V1 Project Accounting

Performance Troubleshooting Guide

Why is V1 Project Accounting appearing slow?

At V1 Project Accounting we take our customer feedback with utmost importance and have created this document to tackle instances of why V1 Project Accounting may be running slowly in some circumstances to illustrate the different reasons why this may be, which measures we have in place to guarantee a fast performance and the steps you can take to improve the performance of V1 Project Accounting on your computer.

To speed up V1 Project Accounting you can look at the following areas;

1. **Settings in your V1 Project Accounting database**
2. **Settings across the local and wider network:**
    A. Client Machine - The performance of your own computer
    B. Client Network - The performance of your office IT network
    C. Client Internet Connection - The performance of your connection to the Internet
    D. Rackspace Internet connection & internal network - The performance of the V1 Project Accounting servers

1. Settings in your V1 Project Accounting database

There are a few settings in V1 Project Accounting that can be used to improve the performance of certain areas such as timesheets and large lists of data such as projects:

To speed up timesheets:
* **Close any unused open projects** – if a project is no longer active and time is no longer required to be logged to it, open the project and click "Close Project" from the summary screen. This will prevent the project from being loaded into the list of available projects in the timesheet and expenses screens and will therefore make this screen load more quickly
* **Remove any unused rows in the current timesheet** – as each timesheet row contains a list of projects in the project drop-down, reducing the number of empty timesheet rows will decrease the number of projects being loaded into the page and speed up performance
* **Check your project security** – do you really need all users to be able to log time to all projects and tasks? If not, consider restricting project permissions so staff can only log time to projects they are assigned to. This is done in the Project Summary screen, and will also reduce the number of projects loaded on the timesheet.

Decreasing project list load times:

- **Lower value of "set maximum table results"** which can be set by hovering the mouse over the cog in the top-right of most tables in V1 Project Accounting. This will restrict the number of items shown and therefore speed up the loading of the page. All the items are still searchable but will not be shown.
- **Use the** filters at the top of each table to hide data that is not relevant, therefore decreasing the number of items to be loaded

You can check server performance by observing the Page build time for each page of V1 Project Accounting. Typically a page should build within 2 seconds but this will vary slightly if the page you are viewing is returning a larger amount of data i.e. a large Contacts page.

Settings across the local and wider network

If you have explored the options above and you are still experiencing performance issues with V1 Project Accounting, we would suggest that you speak to your IT team and ask them to check the following:

How are you connected to V1 Project Accounting and what could make it slow to use?

There are several layers between your computer and V1 Project Accounting – the following diagram gives you a graphical overview of a typical client network, connected to the Internet via its server, which would then communicate back and forth with our servers via the Internet.
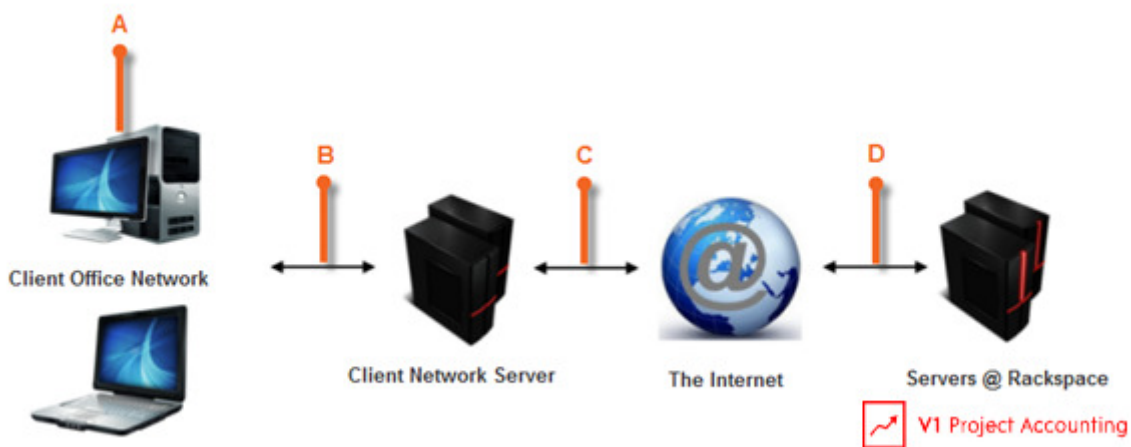
The labelled areas identify potential bottlenecks that could affect how fast V1 Project Accounting pages appear when you are using the software

A Client machine

- Check for any installed software on the client PC that may hinder internet performance by interfering with a browser or using available bandwidth. If you are experiencing performance issues, try the following:

  - o Remove third party internet add-ons such as Yahoo and Google toolbars.
  - o Check that any installed software firewalls are allowing connections to https://secure.V1ProjectAccounting.com.
  - o Check for any software installed that may automatically update in the background – this can use valuable bandwidth without you realising it. Modern virus checkers can update daily or even more frequently – you probably won't want to stop this but it is worth bearing in mind if you experience periods of slowness.

- Check the hardware of the PC – if a machine has insufficient memory or system resources then it may not be able to browse the internet and download information at the maximum rate.

Here is a guide to minimum specification required:

PC (Microsoft Windows XP/Vista/7/8)	Mac (Mac OS X Leopard)
PC with 300 megahertz or higher processor clock speed recommended; 233 MHz minimum required (single or dual processor system);* Intel Pentium/Celeron family, or AMD K6/Athlon/Duron family, or compatible processor recommended 512 megabytes (MB) of RAM or higher recommended (128 MB minimum supported; may limit performance and some features) 1.5 gigabytes (GB) of available hard disk space Internet Explorer version 8 or above See http://www.microsoft.com/windows/default.mspx for latest information	Mac computer with an Intel, PowerPC G5, or PowerPC G4 (867MHz or faster) processor 512MB of memory 9GB of available disk space Safari version 5.1.7 or above See http://www.apple.com/macosx/ for latest information

B Client network

A number of factors relating a "local" network (ie the network of PCs in an office or home) can affect the speed of the internet, and therefore the performance of online tools such as V1 Project Accounting:

- Number of users on the network – the more people on the network, the less bandwidth each user has available to him/her.
- Method of connection – wireless connections can be less stable than wired (Ethernet) connections, and so should be checked as a possible cause of connectivity problems. Weaker signals often cause the PC's internet connection to be slower, so if your wirelessly-connected PC/Mac is far from the router, try moving the router or computer closer to each other if possible. There a number of other tips for wireless connections such as changing channels and changing the broadcast format (G to B) – there are many resources online that will explain these.
- Proxy server & firewall settings (if applicable) – these technologies are used on some company networks to restrict access to certain sites and services on the internet. If you are having problems with accessing V1 Project Accounting, ensure that the URL https://secure.V1ProjectAccounting.com is allowed through any proxies or firewalls.

Ping our server – you can try pinging our server (your IT Support staff should help with this):

1. *Click Start > Run > Type 'command' > Click OK.*

2. *Type 'ping secure.V1ProjectAccounting.com -t' > Enter.*

3. *Leave it running for 5-10mins.*

4. *Hit CTRL+C on your keyboard to end the ping test.*

Example of a ping

So what do these results mean?
The screenshot above shows a successful ping, with the server returning the 4 packets of data that the Ping program sent out (with 0% packet loss in the transfer). This means your connection is passing data correctly and should be able to download web-pages and email without difficulty. The higher the time figure is, the slower the selected site is likely to download – 1s (second) is considered as high, which would suggest a bottle-neck on your network somewhere (typically you should receive a response in a few milliseconds).

C Client Internet connection

- Speed of connection – the speed of the subscribed internet connection determines the bandwidth available to users of the network.

An easy test would be to see how fast another website loads e.g. http://www.V1ProjectAccounting.com/ if this takes the same amount of time then it is likely to be your internet speed in general. A more advanced test can be undertaken here: http://www.speedtest.net/ - whilst you can access V1 Project Accounting with a slow connection, the faster connection you have, the better performance you will have from V1 Project Accounting.

D Rackspace Internet connection & internal network

We chose Rackspace to host V1 Project Accounting is they boast a high-tech, reliable network and high-speed Internet connections.

With this in mind, it isn't likely that any V1 Project Accounting speed issues are related to our servers.

Speed of connection

- Multiple links to Tier 1 bandwidth providers (optimum network backbone for medium to large businesses with critical reliability, stability, and scalability requirements).
- BGP4 (Border Gateway Protocol) – this technology ensures data reaches the end user in the fastest, most efficient manner possible.

Rackspace network

- Their Cisco powered Zero-downtime network infrastructure is world-class with servers running and uninterrupted around the clock.
- We use the London Rackspace Data Centre, which is one of three. It is engineered with fully redundant connectivity, power and HVAC (Heating Ventilation Air Conditioning) to avoid any single point of failure.
- UPS (Uninterrupted Power Supply) – their power systems are designed to run uninterrupted, even in the unlikely event of a total power outage.
- 28 GB/s aggregate IP transit in London data centre.

For further information please see http://www.rackspace.co.uk/managed-hosting/hosting-solutions/managed-hosting/data-centre-facilities/

We are still having problems, what can we do?

- Ensure your IT team have investigated the possible causes of connection problems detailed in this document, from checking the local PC to ensuring the network is operating correctly and any restrictions are lifted on the URL https://secure.V1ProjectAccounting.com
- The next step is to check where in the network the problem is:
  - Try to replicate the problem on a different PC – if other PCs don't experience the problem, it is likely to be something specific to the originating PC that is causing it.
  - If all PCs on your network experience the problem, try logging in from home or outside of the company network to see if the problem is resolved. If it is, it is likely to be a proxy or firewall issue, or something related to the company network.
- Once you have checked the above and you still cannot identify where the problem is occurring, please contact our dedicated V1 Project Accounting support team via email on support.PA@wearev1.com or call on 0844 815 5711 and they will be happy to help you resolve the problem further.