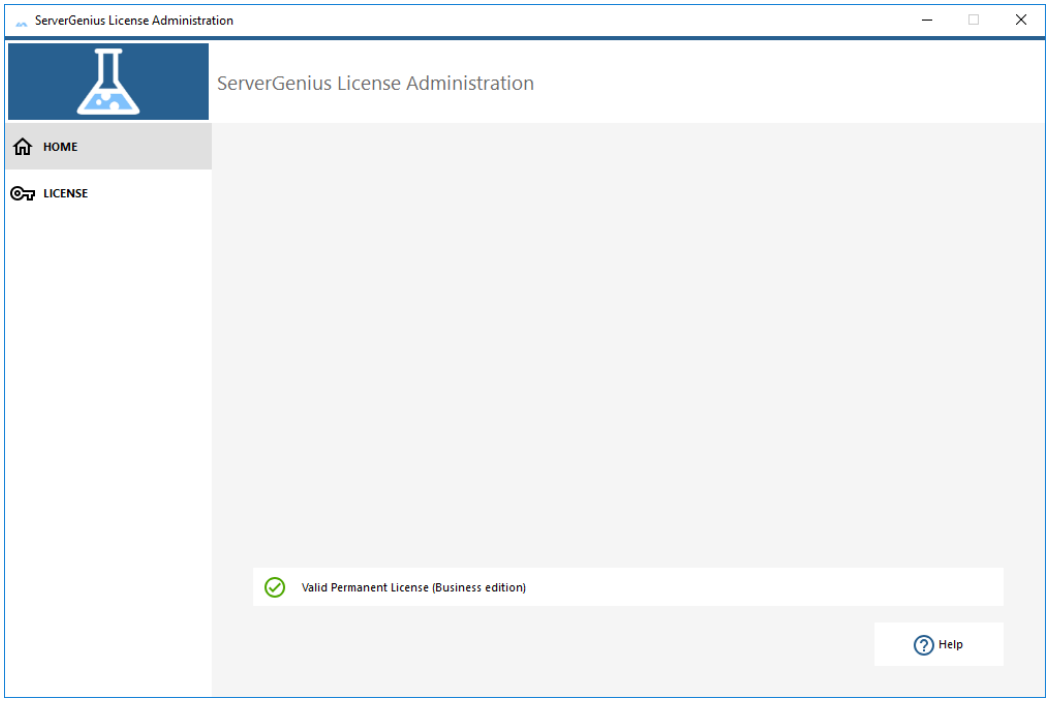
When it is required by the update, the Update Release program will ask you to reboot your computer to finish the update process.

Activating your license

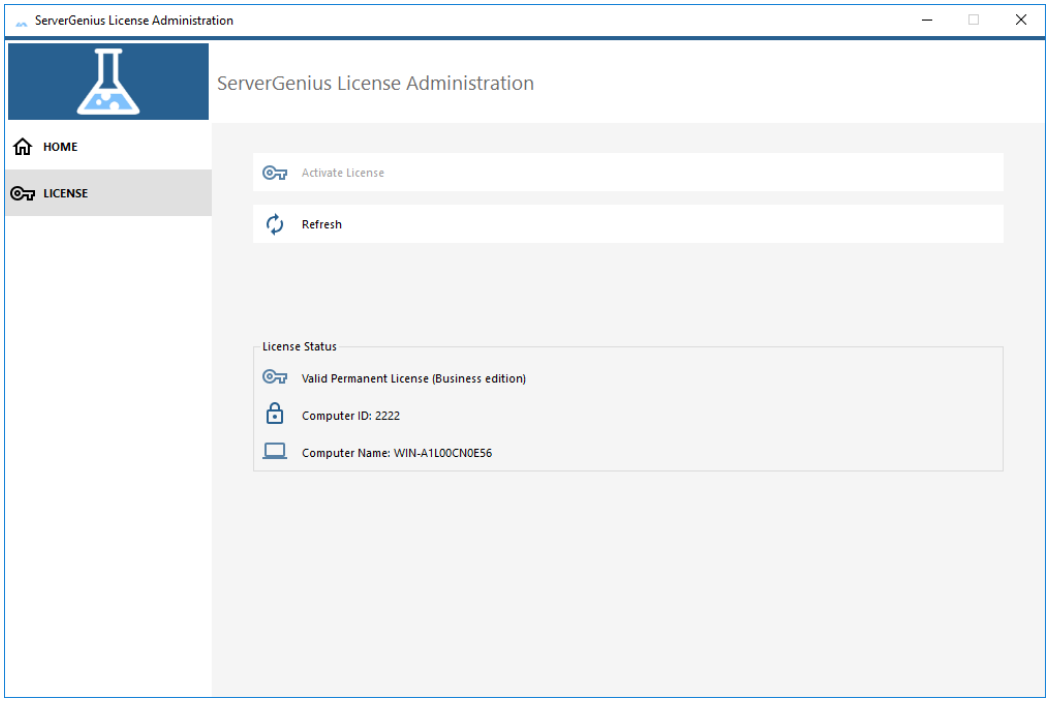
A License Administration Dashboard comes with Server Genius V4.

You can see that a shortcut had been created on your desktop :

On the Home tab, you can see the status of your License. Here it is a permanent Business Edition License:

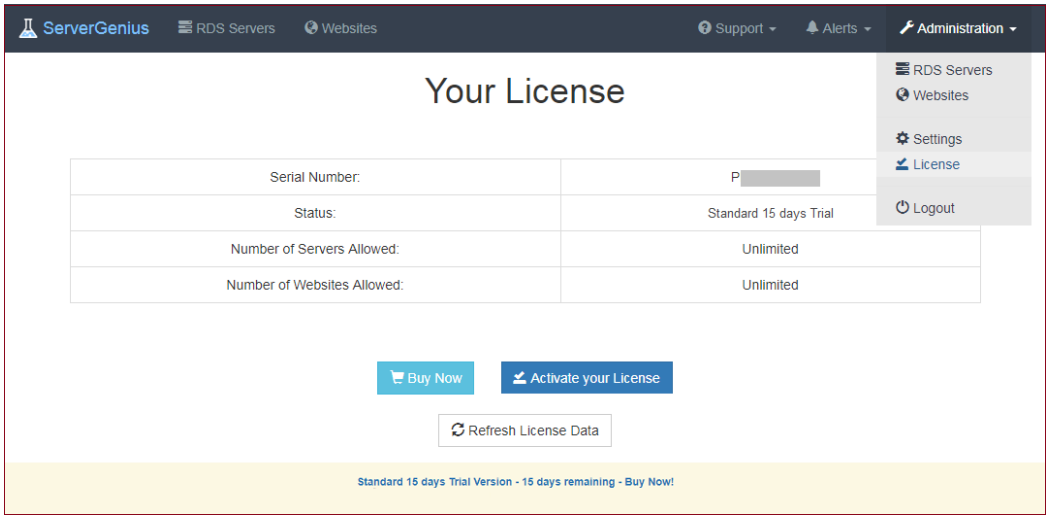


If you click on the License tab, you will be able to see your License status and information, with your Computer ID and Computer Name:



Click on the "Activate License" button or go to Server Genius interface on your web browser (http://localhost:7777 by default) and click on the "Administration" > "License" menu.

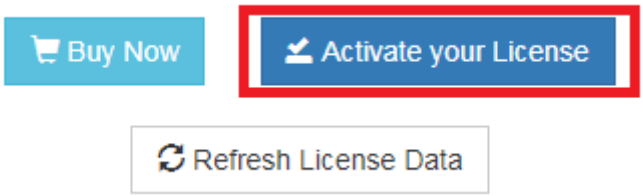
The following page should be displayed:



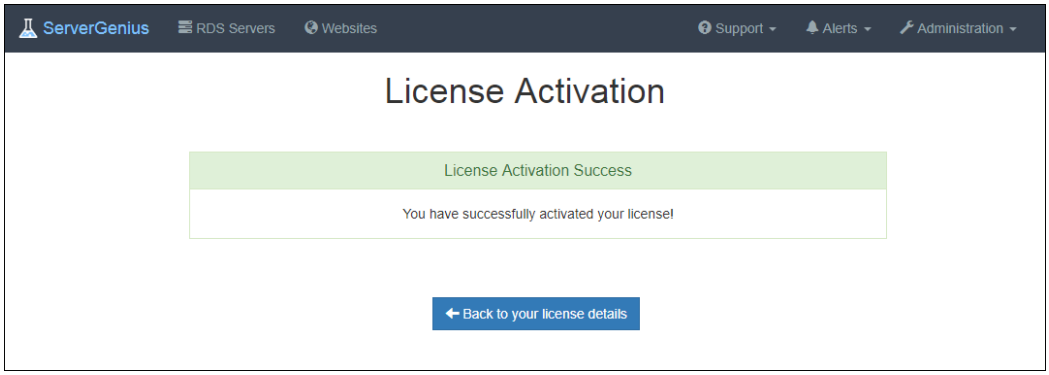
In order to get your Activation Key, connect to our Licensing Portal and enter your Email Address and your Order Number:

Download the Customer Portal User Guide for more information about how to use it.

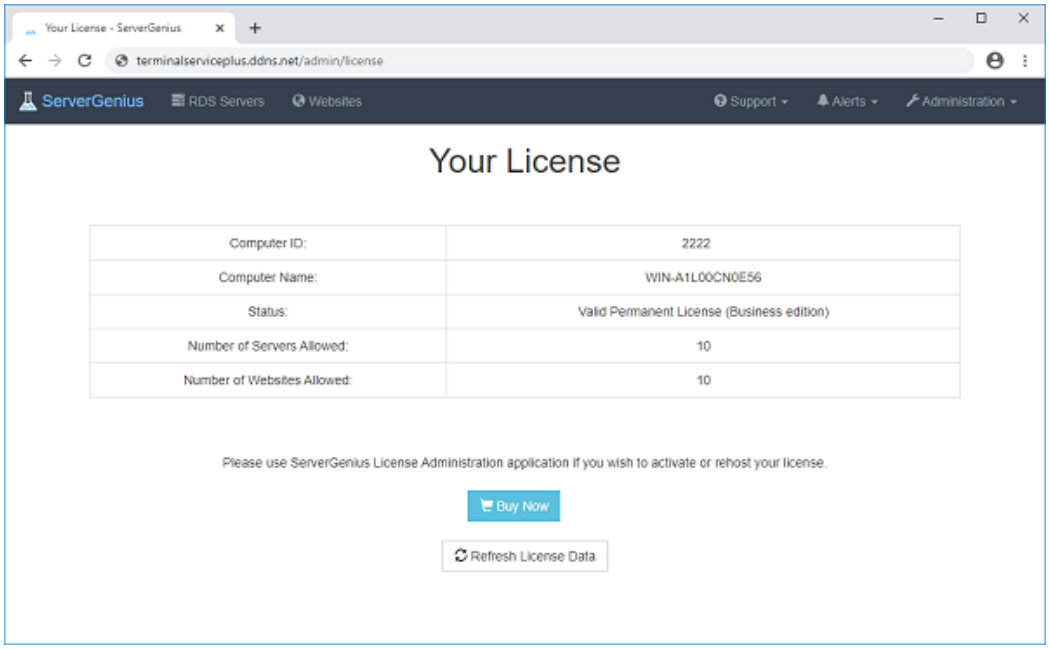
You will be able to see and copy your activation key. Click on the "Activate your License" button and enter it:



From now on, your License page will look like the one below, to confirm that you have indeed an activated license:



You can see the new status of your License by going back to your license details:



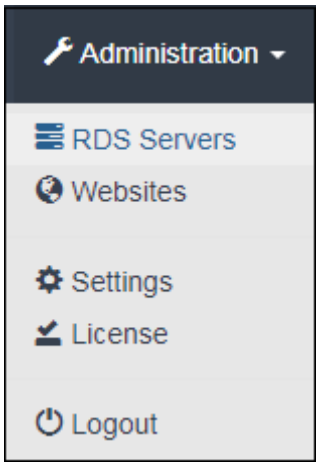
Refresh your License Data by clicking on the corresponding button at the bottom of the page, it will synchronize information with our Licensing Portal.

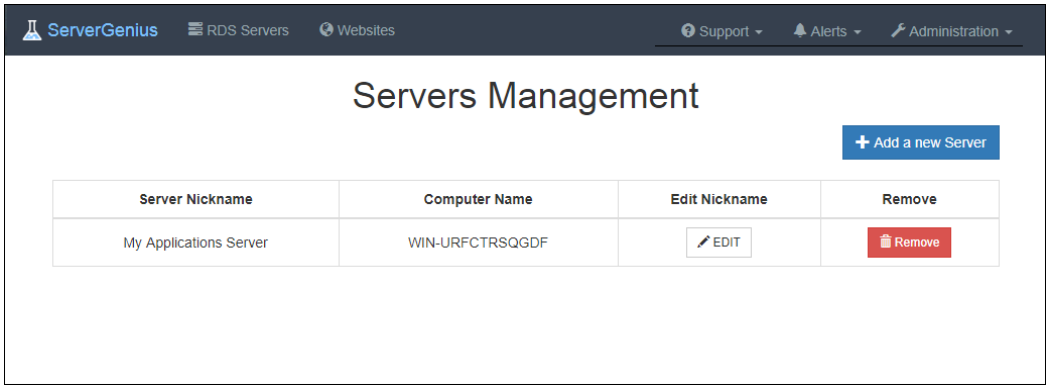
N.B: You can still download a license.lic file on the Licensing Portal for Server Genius Legacy Versions. Download the Customer Portal User Guide for more information about how to use it.

Thank you for choosing ServerGenius!

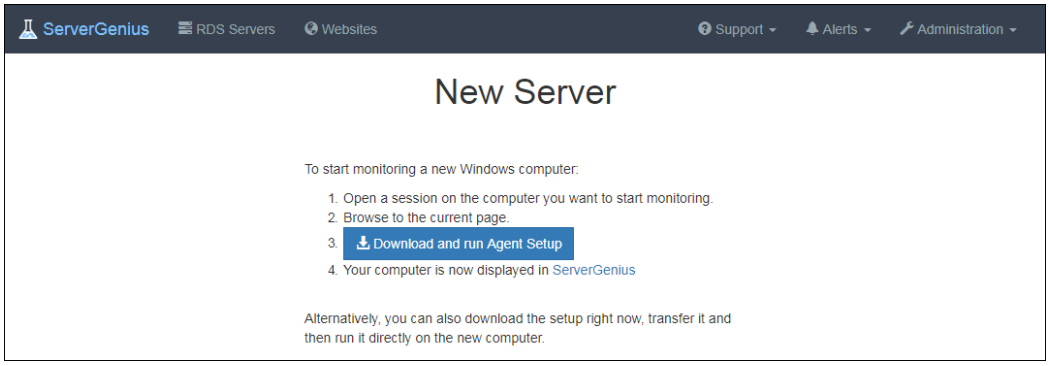
Servers Management

You can see and remove the servers you wish to monitor under the Administration tab > RDS Servers tile of Server Genius:

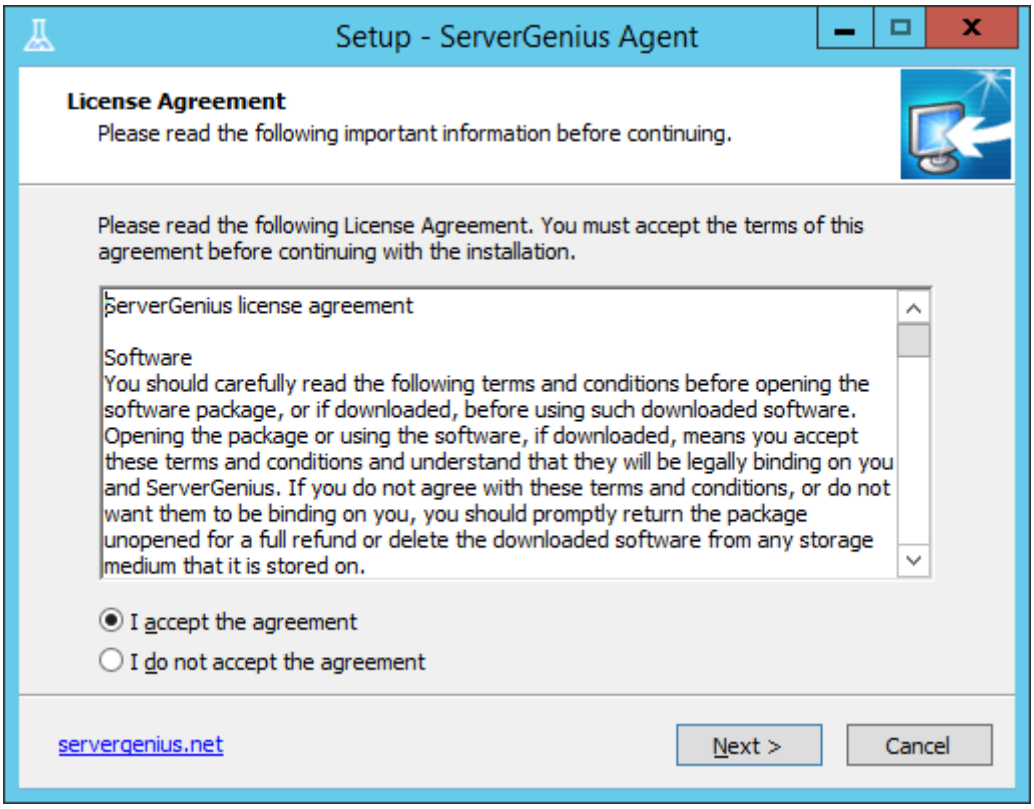




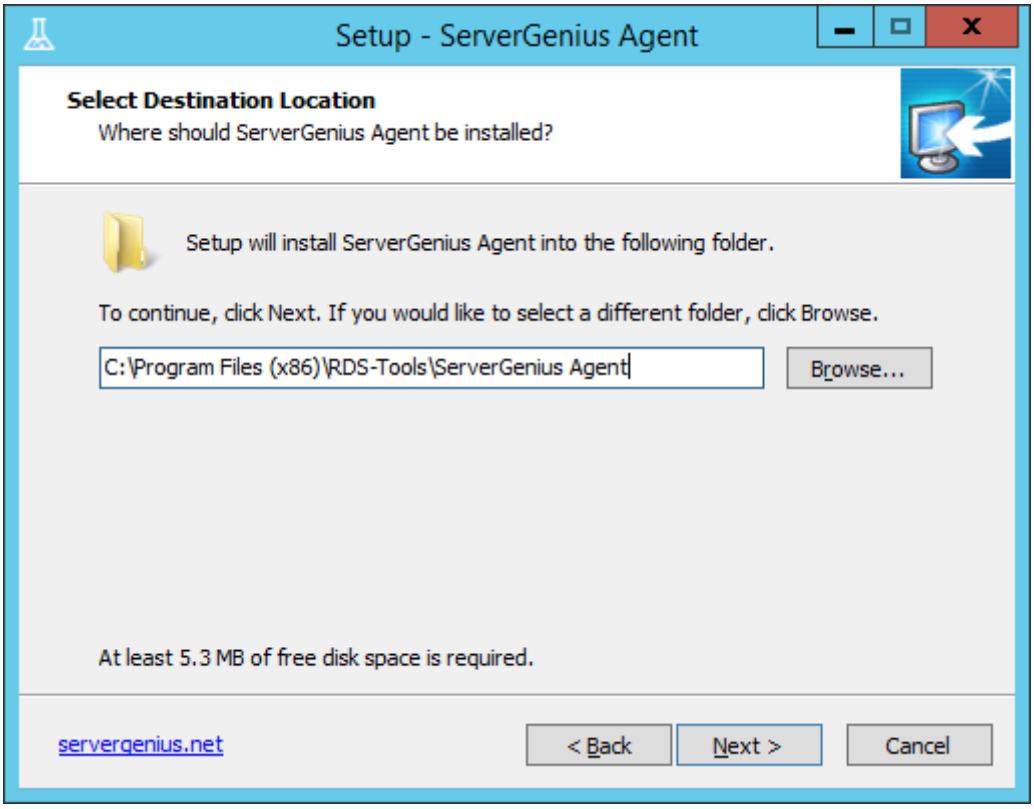
Add a new server by clicking on the "Add a new server" button, you will then see this interface:



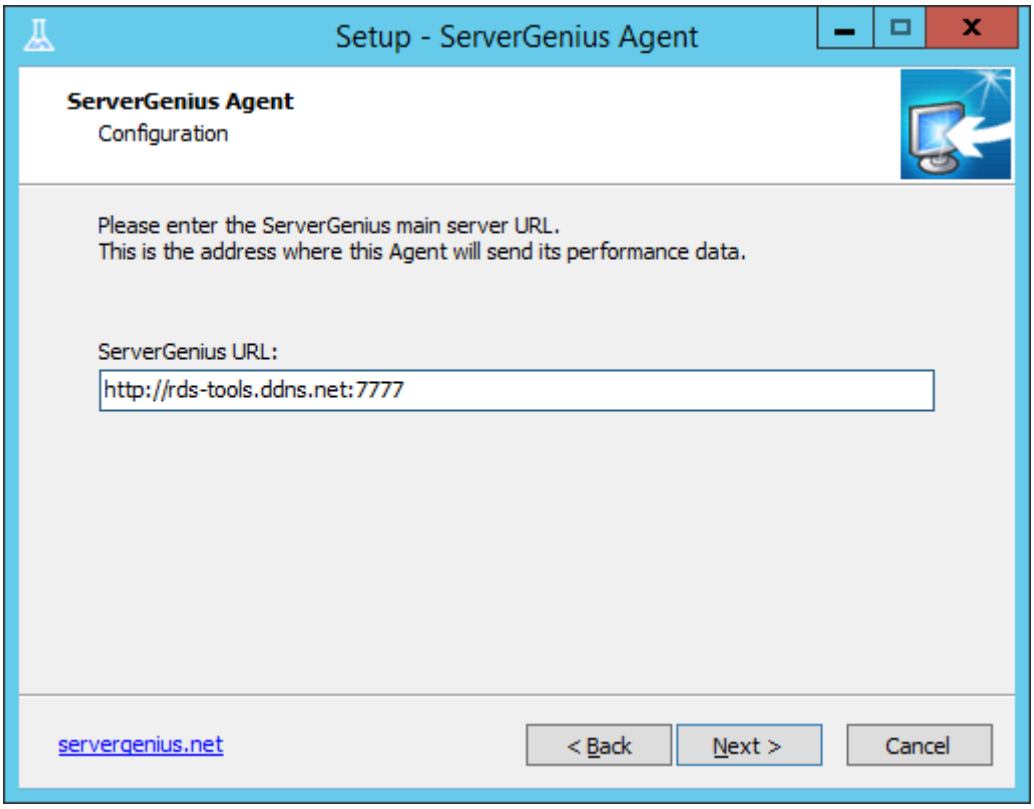
Follow the procedure by downloading Server Genius Agent on the new server you wish to add:



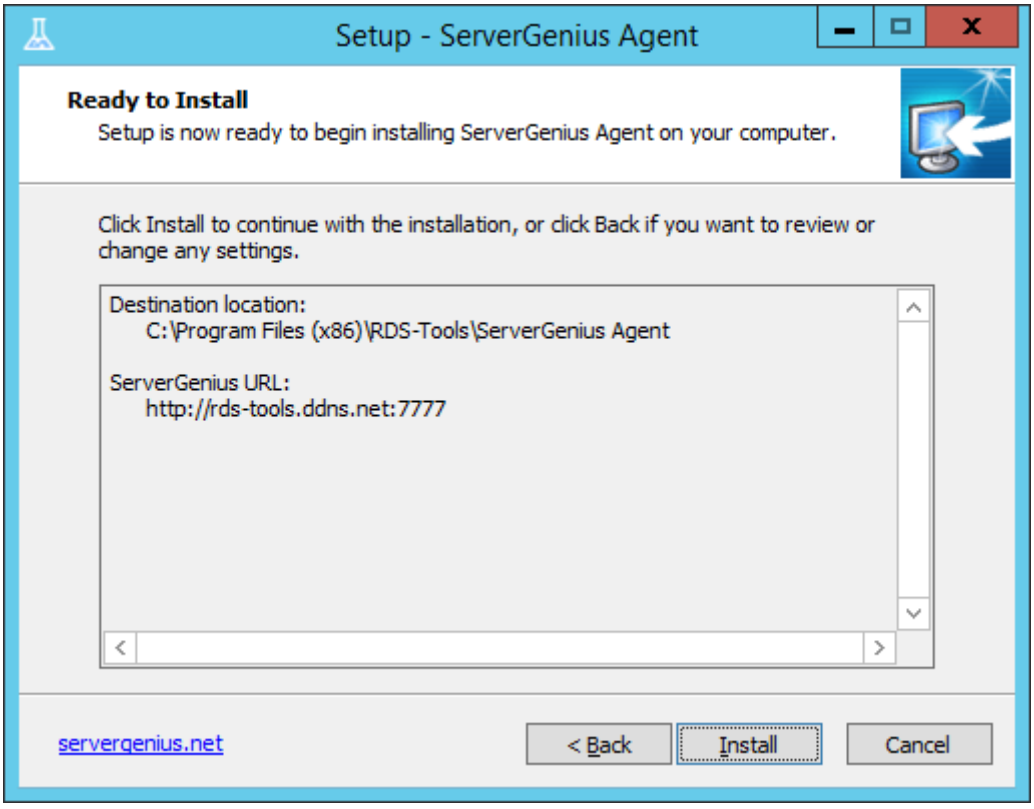
As for Server Genius setup, agree to the License, then select the destination location folder (by default, it will be installed on C:\Program Files (x86)\RDS-Tools\ServerGenius Agent):



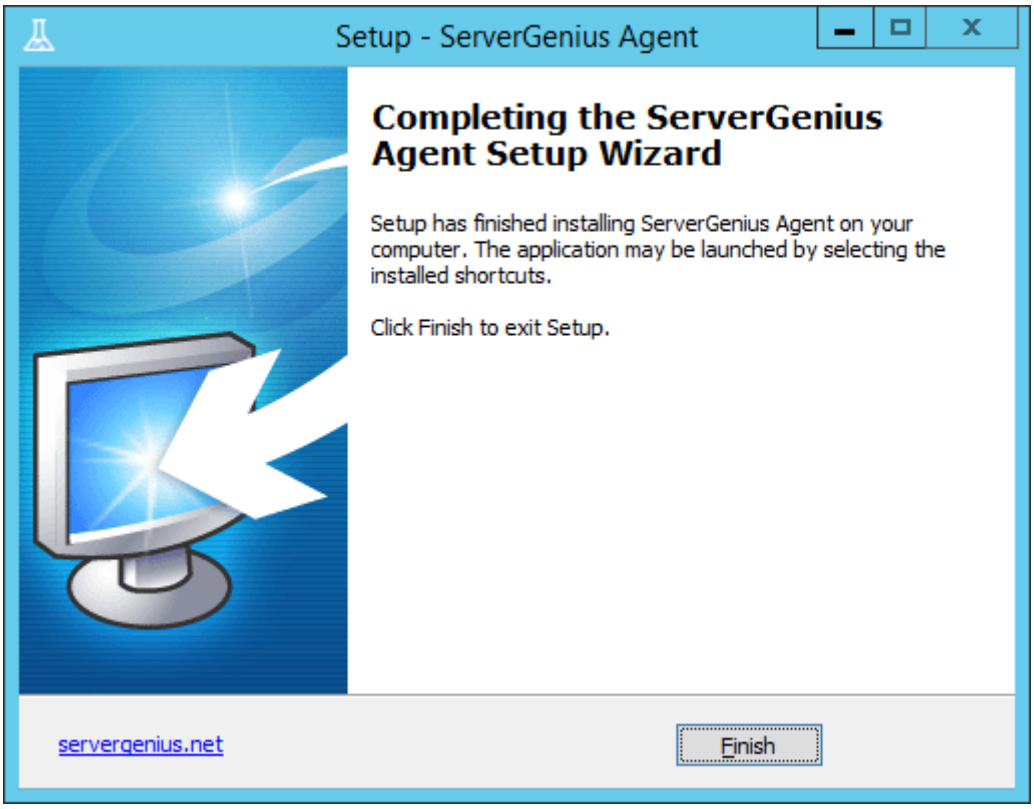
Then, enter the main server URL:



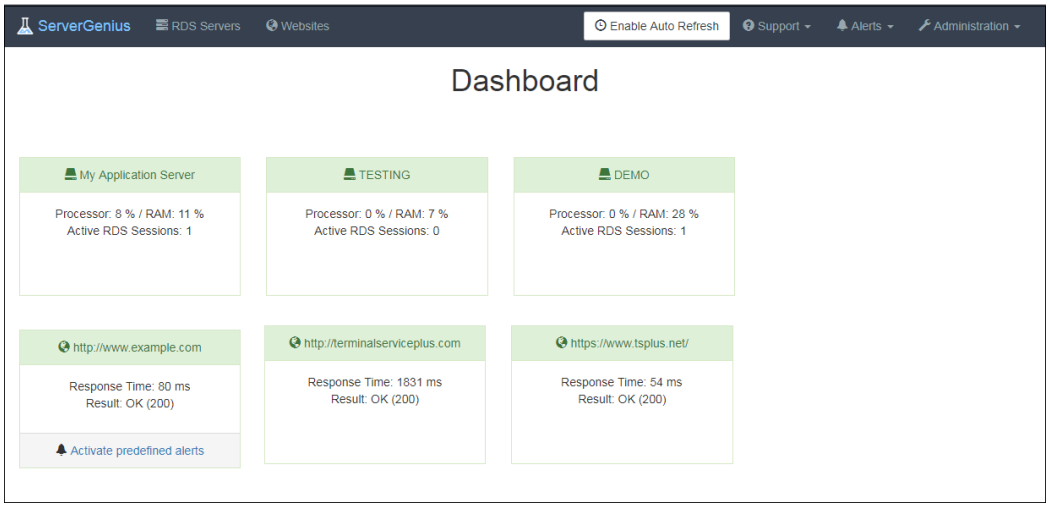
Click on install:



Then click on finish to exit the Setup.



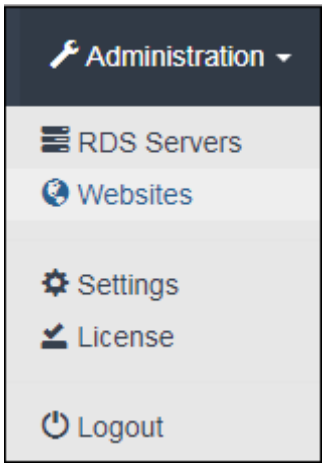
Run the agent and your new server should be visible on the Servers Management interface and on the Dashboard:



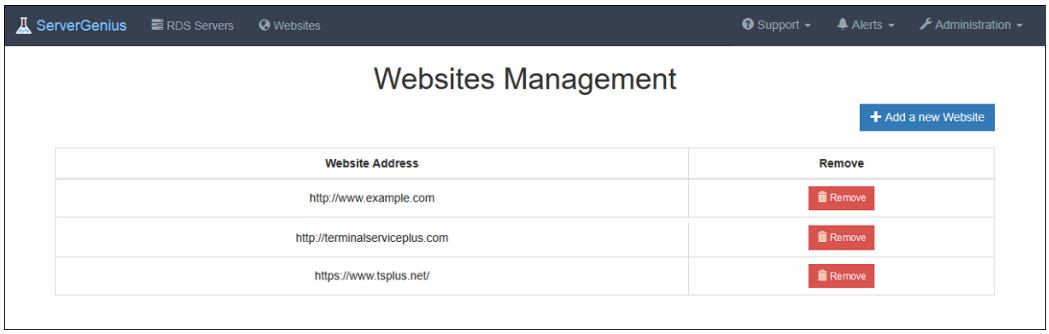
Warning: If you accidentally removed your server or want to change its name, we recommend you to uninstall and reinstall Server Genius.

Websites Management

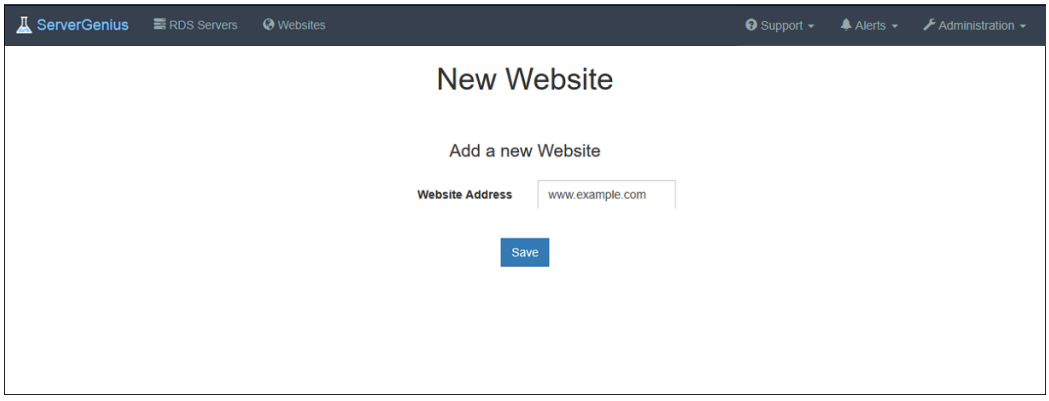
The **Websites Management** page enables you to display the list of monitored websites, add a new website to monitor and remove a website.



The **Websites Management** page can be found under the **Administration tab > Websites** of Server Genius:



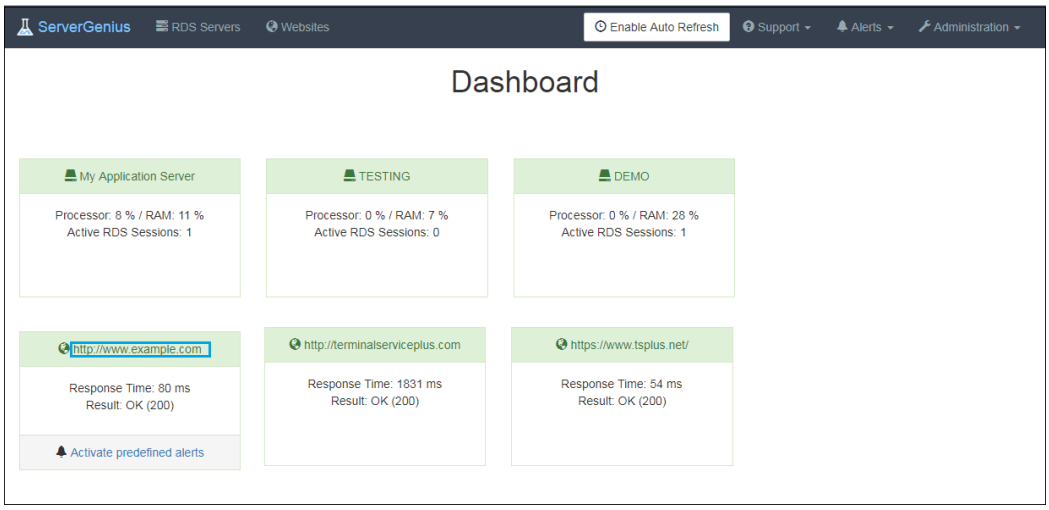
Add a new website by clicking on the **Add a new Website** button. Then, the **New Website** page is displayed and invite you to specify the new website web address:



Please note that in case the protocol is not specified, "http://" will be prepended to the website address provided. For example, if the website address is www.example.com, then the website address monitored by ServerGenius will be

http://www.example.com. Also, please enter two website addresses to monitor if your website is accessible through both "http" and "https".

Your new website should be visible on the **Websites Management** page and on the **Dashboard**:



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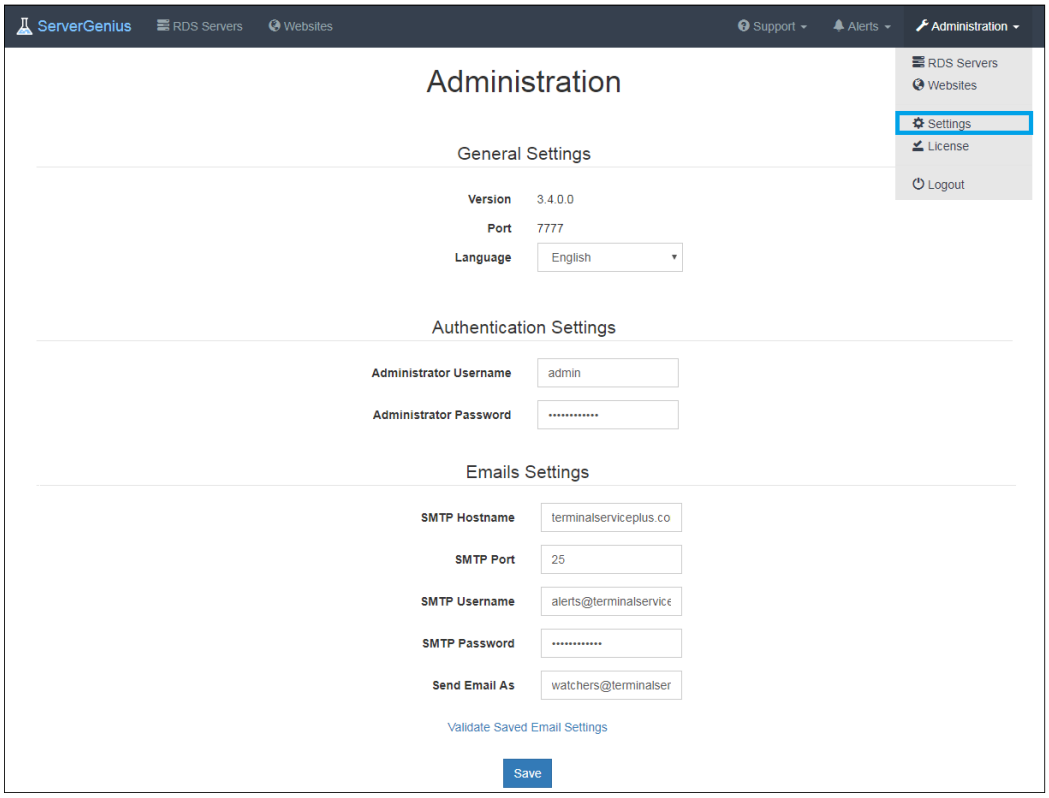
Settings

You can manage ServerGenius settings by clicking under the Administration tab > Settings:

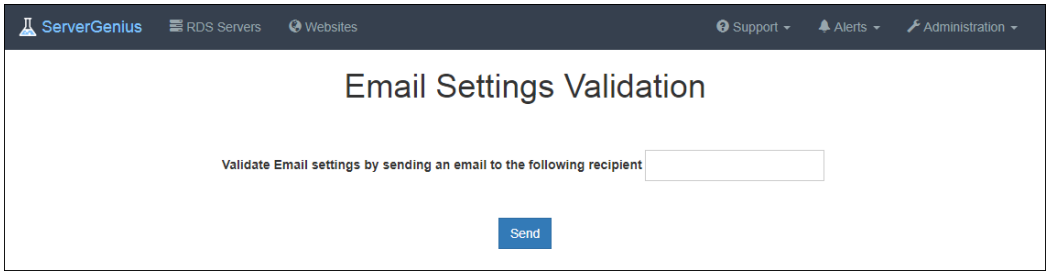


- Under the General Settings, you can see your Server Genius current version and the port you set up during installation and setup your preferred language.

- Under the Authentication settings, you can modify the Administrator username and password (Which is by default **admin** - **admin**).

- Under the Email settings, you can set the SMTP Hostname, Port, Username, Password and even set the Email address you will receive the Alerts from.

Since Server Genius 3.4 version, an Email Settings Validation has been added and enables you to test and validate your SMTP server settings. Click on the Validate Saved Email Settings line, then send an email to the recipient of your choice:


ServerGenius
RDS Servers
Websites
Support
Alerts
Administration
Email Settings Validation
Validate Email settings by sending an email to the following recipient
Send

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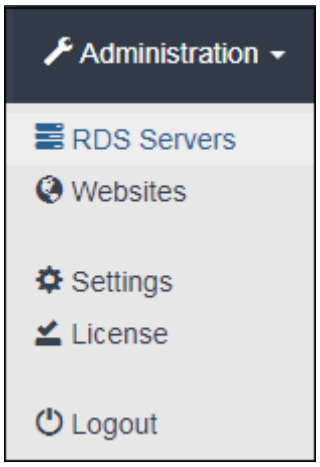
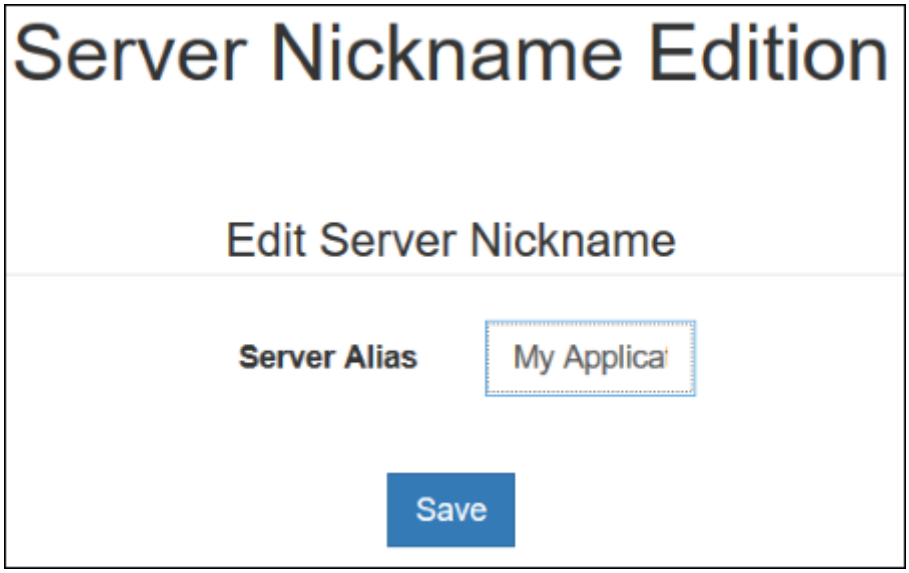
Choose a nickname for your servers

Sometimes, the server computer name is not the easiest way to distinguish your monitored servers. ServerGenius enables you to choose a nickname for your servers and easily identify them.

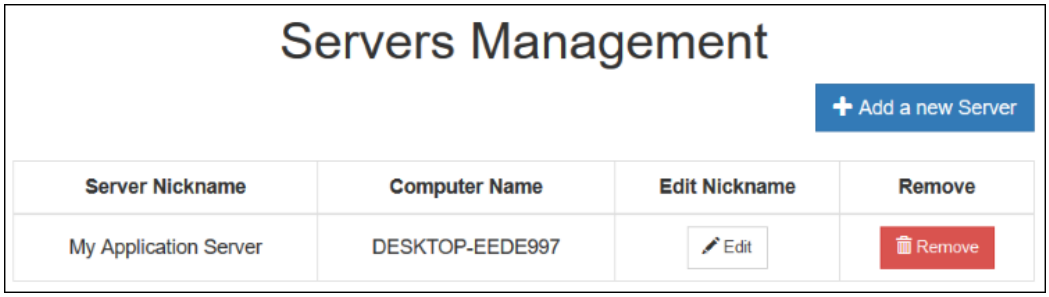


From ServerGenius homepage, select **Administration** and then, click on **RDS Servers**.

From the list of monitored servers, click on **Edit** in order to give a nickname to the corresponding server.



Type a nickname for your server, and then click **Save**.



Your server has been renamed in ServerGenius and will be displayed using the specified nickname in the reporting sections.

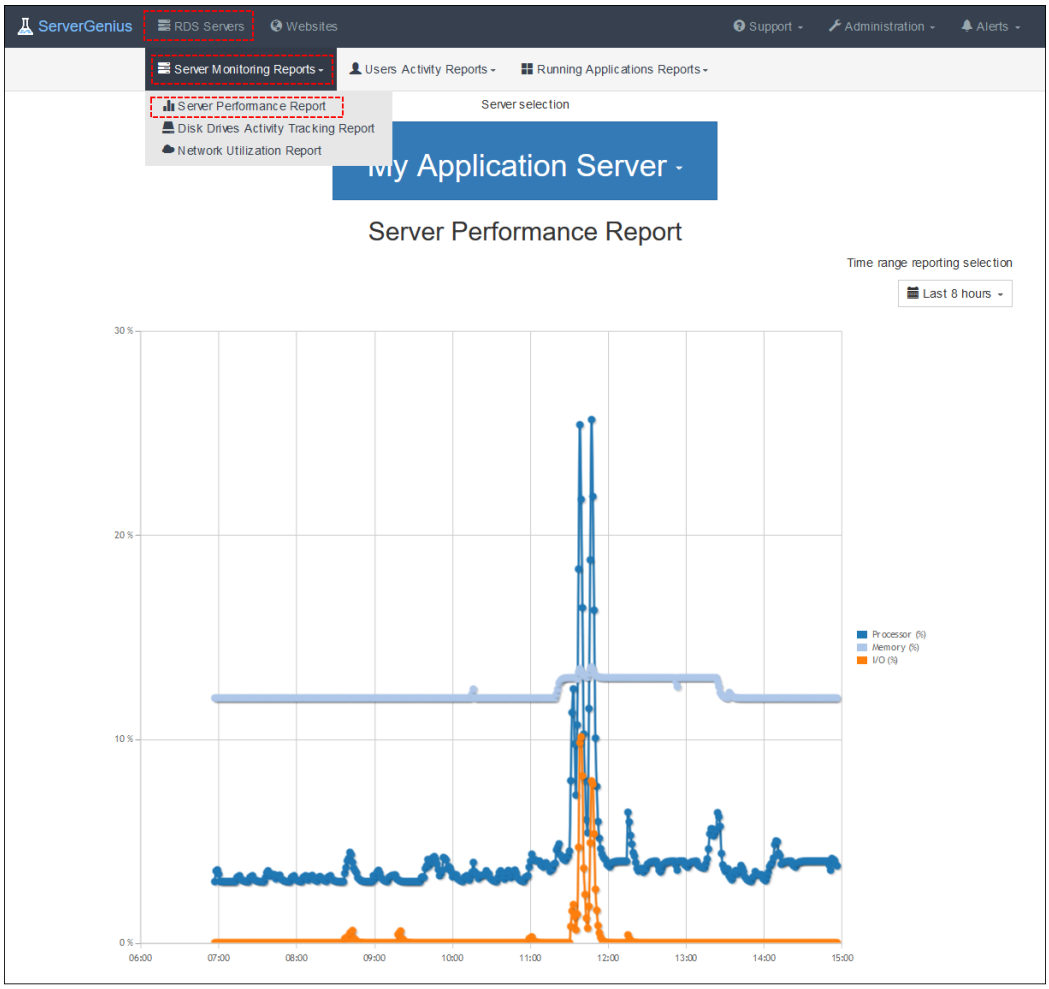
Performance Report

This report is available by clicking under the Servers tab --> Performance on the Server Genius web interface.

It displays the following data:

- **CPU usage** (in percentage of the total available CPU power)
- **Memory usage** (in percentage of the total available RAM memory)
- **I/O** (in percentage of the total available disk time)

The date-range can be customized by using the date-range picker at the top right of the web page.



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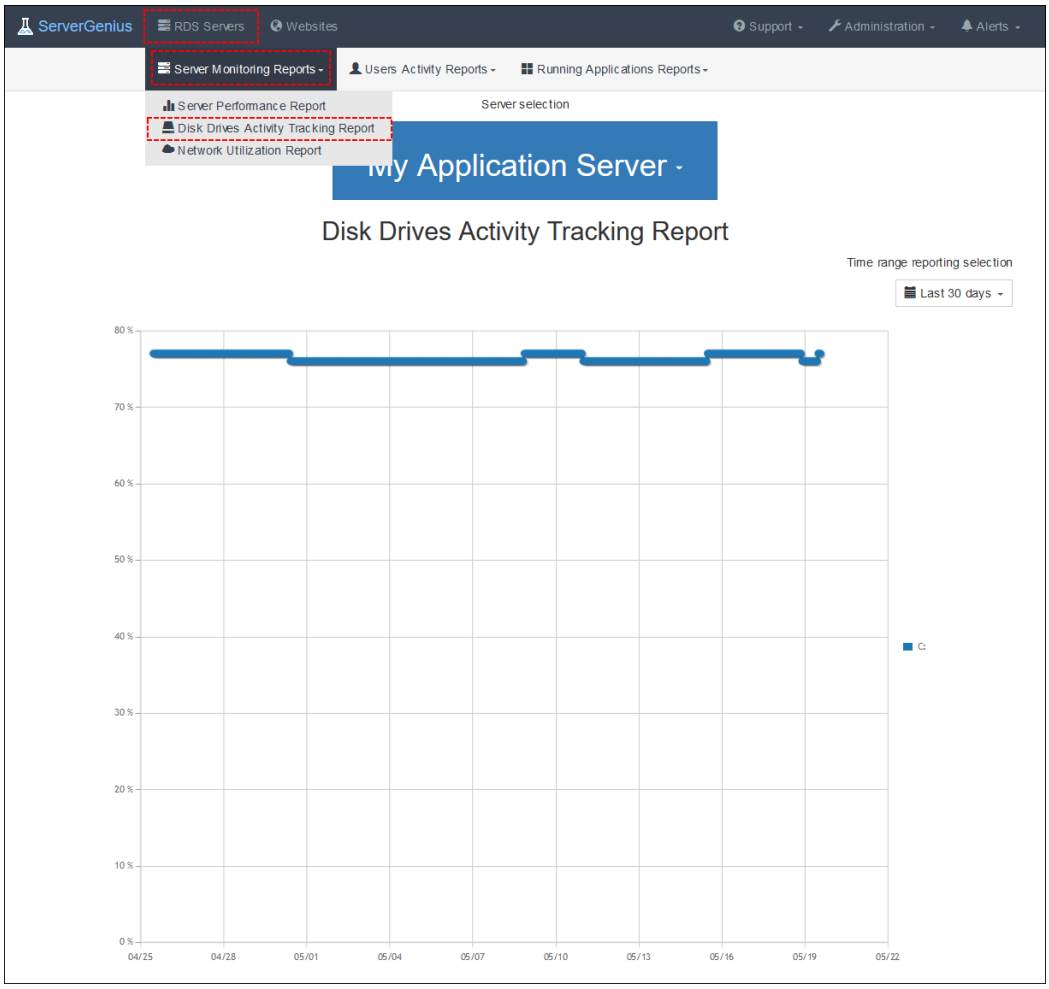
Disk Drives Activity Tracking Report

This report is available from the ServerGenius Web interface by clicking on the RDS Servers tab, then Server Monitoring Reports tab, and then Disk Drives Activity Tracking Report.

It displays the **Disk used space**, in percentage of the total available disk space

The date-range can be customized by using the date-range picker at the top right of the Web page.



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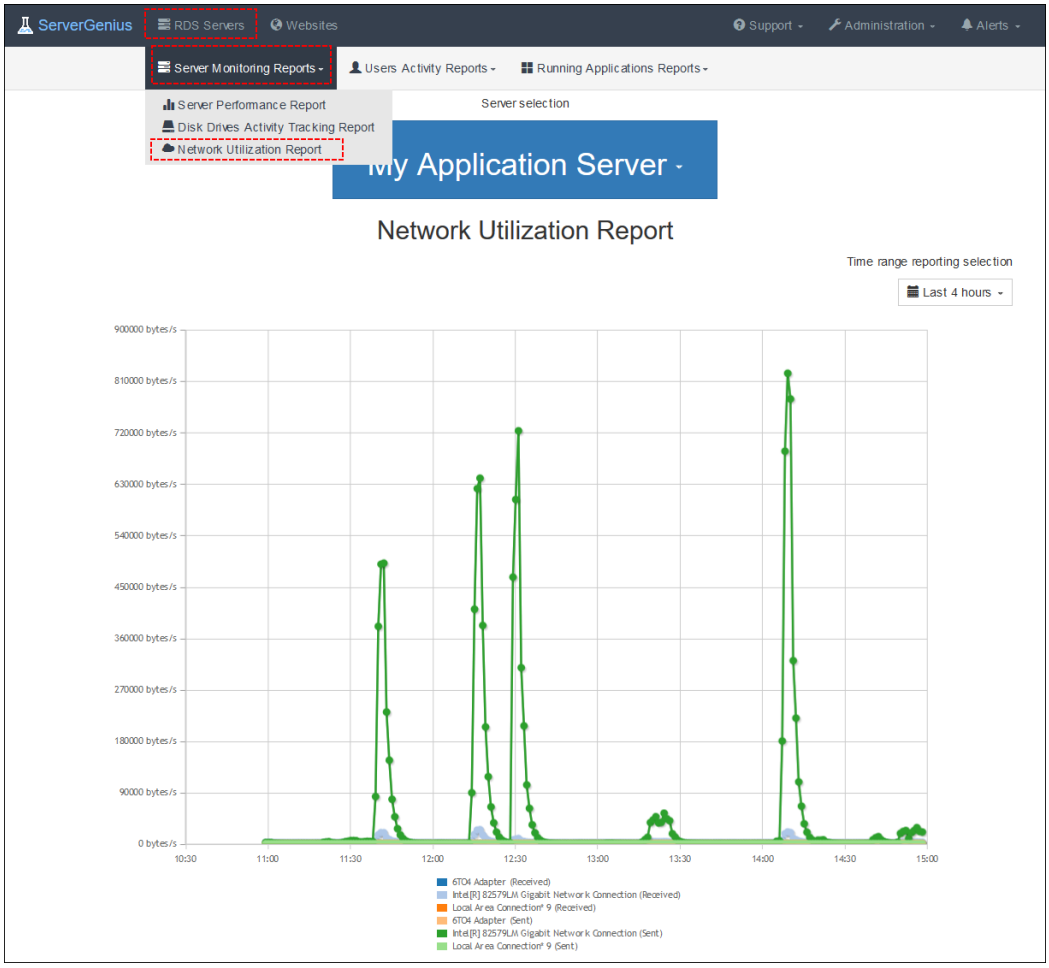
Network

This report is available by clicking under the Servers tab --> Network on the Server Genius web interface.

It displays the Network usage with data sent and received in bytes/second for each hour, per server:



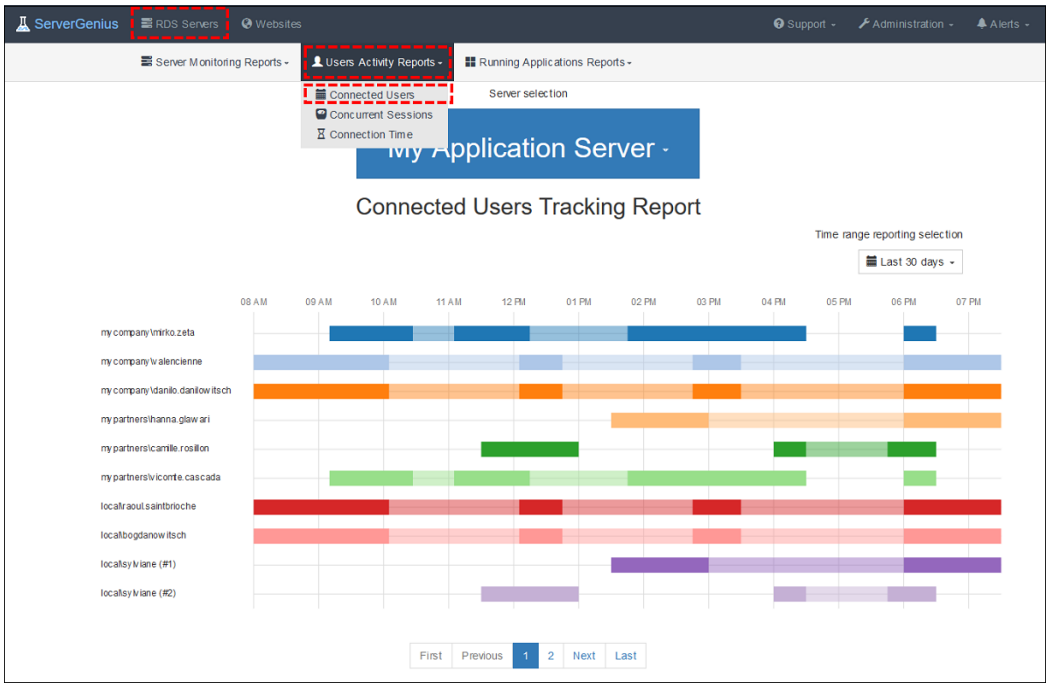
The date-range can be customized by using the date-range picker at the top right of the web page.

Connected Users Tracking Report

This report is available from the ServerGenius Web interface by clicking on the RDS Servers tab, then Users Activity Reports tab, and then Connected Users.

It displays the log of the **opened Remote Desktop Services (RDS) sessions** for the selected period of time.

The date-range can be customized by using the date-range picker at the top right of the Web page.



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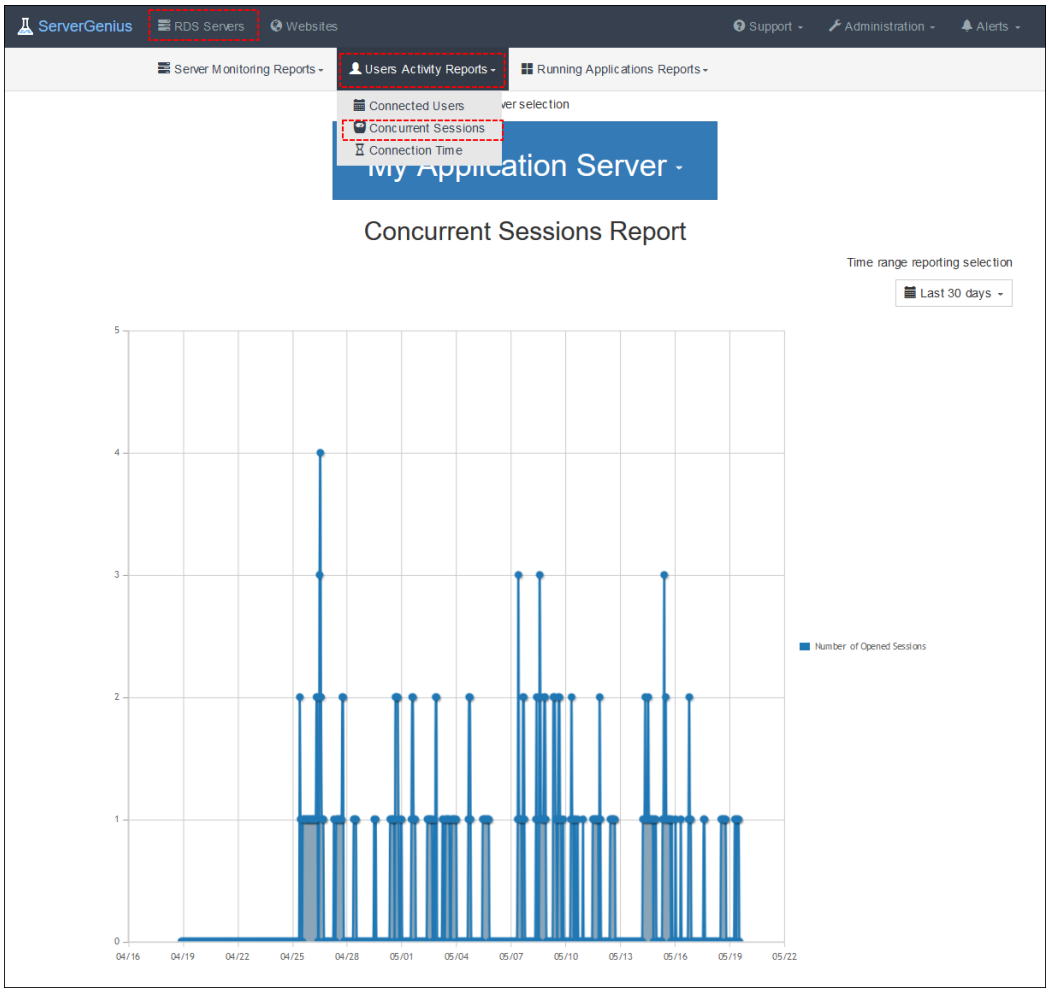
Concurrent Sessions Report

This report is available from the ServerGenius Web interface by clicking on the RDS Servers tab, then Users Activity Reports tab, and then Concurrent Sessions.

It displays the number of **opened Remote Desktop Services (RDS) sessions** for the selected period of time.

The date-range can be customized by using the date-range picker at the top right of the Web page.



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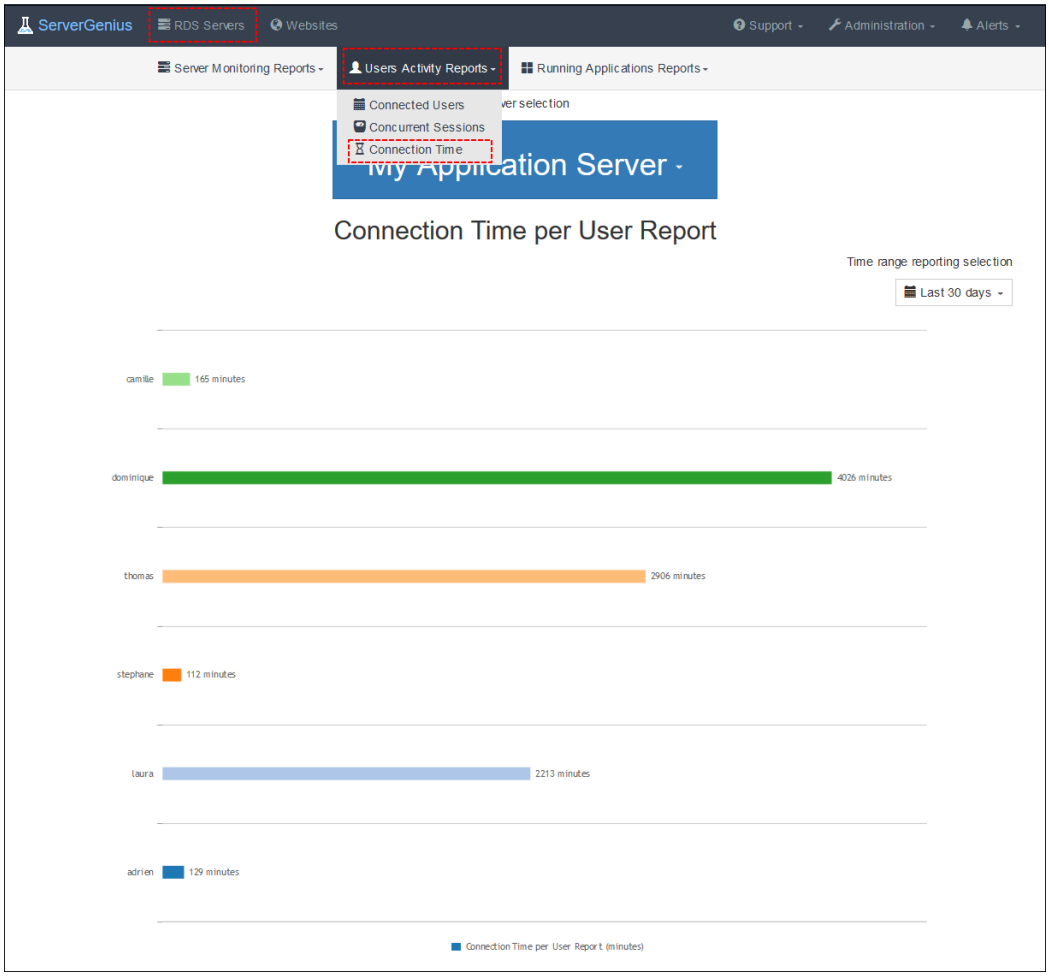
Connection Time per User Report

This report is available from the ServerGenius Web interface by clicking on the RDS Servers tab, then Users Activity Reports tab, and then Connection Time.

It displays the **number of minutes each user was connected to the server through a Remote Desktop Services (RDS) session** for the selected period of time.

The date-range can be customized by using the date-range picker at the top right of the Web page.



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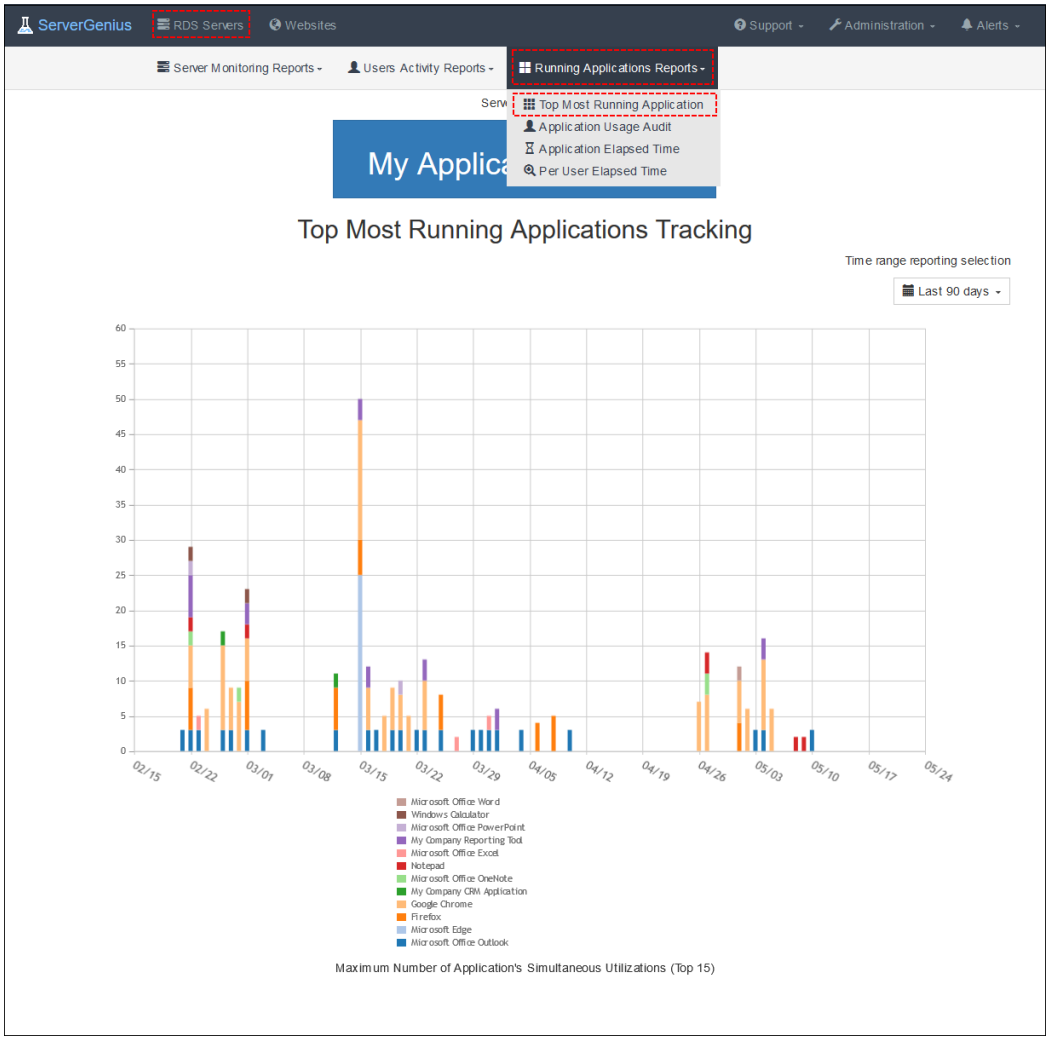
Top Most Running Applications Tracking

This report is available from the ServerGenius Web interface by clicking on the RDS Servers tab, then Running Applications Reports tab, and then Top Most Running Application.

It displays the **number of each application's simultaneous utilizations**, for the top 15 most utilized applications over the selected time range.

The date-range can be customized by using the date-range picker at the top right of the Web page.



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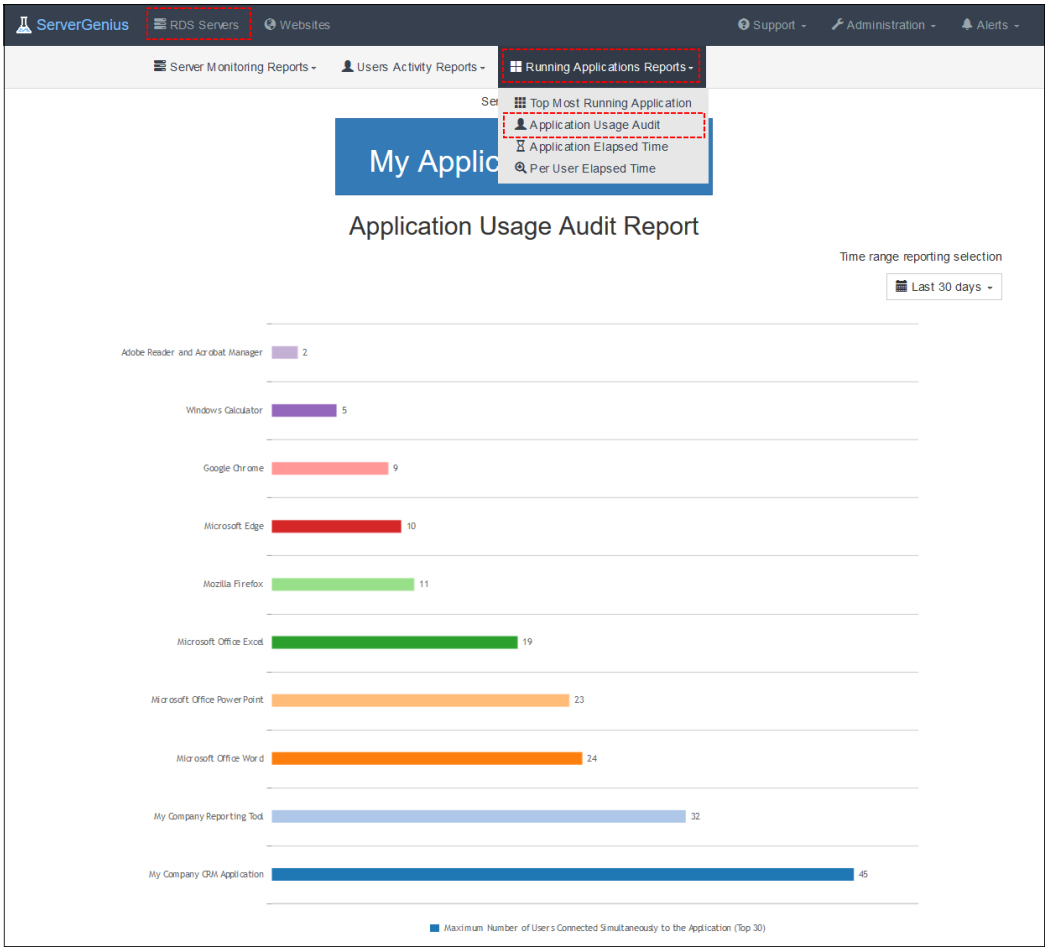
Application Usage Audit Report

This report is available from the ServerGenius Web interface by clicking on the RDS Servers tab, then Running Applications Reports tab, and then Application Usage Audit.

It displays the **Number of users connected simultaneously to the application**, for the top 30 most utilized applications over the selected time range.

The date-range can be customized by using the date-range picker at the top right of the Web page.



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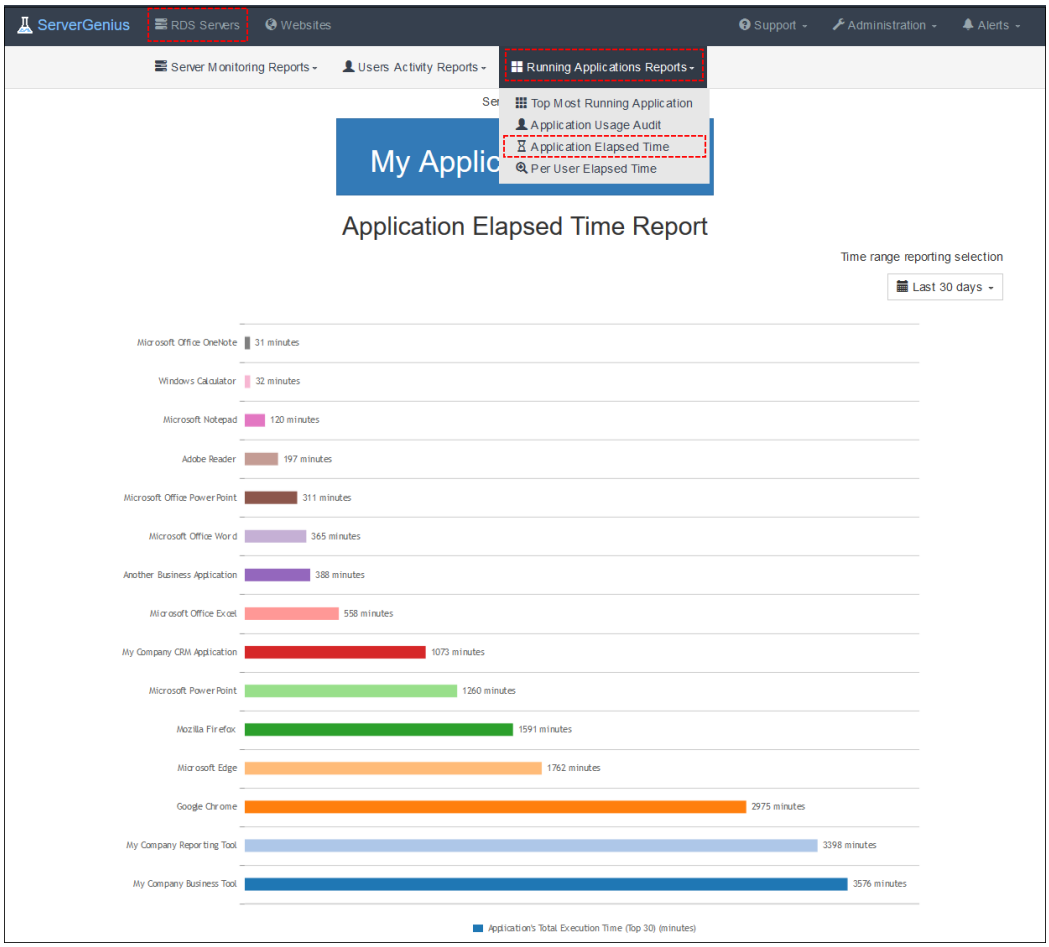
Application Elapsed Time Report

This report is available from the ServerGenius Web interface by clicking on the RDS Servers tab, then Running Applications Reports tab, and then Application Elapsed Time.

It displays the **application's total execution time**, in minutes, for the top 30 applications over the selected time range.

The date-range can be customized by using the date-range picker at the top right of the Web page.



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Application Elapsed Time per User Report

This report is available from the ServerGenius Web interface by clicking on the RDS Servers tab, then Running Applications Reports tab, and then Per User Elapsed Time.

It displays the **application's total execution time per user**, in minutes, for the top 30 applications over the selected time range.

The date-range can be customized by using the date-range picker at the top right of the Web page.

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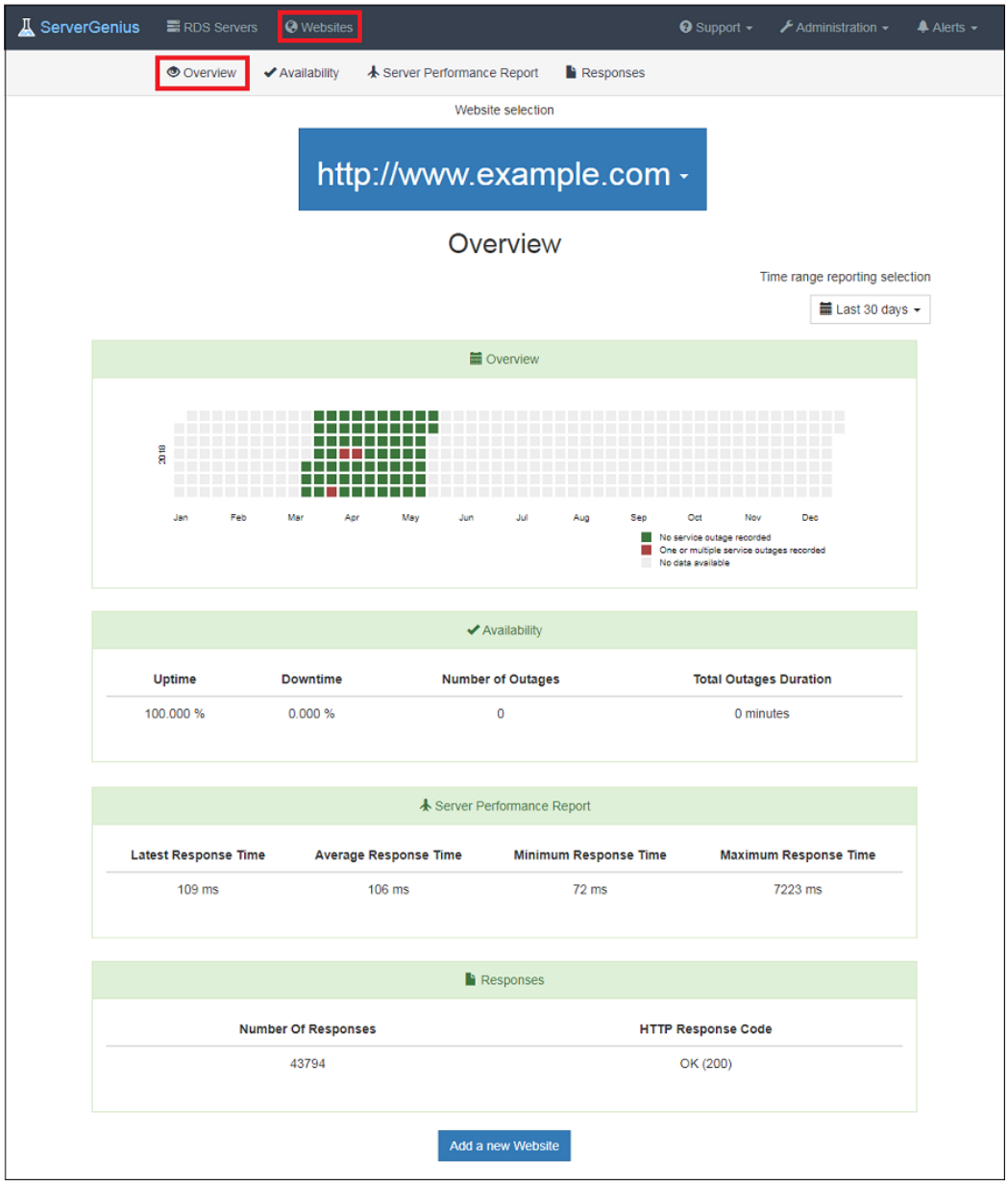
Website Overview Report

This report is available by clicking on the **Overview** tab from the **Websites** menu on ServerGenius web interface.

The **Website Overview Report** provides the following information:

- An **heat map** highlighting the website health for the past years. A red square indicates that the website was subject of one or multiple outages during the day. An outage means that the website was unreachable by ServerGenius or the website response code is an error code.
- **Availability** panel presents the calculated uptime and downtime in percentage for the specified period of time ; as well as the number of outages registered and the outages total duration in minutes.
- **Performance** panel displays the latest, average, minimum and maximum response time in milliseconds for the specified period of time.
- **Responses** panel list the number of responses by response category.

The period of time can be customized by using the date-range picker at the top right of the web page. Please note that the heat-map will display the complete years corresponding to the selected period of time.

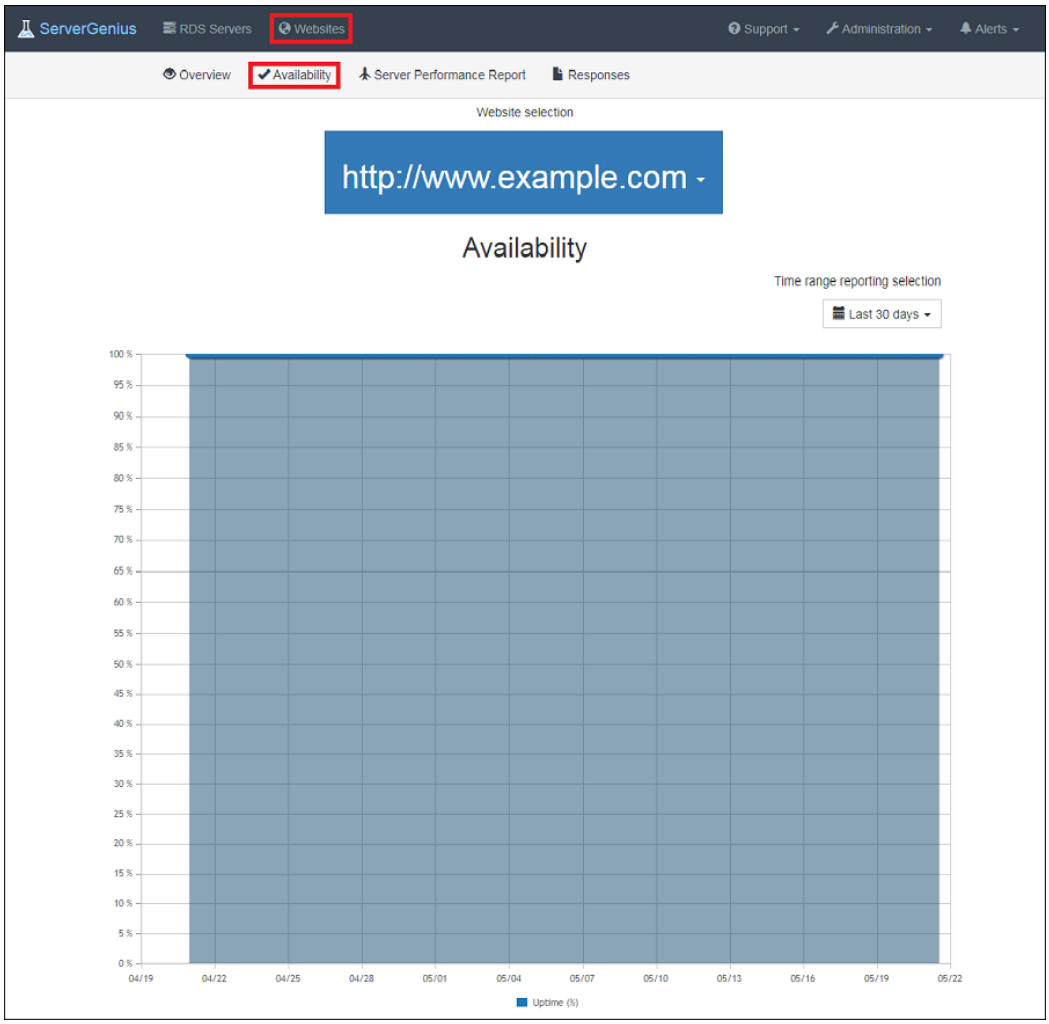

ServerGenius
RDS Servers
Websites
Support
Administration
Alerts
Overview
Availability
Server Performance Report
Responses
Website selection
http://www.example.com
Overview
Time range reporting selection
Last 30 days
Overview
2018
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
No service outage recorded
One or multiple service outages recorded
No data available
Availability
Uptime
Downtime
Number of Outages
Total Outages Duration
100.000 %
0.000 %
0
0 minutes
Server Performance Report
Latest Response Time
Average Response Time
Minimum Response Time
Maximum Response Time
109 ms
106 ms
72 ms
7223 ms
Responses
Number Of Responses
HTTP Response Code
43794
OK (200)
Add a new Website

Website Availability Report

This report is available by clicking on the **Availability** tab from the **Websites** menu on ServerGenius web interface.

The **Website Availability Report** displays the uptime in percentage for the specified period of time.

The period of time can be customized by using the date-range picker at the top right of the web page.



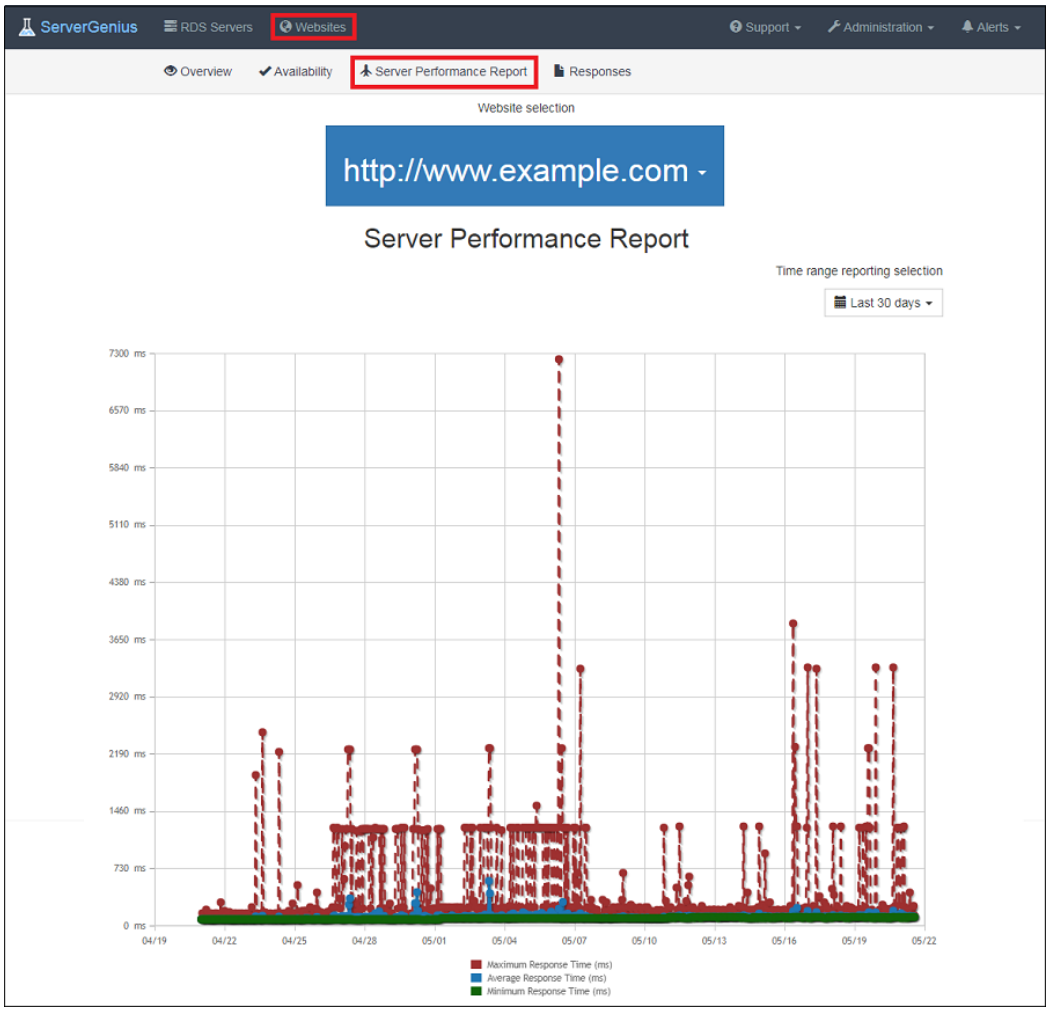
Website Performance Report

This report is available by clicking on the **Performance** tab from the **Websites** menu on ServerGenius web interface.

The **Website Performance Report** displays the maximum, average and minimum response time in milliseconds for the specified period of time.

Please note that for a narrowed down period of time, the maximum and minimum response time will not be displayed and the actual response time will be displayed.

The period of time can be customized by using the date-range picker at the top right of the web page.



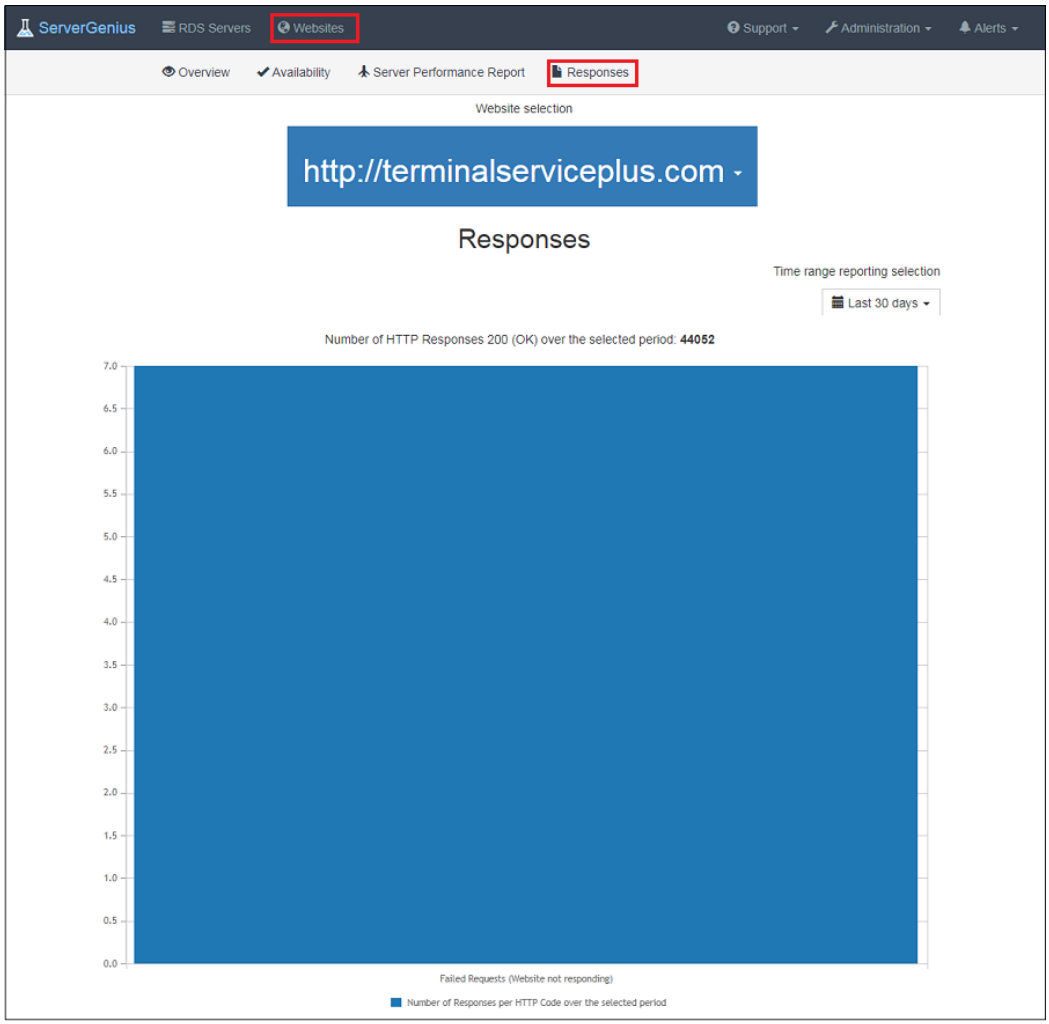
Website Responses Report

This report is available by clicking on the **Responses** tab from the **Websites** menu on ServerGenius web interface.

The **Website Responses Report** displays the number of responses per HTTP Code and the failed requests over the selected period of time.

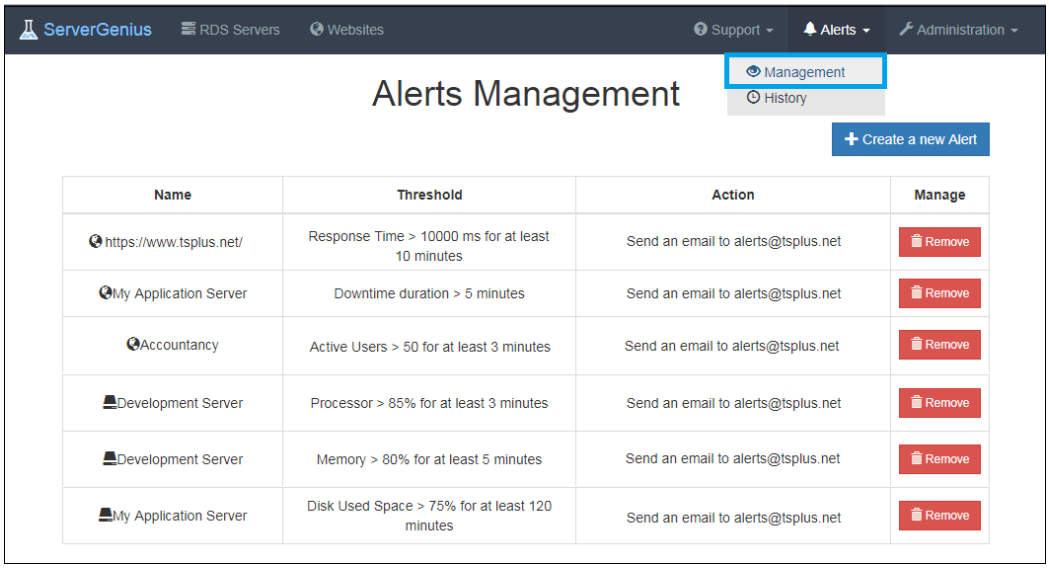
The number of HTTP Responses 200 (OK) over the selected period is displayed on the top of the graph.

The period of time can be customized by using the date-range picker at the top right of the web page.



Alerts Management

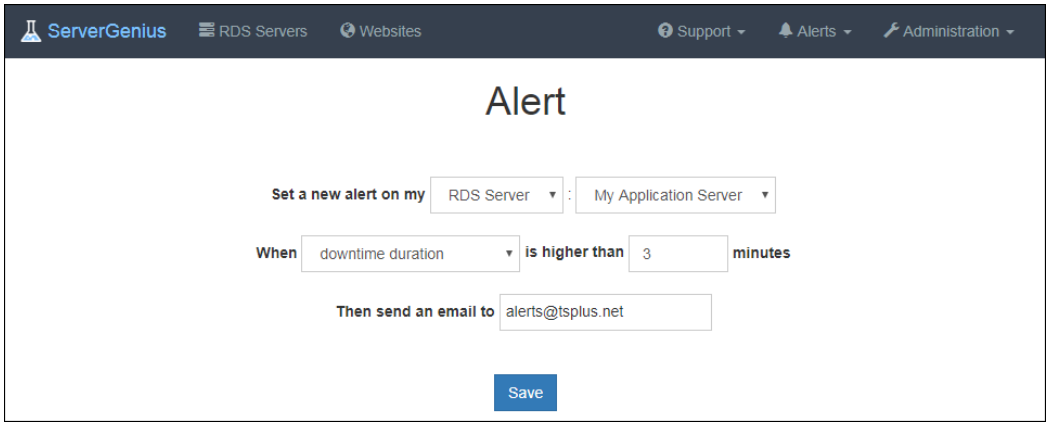
You can access the Alerts Management by clicking on the "Alerts" tab on the Server Genius web interface, then on the "Management" menu item. Using the "Create a new Alert" button, you can add alerts on your Server Genius system.



For **servers**, alerts can be set on:

- Processor
- Memory
- I/O
- Disk used space
- Network Throughput In
- Active Users
- Downtime Duration

You can customize with your own values:



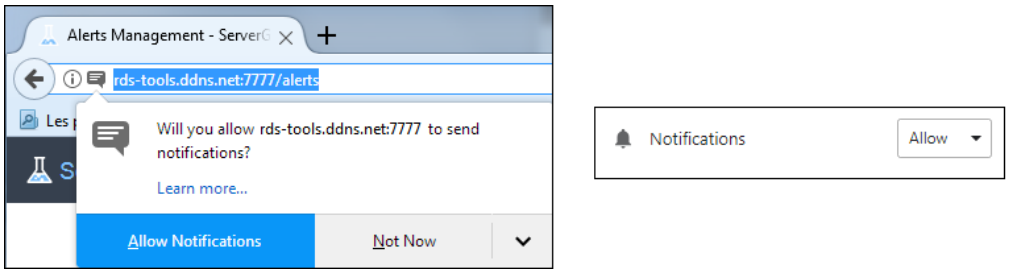
For **websites**, alerts can be set on Response Time or Downtime Duration.

Once you have configured an alert on your server or your website, Server Genius will closely monitor the chosen metric and send you an email as soon as the targeted threshold is reached or exceeded. Server Genius will of course also send you an email when the metric is back to normal.

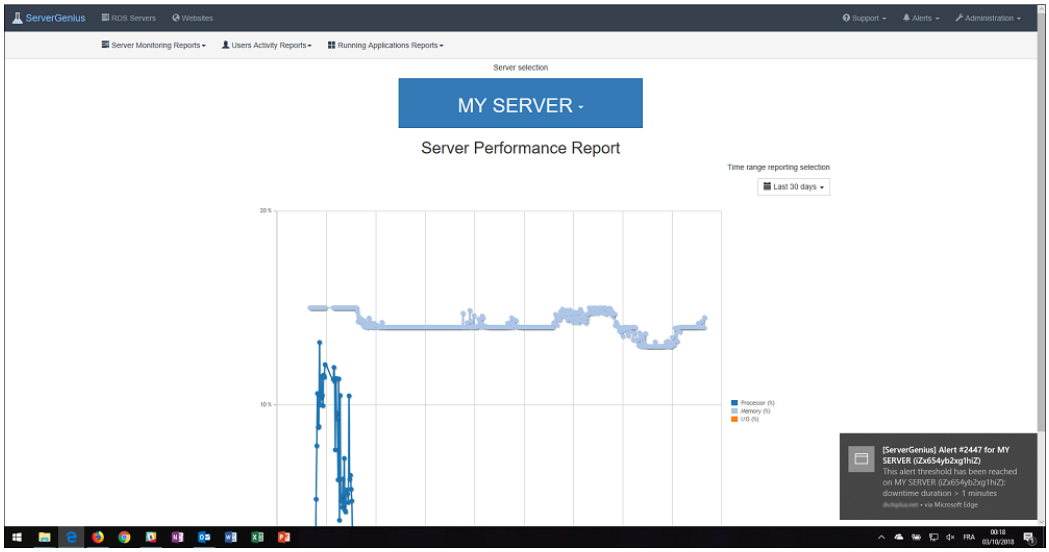
Notifications

Once you have configured an alert on your server or website, ServerGenius will closely monitor the chosen metric and send you an email as soon as the targeted threshold is reached or exceeded. Server Genius will of course also send you an email when the metric is back to normal.

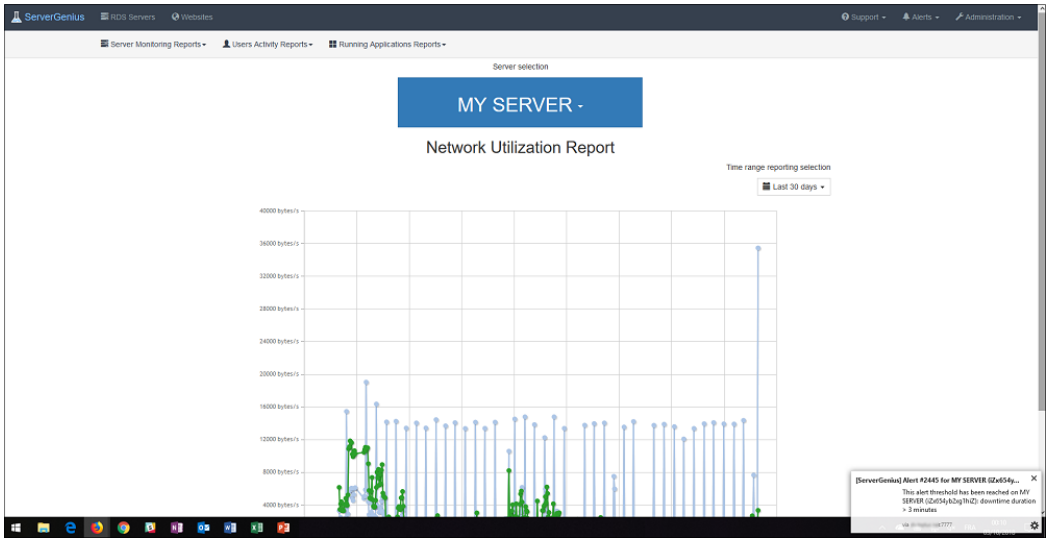
Since Server Genius 3.4 version, it is now possible to enable real-time web notifications by allowing them into your web browser:



On Microsoft Edge, it enables a Windows native notification display:



On Firefox, Chrome and Opera the web push is displayed at the same location than native notifications:



Finally, you can see a list of active and historic alerts by clicking on the "Alerts" tab on the Server Genius web interface, then on the "History" menu item.

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Enabling HTTPS (SSL)

Follow the steps below in order to enable HTTPS (SSL) for the ServerGenius administration website and agents endpoint. As a result, administrators and machine agents will be able to access ServerGenius using the configured HTTPS port.

Please note that enabling SSL support for ServerGenius does not prevent administrators and machine agents from accessing ServerGenius using the current HTTP port configured (default is 7777 for administration website). Therefore, **there is no need to reconfigure machines already monitored by ServerGenius!**

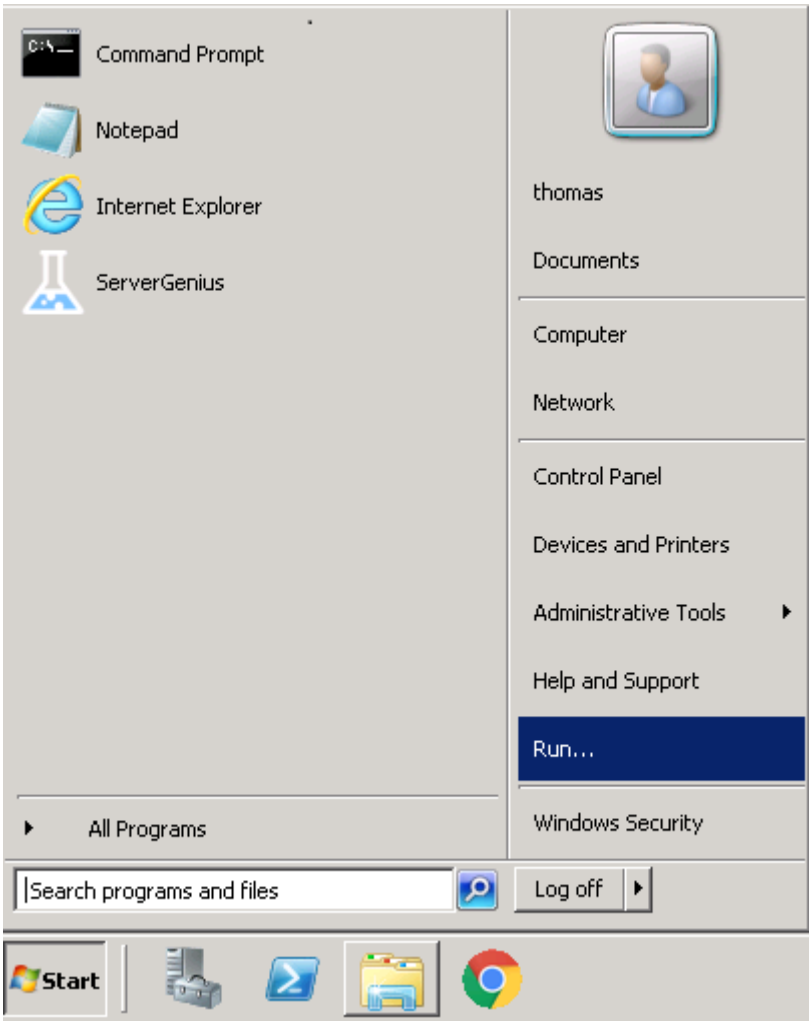
Summary

- Requirements
- Open Certificate Manager
- Import certificates
- Find the certificate thumbprint
- Register SSL certificate for ServerGenius
- Configure ServerGenius SSL port
- Restart ServerGenius

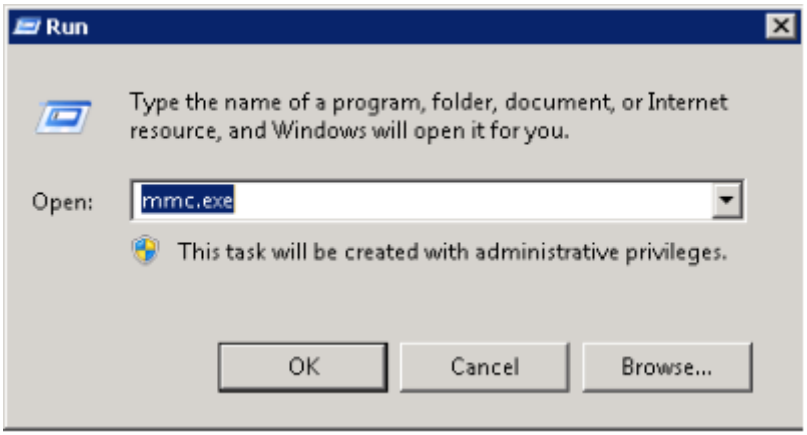
Requirements

- Please make sure you have administrator privileges on the server where ServerGenius is installed.
- Enabling SSL support for ServerGenius requires a valid certificate, with the following details:
  - The certificate's **Issued To** or **Alternate Subject Name** should specify the ServerGenius website's domain name (i.e. servergenius.mycompany.com) or the server name (i.e. COMP-SRVR01)
  - The certificate's purpose should be **Server authentication**
  - The certificate must contain the **private key**
- If the certificate is not validated by a trusted certificate authority (CA) already installed in ServerGenius server, then the CA certificate is also required. Usually, the CA certificate is required when the certificate is a self generated certificate.
- The password for the private key of the certificate and the CA certificate, if applicable, are required for the following steps.

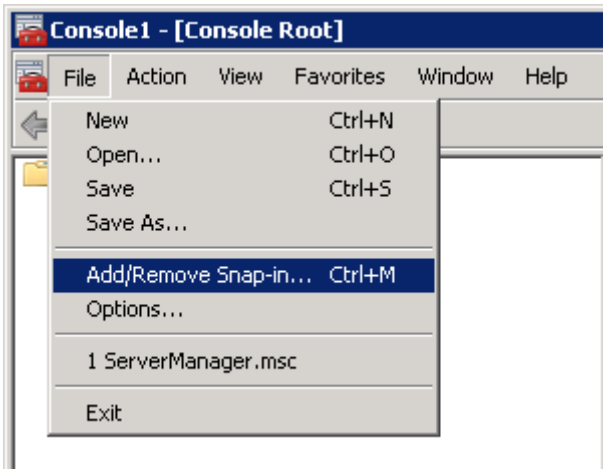
Open Certificate Manager



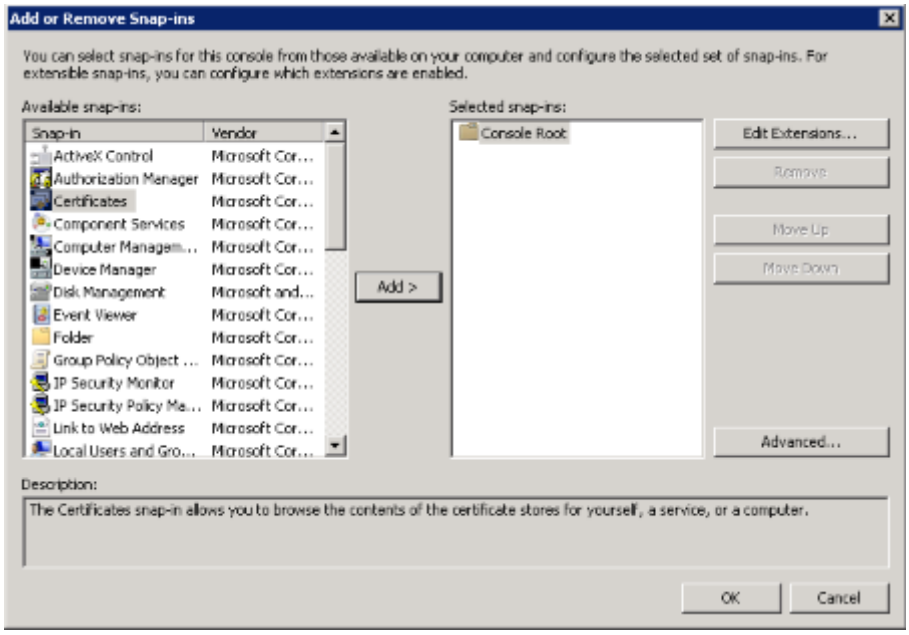
Log in as a local administrator on the server where ServerGenius is installed. Then, from the Windows task bar, click on **Start**. Then, click on **Run...**.



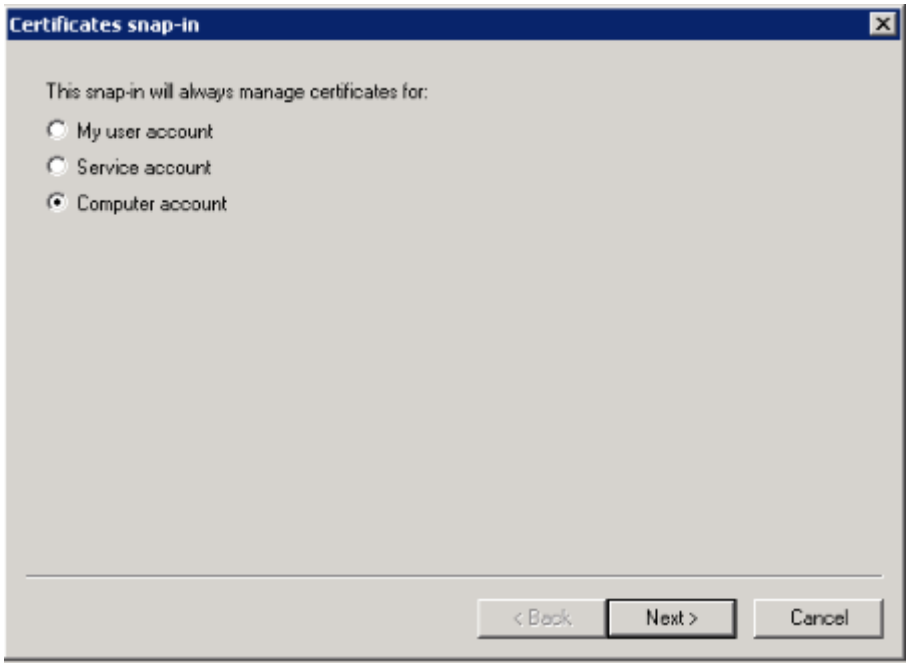
A window opens and prompts for a program executable name. Type **mmc.exe** and click **OK**.



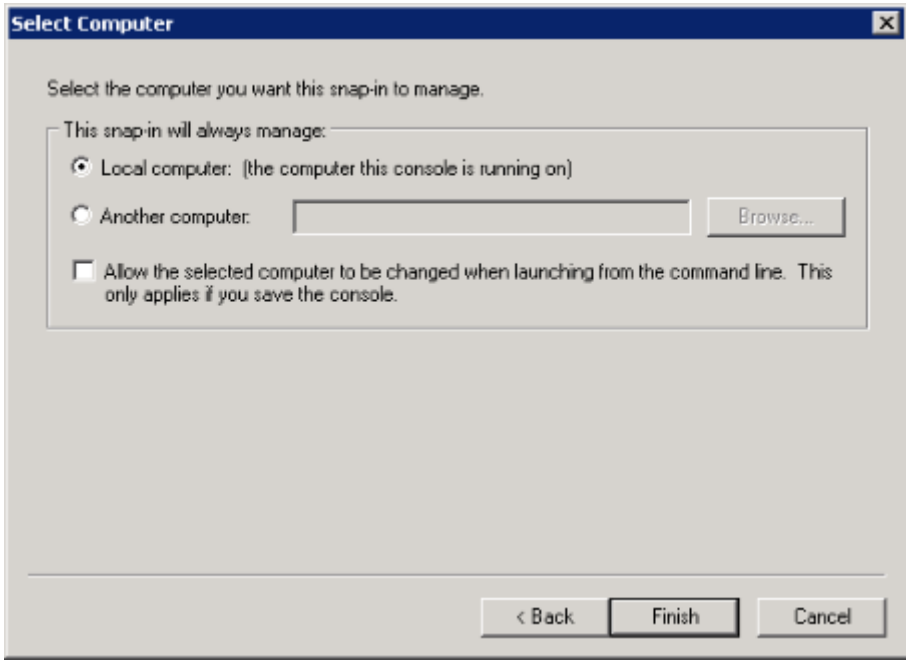
The Microsoft Management Console (MMC) opens. Click on **File** and then click on **Add/Remove Snap-in** to choose the feature to manage.



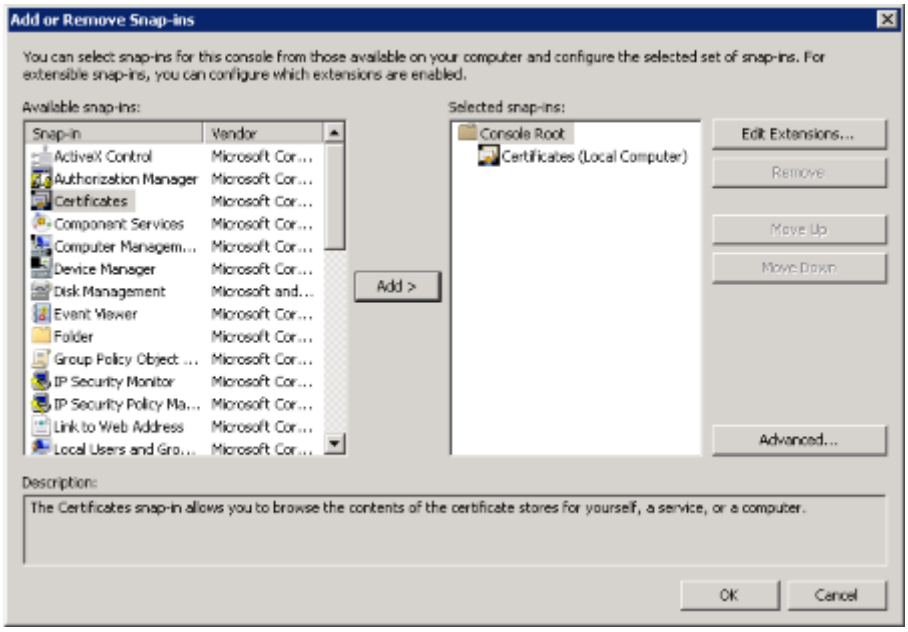
In the list of Snap-in, choose **Certificates** and then click on **Add**. The snap-in is added to the **Selected snaps-ins** column. Then, click **OK**.



In the dialog that appears, select **Computer Account**, then click **Next**.

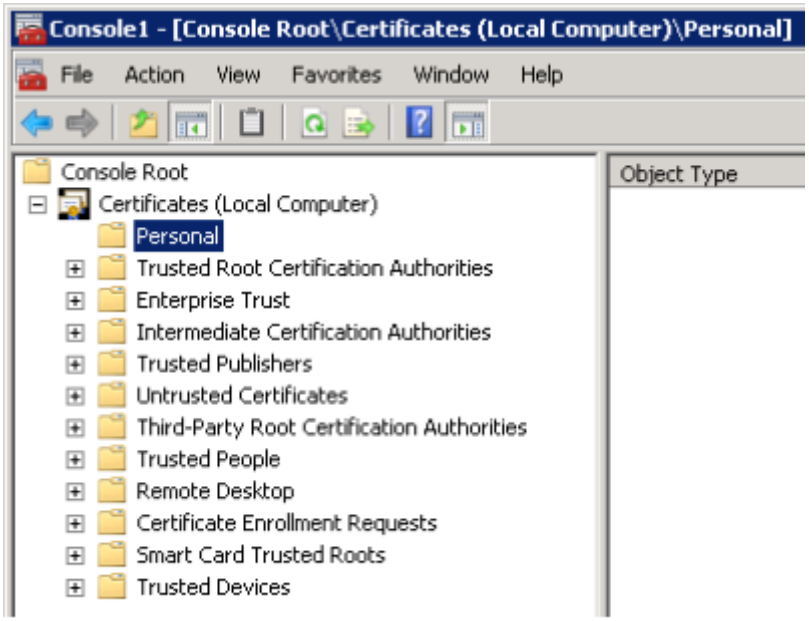


Choose **Local Computer** and **click Finish**.

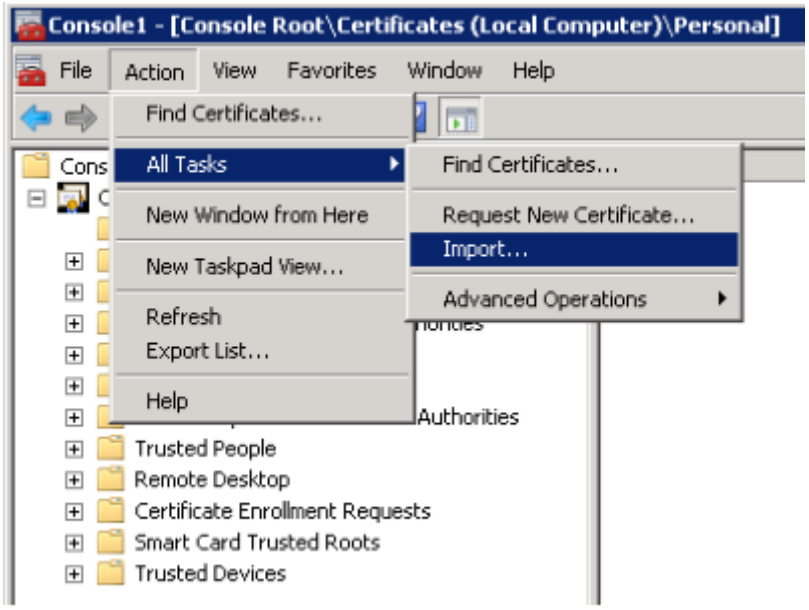


Click **OK** to proceed with importing the certificates.

Import certificates

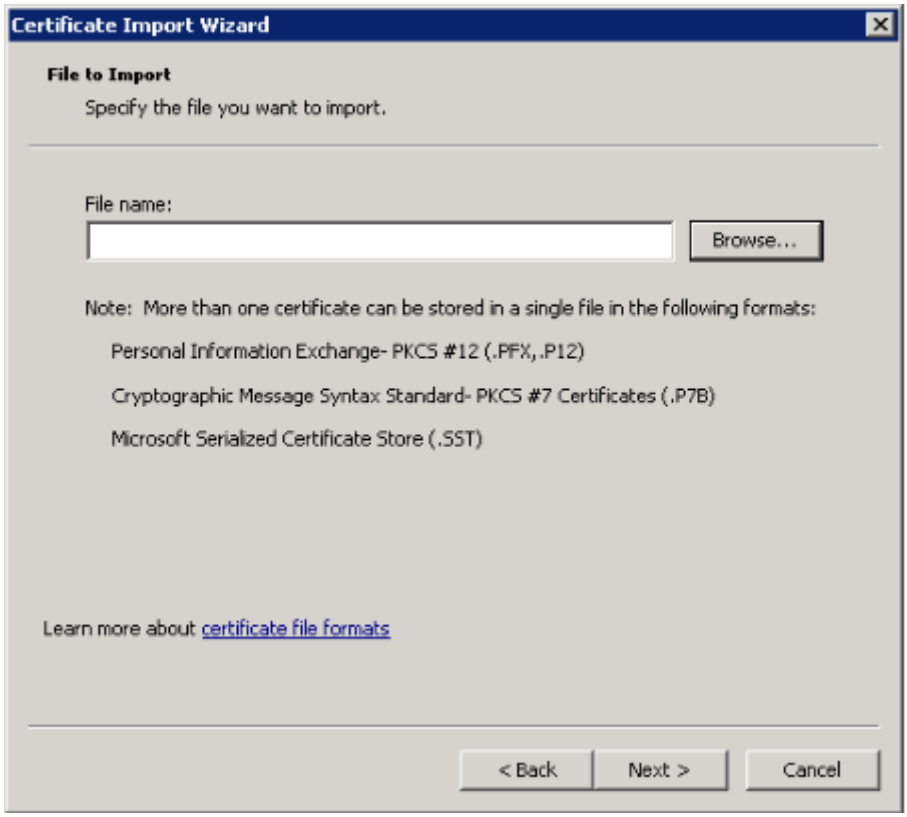


In the MMC window opened in the previous section, drill down to **Certificates (Local Computer)** and **Personal**.

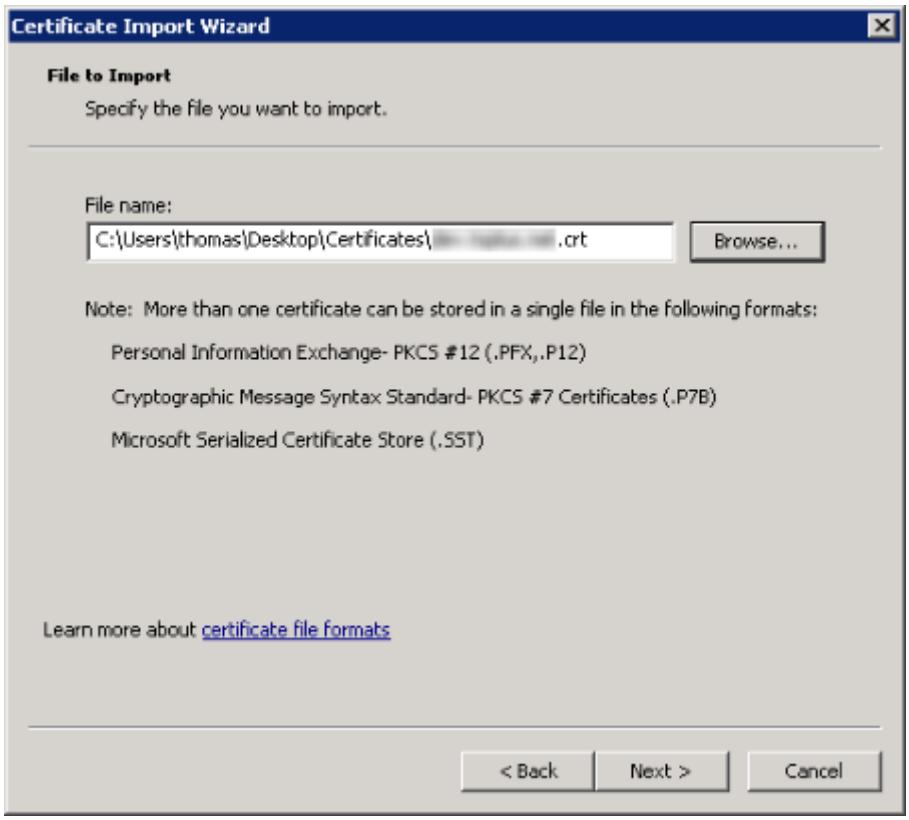


From the **Action** menu on the command bar, select **All Tasks** and then click on **Import...**.

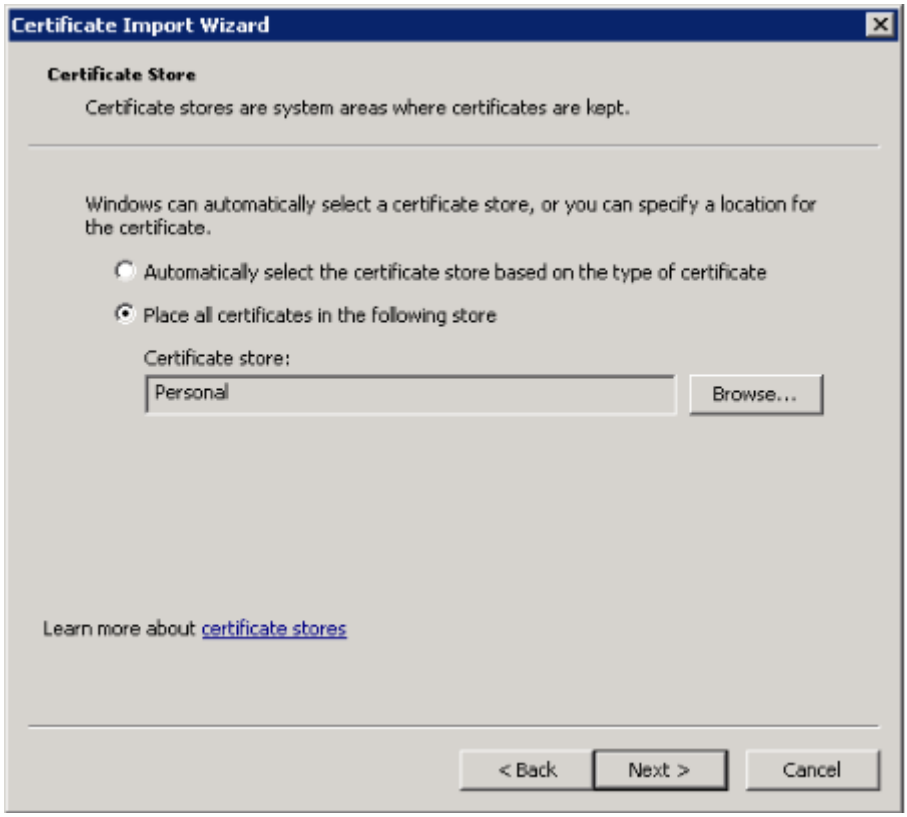
The Certificate Import Wizard opens. Click **Next** to continue.



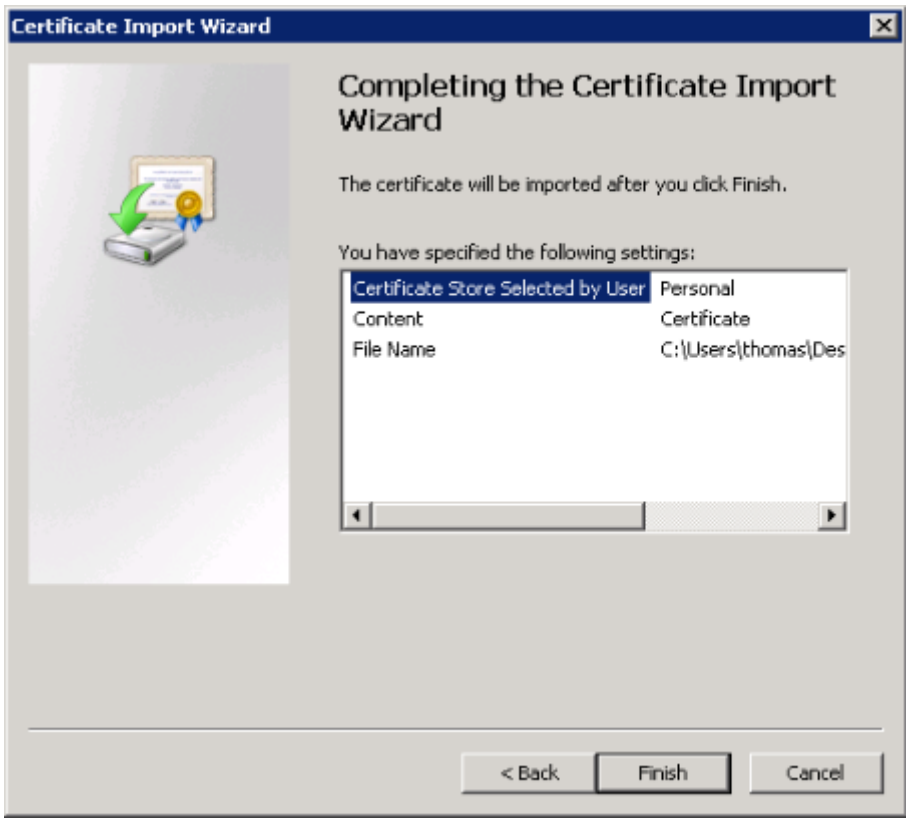
In this step, Click on **Browse** to find the cerficate. Then, click **Next** to continue and import the selected certificate. On the next screen, enter the password you chose for the certificate.



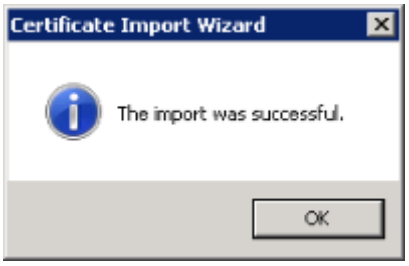
Click **Next** to continue.



Choose **Place all certificates in the following store**. Verify that the selected certificate store is **Personal**, then click **Next**.



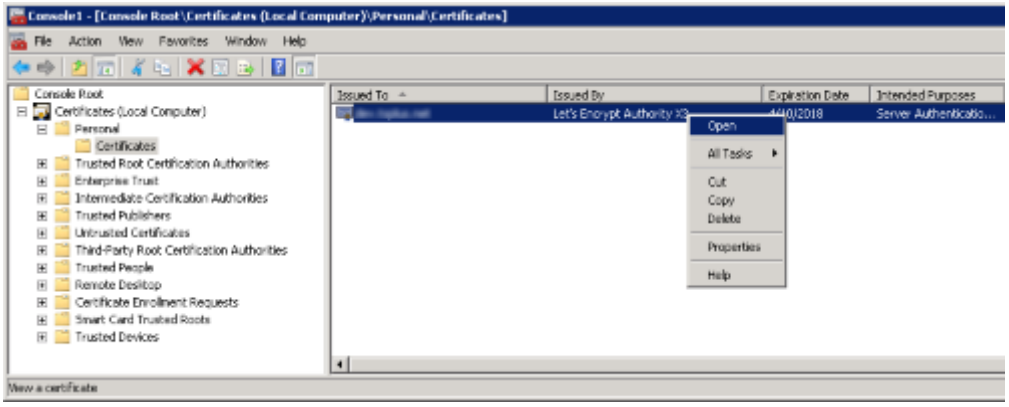
Click **Finish** to import the certificate.



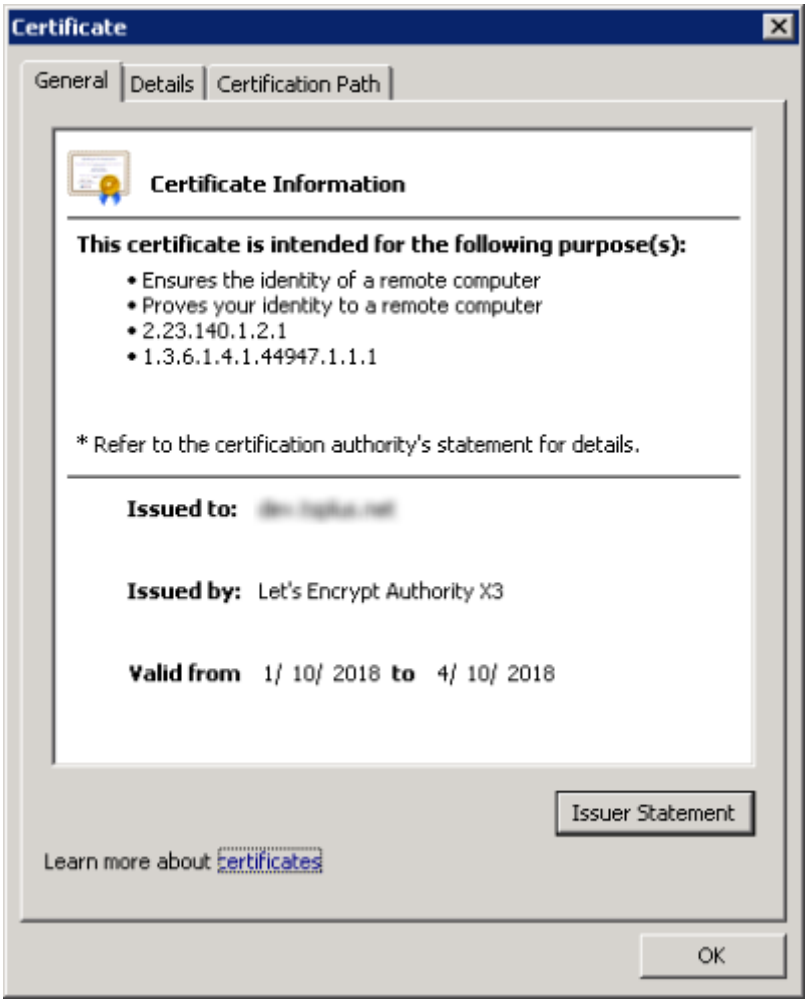
Note:

If you need to import a CA authority certificate, repeat the import procedure above for the CA certificate.

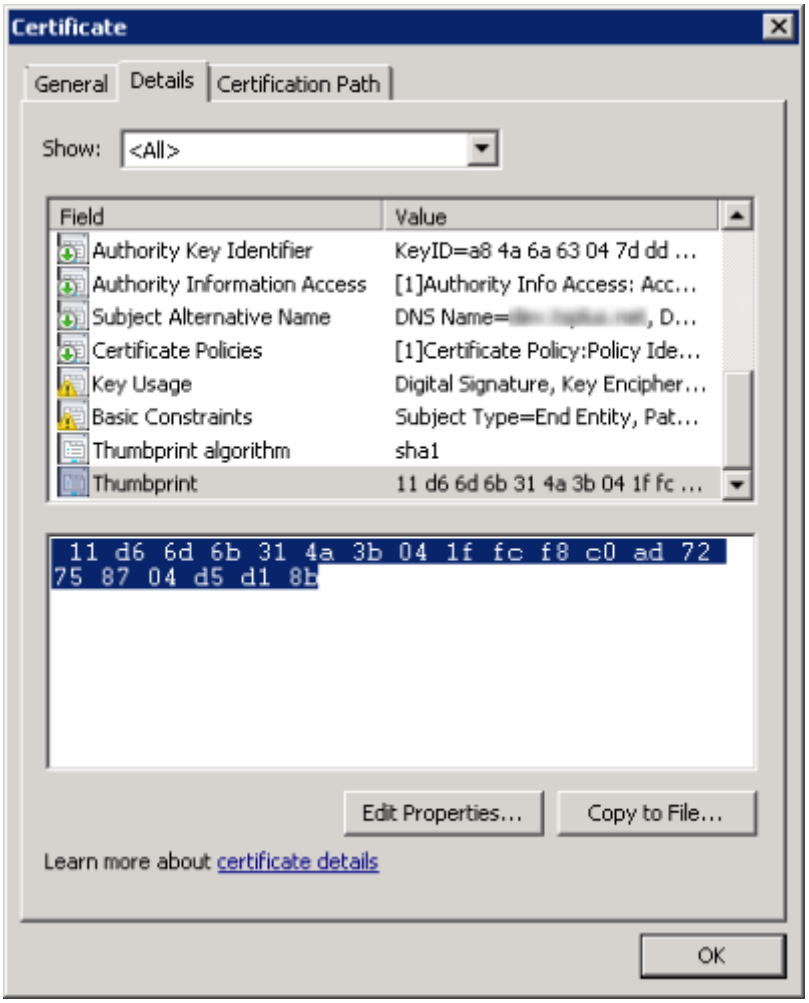
Find the certificate thumbprint



From MMC, right-click on the certificate and click **Open**.



The certificate's details are displayed. Click on **Details** tab to display the certificate's properties.

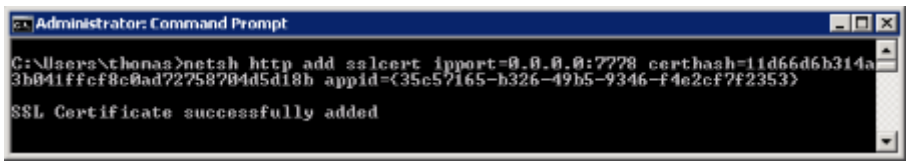


Copy the value of the **Thumbprint** property for the next steps.

Register SSL certificate for ServerGenius

From the administrative command line, type the following to set up the SSL binding to ServerGenius, and specify the appropriate port:

```
netsh http add sslcert ipport=0.0.0.0:7778
certhash=??11d66d6b314a3b041ffcf8c0ad72758704d5d18b appid={35c57165-b326-49b5-
9346-f4e2cf7f2353}
```



The above command line takes the following parameters:

- **ipport** defines the IP address and port which should be configured for ServerGenius. By default, we suggest to use port 7778.

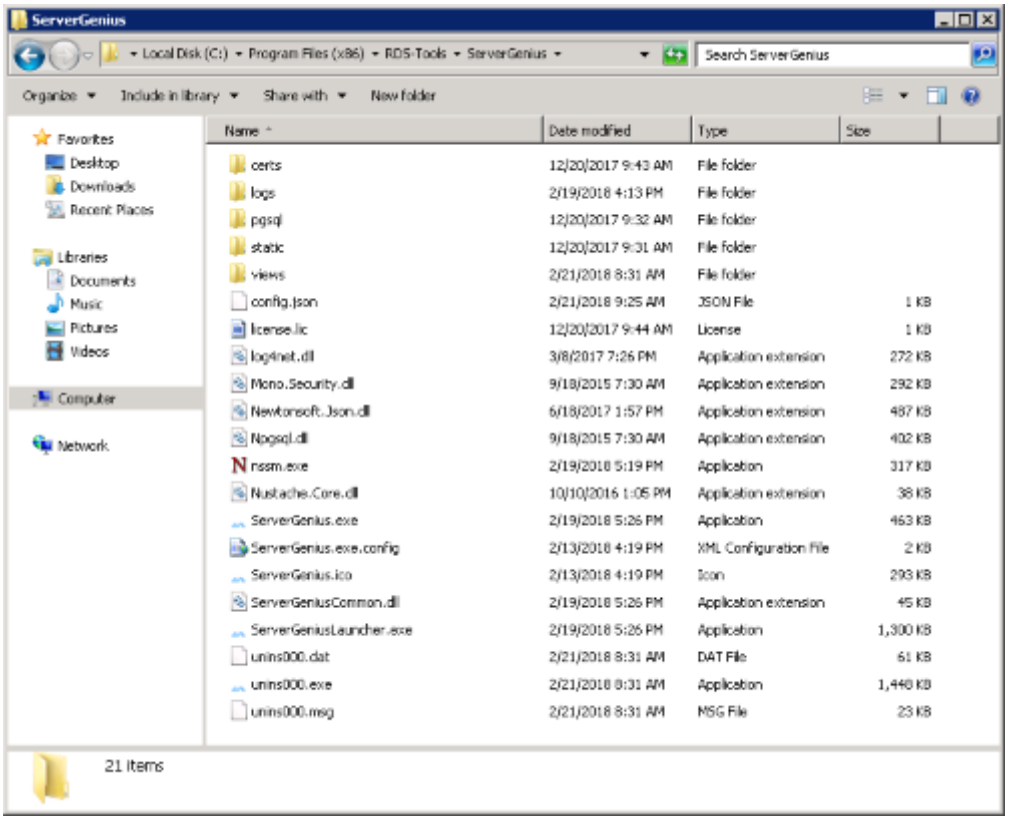
- **certhash** identifies the certificate by its thumbprint, found in the previous section.
- **appid** specifies the application ID. ServerGenius application ID is 35c57165-b326-49b5-9346-f4e2cf7f2353.

For Windows XP and earlier:

If your ServerGenius server is running under Windows XP or an earlier Windows release, the command **netsh** won't be available. use the **httpcfg** command instead as below:

```
httpcfg set ssl /i 0.0.0.0:7778 /h 11d66d6b314a3b041ffcf8c0ad72758704d5d18b /g
"{35c57165-b326-49b5-9346-f4e2cf7f2353}"
```

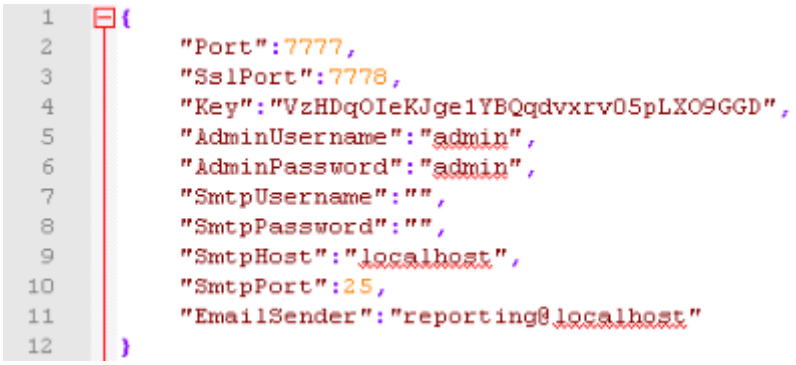
Configure ServerGenius SSL port



Open Windows **File explorer** and navigate to ServerGenius setup directory. By default, the ServerGenius setup path is the following:

```
C:\Program Files (x86)\RDS-Tools\ServerGenius
```

Then, open the file **config.json** and specify the SSL port (e.g. 7778) as the value of the **SslPort** property.



Note: in order to disable SSL for ServerGenius, rollback the changes by setting the **SslPort** property's value to **0** and then restart ServerGenius.

Restart ServerGenius

From the administrative command line, type the following to restart ServerGenius service:

```
net stop ServerGenius && net start ServerGenius
```

ServerGenius is now configured to use SSL (HTTPS).

How is data saved and can I access it from my own applications?

In ServerGenius, all your data is saved in an open format. We use a PostgreSQL database to store both global and servers and websites specific data.

The PostgreSQL database files are stored in the "db" directory inside ServerGenius setup directory.

Even if you can access these files both in read and write mode, we recommend that you always use read-only access mode, in order to avoid any conflict between ServerGenius and your own applications.

Do not hesitate to contact us if you want to know more on developing your own applications using ServerGenius data.

ServerGenius CPU consumption is above expected. What can I do?

1) Check for updates

Please check regularly for updates, as most of them offer performance improvements. We recommend you to apply ServerGenius updates out of working hours since the update may perform long running background operations on the database.

ServerGenius latest update is always available from the following direct link.

2) Apply recommended configuration

A database will always take all computing resources available to complete requests as soon as possible. Therefore, it is recommended to size ServerGenius server according to its usage.

Please find below our recommendations based on the number of monitored servers:

Monitored servers	CPU	Memory (RAM)
1-2	2	8
3-4	4	16
5+	8	32

Installing ServerGenius on an SSD type disk drive is recommended for better performance.

Also, you may need to allocate additional disk space for ServerGenius Server, depending on the number of servers and websites monitored, and coincidelly the amount of data collected and stored in the PostgreSQL database.

Finally, please note that it is generally a good idea to run a monitoring application such as ServerGenius on a dedicated server. This prevents other applications to reduce available resources.

3) Customize database configuration

ServerGenius relies on PostgreSQL database engine. The PostgreSQL database configuration file can be customized based on the server's hardware configuration to enable optimal performance.

The following information are required to build your custom configuration file:

- Memory (RAM)
- Number of CPUs
- Storage type (HDD, SSD or SAN)

Several websites are able to generate the most relevant configuration file based on these information, such as https://pgtune.leopard.in.ua.

For example, please find below a recommended configuration for a 2 CPU, 8 GB RAM server using HDD storage:

```
# DB Version: 10
# Total Memory (RAM): 8 GB
# CPUs num: 2
# Data Storage: hdd

max_connections = 20
shared_buffers = 512MB
effective_cache_size = 6GB
maintenance_work_mem = 512MB
checkpoint_completion_target = 0.7
wal_buffers = 16MB
default_statistics_target = 100
random_page_cost = 4
work_mem = 128MB
min_wal_size = 1GB
max_wal_size = 2GB
max_worker_processes = 2
max_parallel_workers_per_gather = 1
max_parallel_workers = 2
```

Note: ServerGenius uses PostgreSQL version 10

These settings should be replaced in the database configuration file located at: *C:\Program Files (x86)\RDS-Tools\ServerGenius\pgsql\data\postgresql.conf*. Then, the service ServerGeniusDatabase must be restarted for the changes to take effect.

4) Rebuild database indexes

A database index is a data structure that improves the speed of data retrieval operations on a database. Indexes are used to quickly locate data without having to search every row in a database table every time a database table is accessed.

We recommend you to rebuild database indexes periodically in order to speed up data access. This maintenance task may take a while and we recommend you to proceed outside of working hours. From an elevated command prompt, navigate to the *ServerGenius\pgsql\bin* directory and enter the following command:

```
C:\Program Files (x86)\RDS-Tools\ServerGenius\pgsql\bin>
    psql -U postgres -p 7779 -d servergenius
        -c "REINDEX DATABASE servergenius"
```

When prompted for a password, type *password*. This operation may take up to an hour and may increase performance dramatically.

5) Contact our customer support

If all the above recommendations failed to provide you an acceptable experience with ServerGenius, please do not hesitate to contact our customer support and raise a ticket at https://terminalserviceplus.freshdesk.com. We will be happy to help you regain control of your ServerGenius installation.

In order to facilitate our technical support and to reproduce your issue, we might ask you an export of your database.

In order to do so, from an elevated command prompt, navigate to the *ServerGenius\pgsql\bin* directory and enter the following command:

```
C:\Program Files (x86)\RDS-Tools\ServerGenius\pgsql\bin>
    pg_dump.exe -p 7779 -U postgres servergenius export1.dump
```

When prompted for a password, type *password*.

Once the export has finished, please share us the file located at *C:\Program Files (x86)\RDS-Tools\ServerGenius\pgsql\export1.dump* with any file transfer service.