

# QPERM I.T. Requirements:

---

## Contents

Hardware .....	1
Software .....	1
Installation Notes (Multi User): .....	2
Current Known Installation Issues: .....	2
Future Development .....	3

## Hardware

The hardware specification cannot be given precisely; apart from anything else, it will depend on the level of use you expect to put the product to, how many permits you require, and in consequence how much disk space will be needed to store them, and it will also depend on whether you are running the program on Windows 2000, XP or Vista, each of which impose their own requirements on the system, and on what other software you may have permanently running. For this reason, the requirements below are guidelines only.

<b>CPU</b>	1.5GHz or faster, Intel, AMD or VIA
<b>RAM</b>	1GB on Windows 2000 or XP systems; 2GB preferred on Vista systems. Higher RAM sizes typically improve performance on all Windows systems.
<b>Disk space</b>	The installed product requires approximately 1Mbyte for the (initially empty) database, and approximately 1MB for the software, in addition to the requirements of the standard MS components listed below. During installation, a further 2Mbyte of disk space may be required. As the number of permits issued increases, the database size will of course grow, and this will depend on the detail of comment level added by the user to each activity. An estimate of 1Kbyte per permit set is believed to be generous.
<b>Display</b>	1024 x 768 or higher resolution preferred.

## Software

Product	Version
<b>Microsoft Windows™</b>	Windows 2000 Service Pack 4
	Windows XP Service Pack 1 or later
	Microsoft Windows Vista (SP1 preferred)
<b>Microsoft .Net Framework</b>	2.0
<b>Microsoft Installer</b>	3.1 or later
<b>Microsoft Data Access Components</b>	2.8
<b>If the product is being installed to use Microsoft Access, then the product requires EITHER:</b>	
<b>Microsoft Access</b>	2003 or later
<b>OR</b>	
<b>Microsoft JET library *</b>	4.0, (SP6 or later preferred)

\* The JET library comes in different versions for different underlying Microsoft operating systems.

If necessary, please visit <http://support.microsoft.com/kb/239114> and download the version that is appropriate to the operating system in use. If you have an older version of Access, installing a current JET library will work fine, and will have no ill effects on the existing use of Access. The .Net Framework, Installer, and Data Access Component pre-requisites are identified by the installer, and the user will be guided to the appropriate Microsoft site to download them, if required. All the software pre-requisites are common for many popular applications, and it is expected that the majority of users will have them already installed on their systems, even if they are unaware of them.

### **Installation Notes (Multi User):**

- 1) The best location for the access database is a new folder, sharing the folder with permissions as required, and performing all access through that share.
- 2) With that in place (and the appropriate share permissions set), do network client installations for the users rather than standalone, even if initially there is only a single user.
- 3) At first run of each client installation, the program will ask for the site ID, and will then contact our server for activation. This stores various encrypted information in the registry. All QRIMS information is confined to HKLM/Software/QRIMS or HKCU/Software/QRIMS.
- 4) The pre-requirements are the common ones of: .Net 2.0 runtime, MDAC 2.8 for the requisite target OS, Microsoft JET support for the target OS to provide access to MS Access databases, and Windows Installer 3.1.
- 5) QPERM does not create high loads on the target system, however given that the current version is in Access, there maybe some performance issues for more than a few concurrent users, and of course the normal implications of accessing an Access database over a network.

### **Current Known Installation Issues:**

- 1) There is a minor problem with Vista 64, where the permissions on the HKLM/Software/QRIMS registry key are failing to set during installation, causing the activation to fail later. The workaround, if needed, is simply to grant each QRIMS user full control to HKLM/Software/QRIMS and its sub-keys, and re-run the activation. There will be a code fix for this issue in future updates, but none of our existing clients are running Vista 64 and so is deemed a low priority fix at this time. Note: Vista 32 and Windows XP are not affected.
- 2) All versions of Vista do require the installation to be run as administrator. Normal use of the application does not require administration rights.

We have specific plans to support the following security groups:

- |            |  |
|------------|--|
| QRIMUSER   | users with the right to run any QRIMS app that is installed        |
| QPERMUSER  | users with the right to run specifically the QPERM software        |
| QPERMADMIN | users with the right to administer specifically the QPERM software |

We are soliciting feedback from system administrators as to whether a QRIMSADMIN group, for users with the right to administer all QRIMS software installed would be regarded as an aid to administration, or as a potential security headache.

At present, there is a limited degree of support for the first two groups, during the client installation process – if the installing user is in the QPERMUSER security group then this group is given the permission to access the registry entries; otherwise it looks to see whether the user is in the QRIMSUSER group, otherwise it allows access by the AuthenticatedUser well known SID.

## **Future Development**

The data access is currently ADODB accessing OLEDB to get to the access database. However, the product is highly modular, and all OLEDB access is confined to a Data Access Layer module – ptwio.dll – all higher-level code actually acts on an abstracted object model that is not dependant on the underlying database.

We expect to release a number of additional DAL modules for MS SQL Server, MySQL, PostGres, etc., and the first of these will be for SQL Server 2005, supporting both the express edition for companies that want single-user installations, and the various corporate editions for larger clients. We will of course provide an upgrade path from the Access database to SQL Server for existing users.

We hope this information is of use to you, and would welcome any feedback you have on the installation and support of the product.